

## INTERNAL CLAUSULAE IN LATE LATIN PROSE AS EVIDENCE FOR THE DISPLACEMENT OF METRE BY WORD-STRESS

In several recent studies we have developed precise statistical methodologies which have demonstrated that the *cursus mixtus* was the dominant rhythmical system for final clausulae in Latin prose from the third century A.D. to the fifth.<sup>1</sup> The *cursus mixtus* consisted of four standard metrical forms derived from the richer variety of Cicero's Asiatic tradition – cretic-spondee, dicretic, cretic-tribrach and ditrochee –, which were structured according to three accentual patterns – *planus*, *tardus* and *velox*. The latter are differentiated by the number of unstressed syllables intervening between and following two accented syllables. The *planus* has two unaccented syllables between two word accents and one after the last accent. The *tardus* has two between two accents and two after the last accent. The *velox* has four between two accents and one after the last accent. The four metrical forms are contained within the parameters of the accentual cadences. The *planus* contains either the cretic-spondee (*epistulae nostrae*) or the ditrochee (*manu ferire*); the *tardus* either the dicretic (*carcer includeret*) or the cretic-tribrach (*estis indigenae*); the *velox* either the ditrochee (*experientiam singulorum*) or the cretic-spondee (*nimum videbatur*).<sup>2</sup> Authors who used the *cursus mixtus*, however, preferred to effect an exact coincidence between the accent and ictus,<sup>3</sup> and as a result evinced primarily the following standard rhythmical forms: *planus*/cretic-spondee; *tardus*/dicretic or cretic-tribrach; and *velox*/ditrochee.<sup>4</sup>

So far now we have examined only the rhythmical properties of final clausulae, but it is appropriate also to investigate for rhythm at internal positions within the sentence. To date, individual studies have appeared of internal clausulae in Arnobius, Ammianus and the *Historia Augusta*.<sup>5</sup> In each case, however, the proposition that the presence

<sup>1</sup> S. M. Oberhelman and R. G. Hall, 'A new statistical analysis of accentual prose rhythms in imperial Latin authors', *CP* 79 (1984), 114ff.; 'Meter in accentual clausulae of late imperial Latin prose', *CP* 80 (1985), 214ff.; R. G. Hall and S. M. Oberhelman, 'Rhythmical clausulae in the *Codex Theodosianus* and the *Leges Novellae ad Theodosianum Pertinentes*', *CQ* 35 (1985), 201ff.

<sup>2</sup> For more detailed discussion of the *cursus mixtus*, see our paper in *CP* 80 (1985), 215ff.; for a bibliography on the *cursus mixtus*, see *ibid.* n. 11.

<sup>3</sup> We use the term ictus merely to denote the first syllable of the metrical unit. The question of whether an ictus existed in metrical prose, not to mention poetry, is too complicated to be dealt with here. See our comments in *CQ* 35 (1985), n. 5.

<sup>4</sup> There is a fourth accentual scheme, the *trispondaicus*, which is the accentual abstraction of the metrical pattern paeon-spondee. The *trispondaicus* has three unaccented syllables between two word-accent and one after the second accent, e.g. *invenire valeātis* and *vērba gradiātur*. Among the *cursus mixtus* authors the paeon-spondee often falls under the accentual scheme, e.g. *repūlsā rēvōcātūr* and *vīcē sālūtātūr*. As we have demonstrated elsewhere (*CP* 79 [1984], n. 6), this rhythm cannot be admitted as an integral part of the *cursus mixtus* system. It can provide a useful guide to determining an author's rhythmical tendencies; see the discussion in note 11 below.

<sup>5</sup> Arnobius: H. Hagendahl, 'La Prose métrique d'Arnobé. Contributions à la connaissance de la prose littéraire de l'Empire', *Göteborgs Högskola Årsskrift* 42 (1937), 1ff.; Ammianus: A. H. Harmon, *The Clausula in Ammianus Marcellinus* (New Haven, Conn., 1910); *Historia Augusta*: H. L. Zernial, 'Über den Satzschluss in der HA', *Deutsche Ak. der Wiss. zu Berlin. Schr. der Sektion für Altertumswissenschaft II* (1956).



Table 1. (*cont.*)

	Minucius				Cyprian, <i>De lapsis</i>		Symmachus				Palladius, <i>Opus agr.</i>	
	int.	fin.	int.	fin.	int.	fin.	int.	fin.	int.	fin.	int.	fin.
ó/ooóó	2	6	1	4	1	—	—	1	—	—	—	—
	3	1	—	1	1	—	—	—	—	—	—	—
	—	1	—	—	—	—	—	—	—	—	—	—
	—	—	—	1	—	—	—	—	—	—	—	—
óóó/ó/o	—	2	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	1	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
ó/o/óóó	—	—	—	—	—	—	—	1	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	1	—
	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	1	—
Total <i>planus</i> clausulae												
Percentage of all clausulae												
Standard metrical forms under <i>planus</i> :												
(a) exact coincidence												
percentage												
(b) regardless of coincidence												
percentage												
ACCENTUAL PATTERN:												
óóóóó ( <i>tardus</i> )												
Accentual typology												
óó/óóóó												
Metrical form												
a. —ó—ó—ó—x												
b. —ó—ó—ó—x												
c. —ó—ó—x												
d. —ó—ó—x												
e. —ó—ó—x												
f. —ó—ó—x												
g. —ó—ó—ó—x												
h. —ó—ó—ó—x												







Table 1. (cont.)

		Minucius		Cyprian, <i>De lapsis</i>		Ambrosius		Symmachus				Palladius, <i>Opus agr.</i>	
		int.		int.		int.		Orationes		Epist. I-II		Relations	
		fin.	fin.	fin.	fin.	fin.	fin.	int.	fin.	int.	fin.	int.	fin.
ACCENTUAL PATTERN:													
óóóóó ( <i>trispondaiacus</i> )													
Accentual typology		Metrical form											
óó/óóó	a. - - - x	17	30	3	2	5	6	—	2	2	1	1	5
	b. - - - - x	3	21	3	2	—	—	—	—	1	—	2	1
	c. - - - - - x	6	34	10	18	5	10	19	22	18	30	14	7
	d. - - - x	2	—	—	—	—	—	1	—	1	—	—	1
	e. - - - - x	—	—	—	—	—	—	—	—	—	—	—	1
	f. - - - - - x	—	1	—	—	—	—	—	—	—	—	—	—
	g. - - - - - x	—	—	—	—	—	—	—	—	—	—	—	—
	h. - - - - - x	—	—	—	—	—	—	—	—	—	—	2	—
	a. - - - x	3	1	1	—	2	1	1	—	1	—	4	1
	b. - - - - x	9	23	11	10	—	1	4	2	5	5	3	2
óó/o/óóó	c. - - - x	1	—	—	—	—	1	—	—	1	—	7	—
	d. - - - - x	—	—	—	—	—	—	1	—	—	—	—	—
	e. - - - - - x	—	—	—	—	—	—	—	—	—	—	1	—
	f. - - - - - x	—	—	—	—	—	—	—	—	—	—	1	—
	a. - - - x	2	6	—	2	—	1	—	—	—	1	—	—
	b. - - - - x	—	1	—	—	—	—	—	—	—	—	—	—
óóóóó	c. - - - x	—	—	—	—	2	1	—	—	—	—	1	—
	a. - - - x	—	—	—	—	1	1	1	—	2	—	3	—
	b. - - - - x	—	—	1	—	—	—	—	—	—	—	—	—
Total <i>trispondaiacus</i> clausulae		43	117	29	34	15	22	27	26	32	37	22	18
Percentage of all clausulae		17.3	20.5	11.8	11.4	4.8	5.0	7.3	5.3	8.0	5.7	7.6	7.5
Total of <i>trispondaiacus</i> forms with standard metrical forms		25	58	8	6	8	9	2	2	6	2	5	7
Percentage		5.8	49.6	27.6	17.6	53.3	40.9	7.4	7.7	18.8	5.4	22.7	38.9





Table 1. (cont.)

	Symmachus												Palladius, <i>Opus agr.</i>	
	Minucius		Cyprian, <i>De lapsis</i>		Arnobius		Orationes		Epíst. I-II		Relationes		int.	fin.
	int.	fin.	int.	fin.	int.	fin.	int.	fin.	int.	fin.	int.	fin.		
e. -u---ux	1	—	—	—	—	—	—	—	—	—	—	—	—	—
f. uuu---x	1	—	—	—	—	—	—	—	—	—	1	—	—	—
g. uuu---ux	—	—	2	1	—	—	1	—	—	—	1	—	—	—
óóóóó														
a. -u---ux	—	5	—	—	—	—	1	—	—	—	—	—	—	—
b. ---ux	1	—	—	—	—	—	—	—	—	—	—	—	—	—
c. uuu---ux	5	4	—	3	—	—	4	1	2	5	3	4	—	—
d. -u---ux	1	1	2	1	2	2	3	3	6	3	3	—	1	—
e. ---ux	1	—	—	—	—	1	—	—	1	—	—	—	—	—
f. -u---ux	—	1	—	—	—	—	—	—	—	—	—	—	—	—
g. uuu---x	—	1	—	—	—	—	—	—	—	—	—	—	—	—
h. uu---ux	—	—	1	—	—	—	—	—	—	—	—	—	—	—
i. uux	—	—	—	—	—	—	1	—	—	—	—	—	—	—
j. u---ux	—	—	—	—	—	—	—	1	1	—	—	1	—	—
Total <i>medius</i> clausulae	25	27	25	13	5	4	34	12	45	21	12	16	3	—
Percentage of all clausulae	10.1	4.7	10.2	4.4	1.6	0.9	9.2	2.5	11.3	3.2	7.6	6.0	1.2	—
Total of <i>medius</i> forms with standard metrical forms	10	18	15	7	—	—	9	7	22	12	6	3	3	—
Percentage	40.0	66.7	60.0	53.8	0.0	0.0	26.5	58.3	48.9	57.1	27.3	50.0	18.8	100.0
ACCENTUAL PATTERN:														
óóóó ( <i>dispondaicus</i> )														
Accentual typology	Metrical form													
óó/óó														
a. -u-u-x	2	1	2	2	—	—	4	—	3	—	—	—	1	—
b. -u---x	5	8	7	9	—	—	1	3	—	2	1	—	—	—
c. -u---ux	4	—	2	—	—	—	4	—	1	—	—	—	1	—
d. -u---ux	—	—	1	—	—	—	1	—	—	—	—	—	—	—
e. u---ux	2	—	1	1	—	2	—	—	—	—	—	—	—	—
f. ---ux	1	—	—	—	3	1	2	—	1	—	—	1	—	—
g. ---x	—	—	2	2	8	6	1	—	3	—	1	3	—	—
h. -u---x	—	—	—	—	—	—	—	—	2	—	—	—	—	—
i. -uu---x	—	—	—	—	—	—	—	—	1	—	—	—	—	—
j. uuu---x	—	—	—	—	—	—	—	—	1	—	—	—	—	—

Table 1. (cont.)

	Minucius		Cyprian, <i>De lapsis</i>		Arnobius		Symmachus				Palladius, <i>Opus agr.</i>	
	int.	fin.	int.	fin.	int.	fin.	<i>Orationes</i> int.	fin.	<i>Epist. I-II</i> int.	fin.	int.	fin.
óó/ó/o	—	—	—	—	—	—	—	—	—	—	2	—
Total <i>dispondaicus</i> clausulae	14	9	15	14	11	9	13	3	12	2	9	—
Percentage of all clausulae	5.6	1.6	6.1	4.7	3.5	2.1	3.5	0.6	3.0	0.3	3.4	0.0
Total of <i>dispondaicus</i> forms with standard metrical forms	11	9	12	11	—	—	10	3	4	2	2	—
Percentage	78.6	100.0	80.0	78.6	0.0	0.0	76.9	100.0	33.3	100.0	22.2	0.0
<i>Miscellaneï</i> Patterns												
Accentual typology	Metrical form											
óóó/óóóó	1	1	1	—	—	—	—	—	—	—	—	—
a. $\cup\cup\cup\cup x$	4	13	1	—	—	—	—	1	3	1	1	—
b. $\cup\cup\cup\cup\cup x$	—	—	—	—	—	—	—	—	2	—	1	—
c. $\cup\cup\cup\cup\cup\cup x$	—	—	—	—	—	—	—	—	—	—	1	—
d. $\cup\cup\cup\cup\cup x$	—	—	—	—	—	—	—	—	—	—	—	—
a. $\cup\cup\cup\cup\cup x$	—	1	—	—	—	2	—	—	—	—	—	—
óóó/o/óóó	—	—	—	—	—	—	—	—	—	—	—	—
a. $\cup\cup\cup\cup\cup x$	—	1	1	1	—	—	—	—	—	—	—	—
óóó/óóó/o	—	—	—	—	—	1	—	—	—	—	—	—
a. $\cup\cup\cup\cup\cup\cup x$	—	—	—	—	—	—	—	—	1	—	—	—
b. $\cup\cup\cup\cup\cup\cup\cup x$	—	—	—	—	—	—	—	—	—	—	—	—
c. $\cup\cup\cup\cup\cup\cup\cup\cup x$	—	—	—	—	—	—	—	—	—	—	—	—
óóó/o/óó/o	—	1	—	—	—	—	—	—	—	—	—	—
a. $\cup\cup\cup\cup\cup\cup x$	—	—	—	—	—	—	—	—	—	—	—	—
óóó/ó	—	—	—	—	—	—	—	—	1	2	1	—
a. $\cup\cup\cup\cup\cup\cup\cup\cup x$	—	—	—	—	—	—	—	—	2	—	—	—
b. $\cup\cup\cup\cup\cup\cup\cup\cup\cup x$	—	—	—	—	—	—	—	—	—	—	—	—
Total <i>miscellaneï</i> clausulae	5	17	3	1	—	3	—	1	9	3	4	—
Percentage of all clausulae	2.0	3.0	1.2	0.3	0.0	0.7	0.0	0.2	4.5	0.5	1.5	0.0
Total of <i>miscellaneï</i> forms with standard metrical forms	—	—	—	—	—	—	—	—	1	2	1	—
Percentage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	66.7	25.0	0.0



of internal rhythms could be used to demarcate the boundaries of cola and commata was the primary concern. As a result, these studies have largely dealt with colometry, and little progress has been made in examining and defining the forms, dynamics and frequency of use of internal rhythms, especially as they compare with the tendencies of final clausulae. In other words, a scrutiny of internal clausulae, as independent as possible of colometric considerations, is needed.

Accordingly, we have investigated for the presence of rhythm at internal positions where pauses would seem most likely. We therefore chose for our sampling population the endings of all main and subordinate clauses with finite verbs, provided that they did not close the sentence. Certain specific exceptions were made: clauses too brief in length to permit manoeuvrability for the shaping of rhythmical patterns,<sup>6</sup> and internal clausulae in such proximity to final clausulae that the final clausula borrows a word from the preceding clause to effect its rhythm.<sup>7</sup> In short, we have exempted from consideration situations which involve rigid constraints on the formation of internal clausulae. As we will point out below, other constraints involving rhetorical and grammatical considerations may also inhibit internal rhythms. Final clausulae, as the focal point of rhythm in a sentence, are generally not affected by such restrictions.

Samples of internal clausulae were taken from a representative cross-section of authors who span the inception, rise and full development of the  *cursus mixtus* : the early third-century African Minucius, whose  *Octavius*  is the earliest work we have determined to contain the  *cursus mixtus* ; Cyprian, a close contemporary of Minucius and a fellow African; Arnobius, also an African, who flourished at the turn of the fourth century; and finally Symmachus and Palladius, whose late fourth-century writings show the mature development of the  *cursus mixtus* .

We have drawn up in tabular form the results of our findings. All clausulae have been classified according to the accentual rhythm, with subgroupings listed by the metrical pattern.<sup>8</sup> The coincidence of accent and ictus is noted under each accentual form. The data for the internal rhythms in each work are followed by the figures for the same accentual and metrical patterns in the final clausulae. A comparison of the internal and final clausulae will permit an easier understanding of the linguistic and rhythmical forces at work at the various time periods studied here.

The data in the Table suggest certain general and specific observations which point to distinctive differences between the rhythmical practices of the third-century authors Minucius and Cyprian and those of the fourth-century authors Arnobius, Symmachus and Palladius. First, some general observations:

(1) In final clausulae there is a progression in the frequency of the accentual forms of the  *cursus mixtus* . In Minucius and Cyprian, the metrical forms constitute the dominant force of the clausula. By the time of Arnobius, however, metre has become subordinate to accent, which has in turn become the major component of the clausula. Both the third- and fourth-century authors, however, strive for a high coincidence of accent and ictus. This progression in the dominance of the accent is notable in the late fourth- and early fifth-century Christian authors Jerome, Ambrose and Augustine, in whose works the accentual patterns are often favoured to the exclusion of metrical forms in final clausulae.<sup>9</sup>

<sup>6</sup> As a rule we sampled clausulae only if the number of words exceeded four.

<sup>7</sup> For example, at Symm.  *Orat.*  2.4 we read 'quisque arcana scrutari postulat, te sequamur'. Here  *postulat*  is needed to form the first three syllables of the  *velox*  configuration and the metrical scheme, which is a cretic-ditrochee.

<sup>8</sup> We have placed the standard metrical forms in bold face for easy identification.

<sup>9</sup> See our tables in  *CP*  79 (1984), 122ff. and 80 (1985), 222ff.

(2) The internal clausulae support the preceding observation. According to the frequencies of metrical and accentual patterns, the authors of the third century were as careful in the construction of internal clausulae as final ones. Moreover, the internal metrical component in Minucius and Cyprian is slightly more important than the accentual in comparison with final clausulae. Beginning with Arnobius, however, the frequencies of the standard metrical forms are 10–33% lower internally than in final clausulae. In contrast to the metrical, the internal accentual rhythms in Arnobius, Symmachus and Palladius occur at rates only 10% smaller than those found in the final position. It is obvious that later authors were more sensitive to word-stress and were willing to forgo metrical rhythms, should any constraints present themselves. Palladius, in fact, ignores all metre in his internal rhythms (see below), even though he employs a very sophisticated *cursus mixtus* in his final clausulae.

(3) In later authors, the lower rates of the standard patterns of the *cursus mixtus* in internal clausulae and a corresponding dramatic decrease in the coincidence of accent and ictus can be attributed to the growing dominance of the final clausula. Minucius and Cyprian display no such tendencies, and we may conclude that subsequent authors considered the end of the sentence the most appropriate place for rhythm and were not as strict in their internal systems.

(4) In fourth-century authors there is an increasing adherence to the three standard forms of the accentual component of the *cursus mixtus* – *planus*, *tardus* and *velox*. In Minucius and Cyprian, however, the non-standard *trispindaicus*, along with its concomitant metrical form paeon-spondee, occurs at frequencies of up to 20%, a figure that exceeds even Cicero's notorious practice.<sup>10</sup> We find the *trispindaicus* falling into disuse, however, in both the internal and final clausulae of Arnobius, Symmachus and Palladius.<sup>11</sup>

(5) Greater diversity of metrical forms can be observed under the accentual typological variants than under the three standard accentual typologies (*planus*: óo/oóo; *tardus*: óo/oóoo; *velox*: óoo/ooóo), which usually contain only the four standard metrical forms; the exceptions are the internal rhythms of Palladius and Symmachus' *Epistulae*. In particular, we call attention to the following typological variants and by-forms in the Table and to the metrical forms falling under them: *planus*: óoo/óo and óo/o/óo; *tardus*: óoo/óoo and óo/o/óoo; *velox*: óoo/oo/óo, each of which contains many non-standard metrical forms. Such an increase of non-standard metrical forms under the by-forms of the standard accentual typologies in Symmachus, Palladius and even Arnobius supports observations (1) and (2) above, namely that accent comes to dominate metre in the fourth century.

(6) In certain authors we may regard the non-standard trochee-cretic as an acceptable metrical alternative in the *cursus mixtus*. Symmachus in particular liberally used this rhythm in his *planus* and *tardus* clausulae. For example, 23 of the 37 *planus* clausulae of the typology óoo/óo in the internal rhythms of the *Epistulae* contain

<sup>10</sup> For ancient opinions on Cicero's practice and the lengths to which his imitators went, see Tac. *Dial.* 23 and Quint. 10.2.18.

<sup>11</sup> The greater number of the *trispindaicus* óo/ooóo forms in Palladius' internal clausulae, as compared to the number of *velox* óoo/ooóo forms, reinforces Michael Winterbottom's 'velox rule': review of T. Janson's *Prose Rhythm, Medium Aevum* 45 (1976), 298ff., and 'Aldhelm's prose style and its origins', *Anglo-Saxon England*, 6 (Cambridge, 1977), 71ff. Winterbottom has accurately observed that, because Latin has a natural preference for paroxytones rather than proparoxytones as the penultimate word in a sentence-closing, a favouring of the proparoxytone *velox* form óoo/ooóo over the paroxytone *trispindaicus* form óo/ooóo indicates rhythm in an author. Palladius' greater use of *trispindaicus* clausulae over *velox* supports our assertion below that he was not as careful in his adherence to accentual rhythms internally.

trochee-cretics. It is therefore not reasonable to assume, as others have,<sup>12</sup> that there are linguistic factors, such as vowel-lengthening, operating here, which should induce us to interpret these metrical forms as cretic-spondees (*virtūtībūs pōtēst* > *virtūtībūs pōtēst*). The frequencies for the trochee-cretic here and in other authors are simply too high to permit such a conclusion. Moreover, Symmachus and others were in complete control of their syllabic quantities, as is evident from their sophisticated use of the very difficult and highly artificial *cursus mixtus*. Until we can prove that *cursus mixtus* authors intended to employ only the three standard accentual and the four standard metrical forms in their clausulae, we must acknowledge diversity in their rhythmical systems.

(7) The irregular clausulae that we have labelled as *dispondaicus*, *medius* and *miscellanei*<sup>13</sup> are in fact to be regarded as metrical only. Almost all such clausulae contain a standard form or such acceptable Ciceronian patterns as the trochee-cretic and paeon-spondee or longer resolutions of the standard forms like the paeon-cretic. It is our conviction that there are four accentual patterns only in later antiquity – the three standard forms and the *trispondaicus*.<sup>14</sup> *Dispondaicus*, *medius* and *miscellanei* simply represent nomenclature that we have adopted for those instances in which the metrical rhythm is intended but no clear accentual pattern emerges. For example, *tūta dubitatio* and *consilio locus nullus est* are categorised under the *medius* rubric, but the intent is clearly a paeon-cretic and dicretic respectively. The *cursus mixtus* admits both purely accentual and purely metrical clausulae.

Specific observations follow:

(1) Minucius employs a *cursus mixtus* in which the metrical component is the dominant feature. The standard metrical forms, compared to the standard accentual forms, are 12.9% greater internally and 8.8% greater in final position. Minucius, and Cyprian as well, appears to represent a transition between the purely metrical system of the Ciceronian tradition, which was in full bloom just a generation before in Tertullian,<sup>15</sup> and the fully developed *cursus mixtus* of the fourth century. Accentual rhythms are demonstrably present (chi-square = 6.07 [internally] and 21.30 [final]; critical value at 95% level of significance = 3.84), but Minucius is more concerned with the metrical qualities of his clausulae than with the accentual. This is clear from the significant decrease of accentual forms within his internal clausulae. Since, as we have stated, there are more constraints operating in the formation of internal clausulae, at times an author may be forced to choose between types of rhythm. Minucius seems quite willing to forgo the accent in order to preserve a metrical scheme. Conversely we will see the later authors discarding metrics for the sake of keeping an accentual pattern.

The metrical orientation of Minucius' clausulae is also clear from the low rates of exact coincidence of accent and ictus: 78.8% in internal and 82.2% in final clausulae.

<sup>12</sup> L. Stephens, 'Some generalizations concerning syllable quantity in late Latin clausulae', forthcoming in *Phoenix*.

<sup>13</sup> We use the term *miscellanei* to describe those accentual clausulae that do not fit under any of the other rubrics.

<sup>14</sup> Some, e.g. Hagendahl, op. cit. 32–3, add a fifth pattern: óóóóóó, which is a resolution of the *tardus* or *velox*. This pattern does appear in Ammianus and in *cursus mixtus* authors, since the metrical coincidence is a paeon-cretic or paeon-tribrach. The incidence of this pattern, however, is never great enough (about 2%) to justify treating it as a major component of the *cursus mixtus*.

<sup>15</sup> We have sampled all the genuine works of Tertullian and have found them to contain purely metrical rhythms (66.5–80.2%). No accentual tendencies can be determined according to our statistical models.

This set of percentages is the lowest in our Table.<sup>16</sup> We may contrast these figures with the rates of coincidence in such later authors as Arnobius and Symmachus, which fall in the range of 90–95%. We can formulate the following rule: the lower an author's observance of exact coincidence, the less he conforms to the *cursus mixtus*; the higher his rates of coincidence, the stricter his adherence to it.

(2) Minucius has more non-standard or irregular accentual clausulae than any other author in the present survey. These clausulae contain, however, good Ciceronian metrical rhythms. For example, 58 of Minucius' 117 final *trispondaicus* clausulae have a ditrochee or cretic-spondee; the other 59 contain a paeon-spondee. Moreover, 40 of his 43 internal *trispondaicus* clausulae have these same three metrical forms. Obviously Minucius considered the *trispondaicus* pattern a valid vehicle for metrical rhythms. A similar observation may be drawn from Minucius' practice under the irregular *medius* and *dispondaicus* forms, which in the final position contain standard metrical patterns at the respective rates of 66.7 and 100.0%.

(3) Minucius is remarkably consistent in his internal and final clausular style. He uses the same typologies in both positions,<sup>17</sup> equal distributions of accentual and metrical forms, and similar rates of coincidence of accent and ictus. We do not find in any author after Minucius such care devoted to both internal and final clausulae nor such uniformity in distribution of clausular types.

(4) Cyprian represents a further step in the transition to the developed *cursus mixtus*. He strives for a more balanced use of accentual and metrical rhythms. The difference between the percentages of the two is only 5.0% in final clausulae, a figure which is reflected in Cyprian's other works.<sup>18</sup> Apparently, he makes less use of purely metrical rhythms than does Minucius, and relies more on the accentual pattern to carry the metrical.

Cyprian's internal clausulae prove quite interesting. Although the frequency of the standard metrical forms is approximately the same in the internal and final positions (82.5 vs. 84.2%), there are significantly fewer accentual rhythms internally (71.5 vs. 79.2%). Obviously, when faced with the greater constraints at work in internal clausulae, Cyprian still felt the metrical aspect of the clausula to be more important and thus often eschewed the accentual. Such a process will soon be reversed in Arnobius and continued thereafter.

Finally, Cyprian's clausulae display a very strict adherence to coincidence of accent and ictus. The coincidence in his internal clausulae is the highest among all authors surveyed here. Although the coincidence in final clausulae is less than what we see in Symmachus' prose, the internal coincidence and the increase of accentual patterns in all parts of the sentence prove that the accentual and metrical rhythms are being brought more and more into alignment.

(5) Arnobius' final clausulae display the following characteristics: the accentual rhythms have increased to 91.3% from the figures in Minucius and Cyprian; the standard metrical forms occur at a frequency of 86.0%; and the exact coincidence of

<sup>16</sup> Although the percentages of accentual clausulae containing a standard metrical form irrespective of coincidence of accent and ictus are fairly high, they do not approach Symmachus' practice in final clausulae. For reasons why Symmachus' internal rhythms do not show similar properties, see Specific Observations (8) and (9).

<sup>17</sup> The slightly greater diversity of typologies in final clausulae could be due to the very large sample taken of final clausulae (572) vs. internal (248).

<sup>18</sup> *De mortalitate*, accentual 81.1% and metrical 86.0%; *De habitu virg.*, 76.3 and 78.9%; *Epistulae*, 79.2 and 81.9%; *De cath. eccl. unitate*, 72.3 and 74.6%; and *De dom. orat.*, 70.1 and 79.7%.

accent and ictus is 86.7%. Arnobius' final clausulae therefore anticipate the hallmarks of the fully developed *cursus mixtus*: accent and metre each occurring at rates of about 90% and exact coincidence in the range of 85–95%, percentages which characterise the final clausulae of Symmachus and Palladius.

The internal clausulae reveal a slight loss of metre. Although accentual rhythms occur at the same rates of frequency as in the final position, there is a decrease internally of about 9% in the standard metrical forms, along with a corresponding drop in the coincidence of accent and ictus. We may conclude that Arnobius felt that accentual rhythms were more important than metrical in the formation of the clausula. In fact, we now find the employment of metrical patterns which Minucius and Cyprian, following the Ciceronian tradition, had avoided: dactyl-spondee, choriamb-spondee and spondee-tribrach. Because of the preference of Minucius and Cyprian for metrical rhythms over accentual in the *cursus mixtus*, we can postulate from the evidence of Arnobius that a pronounced change has occurred by the end of the third century, inasmuch as accent now surpasses metre as the focal point of the clausula.

(6) The *trispondaicus* and the paeon-spondee are far less common in Arnobius than in Cyprian and especially Minucius. Symmachus avoids these rhythms, as does Palladius, at least in his final clausulae. We cannot at this time offer a comprehensive account of the use of the *trispondaicus* in the fourth century, since we have found in other authors a wide range in the frequency of use. Inasmuch as the *trispondaicus* is not an integral rhythm in the system of the *cursus mixtus* but is rather a by-form, authors seem to have used it according to individual preferences.

Arnobius has considerably fewer of the irregular clausulae, *medius*, *dispondaicus* and *miscellanei*. That is not unexpected, since the major accentual forms now predominate, while the metrical components become secondary.

(7) The final clausulae of Symmachus represent the finest example of the developed *cursus mixtus*: the standard accentual and metrical forms appear at rates of 90% and upwards, and the percentages of exact coincidence of accent and ictus range from 90.9 to 95.3%. We have surveyed the final clausulae of all Latin authors from A.D. 200–450 and have found nowhere else such adherence to the *cursus mixtus*.

Symmachus' internal clausulae, while displaying *cursus mixtus*, have 10–15% lower frequencies for both accentual and metrical patterns. This decrease can be attributed to two factors: the final clausula has come to be viewed as the most appropriate place for rhythmical ornamentation, and there are grammatical and rhetorical considerations operating internally which may occasionally prevent the construction of a good clausula.

(8) Significant differences exist in the internal rhythms of Symmachus' various works. The *Relations* and *Orationes*, both containing formal writings addressed to the imperial court or the senate, display a better *cursus mixtus* than the *Epistulae*, which were directed to family and friends. The occurrences of accentual and especially metrical forms are greater in the former works, and the rates of coincidence of accent and ictus are also much higher. We can attribute such differences to the varying stylistic expectations of the respective audiences; apparently, works delivered before the court and senate required a more sophisticated style.

(9) Far from being a work void of rhetorical trappings,<sup>19</sup> Palladius' *Opus agriculturae* contains final clausulae that are constructed nearly as well as those of Symmachus. We

<sup>19</sup> *OCD*<sup>2</sup>, 772, s.v. Palladius. R. H. Rodgers in his 1975 Teubner edition of Palladius states, xvif., that Palladius was a 'homo...eruditus et numerorum rationem numquam oblitus'. Rodgers may therefore be presumed to have used prose rhythms in drawing up his edition.



find the same high frequencies of accentual and metrical forms (91.3 and 89.2% respectively) and approximately the same percentages in the coincidences of accent and ictus.

Palladius' internal clausulae show a decidedly different trend. The occurrence of the standard accentual patterns (76.3%) is 15% less than in the final clausulae. Moreover, the *trispodaicus* is used more frequently, which suggests that Palladius did not aim for a strict accentual system internally. The percentage of metrical forms is startling: only 56.8% of the internal clausulae contain a standard metrical form. According to our statistical models elaborated elsewhere,<sup>20</sup> this percentage is exactly what we would expect to observe in accentual clausulae void of metrical tendencies (chi-square = 0.53; critical value at the 95% level of significance = 3.84). Palladius has therefore neglected metre altogether and employs only accentual clausulae at the internal position. In a space of 200 years prose rhythms have experienced a complete revolution: from the late second century, when metrical clausulae had no accentual orientation, to the late fourth, when accentual clausulae can stand alone with no metrical properties.

As we have demonstrated above, the later authors who display a stricter adherence to the *cursus mixtus* in the final position – Symmachus, Palladius and, to a lesser extent, Arnobius – are to varying degrees less concerned with an internal system of clausulae. The reasons for such a transformation would seem to lie in the dynamics of the evolving *cursus mixtus*, in which a premium was placed on fewer typologies highlighted in the final position. The corollary of this premise is that such authors deliberately depreciated internal clausulae or responded to rhetorical or grammatical considerations that proved to be constraints in the formation of internal rhythms. A few examples from Symmachus will illustrate the operation of such constraints.

At Symm. Or. 1.22, a penultimate clause ends with *ad vincendum visus est*, which contains no standard rhythm. The following terminal clause, *cui auxilium non tulisti*, however, has the standard ditrochee under the *velox*; inasmuch as one syllable (if elision between *cui* and *auxilium* is observed) separates the end of the internal clausula and the beginning of the final *velox* pattern, it is likely that Symmachus did not strive for an internal rhythm because of its close proximity to the final clausula. Likewise, at Symm. Or. 1.15, we read '... tales sibi terras eligunt, qui ut subveniat eliguntur'. Here the final clausula has a ditrochee under the *velox* (*subveniat eliguntur*), but the internal rhythm, separated from the final clausula by but two syllables, contains no standard metrical or accentual forms (*terras eligunt*). A simple reversal of *terras* and *eligunt* would have achieved a cretic-spondee under the *planus*. Again, the reason for avoiding rhythm at the internal position could be the proximity of internal and final clausulae. But there may be an even stronger motive. In this passage, the orator is discussing Valentinian's timely elevation of Valens to the principate. The word denoting the elevation is *eligere*, which is emphasised by repetition at conspicuous places in the clauses. Thus we may infer that Symmachus, content with the final rhythm, sacrificed an internal one for rhetorical considerations.

In a similar light we can often see Symmachus favouring balance and parallelism at the expense of internal rhythms. At Ep. 1.50 we read: '... ne tibi molestior sit prolixitas querellae nostrae, quam mihi brevitās epistolae nostrae'. A *planus* and trochee-cretic appears in the final clausula, while no standard metrical or accentual forms appear in the internal clause. A reversal of *prolixitas* and *querellae*, while producing a somewhat unusual word-order would not do violence to the sense of the passage and would effect a cretic-spondee under the *planus*. However, the obvious

<sup>20</sup> CP 79 (1984), 120ff.

balance of the two phrases (*prolixitas querellae nostrae* and *brevitas epistulae nostrae*) would then be lost.

The same type of parallelism can be seen at *Ep.* 5.22: '...preces oportet adhiberi, cum sola amici voluntas studium tuum debeat incitare'. The internal and final clauses are balanced by trisyllabic finite verbs followed by quadrisyllabic complementary infinitives; however, the internal clausula is a *trispondaicus* and a paeon-spondee, while the final one has a ditrochee under the *velox*. Again, a reversal of *oportet* and *adhiberi* would have produced a good standard rhythm (ditrochee under the *planus*), provided that we observe elision, which is the usual practice of Symmachus. On the other hand, the desire to avoid hiatus doubtless played a role in the absence of standard rhythms in other internal clausulae. For example, we find at *Or.* 2.19 the internal clausula *exspectabit Alamannia* (paeon-cretic, but no standard accentual rhythm), followed by the final clause *quam totus exercitus et mancipare novit et claudere*, which closes with a dicretic under the *tardus*. Reversing *exspectabit* and *Alamannia* would have produced a desirable *velox* only if hiatus were observed. But in a similar instance at *Or.* 1.18, a reversal of the words in *optavit Alamannia* would have produced, with elision, a cretic-spondee under the *planus*. In fact, it appears that Symmachus was fond of the word *Alamannia* positioned after a finite verb in internal clausulae, even if non-standard rhythms resulted. In this regard, we can adduce the internal clausulae *venit Alamannia* (*Or.* 2.16) and *vivit Alamanniae* (*Or.* 2.12), both of which would have rendered good rhythms (*planus*) if the word-order was reversed.

From the foregoing examples, we can easily conclude that Symmachus could have increased his frequency of internal rhythms, had he chosen to do so. That he was not so disposed is, as we have suggested, strong evidence that considerations other than rhythm came to be equally, if not more, important in the shaping of internal clausulae. With such constraints in place final rhythms took on added significance and received the full attention of the author.

Finally we can show definitively the progression of the role of the accent in late Latin prose rhythm. While we had previously surmised that accent gradually became the focal point of the clausula until it had completely overshadowed metre, we were unable to demonstrate this. Our study of internal clausulae has provided the crucial evidence.

In the second century A.D. prose rhythms consisted of the narrow canon of Ciceronian forms that had evolved in the previous two centuries.<sup>21</sup> Our samplings of the writings of Pliny the Younger, Quintilian, Apuleius,<sup>22</sup> and Tertullian indicate that metre was used by these authors exclusively. No accentual tendencies are discernible according to our statistical methodologies.<sup>23</sup> But in the first half of the third century, in the writings of Minucius and Cyprian, accentual rhythms are demonstrably present. As we have shown elsewhere,<sup>24</sup> accentual patterns first appeared in the clausulae of African authors so as to accommodate their audience, who would have appreciated rhythm structured along the natural word-stress but not artificial metrical patterns taken from Greek models. Thus prose rhythms, now containing both accentual and metrical forms, reflect two cultural worlds: the metrical tradition of the Asiatic-oratorical school that had permeated Latin prose for 300 years, and the author's

<sup>21</sup> L. P. Wilkinson, *Golden Latin Artistry* (Cambridge, 1970), 157ff.

<sup>22</sup> We exclude from consideration the works *De mundo*, *De Platone* and *Peri Hermeneias* which, as we have demonstrated elsewhere (*CP* 79 [1984], 122), contain accentual rhythms. The debate over the authenticity of these works is still raging. See our discussion in *CP* 79 (1984), 127 n. 35.

<sup>23</sup> *CP* 79 (1984), 122f.

<sup>24</sup> *Ibid.* 130.

contemporary audience, a laity that could take pleasure in recognising that metrical tradition as it was formulated in terms of the natural word-stress so familiar to them. The *cursus mixtus* therefore has two startling characteristics: it is revolutionary in that its origin is a purposeful accommodation of the needs of the general public, and it transgresses normal linguistic phenomena by becoming more complex, not simpler, in its rules and application. Equally surprising is the ease with which the rhetorical schools adopted the *cursus mixtus* as an integral part of their teachings on prose rhythm. This was doubtless facilitated by the fact that the standard accentual forms were accentual abstractions of the Ciceronian metrical system.<sup>25</sup>

Although accentual forms are present in the internal and final clausulae of Minucius and Cyprian, the metrical aspect of the clausula is still the more important. This is most clear in the internal rhythms: the metrical forms occur at the same rates of frequency, but the accentual forms are significantly lower. By the time of Arnobius, however, that is, two generations after Cyprian, the accentual patterns are now the dominant feature of the clausula. In the internal rhythms of Arnobius, the metrical patterns decrease significantly, while the accentual forms do not. This growing dominance of the accent culminates in Palladius, who ignores metre altogether in his internal clausulae. Such a phenomenon is soon to be reproduced by the church fathers of the late fourth and early fifth centuries, and will reach its acme in the *cursus* of the Middle Ages. In short, the internal clausulae of literary texts of the third and fourth centuries prove a linguistic change nothing short of remarkable: in the span of 150 years metre is entirely displaced by word-stress and ultimately passes into oblivion. We of course find metrical forms in the *cursus mixtus* of many writers of the fourth and even fifth centuries. But these metrical rhythms are anachronisms, intentionally preserved by archaists interested in a rhetorical praxis no longer valid in the world in which they lived.

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<sup>25</sup> Wilkinson, op. cit. 163, following E. Norden, *Die antike Kunstprosa*<sup>5</sup> (Berlin, 1898), ii. 951.