

Duple Rhythm and Alternate Third Mode in the 13th Century

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THERE HAS BEEN general agreement during the past five decades that binary organization of rhythm prevails in only a few 13th-century compositions. One of these is an English 13th-century dance from MS Oxford, Bodleian Library, Douce 139, the beginning of which was published by Johannes Wolf in 1913.¹ He transcribed the piece in duple meter because of its character as an "evidently secular, popular melody." This feature of his transcription has been generally accepted; only Leo Schrade attacked it as arbitrary, pointing out that the original notation indicated the third and fourth rhythmic modes.² No exception, however, has been taken to Wolf's transcription in duple meter of two other compositions, one of which (*Mo* 8,328) is likewise in third mode.³ In fact, binary interpretation of the rhythm in this motet is unquestionably required, as four semibreves in one voice are often set against two successive breves in another. The third piece (*Ba* No. 35),⁴ though notated entirely in breves and semibreves, is not in sixth mode, since binary mensuration of the longa is required for the same reason. (Rests are not yet a reliable criterion; only MS *Ba* consistently differentiates the rests in its notation.⁵)

¹ *Handbuch der Notationskunde*, Vol. I, pp. 234f. Facsimile in *Early English Harmony*, ed. by H. E. Wooldridge (London, 1897), Vol. I, pl. 24, and *Early Bodleian Music*, ed. by Sir John Stainer (London, 1901), Vol. I, pl. 7.

² *Die handschriftliche Überlieferung der ältesten Instrumentalmusik* (Lahr, 1931), p. 74, note 50.

³ The following sigla will be used for the manuscripts:

- Ba* Bamberg, Staatsbibliothek, Ed. IV. 6
Cl Paris, Bibliothèque Nationale, nouv. acq. fr., 13521, Chansonier de La Clayette
F Florence, Biblioteca Laurenziana, Plut. 29 codex 1
Hu Las Huelgas
Mo Montpellier, Bibliothèque de l'École de Médecine, H 196
Tu Turin, Reale Biblioteca Vari 42
W₁ Wolfenbüttel, Herzog August Bibliothek 677
W₂ Wolfenbüttel, Herzog August Bibliothek 1206
WF Worcester Fragments, *i.e.*, Oxford, Bodleian Library, Lat. Lit. d 20 and Worcester, Chapter Library, Add. 68.

⁴ Wolf (*ibid.*, pp. 272f) pointed out that Aubry had five years earlier called attention to these two as well as three further motets, all of which exhibit what in the 14th century is called *modus imperfectus* (*Ba* No. 86; *Mo* 7,277 and 7,278; *Mo* 5,164 is an earlier concordance of *Ba* No. 35. Cf. Friedrich Ludwig, *Repertorium . . .* [Halle, 1910], Vol. I², p. 377).

⁵ Luther A. Dittmer points out that "in indicating a rest in third mode, the no-

In addition to the compelling criterion involving semibreves two further arguments for binary interpretation of the longa were advanced more recently. Likely candidates for duple rhythm would seem to be those compositions in which a binary ligature cum opposita proprietate in one voice appears simultaneously with an altered breve in another; this seemingly calls for conversion of third mode to duple meter, and just such a case has been made for certain motets in the old corpus of *Mo*.⁶ A third criterion for binary rhythm, irrespective of the third and fourth modes, was first claimed by Bukofzer, who declared the chains of breves—in this case the rhomboid, so-called English breves—in the original notation of the Summer canon and in other pieces to be evidence of such rhythm.⁷

Before any discussion of the second and third criteria it will be well to examine the theoretical evidence. There are two, possibly three, passages in medieval treatises dealing with the problem of binary mensuration in 13th-century music. The most detailed of these, which has puzzled Handschin (as well as others),⁸ was apparently written by a Frenchman, Petrus Le Viser; it is contained, together with selected dicta by other Continental theorists and composers, in the fourth rubric of Robert de Handlo's *Regulae*,⁹ where it follows an explanation of the Franconian rule of alteration as applied to pairs of semibreves, and instructions regarding the divisio modi and the punctus divisionis.

Regula VII

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Maxima 4

PETRUS LE VISER.—A. Triplici vero more longe, semilonge, breves et semibreves in voce proferuntur, scilicet more longo, mediocri et more lascivo.

B. More vero longo, semibreves, quotquot sunt, cum longis, semilongis et brevibus proferri et describi possunt.

C. More vero mediocri, proferuntur tres, vel quatuor, vel quinque semibreves pro brevi cum semilongis et brevibus, et aliquando cum longis, et tunc has semibreves oportet conjungi, non dividi, et si dividi debeant, sint tres et non plures divise.

tator is not always careful enough to distinguish between rests of two and three spatia, and even . . . in the mensural notation and ternary rhythm of *Mo* II-VI, the rests are not yet mensural." ("Binary Rhythm, Musical Theory and the Worcester Fragments," *Musica disciplina* VII [1953], p. 47.)

⁶ Dittmer, *ibid.*, pp. 41f. Cf. the discussion of this criterion pp. 262f *infra*.

⁷ Manfred F. Bukofzer, "*Sumus Is Iucumen In: A Revision* (University of California Publications in Music, Vol. II, No. 2; Berkeley and Los Angeles, 1944), p. 88. Cf. pp. 263ff *infra*.

⁸ Jacques Handschin, "The Summer Canon and Its Background," *Musica disciplina* III (1949), pp. 77f.

⁹ Charles-Edmond-Henri de Coussemaker, *Scriptorum de musica . . .* (Paris, 1864), Vol. I, p. 388a f. Regarding Dittmer's translation and edition of some medieval documents, consultation of the review by Janet Knapp in the *Journal of Music Theory* III (1959), pp. 306ff, is advisable.

Maxima 5

D. *In hoc vero more due semibreves equales sunt, et tres inequales, et quatuor equales, et quinque inequales. More tamen longo omnes precedentes regule tangentes de equalitate et inequalitate semibrevisum locum habent; more tamen mediocri nequaquam.*

E. *More vocato lascivo proferuntur longe, semilonge et breves cum semibrevis minori et majori, divisis, ligatis, vel obliquis, et aliquando cum eis proferuntur longe duplices; sed nec tres, nec quatuor, nec quinque semibreves in hoc more inveniuntur, nisi omittantur longe et semilonge; et tunc eis omissis proferuntur breves et semibreves, scilicet due vel tres pro brevi, non plures.*

F. *Ex his itaque semibrevisum proveniunt Hoketi lascivi quamplures in hoc more, et sic regula tertia in hac rubrica locum habet teste maxima secunda sequente.*

Regula VIII

A. *In hoc vero more denegamus omnem brevem alteram et omnes brevium inequalitates, quarum equalitatem affirmamus.*

B. *Due igitur breves inter duas longas posite in hoc more sunt equales, ambe longe imperfecte. . . .*

C. *Si tamen in hoc more lascivo tres breves inter duas longas inveniuntur, ambe longe erunt perfecte, nisi brevis vel valor eas precedat vel sequatur. . . .*

Rule VII

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Maxim 4

PETRUS LE VISER.—A. In fact, in vocal music longae, semilongae [*i.e.*, imperfect longae], breves, and semibreves are rendered in three different ways, *i.e.*, the *mos longus*, the *mos mediocris*, and the *mos lascivus*.

B. In the *mos longus* semibreves, however many there are, can be written and performed with longae, semilongae, and breves.

C. But in the *mos mediocris* three, four, or five semibreves are introduced in place of a breve, together with semilongae, breves, and, now and then, with longae; in such cases these semibreves must not be separated, but kept in one group, and should it be necessary to divide them, no more than three should be sequestered.

Maxim 5

D. But in this [intermediate] manner two semibreves are equal, three unequal, four equal, and five unequal. However, in the *mos longus* all preceding rules concerning equality and inequality of semibreves apply, strictly in contradistinction to the *mos mediocris*.

E. In the so-called *mos lascivus* the following note values are introduced: longae, semilongae, and breves with the semibrevis minor and major, which may be separate or ligated (including the oblique ligature), and now and then longae duplices are introduced in addition. But in this *mos* neither three nor four nor five semibreves are encountered, unless longae and semilongae are not used; in that case breves and semibreves are introduced, but, it goes without saying, no more than two or three for the breve.

F. Thus, it was these semibreves in the *mos lascivus* that gave rise to a

good many merry hockets, and hence the third rule in this rubric applies, as is attested by Maxim 2 following it.¹⁰

Rule VIII

A. But in the *mos lascivus* we reject any altered breve and any inequality of breves and affirm their equality.

B. Hence, two breves between two longae are equal in the *mos lascivus*, and both longae are imperfect. . . .

C. However, if in the *mos lascivus* three breves are encountered between two longae, both longae will be perfect, unless a breve or its equivalent precedes or follows them. . . .

In paragraphs B, C, and D of rule VII the *mos longus* and the *mos mediocris* are discussed together. Concerning the semibreves in the former (paragraph B), Petrus Le Viser specifically does not add "pro brevi," as he does in paragraphs C and E;¹¹ it is obviously the Franconian manner, as, in effect, he points out in paragraph D.

As regards the definition of the *mos mediocris*, which is clearly related to the motets of Petrus de Cruce, the term "conjungi" has generally been understood to mean "to be ligated."¹² There is, however, only one instance in the motets in *Mo* putting up to five semibreves to the breve (*Mo* 7,253; 7,299; 8,332) that accords with this rule (*Mo* 7,299, m. 11), while even in those compositions that accommodate six or seven semibreves to

¹⁰ Rule III and Maxim 2 of the fourth rubric read as follows (Coussemaeker, Vol. I, p. 387b):

Regula III

FRANCO.—*Si autem quatuor semibreves inter duas longas vel breves inveniuntur, tunc semper due et due pro recta brevi computantur. . . .*

Maxima 2

HANDLO.—*Regula Franconis precedens . . . locum habet, quando valor brevis non currit, nisi ad proportionem trium semibrevis, que siquidem vera est in Hocketis et in quampluribus Motetis.*

Rule III

FRANCO.—But if four semibreves are encountered between two longs or breves, then one pair is always counted to the breve. . . .

Maxim 2

HANDLO.—The preceding rule of Franco . . . applies when the value of the breve is exactly the same as that of three semibreves, since indeed this is true of hockets and a good many motets.

¹¹ This was the misapprehension of Heinrich Bessler ("Studien zur Musik des Mittelalters," *Archiv für Musikwissenschaft* VIII [1926], p. 159), Yvonne Rokseth (*Polyphonies du XIII^e siècle* [Paris, 1939], Vol. IV, p. 82), Dittmer (trans. and ed., *Robert de Handlo* [Musical Theorists in Translation, Vol. II; Brooklyn, 1959], p. 15, note 1), and others.

¹² Wolf, *Geschichte der Mensural-Notation* (Leipzig, 1904), Vol. I, p. 21; Wolf, *Handbuch*, Vol. I, p. 264; Dittmer, *Robert de Handlo*, p. 15, note 1. There are works in the English repertoire to which this interpretation could be applied, e.g., *WF* No. 28 and, especially, two motets in MS Oxford, New College 362 (fol. 88^r) and in MS Oxford, Bodleian Library, E Mus. 7 (fol. X/XI [b]), respectively.

the beat (*Mo* 7,254; 7,264; 7,289; 8,317) there are only two cases of semibreve coloraturas (*Mo* 7,264). Though the passage poses something of a puzzle, it seems more plausible to assume that the term “dividi” refers to *divisio modi* and its punctus, which had just been mentioned in rule VI. Thus, if five semibreves are intended to take the place of two breves (“*si dividi debeant*”), a punctus divisionis may divide them 2 + 3 or 3 + 2; in the case of four, two would be sequestered for the second breve. While this would hardly be news for composers of the time, it is conceivable that the novel practice of increasing the number of semibreves per breve may have produced this cautionary truism. Since so few cases of more than three melismatic semibreves grouped together exist in the relevant works, this interpretation makes at least minimal sense, while the other is apparently not applicable.

But the way in which this paragraph is understood in no wise affects the more important paragraph D. Since, as had just been pointed out in the treatise, the concept of inequality implies precedence of the smaller value, the semibreves apparently must be transcribed thus:



Interestingly enough, Petrus Le Viser stops with the number five, because with this number the rule of inequality becomes ambiguous; strictly speaking, five semibreves should be rendered , thus, in effect, introducing the semiminim. But since in performance the difference would be

small indeed, they might turn out , thereby adding major prolation to the minor prolation permitted by Handlo.¹⁴ The problem certainly becomes more acute when six (or more) semibreves are crammed into one tempus, e.g.,  or  or .

Again, the second alternative, which avoids the semiminim, is the most likely of the three. (The third would change the tempus and therefore need not be considered.)

The passage can only be understood in the light of the probable evolutionary process. The author of the *Speculum musicae*, according to whom Petrus de Cruce was a crucial figure in this phase, reports that the composer began by enlarging to four the number of semibreves set for a

¹³ This also agrees essentially with Walter Odington (Coussemaker, Vol. I, p. 236a), whose more detailed approach, exemplified in MS London, British Museum, Sloane 1210, Wolf did not choose to connect with the practice of Petrus de Cruce (*Handbuch*, pp. 264f and 269f).

¹⁴ Handschin presents only part of the picture when he refers to the stipulation of tempus imperfectum being implied by Petrus's statement that two semibreves are equal and three are not (Handschin, “The Summer Canon” [1949], p. 77).

breve.¹⁵ Since the notion of prolation had not yet arisen, four semibreves were doubtless originally conceived as a semibreval unit, *i.e.*,



That two semibreves in one voice against four in the other (*e.g.*, *Tu* No. 21, m. 1) would almost automatically become equal in performance is as evident as the instability of four equal semibreves in one voice against three equal semibreves in the other (*e.g.*, *Mo* 7,253, m. 13; *Mo* 7,299, m. 21). Petrus Le Viser's system¹⁶ provided a standard of measurement that brought at least temporary clarification.

As soon as the figure six is reached and then exceeded and expanded to nine,¹⁷ the prolation system would, in effect, seem to have arrived. But modal rhythms are still quite clearly apparent in the lower voices of the *Mo* motets just listed,¹⁸ the breve still represents the beat, and the subdivision of the semibreve is not yet subject to a precisely organized system; in other words, Petrus de Cruce's style is not quite halfway ("mediocris") between the Franconian style and what might well be called the "mos brevis" of Vitry with its isorhythm. This proves the assumption that there is as yet no systematic application of the concept of prolation. Therefore, more than five—perhaps even more than four—semibreves within a beat were undoubtedly rendered freely (*e.g.*, )¹⁹.

In the absence of more precise information regarding this passing phenomenon, there is no reason for heeding Petrus Le Viser less²⁰ than those of his contemporaries and successors who in effect apply to the semibreves *minimae* and *minoratae* the rules of alteration previously transferred by Franco from the breve to the semibreve.²¹ But whatever interpretations

¹⁵ Cousse-maker, Vol. II, p. 401a. The example he quotes comes from the only applicable motet preserved in *Mo* (7,253). As regards the occurrence of four semibreves in an earlier composition (*Mo* 3, 40) cited by Rokseth (*Polyphonies*, Vol. IV, pp. 79f, note 9) and Antoine Auda (*Les "Motets Wallons"* [Brussels, 1953], Vol. I, p. 64), the concordance in *Ba* (No. 58) has 2 + 3 semibreves rather than the 4 semibreves + 1 breve of the *Mo* version.

¹⁶ His three *mores* are terms erroneously attributed to Jacques de Liège by Armand Machabey (*Notations musicales non modales* [Paris, 1959], p. 23).

¹⁷ Cousse-maker, Vol. II, pp. 401b f. The subsequent discussion in Handlo (Cousse-maker, Vol. I, pp. 389f) as well as the treatise of Hanboys (*ibid.*, pp. 403ff, especially pp. 424f) also show stages of this development. While Petrus de Cruce limited himself to seven semibreves to the breve, Johannes de Garlandia (the younger) pushed the total to nine.

¹⁸ Therefore, Jacques de Liège approved of them as still in accordance with tradition (Cousse-maker, Vol. II, p. 401a).

¹⁹ An analogous situation existed prior to Franco with respect to the subdivision of the breve (*cf.* pp 267f *infra*).

²⁰ Dittmer disregards his rules (*cf.* the example in *Robert de Handlo*, p. 16).

²¹ Willi Apel's contention that Johannes de Garlandia, the younger, was the inventor of the minima (*The Notation of Polyphonic Music* [Cambridge, Mass., 1953], p. 338, note 3) is not borne out by the reference cited by him. On the basis of the information presented in Handlo's treatise, the following theorists quoted by him

are applied to the *mos mediocris*, it clearly points ahead to 14th-century practice, since it involves tempus imperfectum, and is therefore only marginally relevant here.²²

Compositions in *mos lascivus* are notated in two ways. Either (1) they use all note values, contain no more than two successive (independent) semibreves per breve, and altered breves are forbidden (all but the last clause of paragraph E and paragraphs A-C of rule VIII); or (2) they consist only of breves and semibreves, of which three can replace a breve (last clause of paragraph E).²³ That paragraphs A and B of rule VIII do not simply exclude the third and fourth modes²⁴ is proved by maxim 9 of the thirteenth rubric: *Tertius et quartus modus transmutari debent, si more lascivo per vocem exprimentur in maxima quinte rubrice.*²⁵ ("The

might be said to reflect practices of the times indicated, assuming that they represent one unified and continuous development (cf. also H. Besseler, "Studien" [1927], p. 157): Petrus de Cruce, ca. 1280; Petrus Le Viser, ca. 1290; Johannes de Garlandia (the younger), ca. 1300; and Admetus de Aureliana, the only one to mention the new symbol for the minim, ca. 1310. The position in late medieval music of pieces like *Mo* 7,253; 7,299; and 8,332 is comparable to that of works composed by Schoenberg during the first decade of the present century. In the 14th century the classic "harmony" of the Gothic system of rhythmic modes was stretched and attenuated into a system of serialization of rhythm (isorhythm) and, in the Avignon repertoire, to textures shredded by those extraordinary microrhythmic complexities that are better seen than heard. (Friedrich Ludwig, whose stylistic insight into medieval music in all probability remains unexcelled, frankly abhorred the post-Franconian medieval motet *qua* music; cf. the strong comments in his *Repertorium*, Vol. I², pp. 422 and 425.)

²² The *mos mediocris* cannot be considered pertinent to MS Paris, Bibliothèque Nationale, lat. 25408, as does Machabey (*Notations musicales non modales*, p. 79 et *passim*).

²³ This is what some theorists later called sixth mode, e.g., Anonymous I (Cousse-maker, Vol. III, p. 338) and the author of the *Quatuor principalia* (Cousse-maker, Vol. IV, p. 258). But already Franco, for whom modes 1 and 5 were only one mode (his first), had described his fifth mode as consisting *ex omnibus brevibus et semibrevis* (Cousse-maker, Vol. I, p. 118b; *Hieronymus de Moravia O.P.: Tractatus de musica*, ed. by Simon M. Cserba [Freiburger Studien zur Musikwissenschaft, 2. Reihe der Veröffentlichungen des Musikwissenschaftlichen Instituts . . . , Heft 2; Regensburg, 1935], p. 233). Rokseth (*Polyphomies*, Vol. IV, p. 83) erroneously applied paragraph D to the *mos lascivus* and concluded that two semibreves are likely to have been equal as early as the second quarter of the 13th century. While in most cases the result may be correct, the reasoning is not, since in the second quarter of the century two semibreves very likely were still (not already) equal and Petrus's *mores* were unknown. On the other hand, in compositions in *mos lascivus* of the late 13th century two semibreves are Franconian, i.e., unequal, contrary to the misapprehension of both Rokseth and Dittmer ("Binary Rhythm," p. 54).

²⁴ They might conceivably be understood to allow two successive breves only in this pattern: |JJ|JJ| (e.g., *Mo* 7,257). This is Auda's assumption (*Les "Motets Wal-lons,"* Vol. I, pp. 61f), who further compounds his misunderstanding of the *mos lascivus* by assuming that paragraph A of rule VIII applies only to the second manner of notation (*ibid.*, pp. 62f). In addition, he incorrectly assumed that the new way of notating pieces in this style implied prolation, i.e., minims as well as breves and semibreves; this, in turn, led him to date the passage by Petrus Le Viser later than necessary or likely.

²⁵ Cousse-maker, Vol. I, p. 402a. What is undoubtedly meant is "ut in maxima quinta quartae rubricae."

third and fourth modes must be changed if they are rendered in *mos lascivus*, as per the fifth maxim of the fourth rubric.²⁶) In other words, all modes are possible in this type of *mos lascivus*, but the third and fourth modes are binary (*i.e.*, one longa = two breves rectae = six semibreves minores—modus imperfectus, tempus perfectum), while the sixth mode can become binary, since obviously it is impossible to subject some arrangement such as a phrase consisting of three breves and a breve rest to the Franconian rules of alteration.

Thus, there is theoretical substantiation for the duple rhythm in all the compositions from *Mo* and *Ba* mentioned previously.²⁷ *Mo* 8,328 is in binary third mode, *Ba* No. 86 and *Mo* 5,164 and 7,278, all in modus imperfectus, are notated only in breves rectae and semibreves,²⁸ and *Mo* 7,277 is a hocket motet likewise in modus imperfectus and likewise notated in breves and semibreves, though groups of four semibreves (♪ ♪♪♪) appear three times. (*Mo* 8,332 is a rare example of combination of *mos lascivus* with *mos mediocris*, and its mensuration is therefore ternary.)

It is clear that the “frolicky manner”²⁹ has been misunderstood in the past. It only partly and, as it were, incidentally indicates the evolution from larger to smaller note values. The concept of mood and character is essential, as the term indeed connotes. Thus, the hockets notated in the older manner are in that respect commensurate with the *mos longus* of the Franconian motets, but they are set apart by their merry character, which they have in common with the more recent pieces.³⁰ It is difficult to say what motets in the first or second mode might have been considered to be in *mos lascivus* rather than *mos longus*. But since three of the five in binary

²⁶ Bukofzer's assumption (“*Summer Is Ictumen In*,” pp. 92f, note 13; “Gymel,” *Die Musik in Geschichte und Gegenwart*, Vol. V, col. 1143) that the musical example preceding this maxim should be interpreted in duple time is not warranted by the context.

²⁷ See p. 249 and note 4, *supra*. No. 3 of MS Paris, Bibliothèque Nationale, fonds lat. 11411, claimed by Dittmer to have binary rhythm (Dittmer, *Paris 13521 & 11411* [Publications of Mediaeval Musical Manuscripts, No. 4; Brooklyn, 1959], p. 7), is in fifth mode, which is standard for hockets in modus longus (*cf.* Heinrich Sowa, *Ein anonymer glossierter Mensuraltraktat 1279* [Kassel, 1930], pp. 98f and xxvi f). Neither is No. 4 in duple rhythm, Dittmer's transcription notwithstanding.

²⁸ With the exception of a few cadential longae in *Mo* 5,164; however, the erasures on fol. 214^v clearly show that the scribe of the main corpus of *Mo* had his difficulties with this newfangled piece. Higiní Anglès (*El Còdex musical de las Huelgas* [Biblioteca de Catalunya, Publicacions del Departament de Música, Vol. VI; Barcelona, 1931], Vol. I, pp. 256, 291, and 293) has called attention to two further specimens in the Las Huelgas MS (Nos. 129 and 132). (“44” on p. 256 is a misprint; it should read “45.”)

²⁹ “Lascivus” here and in similar contexts is not to be taken to mean “wanton” (Dittmer, *Robert de Handlo*, p. 15, note 1); perhaps the most suitable translation would be “allegro” (in both senses).

³⁰ *Ba* Nos. 105, 106, and 108. Nos. 104 and 107, being in the modus longus of the St.-Emmeram Anonymous (*cf.* note 27 *supra*), apparently antedate the practices discussed by Petrus Le Viser.

rhythm have secular tenors,³¹ it may not be amiss to consider as in *more lascivo* all other *Mo* motets with secular tenors;³² with one possible exception, they are all contained in the last two fascicles. They fit Petrus's rules, while a piece like *Mo* 7,258 does not. If this assumption is correct, then certainly the entire contents of fascicle 4 of *Mo* could automatically be designated as *more longo*.

The second passage from a theorist's treatise that deals with the problem of binary rhythm is less far-ranging. Odington, who almost certainly did not write his *De speculatione musicae* later than 1300, adds it as an afterthought to his discussion of the notation of the third and fourth modes.³³

Alii autem in his modis utuntur longis et brevibus et semibrevis et pausis³⁴ secundum quod ego accipio, sed tantum dividunt longam in duas breves ut duo tempora habentem, et brevem in duas semibreves et raro in tres. Et pro longa duo spatia occupat pausa, pro brevi unum.

Others, however, use longae, breves, and semibreves, as well as rests in these modes according to my intelligence of these matters, but [except that they] divide the longa into only two breves with a total duration of two beats, and the breve into two semibreves and now and then into three. And long and breve rests are drawn through two spaces and one space, respectively.

Hence, Odington reports binary rhythm only for the type of piece represented by *Mo* 8,328.

The third excerpt occurs in the treatise by Anonymous IV, specifically in his seventh chapter (on irregular modes), which is a rather obscure grab bag of eccentricities. Again the third and fourth modes are involved.³⁵

Iterato diversitas altera et major: una longa minima, et tres mediocres, ut predictum est; et tres festinantes, salva ultima, que dicitur mediocris vel minima; et sic tres mediocres et tres festinantes, etc. . . .

Quartus irregularis sic: tres festinantes, velut predictum est, quamvis ultima minima, et tres festinantes simili modo, et sic procedendo, etc. Aliter tres festinantes, ut predictum est, et tres mediocres, et sic procedendo per mediocres;³⁶ et quandoque permixtive per festinantes et mediocres, etc.

Then again there is another and major variant [of the third mode]: a longa minima and three mediocres, as described above; and three festinantes, except

³¹ The Latin texts of the upper parts of *Ba* No. 86 may well be contrafacta of French originals; cf. Rokseth, *Polyphomies*, Vol. IV, p. 73, note 2.

³² It seems that in such combinations as "cantus lascivus" and "cantilena lasciva" the meaning of "lascivus" could be approximately that of "secular." (Cf. Margarete Appel, *Terminologie in den mittelalterlichen Musiktraktaten* [Bottrop i.W., 1935], pp. 68 and 74.)

³³ Coussemaker, Vol. I, p. 245a.

³⁴ I gratefully acknowledge information received from Professor William G. Waite to the effect that Handschin's addition of "non" ("The Summer Canon" [1949], p. 76) is fallacious and misleading (cf. p. 261 *infra*).

³⁵ Coussemaker, Vol. I, p. 361b f.

³⁶ It seems unhelpful to change "mediocres" to "festinantes," a correction Dittmer finds necessary (Dittmer, trans. and ed., *Anonymous IV* [Musical Theorists in Translation, Vol. I; Brooklyn, 1959], p. 5).

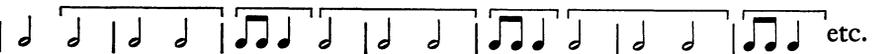
the last, which is meant to be a mediocris, or rather, minima; and in like manner three mediocres and three festinantes, etc. . . .

The fourth irregular mode is as follows: three festinantes, as described before, though the last one is a minima, and three festinantes similarly, and going on this way, etc. Another variant has three festinantes, as described above, and three mediocres, and then in like manner continues with three mediocres; and sometimes it mixes festinantes and mediocres, etc.

In the context of the first half of this chapter the terms here used can only be explained as follows:

Longa minima = Longa duorum temporum
 Brevis mediocris = Brevis duorum temporum
 Brevis minima = One of the constituent notes of a ternary ligature replacing a breve
 Festinantes = Notes faster than a brevis recta.⁸⁷

Thus, the three variants should probably be represented as follows:

1. 

2. 

3. 

(Or a freer mixture of these ligatures.)

Evidently, all three theorists consider exclusively binary mensuration of longae possible only in compositions in the third and fourth modes.

While other passages have been culled from Odington and Anonymous IV to support binary interpretation of rhythm in music, especially English music, of the *Ars Antiqua*, they turn out to be of no help. Of more recent

⁸⁷ Dittmer (*ibid.*, p. 69) interprets the passage “tres festinantes, salva ultima, que dicitur mediocris vel minima” as meaning two breves rectae followed by a longa imperfecta. But there seems to be no reason to call notes “hurried” if they have the duration of at least one tempus each and could therefore be represented by a ternary ligature. The term “festinantes” is so closely related to “currentes” that—the context apart—it suggests the figure particularly common in English fragments (). This symbol, when followed by a breve, often represents two semibreves and a breve, the last note in this special third mode being “mediocris vel minima” (“vel minima” is not included in Dittmer’s translation), because in the ordinary mode it would be a mediocris. The following “translations” are suggested for other terms used by Anonymous IV:

Nimis longa	= 5 tempora
Longa media	= 4 tempora
Longa tarda	= 4 tempora (?)
Longa debita	= 2 tempora
Brevis parva (or simplex)	= Brevis recta
Semibrevis	See pp. 267f <i>infra</i> .

authors both Handschin and Dittmer³⁸ adduced the following two excerpts:³⁹

1. *Longa autem apud priores organistas duo tantum habuit tempora, sic in metris; sed postea ad perfectionem ducitur, ut sit trium temporum. . .*⁴⁰

With the earliest polyphonists the long was worth only two tempora, as in verse meters; but later on it is brought to perfection, so as to contain three beats. . . .

2. *Iste modus transit in tertium imperfectum, si pausa longa auferatur, et tertius . . . [lacuna] . . . si due breves pause demantur;⁴¹ nec est inconveniens.⁴² Scilicet tertio et quarto longa est trium temporum et altera brevis duorum, licet prius dictum sit longa in metris duorum esse temporum, quia syllabam longam licitum est quantumcumque protrahere voci aptata;⁴³ et similiter non omnis cantus organicus est in carmine. Sed et convenientissime in his modis est longa trium temporum et brevis altera duorum, quia hi modi constant principaliter ex dactylis et anapestis. . . . Et ideo in his modis longa perfecta primo traxit originem, et tamen in his modis est brevis altera; semper autem secunda est altera, . . . ne, si diversitas esset, congregationem offenderet, nisi forte in duas rectas redigatur, vel si prior altera esset, in primum modum transiret.*

The beginning of the first sentence of the second excerpt, apparently dealing with the mutual convertibility of the third and fourth modes, is defective. Odington then continues:

And that works out quite well. Of course, even though the long was previously said to contain two beats in poetic meters, in the third and fourth modes the long has three beats and the altered breve two, because it is allowable any time to lengthen a long syllable for music fitted to it; also, not every polyphonic composition is written in [the same manner as] metric poetry. But in these modes it is most suitable that the long have three beats and the altered breve two, because these modes principally consist of dactyls and anapests. And therefore the perfect long had its origin in these modes, but with the breve altered; it is the second, however, unless it is split into two rectae, that is always altered . . . so as to avoid the chance of the singers' not being together, which would be offensive to everybody, and so that they do not slip into first mode through alteration of the first breve.

It is hard to see why the first passage should have had such a "thorny career in modern musicology."⁴⁴ Both Handschin and Dittmer,⁴⁵ the

³⁸ Handschin, "The Summer Canon" (1949), pp. 74f; Dittmer, "Binary Rhythm," pp. 39 and 43.

³⁹ Coussemaker, Vol. I, pp. 235b and 241a.

⁴⁰ Handschin (*ibid.*, p. 76) suggests that probably "sicut" was intended instead of "sic." While "ducitur" may be more comprehensible Latin than "dicitur," it does not affect the sense of the passage and therefore does not resolve "this problem conclusively," as Dittmer puts it ("Binary Rhythm," pp. 39f, note 1).

⁴¹ Handschin's (*loc. cit.*) and Dittmer's ("Binary Rhythm," p. 43) punctuation must be changed here.

⁴² According to Handschin (*loc. cit.*).

⁴³ *aptate (aptatae)? aptatam?*

⁴⁴ Handschin, *ibid.*, p. 74.

⁴⁵ Dittmer ("Binary Rhythm," p. 40) claims that, while certain Montpellier motets in third mode (*cf.* p. 262 *infra*) go back to putative models with binary rhythm—

former after considerable vacillation, decided that Odington here referred to binary third mode. In view of the second excerpt⁴⁶ there can be no doubt that Odington actually confirms the assumption of modern writers⁴⁷ that the *modi recti* historically preceded the *modi ultra mensuram* or *obliqui* (*non recti*). Clearly, Odington does anything but oppose “the third musical mode to the dactylic and anapest rhythms of metrics.”⁴⁸ Another statement in Odington’s treatise, regarding the historical precedence of binary before ternary division of the breve, has been claimed by Handschin to be analogous to the evolution of the mensuration of the *longa*.⁴⁹ However, the passage does not bear him out: *Brevis vero apud priores resoluta est in duas semibreves; apud modernos, aliquando in tres, aliquando in duas*.⁵⁰ (“With earlier composers the breve could be replaced by two semibreves; the moderns divide it sometimes into two, sometimes into three.”) If anything can be inferred from this, it is at best that prior to Franco the subdivision of the breve was not yet subject to a precisely organized system, a situation comparable to that existing in those motets by Petrus de Cruce in which four semibreves can take the space of one *tempus*.⁵¹

An additional passage from Odington’s treatise has been cited in support of duple rhythm:⁵²

Quidam autem tantum tertio et quarto modo utuntur talibus regulis in his modis habentibus, ut patet. Longam in duas breves dividunt, ternariam ligaturam

mostly assumed to be of English origin—others have become subject to *reductio modi* to such an extent that they have “ceased being in third mode . . . but [have] taken on the characteristics of ‘Modi Recti,’ that is they have become identical with compositions of the second (and first) modes” (p. 42). However, to the medieval musicians the concept of modal reduction did not involve whole compositions, but simply the principle of modal convertibility, which the composer applied in a piece at his discretion; quite apart from the fact that of the ten upper parts of the five motets cited by Dittmer only a total of three lean clearly to second mode, none to first. Thus, it seems hardly convincing to use these pieces as examples of what Odington referred to when he wrote “postea ad perfectionem ducitur.” Besides, Dittmer furnishes no proof that these motets had binary models or that they are younger than those supposed by him to have a binary past.

⁴⁶ Dittmer’s interpretation of its last sentence (*ibid.*, p. 46) rests on a faulty translation.

⁴⁷ Anton M. Michalitschke, *Die Theorie des Modus* (Regensburg, 1922), pp. 106f, note 201; William G. Waite, *The Rhythm of Twelfth-Century Polyphony* (Yale Studies in the History of Music, Vol. II; New Haven, Conn., 1954), p. 18.

⁴⁸ Dittmer, “Binary Rhythm,” p. 44. Dittmer’s subsequent analysis is therefore nugatory. Gilbert Reaney’s statement that in this passage Odington reports the third and fourth modes to have been binary originally is incorrect (“Odington,” *Die Musik in Geschichte und Gegenwart*, Vol. IX, col. 1849f).

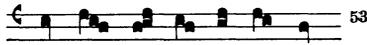
⁴⁹ “Was brachte die Notre Dame-Schule Neues?,” *Zeitschrift für Musikwissenschaft* VI (1924), p. 558, and again, 25 years later, in “The Summer Canon” (1949), pp. 74f.

⁵⁰ Coussemaker, Vol. I, p. 235b.

⁵¹ Cf. p. 253 and note 19 *supra*.

⁵² Dittmer, “Binary Rhythm,” pp. 47f; the excerpt occurs in Coussemaker, Vol. I, p. 245a.

dicunt valere duas longas, quaternariam vero ligaturam equalem ternarie, et quinariam similiter, semper ultimam tenentes longam, nisi binariam ligaturam sequitur, et tunc faciunt ultimam brevem. In binaria autem ligatura omnes tenent breves, donec ternaria, vel longa, aut longa pausa sequatur, sic:



Et sic perfectio aliquando brevis, aliquando longa.

Some, however, use the following rules in the third and fourth modes only. They divide the longa into two breves, give the ternary ligature the value of two longae, and make the quaternary as well as the quinary ligature equivalent to the ternaria. The last note [of such a ligature] is always long, unless it follows a binary ligature, in which case they make the last note a breve. As regards binary ligatures, however, they conceive of all notes as breves, till at length a ternaria, longa, or long rest follows. Thus, ligatures are perfected sometimes by a brevis and sometimes by a longa.

Odington in no way refers to binary rhythm, as he had previously stated quite unconditionally that of two breves replacing a longa the second *valet longam imperfectam*,⁵⁴ rather, the passage, which mentions the pre-Franconian valuation of quaternary and quinary ligatures, evidently deals with ways of notating *fractio* or *reductio modi* (*i.e.*, of the third mode to the second):



Two paragraphs later comes the passage cited previously, in which Odington reports that others, while properly using the modern Franconian notation, apply binary mensuration to the third and fourth modes.⁵⁵

One of the two quotations from Anonymous IV cited by Dittmer immediately precedes the one given previously.⁵⁶

Est et alius irregularis ejusdem majoris diversitatis, sic: una longa et tres conjunctim, ut supra dictum est; et alie tres, quarum due prime minime breves et tertia mediocris, vel ultima longa; et sic similes tres procedendo, etc.

Moreover, there is another irregular type of this major variety [*i.e.*, third mode], as follows: a longa and a ternary ligature, as described above; and another three [*i.e.*, ternary ligature], of which the first two are *minimae breves* and the third a *mediocris*, while the last, of course, is a longa; and then it continues with three similar ones, etc.

Apparently the following pattern is meant:



⁵³ The example printed by Coussemaker "is wildly remote from the original" (communication from Professor Waite).

⁵⁴ Coussemaker, Vol. I, p. 235b.

⁵⁵ Cf. p. 257 *supra*.

⁵⁶ Cf. p. 257 *supra*.

⁵⁷ Cf. Dittmer, *Anonymous IV*, p. 69.

The remaining passage cited by Dittmer will be discussed subsequently.⁵⁸

The first of the three criteria for duple rhythm mentioned previously⁵⁹ is not only ineluctable, it also finds its theoretical substantiation in Robert de Handlo's *Regulae*; in addition, the existence of binary third mode, as exemplified in *Mo* 8,328, is also reported by Odington and, probably, Anonymous IV, if his seventh chapter can be claimed to be comprehensible.

As regards the second criterion—a binary ligature cum opposita proprietate in one voice set against a presumably altered breve in another—the evidence is unreliable. While Dittmer states that “the ligature, which would normally replace the Brevis Altera in third mode, is in *Mo* II-VI a binaria cum proprietate et cum perfectione,”⁶⁰ his tabulation in another article⁶¹ shows that in these cases the following situation obtains: 30 binariae cum proprietate et cum perfectione; 22 binariae cum opposita proprietate; 3 binariae cum proprietate et sine perfectione. All three types occur in the triplum of *Mo* 4, 51 and in *Mo* 5,109. If this suggests a state of blessed irregularity rather than peaceful coexistence of two types of third mode, that should not be surprising in view of other notational features of MS *Mo*. “There was no apparent attempt made to draw a formal distinction between the binaria which divided the longa perfecta and that which divided the longa imperfecta,”⁶² and in the former case four types of binary ligatures are to be read not only in the traditional manner of alteration as 1 + 2, but in 20% of the cases as 2 + 1.⁶³ As regards ternary ligatures cum opposita proprietate, Dittmer points out that “the notator is relatively uncertain in his application of the tractus.”⁶⁴ All this surely indicates that there is ample evidence of a notation which, as Dittmer himself puts it, “is not in a state of equilibrium,”⁶⁵ and it is plausible that equal lawlessness would apply to binariae cum opposita proprietate in third mode. In fact, there are in these motets only two cases in which the notator consciously distinguished between binary ligatures for a brevis recta and for a brevis altera, respectively, and both cases involve

⁵⁸ Cf. p. 270 *infra*.

⁵⁹ Four semibreves in one voice set against two adjacent breves in another; cf. p. 249 *supra*.

⁶⁰ Dittmer, “Binary Rhythm,” p. 42.

⁶¹ Dittmer, “The Ligatures of the Montpellier Manuscript,” *Musica disciplina* IX (1955), pp. 52-54.

⁶² *Ibid.*, p. 43.

⁶³ In modal and pre-Franconian notation of syllabic parts and of fractio of the fifth mode in melismatic parts the binary ligature necessarily has to serve both purposes.

⁶⁴ *Ibid.*, p. 42.

⁶⁵ *Ibid.*, p. 44. This conclusion weakens the conjectures regarding binary rhythm expressed by Handschin in “The Summer Canon” (1951), pp. 71f.

adjacent ligatures. They occur in the triplum of *Mo* 4, 51 (over “caruit”) and in the triplum of *Mo* 5, 112 (over “pour autrui”); the latter case is especially striking, since the second of the two ligatures originally had a tractus, which the scribe then carefully erased, because the situation required a notational distinction not usually called for.

Another consideration also militates against acceptance of this criterion. While ternary ligatures in the upper parts might be conceived to occupy only two tempora, the constellation ♪ ♫ ♬, which occurs in the duplum of one of the motets adduced by Dittmer (*Mo* 4, 51) would seem to be capable of ternary transcription only. Finally, Lambertus reports quite specifically that the binaria cum opposita proprietate may be written *pro altera brevi*,⁶⁶ for which opinion he is not attacked by his critic, the St.-Emmeram Anonymous. All these facts lead “to the conclusion that the original meaning of the upward drawn tractus was to show that this ligature had the total metric value of a brevis, whether this brevis be recta or altera.”⁶⁷

Some seventy years ago, William S. Rockstro in his article on the Summer canon in the first edition of Grove’s *Dictionary*⁶⁸ called attention to erasures in the notation of the piece. In 1901, H. E. Wooldridge, discussing the canon in the first volume of the *Oxford History of Music* (first edition),⁶⁹ pointed out that there were other alterations, which involved the addition of caudae to some of the breves, thus apparently changing them to longae. Both he and—some forty years later—Bukofzer,⁷⁰ with very minor differences, printed the restored version—consisting primarily of chains of English breves in multiples of two—in the original notation. Bukofzer also called attention to “alterations of a similar nature . . . in other compositions” in the same manuscript (London, British Museum, Harleian 978).⁷¹ The first who finally investigated these alterations systematically was Handschin,⁷² who pointed out that those in the other two pieces at issue differed somewhat from the changes in the notation of the Summer canon. In both pieces, which are syllabic and, in contrast to the canon, monophonic, the modal meaning of the original notation was presumably to be deduced from the text, and the alterations are an attempt at graphic clarification of the modal rhythms.⁷³ Wooldridge had

⁶⁶ Coussemaker, Vol. I, p. 274a; cf. note 134 *infra*.

⁶⁷ Dittmer, *op. cit.*, p. 42, note 8.

⁶⁸ (London, 1889), Vol. IV, p. 1.

⁶⁹ (Oxford, 1901-05), pp. 328f.

⁷⁰ “*Summ Is Icumen In*,” p. 87.

⁷¹ *Ibid.*, p. 86.

⁷² “The Summer Canon” (1949), pp. 69f.

⁷³ Since in the first of these pieces not only series of puncta, but also series of virgae were involved, the second hand applied erasures to the stems of some of the virgae.

felt that this situation also applied to the Summer canon,⁷⁴ and that its original notation corresponded to the use of undifferentiated simplices in the upper parts of Notre-Dame motets, whose notation gives no clue as to their rhythm. In 1944 Bukofzer challenged this view, arguing irrefutably that the series of breves in the unreformed notation must have had precise mensural meaning,⁷⁵ and bolstered his case with a previously unknown fragmentary Worcester composition, notated in the same manner; however, the tenor, which, in contrast to the pes of the Summer canon, was notated in ligatures, was to be read neither modally nor according to Franconian mensural principles.⁷⁶

Bukofzer, disregarding the possibility of alteration of alternate (*i.e.*, all even-numbered) breves in the chains, contended that all breves were equal. It was to a large extent because of his reliance on the concept of the supremacy of French medieval music, generally accepted ever since Ludwig formulated it, that he felt binary rhythm to be impossible in England before *ca.* 1310. While this rhythm exists in Continental motets going back to roughly the middle of the century, it is so rare that Bukofzer's disregard of them might not be considered to weaken seriously his revision of the date of the Summer canon.⁷⁷ But though successive pairs of breves are scrupulously avoided in the *Mo* and *Ba* manuscripts, the notation of the upper parts of motets in third (and fourth) mode constantly involves single pairs of breves which—with the exception of *Mo* 8,328—must be rendered unequally. One might well ask why Bukofzer's syllogism could not be reversed, in order to conclude that successive breves need not sound as rhythmically equal as they look. This was, in fact, suggested a few years later by Levy, who, in the course of his discussion of MS Princeton, Garrett 119, proposed that the rhythm, trochaic or iambic, of a tenor notated in modal ligatures might with fair certainty be taken as a guide for the interpretation of series of English breves in the notation cum littera of the upper parts; in other cases there seemed to him no criterion for the selection of equal, trochaic, or iambic rhythm.⁷⁸

The recent publication of the Worcester fragments in transcription⁷⁹ as well as in facsimiles⁸⁰ affords a considerably greater insight into the English repertoire of the Ars Antiqua and into the problem of duple rhythm

⁷⁴ *Op. cit.*, pp. 331f.

⁷⁵ "Summer Is Iucumen In," p. 88.

⁷⁶ *Ibid.*, p. 91.

⁷⁷ Handschin saw himself forced to disavow Bukofzer's dating, while accepting his interpretation of the rhythm ("The Summer Canon" [1949], pp. 56 and 71).

⁷⁸ Kenneth J. Levy, "New Material on the Early Motet in England," this JOURNAL IV (1951), p. 227f.

⁷⁹ Dittmer, *The Worcester Fragments* (American Institute of Musicology, Musicological Studies and Documents, Vol. II; Dallas, 1957).

⁸⁰ For a listing see Dittmer, *Worcester Add. 68 . . .* (Publications of Mediaeval Musical Manuscripts, No. 5; Brooklyn, 1959), pp. 5-13; a number of corrections are necessary, the most important of which involves the editor's inadvertent failure to publish a facsimile for *WF* No. 89.

than had been possible theretofore on the basis of the volume put out by Hughes in 1928.⁸¹ The latter had drawn attention to another case of "reformed notation," as Wooldridge had called it, in the two upper parts of *WF* No. 42,⁸² whose tenor is written in longae and a few longae duplices.⁸³ Dittmer, at least partly on the basis of his choice of binary rhythm for *WF* No. 41, believes that the rhythm represented by the paired breves of the original notation of No. 42 is likewise duplé.⁸⁴ Now, a comparison of the facsimile containing this piece with that of *WF* No. 45, which is part of the same fragment,⁸⁵ reveals similarly paired breves in No. 45; in this case Dittmer found it necessary to transcribe them in trochaic rhythm.

The fact that two scribes wrote Nos. 42 and 45, respectively, is not crucial; the notations are clearly and closely related. However, as the situation becomes vastly more complex when all the fragments are considered, an attempt at grouping the various hands becomes a necessity. The following table indicates the complexity of the situation:⁸⁶

Hand	<i>WF</i> No.
A	9-11, 70-77, 107(?)
A ₁	15-19, 38-40, 45, 46, 49-52, 54-63, 65, 66
A ₂	92, 95
B	12-14, 20-25, 42 (reformed); No. 41, a palimpsest, is similar, if not identical.

⁸¹ Dom Anselm Hughes, *Worcester Mediaeval Harmony* (Burnham).

⁸² *Ibid.*, p. 94. In citing Worcester compositions, the numbering of Dittmer's edition will, of course, be followed.

⁸³ It was the reformed state of the notation of this piece and of the Summer canon as well as the notation of the Princeton MS that prompted Levy's observations.

⁸⁴ Dittmer, "Binary Rhythm," pp. 50 and 52. He is forced, however, to insert a longa rest after the first note of the tenor, a fact nowhere acknowledged in his notes (*The Worcester Fragments*, p. 41).

⁸⁵ Though it may not have belonged to the same manuscript; cf. Dittmer, *The Worcester Fragments*, pp. 22f, 13f, and 15f.

⁸⁶ There is no intention to claim definitiveness; while it is not always possible to distinguish clearly between hands belonging to one group, such as A and A₁, or even at times between hands of closely related groups, e.g., A and B, major adjustments should not be necessary. The difficulties involved are underscored in Dittmer's statement that almost every composition from No. 1 to No. 40 "appears to have been notated by a different scribe" (*The Worcester Fragments*, p. 14, note 7). As regards *WF* No. 43, Dittmer states (p. 41) that the hand "is unfortunately not identical with any one of the hands of *Worc. Add. 68* Frag. XX, as maintained by" Hughes. Hughes, however, had merely said (*Worcester Mediaeval Harmony*, p. 105) that "the notation bears some traces of affinity" with *WF* Nos. 93 and 94; on the other hand, some relationship seems to exist between the hands of Nos. 43 and 96. In the case of fol. 22 (Nos. 38-40) the hand is so close to that of other pieces here attributed to A₁ that to insist on differences (*The Worcester Fragments*, p. 14, note 7) is unnecessary. As regards volume 4 (Nos. 70-77), it surely is related to volume 1; contrary to Dittmer's assertion, there are motets in both volumes in which the same "s" is used in the word "Pes" (e.g., fols. 8 and 37); cf. *The Worcester Fragments*, p. 14, note 9, and Dittmer, "The Dating and the Notation of the Worcester Fragments," *Musica disciplina* XI (1957), p. 11, note 43. Contrary to Dittmer's claim (*The Worcester Fragments*, p. 49), hands E₂ and G do not seem to be identical. *WF* Nos. 97-99 and 101-106 are not included in the above list, because their notation apparently precedes the introduction of paired-breve notation.

A or B	68, 69, 81, 100
C	1-8, 34-37, 93, 94
D	88
D ₁	29-33, 87, 89 (?—facsimile unavailable), 90-91
D ₂	26-28
E	43 (palimpsest), 96
E ₁	64, 108
E ₂	78-80
E ₃	53 (palimpsest)
F	44, 47, 48 (all palimpsests)
F ₁	109
G	67 (palimpsest)
G ₁	82-86

Only the 55 compositions written by scribes A, A₁, A₂, and B have the English rhomboid breve. Of these, half bring breves in pairs more or less occasionally—as many as eight successive breves occur in No. 9, one of the oldest of the listed pieces—while ten compositions written by other hands have paired (square) breves. To seven of the pieces with paired English breves (*WF* Nos. 9,⁸⁷ 10, 19, 45, 56, 81, 100) Dittmer applied ternary (trochaic) mensuration because the principle of *convenientia modorum*⁸⁸ makes this inevitable.⁸⁹ In one case (*WF* No. 14) the transcription evinces both ternary and binary mensuration. The remaining compositions (*WF* Nos. 12, 13, 15-18, 21-25, 41, 42 [unreformed], 65, 66 [= 18], 71-73, 75, 76, 95) are all transcribed in duple meter.⁹⁰

While in the seven cases listed before binary rhythm is impossible, of the remainder only Nos. 12, 15-18, 22, 41, and 65 seem to demand duple mensuration because of the complicating factor of the semibreve. For instance, the appearance of a ternaria cum opposita proprietate (which in the cases under discussion always appears as ) to take up the duration of the first or second half of a pes in third or fourth mode might be considered as an indication of duple rhythm. Another contingency precluding anything but binary mensuration of the longa would seem to be the simultaneous appearance of two independent semibreves and what ordinarily would be called an altered breve. Binary rhythm could be expected

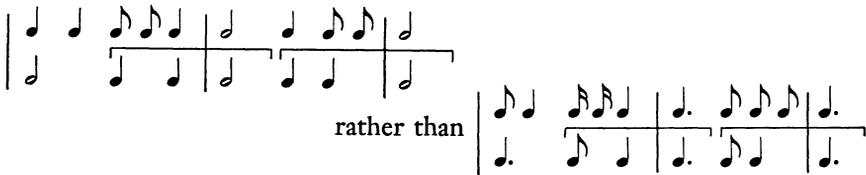
⁸⁷ The facsimile of No. 9 had already been published by Hughes (*Worcester Mediaeval Harmony*, p. 63).

⁸⁸ Combinatoriality, to borrow a term from the serialists. Cf. Anonymous VII (Coussemaker, Vol. I, p. 379a f).

⁸⁹ Dittmer, "Binary Rhythm," pp. 55f. Mme. Rokseth had already (1939) expressed the opinion that in the Worcester fragments trochaic as well as iambic interpretations should be applied to both binary and ternary ligatures, "selon le mode" (*Polyphonies*, Vol. IV, p. 91, note 4).

⁹⁰ There are three further fragmentary compositions in MS Oxford, Bodleian Library, Rawlinson c 400*, the paired English breves of which Dittmer also transcribed binarily (Dittmer, "An English Discantuum Volumen," *Musica disciplina* VIII (1954), pp. 50 and 52, and plates 1 and 2; the compositions are Nos. B, D, and E in Dittmer's edition). Finally, there is the case of ternary mensuration (trochaic) applied to pairs of English breves by Levy ("New Material," pp. 232-233 and fac. A).

with absolute certainty if two independent semibreves appear over both the first and the second breve of separate pedes of a composition in third and/or fourth mode, e.g.,



Yet, the one case in which this occurs (*WF* No. 10) nonetheless requires ternary mensuration and is so transcribed by Dittmer for the reason given before. In fact, apart from No. 10, Dittmer transcribes the English symbol for the semibreve (a rhomb with a short stem descending more or less perpendicularly from its left corner) as a quarter note in Nos. 11, 59, 60, 62, and 100,⁹¹ and as an eighth note in Nos. 12, 15, 16, 17, 65, and 72. In No. 10 it appears variously both as a quarter note and as an eighth note.

Fortunately, the situation is not quite so confusing as it seems, inasmuch as the English theorists, as well as others, give us several hints. A number of the theorists writing *ca.* 1250 or shortly thereafter, such as Johannes de Garlandia, define the breve as comprising three kinds, *i.e.*, the ordinary breve, the plicated breve, and the semibreve.⁹² Having described the various note symbols, Garlandia gives rules as to the use of the different note values. One of these rules reads as follows: *Regula est quod numquam ponuntur due breves, vel tres, vel quatuor, etc., pro brevi ubi possunt poni pro longa.*⁹³ (“It is a rule that two, three, or four, etc. breves never take the place of a breve where [in consistency with the mode] they can take the place of a long.”)

Clearly, if in different cases two “breves” can take the place of a breve (as semibreves) or of a long (as breves rectae), this must mean not only that the term “brevis” is a generic term, but also that the meaning of “semibrevis” is flexible.⁹⁴ Similarly, the author of the *Discantus positio vulgaris* and Anonymous VII both specify that four breves can take the place of a ternary longa.⁹⁵ Anonymous IV not only gives no special designation to the breve containing two tempora,⁹⁶ but often avoids the term “semibreve” for the subdivision of the brevis recta.⁹⁷ Elsewhere—and this

⁹¹ He criticizes Levy for applying essentially the same method in his transcription (“An English Discantum Volumen,” p. 42). Both Levy and Dittmer use half notes and quarter notes to represent longae imperfectae and breves rectae, respectively.

⁹² Coussemaker, Vol. I, p. 99a (Cserba, p. 197f) and Coussemaker, Vol. I, p. 178a.

⁹³ *Ibid.*, p. 178b.

⁹⁴ While this passage deals with ligatures, it applies equally to simplices, since *omnes figure non ligate debent reduci ad figuram compositam per equipollentiam* (*ibid.*, p. 181a).

⁹⁵ *Ibid.*, p. 95a (Cserba, p. 191); Coussemaker, Vol. I, p. 379a.

⁹⁶ *Ibid.*, p. 330a and p. 341a.

⁹⁷ *Ibid.*, 336b-338b. Cf. Wolf, *Geschichte der Mensural-Notation*, p. 4. Analogously, to Johannes de Garlandia, the younger, the minim was still a semibreve (*cf.* notes 17 and 21 *supra*).

is still more significant—he seems to refer to a breve as a semibreve;⁹⁸ this valuation of the semibreve as containing one tempus is also found in the treatise of Anonymous VII.⁹⁹ The remaining two passages in which Anonymous IV mentions the semibreve in no way contradict the evident flexibility of its definition. In the first of the two he also states that . . . *quandoque est tertia pars brevis; et hoc est quando tres per modum currentium ponuntur, et sic sunt tres pro brevi.*¹⁰⁰ (“Now and then it amounts to a third of a breve, *i.e.*, when three of them are written in the manner of currentes; in that way three take the place of a breve.”¹⁰¹)

What seems especially significant is that the theorists so frequently mention the semibreve together with the *plica brevis*. Twice Anonymous IV refers to the mysterious “*Elmuahym*,” which he says is synonymous with “*plica*,”¹⁰² which, in turn, is the same thing as the English semibreve (his “*Elmuarifa*”). Somewhat later he points out that there is another symbol *que dicitur Elmuahym, vel simile sibi*¹⁰³ (“which is called *Elmuahym*, or rather similar to it”). He continues with a statement that of two successive *Elmuahym* each is worth a semibreve; then follows the passage just cited, in which he declares that three placed together like currentes are worth a *brevis recta*. There is every reason to assume that both the *plica* attached to a *brevis* and the semibreve were originally variable in value in the sense that each could be not only half a *brevis recta*, but also half a *brevis duorum temporum*. (The first to assign a definite value to the semibreve seems to have been Franco.) It certainly would have been illogical to assign a fixed value to the semibreve if that of the breve was flexible.¹⁰⁴ Apparently, any time two equal “*breves*” formed a pair to subdivide the next larger value, each, being half a pair, was known as a semibreve, whether its value was one tempus or half a tempus. The theorists not only sanction the *semibrevis unius temporis*, they even demand that, whenever possible, the mensuration of a semibreve should be equal to that of a *brevis recta*.¹⁰⁵ A result of this is the notation reported by Odington for compositions in first mode (his Franconian outlook compels him to register his disapproval): *Atque alii in isto modo longam divisam in breves non*

⁹⁸ Coussemaker, Vol. I, p. 361b.

⁹⁹ *Ibid.*, p. 380a.

¹⁰⁰ *Ibid.*, p. 341a. The other passage is *ibid.*, p. 350a.

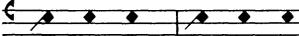
¹⁰¹ In the *WF* this occurs only in Nos. 11 and 69.

¹⁰² Coussemaker, Vol. I, pp. 339a f. Dittmer's translation of this passage (*Anonymous IV*, p. 32) is in error; Anonymous IV here refers to squares that have become rectangles by vertical (not horizontal) lengthening, as in the handwritings of scribes E, E_a, and F₁ in the Worcester Fragments, or in some of the note shapes in MS London, Westminster Abbey 33327 (Dittmer, *Worcester Add. 68*), the hand of which is similar to E_a.

¹⁰³ Coussemaker, Vol. I, p. 341a.

¹⁰⁴ Cf. Michalitschke, “Zur Frage der *Longa* . . .,” *Zeitschrift für Musikwissenschaft* VIII (1925), p. 106. Cf. also Dittmer's conclusion regarding the *binaria cum opposita proprietate* in *Mo* (p. 263 *supra*).

¹⁰⁵ Cf. the passage from Garlandia's treatise quoted p. 267 *supra*.

ligatas sic signant:  *Et semibreves omnes faciunt caudatas et cum brevibus uniformes, sic:*  ¹⁰⁶
 (“And others indicate a longa divided into syllabic breves in this mode as follows: . . . And they affix tails to all semibreves and give them the same shape as breves: . . .”)

In consequence, it turns out that there remains no compelling reason to apply binary mensuration to the longa in any of the compositions using the English breve, except in the progressive *WF* No. 16, which, because of the disposition of the semibreves is comparable to *Mo* 8,328 (*mos lascivus* in third mode).¹⁰⁷ To be sure, the possibility that the binary mensuration of the longa in *WF* No. 16 may also have been applied to Nos. 14, 15, and 17, which are all stylistically progressive, cannot be denied absolutely, especially as the relative frequency of adjacent plicated breves seems like a way station to the equalization of the breves brought about by semibreves in No. 16; while both Petrus Le Viser and Odington mention semibreves when discussing *modus imperfectus*, neither specifies that binary mensuration of the longa can take place only in a composition containing independent semibreves.

Iterato sunt et alii modi qui dicuntur modi inusitati, quasi irregulares quævis non sint, veluti in partibus Anglie et alibi, cum dicunt longa, longa, brevis; longa, longa, brevis.

Again, there also are other modes, which are said to be unusual—though it is not as if they were against the rules—as for instance in parts of England and elsewhere, when they render a passage long, long, short; long, long, short.

The existence of this type of rhythm, here reported by Anonymous IV,¹⁰⁸ is also mentioned by another Englishman, Johannes de Garlandia.¹⁰⁹

¹⁰⁶ Coussemaker, Vol. I, p. 244a. The notational symbols printed by Coussemaker are incorrect, as was pointed out by Bukofzer (Hughes, “The Motet and Allied Forms,” in *Early Medieval Music Up to 1300* [New Oxford History of Music, Vol. II; London, 1954], p. 369, note 2); the first example must undoubtedly be read as indicated above, since Odington specifically states that breve and semibreve look alike; that this *valde est inconveniens*, as he puts it, has been amply proved by the career of English notation in modern musicology. In view of the English cultivation of alternate third mode to be discussed presently, there is nothing inconsistent about the appearance of this notational device in the first mode. A symbol similar to the so-called English semibreve is used to indicate a *brevis unius temporis* in two *Las Huelgas* motets (Nos. 101 and 104); cf. Anglès, *Las Huelgas*, Vol. I, pp. 261 and 266.

¹⁰⁷ Cf. Dittmer, “Binary Rhythm,” p. 50. Certain other stylistic features of *WF* No. 16 are likewise advanced. Dittmer’s argument (p. 47) that rests are differentiated in hocket compositions and that therefore *WF* Nos. 25 and 75 have duplé mensuration of the longa is spurious, since, apart from the fact that only No. 25 displays hocket technique, long and breve rests are not differentiated with mensural precision. Besides, in Procrustean fashion, he has to change a long into a breve (No. 75, m. 32); there is no mention of this anywhere.

¹⁰⁸ Coussemaker, Vol. I, p. 328a. The passage is quoted by Dittmer in a grievously bowdlerized version. (“Binary Rhythm,” p. 41; that “inusitati” is a misprint in Coussemaker’s edition can be found in his list of “Emendenda;” the correction had already been applied as self-evident by Michalitschke [*Die Theorie des Modus*, p. 30, note 30].)

¹⁰⁹ Coussemaker, Vol. I, p. 97b and p. 98a (Cserba, pp. 195 and 196). The subse-

1. *Aliqui addunt modos alios; sed non est necessarium illos numerare, ut due longe et brevis, quia per istos VI sufficientiam possumus habere.*

Some add other modes; but it is not necessary to give them a number—as, for instance, two longae and a brevis—because we can make do with those six.

2. *Quare tertius modus et quartus potius reducuntur ad secundum quam ad primum.*

Wherefore the third and fourth modes are preferably reduced to the second, rather than to the first.

Anonymous IV reports the fractio of the third mode impartially, according to either second mode, which he mentions first, or first mode.¹¹⁰ Both theorists agree that the ternary longa of the third and fourth modes can be counted either $2 + 1$ or $1 + 2$.¹¹¹

Regarding the notation of this “unusual” variant of the third mode—if that is what it is—we are left in the dark, which is not dispelled by the tantalizingly unenlightening statement of Anonymous IV that *quidam vero fuit alius ANGLICUS, et habebat modum Anglicanum notandi*.¹¹² (“There was, however, somebody else, an Englishman, and he notated in the English manner.”) A passage in the same treatise, alluded to previously,¹¹³ may hold the answer. In a section dealing with the notation of the ordines of the modes, Anonymous IV describes the first ordo of the third mode as follows: *Una longa, tres ligate, cum una longa*¹¹⁴ *trium temporum, etc.*¹¹⁵ (“One long, a ternary ligature, and a rest of three beats, etc.”) In his long-winded way he then mechanically enumerates and describes the corresponding notation of the second, third, and fourth ordines, and continues: *Quare sequitur quod tres ligate post longam, due prime sunt breves. Sed in quodam modo irregulari, veluti canunt Anglici, dicunt de isto modo duas ligatas, et unam brevem etc., et quandoque eis competit, quandoque non.* In his article on the ligatures in the Montpellier manuscript Dittmer cites this passage plus the one quoted on p. 269 *supra* as substantiation for this alternate third mode, whereas in another article he concludes what seems a rather strained and unconvincing effort to relate it to binary third mode with the remark that “admittedly, however, this passage is rather obscure.”¹¹⁶ While emendation of intractable passages in such treatises can be a risky business, the pertinence of this one becomes apparent if “longas” is substituted for

quent passage quoted by Dittmer (“Binary Rhythm,” p. 40) (*omnes modi ad primum et ad secundum possint reduci*—“all modes can be reduced to first and second mode”) is, strictly speaking, not relevant, since, while this pertains to all modes, it does not apply equally to each. Otherwise, there would be a conflict with the statement preceding it.

¹¹⁰ Coussemaker, Vol. I, p. 338b.

¹¹¹ *Ibid.*, p. 98a (Cserba, p. 196); Coussemaker, Vol. I, pp. 330a and 338b.

¹¹² *Ibid.*, p. 344b.

¹¹³ Cf. p. 262 and note 58 *supra*.

¹¹⁴ “Pausatione” must be inserted here, as suggested by Dittmer (*Anonymous IV*, p. 4).

¹¹⁵ Coussemaker, Vol. I, p. 346b.

¹¹⁶ “Binary Rhythm,” p. 49, note 7; cf. Dittmer, “The Ligatures,” p. 38, note 5.

“ligatas.”¹¹⁷ (“Therefore it follows that when a ternary ligature follows a longa, the first two notes are breves. But in a manner somewhat against the rules, as for instance the English sing, they render this mode two longae, one brevis, etc., and sometimes it [*i.e.*, the breve] corresponds to them [the longs, *i.e.*, one of them], sometimes not.”) The correction, which at least brings some sense out of obscurity, leaves the passage quite consonant with the style of Anonymous IV, generally, and reveals it to be in agreement with his previous definition of this mode. Since he has just described the notation of regular third mode, it is a fair assumption that the author expects the reader to infer that the “irregular” mode, though rendered differently, is notated in the same way. It is, of course, the notation with paired breves in which the brevis sometimes corresponds to the longa (imperfecta) and in which ligatures have to be interpreted accordingly (in contrast to regular third mode).¹¹⁸

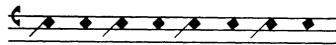
It is evident that the manner in which “the English sing” has a good bit in common with the first mode. And, in fact, the English compositions to which the “alternate third mode” applies are very flexible in the application of the modal pattern; mostly it is more a free mixture of the first and fifth modes than a case of occasional *reductio modi* (*i.e.*, from fifth, or alternate third, to first). It is for this reason that notational features that were doubtless characteristic originally of alternate third mode in pieces notated with rhomboid breves came to be applied irregularly to the “convenient” first mode and vice versa. This is proved first of all by the fact that of three successive breves rectae cum littera in the compositions cited on p. 267 *supra*, one, two, or all three are notated as semibreves, regardless of the mode. (The same is true of Fragment A, Side 1, of the Princeton MS.¹¹⁹) Interchangeability is demonstrated further and most

¹¹⁷ Dittmer (*Anonymous IV*, pp. 3-5), lists 127 corrections of Coussemaker’s text, of which 18 were already in Coussemaker’s “Emendenda.” This emendation was first suggested by Handschin (“Conductus-Spicilegien,” *Archiv für Musikwissenschaft* IX [1952], p. 110, note 2.

¹¹⁸ Dittmer (“Binary Rhythm,” p. 48, note 7) feels that this excerpt cannot apply to the alternate form of the ternary third mode, since Anonymous IV had previously said, if somewhat hedgingly, that it was not against the rules (*cf.* p. 269 *supra*). However, he hedges here, too (“in quodam modo irregulari”), and while the whole matter may not exactly be against the rules, it is surely “irregular.”

¹¹⁹ It is not impossible that a somewhat puzzled Odington still referred to the alternate third and fourth modes in a paragraph following the description of certain unambiguous pre-Franconian practices quoted on pp. 260f *supra* (Coussemaker, Vol. I, p. 245a):

Et hic modus notandi in aliquo genere est incertus, sicut patet posterius in cantilenis, admixtis pausis diversis, qui [quia?] non determinatur quid breve et quid semibreve. Sic cum aliquando dividatur longa in duas breves et aliquando in tres vel quatuor notas quas currentes vocant, verum in simplicibus utuntur prius positus figuris pro brevi et semibreve, sic:



(And moreover, certain people apply this manner of notation ambiguously (as is clear in the case of the cantilenae [discussed] below, where the rests are inconsistently and indiscriminately written), because neither the breve nor the semibreve is properly distinguishable. Thus, while

strikingly in the top voice of *WF* No. 45, which has paired English breves, except in the last 35 measures where the same rhythm is expressed in first-mode notation cum littera; by the concordance of *WF* Nos. 19 and 56; and by No. 42, which is therefore a likely candidate for posterior notational reform. (Moreover, it is clear that the greater the amount of text contained in a composition and the more syllabic its treatment, the more troublesome the notation with undifferentiated breves must become. This applies to No. 42, which was thus particularly likely to be reformed, in view of the fact, proved conclusively by Dittmer, that this happened some twenty years after the original notation.)¹²⁰ If chains of paired breves in the syllabic sections of such compositions are indications of alternate third mode (or, in a more liberal sense, of Franco's first mode), this must surely apply to the unreformed notation of the Summer canon as well, which comes from the same region and is stylistically related.¹²¹ It follows that, aside from an incorrect premise (non-mensural simplices), Wooldridge was right after all.

While it would be needless inconsistency to consider either duple rhythm or regular third mode for Worcester compositions notated with the English breve (except *WF* No. 16 and, perhaps, Nos. 14, 15, and 17), the supposition must be entertained that Continental notational symbols mean Continental rhythms. (It also seems likely that pieces notated in the Continental fashion would be more modern, since one of the Worcester compositions with paired English breves—No. 81—contains a work by Perotin and is thus probably older and perhaps written down earlier than

the longa is sometimes divided into two breves and sometimes into three or four notes, which they call "currentes," yet when these are not ligated they use for the breve as well as the semibreve the symbols previously put down, *i.e.* . . .)

One wonders whether one element of the ambiguity in this type of notation is perhaps the trochaic rhythm of the first mode with which these note symbols were associated according to Odington's own testimony (*cf.* pp. 268f *supra*). Unfortunately, he did not fulfill his promise of a discussion of cantilena, which might have furnished further proof for the conclusion that in the Worcester area the rhythmic pattern 3 + 2 + 1 was thought of as long-breve-breve (third mode), or, for that matter, as long-long-breve (first mode).

¹²⁰ Dittmer, "Binary Rhythm," pp. 51f.

¹²¹ *Cf.* *WF* No. 55. In fact, Harrison has shown that this extraordinary piece could be considered a fourteen-part *Stimmtausch* motet, in which two of the parts constitute the pes with its own material and *Stimmtausch* (Frank Ll. Harrison, *Music in Medieval Britain* [London, 1958], pp. 142-143). Furthermore, *WF* No. 21 also seems to have been intended as a canon, not as a rondellus, as Dittmer assumes; no other rondellus is notated like this piece (*i.e.*, one voice only, with subsequent entrances indicated), and no other Worcester compositions consist of only one section of music, whose three phrases are to be stated over and over (five and one-third times in the leading voice). Moreover, unlike other rondelli, but like the Summer canon, it has no non-imitative coda. It is thus anything but apparent that all the voices begin together, as Dittmer believes (*The Worcester Fragments*, p. 38). Admittedly, the difference is relatively small in this style.

the others.¹²²) The appearance of second mode in *WF* Nos. 1, 29, and 87 (in addition to the presumably later palimpsests 44, 47, and 78) makes this assumption even more likely.¹²³ Dittmer transcribed such of these pieces as have paired breves (*WF* Nos. 4-8, 27, 30, 32, 35, and 96) in duplé rhythm, with one exception (*WF* No. 5). The latter composition is the only one of this group in which the rests are at times—by no means consistently—written in such a way as to indicate Franco's first mode unequivocally. However, No. 27 apparently also requires trochaic rhythms. Since this piece was written by the same hand as that of the two surrounding compositions, which Dittmer considers to be in an "advanced notation,"¹²⁴ it seems precarious to transcribe all ternary ligatures cum proprietate et sine perfectione like ternary ligatures cum opposita proprietate (which occur twice, in the triplum in m. 14 and in the duplum in m. 58), while, on the other hand, transcribing binary ligatures cum proprietate et sine perfectione according to Franconian precepts.¹²⁵ Regular third mode is most unlikely; since paired semibreves seem to demand a trochaic interpretation in Nos. 26 and 28,¹²⁶ it is likely that the paired breves in No. 27 are meant to express the same rhythm according to somewhat older notational concepts. Moreover, No. 27 is stylistically related to the bulk of the Worcester compositions, the majority of which have English-breve notation. Finally, if alternate third mode is applied, the only apparent irregularities that result are that the modal binary ligatures still used must be read 2 + 1 and that a binary ligature cum opposita proprietate may take up one tempus or two tempora.¹²⁷ Dittmer has identified both of these irregularities in the Montpellier codex.¹²⁸

It would seem likely, then, that by analogy with *WF* Nos. 5 and 27, pieces with paired square breves in the Worcester repertoire also require alternate third mode and that, apart from the later palimpsests and, perhaps, the three pieces in second mode, only *WF* No. 16 unmistakably

¹²² It certainly contains no minimae, as Dittmer asserts ("An English Discantum Volumen," p. 45).

¹²³ Of the Worcester compositions notated with English breves only No. 74 may be in second mode.

¹²⁴ "Binary Rhythm," p. 53, note 12.

¹²⁵ The ligature in m. 14 of the triplum is evidently a ternaria like that in m. 58 of the duplum.

¹²⁶ Cf. note 134 *infra*.

¹²⁷ Dittmer slightly overstates the case in claiming that in *WF* Nos. 27 and 96 binary ligatures cum opposita proprietate in one voice are used together with adjacent breves in another ("Binary Rhythm," p. 50). What happens in these pieces is that such ligatures appear on the first or the second of a pair of breves, but not in succession.

¹²⁸ Cf. pp. 262f *supra*. It is therefore not necessary to assume defective notation of binariae cum opposita proprietate (Dittmer, "Binary Rhythm," p. 53, where the binary ligature over "Maria" in m. 51 is used as an example; significantly, in his transcription of this ligature Dittmer had to disregard his own argument, while he neglected to point out that a tractus seems to be missing at the beginning of the ternaria over "alme" in m. 14). The case of *WF* No. 70 is inapplicable, since it employs the English breve.

represents a certain departure from the overall stylistic homogeneity, because its chains of independent semibreves compel binary mensuration of the third mode.¹²⁹ But an element of doubt remains, in view of MS University of Chicago, 654 app.¹³⁰ Its four fragmentary folios reveal a notation that is somewhat more advanced, at least insofar as the rests are indicated with painstaking exactitude. Of the nine more or less complete compositions remaining, only two (Nos. 1 and 3), after a first section in duple rhythm, employ ternary mensuration of the longa. While four of the pieces still have the English breve, this concentration on duple rhythm might nonetheless be held to indicate a somewhat later origin of the fragment. A local condition may well be involved.¹³¹ Meaux Abbey, which has not been disproved as the provenance of the Chicago manuscript, was located about six miles north of Hull and twelve miles from the North Sea. It is approximately 150 miles by air from Worcester, as well as from Reading. The almost exclusive use of a type of rhythm identified as "lascivus" by Petrus Le Viser seems a strange phenomenon in music of a Cistercian abbey and brings to mind related aspects of the other Meaux Abbey manuscript, discussed by Harrison.¹³²

¹²⁹ Cf. p. 269 *supra*. *WF* Nos. 26 and 28, which are basically in first mode, are even more progressive in their use of semibreves; cf. Dittmer's discussion of these pieces in "Binary Rhythm," p. 53, note 12. In each work the final section is an example of *mos lascivus* notated in the modern way. The end of *WF* No. 26 demonstrates strikingly how an unpatterned sixth-mode tenor can undermine consciousness of ternary mensuration (cf. note 182 *infra*).

¹³⁰ Dittmer, *Oxford, Latin Liturgical D 20 . . .* (Publications of Mediaeval Musical Manuscripts, No. 6; Brooklyn, 1960), pp. 6-10, 48-75.

¹³¹ The diversity of styles and practices in England near the turn of the century is shown further by MS London, Westminster Abbey 33327, which employs Continental notation and contains compositions in regular third mode.

¹³² *Music in Medieval Britain*, p. 275. At least in Yorkshire, however, the secular affairs of the Cistercians, *i.e.*, the wool trade, litigations, business failures and successes, etc., came to be of primary importance and concern to them (cf. David Knowles, *The Religious Orders in England* [Cambridge, 1949], Vol. I, pp. 68f), and there can be little doubt that many of the original strictures, including those on the ritual, were relaxed, if not disregarded. While there may be no need to go so far as to report a total perversion of the original Cistercian ideals in Yorkshire (cf. Joseph S. Fletcher, *The Cistercians in Yorkshire* [London, 1919], pp. 117 and 170), two authors who can hardly be said to be biased against monasticism state that "the Cistercians probably had reached the turning point in their history in Yorkshire by the end of the thirteenth century" (Francis A. Mullin, *A History of the Work of the Cistercians in Yorkshire* [Washington, 1932], pp. 106f) and that they "retained something of their reputation for austerity until the middle of the [13th] century" (Knowles, *op. cit.*, p. 316). Roger L. Palmer (*English Monasteries in the Middle Ages* [London, 1930], pp. 86 and 212) shows the same to be true of their architecture and art work, adding that by the second half of the 14th century there could no longer be any doubt about "the growing resemblance of Cistercian customs to the normal monastic usage." (*Op. cit.*, p. 92; cf. also Bukofzer, *Studies in Medieval and Renaissance Music* [New York, 1950], pp. 104f.) The use of red ink in a Cistercian musical manuscript is therefore even less shocking than abbot Huby's tower (cf. Denis Stevens, "The Second Fountains Fragment: A Postscript," *Music & Letters* XXXIX [1958], p. 151). As regards the Cistercians' music, there could have been some assimilation of secular practices be-

No. 3 of the Chicago manuscript is also preserved in the Worcester fragments (No. 93), where the rests—as in *WF* No. 5, which seems to have been written by the same scribe—are likewise carefully placed in the staff. Unfortunately, the first section is missing, so that it is impossible to tell whether binary rhythm was employed in the Worcester concordance. However, another of the Worcester pieces (No. 32), written by one of the hands related to that of the Chicago manuscript, has rests drawn through two spaces, with only a few, possibly accidental, exceptions. This piece probably is in duplé rhythm; there can be no certainty, though, since the composition is quite fragmentary and the notation puzzling, to say the least.¹³³

In addition to the compositions in the Chicago manuscript, to *WF* No. 16, perhaps Nos. 14, 15, and 17, and, quite possibly, No. 32, the following definitely apply binary mensuration to the longa: *WF* Nos. 67, 82-86, and 109. All these are quite late. Nos. 67 and 109 are in Franconian notation, so that the semibreves should not be rendered equally.¹³⁴ While

cause of the presence of numerous lay brethren, a condition of Cistercian monasticism.

There are several specific instances in the history of Meaux Abbey that have some relevance. To the copious material presented by Richard L. Greene ("Two Medieval Manuscripts . . .," this *JOURNAL* VII [1954], pp. 21ff) three further items may be added. The chronicler of the abbey reports that in the early years of the 14th century altars were decorated with paintings, tablets, and enamel work (*Chronica Monasterii de Melsa*, ed. by Edward A. Bond, in *Rerum Britannicarum medii aevi scriptores* [London, 1866-68], Vol. XLIII, 3, p. lviii), and that toward the end of the century decorations, utensils, and vestments of the utmost splendor and luxury were made for Meaux (*ibid.*, p. xxx; for the staggering list see pp. 222-229). In the 1290's, the approximate time the Chicago manuscript was written, a chantry was established in Ottringham as a dependency of Meaux Abbey. The rules drawn up by the abbot for the detachment of seven monks assigned to this chantry caution them against "wandering about in pairs, and keeping idle company. There is express provision against quarrelling with each other; and they are emphatically prohibited from entering taverns or attending public shows" (*op. cit.*, Vol. XLIII, 2, p. xxvii; *cf.* also p. 200). Soon one of the monks was replaced by a secular priest (*ibid.*, pp. 196 and 201), and "notwithstanding the excellent exhortations of the abbot Roger, the effect of this exposure of the brethren to the dangers of self-government appears to have been injurious to them. Scandals grew out of it and increased daily. It was found that the situation of the chantry afforded temptations to and facilities for vicious indulgences; and, after the lapse of twenty-four years," the chantry was removed to the immediate neighborhood of the parent establishment (*ibid.*, pp. xxviii; *cf.* also pp. 294f).

Toward the end of the 13th century begin the relaxations of some of the stringent original rules that are symptomatic of the incipient decline of the order. The other (later) Meaux Abbey manuscript comes from a time when the convent had "advanced in age and lost its spiritual character" (Bond, *op. cit.*, Vol. XLIII, 3, p. xlvi).¹³³

¹³³ The triplum has paired breves, while the duplum contains only two successive breves, to the first of which someone later added a tail; their transcription is problematic. (Dittmer equates each with a longa imperfecta.)

¹³⁴ While there seems no justification for Dittmer's binary mensuration of the breves, it is likely that, contrary to Franconian practice, the English method of alteration ($2 + 1$) was applied to the semibreves in at least some English compositions of the time, including such pieces as *WF* No. 67. In the first place, the notation of the two earlier English concordances of No. 67 unequivocally indicates trochaic

what Petrus Le Viser calls the semilonga makes occasional appearances, both pieces abound with semibreves and generally accord with his definition of the *mos lascivus* employing breves and semibreves. Nos. 83-86 (and probably No. 82 as well) are in tempus imperfectum, prolatio major.

Indications are—although no proof or disproof is possible without facsimiles—that the applicable pieces in MSS Oxford, Bodleian Library, Mus. c 60 and Corpus Christi College 497 should also be read in alternate third mode.¹³⁵ There is strong circumstantial evidence in the case of the Corpus Christi manuscript. One of its fragmentary compositions exists in a Montpellier concordance (*Mo* 4, 70); its tenor (*In odorem*) appears only once again in *Mo* (5, 95), where a longa followed by two breves stands for \dot{J} . \dot{J} . \dot{J} . The suspicion seems justified that the same rhythm applies to the Corpus Christi motet.

rhythm (cf. Levy, "New Material," p. 228). Secondly, the binary ligature cum opposita proprietate must be read $2 + 1$ in a number of English manuscripts, e.g., Oxford, Bodleian Library, Fairfax 27; Mus. d. 143; Harlow 55; London, British Museum, Sloane 1210 (facsimiles in Ernst Apfel, *Studien* . . . [Heidelberg, 1959], Vol. II, p. 14, and Stainer, *Early Bodleian Music*, Vol. I); the Fragment Coussemaker (cf. Handschin, "Miscellanea," *Acta musicologica* VII (1935), p. 160); MS Cambridge, University Library Add. 710 (cf. *New Oxford History of Music*, Vol. III, p. 116); and perhaps also MS Oxford, New College 362. Apel (*Notation*, p. 339, note 1) mentions that the St.-Emmeram Anonymous sanctioned such a valuation of "groups of two semibreves." However, the passage (see Sowa, *Mensuraltraktat*, p. 51) referred to is inapplicable because the theorist promptly proceeds to dispute this interpretation in favor of the conventional valuation of this ligature, after having identified the most important of the adherents of the false doctrine as "Magister Lambertus." Now, Lambert, writing in the first half of the 1270's (cf. Sowa, p. xvii; not ca. 1250-60, as Bukofzer, though writing in 1944, suggests [*Summer Is Icumen In*," p. 83, note 3]), sanctions the rendition of such a ligature as either $1 + 2$ or $2 + 1$ (Coussemaker, Vol. I, p. 274a) and grants the same latitude in the case of pairs of independent semibreves (*ibid.*, p. 272b); it is likely that it finds its practical application in *WF* Nos. 26 and 28 as well as 67. (Contrary to Apel's supposition, this practice does not apply to Petronian notation.) The occasional English use of a swallow-tailed semibreve to indicate alteration may well be due to this ambivalence. The symbol, which appears in both Fountains Abbey manuscripts (cf. Bukofzer, *Studies*, p. 97, and H. K. Andrews and Thurston Dart, "Fourteenth-Century Polyphony in a Fountains Abbey MS Book," *Music & Letters* XXXIX [1958], p. 9), was reported with disapproval by Pseudo-Tunstede and Hanboys; the latter identifies its inventor as an Englishman (cf. Wolf, *Geschichte der Mensural-Notation*, p. 122).

Lambert also points out that binariae cum opposita proprietate aliquando pro altera brevi pomuntur (Coussemaker, Vol. I, p. 274a). Furthermore, he uses the English form of the conjunctura in some of his examples elsewhere (Reaney, "Lambertus," *Die Musik in Geschichte und Gegenwart*, Vol. VIII, col. 131). His treatise contains ternary and quaternary ligatures with tractus attached to middle notes (Coussemaker, Vol. I, p. 275a and p. 276a), a practice encountered in England (see the facsimile of fol. 1 of MS London, British Museum, Add. 40725 in Apfel, *Studien*, Vol. II, p. 14; cf. also Bukofzer, *Studies*, p. 97, and Andrews and Dart, *loc. cit.*, regarding the appearance of this notational device in the two Fountains Abbey manuscripts). Finally, Lambertus is an important source for the *Quatuor principalia musicae*, preserved in English sources only (Reaney, *loc. cit.*). While these facts may be insufficient to sustain Wolf's opinion of Lambert's nationality (*Handbuch*, p. 243), they suggest strongly that at least some aspects of his work reflect English practices (cf. Handschin, "The Summer Canon" [1951], p. 107, and Machabey, *Notations*, p. 61, note 1).

¹³⁵ Cf. Dittmer, "Beiträge zum Studium der Worcester-Fragmente," *Die Musikforschung* X (1957), pp. 33f, where two samples are offered in duple rhythm.

The use of paired-breve notation by scribes writing Continental note shapes makes chronological differentiation difficult. While the English breve was a device of long standing, there is no reason to assume that all pieces containing it were for that reason necessarily written earlier than those notated in Continental fashion. In fact, unless volume I of the Worcester fragments¹³⁶ came from more than one manuscript, the original foliation indicates that a scribe with Continental outlook began the collection. Thus, Dittmer does not employ the difference in the original hands as a criterion for dating the contents of the manuscripts. While he gives no chronological table of the compositions of the West English school, it can be inferred from his presentation:¹³⁷

<i>WF</i> Nos. 97-106	<i>ca.</i> 1200
<i>WF</i> No. 81	<i>ca.</i> 1230
<i>WF</i> Nos. 1-40, 42, 45, 46, 49-52, 54-66, 68-77, 93-96, and MS Oxford, Bodleian Library, Rawlinson c 400*	} <i>ca.</i> 1280
<i>WF</i> Nos. 41 and 53	
<i>WF</i> Nos. 82-92, 107-109	<i>ca.</i> 1295
<i>WF</i> Nos. 43, 44, 47, 48, 67, 78-80	<i>ca.</i> 1300
	first quarter of the 14th century

In view of stylistic considerations, concordances with *Mo*, documentary personnel data, and the theorists' evidence, it seems advisable to regard the bulk of the compositions as having been composed between *ca.* 1265 and *ca.* 1280, thus subtracting no less than about ten years from the date given by Dittmer.¹³⁸ He bases it on the fact that concordances exist between a number of these pieces and the index to a lost manuscript from Reading, part of which had been compiled and probably composed by a monk who is known to have been a member of the priory of Leominster (near Worcester, and a dependency of Reading Abbey). However, the available evidence leaves little doubt that at least the earlier of these compositions cannot have been written later than the 1270's, and in all probability, they date from the first half of that decade, perhaps even from the 1260's; the slight revision of the date thus accords more closely with Schofield's and Handschin's conclusions.¹³⁹ In addition, the following adjust-

¹³⁶ Cf. Dittmer, *The Worcester Fragments*, pp. 13f.

¹³⁷ Dittmer, "The Dating and the Notation of the Worcester Fragments." Reaney's dating of the Rawlinson manuscript ("middle of the fourteenth century") is surely in error ("Oxford Handschriften," *Die Musik in Geschichte und Gegenwart*, Vol. X, col. 513).

¹³⁸ Presumably he no longer considers them to have been inscribed as early as *ca.* 1250, as he assumed elsewhere ("Binary Rhythm," p. 56). There are good reasons for believing that the tradition which produced the Summer canon existed before the middle of the 13th century, and that what has come down to us are not only remnants, but the last remnants of this tradition.

¹³⁹ Cf. B. Schofield, "The Provenance and Date of 'Sumer Is Icumen in,'" *The Music Review* IX (1948), pp. 81-86; Handschin, "The Summer Canon" (1949), pp. 88f; Dittmer, "An English Discantum Volumen," pp. 35ff; Dittmer, "The Dating," p. 5. According to Rokseth's dating of the *Mo* concordances of Worcester compositions,

ments suggest themselves: *WF* No. 81 may well be ten or twenty years later than *ca.* 1230; No. 107 dates from the same time as the main body of the *WF*, as do Nos. 92-95, the Summer canon,¹⁴⁰ Fragment A, Side 1, and Fragment B of the MS Princeton, Garrett 119, and, probably, MSS Oxford, Bodleian Library, Mus. c 60 and Corpus Christi College 497; the Worcester pieces written by hands D, D₁, and D₂ probably date from *ca.* 1280-90; the date of No. 41 may be set as approximately 1280, while the following compositions are likely to date from the period *ca.* 1295-*ca.* 1315: Nos. 43, 44, 47, 48, 53, 64 (which may have been a later entry on an originally blank page), 67, 78-80, 96, 108, 109, and Side 2, Fragment A of the Princeton Manuscript; *WF* Nos. 82-86 cannot be much earlier than *ca.* 1320 because of the presence—in all but No. 82—of minims,¹⁴¹ while No. 82a (not transcribable) has of all the Worcester pieces the most advanced notation, and probably dates from the middle of the 14th century.

The use of chains of paired breves to indicate reiterant trochaic rhythms is an English specialty. However, Dittmer has called attention to the intriguing cases of *Hu* No. 90 and *Mo* 5, 95, in which single pairs of breves must be interpreted 2 + 1.¹⁴² That the single pairs in *Hu* No. 90 (mm. 24-42) represent alternate third mode is clear from its concordances in *Ba* (No. 67) and *Mo* (3, 42),¹⁴³ where these rhythms are expressed conventionally. The same situation prevails in the case of *Mo* 5, 95, where the concordance in *Ba* (No. 62) also replaces the first of two breves with a longa. The other concordance (*Cl*, fols. 384^v-385^v) agrees more or less with *Mo*. All three scribes (*Cl*, *Mo*, *Ba*, in probable chronological order) had their troubles with the ligatures. The scribe of *Ba* expresses trochaic rhythms appearing simultaneously in both upper voices with two different descending ligatures, one of which—a binaria cum

WF No. 95 (= *Mo* 4, 68) would have to be dated "avant 1240" (*Polyphonies*, Vol. IV, pp. 139f).

¹⁴⁰ It may well date from *ca.* 1260, if not earlier; cf. Schofield, *op. cit.*; also note 138 *supra*. Shortly before his death, Bukofzer, too, seemed ready to disavow the late date of the Summer canon he had championed in 1944 ("Changing Aspects of Medieval and Renaissance Music," *The Musical Quarterly* XLIV [1958], p. 5).

¹⁴¹ Although Hughes had already mentioned them (*Worcester Mediaeval Harmony*, p. 59), Dittmer unaccountably disregards them. The pieces are all transcribed in duple meter, with the result that two semibreves followed by a minim in tempus imperfectum, prolatio major, are rendered by two sixteenth-notes followed by an eighth-note. (The presence of minims had earlier been acknowledged by Dittmer himself in "An English Discantum Volumen," p. 45.)

¹⁴² Dittmer, "The Ligatures," p. 38, note 5. While *Mo* 5, 95 is there cited by Dittmer as an example of alternate third mode, he later ("Beiträge," p. 38, note 17) decided that it and its model, perhaps even the source clausula in *W*₁ and *F*, are in duple rhythm. In *Anonymous IV*, p. 71, note 1, his questionable interpretation of the irregular modes of *Anonymous IV* even leads him to suggest the possibility of binary rhythm in organum duplum.

¹⁴³ Anglès transcribed the paired breves iambically, thus leaving the motet, which has only trochaic rhythms elsewhere, modally inconsistent, an exceptional case in the manuscript.

propriate et sine perfectione—is otherwise consistently used by him to express two ligated breves. The other two scribes go to a great deal of trouble to thicken the heads of the first note of the first three of four binary ligatures¹⁴⁴ in the duplum in order to indicate that the interpretation demanded here runs counter to the usual modal tradition. (Particularly *Cl* is still quite faithful in the application of modal ligatures.) Now, it turns out that the composition immediately preceding *Ba* No. 62, which also exists as a triple motet in *Mo* (2, 35 on the tenor “Mors”), is another such case, apparently not noticed by Dittmer. In all but one of the fourteen instances in which the rhythm $\dot{\text{J}} \cdot \dot{\text{J}} \dot{\text{J}}$ appears in the upper parts it is notated long-breve-breve in *Mo*. The scribe of *Ba* changes the first of a pair of breves in *Mo* to a long, where another voice has a trochaic rhythm that in *Mo* is also expressed by a longa and a brevis. But wherever in *Mo* two upper voices have paired breves more or less simultaneously, *Ba* also has them.¹⁴⁵ If Continental principles of alteration are applied to these passages, as Aubry did in his transcription,¹⁴⁶ the result is that, similar to the case of *Hu* No. 90, *Ba* No. 61 is the only modally inconsistent piece in the entire collection. For all three pieces alternate third mode must have been intended. This is borne out by the notation of the applicable passages in the source clausulae. Two further cases in *Mo* (3, 44 and 6,245) which express the rhythm $\dot{\text{J}} \cdot \dot{\text{J}} \dot{\text{J}}$ as long-breve-breve are likewise based on clausulae that have third-mode ligature patterns in the corresponding places.¹⁴⁷ A sixth case that should be added is that of the organum with

¹⁴⁴ This notational device is not uncommon in *W*₁ (cf. Handschin, “Conductus-Spicilegien,” p. 118); it is reported only by the author of the *Discantus positio vulgaris* (Coussemaker, Vol. I, p. 94b; Cserba, p. 190).

¹⁴⁵ In the one case in which *Mo* has two longs followed by a breve (m. 39), *Ba* has a long followed by two breves, the second of which originally was a long before its tail was erased!

¹⁴⁶ Pierre Aubry, *Cent motets du XIII^e siècle* (Paris, 1908), Vol. II, pp. 130 and 132.

¹⁴⁷ The notation of No. 215, which has the same feature, was discussed together with No. 245 by Georg Kuhlmann (*Die zweistimmigen französischen Motetten . . .* [Würzburg, 1938], p. 102), who recognized that the long-long-breve mode of Anonymous IV might be involved. *Mo* 6,215 is not included in the above group, because no source clausula is known. *Mo* 3,50 might well be considered to belong to this group of pieces. It is an isolated motet duplum, basically in first mode, for which again a source clausula is not known. Quite frequently a longa is followed by two breves; the three notes were transcribed by Rokseth as $\dot{\text{J}} \cdot \dot{\text{J}} \dot{\text{J}}$. Unwittingly she erred, as both Tischler and Dittmer have proved these passages to be in sixth mode (Hans Tischler, “The Motet in Thirteenth-Century France” [Yale University Dissertation, 1942], Vol. II, pp. 99f; Dittmer, *A Central Source of Notre-Dame Polyphony* [Publications of Mediaeval Musical Manuscripts, No. 3; Brooklyn, 1959], pp. 142f; cf. *ibid.*, p. 49). Dupla in which first mode is occasionally reduced to sixth are anything but common in *Mo*. Since the notation sine littera of this mode is so similar to that of the third mode, it is possible that the scribe, somehow working with a melismatic model, was still familiar enough with the appearance of third-mode ligature patterns in a first-mode context to assume automatically and erroneously (not unlike Rokseth) that they signified alternate third mode. It is intriguing that exactly this piece lacks a tenor in *Mo*.

inserted motet, *Alleluia: Nativitas*, one of the earliest Worcester compositions (No. 81). In contrast to its Continental concordances, some passages contain paired breves;¹⁴⁸ the corresponding passages in the source clausulae have third-mode ligature patterns in all manuscripts.¹⁴⁹ Two, perhaps three, of these motets are by Perotin,¹⁵⁰ only one (*Hu* No. 90) derives from a "substitute" clausula.¹⁵¹

The rhythm of alternate third mode was, of course, nothing unusual in Perotin's time. It is generally referred to as a variant of first mode, in

¹⁴⁸ Cf. Dittmer, "Binary Rhythm," p. 56.

¹⁴⁹ MS Cambridge, Trinity Coll., o.2.1, which preserves three early versions of motets known from Continental sources (cf. Apfel, *Studien*, Vol. I, p. 25), contains two further specimens of this notation (fols. II-II'). A cursory examination of Tischler's transcriptions (*op. cit.*, Vol. II) of the nonmensurally notated Notre-Dame motets yields a few more such cases, e.g., *F* 2,20 and *W*, 2,43 (concordances of *Hu* No. 90, which thus confirm that particular case), *F* 1,13 (also on the tenor *Et gaudebit*) and *W*, 3,4—a motet that gently satirizes Englishmen and parodies their love of *Stimmtausch*.

¹⁵⁰ Tischler ("New Historical Aspects of the Parisian *Organa*," *Speculum* XXV [1950], p. 27) feels that Perotin must have died not much after 1200, since the treatises containing his name were written by theorists contemporary with the period in which the motet flourished; he goes on to point out that "most of them" discuss the motet (there are only two—cf. Frieder Zaminer, *Der Vatikanische Organum-Traktat* [Ottob. lat. 3025] [Münchener Veröffentlichungen zur Musikgeschichte, Vol. II; Tutzing, 1959], p. 160—both native Englishmen, who do not refer to the motet—cf. *infra*), but mention Perotin only in connection with organum or conductus. From this circumstance Tischler deduces that Perotin must have died before the rise of the motet, since it can be assumed that the theorists would have reported it, had he written any. However, two considerations militate against this deduction. In the first place, "motet" derives etymologically from the French "mot," which in the 12th century was often used to denote a stanza or strophe in French poetry (cf. Rolf Dammann, "Geschichte der Begriffsbestimmung Motette," *Archiv für Musikwissenschaft* XVI [1959], pp. 341ff). The conclusion is surely warranted that the word "motetus" must originally have signified a motet with French poetry in the upper part or parts, since it is most unlikely that medieval musicians would have Latinized a vernacular word in order to coin a term for the earliest Latin motets. Secondly, it does not seem far-fetched that such compositions were at first simply referred to as discantus. Not only was discantus a generic term for all measured polyphony, but as late as the 'sixties and 'seventies two theorists still point out that a motet is simply a species of discant with text. Franco states: *Cum diversis litteris fit discantus ut in motetis . . .* (Coussemaker, Vol. I, p. 130a; Cserba, p. 252), and Lambertus expresses himself similarly (Coussemaker, Vol. I, p. 269a f). Since the texts of the upper parts of the earliest motets generally were tropically related to the text or text incipit of the tenor, there is every reason to assume that such pieces were at times simply called discantus (or possibly even clausulae), since they "presented no new problem to the inheritors of the technique of writing sequences, proses, and tropes to pre-existing neumae" (Harrison, *Music in Medieval Britain*, p. 126). This may explain why neither Anonymous IV nor the other two theorists from England or under English influence (Garlandia and Lambertus) discuss the motet. At the same time, *WF* No. 81 is eloquent proof for this assumption. So are the early organal motets (troped organa), such as the Perotinian piece recently discussed by Machabey (cf. note 166 *infra*), and the four compositions mentioned on pp. 100, 105, and 329 of Ludwig's *Repertorium*. Thus, Perotin surely figured in the composition of the earliest Notre-Dame motets, as was suggested by Rokseth (*Polyphonies*, Vol. IV, pp. 50f). Regarding his year of death there is therefore another reason for concurring with Rokseth (*et al.*) rather than with Tischler.

¹⁵¹ Both Harrison (*Music in Medieval Britain*, pp. 123f) and Waite ("The Ab-

which the long and breve of the first of two successive pedes are replaced by a ternary long.¹⁵² A great many of Leonin's clausulae contain passages with this rhythmic pattern. However, to range these clausulae (as well as the motet sources just mentioned) under the concept of first

brevisation of the *Magnus Liber*," this JOURNAL XIV [1961], pp. 148-152) have recently broached the problem of the function of clausulae; they agree in considering all clausulae as ecclesiastical polyphony. Waite, after demonstrating that one of the short substitute clausulae, used to abbreviate the *Magnus liber*, fits its organum very well, concludes, contrary to Harrison, that therefore all clausulae were intended to be incorporated in the pre-existing organa. However, in contrast to the abbreviation clausulae, many of the longer clausulae do present fitting problems. Harrison suggests that the long "substitute" clausulae may have been performed during the Canon (somewhat in the manner of a Baroque sonata da chiesa). But is it not more plausible to assume that before long more and more of these pieces came to be written not for the church, but as a sort of clerical chamber music—for "Liebhaber" and "Lehrbegierige," to use Bachian terms? (It is well known that the motet, the offspring of the clausula, was intended for what Jacques de Liège called "sapientium societates" and "valentes cantores et layci sapientes"—cf. Besseler, "Ars antiqua," *Die Musik in Geschichte und Gegenwart*, Vol. I, col. 687.) Several circumstances argue for such a conclusion:

1. Anonymous IV (Coussemaker, Vol. I, p. 342a) does *not* say that the clausulae were intended to be inserted in organa; the statement that Perotin composed "plurima meliora" by no means warrants the assumption that they therefore inevitably replaced Leonin's settings.
2. The "abbreviation clausulae" avoid the multiple settings (cf. Ludwig, *Repertorium*, p. 94) that render so many of the other independent clausulae liturgically meaningless.
3. The "abbreviation clausulae" are rhythmically conservative, while the modal variety of the other independent clausulae often seems unfitting for the predominantly trochaic rhythms of the *Magnus liber* and Perotin's contributions to it (cf. p. 283 *infra*).
4. Both in *W*₁ (cf. Husmann, *Die drei- und vierstimmigen Notre-Dame-Organa* [Publikationen älterer Musik, 11. Jahrgang; Leipzig, 1940], p. xiii) and *F* the independent clausulae follow the strictly liturgical portion of each manuscript and are, in turn, followed by generally non-liturgical compositions.
5. Of all the clausulae contained in the evidently youngest version of the *Magnus liber* in *W*₁, only nine (15%) are also found among the independent long clausulae in *MS F* (cf. Ludwig, *Repertorium*, p. 171).
6. The custom of fashioning motets (with increasing textual irrelevance) from long clausulae seems less startling when the latter are considered as mainly non-ritual music for voices and/or instruments. (Quite obviously, *In Nomine* and *In Seculum* are relatively close cousins, though separated by more than three centuries.) Rokseth considered at least the great majority of the three-voiced clausulae to have been composed only in order to be turned into motets ("La polyphonie Parisienne du treizième siècle," *Les cahiers techniques de l'art*, Vol. I, fasc. 2 [1947], pp. 44b f). Such compositions as the clausulae of the "St. Victor" manuscript may well have been intended as extra-ritual instrumental counterparts of more or less contemporary French motets (cf. Handschin, "Die Rolle der Nationen in der mittelalterlichen Musikgeschichte," *Schweizerisches Jahrbuch für Musikwissenschaft* V [1931], pp. 40f), especially as their notation makes ritual vocal performance unlikely (cf. Ludwig, *Repertorium*, pp. 144f). They were, according to Mme. Rokseth's most recent opinion, "available" as instrumental repertory; her adherence to the theory formulated by her in 1939 that the St.-Victor clausulae are converted motets for liturgical use (*Polyphonies*, Vol. IV, p. 70) had evidently become quite tentative ("The Instrumental Music of the Middle Ages . . ." in *Ars Nova and the Renaissance* [New Oxford History of Music, Vol. III; London, 1960], pp. 410f).

¹⁵² E.g., Waite, p. 69f; Heinrich Husmann, "Das System der modalen Rhythmik," *Archiv für Musikwissenschaft* XI (1954), pp. 24f.

mode may be a questionable practice, since necessarily the ligature pattern almost invariably indicates third mode.¹⁵³

The conclusion seems inescapable that two types of third mode must have been in use in Paris around and after the turn of the century,¹⁵⁴ and that the six (eight?) cited motets of the *Ars Antiqua* are remnant witnesses to a practice no longer in existence (anywhere but in England) at the time the *Mo*, *Hu*, and *Ba* manuscripts were inscribed. As there is some likelihood that the second mode was a derivative of the "regular" third mode,¹⁵⁵ it may well be proper to apply Franco's first mode to those passages in organa and clausulae where iambic rhythms would be in conflict with the surrounding rhythmic patterns.

The origin of alternate third mode is intimately bound up with the rise of measured polyphony. It is a fascinating fact that the evolution of the element of rhythm in the music of the 13th and 14th centuries reflects a process of division that might well be called organic; each rhythmic value spawned the next smaller one, in fact, so gradually that a new note value was not always immediately recognized as a different entity. (Thus, the semibreve was originally called a breve, and the minim was at first referred to as a semibreve.¹⁵⁶) The appearance of the longa and brevis in the later 12th century seems to have involved similar conditions. Prior to that time music was "ultra mensuram," because of the equality of the notes of plainchant. Melismatic organum and discant, each in its own way, originally reflected the isochronous unmeasured rhythm of chant notes. It is in the discant style that the birth of measured music took place by means of a subdivision that recognized only a simple differentiation of long and short in the duplum (ratio of two to one).¹⁵⁷ This explains the significant statement in the *Discantus positio vulgaris* that *omnes note plane musice sunt longe et ultra mensuram, eo quod mensuram trium temporum continent*.¹⁵⁸ ("All notes of plainchant are long and beyond measurement, because they contain three beats.") A marginal annotation points out that this remark deals not with ordinary plainchant, but *de plano cantu, cui respondet discantus* ("with plainchant on which polyphony is based"). In other words, the unit value of plain-song, which was traditionally "ultra mensuram," now corresponded to 2 + 1 of the discanting voice. What was new and required mensuration was the duplum, not the cantus firmus. The subdivision of the longa ultra mensuram was trochaic, since the theorist continues that *super quamlibet*

¹⁵³ This circumstance was already remarked by Tischler ("The Motet in Thirteenth-Century France," Vol. I, pp. 64f).

¹⁵⁴ Cf. Handschin, "Conductus-Spicilegien," p. 110; Waite, p. 74.

¹⁵⁵ Husmann, *Die drei- und vierstimmigen Notre-Dame-Organa*, p. xv. Cf. also Waite, pp. 69 and 74.

¹⁵⁶ Cf. pp. 253f and 267f *supra*.

¹⁵⁷ Waite, pp. 16f, especially p. 21; also Kuhlmann, *Die zweistimmigen Motetten*, Vol. I, pp. 135f.

¹⁵⁸ Coussemaker, Vol. I, p. 95a; Cserba, p. 190.

*notam firmi cantus ad minus due note, longa scilicet et brevis, vel aliquid his equipollens, ut quatuor breves, vel tres cum plica brevi, proferri debent.*¹⁵⁹ ("At least two notes—it goes without saying, a long and a breve—or their equivalent, as four breves, or three with the plica brevis, must be set over any note of plainchant.")¹⁶⁰ This is a situation that is common not only in the discant sections of Leonin's *Magnus liber*,¹⁶¹ but apparently also in the syllabic notation of a good many (freely composed) polyphonic conducti written before and around the turn of the century, except that in view of the basically homorhythmic nature of the conductus ternary longae are frequent in the upper parts as well.¹⁶² It is noteworthy that the earliest of the modal theorists, writing probably in the early 1230's, associates the six rhythmic modes specifically and exclusively with motets (and hockets),¹⁶³ even though he had just mentioned the conductus. A related phenomenon is that the developed modal system appears demonstrably for the first time in the so-called substitute clausulae,¹⁶⁴ many of which have been proved to be sources of Notre-

¹⁵⁹ Coussemaker, Vol. I, p. 95a; Cserba, p. 191; similarly, Coussemaker, Vol. I, p. 96a f; Cserba, p. 193.

¹⁶⁰ As regards the priority of trochaic rhythm, cf. Waite, *passim*. The presumably earliest state of the English paired-breve notation (cf. *WF* Nos. 9, 10, and others) still reflects this situation with ingenious economy. In this proto-mensural system the virga represents the longa ultra mensuram (containing three beats), while only one additional symbol is needed for the other two values in syllabic notation, since they always appear paired (2 + 1). Somewhat later this clear distinction disappeared, and a value containing two beats was often written indiscriminately as either a virga or a punctum (inclinatum); cf. p. 271 *supra*.

¹⁶¹ Ludwig, *Repertorium*, p. 21.

¹⁶² Cf. Albert Seay, "Le manuscrit 695 de la Bibliothèque Communale d'Assise," *Revue de musicologie* XXXIX (1957), pp. 24f. Similar situations seem to exist in the early Worcester conducti and sequences. Thus, a piece like *WF* No. 101 is doubtless best transcribed like No. 92, *i.e.*, isochronously along the suggested lines, as had already been attempted by Hughes. Around 1200, the ternary (mensurable) long was apparently distinguished notationally in syllabic parts; remnants of this practice, the necessity of which was subsequently eliminated by modal standardization, can be seen in the *W*₂ concordance of *Mo* 2,35 (only duplum and triplum are preserved in *W*₂, fols. 164^r f) and in the notation of the one voice (duplum) preserved in *W*₂ (fols. 170f) of the Perotinian troped organum referred to in note 150 *supra*.

¹⁶³ Coussemaker, Vol. I, pp. 96b f; Cserba, pp. 193f.

¹⁶⁴ There is no reason to assume, as does Dittmer ("Änderung der Grundrhythmen in den Notre-Dame-Handschriften," *Die Musikforschung* XII [1959], p. 393, note 6), that a sort of Athenian birth characterized the appearance of the modal system. Both Odington (cf. pp. 259f *supra*) and Anonymous IV support an evolutionary view of the modal system, the latter in a passage (Coussemaker, Vol. I, p. 334a) referred to but not cited by Dittmer (*A Central Source*, p. 95). Anonymous IV, after designating the time of Perotin and his predecessors as that in which people began to be aware of the implications of modal notation, continues: *Et in quantum distabat ante ipsos, minus erat cognitio talium . . . et non erat mirum, quia paucis modis utebantur juxta diversitates ordinum supra dictorum . . .* ("But according as he was ahead of them, they [*i.e.*, *antecessores*] had less knowledge of such things. . . . And it was no mystery, because they used few modes, along with the varieties of the above-mentioned ordines. . . .") (The result of Dittmer's English rendition of this passage [*Anonymous IV*, p. 21] is an unfortunate perversion of the original.) The association

Dame motets. Therefore, the contention, based on the peremptory modal interpretation of the poetry (and music) of all Notre-Dame conducti, that "by 1179 modes other than the first flourished"¹⁶⁵ appears to be at variance with the evidence. The few identifiable facets of evolution should perhaps be given preferential recognition, where this seems logically applicable.¹⁶⁶

It seems clear that the rhythms of Franco's first mode must have evolved prior to the establishment of the complete modal system and that they were only subsequently associated with the third mode, at least by some musicians of the time.¹⁶⁷ Since the earliest Notre-Dame theorists of whom we have knowledge wrote during the last decade or two of the

of the modes with poetic meters was doubtless a later phenomenon (*cf.* Michalitschke, *Die Theorie des Modus*, p. 105, and Apel, *Notation*, p. 222).

¹⁶⁵ Schrade, "Political Compositions in French Music. . .," *Annales musicologiques* I (1953), p. 39. Two years later, however, he wrote that the puzzle of conductus rhythm requires abstention "from being too categorical in any of our solutions to the numerous problems inherent in conductus composition" ("Unknown Motets in a Recovered Thirteenth-Century Manuscript," *Speculum* XXX [1955], p. 406, note 23).

¹⁶⁶ *Cf.* Handschin, "Zur Frage der Conductus-Rhythmik," *Acta musicologica* XXIV (1952), pp. 113-130; *idem*, "Conductus," *Die Musik in Geschichte und Gegenwart*, Vol. II, cols. 1623f. The evidence here presented weakens Machabey's suggestion of binary interpretation of the longa in certain works in Perotinian style ("A propos des quadruples Pérotiniens," *Musica disciplina* XII [1958], pp. 18 and 24). As to his hesitancy regarding trochaic transcription of binary ligatures, see note 63 *supra*. In fact, a rule of thumb for this type of notation is that the initial note of a ternaria or binaria is a longa duorum temporum when it is preceded by a rest or by a ternary longa, and that a binaria is iambic mainly in such combinations as ternaria plus x binariae. (Of course, these ligatures can also be used for "fractio modi.") The motet *Ave gloriosa mater*, a quite early composition (*cf.* Handschin, "The Summer Canon" [1949], pp. 60f), furnishes further proof. The two syllables of "miro" in its duplum have two binariae in the pre-mensural manuscripts (*W*₂, fol. 140^v, where the piece, deprived of its tenor, appears as a conductus, and London, British Museum, Harley 978, fol. 9^r—*cf.* *Early English Harmony*, Vol. I, pl. 20), which are written as ligatures sine proprietate et sine perfectione in *Hu* (fol. 100^v), while other sources (*e.g.*, *Mo*, fol. 91, *Ba*, fol. 1^r) express the trochaic rhythm by means of plicae. Finally, there are two motets, both going back to Perotinian times (*cf.* Ludwig, *Repertorium*, p. 253; Rokseth, *Polyphonies*, Vol. IV, p. 227), in which the same circumstances are observable: *Mo* 4, 62 (partial concordance of *WF* No. 81) and *Ba* No. 45; in the former the binary ligature over "melle" is replaced by a binaria without propriety and perfection in *Hu* fol. 118, while in the latter the binaria over "comperi" (binaria also in *F*, fol. 398^r, *W*₂, fol. 149; nota plicata in *Mo*, fol. 95, *Cl*, fol. 379) is likewise mensurally unequivocal in *Hu* (fol. 126). Quite a number of motets preserved in the pre-mensural sources, for which no mensural concordances exist, also demand trochaic interpretation of the binaria more or less occasionally. *Cf.* also Waite, pp. 91-99.

Two statements made on p. 6 of Machabey's article require correction: (1) The word "tuam" is not present in the Madrid manuscript version of the gradual in question, as it is the choral conclusion of its verse; the final sections of the trope therefore trope the end of the preceding word "misericordiam." (2) The notes of the cantus firmus are not missing in the one section of the trope that is an exact musical and textual copy of the organum. The assumption is justified that the scribe simply forgot or did not take time to place the notes of the remainder of the cantus firmus where they belong in the score (*cf.* Ludwig, *Repertorium*, p. 129), as, for instance, in *WF* No. 81 (Dittmer's transcription does not reflect the text underlay in the manuscript).

¹⁶⁷ *Cf.* pp. 270f *supra*.

third Notre-Dame generation,¹⁶⁸ there is good reason to assume that they are more reliable as reporters of the practices of their own day than of a time half a century past. Even in this case, however, there is at least one theorist—he could not be more dependable—who gives us a glimpse of the confusion regarding the third mode. Franco, in numbering the old fifth mode as the first,¹⁶⁹ presented the following argument:¹⁷⁰

Primus enim procedit ex omnibus longis, et sub isto reponimus illum qui est ex longa et brevi, duabus de causis; prima est, quia isti duo in similibus pausionibus ununtur; secunda est propter antiquorum et aliquorum modernorum controversiam compescendam.

The first consists of nothing but longae, and under it we subsume that mode which is composed of longae and brevis. We do this for two reasons; first, because both modes have similar rests in common, and secondly, in order to eliminate the cause of the controversy among the old as well as some of the modern composers.

If there had never been any modal patterns that could be analyzed as combinations of the old first and fifth modes (e.g., , or Husmann's "doppeltaktiger 1. Modus" ,¹⁷¹ as in *Mo* 4, 53, with fifth-mode rests, as well as , and other similar patterns with first-mode rests), there would be no reason to throw them together. The custom, intimated by Franco's act, of referring to such combinations as third (and fourth) mode, must indeed have caused controversy among all the older as well as some (English?) younger composers.

Support for the third mode with an altered breve is likely to have gained considerable ground during the time of the third Notre-Dame generation. In time, the association of the dactylic meter with a rhythmic pattern known by everyone to be trochaic must have begun to seem an impossibility to the scholastically trained minds of most medieval French musicians.¹⁷² A short could not be a long; it could, however, be an altered

¹⁶⁸ The three generations may roughly be listed as follows: 1160-90; 1190-1220; 1220-50 (cf. Husmann, "Notre-Dame-Epoche," *Die Musik in Geschichte und Gegenwart*, Vol. IX, cols. 1712-13).

¹⁶⁹ Garlandia had already considered such a switch not a bad idea (Coussemaker, Vol. I, p. 98a; Cserba, p. 195).

¹⁷⁰ Coussemaker, Vol. I, p. 118b; Cserba, p. 232. Franco presumably wrote in the later 1260's, not in the 11th century, which is the information dispensed in the most recent edition of Grove's *Dictionary*.

¹⁷¹ Husmann, *Die drei- und vierstimmigen Notre-Dame-Organa*, p. xvi.

¹⁷² This is also suggested by the last clause of the long passage from Odington's treatise quoted on p. 259 *supra*. Justification of the concept of alteration involved the medieval mind in typically skillful contortions; cf. Waite, pp. 71f. It is not impossible that some pieces, originally in alternate third mode, were subsequently re-interpreted according to the more modern regular third mode. A case in point is *Ba* No. 44, whose duplum, consisting mostly of ternary longae, is associated with a triplum in third mode. Several theorists, however, mention it as an example of Franco's first

short. (The transitional device of a binary ligature with the first note thickened¹⁷³ must have originated at this time, when the "improper" binaria was going out of fashion.) To what extent the Spaniards associated themselves with the iambic interpretation of the third mode is uncertain.¹⁷⁴ The West English school, at any rate, preserved and developed a different aspect of the common Perotinian heritage.¹⁷⁵ (It may, of course, be argued whether this aspect had, in fact, been an English contribution to the middle generation of the Notre-Dame school.) With characteristic forthrightness Franco, in order to clarify the situation and mindful of the fact that the old fifth mode offered "convenientia" to all the others, decided to make the alternate third mode a subspecies of his first mode and thus to preserve the integrity of the third mode.¹⁷⁶

In view of the ambiguity of the third mode during the period of the first two Notre-Dame generations, it is possible to speculate that alternate third mode was applied to monophonic songs of the time.¹⁷⁷ In fact, it

mode (cf. Coussemaker, Vol. I, pp. 139a, 307a, 401a; *idem*, *Histoire de l'harmonie*, pp. 272 and 282). While that subspecies of Franco's first mode that is the equivalent of the old fifth mode can of course be combined with iambic rhythms, it seems unlikely that Franco and his successors would cite as an example of his first mode a motet with a third-mode triplum; moreover, the notation of the pre-mensural sources seems to indicate that trochaic interpretation of the *fractio modi* is preferable in the case of this duplum.

¹⁷³ Cf. p. 279 *supra*.

¹⁷⁴ It is, at any rate, significant that the two motets in *Hu* (Nos. 85 and 96) whose concordances are in second mode are in binary rhythm. (Cf. Anglès, *Las Huelgas*, Vol. I, p. 243; until there is more proof of Anglès's claim that *Hu* No. 117 is also in binary rhythm [*ibid.*, pp. 256 and 277], this isolated motet voice should be read in ordinary third mode.) In the case of one composition iambic rhythm is specifically labeled in the manuscript as typical of the "French manner" (Dittmer, "Las Huelgas," *Die Musik in Geschichte und Gegenwart*, Vol. VIII, col. 246). Apparently, the second mode was also ungenial to the Germans; cf. Handschin, "Die Rolle der Nationen," p. 22; *idem*, "Erfordensia," *Acta musicologica* VI (1934), pp. 104f.

¹⁷⁵ Another example of this is the persistence in England of four-voiced Latin motets, quite a number of which have three upper voices, with different, though related texts. A four-part motet on the tenor "Mors" is still found in the Westminster manuscript.

¹⁷⁶ Kuhlmann (*Die zweistimmigen Motetten*, Vol. I, p. 138) has found fault with Odington for saying that the perfect long originated in the third and fourth modes (cf. p. 260 *supra*), since actually fifth mode appeared before the other *modi non recti*. However, since the combination of the first and fifth modes was not known as a specific mode until Franco cut the Gordian knot, Odington cannot be gainsaid, even if he no longer reports the alternate third mode as such. The evidence offered in the preceding paragraphs is in no way invalidated by the material recently presented by Dittmer ("Änderung der Grundrhythmen"); on the other hand, it does weaken his conjectures and conclusions—put forth as proof positive in *A Central Source*, pp. 83f—regarding rhythmic changes in the Notre-Dame repertoire and Ludwig's supposedly erroneous estimate of *W*₁ as the oldest version extant. While he asserts that *W*₁ is younger than the other Notre-Dame manuscripts ("Änderung der Grundrhythmen," p. 392), the authority he cites is considerably more cautious. Obviously, Apel's findings regarding the date of *W*₁ (*Notation*, p. 200) bear repeating, even if they should turn out to be not quite the last word in the matter.

¹⁷⁷ Cf. Husmann, "Die musikalische Behandlung der Versarten . . .," *Acta musicologica* XXV (1953), pp. 17f.

would be only natural to assume that the dactylic meter in later 12th-century lyric monophony could be rendered in duplé time. The difficulty here is, though, that modal polyphony and the dactylic decasyllable appeared in France at approximately the same time.¹⁷⁸ If indeed binary rhythm did exist then, it is likely that it was swiftly eliminated when the need arose of adjusting it to the modal patterns of polyphony. In this case, too, trochaic rhythm probably would have been the first product of such a process.

In any event, if there was any binary organization of the dactylic and anapestic meters in lyrical monophony during the last few decades of the 12th century, it is obvious that it is no ancestor of duplé rhythm in the *Ars Antiqua*, which is reported by no theorist before *ca.* 1300, with the possible exception of Anonymous IV.¹⁷⁹ Perhaps the adoption of binary rhythm originated in the sphere of French secular (*lascivus*) music, since *Mo* 5,164, which is the oldest known motet with such rhythm (*ca.* 1250), uses a secular tenor.¹⁸⁰ *Mo* 7,277 is also based on a secular tune, while *Mo* 8,328 uses a free tenor. This is a remarkable percentage, considering the amount of non-liturgical *cantus firmi* in the entire repertoire.

That duplé rhythm was an experimental and progressive feature is clear not only from its uniform scarcity in the sources¹⁸¹ (with the exception of the Chicago manuscript), but also from its association with the semibreve, the progressive rhythmic element in the music of the *Ars Antiqua*. The semibreve, which already in the early years of the century is involved in the “*fractio modorum*,” ultimately brings about the breakup of the modal system. Binary rhythm is thus one of the symptoms of this attrition of the modal order through the increasing proliferation of the semibreve. (It is not surprising that the process did not affect the first and second modes, as, in contrast to the others, they are not convertible to duplé mensuration, except with the kind of artificial trick mentioned by the St.-Emmeram Anonymous.)¹⁸² The general collapse of the Franconian

¹⁷⁸ Husmann, “Minnesang,” *Die Musik in Geschichte und Gegenwart*, Vol. IX, cols. 352, 359, and 360.

¹⁷⁹ Odington associates duplé rhythm with musicians trained according to Franconian principles (*cf.* pp. 257 and 261 *supra*).

¹⁸⁰ *Cf.* Ludwig, *Repertorium*, Vol. I, p. 377; *cf.* also pp. 256f *supra*. It is significant that none of the *Mo* and *Ba* motets in duplé rhythm have been suggested to be of English origin by Handschin or Dittmer, even though both authors, who advocate the binary interpretation of the *longa* in many English pieces, have found a good many certain or likely English compositions in *Mo*.

¹⁸¹ Lambertus even goes so far as to deny the possibility of performing—and therefore composing—a piece consisting of nothing but imperfect (long) notes (Cousse-maker, Vol. I, p. 271a).

¹⁸² The process of modal transmutation described by him (Sowa, *Mensuraltraktat*, pp. 97f and especially 103f; *cf.* also pp. xixf) is doubtless related to the type of *mos lascivus* notated only with breves and semibreves. The second as well as the third and fourth modes, according to this theorist, could be transmuted only to the (ternary) sixth mode; the procedure involved elimination of *longae* as well as altered breves, all of which became breves rectae. He particularly notes that the *modus brevis* caused

system, whose ternary rhythmic organization still rests on modal foundations, is attested by both the *mos mediocris* and the *mos lascivus* of Petrus Le Viser. The treatises of early 14th-century theorists (e.g., Handlo and, especially, Hanboys) reveal the atavistic nature of the modes by relegating them to their last chapter and treating them most perfunctorily. The flamboyant Gothic has arrived.

That, on the other hand, the English predilection for alternate third mode and the attendant disregard of the iambic rhythm have a long tradition behind them is proved by its attestation through the earlier theorists.¹⁸³ It is well known that the English composers of the time have for other reasons been described as conservative,¹⁸⁴ a term at times connoting a degree of partisan partiality. Similarly, the "English mode" is strongly beholden to early modal concepts, and, in this connection, it must be borne in mind that it is the English theorists, including even so late a writer as Odington, who concern themselves with the concept of modal ordines. Modal notation, after all, indicates not only rhythmic patterns, but phrase patterns as well, and this concern with ordered phrasing,¹⁸⁵ though not sufficiently clear in some of Dittmer's transcriptions, is apparent in many of the Worcester compositions. (This, too, is a feature that the semibreve helps to undermine.) Much, if not most, of the music in paired-breve notation must, of course, be conceived in the large (double) pedes of the third and fourth modes. Since the English dance from MS Oxford, Bodleian Library, Douce 139, which contains several series of paired English breves, has deservedly become a rather well-known piece,¹⁸⁶ its transcrip-

those singers and composers who did not understand it properly all kinds of difficulties and confusion; this is perhaps attested by the troubles the scribe of the old corpus of *Mo* seems to have had when notating *Mo* 5,164 (cf. note 28 *supra*). It should be remembered that notation without longae occasionally made the composers lose sight of their mensuration (e.g., *Mo* 7,278 and *WF* No. 26; cf. note 129 *supra*). The cited excerpts from Lambert's treatise strengthen the supposition that the recognition of duple rhythm originated as a result of manipulations of the modi ultra mensuram, even though he himself did not depart from the concept of ternary mensuration.

¹⁸³ Odington expressly forbids it (cf. p. 259 *supra*).

¹⁸⁴ For centuries faithfulness to Gregorian traditions had been a characteristic of Worcester cathedral (cf. *Paléographie musicale*, 1^{re} série, Vol. XII, pp. 106-110).

¹⁸⁵ Isoperiodicity, a prominent structural feature in many English motets of the early 14th century, is a related phenomenon (cf. Handschin, "The Summer Canon" [1951], pp. 75f; Apfel, *Studien*, Vol. I, p. 39, note 62; Apfel, "Zur Entstehung. . .," *Archiv für Musikwissenschaft* XVII [1960], pp. 96f).

¹⁸⁶ Apart from the partial transcription by Wolf mentioned on p. 249 *supra*, the piece was transcribed and published in toto by Wolf ("Die Tänze des Mittelalters," *Archiv für Musikwissenschaft* I [1918], pp. 22f), by Handschin ("Über Estampie und Sequenz," *Zeitschrift für Musikwissenschaft* XII [1929], pp. 13-14, and by Archibald T. Davison and Willi Apel (*Historical Anthology of Music* [Cambridge, Mass., 1957], No. 40c); it has also been recorded by the Belgian Pro Musica Antiqua (*Anthology of Middle Age and Renaissance Music*, EMS 201). All these versions are in duple meter; any transcription in regular third mode would also have to violate some of the original notational features, which may already have been somewhat problematic in the 13th century, judging by the numerous erasures in the manuscript. Al-

tion is appended as a paradigm, though its monophonic nature necessarily causes some of the details to remain in doubt.

The Chicago manuscript seems to show the last remnants of the English notational dialect. A short time after its disappearance,¹⁸⁷ the relatively novel duple rhythm is codified by the heir to a different tradition, Philippe de Vitry.

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ternate third mode is the only convincing alternative, especially as one of the puncta of this dance is closely related in notation, rhythm, and melody to the pes of *WF* No. 10 (cf. p. 266 *supra*).

Of the Worcester compositions in alternate third mode, *WF* No. 76 (*Puellare gremium/Purissima/Pes*) is a particularly suitable example, since it, too, is relatively well known. The half notes in Dittmer's transcription must be changed to dotted quarter notes, while the second note in any pair of quarter notes has to become an eighth note; the plicae must be adjusted accordingly.

¹⁸⁷ Dittmer, "The Dating," p. 11.

The musical score consists of ten staves of music in bass clef. The notation includes various rhythmic values, accidentals, and performance markings. The first staff has two endings marked '1.' and '2.'. The second staff has a trill sign over a note. The sixth staff has a trill sign over a note and repeated notes marked with an asterisk (*). The eighth staff has repeated notes marked with two asterisks (**). The notation is written in a style typical of 18th or 19th-century manuscripts.

* A trill sign over this *f*, representing *f-e-f* in the manuscript, was inadvertently omitted from the autograph.

** The repeated *f*'s at the end of some of the periods may not have any mensural

