Charlemagne’s Archetype of Gregorian Chant

By KENNETH LEVY
For Michel Huglo on his 65th birthday.

When was “Gregorian chant” first written down? When were the propers of the Roman Mass and Office, which we can trace in an unbroken line from the later Carolingians to Solesmes, given their definitive neumed forms? If current wisdom is believed, the neumatic notation was not devised until the first half of the ninth century; it arose in the service of novel and ancillary chants like tropes, sequences, genealogies, celebrant’s and diaconal ekphroneses, theorist’s illustrations, and polyphony. The central repertory of Gregorian proper chants would remain consigned to professional memories and improvisational maneuver during the early generations of the neumes’ availability; its systematic neumation would not be undertaken until ca. 900. This scenario, whose origin we owe largely to Solange Corbin, has won wide acceptance. I believe it is wrong.

My aim here is to assemble witnesses to the existence of an authoritative neumed recension of the Gregorian propers ca. 800, a century sooner than is presently supposed.

To begin, we must deal with two related “archetypes” of Gregorian chant, one containing the verbal texts alone, the other consisting of the same core of liturgy and text plus the supplement of neumes. Inasmuch as early traditions for the Mass propers are better documented than those for the Office, my focus will be on the Mass,

1 Corbin 1952, esp. 226–28, Corbin 1960, 690–94, Corbin 1977, 22–42. It has been embraced by Hucke 1980a, 445, and Treitler: “The earliest practical notations served primarily a cueing function for celebrants reciting ecclesiastical readings and prayers. . . . The notation of antiphons, responsories, and Mass-Proper items for the cantor and schola did not begin until the tenth century” (1984, 176). For the Rutgers Symposium of April 4–5, 1986 at which the original version of the present paper was delivered, Dr. Hucke’s prospectus read: “Written tradition of Western music and of chant did not exist at the time of St. Gregory the Great, and not even when Roman Chant was introduced into the Frankish Empire. It did not begin until ca. 900. . . . Before chant was written down around 900, it was transmitted orally. To study the history of chant up to 900 is to study an oral tradition.”
although the historical situation should be closely parallel for the Office.

The oldest full witnesses of the verbal texts of the Mass propers are the half-dozen documents that receive a masterful edition in Hesbert 1935; they are the first six items in Table 1.

All are of apparently north-European origin, with dates ranging between the later eighth and later ninth centuries. A substantial consensus among them points to a standard text-recension circulating in Frankish regions by ca. 800, a recension whose lost original I shall call the Carolingian Text Archetype. In one of the oldest sources, Bland (Table 1, No. 2, dating ca. 800), there is an annotation contrasting the manuscript's own provisions with those of Roman antiphoners known to its compiler.2 Thus there were Italian roots reaching farther back than the Frankish sources, but no substantial relic of an eighth-century Roman text is preserved.

As for the Gregorian propers with neumes, the earliest surviving witnesses date from ca. 900, a century after those with the text alone.3 Some of the more important of them are listed in Table 2.

These too are in the main northern European, and there is a substantial degree of consensus among them pointing to an archetype which I shall call the Carolingian Neumed Archetype. Their dates begin around 900. It is this distribution of the surviving sources, with text witnesses beginning ca. 800 and neumed witnesses ca. 900, which lends support to the theory that neumes were not supplied to the full Gregorian repertory until a century after the text tradition was established. In my view, the two traditions were closely linked in date and function, with both circulating around the end of the eighth century. Both would represent Charlemagne's politics of liturgical renewal; both would implement the changes that were set in motion by Charlemagne's father Pepin at the time of Pope Stephen II's visit to France in 754 (Vogel 1965a).

Let me address the view that the Gregorian musical collection began later ("ca. 900") than the text collection ("ca. 800"), by examining first what I see as its flawed rationale. It is true enough that a century-long gap separates the earliest preserved witnesses of text from those with music, and what neumations there are from the middle and later ninth century are given to new and ancillary chants—tropes, sequences, hymns, lections, Celebrants' chants,

2 Hesbert 1935, No. 179 (the Seventh Sunday after Pentecost): "Ista ebdomata non est in antefonarios romanos." The situation is studied in Hesbert 1932–33.

3 Both types are surveyed in Jeffery 1983.
### Table 1.

**Carolingian Text Archetype:**

**Early Descendents (Mass-books)**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Type</th>
<th>Date</th>
<th>Origin</th>
<th>Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Rheinau</td>
<td>Antiphonale missarum</td>
<td>late 8/early 9</td>
<td>northern France or Switzerland</td>
<td>elegant</td>
</tr>
<tr>
<td>2.</td>
<td>Bland[iniensis]</td>
<td>Ant. miss.</td>
<td>late 8/early 9</td>
<td>northern Europe</td>
<td>elegant</td>
</tr>
<tr>
<td>3.</td>
<td>Monza Cantatorium</td>
<td>Cantatorium</td>
<td>late 8/early 9, or middle 9</td>
<td>northeastern France</td>
<td>purpureus; uncials</td>
</tr>
<tr>
<td>4.</td>
<td>Compiègne [Compendiensis]</td>
<td>Ant. miss.</td>
<td>late 9</td>
<td>Soissons?</td>
<td>deluxe</td>
</tr>
<tr>
<td>5.</td>
<td>Senlis</td>
<td>Ant. miss.</td>
<td>betw. 877–882</td>
<td>St. Denis/Senlis?</td>
<td>elegant</td>
</tr>
<tr>
<td>6.</td>
<td>Corbie</td>
<td>Ant. miss.</td>
<td>“shortly after 853”</td>
<td>Corbie</td>
<td>elegant</td>
</tr>
<tr>
<td>7.</td>
<td>Lucca fragment</td>
<td>List of chants (Advent)</td>
<td>late 8</td>
<td>Lucca?</td>
<td>routine</td>
</tr>
<tr>
<td>8.</td>
<td>“Monza Schwesterhandschrift”</td>
<td>Cantatorium</td>
<td>late 8/early 9, or middle 9</td>
<td>northeast France</td>
<td>purpureus; uncials</td>
</tr>
</tbody>
</table>

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"**Monza Schwesterhandschrift**" (Berlin, Cleveland, [and Trier]): see Gamber 1968, no. 1311 (Bischoff: "2nd third of 9th c."); Graduale 1957, 143 ("beg. 9th c."); Siffrin 1950; Jeffery 1983, 320.
### Table 2.
**Carolingian Neumed Archetype: Early Descendents (Mass-books)**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Type</th>
<th>Date</th>
<th>Neume type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Laon 239</td>
<td>Antiphonale missarum</td>
<td>ca. 900–930</td>
<td>Lorraine</td>
</tr>
<tr>
<td>2.</td>
<td>Chartres 47</td>
<td>Ant. miss.</td>
<td>end 9th c.</td>
<td>Breton</td>
</tr>
<tr>
<td>3.</td>
<td>Saint Gall 359</td>
<td>Cantatorium</td>
<td>early 10th c.</td>
<td>Saint Gall</td>
</tr>
<tr>
<td>4.</td>
<td>Laon fragment</td>
<td>Cantatorium</td>
<td>ca. 900</td>
<td>Lorraine</td>
</tr>
<tr>
<td>5.</td>
<td>Valenciennes fragment</td>
<td>Ant. miss.</td>
<td>end 9th c.</td>
<td>Breton</td>
</tr>
<tr>
<td>6.</td>
<td>Monza excerpt</td>
<td>Ant. miss.</td>
<td>early 10th c.</td>
<td>proto-Nonantolan?</td>
</tr>
<tr>
<td>7.</td>
<td>Albi excerpt</td>
<td>Ant. miss. (Processionale)</td>
<td>early 10th c.</td>
<td>proto-Aquitaine</td>
</tr>
</tbody>
</table>

Laon 239 (Laon, Bibl. mun., MS. 239): see Gamber 1968, no. 1350; Graduale 1957, 57 ("vers 930"); Mocquereau 1909–12 (facs. ed.).

Chartres 47 (destroyed): see Gamber 1968, no. 1351; Graduale 1957, 43 ("10e s."); Huglo 1979 ("end of 9th c."); Mocquereau 1912–14 (facs. ed.).

Saint-Gall 359 (St. Gallen, Stiftsbibliothek, Cod. 359): see Gamber 1968, no. 1315; Graduale 1957, 132 ("début du 10e s."); Mocquereau 1924 (facs. ed.).


Monza excerpt (Monza, Duomo f-1/101): see Gamber 1968, nos. 801, 1250, 1336; Dalmonte 1969, 20–23, tav. VII.

Albi excerpt (Albi, Bibl. mun., 44): see Huglo 1982, 253–68, pl. V.

etc.—rather than to the Gregorian propers. Yet this fails to consider the plausibilities of survival. With representatives of Mass-antiphoners as rare as they are between the eighth and tenth century, there is an obligation to consider what may have failed to survive as well as what did.

Table 1 has shown the chief early descendents of the Carolingian Text Archetype. Of the eight items listed there, only three—Reinau, Bland, and Lucca—go back to the late eighth or early ninth century, to the period before we have actual evidence of neumes. The Monza Cantatorium and its Trier-Berlin-Cleveland sister-fragments may date from that remote time, or they may (as Bischoff indicates) date only from the second third of the ninth century (Gamber 1968, no. 1311). As for Compiègne, Senlis, and Corbie, they are of later date, originating at a time when notations are already available. Thus only Reinau, Bland, and Lucca, are surely earlier than our first sources with neumes: only these three survive as representatives of the text-antiphoner during the three-quarters of a century from the late 8th through middle ninth century.
CHARLEMAGNE'S ARCHETYPE OF GREGORIAN CHANT

It is hazardous to assess the survival rates of Carolingian manuscripts. Yet for text-antiphoners of the "early" period represented by Rheinau, Bland, and Lucca we have indications that they cannot have been altogether rare. A number of documents indicate the obligation of priests to know the content of the Antiphoner. If each fair-size church or monastic house had just a single text-antiphoner, the number of copies should have mounted into the hundreds during the first century of the Carolingian ecclesiastical reform. At certain houses there were multiple copies. An inventory of 831 for Centula (St. Riquier) lists six volumes of "Antiphonarii," of which none still exists. If we measure the survivors against the numbers that are apparently lost, the disappearance-rate is so high that the extant text-antiphoners can not really be taken as statistical indices. They are accidents, all of which might have disappeared. They may tell us nothing about the original situation.

As for the neumed antiphoners (Table 2), they were doubtless fewer in number than the text antiphoners (Table 1). The early neumes were too small to be read by choral singers during a service.

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These are fundamental concerns for all priests, prominent among them the memorization of the Psalter and Creed, and the knowledge of chant.

c. Such prescriptions are elaborated in a capitulary of Bishop Haito of Basel (807-23) whose sixth paragraph lists the Antiphoner as a necessary volume: Quae ipsis sacerdotibus necessaria sunt ad discendum, id est sacramentarium, lectionarius, antifonarius, baptisterium, compositus, canon penitentialis, psalterium, homiliae per circulum anni dominicis diebus et singulâs festivitatis aptae. Ex quibus omnibus si unum defuerit, sacerdotes nomen vix in eo constabit" (Boretius 1883, 263).

d. At the Council of Rispach in 798: Paragraph VIII. Episcopus autem unusquisque in civitate sua scolam constitutam et sapientem doctorem, qui secundum traditionem Romanorum possess instruere et lectionibus vacare et inde debitum discere, ut per canonicas horas cursus in aecclesia beatum canere unicoique secundum congruum tempus vel dispositas festivitates, qualiter ille cantus adorinet ecclesiam Dei et audientes aedificentur (Werminghoff 1906, 199).

5 Stäblein 1979, 78*, n. 381; the note lists further instances.
and they were unlikely to be consulted during performance by ninth-century soloists and choirmasters who still consigned much about the repertory to their memories. In all, there were fewer musicians who used fully-neumed proper collections than there were priests who used missals, and fewer well-heeled individuals would have kept a noted book for the pure pleasure of ownership. The chance of survival was accordingly smaller for the neumed collections than for the text collections—whose chances we have seen were vanishingly small.

Other factors should have increased the text collections’ odds of survival. The preserved descendents of the Carolingian Text Archetype tend to be attractive examples of the book-creator’s art. Among the Sextuplex manuscripts they range from the simple elegance of Rheinau and Bland to the *purpurei* of Monza and Berlin-Cleveland (See Table 1, last column). For manuscripts of the Carolingian Neumed Archetype (Table 2), the already poor prospect of survival was further dimmed by the fact that even when nicely executed, the pages bearing neumes rarely have the tidy attractiveness of those with text alone. And where a text-antiphoner might remain useful indefinitely, requiring little change in order to be kept current, the neumed antiphoners were rendered obsolete by notational innovations of the tenth and eleventh centuries. The emergence of staff lines and clefs meant that new books were substituted, and the older ones with prediastematic neumes had little further purpose. All things considered, it is remarkable how few text-antiphoners survive from the later eighth and ninth centuries. It should therefore be no surprise if there are none at all with neumes.

In evaluating the plausibilities of survival, one must also consider the ninth-century neumations of music other than Gregorian chant. As a group, these are earlier than the Gregorian neumations, which has fostered the theory that the neumes were invented to serve other repertories than the Gregorian. Yet in most instances the survival of such strays is not attributable to the music itself but to the nature and content of the host manuscript. Certain of the miscellaneous early neumations are for celebrant’s chants (Preface, Exultet), lections, etc., where survival is due to the texts, and to host Sacramentaries and Lectionaries that are exceptionally fine. In other cases, such as the

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6 The twenty-one items in the “Table of Extant Examples of 9th-Century Notation” in Hiley 1980 are the best current inventory of neumatic incunabula; some further possibilities appear in the inventory in Corbin 1977, 21–41, among them the Sélestat Lectionary (Corbin, Taf. 2), and the neumed Exultet in Arsenal 227 (Corbin, Taf. 5).
“oldest dated neumes,” set to the prosula *Psalle modulamina*, or various relics of the Pentecost Greek Mass (*missa graeca*), the neumed entries are additions to manuscripts whose principal content is not related to the music.⁷

To sum up, the theory of the neumed antiphoners’ origin a century after the text antiphoners’ may be commended for its cautious reliance on the surviving evidence, but it does not stand up to scrutiny. When closely examined, there is no aspect that appears soundly based. The absence of early noted antiphoners does not validate the “late” scenario of Corbin, nor does it preclude the “early” scenario to which I now turn. Speculations have, of course, long circulated about the existence of noted recensions going back even as far as Gregory the Great, but no plausible case has yet been made.⁸ I offer seven indices of the existence of an “early” Gregorian neumation, all pointing well back of 900, some pointing back of 800.

The first index of an “early” date for the Gregorian neumation is a matter of paleographic common sense. Around the year 900, when the first substantial witnesses of the noted Gregorian propers appear (see Table 2), there are already marked differences in regional ductus: the distinctive neumes of Lorraine, Saint Gall, Brittany, etc. The brilliant work of our generation’s Gregorian semiologists, the “école Cardine,” has affirmed the long-held premise—going back to Volumes 2 and 3 of the *Paléographie musicale*—that a common neumatic archetype lies behind the diverse regional manifestations. Dom Cardine calls this the “archétype d’écriture” (1977, 174). I prefer a terminological distinction between the Carolingian Neumed Archetype and its neumeless counterpart, the Carolingian Text Archetype. Yet whatever the name, the varieties of ductus ca. 900, in the main descendents of an authoritative archetypal neumation, render awkward the claim that “the different regional paleographic styles go back to the very beginning of neume notation” (Hucke 1980a, 445). It is more likely that a period of development lay between the neumed archetype and its first preserved descendents. Allowing for paleographic change, one should suppose at least an intervening half-century, and perhaps much longer.

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⁷ Hiley 1980, “Table of Extant Examples of 9th-Century Notation,” 7th, 10th, and 12th items.

⁸ Recent advocates of an eighth century or earlier date have included Anglès 1954, 106–8, arguing for the time of Gregory, and Froger 1978. Froger correctly—as I see it—dates the archetype: “... we aim to restore the Gradual to the state in which it was diffused in the Carolingian Empire from the last quarter of the 8th century” (p. 82), but he attempts no justification of the dating.
A second index of an "early" Gregorian neumation can be drawn from the politics of the Frankish Empire, whose subdivisions were beginning even before the death of Charlemagne in 814. The most considerable of these came in 843 with the Treaty of Verdun, which formalized the growing split between a French West and German East. Musical consequences are recognizable in the differing states of the East- and West-Frankish sequence repertories. Among the Gregorian neumed propers, there are discrepancies reflecting similar causes but these are small while the agreements are large. Huglo has observed that this points to a noted Gregorian archetype before the middle ninth century (Huglo 1975).

The third index of an "early" date for the Carolingian Neumed Archetype is the reception of the Gregorian repertory in south Italy. Charlemagne took over the old kingdom of the Lombards after the capitulation at Pavia in 774, but in practice he was limited to the northern Duchy of Spoleto, and it was only ca. 787 that the southern Duchy of Benevento came under effective Carolingian control. South Italy is unlikely to receive a Frankish-Gregorian transmission before that time (Gay 1904, 25-48). At the later end, Dom Hesbert has placed the arrival of Gregorian chant at Benevento "before ca. 808" (1936, 450ff.). I pointed out some time ago that Hesbert's reasoning was sound but his date represented a faulty reading which has to be changed to "before ca. 838" (Levy 1970, 221, n. 100). Nevertheless, a Gregorian musical transmission would arrive at Benevento between ca. 787 and ca. 838, and since the neumatic details of the Beneventan readings agree with those of northern Europe, the indication is again of an archetypal Gregorian recension before the middle ninth century. This will be amplified in my seventh index, below.

The fourth index of an "early" noted archetype depends on the missa graeca, the composite of Byzantine, quasi-Byzantine, and Latin musical elements which was evidently assembled for the celebration of some Frankish imperial Pentecost of the late eighth or early ninth century. Charles Atkinson has tentatively proposed the years 827-35 for the compilation (1982, 144f.). I would prefer to keep it during the last decades of Charlemagne's reign, in particular between ca. 797 and 814 (Levy 1963, 36). Yet for present purposes either dating will suffice. What matters is that there are some six dozen manuscripts of the ninth through twelfth centuries with traces of this Pentecost Greek Mass. They represent nearly every region: France, Germany, Lowlands, England (by way of France). The exception is Italy, which

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9 Atkinson 1982, 120-25, provides an exhaustive inventory.
has at most five sources with "Greek" chants, none showing any relation to Pentecost, and none originating in the Beneventan zone. Now it may be that the Frankish-Gregorian tradition that came to Benevento left the north at a time so late that the Pentecost Greek Mass no longer mattered enough for inclusion. Yet the Beneventan transmission occurred "before ca. 838." Thus a likelier assumption is that it left the north before the elements of the Pentecost Greek Mass were annexed to the Gradual and Troper, hence at the latest by 827–835, and perhaps during the reign of Charlemagne.

The fifth index comes from the *Musica disciplina* of Aurelian of Réôme, composed ca. 850. Lawrence Gushee has demonstrated that Aurelian knew the neumatic notation. Yet to judge from the nature and considerable abundance of his musical citations, Aurelian may not have supplied the treatise with noted illustrations. He may have expected his specialist-readers to have neumed antiphoners for consultation. There is an indication of this in Cap. X, 27–29, where Aurelian cites an unusual passage in two Responsory verses of the first mode:

"There is in this mode [the First Authentic] a certain phrase (divisio) in the Responsories of the Nocturns that I do not remember finding elsewhere in the whole repertory (latitudinem) of the Responsory verses, except only in the verses of these two Responsories: R Domine, ne in ira tua; V Timor et tremor; and R Peccantem me cotidie; V Deus in nomine tuo. Which verses, although they could have the same arrangement as the others, nevertheless, because this remained so among the ancients, so also must it remain among us, in their memory."  

"Est in hoc tono quaedam divisio in nocturnalibus responsoriorum quam non uspiam memini me in latitudine totius responsiorium versibus reperisse, nisi solummodo in versibus istorum duorum responsorium. Hi autem sunt: Resp.
The survey of the verse repertory that Aurelian describes—"quam non uspiam memini me in latitudinem totius responsoriorum versibus repperisse"—is unlikely to have been a scroll through a memory bank, but rather a point to point comparison of neumed chants in a reference antiphoner. And when Aurelian opts to preserve the musical anomaly because it was used "among the ancients" ("apud antiquos ita mansit"), he is likely to have found the former tradition in a noted antiphoner.

Then in Cap. XIII, the reader is told of a musical passage in two Gregorian Gradual verses that is "not found elsewhere in the prolixity of the whole Antiphonale" ("memini me non alicubi repperisse in prolixitate totius antiphonarii"). One must again conclude that Aurelian is not referring to a singer's well-stocked memory but to the "prolixity" of a fully noted Mass-antiphoner.

My sixth index of the "early" date comes from the famous capitulary or Admonitio generalis, addressed by Charlemagne to the Frankish clergy on 23 March 789, setting forth the guidelines of his ecclesiastical reforms. In its eightieth chapter there is the injunction to all clergy ("omni clero") that they fully learn the Roman chant which his father Pepin ordered substituted for the Gallican chant.14 In its seventy-second chapter, addressed to "priests" ("sacerdotibus"), there is the injunction,

"... that there be schools for teaching boys to read. Be sure to emend carefully in every monastery and bishop's house the psalms [psalmos], notes [notas], chants [cantus], calendar material [computus], grammar[s] [grammaticam], and the Epistles and Gospels [libros catholicos]. For often

Domine, ne in ira tua; Æ Timor et tremor, et item: Resp. Peccantem me cotidie; Æ. Deus in nomine tuo, qui, cum ordinem possidere queant ceterorum, tamen [quia] apud antiquos ita mansit, apud nos quoque ob eorum memoriam necesse est permanere" (Gushee 1975, 88–89). I cannot say how how rare this phrase is among the First Mode Responsory verses, but the two verses end identically in the readings of the Worcester Antiphoner (Mocquereau 1922–25, 60 and 137), suggesting that the chants known to Aurelian in 850 were like the ones we know.

13 Gushee 1975, 99. I am indebted to Professor Gushee for confirming this reading of the Valenciennes manuscript. Aurelian here cites identical verse-endings of the Graduals Tollite portas and Haec dies; our later neumed traditions (Graduale Triplex, 25 and 212) once more indicate that he is talking about the chants we know.

14 "Ut cantum Romanum pleniter discant, et ordinabiliter per nocturna vel gradale officium peragatur, secundum quod beatae memoriae genitor noster Pippinus rex decertavit ut fieret quando Gallicanum tulit ob unanimitatem apostolicae sedis et sanctae Dei aeclesiae pacificam concordiam" (Boretius 1883, 61).
enough there are those who want to call upon God well, but because of poor texts [iemendatos libros] they do it poorly.\(^{15}\)

The passage is often cited as a possible indication of neumes, though so far without firm claim (Hiley 1980, 334). Within my present historical framework, Charlemagne's "notas" may perhaps be taken at face value. At issue are both the word notas and its context: psalmos, notas, cantus, computus, grammaticam, and libros catholicos. These are texts to be scrupulously emended for ecclesiastical establishments. We await adequate guides to Merovingian-Carolingian usage, but a sifting of available glossaries has produced no support for the view that Charlemagne's "notas" refers to notaries' shorthand signs ("Tironian notes") or schoolboys' jottings about texts under study, rather than to the neumes of plainchant—which is what the context suggests: "... psalmos, notas, cantus..."\(^{16}\)

My seventh index of an "early" date for the Carolingian Neumed Archetype points again to 800 and the reign of Charlemagne. It depends in part on eleventh-century evidence and hence cannot, any more than my previous indices, produce firm conclusions about an eighth-century Gregorian neumation. Yet it comes as close to proof as I think anything can.

Despite Charlemagne's characterization of his father's thoroughness in suppressing the old "Gallican" chant,\(^{17}\) it appears that the

\(^{15}\) "Et ut scolae legentium puerorum fiant. Psalmos, notas, cantus, computum, grammaticam per singula monasteria vel episcopia et libros catholicos bene emendate; quia saepe, dum bene aliqui Deum rogare cupiunt, sed per inemendatos libros male rogant" (Boretius 1883, 60).

\(^{16}\) Franz Blatt's Novum Glossarium mediae latinitatis (Copenhagen, 1957- ), the best compilation, begins only with the ninth century; its extensive entries under neuma (pp. 1231-34) and nota (pp.1391-96), assembled by Anne-Marie Bautier-Regnier, are excerpted in Bautier-Regnier 1964. The comprehensive Mittellateinisches Wörterbuch (1959- ) of the Bavarian and Berlin Academies does not reach this portion of the alphabet. I have consulted Maigne d'Arnis, Lexicon manuale (Paris, 1860); Forcellini et al., Totius latinitatis lexicon, (Padova 1864-98); Diefenbach, Novum glossarium (Frankfurt, 1867); Du Cange-Favre, Glossarium mediae et infimae latinitatis (Niort, 1883-87); A. Bartal, Glossarium mediae et infimae latinitatis regni hungariae (Leipzig, 1901); F. Arnaldi, Latinitatis italicae medi aeveii (Brussels, 1939); A. Šouter, A Glossary of Later Latin to 600 A.D. (Oxford, 1949); R. E. Latham, Revised Medieval and Latin Word List from British and Irish Sources (Oxford, 1965); J. F. Niermeyer, Mediae latinitatis lexicon minus (Leiden, 1976); and P. G. W. Glare, Oxford Latin Dictionary (1982).

\(^{17}\) "... quod beatae memoriae genitor noster Pippinus rex decertavit ut fieret quando Gallicanum tulit ..." (Boretius 1883, 61).
process by which Gregorian chant supplanted Gallican chant in the Frankish homeland was not one of outright exchange of an existing liturgical-musical corpus for a wholly different one. Only the final stages can be observed in surviving documents, but from an amount of apparently Gallican material that lingers in the Sextuplex and other early chant sources it would seem there were preliminary editions which for a while perpetuated locally-esteemed Gallican matter that later became obsolete. In a recent article, I outlined one such class of Gallican survivals: “non-psalmic” Offertories, whose texts are “centonate librettos,” composed of fragments drawn from biblical or post-biblical narrative rather than the verbatim Psalter. Certain Offertories of this class (among them, Sanctificavit, Erit hic vobis, Oravi Deum, Precatus est Moyses, and Vir erat) found permanent places in the Frankish-Gregorian canon, assigned to later and lesser calendar stations such as the final Sundays after Pentecost, or the formerly aliturgical Thursdays in Lent; presently they were absorbed even into the Urban Roman liturgy. For others, there was a briefer regional or local survival. Some of these “Gallican apocrypha,” attached to the fringes of Gregorian traditions, open extraordinary perspectives on the early history of the rite (Levy 1984).

One such chant is the Pentecost Offertory, Factus est repente. As with other Offertories of this type, its text is a non-psalmic libretto, centonized from passages in the second chapter of Acts. The chant has already served as the centerpiece of a discussion by Dom Hesbert, who concluded that it was both “old” and “Roman” (1963, 68). I return to Factus est repente now, not because I view it as “Gallican” rather than “Roman” in origin, but because evidence unknown to Hesbert gives it a significant role in the history of the neumed archetype.

Hesbert knew Factus est repente in two recensions, one northern European, the other Italo-Beneventan. In the Frankish north—its presumable homeland—he found it only in Bland, one of the two oldest un-neumed sources of the Gregorian Antiphonale missarum (Table I, No. 2), a codex for which there is every indication of late eighth or early ninth century origin. Factus appears in Bland as an alternative to the standard Gregorian Pentecost Offertory, Conferma hoc Deus, whose psalmic text it follows:


Item Off. Factus est repente de caelo sonus tamquam advenientis in spiritu vehementis & replevit totam domum hubi erant sedentes alleluia.
7. I. Et repleti sunt omnes Spiritu Sancto loquentes magnalia Dei alleluia alleluia (Hesbert 1935, 124, no. 106).

Among the Sextuplex traditions, then, *Factus est repente* has the earliest and narrowest of circulations. It seems already to be obsolescent by ca. 800. For the centuries that followed, Hesbert’s search of more than six hundred Graduals and Missals uncovered no further sources from northern Europe. But it did turn up seven from Italy, all dating from the eleventh and twelfth centuries. Six of these are from the Beneventan zone, and the seventh is from the Abruzzi, abutting the northern limit of the Beneventan zone. In these Italian versions the Offertory refrain has the same text as Bland, but the verse has an ampler beginning and an altered conclusion:

**Bland Verse.** Et repleti sunt omnes Spiritu Sancto loquentes magnalia Dei alleluia alleluia.

**Italian Verse.** Et apparuerunt Apostoli dispertitae linguae tamquam ignis, seditque supra singulos eorum; et repleti sunt omnes Spiritu Sancto, et coeperunt loqui magnalia Dei. Alleluia.

The six Beneventan versions are noted, and their agreements indicate a common neumed source. Hesbert’s transcription of the Beneventan *Factus est repente*, an “antique composition . . . qui, bien exécutée devait être fort belle,” is based upon the ensemble of Beneventan readings; it is shown in Example 1 (Hesbert 1963, 69).

There are two main differences between the “northern” text-tradition of Bland and the composite “southern” tradition of Benevento and the Abruzzi (Ex. 1). One is the discrepancy in verse-texts, something to which I will return. The other is the liturgical assignment. Bland prescribes *Factus est repente* as an alternate for Pentecost Sunday, appended to the standard Gregorian-Roman *Conferma hoc Deus*, while the Italian sources have *Factus* only at Thursday in Pentecost week. Hesbert found a satisfactory explanation: *Factus* was once a fixture on Pentecost Sunday but was obliged to give way to the newer Gregorian provision of *Conferma hoc*; it was preserved in the Beneventan-Abruzzese tradition by transfer to a neighboring occasion that lacked proper chants (Pentecost Thursday long remained aliturgical).\(^\text{18}\)

Having reclaimed *Factus* to this extent, Hesbert was obliged to leave it, the available documents opening no further avenues. His

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\(^{18}\) Hesbert 1963, 68f.; Hesbert’s reasoning is an application of the “loi des doublets” described in Huglo 1971, 296.
Example 1

Offertory, Factus est repente (Beneventan versions, transcr. Hesbert).

Despite the thoroughness of Hesbert's search, two important witnesses of Factus est repente eluded him. One was a noted version


conclusion that it was “An Old Offertory for Pentecost” will stand. But his supposition that it was of “Roman” origin should have been suspect even in 1963 when there were indications that the “Gregorian” recensions with which Factus est repente circulated were promulgated in the Frankish north. The chant has no analogue in the Old-Roman musical repertory (Cutter 1979). And the class of “non-psalmic, centonate-libretto” Offertories that it represents now appears to be of Gallican origin (Levy 1984).
from the Beneventan zone, the earliest yet discovered, datable around the middle eleventh century. The other was a noted version from the Frankish homeland, datable around 1000, hence earlier than any Beneventan neumation, and a unique witness of the northern melodic practice. Singly and together, they expand the evidence so considerably that I would now venture the following four propositions:

1. that the Gallo-Gregorian Offertory *Factus est repente* reached south Italy from the Frankish north by ca. 800;
2. that *Factus* arrived as a component in a full Gregorian musical recension;
3. that the music of *Factus* made its journey, not in an oral transmission but fully neumed;
4. that the whole Gregorian recension with which *Factus* came to Italy ca. 800 was itself fully neumed.

Hesbert could have encountered the new Beneventan witness only with difficulty since it was in an American collection whose resources were not included in the Solesmes documentation upon which he relied. MS. W.6 of the Walters Art Gallery in Baltimore is a *missale plenum* of the middle eleventh century, written for Canosa, near Monte Gargano, in the southeast of the Italian peninsula. The text is executed in the “Bari” type of Beneventan script, and is embellished with handsome zoomorphic initials. Small in outer dimensions (19 x 12 cm.), the manuscript contains the prayers, lections, and chants for the principal feasts of the Temporale and Sanctorale, but it lacks the bulky provisions for the numbered Sundays and seasonal weekdays. It may have served a prosperous cleric for portable use.

The version of *Factus* in the Canosa Missal makes three important contributions to our dossier. First, it is the only Beneventan version in staffless neumes, hence it is the “earliest” witness of the Italian recension (see Figure 1).

Second, it is assigned, not as in all other Beneventan manuscripts, to Pentecost Thursday, but to Pentecost Sunday itself. This appearance in the southeastern Beneventan zone, which tends to be more conservative in liturgical usage than the western regions, confirms the Offertory’s archaic assignment to Pentecost—which otherwise is found only in the eighth- to ninth-century Bland. Third, the Canosa missal supplies this confirmation in most striking fashion, for it does not prescribe *Factus est repente* merely as an alternative to the standard

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20 It was listed in Huglo 1971, 194, n. 2, and is also found as a Beneventan tonary listing in Monte Cassino 318.
Gregorian *Confirma hoc* (which is the situation already in *Bland*); *Factus* stands here as the sole Offertory for Pentecost.

These three points are the basis of my first proposition—that *Factus est repente* reached South Italy ca. 800. In brief, the Canosa Missal, with *Factus* as its sole Pentecost Offertory, would represent an earlier stage of the Gregorian tradition than any other known: a stage...
before the psalmic Offertory *Confirma hoc* became fixed at Pentecost, hence a stage even “before Bland,” where *Confirma hoc* is installed as the Pentecost Offertory, and the non-psalmic *Factus est repente* is relegated to alternate status. Bland, as we know, dates from ca. 800.

My second proposition is that the full Gregorian repertory reached Italy at the same time as *Factus est repente*. It seems unlikely that this obsolescent “Gallican” Offertory journeyed to Italy as an isolated transmission of an individual chant; more plausible is that it came installed as the Pentecost Offertory in a full Gregorian Mass-antiphoner. Thus whatever can be said about the “early” date of *Factus* in the Canosa Missal should apply as well to the whole transmission with which it came. We shall soon see decisive support for this.

My other new witness of *Factus est repente* is the unique northern neumation found in the Gradual-Troper of Prüm, Paris, lat. 9448, copied around 1000 (see Figure 2).

This manuscript has long been recognized as one of the best sources of the Gradual and Troper, yet in recent inventories it has curiously been slighted. It was omitted from the Solesmes census of Graduals and plenary Missals for the critical edition of the Roman Gradual, evidently because it was classed as a Troper (Graduale 1957). It was omitted from Husmann’s census of Tropers for opposite reasons. Nevertheless Prüm was described by Gautier in 1886 and it has often been used since. The failure of its neumation for *Factus est repente* to draw Hesbert’s attention must be attributed to a simple oversight.

The Benedictine abbey at Prüm was located just 45 miles south of Charlemagne’s birthplace and capital at Aachen. Founded in 710, it enjoyed many benefices and visits from the Frankish monarchs, and it retained its prominence for centuries. During the 89os its abbot was Regino, whose writings are among the era’s most informative on music theory; and it was from Prüm in 1008 that the monk Bernhard, himself a commentator on liturgy and music, was called to the abbacy of Reichenau by the Emperor Henry II. The abbey’s cultural pretensions around 1000 can be gauged from this “magnifique manuscrit” (Gautier 1886), in which splendid full-page illuminations embellish a text that is rich in liturgical and musical archaisms.

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22 Husmann 1964, 110 calls it “... dem berühmten Prümer Graduale.”

23 Gautier 1886, 123. Lagerlöf 1983, 125–78, is an amply illustrated art-historical study.
Figure 2. Prüm Gradual-Troper, f. 51.
Among the latter is its Offertory *Factus est repente*. Since Prüm represents the same "northern" region as Bland, it comes as no surprise to find Bland’s provisions reproduced. Prüm’s Pentecost Offertory is the standard Gregorian *Confirma hoc* without verses. Immediately following, and again designated as an alternate (“Item Of[f]”), there is the “apocryphal” *Factus est repente* with verse *Et repleti sunt omnes*, both texts just as in Bland. Prüm also has *Factus* cued at the Pentecost Octave, another mark of its former prominence.

At the outset, Prüm answers an important question. I have spoken of the apocryphon *Factus est repente* as a Frankish import to Benevento, basing this on the “Gallican” style of its “non-psalmic, centonate-libretto” text. Yet only the Italian melody has been known, and there was no real way of telling whether the material that travelled south from Gaul to Italy included music as well as text, or whether the melody in the Beneventan sources was just a local and later composition. The Prüm manuscript sets doubt to rest. A comparison of its neumation (Fig. 2) with that of Canosa (Fig. 1), or with Hesbert’s generic Beneventan transcription (Ex. 1), shows that for the refrain both the text and music are the same.

I will shortly return to this melody and subject its northern and southern readings to close scrutiny. But first I must deal with an objection to my theory that the transmission of *Factus* to Benevento was “pre-Bland” or “early.” Inasmuch as the oldest Italian witness (the Canosa missal) dates from the eleventh century, what assurance is there that the music did not come south during the later ninth, tenth, or early eleventh century? There can be no assurance. At best I can refine my theory in the light of the Prüm exemplar. In the Frankish north, the “Gallican”-style *Factus est repente* was obsolescent as the Pentecost Offertory by ca. 800, barely surviving among the Sextuplex sources, with only Bland transmitting it as a hanger-on. Prüm confirms the narrowness of northern survival by mirroring the provisions of Bland. Thus few local traditions used *Factus est repente* even ca. 800, and presumably still fewer kept it through the 9th and 10th centuries. One of these was the source for Benevento, whose verse differs from that of Bland-Prüm. Yet the Frankish transmission to Benevento is likelier to have occurred in the late 8th or early ninth century (the time of Bland or earlier), when the repertory of Offertory refrains and verses was relatively rich in Gallican holdovers, rather than later on, when the entrenchment of the standard Gregorian canon had narrowed such options. In addition, if one supposes a “late” (ninth to eleventh century) transmission of *Factus* to Benevento, one must explain why the standard Offertory *Confirma hoc* should be
displaced at a time when there is no longer an apparent liturgical warrant for any other Pentecost Offertory than *Confirma boc*. Thus a “late” transmission of *Factus* to Benevento remains a possibility, but is less likely than an “early” transmission, at a time “before Bland,” when *Factus* would still flourish as an interim Pentecost Offertory in the Gallo-Frankish north.

The third of my four propositions above was that when the music of the *Factus* refrain reached Benevento “ca. 8oo,” it arrived not in an oral transmission, but neumed. Under normal conditions of evidence there should be no way for documents of the eleventh century to tell us how singers of the eighth to ninth centuries practiced their craft, to assure us that they relied on neumations rather than the fashioning of their chants through the exercise of memory and improvisational skills. With *Factus*, an extraordinary constellation of evidence points to a noted tradition ca. 800. Let me return to my earlier statement that the Prüm and Beneventan melodies for the Offertory refrain are the “same,” and inquire how far this sameness extends. An answer can be taken from Figure 3, where the melisma *et replevit* of the refrain is shown in the readings of Prüm (Fig. 3a), Benevento VI.34 (Fig. 3c), Benevento VI.39 (Fig. 3d), and Hesbert’s composite Beneventan transcription (Fig. 3b).

The neumations are close enough to indicate a common written source. There are agreements of pitch-groupings into compound neumes. There is the uncommon neume, *pes stratus* (a *podatus* plus *oriscus*), which is considered a symptom of a Gallican or “imported” chant. But the pes stratus, in addition to its appearances in “Gallican” chants and Frankish sequences (see Huglo 1972, 228 and 238), is common enough in early English and central-Italian collections of the Gregorian propers. In a future paper I will consider the possibility that this neume was applied to the full Gregorian repertory in early west Frankish traditions.

There is further support for this in my fourth proposition—that the melody of *Factus* reached Benevento in a full Gregorian neumed recension. I have already suggested that *Factus* is likelier to have journeyed from the north in a complete repertory than as an isolated chant. Thanks to a sharp-eyed observation by Dom Hesbert, this suggestion can be given solidity, and extended to show that the transmission entailed the use of neumes. Hesbert’s analysis of his newly-restored Pentecost Offertory disclosed a melody that was almost entirely independent of the rest of the
Gregorian repertory. But at one small passage in the refrain—at the word *repente*—Hesbert identified the musical fabric of *Factus est repente* with that of the Gregorian Offertory *Angelus Domini* at the words *de celo* (Hesbert 1963, 64). The parallel is shown in Figure 4.\textsuperscript{25}

The situation is not unusual: a centonate formula appearing in different contexts of text and music, and at points far removed in the Gregorian Mass-book. There is an underlying logic, since the two Offertories are based on non-psalmic, centonate-libretto texts (*Angelus Domini* draws on Matt. 28), and both represent the G-plagal mode of this “Gallican” liturgical-historical type. However, there is a significant difference. Where *Factus est repente* is an apocryphon of restricted preservation, *Angelus Domini* found a regular place in the Gregorian canon; it appears in five of the Sextuplex manuscripts, assigned to Holy Saturday, Easter Monday, and the Easter Octave;\textsuperscript{26} it settled as the standard Gregorian Offertory for Easter Monday. This carries an uncommon historical potential. For if *Factus* and *Angelus* should be closely related in the neumation of their centonate *repente/de celo* formula, then what we have learned about the early history of *Factus est repente* should apply as well to the history of *Angelus Domini*. And what we learn about the neumation of *Angelus* should in turn apply to the full Gregorian recension with which it circulated.

Figure 5 compares the neumation of our two melismas: four selected regional neumations of the *de celo* melisma in Figure 5a (the left-hand column), and the two regional neumations of the *repente* melisma in Figure 5b (the right-hand column).\textsuperscript{27}

In Figure 5a\textsuperscript{1} (*de celo*) the readings of Lorraine and Saint Gall accompany the square-note version of the *Editio vaticana* as reproduced in the *Graduale Triplex*. To judge from the quilisma in the opening figure, from the oriscus as penultimate pitch, and from the general agreements in neumatic disposition and melodic detail, it appears that Lorraine and Saint Gall descend from the same written archetype. But so does Prüm (Fig. 5a\textsuperscript{2}), whose neumation is close to that of Saint Gall. And so do the twelfth-century south Italian

\textsuperscript{25} Fig. 4a: *Graduale sacrosanctae romanae ecclesiae* (Desclée, No. 696; Paris, Tournai, Rome, 1952), 246. Fig. 4b: see Ex. 1, above.

\textsuperscript{26} Hesbert 1935, Nos. 79b, 81a, 87. In light of its paschal assignments and the concordance of its centonate libretto text with a musically related Offertory of the Milanese rite for Easter Sunday (Antiphonale 1935, 210), *Angelus Domini* may descend from a “Gallican” Easter Offertory, just as *Factus* would from a “Gallican” Pentecost Offertory.

\textsuperscript{27} Fig. 5a\textsuperscript{1}: *Graduale triplex* 1979, 218; 5a\textsuperscript{2}: Paris 9448, 36; 5a\textsuperscript{3}: Benevento VI.34, 132; 5a\textsuperscript{4}: Benevento VI.33, 84. Fig. 5b\textsuperscript{1}: Hesbert 1963, 62; 5b\textsuperscript{2}: Paris 9448, 51 (Fig. 3); 5b\textsuperscript{3}: Benevento VI.34, 192; 5b\textsuperscript{4}: Baltimore, Walters 6, 152 (Fig. 1).
Figure 4. "Centonate" contexts of de celo and repente.
neumations of Benevento VI.34 (Fig. 5a³) and its eleventh-century forerunner, Benevento VI.33 (Fig. 5a⁴). In VI.34 a *scandicus* is substituted for the ornamental opening *quilisma* figure of Lorraine, Saint Gall, and Prüm; but the *quilisma* survives in Benevento VI.33. Thus there is a common written source behind the neumations of *Angelus Domini* in tenth- to eleventh-century traditions of the Frankish north and Benevento. As for the melisma *repente* of the Offertory *Factus est*, a comparison of the surviving neumations (Prüm and Benevento) in Figure 5b confirms what Figure 3 leads us to expect: that behind these two recensions there is also a common neumation.

Now do the archetypal neumations for these two melismas themselves turn out to be the same? Looking first at the readings of Prüm, the neumations of *de celo* (Fig. 5a²) and *repente* (Fig. 5b²) are substantially identical. And if minor variants between the Prüm neumations leave doubt about their underlying identity, they are removed by the readings of Benevento, for in Benevento VI.34, VI.33, and the Canosa Missal (Figs. 5a³, 5b³, 5a⁴, 5b⁴), the neumations of *de celo* and *repente* are precisely the same.
That being the case, my fourth proposition receives substantial support. There is no good way to explain the exact neumatic correspondence in Prüm and Benevento of two contextually unrelated melismas occupying isolated corners of the Gregorian Mass-book, other than by supposing that what brought their two Offertories (Angelus Domini and Factus est repente) from the Frankish north to southern Italy was a precisely-neumed, editorially homogenized recension of the full "Gregorian" repertory: in short, a neumed archetype whose existence can now be placed with some assurance around the year 800.

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My aim has been double: to give greater substance to the concept of the Carolingian Neumed Archetype of Gregorian chant, and to make a hundred-year adjustment in its date, setting this back by about a century, from ca. 900, where it has settled in recent opinion, to shortly before 800, in the middle of Charlemagne's reign. In my view, the neumatic notation is likely to have been employed during the later eighth century in effecting the changeover from Gallican to Gregorian musical repertories, and the authoritative neumation of the Gregorian propers, whose descendents we know in the Editio vaticana, would be a fruit of Charlemagne's Carolingian Renaissance. I have no firm proofs. Short of a dated early neumation or a dated description of early neumatic practice, it is difficult to imagine what form such proof could take. Instead, I have a variety of indices which point to the middle 9th and late 8th centuries as times when the noted Gregorian edition existed. Each index has some shortcoming. Concerning the varieties of neumatic ductus ca. 900: I cannot prove that the regional neumations began in a common ductus and then evolved differently, but that is likelier than for them to have differed from the start.28 Concerning the divisions of the Empire during the earlier ninth century, or the arrival of Gregorian chant at Benevento "before 838," or the compilation of the missa graeca during the last decades of Charlemagne's reign: neither the specific dates nor the connections with the Gregorian repertory are firm. Concerning the discussions by Aurelian of Réôme (ca. 850) and the reference to "notas" in Charlemagne's Admonitio generalis (789): the odds are that these describe neumed Proper collections, but neither instance is conclu-

28 I will consider certain merits of the "diverse beginnings" theory in a forthcoming paper titled, "On the Origin of Neumes."
sive. As for my final index, the “apocryphal,” “Gallican” Pentecost Offertory, *Factus est repente* and its “centonate” relationship with the Paschal Offertory *Angelus Domini*: this should remove many doubts concerning the “early” circulation of the Carolingian Neumed Archetype; yet the possibility remains that Benevento received its melody for *Factus est repente* after the date, ca. 800, which the early obsolescence of the *Factus* Offertory has led me to infer. Thus each of my indices has weaknesses; yet each also has strengths. Taken together, they make a considerable case for the neumed archetype—the ancestor of our later Gregorian recensions—as a product of the same fertile decades around the turn of the ninth century that saw the revised Carolingian editions of the sacramentary, homiliary, lectionaries, tonary, etc.29

I have gone to some length in this exercise because the challenge is more than one of marshalling arguments for a difficult proof. The consequences go beyond a mere century’s revision in a medieval date. The new historical perspectives that emerge from my revised chronology bear on three central issues in the development of Gregorian chant. Concerning the origin of neume-species, my framework offers paleographers a sounder basis for projecting the pre-history of tenth-to eleventh-century neume-species than they have had before. Concerning the interrelations of oral and written practice, if my supposition that the Gregorian propers were crystallized in neumes ca. 800 is correct, then various assertions about the continuing effects of oral and improvisational techniques on Gregorian melodies during the 9th century and later will need fundamental review.30 Concerning the relationship between the “Old-Roman” and “Frankish” musical repertories, if my claim holds that the neumes were employed in the process of shaping the “Gregorian” recension during the later eighth century, then it may be asked whether some of the musical content of the “antefonarios romanos” known to the compiler of Bland ca. 800 was not also at that time cast in neumatic form. That is, how much of the “Gregorian” musical substance that advocates of the “frankische Überlieferung” have been explaining as an essentially northern stylistic overlay (Hucke 1980b, 696–97) actually represents the Frankish melodic footprint? May the bulk of the Gregorian repertory not be

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29 There is no adequate current survey of this liturgical reform (see Vogel 1965a and 1965b, and Patzelt 1965). For the sacramentary, the situation is amply covered in the editions of the “Gregorian” and Gellone sacramentaries by J. Deshusses (1971–79 and 1981). For the tonary, we have the masterful Huglo 1971 and also Lipphardt 1965.

30 Most recent are Hucke 1980a and Treitler 1981, 474.
attributable instead to large-scale appropriations of Roman melodies, with but minor northern retouchings and supplementations, the latter chiefly among the Alleluias and Offertories? On each of these three issues—the early history of neumes, the symbiosis of oral and written practice, and the genesis of the “Old-Roman” and “Gregorian” melodies—much remains to be said. I will return to them in further papers of this series devoted to the emergence of Gregorian Chant.

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LIST OF WORKS CITED


ARGUES that the “Gregorian” repertory of Mass propers was fully neumed under Charlemagne, a century sooner than is generally supposed. The chief witness is an “apocryphal” Offertory, Factus est repente for Pentecost. Affected are widely-held views concerning: (1) the origin of neumes; (2) the impact of...
oral-improvisational techniques on Gregorian chant; and (3) the origin and relationship of Gregorian and Old Roman chant styles.