

ACCENTUAL CADENCES IN GREGORIAN CHANT*

By Dom Gregory Murray

The contemporary literary evidence leaves no room for doubt that the Gregorian Chant was originally sung in long and short notes, the former twice as long as the latter. This, at least, is the conclusion which I found to be inescapable in my study of the ancient authors, entitled *Gregorian Rhythm in the Gregorian Centuries: The Literary Evidence*. The principle of unequal note-values certainly applied to the primitive syllabic hymn-melodies and also to the melismatic chants. It is not clear, however, that it would have applied to the liturgical recitatives or how far to the simpler non-metrical melodies, especially those of a partially recitative character. In the following pages some such antiphon-melodies are transcribed in equal notes without thereby claiming historical accuracy. Our main concern for the moment is with the treatment of cadences, and only with cadences based on accent.

Every polysyllabic Latin word has an accented syllable. If the word has three syllables or more, the position of the accent depends on the prosodic quantity of the penultimate syllable. We thus have two types: (1) *redēptor* (the penultimate syllable being long) and (2) *dōminus* (the penultimate syllable being short). Since words of two syllables always have the accent on the first syllable, they all come in the first category: in *pāter* the first syllable is short, in *māter* it is long.

In ecclesiastical Latin, where the rhythmic principle of quantity (long and short syllables) has yielded to that of accentuation (strong and weak syllables, there are therefore two types of verbal cadence: (1) the spondaic (e. g. *redēptor*) and (2) the dactylic (e. g. *dōminus*).¹ That these two types are rhythmically distinct needs no proof: it is obvious.² That the distinction was recognized during the Gregorian centuries can be seen from an examination of the many plainsong formulae which are set to both types.³

* From The Downside Review, January, 1958, with the kind permission of the Reverend Editor.

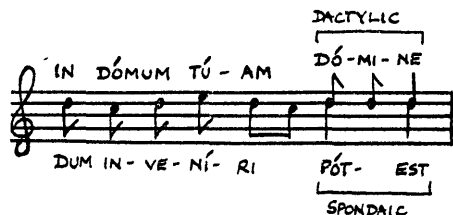
¹ I here use the terms 'spondaic' and 'dactylic' (as Dom Mocquereau and other plainsong theorists do) in a purely accentual sense.

² Except, of course, to Dom Mocquereau, for whom the two words *redēptor* and *dōminus* had exactly the same rhythm! See *Le Nombre Musical Grégorien*, II p. 254, and I, p. 60.

³ Monosyllabic cadences (which we might expect to find treated differently) are also as a rule treated in the chant either as spondaic or dactylic, by making use of secondary accents. Thus the usual eighth-mode psalm-tone termination treats *gēnui te* as spondaic (the last syllable of *gēnui* being given a second accent) and *indūtus est* as dactylic.

One of the most familiar of such melodic formulae is the fourth-mode antiphon *Apud Dóminum* (second vespers of Christmas). In the famous *Antiphonale* of Blessed Hartker, St. Gall 390-1, dating from the tenth century,⁴ this melody occurs about a hundred times with different words.

In its normal form the second phrase runs thus:

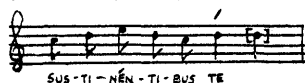


If we leave on one side the comparatively few irregular melodic variants⁵ (which afford no help), we find that in the 63 antiphons in which the verbal cadence at this point is spondaic Hartker gives a lengthening sign both to the accented note and to the final note. On the other hand, in the 29 antiphons where the verbal cadence is dactylic only the last note is lengthened.⁶

This is striking evidence of the mind of the Gregorian musicians at the period of our best plainsong MSS, and it shows beyond doubt how all such purely syllabic cadences should be treated. Moreover it provides unequivocal documentary support for what would be our instinctive interpretation to-day: either the last two notes should be lengthened (the spondaic type) or only the last note (the dactylic type). This rule would seem to apply to all syllabic cadences which are not subject to metrical consideration.⁷ Furthermore, Hartker here appears to settle once and for all how we should interpret those

⁴ Photographically reproduced in *Paléographie Musicale*, sér. II, t. I. The importance of this MS may be judged by the fact that it was taken as the basis of the *Antiphonale Monasticum* of 1934.

⁵ Among such irregular variants may be mentioned the cadence *sustinéntibus te* in the antiphon *Da mercédem* (*Antiph. Mon.*, p. 214):



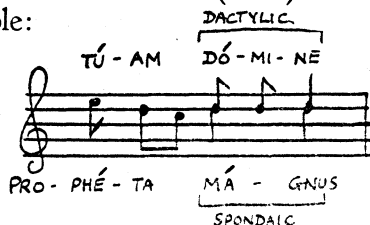
Here it will be seen that the customary final note (for the concluding weak syllable) is missing, so that the phrase ends on the note which elsewhere always carries the cadential accent. In giving this cadence, Hartker provides some warrant for regarding a concluding monosyllable as accented. It should be added, however, that in the antiphon *Magister dicit* (*Antiph. Mon.*, p. 397), Hartker treats the cadence *própe est* in the more usual way, with the accent of *própe* on the first D of the unison cadence.

⁶ As a check on the MS statistics in these pages, the reader is referred to Dom Mocquereau's *Monographie Grégorienne VII*, from which they are derived.

⁷ In syllabic metrical compositions (e. g. hymns, etc.) the rhythm is determined by the metre, not by the verbal accentuation.

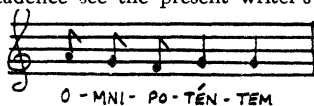
cadences of Credo I which are melodically identical with the cadence we are now considering:⁸

But, to return to the antiphon, if we examine the three notes E-D-C that precede the unison cadence, we find that the first note (E) always carries a verbal accent or its equivalent,⁹ and also that in 63 antiphons the next two notes (D-C) are united as a clivis and carry a weak syllable:



Now, according to Solesmes, in these cases the ictus comes, not on the accented E, but on the subsequent D, because it is the first note of a neum. But in Hartker's *Antiphonale* there are 11 antiphons where this D is missing altogether, and in 5 of them the E is lengthened:¹⁰

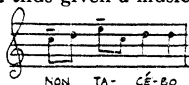
⁸ The MSS of the Credo give only the notes, without additional 'rhythmic signs'. For a detailed study of this Credo cadence see the present writer's *Plainsong Rhythm: The Editorial Methods of Solesmes*.



⁹ This statement can be tested by reference to the *Antiphonale Monasticum*, from which the following statistics emerge:

(i) Syllabic type: in only 1 example of 12 is the E not given an accented syllable, and this exception is the antiphon *Vestitus erat* (for the modern feast of the Precious Blood) which does not occur in Hartker's *Antiphonale*.

(ii) Melismatic type: here, although in 7 cases out of 10 the E carries a weak syllable, it is always lengthened and thus given a musical accent:

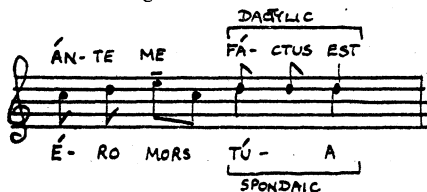


(iii) Normal type: out of 41 examples there are only 11 at which the E appears not to carry an accent. But in 10 of these 11 antiphons there is podatus on the previous syllable with its first note lengthened, and in all 11 cases the E is followed by a weak syllable. Thus:

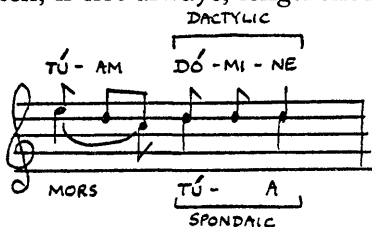


This combination is of itself sufficient to establish the E as an accent, even without the clear evidence of the other 51 antiphons (out of 63) to prove it.

¹⁰ The *Antiphonale Monasticum* gives 10 antiphons of this type (i. e. without the D), and in every one of them the E is lengthened.

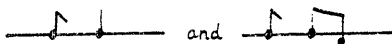


From this we can gather that of the three notes, E-D-C, the least important is the D, and the most important the E. This conclusion is supported by the fact that in 24 antiphons where the D does actually appear as the first note of the neum, Hartker marks it with *c* (=celeriter), which at the very least must mean that the note should be treated extra-lightly. There can be little doubt, then, that in all these antiphons the ictus should come on the E, making E-D-C a ternary group, occasionally replaced by a similar group consisting of E (often, if not always, lengthened) followed by C:



In other words, we must here reject the solesmes rule about the ictus on the first note of a neum. I have elsewhere given examples from the chant which prove conclusively that this rule does not necessarily apply when the neum is immediately preceded by an accented syllable on a isolated note.¹¹ This is not to say, of course, that the first note of a neum does not normally have an ictus: such examples as the intonation of the antiphon *Asperges* leave little doubt on the point. I merely claim that an accented note immediately before a neum can, and often does, assume greater rhythmic importance than the first note of the neum, which thereby loses its ictus.

Once we allow this idea to enter our minds, a completely fresh approach is opened to us in tackling the rhythmic problems of the chant. We have been too ready to accept without question—as I did twenty-three years ago—the doctrine put forward by Dom Mocquereau that there is no rhythmic difference between the two patterns:



In fact, of course, there is a very great difference between them. In the former, the long note is of primary rhythmic significance, so that even if the short note before it carried an accent, the long note might still indicate an ictus, unless the rhythm were otherwise determined by a regular metrical frame-work (as in the first measure of Purcell's 'Fairest Isle'). But in the second example, the first note of the neum-group, not being a long note, has no such rhythmic

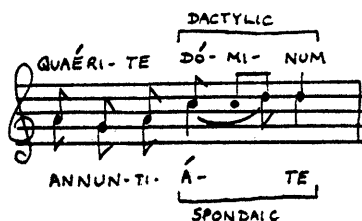
¹¹ See *Plainsong Rhythm: The Editorial Methods of Solesmes*, p. 6.

significance, especially if the isolated note before it carries an accent. Thus in:

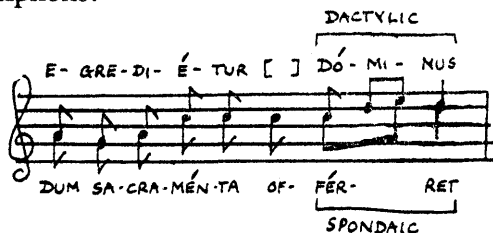


the notes E-D-C are spontaneously and naturally heard as a ternary group. This natural interpretation is made still more compelling if the D is sung *celeriter*, according to Hartker's marking.

Having thus shaken off our Solesmes shackles, we can profitably pass to an examination of the first phrase of this same antiphon-formula:



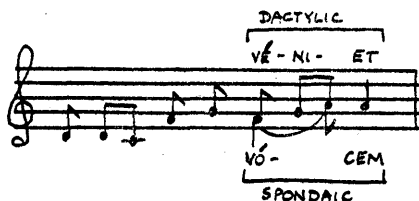
Out of 62 intonations of this kind, Hartker gives 25 with spondaic cadences, and in every one of them the accented note is marked with a lengthening sign. The remaining 37 antiphons have dactylic cadences, and in these the accent remains unlengthened. Here again the accent clearly has the ictus, even in the dactylic cadences. No musician could have any doubt on the point unless he had previously allowed himself to be indoctrinated with Dom Mocquereau's peculiar rhythmic theories. But there are some interesting variants in 33 other antiphons:



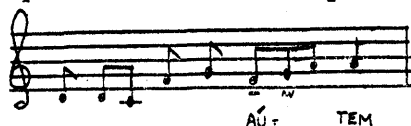
Of this type there are 10 spondaic cadences and 23 dactylic. In the latter, again, Solesmes would have us put the ictus on the first note of the neum carrying the weak syllable. But this D is precisely the note that is omitted in the spondaic cadences. Why? Because it is the least important note in the phrase. The preceding C, on the other hand, is so important that it must obviously have the ictus in every case. This corroborates the conclusion we reached in exam-

inging the more usual form of the phrase. The pivotal notes in both variants are A, C, and the final D.

Another very common antiphon-formula, this time in the first mode, begins as follows:

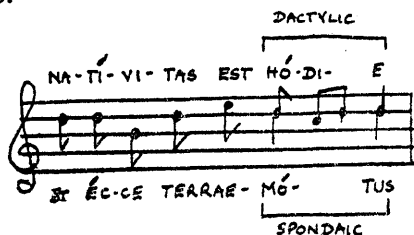


Hartker gives 75 antiphons with this intonation, 39 of them with dactylic cadences, 36 which spondaic cadences. Of the 36 spondaic cadences no less than 28 have a lengthening sign on the accented F and omit the G. Once more, this seems to show that even in the dactylic cadences it is the F (not the G) that should have the ictus. In corroboration of this we find 4 other spondaic cadences which include the G, but only as a quilisma; and, according to Solesmes, the note before such a quilisma should be lengthened and have the ictus, whereas the quilisma itself should be passed over lightly:



From the purely melodic point of view it must be quite obvious to any musician that the structurally strong notes of the phrase are D, F, F, A — the notes of the triad on the first-mode final (D). The two G's, like the earlier C, are purely decorative and rhythmically of minor importance.

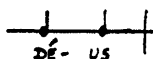
A third familiar antiphon-formula is the seventh-mode melody which begins thus:



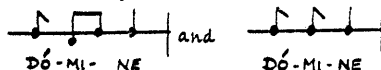
This occurs 23 times in the *Antiphonale Monasticum*, 17 times with spondaic cadences and 6 times with dactylic. In the spondaic cadences the accent is always lengthened, never in the dactylic cadences. After what has been said we can have little hesitation in

giving the ictus to the D which carries the accent, both in the spondaic cadences and the dactylic. The subsequent C is so unessential to the melodic structure that it does not occur at all in the spondaic cadences. It can therefore have no rhythmic significance.

But this cadential formula is a commonplace in the chant. For the normal spondaic unison cadence:



we frequently find two dactylic variants:



In both of these the ictus comes naturally on the accented note. It may be that the first form (with the neum-group on the weak syllable) is the more authentic; but, if so, the other form could never have been derived from it except on the supposition that the accent already had the ictus.¹²

A still more decisive argument against the rigidity of the Solismes rule attributing the ictus to the first note of a neum emerges from a comparison of the two authentic versions of the hymn *Jesu corona virginum*. In the cadences of lines 2 and 3 the *Antiphonale Monasticum* gives one grouping, the Sarum version the other. To maintain that these different groupings imply a different rhythm would be nothing less than absurd:



Although I give this tune in equal notes, it is practically certain that it should be sung throughout in triple time, with the notes

¹² It is true that there is one such dactylic cadence (at the word *balsami* in the antiphon *Sancti Tui Domine* for apostles and martyrs in paschal tide) in which the *Antiphonale Monasticum* (following Hartker) gives a lengthening episema to the first note of the neum carrying the weak penultimate syllable. But this solitary instance proves nothing; it may even be a copyist's error. In any case the preceding isolated note on the accent is a *punctum liquescens*, which (we are told) should be sung *aliquantulum protracte* (*Antiph. Mon.*, p. xiii).

marked with an asterisk doubled in length. This is the natural, and was the original, rhythm for tunes of this metre, and it gives an interpretation that settles the matter.

In all the liturgical recitatives (tones for the collects, epistle and gospel, psalms, lessons, versicles and responses, little chapter, Preface, Pater, etc.) we must remember that, *if the cadence is constructed on an accentual principle, then logic demands that the decisive verbal accent should fulfil its decisive rhythmic function in every case.* According to Solesmes this is not so. The Solesmes authorities insist on two different, nay contradictory, rhythms for the spondaic and dactylic forms of the same cadence, so that rhythmically the dactylic form is no longer a modification of the spondaic but quite a different thing. Consequently, instead of having the same formula in two ways, spondaic and dactylic, we have two different formulae, both seemingly dactylic — a curious paradox. An example will make this clear.

The mediation of the eighth-mode psalm-tone is essentially a method throwing into relief the final verbal accent of the phrase: the position of this accent decides the rhythmic character of the cadence, whether spondaic or dactylic. In both types it is sung to the higher note (D). But according to Solesmes, in dactylic cadences the accent here will coincide with the ictus whereas in spondaic cadences it will not. The ictus (ˊ) and accent (´) markings illustrate this:

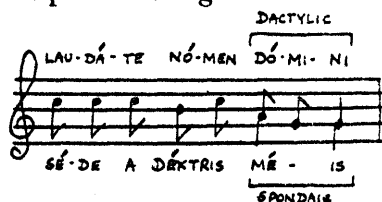


This illogical and unmusical artificiality is in practice modified (at least by the better choirs) by making much more marked *rallentando* in the spondaic cadences, so that the accent sounds like a doubled note and thus to have the ictus. (The recordings of the Solesmes monks bear this out.) But only too often the theory leads to ludicrous results when less expert singers interpret all such spondaic cadences in rigidly strict tempo, in a resolute determination to avoid what they have been taught to regard as the one unforgivable sin: *lengthening the accent*.¹³

¹³ In this matter, of course, Blessed Hartker was a shameless sinner! But we must be lenient in judging him, for he never had a chance to study *Le Nombre Musical Grégorien*. He had obviously never heard of such a thing as a *spondaic* cadence with a hiccup of an 'off-the-beat' accent: that peculiar phenomenon was invented almost a thousand years after his death.

It is equally as victims of the same unrealistic theory that the two main exponents of the Solesmes 'rhythmical' accompaniment, Dom Desroquettes and M. Potiron, direct that in this eighth-mode psalm-mediation (as in all similar formulae) the organist should place his chord in dactylic cadences *on* the accent (in this case, D), and in spondaic cadences on the note *before* the accent (in this case, C). Such inconsistency stands self-condemned: it produces two different cadences in the same rhythm, instead of two different rhythms for the same cadence. Obviously *the true musical interpretation of all syllabic cadences that are based on accent is to give the accent the ictus every time, and (as Hartker has shown us) to lengthen it in spondaic cadences.*¹⁴

Once this procedure is recognized — as it is in practice by the Solesmes monks themselves in their purely syllabic psalmody — it is only logical to apply it consistently. This will have far-reaching results. As an instance of such further applications, we may consider the usual eighth-mode psalm-ending:



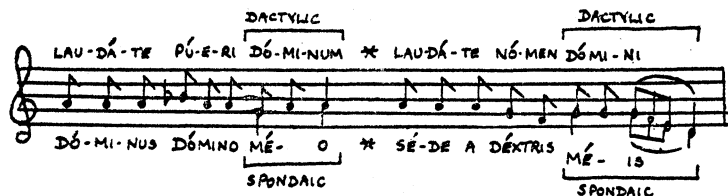
Occasionally this ending is slightly elaborated, its final note giving place to a group:



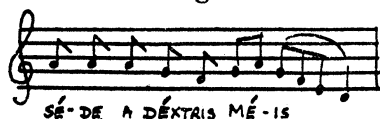
Clearly we must treat this formula exactly as we should now treat the simpler version of which it is a variant: in spondaic cadences the final accent must be lengthened. This rule must in fact be applied to all genuinely accentual cadences of spondaic pattern in which the accent has only one note, but not, of course, to cadences which

¹⁴ The same principle must surely be applied to monotoned psalmody and other non-metrical texts: we should (slightly) lengthen the accent in spondaic cadences, but not in dactylic. Verbal accent and ictus will then coincide throughout in a perfectly natural, simple manner. By contrast, the Solesmes doctrine that the ictus should coincide with word-endings appears unreal and artificial, and for most people quite impossible. The reader may put the matter to the test quite simply. He has only to take half of a psalm-verse (e. g. *Dixit Dómino méo*) and recite it first according to Solesmes, tapping the table on the final syllable of each word, and then again, this time tapping the table at each accent and (as this happens to be a spondaic cadence) lengthening the final accent. He will have no doubt as to which is the natural rhythm of the words.

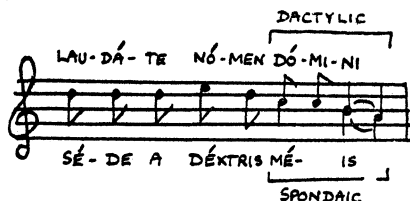
are governed by overriding metrical consideration or which are constructed on a principle different from the accentual one. We shall thus have in first-mode psalmody:



Incidentally this psalm-ending is thus seen to be what it really is, a variant of another familiar ending:



— a likeness which is completely disguised if we treat the former cadence in its spondaic form as Solesmes dictates. Similarly it is only by our proposed treatment that the Vatican second-mode psalm-ending shows its basic identity with the version of the *Antiphonale Monasticum*. Again, to give but one more example, in the following seventh-mode psalm-ending we must lengthen the final accent in spondaic cadences:



Only in this way can we ensure that the dactylic and spondaic forms of any given cadence are in fact what they are supposed to be: rhythmic variants of one and the same formula. (The Solesmes system, on the other hand, simply destroys their basic identity.)¹⁵

¹⁵ If we compare, for instance, the Solesmes interpretations of dactylic and spondaic cadences of the seventh-mode ending given above, noticing the ictus marks:



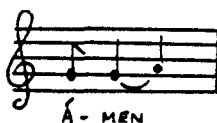
we again find two different formulae with the same rhythm, instead of two rhythmic variants of the same formula—exactly as in their treatment of the purely syllabic cadences.

Moreover we obviate the need for constant slowing-down at the cadences: the longer notes *are* the *rallentando*.¹⁶

Finally, it is interesting to discover that by following the principles advocated in these pages we arrive at the only possible *congregational* rendering of the Amen before the Preface, Pater, and Agnus:



— a welcome relief from the unnatural, highly improbable, and rather absurd:



¹⁶ The *Scholia Enchiriadis* of the early tenth century (the same century as Hartker's *Antiphonale*) supports this interpretation in a very interesting passage: 'Rhythmical singing means to measure out proportional durations to long and short sounds, not prolonging or shortening more than is required under the conditions, but keeping the sound within the law of scansion, so that the melody may be able to finish in the same tempo with which it began. But if any time you wish for the sake of variation to change the tempo, i. e. to adopt a slower or a faster pace either near the beginning or towards the end, you must do it in double proportion, i. e. you must change the tempo either into twice as fast or twice as slow' (Gerbert, *Scriptores*, I, 182-3).

THE AUTHENTIC RHYTHM OF GREGORIAN CHANT *

by

DOM GREGORY MURRAY

As long ago as 1934 there appeared in the pages of *La Musique d'Eglise* — a valuable periodical, unhappily no longer in publication — the first of a series of articles by the Abbé G. Delorme, entitled 'La Question Rhythmique Grégorienne'. What attention was paid to these articles at the time, I am unable to say; now, however, it is quite certain that they are of enormous importance. Indeed they provide the vital clue to a problem that has exercised all students of the Chant for years: the problem of its authentic rhythm. It is on the foundation laid by the Abbé (later Canon) Delorme that the most recent, the best and the most convincing book on the subject has been based.¹ Its author, Dr J. W. A. Vollaerts, a Dutch Jesuit, had spent the last thirty years of his life — he died in 1956, just as his book was going to press — in a painstaking study both of the Chant manuscripts and of the ancient musical treatises on Chant rhythm. But he freely acknowledges his great debt to Canon Delorme's fundamental studies. In giving some account of Fr Vollaerts' book, therefore, it is essential to begin, as Fr Vollaerts himself does, with Canon Delorme's articles.

These articles make no pretence of doing anything more than examine the notation of some of the more important Chant manuscripts, and even then confining the investigation to only one category of notational signs, viz. those used for single notes, first in syllabic passages and then in groups. But the results of the enquiry are quite astonishing. They expose as utterly indefensible the generally accepted practice of regarding all the notes as fundamentally equal in length. All the various 'equalist' systems of interpretation, therefore, whether according to Solesmes or not, must now be abandoned as invalid.

The *Antiphonale Missarum* known as Laon 239 (published as Volume X of *Paléographie Musicale*) is universally recognised as one of the most important manuscripts of the Chant. It dates from

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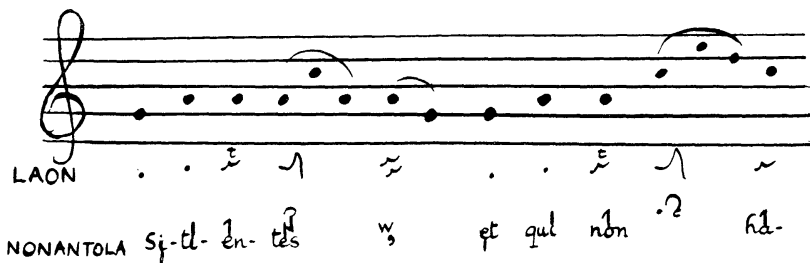
¹ *Rhythmic Proportions in Early Medieval Ecclesiastical Chant* by J. W. A. Vollaerts, S.J. (E. J. Brill, Leyden, Holland; 25 guilders). Although published in Holland, the book is written in English.

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the ninth or tenth century and it employs the Metz notation.² A remarkable feature of this codex is that it uses two distinct signs for isolated notes on a single syllable. There is first the dot or point (a sign found in all the neumatic notations) and then what Fr Vollaerts describes as 'the swallow-tail *tractulus*'.

A completely different notational system is to be found in all that remains of a tenth-century manuscript (two folios of which are in the Capitular Archives at Monza, and a third folio at Milan), classified as Nonantolian. But, here again, two distinct signs are used for single notes: a 'stick' (a simple vertical stroke) and a 'stick-with-crook' (in which a short line is added to the top or bottom of the simple stroke).

A comparison of these two notations, when they give the same melody, shows that the Nonantolian 'stick' corresponds to the Metz point, and the Nonantolian 'stick-with-crook' to the Metz *tractulus*. There are occasional disagreements, but the concordances are in an overwhelming majority — so much so that the disagreements merely serve to indicate that the two notational systems are independent witnesses to a single rhythmic tradition lying behind both of them. In the following illustration it will be seen that it is characteristic of the Nonantolian notation to attach its symbols to the actual vowels, either above or below them :



But there is also a third notational system to which Caron Delorme gave detailed attention, viz. the Aquitanian. An interesting and very valuable example of this notation is to be found in codex 1118 of the Paris *Bibliothèque Nationale*, which has been edited by Dom Ferretti in Volume XIII of *Paléographie Musicale*. The particular interest of this manuscript for our present purpose is

² Dom Mocquereau described the manuscripts in Metz notation as 'scarcely inferior' to those of St Gall (which he regarded as the best), and Laon 239 as 'the most faithful' of them (*Le Nombre Musical Grégorien*, tome I, p. 157).

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that it contains a number of Tropes or Prosae (i.e. syllabic settings to specially written words) for melodies of the Alleluia jubilus and Offertory verses. On comparing these melodies in their Aquitanian notation with equivalent melodies in the Laon manuscript we again find a remarkable correspondence between the points of Laon 239 and the points of B.N. 1118, and between the Laon *tractuli* and the differently shaped *tractuli* of B.N. 1118.

Briefly, then, in each of these three quite distinct — and therefore independent — notational systems there are two distinct signs for a single note, and the different uses of the two distinct signs are found to correspond (with only minor exceptions) whenever the same melody is found in two (or more) of the notations.

What do these distinct signs indicate? They cannot have melodic implications, for the following reasons:

(1) In Laon 239 many points indicate higher or highest sounds (e.g. in innumerable *climaci*).³

(2) Every page of Laon 239 shows many more *tractuli* than points for low sounds.⁴

(3) Consecutive sounds of equal pitch are indicated in Laon 239 both by *tractuli* and points.

(4) Both *tractuli* and points are used in Laon 239 for any degree of the scale.

(5) The same indifference to pitch is found both in the Nonantolian and Aquitanian notations in their use of their respective distinct signs for single notes.

Any hesitation we may yet feel in attributing a rhythmic significance to the distinct signs is dispelled when we refer to the St Gall manuscripts — yet a fourth notational system. The *episemia* (a stroke added to the neums, universally acknowledged to be an indication of lengthening) corresponds again and again to the Laon *tractulus*, but nowhere to the Laon point. Moreover, the passages in St Gall marked with 'c' (*celeriter*) show a general agreement with the Laon points.

³ A *climacus* is a descending neum of three notes.

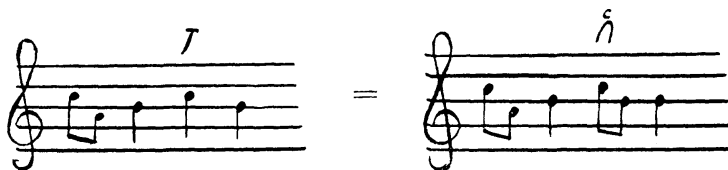
⁴ The full significance of these first two reasons will be better understood if we remember that, in contrast to the Metz notation (which we are now considering), the various symbols in the St Gall notation *did* have a melodic significance. Thus the St Gall point always indicates a lower note and the St Gall *virga* a higher one. An ordinary St Gall *climacus*, therefore, always shows a *virga* followed by two points:

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What conclusions are we to draw from these remarkable facts, except that there were two note-values in the Gregorian Chant, a long and a short (as all the contemporary literary evidence indicates), and that these two values are shown in each of the different notations by two distinct signs?

The question now arises: What is the proportional relationship between the long note and the short? The literary evidence is clear enough, as I have already shown.⁵ One typical quotation (from the *Commemoratio Brevis*, a document contemporaneous with the best Chant manuscripts) must suffice here: 'All the longs must be equally long, all the shorts of equal brevity . . . Let there be formed short beats, so that they be neither more nor less, but one always twice as long as the other'.

The evidence of the Chant manuscripts is equally clear and fully corroborates what the writers say. For example, if we compare settings of the same melodic formula to different words, even in the same manuscript, we often find that in one place there is a single long note, which elsewhere becomes a group of two short notes (*pes* or *clivis*).⁶ Thus, in the familiar *Ostende*-type of Alleluia melody (which occurs with thirteen different texts in the St Gall manuscripts 339, 359 and Einsiedeln 121, as well as in Laon 239) we find at one point that sometimes there is a long note (indicated by a *virga*, marked with a lengthening *epise a*) and sometimes there are two short notes (a *clivis*, marked with 'c'):



This is quite typical of the variants to be found in all the best Chant manuscripts, and it leaves little room for doubt that the long note is equivalent in length to two short notes.

Now, although there are two distinct signs for single notes in several of the notational systems, it would be erroneous to imagine


⁵ See *Gregorian Rhythm in the Gregorian Centuries: The Literary Evidence*.

⁶ A *pes* (or *podatus*) is a rising neum of two notes; a *clivis* is a descending neum of two notes.


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that the long and the short signs are equally numerous. Where isolated syllables are concerned (i.e. on syllables with only one note) each notation shows the long sign ten times more often than the short sign; from which we must conclude that the normal isolated note is a long note.⁷ Comparative analysis leads to a second conclusion, viz. that the normal (unlengthened) group of two notes (*pes* or *clivis*) consists of two short notes. A single example from the Gradual-formula *Justus*, set to two different texts, is quite typical:

ST GALL	. . T	/ . . /	✓
LAON	✓



ST GALL	. . T	/ . . /	= /
LAON



Here the unlengthened *pes* on the syllable *nu-* must obviously consist of two short notes, because when the same two notes are allocated to two separate syllables they are marked as two short notes. It is unthinkable that the same melodic phrase could be sung in two different ways.

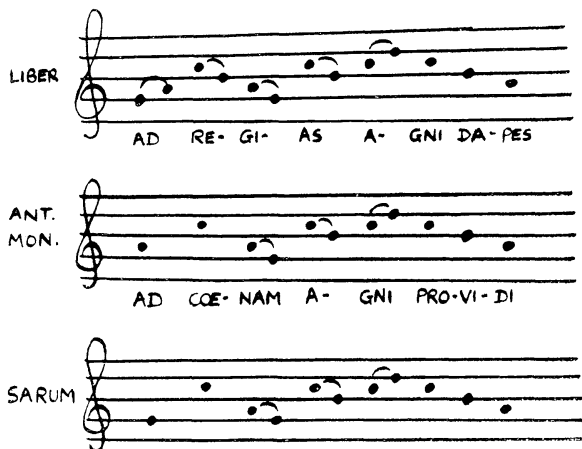
Similar proofs abound that the normal (unlengthened) *clivis* likewise consists of two short notes.

Corroboration of these conclusions, which Fr Vollaerts has established by a comparative study of the Chant manuscripts, may be found easily enough when we compare different versions of individual melodies in our modern books. Here, for instance, is the first line of the Easter Vesper hymn as given in the *Liber Usualis*,

⁷ The most usual position for short signs on isolated syllables is at the beginnings of phrases, where we often find a series of them leading to an accented syllable which receives some kind of lengthening. In the Introit *Gaudeamus*, for instance, there are four such passages: the first two syllables of *Gaudeamus*; the first two syllables of *sub honore*; the first two syllables of *passione*; and the first two syllables of *et collaudant*.

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the *Antiphonale Monasticum* and *The English Hymnal* (representing the Sarum version):



Clearly these variations could only have arisen if the initial *pes* and *clivis* of the Liber version corresponded in time-value to the two isolated notes in the *Antiphonale Monasticum* and Sarum versions. If all three versions are sung with equal notes, their fundamental identity becomes so completely disguised as to be unrecognisable, and it becomes impossible to imagine how they could have been derived from one another or from some common source. We may presume, without fear of error, that the simpler version of the *Antiphonale Monasticum* and Sarum is earlier than the *Liber* version, for the latter reveals the common tendency of later variants to 'fill out' the originally simple melodic outline. But what a splendid melody the Sarum version becomes when its correct note-values are restored — a really worthy setting for the triumphant words:



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This is music which any ordinary congregation could learn without difficulty and sing with vigour. Can we say the same of the equal-note version as indicated by the accompaniment given in *The English Hymnal*?

Not the least valuable part of Fr Vollaerts' book is the initial chapter in which he submits all the more important Chant manuscripts to a comparative survey. From this analysis, which reveals him as a paleographer of the first rank, certain important conclusions emerge. But first of all he warns us that 'the neums had much less value to the medieval singer than our present-day printed music has to contemporary musicians. In these days every note is so written that a definite relative duration is depicted. The medieval neum-notation, however, showed the sound-durations often very incompletely, this being evident from several notations of the same melodic fragments' (p. 5). Furthermore, 'a positive testimony is generally of greater value than a negative one. A positive indication is indeed a direct indication: a 't' or *episema* testifies positively and directly to a long sound-duration. The absence of a testimony, however, can mean something only when there is a possibility and a necessity for such a testimony . . . Hence the absence of *episemata* or letters denoting a long sound-duration in known passages need not be an indication of the absence of that sound-duration itself, because to the medieval copyist there was no reason or necessity for noting them over and over again' (pp. 5-6).

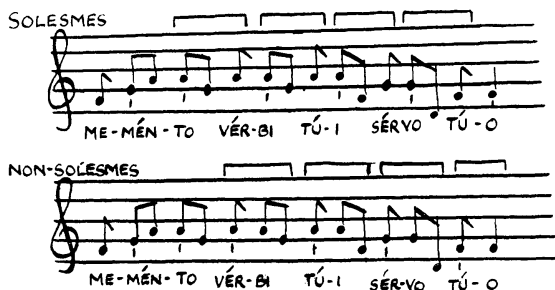
For the Mass Chants, as Fr Vollaerts demonstrates, the most important rhythmic manuscript is undoubtedly Laon 239, to which we have already referred. In this codex we find the most complete rhythmic indications, so that in this respect it is superior even to the best manuscripts of the St Gall school. For 'only this manuscript has saved from mutilation what has been dispersed over several other manuscripts as incomplete fragments of a crumbling tradition' (p. 44). It consistently differentiates between long and short notes, whereas the St Gall *episema* is so irregular and capricious in its use that it is obviously an unreliable guide in the process of rhythmic discrimination. But 'provided that the rhythmic indications in the several St Gall manuscripts are *totalled*, the letter 'c' indicates exactly in St Gall the same 'shorts' (and consequently the same 'longs') as are shown in the other notation schools. Hence it is

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this letter 'c', and not the *episema*, which is the safe discriminating factor for 'longs' and 'shorts' in the St Gall Mass documents. Thus perfect uniformity and coherence in the rhythmic tradition has been established and saved, and this tradition is represented by the different notations of the various manuscripts' (p. 152).

The Metz manuscript, Laon 239, is therefore the key to the problem. It alone reconciles the apparent divergences among even the best St Gall manuscripts, and its consistent discrimination between long and short notes is independently corroborated (as we have seen) whenever it can be checked by the quite distinct notations of Nonantola and Aquitaine. Without Laon 239, the discrepancies, inconsistencies and omissions in the various St Gall manuscripts might seem to indicate that their length-indications were merely more-or-less optional *nuances*, not essential to the rhythm of the Chant. Such an interpretation, however, is no longer possible when we find that, taken together, the best St Gall manuscripts are equivalent in their totalised indications to the clearer and fuller symbols of Laon.⁸ When these latter are reproduced in their completeness, there is no need for the addition of any purely editorial rhythmic signs, except possibly for bar-lines at the ends of phrases. The note-values can almost always be clearly perceived, with Fr Vollaerts to help us.

Thus we no longer have to decide between the Solesmes and non-Solesmes 'equalist' interpretations of the much-disputed Communion, *Memento*:



⁸ Perhaps it is not surprising, in view of the history of the Chant, that a Metz manuscript should prove to be the best. Metz was certainly a much more important musical and liturgical centre than St Gall. In fact a monk of St Gall, writing towards the end of the ninth century, tells us that the chant then established throughout the Frankish dominions 'is even now called *ecclesiastica cantilena Metensis*' (see Willi Apel, *Gregorian Chant*, p. 81).

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When the notes are given their correct values there is no problem and no room for rhythmic difference of interpretation:

LAON 239 ~ ✓ 1 ~ 1 ~ 1 ~ 1 ~ ~

ST GALL 339 / J 1 / 1 / 1 / 1 / /

ME-MÉN-TO VÉR-BI TÚ-I SÉR-VO TÚ-O

Similarly the famous cadence-formula, so often invoked as a 'proof' that the Gregorian composers did not regard the verbal accent as either long or 'ictic', raises no problem if it is interpreted according to the rhythmic indications of the manuscripts. Here is how it occurs as the ending of the Offertory, *Confitebor tibi*, in both the Metz and the St Gall notations :

LAON 239 ~ . . ~ . . ~ ~ ~

ST GALL 339 - . . T . . T T

DÓ-MI- NE.

How this cadence ever came to be interpreted by the Solesmes editors (who must have examined the manuscripts), with the ictus marks as indicated below, passes all comprehension:

DÓ-MI- NE.

As the reader can see for himself, the only ictus mark that coincides with a St Gall *episema* is the second. The other two derive, in flagrant opposition to the manuscript evidence, from the 'equalist' fallacy and the peculiar rhythmic theory to which it gave rise.

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But, of course, there is no need for any special theory of rhythm in interpreting the Chant. All that is required is to give the notes their correct time-values according to the reliable manuscripts: musicianship can do the rest, as in all other music.

It would manifestly be impossible within the limits of these pages to reproduce all the close argumentation and logical deduction that Fr Vollaerts displays in his examination of the manuscript evidence. But some of his main conclusions with regard to the simpler neums may be set down:

(1) Simple neums of two notes (*pes* or *clivis*) are normally composed of two short notes. When they are lengthened, however, they consist of two long notes. Thus the Solesmes interpretation, which lengthens only the first note, does not square with the manuscript evidence. Laon 239 represents the lengthened *pes* and *clivis* by two long signs. The same interpretation can be proved, as we shall see, by the evidence of the St Gall manuscript of Hartker's *Antiphonale*.

(2) A simple (unlengthened) neum of three notes (*torculus* or *porrectus*, *salicus* or *scandicus*)⁹ consists of two short notes followed by a long. In their long form, however, these neums consist of three long notes. The Solesmes interpretation of the *salicus* (with only the penultimate note lengthened) is based on a misreading of the manuscript evidence.

(3) A descending group of three notes (*climacus*) is always represented in the neumatic notations by three separate signs, each of which normally indicates its proper time-value. Some uncertainty arises, however, as to the length of the third note when the penultimate note is short. Fr Vollaerts gives good reason for accepting the final note as long if it is so written in the better manuscripts (Paris B.N. 1118, Nonantola, St Gall 359 or Laon 239). In other manuscripts the long sign in this context 'is in process of losing its original significance of length, in the same way as did the *episema* during the eleventh and twelfth centuries. It is becoming a mere graphic convention' (p. 98).

Plate III in Fr Vollaerts' book (pp. 147 ff) gives a full transcription of the Gradual *Tribulationes*, together with the complete neumatic

⁹ A *torculus* consists of the sequence low-high-low, a *porrectus* has high-low-high, *salicus* and *scandicus* are both rising neums.

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notation from the eleven most important manuscripts. Here, for the conscientious student, is a fascinating demonstration of the author's scientific method and a complete vindication of the soundness of his conclusions.¹⁰ His case seems to me to be unanswerable. It produces, as might be expected, quite a different kind of music from the Chant we have been accustomed to: gone are the seductive curves, and the smooth, ethereal melismas, to be sung in that half-voice which is the musical equivalent of the 'dim religious light' of Victorian gothic. Instead we find a strong, virile, somewhat angular music, far more in keeping with every other artistic manifestation of the days of the Chant, and measured in its phrases — not by the nineteenth-century standards of 'endless' Wagnerian melody — but by the natural limitations of the human lungs.¹¹ This is emphatically vocal music, not instrumental music played on human voices. We need no longer defend (or extol!) the Gregorian Chant on the plea that its remoteness from the rhythmic vigour of other music shows that it is 'prayer-music' and therefore 'quite different': *non ex virili semine, sed mystico spiramine*. That particular smoke-screen, heavily laden with incense, we can dispel once and for all. St Bernard tells us: *Viros decet virili voce cantare et non more femineo*. With the authentic Chant before us, we can now carry out his instructions.

When we come to the Office Chants (as opposed to those for the Mass), the most important single manuscript is undoubtedly the *Antiphonale* of Blessed Hartker, St Gall 390-1 (published as Volume I of the second series of *Paléographie Musicale*).¹² Fr Vollaerts has made a special study of the fourth-mode antiphons ending on A, of the *Prudentes virgines* type. Thirty antiphons with this melody are set out in a comparative chart, with their full texts and Hartker's neums (pp. 134-5). In his analysis Fr Vollaerts shows

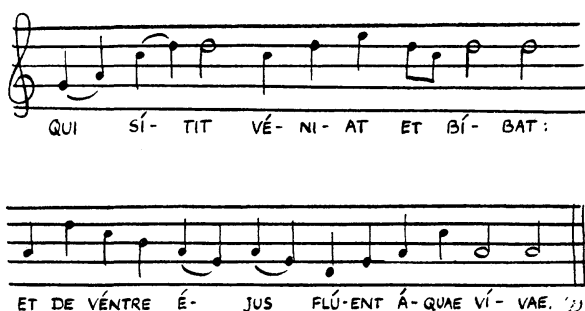
¹⁰ But, of course, we must begin by studying the author's closely-reasoned arguments and then compare the various neums. It would be folly to look only at the transcription (as some have done) and to reject it out-of-hand simply because of its unfamiliarity.

¹¹ Every choirmaster knows that, in order to produce the 'endless' melismas that characterise the more elaborate melodies as rendered at Solesmes, the singers must be instructed to take breath in relays at quite unorthodox places. Only so can the artificial, 'instrumental' continuity be maintained. No purely vocal music was ever designed for such treatment.

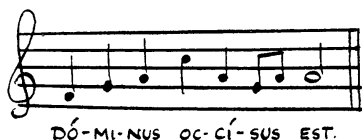
¹² The importance of this manuscript is such that it was taken as the basis of the *Antiphonale Monasticum* of 1934.

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that in this particular manuscript, at least in these and certain other antiphons, the scribe has used a special 'compensation' technique whereby texts of different lengths are quite naturally accommodated to the same basic melodic formula. Here again, the results of his analysis are convincingly argued and no less convincingly effective. Amongst other things he demonstrates how Hartker employs three note-values, the long, the short, and the double-long:



With these three note-values, Hartker is able to adapt the same cadence to a dactylic ending thus:



which is how all similar dactylic cadences should be sung—a decorative variant of three plain notes at the same pitch,

But the many different texts for which this melody is used also provide convincing proof of Fr Vollaerts' basic contention which we have already indicated: viz. that a lengthened neum of two notes (*pes* or *clivis*) consists of two long notes, each of them equal to a normal isolated note. In the following illustration, taken from four different antiphons, the *clivis* with *episema* (seen on each syllable of *vestrum*, on the final syllable of *Dominus*, and on the first syllable

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of *aqua*) is in each case to be identified with the two separate notes when two separate syllables occur:

π π
 VE- STRUM

 | π
 DO-MI- NUS

 π | |
 A- QUA ET

 | | |
 INCRE- PAN-TI- BUS ET

The converse is equally true: viz. that an unlengthened *pes* or *clivis* consists of two short notes. Here, for instance, is the intonation from the same antiphon, set to two different texts:

QUI SI- TIT A- PUD DÓ-MI- NUM

In the first case Hartker uses two angular (i.e. lengthened) *pes*. The first of these is clearly equivalent to the two isolated notes on *Apud*; the second is equal to the isolated note on *Do-* plus the unlengthened *pes* on *mi-*.

In the second part of his book Fr Vollaerts examines the evidence of the medieval theorists. Up to this point his arguments have all been based on the Chant manuscripts; but it is obvious that any interpretation of the manuscripts which does not accord with the writings of contemporaneous authors cannot be correct. For, as Dom Mocquereau wrote in the Introduction to *Le Nombre Musical Grégorien*, 'these men were all monks . . . and they all possessed a thorough *practical* knowledge of the melodies, a knowledge acquired during long hours spent in choir, singing the praises of God . . . There is nothing to do, therefore, but to accept their teaching, their entire rhythmic teaching, since it is in accord with the

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natural laws proper to rhythm and agrees with the tradition handed down to us by the Chant manuscripts'.¹³ Eighteen years later, however, he appears to have changed his mind, for he then candidly confessed that the Solesmes teaching was not based on what he called the 'disputed texts' of the old writers, but on 'the evidence of the Chant manuscripts . . . We therefore base our theory on the unshakable rock of the well-established facts of paleography, not on the shifting sands of the medieval authors, who not only contradict one another, but often, alas, do not really know what they are talking about'.¹⁴ This, of course, is nothing less than a confession that the Solesmes interpretation evolved by him could find no support in the medieval authors. In other words, it was an incorrect interpretation; for, on his own admission, these same medieval authors were 'all of them monks' with 'a thorough *practical* knowledge of the melodies'!

The great merit of Fr Vollaerts' book is that the solution he proposes is based solely and exclusively on a careful and impartial study of the Chant manuscripts. He does not start—as Dom Mocquereau did—with preconceived ideas about rhythm,¹⁵ but simply looks at the facts before him. Nor does he assume—as the opponents of Dom Mocquereau have so often assumed—that when words are set to music, it is always the words that dictate the rhythm.¹⁶ Similarly, in dealing with the medieval authors, he does not make the mistake—as the mensuralists sometimes did before him—of over-emphasizing the importance of a particular text at the expense of all the other evidence.¹⁷ The objectivity of his approach must excite the admiration of all scholars, and the results of his researches have that quality of obviousness and inevitability which makes it difficult to understand how the truth can have

¹³ *Le Nombre Musical Grégorien*, tome I (1908), pp. 10-11.

¹⁴ *Monographie Grégorienne VII* (1926), p. 31.

¹⁵ The first part of *Le Nombre Musical Grégorien*, up to page 128, is concerned exclusively with the exposition of a novel theory of rhythm, a theory which finds no place in any ordinary musical text-book, ancient or modern.

¹⁶ Naturally, composers usually consider the verbal accentuation in setting words to music; but there are plenty of exceptions, both in the Chant and elsewhere.

¹⁷ Thus, on the strength of a single statement of Guido in his *Micrologus*, Fleischer and Houdard both assumed that every neum, whether of two notes or of six, had the same over-all time-value; and Wagner, relying solely on *Anonymus Vaticanus*, resorted to the over-simplified principle that every *virga* was a 'long'.

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remained hidden for so long. For here, at last, is a solution that fits all the evidence, whether of the Chant manuscripts or of the old authors, and which at the same time satisfies our purely musical instincts.¹⁸

What a magnificent gesture it would be if, instead of blandly ignoring the serious criticisms levelled against their theories and their editions, the Solesmes authorities would now publicly acknowledge the splendid contribution Fr Vollaerts has made to the cause they themselves have done so much to promote! They have only to explain — what every independent scholar knows, in any case — that their 'rhythmic editions' of the Chant were prepared merely as interim, practical, working editions; that they do not incorporate more than a limited number of rhythmic indications from the manuscripts; and that as editors, in default of complete knowledge, they were compelled to insert innumerable signs of their own in accordance with a special theory of rhythm (inspired by the consequences of their equal-note fallacy) for which there is no further need. Now that the secret of the true, authentic rhythm has been discovered, these outdated editions must gradually and inevitably be discarded at some time; no doubt they will eventually be prohibited, as previous faulty editions were when their manifest and indefensible errors could no longer be officially tolerated.

Meanwhile, with all the paleographical resources of their scriptorium at their disposal, the Solesmes monks are in a better position than anyone else to prepare editions of the Chant containing nothing but authentic rhythmic indications and correct note-values from the best manuscripts. Fr Vollaerts has provided them with the vital clue. In making use of it they could bring to completion their magnificent task of restoring to its primitive purity the authentic Gregorian Chant.¹⁹

¹⁸ This is not to say that every problem is solved by Fr Vollaerts' book. Some details will require further research, undoubtedly; but the essentials are established.

¹⁹ On the other hand, how regrettable it would be if, instead of acknowledging Fr Vollaerts' great work for the rhythm of the Chant, the Solesmes authorities were to adopt the intransigent attitude they themselves had to contend with in their early efforts to restore the correct notes. Vested financial interests in the existing editions once provided the main obstacle to their Gregorian restoration.

GREGORIAN RHYTHM IN THE GREGORIAN CENTURIES

*The Literary Evidence**

By Dom Gregory Murray

There can hardly be any doubt that it would be both unscholarly and foolish to attempt to understand that music of any period of the past without taking into account what the musicians of that period have to say. However difficult and puzzling their statements may appear, their guidance is something we can ill afford to ignore in our search for the authentic interpretation of the music they discuss. This, however, was not the opinion of Dom Mocquereau, who has left on record a candid confession of his own attitude to the ancient treatises on the Gregorian chant:

'It is not on the disputed texts (of the old writers) that we have based our Solesmes teaching, but on the evidence of the (musical) manuscripts, which form a solid block, often in opposition to the authors. Let us not forget that in the ninth, tenth and eleventh centuries there were mensuralists like Deschevrens, Houdard, Raillard and Jeannin in our own days.¹ We therefore base our theory on the unshakable rock of the well-established facts of paleography, not on the shifting sands of the medieval authors, who not only contradict one another, but often, alas! do not really know what they are talking about.'²

This is an astonishing statement from one who is often regarded as the greatest of modern authorities on the Gregorian chant. His summary dismissal of the ancient authorities would perhaps carry greater conviction had he been able to quote unambiguous literary evidence from sources of equal date in favour of his own system. The suspicion remains that the ancient authorities are discounted precisely because they do not provide such evidence. To claim

* This article is reprinted, by kind permission of the Reverend Editor, from *The Downside Review*, Summer number, 1957. It was already in print when Dr. Carroll's article "The Forest and the Trees" came to hand and will clear up some of his misconceptions. He does not seem to have read the final foot-note of the previous article.

¹ A mensuralist is one who maintains (as against the equalist systems of Dom Pothier and Dom Mocquereau) that in the golden age of the chant the notes were not all basically equal but were measured in different lengths. The modern mensuralists mentioned by Dom Mocquereau differed, it is true, in the details of their systems, although all were attempting to rediscover the authentic interpretation of the chant according to the indications of the ancient writers. If they did not succeed in their quest, at least they were looking in the right direction. They quite naturally believed that in this matter the monks of the ninth century would know better than those of the nineteenth.

² Monographie Grégorienne VII (1926), p. 31.

that they 'did not really know what they were talking about' is manifestly absurd if we recollect that they were all of them monks, with daily experience in their monastic choirs of the music in question. Nor may we forget that the best manuscripts we possess of this same music were also the work of monks of precisely the same period as the literary treatises. Admittedly there are obscurities in these treatises; but there are also passages of luminous clarity, in the light of which the obscurities tend to disappear. As we have seen, Dom Mocquereau admits that there *were* mensuralists during the Gregorian centuries; it would be interesting if clear evidence could be cited to show that during the same period there were some who were *not* mensuralists. As for the alleged contradictions in their writings, the reader of these pages will soon see for himself that on this crucial point at least there is solid agreement. Until this fact is faced, we are unlikely to recover the authentic, historical interpretation of the Gregorian chant—which is another way of saying that we are unlikely to recover the Gregorian chant itself.

If there is one thing of which we can be certain, it is that there could never have been any conscious attempt during the formative period of the Gregorian chant to evolve a completely different type of music from that obtaining at the time. It is absurd to imagine that anyone at any period could have set out to invent a musical idiom without points of contact with, or roots in, the music of the day. Furthermore, St. Gregory (†604), who is traditionally regarded as having taken the major share in giving the Gregorian chant its final form, has no serious claim to be considered a composer. Even his enthusiastic admirer and biographer, the ninth-century John the Deacon, says nothing more in this connection than that he was a 'compiler'.³ The materials of his compilation he had received from the past: they were traditional melodies already in use to which he may have given some editorial revision, but which he certainly did not invent or compose. However, it is of no real consequence whether the melodies were pre-Gregorian, Gregorian, or post-Gregorian in origin; for in any case it is obvious that they must have been composed in the current musical idiom of the time.

Now there was in St. Gregory's day a famous musical treatise, already two centuries old but destined to exert a powerful influence for many centuries to come. This was St. Augustine's *De Musica*,

³ 'Antiphonarium centonem compilavit' (Vita S. Gregorii Magni, II, 6; P.L., 75, 90). It is only fair to add that one modern authority, whose opinion cannot lightly be dismissed, would limit St. Gregory's share in the Gregorian chant even more drastically. According to Fr. Jos. Smits van Waesberghe, St. Gregory merely arranged 'the artistically less important parts (the so-called Office chants and the words of the variable Mass chants) . . . The Mass chants, such as the Introit, Offertory, and Communion, were not composed till years after he was dead' (*Gregorian Chant and Its Place in the Catholic Liturgy*, p. 12).

a valuable text-book on musical rhythm, written about the year 388. That it was widely known and recognised in the sixth century is clear from the fact that Cassiodorus (†575) mentions it amongst the handful of Latin musical treatises to which he was indebted and which he recommends:

'Also the Father, Augustine, wrote six books *De Musica*, in which he showed that the human voice naturally has rhythmical sounds and melodic modulation in long and short syllables'.⁴

But before quoting some of its more significant passages it may be as well to notice an interesting reference to contemporary musical interpretation in another of St. Augustine's writings. This passage is of particular importance because it deals specifically with the music of the Church, in fact with one of St. Ambrose's hymns, then in popular use:⁵

'*Deus creator omnium*: This line is composed of eight syllables, short and long alternately: the four short syllables, the first, third, fifth, seventh, are single in relation to the four long syllables, the second, fourth, sixth, eighth. Each long syllable has double the time of each short syllable. I pronounce them and I say that it is so, and so it is, as is quite obvious to the ear'.⁶

We find the same hymn instanced in *De Musica*:

'Master: When we pronounce the line *Deus creator omnium*, where in your opinion are the four iambs and the twelve

⁴ 'Scripsit etiam et Pater Augustinus de musica sex libros, in quibus humanam vocem rhythmicos sonos et harmoniam modulabilem in longis syllabis atque brevibus naturaliter habere monstravit' (*Institutiones*, V. Gerbert, *Scriptores de Musica*, I, 19). In ancient terminology 'harmonia' refers to the successive order of notes in a scale, not (in our modern sense) to the simultaneous disposition of notes in a chord. Moreover, it is possible that by 'long and short syllables' Cassiodorus may also mean musical syllables (i.e. groups of long and short notes); for, since early musical notation was alphabetical, a combination of notes (letters) produced musical syllables, as Guido of Arezzo points out (see below, page 191). The idea of musical syllables apparently goes back to the Greeks. Thus Aristoxenus tells us in his *Harmonic Elements*: 'The order that distinguishes the melodious from the unmelodious resembles that which we find in the collocation of letters in language. For it is not every collocation but only certain collocations of any given letters that will produce a syllable' (Oliver Strunk, *Source Readings in Musical History*, p. 29). Incidentally, St. Augustine's definition of music as "scientia bene modulandi" (*De Musica*, I, 2) is adopted by Cassiodorus (Gerbert, *Scriptores*, I, 16).

⁵ It is important to remember here that, as Fr. Joseph Connelly has pointed out, 'St. Ambrose wrote his hymns to be sung' (*Hymns of Roman Liturgy*, p. xiv). Moreover, St. Augustine himself insists that without singing there can be no hymn: 'Si laudas Deum et non cantas, non dicis hymnum' (Enarr. in Ps. 148, 17; P.L., 37, 1947). There is no question, therefore, that St. Augustine is talking in the passages quoted of a hymn merely as metrical verse to be read.

⁶ *Deus creator omnium*: versus iste octo syllabarum brevibus et longis alternat syllabis. Quatuor itaque breves, prima, tertia, quinta, septima, simplae sunt ad quatuor longas, secundam, quartam, sextam et octavam. Hae singulae ad illas singulas duplum habent temporis: pronuntio et renuntio et ita est, quantum sentitur sensu manifesto' (*Confessiones*, XI, 27).

beats of which it is composed? Are they only in the sound we hear? or also in the ears of the hearer? or also in the action of the person who utters the words? or, since we already know the line, must we admit that these rhythms are also in our memory,

Pupil: I think they are in all these things.⁷

These two quotations show quite clearly that in St. Augustine's time the hymn was sung in the triple measure of iambs—not in notes of equal length in the manner of Solesmes.

But we find the same tradition three centuries later in the writings of St. Bede (†735), whose treatise *De Arte Metrica* is founded on the classical prosodic distinction of long and short syllables (the former twice as long as the latter), but whose examples are all from the current liturgical hymns. In the chapter on rhythm he tells us:

'In the manner of iambic metre the following famous hymn was beautifully written:

(O) *rex aeterne Domine,*
Rerum creator omnium,
Qui eras ante saecula
Semper cum Patre Filius.

And also not a few other Ambrosians.⁸ Similarly in trochaic metre they sing an alphabetical hymn about the judgement-day:

Apparebit repentina
Dies magna Domini,
Fur obscura velut nocte
*Improvisos occupans.*⁹

This, then, is how the liturgical hymns were sung — notice St. Bede's word 'sing', *canunt* — within a hundred years or so of receiving the Gregorian chant from St. Gregory's monks. It is obviously identical with the practice described by St. Augustine

⁷ 'Magister: Responde, si videtur, cum istum versum pronuntiamus *Deus creator omnium*, istos quatuor iambs quibus constat et tempora duodecim ubinam esse arbitreris, id est, in sono tantum qui auditur, an etiam in sensu audientis qui ad aures pertinat, an in actu etiam pronuntiantis, an, quia notus, versus est, in memoria quoque nostra hos numeros esse fatendum est? Discipulus: In his omnibus puto' (*De Musica*, VI, 2).

⁸ An 'Ambrosian' is a hymn. The word is often used by St. Benedict in his Rule (chapters ix, xii, xiii, xvii). St. Bede here seems to limit the meaning particularly to hymns in the iambic dimeter used by St. Ambrose.

⁹ 'Ad instar iambici metri pulcherrime factus est hymnus ille praeclarus (O) *rex aeterne Domine*, / *Rerum creator omnium* / *Qui eras ante saecula* / *Semper cum Patre Filius*. Et alii Ambrosiani non pauci. Item ad formam metri trochaici canunt hymnum de die iudicii per alphabeticum: *Apparebit repentina* / *Dies magna Domini*, / *Fur obscura velut nocte* / *Improvisos occupans*' (P.L., 90, 174).

two centuries before St. Gregory and, as we shall see, it still obtained in some degree in the eleventh century, when Guido of Arezzo stated: 'We often sing according to the scansion of the line in feet, so to speak, as happens when we sing the metres themselves'.¹⁰

But St. Augustine's *De Musica*, despite the mistaken assumptions of those who have not studied it, is something very much more important and valuable for our purpose than a mere treatise on metrics. In a letter to Bishop Memorius, who had requested a copy of the work, St. Augustine wrote thus:

'I have written six books solely about rhythm and, I confess, I was disposed to write perhaps another six concerning melody when I had future leisure.'¹¹

Thus the *De Musica* is the first half of a complete treatise on music. As a recent writer has observed: 'More than once in the *De Musica* Augustine makes a clear distinction between the function of the musician, who treats the quantities of the words as components of rhythm, and the grammarian who simply discusses the quantities of syllables as they have been handed down by authority'.¹² One such passage may profitably be quoted:

'But the science of music, to which belongs the reasoned measurement of words in themselves and their rhythm, is only concerned to see that the syllable in this or that place be shortened or lengthened according to the pattern of the proper measure. For if you put the word *cano* where there ought to be two long syllables and pronounce the first syllable long although it is really short, it is not a musical offence; for the lengths of the sounds reach the ear as the rhythm demands that they should. But the grammarian insists on a correction being made and directs you to substitute a word whose first syllable is long according to the authority of the ancients, whose traditions he guards.'¹³

The basis of the entire system is the strictly measured proportion of two sounds, the long and the short:

¹⁰ 'Saepe ita canimus ut quasi versus pedibus scandere videamur, sicut fit cum ipsa metra canimus' (*Micrologus*, ed. van Waesberghe, p. 171. See also Gebert, *Scriptores*, II, 16).

¹¹ 'Conscripsi de solo rhythmico sex libros, et de melo scribere alios forsitan sex, fateor, disponebam, cum mihi otium futurum sperabam' (Epist. CI; P.L., 33, 369).

¹² William G. Waite, *The Rhythm of Twelfth Century Polyphony*, p. 30.

¹³ 'At vero musicae ratio, ad quam dimensio ipsa vocum rationabilis et numerositas pertinet, non curat nisi ut corripiatur vel producat syllaba, quae vel illo loco est secundum rationem mensurarum suarum. Nam si eo loco ubi duas longas syllabas poni debet, hoc verbum *cano* posueris, et primam quae brevis est pronuntiatione longam feceris, nihil musica omnino succenset; tempora enim vocum ea pervenire ad aures, quae illi numero debita fuerunt. Grammaticus autem jubet emendari, et illud te verbum ponere cujus prima syllaba producenda sit, secundum majorum, ut dictum est, auctoritatem, quorum scripta custodit' (II, 1; cf. I, 1).

'It is not absurd, then, that the ancients called one beat (*tempus*, measure of time) that sort of minimum space in time occupied by a short syllable . . . (and) since just as in numbers the first progression is from one to two, so in syllables, as we progress from a short syllable to a long syllable, the long must have a double length. Accordingly, if the space that a short occupies is called correctly one beat, the space that a long occupies is to be called correctly two beats.'¹⁴

These two quantities, long and short, are combined in various ways to form feet of from two to four syllables, beginning with the pyrrhic of two short syllables and ending with the dispondee of four long syllables — twenty-eight possible combinations (II, 8). Each foot, moreover, is divisible into two parts, proportional to one another, and these parts are indicated by manual gestures called the *plausus*. The hand is first raised (*levatio*) then lowered (*positio*). There are only two movements, no matter how many beats the foot may contain. Thus for a dispondee the *levatio* and the *positio* will each last for two beats, whereas for a trochee — and here St. Augustine is in direct opposition to the Solesmes authorities — the *levatio* is for two beats and the *positio* for only one (II, 10-11).

According to St. Augustine, the essential condition for the combination of feet is that the feet should contain the same number of beats and have the same *plausus*. The iamb (u·) and the trochee (·u), therefore, cannot combine, for, although they each have three beats, the *levatio* and *positio* are of different lengths; but the tribrach (uuu) could combine with either, because its *plausus* can be of the pattern of either (II, 14). So at length we arrive at a discussion of the difference between rhythm and metre.

Rhythm results from the combination of feet of equal length and *plausus*:

'When we have a continuous succession of definite feet, which is spoiled if unsuitable feet are introduced, it is rightly called *rhythm*, i. e. number; but because this succession has no limit and no particular foot has been selected to mark an ending, this absence of measure in the series does not allow us to call it *metre*. For metre involves two things: it proceeds by definite feet, and it has a definite limit. And so it is not only *metre*

¹⁴ 'Non absurde igitur hoc in tempore quasi minimum spatii, quod brevis obtinet syllaba, unum tempus veteres vocaverunt . . . quoniam ut in numeris ab uno ad duo est prima progressio, ita in syllabis, qua scilicet a brevi ad longam progredimur, longam duplum temporis habere debere; ac per hoc si spatium quod brevis occupat, recte unum tempus vocatur, spatium item quod longa occupat, recte duo tempora nominari' (II, 3).

because of its fixed limit, it is also *rhythm* on account of the orderly combination of its feet. Thus all metre is rhythm, but not all rhythm is metre. In music the word *rhythm* is so wide in its scope that everything therein which concerns the longs and the shorts (*quae ad diu et non diu pertinet*) is called rhythm.¹⁵

A little later the disciple in the dialogue thus summarizes his master's teaching:

'Between rhythm and metre there is this difference, you have said: that in rhythm the series of feet has no fixed limit, but in metre it has. The combination of feet is common to rhythm and metre, therefore, but in the one case it is without limit and in the other case it is limited.'¹⁶

The same idea of rhythm is similarly expressed in another of St. Augustine's works:

'Whatever is not limited by a fixed ending but yet proceeds in orderly fashion with properly organized feet we call rhythm.'¹⁷

There is no need to follow St. Augustine into further detail. The main lines of his ideas (as far, at least, as they concern our present purpose) have already been revealed. For rhythm, as for metre, the basis is the constant contrast between long and short sounds, in the strict proportion of double to single. Such a proportion, he tells us in a somewhat unexpected context (a treatise on the Trinity!) has its roots deep in human nature and is an obvious characteristic of vocal music:

'This is not the place to set forth the power of that con-

¹⁵ 'Nam quoniam illud pedibus certis provolvitur, peccaturque in eo si pedes dissoni misceantur, recte appellatus est rhythmus, id est numerus: sed quia ipsa provolutio non habet modum, nec statutum est in quoto pede finis aliquis emineat, propter nullam mensuram continuationis non debuit metrum vocari. Hoc (metrum) autem utrumque habet: nam et certis pedibus currit, et certo terminatur modo. Itaque non solum metrum propter insignem finem, sed etiam rhythmus est propter pedum rationabilem connexionem. Quocirca omne metrum rhythmus, non omnis rhythmus etiam metrum est. Rhythmici enim nomen in musica usque adeo late patet ut haec tota pars ejus quae ad diu et non diu pertinet, rhythmus nominata sit' (III, 1). The expressions *diu* and *non diu* (for long and short sounds) recur both in the *Scholia Enchiridis* and the *Commemoratio Brevis* in phrases very similar to that of St. Augustine here. See below, notes 30 and 31.

¹⁶ 'Quia inter rhythmum et metrum hoc interesse dixisti, quod in rhythmico contextio pedum nullum certum habet finem, in metro vero habet: ita ista pedum contextio et rhythmici et metri esse intelligitur; sed ibi infinita, hic autem finita constat' (III, 7). This passage is closely echoed by Remigius of Auxerre in the ninth century. See below, note 25.

¹⁷ 'Quod autem non esset certo fine moderatum, sed tamen rationabiliter ordinatis pedibus curreret, rhythmici nomine notavit' (*De Ordine*, II, 14; P.L., 32, 1014). This definition is repeated verbally by Walter Odington in the thirteenth century: 'Rhythmus non est certo fine moderatus; sed tamen rationabiliter ordinatus pedibus currit' (*De Speculatione Musicae*; Coussemaker, *Scriptores de Musica*, I, 211).

sonance of single to double which is found especially in us, and which is naturally so implanted in us (and by whom, except by him who created us?), that not even the ignorant can fail to perceive it, whether when singing themselves or hearing others sing.¹⁸

The close connexion in the mind of St. Augustine between music and metrical verse is beyond dispute. In the metrical hymns, as we have seen, the musical rhythm was identical with the metre of the verse. But in other chants the musical rhythm was less limited. In all the music, however, there were long and short sounds, so that even in the non-metrical melodies these long and short sounds combined to form feet. This idea was to persist all through the Gregorian centuries and beyond them.

We have a letter written by St. Aldhelm (†709) within a century of St. Gregory's death, in which he describes the syllabus and the methods used in Rome to instruct the students. These, he says, have not only to master the secrets of the Roman laws, but

'what is much more difficult and intricate, to distinguish a hundred kinds of metres by the rule of feet, and follow the mixed modulations of the melody by a right disposition of (musical) syllables . . . But there is no room in a letter to explain these matters at length, viz. how the abtruse materials of this same metrical art are compounded of letters, syllables, feet, poetic forms, lines, tones and times (beats).'¹⁹

That music was still a 'metrical art' in the century that followed may be seen from the description given by Alcuin (†804) of instruction in the 'sacred chant':

'Iduthun instructs the boys in the sacred chant so that they may sing the sweet sounds with sonorous voices and learn of how many feet, numbers and rhythm music is composed.'²⁰

Alcuin's testimony cannot be treated lightly. Roman cantors had already been sent into Gaul under Pippin and had founded

¹⁸ 'Neque nunc locus est ut ostendam quantum valeat consonantia simpli ad duplum, quae maxima in nobis reperitur, et sic nobis insita naturaliter (a quo utique, nisi ab eo qui nos creavit?), ut nec imperiti possint eam non sentire, sive ipsi cantantes, sive alios audientes' (*De Trinitate*, IV, 2; P.L., 42, 889).

¹⁹ 'Quod his multo arctius ac perplexius est, centena scilicet metrorum genera pedestri regula discernere, et admixta cantilenae modulamina recto syllabarum tramite lustrare . . . Sed de his prolixo ambitu verborum disputare epistolaris angustia minime sinit, quomodo videlicet ipsius metricae artis clandestina instrumenta litteris, syllabis, pedibus, poeticis figuris, versibus, tonis, temporibusque conglomerantur' (*Epist.* IV; P.L., 89, 95).

²⁰ 'Instituit pueros Idithun modulamine sacro,
Utque sonos dulces decantent voce sonora,
Quot pedibus, numeris, rhythmico stat musica discant'
(*Carmina*, 228; P.L., 101, 781).

schools at Aix-la-Chapelle, Metz, Rouen and elsewhere. Alcuin therefore knew something of the Roman tradition from his experience in Gaul. As an Englishman he would have already known it in any case, for the English tradition had also come from Rome, whence Theodore and John had been sent in the seventh century and, before them, St. Augustine and his monks.²¹

Before passing in chronological order to our next witness we must return to St. Bede (†735), whose treatise *De Arte Metrica* we have already quoted. This time, however, we must give the passage more fully:

'It seems that rhythm is in every way like metres, for it is a modulated composition of words, not by metrical rule but tested by the number of the syllables according to the judgement of the ear, like the songs of the secular poets. And indeed there can be rhythm without metre, but never metre without rhythm. This can be more clearly defined as follows: Metre is regularity with modulation: rhythm is modulation without regularity. Nevertheless you will very often find on occasion a regularity maintained in rhythm not by the restraint or artifice, but the music itself producing it by its own modulation . . . just as in the manner of iambic metre the following famous hymn was beautifully written:

(O) *rex aeternae Domine,*
Rerum creator omnium,
Qui eras ante saecula
Semper cum Patre Filius.

And also not a few other Ambrosians.²²

St. Bede is here explaining that some hymns, especially in the Ambrosian pattern, are not strictly metrical if judged by the prosodical quantities of the syllables. Nevertheless the number of the syllables is correct, and the melody (by its long and short notes) gives the impression of the proper metre. The hymn he quotes is a typical example, but it would be so only if the melody to which it

²¹ John the Deacon, *Vita S. Gregorii*, II, 8; P.L., 75, 91.

²² 'Videtur autem rhythmus metris esse consimilis, quae est verborum modulata compositio non metrica ratione, sed numero syllabarum ad iudicium aurium examinata, ut sunt carmina vulgarium poetarum. Et quidem rhythmus sine metro esse potest, metrum vero sine rhythmo esse non potest; quod liquidius ita definitur: Metrum est ratio cum modulatione, rhythmus modulatio sine ratione. Plerumque tamen casu quodam invenies etiam rationem, in rhythmo non artificis moderatione servatum, sed sono et ipsa modulatione ducente . . . quomodo et ad instar iambici metri pulcherrime factus est hymnus ille praeclarus: (O) *rex aeternae Domine, / Rerum creator omnium, / Qui eras ante saecula / Semper cum Patre Filius.* Et alii Ambrosiani non pauci'. (P.L., 90, 173-4.)

St. Bede's 'rhythmus sine metro esse potest, metrum vero sine rhythmo esse non potest' seems to echo St. Augustine's 'omne metrum rhythmus, non omnis rhythmus etiam metrum est'. See above, note 15.

was sung were composed of alternate short and long notes(i.e. iambs).

The following passage from the *Musica Disciplina* of Aurelian of Réomé (early ninth century) is little more than a transcription of the passage from St. Bede:

'Rhythm seems to be in every way like metres, for it is a modulated composition of words, not tested by the rule of metres but by the number of the syllables, and it is judged by the ear, like most Ambrosian hymns. So it is that the hymn (O) *rex aeterne Domine./Rerum creator omnium*, though composed in the manner of iambic metre, has nevertheless no regularity of feet, but is blended only by rhythmical modulation . . . For metre is regularity with modulation, whereas rhythm is modulation without regularity, and is perceived by the number of the syllables.'²³

That this passage directly depends on that of St. Bede is obvious. In fact the two texts dispel one another's obscurities. Both mean the same thing: that even if the strict rules of prosody are not observed by the author of the words, nevertheless the metrical pattern is maintained by the melodic alternation of short and long notes. Incidentally, whereas St. Bede says that 'not a few Ambrosians fall into this category, a century later (when presumably many more hymns had been written on this less rigid principle) Aurelian says that 'most Ambrosian hymns' were of this kind.

Any doubts we may have whether Aurelian was really familiar with such metrical methods of singing Ambrosian and other hymns are dispelled by another quotation from the same treatise in which he says that music could (and therefore did) produce all the metres:

'In metrical (music) indeed is produced every single kind of metre, wherein the melody modulates.'²⁴

Our next witness, Remigius of Auxerre (end of the ninth century), was obviously acquainted with the *De Musica* of St. Augustine:

'This is the difference between rhythm and metre: rhythm is the mere consonance of words without any fixed number and

²³ 'Rhythmus namque metris videtur esse consimilis; quae est modulata verborum compositio, non metrorum examinata ratione, sed numero syllabarum, atque a censura dijudicatur, aurium, ut pleraque. Ambrosiana carmina. Unde illud (O) *rex aeterne Domine./Rerum creator omnium*, ad instar metri iambici compositum, nullam tamen habet pedum rationem, sed tantum concentus est Rhythmica modulatione . . . Etenim metrum est ratio cum modulatione, rhythmus vero est modulatio sine ratione, et per syllabarum discernitur numerum' (Gerbert, *Scriptores*, I, 33).

²⁴ 'Metrica (musica) vero proditit unumquodque genus metri, qua cantilena modulatur' (Gerbert, *Scriptores*, I, 35).

cadence, and it continues indefinitely, bound by no law, composed of no specified feet; whereas metre is ordered with its proper feet and definite cadences.²⁵

Clearly this a paraphrase of a passage from St. Augustine which we have already quoted.²⁶ The very sequel in each case is the same: both writers proceed to explain that the minimum required for a metre is a foot and a half, and that the maximum is eight feet. Remigius is here distinguishing between the strictly regular feet and cadence of metrical melody and the irregularity of merely rhythmical melody. In view of the other evidence, both earlier and later than Remigius, it would be unjustifiable to conclude from his statement (as some have tried to argue) that merely rhythmical melody did not have its feet. According to St. Augustine, whom Remigius is following, it certainly did, though not on a fixed, regular, metrical plan. Indeed later in this same treatise Remigius talks about the various kinds of rhythmical melody and the proportions they involve. He is writing a commentary on Martianus Capella and his whole approach is one the lines of classical prosody, i. e. long and short quantities. Thus he speaks of the 'neums consisting of short and long notes' (*virgulae quibus constant brevia et longa*) and describes these varying lengths as being in strict proportion: 'as one to one . . . or two to two' (*sicut unum ad unum . . . vel duo ad duo*). 'In the iambic kind' he continues, 'the signs of the feet, i.e. the neums as above, are in double proportion to one another, as one to two, as in an iamb.'²⁷

We have now reached the period of the oldest and best extant manuscripts of the Gregorian chant and simultaneously of the most striking and important literary evidence of their authentic interpretation.

The *Scholia Enchiriadis*, traditionally attributed to Hucbald of St. Amand († c. 930),²⁸ is — like St. Augustine's *De Musica* — a dialogue between master and pupil. But here it is the pupil who asks the questions and the master who provides the answers:

'Pupil: What is rhythmical singing?

Master: It is to observe where to use the more prolonged dura-

²⁵ 'Hoc interest inter rhythmum et metrum, quod rhythmus est sola verborum consonantia, sine ullo certo numero et fine, et in infinitum funditur, nulla lege constrictus, nullis certis pedibus compositus; metrum autem pedibus propriis certisque finibus ordinatur' (Gerbert, *Scriptores*, I, 68).

²⁶ *De Musica*, III, 7.

²⁷ 'Iambicum genus . . . in quo pedum signa, id est virgulae similiter ut supra, duplicem rationem ad invicem servant, sicut unum ad duo, ut in iambo' (Gerbert, *Scriptores*, I, 84-85).

²⁸ If not by Hucbald, it was probably by another monk of the same monastery at much the same time.

tions and where the shorter ones. As we observe which syllables are short and which long, so too which sounds are to be prolonged and which shortened, in order that the long concur proportionally with those that are not long, and the melody may be scanned (measured out, the *plausus* indicated), as though in metrical feet. Now let us sing for practice. I will clap (beat time, indicate the *plausus* of) the feet (of which the melody is composed) and lead; you follow me:

G G G a GF/ G F a a cd d/ dc cb G ab ba GG/²⁹
Ego sum vi-a, veritas et vi-ta al-le-lu-ia alleluia.

Only the last notes in the three members are long, the rest are short. So to sing rhythmically means to measure out proportional durations to long and short sounds, not prolonging or shortening more than is required under the conditions, but keeping the sound within the law of scansion, so that the melody may be able to finish in the same tempo with which it began. But if any time you wish for the sake of variation to change the tempo, i.e. to adopt a slower or a faster pace either near the beginning or towards the end, you must do it in double proportion, i.e. you must change the tempo either into twice as fast or twice as slow . . . This numerical proportion is always seemly in skilled song and adorns it with very great dignity, no matter whether the singing be slow or fast, or whether it be rendered by one or by many. Furthermore it follows that, as in rhythmical singing no one sings either more slowly or more quickly than another, the voices of a multitude sound like that of one man.³⁰

²⁹ For this musical illustration Hucbald employs the now unfamiliar daseian notation. I have therefore substituted the ancient seven-letter notation which modern readers will more readily understand. Each octave is reckoned from A up to G, the lower octave being represented by capitals, the second octave by small letters.

³⁰ 'Discipulus: Quid est numerose canere? Magister: Ut attendatur ubi productioribus, ubi brevioribus morulis utendum sit. Quatenus uti quae syllabae breves, quae sunt longae attenditur, ita qui soni producti quique correpti esse debeant, ut ea quae diu ad ea quae non diu legitime concurrant, et veluti metricis pedibus cantilena plaudentur. Age canamus exercitii usu. Plaudam pedes ego in praecinando; tu sequendo imitabere: *Ego sum* . . . Solae in tribus membris ultimae longae, reliquae breves sunt. Sic itaque numerose est canere, longis brevibusque sonis ratas morulas metiri, nec per loca protrahere vel contrahere magis quam oportet, sed infra scandendi, legem vocem continere, ut possit melum ea finiri mora qua cepit. Verum si aliquotiens causa variationis mutare moram velis, id est circa initium aut finem protensorem vel incitiatorem cursum facere, duplo id feceris, id est ut productam moram in duplo correptiore seu correptam immutes duplo longiore . . . Haec igitur numerositas ratio doctam semper cantionem decet, et hac maxima suit dignitate orantur, sive tractum sive cursim canatur, sive ab uno seu a pluribus. Fit quoque ut dum numerose canendo alius alio nec plus nec minus protrahit aut contrahit, quasi ex uno ore vox multitudinis audiatur' (Gerbert, *Scriptores*, I, 182-3). The phrase 'ea quae diu ad ea quae non diu' occurs also in the *Commemoratio Brevis* (see below, note 31) and is reminiscent of St. Augustine's 'quae ad diu et non diu pertinet' (see above note 15).

Hucbald's *Commemoratio Brevis* provides us with equally important and clear information:

'Caution should be observed above all that the chant is performed with diligent equality; otherwise, if this be absent, it is deprived of its essential character and defrauded of its legitimate perfection. Without this (equality) the choir is set in confusion by the discordant ensemble; neither can anyone join in harmoniously with others nor sing artistically by himself. In equity manifestly has God the creator appointed all beauty to consist, nor less that which the ear than that which the eye perceives; for he has ordered all things in measure, weight and number (Wisdom, xi, 21).

Therefore let no inequality of chanting mar the sacred melodies, not for moments let any neum or note be unduly prolonged or shortened; nor may we through lack of care sing in the course of any given melody, such as a responsory etc., more slowly than at the beginning. Similarly let not the short notes be hurried more than they should be. In fact all the longs must be equally long, all the shorts of equal brevity; the only exceptions are the distinctions (phrase-endings), which in the chant must likewise be observed with care. Everything of long duration must rhythmically concur with what is not long by legitimate and reciprocal durations, and let every single melody run its full length from end to end at the same level of speed . . . And in accordance with the length durations let there be formed short beats, so that they be neither more nor less, but one always twice as long as the other.'³¹

This passage requires little comment. Its obvious importance is matched by its luminous clarity. And yet Hucbald's plea for 'equality' has been cited—omitting his subsequent insistence on strictly proportional longs and shorts, of course — in favour of 'equalist' systems of interpretation. We must not overlook the

³¹ 'Ante omnia sollicitius observandum ut aequalitate diligenti cantilena promatur; quae utique si careat, praecipuo suo privatur jure et legitima perfectione fraudatur. Sine hac quippe chorus concentu confunditur dissono, nec cum aliis concorditer quilibet cantare potest nec solus docte. Aequitate plane pulchritudinem omnem, nec minus quae auditu quam quae visu percipitur, Deus auctor constare instituit, quia in mensura et pondere et numero cuncta disposuit. Inaequalitas ergo cantionis cantica sacra non vitiet, non per momenta neuma quaelibet aut sonus indecenter protendatur aut contrahatur; non per incuriam in uno cantu, verbi gratia responsorii vel caeterorum, segnius quam prius protrahi incipiat. Item brevitas quaeque impeditiosiora non sint quam conveniat brevibus. Verum omnia longa aequaliter longa, brevium sit par brevitatis, exceptis distinctionibus quae simili cautela in cantu observandae sunt. Omnia quae diu ad ea quae non diu legitimis inter se morulis numerose concurrant, et cantus quilibet totus eodem celeritatis tenore a fine usque ad finem peragatur . . . Et secundum moras longitudinis momenta formentur brevitas, ut nec majore nec minore, sed semper unum alterum duplo superet' (Gerbert, *Scriptores*, I, 226-7). Hucbald's authorship of the *Commemoratio* is doubtful, but it dates from his time.

solitary exception that Hucbald makes to the general rule of proportionality: the phrase-endings. Here strict proportion is not necessary. The proportion he insists upon must therefore be a normal feature of the interior of phrases; it is not a question of cadences.

The concluding passage of this same treatise is as follows:

'This equity in chanting is called in Greek rhythm, in Latin number; because certainly all melody must be diligently measured after the manner of metre. This (equity) masters of schools ought studiously to impress on their pupils, and from the first they ought to form children to the same discipline of equity or rhythm, beating time with hands or feet or some other means of percussion while they sing, so as to inculcate number (rhythm). Thus by habit in their earliest years the difference between equal and unequal proportion may be known and they may show that they understand the art of praising God and rendering him intelligent service with humble devotion.'³²

But already by this time the practice of 'organum' was spreading, in which the chant was sung, no longer merely in unison, but in parallel fourths and fifths. The effect of this practice, as Hucbald tells us, was to slow down the tempo: 'a slow pace is the special characteristic of this music,'³³ so much so that 'in it, it is hardly possible to maintain proper rhythmic proportion,' between 'the short and the long notes'.³⁴ It was no doubt largely through the introduction and spread of such practices that the authentic Gregorian rhythm was lost.³⁵

Berno of Reichenau (†1048), who is said to have spent some time in Rome in the study of the chant about the year 1014, not only

³² 'Quae canendi aequitas rhythmus graece, latine dicitur numerus; quod certe omne melos more metri diligenter mensurandum sit. Hanc magistri scholarum studiose inculcare discipulis debent, et ab initio infantes eadem aequalitatis sive numerositatis disciplina informare, inter cantandum aliqua pedum manuumve vel qualibet alia percussione numerum instruere; ut a primaevo usu aequalium et inaequalium distantia calle eos (? pateat, eos) laudis Dei disciplinam nosse, et cum supplici devotione scienter Deo obsequi' (Gerbert, *Scriptores*, I, 228). The obvious textual corruption in the last part of this passage in no way obscures its meaning.

³³ 'Morositate, quod suum est hujus meli' (*Musica Enchiriadis*, XIII; Gerbert, *Scriptores*, I, 166); 'morositate . . . quod suum est maxime proprium' (*Scholia Enchiriadis*; Gerbert, *Scriptores*, I, 188).

³⁴ 'Sane punctos et virgulis ad distinctionem ponimus sonorum brevium ac longorum, quamvis hujus generis melos tam grave oporteat tamquam morosum ut rhythmica ratio vix in eo servari queat' (*Quaedam e Musica Enchiriadis Inedita*; Coussemaker, *Scriptores de Musica*, II, 75).

³⁵ See Joseph Vos and Dom Francis de Meeus, 'L'introduction de la diaphonie et la rupture de la tradition grégorienne au XI^e siècle' (*Sacris Erudiri*, VII (1955), pp. 177 ff.).

preserves the traditional teaching of proportional values, but also provides evidence that by then the tradition was no longer universally accepted:

'In the neums it is necessary that you pay close attention where the proportional shorter duration is to be measured and where, on the contrary, the longer duration, lest you execute as quick and short what the authority of the masters has determined should be longer and more extended. Nor should we heed those who say there is no reason whatsoever for our making now the quicker duration, now the more prolonged one, in a chant with a naturally disposed rhythm. Any grammarian will reprove you if you shorten a syllable in a line where you ought to lengthen it, no other cause existing why you ought rather to prolong the syllable than that the authority of the ancients has so ordained. Why should not the system of music, to which the quite lawful measurement and rhythm of sounds belongs, be outraged to a greater degree by your unobservance of the due quantity of held notes in their relation to the context? . . . Hence, as in metrical verse the strophe is constructed with definite measurements of feet, so the chant is composed of a fitting and harmonious combination of long and short sounds . . . Therefore let the melody of our music be characterised by the proportional quantity of the sounds.'³⁶

Although it contains expressions which are still hotly contested—indeed they were differently interpreted by early commentators—the fifteenth chapter of the *Micrologus* of Guido of Arezzo (†c. 1050) confirms much of what our previous authors have said. Guido is apparently enlarging on a passage we have already studied from Huchald's *Scholia Enchiriadis*.³⁷ Not only is the matter similar, but also some of the expressions;³⁸

'Therefore, just as in metres (verse) there are letters and syllables, parts and feet and lines, so also in music there are

³⁶ 'Etiam pervigili observandum est cura uti attendas in neumis ubi ratae sonorum morulae breviores, ubi vero sint metiendae productiores, ne raptim et minime diu proferas quod diutius et productius praecinere statuit magisterialis auctoritas. Neque audiendi sunt qui dicunt sine ratione omnino consistere quod in cantu aptae numerositatis moram nunc velociorem, nunc vero facimus productiorem. Si grammaticus quilibet te reprehendit cum in versu eo loci syllabam corripas ubi producere debeas, nulla alia causa naturaliter existente cur magis eam producere debeas nisi quia antiquorum ita sanxit auctoritas; cur non magis musicae ratio, ad quam ipsa rationabilis vocum dimensio et numerositas pertinet, succenseat quodammodo si non pro qualitate locorum observes debitam quantitatem morarum? . . . Idcirco ut in metro certa pedum dimensione contextitur versus, ita apta et concordabili brevium longorum sonorum copulatione componitur cantus . . . Quocirca sit nostrae musicae cantilena rata sonorum quantitate distincta' (*Prologus in Tonarium*; Gerbert, *Scriptores*, II, 77-8).

³⁷ See above, page 187.

³⁸ Huchald has 'veluti metricis pedibus cantilena plaudatur'; Guido 'quasi metricis pedibus cantilena plaudatur'.

phthongi, i.e. sounds, one, two or three of which go to form a *syllable*; the latter, either by itself or with another, constitutes a *neum*, i.e. a member of the melody; then one or more of these members make a *distinction*, i.e. a suitable place for a breath. In these things it should be noted that the entire member must be compact both in notation and in performance; a syllable even more so.

The *tenor*, however, i.e. the lengthening of the last note, which is very slight in a syllable, larger in a member, very long in a distinction, is an indication of the division in these. Thus the chant must be scanned (measured out, the *plausus* indicated) as though in metrical feet, and some sounds must have a duration twice as long or twice as short as others, or they should have a *tremula*, i.e. a varying length which is sometimes long when the line (*episema*) attached to the note so indicates.³⁹

Fr. Jos. Smits van Waesberghe, S.J., whose critical editions both of Guido's *Micrologus* and of his early commentator Aribo's *De Musica* are now published in the new *Corpus Scriptorum de Musica* of the American Institute of Musicology, tells us in the second of these volumes that 'both the oldest and best MSS make it clear that there has always been uncertainty as to what Guido meant' by the three expressions *tremulam*, *varium tenorem* ('varying length') and *virgula plana* ('episema' — sign of lengthening).⁴⁰ Nevertheless Guido is clear enough in his insistence on proportional long and short notes and on the necessity of scanning the melody 'as though in metrical feet'. In this, at least, he continues the traditional teaching. The same passage then proceeds:

'And above all we must be careful, whether the members are formed by repeating the same note or by uniting two or three (different ones), that the members are always so arranged that either in the number of notes or in the proportion of their tenors (lengths) they suit one another and correspond either as equal to equal, or in the proportion of two to one or three to one, or else in sesquialteral proportion (3 : 2) or sesquitercia (4 : 3). Let the musician decide in which of these categories he will

³⁹ 'Igitur quemadmodum in metris sunt litterae et syllabae, partes et pedes ac versus, ita in harmonia sunt phthongi, id est soni, quorum unus, duo vel tres aptantur in syllabis; ipsaeque solae vel duplicatae neumam, id est partem contituunt cantilena; et pars una vel plures distinctionem faciunt, id est congruum respirationis locum. De quibus illud est notandum quod tota pars compressa et notanda et exprimenda est, syllaba vero compressus. Tenor vero, id est mora ultimae vocis, in distinctione, signum in his divisionis existit. Sicque opus est ut quasi metricis pedibus cantilena plaudatur, et aliae voces ab aliis morulum duplo longiorem vel duplo brevior, aut tremulam habeant, id est varium tenorem, quem longum aliquotiens apposita litterae virgula plana significat (Guido, *Micrologus*, ed. J. Smits van Waesberghe, p. 162 ff). The slight verbal differences in the text as given by Gerbert (*Scriptores*, II, 14-15) are of no significance.

⁴⁰ Aribo, *De Musica*, ed. van Waesberghe, p. xvii.

make his melody proceed, just as the poet decides of what feet he will make his verse, except that the musician does not bind himself by such rigid rule . . .

There are, however, as it were, *prose* melodies, which do not observe these principles, for in them it does not matter if some members are greater, other less, and if in places we find distinctions without moderation, after the manner of prose. But there are what I call *metrical* chants, for we often sing according to the scansion of the line in feet, so to speak, as happens when we sing the metres themselves . . .

There is considerable similarity between metres and chants, for there are neums in place of feet and distinctions in place of lines; so that this neum goes like a dactyl, that like a spondee, another like an iamb; and you may perceive a distinction like a tetrameter (line of four metrical feet), another like a pentameter (five metrical feet), yet another like a hexameter (six feet), and many other things of the kind.⁴¹

Before leaving Guido we may quote some lines from his *Versus de Musicae Eplanatione*:

'Everyone knows how to treat the notes as though (to form) syllables and parts, members and periods; and they often sing lines in a metrical fashion.'⁴²

And so we come to our last witness, Aribio, from the latter part of the eleventh century. His comment on a phrase from the disputed chapter of Guido's *Micrologus* runs thus:

'"Or in proportion to their tenors": A tenor is the length of a note which is in equal proportion if two notes are made equal to four and their length is in inverse proportion to their number (i. e. two long notes being equal to four short ones). So it is

⁴¹ 'Ac summopere caveatur talis neumarum distributio, ut cum neumae tum ejusdem soni repercussione, tum duorum aut plurium connexionem fiant, semper tamen aut in numero vocum aut in ratione tenorum neumae alterutrum conferantur, atque respondeant nunc aequae aequis, nunc duplae vel triplae simplicibus, atque alias collatione sesquialtera. Proponatque sibi musicus quibus ex his divisionibus incedentem faciat cantum, sicut metricus quibus pedibus faciat versum, nisi quod musicus non se tanta legis necessitate constringat . . . Sunt vero quasi prosaici cantus qui haec minus observant, in quibus non est curae si aliae majores, aliae minores partes et distinctiones per loca sine discretione inveniantur more prosarum. Metricos autem cantus dico, quia saepe ita canimus, ut quasi versus pedibus scandere videamur, sicut fit cum ipsa metra canimus . . . Non autem parva similitudo est metris et cantibus, cum et neumae loco sint pedum et distinctiones loco sint versuum, utpote ista neuma dactylico, illa vero spondaico, alia iambico more decurrit, et distinctionem nunc tetrametram, nunc pentametram, alias quasi hexametram cernas, et multa alia ad hunc modum' (*Micrologus*, ed. van Waesberghe, p. 164 ff. See also Gerbert, *Scriptores*, II, 15-16).

⁴² 'Illud vero late patet, quid fiat de vocibus,
Velut syllabae et partes, cola atque commata.
Concunantque saepe versus arte sicut metrica'

(Gerbert, *Scriptores*, II, 30).

that in the old antiphonaries we very often find the letters "c", "t", "m", indicating respectively "celeritas" (quick), "tarditas" (slow), and "mediocritas" (moderate). In olden times great care was observed not only by the composers of the chant but also by the singers themselves to compose and sing proportionally. But this idea has already been dead for a long time, even buried.⁴³

Here surely we have convincing evidence of the nature of that decadence in the rhythmic interpretation of the Gregorian chant which is universally admitted to have occurred in the eleventh century. Already at the beginning of this century Berno of Reichenau had spoken of those who no longer accepted the ancient rhythmic tradition,⁴⁴ and in the previous century Hucbald's remarks about 'organum' had pointed to the destructive effects of such slow singing upon the proper rhythmic proportions.⁴⁵ There can be little doubt that the levelling out of note-values to equal lengths was brought about chiefly, if not entirely, by this means. There is, in any case, no early evidence of equal note-values which can compare in clarity with the consistent tradition that in its golden age the chant was sung in strictly proportional long and short notes and was measured as though in metrical feet.

This, then, must be the foundation upon which to build our authentic interpretation of the ancient Gregorian manuscripts. As Dr. Peter Wagner once wrote: 'It is good historical method to interpret chant manuscripts by contemporary authors, and not to seek to refute the clearest part of the sources by the other part, which is, after all, still full of obscurities for us'.⁴⁶ The same great authority also declared: 'The original chant rhythm, intermingling variously long and short sounds, has yielded since the eleventh century to an equalistic execution that has robbed the rhythmic

⁴³ "Aut in ratione tenorum": Tenor dicitur mora vocis, qui in aequis est si quatuor vocibus duae comparantur, et quantum sit numeros duarum minor tantum earum mora sit major. Unde in antiquioribus antiphonariis utrisque c, t, m, reperimus persaepe, quae celeritatem, tarditatem, mediocritatem innuunt. Antiquitus fuit magna circumspectio non solum cantus inventoribus sed etiam ipsis cantoribus ut quidibet proportionaliter et invenirent et canerent. Quae consideratio jam dudum obiit, immo sepulta est' (Aribo, *De Musica*, ed. van Waesberghe, p. 49; Gerbert, *Scriptores* II, 227). Apart from a minor difference (Gerbert gives 'quilibet' or 'quidlibet') this passage is the same in Fr. van Waesberghe's text as in Gerbert's. It should be noted however that Gerbert's text is on the whole unreliable and in many places unintelligible, being based on only two manuscripts, one containing only small fragments, the other complete but very inaccurate and marred by a number of dislocations. The outstanding need for a critical text has at last been satisfied by Fr. van Waesberghe's edition.

⁴⁴ See above, page 190.

⁴⁵ See above, page 190.

⁴⁶ Art. 'Sur l'exécution primitive du chant grégorien', *Revue d'Histoire Ecclésiastique Suisse*, 1915, p. 182.

movement of much of its attractiveness and done away with numerous means of expression.⁴⁷

The careful reader will have noticed that in the ancient authors we have studied there is no trace whatever of certain fundamental principles of the modern Solesmes interpretation of the Gregorian chant, viz. (1) that the notes are all basically equal in length, (2) that they are to be grouped exclusively in twos and threes, and (3) that the secret of correct rhythm is to know all about a novel and quite peculiar kind of 'ictus' and exactly where it comes.⁴⁸ Having built on these unhistorical foundations, and having dismissed as worthless their clear literary evidence of the Gregorian centuries, Dom Mocquereau and his school (like Dom Pothier before him)⁴⁹ have merited once more the rebuke delivered by Charlemagne in the year 787 to the Frankish singers of his own court. These had dared, even in Rome itself, to challenge the correctness of the traditional Roman version of the Gregorian melodies because it differed from their own. After eliciting from them the admission that the waters of a spring are always purer than those of the distant river to which it gives rise, Charlemagne told them quite bluntly: 'As for yourselves, go back to the source of St. Gregory, for manifestly you have corrupted the Church's chant'.⁵⁰

A Fallacy Confessed

I wonder what serious readers would think if the author of a book about the rubrics of the Mass were to argue his thesis on the following lines:

Everyone must admit that according to the rubrics the Sunday Mass is said in certain seasons (a) in *white* vestments, at other seasons (b) in *green* vestments, and at other seasons again (c) in *purple* vestments. The logical conclusion is obvious. Neither white vestments, nor green vestments, nor yet purple vestments

⁴⁷ *Gregorianische Formenlehre* (1921), p. 301.

⁴⁸ The 'ictus' is not only missing from the literary sources, it is also conspicuously absent from all the ancient manuscripts of the chant. Nevertheless it is now considered so essential to the Solesmes interpretation that no melody may be sung without inserting an 'ictus' on every second or third note—and, we may add, inserting it on principles which are only too often musically indefensible. (See the present writer's *Plainsong Rhythm; The Editorial Methods of Solesmes*.) Even in the ninth century John the Deacon complained that the singers of Gaul seemed constitutionally incapable of leaving the Gregorian chant as they found it; they always wanted to add something of their own: 'nonnulla de proprio Gregorianis cantis miscuerunt' (*Vita S. Gregorii*, II, P.L., 75, 91).

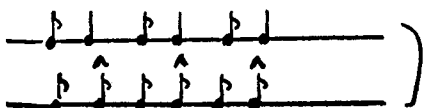

⁴⁹ It was Dom Pothier who took the main share in the preparation of the Vatican Edition of the *Graduale* and who, as author of the Preface to it, gave official status to equalist systems of interpretation.

⁵⁰ 'Revertimini vos ad fontem sancti Gregorii, quia manifeste corrupistis cantilenam Ecclesiasticam' (*Vita Karoli Magni per monachum egolism. scripta*; A. du Chesne, *Historiae Francorum Scriptores* (1636), II, 75).

are individually necessary for the correct celebration of Sunday Mass of the season. According to the rubrics, therefore, the Sunday Mass may be said without vestments of any of these colours.

Incredible as it may seem, this is precisely how I argued in the account of my conversion to the Solesmes principles of plainsong interpretation twenty-three years ago. This account — *Gregorian Rhythm: A Pilgrim's Progress* — originally published in *THE DOWNSIDE REVIEW* (1934), was subsequently produced separately as a pamphlet (twice reprinted), was serialised (in England) in *Music and Liturgy*, (in America) in *The Catholic Choirmaster*, (in France, in translation) in *La Revue Grégorienne*, and finally was included in the Solesmes series of *Monographies Grégoriennes*. Obviously, then, the article must have been fairly widely read, both by those who accepted its conclusions and those who did not. The following pages are offered in an attempt to correct the error into which, quite unwittingly, I may have led my readers. It is too much to expect that the correction will receive as much publicity as was accorded to the original error in those journals which are exclusively Solesmian; but honesty demands that logical fallacy be humbly acknowledged by its author however late in the day, and that the proper conclusion be drawn from the premises proposed.

The main argument of the article was briefly this: everyone must admit that a definite rhythm can be indicated to a listener by a succession of sounds

(a) varying *only in length*: 
 or (b) varying *only in strength*: 
 or (c) varying *only in pitch*. Such melodic formulae as the following:



are clearly understood as in duple rhythm, with the ictus (beat) on the notes marked (1). 'The mind', I wrote, 'instinctively prefers to put the ictus on the *lower* note.'

From these premises I deduced (quite correctly) that rhythm is not essentially tied to any particular one of these variations, whether quantitative (length), dynamic (strength), or melodic (pitch). But I also argued (quite incorrectly) that therefore objective rhythm can exist without any of these variations—which is a *non sequitur*.

The clue to my error was provided by Miss Dorothy Howell in a letter to the Editor of *Music and Liturgy* (April, 1935, p. 260), which must be quoted:

'Dom Murray holds that in a purely melodic passage (i.e. one devoid of any variation as to length of note or intensity of sound) the mind instinctively places the ictus on the *lower* note. (Miss Howell here reproduces the last musical illustration printed above.) But this is clearly not so. For by reversing the progression we produce what might be termed a "natural ictus" on the *upper* note:



I think the question is not one of pitch, but rather of pattern. "A sound is said to be accented when it attracts the attention of the hearer in virtue of some quality or characteristic which distinguishes it from its neighbouring sounds" (McEwen, *Principles of Phrasing and Articulation*, p. 10). When something moves and something else does not, the mover will attract attention, and in each of the examples quoted in Dom Murray's article it is the second note which moves, while the first merely repeats. For further proof of my contention I will do away with the repeated note:



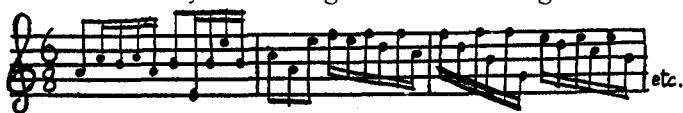
The passage has now become "neutral". No longer is there any instinctive placing of the ictus, but the mind is free to impose it on the upper or lower note at will.

All this, of course, leaves unimpaired the statement that "a succession of notes varying only in pitch can awaken a sense of rhythm in the mind." But I think it is *design* which governs this and not *cadence* (using the word, as Dom Murray does, in the sense of a fall in pitch.)

I did not see it at the time, nor, I think, did Miss Howell herself, but this criticism contains the vital clue to the fallacy that invalidates my entire argument. In the melodic patterns, whether rising or falling, it is *the note which moves* (i.e. the more emphatic note) that naturally coincides with the ictus. Hence the listener has no difficulty in sensing the rhythm of the following fugue-subject:



But, for the same reason, he may share the difficulty I experienced as a boy listening to the sequential pattern that begins in the second half of bar 2 in the subject of the great A-minor fugue:



The first bar presents the hearer with no puzzle because of the longer notes (A and B), but unless he is familiar with the score the subsequent sequence seems to be out of step, and he will want to put the ictus on the notes which move — not because there are lower (cadences, as I once thought), but because as moving notes they acquire emphasis. I am speaking, of course, of performance on the organ, an instrument which lacks the power of dynamic accent. On the percussive piano the difficulty can be obviated by making the non-moving notes louder (i.e. more emphatic) than the moving notes.

In other words, musical rhythm is indicated by emphasis of some kind. This emphasis may be quantitative, dynamic, melodic, harmonic, or even metrical. That is to say, certain notes may receive prominence by being longer, or louder, or melodically emphasized, or marked by a chord, or they may coincide with what has already been established as a structurally strong (though not necessarily louder) beat in the chosen metre. Without some such variety of emphasis, rhythm is either absent or imperceptible. An ictus which is not in some way perceptible or clearly implied as a point of emphasis is a figment of the imagination.

That the ictus (first beat of the measure, down-beat) is in fact a point of emphasis, actual or implied, is tacitly admitted by Dom Mocquereau and his followers, although denied in principle. They hold that all rhythm is fundamentally the passage from energy (up-beat, arsis) to repose (down-beat, thesis). This simplistic theory obliges them to maintain that the ictus (down-beat) is essentially a cadence, a coming-to-rest, not a strong-point. Yet Dom Mocquereau makes mention (*Le Nombre Musical Grégorien*, I, p. 78), albeit very briefly and quite inadequately, of 'feminine cadences' or (as he prefers to call them) 'post-ictic cadences'—terminology which of itself shows that the ictus cannot be essentially a cadence! Similarly both Dom Desroquettes (*Monographie Grégorienne* VIII, p. 59) and M. Potiron (*Plainsong Accompaniment*, p. 38) tell us to ac-

company 'compound cadences' by putting our main chord on the first ictus, reserving only a minor harmonic change (such as the resolution of a suspension) for the final ictus. This can only mean that the more important ictus in such a cadence is not the final one. But if the ictus were essentially a cadence or coming-to-rest, the final ictus would always and necessarily be the most important! Both these writers, therefore, imply that there is a hierarchy of importance among the various ictus, and that it is a matter of emphasis and structural musical significance, not simply of cadence. Despite their professions of fidelity to Dom Mocquereau, then, it is clear to others, if not to themselves, that here they both ultimately reject his basic theory of rhythm, as I now do myself.

Now this is not to say that everything I wrote in 1934 is wrong. Obviously, as I said then, quantitative variation is normally the most powerful determinant of music rhythm. In fact, as we have seen, during the Gregorian centuries musical rhythm was regarded as essentially a matter of long and short sounds. St. Augustine sums up the attitude of all the later writers when he says that 'In music the word *rhythm* is so wide in its scope that everything therein which concerns the longs and the shorts is called rhythm' (*De Musica*, III, 1). But in default of quantitative variation (sometimes in spite of it) another powerful rhythmic determinant is dynamic variation: a louder note in a series of non-metrical sounds of equal length naturally indicates an ictus.⁵¹ The doctrine that in such a series (monotoned psalmody, for instance) the accent does not indicate the rhythm is an invention of Dom Mocquereau without foundation in fact: 'Magister dixit is not an argument', as M. Potiron has said (*L'Origine des Modes Grégoriennes*, p. 3). Incidentally the same faithful disciple has also confessed that his master's use of the Greek terms *arsis* and *thesis* does not correspond with ancient Greek usage: 'le memes mots n'ont pas le meme sens . . . ce qui est certain, c'est que nous prenons pas thésis et arsis au sens grec' (*Les Modes Grecs Antiques*, p. 18). So, whatever we may think of Dom Mocquereau's idea of rhythm, we shall have to admit that after all the Greeks did not have the words for it! Can we blame them?

⁵¹ As I have pointed out elsewhere (*Plainsong Rhythm: The Editorial Methods of Solesmes*, p. 10), the rhythm of the two word-groups *Déus et Dóminus* and *Dóminus Génitor* is identical, because the accentual schemes are the same. In non-metrical speech an accent indicates the ictus, as every musician knows and every student of language. But Dom Mocquereau's theory of the ictus as essentially a cadence compels him to associate the ictus with word-endings rather than with accents. For him, therefore, *Déus et Dóminus* and *Dóminus Génitor* have entirely different rhythms! Where they do differ, of course, is in *phrasing*—but that is quite another matter. I do not say (neither did Dom Jeannin) that the verbal accent is necessarily ictic (Dr. Carroll is quite wrong here); but simply that accent indicates the ictus in "non-metrical sounds of equal length."

PLAINSONG RHYTHM*

The Editorial Methods of Solesmes

by Dom Gregory Murray

Enthusiasm for a 'cause' is likely to lead to overstatement, especially in making generalizations. Even without intending it, the earnest apostle runs the risk of misleading his audience or his readers. This no doubt, explains the following oversimplified declaration by one of the leading preachers of Solesmes doctrine:

'Modern rhythmic signs, in our Solesmes choir-books, are no new invention, an innovation calculated to deprive us of our liberty; they are merely a modern way of reproducing the rhythmic signs found in the best MSS, and we have no more right to neglect them, if we wish to sing the melodies as they were intended to be sung, than we have to change the notes themselves.'¹

The impression this gives is clear enough, viz. that the modern rhythmic signs of Solesmes merely represent those of the ancient MSS. As the writer of this passage must know well enough, many of the modern rhythmic signs do not represent signs in the ancient MSS, but are purely editorial additions. Such purely editorial additions include practically all the rhythmic signs which are to be found in the simpler melodies. Unfortunately, it is impossible to tell from the Solesmes editions whether there is MS warrant for a particular rhythmic sign or not, for the printed books make no difference between a MS sign and an editorial sign. Furthermore, a particular sign in the MSS is liable to be given three different interpretations according as one or other of the modern signs is selected to represent it. The matter, therefore, is not quite so simple as Dom Dean's statement might lead us to suppose. Indeed, without qualification the impression it gives is quite false.

The best corrective is provide by another apostle of Solesmes, Dom Desrocquettes, who writes as follows:

'I shall always remember the 'indignation' of Dom Mocquereau being warned that a friend of his, in his "simplicity", had written somewhere that all the vertical

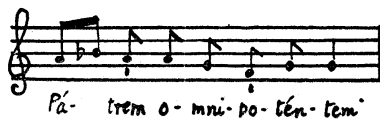
* This article is reprinted from THE DOWNSIDE REVIEW, Autumn, 1956, by kind permission of the Reverend Editor.

¹ Dom Aldhelm Dean, *Solesmes—Its Work for Liturgy and Chant* (published by The Society of St. Gregory), p. 18. These 'modern rhythmic signs' have been added by the Solesmes editors to the official notes of the Vatican Edition. They are of three kinds: the dot indicates a doubling of the note, the horizontal line (or episema) slightly lengthens notes, the vertical line (or episema) indicates an 'ictus' or downbeat, i. e. the first beat of a binary or ternary measure.

episemas of this Credo (viz. Credo I in the Kyrie) were found in the MSS! No, of course, none of them, and even no indication of any length or stress could be found in the MSS that could indicate the 'validity' of any of these vertical episemas. In that particular case *all* came from Dom Mocquereau."²

In fact not only the vertical episemas, but also the doubling dots of this Credo '*all* came from Dom Mocquereau', as he himself made abundantly clear in his Monograph³ on the piece to which Dom Desroquettes refers us.

When we turn to this Monograph we naturally expect to find Dom Mocquereau's detailed reasons for inserting the episemas and dots in the places where we find them. Certainly some explanation is necessary to justify his treatment of the Vatican text. Yet the Monograph is far from satisfactory, especially in those places where the reasons for the treatment are least obvious. For example, we naturally want to know why the very first phrase (after the intonation) is treated as it is, with only one doubled note at its cadence and with an 'ictus' sign⁴ under the F;



All that the Monograph tells is is (1) that this cadence is one of less importance and therefore does not require two doubled notes;

² Article 'The Rhythmic' Tradition in the MSS and the Rhythmic Signs of Solesmes' in *Liturgy* (the organ of The Society of St. Gregory), July 1953, p. 95. Dom Desroquettes is referring, not to Dom Dean, but to a much earlier writer.

³ Number III of the Solesmes series of 'Monographies Grégoriennes', *Le Chant 'Authentique' du Credo* (Desclee, 1922).

⁴ According to Solesmes theory the indivisible, basic unit in plainsong is the simple note, represented in modern notation by a quaver. The quaver units are grouped into binary and ternary measures in free sequence, with an 'ictus' (or down-beat) on the first quaver of each measure. The 'ictus' sign (i) placed under a note (as in the musical illustrations in these pages) indicates that a binary or ternary measure begins with that note. Every doubled note (crotchet) automatically has an 'ictus' and normally also the first note of every neum (group of notes on one syllable); in these cases no additional sign is necessary to indicate the 'ictus'. Thus in the musical illustration that follows, the 'ictus' falls on the first note of 'Pa-', on 'trem', on 'po-', and on 'tem'. Readers unfamiliar with the word or the sign are recommended to draw a bar-line before each 'ictic' note. In that way they will clearly distinguish the binary and ternary measures. Although this exclusively binary and ternary grouping is an essential element in Solesmes theory. It is unsupported by any literary evidence from the past. Similarly the Solesmes writers can adduce no ancient description or definition of the 'ictus' in their special sense of the word, as a down-beat essentially without impulse, actual or implied. (See, for instance, Dom Desroquettes, *Plainsong for Musicians*, p. 22). Furthermore there is not a single 'ictus' mark as such in any ancient MS; all the authentic rhythmic signs concern the lengths of the notes. Dom Mocquereau and Dom Gajard admit this in Monographie Grégorienne IV, p. 11.

and (2) that correct Latin accentuation of a spondaic cadence⁵ is best achieved by not doubling the accented syllable (p. 38). Both of these statements are gratuitous assertions, and it is peculiarly piquant to be told that a spondee is best interpreted by being changed into an iamb! 'In rising cadences', continues the author, 'the lengthening of the tonic accent is ordinarily forbidden' (p. 39). By printing this statement in italics he makes it emphatic. But no amount of emphasis can take the place of logical reasoning and explanation. We may well ask: By whom is the lengthening forbidden?

If we turn to *Le Nombre Musical Grégorien*⁶ for further enlightenment, we find a fuller statement, though, once again, without explanation or logical argument. The same phrase from the Credo is quoted as an example of a spondaic cadence at the unison approached from below, and Dom Mocquereau continues:

'It is difficult to give a rule which applies to all cases:

- (a) in general the doubling of the accent serves no purpose;
- (b) ordinarily it is forbidden;
- (c) sometimes it is allowed;
- (d) at other times, less often, it is necessary.

It is the musical context and taste that decide for or against the doubling; it is absolutely necessary to study each case on its merits. In practice one can follow the indications of the rhythmed books' (Tome II, p. 313).

Surely we do not need to be told that we 'can follow the indications of the rhythmed books'; but what we should be told is why the books have been so rhythmed. To give a list of vague rules, unexplained and unjustified by scientific evidence, is yet another instance of Dom Mocquereau's tendency to substitute an *ipse dixi* for a positive proof. But since he has told us that 'it is absolutely necessary to study each case on its merits', there can be no harm in following his advice and subjecting the cadence in question to a careful scrutiny.⁷



⁵ The terms 'spondaic cadence' and 'dactylic cadence' are employed in these pages according to accepted plain-song usage. A 'spondaic cadence' has the accent on the penultimate syllable (e.g. 'Redemptor'), a 'dactylic cadence' has the accent on the antepenultimate syllable (e.g. 'Dóminus').

⁶ This is considered to be Dom Mocquereau's most authoritative exposition of Solesmes theory.

⁷ In the examination that follows I must acknowledge my debt to the late Canon Colard's admirable articles in *La Petite maîtrise*, 1935.

Here the spondaic cadence at the unison is preceded by a group of three notes (A-G-F), a melodic motive which occurs in various forms no less than twenty-seven times during the Credo, eleven times as above. Its rhythm is as clear as could be, especially when it emerges as pure 'vocalise' (without separate syllables to the individual notes) in the 'Amen':



The identity of this phrase with that at 'omnipoténtem' is emphasized by the identity of the melody immediately before it ('saéculi') with the melody of 'Pátrém' (A-B flat-A).

Once we have perceived the unmistakable rhythmic character of this motive (A-G-F) from the purely melodic point of view, it is interesting to see how the words are fitted to it. The first note (A) coincides in every case save one (de Déo véro)⁸ with a tonic accent, either principal or secondary. The following table marks this clear:

	A	[A]	G	F	G
	o-		mni-	po-	téntem
invisi-	bí-		li-		um
uni-	gé-		ni-		tum
	saé-		cu-		la
	de		Dé-	o	véro
	fá-		cta		sunt
	Vír-		gi-		ne
	fá-		ctus		est
	Pón-	ti-	o	Pi-	láto
se-	púl-		tus		est
se-	cún-		dum	Scrip-	túras
	déx-		te-	ram	Pátris
	mór-		tu-		os
	vi-		vi-	fi-	cántem
con-	glo-		ri-	fi-	cáthur
ec-	clé-		si-		am
	A-				men

Certain points call for comment:

(1) All three compound words have their secondary accents thus: ómni-poténtem, vivi-ficántem, conglóri-ficáthur—not according to the usual rule of counting back in twos from the principal accent.

⁸ One exception out of seventeen!

(2) In one case ('Póntio Pilátó) an extra note (A) is added to accommodate an extra syllable. This is a recognized procedure in plainsong, and raises no problem.

(3) But in nine other cases the G and F are united as a clivis⁹ and set to the weak penultimate syllable of a dactylic cadence. According to a rigid law—decreed by Dom Mocquereau—such a clivis should have an 'ictus' on its first note, which would necessarily destroy the ternary rhythm of the group A-G-F. But is this Solesmes rule about the 'ictus' at the beginning of such neums a sound one? How does it stand up to the test of the internal evidence of 'the notes themselves'? I need only quote two or three other phrases from the Kyriele to expose its lack of solid basis in the Chant:

Gloria VII

Glá- ti- as = Fí- li- us Pá- tris
Dó- mi- ne

Gloria VI

mún- di = Dó- mi- ne
Pá- tris

Gloria XI

Jé- su Chri- ste = mi- se- ré- re no- bis

These examples are sufficient to show that for the Gregorian composers the first note of a neum—if immediately preceded by an accent—did not always have what Solesmes call an 'ictus'; for the neum in such circumstances may be the second part of a disintegrated larger neum, the first note of which has been separated to accommodate the accented syllable. This is exactly what happens to the initial neum of the Credo 'Amen' when its three notes (A-G-F) are divided to fit dactylic cadences. In every case, as the 'Amen' proves, it is a ternary group, with the 'ictus' on the A.

If we look closer at this Credo, we find that the same melodic motive (A-G-F) occurs twice over when it is used for a dactylic cadence:

⁹ According to accepted terminology, a clivis is a descending neum of two notes on one syllable.

¹⁰ The 'ictus' marks in these three pairs of parallels have been added to clarify the point. Those in the first example of each pair are according to Solesmes; those in the second example are not.

	A	[A]	G	F	A	G	F	G
	in-		vi-	si	bí-	li-		um
	Dé-	i	u-	ni-	gé-	ni-		tum
	ó-		mni-	a	saé-	cu-		la
	ó-		mni-	a	fá-	cta		sunt
	Ma-		rí-	a	Vír-	gi-		ne
	hó-		[]	mo	fá-	ctus		est
pás-	sus		et	se-	púl-	tus		est
ví-	vos		[]	et	mór-	tu-		os
apo-	stó-	li-	cam	ec-	clé-	si-		am

If we study the first column here we shall again find that the initial A is in nearly every case associated with tonic accents, either principal or secondary. The apparent exceptions may be briefly examined:

(1) The word 'invisibílium' may certainly be regarded as having its secondary accent on the first syllable, the emphatic negative of which is all-important in contrast with 'visibílium'. Even in English, although the normal emphasis is on the second syllable of 'invisible', it frequently moves to the first syllable when the word is contrasted with 'visible'.

(2) 'Pássus' and 'vívos' each have two notes on the first syllable, and this phenomenon naturally tends to give a sort of (musical) secondary accent to the final syllable.

(3) The only difficult case is 'Maria', the first syllable of which cannot by any means be regarded as accented. It is the one genuine and clear exception (like 'de Déo véro' above) that proves the rule.¹¹ In every other case the A coincides with an accent or a pseudo-accent.

In two cases we notice that the middle note (G) of the ternary group (A-G-F) is missing (at 'hómo' and 'vívos'). This point will be mentioned later.

In two other cases ('Déi unigénitum' and 'apostólicam') an extra syllable is accommodated (as in 'Póntio Piláto' above) by adding another A.

When the Solesmes *Antiphonale Monasticum* appeared in 1934, one of its most notable editorial improvements was in the treatment of spondaic cadences: at last they were (in many cases, though not all) given their natural, normal, spondaic treatment—two doubled (dotted) notes:

¹¹ It is a recognized phenomenon in all vocal music that sometimes the musical rhythm overrides the natural rhythm of the words.



It is interesting to notice that these particular cadences are of no greater importance as cadences than that of 'omnipoténtem' in the Credo! In previous Solesmes editions the first syllable of 'Pé-trus' was left as an ordinary (i.e. short) note, while the first syllable of 'mágnus' was marked (somewhat equivocally) with a horizontal episema.¹² Such an improvement in the editing of the *Antiphonale Monasticum*, although not consistently maintained, gives grounds for hope that ultimately Solesmes may altogether abandon their abnormal, unnatural, affected treatment of the accented syllable.

Now the second of these examples provides a close melodic and rhythmic parallel to the phrase of the Credo we have been studying:



The antiphon melody in which this cadence occurs is frequently employed in the *Antiphonale*, and often enough (as when set to the word 'tardábit') the middle note of the ternary group is omitted—just as we found that the word 'hómo' in the Credo. Clearly the cadences are identical: a sort of conventional 'turn' about the final note. There can therefore be no scientific reason whatsoever for not treating such cadences consistently in every case, and as Solesmes now treat them in the *Antiphonale Monasticum*: with two doubled notes at the conclusion. The Credo must be corrected and brought up-to-date.¹³

The phrase we have examined, then, is composed of two parts: (1) a ternary group (sometimes extended to accommodate an extra syllable, as in 'Póntio', sometimes contracted by the omission of the middle note, as in 'hómo'); (2) a spondaic cadence of two doubled notes, the second of which disappears when the formula is adapted to dactylic cadences (as in 'fáctus est').

In this Monograph on the Credo, Dom Mocquereau is so blinded by his peculiar theories about the rhythmic importance of word-endings and the relative unimportance of the accented syllables, that he never even notices the melodic existence, not to say

¹² Denoting, not a doubling, but a slight prolongation without having the 'ictus'!

¹³ For this reason alone the F would have to lose its 'ictus', quite apart from the other fact we have established: that it is the third note of a ternary group.

significance, of the group A-G-F.¹⁴ Having decided—on what evidence?—to mark the F with an ‘ictus’ in order to give the spondaic cadence an iambic interpretation (!), he quite fails to observe what is manifestly a characteristic melodic feature of the piece, occurring (as we have seen) no less than twenty times, with its rhythm unmistakably defined in the ‘Amen’.



We can now pass to a second musical motive of Credo I: Here again we have a ternary group (G-F-A), leading to a spondaic cadence at the unison. This cadence Dom Mocquereau treats in a normal spondaic fashion, although it would seem to be of even less importance as a cadence than that at ‘omnipoténtem’. However, let that pass.

The ternary group (G-F-A) occurs nine times during the Credo, and in every case save one the initial G coincides with a tonic accent, principal or secondary:

	G	F	A	G
	caé-	li	et	térrae
	Dé-	um	de	Déo
	lú-	men	de	lúmíne
de-	scén-	dit	de	caélis
	non	é-	rit	fínis
Fili-	ó-	que	pro-	cédit
locútus	est	per	pro-	phétas
	sán-	ctam	ca-	thólicam
	ú-	num	bap-	tísma

The solitary exception—if it really be an exception—is at ‘non érit fínis’. But it is at least arguable that the emphatic ‘non’ may here be regarded as accented, as monosyllables often are.

Dom Mocquereau, once again, fails to observe the melodic significance of this ternary group, the rhythm of which is clearly indicated by the accent on its initial note. He is prevented from seeing this obvious truth by his fixed determination to mark as many word-endings as possible with the ‘ictus’, serenely oblivious that, in default of positive melodic, harmonic, metrical or quantitative indication to the contrary, *an accent of itself indicates rhythm*.¹⁵ Indeed

¹⁴ The reader who finds this difficult to believe is invited to consult the Monograph for himself, especially the analytical melodic charts there provided.

¹⁵ Not recognizing this, he regards the two words ‘Dóminus’ and ‘Redémptor’ as having exactly the same rhythm! (See *Le Nombre Musical Grégorien*, II, p. 254, and I, p. 60).

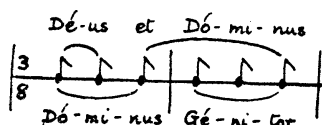
at 'sánc̄tam cathólicam' he completely obliterates the melodic identity of the ternary group by adding an unnecessary and undesirable doubling on the last syllable of 'sánc̄tam'—as undesirable and as unnecessary as the similar doubling of 'únam'.

As an example of accent defining rhythm where no overriding melodic, metrical or quantitative indication intervenes, we can see at once that the rhythm of the following two word-groups is identical:

Déus et Dóminus,

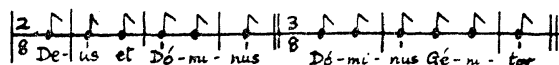
Dóminus Génitor.

The varying positions of the word-endings make no difference to the *rhythm*,¹⁶ though they alter the *phrasing*:



The rhythmic identity is due to the identity of the accentual schemes.

But Dom Mocquereau, with his penchant for putting the 'ictus' on word-endings, would regard these two phrases as rhythmically distinct:

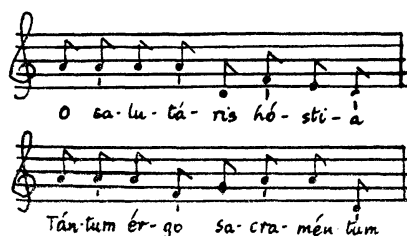


On the other hand, he is unable to appreciate the obvious rhythmic difference between the two lines:

O salutáris hóstia,

Tántum ér-go Sacraméntum.

Each line, it is true, has eight syllables, but rhythmically that is all that they have in common. Nevertheless in syllabic plainsong settings Dom Mocquereau would offer us the following 'authentic' rhythmicings:



Could anything be more absurd? Would any intelligent musician fail to observe that the first line is iambic and the second trochaic? Could any musician worthy of the name be permanently

¹⁶ Except in languages in which the final syllable of the word is accented, e.g. French!

satisfied with a theory whereby words in contradictory metres are sung to syllabic melodies of identical rhythm?

So relentless is Dom Mocquereau in his campaign against the word-accent as rhythmical determinant, that, rather than be guided by it, he would advocate the quite mechanical process of counting back in twos from the 'next certain ictus' as a means of discovering the *objective rhythm* (!) of a syllabic phrase. This verges on the comic when the 'next certain ictus' is itself fixed by the application of his own arbitrary rules. We thus find almost identical melodies edited with contradictory rhythms—each claiming to be the objective rhythm inherent in the melody. Here, for example, are two lines from two plainsong settings of the same words, printed on opposite pages of the latest Solesmes edition of the *Graduale*:



Obviously these are two versions of the same melody, derived either one from the other or both from some common melodic source. Such melodic variants as they contain are easily understandable. But to me it seems quite inconceivable that, if the rhythm of one or other version was originally as Solesmes have indicated, the melody should then have been subjected to such flagrant 'counter-rhythm' as Solesmes have indicated in the alternative version. I would willingly stake my reputation as a musician that in a hymn-melody of this kind a melodic variant in one part of a phrase ('pretiósí') would not involve an essentially different rhythm in another part of that same phrase where the melody remains unaltered ('sanguinisque'). Nobody knowing one version *with Dom Mocquereau's rhythm* could evolve the other version *with Dom Mocquereau's quite different rhythm*. It is musically unthinkable.

But, of course, these particular Solesmes markings have no MS warrant whatever; they are simply the result of Dom Mocquereau's home-made rules. Having decreed that the first note of a neum has an 'ictus' (word-accentuation and even metrical considerations notwithstanding), he has to put an 'ictus' in version A on the second syllable of *lingua*. From this 'next certain ictus' he has (by another of his own rules) to count back in twos and mark an 'ictus' on the

second syllable of 'Pänge'. According to him we now have the 'authentic Gregorian rhythm!

In fact, of course, the unassailable Solesmes rhythming of version B proves that their rhythming of version A must be wrong. As the metre is undeniably trochaic, the 'ictus' should come on the first syllable of 'língua' in both versions. (We have already seen that the Plainsong composers did not always attribute the 'ictus' to the first note of a neum immediately after a tonic accent.)¹⁷

In the other line ('sanguínisque . . .') the (obviously correct) rhythming of B again shows that of A to be incorrect. But, here again, Dom Mocquereau is the victim of his own arbitrary rules. Having decreed that spondaic cadences such as this are best treated without doubling the accented syllable and that the accent is best separated from the 'ictus', he automatically puts an 'ictus' on the final note of the phrase in version A, and then counts back in twos from this 'next certain ictus' and (there being no neums to interrupt his progress) mechanically drops 'ictus' marks on alternate notes. It is idle to pretend that this is a scientific method of discovering the authentic rhythm; it is nothing better than a children's game. And a rhythmic theory which can readily accept the results so obtained is altogether too good for this world.

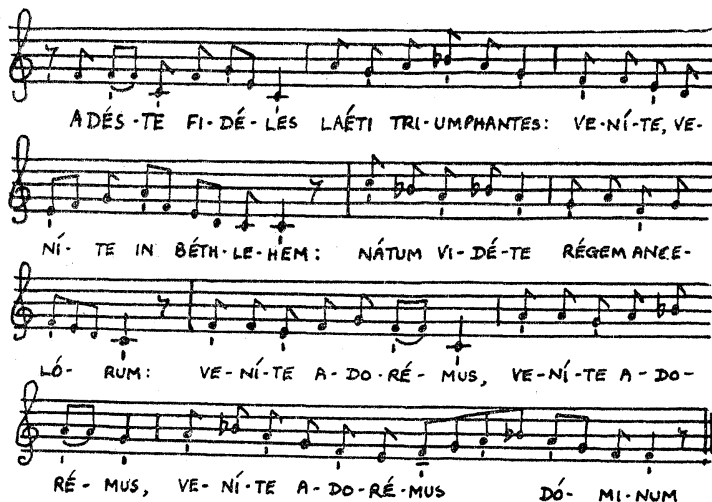
It is almost certain that version B is earlier than version A, but in any case the neum on the accent of 'pretiósí' in B shows that the corresponding syllable in A must have been 'ictic'—even apart from metrical considerations. Nobody knowing one version could have evolved the other (taking them both in Dom Mocquereau's rhythm) except in a mood of deliberate perversity. Obviously the phrase in version A has a feminine cadence, a trochaic cadence. Several valid interpretations are possible, the most natural being with two doubled notes.¹⁸ Only one interpretation is quite impossible — Dom Mocquereau's!

If these examples have not been found sufficiently compelling as a *reductio ad absurdum* of Solesmes editorial methods, a glance at the 'rhythmic edition' of 'Adéste fidèles' will show to what depths of musical insensitivity it is possible to be reduced by living exclusively on the self-administered drug of a home-made theory, however

¹⁷ See above, p. 6.

¹⁸ Even if we were to double neither note—an unlikely rendering—but, instead, were to pause on the last note, such a pause would not be equivalent to Dom Mocquereau's rhythming. A pause is a different thing from a positive doubling. A pause may occur independently of the 'ictus', as in so many trochaic hymn tunes, both of plainsong and later music, and in countless feminine cadences. Dom Mocquereau never understood this distinction. For him a different treatment of a cadence in syllabic phrases necessarily altered the rhythm of what had preceded it! (*Le Nombre Musical Grégorien*, II, p. 310.)

plausible or ingenious. In the end the vision becomes so clouded that everything looks the same—and nothing can be seen:



A printed copy of this version—bearing the Imprimatur of the Patriarch of Constantinople!—is amongst my treasured collection of musical curiosities. I am not sure that it is not the gem of the entire collection. I need offer no comment beyond saying that it shows where the ‘word-ending’ mania and the ‘un-ictic word-accent’ theory and the ‘counting-back-in-twos’ trick logically lead us—to musical Bedlam! In the Chant the futility of such editorial methods can be concealed, because the results can be accepted (up to a point) as part of that ‘strange unworldly, spiritual, Gregorian rhythm’, which is so different from the familiar, mundane, coarse, everyday habits of other music! But when applied to a tune we already know, these same editorial methods are revealed for what they are.

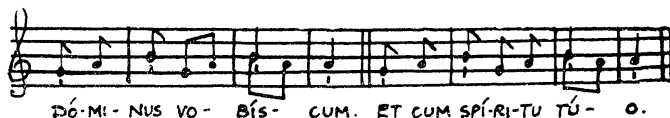
But the ‘un-ictic word-accent’ theory can so easily be refuted by looking at some of the simplest and most familiar of plainsong formulae. If, for instance, the ancient method of singing the ferial ‘Dóminus vobíscum’ at the Preface was as Solesmes would have us believe (with the accent ‘vobíscum’ ‘un-ictic’):



then how did the cadence ever come to be sung as in the festal Preface:



with the accent made 'ictic'? Surely nobody, to whom the 'un-ictic' accent of the simpler version was an habitual practice and mode of thought, would ever have forgotten himself so lamentably as to put an 'ictus' in a hitherto forbidden place in order to make the music more festive! Such unbridled license would certainly not have been allowed to pass unchecked by those (if ever there were any) who accepted Dom Mocquereau's ideas in ancient times. But if, on the other hand, it had been customary to prolong the accent in the natural, normal spondaic fashion in the ferial version, then a slight *portamento* is all that would have been required to produce what we now call the festal version.¹⁹ And, of course, the natural method of singing this 'Dóminus vobíscum' and its response is clearly as follows:



Notice the 'ictus' on the final syllable of Dóminus'—not because it is a word-ending, but because the syllable here acquires a secondary accent, both on account of its position (between two weak syllables) and its melodic elevation. It corresponds to the accent of 'spíritu' in the response.

The question may now be asked: How is it that the Solesmes editions, having been prepared on such questionable principles, are nevertheless so universally employed?

The answer is, I think, simple enough.

The Solesmes method is a cut-and-dried affair, to which there is as yet no coherent alternative.²⁰ Furthermore the Solesmes editions can be used as it were by rule of thumb, without the bother of having to examine the music carefully for oneself, even without having to think. Everything (with some notable exceptions) is made clear

¹⁹ Compare also the 'Agnus Dei' of the Litany (at the word 'nóbis') with the same music in Mass XVI: the neum on the accent in the latter similarly proves that the accent in the former was lengthened and 'ictic'.

²⁰ Its cut-and-dried coherence is obtained by the simple expedient of inventing a novel rhythmic theory that no one had thought of before and then ignoring difficulties. It is so easy to insist that the first note of a neum must normally have an 'ictus' and that the verbal accentuation does not alter this rule, but what about the examples on page 6 above?

and definite,²¹ so that by knowing the Solesmes rules for recognizing where every 'ictus' falls, it is comparatively easy to achieve uniformity of interpretation and consequently a polished performance, as everyone knows. When I say that this can be done without looking too closely at the music for oneself, I am speaking from experience. Indeed, the Solesmes editions, being assumed to be authoritative and scientifically reliable and claiming to incorporate the rhythmic signs of the ancient MSS, positively discourage their users from critically scrutinizing either the music or the printed rhythmic signs.

There must be thousands who have sung Credo I hundreds of times according to the Solesmes books (many of them may even have read Dom Mocquereau's 52-page Monograph on it) who have never yet paused to examine the structure of the melody even as briefly as we have attempted to do in these pages.

Very few, if any, of those who use the Solesmes method and the Solesmes editions ever seem to object that it is impossible to know whether a printed rhythmic sign is purely editorial or has MS warrant. Many are blissfully unaware that innumerable MS signs are not represented at all, and that those that are represented have been somewhat arbitrarily selected and somewhat arbitrarily interpreted, either as a doubling or as a lesser lengthening (a 'nuance') or (quite unwarrantably) as a mere 'ictus'. They do not realize that the proportion of authentic rhythmic signs in the music they sing most often (viz. the Kyrie) is quite negligible. Nearly all, if not all, of the rhythmic signs printed there are purely editorial additions.

Many Solesmes experts,²² indeed, have acquired their reputations solely on the strength of their mastery of Dom Mocquereau's ready-made rules and their own vocal proficiency. In most cases they have never queried the soundness of their Master's theories or editorial methods, and they are probably unaware of the many problems awaiting solution. They are not exercised or worried about recovering the original Gregorian interpretation of the Chant,²³

²¹ We have seen at what a cost this 'simplicity' is achieved and by what methods.

²² One of whom I was formerly reckoned to be! 'Cette etude, que l'on sent ecrite par un artiste tres fine en meme temps que par un musicien tres su lui, revele egalement une remarquable assimilation de la theorie de Solesmes, qui nous fait voir en Dom Gregory Murray l'un de plus brillant disciples de Dom Mocquereau' (Dom Gajard, quoting Dom Desroquettes, in *Monographie Grégorienne XIII*, p. 5). I have learned a little since those words were penned (1934).

²³ In these pages nothing has been said about a fundamental principle of the Vatican Edition (ultimately dictated by Solesmes): that the notes are all basically equal in length. The fact must be faced that all the literary evidence of the Gregorian centuries points in another direction. Similarly, nothing has been said about the Solesmes interpretation of the rhythmic signs that actually do appear in the MSS. On both these points independent scholars are at work, and one book is already in the press which may necessitate a drastic revision of accepted ideas.

because they sincerely believe that this has been made available for them in the Solesmes editions. In their view 'the modern rhythmic signs . . . are merely a modern way of reproducing the rhythmic signs of the best MSS, and we have no more right to neglect them . . . than we have to change the notes themselves'. Such happy mortals enjoy an enviable peace of mind: 'Where ignorance is bliss, 'tis folly to be wise!'

If these pages have succeeded in their object, such blind trust in Solesmes will have been exposed as unwarranted. It will have been realized that Solesmes theory and Solesmes editorial methods are indeed very much open to criticism. The reader will know that in fact we have every right to 'neglect' the rhythmic signs whenever (as is so often the case) we find them to have no MS warrant—especially when careful study shows them to be actually opposed to the musical implications of 'the notes themselves'.

One final point. To welcome the Solesmes interpretation as a justifiable 'modern' interpretation of the Church's ancient music, and therefore to discourage and forbid the continuation of conscientious attempts to discover the authentic ancient interpretation, is to abandon the only valid justification for singing the Chant at all, viz. that it is the Church's traditional music. Apart from the fact that the Solesmes interpretation can hardly be accepted as 'modern' (it differs fundamentally from modern musicians' ways of thought), we have to remember that if we sing the Chant in a manner demonstrably different from its original interpretation, then we are no longer singing the Church's traditional music but a modern parody deserving of scant respect. If that is all it can claim to be, it is causing more trouble than it is worth. In its place we must use every endeavor to re-establish the authentic Gregorian Chant with its authentic Gregorian Rhythm. In the words of Giulio Bas, one of Dom Mocquereau's early collaborators who later rejected the Solesmes theories: 'We should have the courage to revise everything from top to bottom, not to destroy, but to rectify.'

A REPLY TO FATHER SMITS VAN WAESBERGHE, S.J.

By Dom Gregory Murray, O.S.B.

FR. VOLLAERTS's posthumous book, *Rhythmic Proportions in Early Medieval Ecclesiastical Chant*, was published by E. J. Brill of Leiden in 1958.¹ My attention was first called to the existence of Fr. Smits van Waesberghe's critique of it by a remark in *The Clergy Review* of April 1960. The writer—Dom Dean, a monk of the Solesmes Congregation — there declared, with obvious satisfaction, that Fr. Vollaerts's book 'has already been put out of court by his fellow Dutch Jesuit, Fr. Jos Smits van Waesberghe, s.j.' (p. 249). In subsequent correspondence Dom Dean frankly admitted that he had not seen Fr. Smits's critique, but he gave various addresses where a copy might be obtained. Although the critique does not seem to have been printed (my own copy is typewritten), it has received sufficient publicity to merit a rejoinder.²

Fr. Smits is said to have declared that he wrote the critique at the request of the monks of Solesmes. Both internal and circumstantial evidence seem to corroborate this. At any rate the purpose of the critique is clearly to discredit Fr. Vollaerts's work. It must be said at the outset that the tone of some of the comments, the zest with which fault is found, the futility of some of the criticisms, and especially the failure to produce a single solid argument against Fr. Vollaerts's conclusions — all these things reflect little credit on a scholar of Fr. Smits's reputation. Leaving aside, then, such pettifogging criticisms as have no significance, I confine myself to those points which appear serious enough to warrant a reply.

Quite early in his critique Fr. Smits writes as follows: 'The author must be credited with an original (as far as I know) and highly instructive comparison' between certain melismatic melodies in the best St. Gall and Metz manuscripts and their syllabic settings to prose-texts in the Aquitanian manuscript, Paris B.N. lat. 1118. Here Fr. Smits reveals a surprising ignorance. Every serious student of the Chant ought to know that this comparison was made more than a quarter of a century ago by the Abbé (now Canon) Delorme. If Fr. Smits had read *Rhythmic Proportions* with due care, he might have remedied this defect in his knowledge, for Canon Delorme's articles in *La Musique d'Eglise* (1934-35) are repeatedly referred to.

¹ For a simple introduction to this epoch-making study, the reader is referred to the present writer's booklet, *The Authentic Rhythm of Gregorian Chant*, obtainable from the author, Downside Abbey, Bath, England, price 1/-.
² This reply to Fr Smits's critique was originally written and printed for private circulation. The publication of the critique (in *Caecilia*, Autumn, 1960) calls for the publication of the reply.

However, having credited Fr. Vollaerts with an originality of method to which he made no claim, Fr. Smits then proceeds to question the value of B.N. 1118 for comparative study and even to cast doubts on Fr. Vollaerts's honesty in dealing with the evidence. In support of this suspicion he quotes a passage in which there are discordances between Fr. Vollaerts's transcriptions (*Rhythmic Proportions*, p. 35) and the notation of B.N. 1118. What Fr. Smits does not say is that the transcription is based, not merely on B.N. 1118, but on a comparative study of this manuscript together with St. Gall 339, Einsiedeln 121 and Laon 239. Having been privileged to examine the chart in Fr. Vollaerts's own hand from which this transcription was taken, I am in a position to vouch for the statistics which Fr. Vollaerts himself gives of this trope (and of several others) on page 57 of his book. In spite of some discordances, there is an overwhelming majority of concordances between the long signs of B.N. 1118 and the *tractuli* of Laon 239, without taking account of those places where the notation of B.N. 1118 is unclear. Fr. Smits stresses this lack of clarity in B.N. 1118, as though Fr. Vollaerts had not called attention to it (which he does on page 57) and as though it undermined the whole argument. Is it not curious that the distinctness of signs in B.N. 1118 should be clear enough for Fr. Smits's purposes, but not for Fr. Vollaerts's? This kind of argument is reminiscent of the controversial methods of the Solesmes propagandists. Their opponents are first of all accused of basing their conclusions exclusively on the inadequate evidence of the manuscripts reproduced in *Paléographie Musicale* (which the Solesmes authorities have always claimed are the best), and when corroborative evidence is adduced from other manuscripts (B.N. 1118, for instance) the Solesmists reply that such manuscripts are inferior! This is Fr. Smits's technique: 'Fr. Vollaerts . . . is satisfied with his comparative study of some half-dozen manuscripts, where twice that number are required to constitute any kind of objective proof of his thesis'.³ In fact, the manuscripts upon which Fr. Vollaerts mainly relies are precisely those which, in Dom Gajard's words, 'sont la base obligée de toute restitution' (*Etudes Grégoriennes*, I [1954], p. 20). To accuse him of confining his research to 'some half-dozen manuscripts', however, is an unpardonable distortion of the truth. The book itself provides ample proof that he had studied many more than 'twice that number': well over thirty, in fact!

But any allegation that evidence has not been taken into consideration comes strangely from a writer who, like Fr. Smits, can airily dismiss the consistent and overwhelming evidence of the

³ This sentence is omitted from the printed version of Fr Smits's critique but is included in the typewritten copies which have been circulating.

medieval monastic authors in favour of proportional note-values in the Chant, simply because he finds it inconvenient. As Dr. E. Jammers once wrote: 'It would be better to revise a theory rather than strangle the ancient witnesses.' But when the witnesses refuse to be strangled, Fr. Smits has to resort to different tactics. The *Scholia Enchiriadis*, for example, tells us that 'rhythmical singing is to observe where to use the more prolonged durations and where the shorter ones', so that 'the melody may be scanned as though in metrical feet . . . Therefore to sing rhythmically means to measure out proportional durations to long and short sounds . . . This numerical proportion is always seemly in skilled song (*docta cantio*)' (Gerbert, *Scriptores* I. p. 182-3). Unable to evade the clear meaning of this statement that proportional note-values are characteristic of 'skilled song' (*docta cantio*), Fr. Smits declares that 'the context suggests that the *docta cantio* may well refer to the classical poetry studied in the schools rather than to that which is referred to elsewhere as the *ecclesiastical cantus*.'

This is an astonishing piece of bravado. Fr. Smits no doubt hoped that his readers would not examine the context for themselves. As it happens, there is a musical illustration in this passage from the *Scholia Enchiriadis*. It occurs twice, and it is given as a simple exercise in applying the principle of proportional note-values in an elementary way. And what sort of musical illustration is it? A short antiphon, 'Ego sum via, veritas et vita, alleluia, alleluia', which by no stretch of the imagination could be described as 'classical poetry studied in the schools'. Does Fr. Smits deny that it is *ecclesiastical cantus*?

If he has any hesitation, let him read what the *Commemoratio Brevis* has to say about proportional note-values in *ecclesiastical cantus*; 'Therefore let no inequality of chanting mar the sacred melodies; not for moments let any neum or note be unduly prolonged or shortened . . . In fact all the longs must be equally long, all the shorts of equal brevity . . . And in accordance with the length-durations let there be formed short beats, so that they be neither more nor less, but one always twice as long as the other . . . because assuredly every melody is to be carefully measured after the manner of metre' (Gerbert, *Scriptores* I, 226-8). This 'measuring after the manner of metre' can only mean one thing: distinguishing the component elements (the notes), as the syllables are distinguished in metre, into longs and shorts, the former being twice the length of the latter.

When Fr. Smits falsely accuses Fr. Vollaerts of attributing the *Scholia Enchiriadis* to Hucbald — ignoring what Fr. Vollaerts says

about 'the so-called Hucbald writings' on page 178 and his two footnotes on 'the authorship of the Hucbald-writings' on pages 178 and 205! — we might remind him that he would do better to heed what the old writers say rather than fuss as to who they were. '*Non quaeras quis hoc dixerit*', says the *Imitatio Christi*, '*sed quid dicatur attende*' (I, v).

It is difficult to understand how anyone at this stage in Chant study can seriously doubt that in the St. Gall notation both the angular *podatus* and the *clivis* with upper episema comprise two long notes. Fr. Vollaerts sets out the proofs fully and convincingly. Fr. Smits does not say what he believes; he simply makes a childish — nay, infantile — pass at Fr. Vollaerts because his table on page 82 records that sometimes the later Chartres manuscripts and B.N. 1118 represent the second note of the long *clivis* as short. Does he really think that the occasional negative evidence of such manuscripts is of any consequence against the consistent positive evidence of the superior manuscripts of St. Gall, Metz and Nonantola? Has he forgotten the basic principles of comparative study in textual criticism? To refresh his memory he might turn to what Dom Mocquereau has to say on the subject in *Le Nombre Musical Grégorien* I, p. 171, or (better still) *Monographie Grégorienne* IV. I can only regard this as a typical case of pettifogging fault-finding, calculated to mislead the reader, but also revealing the critic's lack of solid ammunition.

But what is to be thought of a reviewer who misquotes an author and then discredits him for saying what in fact he did not say? On page 90 of *Rhythmic Proportions* Fr. Vollaerts states that, owing to the frequent absence of letters from the St. Gall *pressus*, 'a comparison with other notations is necessary'. Fr. Smits quotes this last phrase, putting it into inverted commas — but for the word 'notations' he substitutes the word 'manuscripts'! He then complains that Fr. Vollaerts ought to have mentioned the fact that such a comparison had already been made — by Fr. Smits! But surely Fr. Smits knows the difference between 'notations' and 'manuscripts', and therefore he must realize that Fr. Vollaerts means something far more comprehensive and (be it added) more important than a mere comparison with other manuscripts in the same St. Gall notation. This sort of criticism can hardly be called honest. It is too obviously designed to undermine the unsuspecting reader's respect for Fr. Vollaerts as a scholar. Moreover, it is not the only evidence in Fr. Smits's critique of a somewhat petulant resentment that his own name does not loom more largely in Fr. Vollaerts's book.

Yet another instance of unfair and misleading criticism occurs

when Fr. Vollaerts is represented as dismissing a statement of Aribó's as nonsense. The facts are as follows:

(i) The disputed statement occurs in a document of doubtful authenticity — the *Utilis Expositio* — which is to be found at the end of the authentic *De Musica*.

(ii) Fr. Smits himself has to admit that, if the suspect document is authentic, Aribó must have changed his mind. The *Utilis Expositio* and the *De Musica* certainly contradict one another. In Fr. Smits's own words: 'The two take up quite different standpoints with regard to the same text of Guido's' (Aribó's *De Musica*, ed. Fr. Smits van Waesberghe, p. xxij).

(iii) Fr. Vollaerts gives good reasons for rejecting the authenticity of the *Utilis Expositio* and argues quite convincingly that the statement in question is in fact nonsense (*Rhythmic Proportions*, pp. 191-2). This is not the same thing as dismissing a statement of Aribó's as nonsense. And, even if it were, it would not compare in barefaced effrontery with the action of another scholar (apparently approved by Fr. Smits) who cheerfully dismissed all the monastic writers of the ninth, tenth and eleventh centuries as ignorant fools '*qui ne savent pas trop ce qu'ils disent*' (Dom Mocquereau, *Monographie Grégorienne VII*, p. 31). We may here recall Fr. Smits's own efforts to explain that when Aribó in the eleventh century says 'in olden times (*antiquitus*) great care was observed to . . . sing proportionally', the word *antiquitus* refers to Greek antiquity (*Muziekgeschiedenis de Middeleeuwen I*, p. 138). As we shall see shortly, Aribó has been speaking in the previous sentence of the older (*antiquiores*) antiphonaries and of the proportional indications to be found in them. Is it likely that in two successive sentences '*antiquiores*' can refer to recent centuries and existing books, and '*antiquitus*' to the pre-Christian era? Such an interpretation can only be regarded as a gesture of despair, a forlorn attempt to evade the implications of what Aribó says and clearly means. Dom Mocquereau's tactics were simpler: Aribó 'did not know what he was talking about'!

One of Fr. Smits's parting shots, towards the end of his critique, is concerned with Appendix II of *Rhythmic Proportions*, in which Fr. Vollaerts quotes a text from a Monte Cassino manuscript describing the medieval practice of conducting the Chant. The director is to measure the Chant with his right hand raised: '*dextra manu elevata metiri . . . ut sicut metiendo praenotabitur cantus*'. It was Dom Jeannin who first adduced this text as evidence that the conductor used to beat time so that the singers might be able to observe the correct proportions of the note-values. Fr. Smits claims that he him-

self 'successfully challenged' this interpretation in the *Gregoriusblad* of January 1932. He does not add that Dom Jeanin subsequently vindicated his interpretation in *De Muziek* of October 1932 — a vindication which, as far as I know, neither Fr. Smits nor anyone else has ever attempted to invalidate.

Fr. Smits is of the opinion (for which he offers no proof) that all the rhythmic indications, episemas and letters in the manuscripts signify mere nuances, not proportional note-values. Needless to say, he cannot tell us how this could be carried into practice, for it is utterly impracticable. He is therefore forced to the conclusion that 'we cannot penetrate to the authentic performance practice of Gregorian Chant'. In Appendix III of *Rhythmic Proportions* Fr. Vollaerts demonstrates how the nuance-theory completely breaks down when a syllabic melody (or even a melismatic one) is composed almost entirely of 'nuanced' notes. But the theory is also, as we have seen, directly opposed to the teaching of the medieval monastic authors. If, as they assert, a long note is twice the length of a short, what difficulty is there in accepting both the episema and lengthening letters ('a'=a^uge, 't'=t^ene) as signs of double length, and ('c'=c^el^eriter) as indicating single length? Fr. Smits objects that lengthening letters often occur when the neum or note is already long, either by its shape or by the addition of an episema, and that the added letters must therefore indicate extra length. Fr. Vollaerts is not the only paleographer to argue from the inconsistent and haphazard use of letters in parallel passages that the letters in such cases are merely additional warnings. He is able to quote Fr. Agustoni in his support, from *La Revue Grégorienne*: '*Le copiste ajoutait une indication spéciale . . . soit parce que le contexte pouvait induire en erreur, soit parce que le chœur n'observait pas à cet endroit l'exécution voulue*'. There is also the fact that one of our most important manuscripts, St. Gall 339, has no letters at all.

The matter is perhaps not quite so simple when the letters 'm' (*mediocriter*) and 'b' (*bene*) are combined with 't' or 'c', as sometimes happens in some of the St. Gall manuscripts. But here, as always, the uncertainties must be resolved by the clear teaching of the writers. 'It is good historical method', wrote Dr. Peter Wagner, 'to interpret Chant manuscripts by contemporary authors, and not to seek to refute the clearest part of the sources by the other part, which is, after all, still full of obscurities for us.' In the light of the medieval treatises, therefore, we may venture the following suggestions.

It is at least possible that 'm' by itself has a purely melodic or dynamic significance: '*mediocriter moderari melodiam mendicando*

memorat', says Notker at the end of the ninth century. But, as against this, we have a statement of Aribo in the second half of the eleventh century, which must be quoted in full: 'A tenor is the length of a note which is in equal proportion if two notes are made equal to four and their length is in inverse proportion to their number [i.e. two long notes are equal to four short ones]. So it is that in the older antiphonaries we very often find the letters "c", "t", "m", indicating respectively *celeritas*, *tarditas* and *mediocritas*. In olden times great care was observed, not only by composers of the Chant but also by the singers themselves, to compose and sing proportionally. But this idea has already been dead for a long time, even buried' (*De Musica*, ed. Fr. Smits van Waesberghe, p. 49; Gerbert, *Scriptores* II, p. 227). Aribo here writes as though 'm' by itself were a rhythmic indication. But he is obviously not an absolutely safe guide to manuscripts which were no longer in use, nor may we rely on him for precise details of an interpretation which (in his own words) had 'already been dead for a long time, even buried'. He makes no mention of the episemas or long neum-forms, both of which were at least as prominent a feature of the older manuscripts as were the letters. Moreover, if 'm' were a mean between 'c' and 't', Aribo ought to have put the letters in the correct order: 'c, m, t'.

Still, the fact remains that Aribo instances these three letters as indications in the old manuscripts of proportional note-values, once observed with great care (*magna circumscriptio*) but no longer so. The 'c' and 't' present no problem, for they stand for *celeritas* and *tarditas*, the very words used by Quintilian in contrasting the proportional short and long syllables of prosody: '*fugiat spondeum et trochaeum, alterius tarditate, alterius celeritate damnata*' (*Institutio Oratoria* IX, iv). The precise significance of an isolated 'm', however, remains doubtful, as Fr. Vollaerts says (*Rhythmic Proportions*, p. 190, note), and 'often seems to have some melodic meaning'.

But when 'm' is combined with 't' or 'c', it almost certainly seems to have a connection with the note-values or the *tempo*. Similarly, 'b' is undoubtedly meant to emphasize the 't' or 'c' to which it is joined. But does this really amount to an argument against proportional note-values? There is no reason to suppose that precise note-values might not be occasionally modified in the Chant, as they are in modern music, by a *tenuto* or an *accelerando*. Such modifications do not destroy the basic relative note-values: they affect the *tempo*. If this suggestion be accepted, the letters 'tb' would indicate a long note (or notes) with generous length (*tenuto*), whereas 'tm' would serve as a warning that the length of the long note (or notes) must not be exaggerated (*a tempo*). Dom Jeannin's suggestion —

that 'm'=*mediocriter*=*in medio*=precise, exact, without exaggeration — seems sensible enough, and might even supply a rhythmic meaning for the isolated 'm'. Hence we arrive at the following solutions:

tm=long without exaggeration, exact double length, *a tempo*;

tb=long with *tenuto*, generous double length;

cm=short without hurry, exact single length, *a tempo*;

cb=short with *accelerando*;

m=*a tempo* (if this letter really has a rhythmic meaning in isolation).

The alternative—Fr. Smits's alternative—to these suggestions is a large range of unmeasured and unmeasurable 'nuance-lengths', each being a subtly differentiated modification of the basic note (which is short!), which no choir on earth could ever sing either today or at any other time. For how can an unmeasured length-nuance be itself further nuanced? If, on the other hand, the letters 'a', 't', and 'c' are interpreted (like the episemas and long neumes) as proportional length-indications, the occasional addition in some St. Gall manuscripts of the qualifying letters 'm' and 'b' raises no very great problem.

It has to be admitted that in his monumental *Muziekgeschiedenis der Middeleeuwen* (to which he refers so often in his critique) Fr. Smits has collected an enormous amount of statistical detail. It is a work of undoubted erudition, the fruit of years of patient study and remarkable industry. He has also provided us with valuable modern editions of some important medieval writings on music. But where has all this industry led him? To the lame conclusion — repeated yet again in the critique of *Rhythmic Proportions* — that we shall never know how the Gregorian Chant was originally performed. With this obstinate conviction firmly in his mind, he seems to take amiss that Fr. Vollaerts, and others with him, should have reached more positive conclusions after studying the evidence he is himself supposed to have examined.

But Fr. Smits is not altogether consistent. In one and the same book — *Gregorian Chant and its Place in the Catholic Liturgy* — he both tells us that 'it is impossible for us, now, to discover how Gregorian Chant was originally performed' (p. 51) and also regales us with an eloquent description of what the Chant sounds like in performance: 'The movement and rhythm of plainsong are of a surprising liveliness and beauty — surprising because we are no longer used to the freedom of its upward-springing rhythmic waves. This wonderful Gregorian rhythm runs in a rising line of tension up to

the peaks of the melody, to move then to its end in slow, quiet relaxation. Its melody and rhythm are classical, though not in the sense of servitude to a stiff and academic system: plainsong breathes liberty, it rises above the earthly on the wings of its rhythm, through its pure musicality within the sound laws of the old ecclesiastical modes' (p. 28).

After this breath-taking extravaganza, we may well ask: What is this wonderful rhythm which can be described so vividly and yet remain undiscoverable?

Elsewhere in the same book Fr. Smits speaks of the verbal accent in the Chant in terms which would do credit to Dom Mocquereau himself, and with as much scientific justification (pp. 19-20). His transcriptions of the Chant likewise are consistently according to the Mocquereau system — a system which defies the medieval monastic authors, selects a comparatively small percentage of rhythmic indications from the manuscripts, interpreting them quite arbitrarily as either nuances or doublings or even as mere 'ictus' signs, and then adds innumerable editorial indications (indistinguishable in form from those representing manuscript signs) for which there is no warrant anywhere; a system, moreover, which Fr. Smits admits cannot be authentic because (in his own words) the authentic interpretation 'is impossible for us, now, to discover'.

To accept without protest an interpretation with no historical basis at all, and then to reject one with solid foundations in the manuscripts and the medieval authors, suggests an inability to view the matter with that impartiality and objectivity which should characterize the attitude of a genuine scholar and a sincere seeker after truth. Irrational prejudice is incompatible with sound scholarship.

It must be admitted that on a first reading Fr. Smits's attack on *Rhythmic Proportions* appears to be a formidable one. The critique is so cunningly contrived that a less well informed reader might easily be led to regard it as conclusive. It is only after careful examination that its essential weakness is revealed. As we have seen, Fr. Smits is not over-careful or over-scrupulous in his choice of weapons, and some of them have been shown to be veritable boomerangs. The net result of his attack is that Fr. Vollaerts emerges in a stronger position than ever — a position which, despite serious endeavours, remains unchallenged by serious argument. Perhaps there is a certain justice in this. For in a broadcast review of *Rhythmic Proportions* in the Third Programme of the BBC (23rd February 1959), Mr. Alec Robertson said of Fr. Vollaerts that he is scrupulously fair to those with whom he disagrees' and that he 'deserves the same treatment'—statements which Fr. Smits obviously did not hear.