## LATIN PROSE RHYTHM

BROADHEAD

Digitized by the Internet Archive in 2008 with funding from Microsoft Corporation

# Latin Prose RhyTHM 

A NEW METHOD OF INVESTIGATION

BY
H. D. BROADHEAD
M.A. (Cantab.), Litt. D. (Nov. Zel.)

Late Scholar of Trinity College, Cambridge

CAMBRIDGE:
DEIGHTON, BELL \& CO., LTD.
1922

$$
\begin{aligned}
& P A \\
& 2340 \\
& 37
\end{aligned}
$$

630006
292.56

## C. E. BEVAN-BROWN, M.A. (Oxon.)

## CVIVS DOCTRINA

LATINIS GRAECISQVE IMBVTVS EST LITTERIS

HVNC LIBELLVM

GRATISSIMVS DEDICAT QVONDAM DISCIPVLVS

## PREFACE.

"The subject of prose rhythm," writes Professor A. C. Clark,* "is one upon which much has been written of late years by investigators who differ widely in their theories and methods. It, therefore, is highly controversial, and a writer who puts forward a view of his own must possess some boldness." In view of the severe handling to which most works on this subject have been exposed, one might well hesitate before rushing to what seems a predetermined doom. But; as Professor E. A. Sonnenschein says, $\dagger$ "the whole question is in the melting-pot", and by subjecting it still further to the fires of criticism the alchemist may hope for a successful result.

I have read carefully all the more important contributions to the subject of ancient prose rhythm, especially the works of Zielinski, Zander and De Groot. While great services have been rendered by such investigators, the want of unanimity among competent scholars shows that there is still a secret to discover. To unfold what I believe to be the secret is the main object of this book. Chapters I-II deal with the classification of sentences and with their constituent word-groups or "kola." Chapter III shows how the rhythm of such word-groups is to be examined, and endeavours to prove (a) that in both Latin and Greek, words have an inherent rhythm, and (b) that in Latin this inherent rhythm is enforced by a stress accent. Chapter IV treats of minor details of accentuation, elision, etc., while in Chapters V-VI are to be found the results of applying the new theory to Cicero's oratorical prose. The clausula, or end of a

[^0]period, is distinguished from the end of a "membrum" and from the end of an "articulus", and the "internal" feet, which precede the final combinations in each case, are also investigated. Zielinski's tables in "Das Clauselgesetz" furnish the material for Chapter V, while for Chapter VI I have myself made a complete analysis of several of Cicero's speeches, so as to discover the broad rhythmical tendencies of the obscurer parts of the sentence.

The writers most frequently referred to are Zander and Zielinski, each of whom has contributed much of permanent value to the study of Latin Prose Rhythm ; but it is Zielinski to whom I am most indebted. To his inspiring works I owe my first interest in the subject, and much as I am compelled to differ from him in the following pages, I think my obligations have always been made clear. Zander's volumes have been useful chiefly on account of his exhaustive study of what the ancients have to say on rhythmical questions, though such criticisms as I make of Cicero and Quintilian are entirely my own, and due to an independent study of their writings.

To the two British scholars mentioned above I would also record my obligations. The articles of Professor Clark* in the "Classical Review", and the critiques of Professor Sonnenschein in "The Year's Work in Classical Studies" have been especially helpful in keeping one domiciled in the Antipodes in touch with current literature on the subject. I am glad to note that Professor Sonnenschein (in "The Year's Work", 1914, 1916) expresses similar views to my own on the place of accent in the rhythm of Latin prose.

[^1]Though my attention has been confined to Cicero's speeches,* my method is applicable to all Latin prose-writers, whether they are supposed to be "rhythmical" or not. All prose must in some sense be rhythmical, since, as Quintilian says (IX 4, 61), "neque loqui possumus nisi syllabis brevibus ac longis ex quibus pedes fiunt."

Finally, I desire sincerely to thank all those gentlemen who have generously subscribed towards the cost of printing this book; for their encouragement and support I am very grateful.
H.D.B.

Canterbury College,
Christchurch. N.Z.,
September 11th, 1922.

[^2]
## TABLE of Contents.

PAGE
Chapter I: Distinctio Maior ..... 1-25
Chapter II: Principles of Kolometry.. .....  26-34
Chapter III: Numeri et pedes ..... 35-47
Chapter IV: Accentuation, Elision, \&c. ..... 48-65
Chapter V: The Clausula .....  66-100
Chapter VI: Membra and Articuli .....  . 101-137


## Chapter I.

## DISTINCTIO MAIOR.

Before the investigator of Latin Prose Rhythm can begin the task of collecting statisties, there are, as Zander rightly insists (III iv), two important preliminary questions that demand his careful attention; they are, "ut et numeros veros reddamus pronuntiando, et vera utamur distinctione membrorum." To a consideration of these the first four chapters of this work are devoted; for I feel that Zander's treatment of distinctio is unduly influenced by his theory of "rhythmi congruens iteratio," while his hypothesis of a word-ictus in prose seems to me untenable. Now, although some of the statements of ancient writers that have dealt with this subject of prose rhythm are of little value, yet I have found much that is useful and suggestive, and that directly supports my own views. I begin with some quotations from Cicero.

That there is a certain rhythm about prose our instinct assures us (esse ergo in oratione numerum quendam....indicat sensus, Or. 55,183 ) ; but rhythm does not consist of an uninterrupted stream of words ; there must be breaks or pauses within the sentence (clausulas enim atque interpuncta verborum animae interclusio atque angustiae spiritus attulerunt, ib. 181; continuatio verborum....articulis membrisque distincta, ib. 186; cf. Or. 16, 53, distincta et interpuncta intervalla). Cicero insists repeatedly on the necessity of having a well-articulated sentence, a body with limbs (membra) of appropriate length: efficiendum est nobis ne fluat oratio... ut membris distinguatur.. . saepe carpenda membris minutioribus oratio est. quae tamen ipsa membra sunt numeris vincienda (De Or. III. 190 f.). Although the language is somewhat vague, we can be reasonably
certain that these "intervalla" refer not only to clauses, but also to groups of words forming part of a clause or sentence. What Cicero means by "membrum" may be seen from the following passages: Or. 213 f .-"tu solebas dicere sacram esse rem publicam"; here, he says, we have two membra, each of which is composed of three feet, so that the pause occurs between "dicere" and "sacram". Or. 223-"cur de perfugis nostris copias comparant contra nos?"; this is a "comprehensio" or period (a short one it is true), and it also is composed of two membra (contrast Zander's remarks I 211). So also ib. 225 ff., where Cicero tells us that a period cannot be composed of fewer than two membra, and gives as another example, "quem, quaeso. nostrum fefellit ita vos esse facturos?". The "membrum". then, was a group of words after which there was a pause, which might be slight or considerable according to the context; e.g., in the following examples quoted by Cicero ib., the pauses are greater than in those given above-"incurristi amens in columnas, in alios insanus insanisti"; "o callidos homines, o rem excogitatam, o ingenia metuenda!" Further, from Or. 205, we learn that these "membra" or "particulae" must be varied in length (omnibusne numeris aequaliter particulas deceat incidere, an facere alias breviores, alias longiores....quaesitum est).

Such "membra" or "kola" I consider to be rhythmical wholes, which correspond to the natural phrasing or grouping of words. Zielinski (Der constructive Rhythmus in Ciceros Reden) divides the sentence into "kola", but they are largely artificial units, the length of which is often determined by the self-imposed necessity of finding everywhere the cretic-trochaic rhythm. De Groot, in his desire to give a perfectly objective presentation of facts, ignores entirely any sense-groups, and so neglects that which alone makes speech intelligible and rhythm possible.

Now, at the end of each sense-group there is usually a pause. which may vary in duration and importance according to its place in the sentence. Of such places we distinguish four: ( $a$ ) the clausula or end of a "period": (b) the end of a short simple sentence (cf. ко́ $\mu \boldsymbol{\alpha}$ and incisum); (c) the end of a "membrum"; (d) the end of an "articulus". This fourfold division I shall now proceed to explain and justify; for I take it to be a fundamental rhythmical principle that the slighter the nature of the pause, the greater was the liberty of employing various combinations of feet.
(a) Although there is no reason, as Prof. A. C. Clark says (Classical Review XXX, p. 23), why the term clausula should not be applied to the end of every kind of kolon, yet it will be convenient to confine it to the end of a period. We must now ask what exactly is a period. The definition suggested by the derivation of the Greek term $\pi \epsilon \rho i o \delta o s$ and its Latin equivalents "ambitus", "circuitus", "circumscriptio", etc. (cf. Orator 204), would rule out many sentences that are nevertheless termed periods. Cicero says that a well-balanced period consists of four membra (Or. 221), and that no period can have fewer than two membra (ib. 225). We find the same statements in Quintilian (IX 4, 125), and in Demetrius de eloc. 16. But in section 17 Demetrius speaks also of "simple" periods, which consist of a single member, of the requisite length and rounded at the end. Again, in section 11 (Roberts' translation) we read: "It may be said in general that a period is nothing more or less than a particular arrangement of words. If its circular form is destroyed, the subject-matter remains the same, but the period will have disappeared.' Since, then, the term period was used very loosely, I feel justified in applying it to all sentences that contain more than one kolon, and that are followed by a decisive pause. A sentence that contains only one kolon I class under $(b)$ below.

Such a classification will at any rate have the merit of simplicity, and will cover all the different kinds of sentences described by the ancients as periods. We must now consider certain difficulties that arise in connection with the nature of the pause.

After most periods we find in our texts a full-stop, which shows that the meaning of the sentence has been fully expressed; if, however, we find a lesser mark of punctuation, doubt may sometimes arise as to whether the train of thought is really completed or not. Take the following passage from Cic. in Verr. II 44, 117, quoted by Quintilian (IX 4, 70) : non vult populus Romanus obsoletis criminibus accusari Verrem: nova postulat, inaudita desiderat. Q. says that, in spite of the natural division, the first sentence is really very closely connected with what follows, so that "inaudita desiderat" contains the clausula, not "accusari Verrem" (salvus est cursus). Now, there is no hard and fast rule that we can apply to all such cases, and it is inevitable that the individual judgment should be exercised on occasion. Still, in order to show my method of procedure in collecting the statistics for Chapter VI, I here discuss briefly the chief types of sentences that are sometimes to be considered as periods, sometimes as membra (for the latter see below ( $c$ )).
E. Mueller in his dissertation (De numero Ciceroniano, p. 45 ff.) remarks that often two sentences are so closely connected with each other that they may be regarded as one, especially where we find the conjunctions nam, enim, igitur, autem, etc. The true period has this characteristic, "ut sit in se perfecta atque absoluta, ideoque vocem in fine descendere et quasi requiescere necesse est". This, I believe, is the right view, though Mueller does not lay down any definite principles, and confesses himself to be in doubt about such sentences as are followed by others beginning with the particles nisi, nisi forte, quasi, quanquam, etc. (ib. p. 47). Zander (I 360) applies the
term period to "enuntiata primaria atque absoluta", but includes in these clause-equivalents, even when introduced by participles, and quotes in illustration the opening sentences of Plato's Republic and Thucydides' History. Such treatment may accord very well with Zander's theory of prose rhythm, but we are obliged to reject it, since we must distinguish, as has been done from the times of Cicero and Quintilian, between the end of a sentence and the lesser pauses that occur within it. Zielinski ( I 7) says that we cannot define precisely what a period is, and in his own case he was guided by his "rednerisches Gefühl'". In Chapter V I have used Zielinski's tables on the assumption that his instinct was in the main correct; and though, as he himself confesses, some "Sätze" may have slipped in, yet the numbers are so large that we cannot fail to have a pretty accurate idea of the rhythms prevailing in the clausula.

The general principle I have followed is that quoted from Mueller above : if two sentences are so closely connected that the second is necessary to complete the meaning of the first, the two form one period; if, however, the second is loosely added and the first is not merely preparatory to it, then we have two periods.
(i) Sentences connected by "nam" or "enim" (the examples quoted in this discussion of the clausula are, unless it is otherwise stated, taken from the "Planciana'"). Pl. 22 '24-omnia quae dico de Plancio dico expertus in nobis; sumus enim finitimi Atinatibus, where, if we had "quandoquidem sumus', there would be a loose period ; 13 18-desiderarunt te, inquit, oculi mei, cum tu esses Cyrenis; me enim quam socios tua frui virtute malebam; cf. 96 14, etc. Contrast with these the following examples, where there are two periods: 13 20-sitientem me virtutis tuae deseruisti ac reliquisti. Coeperas enim petere tribunatum....where, as in I 14,2316 , the Oxford text prints
a full stop. But in other cases, though a semicolon is all the punctuation required, yet the connection is so loose that we must. I think, assume two periods; e.g., 77 21-cui quidem ego.... numquam dissimulavi me plurimum debere semperque prae me feram; nullas enim sibi ille....contentiones....defugiendas putavit; 36 27-in qua tu....omnes ambitus leges complexus es ; neque enim quicquam aliud....es secutus.
(ii) Relative Clauses: 61 21—rogas quae castra viderit; qui et miles....fuerit et quaestor....transferre maluerit, where the pause between the two sentences is the very slightest; 2716 -fuit in Creta....miles huius Q. Metelli; cui cum fuerit probatissimus....omnibus esse se probatum sperare debet, where the connection is not quite so close, but sufficiently close for us to regard the two sentences as one period. Cf. 23 13-adiungamus ....patrem publicanum; qui ordo....; 87 3-at erat mecum cunctus equester ordo : quem quidem . . . .saltator ille. . . . terrebat. But in Lig. 24 -itaque Ligarius. . . . provinciam accepit invitus; cui sic praefuit in pace ut....there are two periods, as also in the following: Planc. 8712 -....armis, inquam, fuit dimicandum; quibus a servis....caedem fieri....exitiosum fuisset; 93 22 -si horum ego nihil cogito....tamenne libertatem requires meam? quam tu ponis in eo si....; 31 17-pater ut apud tales viros obesse filio debeat? qui si esset turpissimus.... ; 72 12mihi.... parum iustae necessitudines erant.... patris amicitiae? quae si non essent....Cf. also 74 11; 89 1; 9027 ; 985.
(iii) Alternative clauses introduced by si . . . .sin. If the first condition is so expressed that its statement keeps us waiting. as it were, in suspense for the second, then we have only one period; thus, 1125 -honores si magni non putemus, non servire populo; $\sin$ eos expetamus, non....cf. 3522 -si sortis, nullum crimen est in casu; si consulis....If the speaker emphasised one word, his hearers would naturally be expecting an antithesis (see next
heading). So 84 20-si locus habet.... ansam aliquam, nescio cur....putes....si spectanda causa est.... Where, however, the second sentence is not necessarily implied by the first, we have again two periods: 9110 -si quis putat....nonne desino incurrere in crimen....? Sin autem....respicio etiam salutem $\ldots$ (where the Oxford text prints a capital) ; 35 20-si in eo crimen est quia suffragium tulit, quis non tulit publicanus? si quia primus scivit....; 6 11—si cedo illius ornamentis.... recipienda suspicio est ; sin hunc illi antepono....cf. $463 ; 8926$; 10111.
(iv) Enumeration of clauses.-If the clauses are simply "membratim dicta" as in Cicero's "incurristi amens" etc. (quoted above p. 2), the last only of the series contains the clausula; if, however, the first sentence has the form of a period, the addition of other clauses does not change its status. Thus, Pl. 42 7-cum enim has tribus edidisti, ignotis te iudicibus uti malle quam notis indicavisti; fugisti sententiam legis.... reiecisti....maluisti, where "indicavisti" ends the first period and "maluisti"' the second. So with a series of questions: 3426 -quae enim unquam Plancio vox fuit contumeliae potius quam doloris? quid est autem questus.... cf. 805 . In 7415 (nolo cetera quae a me mandata sunt litteris recitare; praetermitto....) the second clause is explanatory of the first, so that there is only one period. In 9412 (ego vero haec didici. haec vidi, haee scripta legi; haec de sapientissimis....viris....prodiderunt) the anaphora of "haec" shows the close connection of the clauses, and prevents our assuming a clausula before the semicolon. Contrast however, vidit....vidit 5115 , and "multi". ..." ${ }^{\text {' }}$ multi"' 5524 , where the connection is not close. In $243-5$ we have two pairs of membra, each pair having its own clausula. Where complex sentences are enumerated each is a period, e.g., 6810 -nam qui pecuniam dissolvit, statim non habet id quod reddidit; qui
autem debet is retinet alienum ; gratiam autem....cf. also 8624 ; 101 17; 103 10; Lig. 721 ff. These remarks apply also to a series of infinitive clauses in Oratio Obliqua, e.g., Pl. 12 6supplicari.... praetulisse.... 304 -ductum esse.....aliquem.... quod non crimen est, sed....mendacium; raptam esse mimulam.....
(v) Exclamatory phrases are sometimes "membratim dicta". as in "o callidos homines", etc. (quoted above, p. 2), and Planc. 1015 -o excubias tuas....o flebiles vigilias, etc.; but they may also be equivalent to periods, as in $9917-0$ rem cum auditu crudelem tum visu nefariam! o reliquos omnes dies noctesque quibus.... perduxit!
(vi) Parentheses.-These have clausulae only when they are of sufficient length to rank as periods, e.g., Pl. 8710 :....nam profecto....numquam quo ceteri saepe abundarunt, id mihi ipsi auxilium meum defuisset-Lig. 185 -quanquam hoc victore esse non possumus; sed non lorquor de nobis. de illis loquor qui occiderunt-.....
(vii) Sometimes the answer to a question concludes a period, as Zielinski (I 7) observes: "wo ein längerer Fragesatz kurz beantwortet wird, ergeben erst Frage und Antwort zusammen eine Periode'". But any short clause or membrum may thus close the period ; thus, Lig. 68 -cuius ego causam animadverte, quaeso. qua fide defendam: prodo meam; Lig. 17 28-alii errorem appellant, alii timorem ;....scelus praetor te adhuc nemo.

This brief discussion must suffice, since I am concerned simply to show the broad principles that underlie my classification of sentences. My aim has been to find out when the meaning of a sentence is fully expressed, as at the close of such sentences it seems probable that the rhythms would be chosen (consciously or unconsciously) with equal care, whether the clausulae are those of the technical "period" or not. That these principles have
been consistently followed is clear from Chapter VI，p．103，where it will be seen that in the speeches examined the proportion of clausulae to membra and articuli remains practically constant．
（b）To this head we refer those short sentences that are to be found，as Cicero says（Or．225），in＂incisim et membratim trac－ tata oratio＇，In these，too，he asserts，the endings must be suit－ able（quae incisim aut membratim efferuntur，ea vel aptissime cadere debent）；but he goes on to say that the very brevity of the incisa allows of much greater freedom in the matter of rhythm（brevitas ipsa facit liberiores pedes）；for we often use one foot for an incisum，at other times one and a half，two，two and a half and，as a rule，not more than three．So，when need be，we must drop the periodic structure and express our thoughts in short，forcible sentences（ $\sin$ membratim volumus dicere， insistimus．．．．ab isto cursu．．．．facile nos et saepe diiungimus）． From the examples given by Cicero it is clear that a＂membrum＂ in such＂membratim tractata oratio＂is a short，complete sen－ tence（cur clandestinis consiliis nos oppugnant？incurristi amens in columnas，in alios insanus insanisti－o callidos homines，o rem excogitatam，o ingenia metuenda－testes dare volumus）．But such＇membra＇＂as are not followed by a full stop we classify under（c）below，and refer to this present head only such isolated ＂＇membra＂as＂testes dare volumus＂．The ко́ $\mu а ⿱ 亠 䒑 𧰨$ or＂in－ ＂cisa＂are composed either of single words（e．g．，diximus）or of extremely short sentences of two or three words that often go together in pairs（e．g．，missos faciant patronos；ipsi prodeant－ domus tibi deerat？at habebas；pecunia superabat？at eqebas）． These definitions do not agree with those given by Quintilian and some of the Greek writers on rhetoric ；so that the confusion is similar to that noticed in the case of the period．Whichever definition，however，is technically more correct matters little to the present investigation．It is sufficient in the meantime to note

Cicero's statement that the rhythms of such ко́ $\mu$ ала and "membra" (in the sense of complete, isolated sentences) differed in the main from those of the clausula.
(c) So far we have been considering the very definite pause that marks the interval between one sentence and another; we have now to see what pauses occur within the body of the sentence. Whether there are what Cicero (Orator 53) calls "distincta et interpuncta intervalla" will depend largely on the length of the sentence (cf. ib. morae respirationesque), though, as we shall see, a pause is not always due to "angustiae spiritus". The most parked pause within a sentence is usually that which occurs at the end of a subordinate clause (when it is a "membrum", see below), and is indicated as a rule by some sign of interpunction (comma, colon, or semi-colon). But here arise difficult problems ; is not a pause of equal importance to be found at the end of certain phrases that contain no finite verb at all? and how are we to distinguish the greater and the lesser pauses? This difficulty was felt by Zielinski (II 23), who distinguishes between "Sätze" and "Binnenkola", but frankly admits that there are no a priori criteria upon which to base the distinction (wo ein Grenzgebiet in Frage kommt . .muss die Entscheidung discretionär sein). He points out that in the case of Binnenkola the pauses are not always of similar character: "die Schattierungen sind ungezält, keine noch so feine Scala kann sie alle umfassen'. Zander, too, distinguishes between "membra primaria" and "membra secundaria"" (or articuli), since the "membra" "non in pari sunt gradu omnia collocata" (II vi). But while Zander indicates where we are generally to assume an "intervallum', he does not help us to distinguish the two grades of interpunction, as this distinction is irrelevant to his enquiry, and is, besides, "sane lubricum....et multis erroribus controversiisque impeditum'" (I 189). Do these practical difficulties,
then, justify our neglecting this distinction? Let us consider what this would mean. It may be taken as axiomatic that the more marked the pause, the greater is the necessity for employing the "better" types of feet. In the longer membra at any rate there will be a species of rounding differing from that at the end of the period not in kind, but in degree. We can readily understand with Cicero and Quintilian that less care need be bestowed on the "media orationis"; for it is mostly at a distinctly felt pause that we are sensible of rhythm. If, then, in our statistics we abandon the distinction between "membra" and "articuli", we shall be tacitly admitting that except in the clausula the author employs his rhythmical combinations throughout the sentence indiscriminately. This view is not only in itself highly improbable, but is soon refuted by observation of the facts. On examination we find that the rhythms at the end of subordinate clauses followed by a sign of interpunction differ considerably from those occurring at the end of phrases after which there is no such pause, as well as from the internal combinations described in Chapter VI. Zielinski (II 52) expressed this truth in his "Stufengesetz", although, owing to his failure to distinguish satisfactorily between the Satz and Binnenkolon, his statistics are not altogether reliable.

We must, then, discover some method of classifying the inner parts of the sentence. The classification cannot depend entirely on the nature of the pause, as this is too elusive and subjective a phenomenon, and further would not always be a safe guide. For instance, a considerable pause may occur after a part of a clause separated from the rest by the intervention of another clause, and yet we should not regard the fragment as a membrum ; e.g., Quintus enim Ligarius, cum esset nulla belli suspicio, ....profectus est. The first three words here form an "articulus". So also "ut mihi Tubero" in the following: "haec
propterea de me dixi, ut mihi Tubero, cum de se eadem diceret, ignosceret". Further, we must bear in mind that, so far as mere pause is concerned, membra gradually shade off into articuli, which in their turn come to be scarcely distinguishable from the most closely connected words (cf. Zielinski, I 7-es ist eine unmerklich stufenweise Gradation die vom Redeschluss bis zur Commissur zwischen zwei engverbundenen Silben führt). Now, since we must grant that it is absolutely impossible to measure mathematically the length of the pauses after the various kola and to class them according to the infinitesimal differences of pause-and even if we could, how could the rhythm be examined on such conditions?-the very most we can reasonably be expected to do is to divide the kola themselves into such classes as have some objectively clear mark of pausal differentiation. I have determined to abide by the usual classification into membra and articuli (what Zielinski calls Satz and Binnenkolon, Zander membra primaria and membra secundaria), but to state more specifically than appears to have been hitherto done what distinguishes the one class from the other. The simplicity of this division has a much higher degree of psychological probability; for we can hardly suppose that the orator, consciously or unconsciously, adapted his rhythms to the innumerable distinctions of pause.

The definitions and explanations of the ancient writers (discussed fully by Zander I pp. 185-215) do not help us here to distinguish clearly between membra and articuli; for with them "membrum" or "kolon" seems to have been a generic term, being applied by some to a clause only (sensus finitus), by others to part of one "sensus". What is clear, however, is that they regarded a clause followed by a distinct pause as the prototype of our membrum. As the majority of membra are such
subordinate clauses, we must make them the basis of our discussion. What are their chief characteristics? (i) We have a sensus per se finitus, and therefore in most cases a verb expressed or understood; (ii) following naturally from this, a marked pause, usually indicated in our texts by a comma; (iii) if the clause is of some length, we expect to find the rounding ( $\kappa \mu \pi \eta$ ) referred to above (p. 11).

Now, that we must admit as membra phrases that do not satisfy all the above conditions is easily shown. Take the following sentence from In Verr. 12 (the brackets indicate the end of a membrum) : adduxi enim hominem in quo reconciliare existimationem iudiciorum amissam) (redire in gratiam cum populo Romano) (satisfacere exteris nationibus possitis) (depeculatorem aerari) (vexatorem Asiae atque Pamphyliae) (praedonem iuris urbani) (labem atque perniciem provinciae Siciliae. In the latter part of this sentence we have four appositional phrases in every way parallel to one another; the last, which contains the clausula, differs from the others only in position. But we cannot conclude that all appositional phrases are membra; it will depend on their context and setting, on their position of relative importance. It is just these differences of position that make it difficult to give any formal, universally valid rules for the classification. Then in place of the finite verb we may find infinitives and participles: so "reconciliare".... "redire"....""satisfacere" above, and in the same section: reus in iudicium adductus est G. Verres) (homo vita atque factis omnium iam opinione damnatus) (pecuniae magnitudine sua spe et praedicatione absolutus (cf. ib. $11 \quad 131316 ; 1117$ ff.; 29 21, etc.). Then a mere prepositional phrase may be equivalent to or parallel to a clause : cf. ib. 2-nunc in ipso discrimine ordinis iudiciorumque vestrorum) (cum sint parati qui.... conentur. Some clauses again may be too short to allow of
rounding, e.g., Lig. 10, 20 -nam si vidisset) (....maluisset, while others may be so small that they are followed by no pause at all (see (I) infra).

Zielinski seems to class under "Sätze" every kind of clause, while many phrases that show quite as much pausal distinction as some clauses are classed among the "Binnenkola". Thus, in the first section of the Ligariana, "idque Gaius Pansa, praestanti vir ingenio, fretus fortasse familiaritate ea quae est ei tecum, ausus est confiteri", the clause equivalent "fretus....ea" is regarded as a Satz, while "praestanti," etc., is taken to be a Binnenkolon. Such a classification is based on a formal grammatical distinction that really in many cases leaves out of account what seems to me to be a fundamental rhythmical principle; for the nature of the pause will depend largely on whether there is a loose or a close connection between phrases or clauses. Nor is Zander's treatment of "distinctio minor" satisfactory; for, where he is not influenced by his theory of metrical responsion, he builds on a logical rather than on a pausal foundation. Thus, a conditional clause is usually "indistincta" (Examples in vol. I, pp. 415-6). The reason given is that without the subordinate clause the sentence is deprived of its essential meaning (ib. 415 -membrum subiunctum non possit detrahi quin corruat tota sententia). This is surely an artificial way of settling the question. A subordinate clause may be necessary to the sense of a whole passage, but as a clause it may be a self-subsisting unit, i.e., nothing more is required to complete the sense of the clause as a clause. There are, as we shall see, some kinds of clauses that are not in themselves complete, whether they are technically subordinate or not. Zander gives examples of sentences divided into membra and articuli in spite of his assertion that the distinction is irrelevant to his enquiry; for his theory requires us only to know where there is an intervallum: "maius an minus
nihil attinet" (I 189). After studying these examples, especially those given in vol. II. pp. v-xxii, I feel that Zander's "articulation" is often quite arbitrary; sometimes he assumes that one membrum is divided into two articuli where there is clearly no break in the rhythmical flow of the clause; and conversely he gives one undivided membrum where we must often assume at least two articuli. Thus, in Catil. III 4 (quoted on II x ), he supposes there are four periods, when in our view there is really only one ; while most of his membra would rank in our system as articuli. I subjoin an analysis of the passage (a dash indicates the end of an articulus, the brackets the end of a membrum): itaque- ut comperi legatos Allobrogum- belli Transalpini- et tumultus Gallici excitandi causa- a P. Lentulo esse sollicitatos) (eosque in Galliam- ad suos cives- cum litteris mandatisque-eodemque itinere-ad Catilinam esse missos) (comitemque iis adiunctum esse T. Volturnium) (atque huic esse ad Catilinam datas litteras) (facultatem mihi oblatam putavi) (ut—quod erat difficillimum- quodque ego semper optabam ab dis immortalibus) (tota res non solum a me- sed etiam a senatu et a nobis- manifesto deprehenderetur. Compare also Catil. II 23: hi pueri tam lepidi ac delicati-non solum amare et amari-neque saltare et cantare-sed etiam sicas vibrare -- et spargere venena didicerunt. We see here five articuli where Zander sees four membra; further, he regards "neque saltare et cantare" as one membrum divided into two articuli. The reason is seen when one consults his rhythmical analysis of the passage in III 67: neque saltare- et cantare exhibit the rhythmi congruens iteratio (note how the "neque" of Vol. II becomes "nee" in Vol. III, no doubt to make the iteration perfect). This is surely a case where the plain facts give way before the theory; for "saltare et cantare" are as rhythmically inseparable as "amare et amari".

It seems necessary, then. for us to lay down new principles by which we shall be able to recognise membra and articuli. As we have already remarked, absolute certainty is not attainable, but we may to a large extent avoid the charge of subjectivity by showing how the character of the pause depends on the nature of the connection between phrase and phrase, and between clause and clause. Since the majority of clauses are membra, and the majority of phrases articuli, we have simply to consider the exceptions in both cases.
(I) First, we must find out what "internal" clauses (i.e., those that do not contain the clausula) cannot be classed as membra. Generally speaking, these are either of diminutive size (cf. Zander II xi.: quid igitur ad distintionem interest plurimum? quanti spatii quodque sit membrum), or are so closely connected with what follows that we are conscious of no real pause. Sometimes, indeed, a very short clause, far from forming a membrum, does not even rank as an articulus. Thus, Lig. 126 -qui omnes quos oderat-morte multabat; ib. 722 -ut essem idem qui fuissem; 1020 -qui genus hoc causae quod esset non viderit; 1124 -sed prodigi simile est quod dicam; etc. Clauses (or clause-equivalents) that stand in very close connection with some other part of the sentence may be classified as follows:-
(A) Those that contain an anticipatory particle; taken by themselves they are deprived of their essential meaning. This may be illustrated in English by the difference between what the grammarians call the restrictive and continuative uses of the pronouns "that" and "which". So in Latin: Lig. 11-non habet eam vim ista accusatio ut Quintus Ligarius condemnetur) (sed ut necetur. Compare ib. 1 (where the participial phrase is equivalent to a clause) : fretus fortasse familiaritate ea quae est ei tecum (Zielinski divides this into two Sätze). The clauses following such anticipatory particles are-
(i) Relative: Planc. I 8-eandemque rem adversariam esse in iudicio Cn. Plancio quae in petitione fuisset adiutrix; $215-$ video enim hoc in numero neminem cui mea salus non cara fuerit; cf. $218 ; 35 ; 620 ; 84 ; 2511$, etc. Sometimes we find a second clause of this kind dependent on the first : Planc. 729 -quanquam nihil potes in te...constituere quod sit proprium laudis tuae quin id tibi sit commune cum Plancio; 25 9-nam ut omittam illud quod ego pro eo laborabam qui valebat ipse per sese....cf. 4624 ; 9322.
(ii) Clauses expressing Reason or Purpose: Planc. I 10-si huius salus ob eam ipsam causam esset infestior quod is meam salutem....texisset; 7127 -nisi forte existimas eos idcirco vitae meae pepercisse quod de reditu meo nihil timerent; cf. 78 2; 837.
(iii) Comparative Clauses: Planc. 4 19-ut....merita Cn. Planci erga me minora esse dicerent quam a me ipso praedicarentur; 171 -ab eo qui hos dimovit potius quam ab eis qui in te ipsum incubuerunt te depulsum putas; Lig. 16 20-suam citius abiciet humanitatem quam extorquebit tuam.
(iv) Clauses of Manner and Restriction: Planc. 418 quae vero ita sunt agitata ab illis ut aut. ...dicerent; cf. $643-$ eum me postea fuisse....arbitror ut non ita multum mihi gloriae sit....repetendum; 10 7-de quo ipso tecum ita contendam paulo post ut conservem dignitatem tuam. Yet, if we have a series of such clauses, the anaphora gives them sufficient distinction to rank as membra: e.g., Planc. 75 3-nisi forte ego unus ita me gessi in iudiciis) (ita et cum his et inter hos vixi) (is in causa patronus) (is in re publica civis et sum et semper fui... cf. II ( $a$ ) infra.
(v) Temporal Clauses. Planc. 1018 -neque unquam obliviscar noctis illius cum tibi vigilanti....pollicebar.... cf. Lig.

7 fin.-qui mihi tum denique salutem se putavit dare si eam.... dedisset, where the time is also represented as the condition.
(в) Noun Clauses, whether subjects or objects, generally stand in close relation to another clause: Planc. 810 -nunc postulatur a vobis ut....iudicium populi Romani reprendatis; Lig. 3-bellum.... quod qui erant in Africa ante audierunt geri quam parari; Verr. I, 16-quam spem nunc habeat in manibus et quid moliatur breviter iam, iudices, vobis exponam ; ib. 104 ; Lig. I 10 -praesertim cum meus necessarius Pansa fecerit ut id integrum iam non esset ; ib. 1014 -quid autem aliud egimus.... nisi ut quod hic potest nos possemus (where in spite of the small size of the clause "quod hic potest" Zielinski prints a comma, which does not prevent him, however, from running the rhythm on) ; cf. Planc. $165 ; 1012$, etc. Under this head we must, of course, include the acc. and infin. construction, when the dependent clause precedes the governing verb: Planc. 9721 -quae se potius exscindi quam e suo complexu ut eriperer facile pateretur. It is much more common, however, for the acc. and infin. to be after the governing verb, and then the clause containing the latter is an articulus: Lig. 3325 -te enim dicere audiebamus nos omnes adversarios putare ; 2522 ; 264 ; Planc. 645 et saepe. Oceasionally the sentence is so constructed that the connection is not so close: Verr. I 43 init.-moneo praedicoque id quod intellego) (tempus hoc vobis divinitus datum esse.... ; Lig. 25 24 - atque in hoc quidem vel cum mendacio si voltis gloriemini per me licet) (vos.... ; ib. 17 init.-ac primus aditus et postulatio Tuberonis haec ut opinor fuit) (velle se de Q. Ligari scelere dicere.
(c) When one clause is inserted by hyperbaton in another, the decision turns partly on the size of the inserted clause, partly on its connection with the context, partly on the nature of what follows. We shall consider these conditions in turn.
(i) We have already seen that some short clauses merely form part of an articulus, as in Planc. 4 20: negarent ea tamen ita magni ut ego putaram ponderis apud vos esse debere. But in most cases such short clauses are articuli, and the rhythm runs on with only the slightest break: Planc. 9 22-gravius de te iudicatum putarem - quam est hoc quod tu metuis--ne a populo iudicatum esse videatur ; ib. 166 -cur tu id in iudicio ut fiatexprimis quod non fit in campo; 187 -sed vide ne haec ipsa quae despicis-huic suffragata sint.
(ii) For other kinds of inserted clauses it is, as Zander says (II viii), difficult to state rules that will be universally applicable (difficile ad communia quaedam praecepta revocare). The reason lies in the different surroundings in which the same type of clause may be found; sometimes it may have sufficient distinction and importance to rank as membrum, in which case we are conscious of a definite pause or break in the flow of the sentence; on the other hand it may be an integral part of the complex clause, so that only the slightest pause is felt. In cases of doubt, if I have erred, it has been in the direction of excluding from the membra clauses that were not followed by a decisive pause. That the articuli will thus contain a somewhat heterogeneous mixture of word-groups is inevitable; but the main point is to ensure as little disparity as possible among the membra.

There are certain clauses that are nearly always to be taken as membra; while modifying the main statement in which they are inserted, they do not form an integral part of that statement. Such are Temporal, Continuative Relative, Conditional and Concessive clauses. Lig. 4 16-itaque Ligarius, qui omne tale negotium fugeret, paulum....conquievit; ib. 2 19-Q. enim Ligarius, cum esset nulla belli suspicio,.... profectus est; Planc.

58 fin.-in quibus ipsi aculei, si quos habuisti in me reprehendendo, tamen mihi non ingrati acciderunt. So even when the clause is inserted in another subordinate clause: Planc. 69 17quaeris quid pro meis liberis, quibus mihi nihil potest esse iucundius, amplius....facere possum ; ib. 26 19-si ante reditum meum Cn. Plancio se viri boni, cum hic tribunatum peteret, ultro offerebant. . . . If, however, the inserted clause is not independent, but coheres closely with the preceding phrase, it must be regarded as an articulus: Plane. 10027 -qui cum ad me L. Tubero, qui fratri meo legatus fuisset) (decedens ex Asia venisset easque insidias quas mihi paratas.... audierat ad me.... detulisset...., which illustrates the use of both the restrictive and the continuative relative; ib. 425 -hune eis iudicibus editis qui idem testes esse possent absolutum putarem ; 8 10-postulatur ....ut eius exitio qui creatus sit iudicium populi Romani reprendatis.

The first clause in Appositio Correlata (Zander I 423) is a membrum, since the form of expression gives it great prominence, and interpunction is necessary, in whatever kind of clause it may be inserted: Planc. 86 11-ego fateor me, quod viderim mihi auxilium non deesse, idcirco illi auxilio pepercisse; I 5-capiebam....voluptatem quod, cuius officium mihi saluti fuisset, ei meorum temporum....cf. $415 ; 36 ; 135 ; 1411$.

What we have said in this section applies also to a clause inserted between two others that are closely connected in sense: Lig. 15-paratus enim veneram-cum tu id neque per te scires -neque audire aliunde potuisses) (ut.....abuterer; Planc. 814 -tantum afuturam....orationem....a suspicione offensionis ....te ut potius obiurgem quod iniquum in discrimen adducas dignitatem tuam) (quam ut eam.... coner attingere ; 11 21nostrum est autem, nostrum qui in hac tempestate....iactemur et fluctubus) (ferre modice....; Verr. I 15, 13-neque enim
mihi videtur haec multitudo quae ad audiendum convenit) (cognoscere ex me causam voluisse; contrast Planc. 12 3-meum beneficium- ad eum potius detuli- qui a me contenderatquam ad eum qui....supplicarat. Verr. I 53, 28-non patiar rem in id tempus adduci ut quos adhuc servi designatorum consulum non moverunt) (cum eos novo exemplo universos arcesserent) (eos tum lictores consulum vocent.
(iii) When only one word (most often the verb) follows the inserted clause, the latter cannot be a membrum, since there is an inevitable rhythmical enjambement: Verr. I 4 init.-neque me tantum expectatio concursusque....quibus ego rebus vehementissime perturbor, commovet quantum istius insidiae...., where "perturbor"' is the end of the relative clause, but cannot be dissociated in rhythm from "commovet"; ib. 34 -auctoritas ea quae in vobis remanere debet haerebit; Lig. 12 10-quae crudelitas ab hoc....quem tu nunc crudelem esse vis, vindicata est ; cf. Verr. I, 2014 ; 22 5; Planc. $109 ; 1228 ; 1415 ; 1611$; 298 , etc. In such cases the last word is generally not sufficient in itself to constitute a rhythmical combination, to do which it needs the assistance of the preceding word. Sometimes the dependence is reversed, e.g., Planc. 1324 -si hoc indicasti....te gubernare non posse) (de virtute tua dubitavi) (si nolle, de voluntate. Here the two infinitives "posse" and "nolle" are precisely parallel; but while the former is the end of the membrum, the latter must be taken rhythmically with the clausula. Compare, though the construction is somewhat different, Pl. 422 -haec mihi sunt tractanda, iudices, et modice, ne quid ipse offendam) (et tum denique cum respondero criminibus ...., where the adverb "modice" is parallel to the membrum "tum....criminibus". We reserve further discussion of such examples to Chapter II, p. 29 ff .
(II) We now pass to the consideration of such membra as are not clauses. Here, too, in some cases, the decision rests on the nature of the pause and the size of the phrase, though most of the examples can be referred to one of the following heads :-
(a) Enumeration of phrases (not mere words), cases of antithesis, parallelism, rhetorical anaphora. Under such conditions phrases receive a distinction and prominence that makes them as independent as clause-membra. In addition to the examples quoted on p. 13 may be cited: Verr. I, 11 16quaestura....quid aliud habet in se nisi Cn. Carbonem spoliatum....) (nudatum et proditum consulem) (desertum exercitum) (relictam provinciam) (sortis necessitudinem religionemque violatam? ib. 1013 -etenim quod est ingenium tantum) (quae tanta facultas dicendi aut copia) (quae istius vitam tot vitiis flagitiisque convictam) (iam pridem omnium voluntate iudicioque damnatam) (aliqua ex parte possit defendere? 2623 -in eo esse haec commoda) (primum M. Metellum amicissimum) (deinde Hortensium consulem) (neque Hortensium solum sed etiam Q. Metellum; 7 18—videt multos equites Romanos) (frequentes praeterea cives atque socios) (quibus ipse ....cf. Lig. 10 22. In such sentences the verb is placed early, so that the following phrases stand out all the more conspicuously; but a verb common to several such phrases may also stand last: Verr. 421 -nihil esse tam sanctum quod non violari) (nihil tam munitum quod non expugnari pecunia possit; 56 1-multa crudeliter in cives Romanos atque socios) (multa in deos hominesque nefarie fecerit....; Lig. 5 2-cum P. Attio quam cum concordissimis fratribus) (cum alienis esse quam cum suis maluisset? ib. 17 7-....nulla vi coactus) (iudicio ac voluntate ad ea arma profectus sum....; Planc. 9813 -statim ad me lictoribus dimissis) (insignibus abiectis) (veste mutata profectus est; cf. $8315 ; 9217$-fructus autem ex sese non, ut
oportuisset, laetos et uberes) (sed magna acerbitate permixtos tulissem....; Verr. 30 1-M. Creporeius ex....illa equestri familia et disciplina) (L. Cassius ex familia....severissima) (Cn. Tremellius, homo summa....diligentia) (tres hi homines veteres tribuni militares sunt designati, where, however, the third phrase "Cn. Tremellius. .. .diligentia" is also a membrum, since the enumerations are summed up by the resumptive "tres hi homines'".
(b) Many phrases are equivalent to clauses, and are therefore subject to the same rules; so commonly an ablative absolute: Verr. I, 309 -ita secundum Kalendas Ianuarias et praetore et prope toto commutato consilio) (magnas accusatoris minas.... eludemus; 44 11-qui Gn. Pompeio....de tribunicia potestate referente) (cum esset sententiam rogatus; et saepe. Where we have a series, principle ( $a$ ) is also in operation: Verr. 545 -non sinam profecto causa a me perorata) (quadraginta diebus interpositis) (tum.... If the participial phrases are closely connected as with "que" in 389 , the first is an articulusiudiciis....translatis sublataque populi Romani.... potestate. So when the abl. abs. is not really independent, as in Verr. 3116 -ita prope xl diebus interpositis tum denique se ad ea.... responsuros esse arbitrantur, with which we may well contrast 545 , just quoted.

An appositional phrase is often equivalent to a clause: Planc. 2 21-mihi venit in mentem admirandum esse M. Laterensem, hominem studiosissimum et dignitatis et salutis meae) (reum sibi hunc delegisse; so very frequently in enumerations: Verr. 2921 -iudex est M. Caesonius) (conlega nostri accusatoris) (homo in rebus iudicandis spectatus et cognitus....; 23 18; 53 1; Lig. 1 3-idque Gaius Pansa, praestanti vir ingenio) (fretus fortasse....ausus est confiteri, where we have as clauseequivalents both an appositional and a participial phrase.

Not infrequently a phrase that has the force of a clause is parallel in construction to a clause : e.g., Verr. 2 9-nunc in ipso discrimine ordinis iudiciorumque vestrorum) (cum sint parati qui....invidiam....inflammare conentur....Lig. 8 2-vel propter propinquam cognationem) (vel quod eius ingenio.... delector.
(III) Finally, we may consider some special cases of clauses that must be classed as membra.
(a) A clause before a quotation; e.g., Verr. $2021 —$ optimus enim quisque ita loquebantur) ("iste quidem tibi eripietur..."; Lig. 3014 -causas, Caesar, egi multas....certe numquam hoc modo:) ("ignoscite, iudices," etc. Compare the whole passage.
(b) Clauses introduced by "et....et", "neque....neque", "aut....aut" are nearly always membra; if, however, the first clause is short, it may be an articulus, e.g., Lig. 1424 quod et fecimus et ut spero non frustra fecimus; cum tu id neque per te scires neque audire aliunde potuisses (I 6) ; but Verr. I, 3 11numquam tamen neque tantum periculum mihi adire visus sum) (neque tantopere pertimui ut nunc....
(c) Parentheses, unless they are very short, are membra: Lig. 154 -si.... lenitas tanta non esset, quam tu.....obtinesintellego quid loquar-etc.; Planc. 29-ut vivat, . .cum parentenam meo iudicio pietas fundamentum est omnium virtutumquem veretur ut deum-neque enim multo secus est parens liberis-amat vero.... Sometimes, as we saw above (p. 8), the parenthesis may exhibit the form of a period.
(d) The first of two paratactically arranged clauses is a membrum. This is the view taken by Zander (II ix) : nihil enim fere refert, hypotaxine an parataxi utaris. Lig. 35 15-sed ierit ad bellum. dissenserit non a te solum, verum etiam a fratribus: hi te orant tui, where we have two clauses that are in sense
subordinate to "hi te orant tui". Compare certain clauses contrasted by asyndeton, as Lig. 27 19-hine prohibitus non ad Caesarem, ne iratus....ne condemnare causam illam quam secutus esset videretur : in Macedoniam....venit; 33 init.-noli Caesar putare de unius capite nos agere: aut tres Ligarii retinendi. . . . aut tres. . . .exterminandi.

This completes my treatment of "distinctio maior". An exhaustive examination would demand a volume to itself, and even then it would be difficult to establish canons that would cover all cases. Nevertheless, the task had to be faced, and I have done my best to make my method of procedure clear. Even if we allow for a margin of doubtful cases, my classification of membra depends on what I believe to be rational principles, so that the statistics in Chapter VI will give a fairly accurate idea of the rhythms employed by Cicero at the more important pauses within the sentence; at the minor pauses we must be ready to expect greater freedom and variety.

## Chapter II.

## DISTINCTIO MINOR.

## Principles of Kolometry.

The only writer, so far as I know, that has made a systematic attempt to examine the rhythm of the whole sentence by dividing it into word-groups or kola is Zielinski in his work on "Der constructive Rhythmus in Ciceros Reden." On p. 30 (section 9) of that book he says he has been guided by three principles: (a) the grammatical coherence of words-a principle which covers a large number of cases; (b) "concinnitas", which comes to our aid when the kola, according to the first principle, would be unduly long (überlange Satzglieder entstehen); (c) symmetry, to the investigation of which the larger portion of the book is devoted. Of these three principles we can admit the first only to be thoroughly sound; to the second Zielinski has been obliged to have recourse simply because of his own misconception of the real length and nature of a kolon (for convenience sake I, too, shall use "kolon" in the general sense of "wordgroup"'). Being convinced that the various combinations of feet to be found in Cicero's speeches are all varieties of one "Ground-form," he was forced to find some means of cutting down the natural word-groups to the size from time to time required-a flagrant case of suiting facts to theory. By virtue of "concinnitas" punctuation may be entirely neglected. Thus, in Lig. 20 4, "atque ille eo tempore paruit, cum parere senatui necesse erat" Z. makes "paruit cum parere" form one kolon. Nor does Z. hesitate to choose an inferior reading if it suits his purpose; e.g., in Lig. 1619 he rejects "utetur" because the
"Anlauf" would be too long! As regards the third principle, Z. seems to be arguing in the proverbial circle. Starting with his theory of a universally prevalent rhythm, he discovers that, if words are grouped in a certain way, they exhibit similar or identical rhythms. Then to this similarity of rhythms he gives the name of symmetry and from it argues the correctness of the kolometry. Now, if he had discovered real symmetry, the argument would no doubt stand; for symmetry can apply only to grammatically coherent groups of words; as it is, there is very often no symmetry at all. The example that Z. quotes by way of illustration is peculiarly infelicitous: "quae cum plurimae leges veteres, tum lex Cornelia maiestatis Iulia de pecuniis repetundis planissime vetat', He divides the latter part of the sentence as follows: Iulia de pecuniis-repetundis planissime vetat, and considers these two kola to be symmetrical in rhythm (the first two syllables of "repetundis" are extra metrum). It is very difficult to conceive how 'pecuniis repetundis'" can be severed; and as soon as they are taken together, Zielinski's symmetry disappears.

It is essential, then, to lay down definite principles of kolometry. In some cases, however, we must admit that it is practically impossible to arrive at a purely objective decision. As Zander remarks (I 183, cf. II viii)-saepe positum est in arbitrio loquentis, utrum malit dissimulare minimas illas orationis moras, an adhibere. This is only to be expected in dealing with such a subjective and elusive phenomenon as rhythm, and careful reading aloud is the only resource.

The most general definition of the kolon is that it is the smallest group of grammatically coherent words followed by a pause. This pause, as we saw in the first chapter, may vary in duration and importance, but is not necessarily for breath, as the kolon may be quite short. Grammatical coherence involves, of
course, rhythmical coherence, though occasionally strict grammatical coherence is wanting (see (b) below). As there can be no doubt in the case of membra where the pause occurs, we shall confine our attention to the "articuli". The examples are chosen chiefly from the Ligariana, so that Zielinski's treatment may be contrasted with ours.
(a) The grammatical connection of words must not be broken. I should therefore divide the opening sentence of the Cluentiana as follows:-animadverti iudices-omnem accusatoris orationem-in duas divisam esse partes, although Quintilian (IX 4, 67) maintains that there is a slight pause after "duas". If there is one, it is scarcely perceptible, and is certainly not sufficient to prevent our connecting "duas" rhythmically with "divisam".

Lig. 7 23-in toto imperio populi Romani ; 425 -cum efflagitatus a provincia; I 9-praesertim cum meus necessarius Pansa fecerit; 1213 -plurimarum artium atque optimarum; 1610 quod si probare Caesari possemus; 19 15-tua in me maxima merita; 22 19—cessit auctoritati amplissimi viri; 35 22—etiam de aliis quibusdam quaestoribus reminiscentem.
(b) One of the commonest sources of distinctio is hyperbaton, by which, as Zander says (I 388), "laxata quodammodo orationis compago". In consequence, a kolon may sometimes be composed of words that have no real grammatical connection : e.g., Lig. 829 —ut mihi Tubero-cum ....dicerem....; 19 15-mihi vero, Caesar-tua in me maxima merita....; 4 17-adhuc, G. Caesar-....

Hyperbaton is so common that we need give only a few examples: Lig. 6 7-cuius ego causam-animadverte, quaeso,qua fide defendam; 83-vel quod laudem adulescentis propinqui -existimo etiam ad meum aliquem fructum redundare; 25 17-
acceptae iniuriae querelam-ad quem detulistis? 6 6-nullum igitur habes, Caesar,--adhuc in Q. Ligario-signum alienae a te voluntatis; 203 -sed tamen Ligarium-senatus idem legaverat; 171 -ac mihi quidem-si proprium et verum nomen nostri mali quaeritur, where Zielinski takes no notice of the pause after "quidem", and links "si proprium" in rhythm to what precedes. Plane. 82 2-amicitiam meam-voluptati pluribus-quam praesidio fuisse; but a verb common to two words is often inserted between them : Lig. 1812 -nisi ut suum ius tuereturet dignitatem tuam ; 27 19-ad Cn. Pompei castra venit-in eam ipsam causam-a qua erat reiectus iniuria.

Sometimes, owing to hyperbaton, a word at the end of a clause has no very close grammatical connection with what precedes, yet the pause, if any, is so slight that for rhythmical purposes the last word must be taken in conjunction with that immediately preceding: Lig. 7 26-si eam-nullis spoliatam ornamentis dedisset; 1426 -cave te fratrum-pro fratris salute obsecrantium misereat; 19 17-si me ut sceleratum-a te conservatum putarem.

What are we to say about those cases in which the last word of a clause is preceded by an unmistakable pause? e.g., Lig. 1023 -aut, ut tu vis, parem. Since the clausula cannot contain only one foot, "tu vis" (spondee) and "parem" (iambus) must be taken together. So also when the final word contains one foot and part of another: Lig. 8 1-cum de se eadem dicerem, ignosceret; 115 -non tu ergo hunc patria privare, qua caret,.... We have already discussed this question in Chapter I p. 21 (iii). In collecting my statistics I have regarded "eadem dicerem", "patria privare", etc., as the final combinations of the kolon; for, although one foot thus does double duty, there is a definite pause which prevents our assuming one continuous kolon. Further, such a "kolon" ranks as an articulus, never as a
membrum, since the "distinctio" in the case of membra is too great to allow of such rhythmical enjambement.

In the case of quadrisyllabic words that contain two feet the answer is not so obvious: Lig. 129 -quem tu nunc crudelem esse vis, vindicata est; Philipp. XII 21, 5-si non potuero frangere, occultabo; ib. I 19, 19-quamvis iniquum et inutile sit, defendetur; Lig. 6 13-nec quid tibi....de se occurrat, reformidat. Now, we shall see in Chapter V that the dichoreus, being a cadence, was nearly always preceded by a "base," and that it was a matter of great importance what foot preceded words like "reformidat"' and "defendetur". We feel justified, therefore, in treating such quadrisyllabic words in the same way as those dealt with above.
(c) Antithesis plays a large part in the delimitation of kola. 3 7-partim cupiditate inconsiderata-partim caeco quodam timore-primo salutis-post etiam studi sui-quaerebant aliquem ducem ; 7 17-nulla vi coactus) (iudicio ac voluntate-ad ea arma profectus sum; 613 -tibi de alio audienti-de se occurrat.... ; 1814 -ut tibi cum sceleratis-an ut cum bonis civibus conveniret. In enumerations, single words often go together in pairs : 206 neque enim licuit aliter-vestro generi nomini-familiae, disciplinae; 18 8-sceleris vero crimine-furoris, parricidi; 17 26-spem, cupiditatem-odium, pertinaciam. In 69 -atque omnium laude-praedicatione-litteris monumentisque decorandam, the length of "praedicatione" justifies our placing it in a separate kolon, while nouns joined by "que" are naturally taken together. Zielinski's treatment is truly extraordinary ; with him "omnium....litteris" forms one kolon, the rhythm being denoted by the "Ground-form'" 10 !
(d) An emphatic word often introduces a new kolon : 2 20qua in legatione-et civibus et sociis-ita se probavit, where, if
"ita" were omitted, "se probavit" would form part of the preceding kolon; cf. 4 17-adhuc, G. Caesar,-Quintus Ligarius -omni culpa vacat; 174 -ut nemo mirari debeat-humana consilia-divina necessitate-esse superata. Here the two adjectives are both emphatic and antithetical. If "esse" were not present "divina necessitate superata" would be one kolon; as it is, the parallelism and antithesis are all the more conspicuous through the pause after "necessitate".

A strongly stressed idea is often followed by quite unemphatic ones, and the kolon ends, as it were, in a gradual diminuendo: Lig. 1620 -suam citius abiciet humanitatemquam extorquebit tuam, where the chiastic order corresponds to the diminuendo and crescendo. Compare, though the kolon is not an articulus, 155 -acerbissimo luctu redundaret ista victoria. Although this kolon is of more than ordinary length, we cannot say that there is any pause within it. We have an instructive contrast in the following example: $313-$ non mediocri cupiditate -adripuit imperium, where the emphasis on the verb is shown by its position.
(e) Two clauses, of course, will generally form separate kola, unless, as we saw above (p. 16), one is so short as to be rhythmically inseparable from the other. Thus, an acc. and infin. clause is nearly always disconnected from the governing verb: e.g., Lig. 264 -nisi a te cognovissem-in primis eam virtutem solere laudari ; 174 -ut nemo mirari debeat-humana consilia....esse superata; 25 22-a quo queramini-prohibitos vos contra Caesarem gerere bellum. If the governing clause contains only a verb, it must be taken with the dependent clause: patere tua consilia non sentis (Catil. I 1) ; cf. Lig. 6 11-in qua se ipsum confitetur fuisse, where the verb is in the penultimate position only to avoid an unsuitable rhythm.

Whether parentheses form kola or not depends on their size: Lig. 17 21-haec ut opinor fuit; 10 22-aut,-ut ego dicomeliorem quam tu. . . cf. p. 24.
( $f$ ) Participial phrases that are equivalent to clauses form kola: 21-decedens Considius provincia-satisfacere hominibus non posset....cf. 426 ; so also the abl. abs., as the name would lead us to expect: 3 7-quo audito; 185 -quanquam hoc victore -esse non possumus. In 716 , "suscepto bello, Caesar," the vocative must be taken along with the abl. abs.
(g) Appositional phrases will naturally introduce a new kolon : 11 2-ne cum eius filio-consobrino suo ; I 3-G. Pansapraestanti vir ingenio; 10 18-homo-cum ingenio-tum etiam doctrina excellens.
(h) Vocatives cannot stand by themselves, but are attached either to what precedes or to what follows: Lig. 2 13-habes igitur, Tubero-.... 4 17-adhuc, Gai Caesar-....; 6 6nullum igitur habes, Caesar-...; 716 -suscepto bello, Caesar-...; 16 17-Caesar, cave credas-; 11-novum crimen, Gai Caesar-et ante hunc diem non auditum.... (cf. Quintilian XI 3, 110). These two kola are chiastically arranged, so that the rhythm is a diminuendo in the one case, a crescendo in the other. They are also nicely balanced as regards length, as they both contain four feet. There is scarcely any difference between the interval separating "crimen" from "Caesar" and that separating "diem" from 'non auditum", and I cordially agree with the spirit of Zielinski's remarks on this passage (II 31). Occasionally the vocative is in the middle of a kolon : Lig. 1810 -quando hoc ex te quisquam, Caesar, audivit; 14 2-dicam plane, Caesar, quod sentio.
(i) The end of a kolon can sometimes be determined by the presence of hiatus or syllaba anceps. Contrast Zander (II 556) : "quodsi rhythmo distinctus est exitus membri incisive orationis,
ibi non modo hiatus locum habet legitimum ac iure concessum, sed etiam syllaba anceps", which is the converse of what we have just said. Thus, in reading the following passages one does not "elide" the vowels between the kola as here distinguished: Lig. I 8-sed quoniam diligentia inimici-investigatum est quod latebat; 5 27-quod post adventum Vari-in Africa restitit; 36 -quod qui erant in Africa-ante audierunt geri quam parari. Similarly, one is conscious of a syllaba anceps in the following cases: Lig. 6 9-omnium laude-praedicatione-.... etc. 4 18-Quintus Ligarius-omni culpa vacat (given also under (e) above) ; 614 -vide quanta lux liberalitatis-et sapientiae tuae....oboriatur; 24 12-in qua rex potentissimus-inimicus huic causae. Of course, this is a highly subjective test, and to be applied only when other resources fail.
(j) Finally, we may consider certain cases in which the words can scarcely be said to form proper kola. It is their mere occurrence to which I draw attention rather than their rhythm; for in this investigation we are concerned only with kola that have at least two feet. Such fragmentary kola are a sort of "Anlaut," comparable in effect to the notes that precede the introductory bar of a piece of music, or to the anacrusis of certain poetical measures. Lig. 125 -at istud-ne apud eum quidem dictatorem... 7 26-si eam-nullis spoliatam ornamentis dedisset ; I 6-cum tu id-neque per te scires.... ; 5 29-an ille -si potuisset illine ullo modo evadere....; 7 20-tamen meantequam vidit,....; I 12-cum a te-non liberationem culpae....; 10 18-quod homo-cum ingenio-tum etiam.... So even single words are sometimes followed by a pause. e.g., itaque, ut, nisi, interim, etc.

We have noticed that the majority of kola contain from two to four "feet" (for the definition of "foot" see Chapter III) ;
groups of five feet and over occur only when the words are indissolubly linked to one another, so that they cannot be further subdivided into smaller groups. Such kola are more common in the non-rhetorical writers, in whose sentences the ideas follow one another, for the most part, naked and unadorned. In oratory, on the contrary, rhythm is so important that amplifications of a simple idea are often necessary. Take a short sentence like the following:

Marcellia maximo civitatis luctu tolluntur.
The ideas could not be expressed with greater brevity or simplicity; what do we find in Cicero?

Marcellia tolluntur-maximo gemitu luctuque civitatis (in Verr. II 21). In order to describe with emphasis the depth of the State's grief Cicero puts the adverbial phrase in this amplified form at the end of the sentence. That such amplifications are often necessary to round off a sentence Quintilian tells us (IX 4, 119) : "animus accipit plenum sine hac geminatione non esse, ad sensum igitur referenda sunt." Compare also Orator 210 : "saepe etiam in amplificanda re concessu omnium funditur numerose et volubiliter oratio'".

## Chapter III.

## NUMERI ET PEDES.

In the last chapter we were concerned to divide the sentence into word-groups ; we must now consider in what way the rhythm of these word-groups is to be examined. Let us first see how the ancient writers approached the problem. All agree that the rhythm of prose differs from that of verse; but wherein exactly does the difference lie? Both Cicero and Quintilian say that the individual feet are the units of measurement, and that the feet employed in verse necessarily occur also in prose: Quint. IX 4, 79 -omnem orationem constare pedibus; neque enim loqui possumus nisi syllabis brevibus ac longis, ex quibus pedes fiunt; Cic. Or. 188—nullus est numerus extra poeticos.... pes adhibetur ad numeros, etc. Both writers then proceed to give a list of feet. and to indicate which are most suitable for the various parts of the sentence. Examples are quoted from different authors by way of illustration. Quintilian (ib. 102) considers both "timeres" and "potest nos" to be bacchii, though he adds that in the latter case "nos" should rather be taken with what follows, no doubt because of the pause before 'nos'. One wonders why he did not choose a more convincing example. Q. is also uncertain what feet are found in "civis Romanus sum," though he inclines to regard "Romanus sum" as composed of spondee and choreus. "In Africa fuisse", is said (ib. 105) to end with an amphibrach; yet it may be also regarded as the beginning of an iambic senarius (ib. 73). Here Q. seems to be confusing the typological with the purely metrical point of view. "fuisse", treated as a word, is, of course, an amphibrach; in that case we should have to say that a cretic precedes. If,
however, we take the words as capable of forming the beginning of an iambic senarius, the clausula would end in two trochees, just as if we had "in Africamque venit". "quod precatus" is supposed to contain a cretic (107), though one might just as well take it as composed of two trochees; cf. Cic. De Orat. III 183, where the words of Fannius "si, Quirites, minas illius" are cited as an example of cretic rhythm. So also, according to Quintilian, "leve innocentiae praesidium est" ends with an anapaest preceded by a spondee (ib. 110) ; why not paeon preceded by cretic? Compare "dixit hoc Cicero" (106), which is said to be trochee + paeon; why not cretic + anapaest?

We see, then, that for Cicero and Quintilian a foot, in prose as in verse, was simply a combination of a fixed number of syllables of definite quantity; but, whereas in verse the feet were determined by a certain metrical scheme, in prose the construction of feet was a quite arbitrary proceeding. As Laurand shows (Etudes, p. 138), it is impossible to scan prose on the mere basis of quantity. The ictus (percussio) is dismissed by our authors in a few words (Cicero, De Orat. III 185-6; Quintilian IX 4, 55) ; about its incidence we are told nothing. If they had settled, as Zander has, where the ictus should come, they would at any rate have introduced some consistency and method into their attempts at prose scansion.

Now, the ancient writers, in their remarks on rhythm, make no reference to word-accent (cf. Zander II 263 ff.). When Cicero (Or. 58) refers to the Paenultima law, he does so merely to emphasise the necessity of modulating the voice; nature points the way by giving to every word an acute accent (acuta vox), or sharp tone, though Sandys ad loc. explains "emphasised sound." Though Cicero in this passage may be thinking of the pitch of the syllable concerned, it does not follow that the Latin accent
was wholly one of pitch. I feel convinced that the evidence we possess justifies us in drawing with Lindsay (The Latin Language, p. 152) the reasonable conclusion that the Latin accent was in the main an accent of stress, possibly accompanied by a higher tone. Are we to conclude from the silence of ancient writers that the question of accentuation is irrelevant to our investigation? I hope to show that, so far as Latin Prose is concerned, accent is an essential element in the production of rhythm. "But," it may be objected. "you are assuming that we moderns can know more about the question of prose rhythm than the ancients themselves. Surely, if accent was so important for the rhythm of prose, it could hardly have escaped the notice of writers like Cicero and Quintilian'". To this I would reply that our problem is at bottom a scientific one, and that it is quite possible for one to practise an art without being able to give an objective description of a method unconsciously and instinctively followed. As Professor Hardie says (Res Metrica, Preface p. ix) : "Is it not the case that the arts of analysis and interpretation lagged far behind creation, and were developed surprisingly late?" Further, the fact that no clear distinction was made between metre and rhythm shows that the ancients regarded rhythmical prose as a kind of free verse. The principles underlying both prose and verse rhythm are essentially the same (nullus est numerus extra poeticos, etc., quoted above, p. 35) ; prose is "remissius numerosa", i.e., we do not know, as in verse, the type of foot that is coming next. We believe, on the contrary, that in one metrical scheme there may be a great variety of rhythms; e.g., the latter half of an iambic senarius may be trochaic in rhythm (cf. Hardie ib. p. 192). Why is this? Because metre is a mere framework, imposing limits on the alternation of long and short syllables; it is the words that, within this scheme, give life and character to the line. To
explain and justify this statement is the object of the following discussion.

When Cicero and Quintilian say that the feet of prose are the same as those of verse, they do not seem to have appreciated this distinction between metre and rhythm. A word like "conceperit." would have been described as consisting of spondee and iambus, since such a word could form the last two feet of an iambic senarius. But in an hexameter the word is a dactyl preceded by a long syllable, so that the same word can in different surroundings represent different feet. But, whereas in verse the metrical scheme is responsible for our dissecting the word into the divisions known as feet, in prose, where there is no fixed succession of long and short syllables, we are driven either to find some new principle of determining where "feet" begin and end, or else, like Laurand, to give up all attempt at scanning prose. There are some, indeed, to whom this counsel of despair may appeal, but I think most of us so far trust our ears as to be convinced that there is more in ancient prose than the observance of the "règle négative d'éviter les vers et les parties de vers'". Of those that have followed the other alternative, the most noteworthy are Zielinski and Zander. The former's principle is that all prose feet are cretics and trochees (or their resolutions), though the cretic is capable of very wonderful "variations" (Entfaltungen, Erschwerungen, etc.). Zielinski's theory was wrong, but its formulation was due to a very important and incontestable fact, viz., the great frequency of cretic-trochaic combinations (see further Chapter V). Zander believes that even in prose every word (or group of words) has an ictus by which we can say what kind of foot is before us. This view is soon disposed of when we realise clearly what an ictus is and how it arose. A foot in verse is, as we implied above, an entirely artificial unit, a fixed succession of syllables of certain
quantity, and in this unit one syllable predominated, so that, in Zander's words (II 287), "in longa esset ictus quidam levior quantitatis praeponderantis". Compare the words of Radford (quoted by Zander ib. footnote): "Any regular alternation of long and short syllables in Latin prose or verse, provided a careful enunciation of the quantities be employed, produces naturally a rhythmic beat or ictus, which approaches the value of a stress-accent', This recurring, dominant note arises, however, only when there is a "regular alternation" of long and short syllables; in prose this sometimes occurs, but the very fact that it was studiously avoided by ancient writers points to the conclusion that the assumption of an ubiquitous prose-ictus is not only wholely unnecessary, but is dependent on a fundamental misconception of the real meaning and nature of an ictus.

I believe the root of the difficulty that has beset both ancient and modern investigations is the failure to recognise that words have an inherent rhythm, which is not changed by their appearance in various metrical contexts. Words are not mere amorphous agglomerations of long and short syllables, which have to be forced into a rigid framework before rhythm can be said to emerge. The adaptation of words to a metrical scheme is peculiar to verse, the technique of which, along with the terminology of ancient metrists, has obscured for many the real nature of rhythm. A sentence of prose is not divided, like verse, into so many lines of definite length; the only breaks are those indicated by the natural pauses. Upon it there is imposed no framework from without-there are no fixed successions of long and short syllables; consequently no artificially constituted units termed "feet". If there are feet in prose, they must, therefore, be not artificial constructions, but units naturally inhering in the words themselves. This is what Zielinski failed to see when he placed prose on a par with verse by arbitrarily assuming a
basic "metrisches Gebilde". The very variety of verse metres should have prevented Zielinski from supposing that prose could be content with such a dull uniformity.

I distinguish, therefore, between the "rhythmical" and the "metrical" foot, though, of course, the two are often identical. Thus, who can doubt that "esse," as a word, is a trochee; yet in iambic metre it would belong partly to one metrical "foot" and partly to another. I hope to show (a) that every polysyllabic word either is or contains one or more of the following feet, and no others-cretic, spondee (with the resolved forms, i.e., anapaest and dactyl), trochee (with its resolved form, i.e., tribrach), and iambus (including, at the end of a word, pyrrich) ; these I term the primary rhythmical feet; (b) that such primary feet have caesuras, i.e., may extend from one word to another.

Let us call the rhythmical unit formed by a word like "noscunt" a spondee; for the present we make no mention of accent or of the quasi-stress accents that Radford believes exist in Latin. If we prefix a long syllable to this word, how are we then to describe the rhythm? Is "cognoscunt" a new rhythmical unit, or have we, say, a unit and a half? That the latter is the correct view may be shown by the comparison of "criminis causa" with "esse cognoscunt" and "archipiratae". There are few ears that would not recognise here one essentially identical rhythm, the units being cretic and spondee. But if modern ears are not to be trusted, we can appeal to the weighty testimony of Quintilian (IX 4, 64), who regards "archipiratae", and "criminis causa" as exhibiting the same rhythm. the only difference being that the former was "molle," the latter "forte". We are bound to accept this statement, for Quintilian was not expressing a theory, but stating an actual fact, that would be instantly appreciated by all that could speak the Latin language correctly. On the other hand, his attempts at
prose-scansion are practically valueless, for there he was entering the region of pure theory, and working, as we saw above on very imperfectly conceived principles (cf. Zander I 469 note).

Instead of "esse cognoscunt"' Quintilian gives us the Greek words $\mu \eta \delta \grave{\epsilon} \tau 0 \xi \in \mathcal{v}_{\eta}^{\eta}$ so that our argumentation applies equally to the Greek language. Both "cognoscunt" and " rokєúク", end with a spondee preceded by what may be called an "Anlaufsilbe". which may form part of another foot, (here a cretic). By a similar train of reasoning we shall conclude that "esse cognoscerent" is composed of two cretics. If "facere" is a tribrach, we shall not describe "perficere" as a paeon; for "per-" is still an Anlaufsilbe just as it is in "perfecit". The name paeon may serve to indicate how many syllables of certain quantity the word contains, but it does not express the rhythm inherent in the word. This is the fatal objection to all purely typological methods.

It may here be objected: "You have just said that 'esse' is a trochee, and yet regard it in the above example as forming part of a cretic', But such a proceeding is perfectly legitimate, since the larger rhythmical unit absorbs the smaller; "tenent" is an iambus, yet "continent" ranks as a cretic. That a trisyllabic foot is the largest unit that a word can contain should now be obvious. Any arrangement of four syllables will contain either two feet or one preceded by a long "Anlaufsilbe" (or two short Anlaufsilben, for which see further Chapter IV, p. 50 ff.).

Now, when we consider that the first syllable of such rhythmical feet bears in Latin the accent, the truth of the view we have taken seems to be beyond all doubt, especially as that accent was almost certainly one of stress, though not so forcible as in modern languages. Thus we understand why Diomedes called the accent the "soul of a word" (est accentus, ut quidam putaverunt, vel anima vocis). Cicero (Or. 58) says that human speech has an inherent rhythm due to the natural law of accent,
which compels us to modulate our voice (cf. ib. 173 -"omnium longitudinum et brevitatum in sonis sicut acutarum graviumque vocum iudicium ipsa natura in auribus nostris collocavit'').

What we said above about the inherent rhythm of words applies equally to the Greek language, but in the matter of accent the two languages part company. In Latin the first syllable of what we regard as a metrical unit received stress, but not, so far as we know, in Greek. The stressed syllable in Latin may quite well have been accompanied by a higher pitch, but in Greek the middle syllable of a cretic (e.g.) might receive the pitch accent. From this we draw the important conclusion that pitch accent had nothing to do with determining a rhythmical unit, so that the Latin accent was undoubtedly in the main one of stress (possibly, though not necessarily, accompanied by a higher pitch) ; otherwise it would be very difficult to understand why the first syllable of our rhythmical units invariably in Latin received an accent.

While, then, in Greek, accent is not a determining factor in rhythm (though, of course, it would give great variety to one rhythm), in Latin it accentuates the rhythm that may be regarded as already inhering in the word. For this reason I regard accent in Latin as an essential element in the production of rhythm, though, as a matter of fact, our results would be little affected if this were not the case. On this point see next chapter.

We said above that the primary feet may extend from one word to another, and gave the cretic as an illustration; but the same may happen to the other feet; thus, "esse videtur" and "possumus omnes", have the same relation to each other as "esse cognoscunt" and "criminis causa"; "non concedo" exhibits the same rhythm as "cognoscebant"; "ea peregit" as "facere possit"; "ea confecit" as "faciebatis", etc.

Now an Anlaufsilbe may not only form part of a primary foot, but may follow upon a word that ends in such a primary foot, e.g., omnes cognoscunt, consules cognoscunt, ete. Thus arises what I term the "secondary" foot, which will, in Latin, be composed of the initial accented syllable and the "intervallum" of succeeding unaccented syllables. The accent may now be compared to the first beat in a bar of music. the only difference being that the bars of prose are of irregular lengths. This method of interval-measurement receives indirect support from the "cursus" of the Middle Ages, in which the intervals between accents (irrespective however, of quantity) were the sole means of measuring rhythm. If "genus humanum" is the lineal descendant of "pace firmavit" (Clark, Fontes p. 7), it is hard to resist the conclusion that in classical times too the "foot" began with the accented syllable.

A kolon will usually be composed of several feet or "bars". the number of which will have an influence on the general character of the rhythm (cf. Quintilian IX 4. 91-"circumfusi bonis deteriores lateant'’). Now. just as in music we have "Lieder ohne Worte", so also in prose we may consider the rhythm apart from typology (cf. Virgil's "numeros memini si verba tenerem'"). The same tune may be sung to very different sets of words. Not that typology is by any means an indifferent factor in the total rhythmical effect, as we shall see in Chapter V; but. against Bornecque, Novotny and others. I hold that the rhythm lies fundamentally in the tune.

In a kolon the "bars" are not to be considered independently. If there are three bars $a b c, b$ cannot be rhythmically separated from $a$ any more than it can from $c$. Zielinski refers to this principle (II 25) as the psychological basis of his theory of "Stiitzsilben", but he is prevented from making a correct use of it through his erroneous belief that every kolon must exhibit
the cretic-trochaic rhythm with its variations. What we have in such cases is not a "Stützsilbe", but a whole "Stützfuss": e.g., if we regard "nervos esse reipublicae semper duximus" as a single kolon, not merely the syllable "ae", as Z. thinks, must be taken with what follows, but the whole foot "publicae," so that "publicae" and "semper" are just as much rhythmically connected as "esse" and "reipublicae." It must be carefully noted, however, that I consider this principle to be in operation only when the bars concerned form part of one indivisible kolon. The "arabeskenhafte Entwickelung" to which Zielinski appeals cannot extend from one rhythmical group to another. If pauses have any meaning and importance for the rhythm of a sentence, we cannot with Zielinski borrow these "Stützsilben" at random.

Now, since kola are of varying lengths. the question arises as to the way in which we are to compare the rhythm of one kolon with that of another. The greater the number of bars in a kolon the smaller will be the probability of a recurrence of the same sequence. Thus combinations of two will recur frequently, combinations of three less frequently, and so on. But there is no a priori reason for expecting the rhythm of prose to be largely a matter of the recurrence of certain combinations; on the contrary, one would rather expect as much variety as was consistent with the observance of certain broad principles. After all, our investigation can only disclose tendencies, and any constancy we may trace is due not to conscious purpose, but to the guidance of unerring instinct. With authors like Symmachus, who constructed their sentences with a view to introducing certain rhythms, the case is very different. Such a rigidity of rhythm is altogether unnatural, and in its wearisome monotony is very far removed from the charming variety to be found in the speeches of Cicero; for the spoken language must be life-like, though this, of course, does not exclude art-"ars est artem celare".

We have, therefore, two ways of comparing the rhythms of kola: (a) for any given sequence, say, $a b c$, or $x y z$, etc., we may either find out how often it recurs in comparison with other sequences of the same length; or (b) we may, especially in the case of longer kola (e.g., abcd,wxyz take combinations of two feet at a time (e.g., $a b, b c, c d ; w x, x y, y z$, ete.), keeping the last combination of a sequence in a different class from the others, since more care would (consciously or unconsciously) be exercised before a pause. From Chapter VI it will be seen that I follow the latter method, except in the case of certain combinations of three feet that recur frequently.

Now, in order to facilitate the collection of statistics, it is essential that we should have a set of symbols by which combinations of feet can be designated as succinctly as possible. In this matter I am to a certain extent indebted to what Professor Clark justly terms Zielinski's "exceedingly ingenious system of nomenclature". The fundamental difference consists in the principle that underlies the classification of the various combinations. By Zielinski the L, M, S, and P classes are all regarded as variations of the "Integrationsclausel"; in our system every foot is given its own symbol. Thus, to take the primary feet first, C stands for cretic, S for spondee, T for trochee, I for iambus; but when the final foot of a kolon is a trochee (or spondee) I use the number 2 ; when it is a cretic or dactyl I use the number 3. This is not only a convenient method of indicating the end of a kolon, but is intended to suggest the indifferent quantity of the final syllable. On this point see p. 65. Thus, "voltus ferre possemus" is SC2; "omnes postulant" is S3; "copias comparavit" is CT2. Resolutions of long syllables are figured, as with Zielinski, by the "Exponent"; e.g., "esse videtur" is $\mathrm{S}^{2} 2$; "esse videatur" is $\mathrm{C}^{2} 2$; "facere conatur" is $\mathrm{C}^{1} 2$; "ea peregit" is $\mathrm{T}^{1} 2$. If a final trochee (or spondee) is
resolved the index ${ }^{1}$ is placed after the number; thus "debeat facere is $\mathrm{C} 2^{1}$.

Equally simple are the symbols for the secondary feet:
(a) If a cretic is followed by a short Anlaufsilbe (e.g., consules adessent), the resulting secondary foot is denoted by the symbol D (as a help to the memory compare Dichoreus); if the Anlaufsilbe is long (e.g., consules audistis) the symbol is E.
(b) For a spondee followed by a long Anlaufsilbe the symbol is M (cf. Molossus) ; e.g., "omnes cognoscunt"' is M2; if the Anlaufsilbe is short the symbol is N ; e.g., "omnes reguntur" is N 2.
(c) Finally, an iambus followed by a short Anlaufsilbe is A (cf. Amphibrach) ; e.g., "pedem refertis" is A2; if the Anlaufsilbe is long, B is the symbol (cf. Bacchius); thus, "fidem defendo" is B2.

Two more symbols complete the list: P represents either a pyrrich word (e.g., ea dicit is P2), or a pyrrich foot formed by elision, e.g., facere arbitratur (PT2); ea adesset (P2), while U represents one long accented syllable that does not make part of a foot, e.g., erant permulti alii (BU2 ${ }^{1}$ ), where we assume that the final vowel of "permulti" was elided.

Just as in the case of the primary feet, a long syllable of a secondary foot also may often be replaced by two shorts, and the appropriate index shows which of the long syllables has been resolved; thus, "potuit suspicio" is $\mathrm{M}^{1} 3$; "gratia decessit" ( $\mathrm{M}^{2} 2$ ) ; illo dominante ( $\mathrm{M}^{3} 2$ ) ; "consules referuntur" is $\mathrm{E}^{3} 2$; "liceat multis aliis carere" ( $\mathrm{S}^{1} \mathrm{SN}^{12}$ ).

While in the primary feet various caesuras were possible, the secondary feet are practically "monotypisch", though a subordinate caesura may arise when the Anlaufsilbe is a monosyllable. Compare "possem cognoscere" with "possem iam dicere". Still, the main caesura is always present. On our theory, there
cannot be any "concurrent forms" to cause us the difficulties that we meet in Zielinski's pages (cf. I 44 ff. "Die Vieldeutigkeit der metrischen Gebilde"'). If we follow Laurand's suggestion (Etudes p. 139), and content ourselves with noting the order of long and short syllables, we shall not be able to distinguish between "gratia refertur" and "esse videatur". Zielinski (I 53), though some of his "vier Probem"' are irrelevant, rightly concludes that these are different forms. With us "gratia refertur" is $\mathrm{N}^{2} 2$, the "Ground-form" being, say, "gratum refertur" (N2) ; "esse videatur" is $\mathrm{C}^{2} 2$, since here the two short Anlaufsilben come together and are equivalent to one long Anlaufsilbe; in the other case there is only one Anlaufsilbe, since "gratia" according to our principle is a rhythmical unit. Compare what Quintilian (IX 4, 108) has to say about the "inane" between words (cf. also ib. 51). Yet even Quintilian neglects this important principle when he states (ib. 101) that "Brute dubitavi" may be composed of dactyl and bacchius. Compare also Zielinski's "Auflösungsgesetz" (I 34).

Now, we have said that our feet (primary or secondary) have only one accented syllable, and this is certainly the general rule; but I think we have undoubted evidence that sometimes not only the initial, but also the final syllable of a foot was accented. In Planc. 23 16, "honore quis nescit?" the interrogative pronoun must have received an accent; cf. 8614 -"illa quis nescit?". This juxtaposition of accents is more common when elision takes place ; e.g., Planc. 4 17-"criminosum esse possit" (CT2) ; cf. Lig. 1425 -" "tu repente inruisses". This question is discussed at greater length in Chapter VI, p. 115.

If Anlaufsilben occur at the beginning of a kolon. we take no account of them, not as if they were of no importance, but because we are at present concerned only with combinations of feet.

## Chapter IV.

## ACCENTUATION, ELISION, ETC.

Before we can proceed with the collection of statistics, we must consider certain details of accentuation, and decide upon some consistent method of treating phenomena like hiatus and elision. Zielinski's treatment is most arbitrary; he assumes hiatus or elision wherever it suits his theory; even an accented monosyllable is elided, and pauses make no difference. Thus "per te, per te, inquam, obtines', by the omission of the first "per"' is supposed to be a molossus followed by a cretic. But if the first "te" is emphatic and strongly accented, surely the second one by its very repetition is even more so, and cannot have been elided in speech. Nor is Zander an entirely trustworthy guide, as he decided doubtful cases by the theory of "rhythmi congruens iteratio". But first accentuation demands our attention.

## Section I: Accentuation.

Simple as is the application of the Paenultima law to the majority of words, difficulties arise when we consider certain words not as individual units, but as forming part of a wordgroup. Then, again, there are some words that are commonly supposed to have no accent, while others may have several ; and finally there are some exceptions to the Paenultima law itself. To avoid needless repetition of much that has been already settled, I shall refer to the chapter on accentuation in Lindsay's work on the Latin Language, and shall discuss only such points
as admit of reasonable doubt. It will be seen that accent provides a directing principle for rhythm in many cases about which it would otherwise be difficult, if not impossible, to arrive at a certain conclusion.
(a) Exceptions to the Paenultima law (Lindsay pp. 163-4): that the accent fell in certain cases on the last syllable seems beyond dispute, so that "adhuc" is not an iambus, nor "posthac" "illuc," ete., spondees in the sense in which we have defined these "feet" above. Whether the accent was affected by the elision of the particle "que", as in "prospereque", "surruptasque," etc., is a question that can hardly be settled by referring to the incidence of the metrical ictus in Plautus. I see no reason why these cases should not be treated in the same way as "tanton", "adduc", etc.; since, though for metrical purposes the "que" is not reckoned as a syllable, it must have been pronounced, however slightly (cf. the appoggiatura in music), and the accent would therefore naturally remain on the preceding syllable when long, just as it would if the final syllable of "multorum" were elided. See below on "Elision". For contracted vocatives and genitives such as "Vergili", "tuguri", we must, I suppose, accept the evidence of the grammarians.
(b) Secondary Accents: Lindsay (pp. 158-9) remarks that "a long word like "sapientia", "tempestatibus" must at all periods have had a secondary as well as a main accent"; and also (p. 161) that "the secondary accent shows traces of itself in Italian in the doubling of the consonants in words like "pellegrino, scellerato, tollerare," etc. As to the existence of a secondary accent there can be no doubt ; but it is essential to our investigation that we should be quite certain of the kind of words that may have a secondary accent. Lucian Mueller (De Re Metrica p. 373) says: "non licet verbum duos simul habere accentus, nisi cum binas discedit in partes, sicut potest fieri in
illis mansuefacere vacefient calefit'. This definition is not precise enough; for the whole question depends on what are "binas partes". My own view is that, to receive a secondary accent the first part of the word (i.e., the syllables immediately preceding the main accent), must contain one of the "primary" feet described in the last chapter. If the principal accent is confined to these, it is inconceivable that secondary accents could fall on other units. Thus, arboretum begins with a trochee, intemeratus with a dactyl, arbitrabantur with a cretic, dominaremus with an anapaest, inconcussus with a spondee, vacefient with an iambus, calamitatem with a tribrach. The secondary accent, like the principal accent, may be preceded by a long or a short Anlaufsilbe. Thus in "recedebamus", "accusatores" we have two spondees, in "decederemus", "reponeremus" two trochees. It will follow from the argument of Chapter III that though "parabatur" begins with an iambus, "comparabatur" begins with a cretic, which is accented accordingly (cf. p. 41). But I do not consider two short syllables preceding either the main or the secondary accent to constitute a foot any more than one long syllable (their rhythmical equivalent) would. Two short syllables, so far at least as prose scansion is concerned, form a foot (pyrrich) either when they compose one word, or when the last syllable of a tribrach or anapaest is elided. (See p. 46).

In support of this view I would urge the following considerations: (a) the fact that "peregrinus" becomes "pellegrino" in Italian does not prove that in the classical period there was an accent on the first syllable. We know that as the sense of quantity died out, accent became more and more the guide to pronunciation, and further that there was a tendency for the accents to follow one another alternately. This peculiarity of later Latin is quite sufficient to explain the Italian forms of such words as peregrinus, sceleratus, tolerare, etc., and we certainly
cannot infer from them the presence of a secondary accent in the classical period. (b) I do not agree with the statement of Lindsay (p. 159), that a word like "sapientia'" could hardly be pronounced without a secondary aceent on the first syllable; I cannot see that a secondary accent is reyuired any more for "sapientia" than for "Cornelius', and it certainly could dispense more easily with a secondary accent than "iusiurandum", which we are told on p. 161 had only one accent (for such compound words see below). Further, if "sceleratus" and "temeratus" have an accent on the first syllable, why should the secondary accent be thrown further back in "intemeratus"? Clearly we require some more definite way of settling where a secondary accent is to come. If "malesanus" (one word) has only one accent, why should we postulate two accents for "peregrinus', which is rhythmically identical. and further is not a mere compound of two words that may be written separately? (c) No arguments can be drawn from Saturnian verse, even if we may regard it as accentual ; for not only do secondary accents appear where we should not expect them, but they are neglected in words which certainly did passess a secondary accent in classical times (e.g., "adlocutus summi" in the second hemistich has only two accents). Nor can any argument be drawn from the incidence of the ictus on certain syllables in the comic poets. "Sceleratum Syrum" (Ter. Ad. 551 ) is at the end of a trochaic septenarius, so that the ictus falls on the first and last syllables of "sceleratum"; while what I take to be the ordinary pronunciation is seen in "simul sceleratus Davos" (Andria 132), the beginning of an iambic senarius. (d) Indirect evidence comes from the fact that words like "peregrinus"' are very often, in the Ciceronian clausula, preceded by a trochee, as in the hackneyed example "esse videatur'". The so-called pyrrich is then to be regarded as the resolution of the second syllable of a cretic, which has normally
one accent, and that on the first syllable. We should therefore expect the resolved syllables also to be without an accent. There are, I know, some scholars that reject this hypothesis of "derived" forms. It does not, however, presuppose the theory, as Laurand (Etudes p. 189), seems to imagine, "que les clausules diverses doivent leur origine à quelques types primitifs". We can agree with the same writer (ib.) that "les formes ont été d'abord multiples et se sont restreintes progressivement'", and yet maintain that from the rhythmical point of view it is legitimate to classify "resolved" forms under the corresponding "Ground-form". Just as in the hexameter we say that the dactyl and spondee are equivalent feet without implying that the dactyl is a later evolution of the spondee, so in prose rhythm we may treat the succession of syllables denoted by the term paeon as the equivalent of the cretic (cf. Cicero Or. 215-creticus....et eius aequalis paeon; De Orat. III 183 paeon....non syllabarum numero, sed aurium mensura....par fere cretico). The phrase "aurium mensura" is explained by what Quintilian says (IX 4, 46) : nam rhythmi, id est numeri, spatio temporum constant, and ib. 47-longam esse duorum temporum, brevem unius, etiam pueri sciunt. In a word, "time" was a fundamental feature of prose rhythm, so that the ear would at once recognise an affinity between a "Ground-form" and the equivalent "resolved" form, just as in music we say that two quavers are equivalent to a crochet without implying that the effect in both cases is the same.

I think, then, that we are justified in omitting the so-called pyrrich from the list of feet that receive a secondary accent. We may add that the accents which fall on a succession of feet composed of individual words naturally fall also on a succession of feet in one word: thus, in "liberationesque" we have three accents, as the word is composed of trochee, cretic, and trochee;
in "liberationibusque" we have four accents corresponding to the four trochees, and so on. Of course these subordinate accents differ in strength not only from the main accent. but from one another ; the mere relativity of stress. however, cannot invalidate the partition of a word into its constituent feet. The variation of stress would generally be decided by the context or the caprice of the speaker.
(c) Sentence enclitics and word-groups: It will follow from what was said about secondary accents that compound words and word-groups like iusiurandum. paterfamilias. legislator. ete., must have had more than one accent, despite the grammarians. who, to use Professor Malden's expression (quoted by Wilkins on De Or. III 183). were blessed with fingers, but not with ears. An English phrase like "man-of-war" is not a true parallel (Lindsay p. 162), because in Latin we have to consider quantity as well as accent. So in the case of prepositions like "circum". In the line "quae circum litora, circum Piscosos scopulos", discussed by Quintilian (I 5, 26 ff ), the first "circum" may or may not go so closely with "litora" in pronunciation that we seem to have one word; what is certain is that "circum" had an accent, possibly similar in strength to the secondary accent of a word like "condiscipulus". or "spectabamini". L. Mueller (De Re Metrica p. 372) remarks that the statement of Quintilian "dactylicorum certe usu non confirmatur. qui semper ut divisis omnino vocabulis utuntur praepositione et nomine finitimis." Similarly the relative "qualis" would have an accent just as much as the interrogative, though doubtless with a variation of stress. This stress-variation was one feature in the total æsthetic effect of a sentence; but it is a subject which lies outside the province of the present enquiry. which is concerned only to note the sequences of metrical feet.

Just as the accent of a word may change through the addition of terminations, so the constituent elements of a word-group may have varying accentuation according to the different surroundings: e.g., the preposition "ad" is unaccented in "ad Romam", but accented in "ad privatum". I am obliged, however, to differ from Lindsay (p. 168), who believes that unaccented monosyllables altered the accent of the preceding word; thus, in "testem quem dudum te adducturum dixeras" he says that the ictus of the verse coincides with the accentuation of the word-group "testem quem", so that "-em" receives the accent; for "quem" presumably goes with the noun just as much as it would if it preceded. But it makes all the difference whether in such a case the enclitic precedes or follows. If it precedes, "quem" is simply an "Anlaufsilbe"; if it follows, it is part of the "intervallum" separating the accent of "testem" from that of "dudum". Our syinbols would represent the line as MSSS3. The versification of the dramatists appealed to by Lindsay cannot help us; the ictus may or may not coincide with the accent, and not even the fact that the ictus regularly falls on one syllable of a word (e.g.. dono data, factum volo, etc.), warrants our drawing any certain conclusion for the pronunciation of such groups in prose. So also in "quando tot stragis acervos", "quando", if the line is pronounced as in prose, has the accent on the first syllable, so that "quando tot" is our foot "M". "ante" would count as a trochee both in "ante venit" and "ante Caesarem venit", though Lindsay (p. 168) says that in the latter case the preposition is unaccented. We believe that both adverb and preposition were accented, though with a variation of stress. Again, because "obviam", "sedulo", "admodum", etc., have the accent on the first syllable, Lindsay supposes that the preposition and not the noun may have been accented in such groups as "in via", "per dolum", unless it were desirable for some
special reason to give prominence to the noun. I cannot see that there is any justification for such a supposition; the mere fact that "obviam" is derived from "ob" and "via" can have no bearing on the pronunciation of the word-groups "in via", "per dolum". The former is really one word, and follows the accentuation of single words; the latter are groups of words. in which there is every reason to believe that the noun received the accent, just as the pronoun would in "ad eam".

There are, however, some monosyllables that have an accent if emphatic, but no accent if unemphatic, e.g.. "res" and "spes". Thus, the noun is unaccented in "omnem spem perdidit" accented in "spes mihi relicta est nulla". As Lindsay says (p.167), 'the extent to which....all 'Sentence Enclitics' were suppressed would depend on the caprice of the speaker, on the nuance of thought, on the style of composition, etc.' It will, however, follow, from what has been already said about secondary accents and foot-measurement that even a word that may be called a sentence-enclitic must in certain word-groups receive some accentuation; e.g., "quod latebat", where "quod"' has an accent similar to the secondary accent of a word like "comprobavit". So "et nos iacentes ad pedes" (unaccented); "et cognovi", (accented). The fact that a word is by nature an enclitic and most often unaccented does not prevent its having an accent in certain surroundings. In the speeches of Cicero we have noticed that words like "et'", "sed", "est", etc., are much more frequently unaccented than accented, just as these words are, according to Lindsay (p. 169), relegated as a rule by the early dramatists to the theses, so that they do not receive the metrical ictus.

Of the enclities mentioned by Lindsay (pp. 166-170), only the following may at times be unaccented (omitting que, ve, which of course can never be accented): (i) the monosyllabic
forms of the verb "esse" and possibly the dissyllabic forms that may be scanned as pyrrichs and iambi (see infra) ; (ii) monosyllabic forms of the personal and possessive pronouns; for dissyllabic forms see infra; (iii) demonstrative pronouns with the same restrictions; (iv) similarly relative and indefinite pronouns, prepositions, adverbs, conjunctions, with the same restrictions; (v) some nouns of subordinate meaning, monosyllabic and unemphatic (e.g., res, spes, etc., quoted above). The dissyllabic enclitics we shall now consider in detail.

When an unemphatic pyrrich followed immediately upon an accented syllable, it was doubtless accentless, and the two words counted as one rhythmical whole. This view is supported by forms like "quomodo", where "modo" was originally an iambus, afterwards reduced to a pyrrich - a phenomenon abundantly illustrated by the scansion of the comic poets. Words like "admodum", "obviam", "sedulo", are different, as I explained above; for the stress did not originally rest on the preposition, but on the noun. It was only when such phrases became crystallised into one word that the accent was placed on the first syllable. In "per dolum", therefore, the noun retains the accent. But, "huc age" would scan as a dactyl; "quid agis" as a tribrach. So commonly with an accented "non"; "non habet", "non modo", etc., are often dactyls. "Fuit" is unaccented in "quae fuit ista amentia?", accented in "dignitas fuit". The same applies to "meus", "tuus", etc.

But if pyrrichs may be treated in this way, why not also iambi? This, too, I consider very probable, especially when we remember the facility with which iambi were shortened into pyrrichs. So a long accented syllable followed by an unemphatic iambus would form a cretic, a short syllable an anapaest; e.g., quid enim, Tubero ( $\mathrm{S}^{1} 3$ ); ne haec quidem colligo (C3); tu tamen salvos esse voluisti (CSC ${ }^{2} 2$ ) ; hoc erat iudices (C3) ; but,
tamen non commemorabam ( $\mathrm{BS}^{2} 2$ ) ; paratus enim veneram (TI3). This method of scansion I have followed in collecting the statistics for Chapter VI. If the unemphatic pyrrichs and iambi do not immediately follow an accented syllable, they are treated in accordance with the principles we have already given; but unemphatic pyrrichs like apud would receive no accent at all: apud eum commorabar (IT2, i.e., the two syllables of apud are Anlaufsilben). On the other hand, "apud consulem'" is $\mathbf{I} 3$, because even an unemphatic $i a m b u s$ has an accent unless immediately preceded by an accented syllable.

Before leaving the question of accentuation we may draw attention to one or two special points. It occasionally happens that two accented syllables are in juxtaposition, e.g., Lig. $24-$ cui sic praefuit in pace ( $\mathrm{UM}^{2} 2$ ) ; ib. 7 26-tum denique salutem se putavit dare (UN²STSI) ; 3 9—post etiam studi sui ( US ${ }^{1}$ II). It will be noted that I consider even monosyllables in certain cases to be "accented", though some prefer to speak simply of "stress", e.g., Westaway, "Latin Quantity and Accent', p. 70 footnote. This distinction, however, is of little importance to our investigation, since even such "stress" or oratorical accent could not fall on unaccented syllables, and would in such cases mark the intervals between feet just as the "ordinary" accent does. This juxtaposition of accents occurs most frequently through the necessity of elision: Planc. 134 permagni interest; 58 26-factum esse dixit. If the last example formed a complete kolon, the rhythm would be given by the symbols UT2; if, however, we had ' aedilem factum esse dixit" we should represent the rhythm by mT2. This is because the syllable, which in the former case was isolated, here forms part of a foot that is accented on the last syllable as well as on the first (cf. p. 47 and p. 115. We have disting7ished such feet by assigning to them a small letter instead of a capital, so that
we might see how often they occurred. Since, however, we found that they were comparatively rare, we have in the next two chapters included both under one head. C and M are the principal feet that may have two accents, though there are a few examples of other feet.

When M occurs at the end of a kolon, its last syllable is usually unaccented, e.g., restituti sunt, profectus sum; m, however, does occur. e.g., Crassus quoted by Cicero (Or. 223) : cur de perfugis nostris copias comparant contra nos, where "nos" must have an accent, as it is emphatic and parallel to "nostris". cf. Planc. 24 3-attulimus etiam nos ( $\mathrm{T}^{1} \mathrm{~m}^{1}$ ). In "restituti sunt" Zielinski (I 29) states that the final syllable of the participle is accented, since the auxiliary is to be regarded as an enclitic just as in "restitutusque". But the two cases are not in the least parallel; "que" is inseparable from the word with which it goes in sense, whereas "sunt" is merely an unaccented monosyllable, as independent as the unaccented relatives, conjunctions and prepositions mentioned above. Indeed it more commonly precedes the participle in such a case, i.e., "sunt restituti" is the order preferred. I do not see that the auxiliary alters the accentuation of the participle any more than the pronoun alters the accentuation of the noun in "testem quem dudum...." quoted on p. 54. The pronunciation for which I am contending may be seen in the following line of Terence (Ad. v. 4, 20) : illum diligunt; apud illum sunt ambo, ego desertus sum, though I would not, of course, base any argument on such cases. In Planc. 1722 "equitis Romani filius est", the verb does not affect the accent of "filius", so that the kolon is $\mathrm{M}^{1} \mathrm{SM}^{2}$. In Lig. 115 : "non tu ergo hune patria privare.... sed vita vis", the strong emphasis on "vita" makes Zielinski's scansion and accentuation extremely improbable. According to his system, neither of the two contrasted words "patria"
and "vita" receives it usual accentuation. Compare the comment of "Asconius" (in divinat. c. 7) on this passage: "clausulam de industria duriorem positam ad exprimendam sententiam", and I think the harshness is largely due to the emphasis on "vita", which is followed by an unaccented monosyllable that is not closely connected in sense (contrast "restituti sunt"), though the fact that a long syllable precedes the already heavy ending may also be taken into account. In this connection we may note Quintilian's statement (IX 4, 101) that a clausula of two spondees is to be avoided, unless the four long syllables are distributed over three words (ex tribus quasi membris) : e.g.. comparant contra nos (the reading of Cicero Or. 223 is certainly right, though it makes no difference to his argument which we adopt). Now, this type of ending is very uncommon, whereas dispondaic words at the close of a sentence are frequent in comparison, and I think we may infer that "Asconius" is nearer the mark than Quintilian.

With regard to "inter me", "inter nos", etc., there is no evidence to prove that the second syllable of the preposition was accented instead of the first; not even the use of the dactyli poets is decisive. (L. Mueller De Re Metrica p. 371 believes that the preposition and noun form one word-"coire in unum verbum"). What I take to be the ordinary pronunciation is shown in the line "attamen inter nos medio versantur in usu", where the ictus coincides with the accent. Of course, if the pronoun is quite unemphatic there is an accent only on the first syllable of the preposition. Cf. Westaway, "Latin Quantity and Accent," p. 71.

Monosyllabic verbs like "est", "vult", "dat", ete., more usually form the last syllable of a cretic, more rarely of other feet; e.g., In Caec. Div. 562 religione retinere vult ( $\mathrm{T}^{1} \mathrm{C}^{2} 3$ );

397 -aut proficere vis ( $\mathrm{S}^{1}{ }^{1}$ ) ; Lig. 23 2-liberalitas $\operatorname{det}(\mathrm{TE})$; ib. 3127 -apud te locus sit (BB).

Finally, we may refer to the supposed alternative accentuation of words like "familiam", in favour of which two arguments are generally advanced: (i) the incidence of the ictus on the first syllable in the comic poets; (ii) the evidence of the Ciceronian clausula. The former is one that from the nature of the case can never be conclusive, while the latter seems to be based upon the results of Zielinski's investigations. But if our criticism of Zielinski is sound, this argument falls to the ground. At any rate, while not denying the possibility of such an alternative accentuation, I do not think that the evidence for its existence, at any rate in Cicero's time, is sufficient to warrant our assuming it in the collection of statistics.

## Section II: Hiatus and Elision.

We now approach a very important question that confronts the investigator of Latin Prose rhythm; for he cannot pursue his enquiry until he has arrived at some consistent method of dealing with the "concursus vocalium", as the Roman writers term it. The suggestions thrown out by the ancient writers are hardly specific enough to help us in the more doubtful cases. Cicero (De Or. III 171 ff ., Or. 150 ff .), speaking of the arrangement of words (collocatio verborum), disapproves of the overrefinement of those that make their words fit into one another like the stones of a piece of mosaic, as well as of the uncouth habit of permitting rough combinations of consonants or unpleasant collisions of vowels. The sentence, in mixed metaphor, must be at once a compact structure and a smoothly flowing stream. When two vowels come together, says Quintilian (IX 4 33 ), there is a gap or blank, and we are conscious of a halting
rhythm (hiat et intersistit oratio) and the more dissimilar the colliding vowels are, the harsher is the effect produced. This last statement (prout oris habitu simili aut diverso pronuntiabuntur) clearly shows that both vowels were pronounced, so that the term elision is really a misnomer (cf. Zander II 658). The words of Cicero (Or. 77) "hiatus et concursus vocalium". as Zander (ib. 654) well points out, mean "hiatus qui concursu vocalium oriatur'" and confirm this view. Such collisions are not in themselves reprehensible; indeed they often indicate a graceful, if negligent, ease on the part of the writer (Or. ib.), at other times they impart dignity and breadth to the expression of an idea (Quiunt. IX 4 36). That the two colliding vowels, though both pronounced, were not to count as two syllables, but should be run into each other (or slurred, as Ellis puts it, "Quantitative pronunciation of Latin, p. 35 ff.), is clear from the words of Cicero (Or. 150). "nemo ut tam rusticus sit qui vocales nolit coniungere", and ib. 152. "nobis ne si cupiamus quidem distrahere voces conceditur'".

Are we to conclude, then, that two vowels in hiatu were never to be separated in pronunciation so as to count as two syllables? A careful study of Cicero's own writings forbids our drawing such a sweeping conclusion; indeed Cicero implies that "distractio vocalium" was occasionally allowed, as in the poets, but its repeated use would be intolerable. A good writer will, by the arrangement of words, generally avoid such hiatus. As neither Cicero nor Quintilian has left us specific instructions about this point, all we can do is to study their works and do our best to discover the secret for ourselves.

Such an attempt has been made by Zander in his second volume ( $\mathrm{pp} .555-660$ ). where we have the results of a most thorough and exhaustive examination of hiatus and synaloepha as found both in verse and prose. While I believe his treatment
to be in the main sound, I cannot always agree with the way in which Zander assumes hiatus in certain instances. Thus, on p. 575 , we are told that since in the clausula there is always "rhythmi congruens iteratio", it will be quite evident that synaloepha always takes place "in ipsa clausula vel membri terminatione". In the treatment of this subject writers should rather aim at setting forth certain principles that do not rest on a purely theoretical basis, but in themselves have the highest degree of probability.

As the object of this section is simply to discover when synaloepha does not occur, I shall quote from Zander such principles as I approve, and add comments where it seems necessary.
(a) hiatus interpuncti: (Zander op. cit. pp. 555-556). This principle is summarised thus on p. 559-"ad omne interpunctum hiatus in prosa rhythmica semper est, sive interpunctum maius est seu minus, sive terminat clausulam, sive est in eo inciso membrove quod cum insequenti membro incisove communis rhythmi vinculo conexum est'". Compare the example quoted at the beginning of this chapter. When Zander feels that hiatus was present "sine interpuncto", he assumes a "pausa rhythmica" (p. 557) ; but that this rhythmical pause is different from that described in Chapter II of this work is clear from his separation of "emisso" from "aculeo" in the sentence "velut quaedam animalia emisso aculeo torpent".
(b) hiatus distinctionis: (Z. pp. 561-3). There are certain words that must be pronounced fully, even though no sign of interpunction follows: "est etiam in perpetuitate orationis pronuntiatio quaedam distinctior". The cases in which this happens are these: (i) Proper names and foreign words, "si erant pronuntianda distinctius, quo perspicuitati orationis consuleretur magis". There is no absolute rule, and synaloepha is
commoner than "hiatus": (erat....in his nominibus inconstantia quaedam sermonis raro hiantis, plerumque conglutinantis). (ii) Hiatus is sometimes found in the case of an emphatic word, since synaloepha would do away with the "latens tempus" referred to by Quintilian (IX 498 ), who says that it must be felt in proportion to the distinctness with which words were uttered. So also words exhibiting the following figures: antithesis, parallelism, homoeoteleuton, homoeoptoton, hyperbaton. I quote some examples from the Ligariana: 113-errati veniam impetravissent; 3 7--quo audito; de Ligari audeam dicere ( 828 ) ; 1717 -gesto etiam ex parte magna, where "gesto" is opposed to "suscepto"; 81 -cum de se eadem diceret (for monosyllables see below) ; 7 18—ad ea arma profectus sum; cf. 84 etiam ad meum aliquem fructum redundare; 5 3-plena desideri ac sollicitudinis; 98 -et certe contra ipsum Caesarem est congressus armatus, though here I should prefer to take "Caesarem" as ending a kolon; 54 -hic aequo animo esse potuit, where the final syllable of "aequo" is "elided", since the adjective goes very closely with the noun, but the final syllable of "animo', was probably in hiatu; cf. 1813 -cum pacem esse cupiebas. It is worthy of note that doubt very rarely arises in the clausula, and most of the places where I assume "hiatus" are in the body of a kolon, so that any error will affect only the statistics of the "internal" feet discussed in Chapter VI. Since, however, the total number of internal feet examined is so large in comparison, such possible errors need not concern us seriously, and certainly will not affect the general impression we shall receive of the rhythm in the body of the sentence.

Monosyllables require special treatment. Zander (pp. 581602) shows that synaloepha occurs generally (i) if the second syllable is long by position or nature; (ii) if two shorts follow the elided syllable; very rare is hiatus in such a case with
shortening of the monosyllable. This latter shortening I consider extremely doubtful, and I do not sean feet in accordance with this supposition, but in the rare places where they occur I assume hiatus without shortening; (iii) rarely do we find an iambus following the monosyllable; sometimes synaloepha, sometimes hiatus is found. Zander admits that in some cases he is in doubt whether to assume one or the other ( p .584 ), because, whichever happens, the "rhythmi congruens iteratio" is unaffected, or else the cases occur where the rhythm is uncertain, i.e., not in the clausula. Neither of these reasons is from our point of view relevant to the question. (iv) With internal collisions of vowels there is a similar variation. Any other examples of hiatus of monosyllables are to be referred to the hiatus distinctionis, etc.

Finally, those monosyllables that admit of synaloepha are mostly pronouns or unaccented particles. It is hard to believe that spem, vim, vi were ever entirely absorbed, or that a word like "vi" could be shortened in prosodical hiatus. Where evidence is lacking one is forced to rely on one's own judgment. In fine, synaloepha of monosyllables is confined in rhythmical prose to narrow limits; for the license of the comic poets was avoided by the choice and arrangement of words (delectu igitur vocum severiore et compositio prosae rhythmicae et versificatio classica coercuit antiquam huius rei libertatem, Zander p. 589).

To sum up: Cicero at any rate avoided a concursus vocalium except where the vowel at the end of one word could be easily run together in pronunciation with the vowel beginning the next word (Wilkins on De Or. III 171, Sandys Or. 150). Zander's exhaustive examination of the relative frequency of various concursus leaves us in doubt in comparatively few cases whether we should assume hiatus or not. The subject is one that perhaps will never be completely cleared up, but we must face the difficulty, and on occasion trust to our individual judgment.

At the very worst, the doubtful cases are not sufficiently numerous to affect our statistics to any appreciable extent.

We may add a word about the "syllaba anceps". Cicero (Or. 214) tells us that it is immaterial whether the last syllable of a clause was long or short: e.g., persolutas is called a dichoreus. Quintilian (IX 4, 93) is aware that a final short is commonly counted as a long syllable. "quia videtur aliquid vacantis temporis ex eo quod insequitur accedere', but adds that if he may trust the evidence of his ears, there certainly is a difference between a short and a long syllable at the end of a sentence. I do not think that Quintilian's statement can be denied; but it does not matter to our present investigation, which is concerned only to note the number and quantities of syllables that separate one accent from another. Since we do not run the last foot of one kolon on to the first foot of the next, it is a matter of entire indifference whether the last syllable be long or short.

## Chapter V.

## THE CLAUSULA.

As this chapter will involve a considerable amount of criticism of Zielinski's methods and results, this is a fitting place to explain how far I am indebted to him, and what seem to me the chief merits and faults of his system. The appearance of his first work in 1904 (Das Clauselgesetz) marked the beginning of a new era in the study of Latin Prose Rhythm. The somewhat desultory observations of previous investigators were thrown into the shade by the brilliance of this elaborate and scientific treatise. The second volume, however, (Der constructive Rhythmus), though it was the logical outcome of his earlier work, exhibits even more conspicuously the weaknesses inherent in his method. Zielinski found that the cretic-trochaic rhythm was exceedingly common in the clausulae of Cicero's speeches, so common indeed that he conceived the strange idea that all the other rhythms may be regarded as evolutions of this one type, which he termed "Integrationsclausel". This fatal assumption was possible because rhythm was for him simply a question of the quantitative relation of long and short syllables (I 5-Das quantitative Verhältnis der langen und kurzen Silben ist es, welches der Sprache ihren rhythmischen Character gibt). His metrical schemes are analogous to those we find in verse; both the "base" and the "cadence" have an ictus, which may or may not coincide with the ordinary accent. Hence an ingenious list of "laws" and deductions that are often simply expedients to explain the anomalies produced by his Procrustean method of forcing the most varied rhythms into one basic "metrisches Gebilde". Although Z. has much to say about accent, it is
clear that for him it is a subordinate element in the production of rhythm. Our view, on the other hand, makes rhythm in Latin prose depend equally on accent and on quantity.

The first, then, of Zielinski's merits was to have proved beyond all doubt the predominance of cretic-trochaic rhythms in the clausula. The second was his symbolical representation of the rhythm by very convenient signs. Since this system, however, owes it wonderful simplicity to mistaken assumptions, I have made a scheme of my own, in which I retain with the necessary limitations two of the characteristic features of Z.'s system, viz., the use of the "Exponent" to indicate the resolutions of a "Ground-form", and the use of a number to show the length of the trochaic close. Last but not least must be praised Z.'s scientific investigation of all the facts, and his exact statistics. To his exhaustive collection of data I am indebted for the material that has resulted in the conclusions of the present chapter. It may be remarked, however, in passing that Z. is inclined to use figures as if they were algebraic formulae expressing some mechanical natural law (cf. the somewhat extravagant statement following the Parallelogramgesetz, I 66, and the uncanny manner of determining beforehand how often a certain rhythm "ought" to occur, ib. 153).

Any further criticism must be reserved for its appropriate place; I proceed now to explain the way in which I have reclassified Zielinski's facts. It has been no small task to re-arrange the material amassed by Z., as combinations that I include under one category are often scattered throughout the book, and, what was more serious, the indication of typology was sometimes insufficient for my purpose, so that hundreds of references had to be looked up. Thus, on pp. 46-48 all the caesuras are not always indicated, and a cretic base is made to include what are really iambic bases (cf. the table on p. 108 where the type
"commodi cadere possit" includes, as is stated on p. 116, other caesuras than the two figured). The chief cases in which, owing to the absence of references, the typology failed me are the following: p. 64 where the miscellaneous caesuras of the light and heavy forms of V2 are lumped together, and similarly on p. 86. But the proportion of each of these to the total is so small $(34 / 1991 ; 42 / 1297 ; 5 / 239 ; 11 / 207)$ that their omission cannot affect any conclusions we draw, especially as the omitted cases are probably pretty evenly distributed over the various types. Then on p. 59 the number 1140 includes cases like non oportere as well as those like civibus pepercisse. When an accented syllable immediately precedes a word like "oportere", we may regard the combination as our C2 ; otherwise "oportere" would be I2. Zielinski's tables do not help us to distinguish these different types. But this again is an omission of little consequence, as Z. tells us on p. 28 that the type non oportere is comparatively rare (bilden die verschwindende Minderzahl), while the type "valere oportere" is likewise infrequent (ib. 29die gleichfalls nicht zahlreichen Elisionsfälle). In any case, we have no algebraical equation to solve, where one figure makes all the difference; we are dealing, as Z. himself rightly insists in his second volume, with tendencies, and the omission of a few examples does not prevent our estimating these. Indeed it is something to know that such cases as those just indicated are not frequent. See also pp. 80, 86-87, 100.

Now, the clausula, as Z. understands it, is composed of a "base" (consisting usually of one metrical foot, though in some types there are really two), and a cadence, which may contain several feet. This view depends on the assumption of an ubiquitous cretic base (with its modifications). These convenient terms I use throughout this chapter, though, as will be seen, not always in the same sense as that in which Zielinski uses them. A simple description of my method is this-I record what are
the last two feet of the "period", except where the antepenultimate foot (as in I2, T2, S2) is of vital importance. This does not mean that what precedes the other combinations is a matter of indifference; but we shall reserve the investigation of this question to Chapter VI. In most cases the last two feet constitute the clausula; this is partly because the antepenult does not exhibit very decided preferences, partly because the clausula is frequently co-extensive with a kolon of only two feet. This method of determining the length of the clausula is analogons to that stated by De Groot (Handbook p. 38): "the length of the clausula ends with a syllable of indifferent quantity.' But there are these two points of difference: (a) De Groot's principle might cause us to violate the rules given in Chapter II for the delimitation of a kolon; we cannot borrow, as Zielinski often does, syllables from another kolon that is rhythmically disconnected; (b) single syllables are not in our view metrical units; it is feet that are rhythmically combined.

Before considering the various combinations in detail, let us see what is the relative frequency of the principal combinations of two feet. Resolved forms are given in parentheses.

| (a) C2-2831 | (1406) | (n) M3-637 | (238) |
| :---: | :---: | :---: | :---: |
| (b) C3-1539 | (139) | (o) T3-455 | (42) |
| (c) T2-3868 | (603) | (p) I3 - 222 |  |
| (d) I2-1455 | (17) | (q) N3-82 | (18) |
| (e) $\mathrm{S} 2-826$ | (277) | (r) E3-51 | (1) |
| (f) N2-859 | (203) | (s) B3-39 | (2) |
| (g) SI - 474 | (57) | (t) D3-6 |  |
| (h) E2-115 | (30) | (u) $\mathrm{A} 3-$ |  |
| (i) M2-57 | (89) | (v) $\mathrm{P} 2-$ |  |
| (j) D2- 45 | (6) | (w) P3-4 |  |
| (k) B2-32 | (12) | (x) $\mathrm{CI}-92$ | (1) |
| (l) A2- 25 | (2) | (y) -I -27 |  |
| (m) S3-659 | (184) | (z) $-\mathrm{M}-68$ | (4) |

In (y) and (z) I and M are the final feet. There are also a few miscellaneous examples that will be given at the close of this chapter. I may remark that occasionally I have adopted different readings from those given by Zielinski.

Setting aside those combinations that occur less than 100 times, let us also consider the typology of the remaining twelve forms. Of these, four (N2, M3, SI, E2) do not need any more detailed indications than our signs express, since it is only the main caesura that is of any considerable rhythmical importance. I have retained Z.'s convenient mode of marking caesuras by the letters of the Greek alphabet, which here, however, appear in English form. For T2 and T3 complete statistics are not available, but the figures given are for the chief "forms" of Zielinski's tables, so that the proportions are correct as far as they go.

|  | C2 | C3 | T2 | T3 | S2 | S3 | I2 | I3 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| (a) | 520 | 7 | 2779 | 82 | 617 | 215 | 1284 | 214 |
| (g) | 2055 | 866 | 135 | 31 | 118 | 4 | $\overline{ }$ | - |
| (d) | 256 | 666 | 320 | 145 | 91 | 440 | 171 | 8 |

(a) Means that the two feet are contained in one word; (g) applies to the cretic when the caesura is after the short syllable; to the spondee when the caesura is after the first syllable; to the iambus when it is after the short accented syllable, e.g., suum effudit ; (d) of course means that the two feet are coterminous with two words.

From the first table we learn that the double trochee was the most frequent combination at the close of the period. This "Asiatic" cadence, by its swift movement, was specially adapted for rounding off a sonorous period. It may occasionally, as Laurand says (Etudes, p. 155), form the clausula itself; but, as he rightly adds (ib. 158), "ils" (se. le dichorée et le dispondée) peuvent aussi être précédés d'un crétique dont ils font ressortir le rhythme par contraste'. What other feet precede the
dichoreus we shall see presently; but it was artistically desirable that some rhythm should precede that would contrast with the striking cadence of this combination.

C 2 with its quieter and more equable movement is the next most frequent ending. C3 is distinguiushed by the perfect balance and symmetry of its constituent feet. T2 and S2, though also symmetrical, are in a different position; for whereas C3 is practically always composed of at least two words, T2 and S2, as the typological table indicates, are generally covered by one word, and it is by no means a matter of indifference what foot precedes. The former feature is no doubt to be explained by the fact that trochees and spondees have in Cicero's words 'nimis insignes percussiones', which are less felt when there is no "inane" between two such feet. To Quintilian (IX 4, 97) there was a considerable difference between "archipiratae" and "criminis causa". the former being "molle", the latter "forte", while "accusari Verrem" was "durum". When one word contains two feet, the two accents are different in quality, the one being secondary, and presumably less forcibly uttered than the chief accent; whereas when we have two feet composed of two words, there are two accents of equal strength.

I2 comes next in frequency, and here, too, we notice that the two feet were generally comprised in one word; otherwise the iambus and trochee, being "minuti pedes", would scarcely be suitable for the close of a period. It may be objected to this explanation that SI. in which the same feet are in the reverse order, occurs over 400 times, and here the two feet are necessarily separated. In SI, however, the spondee is rarely a single word; it is usually part of a quadrisyllable, so that the spondee is not in conspicuous isolation, but part of one rhythmical whole.

It may at first sight appear strange that S 2 should occur more frequently than S3. S2 is a decidedly heavy rhythm, while
the substitution of cretic for trocheein S 3 removes this heaviness to a large extent. The explanation no doubt lies in the fact that we are dealing in the one case with one word, in the other with two. As this involves a discussion of the diaeresis, we shall return to this question below. Further, it is seen that the penultimate foot is rarely smaller than the last; besides S3 the only cases are T3 (which is really a cadence) and I3, a comparatively rare combination. As Laurand remarks (Etudes p. 156), "le dernier pied est moins important que l'avant dernier où le rhythme a tout son relief,'. To make the final foot longer than the penult was to make the tail more important than the head, and to throw the weight from one scale into the other.

Very instructive is the comparison of the forms C2, N2, and B2. These three combinations have the same number of long and short syllables, but how great a difference to their artistic worth does the order of syllables make! C2 has 2831, N2 has 856, and B2 has 32 examples. While C2 has a smooth and equable movement through the alteration of long and short syllables. the two long syllables at the beginning of N2 produce a rugged, though forcible effect; the final short relieves its heaviness very considerably. Contrast the rarity of M2, in which this short syllable is replaced by a long one. B2 is even less frequent than M2, and this illustrates the marked avoidance of iambic words in the penult. From the typological table we see that I2 and I3 were nearly always composed of one word, so that the short syllable of the penult would receive the weaker secondary accent. That an iambic word is found so rarely in the penult is due partly to its being a pes minutus, partly to the fact that the full accent falls on a short syllable, which stands, as it were in rhythmical isolation. In other words, we have one solitary "tempus", whereas in other cases where the accent falls on a short syllable, we have two "tempora", indissolubly linked together. as they
are the equivalent of one long syllable. So A2, A3, B2 and B3 are all rare since they begin with iambic words. Cicero clearly prefers in the penult those feet that begin with a long syllable or its equivalent, two shorts.

It is remarkable also how rare it is for the final foot to be an iambus. This is because it is not a "cadence" foot, and cadences are especially necessary for rounding off an oratorical period. This iambic ending is much commoner in the easy. colloquial style of letter-writing.

When we compare M3 with M2, we understand that a heavy base was not in itself objectionable; it depended on the number and the character of the syllables that followed whether it was avoided or not. In M3 the balance between long and short syllables is to a large extent restored.

Explanation, however, of the relative frequency of the different forms is rendered more difficult by our ignorance of how often certain words were likely to occur as compared with others, though the knowledge that quadrisyllables (e.g.) are less frequent than trisyllables is of service in our endeavour to decide which of two clausulae is preferred. With these brief preliminary remarks we proceed now to the detailed investigation of the various combinations.
(I) Cretic Combinations: We shall begin with these as a discussion of them will involve comparison with many others. and so lead to the explanation of certain rhythmical phenomena of fundamental importance. Subjoined are tables of C2 and C3.

| C2 | $\mathrm{C}^{1} 2$ | $\mathrm{C}^{2} 2$ | $\mathrm{C}^{1}$ | $\mathrm{C}^{12} 2$ | $\mathrm{C}^{1} 2^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2831 | 242 | 773 | 262 | 107 | 22 |
|  |  |  |  |  |  |
|  | C3 | $\mathrm{C}^{1} 3$ | $\mathrm{C}^{2} 3$ | $\mathrm{C}^{12} 3$ |  |
|  | 1539 | 126 | 12 | 1 |  |

The first thing that strikes the eye is the paucity of resolved forms in C3 as compared with C2. This is partly due to the fact that fewer forms are possible in C3, partly to the greater infrequency of words of the necessary type. But that this is not the only explanation seems evident from a comparison of $\mathrm{C}^{2} 2$ and $\mathrm{C}^{2} 3$. In order to eliminate other influences, let us take M3 and compare it with C3g. A word like "cognoscere"' has before it a trochee 865 times, a spondee 637 times; but with the resolutions the relative frequency is reversed: $\mathrm{M}^{3} 3 / 27, \mathrm{C}^{2} 3$ only 12. As the last word in both combinations is the same, it would seem that the heavier "base" is more tolerant of resolution than the lighter, though in both the resolution of the last syllable of the base is clearly avoided. Then we observe that the further the resolution is from the diaeresis, the greater is the frequency: $\mathrm{M}^{1} 3$ occurs $145, \mathrm{M}^{2} 358, \mathrm{C}^{1} 3126$ times. In C3g and M3, where the case and cadence balance each other, the two syllables round the diaeresis seem to be, so to say, the cardinal points, the hinges on which depends the symmetry of the combination. The symmetry is less disturbed when resolutions occur elsewhere and these two syllables remain intact.

This may perhaps help us to explain why C2 is so different from the combinations just mentioned. Here the two feet are not equally balanced, and the middle syllable of C 2 g (the only type in which a resolution of the syllable preceding the diaeresis is possible) serves as a sort of glide between the two accented portions. It is attached to both words; to the first because it completes the cretic foot, and to the second because it is part of the word. Its position is therefore in a sense neutral, and the substitution of two shorts does not alter profoundly the character of the rhythm. since it leaves undisturbed what we may call the "cardinal points" of C2, viz., the first syllable of the base, and the first syllable of the cadence. The final syllable of the base
in C 2 is a connecting link between the two equally balanced parts, not as in C3, an essential part of the balance. When the cretic of C 2 is composed of one word, the absence of "inane" prevents the third syllable from fulfilling this function, and this may to a certain extent explain what Zielinski calls the "Scheu vor der Diaerese". In the one case we have "oratio vincta", in the other "oratio dissoluta". See further below and compare Zander II 262, De Groot, Commentatio p. 20.

We can now understand why $\mathrm{C}^{12}$ is so much rarer in proportion to C 2 g than the forms $\mathrm{C}^{1} 3$ and $\mathrm{M}^{1} 3$ are to their corresponding Ground-forms (g caesura). In $\mathrm{C}^{12}$ a "cardinal point" is weakened by resolution, whereas the reverse is the case with $\mathrm{C}^{1} 3$ and also with $\mathrm{M}^{1} 3$, where the heavier base more readily admits of resolution. Further, since $\mathrm{C}^{2} 2$ occurs much more frequently in proportion than $\mathrm{C}^{1} 3(37 \%: 14 \%)$, and $\mathrm{C}^{1} 2$ still more frequently in proportion than $\mathrm{C}^{2} 3(11 \%: 1 \cdot 3 \%)$, we see that in symmetrical combinations resolutions are much less frequent than in non-symmetrical combinations, and that the disparity is all the greater where a cardinal point is resolved.

It will be noticed that the form $\mathrm{C}^{2} 2^{1}$ does not occur. Zielinski (I 58), arguing from the incidence of the ictus, refers such combinations as might appear to belong to this form elsewhere; on the accentual principle there is no need to discuss the question. The combinations would be either like "condicione dare potuit" or "ire prohibuimus", which, on our view, are different ( $\mathrm{P}^{1}{ }^{1}$ and $\mathrm{C}^{2} 2^{1}$ ). Z., following his theory of "Anläufe", maintains that "prohibuimus" should have the accent (or ictus) on the second syllable. If this view were correct, such an example would have to be classed $\mathrm{ii}^{23}$ (where, as Professor Clark, we use the Roman numerals for Z.'s heavy forms), at any rate if a long syllable preceded; cf. "commune periculum" $=\mathrm{ii}^{2}$, p. 78. However, we are told on p. 115 that the resolution of the length
following a dactyl is avoided (das $0^{23}$ Verbot), though there are two examples that seem to defy this law. Now, there are seven examples of a dactylic base followed by a resolved cadence, viz., $\mathrm{S}^{2} 2^{1}$, though Z. considers these two feet to be the cadence of his forms 4 and 6 (see pp. 127-8, 136). This is because he accents a word like "potuerat" on the first syllable. Zielinski makes his "Verbot" apply only to a molossus base; but the rhythmical instinct which has unconsciously been obeying this "law" is seen also in the avoidance of the form $\mathrm{C}^{2} 2^{1}$, which never occurs in the clausula, and very rarely elsewhere (in the speeches I have examined there are only two examples, see p. 106). It is not the mere accumulation of short syllables that is responsible for this avoidance; $\mathrm{C}^{122}$ has five successive shorts and occurs 100 times. But a resolved cadence is by no means common $\left(\mathrm{C} 2^{1}=262\right)$ and still less common are examples in which both base and cadence are resolved ( $\mathrm{C}^{1} 2^{1}$ occurs only 22 times). If the cadence is resolved, the preceding syllable is nearly always long. N2 ${ }^{1}$, in which one short precedes the resolved cadence, occurs only 8 times; $\mathrm{S}^{2} 2^{1}$. in which two short syllables precede, only 7 times; and finally there are no examples (in the clausula) where three shorts precede.

We pass to the consideration of the typology. The only forms (in cretic combinations) that admit of more than one caesura are C2 and C2 ${ }^{1}$. In both we see that the d caesura is avoided; this is no doubt due. as we said above, to the desire for "vincta oratio'". If the foot is co-extensive with the word, we have a choppy, staccato effect, analogous to that produced in music, where there is a perceptible break in time. The $g$ caesura corresponds to the legato touch, the d caesura to the staccato. This is what Quintilian means when he speaks of $d$ as "forte" as opposed to the "molle" of "archipiratae". Though he does not speak of the effect of $g$, we may give it an intermediate
position between a and $d$. The presence of a caesura of course involves a certain break in the rhythm, but this is less felt in the case of g , as the cretic is a rhythmical whole, and the break does not come at the end of this whole, but in the middle, thus linking one word to the other. It is scarcely adequate, with Zielinski, to put down the rarity of $d$ to a "Scheu vor der Diaerese"; for there must have been times when the more forcible rhythm was appropriate to the context. Nevertheless, the facts justify our saying that smoothness of rhythm is a characteristic feature of Cicero's oratorical prose. In C2d the words required are dissyllabic and trisyllabic, and therefore much commoner than the pentasyllables of type a; so that the greater number of the latter (520:256) is further evidence of the preference for smoother rhythms.

On the accentual principle g is of course the only type of base that is capable of resolution, so that the two examples of $\mathrm{C}^{12} 2 \mathrm{~d}^{1}$ that perplexed Zielinski (I 56) are to be referred elsewhere ( $\mathrm{S}^{12} 2$ ). In resolved forms, consequently, the d caesura is possible only when the cadence is resolved. In $\mathrm{C} 2^{1}$ the d caesura is much commoner in proportion than in C2, and this may be ascribed largely to Zielinski's "Häufigkeitsgesetz", though the tribrach lessens the "forcibleness" (forte) of the trochaic ending.

Since many of the examples of the b caesura are doubtful we have not included it in our table; if "non oportere" is really C2b, the stressed monosyllable must practically form one word with the following quadrisyllable.

As regards the form C3, we notice that the d caesura is much more frequent than in C2. This may be partly due to the fact that the longer cadence softens the staccato effect which is so noticeable when a cretic word is followed by a diminutive trochee. That there are no resolutions of the cadence is not
surprising, as the only possible case would be where the cadence ended with a monosyllable, e.g., perficere vis, a decidedly awkward rhythm.

Before leaving the forms with cretic bases, we may make some remarks on Zielinski's treatment of special cases that he supposes come under the category of cretic combinations. On p. 34 he takes "esse patiebatur" to be an example of a V1 combination with the first syllable resolved. On our principles this must be TS ${ }^{1} 2$, since we begin the foot with the accented syllable. But there is no reason why even Z. should not rather class this is an example of his form $\mathrm{S} 2^{2}$, which he says ( p .155 ) is not found, since according to the S-Gesetz a d caesura would be expected. This bowing to a quite arbitrary "law' is not only not justified, but is inconsistent with his treatment of $\mathrm{S} 2^{1} \mathrm{~g}$ and d. Z. admits the g caesura in the one case, but shuts out the possibility in the other. If he had only allowed this, he might have classed the example just given as $S 2^{2} g$, as the anapaest takes the place of the spondee, just as on p. 146 he says "homine delectemur" is a resolution of "esse cognovistis". This would also have had the merit of restoring an harmonious ictus-one of Z.'s favourite tests when there is any doubt.

Then Z. classes "credatis postulo" with "possem cognoscere", and calmly justifies this on p. 68 by saying that a slight "Ictenverschiebung'" has taken place, though he adds immediately that this "den Character der Clausel als ii denaturirt", and so explains the smaller number of d caesuras in ii as compared with 2 where this Verschiebung was not necessary! I have mentioned this in order to point out how valueless some of Z.'s conclusions must be when the basis on which he works is so unsubstantial. The incorrect classification of the data vitiates the conclusion. On p. 79 Z. quotes this same phenomenon or "law'"
in most illegitimate circumstances. Though on p. 100 he distinctly states that the law applies only to molossus bases consisting of one word, yet he uses it to discuss the form "illis dominantibus." On the same page 79 Z . is in some doubt whether combinations like "commune periculum" should be classed along with that just quoted, and remarks that his Auflösungsgesetz would suggest that they are different forms, as indeed according to the accentual principle they are $\left(\mathrm{M}^{3} 3\right.$ and $\left.\mathrm{S}^{2} 3\right)$. But since $\mathrm{ii}^{2}$ and $2^{\mathrm{d}}$ are concurrent forms, one has to go, since Z.'s four "Proben" here fail him. He is very loth to do away with $\mathrm{ii}^{2}$, since that would cause a gap in his system! A naive admission, which clearly shows that with Z. his system is an idée fixe; it must be right, and all his ingenuity is directed to the process of adapting facts to theory. Having decided that $2^{d}$ is really a variation of $i^{2}{ }^{2}$, he explains the syllaba anceps at the beginning of the foot by the heavy stress thrown on to the middle length, "with which for our consciousness the clausula begins" (da die Clausel also solche für das Bewusstsein mit den guten Taktteil einsetzt). If this avowal is to be taken strictly, it is tantamount to admitting accent as the guiding principle instead of a mere "metrisches Gebilde."

Finally, on pp. 85 ff., in discussing the hypothetical forms $2^{\text {ch }}$ and $2^{\mathrm{e}} \mathrm{Z}$. seems to argue that because ii has a larger percentage of g caesuras than 2, and because the two forms under discussion show similar proportions, the form $2^{\text {ch }}$ is a development of 2 , the form $2^{e}$ a development of ii. But Z. omits to note that in the case of $2^{1}$ and $\mathrm{ii}^{1}$, the proportions of g and d caesuras are reversed. Why, we may ask, should a resolved form not agree in this respect with the forms where according to Z. a trochee has been substituted for the first length? The analogous proportions are no argument at all; each form must be discussed on its own merits.
(II) T2 endings. We give first a table showing the chief feet that precede this cadence (Ground-forms only).

| CT2 | ST2 | IT2 | MT2 | ET2 | NT2 | PT2 | BT2 |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1093 | 1135 | 384 | 276 | 97 | 23 | 80 | 13 |

We have already spoken of the necessity of finding a base that would afford a sufficient contrast to the outstanding cadence. This condition is fulfilled by C and S , which account for more than half of the total number of cases. The iambus is a somewhat slender foot, and occurs much less frequently. The dichoreus does not come so well after M, since it has not the same isolation as it usually enjoys when we have the d caesura. We have types like "consideremus", or "non vindicari", so that the preceding long syllable is either part of the same word, or at least closely attached to it. Cicero clearly prefers that the dichoreus should be contained in one word, and that this word should be a quadrisyllable. Unfortunately Z.'s tables do not allow us to give exact statistics of the typology of this cadence, as he tells us on p. 116 that the caesuras for the cadence have not been always marked in his form $3^{\text {tr }}$. Still, one has only to consult the Ground-form on p. 94 to see that the dichoreus is generally composed of only one word. We now take each combination in detail.
(a) Cretic Combinations.

| CT2 | CT $^{12}$ | C $^{1} \mathrm{~T}^{2}$ | CT2 $^{1}$ | CT $^{1} 2^{1}$ | C $^{1} \mathrm{~T}^{12}$ | $\mathrm{C}^{2} \mathrm{~T}^{1}$ | $\mathrm{C}^{2}$ T2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1093 | 149 | 32 | 12 | 3 | 1 | 2 | 2 |

and there is also one example of $\mathrm{C}^{1} \mathrm{~T} 2^{1}$.
The resolutions are here about $20 \%$ of the G.F., and in the majority it is the first trochee of the cadence that is resolved. The resolutions of C are naturally much rarer, since the type of cadence preferred involves the use of long words to enable
the cretic to be resolved. The most remarkable fact is that the last trochee is resolved only 18 times, thus showing that the cadence was spoilt by such an ending. On the other hand, the first trochee is often resolved, because this is possible without having two words, words like 'calamitatem'" being fairly frequent, while words of the type $\mathrm{T} 2^{1}$ are exceedingly rare ("constituerat'" is, I think, the only example in Cicero's speeches). Most of the cases of $\mathrm{T} 2^{1}$ are infinitives followed by their governing verb (esse cupimus, etc.). Double resolutions of the cadence are naturally rare. The two examples of $\mathrm{C}^{2} \mathrm{~T} 2$ are uncertain; Verr. II 61, where the Oxford text reads "facta esse videantur" (cf. for the rhythm "gesta esse videantur", Sull. 83), while the other example quoted by Zielinski (I 104) is Sull. 81, "audaci, at aliquando amico', where it seems hardly possible to carry on the rhythm after a distinct pause.
(b) Spondaic Combinations.

| ST 2 | $\mathrm{~S}^{1} \mathrm{~T} 2$ | $\mathrm{ST}^{12}$ | $\mathrm{~S}^{2} \mathrm{~T} 2$ | $\mathrm{~S}^{1} \mathrm{~T}^{12}$ | $\mathrm{ST}^{1}$ | $\mathrm{~S}^{2} \mathrm{~T}^{1} 2$ | $\mathrm{~S}^{2} \mathrm{~T}^{1}$ | $\mathrm{~S}^{1} \mathrm{~T}^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1135 | 377 | 132 | 140 | 43 | 36 | 4 | 3 | 5 |
|  |  |  |  |  |  |  |  |  |
|  |  | $\mathrm{ST}^{1} 2^{1}$ | $\mathrm{~S}^{12} \mathrm{~T} 2$ | $\mathrm{~S}^{1} \mathrm{~T}^{1} 2^{1}$ |  |  |  |  |
|  |  | 2 | 1 | 1 |  |  |  |  |

This combination is of course capable of more resolution, and we find that the resolutions are over $60 \%$ of the G.F. As in CT2 the final trochee is rarely resolved. The greater number of the resolutions occur in the base, since this is possible without disturbing the dichoreus. $\mathrm{T}^{12}$ is preceded by S nearly as often as by C . We expect $\mathrm{S}^{1} \mathrm{~T} 2$ to be more frequent than $\mathrm{S}^{2} \mathrm{~T} 2$, as the latter makes too swift a rhythm. The examples of $\mathrm{S}^{2} \mathrm{~T} 2$ are given in full by Zielinski (I 96-98), but of the 163 cases there quoted 23 are undoubtedly PT2, 2 are IT2, while 19 may be CT2 owing to the possibility of a syllaba anceps after a
pause. These differences are recognised and discussed by Z. ( p . 99-100), who concludes that the majority are doubtful. On our theory the majority are certainly $\mathrm{S}^{2} \mathrm{~T} 2$. The larger number of resolutions of the final trochee is perhaps due to the firmer base in S as compared with C . Then I should explain the increase of double resolutions by the greater possibilities afforded by the base $S ; \mathrm{S}^{1} \mathrm{~T}^{1}$ does least violence to the basic rhythm.
(c) Iambic Combinations.

| IT2 | IT $^{12}$ | IT2 $^{1}$ | IT1 $^{1} 2^{1}$ |
| :---: | :---: | :---: | :---: |
| 384 | 49 | 10 | 3 |

The same phenomena meet us here; resolution of cadence chiefly in the first trochee, double resolutions rare. Of course, as the iambus cannot be resolved, there must naturally be fewer; but it is interesting to note that the proportion of resolved cadences is nearly the same in all the three forms we have been considering. In CT2 it is $15 \%$, in ST2 $14 \%$, in IT2 $16 \%$.
(d) M Combinations.

| MT2 | $\mathrm{M}^{1} \mathrm{~T} 2$ | $\mathrm{M}^{2} \mathrm{~T} 2$ | $\mathrm{M}^{3} \mathrm{~T} 2$ | MT ${ }^{12}$ | MT2 ${ }^{1}$ | $M^{3} \mathrm{~T}^{2}$ | $\mathrm{M}^{1} \mathrm{~T}^{12}$ | $\mathrm{M}^{1} \mathrm{~T}^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 276 | 65 | 51 | 30 | 26 | 12 | 6 | 6 | 3 |
|  |  | $\mathrm{M}^{13} \mathrm{~T} 2$ |  | MT ${ }^{12}$ |  | $\mathrm{M}^{2} \mathrm{~T}^{12}$ |  |  |
|  |  |  |  | 1 |  | 1 |  |  |

In MT2 the resolutions are much more numerous than in any other T2 combination. This is largely because the base has three lengths capable of resolution, $\mathrm{M}^{1}, \mathrm{M}^{2}$, and $\mathrm{M}^{3}$ alone accounting for 146 cases out of 205. M is a somewhat heavy base for the light cadence. Note also how the resolutions of M are increasingly frequent the further they are away from the
diaeresis. The number of resolved cadences (excluding cases where the base too is resolved) is $15 \%$ of the G.F., which is the same proportion as in $C, S$ and $I$. The resolution of the first trochee is not much more frequent than that of the second, perhaps because the heavy base would make too great a contrast. In any case it would be rare to find $M$ before a word like "calamitatem", as a monosyllable would be required. With double resolutions we never find that of the base next that of the cadence.
(e) $\boldsymbol{E}$ Combinations.

| ET2 | ET2 $^{1}$ | $\mathrm{E}^{3} \mathrm{~T}^{1}$ | ET $^{1} 2$ |
| :---: | :---: | :---: | :---: |
| 97 | 2 | 1 | 11 |

In ET2 there are 66 cases of the type "postea nil audierunt," and from Zielinski's table (I 117) we cannot say whether the last syllable of the base was accented or not. In the one case we should have ET2, in the other eT2. (See chapter IV on Accentuation, and p. 115 below.)
(f) PT2. These are given by Zielinski (I 105) as belonging to his form $3^{2}$; but we have rescued some from the list given on pp. 96-98. The former are the more numerous, and are all cases of elision (iudicium arbitratur, etc.).

| PT2 | $\mathrm{PT}^{12}$ | $\mathrm{PT}^{1} 2^{1}$ |
| :---: | :---: | :---: |
| 80 | 2 | 3 |

The resolutions are necessarily confined to the cadence, and their paucity is due to the weak character of $P$. The "base", if one can apply this term to $P$, is always preceded by a long syllable, so that the preceding foot will be substantial. As regards the typology, the pyrrich is 42 times coincident with a word. Zielinski would no doubt shudder to see P treated as a foot before T 2 ; but this is just as natural a combination as others that are even rarer (A2, B2, etc.).
(g) We give here the remaining cases in which T2 is preceded by some other foot than a trochee.

| BT2 | $\mathrm{B}^{2} \mathrm{~T}^{1}$ | $\mathrm{BT}^{1}$ | $\mathrm{BT}^{12}$ | $\mathrm{NT}^{2}$ | $\mathrm{NT2}^{1}$ | $\mathrm{~N}^{2} \mathrm{~T}^{2}$ | $\mathrm{NT}^{12} 2$ | $\mathrm{~N}^{1}$ T2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | 2 | 2 | 4 | 22 | 1 | 2 | 1 | 2 |
| DT2 | DT2 $^{1}$ | DT $^{12}$ | AT2 | UT2 $^{1}$ | UT $^{12}$ | T2 | T2 $^{1}$ |  |
| 3 | 3 | 1 | 1 | 6 | 1 | 3 | 5 |  |

$\mathrm{B}, \mathrm{D}$ and A , rare at any time, are unsuitable as bases for T 2 , and even N , though a fairly common foot in the penult, produces too rugged a rhythm before the dichoreus, which can be coincident with one word only if a monosyllable precedes. In most of the examples of NT2 the dichoreus is composed of two words (e.g., istius fuisse clamant), more rarely do we have the type "abiecta petitione". (The examples of T2 and T2 ${ }^{1}$ have no "base", since they form the kolon; e.g., festinat animus, where the Anlaufsilbe follows a mark of interpunction.)
( $h$ ) Finally we have to consider those cases in which one or more trochees precede the cadence T2. Here, Zielinski, in order to find a base, will go back as far as four trochees (cf. p. 139), though he adds that a series of fifteen syllables could hardly have been felt as a clausula. He justifies his treatment by saying that the transition is so gradual that we cannot stop elsewhere. Now, it seems best in such cases to admit that there is no "base", and that we have simply a succession of trochees (rare in prose), so that the dichoreus at the end would be the clausula. The effect of swift movement would often be modified by the pause between words (cf. what Quintilian says about the "inane"). We can quote a still longer example from the Orator (224): comprehensione longiore sustinentur, where there is a slight pause between the last two words, so that "sustinentur" is felt to be the real cadence of the phrase. If we insist on finding a
base, we may sometimes have to encroach on other kola, as Zielinski does not scruple to do, e.g., Phil. VIII 25 (Z. p. 137): ....depono, privatus esse non recuso, where Z. takes "depono" as forming part of the clausula, though the pause is such that we must assume two kola. Then, when a sentence ends with a word that is not closely connected in sense with what immediately precedes, Zielinski runs as much of the preceding words as he requires on to the final word; thus, et dum erit illa civitas. manebunt" is Z.'s G.F. 7 (the last syllable of "erit"' is taken to be anceps), while we should take only the syllables that make up a penultimate foot (the clausula = D2). This would seem to be a reasonable way of distinguishing between this type of kolon and those where there is no break at all. These fragmentary kola have been discussed in Chapter II; they occupy a place intermediate between two separate kola and one continuous kolon. In a sense they are separate, but the small number of syllables (under two feet) makes a connection with the immediately preceding rhythm unavoidable.
(i) TT2.

| STT2 | ITT2 | MTT2 | CTT2 | PTT2 | BTT2 | TT2 ${ }^{1}$ | Misc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $17(17)$ | $6(4)$ | $6(5)$ | $2(3)$ | 1 | 3 | 8 | 12 |

The figures in brackets refer to resolved forms, which we have not thought it worth while to reproduce here. In addition E precedes resolved forms of TT2 3 times, while D, N, and A precede TT2 once each.
(ii) TTT2. Of these there are only twelve examples, and of the twelve five are resolved forms. I should not include here Zielinski's G.F. 11 (crudelissimaque servitute liberatum), since I take the clausula to be "liberatum".
(III) T3 Combinations. As T3 is really a cadence, we shall class the examples according to the foot that precedes.

| CT3 | $\mathrm{C}^{1} \mathrm{~T} 3$ | $\mathrm{CT}^{1} 3$ | $\mathrm{C}^{12} \mathrm{~T} 3$ | $\mathrm{C}^{2} \mathrm{~T} 3$ |
| :---: | :---: | :---: | :---: | :---: |
| 116 | 2 | 9 | 1 | 3 |

What strikes us here is that the cadence is resolved only 9 times; the longer the cadence the less are resolutions tolerated, since these to a large extent destroy the swift movement and equable flow of a trochaic close. We must note that under CT3 there may be some examples of IT3, since Zielinski's typology is not here sufficient (pp. 121-22).

| ST 3 | $\mathrm{~S}^{1} \mathrm{~T} 3$ | $\mathrm{~S}^{2} \mathrm{~T} 3$ | $\mathrm{ST}^{13}$ | $\mathrm{~S}^{1} \mathrm{~T}^{1} 3$ | $\mathrm{~S}^{12} \mathrm{~T} 3$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 142 | 18 | 5 | 11 | 3 | 1 |

C, S, and M precede T3 in much the same proportion as we find in the case of T2, which would seem to confirm the view that T3 is a cadence.

| MT3 | M $^{1}$ T3 | M $^{3}$ T3 | IT3 | ET3 | BT3 | NT3 | DT3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 29 | 19 | 15 | $12(2)$ | $22(5)$ | $13(3)$ | $11(7)$ | 4 |
|  |  |  |  |  |  |  |  |
|  | AT3 | UT3 | PT3 | T3 |  |  |  |
|  | 2 | 2 | 8 | 3 |  |  |  |

The numbers in brackets refer to resolutions. To IT3 we must add some from CT3 as was explained above. Below we give the cases where T3 is preceded by one or more trochees.

| TT3 | CTT3 | STT3 | TTT3 | STTT3 | CTTT3 | Misc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | $5(1)$ | 9 | 1 | $2(1)$ | 1 | 4 |

The miscellaneous ones at the end are cases in which TT3 is preceded by I, M, and N.
(IV) Spondaic Combinations. That the antepenult is important in these is seen from the following table (Ground-forms only given).

| CS2 | MS2 | SS2 | TS2 | IS2 | Misc. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 395 | 24 | 131 | 102 | 75 | 17 |

*That the cretic is the commonest by far is due to the desire for a suitable rhythm to contrast with the heavy ending. But then we may ask, why is SS2 more frequent than TS2, since the trochee lightens the rhythm while the spondee adds to its heaviness? Perhaps the trochee formed too great a contrast, and the unevenness of rhythm produced was less agreeable to the ear than the heavy, yet dignified SS2. CS2 seems to be a mean between two extremes. Note that TS2 is much more rarely resolved than SS2. The infrequency of MS2 as compared with SS2 shows clearly the importance of accent; for with both SS2 and MS2 we have the same number of long syllables (SS2 is always preceded by a long syllable). Cicero prefers to say "me Romam deportare" as against "Romam me deportare". In the 17 miscellaneous examples the feet that precede the final combination are P, B, E, A, D. We shall now consider these forms in detail.

| CS2 | CS12 $^{2}$ | CS2 $^{1}$ | $\mathrm{C}^{1}$ S2 | CS12 $^{1}$ | C $^{12}$ S2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 395 | 13 | 15 | 4 | 2 | 1 |

That the resolutions of the base are so few is to be expected, as the last word would have to be either pentasyllabic or dissyllabic. The former type is rare, while we know that a spondaic word at the end of the clausula is avoided, when another spondee precedes. Nor do we expect either S or 2 to be resolved often,

[^3]as after a cretic two words would generally be necessary. We leave all examples of $\mathrm{S}^{2} 2$ to be considered below.

| MS2 | $\mathrm{M}^{1} \mathrm{~S} 2$ | $\mathrm{M}^{1} \mathrm{~S} 12$ | $\mathrm{M}^{3} \mathrm{~S} 2$ |
| :---: | :---: | :---: | :---: |
| 24 | 6 | 1 | 1 |

Though the numbers are very small yet we may note that this heavy form does not show many resolutions. Contrast M2 where these are more numerous than examples of the G.F.

| SS 2 | $\mathrm{~S}^{1} \mathrm{~S} 2$ | $\mathrm{SS}^{12}$ | $\mathrm{~S}^{1} \mathrm{~S}^{1} 2$ | $\mathrm{~S}^{2} \mathrm{~S} 2$ |
| :---: | :---: | :---: | :---: | :---: |
| 131 | 39 | 8 | 1 | 4 |

We observe that the final foot is not resolved in either SS2 or MS2, while in CS2 this resolution is commoner than any other. We may attribute this to the fact that CS2 is a lighter rhythm than SS2 or MS2, and the final tribrach is not so great a contrast in CS2 as in the others.

| TS2 | T $^{1}$ S2 | TS2 $^{1}$ | T $^{1}$ S2 $^{1}$ | IS2 | IS12 $^{1}$ | IS2 $^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 102 | 14 | 11 | 5 | 76 | 7 | 6 |

These forms teach us nothing new; S2 is again rarely resolved, while the resolution of $T$ makes too great a contrast to the following spondees.

Before considering the clausula heroica we may add some miscellaneous examples, in most of which we cannot tell from Zielinski's tables what precedes.

| $\mathrm{S}^{12}$ | $\mathrm{~S} 2^{1}$ | $\mathrm{~S}^{1} 2^{1}$ | $\mathrm{~S}^{12} 2$ | $\mathrm{~S}^{12} 2^{1}$ | S 2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 79 | 27 | 6 | 14 | 1 | 7 |

Most of the examples of $\mathrm{S}^{12}$ are taken from the table Z . gives on p. 32, where we see that the types are "recuperatores",
"patiebantur" and "calamitas ipsa". The last type is much more frequent than either of the others. Note also the rarity of the very weak clausula $\mathrm{S}^{12} 2$.

| PS2 | BS2 | ES2 | AS2 | DS2 | US2 | NS2 ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{5}$ | $\mathbf{7}$ | $\mathbf{6}$ | $\mathbf{1}$ | $\mathbf{1}$ | 2 | 2 |

These figures speak for themselves, and we see that the only feet that precede S 2 at all frequently are $\mathrm{C}, \mathrm{S}$ and T . That the above should occur, however, shows that there was no mechanical adhesion to a limited number of forms, and is just what we should expect in any writer that was not consciously moulding his sentences in accordance with a rigid scheme. It is good evidence of the spontaneity and naturalness of a great master of prose, whose largely unconscious instinct led him to prefer certain rhythms, but not to the absolute exclusion of others that in the nature of things were only likely to occur.

The clausula heroica occurs 71 times. What feet precede may be seen from the following tables.

| $\mathrm{CS}^{22}$ | $\mathrm{TS}^{22}$ | $\mathrm{SS}^{22}$ | $\mathrm{MS}^{22}$ | $\mathrm{IS}^{22}$ | Misc. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 22 | 10 | 8 | 6 | 6 | 7 |

As $\mathrm{S}^{2} 2$ would make the end of an hexameter, we should expect the preceding foot to be generally one that would be impossible in the fourth foot, so as to break up the verse rhythm. This is the case, as S occurs only eight times, while of its resolved forms only two are dactyls. The cretic most often precedes, while the trochee is as rare as the spondee, no doubt because the form $\mathrm{S}^{2} 2$, with its swift movement, was felt to be a sort of double cadence, similar to T2, and a preceding trochee would aggravate this feeling. We now give resolved forms of the above combinations.

| $\mathrm{CS}^{2} 2^{1}$ | $\mathrm{~T}^{1} \mathrm{~S}^{22}$ | $\mathrm{~S}^{1} \mathrm{~S}^{2} 2$ | $\mathrm{~S}^{2} \mathrm{~S}^{2} 2$ | $\mathrm{~S}^{2} \mathrm{~S}^{2} 2^{1}$ | $\mathrm{SS}^{2} 2^{1}$ | $\mathrm{~S}^{12} \mathrm{~S}^{2} 2$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1 | 6 | 2 | 1 | 1 | 1 |
|  |  |  |  |  |  |  |
|  |  | $\mathrm{M}^{2} \mathrm{~S}^{2} 2$ | $\mathrm{M}^{3} \mathrm{~S}^{2} 2^{1}$ | $\mathrm{~S}^{2} 2^{1}$ |  |  |
|  |  | 2 | 1 | 4 |  |  |

We now pass to the form S 3 .

| S3 | $\mathrm{S}^{13}$ | $\mathrm{~S}^{23}$ | $\mathrm{~S}^{12} 3$ |
| :---: | :---: | :---: | :---: |
| 659 | 149 | 24 | 1 |

S3 is a very different combination from S2; while in the latter $d$ is the rarer caesura, in the former it is by far the most common. We append a typological table.

|  | S 13 | S 23 | S 3 |
| :---: | :---: | :---: | :---: |
| a | 13 | 6 | 215 |
| g | 24 | 9 | 4 |
| d | 122 | 9 | 439 |

That the $g$ caesura is more frequent in the resolved forms is due to the "Häufigkeitsgesetz'. The caesuras for $S^{2} 3$ seem to indicate that this clearly avoided ending was not made less objectionable by any particular caesura. It occurs less frequently than the clausula heroica, and we shall probably find the reason when we compare it with C3. The balance which characterises the latter is quite spoiled by the substitution of dactyl for cretic in the penult. As we have already said, we believe Zielinski to be in grievous error in classing our S3 forms with M3, a form that we may now examine.
(V) M Endings.

| M3 | $M^{13}$ | $M^{23}$ | $M^{3} 3$ | $M^{123}$ |
| :---: | :---: | :---: | :---: | :---: |
| 637 | 145 | 58 | 32 | 3 |

It is noteworthy that S3 and M3 are almost equally frequent, and the same applies to $S^{1} 3$ and $M^{1} 3, S^{2} 3$ and $M^{3} 3$. These facts do not appear from Zielinski's table on p. 64, where ii a, b, d $=483 ; \mathrm{g}=637$. This is because our S3 appears also on the table of resolutions ( $\mathrm{ii}^{1} \mathrm{~d}$, videamus cetera, etc.). Far from Z.'s iid being on a par with iig (as S3 and M3 with us really are), it is according to $Z$. much less frequent. The number of $d$ caesuras is greater than Z. thinks, so that the explanation given on p. 68 for the great decrease of $d$ cases as compared with the G.F. is unnecessary, and the words on p. 66 "die grössere Ungunst von d" are unwarranted. S3d occurs 439 times, M3 637 times, but we cannot thus compare the caesuras of totally different combinations.

We have already seen that, as a rule, the further the resolutions are from the base, the greater is the frequency. M3 is a good instance of this. It is a symmetrical combination, the nature of which is considerably altered by resolution, and it is clear that the resolution of the second and third lengths made the greatest change. Below is a table of M2 and its resolutions.

| M 2 | $\mathrm{M}^{12}$ | $\mathrm{M}^{2} 2$ | $\mathrm{M}^{3} 2$ | $\mathrm{M}^{2} 2^{1}$ | $\mathrm{M}^{1}$ | $\mathrm{M}^{1} 2^{1}$ | $\mathrm{M}^{13} 2$ | $\mathrm{M}^{23} 2$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 57 | 30 | 18 | 8 | 4 | 16 | 5 | 6 | 2 |

M2 is the only combination in which resolutions outnumber the examples of the G.F. (contrast Zielinski's peremptory statement p. 156, "was nicht statthaft ist'"). This very fact proclaims its status; the intolerably heavy rhythm demanded more than ordinary resolution. Note the gradation from $\mathrm{M}^{12}$ to $\mathrm{M}^{3} 2$, which is all the more remarkable considering the unusual nature of the G.F. Of the double resolutions $\mathrm{M}^{23} 2$ occurs only twice, perhaps only once, since the reading of Agr. II 45 is doubtful (mentibus animisque, Z. p. 133).
(VI) $N$ Combinations. In these the nature of the antepenultimate foot is of great importance, so we shall classify the examples accordingly.

| SN2 | SN12 $^{2}$ | $\mathrm{~S}^{2}$ N2 | S $^{1}$ N2 | SN $^{2} 2$ | SN2 $^{1}$ | S $^{2} \mathrm{~N}^{2} 2$ | Misc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 412 | 137 | 107 | 65 | 24 | 2 | 1 | 3 |

The typology for SN2 is as follows:-"tum demonstrat fuisse" (151) ; "armatorum fuisse" (142); "aequum dixit videri" (119), so that in more than two-thirds of the cases S is connected very closely in rhythm with N. SN2 may therefore be called a Ground-form, though N will still be referred to as the base. The resolutions of SN2 are nearly as numerous as the examples of the G.F. But as regards N itself. N2 occurs 856 times, $\mathrm{N}^{1} 2145$, and $\mathrm{N}^{2} 252$ times, and there is only one example in which both base and cadence are resolved, viz., $\mathrm{N}^{1} 2^{1}$. $\mathrm{N}^{2} 2$ is referred by Zielinski to his form 3, so that the resolution would be in the cadence, not, as with us, in the base. Its comparative rarity is due to the weak rhythm produced by a short syllable following upon a dactyl. The greater frequency of $\mathrm{N}^{12}$ is another illustration of the gradation already referred to.

That the antepenult of SN2 is not more frequently resolved may seem strange, as we should think resolution would relieve the weight of the base. But the foot or feet that precede the final combination must lead up to and harmonise with it (cf. Zander I 180, and 331-"illa quae clausulam antecedant oportere pedibus congruere cum clausula ut apte perveniatur ad clausulam"). A dignified, stately ending, albeit somewhat heavy, must not have preceding it a rhythm that affords too great a contrast. Note that when N is resolved. S never is (with only one exception), and vice versâ.

| TN2 | $\mathrm{T}^{1} \mathrm{~N}^{2}$ | $\mathrm{TN}^{12}$ | $\mathrm{TN}^{2} 2$ | $\mathrm{~T}^{1} \mathrm{~N}^{12}$ | $\mathrm{TN}^{1}$ | $\mathrm{~T}^{1} \mathrm{~N}^{1}{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 161 | 21 | 6 | 3 | 1 | 1 | 1 |

In the light of what has just been said, we are not surprised to find TN2 much less frequent than SN2, and resolutions of the base very rare.

| CN2 | $\mathrm{CN}^{2} 2$ | $\mathrm{C}^{2} \mathrm{~N} 2$ | IN2 | IN $^{2} 2$ | $\mathrm{IN}^{1} 2^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 32 | 7 | 4 | 24 | 4 | 1 |

Why should CN be so much less common than TN? Because N is an awkward rhythm after C , which is usually followed at the close of the period by a spondee or another cretic. Both C and $\mathrm{C}^{2}$ gravitate, as we shall see in Chapter VI, to the penultimate position. IN is an ill-matched combination, the weakest of feet preceding one of the strongest.

| DN2 | $\mathrm{MN}^{2} 2$ | $\mathrm{NN}^{2} 2$ | $\mathrm{~N}^{1} \mathrm{~N}^{12}$ |
| :---: | :---: | :---: | :---: |
| 30 | 10 | 4 | 1 |

With this table end the cases of N2. We now give N3 and its resolutions.

| N3 | $\mathrm{N}^{13}$ | $\mathrm{~N}^{2} 3$ |
| :---: | :---: | :---: |
| 82 | 15 | 3 |

The feet that most commonly precede are again S and $T$. Note how much rarer in proportion $\mathrm{N}^{2} 3$ is than $\mathrm{N}^{2} 2$.
(VII) Iambic Combinations.

| I 2 | PI 2 | $\mathrm{PI}^{1}$ | $\mathrm{I}^{1}$ | TI2 | T $^{1} \mathrm{I}^{1}$ | DI2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1311 | 129 | 2 | 14 | 14 | 1 | 1 |

As we have already pointed out, I2 may include some examples of C2b. Since we know that a long syllable precedes I2 1311 times, the thing that strikes us most is the small number of cases where I2 is preceded by a short syllable. Under PI2 are included types like "arbitror oportere" as well as "tamen
oportebit'", since Zielinski's table makes no distinction. It is at any rate clear that trochaic and dactylic rhythms were avoided before the iambus, though the dactyl is much commoner than the trochee (see Zielinski II 75 ff . on the "Complosionsgesetze"). The two examples of PI2 ${ }^{1}$ are given by Z. I 57 as belonging to his form $1^{13}$; "eat in exilium" and "patris amicitiae". In the former the preposition practically forms one word with the noun, and so is accented just as "amicitiae".

Of I3 there are 222 examples, nearly all of the type "recognoscite"; 6 only have the $d$ caesura (idem quaeritur). There are no resolutions.
(VIII) $E$ Combinations. E is a foot with a sluggish, cumbersome movement, which is not in any way relieved by a longer cadence, as is the case with M.

| E 2 | $\mathrm{E}^{1}$ | $\mathrm{E}^{3} 2^{1}$ | E 3 | $\mathrm{E}^{33}$ |
| :---: | :---: | :---: | :---: | :---: |
| 115 | 19 | 11 | 51 | 1 |

E2 corresponds to Z.'s S2, in which the final cretic is replaced by a molossus (I 141 ff .). This phenomenon of "Cholose" is, he says, the converse of resolution (ib. 143); but the substitution of a molossus for the final cretic means that the last word is not really a cadence, which must begin with the syllable that has the accent (or ictus). This "Cholose", then, is simply an ingenious expedient to make this type appear to be an evolution of the "Integrationsclausel". The S-Gesetz is the result of a theory that introduces an inconsistency into his system; for elsewhere the first syllable of the cadence has the ictus. Its existence is no more warranted than the "Ictenverschiebung" already discussed. Then on p. 158 Z. classes "et Marcum Lucullum" as S2, partly because of this S-Gesetz, partly on statistical grounds, though not without some hesitation. He hopes that later investigation may throw some light on the question, and meantime classes the
examples as S2, not as S1. This last he confines to cases that exhibit the caesuras $a, d$, $e$, which are not (most of them) according to us S1 (or our M2) at all, but our S2 (dispondeus). Examples like 'multis post annis'" (our M2) are classed with others like "censorem possit" (our S2). While Z. rejects g as a caesura for his S1 form, our M2 must of necessity always have the $g$ caesura. The statistical argument is another instance of Z.'s persistent attempt to fit facts to theory.
(IX) $B$ Combinations. These are one of the many combinations included by Zielinski in his S class.

| B2 | B $^{2} 2$ | B2 $^{1}$ | B3 | B23 |
| :---: | :---: | :---: | :---: | :---: |
| 32 | 6 | 6 | 39 | 2 |

The two forms with their resolutions are about equal, and are thus a contrast to N and E . That a cretic is slightly preferable to an iambus before words like "defenderem" is shown by comparing E3 with B3. But such a word is usually part of a symmetrical combination as in C3 and M3.
(X) A Combinations. A2 occurs 25 times (A2 ${ }^{1}$ twice), A3 only once, viz., Milo 73, "nec in facinore nee in libidine", where the "nee" is clearly accented. The pause, however, is somewhat slighter than that found at the end of most periods, and is indicated in the Oxford text by a semi-colon.
(XI) D Combinations. Zielinski of course treats D2 as a succession of trochees, though the effect is very different, owing to the caesura and the presence of only one accent. Quadrisyllabic bases are naturally rare, but we may ask why D should be considerably rarer than E . The answer seems to be that D as a base is too light. and offers no real contrast to the cadence.

Very rarely is D preceded by a foot that ends in a short syllable, as we see from the following table.

| ID2 | BD2 | SD2 | S1 $^{1}$ 2 | CD2 | TD2 | MD2 | M $^{1}$ D2 | ND2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | 7 | 12 | 5 | 4 | 3 | 1 | 1 | 3 |

There are also six examples of D2 ${ }^{1}$. D3 occurs six times, being preceded by C four times, by $\mathrm{S}^{1}$ once, and by T once.
(XII) We shall now consider combinations in which the final foot is an iambus. There are altogether 651 of these, which shows the remarkable predominance of the trochaic ending in the clausula of Cicero's speeches. The iambus is not a cadence foot, and cadences seem to be indispensable for the oratorical period. The following table shows what feet precede (Groundforms only given).

| SI | CI | TI | II |
| :---: | :---: | :---: | :---: |
| 476 | 91 | 7 | 7 |

As I is a weak ending, we should expect some firm rhythm in the penult, and this is shown by the predominance of S , and the extreme rarity of T and I .
(a) SI. We shall classify the examples according to what precedes.

| TSI | T $^{1}$ SI | TS ${ }^{1}$ I |
| :---: | :---: | :---: |
| 220 | 29 | 5 |

As T, S, and I are all "pedes minuti", we should expect the typology to present TS mostly as one word, and this is indeed the case. The 220 examples are all of the form "experiri tamen" (Zielinski I 64), though there are in addition some miscellaneous caesuras given by Z. ib. It is noteworthy, too, that where T is
resolved, the tribrach is rarely one word. The typology is given by Zielinski (I 70).

| $\mathrm{T}^{1}-\mathrm{S}-\mathrm{I}$ | $\mathrm{T}^{1} \mathrm{~S}-\mathrm{I}$ | $\mathrm{T}^{1} \mathrm{gS}-\mathrm{I}$ |
| :---: | :---: | :---: |
| 7 | 12 | 10 |

The dash (-) indicates the coincidence of the foot with the word, and in the last column $g$ means that the tribrach has the caesura after the second syllable. Of the five examples of $T S^{1} I$, four are of the type "partis hominum magis", the remaining one is "de Cleomenis fuga'", quoted by Z. (I 73) as belonging to his form $\mathrm{iv}^{3 \mathrm{tr}}$, which involves not only an extraordinary "Ictuirung', but total indifference to kolometry, since there is clearly a distinct pause after the preceding words "de fame".

| SSI | S $^{1}$ SI | S $^{2}$ SI | SS $^{1} \mathrm{I}$ | S $^{1} \mathrm{~S}^{2} \mathrm{I}$ | $\mathrm{S}^{1} \mathrm{~S}^{1} \mathrm{I}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 135 | 23 | 40 | 32 | 1 | 8 |

The large number of resolutions suggests that SS was felt to be a somewhat heavy combination to precede the slight iambus. This view is supported by the greater frequency of TSI, a lighter form, and by the fact that SS is usually covered by one word (see Z. p. 64, where the other cases are included in the miscellaneous caesuras, which number in all 44). Of course, as with all combinations, there must be numerous places where the rhythm echoes the meaning, e.g., Lig. 1620 -suam citius abiciet humanitatem quam extorquebit tuam ( $\mathrm{IC}^{1} \mathrm{C}^{1} \mathrm{~T} 2$ —SSI), where the rapid movement of the first kolon contrasts with the slow rhythm of the second. Let us consider the typology of the resolutions.

| S $^{1}-\mathrm{S}-\mathrm{I}$ | $\mathrm{S}^{1} \mathrm{I}-\mathrm{I}$ | $\mathrm{S}^{1} \mathrm{gS}-\mathrm{I}$ |
| :---: | :---: | :---: |
| 13 | 3 | 7 |

In 13 examples out of 23 all three feet are separate. From this we may conclude that the resolved form considerably softened
the staccato effect that would be felt if the G.F. were composed of three words.

| $\mathrm{S}^{2} \mathrm{~S}-\mathrm{I}$ | $\mathrm{S}^{2}-\mathrm{S}-\mathrm{I}$ | $\mathrm{S}^{2} \mathrm{bS}-\mathrm{I}$ | $\mathrm{S}^{2} \mathrm{gS}-\mathrm{I}$ |
| :---: | :---: | :---: | :---: |
| 19 | 8 | 7 | 6 |

From this we see that the dactyl and following foot are generally covered by one word, and where we have two words, the $d$ caesura occurs only eight times. This is due to the same desire for "vincta oratio" that we have noticed above.

For $\mathrm{SS}^{1}$ I we find only two caesuras; 18 examples like "ternas decumas darent", 14 like "aedilicium vides" or "in iudicium vocat", (for the preposition practically forms one word with the noun). See Z. I p. 78. In $\mathrm{S}^{1} \mathrm{~S}^{1} \mathrm{I}$ each foot is also the end of a word. There are further three examples of $\mathrm{S}^{1} \mathrm{I}$, in which no foot precedes because the combination itself forms a complete kolon.

The only other examples of SI are these :

| CSI | $\mathrm{CS}^{1} \mathrm{I}$ | ISI | IS $^{1} \mathrm{I}$ | $\mathrm{M}^{1} \mathrm{SI}$ | $\mathrm{S}^{1} \mathrm{I}$ | $\mathrm{ES}^{1} \mathrm{I}$ | $\mathrm{DS}^{1} \mathrm{I}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 17 | 2 | 8 | 2 | 2 | 5 | 1 | 1 |

The rarity of CSI is perhaps due to the fact that CS (or C2) is so common at the end of a kolon. Where, as here, CS was a complete rhythm in itself (I being necessarily detached), the addition of another foot to the familiar final combination would produce an awkward effect. It is noteworthy that the only examples of ISI are of the type "potestatem dare", which again shows the dislike of a series of minuti pedes.
(b) CI. Here I treat the cretic as a base, just as we do when a trochee or a cretic follows. Zielinski, however, is compelled to reckon C and I as the cadence.

| CCI | $\mathrm{C}^{1} \mathrm{CI}$ | $\mathrm{C}^{1} \mathrm{C}^{1} \mathrm{I}$ | SCI | $\mathrm{S}^{1} \mathrm{CI}$ | MCI | $\mathrm{M}^{1} \mathrm{CI}$ | $\mathrm{M}^{2} \mathrm{CI}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 25 | $\mathbf{1}$ | $\mathbf{1}$ | 21 | $\mathbf{8}$ | 18 | 4 | $\mathbf{1}$ |

$\mathrm{C}, \mathrm{S}$ and M are the feet that most frequently precede, though as the table below shows, there are 10 examples of other feet.

| NCI | $\mathrm{N}^{1} \mathrm{CI}$ | TCI | DCI | BCI | Misc. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 1 | 3 | 2 | 3 | 2 |

With $\mathrm{N}, \mathrm{T}$ and D we have a disagreeable alternation of long and short syllables, which is avoided, even though the accent causes the total effect to be very different from that produced by a succession of trochees.
(c) Miscellaneous combinations with I as final foot.

| STI | ST $^{1} \mathrm{I}$ | $\mathrm{c}^{1} \mathrm{TI}$ | bTI | ATI | TTI | SII | mII | $\mathrm{M}^{2} \mathrm{I}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | $\mathbf{1}$ | $\mathbf{1}$ | $\mathbf{1}$ | $\mathbf{1}$ | 3 | 7 | 1 | 11 |

The form TI involves what Zielinski calls "Complosion" (supra p. 94), a comparatively rare phenomenon in any part of the sentence (Z. II 76 ff .) and particularly eschewed in the clausula. TTI is given by Zielinski (I 32) as "quam necesse fuit", i.e., we have a cretic base with a resolved trochee following, surely a most extraordinary view. It is classed along with "laedit improbitas", etc., which has a totally different rhythmical effect. Both these forms show the same sequence of long and short syllables, but Z.'s classification of TTI takes the heart out of the rhythm. The other examples of TI are of the type "esse velit", "esse solet", etc. ATI is "eas referre iubes" (I 34), which Z. (p. 201) thinks is corrupt. Instead he would read "deferri" (Vii), which for us would be BSI, a form that nowhere else occurs, though the ending SI makes it much preferable to TI. Esse velit, etc., are taken by Z. to be cadences, and are classed along with words like "exigeret". Now, if these two rhythms are really identical, it is difficult to understand why our TI should be so rare, since the dissyllables composing the former
are much more common than the quadrisyllables composing the latter. On our theory there is no dactyl in either rhythm, and we explain the rarity of TI by the fact that the penult is not a base nor the final foot a cadence. The infrequency of the double iambus is equally great; Cicero does not have clausulae such as we find in Caesar, "castra ex eo loco movent" (SIII).
(XIII) Miscellaneous endings. Since a period was most appropriately rounded off by a cadence, we expect combinations like the following to be rare.

| TM | $\mathrm{T}^{1} \mathrm{M}$ | MM | $\mathrm{M}^{1} \mathrm{M}$ | CM | $\mathrm{CM}^{1}$ | SM | $\mathrm{EM}^{1}$ | $\mathrm{BM}^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 42 | 2 | 9 | 1 | 9 | 1 | 5 | 2 | 1 |

P2 occurs once, P3 four times, U2 twice, U2 ${ }^{1}$ twice, and the following once each: $\mathrm{cB}, \mathrm{Pb}, \mathrm{TE}, \mathrm{S}^{12} \mathrm{e}$. M as an ending occurs 68 times, its resolutions 4 times. In many cases TM is followed by a slighter pause (e.g., a semi-colon), and the examples are mostly of the type "restituti sunt." But the 42 examples of TM may possibly include other forms, since Zielinski does not give the typology so as to enable us to see when the first syllable of the base is the last syllable of a word, etc.

Zielinski, as we have seen, regards "sunt" as enclitic, so that the accent falls on the preceding syllable when long. This view might be maintained when "sunt" comes after the participle to which it in sense belongs; but it is almost inconceivable that in a sentence like "tribuni militares sunt designati" (Verr. I 10) the so-called enclitic in any way affected the accent of the preceding word, which in the example before us is a stock phrase. If "militares" retains its usual accent, then "sunt" is simply an unaccented monosyllable, and the clausula is MS2. At any rate I feel that much more evidence must be forthcoming before one can accept Zielinski's view.

## Chapter VI.

## MEMBRA AND ARTICULI.

## Section I.

We shall give first a table showing what are the principal combinations found at the end of membra and articuli, so that we can obtain a general view of the rhythmical tendencies at these parts of the sentence. Resolutions are enclosed in brackets after their Ground-forms, and the statistics are drawn from my complete rhythmical analyses of the Ligariana, Planciana, Miloniana, and the first Actio in Verrem.

|  | C2 | C3 |  | T2 | T3 | I2 | I3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Artic. <br> Memb <br> Claus. | 203(123) | 112(8) |  | 376(123) | 119(15) | 126(45) | 51 |
|  | . 249(130) | 139(7) |  | 357(84) | $56(7)$ | $88(20)$ | 55 |
|  | 187(117) | 93(8) |  | 321 (37) | 28(5) | 66 (3) | 23 |
|  | S2 | S3 |  | N2 | N3 | M2 | M3 |
| Artic. Mem. Claus. | 348(311) | 196(75) |  | 97(43) | 33(2) | 102(165) | 59(12) |
|  | 193(157) | 103(33) |  | $117(26)$ | 9(4) | 36(68) | 48(22) |
|  | 56(26) | 46(18) |  | 92(20) | 13(3) | 4(7) | 38(17) |
|  | SI | CI |  | E2 | E3 | B2 | B3 |
| Artic. Mem. Claus. | 164(39) | 60(1) |  | 27(25) | 9(1) | 41(35) | 15 |
|  | 121(19) | 32 |  | 30(9) | 11(1) | 20(10) | 7(1) |
|  | 72(6) | 7(1) |  | 3(3) | 2 | 3(2) | 4(1) |
|  | D2 | D3 | A2 | A3 | P2 | P3 | II |
| Artic. Mem. Claus. | 24(6) | 7 | 17(6) | 10 | 29(8) | 5 | 37 |
|  | 14(4) | 3 | 5(2) | 4 | 6 | 4 | 8 |
|  | 3(1) | 1 | 5(1) | ) | 1(1) | - | 3 |


|  | TI | U2 | U3 | *-M | - E | - B | - I |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Artic. | $49(2)$ | $19(13)$ | 12 | $25(5)$ | $5(3)$ | $8(3)$ | $18(5)$ |
| Mem. | $6(2)$ | $9(1)$ | 2 | $23(9)$ | 2 | - | $13(3)$ |
| Claus. | - | - | - | $13(1)$ | - | - | - |


|  | Totals. | Per cent. |
| :--- | :---: | :---: |
| Artic. | 3477 | $48 \cdot 0$ |
| Mem. | 2389 | $33 \cdot 1$ |
| Claus. | 1371 | $18 \cdot 9$ |

As in the clausula, so in the membra T2 and C2 are the most frequent combinations, but C3 is here outnumbered by S 2 , and I2 by S 3 . In the articuli T 2 is still most frequent, but S 2 is close upon it, while C2 has fallen considerably behind; C3 and I2 are nearly on a par, whereas in the membra and clausula C3 is much commoner. Those combinations that are rare in the clausula become increasingly frequent as we pass to membra and articuli, e.g., T3, M2, E2, E3, D2, A2, and B2, and further study will confirm the general impression we have already gained that the membra approximate in character to the clausulae, so far as the final combinations are concerned, and that the articuli in many cases reverse the "order of merit" that obtains in membra or clausulae.

Although the question of resolutions can be profitably discussed only when we see what forms are resolved, yet it is interesting to note that resolutions also are in the main more numerous in membra and articuli. Take T2, S2, I2, which combined constitute a large proportion of the total number of combinations in clausula, membra, and articuli; adding together the resolutions of these three forms, we find that the proportion of resolved forms to Ground-forms is in the clausula 66/443 or $14.9 \%$; in the membra $261 / 638$ or $40.9 \%$; in the articuli
$479 / 850$ or $56 \cdot 4 \%$. That these particular combinations are so rarely resolved in the clausula is due, as we saw in the last chapter, to the preference for quadrisyllabic words for these endings.

## Section II.

We shall now study the final combinations of membra and articuli in detail, comparing both with the clausula. Unfortunately, Zielinski's exhaustive tables in "Der constructive Rhythmus" are of practically no use to us here, as not only his method of indicating rhythm differs from ours, but his kolometry also, and his distinction of membra and articuli. For instance, the relative proportions of clausulae, membra and articuli according to Z.'s figures are $14 \cdot 3,35 \cdot 7$, and 50 , whereas for the speeches we have examined the proportions are $18 \cdot 9,33: 1$, and 48 . It might be thought that the discrepancy was largely due to the fact that Z.'s statistics cover all the extant orations; but, while not denying the possibility of some variation on that account, I am convinced that Z.'s principles of kolometry have caused him to find more Binnenkola than on our view really exist. This would account for the larger proportion of clausulae that our results show. Confirmation of our percentage for the clausulae is obtained from the individual speeches; in the Planciana it is $19 \cdot 2$, in the Miloniana $18 \cdot 6$, in Actio I in Verrem and the Ligariana 18.9 .

These four speeches occupy some 125 pages of the Oxford Text, and it seems to us that from these the decided rhythmical tendencies should be quite evident. Indeed, it may reasonably be contended that even one speech of considerable length (e.g., Pro Plancio) should be sufficient to disclose the general character of the rhythms prevalent in the inner parts of the sentence, and, for the most part, in the clausulae. But the advantage of
examining several speeches is obvious; for not only do speeches differ in subject-matter and in tone, but some are more highly elaborated than others, and, as Zielinski has shown, there is an evolution traceable in Cicero's choice of rhythms. Such differences affect the proportions of membra and articuli as well as the selection of individual combinations.

|  | Articuli | $48 \cdot 0$ <br> $\%$ | Membra | $33 \cdot 1$ <br> $\%$ | Clausulae | $18 \cdot 9$ <br> $\%$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| C 2 | 203 | $31 \cdot 8$ | 249 | 39 | 187 | $29 \cdot 2$ |
| $\mathrm{C}^{2} 2$ | 12 | 25 | 18 | $37 \cdot 5$ | 18 | $37 \cdot 5$ |
| $\mathrm{C}^{2} 2$ | 26 | $18 \cdot 8$ | 47 | $34 \cdot 1$ | 65 | $47 \cdot 1$ |
| $\mathrm{C}^{1}$ | 69 | $49 \cdot 6$ | 50 | $36 \cdot 0$ | 20 | $14 \cdot 4$ |
| $\mathrm{C}^{1} 2^{1}$ | 11 |  | 6 |  | 4 |  |
| $\mathrm{C}^{12} 2$ | 3 | $13 \cdot 6$ | 9 | 41 | 10 | $45 \cdot 4$ |
| $\mathrm{C}^{2} 2^{1}$ | 2 |  | - |  | - |  |
| $\mathrm{C}^{2}$ | 112 | $32 \cdot 6$ | 139 | $40 \cdot 4$ | 93 | 27 |
| $\mathrm{C}^{1} 3$ | 7 |  | 5 |  | 7 |  |
| $\mathrm{C}^{2} 3$ | 1 |  | 2 |  | 1 |  |

Alongside the actual figures for each form we give the percentage, and at the top of each column the percentage that would be expected if the various combinations had been used indifferently in clausulae, membra and articuli. In several cases, however, the percentage has not been given, as the number or the distribution of the figures is such that no certain deduction can be made. It must, of course, be admitted that complete statistics for all the speeches would doubtless not exhibit exactly the same proportions as those obtaining for the four we have examined ; but, even so, there is no reason to suppose that the broad tendencies would not appear to be the same. To illustrate this I shall occasionally quote the figures as found in Z.'s tables, and show that his classification of "positive"' and "negative" forms in the main agrees with ours.

For C2 the variations are $10 \cdot 3$ (plus) in the clausula, 5.9 (plus) in the membra, $16 \cdot 2$ (minus) in the articuli, so that C2 is a strongly positive form, i.e.. it occurs most commonly in the clausulae, less commonly in the membra, while in the articuli it falls very far behind the "Normalsatz" or "indifferent percentage'". According to Z.'s tables the figures are 2831 (cl.), 3719 (Satz), 3825 (Binnenkola), from which the same conclusion may be drawn. C3 is in a very similar position, which is likewise attested by Z.'s tables 1539 (cl.), 1890 (Satz), 1903 (Binnenkola).

As regards the resolutions. $\mathrm{C}^{2} 2$ and $\mathrm{C}^{12} 2$ have an even more pronounced "Schlusscharacter" than the G.F. (cf. Z.'s figures II 55, and his statement ib. 56 on the form $1^{2}$ ). The figures we give for $\mathrm{C}^{12} 2$ are certainly small, but their distribution bears unmistakable evidence. $\mathrm{C}^{12}$ is much more positive than Zielinski's $1^{1}$, which includes various "types" that in our view are really different forms. C2 ${ }^{1}$ (practically the same as Z.'s $1^{3}$, since the types that should be referred elsewhere only number 18 out of 279 in the clausulae) is designated by Z. as "schwach negativ'", a judgment with which our statistics fully accord. Possibly the same may be said of $\mathrm{C}^{1} 2^{1}$, though the small numbers are not conclusive as in the case of $\mathrm{C}^{12} 2$, where the differences are very marked.

Finally, $\mathrm{C}^{1} 3$ seems to be undoubtedly positive, and more so than appears from Z.'s figures for his form $2^{1}$, which he terms "schwach positiv". Seeing that several negative or indifferent forms are included under $2^{1}$, viz., $\mathrm{S}^{1} 3$, I3 and SI, Z.'s figures confirm our view of $\mathrm{C}^{13}$.

About the forms $\mathrm{C}^{2} 2^{1}$ and $\mathrm{C}^{2} 3$ it is neither necessary nor possible to say more than that they are everywhere avoided. We saw in Chapter V that $\mathrm{C}^{2} 3$ occurs only twelve times in the clausula, but Zielinski does not record how often it occurs in
the body of the sentence, since it belongs to his M-class, which, as he rightly says (II 57), "mit ihren unzähligen Componenten und entsprechend kleinen Summenzahlen keine vernunftigen Resultate verspricht'". The two passages where $\mathrm{C}^{2} 2^{1}$ occurs are Pro Planc. 9920 (praetore Macedoniae) and Pro Milone 10013 (vestra beneficia).

|  | Articuli | $\begin{gathered} 48.0 \\ \% \end{gathered}$ | Membra | $\begin{gathered} 33 \cdot 1 \\ \% \end{gathered}$ | Clausulae | $\begin{gathered} 18 \cdot 9 \\ \% \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T2 | 376 | $35 \cdot 7$ | 357 | $33 \cdot 9$ | 321 | $30 \cdot 4$ |
| T 12 | 43 | 41.0 | 37 | $35 \cdot 2$ | 25 | $23 \cdot 8$ |
| T2 ${ }^{1}$ | 73 | 56.7 | 44 | $34 \cdot 0$ | 12 | $9 \cdot 3$ |
| $\mathrm{T}^{12}{ }^{1}$ | 7 |  | 3 |  |  |  |
| T3 | 119 | $58 \cdot 6$ | 56 | $27 \cdot 6$ | 28 | $13 \cdot 8$ |
| T ${ }^{1} 3$ | 15 |  | 7 |  | 5 |  |

The dichoreus is clearly a strongly positive ending, in marked contrast to T3, which is avoided almost to the same extent in both clausulae and membra, but is very common in the articuli. It will be noted that we are not here taking the penult into account, as we did in discussing these forms in Chapter V; for it very frequently happens that T2 and T3 each form a complete kolon (e.g., at the beginning of a clause or sentence), though this is extremely rare in the clausula, where some other foot is generally rhythmically connected. In the latter part of this chapter, however, we shall see how often CT, ST, etc., occur in the clausulae as compared with the other parts of the sentence, and so obtain, if not exact statistics for CT2, ST2, etc., at least an accurate idea of the positions to which CT, ST, etc., gravitate.

Zielinski (II 55) asserts that V3 is the most positive of all V-forms; but his statistics do not enable us to draw any conclusion for our form CT2, since in the Binnenkola and Satzschlüsse we cannot distinguish between 3 d and 3 bd (our CT2 and IT2).

Especially noticeable is the resolution of the final trochee, which in both membra and articuli is commoner than the resolution of the first, and much more frequent in articuli than in membra. The infrequency of $\mathrm{T}^{1}{ }^{1}$ in the clausula is largely due to the avoidance of "pedes minuti"' in that position, whereas T12 is generally composed of one word (calamitatem, etc.). Such "pedes minuti" as are nearly always required by the form T2" (types like constituerat being rare), are less objectionable in the interior of the sentence, where the pauses are so much slighter. Compare Zielinski II 56, where $3^{3}$ and iii $^{3}$ are marked as positive; $3^{4}$ and iii ${ }^{4}$ are not mentioned, but may safely be assumed to be negative.

|  | Articuli | $48 \cdot 0$ <br> $\%$ | Membra | $33 \cdot 1$ <br> $\%$ | Clausula | $18 \cdot 9$ <br> $\%$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| I2 | 126 | $45 \cdot 0$ | 88 | $31 \cdot 4$ | 66 | $23 \cdot 6$ |
| I2 | 45 | $66 \cdot 2$ | 20 | $29 \cdot 2$ | 3 | $4 \cdot 5$ |
| I3 | 51 | $39 \cdot 5$ | 55 | $42 \cdot 7$ | 23 | $17 \cdot 8$ |

I2 is a decidedly positive combination, though, it is important to remember, only when I2 is composed of one word (e.g., oportebat) ; the type "potest esse"' is, as Zielinski shows (II 58), very rare in the clausula, but extremely frequent in comparison in the Binnenkola. The figures given in our table agree pretty closely with those we have obtained from Z.'s tables, which show 1455 (cl.), 2266 (Satz), 2805 (Binnenkola), though, as we have remarked in Chapter $V$, a few of the examples included in Z.'s V1b and V1bd may really belong to our form C2 (b or bd).

The distribution of I3 suggests that it is an "indifferent" combination; while it occurs much more frequently in membra than in articuli, we cannot trace any such gradation from clausula to articuli as we find in the combinations already dealt
with. Zielinski's figures (199 cl. 1076 Satz, 1458 Binnenkolon) would make it distinctly negative.

|  | Articuli | $\begin{gathered} 48.0 \\ \% \end{gathered}$ | Membra | $\begin{gathered} 33 \cdot 1 \\ \% \end{gathered}$ | Clausula | $\begin{gathered} 18 \cdot 9 \\ \% \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S2 | 348 | 58.6 | 193 | $32 \cdot 3$ | 56 | $9 \cdot 4$ |
| S12 | 85 | $62 \cdot 5$ | 44 | $32 \cdot 3$ | 7 | $5 \cdot 2$ |
| $\mathrm{S}^{2} 2$ | 80 | $55 \cdot 2$ | 55 | $37 \cdot 9$ | 10 | $6 \cdot 9$ |
| S2 ${ }^{1}$ | 107 | 67.7 | 46 | $29 \cdot 1$ | 5 | $3 \cdot 2$ |
| $\mathrm{S}^{121}$ | 15 |  | 8 |  | 2 |  |
| $\mathrm{S}^{12} 2$ |  |  | 2 |  | 1 |  |
| $\mathrm{S}^{2}{ }^{1}$ | 16 |  | 2 |  | 1 |  |
| S3 | 196 | 56.8 | 103 | 29.8 | 46 | 13.4 |
| S13 | 50 | $55 \cdot 0$ | 26 | 28.5 | 15 | 16.5 |
| $\mathrm{S}^{23}$ | 20 | $71 \cdot 4$ | 6 | $21 \cdot 4$ | 2 | $7 \cdot 2$ |
| $\mathrm{S}^{12} 3$ | 3 |  | 1 |  | 1 |  |
| S231 | 1 |  | - |  | - |  |
| S31 | 1 |  | - |  | - |  |

That S2 and its resolutions are strongly negative admits of no doubt, though it makes a great difference what foot precedes S2. Thus, Zielinski (II 57) maintains that his S3 (which for the most part is equivalent to our CS2) is "slightly positive". But, as with T2, we shall consider the antepenultimate and penultimate feet in the latter part of this chapter.

It is significant that the resolutions of S 2 are not far from being as numerous as the G.F. in the membra 157/93), and in the articuli $(311 / 348)$, whereas in the clausula they are only 25 as compared with 56 . Further, the heroic clausula ( $\mathrm{S}^{2} 2$ ), though strongly negative, is less so than $\mathrm{S}^{12}$ and $\mathrm{S}^{1}$. Double resolutions are everywhere rare, particularly the form $\mathrm{S}^{12} 2$. In general we may say that S2 and its resolutions increase considerably in frequency as we pass from clausula to membra and articuli, so that for Cicero these feet, which according to the nature of the language are bound to be very numerous, are one
of the chief mainstays of the sentence (see also internal combinations below).

S3 is also negative, but less so than S2. Zielinski's figures point in the same direction-659 (cl.), 2029 (Satz), 3172 (Binnenkola). $\mathrm{S}^{13} 3$ seems to be slightly less negative than its G.F., but $\mathrm{S}^{2} 3$ sinks to the level of the S 2 resolutions.

|  | Articuli | $\begin{gathered} 48.0 \\ \% \end{gathered}$ | Membra | $\begin{gathered} 33 \cdot 1 \\ \% \end{gathered}$ | Clausula | $18 \cdot 9$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N2 | 97 | 31.7 | 117 | 38.3 | 92 | 30.0 |
| N22 | 25 | $45 \cdot 4$ | 16 | $29 \cdot 1$ | 14 | $25 \cdot 5$ |
| N22 | 4 |  | 4 |  | 5 |  |
| N2 ${ }^{1}$ | 12 |  | 6 |  | 1 |  |
| $\mathrm{N}^{12}{ }^{1}$ | 2 |  | - |  |  |  |
| N3 | 33 | 60.0 | 9 | 16.0 | 13 | $24 \cdot 0$ |
| N13 | 1 |  | 4 |  | 3 |  |
| N23 | 1 |  | - |  | - |  |

We see that the "Schlusscharacter" of N2 is very marked. while N3 seems to be slightly positive. The latter occurs 13 times in the clausula as compared with 42 times in the membra and articuli combined, i.e., $23 \cdot 7 \%$ against $76 \cdot 3 \%$. while the "indifferent percentages" would be $18 \cdot 9$ and $81 \cdot 1$. $\mathrm{N}^{1} 2$ is positive and probably also $\mathrm{N}^{2} 2$, though this is a very rare combination. $\mathrm{N} 2^{1}$ is obviously avoided, and naturally found more frequently in the articuli than elsewhere.

|  | Articuli | $48 \cdot 0$ <br> $\%$ | Membra | $33 \cdot 1$ <br> $\%$ | Clausula | $18 \cdot 9$ <br> $\%$ |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: |
| M2 | 102 | $71 \cdot 8$ | 36 | $25 \cdot 3$ | 4 | $2 \cdot 9$ |
| M2 | 69 | $67 \cdot 6$ | 29 | $28 \cdot 4$ | 4 | $4 \cdot 0$ |
| M22 $^{2}$ | 4 |  | - |  | 1 |  |
| M $^{32}$ | 24 |  | 14 |  | - |  |
| M2 $^{1}$ | 48 | $71 \cdot 7$ | 17 | $25 \cdot 4$ | 2 | $3 \cdot 0$ |
| M2 $^{1}$ | 3 |  | 4 |  | - |  |
| M22 $^{2}$ | 7 |  | 1 |  | - |  |


| Articuli |  | $\begin{gathered} 48.0 \\ \% \end{gathered}$ | Membra | $\begin{gathered} 33 \cdot 1 \\ \% \\ \hline \end{gathered}$ | Clausula | $\begin{gathered} 18 \cdot 9 \\ \% \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{M}^{3} 2^{1}$ | 1 |  | 1 |  | - |  |
| $\mathrm{M}^{132}$ | 8 |  | 2 |  | - |  |
| $\mathrm{M}^{23} 2$ | - |  | 1 |  | - |  |
| M3 | 59 | $40 \cdot 7$ | 48 | $33 \cdot 1$ | 38 | $26 \cdot 2$ |
| $\mathrm{M}^{13}$ | 8 | $22 \cdot 9$ | 15 | $42 \cdot 8$ | 12 | $34 \cdot 3$ |
| M ${ }^{2}$ | 2 |  | 1 |  | 3 |  |
| M ${ }^{3} 3$ | 2 |  |  |  | 1 |  |
| M3 ${ }^{1}$ | - |  | 1 |  | - |  |
| M ${ }^{13} 3$ | - |  | 1 |  | 1 |  |

We saw in Chapter V how rare M2 is in the clausula, and now we have striking additional evidence of the value that Cicero's rhythmical instinct put on this combination. As Zielinski remarks (II 60), a combination like "vita vicerunt" could just as easily occur, so far as the mere frequency of the necessary words is concerned, as "morte vicerunt"; but such a rough and heavy rhythm as M2 is avoided even in the membra, and becomes frequent only in the articuli.

Resolutions everywhere considerably outnumber the Groundform, $7 / 4$, cl.), $68 / 36 \mathrm{mem}$. ), 165/102 (art.), thus showing clearly, I think, that it is the heaviness of the rhythm that was offensive. Yet we have noticed that Caesar, Livy and Tacitus use this form in the clausula much more frequently than Cicero. Of the resolved forms $\mathrm{M}^{12}$ seems to be the least objectionable. The rarity of $\mathrm{M}^{3} 2$ seems to us to afford strong confirmation of the method of classing resolved forms under a Ground-form. We have already illustrated the principle with reference to $\mathrm{N}^{2} \mathbf{2}$ and $\mathrm{C}^{2} 2$, and we may give further illustration here. N2 is very similar, so far as mere succession of syllables is concerned, to $\mathrm{M}^{3} 2$, and we might have expected theoretically that the two short syllables in the base of the latter would relieve the heaviness of the preceding long syllables more than the single short syllable
of N ; yet N 2 is a strongly positive form and $\mathrm{M}^{3} 2$ merely the resolution of an already strongly negative form. In spite of the "Häufigkeitsgesetz" it seems indisputable that $\mathrm{M}^{3} 2$ was felt by Cicero's fine instinct to belong to the same class as M2, just as other resolved forms to their respective Ground-forms. We can hold this view without in the least implying that Cicero himself was conscious of the principles that underlie his practice.

The example of $\mathrm{M}^{23} 2$ occurs in Pro Plancio 5237 -_'fortissimus adulescens." This combination, practically non-existent in the clausula, is apparently the rarest of all avoided rhythms. The resolution of two consecutive long syllables is found also in $\mathrm{S}^{122}$, which is not so rare.

M3 is classed by Zielinski (II 55) along with our S3 in his G.F. Vii, and he regards it as a negative combination. This does injustice to M3, for his own figures ( $637 \mathrm{cl} ., 1119$ Satz, 1498 Binnenkola) show, as do ours, that M3 has a distinctly positive 'Schlusswert'". Though the statistics for M ${ }^{13} 3$ are small, they bear, I think, undoubted testimony to the very positive character of this form.

|  | Articuli | $48 \cdot 0$ <br> $\%$ | Membra | $33 \cdot 1$ <br> $\%$ | Clausula | $18 \cdot 9$ <br> $\%$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| SI | 164 | $46 \cdot 1$ | 121 | $33 \cdot 8$ | 72 | $20 \cdot 1$ |
| S1I | 34 |  | 19 |  | 6 |  |
| S² | 5 |  | - |  | - |  |
| TI | 49 |  | 6 |  | - |  |
| T1I | 2 |  | 2 |  | - |  |
| II | 37 | $77 \cdot 2$ | 8 | $16 \cdot 6$ | 3 | $6 \cdot 2$ |
| CI | 60 | $60 \cdot 6$ | 32 | $32 \cdot 3$ | 7 | $7 \cdot 1$ |
| C1I | 1 |  | - |  | 1 |  |

SI, according to the figures given here, would seem to be as nearly as possible an "indifferent" combination; but the number of times that SI occurs in the clausulae varies so much with different speeches that it is very difficult to arrive at a
definite conclusion. Thus TSI and SSI together occur only 56 times in the clausulae of all the Verrine orations, whereas in the speeches In Pis., Pro Planc., Pro Scauro, Pro Rabir., Pro Mil. they occur 43 times, although these contain only 406 sections as compared with 1047 in the Verrines. So the Caesarianae with 115 sections show 19 examples of SI. The tone and character of a speech are no doubt largely responsible for the frequency or infrequency of this form, which, as we have already remarked, is a commoner clausula in literature of a more conversational kind. On the whole, then, I should be inclined to regard SI as an "indifferent" combination, the use of which was dependent not so much on any intrinsic value of its own as on the colouring of the context in which it from time to time occurs.

TI, which we discussed in Chapter V, becomes comparatively common only in the articuli, and the same can be said of II. CI, though very rare in the clausula, is not an objectionable ending even for a membrum, much less for an articulus. With the exception of SI, therefore, those combinations that end in an iambus are strictly avoided in the clausula. The following table shows what other feet than S, T, C and I precede the final iambus.

|  | MI | $\mathrm{M}^{2} \mathrm{I}$ | $\mathrm{M}^{1} \mathrm{I}$ | EI | UI | NI | $\mathrm{N}^{2} \mathrm{I}$ | BI | PI | AI |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Art. | 8 | 1 | 3 | 2 | 3 | 2 | 1 | 1 | 1 | 1 |
| Mem. | 7 | 1 | 2 | 5 | 1 | - | - | - | - | - |
| Cl. | 3 | 1 | 2 | 3 | - | - | - | - | - | - |

The tables that follow include forms that, as we know from Chapter V, occur rarely in the clausula, and are chiefly found at the lesser pauses within the sentence.

|  | E 2 | $\mathrm{E}^{3} 2$ | $\mathrm{E}^{1}$ | $\mathrm{E}^{3} 2^{1}$ | E 3 | $\mathrm{E}^{3} 3$ | A 2 | $\mathrm{~A} 2^{1}$ | A3 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Art | 27 | 5 | 19 | 1 | 9 | 1 | 17 | 6 | 10 |
| Mem. | 30 | 6 | 3 | - | 11 | 1 | 5 | 2 | 4 |
| Cl. | 3 | 3 | - | - | 2 | - | 5 | 1 | - |


|  | B2 | $\mathrm{B}^{2} 2$ | $\mathrm{~B}^{1}$ | $\mathrm{~B}^{2} 2^{1}$ | B 3 | $\mathrm{~B}^{2} 3$ | $\mathrm{~B}^{1}$ | D2 | D2 $^{1}$ | D3 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Art. | 41 | 13 | 21 | 1 | 15 | - | - | 24 | 6 | 7 |
| Mem. | 20 | 4 | 6 | - | 7 | - | 1 | 14 | 4 | 3 |
| Cl. | 3 | 2 | - | - | 4 | 1 | - | 3 | 1 | 1 |


|  | P2 | P2 $^{1}$ | P3 | U2 | U2 | U3 | TM | T $^{1}$ M $^{1}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Art. | 29 | 8 | 5 | 19 | 13 | 12 | 12 | - |
| Mem. | 6 | - | 4 | 9 | 1 | 2 | 15 | - |
| Cl. | 1 | 1 | - | - | - | - | 5 | 1 |


|  | BM | NM | AM | CM | $\mathrm{C}^{1} \mathrm{M}$ | $\mathrm{C}^{2} \mathrm{M}$ | $\mathrm{CM}^{1}$ | SM |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Art. | - | - | 1 | 2 | - | - | 1 | 7 |
| Mem. | 1 | - | 1 | 1 | 1 | 1 | - | 4 |
| Cl. | 1 | 2 | 1 | 1 | - | - | - | 1 |


|  | $\mathrm{S}^{1} \mathrm{M}$ | $\mathrm{S}^{2} \mathrm{M}$ | $\mathrm{SM}^{2}$ | $\mathrm{~S}^{1} \mathrm{M}^{1}$ | IM |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Art. | 1 | 2 | - | 1 | 3 |
| Mem. | 2 | - | 1 | - | 1 |
| Cl. | - | - | - | - | - |

The following oceur only in the clausula-DM (1), EM (1) ; only in the membra-MM (1), $\mathrm{M}^{1} \mathrm{M}$ (2), $\mathrm{M}^{1} \mathrm{M}^{1}$ (1), NE (1), SE (1) ; EB (1); only in the articuli-TE (3), $\mathrm{S}^{1} \mathrm{E}$ (1), IE (1), $\mathrm{M}^{1} \mathrm{E}$ (2), CE (1), UB (1), PB (2), SB (4), $\mathrm{S}^{1} \mathrm{~B}$ (2), $\mathrm{S}^{2} \mathrm{~B}$ (1), TB (1).

We complete with these tables the statistics for final combinations in clausula, membra and articuli, and even here we see confirmation of the statement made above that the membraterminations approximate in character to thase of the clausula. Thus, of combinations that do not occur in the clausula there are only 30 examples in the membra, but 129 in the articuli. Such abnormalities as final $B$ and $E$ are practically confined to the articuli.

In Chapter $V$ we took "restituti sunt" to be an example of TM, not believing the main accent to be affected by the following monosyllable. Should it turn out, however, that TM is really a "type" of C2, my designation is at any rate useful as showing how often this special case occurs, and C2, being well represented, would not have its statistics appreciably altered by the addition of TM. The same applies to combinations in which E or B is the final foot. Thus, "qua constantia vir" (Planc. 27 18), is on our view SE ; according to Zielinski it would be our ST2. So "negat enim se" (Milo 95 6) is PB (otherwise T12) ; "cogita quo loco sis" (Actio I in Verrem 51 10) is EB (otherwise CT2). In some instances doubt may arise as to whether MI, EI, etc., should not really be S3, C3, ete., i.e., the final iambic word might not be accented if a stressed monosyllable precedes. In Verr. ib. I 46 "quod laudent non habent" I take as an example of MI; but in Milo 9519 "circumspicientibus non negat" is C3, because, as the context shows, "non negat" is opposed to "negat" of the previous clause. In the very few cases where uncertainty may exist one must exercise one's individual judgment, and possible errors, where such unusual forms are in question, are of little moment.
" U " of course is not a foot, but where it comes between two feet we must take account of it. Thus, Milo 46 25, "sed erant permulti alii" is BU2 ${ }^{1}$, since the final syllable of "permulti" is elided. Of such isolated accented syllables Zielinski makes no mention, since either the accents of the base or of the cadence may vary in number and position, though the "Ictuirungen" are fixed for each "metrisches Gebilde". A combination with U in the penult has an extremely harsh, jerky effect, which explains its almost entire absence from the clausula and its rarity even in the inner parts of the sentence. Of course, as we stated in Chapter III (p. 47), an accented syllable may sometimes come
at the end of a foot, especially the cretic, and it seems logical to find this phenomenon in other feet also. For example, "ignorare arbitror" (Verr. II 1, 1) we represent as m3, not as SU3; "publicanorum ordine continetur" (Planc. 23 18) as eS $^{2} \mathrm{~T} 2$, not as CUS $^{2} \mathrm{~T} 2$; Milo 39 13-"eius fidem imploranti" $=$ nS2, cf. 57 1-"quam cur parum amplis adfecerit praemiis" = nMC3; 99 24-"nullum mihi unquam iudices" $=\mathrm{nS} 3$; 56 11"satis fere esset paratus" = aN2. There is even an example of d-Milo 78 15-in republica bona esse visuros $=$ SdC2, where we assume of course that the final vowel of "bona" is elided, and possibly an example of t-Milo 657 -"non metu exanimari" $=$ $\mathrm{tS}^{2} 2$, where "non" is accented (see the context) and the final vowel of "metu" likewise elided. "b" also occurs occasionally, e.g., Planc. 920 - "decem soli essent in civitate viri boni"'= bMTTII; cf. ib. 59 23-"ad laborem et ad laudem excitaret" = cbT2. In this last example e and b do not each contain two main accents; indeed it is more usual for the first accent to be secondary. Finally, in the speeches I have examined there are one or two examples of "s": e.g., Milo 79 7-"quid voltu extimuistis?" $=\mathrm{sS}^{2} 2$.

The method I have adopted in dealing with such cases is, so far as I know, a novel one, and, of course, is not capable of strict proof; but if we grant, as seems reasonable, that a cretic at times has two accents, I do not see why we should not apply the principle to other feet, especially when we consider that the first of two colliding accents would be somewhat weakened in force. In any case such feet are quite rare in comparison with the normally accented foot; in the first Actio in Verrem they occur only 10 times in the penultimate and final feet of all kola, and 27 times in the internal feet. Of these 37 twenty-five are $m$ or its resolutions. I have found no examples of short accented syllables that may not form part of a foot, unless Milo 1053 is
to be so taken. On pp. 136-7 I give the statistics for accented syllables that do not form part of a foot.

## Section III.

We now give statistics for the final combinations of the "membratim dicta" and "incisa" discussed in Chapter I. In these we include, of course, only such as are composed of at least two feet, or an accented monosyllable and a foot. We may recall Cicero's words (quoted above p. 9) "quae incisim aut membratim efferuntur, ea vel aptissime cadere debent'"; further, the brevity of such sentences allows, as a rule, of greater freedom in the choice of feet. As regards the former injunction, the aptness of an incisum can be studied only in connection with the context; we therefore confine our attention to seeing whether in the speeches we have examined these short sentences do exhibit greater variety in the final combinations. For purposes of comparison we give the statistics for the clausulae of the Pro Ligario, which are about equal in number to the endings under consideration.

|  | C 2 | $\mathrm{C}^{12}$ | $\mathrm{C}^{2} 2$ | $\mathrm{C} 2^{1}$ | C 3 | $\mathrm{C}^{1} 3$ | T 2 | $\mathrm{~T}^{1} 2^{1}$ | $\mathrm{~T} 2^{1}$ |
| :--- | :---: | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Incisa, etc. | 15 | 1 | 3 | 2 | 7 | 2 | 21 | 1 | 1 |
| Claus. Lig. | 14 | 1 | 9 | 2 | 13 | 2 | 32 | - | - |
|  |  |  |  |  |  |  |  |  |  |
|  | T 3 | $\mathrm{~T}^{1} 3$ | S 2 | $\mathrm{~S}^{12}$ | $\mathrm{~S}^{2} 2$ | $\mathrm{~S}^{1}$ | $\mathrm{~S}^{1} 2^{1}$ | $\mathrm{~S}^{122}$ | S 3 |
| Incisa | 3 | 1 | 18 | 4 | 3 | 5 | 1 | 1 | 9 |
| Cl. Lig. | 1 | 4 | 9 | 2 | - | - | - | 1 | 6 |
|  |  |  |  |  |  |  |  |  |  |
|  | $\mathrm{~S}^{13}$ | $\mathrm{~S}^{2} 3$ | I 2 | $\mathrm{I} 2^{1}$ | I 3 | M 3 | M 2 | $\mathrm{M}^{12}$ | $\mathrm{M} 2^{1}$ |
| Incisa | 2 | 2 | 5 | 1 | 2 | 2 | 5 | 1 | 1 |
| Cl. Lig. | - | 1 | 10 | - | 4 | 6 | - | 1 | - |


|  | $\mathrm{M}^{1} 2^{1}$ | $M^{132}$ | N2 | SI | $\mathrm{S}^{11}$ | P3 | D2 | U2 | U3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Incisa Cl. Lig. | 1 | 1 | 6 | 7 | 5 | 1 | 1 | 2 | 1 |
|  | - | - | 9 | 11 | - | - | 1 | - | - |
|  | E2 | $\mathrm{E}^{3} 2$ | B2 | B2 ${ }^{1}$ | B22 | B3 | TM | CI | $\mathrm{C}^{11}$ |
| Incisa <br> Cl. Lig. | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 1 |
|  | - | 2 | 1 | - | - | - | 1 | , | - |
|  |  |  |  | II | EI | $\mathrm{N}^{1} \mathrm{I}$ |  |  |  |
|  |  | Inc |  | 2 | 1 | 1 |  |  |  |
|  |  |  |  | 1 | 2 | - |  |  |  |

The incisa, ete., number 161, the clausulae 163 , but some of the latter are not in the above table, since they do not occur in the incisa. It is impossible with these figures to enter into detail about every form, but some general conclusions may legitimately be drawn. First, there is a greater variety of combinations in the incisa- 48 different forms as compared with 37 in the clausulae. Then, those endings that are specially favoured in the clausula are not so frequent in the "membratim et incise dicta", which are usually not long enough to permit the rounding common to the period. Such are $\mathbf{C}^{2} 2, \mathrm{C} 3, \mathrm{~T} 2, \mathrm{I} 2, \mathrm{M} 3, \mathrm{~N} 2$. C2 is equally common, but the "negative" forms S2, M2, P3, etc., are much more frequent in the incisa. In a word, the rhythm of these short simple sentences is similar, so far at least as concerns the final combinations, to that of the membra and articuli, the longer ones approaching to the membra in character, the shorter ones to articuli. Cicero's statement about the "liberiores pedes" seems, then, to be borne out by his practice.

## Section IV.

We now proceed to examine the internal combinations of a kolon, i.e., those that come before the last two
feet. Since it is an important matter in what part of a kolon a combination is found, we distinguish them as follows. If the kolon contains, say, six feet, e.g., TCMST2, we work from right to left, so that our first internal combination is ST, the second MS, the third CM, the fourth TC. For the sake of brevity I refer to the first as a $3-2$ combination, to the second as a $4-3$ combination, while the remainder (5-4, 6-5, etc.,) I class under one heading. I make these distinctions because the antepenult (as we saw in the last chapter) is often part of the clausula, and at the end of membra and articuli we shall meet the same combinations of three feet. So in the above example, S begins the "clausula" of the kolon, and it would seem prudent to keep the antepenult with the immediately preceding foot separate. Any further distinction is hardly necessary.

We shall first give a table showing how often the chief internal combinations occur, irrespective of their position in the kolon. Only those forms that occur over 100 times are set down, and the resolutions are in brackets.

| SS | ST | TS | SC | SI |
| :---: | :---: | :---: | :---: | :---: |
| $641(660)$ | $615(395)$ | $501(250)$ | $397(224)$ | $306(131)$ |
| TT | CT | TC | IS | CS |
| $265(59)$ | $259(44)$ | $254(69)$ | $218(87)$ | $211(89)$ |
| S¹ | IT | SS $^{1}$ | S $^{1}$ S | SN |
| 202 | $198(28)$ | 172 | 161 | $137(119)$ |
| S $^{2}$ S | SM | CC | MC | MT |
| 132 | $132(79)$ | $128(46)$ | $123(76)$ | $122(86)$ |
| IC | TM | MS | II | SS $^{2}$ |

The resolutions given for SS and ST include, of course, those forms that are later on shown separately, since they occur more than 100 times. The forms that appear in the above table cover (with resolutions) 7733 cases out of a total of 9984 internal combinations that we have found in the four speeches examined. In these forms there are only six feet represented, viz., $\mathrm{C}, \mathrm{S}, \mathrm{T}, \mathrm{I}$, $M$ and N. Now, since C, S, I and $T$ are the commonest of feet, it is instructive to note that of the possible combinations of these four feet TI is the only one not found above. Of the nine possible combinations of $M$ with these same four feet four are absent, viz., IM, MI, MM and CM, which, as we shall learn later, are very rare indeed. SN is the only combination containing N that is at all frequent in the internal feet of a kolon.

As regards resolutions, we see that on the whole they are considerably more numerous in these internal combinations than elsewhere. Especially noticeable is the large number of resolved forms of SS and MS. That the Ground-forms are here outnumbered by the resolutions is of course due to the exceptionally heavy rhythm ; for oratory demands comparatively swift movement. In general we see that resolutions increase with the heaviness and decrease with the lightness of the combination, so that the rhythm holds the mean between two extremes.

That SS and ST head the list is probably due to the "immanent'" rhythm of the Latin Language. Owing to this difficulty of ascertaining how far the greater frequency of some forms may arise from verbal necessity, we shall seek rather to find out whether or not there are certain parts of the sentence to which a given combination gravitates. Also, we shall group the various combinations according to the nature of the final foot, e.g., all those forms in which the second foot is $T$ will be considered together. This enables us-and we particularly desire it in the case of 3-2 combinations-to see by what feet $\mathrm{C}, \mathrm{S}, \mathrm{T}$, etc.,
were preferably preceded. T2, as we know, is really a cadence, and a glance at the table will show what are its most common "bases". Similarly, even when the antepenult is not a "base", it will be interesting to know what rhythm precedes the technical clausula of each kolon. A study of these internal combinations should prove instructive, seeing that they compose the very backbone of the sentence. We naturally expect them to exhibit much more varied rhythms than the ends of kola, and yet to find decided preferences. The tables that follow amply fulfil our expectations. For the sake of brevity we describe the group to which a combination belongs by reference to its second foot, e.g., CT is one of the "T"'-combinations. TS one of the "'S"'-combinations, etc.

## T-Combinations :

|  | Art. | $\begin{gathered} \text { 3-2 } \\ \text { Mem. } \end{gathered}$ | Cl . | Art. | $\begin{array}{r} 4-3 \\ \text { Mem. } \end{array}$ | Cl. | Art. | $5-4 \text { etc. }$ Mem. | Cl. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ST | 137 | 124 | 93 | 60 | 51 | 28 | 32 | 52 | 38 |
| $\mathrm{S}^{1} \mathrm{~T}$ | 45 | 47 | 40 | 19 | 16 | 7 | 9 | 18 | 1 |
| $\mathrm{S}^{2} \mathrm{~T}$ | 19 | 17 | 10 | 12 | 8 | 6 | 5 | 6 | 3 |
| $\mathrm{S}^{2} \mathrm{~T}^{1}$ |  | 2 |  | 3 |  |  |  |  |  |
| $\mathrm{S}^{1} \mathrm{~T}^{1}$ | 4 | 4 | 3 | 5 | 5 | 1 | 1 | 2 | 2 |
| $\mathrm{ST}^{1}$ | 21 | 12 | 7 | 6 | 6 | 2 | 3 | 10 | 3 |
| $\mathrm{S}^{12} \mathrm{~T}$ | 2 | 1 |  | 1 |  |  |  |  |  |
| $\mathrm{S}^{12} \mathrm{~T}^{1}$ | 1 |  |  |  |  |  |  |  |  |
| CT | 40 | 70 | 90 | 20 | 11 | 8 | 10 | 9 | 1 |
| $\mathrm{C}^{1} \mathrm{~T}$ | 5 | 1 | 1 | 1 |  |  | 1 |  |  |
| $\mathrm{C}^{2} \mathrm{~T}$ |  |  |  |  |  |  | 1 |  |  |
| $\mathrm{C}^{12} \mathrm{~T}$ | 1 |  |  |  |  |  |  |  |  |
| $\mathrm{CT}^{1}$ | 5 | 5 | 7 | 2 | 3 | 1 | 6 | 1 |  |
| $\mathrm{C}^{1} \mathrm{~T}^{1}$ |  | 2 | 1 |  |  |  |  |  |  |
| IT | 42 | 42 | 43 | 17 | 14 | 6 | 14 | 15 | 5 |
| IT ${ }^{1}$ | 4 | 5 | 4 | 4 | 3 | 2 | 5 | 1 |  |
| TT | 77 | 27 | 9 | 45 | 30 | 15 | 15 | 31 | 16 |
| $\mathrm{T}^{1} \mathrm{~T}$ | 13 | 9 | 1 | 3 | 4 | 1 | 4 | 8 | , |


|  | Art. | $\begin{gathered} 3-2 \\ \text { Mem. } \end{gathered}$ | Cl . | Art. | $\begin{gathered} \text { 4-3 } \\ \text { Mem. } \end{gathered}$ | Cl . | Art. | 5-4 etc. Mem. | Cl . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TT ${ }^{1}$ | 2 | 1 |  | 3 | 1 | 2 | 1 | 1 | 2 |
| $\mathrm{T}^{1} \mathrm{~T}^{1}$ |  |  |  | 1 |  | 1 |  |  |  |
| MT | 30 | 29 | 21 | 4 | 10 | 3 | 5 | 12 | 8 |
| M ${ }^{1} \mathrm{~T}$ | 11 | 8 | 6 | 1 | 5 | 2 | 1 |  | 3 |
| $\mathrm{M}^{2} \mathrm{~T}$ | 6 | 2 | 4 | 3 |  |  |  |  | 1 |
| $\mathrm{M}^{3} \mathrm{~T}$ | 3 | 2 | 1 |  | 1 | 1 |  | 1 | 1 |
| $\mathrm{M}^{13} \mathrm{~T}$ | 1 |  |  |  | 1 |  |  |  |  |
| MT ${ }^{1}$ | 3 | 1 | 1 | 2 | 3 |  | 1 | 2 | 1 |
| $\mathrm{M}^{1} \mathrm{~T}^{\mathbf{1}}$ | 3 | 1 |  |  |  |  | 1 | 1 | 1 |
| NT | 12 | 4 | 3 | 9 | 8 | 1 | 2 | 3 |  |
| $\mathrm{N}^{1} \mathrm{~T}$ | 3 | 2 | 1 | 2 | 1 |  |  |  | 1 |
| NT ${ }^{1}$ | 1 |  |  |  | 1 |  |  | 1 |  |
| $\mathrm{N}^{1} \mathrm{~T}^{1}$ | 1 |  |  |  |  |  |  |  |  |
| $\mathrm{N}^{2} \mathrm{~T}^{1}$ |  |  |  |  |  |  |  |  | 1 |
| ET | 4 | 9 | 4 | 1 |  | 1 | 3 |  | 2 |
| ET ${ }^{1}$ |  |  | 3 |  |  |  |  |  |  |
| $\mathrm{E}^{3} \mathrm{~T}$ |  |  | 1 | 1 |  |  |  |  |  |
| BT | 8 | 8 | 9 | 2 | 3 | 2 | 1 | 2 | 4 |
| $\mathrm{B}^{2} \mathrm{~T}$ | 1 |  |  |  | 1 |  | 1 |  |  |
| BT ${ }^{1}$ | 2 | 3 |  |  |  |  |  |  |  |
| AT | 3 | 1 |  | 3 | 1 | 1 | 1 | 2 |  |
| DT | 1 | 2 |  |  | 1 |  |  | 1 | 3 |
| PT | 22 | 8 | 5 | 8 | 6 | 2 | 3 | 1 | 1 |
| PT ${ }^{1}$ |  | 2 |  | 1 |  |  |  | 2 |  |

In this table and in those that follow there are many forms that occur so rarely that we need not do any more than record their existence. Such combinations, however, as occur with adequate frequency we shall discuss separately and give tables showing (a) in what position a combination is most frequent, (b) the relative frequency of a $3-2$ combination in articuli, membra and clausulae. To include under (b) the 4-3 and 5-4 combinations would be to carry our elaboration further than is, I think, psychologically justifiable.

|  | $3-2$ | $51 \cdot 6$ |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $\%$ | $4-3$ | $30 \cdot 2$ <br> $\%$ | $5-4$ | $18 \cdot 2$ <br> $\%$ |  |  |
| ST | 354 | $57 \cdot 5$ | 139 | $22 \cdot 6$ | 122 | $19 \cdot 9$ |
| STT | 132 | $65 \cdot 3$ | 42 | $20 \cdot 8$ | 28 | $13 \cdot 9$ |
| CT | 200 | $77 \cdot 2$ | 39 | $15 \cdot 1$ | 20 | $7 \cdot 7$ |
| IT | 127 | $64 \cdot 2$ | 37 | $18 \cdot 7$ | 34 | $17 \cdot 1$ |
| TT | 113 | $42 \cdot 7$ | 90 | $33 \cdot 9$ | 62 | $23 \cdot 4$ |
| MT | 80 | $65 \cdot 5$ | 17 | $14 \cdot 0$ | 25 | $20 \cdot 5$ |
|  |  |  |  |  |  |  |
|  |  | $44 \cdot 3$ |  | $36 \cdot 3$ |  |  |
|  | $(3-2)$ Art. | $\%$ | Membra | $\%$ | Claus. | $19 \cdot 4$ |
| ST | 137 | $38 \cdot 7$ | 124 | $35 \cdot 0$ | 93 | $26 \cdot 3$ |
| S1T | 45 | $34 \cdot 1$ | 47 | $35 \cdot 6$ | 40 | $30 \cdot 3$ |
| CT | 40 | $20 \cdot 0$ | 70 | $35 \cdot 0$ | 90 | $45 \cdot 0$ |
| IT | 42 | $33 \cdot 0$ | 42 | $33 \cdot 0$ | 43 | $34 \cdot 0$ |
| TT | 77 | $68 \cdot 1$ | 27 | $23 \cdot 9$ | 9 | $8 \cdot 0$ |
| MT | 30 | $37 \cdot 5$ | 29 | $36 \cdot 2$ | 21 | $26 \cdot 3$ |

At the top of each percentage column is the "indifferent" percentage, i.e., the percentage that would be expected if it were a matter of indifference where the combination came. The number of combinations in the different parts of the kolon is 5146 (3-2), 3018 (4-3), 1820 (5-4, etc.). The $51463-2$ combinations are distributed as follows:- 2270 (artic.), 1872 (membra), 1104 (cl.).

ST is preferably a $3-2$ combination, $\mathrm{S}^{1} \mathrm{~T}$ still more so, and we observe in both forms a gradation from clausula to articuli. The favourite position of CT is unmistakably clear, and there is the same gradation from clausula to articuli, though much more marked than in the case of ST. IT is very similar to CT both as regards its position in the kolon and the preponderance of cases in the clausula, though the differences are not so striking. TT is avoided in the $3-2$ position and becomes increasingly common the further it is from the end of the kolon. Further, it
is a strongly negative combination in the clausula and even in the membra, and finds its most suitable place in the articuli. MT gravitates to the 3-2 position much more than ST, but as a 4-3 combination is rare. In the clausula and membra it is equally frequent, but less common in the articuli.

C-Combinations :

|  | Art. | 3-2 <br> Mem. | Cl. | Art. | $4-3$ <br> Mem. | Cl. | Art. | $\begin{gathered} 5-4 \\ \text { Mem. } \end{gathered}$ | Cl. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SC | 74 | 103 | 61 | 31 | 48 | 27 | 16 | 20 | 17 |
| $\mathrm{S}^{1} \mathrm{C}$ | 16 | 22 | 10 | 4 | 14 | 10 | 7 | 6 | 5 |
| $\mathrm{S}^{2} \mathrm{C}$ | 14 | 21 | 6 | 4 | 4 |  | 5 | 3 | 2 |
| $\mathrm{SC}^{1}$ | 6 | 9 | 4 | 1 | 1 |  | 1 | 2 |  |
| $\mathrm{SC}^{2}$ | 3 | 9 | 7 |  |  |  |  |  | 1 |
| $\mathrm{SC}^{12}$ | 1 | 2 | 1 |  |  |  |  |  |  |
| $\mathrm{S}^{1} \mathrm{C}^{12}$ | 1 |  | 1 |  |  |  |  |  |  |
| $\mathrm{S}^{1} \mathrm{C}^{2}$ | 1 | 2 | 3 | 1 |  |  |  |  |  |
| $\mathrm{S}^{2} \mathrm{C}^{2}$ | 1 | 1 | 8 |  |  |  |  |  |  |
| $\mathrm{S}^{1} \mathrm{C}^{1}$ | 1 | 1 |  | 1 |  |  |  |  |  |
| $\mathrm{S}^{2} \mathrm{C}^{1}$ | 1 |  |  |  |  |  |  |  |  |
| TC | 51 | 56 | 46 | 23 | 22 | 25 | 12 | 16 | 3 |
| $\mathrm{T}^{1} \mathrm{C}$ | 8 | 6 | 5 | 2 | 3 | 3 | 2 | 2 | 2 |
| TC ${ }^{1}$ | 2 | 2 | 2 |  |  |  |  |  |  |
| TC ${ }^{2}$ | 3 | 8 | 11 | 3 |  |  | 2 |  |  |
| TC ${ }^{12}$ |  |  | 1 |  |  |  |  |  |  |
| $\mathrm{T}^{1} \mathrm{C}^{2}$ | 1 |  |  | 1 |  |  |  |  |  |
| CC | 29 | 46 | 20 | 10 | 7 | 9 | 2 | 3 | 2 |
| $\mathrm{C}^{1} \mathrm{C}$ | 5 | 1 | 2 | 1 | 1 | 1 | 2 |  |  |
| $\mathrm{CC}^{12}$ |  |  | 1 |  |  |  |  |  |  |
| $\mathrm{C}^{1} \mathrm{C}^{2}$ |  |  | 1 |  |  |  |  |  |  |
| $\mathrm{C}^{1} \mathrm{C}^{1}$ |  |  | 1 | 1 |  |  |  |  |  |
| $\mathrm{C}^{2} \mathrm{C}$ |  | 2 |  | 2 |  |  |  | 1 |  |
| CC ${ }^{1}$ | 2 | 1 | 2 | 1 | 1 |  | 1 |  |  |
| $\mathrm{CC}^{2}$ | 2 | 7 | 6 |  |  |  |  |  |  |
| $\mathrm{C}^{2} \mathrm{C}^{2}$ | 1 |  |  |  |  |  |  |  |  |
| IC | 31 | 12 | 14 | 16 | 13 | 11 | 6 | 10 | 3 |
| IC ${ }^{1}$ |  | 2 | 2 |  | 1 | 1 | 1 |  |  |
| $\mathrm{IC}^{2}$ | 2 | 2 | 1 |  |  |  |  |  |  |


|  | Art. | $\begin{aligned} & 3-2 \\ & \text { Mem. } \end{aligned}$ | Cl. | Art. | 4-3 <br> Mem. | Cl. | Art | $5-4$ <br> Mem. | Cl. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{IC}^{12}$ |  | 3 |  |  |  |  |  |  |  |
| MC | 28 | 38 | 17 | 6 | 13 | 13 |  | 6 | 2 |
| $\mathrm{M}^{1} \mathrm{C}$ | 5 | 4 | 1 | 2 | 3 | 6 |  | 1 | 1 |
| $\mathrm{M}^{2} \mathrm{C}$ | 3 | 3 |  | 1 | 1 | 3 |  |  |  |
| $\mathrm{M}^{3} \mathrm{C}$ | 3 | 2 | 5 | 1 |  | 1 |  | 1 |  |
| $\mathrm{M}^{3} \mathrm{C}^{1}$ |  | 1 |  |  |  |  |  |  |  |
| $\mathrm{M}^{3} \mathrm{C}^{2}$ |  | , |  |  |  |  |  |  |  |
| $\mathrm{M}^{13} \mathrm{C}$ | 1 | 1 | 1 |  |  |  |  |  |  |
| $\mathrm{M}^{13} \mathrm{C}^{2}$ |  |  | 1 |  |  |  |  |  |  |
| $\mathrm{M}^{13} \mathrm{C}^{12}$ |  |  | 1 |  |  |  |  |  |  |
| $\mathrm{M}^{1} \mathrm{C}^{2}$ |  | 1 | 1 |  |  | 1 |  |  |  |
| MC ${ }^{1}$ | 1 | 3 | 5 | 1 | 1 |  |  |  |  |
| MC ${ }^{12}$ |  |  | 1 |  |  |  |  |  |  |
| $\mathrm{M}^{1} \mathrm{C}^{12}$ |  |  | 1 |  |  |  |  |  |  |
| $\mathrm{M}^{1} \mathrm{C}^{1}$ |  | 1 |  |  |  |  |  |  |  |
| MC ${ }^{2}$ | 1 | 3 | 4 |  |  |  |  |  |  |
| NC | 9 | 14 | 10 | 6 | 5 | 2 | 1 | 4 | 2 |
| $\mathrm{N}^{1} \mathrm{C}$ |  | 5 | 7 |  | 1 |  | 1 |  | 1 |
| $\mathrm{NC}^{1}$ |  |  |  |  | 1 |  |  |  |  |
| $\mathrm{N}^{1} \mathrm{C}^{1}$ | 1 | 1 |  |  |  |  |  |  |  |
| $\mathrm{NC}^{2}$ | 2 | 1 | 3 |  |  |  |  |  |  |
| EC | 3 | 10 | 5 | 2 | 3 | 2 |  |  | 1 |
| EC ${ }^{2}$ |  | 1 |  |  |  |  |  |  |  |
| DC | 1 | 3 |  |  | 2 | 1 |  |  |  |
| $\mathrm{DC}^{1}$ |  | 1 |  |  |  |  |  |  |  |
| $\mathrm{DC}^{2}$ | 1 |  |  |  |  |  |  |  |  |
| AC | 3 |  | 3 | 1 |  | 1 | 1 | 3 |  |
| $\mathrm{AC}^{1}$ |  | 1 |  |  |  |  |  |  |  |
| $\mathrm{AC}^{2}$ |  | 1 |  |  |  |  |  |  |  |
| BC |  | 12 | 5 | 4 | 3 | 3 | , | 3 |  |
| $\mathrm{B}^{2} \mathrm{C}$ |  |  |  |  | 1 |  | 1 |  |  |
| $\mathrm{BC}^{1}$ |  | 1 |  |  | 1 |  |  |  |  |
| $\mathrm{BC}^{2}$ |  | 1 |  |  |  |  |  |  |  |
| PC | 9 | 6 | 3 | 2 | 3 | 2 | 4 | 2 | 1 |
| $\mathrm{PC}^{1}$ | 1 |  |  |  |  |  |  |  |  |
| $\mathrm{PC}^{2}$ |  |  | 1 |  |  |  |  |  |  |
| PC ${ }^{12}$ | 1 |  |  | 1 |  |  |  |  |  |

Though the number of C-Combinations is very large, there are really few that occur at all frequently. These appear in the following tables:-

|  | $3-2$ | $51 \cdot 6$ <br> $\%$ | $4-3$ | $30 \cdot 2$ <br> $\%$ | $5-4$ | $18 \cdot 2$ <br> $\%$ |
| :--- | ---: | :---: | :---: | :---: | :---: | ---: |
| SC | 238 | $59 \cdot 9$ | 106 | $26 \cdot 7$ | 53 | $13 \cdot 4$ |
| TC | 153 | $60 \cdot 2$ | 70 | $27 \cdot 5$ | 31 | $12 \cdot 3$ |
| CC | 95 | $74 \cdot 2$ | 26 | $20 \cdot 3$ | 7 | $5 \cdot 5$ |
| IC | 57 | $49 \cdot 1$ | 40 | $34 \cdot 5$ | 19 | $16 \cdot 4$ |
| MC | 83 | $67 \cdot 5$ | 32 | $26 \cdot 0$ | 8 | $6 \cdot 5$ |
|  |  |  |  |  |  |  |
|  |  | $44 \cdot 3$ |  | $36 \cdot 3$ |  | $19 \cdot 4$ |
| (3-2) | Art. | $\%$ | Membra | $\%$ | Clausula | $\%$ |
| SC | 74 | $31 \cdot 1$ | 103 | $43 \cdot 3$ | 61 | $25 \cdot 6$ |
| TC | 51 | $33 \cdot 4$ | 56 | $36 \cdot 6$ | 46 | $30 \cdot 0$ |
| CC | 29 | $30 \cdot 5$ | 46 | $48 \cdot 4$ | 20 | $21 \cdot 1$ |
| IC | 31 | $54 \cdot 4$ | 12 | $21 \cdot 0$ | 14 | $24 \cdot 6$ |
| MC | 28 | $33 \cdot 7$ | 38 | $45 \cdot 8$ | 17 | $20 \cdot 5$ |

SC and TC are practically equivalent in value as 3-2 combinations, and show the same proportions for the other positions. Also, they are much more frequent in clausula and membra than in articuli. A very strongly positive 3-2 combination is CC, but it is significant that it occurs so much more frequently in the membra than in the clausula, where both C2 and C3 prefer a contrast in the antepenult (SC, TC). Repetition of the same foot is characteristic of verse, but the reverse is the case with prose. So sentences that end like "effrenata iactabit audacia" (Catil. I 1, 1) are decidedly uncommon. IC is very different from CC, though with Zielinski an iambus is usually made to form part of a cretic (cf. his inclusion of our I2 in his Groundform V 1). Finally, MC is a strongly positive 3-2 combination, and most frequent in membra and clausulae.

S-Combinations:

|  | Art. | $\begin{array}{r} 3-2 \\ \mathrm{Mem} . \end{array}$ | Cl . | Art. | $\begin{array}{r} 4-3 \\ \text { Mem. } \end{array}$ | Cl . | Art. | $5-4$ Mem. | Cl . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SS | 134 | 88 | 22 | 82 | 100 | 61 | 34 | 76 | 44 |
| SIS | 43 | 18 | 9 | 22 | 26 | 7 | 7 | 19 | 10 |
| $\mathrm{S}^{2}$ S | 31 | 17 | 7 | 17 | 23 | 14 | 8 | 10 | 5 |
| SS ${ }^{1}$ | 27 | 19 | 7 | 25 | 29 | 27 | 8 | 14 | 16 |
| $\mathrm{SS}^{2}$ | 25 | 15 | 2 | 12 | 16 | 8 | 8 | 12 | 4 |
| $\mathrm{S}^{1} \mathrm{~S}^{1}$ | 9 | 5 | 1 | 1 | 6 | 3 | 2 | 1 | 1 |
| $\mathrm{S}^{2} \mathrm{~S}^{2}$ | 2 | 3 |  | 3 | 1 | 1 | 1 | 1 | 1 |
| $\mathrm{S}^{1} \mathrm{~S}^{2}$ | 4 | 7 | 1 | 1 | 5 | 1 | 2 | 1 | 3 |
| $\mathrm{S}^{2} \mathrm{~S}^{1}$ | 4 | 2 |  | 3 | 1 | 1 |  |  |  |
| $\mathrm{S}^{12} \mathrm{~S}$ |  | 3 |  | 3 |  | 2 |  |  | 1 |
| SS ${ }^{12}$ |  |  |  | 1 | 2 |  |  |  | 1 |
| $\mathrm{S}^{1} \mathrm{~S}^{12}$ |  |  |  |  | 1 |  |  | 1 |  |
| CS | 34 | 36 | 35 | 26 | 30 | 17 | 10 | 8 | 15 |
| $\mathrm{C}^{1} \mathrm{~S}$ | 2 | 2 |  | 2 |  |  |  |  |  |
| $\mathrm{CS}^{1}$ | 6 | 8 | 4 | 5 | 4 | 6 | 1 | 3 |  |
| $\mathrm{C}^{2} \mathrm{~S}$ | 3 |  | 1 |  | 1 | 1 | 2 |  | 1 |
| $\mathrm{CS}^{2}$ | 10 | 4 | 3 | 5 | 1 | 2 | 2 | 4 | 1 |
| $\mathrm{C}^{1} \mathrm{~S}^{1}$ |  | 1 |  |  | 1 |  |  |  |  |
| $\mathrm{C}^{2} \mathrm{~S}^{1}$ |  |  |  | 1 |  |  |  |  |  |
| CS ${ }^{12}$ |  |  | 1 |  |  |  |  |  |  |
| TS | 112 | 76 | 34 | 55 | 74 | 37 | 27 | 50 | 36 |
| T ${ }^{\text {S }}$ | 14 | 12 | 4 | 16 | 8 | 2 | 6 | 8 | 9 |
| TS ${ }^{1}$ | 18 | 8 | 4 | 8 | 11 | 7 | 11 | 16 | 4 |
| TS ${ }^{2}$ | 19 | 11 | 1 | 17 | 8 | 3 | 5 | 2 | 2 |
| $\mathrm{T}^{1} \mathrm{~S}^{1}$ | 4 |  |  |  |  |  | 1 | 1 |  |
| $\mathrm{T}^{1} \mathrm{~S}^{2}$ | 1 | 4 |  |  | 1 | 2 | 1 |  |  |
| $\mathrm{T}^{1} \mathrm{~S}^{12}$ |  |  |  |  |  |  | 1 |  |  |
| IS | 56 | 30 | 7 | 34 | 29 | 10 | 19 | 21 | 12 |
| IS ${ }^{1}$ | 10 | 8 | 3 | 7 | 6 | 1 |  | 10 | 2 |
| $\mathrm{IS}^{2}$ | 7 | 7 |  | 7 | 7 | 2 |  | 2 |  |
| $\mathrm{IS}^{12}$ | 1 |  | 1 |  |  |  | 1 |  |  |
| MS | 26 | 11 | 3 | 19 | 26 | 11 | 7 | 6 | 5 |
| M ${ }^{1}$ S | 8 | 10 | 2 | 3 | 8 | 4 | 5 | 1 | 3 |
| M ${ }^{\text {S }}$ | 3 |  | 1 | 2 | 2 |  | 2 | 2 |  |
| M ${ }^{3} \mathrm{~S}$ |  | 2 |  | 1 | 1 |  |  | 1 |  |
| MS ${ }^{1}$ | 10 | 5 |  | 8 | 9 | 7 | 1 | 4 | 2 |


|  | Art. | $\begin{array}{r} 3-2 \\ \text { Mem. } \end{array}$ | Cl. | Art. | $\begin{gathered} 4-3 \\ \text { Mem. } \end{gathered}$ | Cl . | Art. | 5-4, Mem. | Cl. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MS ${ }^{2}$ |  | 3 |  | 2 | 4 | 3 |  | 4 |  |
| $\mathrm{M}^{1} \mathrm{~S}^{1}$ | 2 | 3 | 2 | 1 | 4 | 1 |  |  |  |
| $\mathrm{M}^{2} \mathrm{~S}^{1}$ | 1 | 3 |  |  | 1 | 1 |  |  |  |
| $\mathrm{M}^{1} \mathrm{~S}^{2}$ |  |  |  |  | 1 |  |  |  |  |
| $\mathrm{M}^{2} \mathrm{~S}^{2}$ |  |  |  |  |  | 1 |  |  |  |
| $M^{3} S^{2}$ |  |  |  |  |  | 1 |  |  |  |
| $\mathrm{M}^{3} \mathrm{~S}^{1}$ |  |  |  |  | 1 |  |  |  |  |
| MS ${ }^{12}$ | 1 |  |  |  |  |  |  |  |  |
| $M^{13} \mathrm{~S}$ | 2 |  |  |  | 1 |  |  | 1 |  |
| $M^{13} \mathrm{~S}^{1}$ |  |  |  |  |  |  |  | 1 |  |
| $M^{13} S^{2}$ | 2 |  |  |  |  |  |  |  |  |
| NS | 25 | 15 | 11 | 7 | 12 | 3 | 2 | 1 | 1 |
| $\mathrm{N}^{1} \mathrm{~S}$ | 6 | 5 | 1 |  | 3 |  |  | 2 | 1 |
| $\mathrm{N}^{2} \mathrm{~S}$ |  |  | 1 |  |  |  |  |  |  |
| NS ${ }^{1}$ | 2 | 2 |  | 3 | 3 | 4 | 2 | 4 | 1 |
| $\mathrm{N}^{1} \mathrm{~S}^{1}$ | 2 |  |  | 2 | 2 |  |  |  |  |
| NS ${ }^{2}$ | 3 |  |  |  | 1 |  |  | 1 |  |
| $\mathrm{N}^{1} \mathrm{~S}^{2}$ |  |  | 1 |  |  |  | 2 |  |  |
| NS ${ }^{12}$ | 1 |  |  |  |  |  |  |  |  |
| ES | 5 | 3 | 2 | 2 | 1 | 1 |  | 3 | 1 |
| $\mathrm{E}^{3} \mathrm{~S}$ |  | 1 | 2 |  | 1 |  |  |  |  |
| ES ${ }^{1}$ | 3 | 1 |  | 1 | 2 | 1 | 1 |  |  |
| ES ${ }^{2}$ | 2 |  | 1 |  |  |  |  |  |  |
| ES ${ }^{12}$ |  | 1 |  |  |  |  |  |  |  |
| BS | 14 | 7 | 4 | 8 | 6 | 5 | 4 | 4 | 2 |
| B2S |  |  |  |  | 1 |  |  |  |  |
| BS ${ }^{1}$ | 3 | 4 |  | 2 | 3 | 1 |  | 2 |  |
| $\mathrm{BS}^{2}$ | 1 | 2 |  |  | 1 | 1 | 1 | 1 |  |
| $\mathrm{B}^{2} \mathrm{~S}^{1}$ |  |  |  | 1 |  |  |  |  |  |
| $\mathrm{B}^{2} \mathrm{~S}^{2}$ | 1 |  |  |  | 1 |  |  |  |  |
| BS ${ }^{12}$ | 1 |  |  |  |  |  |  |  |  |
| AS | 11 | 6 |  | 7 | 1 | 1 | 2 | 2 | 2 |
| AS ${ }^{1}$ |  | 1 |  |  | 1 |  |  |  |  |
| $\mathrm{AS}^{2}$ |  | 1 | 1 | 1 | 1 | 1 |  |  |  |
| AS ${ }^{12}$ |  |  | 1 |  |  |  |  |  |  |
| DS | 3 |  |  |  | 2 |  |  |  | 1 |
| DS ${ }^{1}$ | 1 |  |  |  | 2 |  |  | 1 | 1 |


|  | $3-2$ <br> Mem. |  |  | Cl. | Art. | $4-3$ <br> Mem. | Cl. | Art. | $5-4$ <br>  <br>  <br> Art. |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| DS $^{2}$ |  |  |  |  |  | 1 |  |  |  |
| PS | 16 | 18 | 2 | 16 | 8 | 4 | 9 | 7 | 5 |
| PS $^{2}$ | 2 |  | 1 | 3 | 1 |  | 2 |  |  |
| PS $^{1}$ | 3 |  |  | 7 | 2 |  | 1 | 9 |  |


|  | $3-2$ | $51 \cdot 6$ <br> $\%$ | $4-3$ | $30 \cdot 2$ <br> $\%$ | $5-4$ | $18 \cdot 2$ <br> $\%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| SS | 244 | $38 \cdot 1$ | 243 | $37 \cdot 9$ | 154 | $24 \cdot 0$ |
| SS $^{1}$ | 43 | $26 \cdot 5$ | 81 | $50 \cdot 0$ | 38 | $23 \cdot 5$ |
| S'S $^{2}$ S5 | $51 \cdot 6$ | 54 | $41 \cdot 0$ | 23 | $17 \cdot 4$ |  |
| S'S $^{15}$ | 70 | $38 \cdot 7$ | 75 | $41 \cdot 4$ | 36 | $19 \cdot 9$ |
| SS | 42 | $41 \cdot 1$ | 36 | $35 \cdot 3$ | 24 | $23 \cdot 6$ |
| CS | 105 | $49 \cdot 8$ | 73 | $34 \cdot 6$ | 33 | $15 \cdot 6$ |
| TS | 222 | $44 \cdot 3$ | 166 | $33 \cdot 1$ | 113 | $22 \cdot 6$ |
| IS | 93 | $42 \cdot 6$ | 73 | $33 \cdot 5$ | 52 | $23 \cdot 9$ |
| MS | 40 | $35 \cdot 0$ | 56 | $49 \cdot 1$ | 18 | $15 \cdot 9$ |


|  | (3-2) Art | $\begin{gathered} 44 \cdot 3 \\ \% \end{gathered}$ | Mem. | $\begin{gathered} 36 \cdot 3 \\ \% \end{gathered}$ | Cl . | $\begin{gathered} 19 \cdot 4 \\ \% \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SS | 134 | $54 \cdot 9$ | 88 | $36 \cdot 1$ | 22 | $9 \cdot 0$ |
| SS ${ }^{1}$ | 27 | $50 \cdot 9$ | 19 | $35 \cdot 9$ | 7 | $13 \cdot 2$ |
| $\mathrm{S}^{2} \mathrm{~S}$ | 31 | $56 \cdot 3$ | 17 | 31.0 | 7 | $12 \cdot 7$ |
| $\mathrm{S}^{1} \mathrm{~S}$ | 43 | $61 \cdot 4$ | 18 | $25 \cdot 7$ | 9 | $12 \cdot 9$ |
| $\mathrm{SS}^{2}$ | 25 | $59 \cdot 5$ | 15 | $35 \cdot 7$ | 2 | $4 \cdot 8$ |
| CS | 34 | $32 \cdot 4$ | 36 | $34 \cdot 3$ | 35 | $33 \cdot 3$ |
| TS | 112 | $50 \cdot 4$ | 76 | $34 \cdot 2$ | 34 | $15 \cdot 4$ |
| IS | 56 | $60 \cdot 2$ | 30 | $32 \cdot 3$ | 7 | 7.5 |
| MS | 26 | 65.0 | 11 | 27.5 | 3 | 7.5 |

All the combinations in the above tables are negative in the $3-2$ position as a whole ; but CS, which is only slightly negative, is in the clausula strongly positive. Zielinski, as we saw above (p. 108), regards our CS2 (his S3) as "schwach positiv"; our figures, however, would seem to show that the epithet "schwach" is not correct, since the difference in negative value between our
"ombinations $S^{2} 2$ and $\mathrm{S}^{3}$ in the clausula is not so great as to reduce ('s2 to the status assumed by Zielinski. The extremely heavy rhythm MS is for the most part reserved for the 4-3 position, and in the 3-2 position is chiefly found in the articuli.

Miscellaneous combinations. We shall now consider such of the remaining combinations as occur at all frequently.

|  | $3-2$ | $51 \cdot 6$ <br> $\%$ | $4-3$ | $30 \cdot 2$ <br> $\%$ | $5-4$ | $18 \cdot 2$ <br> $\%$ |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: |
| SN | 105 | $76 \cdot 6$ | 23 | $16 \cdot 8$ | 9 | $6 \cdot 6$ |
| TN | 51 | $69 \cdot 8$ | 14 | $19 \cdot 2$ | 8 | $11 \cdot 0$ |
| SI | 178 | $58 \cdot 1$ | 81 | $26 \cdot 5$ | 47 | $15 \cdot 4$ |
| CI | 50 | $49 \cdot 1$ | 32 | $31 \cdot 3$ | 20 | $19 \cdot 6$ |
| TI | 37 | $44 \cdot 6$ | 30 | $36 \cdot 1$ | 16 | $19 \cdot 3$ |
| SM | 68 | $51 \cdot 5$ | 39 | $29 \cdot 5$ | 25 | $19 \cdot 0$ |
| TM | 46 | $39 \cdot 6$ | 43 | $37 \cdot 1$ | 27 | $23 \cdot 3$ |
|  |  |  | $44 \cdot 3$ |  |  |  |
|  |  |  |  | $36 \cdot 3$ |  | $19 \cdot 4$ |
|  | $(3-2)$ | Art. | $\%$ | Mem. | $\%$ | Cl. |
| SN | 36 | $34 \cdot 3$ | 41 | $39 \cdot 0$ | 28 | $26 \cdot 7$ |
| TN | 15 | $29 \cdot 4$ | 17 | $33 \cdot 3$ | 19 | $37 \cdot 3$ |
| SI | 65 | $36 \cdot 5$ | 66 | $37 \cdot 1$ | 47 | $26 \cdot 4$ |
| TI | 26 | $70 \cdot 2$ | 9 | $24 \cdot 3$ | 2 | $5 \cdot 5$ |
| CI | 23 | $46 \cdot 0$ | 16 | $32 \cdot 0$ | 11 | $22 \cdot 0$ |
| SM | 37 | $54 \cdot 4$ | 20 | $29 \cdot 4$ | 11 | $16 \cdot 2$ |
| TM | 21 | $45 \cdot 6$ | 19 | $41 \cdot 4$ | 6 | $13 \cdot 0$ |

SN is as pronounced a $3-2$ combination as CT, while TN is not far behind. N is a foot that occurs very rarely in any other than the penultimate position. Note the gradation from clausula to articuli. For SI the figures do not speak decisively, but it would seem to be slightly more frequent in the $3-2$ position than in the others. It is certainly most common in the clausula, and gradually decreases in frequency as we pass to membra and articuli. CI and SM prefer the $4-3$ and 5-4 positions, but
there is no gradation in their distribution over articuli, membra and clausulae. TI and TM are distinctly negative 3-2 combinations, but while the latter is apparently used indifferently in membra and articuli, in the clausula it is avoided. TI, which we have already seen to be a rare form, is extremely rare in the clausula, and comparatively common only in the articuli.

The remaining forms, which are given for the sake of completeness in the following tables, are noteworthy only for their infrequency, so that we can dispense with any detailed discussion of them. Such feet as A, B, D, E and P occur very rarely, and therefore combinations of these with other feet are necessarily also rare. M and N are certainly more common, but are found 'hiefly in the following combinations-SN. TN. SM, MC, MT, TM ; the others are almost negligible.

|  | Art. | $\begin{gathered} 3-2 \\ \text { Mem. } \end{gathered}$ | Cl. | Art. | $\begin{gathered} 4-3 \\ \text { Mem. } \end{gathered}$ | Cl. | Art. | $\begin{gathered} 5-4 \\ \text { Mem. } \end{gathered}$ | Cl. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SN | 36 | 41 | 28 | 11 | 7 | 5 | 3 | 5 | 1 |
| $\mathrm{S}^{1} \mathrm{~N}$ | 5 | 7 | 9 | 6 | 4 | 2 | 2 | 2 | 2 |
| S.N ${ }^{1}$ | 9 | 4 | 4 | 2 | 4 | 1 | 1 | 1 | 1 |
| $\mathrm{S}^{1} \mathrm{~N}^{1}$ | 1 | 2 |  | 3 |  | 1 | 1 | 1 | 1 |
| $\mathrm{S}^{2} \mathrm{~N}$ | 6 | 10 | 12 | 3 | 1 | 1 | 1 | 2 | 1 |
| SN2 | 2 |  |  |  |  | 1 |  |  |  |
| $\mathrm{S}^{2} \mathrm{~N}^{1}$ | 1 |  |  | 1 |  |  |  | 1 |  |
| $\mathrm{S}^{12} \mathrm{~N}$ |  | 1 |  |  |  |  |  |  |  |
| TN | 15 | 17 | 19 | 5 | 5 | 4 | 3 | 3 | 2 |
| TN ${ }^{2}$ | 1 | 1 |  |  |  | 1 |  |  |  |
| $\mathrm{T}^{1} \mathrm{~N}$ | 2 | 4 | 4 | 1 | 1 | 1 | 1 |  | 1 |
| TN ${ }^{1}$ | 1 | 1 | 2 | 1 |  | 1 |  | 1 |  |
| DN |  | 1 |  |  |  |  |  |  |  |
| DN ${ }^{1}$ |  |  |  |  | 1 |  |  |  |  |
| CN | 5 | 5 | 4 | 4 |  | 1 | 3 | 4 | 2 |
| CNI | 2 | 1 | 3 | 2 |  | 2 | 1 |  | 2 |
| CN2 |  |  | 1 |  |  |  |  |  |  |
| $\mathrm{C}^{2} \mathrm{~N}$ | 2 |  |  | 1 |  |  |  |  |  |
| MN | 1 | 3 | 1 | 3 | 4 | 1 | 2 |  | 1 |


|  | Art. | 3-2 <br> Mem. | Cl . | Art. | $\begin{aligned} & \text { 4-3 } \\ & \text { Mem. } \end{aligned}$ | Cl. | Art. | 5-4 <br> Mem. | Cl. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{M}^{2} \mathrm{~N}$ | 1 |  |  |  |  |  |  |  |  |
| M ${ }^{1}$ | 4 | 1 | 3 |  | 1 | 1 |  | 1 |  |
| $\mathrm{MN}^{2}$ |  | 1 | 1 |  |  |  |  |  |  |
| $\mathrm{M}^{1} \mathrm{~N}$ | 1 | 2 | 1 | 1 |  | 1 |  | 1 |  |
| $\mathrm{M}^{3} \mathrm{~N}$ | 2 |  |  | 1 | 1 |  |  |  |  |
| $\mathrm{M}^{3} \mathrm{~N}^{1}$ |  |  |  |  |  |  |  | 1 |  |
| $\mathrm{M}^{13} \mathrm{~N}$ |  | 1 |  |  |  |  |  |  |  |
| $M^{13} \mathrm{~N}^{1}$ |  |  |  |  |  | 1 |  |  |  |
| IN | 7 | 7 | 2 | 3 | 2 | 1 | 2 | 2 |  |
| IN ${ }^{1}$ |  | 1 |  |  | 1 |  |  |  |  |
| BN | 1 | 1 | 2 | 1 |  | 1 |  |  |  |
| $\mathrm{BN}^{1}$ |  | 1 |  | 1 |  |  | 1 |  | 1 |
| $\mathrm{BN}^{2}$ |  | 1 |  |  |  |  |  |  |  |
| $\mathrm{B}^{2} \mathrm{~N}$ | 1 |  |  |  |  | 1 |  |  |  |
| NN | 3 |  | 2 | 1 |  |  |  | 2 |  |
| $\mathrm{N}^{1} \mathrm{~N}$ |  |  | 1 |  |  |  |  |  |  |
| NN ${ }^{2}$ |  |  |  |  |  | 1 |  |  |  |
| EN |  | 3 | 1 | 2 |  |  |  |  |  |
| EN ${ }^{1}$ | 1 | 2 |  |  |  |  |  |  |  |
| EN ${ }^{2}$ | 1 |  |  |  |  |  |  |  |  |
| $\mathrm{E}^{3} \mathrm{~N}$ | 2 |  |  |  |  |  |  |  |  |
| AN | 1 | 2 | 1 |  |  |  |  | 1 |  |
| PN | 1 |  | 1 | 2 | 1 |  |  | 1 |  |
| PN ${ }^{1}$ | 2 |  |  | 1 |  |  | 1 |  |  |
| $\mathrm{PN}^{2}$ | 1 |  |  |  |  |  |  |  |  |
| SI | 65 | 66 | 47 | 24 | 31 | 26 | 17 | 17 | 13 |
| $\mathrm{S}^{1} \mathrm{I}$ | 20 | 14 | 13 | 11 | 11 | 10 | 4 | 6 | 3 |
| $\mathrm{S}^{2} \mathrm{I}$ | 9 | 6 | 3 | 3 | 2 |  | 6 | 7 | 1 |
| CI | 23 | 16 | 11 | 8 | 16. | 8 | 4 | 13 | 3 |
| $\mathrm{C}^{1} \mathrm{I}$ |  |  |  |  | 1 |  |  |  |  |
| TI | 26 | 9 | 2 | 10 | 15 | 5 | 11 | 4 | 1 |
| $\mathrm{T}^{1} \mathrm{I}$ | 5 | 2 | 1 | 4 | 2 |  | 2 | 2 | 1 |
| MI | 6 | 6 | 2 | 3 | 3 | 1 | 2 | 1 | 3 |
| M ${ }^{1}$ I | 2 | 1 | 2 | 1 | 1 |  | 1 | 1 |  |
| M ${ }^{2}$ I | 3 | 1 | 1 |  |  |  |  | 1 |  |
| NI |  | 1 | 1 |  | 2 |  |  | 1 |  |
| $\mathrm{N}^{1} \mathrm{I}$ |  |  |  |  |  |  | 2 | 1 |  |


|  | Art. | $\begin{aligned} & 3-2 \\ & \text { Mem. } \end{aligned}$ | Cl. | Art. | $\begin{aligned} & 4-3 \\ & \text { Mem. } \end{aligned}$ | Cl. | Art. | $54$ Mem. | Cl . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| II | 17 | 17 | 5 | 23 | 14 | 5 | 8 | 10 | 5 |
| PI | 5 | 4 | 1 | 9 | 5 | 4 | 6 | 2 | 1 |
| BI | 3 | 2 |  |  |  |  | 1 |  | 1 |
| EI | 1 | 1 |  |  |  |  |  |  |  |
| DI | 1 |  |  |  |  |  |  | 1 |  |
| SM | 37 | 20 | 11 | 16 | 15 | 8 | 8 | 11 | 6 |
| $\mathrm{S}^{1} \mathrm{M}$ | 6 | 10 | 3 | 3 | 7 | 2 | 1 | 3 | 1 |
| SM ${ }^{1}$ | 16 | 13 | 5 | 7 | 2 | 6 | 1 | 4 | 1 |
| $\mathrm{S}^{1} \mathrm{M}^{1}$ | 6 | 2 |  |  | 3 |  |  |  | 1 |
| $\mathrm{S}^{2} \mathrm{M}$ | 9 | 2 | 2 | 6 | 5 | 1 | 2 | 9 |  |
| SM ${ }^{3}$ | 5 | 2 | 1 | 1 | 1 | 1 |  | 1 |  |
| $\mathrm{S}^{2} \mathrm{M}^{3}$ |  | 2 |  | 1 | 1 |  |  |  |  |
| SM13 | 1 | 1 | 1 | 1 |  |  |  |  |  |
| SLI ${ }^{23}$ |  | 1 |  |  |  |  |  |  |  |
| SM ${ }^{2}$ | 2 |  | 1 | 1 | 2 |  |  |  |  |
| $\mathrm{S}^{1} \mathrm{I}^{2}$ |  |  |  | 1 | 1 |  |  |  |  |
| $\mathrm{S}^{1} \mathrm{I}^{3}$ | 1 |  |  | 1 |  | 1 |  |  |  |
| $\mathrm{S}^{2} \mathrm{M}^{1}$ | 1 | 3 |  |  | 1 |  |  |  |  |
| $\mathrm{S}^{1} \mathrm{M}^{13}$ | 1 |  |  |  |  |  |  |  |  |
| $\mathrm{S}^{12} \mathrm{M}^{3}$ |  |  |  |  |  |  |  | 1 |  |
| $\mathrm{S}^{2} \mathrm{M}^{2}$ |  |  |  | 1 |  |  |  |  |  |
| BM | 6 |  |  |  | 3 |  | 2 | 3 | 1 |
| $\mathrm{B}^{2} \mathrm{M}$ |  |  |  |  |  |  |  | 1 | 1 |
| $B^{2} \mathrm{M}^{1}$ |  | 1 |  |  |  |  |  |  |  |
| $\mathrm{BM}^{1}$ |  |  |  |  | 1 |  | 1 |  | 1 |
| BM ${ }^{2}$ |  |  |  |  |  | 1 |  |  |  |
| $\mathrm{BM}^{13}$ |  |  |  | 1 |  | 1 |  |  |  |
| $\mathrm{BM}^{3}$ | 1 |  |  |  |  |  |  |  |  |
| MM | 4 | 5 | 2 | 3 | 2 | 1 |  |  |  |
| $\mathrm{M}^{2} \mathrm{M}^{3}$ | 1 |  |  |  |  |  |  |  |  |
| $\mathrm{M}^{1} \mathrm{NI}^{3}$ | 1 |  |  |  |  |  |  | 1 |  |
| $\mathrm{M}^{1} \mathrm{M}$ | 1 | 2 |  | 1 | 3 | 2 |  |  | 2 |
| $\mathrm{M}^{2} \mathrm{M}^{1}$ | 2 |  |  |  |  |  |  |  |  |
| MM ${ }^{1}$ | 5 | 5 |  | 2 | 4 |  |  |  | 2 |
| M M ${ }^{3}$ |  | 1 |  |  |  |  |  |  |  |
| M ${ }^{3} \mathrm{M}$ |  | 2 |  |  | 1 |  | 1 | 1 |  |
| $\mathrm{M}^{2} \mathrm{M}$ | 1 |  |  | 1 |  |  |  |  |  |


|  | Art. | $\begin{aligned} & 3-2 \\ & \text { Mem. } \end{aligned}$ | Cl. | Art. | 4-3 <br> Mem. | Cl . | Art. | $\begin{gathered} \text { 5-4 } \\ \text { Mem. } \end{gathered}$ | Cl . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{M}^{1} \mathrm{M}^{1}$ |  | 1 |  |  |  |  |  |  | 1 |
| $\mathrm{M}^{13} \mathrm{M}$ | 1 |  |  |  | 1 |  |  |  |  |
| MM ${ }^{2}$ |  |  |  | 1 |  | 1 |  |  |  |
| $\mathrm{M}^{2} \mathrm{M}^{13}$ |  |  |  | 1 |  |  |  |  |  |
| MM ${ }^{13}$ |  |  |  |  | 1 |  |  |  |  |
| TM | 21 | 19 | 6 | 17 | 19 | 7 | 6 | 11 | 10 |
| TM ${ }^{13}$ | 2 |  |  | 1 | 1 |  |  |  |  |
| $\mathrm{T}^{1} \mathrm{M}^{3}$ | 1 | 1 |  |  |  |  |  |  |  |
| TM ${ }^{1}$ | 13 | 2 | 2 | 2 | 4 |  |  | 3 | 1 |
| $\mathrm{T}^{1} \mathrm{M}^{1}$ |  |  |  | 1 |  |  |  |  |  |
| $\mathrm{T}^{1} \mathrm{M}$ | 5 | 1 |  | 3 | 3 | 1 |  | 2 |  |
| TM ${ }^{2}$ | 2 |  |  | 3 |  |  | 1 |  | 2 |
| TM ${ }^{3}$ | 2 | 2 |  |  | 2 | 1 |  |  |  |
| NM | 7 | 2 | 2 | 1 | 4 |  | 1 |  | 2 |
| $\mathrm{N}^{1} \mathrm{M}$ |  |  |  |  | 1 | 2 | 1 |  |  |
| NM ${ }^{2}$ |  |  |  |  | 1 |  |  |  |  |
| NM ${ }^{3}$ | 1 | 2 |  |  |  | 1 |  |  |  |
| $\mathrm{N}^{2} \mathrm{M}^{2}$ |  |  |  |  |  |  |  |  | 1 |
| NM ${ }^{1}$ | 1 |  |  |  | 1 | 1 |  |  |  |
| $\mathrm{N}^{1} \mathrm{M}^{2}$ |  |  |  | 1 |  |  |  |  |  |
| AM |  |  |  | 1 | 3 | 1 |  |  |  |
| AM ${ }^{3}$ | 1 |  |  |  |  |  |  |  |  |
| $\mathrm{AM}^{2}$ | 1 |  |  |  |  |  |  |  |  |
| $\mathrm{AM}^{1}$ |  |  |  | 1 |  |  |  |  |  |
| EM |  |  | 2 |  |  | 1 |  |  |  |
| EM ${ }^{1}$ |  | 1 | 1 |  |  |  | 2 |  |  |
| $\mathrm{E}^{3} \mathrm{M}$ |  | 1 |  | 1 |  | 1 | 1 |  |  |
| CM | 9 | 5 | 4 | 3 | 5 | 1 | 2 | 5 | 1 |
| CM ${ }^{1}$ | 7 | 3 | 3 | 3 |  | 1 |  |  | 1 |
| $\mathrm{C}^{1} \mathrm{M}$ |  | 1 |  |  | 1 |  |  |  |  |
| CM ${ }^{2}$ |  | 1 |  | 2 |  | 2 | 2 |  |  |
| $\mathrm{CM}^{3}$ |  | 2 |  |  |  |  |  |  |  |
| $\mathrm{C}^{1} \mathrm{M}^{1}$ |  |  |  |  |  |  | 1 |  |  |
| IM | 14 | 5 | 2 | 6 | 7 | 4 |  | 3 | 5 |
| IM ${ }^{1}$ | 4 | 2 | 1 | 2 | 1 | 1 |  | 1 | 1 |
| IM ${ }^{2}$ | 2 |  |  | 1 |  | 1 |  | 2 |  |
| IM ${ }^{3}$ | 2 |  |  | 1 |  |  | 1 |  | 1 |


|  | Art. | $\begin{aligned} & 3-2 \\ & \text { Mem. } \end{aligned}$ | Cl . | Art. | $\begin{aligned} & 4-3 \\ & \text { Mem. } \end{aligned}$ | Cl . | Art. | $\begin{array}{r} 5-4 \\ \text { Mem. } \\ \hline \end{array}$ | Cl. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{IM}^{13}$ |  | 1 |  |  |  |  |  |  |  |
| PM | 2 | 1 | 2 | 3 | 1 | 3 |  | 1 |  |
| PM ${ }^{2}$ |  |  |  |  |  | 1 | 1 |  |  |
| PM ${ }^{1}$ | 1 |  |  |  | 1 |  |  | 2 |  |
| PM ${ }^{3}$ | 1 | 2 |  |  |  |  |  |  |  |
| PM ${ }^{13}$ |  |  |  |  |  |  | 1 |  |  |
| DM |  | 1 |  |  |  | 1 |  | 1 |  |
| $\mathrm{DM}^{2}$ |  |  |  |  |  |  |  | 1 |  |
| SB | 16 | 10 | 2 | 10 | 12 | 3 | 2 | 3 | 4 |
| $\mathrm{S}^{1} \mathrm{~B}$ | 3 | 6 |  |  | 2 | 1 | 1 | 3 |  |
| $\mathrm{SB}^{2}$ | 2 | 3 | 1 |  |  |  | 1 | 1 |  |
| $\mathrm{S}^{1} \mathrm{~B}^{2}$ |  |  | 1 |  |  |  |  |  |  |
| $S^{2} \mathrm{~B}$ | 3 | 1 |  | 2 | 1 |  | 1 |  |  |
| BB |  | 1 |  |  | 1 |  |  |  | 2 |
| PB | 4 | 1 |  | 1 | 2 |  |  | 2 | 1 |
| $\mathrm{PB}^{2}$ |  |  |  |  |  |  |  | 1 |  |
| CB | 5 | 4 |  | 1 |  | 2 | 1 | 1 | 2 |
| NB |  |  |  |  |  |  | 1 |  |  |
| MB |  |  |  | 1 | 2 | 1 |  |  | 1 |
| $\mathrm{M}^{2} \mathrm{~B}$ |  | 1 |  |  |  |  |  |  |  |
| $\mathrm{M}^{1} \mathrm{~B}$ |  | 2 |  |  |  |  |  |  |  |
| MB ${ }^{2}$ | 1 |  |  |  |  |  |  |  |  |
| TB | 5 | 2 | 1 | 3 | 2 |  | 1 |  | 1 |
| TB ${ }^{2}$ |  | 1 |  | 1 |  |  |  |  |  |
| $\mathrm{T}^{1} \mathrm{~B}$ |  |  |  |  |  |  | 1 |  |  |
| IB | 4 | 1 |  | 5 | 4 | 1 | 1 | 4 | 1 |
| $\mathrm{IB}^{2}$ | 1 |  |  | 2 |  |  |  | 1 |  |
| ME | 6 |  |  |  | 2 |  |  |  |  |
| $\mathrm{ME}^{3}$ |  | 1 |  |  |  |  |  |  |  |
| TE | 4 | 7 | 1 | 1 | 2 | 4 |  |  | 1 |
| TE ${ }^{1}$ |  |  |  |  |  | 1 |  |  |  |
| $\mathrm{T}^{1} \mathrm{E}$ |  |  |  |  |  | 1 |  |  |  |
| $\mathrm{TE}^{\text {T1 }}$ | 2 | 2 |  | 2 | 1 | 1 |  | 1 |  |
| $\mathrm{T}^{1 \mathrm{E}^{3}}$ |  |  |  |  |  |  | 1 |  |  |
| BE | 2 | ${ }_{3}$ |  |  |  |  |  |  |  |
| $\mathrm{IE}^{3}$ | 1 |  | 1 | 1 |  | 1 | 2 | 1 |  |


|  | Art. | $\begin{aligned} & 3-2 \\ & \text { Mem. } \end{aligned}$ | Cl . | Art. | $4-3$ <br> Mem. | Cl . | Art. | $\begin{gathered} 5-4 \\ \text { Mem. } \end{gathered}$ | Cl . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SE | 15 | 13 | 1 | 7 | 12 | 4 | 2 | 3 | 2 |
| $\mathrm{S}^{1} \mathrm{E}$ | 2 | 3 |  | 1 | 3 | 2 | 1 | 1 | 1 |
| $\mathrm{S}^{2} \mathrm{E}$ |  |  |  |  | 1 |  |  |  |  |
| $\mathrm{S}^{1} \mathrm{E}^{3}$ |  | 1 |  |  |  | 1 |  |  |  |
| $\mathrm{SE}^{3}$ | 4 |  |  | 1 | 1 |  |  |  |  |
| NE | 1 |  |  |  |  | 1 |  |  |  |
| $\mathrm{N}^{1} \mathrm{E}$ |  |  |  |  | 1 |  |  |  |  |
| EE |  | 1 | 1 |  | 1 |  |  |  |  |
| CE | 5 | 1 |  | 1 | 1 | 1 |  | 2 | 1 |
| $\mathrm{C}^{1} \mathrm{E}$ |  | 1 |  |  |  |  |  |  |  |
| $\mathrm{C}^{2} \mathrm{E}$ |  |  |  |  | 1 |  |  |  |  |
| $\mathrm{CE}^{3}$ | 1 |  |  |  |  |  |  |  |  |
| PE | 1 |  | 1 |  |  | 1 |  |  |  |
| $\mathrm{PE}^{3}$ | 1 |  |  |  |  |  |  |  |  |
| AD | 1 |  |  |  |  |  |  |  | 1 |
| ID | 4 | 2 | 1 | 1 |  |  |  | 1 | 1 |
| SD | 6 | 7 | , | 1 | 5 |  |  | 1 |  |
| $\mathrm{S}^{1} \mathrm{D}$ | 1 |  |  | 1 |  |  |  |  |  |
| $\mathrm{S}^{2} \mathrm{D}$ | 5 | 2 |  | 1 |  |  |  |  |  |
| ED | 1 |  | 2 |  |  |  |  |  |  |
| CD |  | 2 |  |  | 1 |  |  | 1 |  |
| TD | 4 | 3 |  | 1 |  |  |  |  |  |
| MD | 2 | 1 |  |  |  |  |  | 1 |  |
| ${ }_{\text {M1 }}{ }^{1} \mathrm{D}$ |  |  |  |  |  |  |  |  |  |
| ${ }_{\text {N }} \mathrm{N}^{1} \mathrm{D}$ |  | 1 |  |  |  |  |  |  |  |
| ${ }_{\text {ND }}{ }^{\text {2 }} \mathrm{D}$ | 1 | 1 | 1 |  |  |  |  |  |  |
| PD | 1 |  |  |  |  |  |  |  |  |
| IA | 5 |  | 1 | 4 |  |  | 1 |  | 1 |
| CA | 1 | 1 |  |  |  |  |  |  |  |
| SA | 3 | 5 |  | 4 | 4 | 2 | 2 | 3 | 1 |
| $\mathrm{S}^{2} \mathrm{~A}$ | 3 |  | 1 | 1 |  |  | 1 |  |  |
| $\mathrm{S}^{1} \mathrm{~A}$ | 1 | 1 | 1 | 1 | 3 |  | 2 |  |  |
| TA | 3 | 1 | 1 | 1 | 1 |  | 1 |  |  |
| $\mathrm{T}^{1} \mathrm{~A}$ |  |  |  |  | 1 |  |  |  |  |
| PA | 3 |  | 1 |  | 1 |  |  | 1 |  |
| AA |  | 1 |  |  |  |  |  |  |  |


|  | Art. | $\begin{aligned} & 3-2 \\ & \text { Mem. } \end{aligned}$ | Cl. | Art. | $\begin{aligned} & 4-3 \\ & \text { Mem. } \end{aligned}$ | Cl . | Art. | $\begin{aligned} & 5-4 \\ & \text { Mem. } \end{aligned}$ | Cl . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | 4 | 3 | 1 | 14 | 4 | 6 | 5 | 10 | 3 |
| $\mathrm{S}^{1} \mathrm{P}$ | 1 |  |  | 3 | 2 | 1 | 2 | 1 | 1 |
| $\mathrm{S}^{2} \mathrm{P}$ | 2 |  |  | 1 |  |  | 2 |  | 1 |
| BP | 1 |  |  | 2 |  | 2 | 2 |  |  |
| IP | 5 | 1 |  | 2 | 2 | 1 | 2 | 1 |  |
| TP | 3 | 1 |  | 3 | 1 | 1 | 3 | 5 | 1 |
| $\mathrm{T}^{1} \mathrm{P}$ | 1 |  |  | 2 |  |  | 1 |  | 1 |
| CP | 3 |  |  | 5 | 4 |  | 1 | 2 | 1 |
| NP | 1 |  |  | 1 |  |  |  |  | 1 |
| $\mathrm{N}^{1} \mathrm{P}$ |  | 1 |  |  |  |  |  |  |  |
| MP |  |  |  | 1 | 2 |  |  | 3 | 1 |
| $\mathrm{M}^{1} \mathrm{P}$ |  |  |  | 1 |  |  |  |  |  |
| $\mathrm{M}^{2} \mathrm{P}$ |  | 1 |  |  |  |  |  |  |  |
| PP |  | 1 |  | 3 |  |  |  | 1 |  |

Finally, we may note how often U occurs in conjunction with the various feet. We do not consider it worth while to enumerate these except where U follows; where U precedes a foot we simply give the numbers.

| U- | $3-2$ | $4-3$ | $5-4$ |
| :--- | ---: | ---: | ---: |
| Art. | 82 | 52 | 19 |
| Mem. | 40 | 30 | 34 |
| Cl. | 26 | 16 | 18 |

In the clausula we find the following combinations in which U is second-(a) 4-3 position-MU or its resolutions (4); EU (2), NU (1), C ${ }^{2} \mathrm{U}$ (1). (b) 5-4 position-MU (1). There are no examples in the $3-2$ position.

In the membra we find-(a) 3-2 position-NU and res. (3) ; DU (1), BU (1). (b) $4-3$ position- NU and res. (3); MU and res. (6) ; EU (2), $\mathrm{C}^{1} \mathrm{U}$ (1), $\mathrm{C}^{2} \mathrm{U}$ (1). (c) 5-4 position- $\mathrm{M}^{1} \mathrm{U}$ (1).

In the articuli we find-(a) 3-2 position-BU (2), $\mathrm{N}^{2} \mathrm{U}$ (1), MU and res. (7), AU (1), $\mathrm{C}^{2} \mathrm{U}$ (1), DU (1). (b) $4-3$ position-AU (1), MU and res. (4), NU (1), $\mathrm{C}^{2} \mathrm{U}$ (1). (c) 5-4 position- $\mathrm{M}^{3} \mathrm{U}$ (1).

Of course, the U-combinations would be more numerous if we did not treat certain "feet" as possessing two accents. This question we have dealt with above (p. 115).

The internal combinations of the incisa, etc.. have not been recorded, as they are so few in comparison with those we have found elsewhere.

In conclusion. I may express the hope that the method of investigating prose rhythm described in this work will prove, in all essentials at any rate, to be correct. That there are many difficult problems that may never be finally solved it is idle to deny. One cannot always be absolutely sure of "elisions" or accentuations, or of the exact length of a kolon, and one is to some extent thrown on one's own resources; but I feel that, in spite of these qualifications, the results given in these pages are a faithful account of Cicero's rhythms considered from the accentual as well as from the quantitative point of view.


## Printed by

## Whitcombe and Tombs Limited

Christchurch, New Zealand


PA
2340 B7

Broadhead, Henry Dan
Latin prose rhythm

PLEASE DO NOT REMOVE CARDS OR SLIPS FROM THIS POCKET

UNIVERSITY OF TORONTO LIBRARY


[^0]:    * In the report referred to below.
    f "The Year's Work in Classical Studies," 1918-19, p. 31

[^1]:    * whose encouraging report on this work when submitted as a doctorial thesis to the University of New Zealand is largely responsible for its appearance in book form. I may mention here that Chapter III has since been enlarged and the argument, I think, considerably strengthened.

[^2]:    * N.B.-Passages quoted from Cicero's speeches are referred to according to the section and lines of the Oxford text.

[^3]:    *N.B.-Some of these 395 examples of CS2 may contain other types (Ziel. I 142).

