ON THE LEGITIMACY OF SO-NAMED 'MODAL' NOTATION

CRITICAL COMMENTARY ON THE

«GRAMMAR OF NOTRE-DAME NOTATION» BY LUIGI LERA

Some time ago an ambitious essay Luigi Lera appeared in «Acta Musicologica», in which the author proposed a new key to the interpretation of Notre-Dame notation, a key no longer based on the rhythmic principles of what has been called modal theory, but founded instead on the research of plainchant scholars, and above all on the concept of the «articulation of the neume» which, he proposes, would allow us not only to account fully for all notational difficulties, but also, at long last, to explain in satisfactory fashion the origin of polyphonic rhythm.[1] For this he proposes that we proceed in two stages, the first being [90]

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[1] LUIGI LERA, *Grammatica della notazione di Notre-Dame*, «Acta Musicologica», LXI/2 1989, pp. 150–74; in the footnotes that follow we shall cite this article by page numbers only. In addition the following abbreviations and sigla will be used:

APEL	WILLI APEL, *The Notation of Polyphonic Music 900–1600*, The Medieval Academy of America, Cambridge (Mass.) 1942; expanded trans.: *Die Notation der polyphonen Musik,* Breitkopf und Härtel, Leipzig 1970; Italian trans. (from the German): *La notazione della musica polifonica dal X al XVII secolo*, ed. Piero Neonato, Sansoni, Florene 1984 (Lera cites only the German translation; for convenience we shall always refer to the Italian edition).
B	*Brevis, Breves.*
Calixtinus	*Codex Calixtinus*, Archivio della Biblioteca di Santiago de Compostela, without call number.
F	MS. Florence, Biblioteca Mediceo Laurenziana, Pluteo 29, 1.
Har	MS. London, British Library, Harleian 978.
L	*Longa, Longae.*
Lw	FRIEDRICH LUDWIG, *Repertorium organorum et motetorum vetustissimi stili*, vol. I, part 1, Halle 1910; photographic repr. Olms, Hildesheim 1964.
Ma	Madrid, Biblioteca Nacional, MS 20686 [*olim* Hh 167].
P 15139	MS Paris, Bibliothèque Nationale, Lat. 15139 [*olim* St. Victor 813].
W₁	MS Wolfenbüttel, Herzog-August-Bibliothek, Cod. Helmstedt 677 [*olim* 628].
W₂	MS Wolfenbüttel, Herzog-August-Bibliothek, Cod. Helmstedt 1026 [*olim* 1099].

«a simple introduction to Notre-Dame notation»,[2] and the second focusing on «an analysis of ligature groupings» whose approach is not so much «to consider each individual ligature as a self-contained organism», but rather «to focus on the connections that bring together the ligatures themselves».[3]

Such far-reaching and ambitious claims invite detailed consideration, and deserve to be critically reviewed for their validity and their potential to bear fruit — a task I undertook in my graduation thesis, in the «annotated bibliography» of the pertinent critical literature,[4] where I concluded that Lera's essay is hampered by defective arguments and apparent contradictions, all of which must compromise, if not invalidate altogether, the 'ground-breaking' proposals which, sad to say, he had sometimes stated as peremptorily stated as they appear to be lacking in adequate documentary support.[5]

1.1. One of the most puzzling contradictions, in an essay that sets out to replace the principles of modal theory by a less clearly-defined rule of neumatic articulation, arises precisely from the frequent references to the rhythmic modes: if it is clear, on some occasions, that those references are meant to characterize what the author wishes to move away from, on others they paradoxically reveal the extent to which the same rules are still informing Lera's own thinking, and are consequently still being applied, consciously or subconsciously, in his transcriptions.

When Lera is dealing with two-note ligatures, for instance, he prefaces his examples with a general principle stated as follows: «The second note is accented; the first note takes away a third from the preceding accent»[6] — a principle which can only make sense if the scansion is assumed to be modal: after all, it is hard to see why else it would have been necessary to speak of «a third» of the value.[7] Lera's examples bear this out, for they are faithfully transcribed according to the principles of modal notation: the two-note ligatures all show the traditional alternation of B and L, and the three-note ligature at the beginning of the second example observes the most traditional of the rhythmic patterns associated with

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[2] P. 169.

[3] P. 169.

[4] Cfr. ENRICO PESCE, *Le Clausolae a due voci del «Magnus liber organi» in W2 MLO, Wolfenbüttel, Herzog-August-Bibliothek 1206 (*olim *Helmst. 1099)*, Università di Pavia, Scuola di Paleografia e Filologia Musicale di Cremona, with Prof. Maria Teresa Rosa Barezzani, a. a. 1991–92. The thesis, as pointed out below (cfr. note 29), offers a new critical-annotated transcription of this part of the repertory which also takes into account all the transcriptions which have tackled it to date.

[5] In the course of his work, for example, Lera states that *F* «is the oldest among the Notre-Dame codices» (p. 162), without offering an explanation for this view, which is contradicted for the most part by modern musicologists.

[6] P. 157, par. 2.1.

[7] It is also worth noting the inconsistency in references to the term «accent», which takes on, in this and other cases, the improper rhythmic meaning of «durations of notes».

the first mode, that is, LBL. The same is true of the *extensio modi* applied in the final two-note ligatures.

Yet these are not the only examples of continued reliance on modal principles. The following rule, for instance, must seem nothing if not self-evident to any transcriber used to the graphic constraints in modal notation: «When two or more single notes are notated at the same pitch, they may behave as if they were written as a group of the same number of notes».[8] Truisms of this kind are reiterated also in such purportedly novel observations as these: «According to the theory of the rhythmic modes, this last figuration 3 2 2 2 . . . is the only one that correctly denotes the first mode; in reality the example before it belongs just as justifiably to that same category»,[9] observations which a less charitable reader might well attribute to limited familiarity with modal notation. In the example in question (*Benedicamus*), the first single note (*d*) is followed by a two-note ligature (*d–e*). Since this notation is functionally equivalent to a single three-note ligature, there can be little doubt that it is graphically different only because of the pitch repetition. One could cite many similar examples: for example, when Lera writes about the clausula *Go*, *ordo* 6, and notes that «the plica maintains the rhythmic scheme within the framework of the first mode (3 2 2 2 2 2 2)».[10]

Finally, the two-note ligatures in the examples on page 157, as well as that in the instrumental piece in the manuscript *Har*,[11] represent cases in which modal transcription would not only be unproblematic, but in fact would produce the very same results as obtained by Lera following his own methods — which serves to demonstrate that whether he realizes it or not, his approach is still conditioned by the principles of modal notation.   [92]

1.2. The critique of the received interpretation of Notre-Dame polyphony does not become more constructive when we consider the concept of «the articulation of the neume/neumes», which concept, according to Lera, would be «capable of supporting the entire edifice of Notre-Dame notation».[12] Lera refers to this pivotal idea throughout his article, yet without ever providing a precise definition of it. Indeed, he freely admits to being unable «to say wherein exactly might consist this articulation around the middle of the twelfth century, and to what degree it would have departed from the original value that had been legitimate within the Gregorian aesthetic».[13] Lera does, however, affirm «that the frequent and regular repetition of this articulation, *whatever its original meaning*, was bound to

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[8] P. 164, par. 2.6.1.
[9] P. 157, par. 2.1.
[10] P. 167, par. 4.1.
[11] P. 161.
[12] P. 174.
[13] P. 156.

facilitate its transformation into rhythmic accent»,[14] and goes on to emphasize that «[t]he indispensable condition for accomplishing this historic transformation was the progressive breaking of the ligatures, or rather the process that ended in assigning the space of a single accent to every neume; from that moment, the principle of articulation had been modified without difficulty while acquiring a new accentual meaning».[15] With far-reaching claims like these one must surely wonder how prudent it can be to ground a theory that purports to be path-breaking on a principle whose precise meaning we are unable to establish.[16]

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In this light, Lera's rather definitively stated general rule sounds only the more puzzling: «*the final note of every ligature is accented; the notes of the preceding ligature must all be considered part of the upbeat, and they subtract part of the value from the preceding accent, and in some cases the entirety of that value*»[17] — a rule that seems arbitrary and inconsistent from the viewpoints of both terminology and musical sense. First of all, it is hard to know what we are to understand by the term «accent»: strictly speaking it would of course be impossible to subtract a *value* from an *accent*; the second part of the rule seems to lack coherence: how can it be possible to subtract «the entirety of its value» from a sound? It is difficult to credit such arguments with logical cogency.

1.3. This impression is only reinforced by Lera's selection of musical examples. Although his article is generous in supplying very many musical examples, actually these come from a limited number of compositions (sixteen, to be exact) and happen to be found mostly on the same folios of the same manuscript:[18]

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[14] P. 156. Italics mine.

[15] P. 156.

[16] It should be noted that the concept has not yet been defined univocally by modern scholars even for Gregorian chant. For example, in ALBERTO TURCO's work *Il canto gregoriano*, Torre d'Orfeo, Rome 1991² (1987¹), which experts now regard as the principal work of reference (even though some principles stated there, such the issue of modality in the second volume, do not appear to be at all convincing), the concept of 'articulation' does not receive extensive treatment (cfr. vol. I, *Corso fondamentale*, «Raggruppamento del neuma», pp. 253–62: particularly pp. 258–60), and in any case does not allow it to be applied outside the narrow confines of Gregorian semiology. The same is true of the volume by FULVIO RAMPI – MASSIMO LATTANZI, *Manuale di canto gregoriano*, EIMA, Milan 1991, whose information regarding the articulation of neumes, though more extensive (see pp. 323–51), do not fulfill our needs in any way.

[17] P. 156, at the end (Lera's italics).

[18] Many of which, in addition, were printed already in the facsimiles of APEL: cfr. Clausula *Go*, facs. 46, p. 254; Clausula *Do* (*F*, fol. 87), facs. 49, p. 271; *Benedicamus Domino*, ibidem; Organum *Descendit de celis*, facs. 47, p. 255; Instrumental piece (*Har*), facs. 48, p. 263; *Scio cui credidi*, facs. 50a, p. 274.

Title of piece	Manuscript	Cited by Lera on p.
Clausola *Go*	*F*, c. 11*v*	159, 164, 167, 172
Clausula *Preciosus*	*F*, c. 32*v*	158, 165
Organum *Athleta Domini*	*F*, c. 33	159, 171, 173
Clausula *Do*	*F*, c. 87	162
Benedicamus Domino	*F*, cc. 87*v*–8	157, 159, 160, 164, 165
Clausula *Do* (Domino n° 9, Lw 9)	*F*, c. 88*v*	160, 165, 166
Clausula *Do* (Domino n° 10, Lw 10)	*F*, c. 88*v*	159, 173
Clausula *Do* (Domino n° 11, Lw 11)	*F*, c. 88*v*	159, 161, 164
Alleluia *Pascha nostrum*	*F*, c. 109	157, 161, 163, 165, 168
Organum *Descendit de celis*	*W₂*, cc. 7*v*–8	158, 160, 166, 167, 168, 171
Mottetto *Gaudeat devotio fidelium*	*W₂*, c. 148*r*–*v*	157, 168
Mottetto *Ave Maria fons leticie*	*W₂*, c. 156*r*–*v*	168
Organum *Viderunt omnes*	*W₁*, c. 21	158
Brano strumentale	Har	161, 173
MAGISTER ATO, *Misit Herodes*	*Calixtinus*, c. 189*v*	166
Scio cui credidi	P 15139, c. 285*v*	169

Yet a hypothesis of such considerable consequence, which cannot claim the backing of a consolidated scholarly tradition, would surely require a more considered selection of examples, chosen from a larger number of compositions, with transcriptions that should not only be longer than the usual two or three measures but genuinely polyphonic, not restricted to two voices — one of which, moreover, almost invariably consists of a single [94] sustained note, which by definition cannot yield a contrapuntal texture that allows us to verify the proposed transcriptions.[19]

1.4. One minor observation about a terminological usage that may perhaps seem innocuous yet is not for that reason any less tiresome: why does Lera speak of «lines» when he cites musical examples,[20] and not «systems», a term that would certainly be more helpful in locating the composition within a *folio* of the manuscript? More to the point, why make it so difficult for the reader to locate the examples, by referring to *ordines* counted from the

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[19] It should be noted, however, that Lera, precisely with regard to the vertical relations between the various voices, affirms that «through the subdivision of melismas into *ordines* […] the Notre-Dame school learns to exploit the principle […] of the parallel disposition of ligatures» (p. 152): a principle which, as reported in the note, was already glimpsed by Apel, on the basis of an indication by Manfred Bukofzer. In reality one cannot attribute fundamental and definitive importance to this parallelism in notation: according to the same Apel, in fact, «[i]n compositions with two (or three) upper parts a clue to the correct coordination is often found in what may be called the "rule of corresponding ligatures". […] Although it cannot be applied strictly, this rule often proves helpful» (APEL, p. 260 [English edition, pp. 236–37]). Properly viewed, then, the 'rule' is certainly not an unequivocal given, but only a useful expedient in contexts of particular difficulty: a kind of 'safety belt' for the transcriber, in short, and certainly not a metric structure immanent in the text.

[20] See, for example, the reference on p. 159.

beginning of the compositions, rather than from the beginning of each system? Why, for example, write something like «Alleluia *Pascha nostrum* cit., Ordines 45–46»,[21] when it would have been much more specific and more helpful to write «Alleluia *Pascha nostrum*, fol. 109v, second system, *ordines* 3–4»? In that case the reader would have known immediately that the page in question was on fol. 109*v* rather than perhaps on 109, and would not have been forced to engage a tedious count in order to reach the forty-fifth *ordo*.

2. Many of the claims in Lera's essay seem debatable from a number of viewpoints. Let us follow the thread of his argument and supply comments where appropriate.

Lera almost immediately expresses doubt that «the musical values were organized in patterns that were recurrent, rigid, and repeated with unchanging regularity»,[22] and then declares:

[95]   the idea that Notre-Dame rhythm was also a *modal* rhythm lacks clear proof in the medieval polyphonic repertory itself: in the oldest pieces the metric trend is, on the contrary, irregular andfull of apparent exceptions, thus testifying to a contrapuntal technique that was light, flexible, and intricate; Notre-Dame musicians seem to have had no need of elementary schematizations in order to guarantee the regular rhythmic flow of their melodies.[23]

It seems to me, however, that this may not be what the problem comes down to. If one is to critique modal principles, it seems illogical to invoke the oldest works, given that most scholars today agree that the *organa dupla* of Leonin should be viewed differently from the later compositions by Perotin.[24] Besides, from a methodological point of view, there is cause for concern when the very claim that requires demonstration (namely, that the musical notation of these pieces is «completely devoid of any kind of metric connotation)[25] appears in the form of an *a priori* statement in the introduction («[t]he musical notation, which is completely devoid of any kind of metric connotation, seems to bear this out»),[26] and this on the basis of ostensible 'proof' like the absence of barlines.[27] Nor, in my view, is Lera's argument necessarily bolstered by the fact that

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[21] P. 168.

[22] P. 150, par. 1.2.

[23] P. 151, par. 1.2.

[24] Not to mention that maintaining that «a modal rhythm lacks clear proof in the medieval polyphonic repertory itself» means to wilfully disregard the motet repertory of the thirteenth century.

[25] P. 151.

[26] P. 151.

[27] « The musical notation […] does not even utilize barlines, which in those times were widely employed in many other types of vocal performance notation.» (P. 151.)

«modern transcribers who take their inspiration from modal theory have not been able to achieve results that met with unanimous acceptance among their colleagues».[28]

This fact, which is of course undeniable,[29] testifies to the intrinsic difficulties of the modal system, but does not compel us to conclude that modal principles therefore *never existed* or have *no validity*. As Willi Apel already observed:

> Our lengthy explanation of modal notation may seem very unsatisfactory to the reader, who naturally expects to obtain concise information and a reliable clue to the problems of this notational system. It certainly will appear even more annoying when, upon trying to make transcriptions of his own, he finds himself confronted with many questions for which our explanations contain no answer. Unfortunately, this situation cannot be remedied since vagueness and ambiguity is an inherent characteristic of modal notation.[30]

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This ambiguity could have had many causes, not least, for example, the fact that composers and performers operated in a musical culture where the everyday currency of the notational 'language' would have prevented such «ambiguities» as we perceive today.

Lera then moves on to explore the possible reasons behind the rise of mensuralism in polyphony. «[W]ithout hope of being able to link rhythm, modal or otherwise, to an external source»,[31] he briefly alludes to the hypothesis according to which «rhythm would have been just a simple expedient, adopted of necessity for the prosaic purpose of making the voices 'go together' when the polyphonic textures of Leoninus and Perotinus underwent their immense growth»,[32] citing on this point a well-known paperback by Ulrich Michels[33] (whose popularizing aim, as well as the generality with which Notre-Dame polyphony is

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[28] P. 151.

[29] Because of this, and because of the intrinsic difficulties of this type of notation, I believe that the mere 'transcription' of the musical monuments transmitted in them is not enough, and that what is needed is a 'transcription with commentary,' that is, a transcription which on every controversial point renders account of the reasons why the transcriber opted for the proposed solution. This is the approach which I adopted in my graduation thesis, cited earlier, in which I critically compared (and in some cases updated) the transcriptions of the *clausulae* in W_1, *F* and W_2 made by: FRITZ RACEK, *Die Clauseln von W_1*, Phil. Diss., Musikwissenschaftliches Institut der Universität Wien 1939; WILLIAM G. WAITE, *The Rhythm of Twelfth-Century Polyphony, its Theory and Practice*, Yale University Press, New Haven 1954; NORMAN E. SMITH, *The Clausulae of The Notre Dame School, a Repertorial Study*, PhD Diss., Yale University 1964; REBECCA ANNE BALTZER, *Notation, Rhythm and Style in The Two-Voice Notre-Dame Clausula*, PhD Diss., Boston University 1974.

[30] APEL, p. 267 [p. 243 in the English edition].

[31] P. 152, par. 1.3.

[32] P. 152, par. 1.3.

[33] Cfr. ULRICH MICHELS, *Atlante di musica*, Mondadori, Milan 1982, p. 223 (original edition *Atlas zur Musik*, vol. I, DTV, Munich 1977).

treated, might render it less than appropriate for a scholarly contribution).[34] Yet Lera immediately discards that hypothesis, admitting that «[t]his hypothetical outline seems implausible, however, and is in any case of limited relevance to the development of vertical harmony in the Notre-Dame school».[35] He is right to say that «certainly it would seem more logical to hypothesize that the growth in the number of voice-parts, and in harmonic awareness, would have advanced in equal measure with the progressive clarification of rhythm», in pursuit of a «vertical synchrony» which (he argues) was facilitated by «the subdivision of melismas into *ordines*», and by the utilization of «the principle, so useful to

singer and composer alike, of the parallel disposition of ligatures»[36] – the well-known principle of «concording ligatures» to which we have already referred. He therefore seeks the birth of polyphonic rhythm elsewhere: having eliminated the possibility that it was «developed single-handedly by some unknown innovator […] the product of painstaking development within a restricted circle of innovators» and the possibility of an «external origin of rhythm»,[37] Lera goes on to declare that «the analysis of the script forces us to recognize that there is a basic continuity between the latest neumatic families, the writing of the first polyphonic forms, and the notation of the Notre-Dame school»;[38] and concludes with the announcement that «[r]hythmic notation, in short, appears to have been simply the natural continuation of previous methods of notation»;[39] and that its origins are therefore «[to] be sought in the performative meanings which square notation was capable of expressing around the middle of the twelfth century».[40]

This conclusion, according to Lera, «might seem nothing if not obvious».[41] Perhaps it is for this reason that he apparently deemed it unnecessary to supply evidence to support it, and avoided being more specific about the scope of the «continuity» between «the latest neumatic families, the writing of the first polyphonic forms, and the notation of the Notre-Dame school» (graphic continuity? continuity of some sort of metric manner? Clarification on this point would have been extremely useful: merely graphic continuity is so obviously in evidence here that there is no need to call attention to it; if, however, Lera means the other possibility, then this would be yet another case where he assumes what is yet to be demonstrated), and failed to define more precisely «the performative meanings which square notation was capable of expressing» (are these perhaps independent from, or

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[34] Above all because in the same footnote, Lera also mentions the study of Waite, already cited above, thus leaving the reader with the impression that the two authors dealt with the issue on the same level of authority and competence.

[35] P. 152, par. 1.3.

[36] P. 152, par. 1.3.

[37] P. 153, par. 1.3.

[38] P. 153, par. 1.4.

[39] P. 153, par. 1.4.

[40] P. 153, par. 1.4.

[41] P. 153, par. 1.5.

contrasting with the notation itself?). He himself, after all, realizes that «the theory of Gregorian chant, for all the thorough investigation on which it is based, has never succeeded in offering clues to the process by which monophonic chant would have brought forth polyphonic rhythm».[42] And yet this is apparently the basis from which he intends to proceed.

All this results in further claims that seem risky at best: the «sudden move» from the rhythmic modes to mensural theory, for example, two notational stages that are claimed to have «points of contact […] that are extremely weak»[43] (as already noted, Lera does not seem greatly concerned with thirteenth-century motet traditions, whose connections, including metrical ones, with the *clausulae* — to cite just one example — seem to me anything but «weak»). «The art of Perotinus», in short, would have been completely without «contemporary ancestors and heirs in the medieval musical context […] a kind of curious island situated between two firm realities, monophonic and mensural, which could scarcely be more different from one another».[44] The only way to repair this putative rupture, according to Lera is, therefore, «the complete reconsideration of the theoretical conceptions on which we have based our knowledge of twelfth-century music. The transition from Gregorian to rhythmic style, and from the latter to mensural style, must be imagined as a gradual and continuous one; it is vital to repair the ruptures that have broken, at two points, the continuity of Medieval performance practice».[45] To this end, he proceeds to hypothesize that «Notre-Dame rhythm could very well have been a by-product, perhaps not even an intentional one [!]», and to postulate that «it did not contain any metric component», and concludes finally that «only under such conditions is it possible, at last, to conceive the possibility that the polyphonic style could have been derived from Gregorian neumatic writing», a conclusion whose «first consequence» must obviously be «the definitive rejection of modal theory».[46]

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One cannot help but wonder, at this point, if it is even plausible that rhythm could have been a «by-product» let alone «not even intentional» in polyphony of any kind; or whether it is appropriate, for music from this period and in these notations, to posit an opposition between a rhythmic order and a metrical one. The undoubtedly tantalizing idea of «determining an original connection between sacred monophony and polyphonic rhythm, […] to discover among the conclusions of the Gregorianists a key which allows us not only to explain the origin of polyphonic rhythm, but also to interpret its writing with greater ease»[47] – this idea thus depends on assumptions that are so doubtful and hypothetical as

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[42] P. 153, par. 1.5.
[43] P. 154, par. 1.6.
[44] P. 154, par. 1.6.
[45] P. 155, par. 1.7.
[46] P. 155, par. 1.7.
[47] P. 156.

ultimately to undermine his credibility. The theories proposed by Lera are no less ambiguous than the ones he claims to replace; yet a revolutionary breakthrough of the kind he proposes, as already said, ought surely to be based on methods that are free from defects and guaranteed to be effective.

We are, in short, doubtful that all this could 'economically' replace the principles of the more tried and proven modal theory, and we will seek to demonstrate this in our commentary to the transcription methods advocated by Lera. First, however, let us deal with the problem of the chronology of the Notre-Dame sources, since Lera's convictions on this point also seem to be at variance with e threeceived scholarly consensus.

3. Lera, when dealing with five-note ligatures and their resolution, writes: «It is this process which is responsible for the many graphic variants that occur between the notation of F, the oldest of the Notre-Dame codices, and the two more recent collections W1 and W2».[48]

Such certitude in affirming, against the vast preponderance of scholarly opinion, the priority of *F* among the Notre-Dame codices calls for adequate evidentiary support — or at least firm bibliographic references, which Lera does not in fact provide. Nor, perhaps, could he have, since most musicologists have always been comfortable with the view that W_1 is the oldest of the three. Ludwig was already convinced of this, and placed the sources in the chronological succession $W_1 - F - W_2$:[49] a chronology which was accepted also by Luther Dittmer,[50] William G. Waite,[51] Norman E. Smith,[52] as well as Raffaello Monterosso, who considers *F* as «the most comprehensive, and in terms of the sheer quantity of its repertory, probably the closest to the original […] from the end of the thirteenth century or the beginning of the fourteenth […] Older by fifty years is Codex 677 of Wolfenbüttel [W_1]», while «the most recent witness is Ms. 1206 of Wolfenbüttel [W_2]».[53]

[100] To the extent that there is any difference of opinion, it has been mostly with regard to the dating of the codices. For example, Anselm Hughes, in his «contribution to *The New Oxford History of Music*, criticizes the belief that «whereas on the one hand organa and conducti were composed and written at Notre-Dame in Paris from about 1170 under Léonin up to the death of his successor Pérotin in 1235, on the other hand manuscripts in

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[48] P. 162.

[49] Cfr. Lw.

[50] Cfr. LUTHER DITTMER, *A Central Source of Notre-Dame Polyphony: Facsimile Reconstruction, Catalogue Raisonné. Discussion and Transcriptions*, Institute of Mediaeval Music, Brooklyn 1959 (Publications of Mediaeval Musical Manuscripts, 3).

[51] Cfr. WAITE, *The Rhythm of Twelfth-Century Polyphony*, p. 5.

[52] Cfr. SMITH, *The Clausulae of The Notre Dame School*, p. 19.

[53] Cfr. RAFFAELLO MONTEROSSO, «Ars antiqua», in DEUMM-*Lessico*, vol. I, 1983, p. 183.

which these productions are preserved must be dated about 1300 or later»,[54] and consequently proposes that «the gap must be very substantially narrowed if not actually closed», citing «Apel's contention[55] that the famous manuscript Wolfenbüttel 677 ought to be dated about 1250, not in the fourteenth century, to which it is sometimes assigned».[56] For his part, Hughes then presents a chronology, based on painstaking research, with the help of experts in palaeography, in which the manuscripts W_1 and F are assigned to the same period (around 1250), whereas W_2 is considered later by about half a century (around 1300). Apel, as Hughes reminded us, had sharply criticized the tendency to consider W_1 as a product from around 1300 or even later, invoking the authority of Professor Edward K. Rand of Harvard University, who «pointed out […] that the minuscule, rather than the majuscule, form of the final *s*, as well as the more regular *a* of minuscule Carolingian script, suggest a mid-thirteenth century date for the codices W_1 and *Fl*, that is to say, only a few decades later than the period represented by their contents».[57]

Yet the scholar who has perhaps dealt most extensively with issues of dating is Rebecca Anne Baltzer. In an article of 1972, she reviewed the state of research on the dating of *F* in a brief historical excursion which it may be useful to summarize here.[58] After citing Léopold Delisle[59] (who studied the manuscript in 1885, definitively establishing its French origins, but arriving at a far too late dating between 1285 and 1314), Baltzer turns to a posthumous article by Ludwig, who confirmed the French origins of *F*,[60] as well as Apel's comments cited above. She then recalls Jacques Handschin as one of the very few advocates of the priority of *F* over W_1[61] and concludes her article by dating the compilation of *F* around the middle of the thirteenth century, and that of W_2 slightly later, around 1260–75.[62]

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[54] ANSELM HUGHES, *La musica a ritmo fisso*, in *Storia della musica*, vol. II *Musica medioevale fino al '300*, ed. Anselm Hughes, Feltrinelli − Garzanti, Milan 1991 pp. 359–403: 360 (original edition *Music in Fixed Rhythm*, in *The New Oxford History of Music*, vol. II, Oxford University Press, London 1954 [pp. 311–12]).

[55] Cfr. APEL, p. 216 [English edition p. 200].

[56] HUGHES, *La musica a ritmo fisso*, p. 360.

[57] Apel 200 n. 1.

[58] Cfr. REBECCA ANNE BALTZER, *Thirteenth-Century Illuminated Miniatures and the Date of the Florence Manuscript*, «Journal of the American Musicological Society», XXV/1 1972, pp. 1–18.

[59] Cfr. LÉOPOLD DELISLE, *L'antiphonaire de Pierre de Médicis, avec en appendice les premiers mots des pièces contenues dans la seconde partie de cet antiphonaire et le texte de quelques-unes de ces pièces*, «Annuaire-Bulletin de la Société de l'Histoire de France», XXII 1885, pp. 100–6 and 109–39.

[60] Cfr. FRIEDRICH LUDWIG, *Über den Entstehungen der grossen «Notre Dame-Handschriften»*, in *Studien zur Musikgeschichte: Festschrift für Guido Adler zum 75. Geburtstag*, Vienna 1930, p. 46.

[61] After refuting Delisle's dating (cfr. JACQUES HANDSCHIN, *The Summer Canon and its Background*, Part I, «Musica Disciplina», III 1949, pp. 55–94: 73), Handschin suggests that W_1 be considered later than *F* by one generation, that is, written probably towards the middle of the thirteenth century (ID., *The Summer Canon and its Background*, Part II, «Musica Disciplina», V 1951, pp. 65–113: 113).

[62] BALTZER, *Thirteenth-Century Illuminated Miniatures*, p. 17.

In the hefty study that accompanies the transcription of the complete two-part clausula repertory in W_1, F and W_2,[63] Baltzer returns to the issue, and also adds interesting new observations on the connections between the three codices. She remarks that while the three manuscripts transmit substantially the same repertory — and often in identical versions — none depends directly on another. As far as W_1 in particular is concerned, she reiterates the remarks she made in her previous contribution, and then continues: «The W_1 manuscript represents a more problematic situation of date and provenance […]. The general state of the repertory in W_1 is stylistically earlier than that of F and W_2 and […] the manuscript was probably copied somewhere in the British Isles rather than on the Continent».[64] This date and provenance are confirmed by the observations of Heinrich Husmann, who held that the origin of W1 was to be sought in the South of England (Hyde Abbey) or in East Anglia (Ely), because of the transmission *in unicum* of the Responsories O 35 and O 36 dedicated to St Andrew, which were part of the liturgy in those locales.[65]

In her brief review Baltzer then cites Rudolf Flotzinger, who proposes a date of 1265 for the last fascicle of W_1 (the eleventh), and consequently pushes back the date of the principal *corpus* of the manuscript itself,[66] and then Ernest Sanders, who does not share Flotzinger's views and would place W_1 rather in the second quarter of the thirteenth century, a little earlier than F.[67] Baltzer adopts this view, and harmonizes it perfectly with all the other palaeographic, chronological and stylistic evidence.[68]

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W_1 is not only older than the other two principal manuscripts, but older even than all minor sources that have survived. Despite the extensive discussion that has led to this consensus, Lera does not appear to be convinced by any of this, and sides with Handschin in settling for the priority of F. It is with convictions like these that Lera then goes on to treat the principles of Notre-Dame notation.

4. On this more delicate matter, to recall, he relies on the support of the elusive «principle […] of the *terminal articulation of the neumes*».[69] Many of the examples — it has to be admitted upfront — seem rather less than persuasive; others can be easily interpreted —

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[63] BALTZER, *Notation, Rhythm and Style*, pp. 5–7.

[64] BALTZER, *Notation, Rhythm and Style*, p. 5.

[65] Cfr. HEINRICH HUSMANN, *Zur Frage der Herkunft der Notre-Dame-Handschrift W₁*, in *Musa – Mens – Musici. Im Gedenken and Walther Vetter*, Wegener, Leipzig 1969, pp. 33–5.

[66] Cfr. RUDOLF FLOTZINGER, *Beobachtungen zur Notre-Dame-Handschrift W₁ und ihrem 11. Faszikel*, «Mitteilungen der Kommission für Musikforschung, Anzeiger der philosophisch-historischen Klasse der Österreichischen Akademie der Wissenschaft», CV/19 1968, pp. 245–62 (cfr. especially p. 261); ID., *Der Discantussatz im Magnus Liber und seiner Nachfolge: mit Beiträgen zur Frage der sogenannten Notre-Dame Handschriften*, Böhlau Nachfolger, Vienna 1969 (Wiener Musikwisssenschaftliche Beiträge, 8), pp. 232–3.

[67] Cfr. ERNEST SANDERS, *Notre-Dame-Probleme*, «Die Musikforschung», XXV 1972, p. 339.

[68] BALTZER, *Notation, Rhythm and Style*, p. 7.

[69] P. 156 (Lera's italics).

with perfectly analogous results — with even the most orthodox application of modal theory. Let us consider a few examples.

4.1. «Two-note ligatures»

As far as two-note ligatures are concerned,[70] we have already mentioned the obvious modal implications of Lera's rule and there is no need to repeat this. Let us only draw attention to the lack of consistency in the treatment of these *ligaturae*, a treatment which makes the complexity of the 'modal rules' look serenely confident by comparison, and which Lera seeks to root in the so-called principle of neumatic articulation, by which, for example, «[t]he freestanding two-note ligature receives additional emphasis on the first note».[71]   [103]

Once again we are faced with the peril of identifying «appoggio» and *lengthening* which, as far as I can see, is not beneficial even for Gregorian semiology and which, therefore, may not be worth commenting on here. Yet it is worth returning to another statement, one that yet again illsutrates how Lera's reasoning often proceeds from hypothetical assumptions only to arrive at ostensible certainties:

> Such formulas are often wrongly assigned to the so-called second mode: here we find the second mode in its classic guise and in a precise transcription. We cannot rule out that some particular performative accentuation may have produced the sense of a iambic progression in listeners; this hypothesis could perhaps help to situate the various discourses surrounding the rhythmic modes in their proper historical context. It goes without saying that theorists have led modern musicologists astray, by elevating to the status of an organic system something that was probably nothing more than a simple type of spoken diction.[72]

The hypothesis alone strikes me as implausible, but let us at least concede the point as hypothesis. Even then it is at least irritating that Lera asserts, on the basis of this alone, that «*It goes without saying* that theorists have led modern musicologists astray, by elevating to the status of an organic system something that was probably nothing more than a simple type of spoken diction». No – on the basis of this hypothesis there is nothing that must «go without saying» – least of all the notion that the essence (not the name!) of a rhythmic mode would have been, and is, «a simple type of spoken diction».

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[70] P. 157, par. 2.1.
[71] P. 158.
[72] P. 159.

4.2. «Three-note ligatures»

Further inconsistencies emerge when Lera deals with the transcription of ligatures of more than two notes. When it comes to the three-note ligatures, it is difficult to assess the conceptual foundation of Lera's transcriptions (aside from the crypto-modalism of the 'rule' which holds that «the last note is accented; the two notes before it each subtract a third from [104] the preceding accent»),[73] for his examples almost invariably include indefinitely sustained notes against which it is always easy to read simples series of *fractiones* ♪♪♪ (which then makes it hard to understand, by the way, how or why the accented note should differ from the others).

In other cases we are dealing with transcriptions that seem to be arbitrary and random. Thus, in the Alleluia *Pascha nostrum*, which ought to exemplify the 'rule' which holds that «[t]he three-note ligature placed by itself or at the beginning of an ordo receives additional articulation on the first note»,[74] but where we find three different interpretations of three different *ternariae*.

Example 1: Alleluia *Pascha nostrum: F*, c. 109, *ordo* 10.

In those places, on the other hand, where there is consistency of interpretation (as in the upper voice of the last example on page 161),[75] it is easy to ascertain that Lera's transcription agrees in all particulars with conventional 'modal' transcriptions.[76]

4.3. «Four-note ligatures»

The 'rule'[77] for four-note ligatures can also be understood as purely modal (apart from its formulation), and the examples, both here and elsewhere, are transcribed accordingly.

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[73] P. 160. par. 2.2

[74] P. 161.

[75] Par. 2.3, for example, deals with the instrumental piece in *Har*.

[76] The same could be said about the example on p. 164, par. 2.6.1, and that of *ordo* 26 of *Pascha nostrum* (p. 157).

4.4. «Five-note ligatures»

With regard to five-note ligatures Lera writes: «The fifth note is accented; the fourth, third and second fill out the preceding accent; the first note occupies the last third of the accent prior to that, but frequently receives an initial articulation that causes to be extended to full duration».[78] After this rule, which is lacking in sufficient clarity, Lera offers two examples which show us two possible interpretations of the ligature in question: BBBBL ternaria and L ternaria BBBL ternaria (we use the 'modal' terminology which Lera studiously avoids in the form that follows in the substance). The examples, which ought to have disproved the possible existence of a general rhythmic structure that informs the compositions, are not, however, conclusive, as shown by the collation of the manuscripts which Lera himself presents. One notes in fact that five-note ligatures in F and W_1 always correspond, in W_2, to three-note followed by two-note ligatures: clear proof that the clausula must be in the first mode; the five-note ligature therefore has exactly the same meaning. Lera however argues that, because of *ordo* 3, this interpretation cannot be sustained: «ordo 3 [...] cannot be transcribed in the so-called first mode»:[79] he probably assumes that such transcription is rendered impossible by the dissonance which, if one transcribes 'modally,' arises between *Duplum* and *Tenor*. Yet in cases like these, all scholars acknowledge that we may momentarily ignore vertical relationships in favor of the organic rhythmic coherence of the horizontal lines: thus Apel, for whom dissonance on a strong beat is perfectly acceptable provided that it be immediately resolved;[80] thus Waite, who notes how it is often possible, in an *organum* (but, as far as I am concerned, the rationale can be extended to include the *clausulae* as well), to sacrifice the principle of consonance in order not to compromise or interrupt a particularly significant melodic motion in the upper voice or voices;[81] and thus also Baltzer who, while not explaining her decision explicitly, always reads five-note ligatures in the way indicated above.[82]

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[77] P. 161, par. 2.3. «The final note is accented; the other three notes fill out the entire preceding accent»: that is, in modal terms: the last note of the ligature is L (ternaria), while all the others are subject to a simple *fractio modi*.

[78] P. 162, par. 2.4.

[79] P. 162, par. 2.4.

[80] Cfr. APEL, p. 269.

[81] Cfr. WAITE, *The Rhythm of Twelfth-Century Polyphony*, p. 122.

[82] Cfr. BALTZER, *Notation, Rhythm and Style*, pp. 1025–27.

[106]   4.5. «Ligatures of more than five notes»

Given this state of affairs, it may not be surprising that Lera's definition of ligatures containing more than five notes should be a little approximate.[83] Yet to say the truth, the transcription of these more rarely encountered ligatures has always presented problems to scholars, many of whom have resorted to extended use of the convenient procedures of *fractio*, at the expense, perhaps, of more coherent rhythmic interpretations. Lera, it seems, is no exception.

4.6. «Single notes»

The same can be said also about one of the rules for the succession of single notes: «In the style of older organum there is no shortage of examples of single successive notes at the same pitch; these are probably to be interpreted as breves».[84] In this case, too, in my opinion, the numerous *fractiones* may resolve the problem in too simplistic a fashion. If it is true that the graphic form of the notes has no connection with the value of the notes (as Lera notes as well), it is also true that a modal interpretation of the same notes would allow us to arrive at more articulated solutions. Here is Lera's version of a passage from the *Benedicamus Domino*:[85]

Example 2.

This transcription strikes me as arbitrary: indeed I wonder why the four successive notes on the same pitch in ordo 20 were not all transcribed as ♪♪♪♪ rather than ♪♪♪♩. – that is, in a manner that would certainly be more 'gregorianizing.' Unless perhaps Lera does not wish to maintain isochrony between the total durations of every *ordo*, thereby lapsing once again in the sort of crypto-modalism which we have observed already. Comparison between
[107]   the sources may help us here, since the figuration is not really that rare. It appears, for example, in the next piece, *Docebit*,[86] which is transmitted in all three manuscripts; all

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[83] P. 163, par. 2.5.
[84] P. 164, par. 2.6.2.
[85] P. 164, par. 2.6.2.
[86] M 26, *Docebit* 1 (L. 1).

transcribers[87] assign the value of a perfect L to the first note, a B *altera* and B *recta* to the two central notes, and lastly a perfect L to the final note:

Example 3.

In a certain sense, then, the configuration anticipates a manner of proceeding typical of pre-franconian and franconian notation, in which precisely this succession of values will become quite typical.

4.7 *Conjuncturae*   [108]

As far as the *conjuncturae* are concerned, after making the self-evident point that «[t]he ternary conjunctura is perfectly equivalent to the ternary ligature»[88] (here too the reservations expressed in 4.2 are applicable), Lera discusses mostly cases of *conjuncturae* that contain a large number of notes. The examples are generally acceptable (in part because they agree with a 'modal' resolution of the same passages); only the example of *ordo* 39 of the Alleluia *Pascha nostrum* is not entirely convincing, with the figuration

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[87] Cfr. BALTZER, *Notation, Rhythm and Style*, pp. 630–5; SMITH, *The Clausulae of the Notre Dame School*, p. 27; RACEK, *Die Clauseln von W₁*, p. XXV.

[88] P. 164, par. 3.1.

transcribed entirely in breves, without assigning the value of L to the last note of the *conjunctura*.[89] Completely incomprehensible, however, is the following statement, which Lera says is «more illuminating to our understanding of the Notre-Dame aesthetic»:[90] «the conjunctura has» the capacity «to indicate explicitly the final articulation by placing a ligature at the bottom of the series of currentes»,[91] analogously to what occurs (still according to Lera) with Gregorian *resupini* neumes. Somewhat unsurprisingly, the examples that follow do not always offer a coherent interpretation of the figuration, but are rendered rather in irregular and contradictory fashion even when compared to the author's preceding transcriptions.

4.8. Plica

The examination of the single figures in Notre-Dame notation concludes with a discussion of the plica and plicated notes – a discussion in which statements of the obvious alternate with statements of dubious authority. While nobody would contest, for example, that the plica was derived from the «Gregorian *liquescence*»,[92] or that «the mensural context in which the plica finds its justification is decidedly different from the medieval monophonic context»,[93] or that «the Notre-Dame plica is no longer linked to the pronunciation of the literary text; on the contrary, it appears very frequently in completely melismatic passages»,[94] I do, on the other hand, find somewhat reductive the notion that «the plica is nothing but a note placed in an anomalous position, that is, after the articulation which ends the ligature»,[95] that it is almost inevitable «in contexts where the greatest possible linearity in the ligature chain is to be preferred», so as not «to resort to a notation that was decisively less clear and immediate, using the so-called fractio modi and alternating two and three-note ligatures in disorderly fashion»:[96] a necessity which can only be perceived by those who, like Lera, hold that the Notre-Dame masters considered *fractio modi* as an exceptional expedient, utilized «only when a unison or some melodic particularity […] made it impossible to use plicated writing».[97] Yet anyone who has worked with Notre-Dame notation knows from experience that *fractio modi* (just as its opposite *extensio*) is a quite normal procedure; Lera

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[89] Cfr. p. 165.
[90] P. 165, par. 3.2.
[91] P. 165, par. 3.2.
[92] P. 166, par. 4.
[93] P. 166, par. 4.
[94] P. 166, par. 4.
[95] P. 167, par. 4.1.
[96] P. 167, par. 4.1.
[97] P. 167, par. 4.1.

himself confirms what we are saying, for he appears to be perfectly comfortable with the regular use of *fractiones* in his transcriptions.

Yet this is not the only viewpoint that must leave the reader puzzled. A little later, for example, Lera considers «cases of plicas located in anomalous positions»:[98] in these, he opines, «the notator does not intend to write a plica at all, but merely indicates particular articulations with the sign of the longa».[99] «Notre-Dame notation moreover prefers to clarify articulation by using the longa in contexts that tend to be unclear […] wide melodic leaps or […] repeated unisons».[100] In all these cases, therefore, Lera, against the unanimous opinion of all other transcribers,[101] deems it unnecessary to interpret the 'sign of the plica' as a plica, and instead simply ignores it. This is an approach of debatable validity, it seems to me, but Lera applies it also in other contexts: when, for example, the plica appears on the note which concludes the *ordo*, he does not transcribe it as a plica, but always considers it as a sign of the «articulation that concludes the ordo».[102]

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5. With these various statements Lera concludes the more properly analytical part of his discussion, in an attempt to offer «a simple introduction to Notre-Dame notation».[103] In the final four pages he sets out to «analyse ligature groupings», rightly convinced that «the study of notation enters its most lively and important discussion only when we cease to consider each individual ligature as a self-contained organism, and when we begin to focus on the connections that bring together the ligatures themselves».[104] We do not consider it necessary to follow him on this further path: having not shared the premises of the discussion, we certainly cannot share their subsequent elaboration either.

To my mind, in sum, Lera's theories regarding Notre-Dame notation are frequently in error, and his claims, when taken together, are not sufficient to prove that the traditional modal interpretation lacks validity. Despite the ambiguities and difficulties that we undeniably encounter, in the current state of research, modal notation is still the most economic theory to explain the nature of the rhythm of the compositions of this school: certainly more economical than Lera's grammatical norms, which create more difficulties than they resolve.

To conclude, one could level the very reproach against Lera that he, at the beginning of his contribution, aims against the theorists who articulated the principles of modal notation: with his ostensible revolution, he confuses the readers rather than helps them understand, abandoning himself, in the majority of cases, to speculations devoid of any real value.

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[98] P. 168, par. 4.2.

[99] P. 168, par. 4.2.1.

[100] P. 168, par. 4.2.2.

[101] Cfr., for example, APEL, p. 257, which reports and transcribes the passage cited by Lera.

[102] P. 169, par. 4.3.

[103] P. 169, par. 5.

[104] P. 169, par. 5.