or components are most effective in the Latin hexameter? There are two possibilities: (a) the number of *ictūs* may be the same in both clauses, but their length, measured in *breves*, unequal; or (b) the lengths may be equal, but the number of *ictus* unequal. M. Cahen finds 49 types of (a), while those of (b) are few and infrequent. The penthemimeral caesura divides the line into parts which have the same number of *ictus*, but are related in length as 10 : 13 (13, on the doubtful assumption that the last foot should count as a trochee). This division is extremely frequent. The 'trochaic' caesura brings the parts nearer to equality (11 : 12 or 13), and is far less frequent (only seven instances in the *Metamorphoses*). Division after the third dactyl is a still closer approach to it (12 : 11, according to M. Cahen, but rather 12 : 12), and of this there are only five instances.

M. Cahen seems to take too narrow a view of his subject. There are advantages in looking at a thing through a microscope, but there are also disadvantages. He makes no allusion whatever to the forms taken by the hexameter in Greek, or to the possibility that the incidence of the Latin accent affected the choice of forms at Rome. Infrequency of the 'trochaic' caesura cannot be deduced from the structure of the hexameter, taken in the abstract; for that caesura

is *not* infrequent in Greek. Far from that, it is one of the chief causes why the Homeric is so unlike the Virgilian hexameter. In Latin the trochaic division of a dactyl made coincidence of accent and *ictus* inevitable (Iaside Palinúre—quaeque viae tibi caúsa—). Again, the infrequency of the division after the third dactyl is not due to 'equality' of clauses simply, but to the fact that equality with the clauses each containing three *ictus* is subversive of the principle of the verse. The *hypothesis* of the hexameter is that it is not constructed on the principle of putting equal clauses in juxtaposition; that is the principle of the pentameter, and of some other forms of metre. It was done before the *technique* of the verse had been mastered (Ennius: *spérniture orator bonus, horridus miles amatur*; Virgil's *pulverulentus equis furit, omnes arma requirunt* is a reminiscence of an older poet). Apart from this, it is not perfectly clear that the lines which M. Cahen discusses are divided where he supposes. *Nescit utro potius ruat | et ruere ardet utroque*; but there is a slight pause after *et* (hephthemimeral). M. Cahen himself seems to feel at the end (p. 120) that he has only been working out what is involved in the 'caesura.' It is rather a tabulation of facts than an explanation of them.

W. R. HARDIE.

THE CLAUSULA IN AMMIANUS MARCELLINUS.

The Clausula in Ammianus Marcellinus.

By A. M. HARMON. Transactions of the Connecticut Academy of Arts and Sciences. Vol. 16. Pp. 117-245. October, 1910.

MR. HARMON'S dissertation has been published separately under the auspices of Yale University. It possesses special interest in view of the very important edition of *Ammianus Marcellinus* by C. U. Clark, Professor at the same University, the first volume of which, containing Books XIV.-XXV., also appeared in 1910. C. U. Clark has introduced into his text the notable

innovation of punctuating his author according to the *numeri*, i.e., according to delivery, not grammatical construction. He says of his work *recensuit rhythmicæque distinxit*, and in his Preface lays down in a few words the principles followed by the author. Harmon has written a valuable monograph, in which he has made very considerable additions to our knowledge of prose-rhythm at that interesting period when *numeri* based an stress-accent took the place of their metrical predecessors.

The only reference to C. U. Clark's edition in this treatise is on p. 236, where it is said to be in course of pub-

lication: although on two occasions there is a reference to his previous work on 'the text-tradition of Ammianus,' and once a conjecture of his is mentioned. As in the preface to C. U. Clark's work we find among those who have co-operated, *Harmon, Austin M., discipulus in seminario Clarkii Ammiano*, we should have expected from Harmon a precise statement concerning the extent of his obligations.

The laws of prose rhythm at this period were first laid down by W. Meyer of Speyer in his review of L. Havet, *La Prose métrique de Symmaque*. I state them as briefly as possible. Roman writers, following in the steps of Greek predecessors, showed a marked preference for three forms of cadence, in which the cretic plays a predominant part, viz.:

1. ˘ — — ˘, e.g. *móрте vicístis*.
2. ˘ — — ˘ — ˘, e.g. *céssit audáciae*.
3. ˘ — — ˘ — ˘ — ˘, e.g. *gáudium pervénire*.

i.e. cretic + trochee, cretic + cretic, cretic + double trochee. (The last syllable is always *anceps* as in verse.)

This preference became more marked in course of time, and finally in writers like St. Cyprian and Symmachus the three forms become almost invariable. The next stage is reached when stress-accent came in and quantity was ignored. The result was what Meyer terms a *cursus mixtus*, *i.e.* where some of the clausulae are correct metrically as well as accentually, while others are based on accent only. Thus *móрте vicístis* and *génus húmánúm*, *céssit audácia* and *bóna remédia*, *gáudium pervénire* and *gáudia pervénire* are found side by side. The accentual clausulae at a later date became known as the *cursus planus*, *tardus* and *velox*, and rules for their use were drawn up by Gregory VIII. and others in the twelfth century.

The prose of Ammianus is especially suitable for a study of this singular development, and Harmon's treatise may be recommended without reserve to any students who are willing to consider the facts.

Harmon has examined the clausulae at the end of the sentences in nine books of Ammianus, 1181 in number,

and all clausulae, *i.e.* those at the end of the *κῶλα*, or clauses, as well as at the end of the sentences, in Book XXI., 1462 in number. He has printed Book XXI. in full with all the clausulae marked, a method which should carry conviction to anyone who approaches the subject with an open mind. He agrees with other writers in the conclusion, which is indeed necessary, that there is no essential difference between the *numeri* of the sentence and the *κῶλον*. The same rhythms predominate in both. It may be doubted whether he does not go too far in seeking to remove the rarer rhythms. Thus for *spectántibus et vílibus* (XXX. 6.3), he proposes *spectándus et vílibus* 'to better the rhythm.' It should be noticed, however, that

-tántibus et vílibus is a very fair metrical clausula, viz. Zielinski's 2 *tr.* in which a choriambus takes the place of the cretic in the base (239 examples in Cicero's speeches). All accentual clausulae are developed from metrical predecessors, and I do not see why 2 *tr.*, which still survives in the metrical prose of Symmachus, should perish wholly *ἄπαις*. Also, in other writers of the period, e.g. St. Jerome, we find now and then among the accentual clausulae a sprinkling of others which can only be classified by the metrical method. The *cursus mixtus*, as Meyer calls it, belongs to a period of transition.

Harmon's minute study of Ammianus has enabled him to reach several interesting conclusions. Thus, he tells us that the author, while in accented syllables he is wholly indifferent to quantity, in unaccented syllables observes quantity, when due to position. The question is too technical for discussion here, but the point appears to be made out. Great light is thrown upon questions of accentuation by the clausula. Thus, Ammianus appears to have accented *adhúc*, *súbinde*, *déinde*, *déinceps*, *quílíbet*, *quovís*, *hoc módo* (but *húiúsmodi*). It appears that a short final vowel, e.g. *ă* or *ě*, when followed by *-que* takes the accent. Greek words, as is also pointed out by C. U. Clark, generally keep the Greek accent, e.g.

σύριγγας appellāmus (= 3), *Abdera visitur* (= 2), *apud Plātonem lēgitur* (= 2), *fūrias Eūmevidas* (= 3), *βασιλέα et reliqua* (= 2), *ātque Cyclādas* (= 1).

He compares the scansions *Cyclādas*, *Arātus*, *emblemā*, *problēmā*, *idōlum* in the verses of Venantius Fortunatus.

The most surprising statement, of which Harmon says that 'at first sight it seems almost incredible,' is that in the combination *qu* the letter *u* may count as a syllable. In the case of some words this is said to be the regular practice: thus *equus*, *aqua* and *quies* are always treated as trisyllables. The

scansion *āquā* is indeed found in Lucretius (VI. 552, 1072) and in Ennius, and Lindsay has remarked in reference to the scansion of *loqui* in Plautus that 'possibly it sounded to Plautus as something like a trisyllable.' It is, however, more surprising to be told that the same principle applies to *qui*, *quibus*, etc.; also that the *u* not only counts as a syllable, but also bears the accent. It would be interesting to know if C. U. Clark in his *rhythmica distinctio* of the author takes the same view.

Harmon emends a number of passages in the light of his conclusions. It may be remarked that in some passages where he says *scripsi*, the correction appears from C. U. Clark's

notes to be the reading of one of the inferior MSS., or of an early editor. Several emendations of other scholars are shown to be supported by the rhythm, which is also decisive in sundry questions of punctuation. The supplements of Gelenius, the authenticity of which has been doubted, are vindicated by the rhythm, and therefore must have been taken from the lost Hersfeld MS., fragments of which now survive at Marburg. Perhaps the most interesting service performed by the new test is to show that the speeches in Ammianus are the composition of the author himself. This is true even of the warning of Procopius to Ursicinus (XVIII. 6. 18), which is said to have been written *notarum figuris*, i.e. in cipher. Harmon gives some amusing examples to show that Romans and barbarians alike, even soldiers on the field of battle, all use the cadences which Ammianus affects and use them in the same proportion. He refers to the view of Glover 'that Ammianus, unlike other Latin historians, does not *make* speeches for his characters to deliver,' and says triumphantly 'so unequivocal is this evidence that I should as soon think of maintaining the authenticity of the speeches in Virgil as of those in Ammianus.'

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SOME NEW WORKS ON PROPERTIUS.

- (1) *Sex. Propertii elegiarum Libri IV. recensuit CAROLUS HOSIUS*. Pp. xiv + 190. Leipzig: Teubner, 1911. M. 1.60 unbound; M. 2 bound.
- (2) *Ad Propertii Carmina Commentarius Criticus*. By P. J. ENK. Pp. xi + 365. Zutphen: W. J. Thieme et Cie., 1911.
- (3) *The Manuscripts of Propertius*. By B. L. ULLMAN. *Classical Philology*, VI. 3. Pp. 282-301. July, 1911.
- (4) *Propertiana*. By B. O. FOSTER. Matzke Memorial Volume. Pp. 100-110. California: Stanford University, 1911.

DR. HOSIUS has produced a highly conservative text of Propertius for the Teubner series, replacing the somewhat unsatisfactory recension by L. Müller. He adopts the now generally accepted views of Baehrens as to the relative value of the MSS., though, following Postgate, he admits the *Codex Holkhamicus* (L) to a well-deserved place beside the *Cod. Vossianus* and the *Cod. Laurentianus*. I have no wish to traverse this view in detail, though I regard it as doubtful, especially after reading Richmond's article, entitled 'Toward a recension of Propertius' (*J. Phil.* 31, 163), whether D and V are genuinely entitled to so important a place in the *Apparatus*