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## TRANSACTIONS

## AMERICAN

## PHILOLOGICAL ASS0CIATION.

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## TRANSACTIONS

# OF THE <br> American Phllological Association, 

 1878.I.-Contributions to the History of the Articular Infinitive.

By basil L. GILDERSLEEVE,

professor of greek in the johns hopilis university.
In examining, with some advanced students, the current statements that Thucydides was a pupil of Antiphon (see Blass, Geschichte der Attischen Beredsamkeit, i. 85), and that Demosthenes was an admirer, and to some extent, an imitator of Thucydides, I marked out some grammatical and stylistic categories which I thought worthy of special observation; and among these the use of the articular infinitive, partly because the history of the combination had interested me for several years, partly because I thought I had noticed that there was a certain coincidence, both in special handling and in proportionate employment. From the examination of these authors I proceeded to look into the usage of the other orators, and thence to the closer study of the general question involved. My treatment has not been exhaustive, and hence I dare not formulate with confidence. My examination has been limited to Pindar and the dramatic poets, Herodotus, Thucydides, and the Attic orators, except Hypereides, and I only undertake to register progress for the sake of those who
may be richer in leisure, or more accurate in method; and the modest title of contributions must be my cover against the charge of rash generalization.

I have no new theory of the infinitive to advance, nor shall I venture on the comparative side of the study, although I know that in the present drift of research it will be hard to gain consideration for any view which does not take in a large group of languages. Yet I am convinced that in this investigation the only safe course is to follow the special development of Greek, and in support of this conviction, I would offer a few preliminary remarks.

After considerable debate the form of the Greek infinitive seems to be regarded by most of those who are qualified to discuss the question as a dative abstract, although Curtius has still something to say in behalf of a locative element, as Westphal had done before him. • Now it matters very little, so far as this investigation is concerned, whether the caseform was dative or locative, or a blending of both, or whether the infinitive forms in the kindred languages are perfectly parallel with the Greek infinitive or not. The use of the article with the infinitive completes the deorganization of the infinitive-deorganized before, it is true, yet, so to speak, not confessedly deorganized. By assuming the article, the Greek infinitive, though comparatively late, sunders its inflexional connection with the substantive by a formal act, and bases its claim to the character of a substantive on a foreign element. That this divorce between the infinitive and its form did not take place without a certain struggle, that there was a dim half-consciousness, is shown, I think, at more than one point, and a striking analogy to the uneasy conscience of the Greek appears in our English handling of the verbal in -ing. The very attempt to attach the article gave a little shock to the sense of language, and it is not until we reach the Attic time that there is any freedom, any license in the use. It is true, as I have said, that the infinitive was deorganized before; that it had become what some scholars have rather unhappily called an adverb before. But the article is confession, and that is a long stride, and one in which the other Indo-European
languages have not kept pace with the Greek. Add the article, and the next step is the use of the preposition wilh the article; and for a time this must have been to the Greek a strange thing. He had taken liberties with the infinitive before-he had construed it directly with $\pi \rho i v$, which, theoretically, would require the genitive or $\eta$, and there are traces of an early attempt to combine $\dot{a} v i$ directly with the infinitive; but with this additional innovation the sense of form revived, as it were, and the prepositions seem to have worked their way into use by degrees. Compare with this phenomenon the limited use of prepositions with gerund and gerundive in Latin. Thucydides, it is true, lets them in as a flood; but Thucydides is abnormal here as elsewhere. With the use of article and infinitive, the Greek language paused. There was no further mechanical handling of the infinitive. The article might take a demonstrative besides, as in Abistoph. Vesp., 89 :
 for certain Latin constructions, such as are usually set down as Hellenisms. See my remarks on Persius, 1, 9. In such Greek as that of Ignatius, we are not surprised to find (Ep. ad

 isms. It would, then, be perfectly justifiable to begin this study on purely Hellenic soil, with the articular infinitive as essentially an Hellenic product, and yet it may be worth while to go a little further back and see how far the infinitive was deorganized before it was thus stamped as a fossil.

A language retains its habits long after it has lost its conscience. So in phrases and formulæ the Greek infinitive may be regarded as having retained its dative, or, as some would say, its locative sense throughout the whole history of the

 Thucydides, and all the so-called "loose" infinitives belong' to this earlier category. So the occasional use of the infinitive after verbs involving motion is a remnant of the older time and perfectly consistent with the function of the pure dative in cognate languages, nay, in Greek itself. With a verb of
motion, the dative represents the personal object for which rather than the object to which, and as the strictly personal character of the dative was effaced in the subsequent contuminatio, it is not surprising that this construction becomes less and less common. Still, such verbs as $\pi \dot{\varepsilon} \mu \pi \varepsilon \iota \nu$, $\dot{a} \pi o \sigma \tau \dot{\varepsilon} \lambda \lambda \varepsilon \iota \nu$, $\delta \delta \delta o ́ v a c$, are found at all stages with the infinitive. But not to consider classes in detail, the great mass of verbs that take the infinitive as an object, may be summarily comprehended under the title of Verbs of Creation, by which I mean verbs whose office it is to bring about a result. And here it is well worth notice how the original dative (for which) and the accusative of the inner object meet-how the object for which, and the object to be effected coincide. The chief of these verbs of creation are verbs of will and endeavor-call them verbs of asking, persuading, teaching, exhorting, or what not. They all convey the notion of effort to an end, of will, of purpose. Of will, of purpose, I repeat, not tendency, because the primitive conception knows nothing of tendency in the modern impersonal sense.

To these combinations the dative notion may not have been foreign. So in English, when by dint of frequent use the to had become a mere "sign," there was added, in order to bring out the final sense, a "for," which was dropped when the conscience had become seared. But while I have just shown how dative and accusative might meet as to sense, the question recurs: What was the infinitive to the Greek himself? If anything definite, an accusative, it would seem. If Homer says: 及oúdeco viкø> H 321, M 347, was that other to him than

 édáas, the infinitive "drink" is parallel with a loaf of bread, two onions, and three olives-and so we can hardly recognize



The use of the infinitive as an object, and as an accusative object, led in time to its use as a subject. It became to the Greek an accusative neuter. Now the neuter has no nominative, because the nominative implies a sentient agent, or one
so conceived, but the Greek language was not at the pains of developing a special form for this occasional use of the neuter, and in its capacity as an accusative neuter the infinitive was treated as a nominative, despite its dative form. This use of the infinitive as a nominative may be considered the final effacement of the infinitive as a dative from the consciousness.

Having now followed the infinitive to the perishing of its case-form, we must next examine the shifting of its temporal relations, and this carries us to the consideration of the use of the infinitive in oratio obliqua, a difficult subject, but one which cannot be avoided in treating of the articular infinitive.

As an abstract noun we should expect the infinitive to have but three tenses-present, aorist, and perfect, say notiv,
 from the beginning of our record, seems to have been as much due to the necessities of oratio obliqua as the future optative, which is post-Homeric.

The three forms of oratio obliqua develop in the following order: First, the infinitive form, secondly, the optative formwhich is chiefly post-Homeric, the optative for the indicative in Homer being pestricted to a narrow class-the interrogativeand thirdly, ws with the participle.

The verb which controls the oratio obliqua clauses is a verb of saying or thinking-which in the first two forms is almost always expressed; the third form corresponding largely to " partial obliquity" in Latin.

This oratio obliqua construction, in which the infinitive no longer represents the stage of the action, the kind of time, but the relation of the action to the present, the sphere of time, seems to have arisen gradually from the other class-the verbs of creation - the verbs of will and endeavor. The connecting link remains, and consists of the verbs of swearing and witnessing, hoping and promising, verbs in which the will is the deed. Two indications of this survive in the normal language. The negative of the infinitive after these verbs is with reasonable regularity $\mu_{i}$, and the tenses follow largely the older scheme-so that the aorist is used for the future-
especially with verbs of promising in which ambiguity is impossible.

The deflection of the verbs of saying and thinking from the verbs of asseveration and the like scems to be due to the image of oratio recta before the mind of the speaker. Hence the negative is ov, and the future infinitive represents the future indicative. And here it is important to notice for the difference between Greek and Latin the closeness with which oratio obliqua follows oratio recta in the one, the looseness in the other. In Latin there is often no oratio recta present to the mind, but the Greek is far more plastic, far less tolerant of oratio obliqua than the Roman, and it is interesting to watch how he feels his way to new combinations. So in Homer Il. $9,684 a^{2} \nu$ with the infinitive, which you can find anywhere in prose Greek, is timidly used with direct reference to an existing ă $\nu$ with the optative (v. 417).

As to the much debated accusative and infinitive, I will simply say that by frequent use it formed a kind of abstract compound, such as we find in the Latin gerundive, and to some extent in the Greek participle, and so was employed as a totality in various combinations and even as a subject. Curtius's explanation by a kind of prolepsis and confusion of two constructions is to my mind utterly unsatisfactory. But not to dwell on these points, let us hasten to the real matter at issue, If the oratio obliqua infinitive is older than the articular infinitive-as we all know-how can the articular infinitive be limited to the category of the pure abstract noun? Of course this is its ordinary function, and scores of passages may be cited to show that the infinitive and the abstract were considered parallels by the Greeks themselves, and I shall have occasion to revert to this fact myself. If Thucydides says ( $2,87,3$ ) rò тóre tuXeir, that does not prove that ruxeiv has a real aoristic past time, for Demosthenes (37, 43) says just as readily ròv đópußov ròv róte. Besides, the negative $\mu^{\prime}$ which marks the difference between the infinitive proper and the oratio obliqua infinitive shows that the articular infinitive remains essentially an abstract. But inasmuch as (1) the article may be prefixed to those forms of the infinitive which
are due to oratio obliqua alone, notably the future infinitive and the infinitive with ${ }^{\prime} \stackrel{y}{r}$, inasmuch as (2) the tense of the infinitive is often suggested by the indicative context, inasmuch as (3) the general sense of a verb of saying or thinking often seems inseparable from the complex, it is not going too far to say that the articular infinitive may be used now as a pure abstract, now as an abstract form of oratio obliqua. That it is often used as substantivizing the imperative use of the infinitive is also worth notice.

But it may seem hardly worth while to linger on so minute a point as this difference between an abstract noun and the abstract expression of an oratio obliqua relation, and I now proceed to consider some chapters from the history of the articular infinitive.

Homer: There is no articular infinitive in Homer; but

 no difficulty in recognizing the articular infinitive here, especially as there is a marked tendency to use the articular infinitive of disagreeable things. But we must interpret with Nägelsbach : "It is another nuisance, this thing, keeping guard all night awake." Compare the familiar use of the preparatory тойтo.

In Pindar, in whom the articular infinitive occurs for the first time, to any extent, the use is restricted. According to Erdmann De Pindari usu syntactico, p. 75, there are but ten examples; all of these, except one, in the nominative, and that one in the accusative. Noteworthy is the position of the articular infinitive, which in all the passages cited, except 01 . 8,60 ,-and that to be explained by chiasm,-is put at the beginning as an object of thought, a real accusative, after all. The aorist preponderates largely; seven times out of ten. The rest are presents. There is but one instance of articular accusative and infinitive.

The Dramatic Poets: The next group that I have inspected is that of the dramatic poets. Aeschylus, Sophocles, Euripides, and Aristophanes. The statistics for the first two have been furnished by Dindorf and Ellendt, respectively. Mr.
J. H. Wheeler, late Fellow of the Johns Hopkins University, has collected the instances of the articular infinitive in Euripides, and I have read Aristophanes myself to that end, my results being compared with those of Dr. E. G. Sihler, who read the same author, independently, for the purpose. While there may have been some oversight in detail, the general result can hardly be wrong.

Aeschylus uses the articular infinitive within modest limits; chiefly in the nominative and the accusative-the latter largely in the stereotyped combination $\tau \grave{o} \mu \dot{\eta}$ ( $\tau \grave{o} \mu \grave{\eta} o \dot{v}$ ) after verbs and phrases of negative result. There is, I believe, but one example of the articular accusative and infinitive as the subject of a sentence, whereas the accusative occurs repeatedly with to $\mu \boldsymbol{\eta}$, which I consider a hint as to the way in which the construction spread. The preposition is used sparingly; in fact, only three times, and in one of these the reading is doubtful. The tenses of the articular infinitive in Aeschylus are the present and aorist. There seems to be no trace of substantivized oratio obliqua.

Aeschylus then is conservative, but less conservative than Pindar.

In Sophocles the vast mass consists of nominatives and accusatives; there are very few genitives and datives, not more in proportion than in Aeschylus. There is a considerable increase in the percentage of use-say one occurrence in one hundred and twenty verses, whereas we find in Aeschylus one occurrence in one hundred and fifty-nine, but the handling is essentially the same. So prepositions are used sparingly ( $\pi \rho \dot{o}, \dot{\varepsilon} r, \varepsilon i c)$. The tenses are all present or aorist, except such perfects as $\varepsilon i \delta \dot{\delta} \nu a \iota$ (Antig. 263), which does not count, andтєфєуч́vai (v. 437), which hardly counts. Remarkable is the substantivized oratio obliqua, Antig. 235. 6.

Here in the mouth of the watchman the article may be considered deictic, and the twist in the expression may be excused. The articular accusative and infinitive subject occurs Phil. 963.

In Euripides there would seem to be a marked falling off. According to Mr. Wheeler's count there are not so many articular infinitives in all Euripides as in Sophocles; and the bulk of Euripides is two and a-half times as great. The occurrences number, but one in three hundred and twenty verses. It would be rash to account for this by the closer approach of Euripides to every-day speech, as I did two years since in the matter of $\dot{\varepsilon} \dot{a} v$ with the subjunctive. Still it is worth noticing. Over forty per cent. of the whole number are nominatives, but the genitives bulk much more largely than in the others. Prepositions (eis, סcí) and quasi-prepositions ( $\pi$ ípos, ëveкa, $\tilde{\varepsilon} \xi \omega)$ are sparingly used. The tenses are present and aorist, counting eisiovac as a practical present. The articular accusative and infinitive, as a subject, is rare, but not so rare as in Aeschylus and Sophocles; and, on the whole, there is somewhat greater freedom in the handling of the construction, but it would seem as if it had not become pliant enough for the poet's purpose-who is irpois, if anything. The largest number of articular infinitives occur in the Iphigenia at Aulis, -by some considered his latest piece,-but this is not to be urged.

Theory would require that Aristophanes should not use the articular infinitive so much as the tragic poets; and the theorist who should begin his search with the Acharnians would be gratified to find none in that play. But an examination of the other plays will not bear out this theory. Aristophanes does use the articular infinitive less frequently than Aeschylus and Sophocles,-once in two hundred and fifty-eight verses,-but still much oftener than Euripides. The bulk consists of nominatives and accusatives. Prepositions are
 ositions ( $\check{\varepsilon \quad \varepsilon \kappa \alpha, ~} \pi \lambda \dot{\eta} \nu)$. The tenses are all present and aorist, ciwqévac being a practical present. A large proportion of the articular infinitives in Aristophanes are purely deictic, or anaphoric; yet another class is exclamatory, both of these belouging to what may be called the popular side of the construction; and a considerable number are parodic. So the

 the same imprint. The variations in the different plays may be of some interest. The Acharnians, as I said, contains none; the Peace but one, the Lysistrata but two. In the Clouds they congregate in the latter part, as might be supposed. In the Plutus there are more in proportion than in any other comedy ; a fact which may or may not be significant.

I now turn to prose. And first to the Historians; and first of the historians, Herodotus. Herodotus uses the articular infinitive very rarely in comparison with Thucydides, who was the first writer to appreciate its possibilities. According to the count of Mr. Allinson, Fellow of the Johns Hopkins University, Herodotus uses it only thirty-two times; eight times (probably) in the nominative, six times in the genitive (three of these without manuscript authority, according to Abicht), eighteen times in the accusative (largely negative). The tenses used are present and aorist; the perfect being used of resulting condition, 4, 6: rò érix $\mathfrak{z}$ シat. The prepositions are $\dot{a} v \tau i, \mu \varepsilon r \dot{c}_{\text {. and }}$ and. In three passages, 1,$210 ; 6,32 ; 7,70$, the manuscripts construe $\dot{a} r r_{i}$ directly with the infinitive; a phenomenon which I have found again in later Greek. The greater part of the examples occur in the latter part of the work.

A remarkable contrast is presented by Thucydides. For his usage I have depended on Forssmann: De infinitivi temporum usu Thucydideo in Curtius's Studien, vi, 1. The articular infinitive rises to an important element of the peculiar style of Thucydides. While his bulk is only six to Herodotus's seven, he uses the articular infinitive more than eight times as often and with great freedom. The genitive and dative are liberally employed. Instead of a sparing use of prepositions, he indulges in the construction without stint (fifteen different prepositions), and absolutely riots in the use of cia ró, which occurs seventy times. Of course present and aorist tenses preponderate, but the perfect is also used, and besides the articular infinitive with ă $\boldsymbol{\nu}$, he uses the articular future infinitive, which is a bold step-every time, be it noted, with a quasi oratio obliqua dependence on such words as "hope," "trust,"
" proof." Of the use of the articular infinitive in Thucydides as a kind of substantivized oratio obliqua in the other tenses, I have not time to treat, and I regret exceedingly that I have not been able yet to analyze the usage of Xenophon in respect to the articular infinitive, especially as I am very much inclined to think that he was influenced by Thucydides. The rest of this paper must be devoted to the use of the articular infinitive in the orators, who are of especial value to the student bent on ascertaining the normal range of the language. I have studied all of them except Hypereides to this end, hut my statistics are not so full as I could desire in regard to Lysias and Isocrates, although so large a proportion of each orator has been read that there can hardly be any very great error. For Antiphon, in addition to my own reading, I have had the advantage of lists made by Mr. J. H. Wheeler, late Fellow of the Johns Hopkins University. Mr. F. G. Allinson has done me the like service for Isaeus and Aeschines, Mr. W. H. Page for Lycurgus, Dr. E. G. Sihler for Dinarchus. Of Demosthenes I read about three-fourths myself, and the whole was read by Messrs. Page, Wheeler, and Savage, Mr. Page undertaking orations 1-18, Mr. Savage orations 19-34, Mr. Wheeler the rest to 59 inclusive. The standard of measurement is the page in the Teubner edition, which is fairly uniform for all contained in that series, except Antiphon and Andocides, who, together with Dinarchus, had to be estimated. Of course, I have excluded from the count of the pages, documents, introductions, and the like. It is not claimed that the result is absolutely accurate, but sufficiently so to show the bearing of the investigation.

Quantitively the comparison of the orators shows the following order of occurrences:

Lysias, . . . . . . 12
Andocides, . . . . . 20
Isaeus, . . . . . . 25
Aeschines, . . . . . 30
Antiphon, . . . . . . 50
Lycurgus, . . . . . . 60
Isocrates, . . . . . . 60
Dinarchus, . . . . . 80

The variation in Demosthenes is remarkable, and I will recur to it presently.

In the public orations the occurrence is . 1.25,
In the private orations .80,
which certainly serves to bring out very forcibly the wellknown preference of Demosthenes for this construction. The nearest approach to him is made by Dinarchus-the homespun Demosthenes, the rustic Demosthenes, the kpisivos $\Delta \eta \mu o \sigma 9 i v \eta s$ of the ancients. Bookish Lycurgus, umbratic Isocrates come next. Then Antiphon, who uses it rather more freely than Thucydides. Low down stand Aeschines. Isaeus, Andocides, Lysias-Aeschines, the man of mere native cleverness, Isaeus, the man of practical business talent, Andocides, by no means a litteruteur, and Lysias, in whom $\eta_{F o s}$ reigns and in whom the narrative is the great thing. To come back to the variations in Demosthenes. They are indeed great, and would have furnished an illustration for the text from which his admirer, Dionysius of Halicarnassus, is never weary of preaching. Of course his case demanded especial care, and 1 separated the public orations from the private, inasmuch as it was to be expected that the difference of theme would show a difference in the number of occurrences. I then excluded from the count those of the public orations which are open to suspicion, and found the average of the remainder to be 1.25. The lowest average of the undoubted public speeches is presented by the Second Philippic (vi), in which the average is .87 ; the lighest by the First Olynthiac, in which the average is 2.75 . Both of these are short orations, and it may be unfair to judge by them, but it cannot le a mere fancy that the large number of articular infinitives in the First Olynthiac gives a peculiar tone to the oration. The long speeches vary as follows:
XXIV. Contra Timocratem, ..... 1.06
XXI. Contra Midiam, ..... 1.10
XIX. De Falsa Legatione, ..... 1.13
XVIII. De Corona, ..... 1.35
XX. Contra Leptinem, ..... 1.54
XXIII. Contra Aristocratem, . ..... 1.62

The De Corona is almost exactly the mean between the highest and lowest. If the private orations be taken without criticism as they stand, the average will be about .80 , but as the genuineness of so many of these is assailed, statistics will be of little satisfaction to those who share the popular tendency towards àitrnots. In the earlier speeches the average is lower than in the later. So the first speech against Aphobus goes as low as .26. In the speech against Spudias, which, to be sure, is questioned, there is no occurrence, nor any in the speech against Callicles, in which Demosthenes approaches nearer to Lysianic $\Pi^{\prime} 9$ os than in any other. The two lighest are the speech against Conon, a masterpiece in which the $\delta_{\varepsilon ı v o r i n s ~ o f ~ D e m o s t h e n e s ~ a n d ~ t h e ~ s i m p l i c i t y ~ o f ~ t h e ~ s u p p o s e d ~}^{\text {a }}$ speaker are curiously blended (1.07), and the speech against Pantaenetus (xxxvii), in which the occurrences are 1.06, and which is a specimen of the grand manner by which Demosthenes sometimes betrays himself even in his private orations. The proëmium is a massive period, better suited to a stately public oration.

If I had time, I might treat of the variations in the other orators, as for instance in Lysias, who ordinarily has no fondness for the construction, and yet crowds an extraordinary proportion into the speech against Philon (xxxi), which, according to Blass 1, 477, marks an epoch in the history of Lysianic art. So I might call attention to the apparent coquetry of Isocrates with the construction in the Panegyricus, but it is high time to bring this paper to a close, and I must suppress what I had to say about the effect of massing the infinitive, and about the rare construction of the articular infinitive with ${ }_{\mathbf{a}} \nu$, and the articular future infinitive, for which Demosthenes, of the orators, is our chief warrant.

In conclusion, then, suffer me to say a few words as to the stylistic significance of this construction. Is it a mere accident that one author employs the articular infinitive much more frequently than another? Is the use determined as much by the department as by the individuality? It would be rash, as I have said, to formulate, but the following con-
siderations may be of some weight for the further investigation of the subject, if it should seem worth the while.

The infinitive has sundry advantages over the abstract noun.

1. Language is capricious as to the development of its other abstracts, while the infinitive is always ready, and not only positively, but, which is a great thing, negatively. We find a goodly number of negative abstracts formed by the help of av- (a privative) ; but they do not supply the needs of expression. We have an ádvvapia, an ádvvacia, an áduvatia, but how often do they occur in comparison with $\mu \eta$ 立 $\dot{\nu} a \sigma \vartheta a r ?$ What have

2. Then the abstract noun often wanders off to a transferred signification, while the infinitive has the original meaning of

3. Besides, the abstract noun does not always sharply indicate the stage of the action, as the infinitive does. Háqoc can be analyzed into $\pi$ á $\sigma \chi \varepsilon \iota \nu$ and $\pi a \vartheta \varepsilon \varepsilon i v, ~ \lambda o ́ \gamma o s ~ i n t o ~ \lambda e ́ \gamma \varepsilon ı \gamma ~ a n d ~ \lambda e ́ z a t, ~$
 $\pi \rho a ̈ k c s$. Tvpavvē̃aג gives an element that rvparvis does not. Bios and qávaros are not so clear as $\zeta \tilde{\eta} \nu$ and aveiv.

There are similar considerations as to the voices. Teda-

4. Finally, the infinitive takes up, with greater and greater ease, into this abstract relation its subject and its modifiers, and a whole complex is thus made the object or subject of the verb, whereas the regular abstract with its dependent genitive is less compact.

The only drawback then to the infinitive was the absence of the article; and as soon as the article was added the infinitive went on its new life.

The change was, as we have seen, prefigured in Homer, and the deictic or demonstrative use seems to have been the popular use. So in the exclamatory infinitive, and the numerous turns in which the demonstrative is contemptuous just for the same reason that ouvros is contemptuous, and pointing is contemptuous and object and objectionable are used in a bad sense. Outside of this rudimentary popular use, the spread
of the articular infinitive seems to be due to conscious ratiocination, to the increasing tendency towards the employment of abstract nouns in varied relations; and the articular infinitive is consequently a gnomon of the reflective element, and cannot be left out of consideration in estimating the character of style.

## II.-The Yoruban Language.

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The main body of African languages, omitting the Shemitic and the Hamitic, (the Berber, the Ethiopic, and the Egyptian,) fall into three groups: the Hottentot in the south, the Bantu occupying the whole center about as far north as the equator, and the Negro lying in Senegambia and Soudan, the last of which has as yet received little attention, while the structure of the others has been carefully studied and satisfactorily exhibited. On the Guinea coast, however, is found a group of dialects almost wholly different in vocabulary and structure from all of these, and offering interesting linguistic features. This group includes the Basa and Grebo of Liberia, but its most important member is the Yoruban, which is spoisen by a partially civilized population of about two million people inbabiting the territory included between Dahomey, Borgoo, the Niger, and the bight of Benin. Its literature, which is wholly the work of Christian missionaries, consists of collections of proverbs, Bible-translations, and a few other religious books. Grammars have been written by Crowther, a native Yoruban, now Anglican Bishop (London, 1852), and the American missionary Bowen (Smithsonian Institution, 1858).

## I. PHONOLOGY.

The phonetic system consists of letters and tones.
The letters are exhibited in the following table:

|  | Vowele． |  | Hale－Consonants． |  |  |  |  | Consonante． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \dot{\circ} \mathrm{O} \\ & \text { 曾 } \end{aligned}$ | $\begin{aligned} & \text { 号 } \\ & \text { 吕 } \end{aligned}$ |  | 号 |  | 量 | 突 | $\begin{aligned} & \text { 免 } \\ & \text { 另 } \end{aligned}$ | 家 |
| Guttural， | $\begin{aligned} & \mathrm{a} \\ & \mathrm{a} \end{aligned}$ | $\begin{aligned} & \text { ai } \\ & \text { au } \end{aligned}$ | h |  |  |  |  |  |  |
| Palatal，． | e e ì íl i | $\begin{aligned} & \text { ei } \\ & \text { ei } \end{aligned}$ |  | y |  |  | ng | g | k |
| Linguo－dental， | $\stackrel{\check{\prime}}{\mathfrak{u}}$ | ¢i |  | $\begin{aligned} & \text { r } \\ & 1 \end{aligned}$ | Sonant． Surd． <br> $\mathbf{z}$（in dz） $\mathbf{s}$（sh） |  | n | d | $t$ |
| Labial，．．． | 0 $u$ | oi |  | w |  | f | m | b | （in kp） |

Besides the three primary vowels $a, i, u$ ，there are the sec－ ondary（diphthongal）$e, o$ ，and the closed modifications of these， $a$（in bat），$e$（in let），$i$（in bit），$o$（in not），$u$（in full），and perhaps；also，$u$（in but）．The sounds of $a i$ and $a u$ seem to be real diphthongs；in the others the second vowel is very． slight，and $u a, u e, u i, u o$ are mere combinations of unmodified vowel－sounds；$a u$ is found in a few words only，mostly adverbs， and probably compounds．There is a partially prevalent law of vocalic harmony whereby vowels of personal pronouns and prefixes are made to accord with those of verbs and roots； the form of the objective pronoun is dependent on that of the preceding verb，thus：emi sha $a$＂I wounded it，＂o se e＂thou shuttest it，＂on ti $i$＂he struck it，＂enyin ro o＂ye provoked it，＂awon ru $u$＂they stirred it，＂and so on through all＂the vowel－sounds．The subject pronoun mo＂$I$ ，＂is used only before verbs containing the vowels $e, i, o, u$ ，while mo＂ I ，＂is used only before $a, e, o$ ．This law prevails to some extent in prefixes to nouns，as，aba，ebe，$i b i$ ，obo（there are no words beginning with $u$ except the object－pronoun，$u$＂him＂），but is not strictly adhered to，since it would make it impossible to derive more than one noun from each verb．In this obedi－ ence to a law of vowel－harmony the Yoruban stands almost alone among the African languages，and so far represents a
stage of linguistic development in which the sense of euphony prevailed over the sense of signification, a fluid condition of speech corresponding to the facility with which some barbarous tribes change their vocabulary.

The consonants, including the breath or aspiration $h$ and the semi-consonants, are eighteen in number, and represent, as will be seen from the table, all the varieties except the guttural (not counting the simple aspiration as a guttural proper). There is only one spirant, the labial $f$, but the scheme of liquids, sibilants, nasals, and full breaks or consonants is nearly complete; the sonants occur somewhat more frequently than the surds. The surd labial $p$, however, is found only in the compound $k p$, which seems to come from word-composition; a similar origin is probably to be supposed for three other consonant-combinations of frequent occurrence, $d z(j), g b, m b$.

In its law of tone, whereby words spelled alike are distinguished in meaning, the Yoruban stands, to some extent, on the same plane with the Chinese, though the system is less elaborate than in that language. There are three main tones: the middle or ordinary, the acute or rising, and the grave or falling. Thus : $b a$ is " to lie in ambush;" $b a$ " to meet, overtake;" bà "to bespeak:" In general, each word in the language has its own tone, which it retains unchanged, and which is a part of its form, whence the Yoruban has a distinctly musical sound. But in connection with the personal pronouns there is a law of tone-harmony by which these pronouns are bruught into a certain relation with the verb. The personal pronouns all have, normally, the middle or ordinary tone, and this they retain when they express the subject or nominative case, and in the shorter objective forms when they are governed by verbs having the acute tone; but after verbs with middle or grave tone the object-pronouns take the acute tone, as: okonri ba mi "the man met me;" but ode ta $\sigma$ " a wasp stung him ;" babba lù $\sigma$ "father beat him." In compound words the rule of tone becomes more complicated; in general there is an attempt to contrast and distinguish by difference of tone.

Polysyllabic words usually have the accent or stress of voice on the penult, with a secondary accent on the second preceding syllable; but in derivatives a verb having the rising inflection commonly takes the accent.

Changes of letters. Vowel-elision is common, and is governed by rules, in general a short vowel yielding to a long one (diphthong or grave) ; but there are many complications which have to be learned by practice. In addition to the law of vowel-harmony above mentioned, the $o$-vowel is subject to a modification, becoming $o$ before $e$ and $o$, and there are other interchanges not governed by recognizable law. Among the consonants the ouly regular euphonic change is that of $n$ in $n i$, which becomes $l i$ before vowels; and the interchanges of $k$ and $g, s$ and $s h$ are found. With these slight exceptions the language shows fixedness and precision of form.

## 1I. MORPHOLOGY.

1. Roots and Words. The roots are probably all monosyllabic, most polysyllabic forms easily resolving themselves into simpler elements, as, olubodzuwo "inspector," made up of olu " chief" (from lu " to beat"), be " to go," odzu " eye," wo " visit" = "chief man who goes to visit with the eye." The roots consist mainly of consonant and vowel with or without nasal appendage; a few pronouns and adverbs consist each of a single rowel, but these may not be original. The words that begin with two consonants seem to be compounds (but in some cases these double consonants seem to be phonetic derivatives from single ones). No root is made by vowel plus consonant.

Inasmuch as the roots are monosyllabic and begin with consonants, there is a partial form-distinction between root and word in the case of many nouns formed by vowel-prefixes; and this derivation serves also to distinguish so far between verbs and nouns, since no verb begins with a vowel. Monosyllables beginning with consonants are either verbs, pronouns, or particles (which last are originally verbs or pronouns or interjections emotional or imitative); apparent exceptions come from contraction. Reduplication also distinguishes the
noun-word from the root. The Yoruban, in this respect, occupies a midway position between the inflecting languages proper, and those in which no difference is made between root and word.
2. Word-composition. Here the language is very rich. Composite noun-forms are made by derivation, by reduplication, and by composition proper; in fact, we are warranted in saying that all nouns are thius formed, the simple root now appearing only as verb or pronoun. We find, therefore, as is to be expected, a great variety of prefixes, monosyllabic and dissyllabic, which are combined with verbs simple or compound. The commonest prefixes are $a$ concrete and $i$ abstract, with the dissyllables ati abstract and $a b i$ concrete; as abo "shelter," ifo " the act of washing," atibo " the act of coming," abila " that which is striped." The vowels $e$ and $o$ are also used to form concrete nouns, and there are other dissyllabic prefixes, as $a d a$, which denotes result, $a b i u$, mostly concrete, and $a f=$ "the maker" (from $f$ "to make"). The monosyllabic prefixes are probably demonstrative pronouns; $a b o=$ "that which shelters;" we find similar uses of the pronoun in the present syntactical construction of the language. The law of vowel-harmony, by which the vowel of the prefix would be assimilated to that of the verb, has been modified by the necessity for variety of signification; usage has, in some cases, fixed one meaning to the noun formed by $a_{0}$ and another to that formed by $e$, though in other cases these prefixes interchange without change of meaning. The dissyllabic prefixes are themselves nouns formed from verbs, but no longer used separate; $a b i$ is from the verb $b i$ "to beget, be," ati probably from a root $t i$ "to finish" (compare titi "wholly, continually," and the auxiliary $t i$ expressing completed action), $a b u$ from $b u$ " to give," or $b i$ " to be." Sometimes the verb without the prefix appears as the first element of a compound; but in this case a prefix seems to have been dropped, as buba "a hiding-place," from $i b i$ "a place," and iba "hiding." By the combination of $a$ with the verb li ( $=n i$ ) "to have," is formed the prefix al (el, ol, etc.), signifying "possessor," as alake " the lord of Ake" (title of the
king of Egba), alaiye " owner of the world," from aiye " the world" (from ye "to live"). The prefix $a$ is also used as a negative : ida "created" (from da "to create"), aida "uncreated" or "uncreatedness," to which may be prefixed al, alaida " possessor of uncreatedness," "uncreated."

Reduplication. The original and simplest form of reduplication in the formation of nouns is the doubling of the vertroot, as, kpejakpeja "a fisherman," from kpeja "to fish," sisesise "a laborer," from sise " to labor." In order to obtain variety of signification the vowel of the root is sometimes changed: from ga " to be high," comes gaga" closely," and giga " hight," also gigagiga " great hight" and " loftily," from le "to be hard," lile (and lilelile) "hardness." Where the verb is a compound of verb and noun, only the.former element is doubled, as from dara" to be good" ( $=d a+a r a)$, didara "goodness." In this formation of nouns by simple repetition of the idea of the root, the language retained consciousness of the distinctness of the elements so far as to insert various descriptive syllables between the two components; thus, by inserting the indefinite pronoun $k i$, an indefinite sense (easily passing into one of contempt) was obtained, as eiyekeiye " any bird," from eiye " a bird," eniakenia " a contemptible person," literally: "person-any-person;" the demonstrative iyi gives emphasis, as ekuruiyekuru "the very dust" ( $=$ dust-this-dust) ; the adverb $r i$ "always" (perhaps from $r i$ "to see, appear, be "), expresses perpetuity, as in ayeraye" always living," (from aye " alive").

Noun-composition proper. Besides the simple juxtaposition of two nouns, the defining following the defined, as in Hebrew (as, om" ehin "child of back," "follower, disciple," ile tubu "house of prison," " jail,") long agglutinations are made, the various clements of the complex idea following in general the English order, as, ibaiyedze " a turning the world upside down, spoiling the world," literally, " meet-world-consume," afibikpore " an ungrateful person," literally, "one-make-evil-call-good," that is, one who returns evibfor good; adogunsille " a revolutionist or disturber," literally, a-da-ayun-8i-ille "one-make-war-against-liand"; afemajumo " morning," is "that
which desires the light of the eye of light (dawn)." Compounds are made also by combining nouns and adverbs, and verbs and adverbs.

The following list of nouns from the root tu "ease, reconcile," will illustrate the facility of the Yoruban in noun-formation :

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itu "ease." letutu " reconciled."
aitu "uneasy." eletututu" a reconciler."
luitu "uneasy" (prefix li "to have"). iletututu "state of reconciliation."
alaitu " one who is unreconciled.". ailetutu " unreconciled."
etutu " reconciliation." laitetutu"unreconciled."
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ralailetutu" one who is unreconciled."

Compound verbs. In the formation of composite verb-forms also, the language proceeds in an agglutinative way, the distinct signification of the different components not being lost sight of. Sometimes the root is simply doubled, as in be, bebe " beg," belebele " to be thin," toto." to be whole," but this is rare, most such doublings being nouns (or adverbs). More commonly two different verbs are combined to express a single (tho complex) idea (as occurs frequently in Hebrew, less frequently in English). But in such combinations the signification and force of the verbs remain always separate and distinct, so that nouns and prepositions may intervene between them in the sentence; only the second verb sometimes occupies the primitive neutral position, neither noun nor verb, but the bare conception, which is the basis of both. Fi lu " beat" is, literally, " make-beat," $f$ dzo " make-burn," "burn"; the idea "show" is expressed by $f$. . han " make . . appear," o $f i$ won han $m i$ " he-make-them-appear-me" $=$ " he showed them to me"; nuon mu u wa si Damascus "they-make-him-come-to-Damascus"; mo ba ive dze" I-meet-book-consume" $=$ "I destroy the book"; or, the object of the action being the subject of the verb: ive ba dze "book-come-consume," "the book is spoiled"; ba ti re loh " come-of-thee-go" = " go thy way"; ta ni yio si duro nigbati o ba fi ara han "who-it is-shall-and-stand-when-he-come-make-himself-appear," " and who shall stand when he appears"? o be ole lori (li ori "as to head ")," he-cut-thief-asto-head "= "he beheaded a thief!"

The insertion of a preposition sometimes gives a transitive sense to a phrase: eru ba mi"fear comes me" =" I am afraid"; o ba mi leru (=li eru)" he comes me in fear" = " he frightens me"; ino mi badze " mind-my-is troubled" = "I am grieved"; o ba mi nino (=ni ino) dze " he-meets-mein mind-spoil" =" he grieves me."

Foreign words. There are a few words taken from Arabic, as tuba " repentance," keferi (kaphir) " unbelievers, gentiles, heathen;" from English, as bann (of marriage), and the Bible-words baptisi " baptize," tempili "temple," furlong, and from the Haussa language, sinkafa "rice," takarda " a book."
3. Inflection. As may be inferred from the forms already given, the Yoruban does not belong to the class of inflecting languages proper. It has some prefixes that have almost or quite lost their independent character, but the duty they perform is simply to convert verb-roots into nouns. As we shall see, there is a slight attempt to mark relation by different forms of pronouns, and there are certain temporal and modal words that have almost dropped their original meaning and become signs of relation, though they almost all retain their form unchanged, and are independent words. The language is, therefore, not agglutinative in the sense in which that term is used of the Turkish, for instance; it rather exhibits the first simple attempts of a primitive root-language to employ certain of its words to mark the distinction between the two main classes of substantive words, nouns and verbs, and to indicate, in a general way, the temporal and modal modifications of the latter, to which must be added that it has distinguished the particles (prepositions, adverbs, conjunctions,) with clearness.
A. Nouns. Nouns are without inflectional signs of gender, number, and case. Gender is marked, as in English, by different words, or by sex-words prefixed, but only where there is real distinction of sex; Fnglish, by a long process of unburdening, has reached the primitive position beyond which Yoruban has never passed. But while English retains the idea of grammatical gender as a heritage of its long historical development, this idea does not properly exist in Yoruban at
all ; it has only sex-distinction, and this is, of course, confined to substantive nouns (there is no mark of gender in adjectives or pronouns). Difference of sex is sometimes marked by different words (as sometimes in Indo-European languages), as baba " father," iya " mother," okonri " man," obiri " woman," where there is no indication of gender, but the objects are regarded as distinct and independent, and have names given them in accordance with some prominent characteristic ; obiri is from $b i$ " to bear," okonri (from oko) perhaps from ko " to rule, guide." However, the words ako and abo naturally came to mean " male animal" and "female animal" respectively, and were then used to mark sex where there was only one word for the species of animal, akomalu " bull," abomalu " cow," ako esin" horse," abo.esin " mare"; ommo " child" is defined by an added sex-word, as ommo konri " boy," ommo binri " girl," and so several other words. In the case of compound words, the sex will, of course, he marked by the sex of the principal component, as bale ( $=$ oba ile) " lord of the house," iyale (iya ile) " mistress of the house." As the language marks only real sex-distinctions, the conception of the " neuter" gender does not exist.

For number also there is no inflectional sign ; but plurality is marked with sufficient distinctness, usually (where the connection does not make it clear) by the personal pronoun awon " they" put before the noun, as Saulu nmi ilo ati pipa si awon ommo-ehin Oluwa" Saul-was-breathing-accusation-and-slaughter-against-them-disciple-of the Lord," "against the disciples of the Lord"; this awon must be repeated before each separate word; or, if the noun refer to a person addressed, the second personal pronoun enyin " ye" is used, as ki enu ki omase ya nyin, enyin arakonri," do not wonder, ye brother," $=$ "brethren"; the more emphatic demonstrative pronouns wonyi" these" and wonni" those" may also be employed in the third person. Plurality is expressed, also, by simple repetition of the noun, and this repetition is necessary when the idea of reciprocity enters.

The relation of case is, in general, determined by the position of the noun; the subject standing before the verb, and the
object, usually, after it. For the sake of emphasis the object sometimes stands first, and its syntactical character is made clear, either by the connection of thought, or by the collocation of words, as on li a wi fu" him-it is-we-spoke-to" = " we told him." So, the defining relation in which one noun stands to another is frequently expressed by position merely, the defining word following the defined (as in Hebrew): okko obba "ship-king" = "king's ship." This relation is sometimes expressed more exactly by the relative pronoun $t i$ (quite as in Aramaic), as ona ti ilu "road of town," literally, " road-which-town." All sorts of relation are thus indicuted, but the insertion of the $t i$ is necessary when possession is to be predicated, or where without the $t i$ the second noun might be supposed to he in apposition with the first: Atiba oba "Atiba the king," but Atiba ti oba" Atiba (the servant) of the king." In this case the relative pronoun seems to have its own proper force, $=$ " which" or "that which"; so in such a sentence as: nwon se ti orisa, literally, "they-do-whatidol," that is, " they do what pertains to idols, they worship idols." The $t i$ is much employed to express this general, indefinite sort of relation, which is left to be understood from the connection. The person addressed is indicated by the simple noun, with or without personal pronouns, or by some interjection, as $o$ (put after the noun), or some demonstrative pronoun indicating greater or less nearness ( $y i$, when the person addressed is quite near the speaker, $n a$, when he is a short distance off).

Adjectives. The Yoruban seems not to have differentiated the adjective proper; its descriptive words are predicative, that is, they are treated as if they included the copula, and therefore fall, technically, into the class of neuter verbs. To indicate that a quality pertains to a substantive, the name of the quality itself (abstract noun) is appended by way of definition, as ohun didara " thing of goodness" = "good thing"; or the possessor of the quality (concrete noun) is preposed in apposition, as alagbara enia "strong one-person" $=$ " strong man"; or a descriptive relative phrase is added, in which the neuter verb is used, as ida ti o mu" sword-which-it-is sharp"=
"a sharp sword"; or, when the qualified substantive is the subject of a verb, the quality is predicated of its subject in a simple sentence, and the affirmation of the verb is added in a relative sentence, as enia re li o se e "person-is good-it is-that-did-it" = "a good person did it." It may be said, then, that the function of our adjectives is wholly performed in Yoruban by substantives and verbs; the abundant use of neuter verbs is a sign of failure to differentiate either the adjective or the copula.

Comparison. Hightening of intensity is expressed by $d z u$ and $d z u \quad$ loh $=$ "exceedingly" and " more"; in connection with numbers $l e$ is used. The highest degree of intensity may be expressed by dzu gbogbo ( $=$ "surpassing all") or tan ( $=$ "completed "), put after the adjective.

Numerals. The numeral system is very well developed, buth in extent of numbers and in the expression of the various relations of the numbers. The ten units are as follows: eni (and okan), edzi, eta, erin, arun, rffa, edze, edzo, esan, ewa, twenty is ogun, thirty ogbon, two hundred igba; of these the last-named =" heap,"so called because cowries (the shell-coin of the country) are counted in heaps of two hundred each ; the origin of the others is obscure. From 11 to 14 the numerals are formed by adding la (="great") to the units (okanla, edzila, etc.); from $15-19$ by subtracting the proper unit from 20 ; from $21-24$ by adding units to 20 ; from $25-29$ by subtracting units from 30 , and so on; multiples of 20 are used up to 180 ( 40 is $o g o d z i=$ twice twenty, and so on), the intermediate tens are made by subtraction of ten from the next higher (fifty, adota is sixty, ogota less ten ewa); in the same way multiples of 200 are used. The first unit eni is used only in counting; okan is emploged independently, ="one person," kan with a noun. A singular usage in connection with the other units is the prefixing of $m$ to them when they are attached to nouns expressed or understood, as enia mewa "ten men"; in Bowen's Grammar it is suggested that this $m$ is from the verb $m u$ " to catch" in the sense of "amounting to," on the ground that when an African [Yoruban !] speaks in English he generally says "he catch ten" for " there were
ten." Ordinals from 1 to 19 are made by prefixing ek (or ek, according to the law of vowel-harmony) to the cardinals: as, ekini " first," ekedzi " second," etc. (or, kini, kedzi); they follow the noun. Examples of distributive numerals are: metameta " three by three" (doubling of meta, which is from eta by prefixing $m$ ); okokan "one by one" (reduplication of first syllable of okan, where the $m$ is not prefixed); oboukan " one cowry each" (from ökan " one cowry").
B. Pronouns. The substantive relational material of the language (which, for convenience, is treated here before the verb) is comparatively full, yet simple; the varieties of form seem to come from the working of euphonic rules rather than from effort after delicate distinctions of thot. 1. Personal Pronouns. These are entirely without inflection, and lacking not only in the rich generic development of the Hottentot, but in all distinction of gender. It will be more convenient to take the persons one after another.
First person. The singular is emi, the plural awa, between which we should not expect to find any obvious relation (since "we" is not the plural of " $I$," but =" $I$ and others"). These may be used everywhere, under all circumstances. But, in accordance with the law of vowel-harmony already explained, there are two modified forms, the open mo used optionally when the first vowel of the following verb is $e$ or $o$, and the close $m o$, used when that vowel is $e, i, o$, or $u$. If, however, the verb is future, the euphonic forms are not allowed; another form $n(n g)$ is then employed, and this is found also before the negative $k o(k v)$ " not." This $n g$ seems to be the nasalization of the $m$ of emi , apparently a euphonic change induced by $k$ and the $o$ of the future : ng ori " $I$ shall see," ng ko ri "I do not see." The abbreviated form $m i$ sometimes stands absolutely at the beginning of a citation, the verb of saying being omitted : mi nibo "I (asked) where?" (which comes possibly from contraction with the verb wi "to say"). When the pronoun stands as object, frequently the full forms are employed, but sometimes the abbreviated forms $m i, w a$ ("me," "us"), where the abbreviation is euphonic and not inflectional, (and possibly these shorter forms are the original). These
latter are used in general when the pronoun follows the verb or the noun in a simple and unemphatic way; but if there be any emphasis, as, if the pronoun stand at the beginning of the sentence, or if the relative $t i$ precede or follow it, or if two pronouns be connected by a conjunction, or if the reflexive $n a$ ("self") follow, or often for euphony, the full forms are employed.

Second person. Full forms: iwo "thou," enyin "ye;" euphonic, open $o$, close $o$; there is no special form before future verbs. The short forms after verbs (object) are $O$ and nyin; but after nouns, while the plural form is the same, the singular is not $o$ but re, the origin of which is not clear ; it seems to be a demonstrative pronoun or a noun (it is found in the third person also).

Third person. Full forms, used for subject, on (on), awon (and nwon); the plural has also the short form $a$; the euphonic open is $o$, and close $o$; the short $i$ used in citations (as $m i$ above), possibly out of $o w i$ " he said." Before future verbs is sometimes found the demonstrative pronoun $y i$ in the sense of "he," for which in some cases $a$ is used. The usual plural subject is nwon; awon is used before the relative $t i$ (and frequently as plural sign before nouns, as above explained). As object after verbs the plural third person is won; the singular shows a great variety of forms, $o, o, u, a, e, e, i$, conforming itself, according to the Yoruban law of vowelharmony to the vowel of the preceding verb. After a noun the objective or defining form is re, the same as in the second person.

Emphatic, Reflexive, and Reciprocal. The simplest emphatie addition to a personal pronoun is the demonstrative na "this," as, iwe ti emi na, " book of me this one," "my own book." Greater emphasis is given by the substantive kpäkpa: emi kpäkpa "I myself, my very self." More common is ara (= "body," as the Rabbinic esem " bone"), which is treated as a noun and followed by the shorter, defining form of the personal pronoun: o fe ara re, "he loves body of him"= "he loves himself"; it is also reciprocal : nwon fe ara won "they love one another" (literally "body of them"). Out
of ati " and" eki" only" and ara is formed tikara, which is used as subject emphatic pronoun: as, on tikara re di ara re, "he himṣelf binds himself."

Demonstratives. The simplest forms are $y i, n a, n i, "$ this, that," with the plurals wonyi "these," wonni "those " (compounded of the won found in the third personal pronoun); they follow the nouns they qualify. From $y i$ are formed eyi, eyiyi, eyini, alayi, eleyi " this," with plurals awonyi, iwonyi, nwonyi, and from na comes onna "that," plurals awoni, awonna; these are used as independent substantives. Na and $n i$, especially the latter, have the force of the definite article.

The Relative $t i$ is without variation of gender, number, or case, and (as in Hebrew) a personal pronoun is often introduced for the purpose of defining the subject of the relative clause, as emi ti mo mo "I-who-I-know," "I who know"; or, the indefinite $o$ (or $O$ ) is employed, as o si damu awon Ju ti o va ni Damaskus "he-and-confounded-them-Jew-who-he-lived-in-Damascus," "the Jews that lived in Damdscus"; this o (properly third person singular) is used for all persons and numbers. In like manner if the relative stand in a defining relation to a following noun, this relation is expressed by a personal pronoun, as okonri ti omo re de "man-who-son-of him-came" = "the man whose son came." As antecedents to the relative are employed eni" one," and eyi " this," or sometimes nouns.

Interrogative and indefinite. First the demonstrative ta (probably connected with the relative $t i$ ) is frequent as interrogative pronoun, usually having the demonstrative $n i$ attached to it: iwo ta ni Oluwa " thou-who-Lord," "who art thou, Lord?" After a transitive verb it introduces the dependent or indirect interrogative clause, as emi mo tani o lu " I-know-what-he-struck." Tani may follow a noun as a defining term, ile tani "house of whom." A further illustration of the demonstrative origin of the interrogatives is found in the fact that $t i$ is used in questions as = "what?" alone or preceded by the interrogative $b i$ : bi emi ti nse "whether-l-what-am doing?" =" what am I doing?" Here the $b i$ precedes as a
general interrogative sign (as Latin an), then follows the personal pronoun as subject, then the question-word proper, and . then the verb. Other interrogatives are $k i$ and $w o$ variously combined (in origin demonstrative), the former inserted between the parts of a reduplicated noun giving an indefinite sense.
C. The Verb. The Yoruban verb has no form-distinctions; for all persons, genders, numbers it remains the same, but this lack is readily supplied (as in English) by the use of the personal pronouns. In respect to modifications of the idea of the stem, the language has pursued an entirely different path from that taken by the southern families of dialects, the Hottentot and Bantu, having developed no system of derived stems (Causals, etc.,) such as is found in them. Yet, while it maintains its isolating character, its words standing sharply apart in almost Chinese separateness, it has means of expressing the ordinary temporal modifications of the verb-idea with sufficient distinctness by the insertion (prefixing) of words that hàve almost lost their independent signification and may thus be called half-inflections; it even makes an approach to modal expression, and has a number of agglutinations corresponding to the English " may, can, ought," etc., expressing permission, ability, obligation, desire, etc., these auxiliary words retaining their full force, yet idiomatically sinking into appurtenances of the main verbs to which they belong. The following are the principal forms employed in this auxiliary way. First, the conditions of completedness and incompletedness are distinguished, the former being marked by $t i$, the latter by the sharp nasal $n$ ( $n g$ ); $t i$ is naturally the sign of past time (in which we naturally think of actions as complete), but also of finished action in present time (our perfect); $n$ is used of present or past, and may be prefixed to $t i$. As to the origin of these forms $n$ is probably connected with the substantive verb $n i$ to be mentioned below, and $t i$ with a root $t i$ or $t a$ meaning " Ginish" (see the verb $\tan =$ " to be finished," with which also may be brot into connection to "to be sufficient, attain to "). Ti may lie used with any time-combinations to indicate that an action is past with reference to any
other. In some idiomatic uses it seems to stand as an independent verb (not a time-auxiliary): mkpa ise owo ti wah "by-labor-money-finish-come" =" by labor money comes"; on ko le ti so eso "it-not-able-finish-bear-fruit," ="it cannot hear fruit."-Future time is expressed by $n$, the origin of which is doubtful; it seems probable that it is connected with the third singular personal pronoun $n$, in which case emioni "I shall have" is literally, "I-he-have," or, "I am he who is to have." Often it is preceded by the demonstrative $y i$ (compare the similar combination $t i$ o above mentioned) : ou yio ton ona mi se "he-will-again-way-my-make" = "he will prepare my way"; in on yio se the $y i$ and $o$ act as demonstrative and relative: "he-that one-who-make." In certain cases a is used instead of $o$. There is another word $m a$ which seems to mean intensity and repeatedness, and is used to express habitual or continued action : on yio ti ma bo "he will have been coming"; it also expresses desire in the first and third persons, and permission in the second, and this use, perhaps, points to a different root (the word occurs also as a negative). With all these forms may be employed the substantive verb $n i$, which gives fullness to the expression : emini ri" I -amsee " $=$ " I am occupied with seeing."

Of modal forms there are no very clear examples. Certain words are used in combinations out of which modal ideas naturally arise ; but it does not appear that these are connected with these words except in a very general way. Such a word is $b a$ (=" reach, attain"), which occurs in conditional sentences, as:•bi iwo ba ri i kpa a "if-thou-reach-see-it,-kill it" $=$ "if thou see it, kill it"; here the sense of uncertainty is involved in the whole sentence, and does not seem to connect itself particularly with $b a$, which also is, in other cases, used in a pure indicative sense. A similar remark may be made of the dependent sentences introduced by the particle ki " that": the modal sense comes out from the general structure of the sentence, and is independent of the ki. A peculiarity of this construction is that when the nominative begins with a consonant or consists of two or more syllables, the $k i$ is repeated (for the sake of clearness or emphasis), and may
be when the pronoun is on: ki on ki ole imu $u$ "that he should seize them." Le "can, be able," gbodo "dare," and some others are used as independent verbs, without modal force.

Gerund. The above construction of dependent sentences with $k i$ (introducing substantive, telic, and other clauses) is employed when the subject of the dependent clause is different from that of the principal. When the two subjects are the same, a gerund is used, made by prefixing $i$ to the verb, as iwo " seeing (videndum) from wo " to see": mo wa iwo nyin "I-come-seeing-you" = "I come to see you." Sometimes this form occurs in independent sentences, and then appears to be an emphatic assertion of the act instead of the ordinary verb-root: $k i(=k o)$ ise awodi " not-the being-a hawk" = "it is not a hawk." Along with this may be mentioned the forms $a b a$ and $i b a$ (from $b a$ " to meet "), expressing obligation : emi aba (or, iba) see" I-the being bound-do-it" =" I ought to do it." $l b a$ is also used for "if," and $i b a \ldots i b a=$ " whether (either) ... or": iba ise okonri, iba ise obiri" whether men or women," literally, " coming on (supposing)-the being-men-supposing-the being-women." Besides this abstract noun with prefix $i$, others formed by prefixes $a$ and ati are similarly employed.

Passive. The passive is not made from the reflexive, nor by the addition of a modifying root, but by a simple use of the ordinary verb or noun. Most commonly the active with the indefinite subject $a$ "they" is employed: a ri $i$ "he is seen" (literally, "they see him"). Or, a gerundal construction is used (the abstract noun of action) : ile se imi, "the earth-is-as to shaking" = "the earth is shaken." In the same way may be employed (with $n i$ ) the reduplicated nouns made by doubling the first syllable of a transitive verb, as riri from $r i$ "to see": riri li (=ni) emi; "as to seeing-am-I"="I am seen." Finally, the compound transitive verbs may be used as passives: thus, from $b a \ldots d z e$ (=" meet . . . spoil") "consume," we have: iwe ba-dze "book consume" $=$ " the book is consumed."

Participle. Our participles may be rendered by the continuous form made by prefixing $n$ to the root, or by independent clauses.

Substantive Verb. The Yqruban shows a profusion of substantive verbs, such as is natural in a primitive, unliterary language; the different forms are however distinguished by usage with some clearness. The most common form, and the one that approaches nearest the simple copula is $n i$ (before vowels $l i$ ), the origin of which is not clear; the only word that offers a probable explanation of it is $n i$ " to have," from which the substantive force may have come somewhat as in French il $y$ a. Ni is frequently used as $=$ " it is," and appears often where its only effect seems to be greater fullness of expression, tho it has of course fixed itself in various idiomatic phrases; there is sometimes a heaping up of auxiliary words, such as we find in Aramaic or in some French phrases. Examples of its use are : emi ni ri, " I-am-see" =" 1 see;" awa li o see "we-are-that-did-it" =" we did it"; iwo ni yi o ri, "thou-art-he-shall-see" = "thou shalt see." Of verbs expressing exist. ence proper, there are mbe, gbe, wa. The first of these (from $b i$ "to beget") is used for absolute existence, ="exists," the second (also from $b i$ ) merely takes the place of $m b e$ in the imperative and in certain dependent sentences, the third, (meaning "to dwell") is used of existence in a place. Modal existence is expressed by $r i$, which seems to be connected with the verb $r i$ "to see"; it is used with such modal words as behe "thus," bi "as.". Se (="to do") denotes the occupying a position, which calls for exertion ; thus, oba li (=ni) on means "he is (is described, known as) a king," but on se. $o b a$, "he fills the station of king"; so also nearly $d z e$. To these may be added si, expressing existence in a place, and used chiefly in negative sentences, and $d i=$ " become."

| I see or saw | emiri | or emini ri. |
| :---: | :---: | :---: |
| I saw or have seen | emitiri | or emi lio ti ri. |
| I am or was seeing | emi nri. |  |
| I have or had been seeing | emiti nri | or emi nti nri. |
| I shall or will see | emio (or a) rion | ri or emi nio (or ni yio) ro. |
| I shall or will have seen | emiotiri | or emi ni yio li ri. |
| I may or would see | emimari. |  |
| I might or would have seen | emi ma ti ri. |  |

To these might be added potential forms with $l e$, conditional
forms with $b a$ (introduced by $b i$ ), and others that do not properly lelong to the synopsis. The above shows sufficiently the isolating method of the language, and the fullness of its verbal forms.
D. Partigles. Adverbs are derived from verbs and nouns. They follow the words they qualify except those expressing negation, those formed from $f$ " with" and nouns and some others. The language abounds with adverbs of time and place, and such as express some particular quality, and a degree of some particular quality, but has failed to abstract the conception of degree, and to supply words for it ; it has, therefore, as is the case with many half-developed languages, a host of locally descriptive words, and a paucity of general terms.

Prepositions also come from verbs and nouns. The same minute local descriptiveness is found among them as in the adverbs. Local prepositions proper are susceptible of three forms; one used when the sentence expresses rest, the second when there is motion from the object to the subject, the third when the motion is in the opposite direction.

Conjunctions. The language has several words for the simple copulative, and a good store of adversative, illative, concessive, causal, telic, and temporal connectives.

## III. SYNTAX.

In conclusion, some more general observations on the syntactical structure of the language may be added.

In the simple sentence the usual order is: subject, copula, predicate; the attributive adjective (or pronoun) usually follows its substantive; the substantive verb is usually inserted, whether the simple $n i$ ( $l i$ ), or one of the forms that express existence in a more definite way. The language is, indeed, fond of the repetition of these words, and of pronouns, personal and demonstrative; in the absence of inflections it resorts to this repetition to secure distinctness or emphasis, and so constructs sentences that seem ungainly to us. It is unfortunate to call this use of pronouns and other words " pleonastic," a term that, so far as it is accepted, shuts out
the investigation of the peculiarities in the modes of expression of the language. In general, when a noun (whether subject or object) is separated from its verb, clearness of reference is gained by the insertion of a personal pronoun: awon alagbase baba mi melomelo li o li ondze "they-hireling-father-my-how many-it is-he-have-food" = "how many hirelings of my father have food," where the vividness gained by the "it is" and the general subject " he" is obvious. So the insertion of the personal pronoun after the relative: "give me the inheritance" ti o tori mi " which-it-belong-me"; and, after verbs of saying: o tenumo o kpe on ko se e" he-said-it-namely-he-not-do-it" = "he said that he did not do it." The substantive verb is often employed to represent a subject or clause, as in the first example above given, summing it up and holding it separate before the mind, somewhat as in the English expression "there is."

The various parts of the composite sentence are commonly regarded merely as standing to one another in the relation of sequence (as in Hebrew). Dependent clauses, however, are frequently introduced by appropriate conjunctions, expressing relations of time, manner, purpose, cause, and the like. Conditional clauses are introduced by $b i$ " if" or $i b a$ ( $=$ " obligation "), the verb $b a$ then standing regularly with the main verb, and the shade of the idea (as to certainty or uncertainty) is left to be inferred from the general connection. Our participial constructions are expressed by a simple verb in an independent clause, or by a separate clause introduced by a conjunction, or by an abstract noun of action. The latter plays an important part in the language, like that of the infinitive and gerund in English. It occurs as simple subject or object, and often expresses purpose; in many cases it stands instead of the finite verb. It may then be introduced by the preposition $l i$ " in, in regard to" or not; if the preposition be absent, the noun is to be taken absolutely, as defining the verb simply by the expression of the idea.

# III．－Influence of Accent in Latin Dactylic Hexameters．＊ 

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In my paper on trimeters（Transactions Am．Phil．Assoc．， 1876），the investigation had much to do with the word－feet $\smile \smile \smile こ, \smile \smile こ, 一 \smile \smile こ, ー \smile \smile, ~-\smile$ ，the object being to ascertain on what syllables the ictus could fall．In hexameters we have nothing to do with this question，for in the first three the ictus cannot fall on the accent，and in the last two it cannot fall anywhere else．In words，on the other hand，that are composed of long syllables，we are not to expect so much influence of accent as was found in iambics， for in the latter a so－called spondee partakes of the nature of an iambus，having its thesis（i．e．，ápocs）shorter than its arsis （Fíacs），whilst in dactylics the two are equal，and the ictus is more nearly uniform from beginning to end of the verse． Further，when Ennius introduced hexameters，he imitated Greek models and instituted a more artificial sort of verse，in which quantity could not be so much neglected，and so did not compose so much after the norm of popular usage．

Having examined the extant hexameters of Ennius，I find， accordingly，that he entirely disregarded accent．This is evi－ dent from the fact that in the fifth and sixth feet，where the usage of later poets shows it to be easy to place the ictus on the accent，he has discord between ictus and accent as fre－ quently as it occurs in Homer or Hesiod，read with Latin accent；and in the latter case the coincidence of ictus and （Latin）accent is due entirely to the system of accentuation and the structure of the verse．And，further，Ennius pre－ ferred the masculine caesura（with conflict between ictus and accent）to feminine，where there is no such conflict．

[^0]But in the fifth and sixth feet, the form of the verse generally causes ictus to fall on accent without any effort on the part of the composer. Any one, by a little reflection, can see why this is so, and that it is so, is shown by Greek verses read with Latin accent. The caesurae, on the other hand, cause conflict up to the fourth foot, where their relation is variable. Hence we see that, whether the composer wills it or not, there will generally be conflict in the earlier feet of the verse, and coincidence in the last two,-a sort of strife followed by a reconciliation. Consequently, in the course of time, when the ear became accustomed to this, it appeared to be a property of the verse, so that verses in which it did not happen, seemed strange and harsh. Hence poets began to seek conflict followed by coincidence, and the more they did this, the more objectionable became verses in which it was neglected. Accordingly, the poets of the Augustan age have conflict in the first few feet more frequently than Ennius, and in the last two feet more rarely; nor can any one read hexameters much without coming to feel that this peculiarity renders the verse pleasing, and peculiarly so, when words employed in one line are repeated in the next with the relation of ictus to accent varied. A beautiful example of this is found in Catullus (LXII, 20-22) :

Hespere, qui coelo fertur crudelior ignis? qui natám possis compléxu avellere mátris, complexú matris retinentem avellere nátam.
(See also Virg. Bucol. VIII, 47-50 and in the poets generally.) The frequency of this shows that it was purposely done by the poets.
§ 2. So far the discussion has been general; but now I proceed to examine the different authors, and shall begin with the origin and trace out the development of the artificial relation of ictus to accent, and shall briefly consider the arguments of those who deny to the accent any influence.

In order to have a rule by which to measure the phenomena, I shall examine Greek verses read with Latin accent; for by this means we come at what would have been the state of affairs, had all been left to chance. The general discussion
will be confined to the last two feet；and in ascertaining the relation of ictus to（Latin）accent in Greek，and comparing with the same in Latin，I confine myself to the fifth foot．In Hom．Od．I，containing 444 verses，the ictus conflicts with Latin accent in the fifth foot


But the word－feet $\smile \smile$ and $\smile \smile ー$ are more numerous in Greek than Latin．To show this，since many verses of Ennius are not entire，I employ 444 verses of Virg．Aen．I，and com－ pare with $0 d$. I，containing 444 verses．

In Od．I we have－．．． 176
－－こ ．． 101
In 444 of Aen．I，־｀．．． 134
－ー－．． 21
I omit words combined with－que into the form $\smile \smile ー \smile$ ， as I should otherwise have to recognize Greek words of the form - －followed by monosyllabic enclitics．Now to find what would be the relation of ictus to Latin accent in Greek，if the forms $\smile$－and $\smile$－こ were not more numerous，we reduce thus：

$$
\begin{aligned}
& \text { for } \smile \smile, 176: 134:: 15: 11+ \\
& \text { for } \smile \smile \smile, ~ 101: 21:: 32: 7-.
\end{aligned}
$$

Then $11+7+16=34$ ，which would be the total number of discords in the fifth foot．Now in the 541 verses of Ennius there are 36 conflicts，which in 444 would be 31 ，which is practically the same as in Homer（34）．But I have also examined Iliad III in the same way，and，omitting proper names，I find the conflicts a little rarer than in Ennius．We can affirm，therefore，that in the aggregate the verses of Ennius do not differ in this respect from those of Homer， from which it appears that Ennius paid no attention to accent． In examining others，therefore，I shall compare all with En－ nius＇s usage as being accidental．Conflict in the sixth foot being occasioned by a final monosyllable，and in the fifth foot by caesurae in that foot，it will be important to note all instances of monosyllables at the end and of caesura in the
fifth foot, even when elision or a preceding monosyllable prevents conflict. I shall also record other peculiarities. When a dissyllable becomes a monosyllable by elision, the fact will be noted. Of course no special notice will be taken of rerses which exhibit no peculiarity. The annexed table* shows the result of the examination of Ennius's Fragments containing 541 verses, Lucretius III, 1,092 vv., Hor. Sat. I, 1,025 vv., Hor. Ep. I and part of II, 1,000 vv., and all the works of Virgil, 12,869 verses with complete endings. Of course these numbers must be taken into account in comparing the result for the different authors. These are selected for the table as representative poets, but others will be included in the discussion that follows. It is scarcely possible that all the figures should be exactly correct, but they are nearly enough so for the present purpose.

1. For Ennius we collect the following result:
Caesurae after fifth arsis (1) with conflict (2) without conflict (a) monosyl. 32

$$
\text { (b) elision (a) dissyl. } 5
$$

( $\beta$ ) polysyl. 542
In sixth foot, caesurae (1) with conflict 40
(2) without conflict (monosyl.) 5

In fifth foot conflicts without caesura (1) -que 4
(2) otherwise $8 \quad 12$

Verses with both feet contained in one word 25
From this we see that in the sixth foot the conflict takes place (in proportion to the number of caesurae) much more frequently than in the fifth, and is more frequent, even, than in Homer. Here we are not to infer that he strove after conflict, but that he frequently imitated certain Homeric endings (with caesurae in sixth foot) which especially pleased him; and this imitation he sometimes carried to an extreme, as when, induced by viös $\dot{\varepsilon} \mu \dot{\partial} \nu \delta \bar{\omega}, \chi^{a \lambda \kappa о \beta a \tau \grave{s} s} \delta \bar{\omega}$, etc., he wrote endo suan do, altisonum cael, laetificum gau, etc.; and, in imitation of Tmesis, "saxo cere- comminuit -brum." Those who

| Form． | E． | Luer． | Hor． s ． | Hor．E． | E．Virr． | Examplea． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 11 | 1 | 30 | 14 | 14 | ignis mare ferrum |
| －ーしーテ | 11 | 1 | 3 | 1 | 29 | rubens hyacinthus |
| ご1－1－ | 0 | 0 | 5 | 1 | 0 | amatorem quod amici |
| ここ○1し－！ | 2 | 0 | 0 | 1 | 0 | stolidi soliti sunt |
| こ！｜こと1！ | 0 | 0 | 5 | 2 |  | medicum roget ut te |
| －－1－ | 4 | 0 | 0 | 0 | 12 | purpureo narcisso |
| リーリーゾ」こ 1 | 13 | 24 | 78 | 49 | 130 | te quoque dignum |
| 1！1－－＝ | 13 | 17 | 8 | 2 | 5 | an Meliboei |
| ｜1－」と1＝ | 1 | 7 | 14 | 8 | 1 | rem facias rem |
| $1 \because 1-!-1=$ | 0 | 0 | 0 | 0 | 1 | si qua tibi vis |
| －1－1－ | 0 | 4 | 2 | 2 | 6 | aut quod ineptus |
| $\because 1-1=$ | 1 | 0 | 0 | 0 | 2 | et magnis dis |
| －｜ー－1 $1=$ | 1 | 4 | 7 | 8 | 8 | iam data sit frux |
| $\because 1-1$ | 3 | 2 | 0 | 0 | 0 | sic compellat |
| －1－＇1， | 0 | 0 | 1 | 0 | 0 | aut etiam ipse haec |
| －1－1－ | 0 | 0 | 3 | 0 | 0 | non ego avarum |
|  | 0 | 0 | 1 | 1 | 0 | stans pede in uno |
| 1！ 1 －－＝ | 0 | 0 | 5 | 0 | 8 | saepe ego longos |
| ｜！＇－－＝ | 3 | 13 | 3 | 0 | 1 | mentem animumque |
|  | 2 | 4 | 3 | 0 | 4 | atque oculi sunt |
| ！－ 1 －1 | 0 | 0 | 1 | 0 | 0 | quanti olus ac far |
| ＇＇1 | 0 | 0 | 1 | 1 | 0 | antestari ego vero |
| ご1しく | 4 | 10 | 1 | 1 | 17 | solidoque elephanto |
| ！\｜－」 | 1 | 1 | 1 | 0 | 0 | scripsere alii rem |
| －＇1－1－1 | 0 | 2 | 0 | 0 | 0. | texere et in illam |
| ○ー｜ーハ｜こ | 25 | 26 | 29 | 18 | 31 | adfixit habes qui |
| ○－，1＝ | 7 | 2 | 14 | 1 | 8 | exiguus mus |
| 11 － 1 | 1 | 0 | 0 | 0 | 0 | sublatae sunt |
| ！－1！1＝ | 3 | 16 | 38 | 37 | 37 | obstitit et nox |
| ○－1 1 1＝ | 0 | 0 | 3 | 1 | 2 | iugera centum an |
| $\underline{\prime}$ | 0 | 0 | 0 | 1 | 0 | ridere decorum et |
| ○ー｜－1 1－ | 0 | 0 | 7 | 2 | 0 | audivit at in se |
| ○－1～1！ | 1 | 2 | 0 | 0 | 0 | isque pium ex se |
| ○ーソノニ 20 | 20 | 46 | 15 | 6 | 21 | Alcimedontis |
| 11 | 5 | 5 | 0 | 0 | 16 | incrementum |
| $\underline{\prime}$ | 0 | 4 | 5 | 2 | 1 | indicium illud |
| ○－1 ！＝ | 4 | 7 | 0 | 7 | 112 | promissaque barba |
| ーゾツ！＝ | 0 | 0 | 1 | 0 | 15 | Ephyreïque aera |
| $\therefore$－－ 1 － | 0 | 0 | 0 | 0 | 1 | omniaque in se |
| セッ＇リー | 0 | 0 | 1 | 0 | 0 | servareque amicos |
|  | 0 | 0 | 0 | 1 | 3 | arvaque et urbis |
| $\underline{1} 10$ | 0 | 0 | 2 | 0 |  | calóremque｜Inter，etc． |
| 11 | 0 | 0 | 0 | 0 |  | tótasque｜Advolvere，etc． |
|  is，Ennius 405，Lucretius 894，Lor．Sat．738，Hor．Ep．833，Virgil 12，372， the per cent．of peculiar endings to the entire number being，Ennius 25 ， Lucr．18，Hor．Sat．28，Hor．Ep．17，Virgil 4： |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

think that such a treatment of words was common at Rome, are called upon to accept

> " Massili- portabant iuvenes ad litora -tanas."

In the fifth foot the ratio of caesurae with conflict to those without it is about what we should expect ( $28: 42$ ) if it were left to chance. In Hesiod I have found the ratio a little larger, but this is due to causes already explained.
2. Now we come to Lucilius; but we need not wonder if no great progress was made by a man who prided himself on " standing on one foot and composing two hundred verses in an hour." Yet it will not be uninteresting to see how he differs from Ennius, especially as he did not follow Greek models so closely. The 925 verse-endings (in which the text is often doubtful) show this result:

Caesurae after fifth arsis (1) with conflict 10
(2) without conflict (a) monosyl. 45
(b) elision (a) dissyl. 8
( $\beta$ ) polysyl. 11
Caesurae in sixth foot (1) with conflict 35
(2) without conflict (a) monosyl. 22
(b) elision (a) dissyl. 1
( $\beta$ ) polysyl. 427
Conflicts in fifth foot without caesurae,

$$
(1) \mid\llcorner\smile \smile \leftharpoonup \mid=10
$$

(2) - $\smile \prime \perp$ - $\quad 5 \quad 15$

Both feet in one word 31
Comparing this with Ennius we see (1) that caesura in the fifth foot is somewhat rarer, and that conflict is much rarer, but that accent on short syllables is disregarded; (2) that caesura in the sixth foot is not quite so frequent, and that a considerably less proportion have conflict, though the conflict still predominates; (3) that fifth spondees are much fewer; and (4) that both feet are something less frequently contained in one word (for $925: 541$ is greater than $31: 25$ ). Of course no great importance is attached to slight differences, but in the two main points (caesurae with conflict in the fifth and in the sixth foot) the difference is considerable, the ratio
being, in the fifth $1: 5$, and in the sixth $1: 2$. But Lucilius did not hesitate to place an ictus on a grave syllable, provided there was another on the accent. Instances are rarer than in Ennius merely because he did not indulge so much in highsounding compounds, such as "altisonantes," "sapientipotentes." But there are two points to be specially noted: first, while conflicts grow rarer, the caesurae without confict also grow rare, but not in the same proportion; and secondly, already in Lucilius, if the verse ends in an ionic word, $1 \sim-$ —モ, a polysyllable before it is carefully avoided ( $-\simeq 1$ $\smile \smile \perp$ ); but if the ending is $|\smile \smile| \perp$, the polysyillable before it is not so rare as in later poets.
3. In Lucretius (III, containing 1,092 verses) we find :

Caesurae after fifth arsis (1) with conflict
2
(2) without conflict (a) monosyl. 58
(b) elision (a) dissyl. 17
( $\beta$ ) polysyl. 13
88
Caesurae in sixth foot (1) with conflict 40
(2) without conflict (a) monosyllables 22

Conflicts in fifth without caesura (1) $\mid$ - - - $1=2$


Spondees in fifth place 7

Both feat in one word 51.

From which we see (1) that conflict in the fifth foot is more carefully avoided than in Lucilius. These conflicts, however, are more rare in Book III than in the rest, which have four or five apiece. (2) In the sixth foot, however, accent is disregarded as much as in Lucilius. (3) Words containing both feet are not avoided, and accent on a short syllable is disregarded, so that the form - " - - suffers elision four times in the fifth place. These words, however, are all infinitives of verbs compounded with prepositions, and are placed so that the ictus falls on the emphasized preposition, as "défluere hilum." (This happens, also, in iambics. See Transactions, 1876.) Similarly an unusual accent is neglected; for such forms as "mutareque" receive the fifth
ictus on the antepenult seven times, although the (artificial) accent is on the penult. Not a few, however, deny that -que creates this accent. (This subject is also discussed in Transactions, 1876, and comes up again in this paper.) Elision is carefully avoided before a monosyllable at the end of a verse, although it would prevent conflict. It was, no doubt, avoided on account of its roughness. It is not rare in Ennius, and Lucilius has some abominable instances of it, as "consciu' sum $m i$; at" - In the fifth foot, however, Lucretius admits elision in order to prevent conflict; for before caesura in that foot we find the form $\simeq-\mid$ only twice, and $\simeq$-' thirteen times. Even this elision was too harsh for Virgil and his contemporaries.
4. Corssen, to establish his theory that accent was entirely ignored, counted the conflicts in Lucr. II, where he found sixteen (in the fifth foot), of which twelve were conflicts with the unusual accent on a short penult caused by -que, as in "arbístaque lenta"; and from this he jumped to the conclusion that accent was entirely disregarded. If he had merely asserted that the phenomena, whatever they might prove to be, were due to other causes, there would have been no need of making the count. Hence, as he made the count, he certainly meant to conclude from it whether accent was regarded or not. What, then, did he demand? That all ictuses in those feet should fall on accents? By his reasoning we can prove that Virgil did not avoid hiatus (cf. Aen. XII, 31, 535, 648, etc.), and that he regarded final short syllables as common (XII, 13, 68, 263, $550,667,772,883$, etc.). But it is useless to reply to such arguments. The very fact that conflict is so much rarer in Lucretius than Ennius shows that this rareness is not due entirely to accident.

In Horace Sat. I, Corssen finds eleven (11) conflicts in the fifth foot and fifty-five (55) in the sixth and compares them with those in Virgil to show that the strictness of the latter was not due to his following popular usage, that is, due to his observing accent. Of course not; but what was it due to? "Legibus aestheticis," says Lucian Müller. Very good: but what do they relate to? The truth is, Horace wrote his

Satires carelessly,-much more so than his Epistles, and consequently we find not only numerous conflicts of the sort, but also frequent neglect of main caesura, and other licenses.

From Hor. Sat. I, containing 1,025 verses, we collect the following:

Caesurae after fifth arsis (1) with conflict 43
(2) without conflict (a) monosyl. 114
(b) elision (a) dissyl. 14
( $\beta$ ) polysl. 3131
Caesurae in sixth foot (1) with conflict 61
(2) without conflict (a) monosyl. 58
(b) elision (a) dissyl. 4
( $\beta$ ) polysyl. 062
Conflicts in fifth foot without caesura 21
" "sixth " by synaphea 2
Spondees in fifth place, absolutely 0
Whence it appears that in the Satires, Horace, in comparison with Ennius, guarded somewhat against conflict in the fifth foot, and much more than Ennius in the sixth. The number of caesurae without conflict in this foot is the same as that with conflict, but if it were left to chance the number with conflict would be as much more numerous than those without, as there are more polysyllabic than monosyllabic words. But if he avoided them at all, why did he make any conflicts? Simply because this is not an absolute law, and there was no necessity to observe it strictly, and it would have cost more labor than it was deemed worth.

Horace's Epistles, being written more as monuments of literary art, were more carefully composed than the Satires. In Ep. I, and part of II, making 1,000 verses, we find:

Caesurae after fifth arsis (1) with conflict 19
(2) without conflict (a) monosyl. 70
(b) elision (a) dissyl. 0
( $\beta$ ) polysyl. 272
Caesurae in sixth foot (1) with conflict 36
(2) without conflict (a) monosyl. 49
$\begin{array}{ccc}\text { (b) elision (a) dissyl. } & 1 & \\ \text { ( } \beta \text { ) polysyl. } & 1 & 51\end{array}$

> | Conflict in fifth foot without caesura (1) -que, -ne |
| :--- |

Both feet in one word 6
Spondees in fifth place 0
Here we see that in both feet the caesurae are rarer，and the conflicts much rarer than in the Satires．The very fact that the same author，under different circumstances，should compose verses so different in this respect，shows that it is not a result of accident or necessity．Horace does not em－ ploy elision to prevent conflict in the fifth foot．This becomes evident from a comparison with Lucretius．

|  | Hor．Sat． | Epist． | Lucr． |
| :---: | :---: | :---: | :---: |
| Conflict（こぃ｜こと $こ$（ |  | 19 | 2 |
|  | 3 | 2 | 13， |

which gives a ratio of $94: 1$ against elision in Horace as com－ pared with Lucretius．

5．In all the works of Virgil（ 12,869 complete verses），I find：

Caesurae after fifth arsis（1）with conflict 57
（2）without conflict（a）monosyl． 153
（b）elision（a）dissyl． 13
（ $\beta$ ）polysyl． 17183
Caesurae in sixth foot（1）with conflict 47
（2）without conflict（a）monosyl． 48
（b）elision（a）dissyl． $2($ ？$)$
（i）polysyl． $0 \quad 50$
Conflicts in fifth foot without caesura（1）－que，－ve 131
（2）otherwise 9140
Spondees in fifth place 30
Both feet in one word， 30 proper names $+7 \quad 37$
The verses of Virgil containing conflicts either end in proper names or Greek words，or are composed in imitation of Homer，Theocritus，or Ennius．The ending＂et magnis dis．＂which occurs twice in Virgil，is found also in Ennius，and not a single other instance even of the ending $|-1-\perp|=$ occurs in all the poets examined．The ending $\mid$－ーユニ is frequently represented by＂hymenaeus，＂before which a short syllable is sometimes lengthened and hiatus occasionally admitted．The same things occur with this word in Catullus．

The caesurae themselves, without conflict, are rare in Virgil. Langen says they would not be rare in the fifth foot if they were allowed after polysyllabic words of each metrical form as frequently as they are after monosyllables. But then polysyllabic words of each form are not so numerous anywhere as monosyllables; and, moreover, earlier poets have the caesura more frequently even after monosyllables. Wherefore we must concede that Virgil avoided the caesurae themselves to some extent, but the conflicts still more. Of this presently.

If enclitics cause accent to fall on a short ultima, as " promissaque (a question discussed in Transactions, 1876), it is clear that Virgil disregarded such accents as being unusual, or rather, artificial ; for in such cases the conflict is more frequent than in any other. It is true, ictus cannot fall on a short syllable, and such words compelled conflict. But the word-foot - $\smile \smile$ suffers elision seventeen (17) times in the fifth place, causing conflict, and of these instances sixteen have -que, as "omniaque in se," the only other being " $n$ ntremere 6 mnes," which is like the examples in Lucretius (prepositions in composition receiving ictus): That such words have to suffer elision proves nothing, for the same is true of words of this form without an enclitic. Nor is it necessary to assume that the original accent remained, as " $\delta$ mniáque" (like $\pi \tilde{j} \mu a \tau^{\prime} \gamma \varepsilon$ ); but the true explanation seems to be this. First, the roughness of elision at that place (as we shall see hereafter) was avoided; but -que, -ve, and -ne suffer total elision (while other words do not), and so cause no roughness. Secondly, in these forms the ictus does not fall on a syllable adjacent to the accent, while in other cases it does (cf. omniaque $=\perp \smile \because(\smile)$ and colligere $=\nearrow \because(-)$ ). And might.it not be, after all, that a sort of secondary accent did remain on the original tone syllable?
6. The difference between Virgil and Horace in respect to conflict is due to the fact that their works are of different natures. Horace's Satires were written to effect sométhing at the time,-were practical and objective ; whilst the works. of Virgil were designed to be permanent literary monuments,
or works of art. No one expects a dépôt-building to be like a memorial hall. The one is a means or an instrument to accomplish an end ; the other is its own end. The one is useful, the other ornamental. But the success of an instrument may make it as great an object of admiration as a monument, and the useful may also be ornamental. The fact, however, of a work being in verse at all, makes it to a certain extent a work of art. Lucretius is didactic, but he could have taught better in prose. Hence his writing verse at all required that he should make his verse at least endurable, and if possible, attractive. Horace's Satires were attacks upon the follies of men, but had to be made readable. His Epistles had a less definite immediate object, were more nearly a pure work of art, and so had to be more readable. The Georgics of Virgil are somewhat didactic, but more monumental. His Bucolics (which have a lyric tone) and his Aeneid are purely monumental.

The Elegy also is artificial or monumental. Hence in the Elegies of Catullus conflicts are rare, in Tibullus and Propertius still rarer, and in Ovid they almost vanish. As far as Elegies seem to be practical (e. g., the love-poems of Tibullus and Propertius), their effectiveness depended in great measure on their perfection as works of art. Besides, they were written to be published, and in the case of Propertius the real name (Hostia) cannot be substituted for the fictitious (Cynthia) without creating frequent hiatus and false quantity. Hence he probably wrote only for publication.
(a) In the 323 hexameters of Catullus's Flegies there are:

$$
\text { Caesurae after fifth arsis (1) with conflict, } 5
$$

$$
\text { (2) without conflict, } 18
$$

Caesurae in sixth foot (1) with conflict, 6
(2) without conflict, 7

One conflict (cxv,5) is caused by synaphea.
In his Heroic poem (Epithal. Pel.) Catullus, though perhaps the best of Roman poets, allowed himself to imitate Alexandrian models, and admitted many Greek peculiarities, such as fifth spondees (See Cic. Att. viI, 2). In that poem there
are eight conflicts in the fifth foot, always caused by "hymenaeus," or some other Greek word, or a proper name. In the sixth foot there is one discord with caesura, and one with synaphea. But there are only three monosyllables before fifth caesura, and none before sixth.
(b) In the 855 hexameters of Tibullus I find :

Caesurae after fifth arsis (1) with conflict, 6
(2) without conflict, 17

Caesurae in sixth foot (1) with conflict, 0
(2) without conflict, 3

In Books III and Iv, which were composed with more art than inspiration by some late versifier, I find no discord at all. In the 211 verses of "Messala," a silly Heroic poem by an unknown stupid poetaster, there are six conflicts in the fifth foot, and only three caesurae with a monosyllable.
(c) In the 1,572 hexameters of Propertius, there are:

Caesurae after fifth arsis (1) with conflict, 4
(2) without conflict, 18

Caesurae in sixth foot (1) with conflict, 1
(2) without conflict, 27

Conflicts in fifth foot caused by -que, 2
Spondees in fifth place, 5
(d) In 500 hexameters of Ovid's Heroides, and the same number from the Metamorphoses, I find:

Elegiac. Heroic.

| Caesurae after fifth arsis (1) with conflict, | 0 | 1 |
| :--- | :--- | :--- |
|  | (2) without conflict, | 5 |
| Caesurae in sixth foot (1) with conflict, | 0 | 1 |
| (2) without conflict, | 1 | 2 |
| Conflicts caused by $-q u e$, | 5 | 4 |
| Spondees in fifth place, | 1 | 0 |

From all this it is evident that in this artificial sort of poetry great care was used. Propertius does not appear to have avoided caesura itself, without conflict, as much as the other Elegists.
7. In order to give a better comparative view of the poets examined, I have reduced the more essential points to a uniform scale of 1,000 verses:

|  | 离 | 水 | $\begin{aligned} & \dot{\ddot{U}} \\ & \stackrel{y}{3} \end{aligned}$ |  | $\begin{aligned} & \text { 苗 } \\ & \dot{0} \\ & \dot{⿴ 囗} \end{aligned}$ | $\dot{E}$ | $\begin{aligned} & \dot{\ddot{\theta}} \\ & \dot{8} \end{aligned}$ | $\begin{aligned} & \text { 唄 } \\ & \overrightarrow{\vec{E}} \\ & \text { D } \end{aligned}$ | $\begin{aligned} & \text { 亩 } \\ & \text { 产 } \\ & \text { 言 } \end{aligned}$ | 㽞 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Caesurae after fifth arsis． <br> （1）With conflict， <br> （2）Without conflict， | 52 <br> 77 | 10 | 80 | ${ }_{128}^{42}$ | 19 | $\stackrel{4}{4}$ | 2 | 15 54 | 21 | 12 | 10 |
| Caesurae in sixth foot． | 77 | 66 | 80 | 128 | 72 | 14 | 2 | 54 | 21 | 12 | 10 |
| （1）With conflict，．．． | 74 | 36 | 36 | 58 | 36 |  | 0 | 18 | 0 | 0 | 0 |
| （2）Without conflict，． | ， | 25 | 20 | 58 | 51 | 11 | 4 | 21 | 4 | 18 |  |

The number（4）for conflict in fifth foot in Lucretius is not taken from Book in，but from the reading of several books． The result for Ovid is from too small a number of verses to show anything more than that the conflicts and caesurae are extremely rare．The average for all his works would no doubt be different．Thus，in Virg．Aen．II there are no conflicts in the fifth foot，whereas the average for all his works is four in 1,000 verses．This shows also that where things are very rare，mere accident may affect them consid－ erably．I should say，therefore，that there is no appreciable difference between Orid＇s Met．and his Elegies in respect to conflict，but that both of them differ widely from Horace＇s Satires．

Virgil admitted the fifth and sixth caesurae，whether with or without conflict，much more rarely than his predecessors； and he carefully avoided an ionic word－foot at the end pre－ ceded by a monosyliable，$|\perp| \smile \smile \perp こ$. This ending occurs only five（5）times，and in each instance the last word is a proper name，while $二 \perp \mid \smile \smile \perp こ$ with conflict is much more frequent．Hermann（Elem．p．344，Epit．§ 322） says that the cause lay，not in the last word，but in the preceding one，it being unpleasant to have ictus on the unac－ cented ultima．But then，why the still greater aversion to a monosyllable in that position？Hermann thinks that the effort to secure coincidence in the last two verses was because the lungs were exhaustsd，and so a smooth ending desirable． One might say that owhen the lungs are exhausted，the ictus must be weaker，and so the conflict would be less objection－ able，and in support of this，the iambic trimeter might be
cited. The true explanation of the above-mentioned phenomenon seems to be this. In the first place, for reasons already stated, conflict in the fifth foot was to be avoided, and this could be done, if there was caesura, by placing a monosyllable before it; and then this monosyllable forbade a long word being placed after it. Virgil preferred even conflict with two polysyllables together, to harmony with a monosyllable and polysyllable combined. This is perfectly evident from the following exhibit:


That is, the tendency to use polysyllables with long words and monosyllables with short ones, as compared with the converse is as seventy-six to one, and that, too, in spite of the tendency to avoid conflict. Similarly in
Horace Sat. I, we find $|\perp| \smile \smile \ddots=8,|\perp| \smile \smile \mid \perp=78$

Why some poets found $|\perp| \smile \smile \Perp こ$ more unpleasant than other poets did, it would be idle to inquire.
§ 3. I shall now make a few observations on special points.

1. Spondaic verses generally end in a proper name of the form $-\ldots \perp$. The ending $--1 \perp=$, although the coincidence of ictus with accent is perfect, was not employed. This is because there was rarely occasion to use a double name, as "Gaius Gracchus." If, again, the name consists of three long syllables, it creates conflict in the fifth foot, and if it is two long syllables it can be put in the sixth place. Hence only $\perp \ldots \perp$ is left. . Of course exceptions, such as $|\perp|--=$, occur.
2. A word of special importance is frequently reserved for the end of the verse. If such a word is monosyllabic it naturally creates conflict; that is, in my opinion the poets placed such words at the end, not-always because they were monosyllables, but frequently although they were monosyllables; as

This verse, I am aware, is often cited to illustrate surprise
caused by a final monosyllable. That the monosyllable is sometimes so employed I do not deny, but in this case the sense of "ridiculus" prevents surprise in "mus." If the verse were

## parturiunt montes, nascetur magnificus mus,

there might be surprise, though in this instance irony would be suspected as soon as the adjective was read. In order to create surprise we should have to read the verse
parturiunt montes, nascetur-ridiculus mus.
And similarly in " procubuit viridique in litore conspicitursus," there is no more surprise than there is in
" quantum lenta solent inter viburna-cupressi."
But if a surprise is to be caused, the monosyllable is well adapted to this place; for every one feels that, being an emphatic word and having accent, it is not to be read like an ordinary thesis, and consequently it gives the verse a novel ending; as
dat latus, insequitur cumulo praeruptus aquaé mons.
In such cases I suspect that the Romans unconsciously made an entire foot of the sixth arsis, and placed a seventh ictus on the monosyllable, thus: aquae mons $=$ - •・ィ. This would be a heptameter; but the ancients made a similar blunder in regard to the so-called pentameter (which is a hexameter).
3. When two verses have too close a connection to admit a pause between them, a monosyllable is frequently placed at the end to prevent the voice from falling and destroying the sense. Hermann (Elem. p. 342) teaches that when there is a pause near the end, this monosyllable causes a sufficient prolongation of what follows the pause, to make it "comparable" to what precedes, as
at Boreae de parte trucis cum fulminat, ét cúm, etc.
But who will prolong "et cum" so that "apte ad praecedentia comparari possit"? It seems to me that the accent on "cum" (or if it has none, then its proclitic character) prevents a
cadence of the voice which would mar the sense; and this close connection with the next verse is most likely to exist just when there is a pause near the end, but when the close connection does exist without such pause, the monosyllable is still employed, as,

> his me consolor victurum suavius ác si quaestor avos pater atque meus patruusque fuisset.

For such instances Hermann's explanation is unavailing, while the explanation just given accounts for all alike. Horace in his Satires very often closely connects two verses in this way, whether there is a pause near the end of the first, or not; as, Book I, Sat. I, $17,46,50,56,69,81,82,96,101$, etc. This is one thing which contributes materially to the large number of sixth caesurae in Horace. Lucian Müller (De Met. Hor. p. 61), speaking of monosyllabic prepositions and conjunctions at the ends of verses, says: "mitigatur haec inelegantia addita, quod saepius fit, elisione." In my original dissertation I criticized his statement as referring to all monosyllables, and so far did him unintentional injustice. His remark applied also to main caesura after such monosyllables, and in that it is strictly correct; but there is so great an aversion to elision in the sixth foot that such elisions as those mentioned by Müller, as,

> naturae fines viventi, iugera centum an, etc.,
are not at all frequent. I have counted such cases as this and "porro et," and find that no greater proportion of such monosyllables, when final, have elision, than when found elsewhere in the verse; and as to final monosyllables generally, the comparison is so striking that I give it:
In all Virgil, without elision, 48, with elision, 2 (atqu').
" Hor. Sat. I, "
"
"
§ 4. I now proceed to reply briefly to the arguments of those who deny that accent has any influence.

1. As conflict grew rarer in the sixth foot, the caesura even without conflict also grew rarer, but not to the same degree. "Why, though, did it grow rarer at all, if the offense lay in the
conflict？＂We answer：Because there was a sort of conflict ； for the monosyllable at the end has an accent which interferes with the cadence，which is objectionable unless the two verses are so closely connected as to make it desirable（See also end of 3 below）．

2．＂Conflict with caesura in the sixth foot might be prevented by elision，as in＂dec6rum et，＂and yet this elision is very rare，occurring only twice in Virgil．＂To this we reply that elision in this place gave the verse so rough a termination that the offense was greater than that of conflict．This is shown by the fact that of the fifty（50）endings of the form $1 \perp 1=$ in Virgil，only two have elision（＂atque＂each time，where the elision is total and hence not unpleasant），and in these fifty cases there can be no question of conflict at all．But if the elision was objectionable between two monosyllables，how much more so between a long word and a monosyllable．

3．Lucian Müller attributes the rareness of fifth caesura after polysyllables to＂esthetic laws，＂whatever they may be． But be they what they may，if they are laws，they must refer to something，and this＂something＂I take to be the relation of ictus to accent．I am willing to admit that the objection was to ictus on a weak ultima，but it is weak because of its relation to accent．Moreover，the unpleasantness was merely a result of contrary usage，and that usage excluded fifth ictus from the ultima just as much as it included coincidence of ictus with accent．
＂But when the ictus falls on a monosyllable there is no confict， and still this is rare in the most careful writers．＂This objec－ tion is not exactly true．There is a species of conflict when the monosyllable is followed by another，or by $\stackrel{-}{\sim}$ ，thus， $|\perp|=-\mid \perp こ$ ，as the ictus is immediately followed by an accent（the case when it is followed by a long word， $1 \perp \mid \smile \smile ン こ$ ，has been already explained）．The ending $\mid\llcorner|\because \leftharpoonup|=$ creates conflict also in the sixth foot．And further，in avoiding conflict the poets no doubt would uncon－ sciously avoid that which causes conflict－namely，caesura．

4．＂But the monosyllable under the fifth ictus sometimes is a proclitic，and so has no accent．＂This is true．Out of
the hundred and thirty (130) verses in Virgil which end in $|\perp!\smile \smile| \perp こ$, six (6) have prepositions in the fifth arsis, as " $a b$ Jove summo," to say nothing of the seven (7) which have "non,"' and the eight (8) which have the relative pronoun, and the many others which have monosyllables regarded as proclitics by the grammarians. But as we have better means of discussing the prepositions, I shall confine myself to them, and the conclusion will apply to other words. I cannot agree with those who, in their eagerness to maintain the influence of accent, deny that prepositions were proclitic. Quintillian says ( $\mathrm{I}, 5,25$ ) that in "circum litora" and in "ab oris" there is but one accent. He cannot mean ictus, for there are two on "circum litora" (and, by the way, his statement proves that the ancients observed both ictus and accent in reading - if it needed any proof). This being our best authority, I need not cite others. Among other evidences, however, I may mention that in inscriptions of all periods of antiquity, prepositions are found joined into one word with their objects (Corss. in, p. 863, etc.). So "antidhac," "postidhac" are results of the proclitic nature of prepositions before they lost final -d. The analogy of Greek prepositions (if that is of any value) supports this view. Some of them, $\dot{i} \nu$, éx, etc., are confessedly proclitic, and inscriptions show close union with their objects by euphonic modifications in the case of other prepositions, and when they lose their vowel, no accent is written; so that the written accent (as in rapà roúrous) must have been very slight, though in other parts of ${ }^{\text {speech Dion. Hal. (De Comp. Verb. C. xi) implies that it was }}$ a "rácıs $\dot{j \xi \varepsilon a ̃ a . " ~ I n ~ v i e w ~ o f ~ a l l ~ t h i s ~ I ~ m u s t ~ a s s u m e ~ t h a t ~ p r e p o-~}$ sitions had no accent. I have also made a careful computation, and find that monosyllabic prepositions are placed under the fifth arsis about as often, in proportion to their entire number, as words are which have an accent. But after all, this is not surprising. The monosyllable, though unaccented, prevents the ictus from falling on a weak ultima; and though it has not the musical elevation belonging to accent, it has the stress belonging to the ictus, as it is an independent word; so that the difference between " ab Jove" and "armaque" is not great,
the latter having the root-stress on " ar-". The same explanation applies when a trochaic proclitic receives the fifth ictus, as "propter eundem," " unde Latinum." But this union of a proclitic with the next word is not entirely so close as that between two syllables of the same word, as is shown by such endings as "inter eundem," which are numerous, while by the more elegant poets a single word like "ingemuerunt" is avoided in this position. Moreover, the caesura may fall between a preposition and its object, as:
et inde tot per \| impotentia freta;
unless we try to believe that in this iambic trimeter aloue Catullus neglected caesura. Other examples occur in other poets.

Here I close. It would be impossible to sum up all the conclusions in a brief space. I wish merely to repeat and emphasize the statement that the influence of accent in dactylic hexameters was a result of usage, and not of an original aversion to conflict between it and ictus; and that this very conflict, which got to be unpleasant in the last two feet, was quite agreeable in the first few feet of the verse.

## IV.-Observations on Plato's Cratylus.

 By JULIUS SACHS, Pr.D., NEW YORK CITY.The student of the science of language who wishes to take a comprehensive view of the theories advanced regarding it, cannot fail to take cognizance of Plato's writings as the earliest detailed embodiment of speculation and observation on this subject. Not but that among the predecessors of Plato and Socrates valuable suggestions on the nature of language were offered, but they were isolated flashes across the field of intellectual vision rather than systematic discussions; neither Herakleitos nor Parmenides formulated their inquiries in a manner calculated to emphasize distinctly the difference between thought and speech. Strange though it may seem, the Greek philosophers busied themselves considerably with hypotheses on the origin of the reasoning faculties, before they convinced themselves that the final results of such investigations must, of necessity, be futile, unless they attacked the problem of the origin of language, since language was the vehicle of reasoning, and thus the most essential characteristic of human kind. Plato's age was fully alive to this inquiry, and in the Cratylus we have by no means a tentative effort in this field of speculation, but a resume of prevalent theories which a master in the art of dialectics sifts, indorses, modifies, or rejects. The very art of the writer, however, his consummate use of the various devices of oratory, satire, modest doubt, etc., have rendered a correct appreciation of his position all the more difficult, as we lack almost completely the evidence for the real opinions held by those philosophers whose views he introduces as foils for his argument.

Hence various modern writers on comparative philology have been able to interpret the position of Plato in consistency with their favorite theories, and the Cratylus has been represented as the precursor of those linguistic treatises that proclaim the study of language a physical science as well as of those that make it a historical science. One point we may lay down
even at this stage: Plato's Cratylus, whatever its object or tendency, cannot be disregarded in any discussion on the science of language; it forms the landmark around which the speculations of the ancients on the subject may be grouped. From Herder on through Schleiermacher, Ast, Steinhart, Benfey, Müller, Whitney, Steinthal, Geiger, down to the most recent expositor of these issues, Ludwig Noire (Ursprung der Sprache), all seek to establish their relation to the Platonic dialogue; nay, the last-named philosopher, whose estimation of his own results is significantly presented in the sentence: "Thus language must have arisen; it cannot have arisen otherwise," finds in Plato's exposition the germs of most advanced modern thought, as of Schopenhauer, and a series of linguistic and philosophical discoveries that thenceforward became an heir-loom to all later speculative research. Now, notwithstanding the discrepancy of opinion as to the ulterior significance of the dialogue, it is a fair question, Are there not a number of points, generally adopted by all commentators, from which a consistent interpretation ought to be possible? A review of the various discussions on the Cratylus, casually undertaken by me, has convinced me that opinions are still almost hopelessly divergent on the problem proposed in the dialogue, and that yet there have appeared two discussions that merit a more thorough consideration than they have received for their bearing upon the main issue; I refer to Benfey's "Ueber die Aufgabe des Platonischen Dialogs Cratylos," and Dr. Herm. Schmidt's "Plato's Cratylus, im Zusammenhange dargestellt." The reasons for this neglect seem to me to constitute a special plea in their favor; neither of them seeks to establish a relationship between the Cratylus and the general system of Platonic plilosophy. I urge this as a point in their favor, for the much-vexed question of the Platonic philosophy, with its numerous subsidiary issues, is too apt to bias the judgment on the import of the single dialogue; and it seems to me incompatible with the nature and purposes of these dialogues, that they should all represent one and the same line of thought, uninfluenced by the exigencies of a conversational exposition. Two circumstances that have, respec-
tively, been prejudicial to these essays in the eyes of the German philological world will not influence our estimate of them. Dr. Schmidt's essay does not present a connected theory of the meaning of the Cratylus, but analytically takes up the various passages, and, disregarding the final result, discusses fairly and acutely the interpretation which is presumably the best. Whilst Schmidt then has no special theory to advance, Benfey, who does look to the claims of the work as a philosophic whole, too modestly pleads ignorance as a metaphysician, and as an exponent of Platonic phraseology. Here, then, has been found the vulnerable point by the spe-cialist-critics ; and though it must be admitted that now and then there occurs an impossible rendering of some minor passage in the Greek, his sound qualities as a linguist more than compensate for this deficiency.

To those parts of Schmidt's work that do not tend to elucidate the questions which Benfey has also treated, nothing more than a passing notice can be given; let it suffice that many a passage, involving knotty, grammatical construction, has been capitally set forth by Schmidt: On the main issues of the dialogue, Plato's opinion of the origin and formation of language, the contributions of the two writers seem to me specially valuable.

In this direction Benfey has developed in succinct argument a point that is particularly timely just now, when other German critics, like Schaarschmidt and Krohn, apply the crucial test to every one of the dialogues, and attempt to deny the Platonic origin of the majority. If Plato is not the author, he argues, it would remain for Schaarschmidt to prove that the dialogue is of much later origin, the product of a time, when the study of language was more thoroughly developed, say, the Aristotelian; and as this can never be done, the inherent excellence of the treatise as the oldest comprehensive work on the subject of linguistics remains unimpaired; the question of Plato's authorship is, under all circumstances, secondary to the internal consistency of the views expressed. Let it not be supposed that the treatment of this question of authenticity is a purely speculative one. Schaarschmidt's
criticisms on so-called inconsistencies in the Cratylus must stand or fall, in several instances, with the accuracy of translation in a given passage. Thus, when he ascribes to the author of the Cratylus the assertion that in a sentence each word embodies a judgment upon an object, and that, if a statement is false, every single word contained in it must also be false, a careful study of the previous passage would have led to a more rational conclusion. With Schaarschmidt, many others err in trying to ascertain what they call "den verhüllten Sinn"; this license once granted, the way is open to various mystifying interpretations, and the natural course of reasoning may as well be abandoned. No more striking instance of this warping of the logical faculties could be found than Steinthal's exposition of the object of this dialogue in his "Geschichte der Sprachwiss. bei den Griechen und Roemern." "The first part of the dialogue, where Plato proves that a name is the sound-complement of the fundamental idea of the name (die Ausführung der Idee des Namens im Laute), and supports the view with the greatest sincerity (mit seinem Herzblute)," all this serious exposition we are, according to Steinthal, to regard as not serious, and in the famous second or etymological part whatever is sportive, conceals under it the reverse of sportive observation, is, in fact, exceedingly sober. Now, whither will such methods of interpretation lead, if, without any clue in the writings before us, such renderings are possible? But why are such tours de force ascribed to Plato? Because, though anxious to establish a science of etymology, he has so little confidence in the correctness of his derivations that he finds it safest to ridicule them all, good, bad, and indifferent. Stranger still, however, is it that these philosophical critics have generally failed to observe carefully the exact meaning of the technical terms used ; and it is peculiarly meritorious that Benfey has estatlished these conceptions beyond a doubt.

The question whether Plato considered language to have originated and developed фúret or $\theta \dot{\varepsilon} \sigma \varepsilon$, for which latter word $\xi_{v \nu} \theta_{i j i n}$ is frequently used in the Cratylus, could not be answered satisfactorily, so long as it was not definitely under-
stood that $\xi_{\nu v} \theta_{i} \boldsymbol{\sim} \eta$ has varying technical and popular significations. Benfey has carefully discriminated its three respective significations, as (1) "an arbitrary agreement, unlimited in every respect, perfectly optional," (2) "the agreement or accord of a number of persons, bound by natural ties," and (3) "such agreement as has become conventional," and we recognize the vast difference between the $\xi_{\nu \nu} \theta_{\dot{\eta} \kappa \eta}$ or accord of society, by means of which the originally manifest meaning of a word is retained, notwithstanding the changes and modifications in etymological value, and that arbitrary $\xi_{\nu \nu} \theta i j k \eta$ which e.g. decides upon certain sound-combinations as proper designations of various numerals. Jowett recognizes the difficulty, and in his latest edition renders it often by "convention and agreement." Plato's time is preëminently the period of transition to a special philosophical terminology, and works in which this process of evolution is being perfected, require a more faithful interpretation than others with a fixed technical vocabulary. In deciding these questions, the aid of kindred sciences is often very desirable, and that were an unworthy sense of exclusiveness that would forego the information likely to be attained from such a solirce. Not unconsciously, however, is this evolution of terms brought about. Plato's tendency toward nice distinctions appears, for instance, from a survey of the verbs he employs in the sense of "to mean"; and one camnot fail to notice with what consideration for the requisite shade of meaning he employs voєiv, ì $\gamma \bar{\epsilon} \sigma \theta a \iota, ~ \lambda \epsilon ́ \gamma \epsilon \iota \nu$,

 conception of Plato's leading terms seems to me an absolute necessity, where he himself has not made matters as plain as in the instance just quoted; $\ddot{\partial \nu} \boldsymbol{\nu} a$ and $\dot{\rho} \bar{\eta} \mu a$ are the veriest by-words of the dialogue, and yet the translations given by Schleiermacher, Steinhart-Müller, and others are ambiguous, since they are confused by the later application of the word by gramıarians, with whom $\ddot{\partial \nu} \boldsymbol{\mu} a=$ noun, $\dot{\rho} \mu \mu a=$ verb. That övoua here means "word" in its wider sense, and not the noun-forms merely, is of no slight importance in the consideration of the main question, for, if we admit that the verbs
are also iripura (and this has, I believe, been unhesitatingly conceded to Benfey), we are forced to admit that pin "ara can no longer be rendered, as all translators have done, by " verb,"
 that $\dot{\rho} \mu \boldsymbol{\mu}$ must indicate an intermediate stage between the "word" and the "sentence" in a logical 'and grammatical sense; the logical sense being differentiated from the grammatical in this fashion, that the same word may in turn serve as an öropec or injua, according as it is accepted as an appellation, or conceived of as a condensation of a logical phrase. So ßoviń is the $\ddot{\partial r o \mu u}$ to fo $\lambda_{i}^{\prime \prime}$ (shot) as $\dot{\rho} \tilde{\eta} \mu \mu$ and if $\beta_{i} \lambda_{i}^{\prime}$ can be analyzed still farther, it becomes the öroua to another jin $a$. Benfey contends, and not unfairly, that the later meaning of $\dot{\rho})_{\mu a}$ ( $=$ verb) comes more naturally from this original application, that the $\dot{j} \boldsymbol{\eta} \mu a$ contains that part of the sentence which is independently intelligible. . Not only is Plato's usage of philosophical terminology often the cause of mistaken conclusions, but the instances are not infrequent where a modern investigator will be oblivious of the development and growth of certain ideas since Plato's time. How else could a distinguished scholar like Steinthal sneer at John Stuart Mill's statement that "words are important for the comprehension of things," and identify this with Cratylus's statement that " a knowledge of the names of things involves a knowledge of the things themselves," seeing that Cratylus refers to the original physical nature of words in which he presumes to find a genuine reflection of the objects they refer to, whilst Mill has in mind the logical meaning that has gradually developed out of a word. Benfey and Schmidt, whilst cognizant of such principles as have here been stated, have proceeded to the solution of other difficult questions by throwing upon the words incolved the light of comparative grammar.-A link in the argument, so urges Schaarschmidt, is wanting in the celebrated passage ( 388 B .) where, after speaking of the functions of various instruments, the shuttle, the awl, etc., Socrates recurs to the name as an instrument, and draws analogous conclusions. Let us examine for a moment the text and Jowett's translation, which is no stronger here than any of

 we do, when we weave? Do we not separate or disengage the warp from the woof?" and shortly afterward, ipyávé övть

 one another something?" Now with such a translation there is an unwarranted transition from diakivope, to $\delta \delta \delta \dot{\sigma} \sigma к о \mu \varepsilon \nu$. An analysis of the verb $\dot{d} \dot{c} \hat{c} i \sigma_{i} w$ shows, however, that in its primitive root-form $\delta u$ we have the true signification of separation which underlies even the forms daiw "to burn" and $\delta a i v \nu \mu c$ "to entertain as guest," and it is in accord with the etymological character of the whole dialogue that Socrates should thus delicately make the logical transition. On the other hand, I do not believe that it will be easy to find one word which in the translation would carry the same suggestiveness with it, and yet not transcend the scope of meaning, usually ascribed to didázetr. Of the salient points in the dialogue which, stripped of the dialectic form, betoken a substantial knowledge of certain principles, current now among students of comparative grammar, Benfey has made an interesting list, and without giving way to the enthusiasm usually connected with such observations, has also dropped various claims that had been previously made for Plato's linguistic insight. Among these prominent points I single out the following: "that word would be most correct which would contain completely its etymological elements;" again, "words are overlaid by the addition or stripping off or twisting of letters for the sake of euphony"; "onomatopoietic origin of words is to be disregarded almost completely." With the acknowledgment of Plato's grammatical insight must be coupled, however, the warning that whether in sport or ignorance, or from other motives, the illustrations of these principles are in many cases untrustworthy.

Have Benfey and Schmidt, you will probably ask, taken any new position on the central question, that of the purpose of the Cratylus? I may as well state that I look upon Benfey's judgment in this question as the most valuable recent contri-
bution to its solution. All preceding commentators, from Proclus to the moderns, have assumed as Plato's purpose the treatment of the question, "Has language, as it exists, come
 siderable ingenuity, maintained the one or other issue. What curious methods of procedure were necessary to make Plato a doctrinarian on either side of this question! That Socrates is represented as finding fault with the views of both Cratylus and Hermogenes, the typical expositors of the two opinions, was undeniable. Now in the one of these critical analyses, Socrates, so say Steinthal and others, does not mean what he says; he criticizes, and yet at heart supports a certain view. Whence this knowledge of the attitude of Socrates? The solution is simple; not from the work itself can such inconsistency be gathered, but from the desire of the modern theorist to confirm his experiences from this ancient product. of literature. Others, less metaphysical, find Plato's individual opinion in the golden mean between the opposing riews. But for this intervening opinion no statement can be found in the Cratylus. On the contrary, the very supporters of this theory confess, as Schleiermacher does, that Plato's language indicates that he camnot give satisfactory account of his opinion ; and thus, also, honest doubts as to the cogency of his own opinions seem to have presented themselves to Deuschle in his work " Die Platonische Sprachphilosophie" who confesses that to himself it is not clear, how in the concrete application фúas and $\theta \dot{\varepsilon} \sigma$ os can correspond respectively to z̈os (custom) and $\xi_{u v \theta i k n ~(a g r e e m e n t) . ~ I ~}^{\text {a }}$ cannot understand why a point of primary significance has not been urged as the final answer to these speculative fancies; that the language of Socrates, naturally interpreted, proves him to be opposed to the views of both Cratylus and Hermogenes is indisputable. Again, if Socrates would wish us to accept the reverse of what he says, the language with its facile particles would afford unmistakable proofs of such intentions; why, then, this vacillation instead of a frank confession of the situation?

Neither фúget nor $\theta \dot{\sigma} \sigma є$ can language, as it exists, be proved
correct; in other words, language, as actually used, neither conforms in its origin and growth to the natural meaning of words, nor to the agreement of mankind regarding them. An ideal language only might be constructed conformably to these principles; in it the veritable óp日órns ivoaáruv would have to be sought; whatever correctness of appellation actual language shows forth, is purely accidental, is, as it were, a reflection from the world of ideas; and yet, it is desirable to extract from language, as it exists, whatever traces of systematic development can be definitely established; hence Plato enters as far as possible into an analysis of existing language, and scrutinizes its laws. In seeking for analogies to this method of treatment, Benfey has, strange to say, overlooked that Platonic work which is most strikingly similar in conception and execution, more so than the Politeia and Politikos that he mentions. I have in mind the Nópos, a treatise far more comprehensive, it is true, than the Cratylus, but equally impelled by the desire to extract an ideal code of laws from the existing and opposite systems, prevailing in Greece. Not for a moment can Plato have assumed that such a code would take effect without extensive modifications and adaptation to the limiting circumstances of time and people, nor, I take it, was that at all his purpose, but rather to evolve from imperfect and contradictory methods something higher and consistent in itself. And such is the case with language.

Under this assumption, however, it must be evident to every student of Plato, that the relation of the second part of the dialogue, the so-called etymological part, must be established with respect to Benfey's theory. Views have diverged widely respecting its importance from Dionysius of Halicarnassus who considers it the cardinal point, as the additional superscription he gives to the dialogue: $\pi \varepsilon \rho \dot{\text { ér }} \boldsymbol{i} \nu \mu \circ \lambda o \gamma i a s$ proves, to Schleiermacher, who looks upon it as "Nebensache,' and with whom many. others fail to find any purpose in this exposition. That Steinthal alone had endeavored to fathom this curious mixture of gravity and irony has already been referred to, but his reasoning has been shown to be exceedingly faulty. According to Benfey it is not only no minor part that has
assumed in consequence of Socrates' tendency to ridicule the etymological fashions of the day undue proportions, but it is a legitimate outgrowth and further exposition of the first por-
 existing, when name and object mutually suggest and cover each other. To the practical illustration of this mutual kinship he devotes himself in the second part, but language, as it actually exists, bristles with imperfections, and hence the application of his principles does not result in a consistent series of etymological analyses. Many absurd conceptions obtrude themselves, but it is to be remembered that the sense of the ludicrous is not what he panders to; it is rather the weakness of language, unphilosophical as it needs must be, that Socrates demonstrates in this extensive series of etymologies. The sense of proportion that Plato elsewhere displays so uniformly, could never have permitted him to ignore the limits within which ridicule proves effective; so prominent a part as this second must have served some higher purpose; and if Benfey's efforts had succeeded in establishing this point merely, his treatise on the Cratylus would seem to me a noteworthy performance, worthy of general recognition and study.

## V.- On the Composition of the Cynegeticus of Xenophon.

## By T. D. SEYMOUR,

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Xenophon at Scillus, as Diogenes Laertius reports, spent his time in huntiny, entertaining his friends and writing his

 safely infer his devotion to the chase from the frequent and loving references to hunting in his larger works. From the Anabasis to the Oeconomicus no one of his writings is without some allusion to this pastime, or some illustration drawn from it.

In the first book of the Anabasis we have a digression upon the chase of the wild ass and the ostrich, and a comparison of the flesh of the ass with that of the partridge, a bird which, as we know from the ancient monuments, was often hunted and shot on the wing in Persia. Cyrus the younger is praised
 is told of his prowess in conflict with a bear. In one of the villages of Armenia the Greeks captured the Komarch's daughter, but her bridegroom was " off hunting hares"- $\lambda a \gamma$ ws
 says in praise of his home at Scillus that there are Sinja,


In the Memorabilia, Socrates is represented as often comparing and contrasting the acquisition of friends to the pursuit of game. Friends are not to be taken karà $\pi \dot{\delta} \delta u$ c like hares, nor ánúry as birds. He tells Theodota that she needs some one to act the part of a hound (ivri kuvós) for her-to scent out the rich who are susceptible to the charms of beauty and drive them into her nets. In another place he says that men of the best natural endowments need the most careful training, as the best dogs, if neglected, become the worst.

In the Hellenica Xenophon mentally smacks his lips as he tells us (iv, 1, 15) of the palace of Pharnabazus, where

Agesilaus found such good hunting in the parks and forests. An observation like this we could hardly find in Thucydides.

The writer of the Spartan State remarks the care bestowed on the hunting dogs, and the importance attached to hunting in the education of the Spartan youth.

But it is in the Cyropaedia, where the writer's fancy had free sway, that his love of the chase is most conspicuous. Cyrus as a child fawned on his grandfather like a puppy on his master. On his first great hunt he cried out like a blooded puppy on approaching the game. His first battle was on occasion of a hunt of the Assyrian prince. In the celebrated sixth chapter of the first book, Cambyses directs his son how to take advantage of the enemy by recalling the arts which he had used against the hares and larger game, describing the pursuit undoubtedly much as it was carried on in Greece, just as elsewhere in this romance many Spartan regulations are ascribed to the ideal Persians.

The Armenians were more willing to yield to Cyrus because they had hunted with him years before. Chrysantas urges the other Persians to enroll themselves for the cavalry, that they may be better able to pursue a man or a wild beast. The son of Gobryas lost his life lecause by his success in the chase he excited the jealousy of the Assyrian crown prince. Finally, as soon as Cyrus was established at Babylon, he appointed masters of the hounds and took his court out to hunt.

Such evidence of devotion to venery prepares us to accept the further statement of Diogenes that Xenophon wrote a treatise on hunting. A tract under that title is found in MSS. of Xenophon's works, and is referred to as his by authors and lexicographers since the early part of the second century of our era. It covers about thirty-three pages of Teubner's text, and is divided into thirteen chapters. The first is introductory; the next describes the nets; the next six chapters describe the dogs and methods of taking the hare; the ninth is devoted to the chase of the deer; the tenth to the wild boar; the eleventh, only a few sections, to lions, leopards, lynxes, panthers, and bears; the twelfth and
thirteenth are a defence of the chase and an attack upon sophists.

The external evidence for the Xenophonticity of this work is strong. We know that Xenophon was devoted to hunting; that he was an eminently practical man; as he wrote treatises on kindred subjects, as horsemanship, he might be expected to write on this subject, and Diogenes Laertius tells us that he did write such a treatise. Arrian of Nicomedeia, who Hourished at the begimning of the second century of our era, was not content with writing another Anabasis (of Alexander) and a second Memorabilia (of Epictetus), but reasserted his
 writing a short Cynegeticus as a continuation of the work of the son of Gryllus, on the ground that the elder had not known the Celtic dogs and the Libyan and Scythian horses.

This work of Arrian is in itself most insignificant, but its authenticity has not, to my knowledge, been questioned. It begins with an evident allusion to Xenophon's first chapter-

 Thro the whole work also, Arrian refers to the views of his master, occasionally confirming and occasionally correcting them. E.g., he says (iv, 5) that he has no objection to xaporia ö $\mu \mu a \tau a$, which Xenophon (iII, 23) considers bad. Again, Arrian does not consider a unitorm color a fault, while Xeno-


Aelian, living at the same time as Arrian, says (de nat. an.
 Cyn. iv, 9 , and elsewhere refers to this work.

Hermogenes, in the latter half of the same second century, quotes Xenophon's description of the hounds smiling and scowling and doubting. One expression is not a verhal quotation, but the rhetorician was probably quoting from memory.

Athenaeus, Libanius, Pollux, Harpocration, and Suidas also refer to the work, and have words and phrases from it.

The tract presents many peculiarities, so many indeed that there is but a poor basis for conjectural emendation. But Valckenaer is said to have been the first to suspect the author-
ship of the work. In his notes to Euripides's Hippolytus (published in 1768) he says: "Xenophon aut quicumque scripsit Cynegeticon." Afterwards he seems to have confined his suspicions to the proëmium, in which Schneider agrees with him. L. Dindorf also in the preface to the last critical edition (Oxford, 1866) says that Valckenaer was right in limiting his suspicions to the proëmiun and the epilogus, which is no better, "nam quod in hoc libello et imperativorum formae sunt Macedonicae potius quam Xenophonteae et aliae multae non Atticae, non sufficit ad eripiendum illum Xenophonti, nisi alia accesserint argumenta.

Here apparently the case stands to-day. No one claims the authenticity of the introduction, as Bernhardy says in his "Wissenschaftliche Syntax," who does not have a mean opinion of Xenophon's understanding ; and most agree with Haupt (Opp. r, 19i) in saying that the original work must have begun with the last section of the first chapter; but so far as 1 have seen, critics have, with the exception of introduction and epilogue, affirmed or denied the Xenophonticity of the treatise as a whole, and mainly on general grounds.

There seems indeed much uncertainty in discussing this question in detail. Xenophon spent much of his life out of Attica. If we adopt the view which seems to me most probable, that he was not much more than thirty years of age* when he went to join Proxenus and Cyrus, he spent most of his life in campaigns in Asia Minor and in Peloponnesus. It is not strange then that Sauppe finds in his writings three hundred and sixtcen poetic words, ninety-nine ionic, and sixty-three doric. A large number of these unattic words are in the Cynegeticus, hut from this alone no inference can be drawn, especially as some allowance may be made for the influence of the subject in introducing unusual words. So those who have rejected other opuscula of Xenophon have based their judgment on the matter or the style, not on the unXenophontic use of words. Thus Boeckh rejected the Athenian State because it must have been written during the Peloponnesian war. Later authorities are still more definite. Kirchhoff

[^1]assigns it to 424 b. c., while Moritz Schmidt and Faltin set it 430-429. Their arguments are based on the allusions to the taxes, to the comedy, and to the naval supremacy of Athens, and they are convincing.

In a work on hunting, however, we do not expect such references to public affairs, and in fact we find in our tract no hint of the kind. Nets are described as used as they were in the Middle Ages (as is shown by the allusions in old German literature), and as we find them pictured on the monuments at Koyunjik. Dogs are described as showing their proximity to the game in the same way as at the present day. Horses and bows are not used, but that seems a peculiarity of place, not of time.

The Xenophontic authorship of the Agesilaus has been disputed because of the florid style of the rhetorical encomium, and because, tho Xenophon died at an advanced age only a year or two later than the Spartan king, the work bears few marks of the old age of the writer. Some have assumed the existence of a grandson of Xenophon, of the same name, as the opponent of Deinarchus (this can hardly have been our Xenophon, for Deinarchus made his first public speech 336 B. c.), and as the author of the Agesilaus, the epilogue of the Cyropaedia, the treatise on the Revenues of Athens, and the editor of the Hellenica and the Spartan State. But there is no reason for assigning the Cynegeticus to a younger Xenophon. In fact, the only prominent stilistic peculiarity of the Agesilaus and some of the other opuscula is (as Blass says) the immoderate use of $\mu i \nu$ and $\gamma_{\varepsilon} \mu_{i}^{\prime \prime \nu}$ (see de re equest., §§ 4-16: miv thirteen times on two pages); but this particle is not once used in our treatise.

Moreover it is impossible to decide upon the authorship of this work from the statement of Diogenes Laertius that Xeno-
 $\ddot{i} \lambda \lambda \omega \nu \ddot{a} \lambda \lambda \omega \mathrm{c} \delta \dot{\delta} a \ell \rho o u v \tau \omega \nu$. There is no help to a decision from the position of the treatise in the MSS. In the Florentine MS. (53, 21), the only one which contains the Cynegeticus with other opuscula, this tract is placed first, and such was its position in the carliest edition (in Latin at Florence, 1504).

The Aldine edition (1525) was the first to place it at the end of the works, where it has since remained.

All these things make it difficult to refute the Xenophontic origin of the work, or any part of it. But on the other hand the authority of Arrian and the rest in support of its authenticity proves too much. Arrian and Libanius referred to and quoted the proëmium, the genuineness of which no one would now claim. We only infer that the work existed in its preseut form, and was accepted as Xenophon's, at the begiming of the second century after Christ.

Further, the discussion of this question on the ground of the internal evidence of style and constructions is made easier and surer by our having more than eleven hundred pages of Xenophon's writings, the authenticity of which has never been questioned. We are thus able to observe the minute details of his style as well as the general features which are set forth by Hermogenes (Spengel, Rhet. Gr. II, 418): "Eatc toívo oüros
 $\dot{\text { o }}$ Zevopǜ. His constructions are simple. He avoids all involved sentences, as he does all abstruse thought.

But we have not merely voluminous writings of Xenophon, but works of every period of his life, and on various subjects, from the Memorabilia and Anabasis, written soon after his return from service with Agesilaus in Asia Minor, to the Cyropaedia, Hellenica, and treatise on the Revenues of Athens, which occupied his later years. We are almost admitted to his study. We see how ready he is to use a second time, in almost the same language, a good thought. We see how several experiences of his own and sayings of Socrates are combined to form incidents and speeches in his romance, the Cyropaedia.

Cyrus the Great, before Babylon, is made to extricate his forces from a difficult position by the device which Agesilaus used before Mantinea (Hell. vi, $\bar{i}, 18$ ). Cyrus the elder gains the affections of his subordinates by the same attentions as Cyrus the younger. The same thoughts on the Delphic motto, [rous aavoir are found in the Memorabilia, in the dialoguc between Socrates and the beautiful Enthydemus, and in the

Cyropaedia in the conversation between Croesus and Cyrus. These books contain the same warnings to young officers that a knowledge of tactics is a small part of military science; the same remarks on the gradual change of the seasons; the same views of prayer and the gods' unwearied care for men, of ingratitude, of oi $\delta o \kappa \varepsilon i v \dot{\dot{a}} \lambda \lambda^{\prime}$ eivar ; the same thoughts on catching hares. The list might be indefinitely extended, and all these examples are in language so similar as to show the identity at a glance. It would be easy to show a similar connection between Xenophon's other works.

If then Xenophon writes a treatise on a subject to which, as was shown at the beginning of the paper, he has referred so often, and especially in the Cyropaedia, like this, one of his later works, we should expect to find many of the same thoughts, in the same style, and not infrequently in the same words. The objection that the subject excuses unusual words and style in this point of riew has less weight. 1 find but two passages (vi, 26 and vir, 11) which could be considered in any sense parallel to anything that we find in the other works of our author. These are directions to the master to feed the dogs himself whenever it is possible, and to rub down the dogs before leaving the hunting-ground. Similar advice is given in regard to horses in the treatise IIfpè im $\pi$ uniss.

As regards words, I may say that we are surprised to find here so few hunting words which had been used in the other

 the Memorabilia and Cyropaedia, are not met with in this tract.

But I will proceed to notice certain peculiarities of the Cynegeticus.

Remarkable is the frequent occurrence of asyndeta. Xenophon on occasion uses the asyndeton effectively. Addressing the soldiers after the treachery of Tissaphernes, he speaks of
 $\mu \varepsilon v_{0}$. In the Anabasis $v, 2,14$, the soldiers ran together sai
 there is somewhat less animation, as in Anab. vi, 6, 1, where


д̈бтрıa, $\mu \varepsilon \lambda i v a \varsigma, ~ \pi u ̃ \kappa a . ~ B u t ~ i n ~ a l l ~ o f ~ X e n o p h o n ' s ~ l a r g e r ~ w o r k s ~$ there are not so many instances of asyndeta as in these thirtythree pages; and no example like Cyn. v. 30 , which section is remarkable in many ways, but does not stand alone in this

 тà $\mu \grave{\nu} \nu$ òépaca $\mu a \lambda a \kappa a ́, ~ \pi \lambda a r e ́ a ~ к \tau \lambda$. Some passages may easily be emended, as $\mathrm{VI}, 8$, $\mu$ ккк $\dot{a}[\kappa \alpha i] i \psi \eta \lambda \dot{a}$. Others are in themselves unoljectionable, as perhaps ix, 1 and xi, 1 , but taken together they are extraordinarily frequent, and the first mentioned, $v, 30$, is desperate. There is no rhetorical animation to excuse it, nor a long list of qualities of one object, but the sentence is made obscure by the frequent juxtaposition, without conjunction, of two or three nouns or adjectives.

I notice next the use of prepositions. Professor Tyler says (Transactions for 1873) that thirty-six per cent. of Xenophon's verbs are compounded with prepositions. Beginning with $\mathrm{I}, 18$, the part of the work most Xenophontic in character, we find that thirty-seven per cent. of the verbs in the first nine sections are compounded with prepositions; while in chapter $v$. we find that fifty-seven of the first hundred verbs are so compounded. This can hardly be mere chance, especially as many of these compound verbs do not differ sensibly in meaning from the



This of course points clearly to a later origin for the passages in which the unusual number of compounds is found.

Further. On the twenty-seven pages which are devoted to the treatise proper, excluding the proëmium and epilogue, there are twenty-one verbs which are compounded with two or more prepositions, thirteen of the twenty-one being on the ten pages which begin with chapter iII. The last twentyseven pages of the seventh book of the Cyropaedia, which I took up at random, have but one verb so compounded. Other passages have more, but that the large number here is not due to chance or the nature of the subject, is obrious from a glance


evidently the result of the growing tendency, noticeable e.g. in New Testament Greek, to make the verb more definite by prefixing a new preposition.

Moreover, there are on these twenty-seven pages forty-three cases (thirty-one different verbs) of the repetition of the preposition with which the verb is compounded, before the
 and others. In the Memorabilia, one hundred and forty-two pages, I have noticed but thirteen examples of this repetition; and of these thirteen, two are in passages suspected by Valckenaer and Dindorf. In the three hundred and thirteen pages of the Cyropaedia I noted but fifty-five examples. At this rate the twenty-seven pages of which we are treating should have not more than five, instead of forty-three. This of course may indicate hasty preparation as well as interpolation, but we are hardly prepared to find it in Xenophon.

A few instances of irregular constructions with prepositions and verbs compounded with prepositions, deserve our notice. Chapter v, § 18 we find $\dot{\operatorname{ar}} \boldsymbol{\pi} \boldsymbol{\chi} \omega \rho \bar{\omega} \sigma \iota$ тoùs $\lambda i \imath_{o u s}$. The first example I find of an accusative after this verb is in the scholia to
 is found, and á $\pi \sigma \chi \omega \rho o \tilde{\sigma} \approx$ might easily be emended, but Dindorf has remarked on the transitive use of $\chi \omega \rho \varepsilon i \nu$ in this sense in late Greek. Perhaps this accusative ( $\mathbf{v}, 15$ ) is better explained as the limit of motion, but one would be puzzled to parallel that from Xenophon.

For áфiaravrat rò̀ $\mathfrak{j \lambda \iota o \nu , ~ I I I , ~ 3 , ~ D i n d o r f , ~ f o l l o w i n g ~ S c h a e f e r ~}$ compares Anab. it , 5, 7, a well-known sentence : tòv $\gamma$ àp $\overbrace{\varepsilon \tilde{\omega}}$
 àоӧраіך, ... a a тоотаї. But surely the Greek usage did not demand the repetition of a noun in another case because the third verb in such a series did not govern the accusative. So our construction, ròv $\dot{\eta} \boldsymbol{\eta} \lambda c o v$, is unusual in Xenophon.

The use of $\dot{a} \pi \dot{o}$ in such expressions as IV, $4, \gamma \nu \omega \rho i \zeta$ ovala à à
 Compare $\mathrm{x}, 12$, rìv кi$\imath \eta \sigma \iota \nu \dot{a} \pi \dot{o} \tau \bar{\eta} \varsigma \kappa \varepsilon \phi a \lambda \tilde{\eta} s$, instead of the simple genitive.

Peculiar also is the use of $\delta$ ó with the genitive. int, $5, \delta, a-$
 is obviously the normal construction. Compare with this iv̀, 3 ,


 it is not classic usage, and by no means parallel to $\delta_{i \alpha}$ rür


Merá is used eight times, ouv but once, except in composition. One use of $\mu \varepsilon \tau a ́$ is unquestionably not Xenophontic. xI, 3, the the wild beasts descending to the plain by night are caught $\mu \epsilon \tau \dot{a}$ ïл $\pi \omega \nu$ каї ö $\boldsymbol{\pi} \lambda \omega \nu$.

The preposition is sometimes irregularly omitted, as iv, 9 ,
 ขáтас.

In connection with these may be noticed $v, 27$, ä $\mu$ а тоúros $=$
 corrupt, as ${ }^{\xi} \xi \omega$ cannot be naturally joined with $\delta \tilde{\eta} \lambda a$. Another particle to be noticed is $\dot{o} \tau \dot{\varepsilon}$ in $\dot{\sigma} \tau \dot{\varepsilon} \mu \dot{\varepsilon} \nu$, and $\dot{o} \tau \grave{\varepsilon} \delta \dot{\delta}$. Never used in the larger works of Xenophon, it is found in this treatise four times, $\mathrm{v}, 8$ and 20 ; Ix, 8 and 20.
 Xenophon regularly uses the singular of $\mu \dot{\epsilon} \gamma \varepsilon \varepsilon_{i o s}$, and that $\mu \varepsilon \tau a \xi i$ can hardly be found in Xenophon used to denote what is between two qualities, as here, "long, short, between these."
 near, between these."

Another peculiarity is the omission of the reflexive pronoun, especially with $\dot{\rho}$ erteiv and its compounds. $\nabla, 4$, $\chi$ aipove $\varepsilon \varsigma \gamma \dot{\alpha} \rho$


 ix, 20, 户́єrтō̃б. Where Theognis speaks of poverty he says (175):

Two similar examples of the use of $\dot{\rho} \pi \pi \tau \bar{\omega}$ are found in Euripides, and one in Menander, but I have met with none in Xenophon's unquestioned works, nor in other classic prose.

We find in this treatise, moreover, an unusual number of periphrastic expressions, specially with $\check{\text { écul }} \mu \mu \eta \delta \dot{\delta} \nu \dot{\omega} \nu \dot{\eta} \gamma \bar{\eta}$
 10), but $\mathrm{x}, 23$, $\dot{\omega} \nu \dot{\mathrm{a}} \nu \dot{\omega} \pi c\rangle \not{a} \mu \neq \omega$ as equal to "both the parents" of the wild beast, is not so natural. Many periphrases with éxelv are found in all of Xenophon's works. They are not uncommon also in Isocrates, as in his Panegyricus, § 67, we
 mical argument for the construction is quite lacking, however,






 $\sigma \tau 0 \lambda \dot{\eta} \nu$, is a clumsiness which we can scarcely impute to Xenophon, especially as the same short sentence has another case of that participle. I can give parallel examples only from later Greek, as Pausanias v. 18, ávìp $\tau \bar{\eta} \mu \dot{e} \nu \quad \delta_{\varepsilon} \xi_{i} \tilde{q}$ кúdıка $\tau \bar{\eta} \delta_{\dot{\varepsilon}}$


Another peculiarity of this opusculum in its present form is the use of the infinitive. Perhaps civa in $\mathrm{Ix}, 1, \dot{\varepsilon} \pi i \quad \delta \bar{\varepsilon}$ roùs
 ple. Compare кєкт $\bar{\eta} \sigma \vartheta a \iota, \mathbf{x}, 1$. It is evident that these are
 infinitive is in apposition with the $\lambda a \mu \beta a \operatorname{var}$ contained in $\lambda_{\eta \pi r i ́ o \nu}$ of the preceding clause. At the beginning of chapters 1 x and x the subject is changed, and after the break it is not a mere matter of course to carry on the force of the $\delta \boldsymbol{i} i$ in viil, 8. In $\mathrm{v}, 15$ also we have this infinitive $\lambda a \mu \beta{ }^{2} v \varepsilon \iota v$ without any word on which to depend. No xpí or $\delta \varepsilon i$ has been used in the whole chapter; and that this is not the imperative use of the infinitive is shown by the accusative of the participle íáyovra, which must agree with the subject of $\lambda a \mu \beta a ́ v \varepsilon ı . ~$ This example in $v, 15$ is the first in the work. Before this the imperative and the infinitive with xpil are used. Thus in chapter iv the imperative is used nine times; xpin twice;
 is $\dot{\pi} \pi \dot{\chi} \chi \in \sigma \vartheta a \iota, \mathrm{v}, 34$, which, if it were alone, might be taken as used for the imperative. vi, 3 , ä $\gamma \epsilon \iota$ may be taken to depend on the x $\quad$ й in § 2. So also in § 4. But vi, 11, we have tiò $\delta_{\dot{\varepsilon}}$
 constant thenceforward to the end of chapter x . Chapter xI is brief, and xir and xiII do not need it or have it. This infinitive must depend on the idea of advice stated, II, 2, ö $\sigma a$

 than seven pages after this that the first infinitive is found which depends on this introductory sentence.

If some of these peculiarities seem slight, and the argument to be founded on them weak, I would call attention to the cumulative force when several of these unusual constructions are found in one passage.

For myself, then, I am convinced that Xenophon did not write this treatise in the form in which we have it. A comparison, however, of the passages in which the most marked peculiarities to which I have referred occur, shows that most of the solecisms and difficulties are contained in certain sections and chapters which may be omitted without interfering with the symmetry of the work; and further, such omission will remove certain difficulties in what remains.

The results of my investigation are as follows:
Xenophon began with $\mathrm{I}, 18$. The long list of heroes who excelled in the chase, found in the proëmium, is not so much in the style of Xenophon as of the later rhetoricians; and, as Mure remarks, it is absurd to preface with so much pomp a tract mainly devoted in its present form to the pursuit of hares, which were not the game of Hercules and Theseus;
 style in general of these first seventeen sections is not that of the Memorabilia, nor of the Cyropaedia. To begin with ézi $\mu \grave{\varepsilon} \nu \operatorname{lon}^{\boldsymbol{i} \nu}(\mathrm{I}, 18)$ seems at first abrupt, but is not unlike the begimning of the Revenues of Athens, írio $\mu$ èr тойто ктג.; nor


Moreover, according to Schneider the Breslau manuscript
 century the editions began the second chapter with what is now § 18 of the first chapter.

To the close of ir, 8, Xenophon writes of nets and their props. Then follows a long interpolation, out of connection here and containing many deviations from Xenophon's style, to vi, 7, where the dropped thread is again taken up and directions given for fixing the props for the nets. In these interpolated chapters are found the most unusual cases of asyndeta, the most remarkable periphrases (as vi, 5), and the greatest license in the use of prepositions.

From vi, 7 , our author tells how the hunt is to be begun. The infinitive in that section can now, assuming this long interpolation, be easily made to depend on ö́a dè кai oía $\delta_{\varepsilon i} \ldots$. $\phi p a ́ \sigma \omega$ of $\mathrm{II}, 2$. After vi, 16 , there is an interpolation of six sections to the beginning of $\S 23$ which resumes the narrative, and the close of chapter vi brings the hunter to his home after the chase of the hare.

Chapter vir is devoted to the care of dogs and their breeding.
 I consider interpolations.

Chapter viil treats of tracking hares on the snow. Part of


Chapter Ix, on hunting deer and fawns, has interpolated §§ 8-10, 13-16, 19-20. In $\S \S 8$ and 20 we find the use of $\dot{o}+\dot{\varepsilon} \delta \dot{\varepsilon}$, which is unknown to the other works of Xenophon, and the reflexive use of $\dot{\rho} \quad \pi \tau \varepsilon i v$.

In chapter $x$, on the wild boar, I hold $\S \$ 4-18$, and $\chi \rho \eta \sigma \tau^{\prime} \epsilon \nu$ . ... $\pi$ ạ́ $\sigma$ xo in § 22 , to be interpolated.

Chapter xi treats of hunting panthers, lynxes, etc., which were not at all in the line of Xenophon, who always writes from his own experiences. Moreover, the second paragraph speaks of poisoning water and food for the wild beasts, a procedure far from the sportsmanlike spirit of our author. In the third section, also, is the late use of $\mu \varepsilon \tau$ á, of which I have previously spoken ; and it is worth mentioning, perhaps, that $\mu \varepsilon \tau \dot{a}$ is found in the whole treatise eight times, but seven of
the eight times in passages rejected by me on other grounds. $\sigma \dot{v} \nu$ is used but once ( $\mathrm{VI}, 16$, $\sigma \grave{\nu}$ тais oipaī) out of composition, and that in a passage which I hold to belong to the original work. It is known that Xenophon used $\mu$ erá less, and oúv more than his contemporaries and later writers.

Chapter xII may well be genuine as far as § 17 , where the original ends, ending as it began with the praise of Hadicia. The eighteenth section contains a direct reference to the proëmium than which, as Dindorf says, the epilogus is no better.

This scheme attributes to Xenophon less than half of the treatise before us; but it removes or explains a much larger proportion of the difficulties and solecisms, while what is left is in a condition to receive emendations which the wretched state of the MSS. renders necessary.

This theory relieves Xenophon of the responsibility for the following statements : that hares do not see well because they rush past everything with such rapidity that their eyes have no practice in examining objects carefully, and because their vision is injured by so much sleep ( $v, 26,27$ ); that their tails are too short to be of much use to them as rudders in running, but they make use of their ears, dropping them to the ground and bracing themselves upon them when they turn quickly to avoid the hounds ( $\mathrm{v}, 32$ ) ; that the breath of the wild boar is so hot as to scorch the hair of the dogs which approach him; and that a hair laid upon his tusk immediately after his death will shrivel up ( $x, 17$ ). These statements, which savor of Aelian and the later writers, are all in rejected passages. My theory also relieves Xenophon of the responsibility for a few stupid puns and unnatural rhetorical clauses.


 used, obviously introduced solely for the sake of the Paronomasia. Compare vi, 20, where the hunter тö̈voца $\mu \varepsilon \dot{\tau} \alpha \beta \dot{a} \lambda \lambda о \nu \tau а$ (literally changing the name, where he means calling the name of each in succession ) inciaric rigc кuroc, is to shout, making the

it would be to give a little call, when the hounds are supposed to be at a distance, we are not informed. But it would take us too long to consider every example of slovenliness or stupidity of thought and construction in the work as we have it. The same portions of the work, then, which contain statements and thoughts which we are not ready to ascribe to Xenophon, also contain the unusual constructions to which I have called attention. The theory propounded in this paper claims attention on the ground that it so largely removes what is unlike to or unworthy of Xenophon, and still leaves a framework far more symmetrical than the traditional form, with a beginning, a well-arranged middle, and an end.

From the external evidence in its favor, as well as from certain internal marks of style, I am inclined to believe that the Cynegeticus is from the hand of Xenophon. If that be still disputed, I claim that the evidence here brought forward for an earlier and a later hand in its composition is still unshaken.

The interpolator generally contented himself with inserting chapters and paragraphs. Only occasionally are we obliged to cut out from a sentence which seems Xenophontic a word or two which, as is evident from other passages, proceeded from the second hand. Only once is it necessary to the construction of the sentence to supply anything from an interpolated section.
 dropped by the diasceuast when he wrote $\S \S 5$ and 6.

Who this interpolator was, it is perhaps idle now to inquire. We only know that he must have lived not later than the begimning of our era; for Arrian early in the second century after Christ seems to have accepted this tract in its present form as the work of Xenophon.

## VI.-Elision, especially in Greek.

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I propose, in this paper, to discuss the nature of elision in Greek; and, in so doing, I shall first examine the views of others, and then present my own.

Corssen, Westphal, Heinrich Ahrens, and many others, hold that elided vowels were not entirely suppressed, but merely diminished, and one argument they employ is that the
 expulsion, but implies that the vowels were united in a rapid pronunciation, and did not suffer what was called érevicucs, or expulsion. To this I reply: 1. That the ancient writers are not always to be interpreted literally; for, as one vowel, or rather one syllable, appeared to result from a combination of two, and the elided vowels sometimes were slightly sounded (a point to be explained hereafter), there was no reason why they should not, in a loose way, designate the process by the word ouvadoupi, or aíripiacs, which does not necessarily mean anything more than "conjunction"; and besides, already at a tolerably early day they employed the term ërvictus to denote elision. Even modern writers are not exempt from much more inaccurate applications of terms than even $\sigma v{ }^{\prime}{ }^{\prime} \lambda_{0 \prime \prime}{ }^{n}$ in the sense of elision, to say nothing of the other words. As, for instance, the German grammarians call final $m$ and $n$ in French a "Nachklang," or "after-sound," as if they were pronounced after the accompanying vowel, while every one knows that they merely give the entire vowel a nasal tone. Many illustrations of this could be cited, but this one must suffice.
2. Moreover, when the ancient grammarians speak of the suppression of hiatus, they frequently fail to distinguish between the various processes, or else between the words that denote them; and in the very passage cited by Corssen,

 тò öroнa. тойroнa. If the metrician had not added his example, the inforence would have been that ouva入ot申i was always the combination of two vowels into one, whilst the example he gave shows that he had only crasis in mind when he cast his definition; and yet Corssen wishes to apply the definition to elision.

But as it is the custom of many now-a-days to dismiss the question of elision with the statement that Ahrens has shown it to have been only a partial expulsion, and as Ahrens has given about all the arguments for that view, I proceed to take up his arguments and examine them one by one. In the first place, Ahrens says that if elision is total, the letter immediately preceding the elided vowel closes the word as thus modified, and he calls attention to the fact that we then find not a few unpronounceable combinations, as $\tilde{\varepsilon}^{\prime} \sigma \lambda^{\prime}, \sigma \varepsilon^{\prime} \mu \nu^{\prime}$, etc., and others which the Greeks would not tolerate, as vont', $\pi \varepsilon \approx \vartheta^{\prime}$, etc. But if, as he asserts, elision does combine two vowels into one, then the two words become one; and why then may we not be allowed to combine the words after expelling one of the vowels? And this is exactly what happens, except in some instances about which I shall presently speak. Secondly, Ahrens says that $\ddot{a} \lambda \gamma \varepsilon^{\prime} \dot{\varepsilon} \dot{\varepsilon} \eta \eta \kappa \varepsilon \nu, \dot{a} \nu \tau i^{\prime} \dot{\varepsilon} \mu \varepsilon \bar{\epsilon} \sigma$, and similar combinations, would still have a "hiatus offensionem, quam non inesse constat." How does he know? The Greeks did not suppress two syllables, by elision, because this would have maimed the word too severely, so there was nothing left them but to tolerate the new hiatus, as custom required them in poetry to remove the original hiatus. And besides, does Ahrens's diminution-theory remove his own difficulty? It seems to
 (pronouncing the final a of ${ }^{1} \lambda \gamma \varepsilon a$, yet making it of inappreciable length)? And in à $\nu \tau i i^{i} \dot{\epsilon} \epsilon \overline{i o}$ there is surely a less offensive hiatus than in $\dot{a} \nu \tau i^{a} \dot{i} \mu \varepsilon i ̃$. Moreover, it is a wellknown fact that languages, in removing one hiatus, sometimes create another no less offensive; as, in Sanskrit vanê âsît is resolved into vanai âsît, and the i being elided, we have vana âsît, where the hiatus appears even worse than at first (Bopp,

Crit. Skt. Gram. § 38). But after all, I am willing to admit that there is nothing offensive in the remaining condition of things when elision has been made; for the two words are pronounced continuously, and the vocal muscles do not have to arrest themselves and then renew the exertion as they do in case of real hiatus.

Thirdly, Ahrens draws his conclusion from the scholia on Eurip. Or. 279 :

The scholiasts on this passage (and also on Aristoph. Frogs, 304 - not cited by Ahrens) say that Hegelochus, getting out of breath, passed rapidly over the elision, and the spectators thought he said $\gamma a \lambda \tilde{\eta} \nu \dot{\partial} \rho \tilde{\omega}$, which circumstance gave Aristophanes (Frogs, 304), Strattis (Anthroporrhaestes), Sannyrion (Danaë), and others an opportunity to amuse their audience at the expense of Euripides and his great actor. But, as I shall show hereafter, when occasion demanded, the Greeks did sometimes slightly sound elided vowels, and one of the most natural places to do this is where ambiguity might result from total elision; and the statements of the scholiasts show that what Hegelochus did was nothing unusual under ordinary circumstances; and as to his breath failing him, that seems to be one of the many inveutions of the very fertile minds of the scholiasts. If he did not have enough breath to utter a "diminished" vowel, how could he add i $\rho \tilde{\omega}$ so as to be heard by thirty thousand people? And if he stopped to take breath, then he did not pass rapidly over the synaloephe. The fact may be that, getting out of breath he lowered his voice, thus making $\gamma a \lambda \bar{\eta} \nu$ out of $\gamma a \lambda i \nu$, and then took a breath and added $\dot{\rho} \rho \bar{\omega}$, which would complete the transformation, since the elision should not be complete where any pause is made. This, however, is a mere conjecture, and is not necessary to the explanation of the inatter. The mistake on the part of the spectators was anyhow quite natural, because ó $\rho a ̄ v \gamma a \lambda \eta \nu a ́ ~ w a s$ a forced and umatural expression.

Fourthly, Ahrens observes that ouvaiocííl does not denote expulsion, and that elision takes place before a pause, and at
the end of a verse, and even between two speakers. I have already spoken of the meaning of ouradou申i; but here I shall discuss the subject more at length. That the word $\tilde{z}_{6}$ was employed to designate elision is well known, and the only question is how early it was so used. I shall not attempt, however, to settle this question, for it is clear that it was so used sufficiently early to show that whatever it denoted had an existence in classic times. Draco enumerates seven kinds of synaloephe, among which he places $\mathrm{z} \cdot: \neq \lambda \downarrow \psi_{1}$, which he defines



 careless the ancient grammarians could be in their statements; and, in my opinion, they had crasis also in mind, or even exclusively in inind, when they appear to apply the word ovradoupi, to elision, except that when employing it as a generic term, they sometines apply it specifically to elision, just as one may call a temporal sentence a relative sentence. Here







 Aisooriq. Here it is evident that the grammarian by ens $}$

 elided, we have ка' $\dot{\varepsilon} \gamma \dot{\omega}$ which then suffers крãocs; and no one will deny that this c was totally suppressed. Hephaestion therefore rightly distinguishes between oureкфír $\eta \sigma \iota$, , by which $\pi \lambda^{\prime} \boldsymbol{e}^{\prime \prime}$ (Il. A. 183) is reduced to one syllable, and synaloephe (generic, including elision), by which a vowel is rejected, as
 these two processes would have been the same, if clision had only been a diminution. And the scholiast on this passage





§ 2. So far my arguments have been negative. I shall now present my own views, and support them with a brief discussion of the evidence in their favor.

In prose, as is well known, the Greeks tolerated hiatus, except that some rhetoricians tried to banish it in artificial compositions, an illustration of which we have in the orations of Isocrates. But then, if they chose, they could elide. Hence we draw the important conclusion that the Greeks could elide or not elide, as suited their convenience. One might assume this as a matter of course, but Cicero, while testifying to this peculiarity of Greek, denies that the same privilege exists in Latin. He says (Or. 44, 152): "Sed Graeci viderint: nobis ne si cupiamus quidem distrahere voces conceditur," etc. But in poetry the Greeks aroided hiatus for the most part, and in tragic trimeters banished it entirely, except (apparently) after $\tau i$ i as Aesch. Sup. 306, ri
 combinations. But frequently it was difficult to prevent a word which ended with a vowel from preceding one beginning with a vowel, even when there was a pause between them. In that case they did not totally expel the vowel, nor even necessarily reduce it to inappreciable quantity. Whenever this happened the clision was indicated as if total, while in recitation the elided vowel was either pronounced in full or merely diminished, just as the sense required or permitted. Another instance of partial, or apparent clision is where an emphatic monosyllable apparently loses its vowel, as Eurir.
 Also where the sense would be obscured, as Herc. Fur. 972:
 Eurip. Ion 3, etc., etc. And thus it came about that if for any reason they desired it, they felt themselves at liberty merely to diminish a vowel, even when there was nothing but metrical considerations to prevent its total expulsion. This fact is of special importance in determining certain effects of elision
in the construction of verses-a subject on which I propose to present a paper at some future time.

But that vowels could be, and actually were, entirely expelled by elision, is shown by the following considerations:

1. When the second word begins with an aspirated vowel, then the aspirate affects the final consonant of the first word, if it can be aspirated without changing its character, as $\nu \nu^{\prime} \mathbf{x}^{\prime}$
 elided vowel was pronounced ever so little, for then it would have separated the consonant from the aspirate. This, it is true, does not happen in Herodotus; but then in H. it docs not happen in compound words, like $\dot{a} \pi i \eta \mu$, where all admit total elision.
2. If the ultima has the accent, it goes back to the next syllable when elision takes place, and enclitics retain their accent when elision takes place before them. This would hardly have been the case if the elided syllable had only been diminished, for the Greek accent was merely an elevation of the voice, and not stress. (This recession of the accent from an elided ultima is found in some of the examples used by Ahrens to prove that the vowel was not entirely suppressed, as ${ }_{\varepsilon} \sigma \ni \lambda^{\prime}$ ', $\sigma \varepsilon \mu \nu^{\prime}$ ') We have in the Greek language itself an instance of the accent remaining on a merely diminished vowel (or at least not seeking another syllable), and that is
 cules such accents, calling them "accentus á $\varepsilon \rho \beta$ ßaroürтas," but if he had put on his phrontistic spectacles he would have detected a крє $\mu$ áspa on which they ride; in other words, the omission of the vowel in this case only indicated its diminution to inappreciable quantity, while the accent still remained on it, just as in Sanskrit we find an accent (the svarita) partly on $v$ and $j$, although these not ouly fail to make syllables themselves, but even do not lengthen a short syllable, as in sìar, kìa, nadjas (Bopp, Crit. Gram. §30, 1); and similarly even in Greek where an accented vowel suffers synizesis, as in Aivéas (Rhes. 85), ápıaté $\omega$ (Alcest. 921), $\tau \in \nu \bar{\epsilon} \omega \nu$ (Androm.
 Od. Airuntious, with hundreds of instances everywhere. In
all these the accented vowels become virtual consonants. This view is further sustained by the fact that when the first syllable of a word is entirely lost, the accent on it is removed
 no vowel precedes. Corssen, indeed, denies that such forms have lost the augment, but G. Curtius more successfully maintains that they have. But as it is important to establish the position that in aphaeresis the vowel was thus diminished and yet.retained the accent, I must not leave unnoticed the fact that Thiersch, Buttmann, and others deny the existence of aphaeresis, and assert that all the apparent instances of it really belong to crasis. This view, though; cannot stand in the face of the following facts:

First, such combinations as סúrapaı ' $\gamma \dot{\omega}$, which are frequently found in mss., and are not wanting in inscriptions, would have to be written סovarà $\boldsymbol{\omega}$, with omission of 1 and contraction of a with $\varepsilon$. Secondly, when the word suffering aphaeresis begins with an aspirated vowel, the consonant beginning the syllable preceding would become exposed to

 examples as aüt ' 'tépa (Aristoph. Lys. 736) for aürך étípa, which, by crasis, would become aìvirípa (aỉaditipa?). I am willing, indeed, to concede that some instances of aphaeresis, as found in the texts, are to be written otherwise, as $\chi^{\prime \prime}{ }^{\prime} \gamma \chi^{\prime \prime \prime}$ va (Lys. 48), which ought to be written $\chi^{i} \gamma \gamma^{\text {ovaa }}$, for the article loves crasis, and I suspect that the usual way of writing these words is due to the fact that the double crasis seemed rather bold, and obscured the words. Felton's a ' $\lambda a \beta \xi$, (Clouds 1268) with long $"$ is certainly wrong. Thirdly, aphaeresis sometimes takes place after a long pause where crasis is


 regarded as taking place at the beginning of a verse, but a careful examination of all the Greek dramatic poetry convinces me that this may have been a mere omission of the augment of verbs (which frequently occurs in piffece cizyedesai), although
in the great majority of cases the preceding rerse ends with a vowel. This vowel is sometimes short, as in Oed. Colon. 1605-6, and sometimes we find a consonant, as Oed. Rex 1248-49. I am not so sure, however, that aphaeresis may not take place after a short vowel ; and I shall presently have occasion to cite a case of similar aphaeresis in Latin. But to return:
3. Diphthongs are frequently elided, and especially in the verbal ending rat. Now can a whole diphthong be reduced to inappreciable quantity? It is difficult to reduce a diphthong even to a short syllable ; nor is there any reason why the first vowel should be diminished unless the second is entirely removed, so that those who assert that elision is mere diminution are compelled to affirm that cis dropped entirely and a diminished; but if 1 in a diphthong can be dropped entirely, why cannot any elidable vowel be thus dropped, as a in äd $\gamma \in a$
 sort of consonant or semi-vowel, like $y$; and I believe that this is what actually happens when a diphthong is shortened,
 and itsv $\dot{\varepsilon} \mu \mathrm{z} i \mathrm{a}$, where $v=\mathrm{w}$, since $v$ is never elided, the wellknown exception in a quoted oracle in Herodotus being only apparent. But if this is what becomes of the second vowel in case of elision of a diphthong, there is no reason at all for the shortening of the first vowel, as there is no longer hiatus.


 and in fact the first, too, was elided, unless for some special reason it was desirable to make the first audible.
4. Epicharmus, as quoted by Athenaeus (viII, p. 338, d; see Ahrens, de Crasi et Aphacr. p. ${ }^{2}$ ) plays upon $\boldsymbol{\gamma}^{\prime}$ ' f paros and riparos, from which it appears that the $\varepsilon$ in $\gamma \varepsilon$ was suppressed. Aristophanes (Clouds 1273) appears also to play upon in ävou and aíò yoù. Further, Dion. Hal. (De Comp. Verb. c. 11) calls ктитєit' (for ктитвitя) "tuo syllables." I am not disposed to make much of this, as an inappreciable vowel might be omitted in counting syllables metrically.
 $\gamma^{\varepsilon} \dot{a} \rho, \gamma^{\varepsilon} \boldsymbol{o}^{\tau} v$. . etc., show that the vowel was entirely suppressed; and after they had been a long time in use, the combinations began to be regarded as single words. This might happen, it is true, merely from long juxtaposition, as we have in Latin, (where elision does not appear to have been total) tantöpere, magnŏpere, for tantō ŏpere, magnō ŏpere. But this is much rarer than in Greek, and we have in Latin two vowels united into a diphthong, as in neuter, neutiquam, deinde, etc.
6. Finally, if elision had been only a diminution of the vowel, as in Latin, it would not have been subject to so strict limitations, but would have been as universal as it was in Latin. But, as is well known, elision in Greek was strictly forbidden under certain circumstances. For instance, $a$, $t$, and $o$ in monosyllables were not elided (except $a$ in $\sigma$ á); and $v$ was never elided at all. The seeming exception in Herodotus (viir, 220) à $\sigma$ ' ' $\ell \rho \kappa v \delta \dot{\delta}_{s}$ should most probably be äбтv 'рккиঠ́¢я (a sort of aphaeresis after a short vowel), or perhaps the oracular poet or priest was at his wit's end for a verse, and admitted diminution where expulsion was not tolerated. When $v$ closes a diphthong, it does, indeed, seem to be clided; but in that case, as I have already said, it was probably pronounced somewhat like $w$, just as $\hat{o}$ in Sanskrit before a vowel becomes av, where $v$ was, no doubt, pronounced like $w$. Further, örc and $\pi \varepsilon \rho i$ do not suffer elision, possibly because they would then sound like öre (with its $\varepsilon$ elided) and $\pi \varepsilon \rho$, which would not be the case if their vowels were sounded ever so little. Some words, however, with long vowels, did suffer a partial elision ; but this is one of those exceptions that prove a rule; for if all elisions were only partial, then $\mu i)$ oi (as one syllable) should be written $\mu^{\prime}$ oi, and would be an ordinary case of elision. Nor is it crasis, for then it would be $\mu \dot{\omega}$ (cf. $\mu \tilde{\omega} \tilde{v}^{\prime}$ for $\mu \bar{i}$ ouvir ); and moreover the combination may occur when a slight pause intervenes, as Oed. Tyr. 944:
 would utterly obscure the sense, as 'Trach. 85 : invik' in $\sigma \varepsilon \sigma \dot{\omega} \sigma$ -
 of $\mu i \bar{\prime}$ iv into $\mu \dot{\omega}$ would itself be rather obscure; but if so in
writing, then certainly also in speaking; and that contractions of the sort, when made in speaking, were also indicated in writing, is shown by xoì for кaì ó $\dot{\varepsilon} \nu$, Eurip. Heracl. 173 ;
 кaì ai, Lysist. 1105.' We have, however, an instance of crasis not indicated in writing, in Eurip. Orest. 599: $\varepsilon i \mu \eta \dot{\eta} \dot{o}$ кєдєíans $\dot{p} \dot{\sigma} \varepsilon \tau a i \mu \varepsilon \mu \eta \geqslant a v \varepsilon i v$, unless with Witzschel and others we omit $\dot{\dot{o}}$, or admit synizesis of a long vowel with a short one, resulting in a long syllable.

Further instances of non-elidable vowels are found in the genitive ending -oco, ao, and to a great extent in the dative ending $\iota$; and third singular endings in $\varepsilon$ are not elided before ằ, unless we admit $\varepsilon^{i} \chi \chi$ 'ä̀ $\mu \dot{\varepsilon} \tau \rho o \nu$ (Ion 354); for $\sigma u \nu \dot{\epsilon} \sigma \chi^{\prime}$ $a_{a} \nu$ (Alcest. 901) is an impossible conjecture, and $\dot{\ell} \lambda a ́ v \vartheta a \nu{ }^{\prime} \not a^{2} \nu$ (Soph. Elect. 914), though desirable as to the sense, is not the mss. reading. Other instances of forbidden elision might be cited. All this proves conclusively that elision was recognized as having power to remove a vowel entirely; for, otherwise, there was no reason why elision might not have been as general as it was in Latin, where the restrictions, as far as they exist, merely have reference to too great a mutilation of the word, and were a refinement of artificial writers. The vowels which could not be elided entirely in Greek, were, for the most part, not even allowed to suffer diminution to inappreciable quantity (Latin elision), because this was a modified form of ordinary elision, and was written as elision, i. e. the vowel was omitted in writing, except in those few cases where the elision was never total, as $\mu \dot{\eta}$ oi. An investigation of these latter cases would lead to a discussion of synizesis and synaeresis, which is foreign to the object of this paper.
§ 3. These arguments seem to prove that vowels could be and frequently were entirely expelled by elision. It now remains to be shown that not unfrequently they were, for special reasons, only partially elided; and indeed they sometimes had nearly or quite their full time, although they counted for nothing in the structure of the verse.

In the first place, elision takes place before a strong punc-
 Androm. 459:

Soph. Elect. 662 :

Cf. also 671, 1041, 1112, 1470 , etc.
I am not disposed to attach much importance to elision at the end of a verse, as in Birds 1716 :
and Oed. Col. 1164 :


for I doubt whether this ever happens unless the sense requires the verses to be closely connected together; and that being the case, the two verses can be read continuously as one long verse, and the vowel can be dropped.

Again, elision takes place between tuo speakers, as Birds 846, 1015 :

ETE

So Soph. Elect. 1431 :

$$
\begin{aligned}
& \text { OP. .... . . . . . . . . . عioopãte } \pi о \bar{v}
\end{aligned}
$$

Ibid. 1502 :

Elisions of the sort just now mentioned-those at a full stop not between two speakers-are comparatively rare; for there was something harsh about them; and although we may use the interrogation point or the period, still the pause is really short in most cases. That they were in some measure unpleasant is shown by the fact that Isocrates, who did not tolerate hiatus in his orations, also banishes this sort of elision-a thing which he could do more effectually than the poets, who were somewhat trammeled in the arrangement of their words by
metrical considerations. But elision between two speakers does not appear to have been avoided at all; for, in fact, it was not a real elision. The second actor began to speak just as the first one struck his last syllable. To this it may be objected that the same thing could have happened just as well, if the first speaker closed with a consonant ; and this is .certainly true. But there would have been nothing to indicate that it was to be so recited, and, as I have already said, verses were so composed that, when written, they looked perfect, which could not be done if the first speaker's final syllable had been disregarded when it was closed by a consonant. We find something analogous to this effort to make the verse appear perfect in the classic French drama, where, without affecting its pronunciation, the mere spelling of a word is sometimes altered, so as to make it look like the word with which it rhymes, as Le Cid, v. 771, where voi (for $v o i s)$ rhymes with toi, and 851 , where voi rhymes with moi. Somewhat analagous is also the method of indicating a pause at the end of a piece of music when the last measure is incomplete.

In view of all this it is safe to assert that elision between two speakers was relatively more frequent than at a full stop in a speech of one person. (I say relatively, because this sort of elision only has a chance to occur when a verse is divided between two persons.) In fact it was not avoided at all, but sometimes appears even to have been sought, as it gave one actor an opportunity to fall in before the other had entirely finished his last word-a thing to be desired when the dialogue is animated, or for any reason rapid. If any one doubts this let him examine such passages as Eurip. Orest. 1598-1612, where in fifteen lines this elision occurs seven times.

These arguments prove conclusively that elision was sometimes only partial, and sometimes even only apparent, the vowel omitted in writing being pronounced in full, but counting for nothing in the structure of the verse.
§ 4. Although it was more especially designed to investigate Greek elision in this paper, it will not be irrelevant to append a few remarks on elision in Latin. It is conceded by
nearly all that elision in this language was only partial. Hence it was subject to less strict laws than in Greek, and hiatus is more rarely admitted, it being easier to avoid it. Indeed Cicero (Or. 44, 152), as quoted before, says that the Romans were not allowed to neglect elision even if they desired to ; and then finds fault with poets for doing it. But this very fact that poets did sometimes allow it, shows that the law Cicero announces was not without exception, and of course it was no physical necessity, but merely convenience and usage. Yet Cicero's remark shows that in prose it was practically universal. Such words as neuter, deinde, etc., show that elision was not total, at least, in some cases where there was nothing to prevent its being total if it ever was; and those cases where the vowel was entirely lost (tantopere, magnopere, animadvertere, etc.) are mere results of long usage, the vowel having been slightly pronounced at first, just as we say "extrordinary" instead of "extra-ordinary." In tantopere and magnopere this process was hastened by the identity of the two vowels brought in contact, "tanto-opere," as elision and contraction are more necessary under these circumstances. This is illustrated by the Greek second declension in the genitive plural, which contracted before the existence of the law that a long ultima should prevent the accent from falling on the antepenult; while the same contraction did not happen in the first declension until after this period, the vowels not being so similar; thus $\lambda$ órow ${ }^{\text {b }}$ became $\lambda$ dór $^{\prime} \nu$, while $\mu$ óvaaw $^{\prime}$ remained. Afterwards the long ultima removed the accent, and then they said $\lambda o \gamma^{\gamma} \omega \nu$, $\mu$ ovóíur (an extant form); and finally $\mu o v \sigma a ́ \omega \nu$ contracted into $\mu$ оvoテ̈v. Similarly nıhll became nil, and mih1, mi; but we must not carry the illustrations too far; for phenomena from within words, simple or genuinely compound, will not always hold for separate words; and tantopere and magnopere are not to be regarded as genuine compounds, such as cogere, degere, in which crasis seems to have been employed. (Corssen, by the way, Ausspr. Voc. Beton. II, 889, writes "tant $\delta$ pere," or possibly his printer did it for him.) And so in mihi, nihil, the process was different from that in tanto opere, but they
illustrate the aversion of the vocal organs to a consecutive repetition of a vowel. But of genuine crasis between two words, not combined into a genuine compound, I know of no example in Latin. In fact, elision being only partial, and so being allowable under almost all circumstances, there was no need of crasis; and the nearest approach we have to it is what we find in degere, cogere (just mentioned), further examples of which are deesse (two syllables), deerrare (three syllables). in which Velius Longus (p. 2227) says the $e$ or ee was long (by nature), which of course we should expect, as the preposition sometimes formed a syllable to itself. Contractions such as amatast, integratiost, are not crasis, but a species of aphaeresis, as is shown by Tibullus ( $\mathrm{I}, 9,53$, and 77):

> at te qui puerum donis corrūmpèrě's aususblanditiasne meas aliis tu vêndĕreč's ausus.

The later Roman grammarians speak of elision as if it were a total expulsion of the vowel; but their authority is not of any importance. The name "elision," it is true, strictly interpreted, would imply total remoral; but the Roman grammarians employed terminology that was adapted to Greek, and sometimes even mistranslated Greek terms. So we now speak, and I have just been speaking of "elision" in Latin; and while doing so, I have been trying to show that it is not elision, but diminution.

But there are good reasons for believing that the particles $-q u e,-v e,-n e$ lost their vowels entirely through elision; and -ne is sometimes written without its vowel even before a consonant; just as face, duce, dice lost their $e$, and even cave (being much used) lost its $e$ sometimes, as shown by Cicero's wellknown remark implying similarity of sound between caunëas and cave ne eas. The elision of these particles will come up in my next paper.

Briefly, then, to sum up the whole matter:

1. In Greek, elision was the total suppression of a vowel; but it could be only the partial suppression, and sometimes was required to be only partial, or even merely apparent.
2. In Latin, elision was the partial suppression of a vowel ; but in a few special instances it was total.

# American Philological Association, 

1877-8.

## MEMBERS IN ATTENDANCE AT THE TENTH ANNOAL SESSION.

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## AMERICAN PHILOLOGICAL ASSOCIA'TION.

Saratoga, N. Y., Tuesday, July 9, 1878.
The Tenth Annual Session was called to order at 7.30 o'clock P. M., in the audience room of the Opera House of the Grand Union Hotel, by the President, Professor B. L. Gildersleeve, of Johns Hopkins University, Baltimore, Md.

The Secretary being absent, Professor W. A. Stevens, of Rochester Theological Seminary, Rochester, N. Y., was appointed Secretary of the meeting.

The Treasurer, Charles J. Buckingham, Esq., presented his report, showing the receipts and the expenditures of the past year. [See p. 31.]

On motion, President William C. Cattell and Professor M. W. Humphreys, were appointed Auditors of the Treasurer's report.

The Secretary presented a report from the Executive Committee, announcing the election to membership of,

Rev. T. T. Eaton, D.D., Petersburg, Va., and Mr. S. E. W. Becker, Wilmington, Del.

Professor C. H. Toy, of the Southern Baptist Theological Seminary, Louisville, Ky., read a paper on "The Yoruban Language."

The Yoruban language, spoken by a partially civilized people living near the western coast of Africa, east of Dahomey, belongs to an isolated linguistic group, which shows little or no resemblance to the great Hottentot and Bantu families in the south, or the Negro and Berber dialects on the north, but is nearly akin to the Grebo and other dialects of Liberia. The literature consists of collections of proverbs and Bible-translations made by Christian missionaries. Grammars have been written by Crowther (London, 1852) and Bowen (Smithsonian Institution, 1858).
I. Phonology. The phonetic system consists of letters and tones. The consonants are eighteen in number, namely: the aspiration $h$, of palatals the surd $k$, the sonant $g$, the nasal $n g$, the semi-vowel $y$, of linguo-dentals surd $t$, sonant $d$, nasal $n$, semi-vowels $r, l$, and the compound linguo-sibilant $j(d z)$, of labials surd $p$ (only in the combination $k p$ ), sonant $b$, spirant $f$, nasal $m$, semi-vowel $\omega$, of sibilants $s$ and $s(s h)$, to which might be added $z(z h)$ in $d \boldsymbol{z}=j$. There are no gutturals. The combinations $d \boldsymbol{z}(j), k p$, $g b$ and $m b$ occur frequently; of these the first may be a weakening of $g$ or $d, m b$ (only in $m b e$ and $m b i$ ) probably comes from word-composition, and
the origin of the others is doubtful. The vowels are the three primitive $a, i, u$, the secondary $e, e$ (as in let), $o, o$ (as in not), and the diphthongs ai, ei, oi, $\sigma i$, and apparently $a u$ (in a few words, mostly adverbs and probably compounds). There is a law of vocalic harmony (partially prevalent) by which vowels of personal pronouns and prefixes are made to accord with those of verbs and roots. In its law of tone, whereby words spelled alike are distinguished in meaning, the Yoruban stands to some extent on the same plane with the Chinese.
II. Morphology. 1. Roots and Words. The roots are probably all monosyllabic, most polysyllabic forms easily resolving themselves into simpler elements. The word is not differenced in form from the root, and there is no essential difference in form between Noun and Verb, tho a partial difference is made by the system of nominal prefixes; thus, there is not a verb of less than three syllables (that is, not compound) beginning with $e$ in the language, $e$ being a noun-prefix. Roots consist of a single vowel, or consonant and vowel (with or without nasal appendage); a few words beginning with two consonants are probably compounds. 2. Wordcomposition. Composite noun-forms are made by derivation, by reduplication, and by composition proper. The derivation is by prefixes only ( $a, e, e, i, o, o, a b i$, ati, etc.), and the language is rich in these forms, as oku "corpse" from $k u$ "to die," atilo "a going" from $l o$ " to go," ese "sin," lese " to have sin," elese "sinner," ilese " the state of having sin," ailese "sinless," and several others from se "to sin." These prefixes were probably originally independent words, and the derivation is true composition. There are compound verbs, made up of verb and verb, or verb and preposition. 3. Inflection. The Yoruban may be called semiinflecting, there being a number of agglutinations that lhave more or less lost their independent character. (1) Nouns are without inflectional marks of gender, number, or case. Gender is sometimes denoted by prefixed sex-words (as in English), as ako, " male," abo "female" (from bi "to beget"); thus: akomalu "bull," abomalu "cow." Case-distinction is marked by position (as in Hebrew), or by the Relative Pronoun ti, equivalent to " of" (as in Aramaic). The comparative and superlative degrees of Adjectives are made by the affixes $j u$ and $j u l 0$ respectively ( $=$ " beyond, more "). (2) Verbs show no distinction of gender, number, or person, nor in themselves of time, completeness or modal conception, and there are no derived stems (Causals, etc.), as in Hottentot, Bantu, Woloff. But temporal and modal distinctions are expressed by prefixed verbal or pronominal words, continuous action by $n$ (probably the sulstantive Verb $n i$ ) and sometimes by $m a$ (perhaps $="$ do"-so in Basa and Grebo), past time and completeness by $t i$, future time by $o$ or yio (the origin of the $y i$ is doubtful; it may be the pronoun $y i=$ "this," or a verb $=$ "turn, revolve," as Basa dyi, Grebo $d i$ "come," $m i$ " go," $y i$ "purpose"). In the expression of modal conceptions the Yoruban stands about on the same plane with modern English - certain agglutinations have acquired modal significations: $b a$ is employed in the protasis of conditional sentences involving uncertainty, and it has such agglutinations expressing obligation, desire, permission, ability, and the like (as English shall, must, will, may, can).

Participles are made by prefixing $n$ to the root, or by abstract substantives (as English "I go a-fishing"); a Passive is formed by the indefinite construction with Pronoun a or nuon "they," as afo o "they broke it" = "it was broken," or by the use of the substantive verb) $n i$ with a reduplicated noun, as rivi (from ri "to see") $n i$ baba "father is seen." The language shows a primitive exuberance of substantive verls, which, however, are distinguished in use. The simplest form is $n i$ (before vowels $l i$ ), perhaps connected with $n i$ "to have," and frequently employed in a merely emphatic way; mbe (from $b i$ "beget") and $\dot{i} a$ make prominent the idea of existence; ri, si, ya express modal being; there are others less definite. (3) The pronouns are without the rich generic development of the Hottentot, and are in other respects flexionless. Personal: Singular, emi (mo, mo, ng), irto ( 0,0 ), on ( 0,0 ), Plural ava, enyin, awon (nvon), with the objective forms mi, $\boldsymbol{o}, a(e, \boldsymbol{e}, \boldsymbol{i}, \boldsymbol{o}, \boldsymbol{o}, u)$, wa, nyin, wou. Besides the law of vowel-harmony above-mentioned, there is this difference in the forms of the tirst person singular, that $n g$ is used only with future verbs. Emphatic forms are made by adding $n a$, and reflexives by prefixing $k a$ and ara. Demonstrative: $u a, n i$ (uonni), yi (eyi, eyiyi). Interrogative: ta, ti, $n i, k i, v o$. Relative: $t i$ The preponderance of the simple dental, palatal, and labial forms (found in most languages) is obvious, and the original identity of all the pronominal forms may be regarded as probable, but nothing further as to their origin cau be said. Their particular uses must here be passed over.
III. Syntax. The syntax is very simple. The usual order of words in the simple sentence is: subject, copula, predicate; the attributive adjective (or pronoun) usually follows its substantive; the substantive verb as mere copula is generally omitted. The order in relative clauses is the same. Relational particles are few; various parts of a composite sentence are commonly regarded merely in the relation of temporal sequence, as in Hebrew, whereby a naive and vivid coloring is given to narrative and proverb. Purpose is expressed by an abstract noun alone, when the subjects of the principal and dependent verbs are the same; when they are different, the dependent clause is introdaced by ki. Conditional protasis is introduced by $b:=("$ if"), or by $i b a$ ( $=$ "obligation") followed by jcpe or sepe, as iba, jepe (or, sepe) emi ni, "had it been I," literally: "obligation that it is that I am." Substantive clauses, as subject or object, are introduced by $t i$ (probably the Relative Pronoun).

Remarks were made upon this paper by Professor S. S. Haldeman, of the University of Pennsylvania, Philadelphia.

Professor F. A. March, of Lafayette College, Easton, Pa., Charman of the Committee, appointed in 1875, "to take into consideration the whole matter of the Reform of English Spelling," and continued after its Reports in 1876 and 1877 [see Proceedings, 1875 , pp. 8, 13, 23 ; 1876, pp. 35, 36; 1877, pp. 30, 31], presented the Report of the Committee, as follows:

In accordance with the plan of preparing a list of words for which an amended spelling may be adopted concurrent with that now in use, as
suggested by President J. Hammond Trumbull, at the session of 1875, and favorably reported upon by the committee of that session, the committee now present the following words as the beginning of such list, and recommend them for immediate use:

| Ar. | Giv. | Tho. |
| :--- | :--- | :--- |
| Catalog. | Hav. | Thru. |
| Definit. | Infinit. | Wisht. |
| Gard. | Liv. |  |

## On motion, it was

Resolved, That the Report of the Committee on the Reform of English Spelling be accepted, and the Committee be continued for one year.
Professor S. S. Haldeman, of the University of Pennsylvania, then read a paper "On Virgil's Hexameters."

This paper presents a discussion of the principles of the Hexameter, illustrated by an English version of a hundred lines from the opening of the Eneid, in which an attempt is made to present every syllable and every natural or prose accent of the original, presenting a specimen sufficiently long to familiarize the listener to the nature of the versification, if he is not so much accustomed to the powerful accent of German or English as to prevent him from appreciating the lighter effect of a rhythm of quantity, which seems proper only in languages where the accents are light. Even if the classic accent was, as some believe, a change of pitch rather than of force, the stress which the derived languages exhibit at the points of accent, indicate at least a concomitant stress originally.

The pronunciation of words is essentially the same in prose and verse, and there is sufficient evidence (Quintilian, Priskian, Donatus) that Latin differed from Greek in being without final accent, so that can'o could not be pronounced cano' in the first line of Virgil. But while the quantitative nature of classic rhythm is admitted, the average speaker with an English vernacular knows so little about quantity, that he will assert that in the pairs fate fat, deep dip, note not, three are long and three short, where all require the same time, and knowing no rhythm but that of stress, the character of his own emphasized verse is intentionally or unconsciously forced upon classic examples, and there are Latin-English grammars in which the beginning of every foot is marked with an accentual, instcad of confining it to the last two, which enable the listener to determine the metre.

The most prominent feature of the hexameter line is the two closing feet of a dactyl and spondee differing from the preceding feet in having their natural accent at the beginning. In the first half of the line, the accents may occur at any point in the foot, or a single foot may have two natural accents, and to connect these with the two final feet (the adonic close), Virgil endeavors to interpose a fourth neutral foot which shall be without natural accent, as in bk. 1, 1. 8-
where the fourth foot is neutral.

In efforts to bring Latin and English prosody into correspondence, and to get rid of the detinite statements of the ancient grammarians, Professor Key says they "were dealing with a language which was already dead;" and Richard Roe asserts of the ancients that "there is reason to believe that their perceptions of quantity were confused and imperfect"!

A few lines would enable a Greek or Roman listener to detect hexameter verse, a test which fails, not only with the spurious English caricatures, but with the ordinary English heroic measure, where, in many cases, the supposed five-foot line is equally of four or of six feet, and when rhyme is rejected, the close of the lines must be indicated by non-metric methods, such as punctuation and syntax. Take, for example, the opening of " Paradise Lost," when it will be found that the first line may be broken at several points without injury to the rhythm, which is rather that of rhythmic prose than of a given metre-

Of Mans

First disobedience, and the fruit of that Forbidden tree, whose mortal tast brought death Into the world, and all our woe, with loss

And the fruit of that forbidden tree, whose Mortal tast brought death into the world, and All our woe, with loss of Eden, till one. . . .

Whose mortal tast brought death into the world And all our woe, with loss of Eden till One greater man restore us, and regain
Mans first disobedience, and the fruit of That forbidden tree, whose mortal tast brought Death into the world, and all our woe, with . . . .

Mans first disobedience and the
Fruit of that forbidden tree, whose
Mortal tast brought death into the . . . .
—which resembles a line of "Evangeline" (2:249)—
Louis|burg is | not for|gotten, | nor Beau | Sojour, | nor Port | Royal. |

Ovid's line (Metam. bk. 6, 1. 451)-
ecce venit magno dives philomela paratu;
may be thus imitated in English-
ahe is com|ing, cloth'd | with pru|dence, Philo|mela the |careworn | -
but this will be likely to strike the English ear as seven accentual feetshe is | coming, | cloth'd with | prudence, | Philo|mela the | careworn. |

The following lines (87-91) are selected from the paper-
Then follow men's loud cries, an' echoes are heard from the cordage. Clouds quickly bedim' the expanse from all eyes of the Teucri, and Nox fuliginose incūbates-broods on the high sea.
Poles of the orb have thŭnderd, and air carries numerous lightnings; all things thrèaten instant and widespread death unto mankind.

The author gave a version of 33 lines (1-33) in the "Literary World," New York, Nov. 6, 1852; of four lines in his "Analytic Orthography," 1860, §646; and of fourteen lines in the article hexameter of "Johnson's Cyclopædia" New York, 1876.

The Association thereupon adjourned to 9 o'clock Wednesday morning.

Wednesday, July 10-Morning Session.
The Association resumed its session at 9 o'clock A. m., the President in the chair.

The minutes of the previous session were read and approved.
The Secretary presented a report from the Executive Committee, announcing the election to membership of,

Professor Henry F. Burton, University of Rochester, Rochester, N. Y.
On motion, it was
Resolved. That the Association approve of the list of words reported by the Committee on the Reform of English Spelling, as judiciously selected for the purpose mentioned in the Report.

On motion, it was
Resolved, That a committee be appointed by the Chair to recommend a suitable time and place for the next meeting.

The President appointed as such committee, President William C. Cattell, Professor W. W. Goodwin, and Professor C. H. Toy. On motion, it was
Resolved, That a committee be appointed by the Chair to nominate officers for the next year.

The President appointed as such committee, Professor A. Harkness, Professor S. S. Haldeman, and Dr. J. H. Trumbull.

Professor H. C. G. Brandt, of Johns Hopkins University, Baltimore, Md., then read a paper on "The Roman Alphabet in German."*

Ther is a strong movement in Germany for the establishing of the roman alfabet. The Berlin conference, on orthografy, of 1876 , did not do its duty towards it. The question coms home to us in this country with our german english schools, on account of the extensiv study of

[^3]german, and our intimate relation with german scholars and german learning. The movement gains not smal momentum from the objection of foreigners to the old german type. It goes hand in hand with german spelling reform. While we in this country cannot move faster in regard to the latter than the fatherland and certainly not so far as radical fonetic spellers, we ought to do al in our power to help on the former.

We must insist upon it that the use of the roman alfabet is a re-introduction of it, not an innovation. The socald gothic character is the misshapen roman character. It became angular in the twelfth and thirteenth centuris, partly through the influence of gothic architectur with its straight lines and pointed arches. Unfortunately printing was invented when this changed form was the prevalent one and the type was shaped after it. The first books in Germany, Italy, Holland, Spain, and England wer printed in it. In Italy, first of al, it was dropt and the pure roman character resorted to, owing largely to the round writing of the classical manuscripts.

In the sixteenth century, the latin classics wer printed in latin type in every country that could boast scholars. Popular books like the bible wer printed in gothic; in Italy not even these, in France to a smal extent. The Dutch and English dropt it entirely in the seventeenth century. Germany, Denmark, Sweden, and Bohemia stil retain the gothic type or german, as it is deservedly and fondly cald.

Originally it was no more german than it was dutch or english or italian. It is german now, because Germany is the only nation of the first rank that stil clings patriotically, as she thinks, to an old abus.

For international reasons, Germany should establish the roman alfabet. It is the only international alfabet in the world. German scholars, of whatever branch of learning, print their publications-at least ninety out of a hundred - in latin type. And why? Becaus the results of german scholarship ar red the world over and latin type makes them more accessibl and palatabl to foreigners.

Ther ar certain drawbacks which hamper the rapid strides of this movement. The german books in latin type ar not printed alike. Ther is great irregularity in the use of the capitals, and ther ar five different signs for german $s \mathrm{z}$ ( $\beta$ ).

As to capitals, som leav them, as in german type, to every noun. Som reject them entirely except in the word beginning a paragraf, and som reject them in al nouns except proper names.

To bring about uniformity, the following "rules" are proposed, which also include a few changes in spelling, generally approved of:

1. Drop the capitals of nouns, excepting proper names.*

The french system is preferabl to the english. Hence, do not use capitals for adjectivs derived from names of persons, places, and countries, for the names of the months, the days of the week, the points of the compass.
e. g. preussischer grenadier, holländische heringe, ostfriesische butter, bairisch bier.

[^4]
# " Der erste tag im monat mai Ist mir der glücklichste von allen." 

Hagedorn.
"Am sonntag bet' und sing, am werktag schaff" dein sach."
2. Write $s$ for $\{$ and $8 ;$ ss for $\{\hat{f},\{\in, \hat{\beta}$.
e. g. "Mit musse kommt man auch fern."
" Er muss das mus essen."
"Grosse kinder, grosse sorgen."
"Mass ist zu allen dingen gut."
" Mässig wird alt, zuviel stirbt bald."
Ther being now no consistency in the use of $\{8, \beta, f s, 8,8$, nothing would be gaind by retaining the awkward sz. The signs $[5$, 8 , $B$, used to som extent in german books in roman type, should be discarded, as other nations do not use them. They ar only so many more signs for the same sound-voiceless s-for which ther ar two alredy, ss and s final. If it wer the office of the consonant to indicate the quantity of the preceding vowel, one of the abov signs might be used after a long vowel and ss after a short one, as the Berlin conference proposed. The diacritical mark [-] over the vowel would indicate that much better.
3. Drop d in the adjectiv todt and all its derivativs. Hence, tot, töten, der tote, totschlagen. But der tod, todkrank, todfeind, todfehde, todsünde.

Crnde and gefcheibt occur only rarely now for ernte and gescheid.
 thuna, tum, as königtum, reichtum.
Retain h, however, in borrowed words, e. g. kathedrale, katheder. athlet.
e. g. "Doch bin ich auch nicht der, der alles, was $\begin{aligned} & \text { Er tat, als wohlgetan verteid'gen möchte." }\end{aligned}$
5. Write a singl consonant in the affixes -niß or nif\%. -imn, mi $\tilde{\beta}-$ or anife-,
 königin. An added vowel restores the double consonant, e. g. gefängnisse, freundinnen, missetat.

The Berlin conference excepts 皿ijo-, because it is a " stammsilbe." But it is difficult to see, why mis- is not as truly an ableitungssilbe as -nis. Besides -nifz does not lose one $s$ because it is a derivativ syllabl, but becaus s is superfluous.
 or $\{8$ write only one $s:-\mathrm{c} . \mathrm{g}$. des, wes, indes, deshalb, desfalls, weshall, compas, atlas, firnis, kürbis, as, küras. An added vowel restores the doubl consonant as in $5:-\mathrm{e}$. g. des compasses, atlasse, kürasse, dessen, wessen.
7. When in compound words the same letter would occur three times, drop one,-e. g. Bettitath, bettuch, Sebiffiabtt, schiffahrt; Stammantter, stammutter.
8. Drop one 1 in allaice, allna , anallo of himbeere, damhirsch, etc., walfish, walnuss, walross.
9. Write the foreign infinitiv ending -itren uniformly -iren, e. g. studiren, turniren, einquartiren, regiren, spaziren, barbiren.

The Berlin conference wants to write still regieren and spazieren, because it is "ublich," and barbieren, turnieren, because ther ar nouns, barbier, turnier. But why not write all alike -iren?
10. Words are divided into syllabls, in general according to pronunciation, somtimes according to etymology, and if compound according to composition,-e. g. be-sänf-ti-gung, ü-ber-ein-stim-mung, wand-te, reis-ten, du ris-sest, un-gern, da-rin, ras-ten (raged), wes-pe, has-pel, hät scheln, wach-sen, haus-tür, ret-ter, was-ser.
The consonant combinations ch, ck, ph, sch, st, tz , ar inseparable. g. ma-chen, we-cken, so-pha, wa-schen, ra-sten (rest), ka-tze, schwatz-te, wach-te.
As to rule 1 , which concerns capitals only, it may be remarked that they wer at first used only for the beginnings of paragrafs and pages. In the earliest printed books space was left for the capitals, which wer added by the hand of the illuminator. When they came to be printed with the rest, they became very common, especially in Germany.

At first proper names receivd them, then appellativs, then neuter and abstract nouns. In the seventeenth century every noun, as is now the case. It is proposed to limit them to the word beginning a sentence and to proper names, because all nations, except the english, using the roman alfabet, do so for the very good reason, probably, that a more extended use of them is of no advantage.

A few changes in spelling are added, because in the change of type they will find a more ready acceptance than in the old alfabet.

Remarks were made upon this paper by Dr. Julius Sachs, Professor S. S. Haldeman, Professor M. W. Humphreys, and Professor W. C. Sawyer.

Professor W. C. Sawyer, of Lawrence University, Appleton, Wisconsin, next read a paper on "Some Contributions of the Phonograph to Phonetic Science."

The Phonograph, though but an indistinct talker as yet, converts audible into visible form with such marvellous exactness that the latter can be reconverted into the former. This affords the basis of a new demonstration of the compound character of the $a$ of fate. Long $a$ distinctly and forcibly pronounced into the mouth-piece of the phonograph yields, besides the fine and confused indentations upon the tin-foil at the beginning and end of the utterance, two distinet series of uniform groups of indentations. The first is the series representing the principal element of the letter. It is composed of miniature human tracks, the hollow of the foot being quite plainly marked in every other one, and altogether wanting in those which are intermediate. These are followed by impressions which change gradually into uniform groups of three indentations each, of which the first is long and the second and third are round. The space between the long mark and the round ones is about twice as great as that between the round ones themselves. The length of the long impression is equal to about two-thirds of the space occupied by the two round dots together with the interval between them. In the tin-foil examined, the first series is about twice as long as the second, the groups
in each averaging about seven to the inch. It is evident that the phonograph cannot give the same result if the needle passes backward over the impressions described as when it passes forward. If we get the sound oi (Italian) when the needle passes one way, we ought, on a priori principles, to get $i e$ when it passes in the opposite direction. So long as like causes produce like effects, a simple and uniform vowel sound cannot produce two such distinct series of impressions as I have described, nor can the phonograph produce a single uniform sound from two series of indentations that are so different one from the other.

With this invention we enter upon a new era in phonetic and orthoëpic science. A dull ear, even more than an unconquerable conservatism, holds the spelling reform in check. An exact symbol implies a definite conception of the thing symbolized, and, until scholars can agree concerning the elements of our speech, all systems of notation must remain crude and ill adapted to the purposes of culture. It is vain to shout, "A sign for a sound," till we discover for what precise sounds signs are required. The phonograph, however, comes to the aid of this reform at the point of its sorest need, and, as illustrated above, brings the eye to the help of the ear in so effective a manner as to promise the settlement of all, or nearly all, our phonetic disputes.

I venture here a query upon which I dare not yet express any opinion of my own: "May not the essential forms produced by the phonograph under the impulses of the voice in articulate utterances be advantageously substituted for our barbarous alphabet?"

Numerous unforescen difficulties may arise, but those which now appear are not insuperable. We are told, for instance, that we cannot even read the writing of the phonograph, on account of the slightness and constancy of its variations. Its impressions and traces must resemble each other precisely as much as its utterances,-an invaluable correspondence-and when we enlarge the traces of the stylus upon a surface easy for the eye, we shall see that they differ as much in form as our vowels and consonants differ in sound. Variations which correspond to the peculiar overtones of individual voices may be neglected, since they are as unessential to distinctness of writing as the latter are to the distinctness of speech. It may be thought that the writing of the phonograph is too complicated and difficult of construction to be adaptable to general use for script and print. Against this objection two considerations tend to reassure us:

1. The profile of the depressions and elevations upon the foil is a continuous curve, easily traced, and probably contains everything essen tial to the writing.
2. A brief section of the curve corresponding to a single sound in the phonograph-for instance, the curve covering the two dots and dash composing one of the groups described above-would sufficiently define that sound.

I will allude to one more possible benefit that the phonograph may confer upon linguistic science. The pronunciation of foreign languages is wretchedly taught in the great majority of our schools, even of the highest grades. When the phonograph is brought to perfection, the
voices of the best orators and orthoëpists of all living languages may be heard in our class rooms, and, if Mr. Edison himself has not overestimated the possibilities of his invention, the children in our homes may, in their most susceptible years, have their very toys so selected that they shall acquire considerable familiarity with colloquial French or German, or both, in the time devoted to play.

The phonograph is still too immature, and my own study of its results quite too slight, to indicate the real value to philology of this invention; but I seem to see a clear promise that some of its best fruits will fall within our province.

Remarks were made upon this paper by Professor S. S. Haldeman.

A paper entitled "Observations on Plato's Cratylus " was then read by Dr. Julius Sachs, of New York City.

The Cratylus gives a resume of the theories, prevalent in Plato's time, on the relations between thought and speech; to appreciate Plato's own views is rendered difficult both by his style and the meagre knowledge we possess of contemporancous philosophical speculation, hence the divergent interpretation put upon the Cratylus by modern critics. Some salient points, however, susceptible of common acceptance, the works of two recent critics seem to contain, Benfey's " Uber die Aufgabe des Platonischen Dialogs Kratylos," and Dr. Herman Schmidt's "Plato's Cratylus im Zusammenhange dargestellt." The vindication of Plato's authorship for the dialogue seems fully carried out by Benfey; discarding the traditional speculative fancies on the "underlying meaning" and connection of the various parts of the dialogue, as Steinthal, Stcinhart, etc., have elaborated them, Benfey has evolved, with less brilliancy perhaps, but with more trustworthiness, the exact meaning of the technical terms used. A careful arrangement of the various grades of meaning that the word $\xi v v \theta \phi \kappa \eta$ shows throughout the dialogue, and in like manner a concise discrimination between Plato's use of the various verbs, indicating "thought," between the terms $\delta \nu o \mu a$ and $\dot{\rho} \tilde{\eta} \mu a$ are among the merits of Benfey's work; the instincts of the student of Comparative Grammar have confirmed by many valuable suggestions the continuity of reasoning in the dialogue, notably so in $388, B$., where the perception of the original root $d a$ in dıdáoxetv affords the justification for the transition from doakpivecv to
 an ideal language only might be constructed conformably to these principles, and whatever correctness of appellation actual language shows forth, is purely accidental.

Dr. J. Hammond Trumbull, of Hartford, Conn., presented papers on "The Name Oregon," and on "The Inflections of the Micmac Verb."

The last paper of the morning session was read by Professor

M．W．Humphreys，of Vanderbilt University，Nashville，Tenn．， on＂The Influence of Accent in Latin Dactylic Hexameters．＂

The observance of accent in dactylic verse is not due to the same cause that it is in iambic verse．In the latter，the shortening and weakening of the thesis（ $i$ ．e．ápois）rendered certain relations of ictus to accent unpleasant on their own account；whilst in dactylic hexameters，where the thesis retains the full time of the arsis，there was originally no influence of accent at all，as is shown by comparing Ennius with Homer read with Latin accent．But the mere form of the verse caused accent and ictus generally to fall together in the last two feet，and to come in conflict in the earlier feet．In the course of time this conflict or strife，followed by the agreement or reconciliation，was regarded as a peculiarity of the verse，and any verse not presenting it，seemed unusual and harsh．As we advance from Ennius to Ovid，we find each kind of poem becoming more and more carefully composed in this respect，but in such a way that one sort of composition may be rougher at a certain period than another sort at an earlier period．Thus，the Satires of Horace are not so carefully composed as the De Rerum Natura of Lucretius；and the Elegies of Catullus are more carefully written in this respect than even the Epistles of Horace；but they are not so carefully written as later Elegies．

In the following table are found some of the principal results of an examination of the Roman poets．The table is the average for every 1,000 hexameter verses，but does not in every case profess to be absolutely exact，as it is derived from only a partial reading（except for Ennius， Lucilius，Virgil，Catullus，Tibullus，and Propertius）．

|  | 号 | 总 | $\begin{array}{\|l\|l} \stackrel{\rightharpoonup}{\ddot{U}} \\ \stackrel{y}{a} \end{array}$ |  | $\begin{array}{\|l\|l\|} \hline \text { 离 } \\ \stackrel{4}{0} \\ \hline \end{array}$ | $\frac{\dot{q}}{\stackrel{e}{D}}$ | $\begin{aligned} & \dot{\oplus} \\ & \dot{\ddot{\theta}} \\ & \dot{ठ} \end{aligned}$ |  | $\begin{aligned} & \text { 画 } \\ & \text { 号 } \\ & \text { 令 } \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Caesurae after fifth arsis． |  |  |  |  |  |  |  |  |  |  |  |
| （1）With conflict．．．． | 52 | 10 | 4 | 42 | 19 |  | 2 | 15 | 7 | 3 | 0 |
| （2）Without conflict，．． | 77 | 66 | 80 | 128 | 72 | 14 | 2 | 54 | 21 | 12 | 10 |
| Caesurae in sixth foot． |  |  |  |  |  |  |  |  |  |  |  |
| （1）With conflict，． | 74 | 36 | 36 | 58 | 36 | 4 |  | 18 | 0 | 0 | 0 |
| （2）Without conflict，． | 9 | 25 | 20 | 59 | 51 | 11 | 4 | 21 | 4 | 18 | 2 |

It will be observed that the more perfect the art of composing became， the more the caesurae themselves were avoided in the last two feet，even when there was no conflict．This was，first，because in avoiding conflict， they unconsciously avoided that which was likely to lead to conflict；and， secondly，because the ending $|\perp| \smile \smile \perp \simeq$ was harsh on account of a monosyllable being followed immediately by so long a word，and the ending $|\perp| \smile \smile \mid \perp$－really caused a sort of conflict between the fifth ictus and the accent in the fifth thesis．

With regard to monosyllables at the end of a verse，it is to be observed that they generally do not cause surprise．Even in＂ridiculus mus，＂the meaning of＂ridiculus＂leads us to expect something like＂mus．＂

This monosyllable, when immediately preceded by another, is much employed to force the reader to connect two verses closely, when the sense requires. The accent and stress of the monosyllable prevents the voice from falling and pausing. (See Hor. Sat. passim).

The varied relation of ictus to accent in the two halves of the verse is made use of frequently to produce a pleasant play upon ictus and accent by repeating the same words with their relation changed, as Catul. LXII, 20-22:

Hespere, qui coelo fertur crudelior ignis? qui natam possis complercu avellere matris, complexú matris retinentem avellere núlam.
(See also Virg. Buc. VIII, 47-50, and in the poets generally.) Many special points, not contained in this abstract, were discussed.

The Secretary presented a communication from the Secretary of the American Anthropological Society, inviting the correspondence and coöperation of this Association.

On motion, it was
Resolved, That the Secretary be instructed to acknowledge and reply to this communication.

A recess was then taken till 4 .o'clock P. m.

## Afternoon Segsion.-4 p. m.

The Association met after the recess.
Mr. A. C. Merriam, of Columbia College, New York City, read a paper on "The Homeric $\phi$ i $\lambda o s$. ."

This was an argument against the critical canon that pinas in Homer is used as a synonym for the possessive pronoun. The first three books of Anthon's Homer being most widely used in this country in preparation for college were brought under review. Everywhere in the translations there given $\phi$ ínos is rendered by the possessive pronoun, except four times in $\Gamma$. This destroys in a great measure the tone of the passage in the episode of Chryseis, A 20, 98, 441, 447; in that of Hephaistos, A 572, 578, 585, 587: of Patroclos, A 345, where the keynote of the later books is struck; and of the patriotic sentiment B $158,162,174,178, \Gamma$ 244. With like strictness the rule is followed by Derby, Pope, Sotheby; less constantly by Hersehel and Merivale: while Bryant, Blackic, Newman, Chapman, and the Latin version of the Ernesti-Clark edition, respond almost uniformly to the
 тoũ $\phi i \nexists \eta \nu$. Autenrieth, accepting a derivation from $\sigma \phi$, makes the original meaning possessive; but the derivation of piroc is too doubtful to determine its meaning.
$\phi\{20$ occurs in II. and Od. between 500 and 600 times. As adjective not predicate or vocative with proper name, its usage may be divided into two classes. In a count only fairly exhaustive, 287 examples were found for



 45. None of these words give offence in the English when connected with dear, and this translation is forced upon us when a limiting genitive or a possessive pronoun qualifies the same noun. This with vibs very common; 'Odvarjos фílos vibs at least 14 times. See also $\Delta 354$, в 260, $\pi 222$. Simi-
 $\beta 51, \mathrm{I} 455$. The possessive pronoun $\mathrm{E} 314,318, \mathrm{~T} 132, \mathrm{Z} 474, \mathrm{I} 447$, T 4 , $\Phi$ 330, 378, $\sigma 214, \omega 505, \Omega 416, \xi 177, \nu 413, \chi 350$.

The remark of Liddell and Scott on I 555, was met by showing that
 $\zeta 26$, фí̃ov Aesch. Choe. 616, $\lambda$ 327, $\mu$ aкápıos Eur. Ores. 4, libero Hor. C. 3, 5, 22. Homer feels that the ties of affection between parent and child can never be destroyed. The evidence of the strength of the domestic affections in all the relations of life is cumulative throughout the poems. See Glad. Juv. Mund., pp. 390-8. Are we not then actually wronging Homer and the spirit of the Heroic Age by nullifying epithets, which, rightly understood, open to fair fields in that distant past?

The second class comprised $\theta v \mu \sigma_{\varsigma}$ found 12 times, ai $\omega \nu 1, \dot{\eta}$ тop 48, $\kappa \bar{\eta} \rho 12$,

 trauslation of $\phi i \lambda o s$ is almost universal; but, if we find the possessive pronoun or possessive genitive at the same time, this must show that the sense of dear was in such cases necessary, and consequently that the same sense was not incompatible when the pronoun was not used. With frubs these not found, but a quasi possessive dative. With iroo a genitive is found $\varepsilon 297,406, \chi 147, \Phi 114, \omega 344, \Phi 425, \delta 703, \psi 205, \chi 68,0166,182$, the last a possessive. The pronominal dative is common. к $\bar{\eta} \rho$ has a genitive $\delta 270, \kappa 485$; a possessive $1413, \pi 274$, and datives. $\sigma$ t $\{\theta \varepsilon \sigma \sigma \iota$ has genitive $v 9$, and datives; yofvara genitive $\nu 231$, and datives; ruäa genitive N 85, and datives. This gives fair ground for the conviction that pixos was to Homer no empty epithet, nor even a possessive pronoun, but really meant with the words of the second class what it did with those of the first, a plump dear. The explanation of this phenomenon was conceived to be this: In many ways it is the youth of the world which the Homeric poems set before us in their childlike directness of expression and awkward fondness for calling a spade a spade, quite foreign to ourselves but often heard from the mouths of children before a conventional schooling has repressed the undisguised utterances of the feelings. The child will say "my poor dear hand" because it knows only to call that dear which is dear. The mau avoids it as savoring of egotism. The Homeric man calls his hand dear, just as he calls it stout $\mu$ 174, or his thigh thick $\lambda 231$, or his house beautiful $\theta 41$, or himself culiant A 393; cf. ، 19, 20, г 183, н 75, $\boldsymbol{\theta} 22$, etc. Were we to speak straight out from the heart, we should acknowledge that the bodily organs are dear to us; see Xen. Mem. 1, 2, 54, Cic. Lael. 81. Epigram of Maec. in Suet. We say, "run for dear life," "dear me." In
 $\mathrm{X} 58, \varepsilon$ 152. This idea of loss is to be considered B 261; cf. Z 272.

Another point to be taken into account in the explanation is the great fondness of the poet for personification. This figure is applied to the feet N 75, the hands $\varepsilon 434$; and the members of the body are sometimes treated as separate and distinct individualities apart from the person himself as $v 237, \Delta 314, \varepsilon 355, v 13-22$. As soon as this was done, there is as good reason for applying the word dear to one's own hand, for instance, as to that of a second person.

Some kindred uses of our word dear were cited from Shakespeare, where it is used above 400 times; but the German exhibits the exactest parallel in das liebe brod, lieben tag, liebe gott (cf. $\omega$ 514, Theogn. 373) and in the application of lieb to gelt, vieh, gut, rock (cf. B 261), sonne, herz, etc.

In later Greek the application of $\phi$ ians to words of the first class is comparatively common, but with those of the second it is rare. The following were cited: Hes. W. \& D. 360, Theog. 163, 568, 283, W. \& D. 608; Hym. Ap. 113, 524, Epigr. 4 15, Tyrt. 10 25, 12 23, Theognis 531, 877, 983, Pseud. Phocyl. 98, Sim. Ceos 37 4, Iby. 4, Pind. Ol. 1 6, 24, Pyth. 3 109; Aesch. Choe. 276, 410, Agam. 983; Eur. Hek. 1026, Elec. 146; Theoc., 17 65, 7 104, 21 20; Mosch. 4 1, 15, 32, 51; Apoll. Rhod., 2 712, 1 281, 3492.

These examples appear to show that a sense of the quaintness of this usage began to prevail long before the Attic period, but of the feeling that it was equivalent to a possessive pronoun, no evidence was seen. Neither does the canon appear to be laid down in the oldest scholia on the Il. the Ven. A. Dind.; but this and the scholia of the Od. treat фinos as if to them it meant dear, cf. scholia on Od. 1 238: nor in the Lex. of Apollon., nor Hesych., nor Etymolog. Magnum, nor Suidas. But it appears in scholia B. L. V. on Il. 1569 (see on I 555), and in Eusth., B 261, and most lexicons since.

In conclusion an earnest protest was entered against that kind of criticism which, in translating from the classic poets, would root out all the poetry, would carefully prune away all the peculiarities of the original, would in fact strip Homer of his $\phi \bar{a} \rho o s$ and $\chi \iota \tau \dot{\omega} \nu$ and array him in dress coat, vest, pants, immaculate tie and shirt-front, before permitting him to appear in modern society. There is wide difference of opinion as to methods in a poetic translation, but in the class-room the aim should be to reproduce the original with all possible fidelity. If Homer says that the wave shouts, let us not translate it roar; if he calls wine honey-hearted, let us follow Tennyson; if he calls the heart dear or shaggy, let us so translate. Like true archaeologists, let us dig for the genuine treasures of that distant day, and carefully preserve all we find. Shall Schliemann, shall Cesnola, put their treasures into the hands of the artist of to-day, to remold and refashion till all the pottery becomes Wedgwood or Sevres, and all the gold might have come from Paris or London?

Remarks were made upon this paper by Professor B. L. Gildersleeve, Professor W. W. Goodwin, and Professor E. North.

Dr. L. A. Sherman, of the Hopkins Grammar School, New Haven, Conn., then read a paper on "The Greek Article as a Pronoun."

This communication grew out of the conviction that the identity of the Greek and English articles, perhaps commonly assumed in teaching Greck, and certainly often implied in Greek grammars, was incorrect and misleading. The article of Greek is demonstrably stronger and nearer its pronoun-original than that of English. It is clear that the $\dot{\delta} \dot{\eta} \tau \dot{\sigma}$ of Homer had commenced the same carcer of progressive weakening which is common to the history of the article generally; but it had not in the time of Plato and Xenophon descended through all the stages and touched bottom in the shape of a genuine article, as has the English from its equivalent original se seo thät of Anglo-Saxon. It still remained a demonstrative in oi $\mu \hat{\varepsilon} \nu$, oi $\delta \hat{\varepsilon}$ and some other expressions in Attic prose, and in varying instances in Attic poetry, as is admitted by all scholars. There was, therefore, a lingering consciousness in the Greek mind of a pronominal potentiality in the article. In the light of certain examples it was maintained that the article of Greek was very nearly like that of modern German, which retains so much of its old pronominal strength as to admit of standing as the representative of a noun alone. It was then urged that the article in prepositional phrases like Mevov кaì oi бìv airū, oi $\dot{a} \mu \phi i$ חخ $\dot{\boldsymbol{a}} \boldsymbol{i} \omega 1 \cdot a$, was more likely pronominal than article to an omitted
 like examples.

It was argued further that, if these conclusions were correct, the interpretation of the article with the participle would need to be amended. It is unnatural to suppose that the participle was always substantived over the article, when the latter being so nearly a demonstrative had already so much of the substantive in its nature; but rather in an unknown proportion of instances it stood in predicative agreement with its so-called article. This view seems really suggested by the very statement of the best grammars (see Curtius' Schgr. \& 581, anm.; Kühner, Ausf. Gr., § 401, 4, 5). With Kühner's statement that eiciv oi $\lambda \varepsilon$ joval sometimes gives way to eioiv oi $\lambda_{i}$ joures is to be associated the constant rendition of the article with participle in German and English grammars by a relative clause. If the participle be really, in the thought of the Greeks, a nomen agentis, it should be easier to deny the article a substantive value than we find it. In regard to the facts of the language, it seems to be clear, first, that the participle is not infrequently found in undoubted predicative agreement with an article known to be demonstrative, as the following familiar sentences illustrate: 'Evтaìva dif́a

 instances where the participle must be regarded as in predicative agreement with article-forms not admitted to be demonstrative: . . . кai riv
 Thirdly, there are passages constantly met with in which not only greater
difficulties are encountered, but the thought seems distorted and shorn of its naturalness and force if the participle be taken as attributive. A


 There seems little doubt that the lack of nomina agentis in Greek is in some measure supplied by the participle, but it would also seem a matter of judgment in each case whether the participle he so used or not.

Remarks were made upon this paper by Professor B. L. Gildersleeve, Professor W. W. Goodwin, and Professor A. Harkness.

Professor J. B. Sewall, of Thayer Academy, South Braintree, Mass., read a paper on "The Greek Indicative, Subjunctive, and Optative Moods: what is the distinction between them?"
I. It is obvious that the indicative, in general, predicates fact as actual. It is that form of the verb specially employed for the assertion of what is, was, or will be. E. g. Dem. 4:1, $\dot{\pi} \pi \varepsilon \iota \delta \dot{\eta} \kappa \tau \lambda$.-The different uses of the indicative mood in the different kinds of sentences shows the same. Dem. 4:5,-4:30 (relative); 1:15,-4:47 (result, cf. Goodwin, Greek Moods and Tenses, §65. 1, N. 5, and \$65. 3.); 4:36 (causal). After temporal particles signifying until and before that cf. also Goodwin G. M. T., §86.

When a clause denotes a result not attained in past time, or an unattainable purpose in past time (after iva, etc.), or a wish for the contrary of what is taking or what has taken place, or a condition or conclusion contrary to fact, the same is apparent because the result not attained, the unattainable purpose, the contrary wish, and the contrary condition or conclusion, are all brought before the mind as the opposite actual facts.

We may call the indicative therefore the mood of actul fact.
II. The Subjunctive. Can we detect that essential character in those relations (condition, purpose, temporal limit. deliberation, etc.), which made the verb-form we call the subjunctive a mood by itself, not the indicative, not the optative, not the imperative? Let us sce.

In Dem. 4:3, $\hat{\nu} \nu^{\prime} \varepsilon i \delta \bar{\eta} r \varepsilon \kappa \kappa-\lambda$, what is the element, essential and common, in eifj̈re, a subjunctive in a clause of purpose, and in $\dot{o} \lambda с \gamma \omega \rho \bar{\eta} \tau \varepsilon$ (same sentence), a subjunctive in a conditional clause? Not simply futurity. They do not predicate actions which are actually to, or will certainly, take place, nor actions which are mere possibilities, potential-actions existing only in thought or conception as $\beta$ oin.oof $\theta e$ (same sentence). The facts they predicated were rather before the speaker's mind as hoped or expected, in the one case, and in the other, as feared or deprecated-facts something more than mere conceptions, and much less than actual-rather, lying in the region, so to speak, between actuality and mere conception; the region of doubt, uncertainty, dependence; the region of facts dependent in some way upon will or other power and determination than the speaker's; a kind of fact to which the term contingent may very well be applied.

The same is clearly to be seen in Dem. 4:17, 22, 41,—Plato 230, E., and all similar examples.

This being the nature of the subjunctive, it is easy to see how it came to be used in the form called deliberative, and in exbortations and prohibitions, and with the value of an emphatic future after oi ut, and also why the indicative sometimes replaces it in final clauses (after $\delta \pi \omega \omega$, etc.), and after verbs of striving and fearing by which the form of statement was made more vivid, viz.: for the reason that the indicative was the mood of actual, while the subjunctive was the mood of contingent fact. And to say with reference to $\mu \boldsymbol{\eta}$ with the perfect indicative expressing a fear that something bas already happened, that "the difference between this and the perfect subjunctive is often very slight, the latter expressing rather a fear that something may hereafter prove to have happened" (Goodwin, G. M. T., $\S 46$, note $5, \mathrm{~b}$ ), is only to say, that, in this case, the indicative is used for actual, and the subjunctive for contingent, fact.
III. The Optative. The position of Rost, Kahner, Donaldson, and others, that this mood is nothing but a peculiar form of the subjunctive, and that they differ in tense only, is very properly discarded by our best and latest Greek scholars. This can only be bowever on the ground that there is an essential difference-a modal rather than a temporal difference.
The optative received its name from the early grammarians from its use in wishes, but this evidently was not its original, as it was not its principal, use. Its principal use lay in the protasis and apodosis of conditional sentences, in final clauses to denote past purpose, in oratio obliqua and after $\dot{\varepsilon} \omega \varsigma, \mu^{\varepsilon} \dot{\chi} \boldsymbol{p}^{\prime \prime} \dot{o}^{i}$, etc., after historical tenses. In these different positions it is casy to see that the optative was the form of the verb employed when the act or state to be predicated was merely conceptional, not brought before the mind as actual either in the present, past, or future, nor as contingent,
 'for if any one should ask **** you would say,' the fact predicated in both condition and conclusion is not predicated as actual, nor in any way contingent, but as merely conceived. It is pure supposition, mere thought as Madvig says. So elsewhere. For an example of final clause (taken at random) see Xen. Anab. II. 6, 21, and oratio obliqua Thucyd. 2:13. In the latter example our English idiom has no other form for the clause
 mus was his friend; and if Thucydides had made the statement on his
 attributes it to Pericles, and that carries it out of the region of actual fact as far as he himself is concerned, and he employs the mood which his mother tongue provides him with to express it separate from all actuality, fact as it exists merely in the conception.

We may call the optative mood, therefore, the mood of conceired fact.
My conclusion accordingly is, that the distinction between the Greek indicative, subjunctive, and optative moods is an essential one, one of kind and not of degree merely, the indicative being in general the mood of actual fact, the subjunctive that of contingent fact, and the optative that of conceived fact.

And a corollary from this would be that the distinction between the subjunctive and optative moods in conditional sentences is not one merely
of degree, but of kind-not one merely of greater or less vividness, but of essential nature, which supports a position assumed in a former paper (Trans. Phil. Asso., 1874).
-The Auditors of the Treasurer's Report reported that they found it correct; and it was, on motion, accepted.

A recess was then taken till 8 o'clock $\mathbf{P}$. m.

## Evening Session.-8 p. m.

The Association met after the recess.
The annual address was delivered by the President, Professor B. L. Gildersleeve, of Johns Hopkins University, Baltimore, Md.

At the meeting of the Philological Association in New York two years ago, the President, Professor Harkness, gave a comprehensive survey of the progress and results of philological study, during the last century, in which he laid especial stress on the origin and growth of comparative philology and linguistic science, and impressed upon the members of the Association the duty of carrying forward the good work that had been begun by others. The concluding exhortation of that address has suggested the theme of this - the Special Province of the American Philologian.

Many fields of philology are as open to Americans as to any devotees of linguistic science, and some philological work is peculiarly our own. So it would be sheer laches in us to resign the department of American languages. And although the history of this Association shows that there is no danger of this, the very fact that so much has been done, pledges us to still greater activity in this department, which is always challenging exploration. As the aboriginal languages of America demand our special care by reason of our local relations, so our historical connection makes English a matter of prime interest to us, and American scholars have done admirable work here, and in some of its forms the historical and scientific study of English has more votaries in America than can be found anywhere else. But outside of these departments, which are ours by local and historical ties, the power of individual effort and individual example has been strikingly manifested in the Sanskrit studies that have made a name all over the world for the distinguished scholar, whose absence we deplore, and have established the science of comparative etymology in this country on a sound basis. In all the leading branches of philological work there are gratifying signs of life, and our associates who are pushing forward the study of the Germanic and the Romance languages, and the Orientalists of this Association and of our sister society show no lack of activity. But it must be admitted that the prospect is not so good for the classical philologian as for those who are at work in less crowded fields, and as they in an especial manner need a word of encouragement, this discourse is addressed especially to them. There are indeed some grounds for the despondency of the classical philologian,
who is aiming at higher work, but there is no reason for despair. The preparation furnished by our schools and academies is very defective. but it was a great deal worse a few decades since. The isolation from other workers is chilling, and yet it is not so entire as it once was, and this Association has done much to bring philologians nearer to each other, although the intervals of meeting are so great. The want of a channel of intercommunication other than the annual volume of transactions is one cause why philological productivity is so slight in this country, for men cease to produce, if there is no outlet for production; but as soon as the want is properly presented, it will certainly be supplied, and the establishment of a philological journal will not and cannot long be deferred. The most scrious drawback that we have to encounter is the want of apparatus; but perhaps even that is exaggerated. In the matter of occasional monographs, the increasing facilities of the book-trade brings certainly as many within our reach as can be procured in small German towns, in which excellent work is done for all that; and besides it is unwise to attach too much importance to these dissertations, a large proportion of which are written by very young men and have no great scientific value. But even if all the literature were accessible, every edition of every author, every treatise on every subject, it would not be desirable to dull the freshness of appreciation which can only be gained by direct employment with the text-with the theme. The field of antique literature is vast, but it is a narrow range as compared with the continent of commentary and dissertation, and any competent man can survey with his own eyes large stretches of the original sources of all our knowledge and so gain new points of view as well as new illustrations for the work he may have in hand. Let any man try what can be done by close study of a text, and a wide range of reading in cognate directions, before he says that Americans have nothing to do except to repeat the references in German books, or at most to run over the indexes of German editions.

Of course, if in our authorship we persist in treading the eternal round of school-books, there will be less room for individual effort, but even in the most thoroughly beaten track of classic literature, there is something yet to be settled; and if we look at our work from its historical and aesthetic sides, all of it requires to be done over every few years. With the progress of social science, with the advancing knowledge of historical evolution, the problems of antique culture, of antique legislation, appear in new lights. Not to speak of the positive gain to be derived from the newly-discovered inscriptions and monuments, which are adding more and more definiteness to our conceptions of the antique world, and are helping us to a better understanding of the dialectic life of the classic languages, and the cantonal and provincial life of the classic peoples, ancient history has to be interpreted into terms of American experience; and it is not saying too much to say that some phases of American life enable us to understand the ancients better than some contemporaries on the other side can do. But apart from the special aptitude of Americans for the appreciation of the political and social relations of antiquity, due partly to our peculiar endowment, partly to our peculiar position, the aesthetic
problems involved in the study of classical philology shift from time to time; the great masters ever need new interpreters. Even the best work done forty or fifty years ago leaves us thoroughly dissatisfied. Not only is there that sense of shortcoming which we feel in all translations, but there is often a repulsive, often a ludicrous incongruity, which shows the change of aesthetic basis. Now Americans have proved and are proving every day that they do not lack acuteness, subtlety, delicate appreciation, and just comprehension in their literary criticisms, but, so far as I know, there has been little independent treatment of the antique authors in this regard. Nor is it unworthy of consideration whether the exact study of function-to use a wider word than syntax-may not be destined to give us a firmer foundation and a clearer outline for the whole structure of style than would have been thought possible some years ago. Indeed this study of syntax or of function-comparative syntax, historical syntaxis large enough to occupy all the force that classical philology can spare for generations to come. No index will serve the turn of the true investigator, because no index-maker can possibly anticipate all the points of view which the thoughtful student will assume, so that it is simply indispensable that the student shall have immediate vision, immediate intercourse with the authors themselves, and if a second-hand acquaintance is of little use in this field of study, it is of no possible avail in yet another direction-the exploration of the linguistic consciousness of the great classic authors-a direction in which something yet remains to be discovered. The conclusion of the whole matter is that the classical philologians of America are in nowise debarred from high scientific work, and especially in the province of grammar, this $\vartheta p ı \gamma \kappa \grave{s} \rho \mu a \vartheta \eta \mu a ́ t \omega \nu$ as Boeckh has called it, may the American philologian find abundant room for the native sagacity, the unresting energy, the quick inventiveness that have distinguished our people in other departments of science.

At the conclusion of the President's address, the Association adjourned to 9 o'clock Thursday morning.

Thursday, July 11.
The Association resumed its session at 9 o'clock A. m., the President in the chair.

The minutes of the sessions of the previous day were read and approved.

The Secretary presented a report from the Executive Committee, announcing the election to membership of,

Professor C. R. Hemphill, Theological Seminary, Columbia, S. C.
The committee on the time and place of the next meeting recommended that the next meeting be held at Newport, R. I., during the second week of July, 1879.

On motion, it was
Resolved, That the report of the committee on the time and place of the next meeting be accepted, and that the Secretary be instructed to send to the members a printed circular, mentioning the place appointed for the next meeting, and requesting each member to send word, whether he would prefer the date appointed, or a later week in July. [See page 36.]

On motion, it was
Resolved, That the Secretary be instructed to send to the members a printed circular embodying the substance of the report presented on Tuesday evening by the Committee on the Reform of English Spelling.

The committee to nominate officers for the next year presented nominations as follows:

For President-Professor J. B. Sewall, Thayer Academy, Braintree, Mass.
For Vice-Presidente-Professor C. H. Toy, Southern Baptist Theological Seminary, Louisville, Ky.; President William C. Cattell, Lafayette College, Easton, Pa.
For Secretary and Curator-Professor Thomas C. Murray, Johns Hopkins University, Baltimore, Md.
For Treasurer-Charles J. Buckingham, Esq., Poughkeepsie, N. Y.
For additional members of the Executive Committee-
Professor W. W. Goodwin, Harvard University, Cambridge, Mass.
Professor M. W. Humphreys, Vanderbilt University, Louisville, Ky.
Professor F. A. March, Lafayette College, Easton, Pa.
Dr. J. Hammond Trumbull, Hartford, Conn.
Professor W. D. Whitney, Yale College, New Haven, Conn.
The report was accepted, and the persons therein named were declared elected to the offices to which they were respectively nominated.
Professor B. L. Gildersleeve, of Johns Hopkins University, Baltimore, Md., then read a paper entitled "Contributions to the History of the Articular Infinitive in Greek."

The use of the articular infinitive completes the deorganization of the infinitive in Greek. Deorganized before, the infinitive had virtually become an accusative to the Greek consciousness, yet in many of its combinations retains traces of its dative origin. Indeed the dative of the object for which and the accusative of result meet in most of the familiar constructions of the infinitive. Not only in case, however, but also in tense there must have been a change in the relation of the infinitive to meet the necessities of oratio obliqua. So the future infinitive, old as it is, seems to be younger than the other tenses of the infinitive, as the future optative is demonstrably younger than the other tenses of the optative. The connect-
ing link between the verbs of creation (verbs of will and endeavor), which take the abstract infinitive (neg. $\mu$ 多, and the verbs of saying and thinking, which take the oratio obliqua infinitive (neg. oi) is formed by verbs of swearing, witnessing, and hoping, in which the use of the negatives and of the tenses seems to show the transition. Now as the articular infinitive is younger than the oratio obliqua inf., it would seem to follow that the oratio obliqua inf. would be susceptible of the article, a point which must be admitted to some extent for the articular inf. and $a \nu$ and the articular fut. inf.-both comparatively rare combinations. The truth seems to be that the articular infinitive may represent the contents of an oratio obliqua sentence without losing, however, its abstract character, which abstract character is sufficiently indicated by the negative $\mu$ $\eta$.

As to the history of the articular infinitive, the construction does not occur in Homer, the only apparent example (Od. 20, 52 ) being in apposition to a demonstrative article.

In Pindar it occurs ten times-all except one example being apparently in the nom. but all in such a position as to vindicate a virtual accusative use.

In Aeschylus the occurrences are one in 159 verses. The cases are chiefly nominative and accusative. Many of the examples are due to the stereotyped grouping of $\tau \grave{\partial} \mu \dot{\eta}$, $\tau \grave{\partial} \mu \grave{\eta} \stackrel{\nu}{v}$. Prepositions are very sparingly used. The tenses are present and aorist.

In Sophocles the occurrences are one in 120 verses. The vast mass consists of nominatives and accusatives; there are very few genitives and datives. Prepositions are used sparingly. The tenses with no exceptions worth considering are present and aorist. A remarkable instance of what may be called substantivized oratio obliqua occurs in Antig. 235. 6.

In Euripides there is a marked falling off; but one occurrence in 320 verses. Forty per cent. of the whole number are nominatives, but the genitive bulks much more largely than it does in the others. Prepositions and quasi-prepositions are not much used. The tenses are present and aorist, civiova being a practical present. There is somewhat more freedom in the handling. The largest number occurs in the Iphigenia at Aulis.

In Aristophanes we note an increase as compared with Euripides, one occurrence in 258 .verses. The bulk consists of nominatives and accusatives. Prepositions are not very common. The tenses are present and aorist (einvtval being a practical present). A large proportion of the articular infinitives in Aristophanes are purely deictic or anaphoric, some exclamatory, others parodic. The largest number occurs in the latest comedy, the Plutus.

Of the historians Herodotus uses the articular inf. very rarely in comparison with Thucydides. Few prepositions are employed. Remarkable is the use of avti directly with the infinitive. While the bulk of Thucydides is only abnut six to Herodotus's seven, Thucydides uses the articular infinitive with great freedom and more than eight times as often. All the cases and fifteen different prepositions are freely used. Also all the tenses. Especially noteworthy are the articular inf. with $\dot{d} \nu$ and the articular fut. inf.

In the orators the usage varies greatly, the occurrence to the Teubner page being for
Lysias, about . . . . . . . 12

Andocides (estimated), . . . . . . 20
Isaeus, . . . . . . . . . 25
Aeschines, . . . . . . . . 30
Antiphon (estimated), . . . . . . 50
Lycurgus, . . . . . . . . 60
Isocrates, . . . . . . . . $\mathbf{6 0}$
Deinarchus (estimated), . . . . . . 80
Demosthenes (private orations), . . . . . 80
(public orations), . . . . 1.25
The lowest average of the undoubted public speeches is presented by the Second Philippic .87; the highest by the First Olynthiac 2.75. The long public speeches vary from 1.06 to 1.62 . In the private orations there is considerable variation, the highest being contra Cononem 1.07 , and in Pantaenetum 1.06, the lowest contra Calliclem in which there is no occurrence.

Professor M. W. Humphreys, of Vanderbilt University, Nashville, Tenn., next read a paper on "Elision, especially in Greek."

In this paper the position was taken that elision in Greek was usually total.

1. The words employed by the Greeks to denote elision were discussed.
2. The ancients used their terms carelessly, and sometimes used the same word to denote both crasis and elision. The passage cited by Corssen to prove partial elision really referred to crasis, as the illustration
 oiov tò dvoua, toivyoua.
3. Discussion of Ahrens' arguments.
(a). Ahrens says that some words would be unpronounceable if elision were total, as $\ell \sigma \vartheta \lambda^{\prime}, \sigma \varepsilon \mu \nu^{\prime}$, ai $\sigma \times \rho^{\prime}$, etc., etc. But as he asserts that elision combines two words, why may they not be combined by omitting the vowel and pronouncing a consonant at the beginning of the next word: $\sigma \kappa \mu-\nu \ell \pi \eta$ ?
(b). Sometimes a hiatus would remain "causing an unpleasantness that evidently is not in it." How does he know there is nothing unpleasant in it? Compare Sanskrit vana asit, vana asit. But granted there is no offense in it; the two words being uttered continuously would prevent offense except such as exists where two consecutive vowels occur in one word. And there would be great offense in $\dot{a} \lambda_{\gamma e^{\prime}} \dot{\varepsilon} \vartheta \eta \kappa \varepsilon \nu$, if we pronounce the elided $a$ a little according to Ahrens' theory.

(d). Ahrens' interpretation of $\sigma v v a \lambda o<\phi \dagger$ discussed, and ancient definitions cited.
4. The Greeks allowed hiatus in prose. They could always neglect elision (in prose); but they could also elide under certain conditions. Hence they had the choice between the two. Not so in Latin, where elision was almost universal (Cic. Or. 44, 152). In poetry Greeks avoided
hiatus. This restriction with the requirements of metre sometimes caused elision even before a long pause. Then the elision was only partial, and sometimes even only apparent; i. e. the verse merely appeared perfect to the eye. Hence they felt at liberty either to elide totally or partially as circumstances demanded (a subject to be discussed in another paper). But that vowels could be and often were totally suppressed, is shown by these considerations:
(a). The aspirate of an initial vowel passes over to the (remaining) final consonant, as $\dot{\varepsilon} \phi^{\prime} \dot{\eta} \mu \nu \nu$.
(b). The accent, when final, is thrown back, as $\varepsilon \sigma \vartheta \lambda \lambda^{\prime}, \sigma \notin \mu \nu^{\prime}$ (words cited by Ahrens). Aphaeresis of accented vowels (aphaeresis is partial) and the Sanskrit soarita show the possibility of accenting a reduced vowel; hence the elided vowel was not merely reduced. (Arguments proving aphaeresis partial, omitted.) Analogous to svarita is Synizesis, as Aifvatiovs (3 syl.)
(c). Diphthongs are frequently elided. If the second vowel merely combines with the next vowel, then the first retains its full quantity.
 Crasi et Aphaeresi, p. 2) show total elision.
(e). 'O $\pi b \tau a v, \delta \tau a v, \gamma h \rho, \gamma o \bar{v}$, etc., show that a vowel was totally expelled. This happens in Latin much more rarely, as in tantopere, whereas we find neuter, deinde, etc., resulting from partial elision (for in Latin elision was partial except in -que, -ve, -ne).
( $f$ ). If elision had been only a diminution, it would not have been subject to such rigid restrictions, but would have been more nearly universal, as in Latin.
5. But vowels were also only partially elided under certain circumstances.
(a). We find elision at the end of a sentence. That we find it also at the end of a verse proves nothing, for when this happens the sense always requires the verses to be read continuously.
(b). Elision takes place between two speakers. Herc, in fact, the elision is entirely for the eye of the reader. As the first speaker uttered his final vowel, the second speaker began his first syllable, and so a rapid exchange of words is secured.
6. That elision was only partial in Latin is shown by the fact that it was so universal (Cic. Or. 44, 152). In tantopere, magnopere, the longcontinued juxtaposition led to the suppression, especially as the vowels were similar. The absence of crasis also proves it. The nearest approach to it is in cogore, deerrare, etc. In amatast, the quantity results from position, as is shown by "corrūmpĕrè's ausus," "vēndĕrě's ausus" (Tibullus, I, 9; 53, 57). Some statements of grammarians imply partial elision. Some late grammarians speak of it as if it were total; buttheir authority is worthless. That -que, -ve, -ne suffered total elision will appear in another paper.

Mr. A. D. Savage, of Johns Hopkins University, Baltimore,
 of irreverence in swearing exist among the Greeks?"

This paper is a discussion of Greek views of the moral side of swearing. 'Padajavivos ôpkos is the name found in scholia, lexica, etc., of oaths by
animals and plants. The reason given by the scholiasts is, a wish not to use the names of gods in swearing. Of the passages in scholiasts, etc., which mention this oath, two may be regarded as the sources of the others, Schol. Aristoph. Av. 521, and Schol. Plat. Apol., 21 E. The earliest appearance of the above-mentioned reason is in a fragment of Sosicrates given by Schol. Aristoph. Av., 521. Sosicrates flourished not later than 150 b. c. It would be expected that such a notion as the irreverence of swearing among pagans would be made the most of by the Greek fathers of the church. But even the fathers do not condemn swearing for that reason. Again, when the moral side of swearing is touched upon in the literature of Greece and Rome, the grounds for condemnation are those of the fathers; either, that it is better to be on the safe side of perjury, or that a man of honor should on common occasions expect his word to be sufficient. This might lead us to suspect that the notion of irreverence (provided we thus interpret the words of the scholiasts) came to them from the grammarians of Alexandria, for this notion existed then in that part of the world, among Israelites and Egyptians. An examination, however, of the passages in classical Greek authors, in whom the oath of Rhadamanthus is found, leads to the view, first, that the names of dogs, geese, and plants were substituted reverentially for the names of gods by some persons whose piety unhappily was tainted with weakness; and in the second place that such oaths gained only the sneers of the more enlightened. Socrates swears by the dog and the plane-tree, but he also swears by the gods. Hence the inference that with Socrates it was not in earnest. In Aristoph. Av., 521, we are told that the prophet Lampon swears an oath by the goose, when he has a bit of swindling to do. And in Aristoph. Vesp., 83, the speaker swears by the dog, and calls Nicostratus a dirty beast ( $\kappa a \tau a \pi i \gamma \omega \nu$ ). Hence in the eyes of Aristophanes this oath was silly. A fragment from Cratinus preserved by
 $\vartheta \varepsilon o v ̀ s ~ \delta \dot{\varepsilon} \sigma i \gamma u \nu$. This makes it plain that there were people who swore by dogs and geese instead of gods. We may take the words of the Scholiasts to mean reverence, and use them here. The writer of the paper would incline to the view that Cratinus's mention of the oath is satirical.

Remarks were made upon this paper by Dr. Julius Sachs and Dr. J. H. Trumbull.

Professor T. D. Seymour, of Western Reserve College, Hudson, Ohio, then read the last paper of the session, "On the Composition of the Cynegeticus of Xenophon."

It was the aim of the paper to show that the assumption of certain interpolations removed or explained most of the difficulties which abound in the treatise, and restored the work nearly to the form which its author gave it.

Since Valckenaer, few have maintained the authenticity of the prooemium or the epilogus; but L. Dindorf, in the last critical edition (Oxford '66) thinks that sufficient evidence has not been brought forward to decide against the genuineness of the treatise itself, and it is to be observed that
all the critics seem to have assailed or defended the Xenophonticity of the work as a whole and on gencral grounds.

So much of Xenophon's life was spent on campaigns in Asia Minor and in Peloponnesus that we are not surprised to find a large number of poetic and dialectic words in his writings. Hence it is impossible to attach much importance to the unusual words in the Cynegeticus. But the characteristics of his style are well known. We have from his pen voluminous works on varied subjects and written at every period of his life.

In this opusculum one peculiarity of style to be noticed is the frequent occurrence of Asyndeta. Xenophon is not averse to the rhetorical employ-
 $\dot{a} \pi \ell \vartheta \imath \eta \sigma \kappa o \nu$ and even where there is less animation, as Anab. vi. 1. 6, the
 $\mu \varepsilon \lambda_{i v a s, ~}^{\text {ouka. But in all of Xenophon's larger works there are not so many }}$ examples as in this one treatise and none like those in Cyn. v. 30. cf. also rv. 1 and vi. 1.

Another peculiarity is the use of the infinitive, e. g. ix. 1, elval and x. 1 $\kappa \varepsilon \kappa т \bar{\eta} \sigma \vartheta a \iota$. In $\mathbf{\nabla} .15$ we have $\lambda a \mu \beta a ́ v e c \nu$ tho no $\chi \rho \nmid$ or dei has been used in the chapter. In most cases a direction is clearly implied, and the infinitive must depend on the general idea of advice which pervades the work, and

 seven pages after this that the first example of the unusual infinitive occurs.

The paper next noticed the peculiarities in the use of prepositions in this treatise. Beginning with I. 18, the part of the work most Xenophontic in character, forty-six of the first one hundred verbs are compounded with prepositions-nearly the proportion in Xenophon's larger works-while in Chap. v., fifty-eight of the first one hundred verbs are so compounded, often with no sensible difference of meaning from the simple verbs. Further, an unusual number of verbs are compounded with two or more prepositions; and the same preposition is repeated with the noun about ten times as frequently as on the same number of pages in the Memorabilia or Cyropaedia. This indicates, of course, a later authorship for the passages where such peculiarities are found. The preposition is sometimes





Another particle to be noticed is $\dot{\sigma} \tau$. Never used by Xenophon, it is found here four times, v. 8 and $20, \mathrm{rx}$.8 and 20.
The use of the plural of abstract nouns was noted, e. g. 1I. 7: áoíuнerpot
 kal $\beta \rho a \chi \varepsilon \omega \nu$. The omission of the reflexive pronoun, specially with $\rho \iota \pi \tau \bar{\omega}$ and its compounds, is unusual. The use of periphrastic expressions, most


These peculiarities will be recognized at once as common in a later age, and where many of them are found in any passage they afford a presumption of later authorship than Xenophon.

The result of the investigation is as follows: Xenophon began with I. 18. After II. 8 there is a long interpolation reaching to VI. 7. After VI. 16 six $\S \S$ are inserted by the reviser. Chap. VII is genuine with the exception of two or three short clauses and most of $\S \S 5$ and 8 . Chap. VIII is doubtful. Chap. IX has interpolated §§ 8-10, 13-16, 19-20. In Chap. X $\S \S 4-18$ and part of $\S 22$ are late. Chap. XI presents few peculiarities of style, but the unusual use of $\mu e \tau d \S 3$, would suggest that it is not Xenophon's. Moreover our author is accustomed to write from his personal experiences, of which there are few traces here. Chap. XII may well be genuine as far as $\S 16$ where the original work ends.

This scheme assigns to Xenophon less than half of the work before us, but it removes or explains nine-tenths of the difficulties and leaves us a more systematic treatise with a beginning, an end, and a well-ordered middle. It deprives us of Xenophon's authority for some stories which savor more of Aelian, and removes many sentences full of unnatural rhetoric, but does not remove anything in which the style of Xenophon is marked.

Who the interpolator was it is perhaps useless to inquire. He evidently lived before the time of Arrian, as the prooemium is referred to by the latter author. He seems to have changed the original text in but a few places, generally contenting himself with inserting whole sections or longer passages.

On motion, it was
Resolved, That the thanks of the Association be tendered to the proprietors of the Grand Union Hotel, for the use of this Opera Hall, and for their courteous attentions to the members of the Association.

On motion, the Association, at 1.30 o'clock, P. m., adjourned.
American Philological Association.
Charles J. Budeingram, Treasurer, in Account with the American Philologigal Asbociation,


CHARLES J. BUCKINGHAM, Treasurer.
There is also in the hands of the Treasurer, one Bond of the Connecticut Western Railroad, for Five Hundred Dollars, with five over-due coupons of the same, of $\mathbf{\$ 1 7 . 5 0}$ each, not at present collectible.

Having examined the above account, and compared it with the vouchers, we certify the same to be correct. We have also personally examined the Bond of the Connecticut Western Railroad, with five over-due and unpaid coupons.
田 "田
CHARLES J. BUCKINGHAM, Theasuror.
Wairad, for

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1878-79.

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The Executive Committee herewith announce, in accordance with the votes of the members communicating with the Secretary [see p. 24], that the Eleventh Annual Session of the Association will be held at Newport, R. I., beginning Tuesday, July 15, 1879, at 3 o'clock P. M.

Members intending to read papers at the next session of the Association are requested to notify the Secretary at as early a date as possible.

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## AMERICAN

## PHILOLOGICAL ASS0CLATION.

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## TRANSACTIONS

# American Philological Association. 

## 1879.

## I.-Modal Development of the Shemitic Verb.

By CRAWFORD H. TOY, NEW YORK CITY.

The verb-structure in the Shemitic family of languages is one of the simplest in the world-simpler than that of many uninflecting tongues. This is true, whatever may have been the history of the family before it became what we now call Shemitic. Through what changes it has past we do not know, but in its present form it is markt by poverty of verbal expression; or, we may say, it has, by a process of sifting, reduced its verbal apparatus almost to a minimum. We may consider it as reasonably certain that the verb in this class of languages was originally a noun or (what amounts to the same thing) that it began its development at a time when there was no distinction of form between noun and verb.* This noun or noun-verb advanced in two directions : first, by the addition of syllables (prefixes, probably originally independent words) that attacht substantiv-ideas to the signification of the root, producing derived stems, which are in a sort new verbs; secondly, by the purely inflectional modification of the noun-stem by additions at the beginning

[^5]and end, and the differentiation of these different forms into various modal expressions of the action.

By modal modification in the broadest sense is meant any modification that does not add a substantividea to that of the verb-root, but ouly expresses an accident of the action. It may include all expressions of the time and completeness of actions and the conception of them as real or unreal. The material that the primitiv Shemitic selected for this expression cousists of two noun-stems, one simpl triliteral and another provided with a prefix. Whatever the original force of these two forms may have been, they were in the earliest time of which we have information devoted to the representation of the ideas of completeness and incompleteness respectively. The attempt to establish a separate form for the expression of temporal accidents in actions was, for some unknown reason, abandoned, and such temporal expression came in only as a secondary application of what may be called the completional force of the two forms.* The second of these, the incomplete, or better, the inchoativ, ingressiv, received farther inflectional modification by terminations which in the noun exprest caserelations, or a strengthend, intensified condition of the object. The subject-relation or Nominativ was represented by the ending $u$ (to take the form in which we actually find it), the object-relation or Accusativ by $a$, the possessiv-relation or Genitiv by $i$, while in each of these the state of independence and intensity was indicated by the addition of an $m$ or $n$, and the state of dependence not only by the omission of this letter, but sometimes also by the dropping of the vowelendings. We should thus have seven possibl forms of the Inchoativ, but in fact the language has chosen to use commonly only four, namely, the two in $u$ and $i$, the vowelless form and the strengthend form in $a$ ( $a m$ or $a n$ and anna) $\dagger$. The modal material thus comprises five forms, the complete,

[^6]katala, and the Inchoativ, yaktulu, yaktula, yaktul, yaktulan (and its variation yaktulanna). As has been said, we do not know how the completional distinction came to reside in these two forms; but, once there, it would easily lend itself to the expression of temporal distinctions (as it did in some cases, particularly in later stages of the language, the idea of past time attaching itself to the Complete or Perfect, and that of future time to the Inchoativ) ; and so also it came to set forth those distinctions that are usually specially characterized by the name " modal," those that deal with the subjectivly real and unreal. We may designate the five forms as follows: 1. the Complete or Perfect (describing an action simply as finisht) ; 2. the Inchoativ in $u$, or the $u$-form (describing an independent inchoativ or ingressiv action); 3. the Inchoativ in $a$, or the $a$-form (in which the ingressiv act is conceivd of as dependent); 4. the vowelless or Jezma-form (representing the action as sharply detacht); 5 . the Inchoativ in $a n$ (or anna), or the $a n$-form (the strengthend, intensiv presentation). But in the four last the essential inchoate ingressiv signification remains always prominent, and the shades of difference between them may sometimes become almost invisibl. Let us look at the actual uses of the forms in the various Shemitic dialects, taking first the expression of the several modal conceptions and then the functions of the several forms. The Imperativ may be reckond (as it is allied in signification to the Perfect on the one hand and to the Jezma-form and the an-form on the other) as a halfway-form between the Perfect and the Inchoativ.

We begin with the expression of modal ideas, and first command. 1. This is renderd in all the dialects by the Imperativ in both its forms, the simpl, and the strengthend or emphatic in an. But the Imperativ is employd in positiv command only, not in prohibition-a fact the discussion of which we shal come to below. It is also confined to the second person. 2. The Jezma-form is employd extensivly to express command. Thus in Arabic it occurs frequently with the prefix $l i$, which indicates a nominal conception of the verb; li-yaktul is "for his kiling," " let him kil." The
conception of command, as involving something as yet nonexistent, usually attaches itself to the Inchoativ, and, as carrying with it decision, naturally also to the shortest, sharpest form. This Jezma-form is generally used in the third person, but sometimes in the others; the greater brevity of the Imperativ suits the greater sharpness of the direct address to a person. The construction with li occurs apparently also in Jewish Aramaic in a jussiv or optativ sense, and Ethiopic has a similar form with la. Without the prefixt particle this form (which, however, everywhere except in Arabic represents not merely the original vowelless Inchoativ, but the others as wel) is used for positiv command in all the dialects, usually in the third person, and, with a negativ particle, for prohibition. The Hebrew distinguishes between negativ command and negativ exhorta-tion-the former is introduced by $l o$, the latter by al. 3. The long Inchoativ in an and anna (principally in Arabic). With the negativ la it expresses prohibition, differing from the short form only in being emphatic.

The similarity in meaning between these three forms is obvious, but the dissimilarity in form is no less obvious. The short Inchoativ has dropt the original final vowel, while the long form is the strengthend Accusativ, and the Imperativ has the simple stem without the preformativ $y a$ characteristic of the Inchoativ. It has been suggested by some grammarians that the Imperativ is derived from the Jezmu-form by dropping the preformativ, but this explanation is clumsy, and therefore improbabl. It is simpler to go back to the original form and meaning of the stem of the noun-verb. The Imperativ is the simpl noun inflected in gender and number, and, because used on account of its vigorous brevity in direct address, confined to the second person; it is the bare noun or name of a thing spoken sharply and decisivly. Perhaps the activity involved in the expression excluded the passiv sense; or the absence of Passiv Imperativs in Shemitic may be nothing more than a formal accident, the result of the choice of another construction to avoid ambiguity of form. Some such fact also may serve to account for the avoidance of the negativ

Imperativ, possibly coupled with the feeling that in such cases there was less sharpness in the expression. However this may be, there is no need to suppose the Imperativ a derivativ from the short Inchoativ. Stil less reason is there for regarding this latter as derived from the Imperativ. It is based on the form out of which the latter was developed; but the two took their several ways, reaching the same point by different lines, but always retaining their distinctiv characteristics. The Jezma-form remains an Inchoativ, and out of the inchoativ signification develops its jussiv force (we shal see that this is not its only force) in the way above indicated. The an-form with a like inchoativ signification comes naturally to the same use, only with its added emphasis (as also in the Imperativ there is a similar emphatic long form in an); whatever peculiarity of meaning may exist in the a-form which is its base, does not appear in this use. We are thus forced to go back to the original significance of these forms, and to allow them large latitude within the bounds of the essential meaning.

Let us next take the expressions of wish. 1. Here we find the Perfect widely used. In Arabic and Ethiopic it is employed in the largest sense, of any wish, and quite answers to the use of the Greek Optativ. In this construction of the Perfect there is no distinct formal expression of wish; it merely represents the act as a completed thing (in the intensity of desire that it shal be) and leaves the precise meaning to be suggested by the tone or context. In Hebrew, however, the Perfect expresses only a wish that is known to be unfulfild-the action stated to be complete is contrasted by the context with the present reality, and thus recognizd as non-existent. In another Canaanite dialect, the Phenician, the usage agrees with that of the Arabic. 2. Arabic employs the long Inchoativ in an, the emphatic force of which is appropriate to the expression of wish, in which there is usually more or less of intensity. It is obvious also that the desired thing, as in the nature of the case not get existent, is properly represented by the inchoativ form of the verb, which exhibits the action as one just entered on and incomplete; the
incomplete stands close to the non-existent. 3. In Ethiopic, Hebrew, and Aramaic we hav the Inchoativ, which in these dialects is at present a vowelless form (except with suffixes). but is a representativ of all the forms of the Inchoativ, except the $a n$-form, and therefore does not specially correspond to the Arabic Jezma-form. Hebrew, however, pursuing its course of abbreviation, has an apocopate form still shorter than this last, and employs it in the expression of wish. In both the Hebrew forms the inchoate sense is the prominent one; and the brevity of the shorter form is appropriate to the energy and excitement of the state of mind involvd. 4. The Assyrian has a special form made by prefixing $l u$ or $l i$ to the Inchoativ. Whether this is imitated after the Accadian (which makes a Precativ by prefix $g a$ ) is uncertain; such a precativ form is found in Jewish Aramaic, and is not unlike the Arabic Jezma-form with prefix $l i$ and the Ethiopic with prefix la. In any case, however, the modal force is in the verbstem, and the same remarks apply here as above.

These differences of construction exhibit considerabl flexibility in the Shemitic conception of wish, yet are easily explaind by reference to the original force of the verb-forms. We can also understand how the Arabic, desiring to bring out the element of energy and intensity, does not employ the $u$-form of the Inchoativ, nor the Jezma-form (having besides appropriated these to other uses), but confines itself to Perfect and long Inchoativ in an.

The voluntativ form, that used to express determination of wil, resolution, is of course the an-form of the Inchoativ. This use is fully developt only in Arabic ; it is, however, not infrequent in Hebrew (in the first person), and is found in Assyrian. The relation between form and meaning is obvious; the Inchoativ suits the non-existent character of the verb-act, and the energetic an is appropriate to the natural energy of the thought. Here again we fail to see any trace of the dependent force of the $a$-form on which this longer form seems to be built; there is, however, a discernibl relation between the voluntativ and the objectiv sense of the $a$-form, the latter expressing the object towards which the
determination is directed. In Hebrew the voluntativ ends in $a$, and is probably the representativ of the old an-form, the Hebrew throwing away the nunation or mimation, as it does habitually in singular nouns. It would indeed be possible to regard this Hebrew voluntativ as the original $a$-form, which had not been confined to the dependent sense that we meet in its use in Arabic; but the analogies obtained by a comparison between the Hebrew and the other Shemitic dialects rather point to the former explanation-the Hebrew verb everywhere shows signs of phonetic decadence.

Purpose is naturally exprest by the Inchoativ, since it looks to an unaccomplisht object. As telic constructions are necessarily syntactically dependent, the Arabic employs for these its $a$-form, the Subjunctive, which especially indicates the object aimd at. It has, however, somewhat petrified the construction, always introducing the verb by $l i$ or some other particl meaning "in order that." The Arabian grammarians also insist that there is always an elision of an "that" after $l i$; but this is a mere grammatical fancy, the real power of the modal expression being in the verb, or rather in the combination of the real preposition $l i$ and the verb: the expression "he went li yaktula that he might kil" means " he went to kiling." In Ethiopic also the shorter form of the verb (commonly called Subjunctiv) is employd in this construction, either alone or after the particles kama and $z a$ "in order that." This Ethiopic verb-form, tho now without final vowel, represents formally all the original unemphatic Inchoativs, but performs a part similar to that of the Arabic $a$-form. Hebrew, Aramaic and Assyrian use their own Inchoativ, which also represents the original three; and there is no means of determining whether the peculiar Arabic force of the $a$-form ever existed in these languages ; whether, that is, it was a part of the original Shemitic material, or is a special development of A rabic. In Hebrew, tho the introductory conjunction is common in this construction, it is sometimes omitted, the telic form being suggested by the juxtaposition of the words, and the same omission is found in Arabic with the $u$-form; the objectiv nature of the dependent verb, which is elsewhere
represented in Arabic by the termination $a$, is here given by the inchoativ sense and by the position. The ordinary Arabic use of $l i$ and the Inchoativ is parallel with the common Shemitic telic construction of preposition and Infinitiv, and the comparison between the two brings out the nominal character of the Inchoativ.

The expression of general result or limit is nearly the same as that of purpose. Arabic employs the $a$-form and Ethiopic its shorter and longer forms, with the appropriate conjunctions. The relation of dependence is as obrious here as in the telic constructions, but the Ethiopic is freer in the use of the verb-forms, and shows that the process of petrifaction had not advanced very far. This long form in Ethiopic (which has a vowel under the first radical of the stem), tho a true Shemitic Inchoativ in its function, is of doubtful origin; whether its inserted vowel is of nativ production, or is an imitation after a non-Shemitic language, is not clear. But in any case its syntactical force is beyond doubt, and there is no ground in the usage of the Ethiopic for supposing that this long form carried with it any non-Shemitic idea, or playd any other part than that of the Inchoativ. The Arabic further employed the $u$-form in the ecbatic constraction, when the conjunction was omitted, whence we must infer, not that it confounded purpose and result, but that a certain liberty in the use of the verb-forms existed. The form set apart as the expression of the object (the $a$-form) was employd after the preposition, but in the absence of the preposition the relations of incompleteness and dependence, given respectivly by the form and the position, were considered to be sufficiently expresst in the $u$-form. Such uses point to a time when the present stif differentiation of verb-use in Arabic grammar did not exist.* When, however, it is desired to represent the result as an accomplisht fact, the Arabic uses the Perfect. In Hebrew, result is usually expresst by the construction of sequence, and the verb follows the ordinary Hebrew laws of sequence.

[^7]In the construction of object-sentences (in which one clause is the object of the action containd in the preceding) the form of the verb in the dependent clause is determind strictly by the nature of the thought. 1 . Where the action in the dependent clause is conceivd as really existent in past or present, the Perfect is used in all the dialects, as after verbs of saying, seeing, thinking and the like. If the action lies in the present and is to be represented as continuous, Arabic permits the use of the $u$-form. 2. In the case of future action, after verbs of thinking, supposing, etc., the $u$-form and the $a$-form are found in Arabic ; these set forth the action as non-existent, with the difference that the $a$-form expresses a close dependence. The Ethiopic employs its long form (called in the grammars the Imperfect) in some similar cases, as after verbs of beginning and ceasing. The Hebrew prefers the Infinitiv-construction, which is also found in the other dialects. 3. Where the act of the dependent clause is in the highest degree unreal, as after verbs of wishing, expecting, etc., we find the $a$-form in Arabic (introduced by the conjunction an " that"), and in such cases the Ethiopic has its shorter form (Subjunctiv) with or without a conjunction.

Conditional and other correlativ sentences show a great variety of constructions, yet always under the control of the proper force of the various verb-forms. I. The simplest case is where the condition or the act of the antecedent clause is represented as really existent, and the apodosis or consequent act also real; the rule in this case is that the Perfect shal be used in both clauses. Where there are seeming exceptions, they are the result of some peculiar conception of the action in the mind of the writer. Instead of the Perfect the participl is sometimes employd, especially in Aramaic, when it is desired to express a present or continuous act. II. The usage is the same when the condition is determind as unreal. The act is represented as complete, and the context indicates its true character. III. When the condition or antecedent action is put merely as a supposed existing fact, or as in general undetermind and ideal, the form of the verbs in the two classes depends on the special coloring that it is intended to
giv the action. 1. It is not uncommon to find the Perfect in both clauses in Arabic and Ethiopic, by which the condition and the result, tho from the context obviously future, are put as finisht or as actually present. This construction is not found except where the condition is patent and near at hand, or where for the sake of energy and vivacity the speaker or writer desires so to represent it. 2. In those dialects that hav reduced their Inchoativs to a single form, Hebrew, Aramaic, Ethiopic, the use of this form is the prevailing one. Hebrew uses its Imperfect in protasis and apodosis; but, in accordance with its laws of sequence, often expresses the apodosis by Waw with the Perfect. In this case the Perfect does not abandon its proper signification ; tho Hebrew in its law of sequence has petrified its constructions, it is always possibl to recognize the original meanings of the verb-forms, and in this case the Perfect acts as the same form in Arabic describd above. In Aramaic the participl often takes the place of the Imperfect in the apodosis, with a force not very different from that of the Perfect. The Ethiopic moves more freely, and varies its verb-forms according to the demands of the thought, especially in the apodosis. In the protasis the verb is usually Perfect-the language has chosen as a rule to look on a condition as something already settled, as a mere assumd preliminary to the result, and then the time of the result fixes the form of the verb of the apodosis: if the time is future, the verb is Imperfect; if past, the verb is Perfect. But, if the time of the protasis be present, the verb is commonly Imperfect, in order to express the incomplete character of the action. 3. The above examples of the use of Perfect and Inchoativ respectivly to set forth conditions and results conceivd of as real and unreal or ideal are easily intelligibl from the nature of the verb-forms. In Arabic we find further a differentiation in the use of the Inchoativ not possibl to the other dialects, and especially a peculiar use of the Jezma-form (the Jussiv of the grammars). This form is subject to various special rules of use, being, like the $a$-form (Subjunctiv) brought into stif connection with certain particls; but its employment in conditional sentences obliges is
to recur to its essential inchoativ signification, and to lay aside that special jussiv force that has given it its ordinary name. In sentences in which condition and result are represented as merely supposed facts we find this Jezma-form sometimes in both clauses, sometimes in only one, the Perfect commonly standing in the other. Further the $u$-form and the $a n$-form are found in place of the Jezma-form. If this makes it necessary to regard this last as in these cases performing the part of a simpl Inchoativ (an expression of incomplete, ingressiv action), it does not prevent us from recognizing something special in its character and force. Its distinction from the Perfect, with which it is often brought into contact in these conditional constructions, is clear enuf: the Perfect represents the act as really complete and present, the Jezma-form puts it as something just entered on or to be entered on. We can also understand how it differs from the an-form, which is always emphatic, and always so emphasizes the incomplete nature of the action as to locate it in the future distinctly. The $a$-form has its special function of dependence in Arabic, tho it sometimes leaves this in the background and brings forward its original inchoativ force. But how does the Jezma-form differ from the long Inchoativ in $u$, with which it sometimes alternates in these constructions? Certainly not by any element of command supposed to reside in it, for if this explanation would serve in constructions where an Imperativ stands in the antecedent clause, or for the apodosis in general, it would be wholly insufficient for the protasis, in which a command would be out of place. Nor can it be said of the Jezma-form that it interchanges in sense with the Perfect. It is tru that after the negativ particles lam and lamma it has what seems to us a present or proper perfect signification, but the explanation no doubt is that the language came to regard the action after these particls as an incipient one, a thing that from the nature of the thought could not be existent, and yet was thought of as about to be, on the point of beginning. It is this feeling that controls the verb-use, and has made the Jezma-form the rule. This projection of the feeling of a speaker, or of that mas of
speaking that constitutes a language, into the circumstances of an action is not uncommon, and the particular feeling may often appear strange to one accustomd to the modes of thought of a different language. We are so far removed from Shemitic methods of conception that it may wel be hard for us to comprehend and explain their grammatical constructions, especially when they take a petrified shape, that is, a shape that is doubtles the product of a natural feeling, but the isolation of which and the absence of free movement in the language disguises its force and conceals its origin. It is so to a great extent, for exampl, with the Hebrew usage of sequence, in which the verb-forms seem to us to shift in an arbitrary and surprising way, and in which, tho we may be abl to discern its general signification, there remains after our best efforts a certain unknown something. It would not be strange, then, if we should find it not easy to explain all the uses of the Arabic Jezma-form, which the language has evidently dealt with in a somewhat peculiar way. We cannot explain historically how its construction with lam arose any more than how the Hebrew use of verbs after Waw arose, and we cannot determine the precise feeling of the conditional use of the Jezma-form. But we know enuf of its application to enábl us to giv a general statement of its signification. When we observ its use as a jussiv, its employment after certain negativs in what seems to us to be very nearly a categorical sense, and its function in some conditional sentences, we are led to the conclusion that it is the extremest expression in Arabic of the purely inchoativ sense-it is the most delicate presentation of that peculiarly Shemitic conception of an action as being just on the point of beginning, so that to us it seems to hover over the dividing line between the existent and the non-existent. Its curtailed form may be connected with this peculiar significance, either by virtue simply of the resulting brevity, or by the comparativ isolation that the absence of the vowel suggests. Whatever may be the relation between form and meaning, this view of its signification offers something like an explanation of its uses. The explanation of the construction with the negativs lam and
lamma is suggested above. Its jussiv force may easily come from its exhibition of an act as being on the point of happening, as in English the future tense is sometimes used where a command is involvd. The conditional use follows in the same way: in the protasis the Jezma-form givs the act as incipient, and this suggests its immediate occurrence and also its present non-existence-it thus represents the condition as a supposd fact, lying near to the speaker and calling forth an - immediate interest. Its range in actual use is wide-it occurs in constructions that in Greek would include Indicativ, Subjunctiv, and Optativ ; but it always maintains its own force, and must be interpreted not according to our usages, but according to the modes of conception of the Shemitic people. The longer Inchoativ form in $u$ does not emphasize the idea of incipiency so sharply and delicately as the Jezmaform, and is rarely used in conditionals. It occurs in the apodosis when that is separated from the protasis by the connectiv participl fa "then." In this case the separation effected by the particl confers a certain independence on the second clause, and it adopts the more general expression of the inchoativ sense. Stil more rarely does the $a$-form occur, only where a second parallel verb follows the Jezmaform in protasis or apodosis, and that under certain conditions in the use of particls. It appears therefore that the Arabic treats the constructions with the negativ particles lam, lamma, and the conditional particles in and others, alike, regarding the action in all of them as a thing imminent, not existent, but on the point of beginning. It is not, indeed, confind to this view-the Perfect, as we hav seen, is sometimes employd to vary the conception by representing the action by anticipation as really existent, and other shades of meaning are given by the employment of the forms in $u$ and $a$. This last construction is rare; practically the ideal conditional forms in Arabic are the Perfect and the Jezmaform, the forms in $u$ and $a$ being devoted to other uses, and the selection is based on the significations of the verb-forms and the conception of the conditional above describd.

We may sum up this rapid view of the modal constructions
in Shemitic by a statement of the modal functions of the several verb-forms. 1. The Perfect is primarily the expression of an existent complete act, in present, past, or future time, and thus covers the ground occupied in the Indo-European languages by the Indicativ Perfect, Aorist, Pluperfect, and Future-perfect. But it also performs the part of an Optativ, the object wisht for being represented by anticipation as actually in complete existence. In Hebrew it is used in those optativ sentences only in which the thing desired is located in the past, and known to be impossibl. Further it is generally employd in Shemitic in conditional sentences in which condition and result are known and declared to be either real or unreal, and also frequently where the condition or the result or both are put simply as ideal or supposed cases. It is a favorit conditional form in Arabic and Ethiopic. 2. The Inchoativ in $u$ is commonly employd in what we call the Indicativ sense, and stands contrasted with the Perfect by representing the action as ingressiv or incipient in present past, and future, answering to our Present, Imperfect, and Future. But as the Shemitic and Indo-European conceptions of the verb are very different, the former distinguishing only the completional and not the temporal element of the act, these two Shemitic forms are in fact used each over the whole ground of the Indo-European verb, the Perfect often standing where we should use Present or simple Future, and the Imperfect or Inchoativ in the place of our Aorist or Futureperfect. Tho commonly occurring in this Indicativ sense in Arabic (and it is not found as a grammatically distinct form in the other dialects), it is used also, as we have seen, in telic and conditional sentences to express relations of dependence and subjectiv unreality. As to the name Indicativ, it belongs not only to this form, but sometimes to the Perfect and to the Jezma-form and $a n$-form also. 3. The Inchoativ in $a$, modally distinguisht only in Arabic, is devoted to the expression of relations of dependence, such as ideal result, purpose, limit, and sequence. This use flows from its inchoativ sense, and from the objectiv force proper to it as the objectiv case of the noun-verb. It looks forward to a point as
yet non-existent; when the object of the action is to be represented as already attaind, one of the properly Indicativ forms is used, either the Perfect or the $u$-form, according to the speaker's conception of the complete or continuous character of the action. There is no reason in the form itself why it should be so rarely employd in conditional constructions (as is stated above); usage alone has determind its restriction to its particular class of constructions; only an occasional deviation enabls us to recognize the broader signification that underlies its present special use. 4. The vowelless or Jezma-form is appropriated to the expression of command (chiefly in the first and third persons) and to conditional and certain negativ sentences, its form and meaning permitting, indeed, a wider use, but suiting very wel the comparativly restricted range that usage assigns it. Its jussiv sense passes naturally in some cases (particularly in negativ sentences) into an optativ. 5. The longest Inchoativ form in an or anna follows the Jezma-form so closely in signification that we should naturally think of it as a derivativ from the latter, but for its vowel $a$, which rather connects it with the $a$-form. It is, however, a true Indicativ in the first instance, and often acts as an emphatic extension of the form in $u$, tho always as a Future. Its uses in prohibition, wish, and in conditional sentences are to be explaind, as abore, by its inchoativ sense, to which is always added the emphasis proper to its form. It is an emphatic Imperativ and Optativ. In Hebrew it occurs in a fragmentary way as a Voluntativ ( the so-called Imperfect with paragogic a). 6. The proper Imperativ of the second person has already been mentiond, the nearness of its relation to the form in $a n$ and the vowelless form pointed out, and reasons given why it should be regarded, not as a derivativ from the latter, but as an independent formation, which has advanced in its own way to a point nearly identical with theirs-nearly, but not quite, for there is a perceptibl difference in the coloring of the command as given by the different forms; the Imperativ simply states the act (or, more probably, the actor) as an object of thought, and leaves it to be inferd from the tone that it is to be done, and
is thus more peremptory than the others which represent the act as something that is about to be done. There is a similar difference, as is remarkt above, hetween two imperativ constructions in English, and so also there is a difference in the coloring of two Shemitic expressions for the present, one of which uses the Perfect, and the other the Inchoativ.

Most of the Shemitic dialects now possess only one form for the three unemphatic Inchoativ forms found in Arabic, and this is without final vowel, not answering to the Jezmaform, but representing a merging of the three into one. This form must execute the functions of the original three. But under the stres of this poverty, various languages have created new forms for special purposes, or have devoted to special uses the forms that arose from phonetic usages or from imitation of other languages. Hebrew has made a short Inchoativ by dropping a final consonant, or reducing a vowel, and employs it as a jussiv or optativ, and without the prefix wa. Ethiopic, on the other hand, has a lengthend form gotten by inserting a vowel $a$ under the first radical, which expresses the incomplete in present, past, and future (answering in general to the Arabic $u$-form), while the older, shortend form is used in the expression of command and wish (somewhat as the Arabic forms in $a$ and without final vowel) in dependent and independent sentences; but no very sharp difference between these two is maintaind as in Arabic, the Ethiopic preserving a considerabl freedom in the employment of its forms. The Assyrian Precativ (made by prefixt lu or li) has a distinct function, and its relation to the original Shemitic scheme is obvious. In Aramaic, particularly in its modern dialects, the old modal expressions hav been largely expunged by the use of the participl. The Amharic shows nearly the same modal development as the Ethiopic, using the old shortened form for command and wish, and the lengthened form in telic sentences, while the Tigriña exhibits a more extensiv employment of the lengthend form in conditional sentences than the Ethiopic, which shows a preference for the Perfect.

It may reasonably be inferd from the examination of the
existing Shemitic languages that the modal material of the primitiv Shemitic was about what we find in classic Arabic. It is certain that the five forms above discust were in the mother-tongue, for they can be traced in all the members of the family. It may be that there were others not now found in Arabic, such as the forms in umma and imma, of which there are traces in Assyrian, and the simple Inchoativ in $i$, remains of which are found in Arabic. We should in fact not be surprised to find that the seven or eight forms of the Singular noun, together with the Perfect, constituted the original modal material ; but if this were so, the language early dispenst with all but the five, by means of which it was abl to expres its modal ideas with sufficient distinctness. It is certain that the mother-language exprest these distinctions, since the identity of modal development in the various dialects could not be otherwise accounted for.

We hav almost no data for tracing the historical genesis of the modal expressions. We are warranted in holding that the verb-forms began as nouns and noun-verbs, and that the modal development proper began at a time when the cases of the nouns were already in existence. The mode-expression, however, started from the completional difference of the two main forms (one with and the other without preformativ), the only mode-difference that has held its place in the Shemitic languages. The Perfect naturally connected itself with the idea of the real ; the Inchoativ, with that of the unreal. Beyond this point it is not certain how far the motherlanguage advanced. If we could suppose that the original state of development has been preservd in Arabic, we should hav to say that the primitiv Shemitic had so differentiated the forms that the $a$-form was devoted to the expression of the relation of dependence, the vowelless form to command, wish, and the most delicate shade of the inchoativ conception, and the long form in $n a$ or ma to emphatic assertion, command, or wish, while the more general expression of the unreal was assigned to the $u$-form, and the real, with connected optativ and conditional uses, to the Perfect. On general grounds this may be considerd probabl, but the absence of the modal
$a$-form in the other dialects leads us to leave the question undecided-it is possibl (as is suggested above) that this form is a special creation of Arabic.

We have treated the Perfect as a proper modal form, tho it is usually said in the grammars that the modal development attaches itself only to the Inchoativ. This is perhaps nothing but an affair of phraseology, but the Perfect has a function as truly modal as the other. The Shemitic did not originate special agglutinations for its modes. It took its derived noun-verb (made by a preformativ $y a$ from the simple stem) and used its cases for the expression of modal ideas; these cases in all probability at an earlier stage played the part of mere nouns, and, as they advanced to the verb-state, gradually and naturally transformd their case-relations into mode-relations. Similarly, the Perfect, which was also a noun (with pronouns attacht) without diversity of caserelations, transferd its nominal conception of completedness and transformd it into the corresponding mode-relations. It seems to work as real a confusion of ideas to confine the name Mode to the Inchoativ, while the Perfect is called an Optativ and a Conditional, as it was, according to the old nomenclature, to call the two main forms Preterit and Future, explaining that the first was also a Present and Future and the second a Preterit and Present. The Shemitic mode-development went out from Shemitic conceptions, and our terminology must be made to conform to these conceptions, not only for the sake of grammatical exactness, but also that we may learn to comprehend the true shades of meaning exprest in the literature of the language.

From what has already been said it is clear that the general tendency in the Shemitic languages has been to drop formal mode-distinctions, and indeed to a compression of all the senses flowing from the Inchoativ into the shortest or Jezmaform (leaving, however, the Imperativ unaffected). In the other direction a compensating process of modal formation has also been going on, but to a less extent.

Ancient Arabic retaind or developt the fullest modal material, whether precisely the complete primitiv material,
cannot be certainly said. In the earliest remains of Hebrew, reaching back perhaps 1200 or 1300 years B. C., only the Jezma-form is in ful use, the $u$ and $a$-forms being preservd only in connection with suffixes, and the am (or an) form in a petrified state as a Voluntativ (similarly the noun-forms in $u$, $i$, and $a$ exist in classical Hebrew only in a petrified state, and with suffixes, the Jezma-form being the common one). The further shortening of this form into the so-called Jussiv is another illustration of the tendency to abridgment, and helps us to understand the prehistoric decadence of the Inchoativ. Of course Hebrew, tho it dropt the forms, retained the ideas, economically reducing the material of expression to what it considerd the minimum, tho afterwards obliged to create a new form suited to its peculiar needs. There is a further step in post-biblical Hebrew, where the main forms have largely sunk the original completional in the derived temporal sense, and the flexibility of the modal expression has suffered corresponding diminution, the Perfect being appropriated to all real and the Inchoativ to all unreal conceptions.

The Assyrian in its earliest known stage shows apparently less formal degradation than the Hebrew in the Inchoativ, inasmuch as it retains the forms in $u$ and $a$ as wel as the Jezma-form. But it seems to hav quite lost the sensedistinction of these forms. It has also maintained the ma-form (and indeed more fully than the Arabic in the three cases umma, amma, imma), but its ordinary Inchoativ is the Jezma-form as in Hebrew. Its new formation of a Precativ has already been mentioned. The curious question, whether it had a Perfect in historical times, must be considered as yet undecided. It certainly brought this form from the mother. tongue, and if its remains do not show it, we may conclude that the Perfect was dropt either from unknown syntactical considerations peculiar to the Assyrian, or through the influence of another language. As its optativ expression is assigned to a peculiar form (the Precativ), it has practically, as far as is now known, comprest its modal material into the Jezma-form.

Pure Aramaic does not appear as a literary language til after the begining of our era, and then shows the same general state of form-degradation as Hebrew and Assyrian, without having developed, like Hebrew, a shorter Inchoativ, or, like Assyrian, a Precativ. There is, indeed, in biblical Aramaic a precativ and future form made by prefix $l$, but there is no trace of it in classic Aramaic and it is probably a peculiar Jewish form, either a dialectic modification of the Aramaic Inchoativ (with preformativ $n$ ) or a combination of the preposition $l$ with the verb. Aramaic has, however, compensated for the loss of the original verb-forms by the use of periphrastic (participial and other) expressions, and in general by advancing towards an analytical structure.

The process of abridgment has been carried by the Ethiopic (whose earliest written remains belong to the fourth century of our era) even farther than by the Hebrew and the Assyrian, but its new lengthend form describd above has brought it back pearer to the original Shemitic modal development. In the other members of the African branch there is no new modal material, except that the Amharic shows, like the Aramaic, a disposition to adopt compound periphrastic forms, and an analytical structure.

Modern Arabic shows about the same stage of formal degradation as ancient Hebrew, and its modal expression has been modified accordingly, and the modern Aramaic dialects exhibit an exaggeration of the tendencies of the classic language.

It appears, therefore, that the loss of primitiv forms and the origination of new forms took place in many of the Shemitic dialects before the historical period; when they appear as written speech, they hav already traversed a long course of growth, decline, and new growth. The primitiv tongue of the family developt a respectabl set of modeforms out of very simpl material, and the dialects hav curtailed these til there has been left the smallest possibl subjectiv element in the formal verbal expression. A minute examination of the modal expression in any one of the dialects, as Hebrew (which does not belong to the design of this
paper), would nevertheless show a considerabl power in the expression of delicate subjectiv shades of thought, not by distinct forms, but by the suggestions arising from the main completional element of the verb. This element itself may be considerd a peculiar Shemitic modal conception, or at least developt in Shemitic speech to an extraordinary degree, and permitting very delicate distinctions of thought. By it the language is enabld to characterize an action as finisht, or as just entering on existence and in all the stages of incompleteness. It has seizd on and formally fixt the period of " becoming," the stage of advance from non-existence to existence, and has thus given a peculiar dramatic coloring to its ordinary style, while it has groupt around this idea the various conceptions of the ideal that constitute the material of modal thought in our family of languages. These last it has in common with other tongues; but the fundamental conception of completional distinction may be regarded as the Shemitic contribution to the modal material of speecha conception that it has workt out more fully than any other linguistic family.

## II.-On the Nature of Caesura.

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While this paper presents an independent discussion of the nature of caesura, it is so shaped that it also serves as an introduction to the following paper On the Effects of Elision.

1. Caesura in general serves two purposes. (a) One of these is to allow the reciter in long verses to catch his breath, in such a way, however, that he shall not be permitted to pause too long for the purpose; and accordingly, in such verses, we usually find a pause at the proper place, or at least the liberty of making a pause without impairing the sense. In the latter case occurs a slight xpóvos кevós or tempus inane, which may fall even between words closely connected. This
use of caesura is not necessary in iambic trimeters, and consequently the caesura may fall where a pause is not to be thought of, and very frequently falls where the sense, though permitting a pause, does not require it. (b) The other general use of caesura is, not to separate, but to link together the two halves, or rather principal portions, of the verse. If the verse is divided exactly in the middle, it at once falls apart into two shorter verses; and if every word-foot constitutes a verse-foot, the whole verse falls to pieces, very much as a brick wall would do, if the bricks were laid the one exactly upon the other, without any over-lapping. A thread-bare illustration is afforded by
sparsis hastis longis campus splendet et horret.
An example in trimeters is Agam. 943:

Hence, somewhere near the middle of the verse, a word must end in a foot, so that the foot, which the reciter feels to be a unit of the verse, may connect the two portions together. This prevents the reciter from pausing too long; for if he did so, he would destroy the rhythm of the foot in which the caesura occurs. And so with the other feet in the verse: the more numerous the caesurae, the more vigorous will be the recitation, as they prevent too great a pause and so insure care and attention on the part of the reader or reciter. A better way, therefore, of indicating caesura, would be to use a vinculum of
 than - - - - - $\|$ - - - - - - ニ. For the sake of convenience, however, I retain the usual method. So it is not to be wondered at that we find many verses which require no pause from beginning to end. To say that such verses have no principal caesura is, in the first place, to beg the question; and, in the second, to overlook the fact that these verses regularly have a caesura at the place for the principal one. Of course I do not mean thereby to say that, for instance, Aristophanes did not write verses without any main caesura, for he certainly did, and frequently allows diaeresis after the first dipody to pass for the chief caesura-a thing not unknown in the Tragedians, especially in Aeschylus, where it is quite
common. But this is not so frequent as is usually supposed, for it is erroneously assumed that the principal caesura must be at the longest pause. Still another use of caesura, with which the present discussion is not concerned, is to conceal the cause of the pleasant rhythmical effect of verse.

Let us now proceed to illustrate the whole subject. The examples cited are not exhaustive, but merely such as I picked up when reading for other purposes. We find caesura between the subject and the verb, as Aesci. Theb. 15:

Between the verb and its object, ibid. 270:

Between an adjective and its substantive, ibid. 19:

So Alcest. 513, 856 :


Even between the article and its substantive in various relative positions, Choeph. 658, Philoct. 964, Hel. 703 :




After a preposition, Oed. Rex 615, Troad. 946, 1211, Iph. Taur. 1174:





Even after où, Iph. Taur. 684:

Before postpositive words ( $\mu \dot{\varepsilon} \nu, \gamma \dot{\alpha} \rho$, etc.), Orest. 360, Eur. Elect. 35 :


So Eumen. 473, Hec. 549, 736, Heracl. 39, 729, 743, Herc. Fur. 69, 1126. 1396, Iph. Taur. 96, 955, 1161, 1379, Iph. Aul. 425 , etc., etc.

Caesura, even between an enclitic and the preceding word, is better than no caesura: thus. Ion 574, Eur. Suppl. 727, Iph. Taur. 696, Choeph. 181, 733, Antig. 1256 :

Before postpositive $\dot{\omega}$, Theb. 53, Antig. 256 :

It is not necessary to multiply examples of caesura between words closely connected. Suffice it to observe, that if we reject these caesurae, we shall have a vast number of verses without any main caesura, almost all of which have this sort of caesura. This cannot be attributed to chance. And to further strengthen my views, I shall adduce some illustrations from other verses. No one will deny that the trochaic tetrameter catalectic of the Tragedians requires diaeresis after the second dipody. There is one apparent exception to this,-Aesch. Pers. 165 ; but this will be explained in my next paper. Although this diaeresis is required, and corresponds in a certain way to the main caesura of the iambic trimeter, still it takes place between words closely connected, and that, too, in spite of the considerable length of the verse. I give here a few of the numerous instances of this: Troad. 451, 454, Ion 530, 1252, Iph. Aul. 871, 877 :







See also Iph. Aul. 860, 868, 1342, 1367, and passim. In some of the above examples the division takes place between an enclitic and the preceding word. This is not so strange as might appear at first sight; I can produce examples of a
grammatical pause immediately before an enclitic, as Androm. 747, Soph. Elect. 647-8:

Some punctuate the last example differently; but unquestionable are Hec. 432, Hel. 1166, Heracl. 78, Antig. 544, etc., unless the vocative is read without a pause.

An enclitic can even stand at the begimning of a verse when the preceding verse is closely connected, as Heracl. 280-81 :



Similarly it may be shown that a proclitic admits a grammatical pause after it, from which fact it is evident that it was not a necessity that it should be read as a part of the word following it, and hence could admit caesura after it. Examples of pause after proclitics are Soph. Elect. 348-9, Phœn. 1280-81:




A proclitic may also stand at the end of a verse, as Plut. 878.
To illustrate further the fact that caesura may take place between words intimately connected, I shall now cite some examples from Latin poets. In Horace, who certainly did not neglect the main caesura, we find, Epod. V, 83, XVII, 6, 13, 36 :
sub haec puer iam \| non, ut ante, mollibus.
Canidia, parce \| vocibus tandem sacris.
postquam relictis | moenibus rex procidit.
quae finis aut quod \| me manet stipendium;
to say nothing of the well-known verses, Epod. XVI, 8, I, 19, XI, 15 :
parentibusque abominatus Hannibal. ut assidens inplumibus pullis avis.
quod si meis inaestuet praecordiis.
In Catullus, who never neglects caesura anywhere else, we find, IV, 18 :
et inde tot per \| inpotentia freta.

Of course this sort of caesura is not to be expected so much in the dactylic hexameter, on account of the length of the verse, and the consequent desirableness of having a pause in it. Still many instances do occur, as Hor. Sat. I, 4, 2-5; Epist. I, 11, 21 ; 10, 14 :

> atque alii, quorum | comoedia prisca virorumst, siquis erat dignus | describi, quod malus ac fur, quod moechus foret aut | sicarius aut alioqui famosus, multa | cum libertate notabant. Romae laudetur | Samos et Chios et Rhodos absens. novistine locum | potiorem rure beato.

In the Homeric Poems are found many such verses as $11 . \mathrm{N}$, 49, 71 :


And even in the so-called pentameter, whose incision (with two or three peculiar exceptions) is invariable and fixed, it may take place where there is no grammatical pause, as Catul. 84, 12: iam non Ionios \| esse, sed Hionios.
Archil. 16, 2 (Bergk):

2. There is a commonly received error that caesura only takes place where a polysyllabic word-foot extends across the space between two verse-feet, and ends in the latter of them. This is utterly false. Caesura is where a word-foot, be it monosyllabic, dissyllabic, or polysyllabic, terminates in a verse-foot. There is a tendency, it is true, to avoid diaeresis, and especially strong is this tendency in that part of the verse where the main caesura is necessary. Consequently diaeresis in the dactylic hexameter is not very frequent after the second foot, but when it does occur there and a monosyliable follows it, the verse has both diaeresis and caesura. To say, then, that caesura excludes diaeresis, or rather includes the absence of diaeresis, is to confuse the whole matter sadly. Besides, not a few instances (although, to be sure, not very many) occur even in hexameters, as Hor. Epist. $\mathrm{I}, 6,40 ; 7,16 ; 7,52$, etc.:

Ne fueris hic tu. \| Chlamydes Lucullus, ut aiunt.
Iam satis est. At tu, \| quantum vis, tolle. Benigne-.
Demetri, (puer hic \| non laeve iussa Philippi-).

And they are especially common in the Satires of Horace, as $\mathrm{I}, 1,8,13,23,32,40$, etc., etc. This is most usual in Latin where the monosyllable is preceded by elision, as Epist. I, 2, 8:

Stultorum regum et || populorum continet acstus;
in which case the monosyllable is often closely connected with the word after it.

But what is of especial importance for the present discussion, in iambic trimeters the caesura is frequently effected by means of a monosyllable, as Orest. 662:

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In the 801 iambic trimeters of the Alcestis this occurs 117 times; and even if we omit instances where the monosyllable is enclitic, or a monosyllable preceding it is proclitic, there still remain 71 instances; that is, the matter was left to take care of itself. So in the last Epode of Horace, containing 81 verses, there are 7 instances, verse 30 being an appropriate specimen :

Quid amplius vis ? | 0 mare et terra, ardeo.
3. It is a happy circumstance that G. Hermann denied that caesura in the fourth foot of iambic trimeters was ever to be regarded as the main caesura. This one view of hts justifies us in disagreeing with him in anything we please, if we can support our views with arguments. But when J. H. H. Schmidt denies that the caesura in the third foot is of any importance, it is time to begin to get out of patience. In his Leitfaden he says: "Unter 100 Versen pflegen etwa 50 Theilung (i. e. hephthemimeres), etwas mehr als 25 Einschnitt (i. e. diaeresis in the middle of the verse), etwas weniger als 25 Bruch zu haben. * * * Die sonst angenommenen Gliederungsarten, welche dem Rythm widerstreiten, haben keine wesentliche Bedeutung." To reply to this would be like arguing with a man who insists that twice two is five. Schmidt has thrown great light upon the reading of Lyric Poetry, but he should not have tried to make everything lyric.

## III.-On Certain Effects of Elision.

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Although some of the facts which are discussed in this paper have been mentioned by others, still it may not be out of place to state that all of them were observed by myself before I knew that attention had been called to them, and that I have arrived at all my conclusions by independent investigation.

## § 1. Quasi-caesura in Greek.

Having once had occasion to find examples of iambic trimeters without any main caesura, I observed that nearly all such had an elision so placed that if the elided vowel were pronounced there would be caesura. This, as I have since learned, was observed by Porson, who calls it quasi-caesura (a name which I adopt), but offers no explanation of the phenomenon. This elision may take place either at the end of a polysyllable, as Ajax 435 :

or in the postpositive or enclitic monosyllables $\tau \varepsilon, \gamma \varepsilon, \mu \varepsilon, \delta \dot{\delta}$, etc., as Theb. 538:

In such instances I have no doubt that the Greeks (who ordinarily made their elisions total) slightly pronounced the elided vowel, so that the effect of caesura was in some measure produced. But to this view there seems at first sight to be an objection. When the reader had come to the place for the penthemimeral caesura and found elision instead, how was he to know whether to make his caesura there or not, as the main caesura might be hephthemimeral? That is, in such a verse as,
how was the reader (and especially the reciter, for in reciting you cannot think ahead) to know whether he was to make caesura by slightly sounding the $-a$ of $\mu a \vartheta v \bar{v} \sigma a$, or was to wait
for the hephthemimeral caesura? This difficulty would evidently debar writers from employing quasi-caesura at the end of the first dipody under ordinary circumstances, and hence we actually find that it is admitted as the equivalent only of the hephthemimeral caesura. Certain exceptions which were to be expected will presently be explained.

It should be observed that verses with quasi-caesura seem to have diaeresis in the middle, which would be a grave fault. Now G. Hermann, who rejects the caesura in the fourth foot, must of course reject quasi-caesura also, and this he does by attributing it to chance. Accordingly he asks how it came that Aeschylus and Sophocles neglected the elision (when they used diaeresis in the middle) more than Euripides, who, he says, was so much more careless than they. We ask in reply how it came that there was any great difference between the usage of Euripides and that of the others, if it was all due to chance. And besides, a verse containing what Hermann regards as an unsuitable substitute for caesura, might well be made by one whom he considers an inferior metrician. But I deny that Euripides was more careless than the others. In fact he is in some respects the most polished and versatile metrician of the three. His frequent resolutions which give variety and life to the verse, being subject to strict limitations, are no evidence of carelessness or of deficiency. Moreover, he does not admit the quasi-caesura more frequently; whereas the diaeresis in the middle, without elision and without any main caesura elsewhere, the rest sometimes admit, but Euripides virtually never.

Hermann's position demanded of him to show that there were many verses entirely without main caesura, and in attempting to do this (Elementa, p. 111) he produced the following supposed instances from Oed. Rex : 326, 449, 598,599 , $615,738,744,785,809,1290,1476$. But of these eleven verses, four have the quasi-caesura, and one more (449) has the ordinary hephthemimeral caesura:
 ätavza:
(Some write $\pi \bar{a} \nu$ for $\pi a^{\prime} \nu \tau^{\prime}$.) And so the number of verses wanting caesura is reduced from eleven to five; and one of these five (615) has a break between a preposition and a noun, which is not the same as no caesura at all; for if in this instance we regard the preposition and its object as one metrical word, the third and fourth feet would then be made up out of one word:

which Hermann himself in another place correctly regards as the worst sort of verse. Still another of the five has a break between an enclitic and a word preceding it, which break is better than total absence of caesura for the same reason that applies to the verse just mentioned, for if the two words form one metrical word, we have

So that there are really three verses without main caesura, and four with quasi-caesura; or even allowing him to count the two I have just mentioned, the ratio is still only five to four, and that too in a play that seems to have been especially selected for making the ratio seem great. Now if the four out of nine instances suffer elision by clance, and the same ratio is sustained in other plays, we must conclude that regularly four words in nine suffer elision, which is not true. But in fact, the other plays of the Tragedians not only sustain the ratio in favor of elision, but show that the instances of elision vastly exceed those of its absence in such verses.

Hermann, further opposing quasi-caesura, compares the verses


with these,


affirming that they are of the same sort. In reference to the two former he says: "Who will believe that the actor recited them in any other way than as was suited to the sense? for if rhythm and not sense is to be observed in reciting, there is no reason why breaks should not be made even in
the middle of words" (a thing, by the way, which he himself had just done on the same page in discussing another subject). Accordingly he regards the main caesura as being replaced in all these verses by diaeresis in the middle. Without denying that this ever happens, I think that, although in the above two verses which have no elision we place a comma after the third foot, still the actor, in order to emphasize $\sigma \dot{v}$ and $\boldsymbol{\sigma} \dot{q} \mathcal{q}^{\prime}$ and so express their relation to $\pi \dot{0} \lambda c s$ and örav, made his caesurae respectively after $\sigma \dot{\ell}$ and $\tau \dot{\delta} \vartheta^{\prime}$; for if we read these verses according to the sense we are almost compelled to make that sort of rhetorical pause and change of tone which best suits caesura. And then we may ask in turn who will
 pronouncing the elided vowel, especially as Hermann himself requires us to make a pause at such places.

In order to prove beyond all doubt that this elision at the middle of the verse cannot be attributed to accident, I shall first collect from one play of each Tragedian the examples of verses that have no main caesura, but have diaeresis in the middle, and see how many of them have elision at the diaeresis; and then I shall give the results of a similar examination of all the extant tragedies. And in so doing I shall first take account of those verses where the sense seems to require the chief pause to be at the diaeresis, whether there be caesura or not, and then I shall drop out the verses which contain a caesura of any sort in the third or the fourth foot, so that there can be no misunderstanding as to what I mean by caesura. I shall, therefore, temporarily place caesurae at places where I do not believe they belong. I use Dindorf's text.

First, then, I find in Avscr. Theb. the following:

1. With elision after the third foot:







2. Without elision :

$$
\begin{aligned}
& \text { 702: Эєої } \mu \dot{\varepsilon} \nu \dot{\eta} \delta \eta \text { | } \pi \omega \varsigma \| \pi а \rho \eta \mu \varepsilon \lambda \eta \mu \varepsilon \vartheta a \text {. }
\end{aligned}
$$

Here we have thirteen instances with elision against five without it. Now let us drop out all the verses that have any break in the third or fourth foot: in the first group, 385,426 , $544,562,799,1007,1012,1053$ being dropped, five remain; in the second group all but the first being dropped, only one remains; and it will be observed that in 632 roũ might well be written, and I have already shown that caesura belongs after $\pi \dot{v}$ in 1046. In 695 фiaov goes with $\pi a r \rho o s_{s}$ and in $702 \pi \omega s$ modifies the word after it, so that these two verses, at any rate, must be read almost continuously; and hence the rejection of all four of these verses is proper enough, while most of the verses rejected from the other group would have to be strained in order to place the caesura elsewhere; and seeing that elision at the diaeresis certainly answered for caesura, we should be justified in retaining the whole list as instances of quasi-caesura.

Secondly, I find in Soph. Antig. the following:

1. With elision after the third foot, vv. 44, $57,74,77,80$, 307, 399, 407, 408, 473, 515, 658, 732, 733, 764, 1012,sixteen in all. The peculiar verse 544,

which really belongs here, I omit entirely, as it might be disputed.
2. Without elision, vv. $327,518,555,723,899,997,1021$, 1073 ,-eight in all. In $55 \delta_{i o}$ is to be read with $\mu i a v$, and in

71 roc should be emphatic, and is read with donei, and 718 should begin $\dot{a} \lambda \lambda^{\prime}$ кinc ${ }^{\imath} \nu \mu \ddot{\varphi}$; so that I omit these three verses. Rejecting, as before, in the first group 307, 407, 473, 515, $658,733,764,1012$, we have eight left; and in the second group we reject all but 1021, thus leaving the ratio $8: 1$. And in 327 (continuous), 555 (emphasis on $\zeta \ddot{\eta}$ ), and 899 (owi emplatic), the removal of the caesura from the middle is not so violent as it is in any of the first group; consequently the above ratio should really be twice as large.

Finally, from Eur. Elect. I gather the following:

1. With elision after third foot, vv. $4,14,31,64,78,96$, $284,305,332,504,510,555,570,642,770,782,837,980$, 1008, 1012, 1036, 1065, 1087, 1262,-twenty-four in all.
2. Without elision : $43,248,1042,1094$,-four in all.

In the first group we reject $770,837,980,1008,1036,1262$, and in the second group all, leaving eighteen against none.

And yet these elisions at the middle of the verse, when main caesura is otherwise wanting, have been attributed to accident! These three plays are quite enough to show that, whether the author was conscious of it or not, he allowed this sort of diaeresis to pass for caesura. But I have gone further and examined all the plays of the three great Tragedians, omitting the Cyclops, but including Rhesus; and the following tables show the result:

1. Including all possible cases:

|  | With elision: | Without ellision: |  | Percentage |
| :---: | :---: | :---: | :---: | :---: |
| Aeschylus, | 89 instances ; | 39 instances. | $69+$ | 31- |
| Sophocles, | 150 | 53 | 74 | 26 |
| Euripides, | 315 | 101 | 76 | 24 |

2. Excluding all doubtful cases:

|  | With clision: | Without elinion: |  | Perceitages: |
| :---: | :---: | :---: | :---: | :---: |
| Aeschylus, | 42 instances ; | 19 instances. | (6)- | $31+$ |
| Sophocles, | 44 " | 9 " | 83 | 17 |
| Euripides, | 123 ، | 1 (\%) " | 99 | 01 (\%) |

I have omitted Aristophanes because of the uncertainty of the caesurae in Comedy.

In excluding doubtful cases, I took nor note of verses which have diaeresis after the first dipody in lieu of caesura, and it
is the considerable number of these that apparently increases the instances without elision in Acschylus in both tables.

In Euripides the only examples of verses with diaeresis in the middle without elision and without any break at one of the places for the principal caesura, are Hel. 86, and Bacch. 1125. But the former verse is corrupt, having in the MSS. an anapaest in the fourth place; and, by the way, it has a good caesura in the fourth foot; but the critics, in remoring the anapaest, destroyed the caesura. Such an "emendation" is utterly unworthy of consideration. The other verse is :

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This being the only instance, one is tempted to remove it. by writing $\dot{\iota} \lambda \grave{c}^{\prime} \nu a \sigma^{\circ}$.

The statistics show that in Euripides a limit was attained, or nearly attained, towards which we see a tendency in passing from Aeschylus to Sophocles.

In collecting the examples 1 observed a few facts to which I call attention. 1. Verses which have diaeresis with a pause in the middle, especially when there is no elision, very frequently have one or more of the following peculiarities:
(a) There is an antithesis between the two parts. This


(Cf. Suph. Oed. Rex 785, Elect. 1036, Philoct. 503, 1009, 1021 ; Eur. Rhes. 161, Hippol. 313, Phoen. iอ1. Ion 742, Hel. 575, Iph. Aul. 827, etc.; and with elision, Aesch. Prom. 500 ; Soph. Oed. Rex 1163, Elect. 696, Philoct. 359, 676 ; Eur. Alcest. 625, Med. 1141, Hec. 497, Hel. 49;) or it may be expressed by öтє . . . то́тє . . . . , or in some other way, as Afsch. Theb. 1046, Pers. 251, Suppl. 401, Agam. 1353, 1396; Soph. Ajax 1377, Antig. 518, Oed. Rex 968, Oed. Col. 1038, Elect. 1038, Philoct. 907 ; Eur. Alcest. 789, Androm. 656, Hec. 232, 2i3, Suppl. 268, 379, Heracl. 424, Hel. 987 , Bacch. $507,682,975$, Iph. Taur. 674 , lph. Aul. 747 , etc. In these cases the real caesura is generally found in its proper place, and the emphasis of antithesis causes the caesural pause.
(b) There is a long pause near the beginning. When this pause occurs, the rest of the verse is naturally read con-
tinuously, so that the mere break at the place for the principal caesura is sufficient, as Antig. 997:

$$
\text { тí } \delta^{\prime} \text { ह̆т }
$$

So Philoct. 736, Phoen. 1005, etc., etc.
(c) The arsis ( word, that is, it is resolved, and there is caesura in the foot, as Androm. 47 :

The relative frequency of this in Euripides, where resolutions are frequent, leads to the suspicion that a computation might show it to be due to accident; but it is certainly striking, if we examine Orest. 1585, Phoen. 449, 846, Suppl. 1060, Herc. Fur. $3 \because 1$, 1181, Ion 742, 828, 1030, Hel. 267, 290 , 1027, 1028, 1241, 1399, 1449, Elect. 43, 1084, Bacch. 297, $353,841,975$, Iph. Taur. 371,484 , Iph. Aul. 747, etc.
2. (a) In Lyric passages when an occasional iambic trimeter occurs, as in other respects, so in regard to caesura, it is not subject to the laws of the ordinary verse; consequently I have omitted them in the count. As examples see Troad. 1305 and its corresponding verse 1320.
(b) A few verses present neither main caesura nor diaeresis, as Aesch. Suppl. 244, Pers. 501 (both $-~-~-~ \| ~), ~$ Sopr. Ajax 969 ( - - - | with elision), Oed. Col. 373 ( $-\cdots-\cdots$ ), Eur. Suppl. 303 (which has a break in the middle, but pause after the second dipody).

As the collection of all these statistics was a mere parergon while I was reading the Tragedians for another purpose, I do not pretend that the figures I have given are absolutely correct. In fact, in some cases, I know that they are slightly erroneous; but they approximate the truth sufficiently to leave no doubt as to the correctness of the general result. I hold that I have fully established the fact that quasi-caesura must be recognized; and the explanation of it which I have given, it seems to me, is not only satisfactory, but is the only possible one. But we are not to imagine that the vowel exposed to elision received its full sound, and that a caesural pause was made in addition; for this would be like an anapaest with
caesura after its first syllable. The elided syllable was pronounced enough to render the first part of the verse somewhat similar to that of a verse having the main caesura in the fourth foot. The voice then passed rapidly on to the next word, unless the sense demanded a pause ; and even when this was the case, the elided vowel, receiving a fuller pronunciation than was customary (as it was usual to suppress elided vowels entirely-elisions before long pauses being generally avoided), in a certain measure supplied the place of a pause. If the objection be made that this would make the verse like one having its caesura after the first syllable of an anapaest, I reply that this must be the case whether we recognize quasicaesura or not, for it is universally admitted that before a strong punctuation an elision cannot be total This sort of caesura, then, is rather of the sort which serves merely as a link or bond to hold the two parts of the verse together, than of the sort which gives the reciter a space to catch his breath in. So that the portion of the verse after the caesura is like that of a verse having no caesura, except that most probably the vowel (which is always short) following the elision suffered a partial aphaeresis. But in all cases the elided vowel and the one after it were so pronounced as not to interfere with the proper time of the foot.

An apparent difficulty is presented by those verses which have elision with a long pause at the ordinary penthemimeres; for if the slight pronunciation of an elided vowel at diaeresis creates caesura, why does not the same thing at caesura destroy it by creating diaeresis? The reason is found in the fact that the diaeresis in the middle of the verse is always followed by a single mora whose place is, in a manuer, partly filled by the elided vowel, there being no ictus, whilst the penthemimeres is followed by a double mora with ictus, whose place cannot be even approximately supplied by the elided vowel. For instance in Alcest. 381 :

unless we slightly pronounce the elided vowel, we have $\mu a \lambda a ́ \xi_{\epsilon c} c^{*}$-which is hardly admissible; but the barely audible


Still it somewhat impairs the flow of the verse, so that some of the Romans, who in almost all cases had only partial elision, appear to have avoided this elision. Hence, in the only ode of Horace composed entirely of trimeters (the last Epode), containing eighty-one verses, there is not a single instance of this elision, and it is very rare in the trimeters in his other odes, which odes were composed, as I shall presently show, under laws less strict in other respects than the last Epode. The rarity of elision at the caesura in Horace can hardly be attributed to accident; for in the twenty-ninth Ode of Catullus, containing twenty-four verses, there are seven such elisions, three of which precede a polysyllable, which is more objectionable than before an unimportant monosyllable. In Horace, on the other hand, there are in all the trimeters only two instances, one of which (Epod. V, 97, where vicatim loses its ultima), takes place to allow the ictus to fall on the first syllable (Transactions Am. Phil. Assoc. 1876, p. 121), and the other (VI, 11) is
cave. cave: namque in malos asperrimus,
where, even if we place the caesura after namque, we must read continuously, and when this is done, -que really suffers total elision, as will appear hereafter. It must indeed be admitted that Catullus allows more elisions in general than Horace does, but not so many more as to account for this disparity.

That elision at the main caesura is so frequent in Latin dactylic hexameters is no matter of surprise, because the feminine caesura is also admissible. These cases are not to be confounded with those where elision takes place at the end of the second foot before a monosyllable, so that this monosyllable is by the elision closely connected in sound with the preceding word, and so admits caesura after it, as Hor. Epist. II, $\mathbf{1 , 4 6}$ :

Paullatim vello et $\|$ demo unum, demo et item unum.
(Or is this a kind of aphaeresis of the vowel of the monosyllable, which is usually et?) In other verses of sufficient length to make a breathing-place desirable, an elided vowel at this place was sounded a little even by the Greeks. Since this elision, frequently occurring in the versuß politicus, as Nub. 1362:

[^8]caused the first half to sound somewhat as if it had feminine caesura, this latter came actually to be admitted, as Nub. 1411:
and finally even with a long syllable, as Nub. 1366:

But this one concession being made to the influence of elision, no further elision was tolerated at the feminine caesura. Again: even in the trochaic tet. cat., Aeschylus seems to have allowed elision, in one instance, to substitute apparent caesura for the otherwise universal diaeresis: Pers. 165 :

From all this it is evident that in iambic trimeters, quasicaesura is to be expected after the second foot (as well as the third), provided some circumstance compels the reciter to sound the elided vowel; and this actually occurs, (1) when there is a long pause at the end of the first dipody, and (2) when at that point the verse is divided between two speakers. The former kind is of rare occurrence, especially in the Tragedians, since the latter portion of the verse was rather long, and, besides, the syllable following the elision is not necessarily a short one (as in the middle of the verse). Still I suspect that Hel. 818:
and a few other verses, such as Oed. Col. 1475, Trach. 449, 1136, 1¿08, Philoct. 1035, Ajax 969, etc., are of this kind.

Verses of the other sort are scarce, indeed, in the Tragedians (see Trach. 418), since they do not very often divide verses between actors, but in Aristophanes I find these instances: Lys. 911, Eccl. 1094, Ach. 832, Equ. 726, Aves 846, Nub. 726, 729, Pax 283, 367, Plut. 374. In my paper on Elision (1878) I called attention to the fact that, when elision seems to occur between two speakers, there is in fact no elision at all, but when the first speaker is uttering the vowel marked as elided, the second speaker utters his first syllable, there being not only no pause bet ween them, but an actual overlapping. Hence, when there seems to be an elision of this kind after the first dipody, we really have the ordinary
penthemimeres, the overlapping being employed to secure quick retort, or sudden reply of some sort, thus (Ach. 832, Nub. 726):

Here the caesura took care of itself without any effort on the part of the first speaker, and hence this kind of caesura is as common at the end of the second as at the end of the third foot,-in fact more common in proportion as caesura in the third foot is more common than in the fourth.

## §2. Quasi-caesura in Latin.

As the Romans were accustomed to hear vowels that were exposed to elision slightly pronounced, their ears were less delicate as to these vowels than were the ears of the Greeks, who were accustomed to the total suppression of elided vowels. Consequently, in Roman authors the quasi-caesura is not to be expected so frequently. But, as they always made clided vowels audible, if quasi-caesura occurs we may expect it occasionally after the second foot, no effort being required to produce it; hut the fact that the latter portion of the verse is so long, and that the elision is usually followed by a long syllable (which cannot be represented by a diminished syllable), renders it rarer than at the middle of the verse. Accordingly there are a few examples of it in both places. But when the (apparent) elision takes place between two speakers, of course the same principle applies as in Grcek, and we find not a few instances. (See Casina 352, 397, 509 , etc.) In the other plays of Plautus it is not rare between two speakers. In Terence also we-find a number of examples, as Andria $\mathrm{I}, 1,7 ; \mathrm{I}, 1,92 ; \mathrm{II}, 5,5 ; \mathrm{IV}, 4,46 ; \mathrm{V}, 3,23$; etc.

Sometimes the caesural pause seems to have prolonged a vowel exposed to elision into a whole mora, so that there was no need of this mora in the next word; whence arose hiatus at caesura, -a question too vexed for discussion here.

## § 3. Principle underlying Quasi-caesura.

I have said that, in case of quasi-caesura in Greek, the reader, having passed to the middle of the verse without encountering caesura, unhesitatingly makes it at this point by slightly uttering the elided vowel, because he knows that it is the last chance for a main caesura. I now propose to illustrate this by giving some further applications of the same principle.

1. An iambic word (as Lachmann pointed out) rarely suffers elision in Latin, especially in dactylic hexameters, the cause no doubt being that the word would thereby be too much modified. (The elision sometimes occurs before et and rarely before other monosyllables; in which case I suspect aphaeresis rather than elision.) And when a reader has become accustomed to finding iambic words always unelided, he acquires the habit of boldly pronouncing them in full without reference to the following word. This gave the poets the opportunity of admitting hiatus after such words, as it removed one of the objections to hiatus-the danger of leading to a false reading. Consequently there is a considerable number of iambic words with hiatus, as "nðvō auctus hymenaeo," "Sămō; hic itlius arma." For many examples see Lachmann (ad Lucret. III) and Corssen (Ausspr. Voc. u. Bet. II, p. 785). Unless one is acquainted with this fact, he will hardly read correctly at the first attempt Verg. Geo. IV, 463 :

## atque Getae atque Hebrus et Actias Orithyia.

Also, when an iambic word is immediately preceded by the arsis, the final syllable may, for a like reason, be shortened before a vowel, as Catul. CXIV, 6 : dum dðmo ipse egeat; Ovid; Metam. III, 501 : . . vălē, vălĕ inquit. Here the short syllables $d \check{o}$ - and $v \check{a}$ - force a short to follow.
2. The lengthening of a short syllable under ictus in hexameters is due to the same principle. For when you have read the thesis (äpots), you know already that the long arsis ( P iocs) must follow; so that you make the syllable long even though it be a short one; whilst, on the other hand, if you finish the arsis and find a short syllable after it, of course you pronounce it short expecting a dactyl, and this prevents the
composer from substituting a short for a long vowel in thesis-a thing which he can do in arsis without any danger of being misread. It is for this reason that common syllables (jixpovor) also are made long much more frequently in arsis than thesis. The statement that the ictus lengthens a short syllable, if literally meant, is absurd. But for the difficulty mentioued, the lengthening would be much less of a license in thesis, for in arsis it is not only lengthened, but also receives special stress, which distorts the word all the more.

But in iambic verse, a short syllable cannot be lengthened under ictus (a good proof that ictus does not lengthen syllables); for the arsis may be resolved, and when you strike a short syllable you at once anticipate a resolution, and would go wrong were a short syllable put for a long one. For instance, if in the verse,
scis; feci ex servo ut esses líbertús mihí,
you put ego for mihi, the reader would put a dactyl in the fifth place, and the verse would come out defective :
scis: feci ex servo ut essem libērlüs ĕgo.

## §4. Elision at the End of a Verse.

1. Of elision at the eud of a verse no example is known to me in the case of Latin iambic trimeters. In Aeschylus I find no instance of it. In Sophocles it occurs, as far as I know, ten times (Antig. 1031, Oed. Rex 29, 332, 785, 791, 1184, 1224, Oed. Col. 17, 1164, Elect. 1017), six examples being in one play. It is confined to verses which are so connected grammatically with the next, as to forbid a pause ; and, as was to be expected, the syllaba anceps is not admitted. Several of these verses end with $\ddot{b}$, which some editors strangely transfer to the beginning of the next line, as if you would not have to read continuously in either case.

In Euripides there appear to be no examples. Orest. 1489 and Elect. 1184, in both of which it takes place before a pause, are not to be counted, as they are mere accidental trimeters in Lyric passages. This is the second feature in which we have found Lyric trimeters to differ from ordinary ones.

In Aristophanes I recall two examples (Aves 1716, Eccl. 351 ), in both of which $\delta$ ' stands at the end, the preceding word being closely connected with the next line.
2. In Greek hexameters I do not know of any instances of elision at the end. Of course I take no notice of Nauck's attempt to banish ocs and $\cdot p s$ (Dat. pl. endings without final c) from Homer, which attempt leads sometimes to on' and $-\eta \sigma^{\circ}$ at the verse-end. In Iliad $\theta$ 206, $\Xi 265, \Omega 331$, Aristarchus wrote $Z \tilde{\eta} \nu$, and not $Z \tilde{\eta} \nu^{\prime}$.

In Latin hexameters we find this elision occasionally under one of two conditions: (a) When the sense and grammatical structure allow no pause, then a vowel with -m, or a simple short vowel (especially in -que) may be elided. It is my opinion that, to insure a correct reading, the poets sometimes sought this elision, as Verr. Aen. VII, 160, X, 781:

> Iamque iter emensi turris ac tecta Latinorum ardua cernebant iuvenes, muroque subibant. Sternitur infelix alieno volnere, coelumque adapirit, et dulcis moriens reminiscitur Argos.

Other examples are Aen. I, 448, V, 422, VI, 602, VIII, 228, XI, 609. Also, Geo. I, 295, which is the only one where the elision is not needed.
(b) When -que stands at the end and occurs again between the main caesura and the end, then the last -que may suffer elision, even before a pause, as Verg. Geo. II, 443, Aen. II, 745 :
navigiis pinos, domibus cedrumque cupressosque ; hinc radios trivere rotis, hinc tympana plaustris. Quem non incusavi amens hominumque deorumque, aut quid in eversa vidi crudelius urbe?
Other examples are Geo. II, 344, III, 242, 377, Aen. I, 332, IV, 558,629, V, 753 , VII, 470, IX, 650 , X, 895 . So Ovid, Metam. IV, 11, 779 , VI, 507 , etc. The examples referred to in Vergil are exhaustive; so that it cannot be regarded as an accident that another -que is always found near the elided one. The cause is that the too frequent repetition of -que was unpleasantly monotonous, on which account the Romans often subjected one of them to this elision even at the verseend, when it happened to be convenient. The aversion of the Roman ear to -que shows itself in several ways. Eren
when not repeated it is exposed very often to elision in the body of the verse. This happens frequently at the main caesura, and especially before et (cf. Hor. Epist. II, 3, 145, $162,165,196.199$, etc.). Again, after Lucretius, it became rare after short $e$ (Horace, in Sat. I, 1, 89, has servāreque amicos, with elision) ; and finally went out of use after words ending thus. Still another striking evidence of their aversion to the monotony above mentioned is found in the fact that, when -que is found two or more times in the same part of the verse, it is frequently lengthened in one of its positions. We often see it stated in the elementary Prosodies that -que is sometimes lengthened; but I have never seen it stated when this occurs. Some speak, indeed, of its being lengthened before two consonants; and in fact it does usually occupy this position when lengthened, but the consonants are generally a mute and a liquid, which very rarely cause position when initial. In fact even the strong position is exceptional in Latin when it acts on a final vowel of a preceding word. In Greek Comedy the weak position never lengthens a syllable, and even in Tragedy, a final vowel to secure quantity always takes movable $\nu$ (if it can) before the weak double consonants ;
 of other places in all Greek poetry. And, what is more to the point, Vergil and other Latin poets do not under these circumstances lengthen final syllables of other words. Rare exceptions occur, as Catul. (in iambics) IV, 9 : Propontidä trucemre, etc. One example of -quē occurs before a simple 8 in Vergil (Aen. XII, 363):

Chloreaquē Sybarimque Daretuque Thersilochumque, where $\mathbf{W}$ agner attributes to 8 the force of a double consonant! He cites, by way of proof, Aen. III, 464:-graviä sectoque elephanto. But if 8 had this weight, why do we meet no more instances of it? Besides, every one knows that occasionally any final vowel (and especially neuter plural -a) is lengthened before a single consonant. And of the letters, 8 is least likely to have such an effect. In Ennius and Lucilius final -8 with an initial consonant in the next word hardly ever makes position in thesis, and with its vowel is
elided very often. Cicero elided it in verse, and Catullus (CXVI, 8) drops it before another 8. Priscian, on "distincta smaragdo," says: " $S$ enim in metro consonantis vim saepe amittit." Even in the middle of a word before a consonant it fails to make position not unfrequently in Plautus and Terence. It is the weakest of all the consonants, except final $m$ before a vowel. Moreover, we have an example before $l$ in Vergil (Aen. III, 91) : liminaqué laurusque, etc.; and even before $p$ in Ovid (Metam. VII, 225) : Othrysqué Pindusque, etc. But, as I said, it usually precedes two consonants, as Verg. Ecl. IV, 51, Geo. I, 153 :

> lerrasquē tractusque maris, coelumque profundum. lappaequé tribulique, interque nitentia culta.

The remaining examples in Vergil are Geo. 1, 164, 352, 371, III, 385, IV, 222, 336, Aen. IV, 146, VII, 186, VIII, 425, IX, 767, XII, 89, 181, 363. In Ovid there are a good many instances, as Metam. III, 530, VIII, 526, etc.

The enclitic -ve, when repeated, also may suffer elision at the end, as Hor. Sat. I, 6, 102,-rūsvě pěrēgrēve | Exirem, etc. When we consider all that has been shown about -que and -ve, and remember further that neve becomes neu, etc., and that-ne drops its e sometimes even before a consonant, and that such forms as "omniaque" suffer elision in fifth foot of hexameters incomparably more than other words, we can hardly doubt that when these enclitics were exposed to clision, their vowel was totally suppressed.

When elision takes place at the end of a dactylic hexameter, the catalectic pause is destroyed by the continuity of the two verses, and so we can have no syllaba anceps, but the last foot must be an actual spondee. I am not disposed to insist on this, but apparent exceptions (such as Verg. Geo. II, 69, III, 449 , Aen. XI, 333) have been removed not without ms. authority.

That the last syllable must be long after the elision has taken place is not disproved by the fact that, at the end of a Sapphic verse it may, under similar circumstances, be either long or short (cf. Catul. XI, 19, 22: "nullum amans vere, sed identem ōmň̌um | ilia rumpens," and "qui illius culpa
cecidit velūt prātum | ultimi flos," etc.); for the last foot in this verse may be either a trochee or a spondee, as is shown by comparing these two verses:

Gallicum Rhenum horribile aequor ültu-mosque Britannos.
Labitur ripa Jove non probante ur-orius amnis;
or in Greek :


Nor is anything proved by the well-known distichs:

For it is too plain that the poet, in these verses, was driven to his wit's end to get the proper name with one short syllable between two long ones into an elegiac distich at all. The reason that no such division of word is found at the end of a hexameter ending in a long'syllable, is that such a word could be incorporated elsewhere into the verse.

## § 5. The Porsonic Pause.

The substance of the well-known law promulgated by Porson in his Prolegomena ad Hecubam, which is usually expressed in a rather clumsy way, is this: caesura in the fifth foot must not be preceded by the long ultima of a polysyllable; or, to make it applicable also to the trochaic tetrameter: caesura cutting off three half-feet from the verse-end must not be preceded by a lony ultima. (By polysyllable I mean a word of more than one syllable.) If the break is followed by an enclitic, the caesura is not so decided; so that some exceptions occur in this case, but not the tenth of what wonld naturally occur. Hence we infer that the enclitic was not regarded as preventing the caesura-a fact which sustains my views before expressed with regard to main caesura before an enclitic. The law applies to some extent, as was observed by Elmsley (Review of Porson's Hecuba), when the caesura is
preceded by a long monosyllable which is more closely connected with what goes before than with what immediately follows. If it is a postpositive word, the offense is still greater, and if it is an enclitic, the offense is next to that of a full violation. Similarly, if a postpositive word follows the caesura, the offense is greater if it is not enclitic, but not so great as if it were not postpositive, and the offense of a proclitic approximates that of a trisyllabic word at the end. Hermann denies that the postpositive character of a word after the caesura excuses a violation of the law, except where $a ̈ \nu$ is separated by the caesura from a verbal form suffering elision, as єітон $\mu^{\prime} \mid \hat{a} v$ тíte. My theory, however, that elision in Greek was ordinarily a total suppression of a final vowel, leading to a close connection of the two words (as ròv ăvò-
 violations of the Porsonic law excused by elision, even though the word following should not be postpositive; for whatever be the reason for the rule, it has reference to a pause or break between words. My search for examples was at first almost fruitless; but finally I went to. the old editions and ms. readings, and found my theory fully sustained. Since my investigation I have found that Munk had already stated that the rule does not hold "wenn ein apostrophirtes Wort zur Verknüpfung mit dem folgendem zwingt." Of course, under the partial elision theory, this announcement went unheeded. To show to what extent elision had influence, it will be necessary to collate the principal exceptions to the rule, and briefly discuss the commonly received views, as first set forth by Hermann.

In the first place, though convenient, it is not accurate to speak of the forbidden spondee, for it has not even the form of a spondee, but of an anapaest, when the arsis of the fourth foot is resolved. Thus, if in Bacch. 495,
 One violation of this sort occurs in mss., Ion 22 :

where Porson very properly wrote qúdake.

Again, all the apparent violations where ijuiv and $\dot{\nu} \mu i v$ precede the pause are to be removed by writing in $\mu \mathrm{iv}$ and $\dot{\mu} \mu i$ ir or $\tilde{\eta} \mu \iota \nu$ and $\tilde{v} \mu \iota$. Dindorf calls attention to the possibility of this change, and yet he does not make it in his text. Aeschylus has one instance, Prom. 821,-inuir |aṽ đápıv; but there is another instance of the short ultima in Eumen. 3 47 ,-
 Sophocles these forms are quite common before the Porsonic pause, as Oed. Rex 1482, Oed. Col. 25, 34, 81, 1038, 1167, 1408, Elect. 1328, 1332, Philoct. 531; but the short ultima is met at every turn in other parts of the verse, and it looks strange to see in Dindorf's text (Oed. Rex 1482) the ending $i \mu \tilde{\nu} \mid \dot{\omega} \delta^{\prime} \dot{\dot{\rho}} \boldsymbol{\rho} \nu$, and two lines lower down (148t), the beginning,


In Euripides there seems to be no shortening of this ultimate, and consequently these forms are not admitted before the Porsonic pause. One exception appears to occur in his Fragments (Dind. 711); but the verse is quoted by Aristophanes who, it is well known, frequently fails to reproduce the exact words.

Hermann, looking upon hephthemimeres as almost a fault, thought it required another pause in the latter part of the verse, so as to make this part more nearly equal to the first part. Hence he divides thus when this ( $3 \frac{1}{2}$ ) caesura occurs:

$$
\kappa \varepsilon i \nu \eta \gamma \dot{a} \rho \ddot{̈} \lambda \varepsilon \sigma \epsilon \in \nu \nu \nu \nu,|\varepsilon i c ̧ ~ T \rho o i| a \nu \tau^{\prime} \text { ä } \gamma \varepsilon \iota .
$$

This theory he applies in explaining certain violations of the rule in question. In fact it looks as if he got up the theory for this purpose; and he would have you believe that the neglect of the rule was intentional, in order to increase the weight, so to speak, of the latter part of the verse. Under certain circumstances, the presence of the hephthemimeres does seem to excuse a violation of the rule, but the violation could not have been sought, for then we certainly should have had more instances. The explanation of the simultaneous presence of hephthemimeres and disregard of the rule is mainly due to the fact that a trisyllable preceding the pause causes the objectionable diaeresis in the middle, and quadrisyllables of the suitable form ( $\sim-. .$. ) are rare, and
hence only the dissyllable ( - - ) is left, and this creates hephthemimeres. With a monosyllable there, the law ordinarily does not apply. There are, however, two ways in which the hephthemimeres might have failed to exist, the one when there is quasi-caesura, the other when a monosyllable follows the penthemimeres; and instances of both these actually occur in the few examples cited by Hermann (Ion 633, quasi-caesura, and Iph. Aul. 1212, monosyl.):

And the hephthemimeres, accordingly, is very common, when a polysyllable ending in a short syllable precedes caesura in the fifth foot, although the Porsonic law is then intact. But Hermann calls attention to the fact that often the caesura has a long pause. In the first place this is not so frequently the case as he assumes; for he puts a strong pause where he would not otherwise have placed it, as after $\varepsilon$ ifa' in Rhes. 715:
(This particular example, however, is lyric, and proves little of itself; but it serves to illustrate.) And so, frequently, when the Porsonic pause is followed by an enclitic. But when it is followed by $\gamma$ áp, $\mu^{\prime} \nu$, oviv, and other postpositive nonenclitic words, there generally ix a pause at the hephthemimeres. But this seems to me to be chiefly due to the fact that these particles generally have a pause preceding them by a word or two. Hence we generally find the pause whether the law is violated or not, as, with violation, Trach. 932:
and without violation, Antig. 771:

(Cf. Antig. 96, 2i55, 270, 407, 448, 478, 567, 989, 1023, 1043, 1103, 1165, 1255, 1302.) Besides, Aristophanes, who certainly disregarded the law, has hephth. like the Tragedians, when he has Porsonic pause. Still it may be that the pause, allowing the reciter to catch breath, justified the non-observance of the rule. For, although I cannot see why comic
actors should be presumed to have better lungs than tragic actors, still we know that harder tasks were imposed upon them, and so, for want of a better, we accept Hermann's (and others') explanation of the law, viz., that it was to prevent too heavy a drag when the lungs of the speaker were nearly exhausted. If they had time to catch breath near the middle, the observance of the law, then, became less necessary.

I now proceed to examine all the violations, as far as I know them ; and it will become quite evident that elision is one of the principal causes of disregarding the law. In collecting examples I have been greatly aided by Elmsley's Review of Porson's Hecuba. (To collect examples would be the simplest thing in the world if the ms. readings had not been tampered with.) I shall first briefly allude to instances which have no apparent excuse, or at least, one that was not much applied. The emendations to most of these seem to have sufficient ground. In Pers. 321, proper names are concerned. In Rhes. 731, the same thing seems to occur; but the correct division into verses removes it. In Aesch. Suppl. 198, and one or two other verses, the origin of the false reading is evident. Oed. Col. 664, which a preposition seems to excuse, was changed by Porson. Oideic and oidév, changed by Porson into oid' दis and oid' 'ar', occur in Oed. Col. 1022, Alcest. 671, Phoen. 747, and Herc. Fur. 1338 (spurious?). Trach. 1136, had quantity before $\mu \nu \omega \mu \dot{\varepsilon} \nu \eta$-changed by Heath to $\mu \omega \mu \dot{\nu} \nu \eta$. Philoct. 533 had $\pi \rho o \sigma x^{\prime} \dot{\sigma} a v \tau e s$ (referring to two)-changed to dual; 731 was changed before law was known; Rhes. 928, Androm. 346, Hec. 729, Heracl. 640, Herc. Fur. 933, Ion 22, Iph. Aul. 530, 1456, and a few others in Euripides have received obvious emendations. For Ion 1, see Dindorf. Iph. Aul. 665 is manifestly corrupt, the verse being defective. In Androm. 346 and Hec. 729, where there is quantity before $\psi$ (in $\psi \varepsilon \dot{v} \delta 0 \mu a 1$ ), Dindorf accepts the emendations, but in Iph. Aul. 530, he retains $\left.\kappa \frac{q}{\boldsymbol{q}} \tau a \right\rvert\, \psi \varepsilon \dot{v} \delta o \mu a t$, but rejects the whole passage. Munk retains all three, regarding the quantity by position as being less effective. In the Fragments of Euripides,
 doubtful ; Witzschel's reading of 499,4 , is unworthy of notice ;
 $\kappa \varepsilon \delta \nu o ̀ \nu$ عis $\lambda$ éxos,-received by Dindorf; 699 was no doubt modified by Aristophanes, by whom it is quoted; the verse (一ка́ $\mu \nu \varepsilon \iota$; | катЭareìv) in Plutarch, referred by Valckenaer (ad Phoen. 1331) to Eur. Palamedes, need not be considered; 707,-ri xp $\boldsymbol{\eta} v \mid$ धïnare is quoted by Aristophanes, where ri throws doubt on the passage; 773 has roüro (for roúrou) in mss.; in $1019 \pi 0 \lambda \lambda \grave{a}$ (for $\pi 0 \lambda \lambda i \nu$ ) is found in one ms., and is to be retained as being the more obscure reading; in 1065,
 Meineke $\mu \varepsilon \tau a \mu \bar{\epsilon} \lambda \epsilon a$ ) appear to be quite arbitrary. The fact, however, that relatively so large a number occur in quoted fragments casts doubt upon their accuracy.

The great body of instances of disregard of the law, nearly all of which are genuine, but have been much tampered with, I take up in this order: 1, Where there is elision; 2, an enclitic ; 3, $\gamma \dot{\rho} \rho, \mu \dot{\epsilon} \nu$, ov̀r, etc., after pause ; 4, enclitics and postpositive words before pause ; and I shall include the trochaic tet. cat.

1. First, then, where there is elision:

where Elmsley writes ruáo’; in fact he always writes rád and ród' when he finds raür' and $\quad$ ooṽ', although he is compelled to leave roũ̀' (as Oed. Rex. 219) and $\tau \tilde{\omega} \nu \delta^{\prime}($ as Iph. Aul. 895), etc., unchanged.

 others in $\gamma \varepsilon \boldsymbol{r}^{\prime}$.

 changed by Elmsley.


 efforts to change this, as far as I know, have failed.
 rıs द̌६áyet.
 бvүкаヲtбтavтat, etc.



 Musgrave and others have $\mu \varepsilon \varepsilon^{\prime} \dot{\eta}_{\sigma \epsilon r^{\prime} \text {. }}^{\text {. }}$
 аылєірркєь.

 verses Elms. proposed $\dot{\varepsilon} \pi a \xi i a$, $̇ \pi a ́ \xi ı a$, and Dindorf accepts.
 Pors. $\pi i \mu \pi \lambda a 9^{\prime}$.



 Porson does not mention, and Dindorf is unable to change.



 Pors. ' 'фíatá'.


 $\phi<\lambda_{\varepsilon i}$. Some change was needed.

 rejects.
 éq̆: Elms. yàp oùr.


 changed by Nauck.
 for it does not matter how closely a word bears upon a mono-
syllable before the pause, the rule does not apply, if that monosyllable bears upon what follows. Hence, there are many such endings, as Soph. Elect. 574-oio' cis |"İıor,
 388, 515, Oed. Col. 1443, 1646, Philoct. 385, Rhes. 418, 765, Alcest. 320, Hippol. 79, Androm. 378, Hec. 592, Heracl. 181, 255,270 , etc., etc. (All these, by the way, sustain my theory that a break between a proclitic and the next word is not to be disregarded in discussing caesura; for here it is clear that the two are not rhythmically one word.)

In the examples collected above, it will be seen that there are many instances of $a \nu$ with elision. Let it now be observed that in all the Tragedians, to the best of my knowledge, there is no instance of à $\mathbf{y}$ without elision in such positions; and it was quite easy for the poets to construct such endings, and they would certainly have done it by accident, had they not avoided it. The frequency of elision where there is no äv cannot be the result of accident either, and it shows clearly that we are not, without some other sufficient ground, to attempt to make emendations. It would be a strange thing if so large a per cent. of corrupt exceptions to the rule happened to have elision.
2. I shall merely refer to other violations of the Porsonic law, without quoting them in full. The instances where the pause is limited by an enclitic, as in
are Aesch. Prom, 648, Agam. 1052, Choeph. 903; Soph. Ajax 995 (?), Oed. Col. 982, Elect. 432, Philoct. 593, 788, 801 ; Edr. Rhes. 715 (lyric), 868, Alcest. 1085, Hec. 507, Orest. 111, Heracl. 516, Ion 633, Hel. 471, Elect. 1119, Iph. Taur. 942, Iph. Aul. 1207, 1212, Frag. 126. (Frag. 794, 4,


 Aul. 1207 changed by Porson:-only four attempts at emendation in twenty-three examples. If the commentators had spared those which have elision as much as they did these, the condition of the texts would be much better.
3. The following verses have $\mu^{\prime} \nu, \gamma \dot{a}$, , etc. immediately after the Porsonic pause, with objectionable preceding spondee, as in
namely : Aesch. Prom. 107 ; Soph. Oed. Rex 142, Oed. Col. 265, Elect. 357, Trach. 308, 932, Philoct. 422, 466, 596 ; Eur. Heracl. 303, Ion 954, Hel. 1552, Iph. Taur. 678, Iph.

 encountered no emendations.
4. When an enclitic or postpositive monosyllable precedes the Porsonic pause, as in
the rule has, among others, the following exceptions: Soph. Elect. 376, Oed. Rex 435, Oed. Col. 115 ; Eur. Androm. 230, Troad. 1182, Phoen. 403, Elect. 275, Frag. 162, 2, Frag. 716 (Dind. $\sigma o i$, Witzschel $\sigma o \iota$ ). Phoen. 403, й̀ rıs $\mid$ òvorvx $\bar{p}$, varies in mss. This list, being collected by a rapid perusal, cannot be exhaustive. The examples show two things: first, that in such cases the law did apply; but, secondly, that the offense was not so great as in polysyllables.

From all this we deduce the following conclusions:

1. All departures from the Porsonic Law, as I at first explained it, are to be regarded as exceptional.
2. These exceptions may take place under the following conditions:
(a) When the break is followed by an enclitic, in which case there is frequently a weak hephthemimeral pause or quasi-caesura.
(b) When the break is followed by a postpositive particle ( $\mu \dot{\varepsilon} \nu, \gamma \dot{\mu} \rho$, etc.), in which case there is generally, from the nature of the case, a strong hephthemimeral pause.
(c) When there is elision at the break, whether it be followed by a postpositive word (äv), or not. This is the only excuse for a real polysyllable with long ultima followed by a real or virtual amphimacer. There is, in this case, no restriction as to caesura, because the elision
renders a word foot of any possible form admissible before the break. The pause is always short enough to allow total elision.
(d) Note: When, instead of a polysyllable, a postpositive or enclitic monosyllable precedes the break, the law is not so rigorous.

## §6. The Porsonic Pause in Latin.

The Roman Dramatists did not observe the Porsonic law, the structure of their verse with respect to quantity being looser even than that of the Greek Comedy, where the rule does not hold. The statement which I have seen that Catullus carefully observed the rule, is somewhat ridiculous, as his senarii are all pure, rendering a violation of the law impossible. Horace, in Epode XVII, observed the law ; but in v. 10 is a violation, an anapaestic word coming before the break. It is true, there is elision in this case, but the effect of this elision in Latin is not the same as in Greek. In Epode XVI the senarii being pure, and other Epodes containing no violation being very short, we conclude that Horace, with the above exception, neglected the law. Of course, when the law is violated, you will generally find the hephthemimeres, for the reason already stated, the exceptions being when there is a word of the form -. - . before the break, or a monosyllable of proclitic nature (so as to prevent diaeresis in the middle) followed by the word foot $-\ldots$, as Epode V, 17, XI, 27 :

> iubet sepulcris | caprificos erutas.
> Sed alius ardor \| aut puellae candidae.

This makes it, if possible, still more evident that this (3id) caesura came unsought, for Horace did not feel himself under the necessity of mitigating what he did not regard as an offense; for when I speak of violations of the law 1 mean merely what would be violations if any attempt were made to observe it. The long pause at the (31) caesura is not so frequent as in the Greek Tragedies; but the cause of the pause in Greek ( $\gamma \dot{a} \rho, \mu \dot{e} \nu$, etc.) did not exist in Latin. Still, as I said before, there was probably some mitigation in the pause,
although it thus originated; that is, the pause renders possible a violation of the law.

In Latin, elision would be no mitigation, as the elided word was not entirely suppressed.

In Seneca, the phenomena attending caesura in the fifth foot stand in no relation whatever to those in Greck. He seems to have desired a cumbersome ending. Elision, indeed, is common, but, as I said, is no mitigation, for that is exactly what he did not wish, as the facts will show. In Herc. Fur. a word ending in a trochee never precedes the break, whether there is elision or not, nor does a short monosyllable nor a dactyl without elision ever precede the break; that is, we never find the forms - | . - ., - - | - - ., ... -

 and, in the play mentioned, in such manner that we find

Total caesurae without elision, . . . 20
" " with " .. . . 129
Violations of Pors. law without elision, . 11
" " " with " . 59
Conformity to Pors. law as nearly as possible, 0 (!) From this it is evident that he was fond of elision at the break, or of anything else that would make the ending drag.

## § 7. Relations of Elision to Accent.

In composing verse, two things inust be observed: first. each verse must preserve its proper feet, caefura, rhythmical accents (ictus),-in short, everything that distinguishes it from other verses; that is, regard must be had to the form of the verse. Secondly, the words which form a verse, must not, in order to become adapted to the verse, be distorted too much in their pronunciation; that is, regard must be had to the words and the sense. If an awkwardly composed verse be so read that its metrical form shall be preserved, the sense is lost and the words sound ridiculous. If, on the other hand, such a verse is read according to the form of the words and the sense, no one will suspect that it is a verse at all. Now this paper has only dealt with the form of the verse. But the
form of the words, and the sense, are also concerned with elision. In Latin, for instance, it enables the ictus or stress of voice to fall on the root-syllable, as in
ita mé vetústas ámplex $u$, ánnorum énecát,
since amplex $\boldsymbol{u}_{\text {, (especially }}$ in the second and fourth places) would distort the form of the word too much. So in dactylic hexameters, the ending $=-1 \smile \smile \perp$ is to be avoided, while it is more admissible (though not much, for another reason) with elision: $\because \simeq$ ( - ) | $-\simeq$.

These are mere illustrations. The whole subject of accent and ictus in trimeters is discussed in Transactions Am. Phil. As8oc. for 1876; and for hexameters, the subject is discussed in Transactions for 1878.

## IV.-Studies in the Heliand.

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Since the Heliand was first made accessible to scholars in general by the publication of Schmeller's edition in 1830, a number of editions have appeared, and several critical and exegetical essays of high worth have contributed to its elucidation, especially in what relates to its age, origin, and place in literature. A general survey of these productions has been given in the last and most complete edition of the Heliand, that of Eduard Sievers, which, anxiously awaited by his fellow craftsmen, at length issued from the press early in 1878.

Sievers, by printing the carefully collated text of both MSS. upon opposite pages, and accompanying it with the prose passages on which the poetical version is founded, has deserved well of all Germanists; but he has gone much farther: for, however the conception of the alliterative formula or of the poetical formula in general may be modified by future investigators, it is undeniable that he has, with much
labor and tact, made the first collection of the standing epithets and phrases employed by the old Saxon singer, and, in so far as they furnish parallels, by the old Norse and Anglo-Saxon poets.

His earlier studies on this subject bore fruit in a monograph entitled Der Heliand und die Angelsächsische Genesis (Halle, 1875). In this he seeks to dismember the Genesis formerly ascribed to Caedmon, and to demonstrate that vo. 234-832 rest upon an old Saxon original,-upon a lost poem by the author of the Heliand. By a consent which is nearly unanimous among scholars he has made good his theory, and it was the acumen thus displayed that marked his eminent fitness to be the future editor of the Heliand.

Lastly, his volume contains' a body of annotations at once learned and suggestive.

The Heliand has been unaccountably overlooked in England and this country; though it appeals alike to lovers of poetry, antiquity, and religion, yet no English translation of it has ever been made for the reading public; even its relation to Paradise Lost, through the poem of Caedmon, has been but incidentally remarked, if at all.

Since, however, increased attention has of late years been bestowed upon the Teutonic languages and literature, and the researches of Grein in Germany, March in our own country, and Sweet in England, have revived, or in some sense created an interest in the beginnings of English speech, it may not be unadvised to prophesy that the Heliand, as the most important literary monument bequeathed to us from the original seat of the Saxon race, will be as deeply and fruitfully studied among the English-speaking peoples as by the Germans.

Vilmar, Deutsche Alterthümer als Einkleidung der Evangelischen Geschichte (Marburg, 1862), and also Windisch, Der Heliand und seine Quellen (Leipzig, 1868), have recognized the epic structure of the Heliand. The former has pointed out some of its more obvious relations to Beowulf and the older heroic poetry, while Windisch, on the contrary, has dwelt most on the poet's art in selection and arrangement,
his strivings after an organic unity suggested neither by Tatian's Gospel Harmony nor the triad of commentators, and his fusion of heterogeneous elements to a compact and wellordered whole.

No less, however, than by his tact in choosing out of this somewhat chaotic evangelical history the most striking and mutually consentaneous passages, does our unknown poet betray the hand of a master in his original additions and the treatment of individual scenes. By original additions we must not be understood as meaning those amplifications of a thought that consist in the piling up of synonymous expressions around a central core-a well-known feature of Saxon poetry, both continental and insular-nor do we refer to the national coloring dyed, as it were, in the grain, to that transforming light which, emanating from the ancient ethnic words employed, suffuses the whole composition with tinges and tones caught from the dawn of history. Rather do we designate those lines or longer sections for which no manuscript authority stands responsible, but which have flowed spontaneously from the mind of the author as informed by the tradition of his people and a vital faith in the conquering and already pervasive Christianity. So far as known, no attempt has yet been made to separate and systematize these passages, so significant from the culture-historical point of view.

Not less deserving of attention is his manner of enlivening the Gospel narrative by dramatizing every scene which admits of interlocutors, substituting dialogue for narration, and pictures for history. Here he has full command of his resources, giving rein to his imagination, but never permitting it to lead him into extravagance or a disregard of the limitations imposed by the sacred and veracious character of his theme. Not alone in the introduction of strictly dramatic form, but generally in the disposition of accessories, in a motivation of some hitherto isolated occurrence, in the omission of a circumstance deemed inconsistent with the heroic tone of the composition or with the conception of certain personages, or, finally, in the insertion of some natural reflection excluded by the severe and self-restrained Evangelists, do we perceive the touches of a master hand.

Reversing the order of presentation of these two topics, this paper will treat: (A) of the chief modifications undertaken with the design of adding vividness or life-likeness, but in no true sense extraneous to the sacred text and the comments possessed by our author; and (B) of the accretions which bear the stamp of newness, and are evidently of his own invention, though they vary in intrinsic worth, and in their relation to the fabric of the poem; while a third section (C) will be devoted to a few syntactical observations upon characteristic idioms and constructions.

The quotations refer to Sievers' edition, and generally to the Munich manuscript.
A.
Verses 106-8. So he tho thana uuiroc drog
ald after them alaha, endi umbi thana altari geng
mid ix rocfatun rikiun thionon.

The ceremonies of the Roman Catholic Church, rather than of the Jewish Temple, seem to have been present to the author's consciousness.

144-58. A monody on the ravages of Old Age. The plaint is true to Jewish habits of thought, yet derives much of its elegiac sentiment from German pensiveness. Worthy of note the specification of age at marriage-twenty winters-and of the time which had since elapsed-seventy winters. With gibenkeon endi gibeddeon, cf. our English law-phrase bed and board.

159-63. The angel's grief and surprise at Zacharias' unbelief.
185. Butan that he mid is suidron hand; 'With his right hand ' is added for picturesque effect.

208 ff . The impersonality of numbers merges into the personality of one, and he an old, wise man. So 221 ff . A kinsman, but now, to mark difference, an overweening and presumptuous man, insists upon disregarding the mother's wish, and ( 225 ff .) is answered by the first speaker, whoand not Zacharias-proposes the use of a writing-table.

231-6. He, the old man, goes nearer, lays the book in

Zacharias' lap, and entreats him to write wisely with wordmarks what the name of the holy child shall be. Here is doubtless a reminiscence of the Runic scratchings and gravings.

287-8. Mary is noways double-minded. Nis mi hugi tuifi. Rather is she clear in her perceptions, trustful and unshaken. Cf. Vilmar, pp. 32-3.
293. 'Said to whom she would.' Makes no secret of her condition, being strong in the consciousness of her purity. Characteristic of German womanhood and confirmatory of Tacitus, Germania, 8 and 19.

380-1. Poetry and popular speech touch and mingle. ' With her two hands.' Cf. English, I saw him with my two eyes, and Hel. 980, 1177, 1194, 2042.
388. Ehuscalcos. Grooms or horse-herds, instead of shepherds. Cf. 2400, Hrosso hafslaga. There is no allusion to horses in the Gospels; this trait is peculiarly German. Hengist and Horsa are the names of the traditionary Saxon chiefs who first settled in Britain.
481. ' Now I am so well stricken in years.' May perhaps be inferred from the Bible narrative, but is nowhere explicitly stated. Cf. 493.
548. The whole interview between the Magi and Herod is dramatically conceived, but properly falls under B .

587-92. Worthy of remark is the precision: 'Self-same day,-out of the East.'
601. 'Each morning' protracts the time, and consequently the distance, to the imagination.
641. Uuestar. But Bethlehem is nearly south of Jerusalem. Cf. also 597, both times because the wise men have been described as coming from the East.
656. 'White stars.' Similarly $590,663,2605,4313$.

732 ff . The whole account of the Massacre of the Innocents is highly wrought. Similarities have been detected between this narrative and that in Otfrid's Krist, as elsewhere between the two works. A reference list of correspondences may be found convenient, and is here given.

Those for which a common basis has been made out are as follows:

| Heliand. | Otfri. | Common Author. <br> 48 ff. |
| :---: | :--- | :--- |
| 420 | II.9.11 ff. | Alcuin in Joh. |
| 484 | I.12.24 | Vulgata. |
| 545 | I.15.11 | Beda in Luc. |
| 1024 | I.17.15 | Hrab. in Matt. |
| 1046 ff. | II.4.1 ff. | Hrab. in Matt. |
| 1305 | II.5.5 ff. | Hrab. in Matt. |
| $2028 \mathrm{ff}$. | II.16.7 | Hrab. in Matt. |
| 3053 ff. | II.8.23 | Alcuin in Joh. |
| 4956 ff. | III.12.23 | Hrab. in Matt. |
|  | IV.12.34 | Alcuin in Joh. |

The following still await explanation:

| Heliand. | Otfrid. | Heliand. | otrrid. |
| :---: | :---: | :---: | :---: |
| 734 ff . | I. 20 passim | 4446 ff . | V. 20.113 |
| 803 ff . | I. 22.23 ff . | 4572 ff . | IV.12.5 |
| 1597-9 | II. 21.23 | 4838 | IV.16.52 |
| 1604 ff. | İ. 21.31 ff . | 5478-9 | IV.24.27 |
| 2925 | III.8.24 | 5535 ff . | IV.27.8 |
| 3843 | III. 17.13 | 5568 | IV.30.8 |
| 4027-8 | III. 24.11 | 5571 | IV. 30.23 |
| 4040-1 | III. 24.21 | 5607 ff. | IV.32.1-2 |
| 4065 ff . | III. 24.47 ff . | 5638 | IV. 33.18 |
| 4380 ff. | V. 20.5 | 5642 ff . | IV.33.20 |
| 4385 | V. 20.19 ff . | 5723 ff. | IV.35.7 ff. |
| 4396 | V.20.71 | 5762 | IV.36.19 |
| $\left.\begin{array}{l} 4398 \\ 4423 \end{array}\right\}$ | V.20.73 |  |  |

758-60. Accurate notions of geography evinced.
964-7. Cf. Sievers' note to 251 , where a long list of similar constructions is given.
968. John is blithe of heart when he sees the approach of Christ. Cf. 1163.

98:3. 'Fair from the flood;' a happy alliteration.
985. Himiles doru. Elene 1230; Salomon 37; Ps. 77:25. Probably biblical.
1121. The wilderness of temptation is represented as an illimitable wood.

1178-9. It is natural to suppose that the nets should have been broken the night before, but the statement must be looked on as embellishment.

1197-8. Matthew leaves the 'gold and silver and many gifts, precious treasures,' and chooses Christ as his liege. In these and 'similar words is contained the germ of many a later tale of loyalty and devotion, of Charlemagne and his
paladins, of Arthur and his knights. Christianity is beginning to leaven the Middle Age. By it the national virtues of the simple-hearted but warlike Germans are confirmed, their rudeness and ferocity mollified.
1610-2. The poet cannot conceive of God as the tempter, and therefore prays for His aid against the machinations of the evil spirits.
$1840-3$. The power against unclean spirits, to cast them out, is not delegated to the apostles, but is reserved to himself by their Lord,-the policy of an earthly prince strenuous in maintaining his authority.

1854-5. The apostles are forbidden to take with them gold and silver, for they will gain nothing thereby.

2026-7. To be exhorted before the whole assemblage is conceived of as prejudicial to Christ's dignity.

2258-9. The wind and the sea are in a manner personified. 'They fulfilled his command, Wielder's word.'

2279-92. No allusion is made to the swine into which the devils entered.
2572. ' Bitter fire,' i. e., biting, devouring fire.

2707-9. Philip is considered as having died before the marriage of his wife with Herod.

2720-4. It is Herodias who casts John into prison.
2750-2. It is at the request of Herod that the daughter of Herodias dances for the diversion of the company, and he makes the promise before she begins. Upon this her mind is inclined toward him, and the dance commences. Vv. 2763-4 prove that this sort of dancing was strange to the Germans, for it is these words that are always attached to every description of foreign and unfamiliar customs.

2813-4. 'Was their curiosity great concerning wise words' explains why they had congregated in such numbers.
2852. 'The folk bode still.' Not found in the sources.

2856-7. Christ orders the meat to be borne away by his disciples and dealt out. Matthew simply says that they distributed to the multitude.

[^9]For the same sense of sheer in English, cf. Rich. II. v. 3, b1.
$3100-1$. The reproof is softened in tone, to be more in keeping with Peter's dignity as primate.

3135-6. The transfiguration extends likewise to the mountain where Christ and the disciples are standing.

3157-9. An antidote against fear is provided in the assurance that nothing of what they had seen should harm them.
3200. Christ's discussion with Peter as to the propriety of his paying tribute was omitted, lest he should seem to be compromised by doing at another's behest whiat he was under no moral obligation to perform.

3261-2. Thoh he mildean hugi bari an is breostun. May be gathered from the context.
3324. Obar that. Cf. English, Over and above that.
3356. The letha uuihti who sink the rich man's soul into the swart hell are introduced as the counterpart to Godes emuilos (3350), who bore Lazarus to Abrahan's bosom.
3418. The command is given but once, while in Matt. 20:3 it is repeated.

3564-6. An argument is drawn from Christ's universal beneficence.
$3576-8$. This expression is singularly beautiful. They ask to behold man's busy doings, the light of the sun, and the splendor of the earth.

3671 ff . The particulars concerning his mode of entry and the animal that bore him are omitted.
3676. Mid berhtun blomun. A figment of the author's.
3691. Uue uuard thi. Cf. English, Woe worth the day.

3709-10. A loud voice, the most powerful of songs, is raised when they reach the Holy City.
$3822-5$. The coin is brought sensibly before our eyes by the realistic handling.
3828. The powers of Caesar are dwelt upon, and the extent of his dominion.
3865. The writing with the finger is passed over as of small moment, or difficult of explanation.
3980. John 11:5 omitted. Indeed, the whole story is much condensed, to its manifest improvement for the poet's purpose.

4234-7. Olivet is pictured as one of the mountains of Germany. In truth, it is neither broad nor high, neither green nor beautiful.

4284-5. The transition from the fate of the temple to that of the world is made with much skill, and affords the necessary bridge to the disciples' next question.
4305. Here, and again 4309, the coming is spoken of, not as Christ's, but as the Father's.
4339. The fig-tree, being unknown to the Saxons, is not distinguished by name.

4486-9. The rulers promise and actually give to Judas whatever he demands as the price of his treachery. By this we are made aware of their eagerness to destroy the Saviour.

4499 ff . Account of Jesus' washing his disciples' feet much abridged. Only the esseutial features are retained.
4501. Skred uuester day, sunne te sedle. Poetical addition. With uuester compare the English westering, 'toward the west.'

4577-80. Not only the treachery of Judas, but his deliberate betrayal of the Master for money is insisted on.

4750-2. Tears fall from him, his sweat drops to the ground, as gore comes boiling from wounds.

4983-5.
Thar uui an themu bomgardone
herron thinumu hendibundun, fastnodun is folmos.
Not in the original.
5086-8. The high priest adjures Christ to declare whether he is the Son of God, and adds these words:

- Who this light created,

Christ eternal King. We can perceive naught thereof, Neither in thy words nor in thy works.'
5416. To designate the character of Barabbas it is said

- that he perpetrated crime often by dusky night.

5449-52. Pilate's wife is terrified by the vision.
5535-8. It is true that Hrabanus Maurus is authority for the details of the crucifixion, but none the less is the poet's vigorous language worthy of admiration :

- They drove cold iron

New nails hatefully (?) sharp
Hard with hammers through his hands and through his feet, Bitter bands.'
5573. They revile the Saviour, and infer from his apparent powerlessness that the subjects of such a ruler would be miserable indeed: ' Woe worth the world, quoth he, if thou shouldst have control of it.'

5607-10. In John 19:25, the names of all the women are given, and that of Mary is but coördinated with the rest. Here special prominence is given to the latter, the others being mentioned only in general terms, and not till after the description of Mary's grief and her view of Christ's sufferings:

> Blec under them borne: gisah iro barn tholon, uuinnan uuunderquala.

The verses quoted are not without a touch of that pathos which finds its embodiment in the Latin Stabat Mater.

5798-9. The earthquake is represented as the effect of the angel's appearance.

## B.

The portions independent alike of Scripture text and commentary will be found in this section. It is convenient to arrange them under six heads. The grounds upon which certain doubtful passages have been assigned to particular classes will recommend themselves, it is hoped, to all who have scrutinized the language and pondered the thought of the Heliand, though different critics will naturally vary in their estimates of the import and character of any extract whose place is not at once decided by the most cogent internal evidence.
I. In the first rank are to be placed such verses as contain the artistic motive or explanation of a subsequent part, and which therefore belong to the organic structure of the poem. In this regard a suggestive and regulative influence is to be attributed to the commentators, since the author must have reflected on their mode of dealing with disjointed, but weighty statements of the Evangelists, especially when the truth conveyed is unusually important or startling.

But making all allowance for hints thus derived, we can scarcely help seeing in the poet of the Heliand an artist with exquisite perceptions of sequence and relation, one who aims
first at perfection of design before attempting the lighter task of adding grace and roundness to the representation in detail.

Thus he accounts (43-5) for the universal sway of the Romans by assuming a decree of Diviue Providence, (239-42) for Zacharias' blindness, (478-80) for Simeon's reverential eagerness, (865-72) for the career of John the Baptist by supposing a communication direct from heaven, prefaces (1146-50) the calling of the disciples by a general statement, accounts (1163-5) for the readiness of Andrew and Peter to forsake their previous vocation, (3113-22) for the Transfiguration, (3954-6) for Christ's departure across the Jordan, gives ( $4807-8 \mathrm{ff}$.) distinctness to our view of Judas with the approaching band, by causing the apostles to wake from sleep and look upon the troop, explains (4964-6) Peter's faintheartedness, comments (5111-3) upon the malicious cruelty of the Jews, and (5503-5) upon Christ's willinguess to endure it, and assigns the reason (5794-6) of the women's presence at the sepulchre.

Allusions to the Judgment occur (2609-20, 5096-7) apart from the general description of Doomsday. Cf. also the formulae under der Jüngste Tag in Sievers' catalogue.
II. Intimately connected with the foregoing are such verifications of prophecy and sequels of incipient action as are omitted by the Evangelists, but, being probable in themselves, satisfy the natural demand for poetic justice and completeness. Here also we find express assertions of that which is contained only inferentially in Scripture.

Zacharias ( $170-4$ ) is stricken with dumbness, according to the word of the angel, the birth of Christ (371-5) fulfills prophecy, (1984-93) general conclusion of Christ's connected discourses, (2066-74) effect of the miracle at Cana, (302933 ) joy of the Syrophenician woman, (3275-7) synopsis of Christ's reply to the rich young man, and (5460-4) mention of the messengers sent to Pilate by his wife.

With 5424-6, which contains an allusion to the retribution that overtook Pilate, compare an article by Wilhelm Creizenach, in Paul and Braune's Beiträge I, entitled Legenden und Sagen von Pilatus, p. 94 ff.
III. Not adduced in the way of motive or effect, but simply to mark a transition, are the following: 1436-7, 1613-5, 2462-4, 2491-3, 2513-6, 5245-6.
IV. More noteworthy than any, except those under I., are the portions which relate to manners and customs, or to modes of thinking and theological opinions among the German people.
(a) The high estimate placed upon womanly purity is indicated by the emphasis put upon the penalties attached to its loss (305-12, 3843-5).
(b) Light is thrown upon the universally Germanic, but specially upon the English unwritten constitution, the binding force of precedent, and the development of common law in England by the fact that landuuise and gibode, eo and aldsidu, custom and law, are coupled as synonymous terms. Cf. 454, 796, 2763, 4549-53, 5258, 5404, 5739.
(c) The Germanic notions of fate and predestination are illustrated (4617-20) by Christ's words to Judas:

Frumi so thu thenkis, quad he,
do that thu duan scalt: thu ni maht bidernien leng uuilleon thinan. Thiu uurd is at handun, thea tidi sind nu ginahid.
Likewise by 2187-90, 4778-80, 4784-5, 4823-8, 4978-80.
(d) The wedding feast at Cana (2001-12) and Herod's birthday banquet are portrayed with great minuteness and zest. One side of the Saxon nature is here displayed. Cf. Beowulf 612-652, 1981-4, 2015-25.
(e) Generosity and condescension are praised in the chief (628-9, 1199-1202), while loyalty, gratitude, fidelity, and tenacity of purpose are regarded as indispensable virtues in his retainers. Cf. 675-7, 1169-72, 1187-9, 2154-8, 3215-23, 4002-4, 4521-5, 4556-9, 4773-5. In 5000 ff. the repentance and sorrow of Peter in view of his unfaithfulness is depicted with moving pathos.

Riches in abundance are the material reward of obedience and courage, 1345-7, 1649-52. The relation between lord and vassals is transferred to Christ and his disciples, so that when he is seated and speaking with authority, they surround him, and are in one sense his supporters, his eaxlgesteallan,
the executants of his will. So 1272-8, 1281-90, 1381-8, 1580-6, 2167-75.

The wounding of Malchus by Peter (4877-82) is amplified in the relation, in accordance with the tastes of the age and nation.
$(f)$ The foreknowledge and omnipotence of God are emphasized, 644-8, 3239-41.

The primacy of Peter and the literal interpretation of Matt. 16:18, 19 (3066-82) are accepted as beyond peradventure. Again, Peter is represented as answering in the name of all the apostles (3054-6) and is exhorted to mildness, since to him is consigned the charge of Christ's flock upon the earth (3253-6). His denial of Jesus is excused because of God's foreordination (4978-80) and explained to be the means of teaching him man's weakness and the duty of forbearance ( 5028 ff .).

As to the cultus of Mary, there is much less ground for forming an opinion, though tradition and the awakening sentiment of chivalry would appear to have grafted more than one strange slip upon the simple . Bible stem. That she is a lovable and virtuous maid (252) need surprise no one; the two Marys at the sepulchre are also lovable. She is called Christ's mother (2018, 5607), and our Lord's mother (264); but in the latter case the qualifying phrase, mid mannun, is added. 'Fairest of women' $(270,379,2017,2032)$ and 'Fairest woman' (438) are standard epithets in Anglo-Saxon (Gen. 626, 700 , 821 , Men. 148, 168, El. 1170), but are applied to no one else in the Heliand.

The more weight may be attached to this fact, since our author is always sparing of his superlatives, never weakening their force by indiscriminate application.

Mary, even after the birth of Jesus, is called thiorna (436, $665,802,1998$, etc.), a word which elsewhere in the Heliand must be translated virgin.

Was the perpetual virginity of Mary accepted at that time among the Saxons as an article of belief? A negative inference might be deduced from the use of magad,-once for Mary (1997), once for the sisters of Lazarus (3967), and
five times for the daughter of Herodias (2760, 2766, 2770, 2777, 2784),-but also for the woman taken in adultery (3861). It cannot be concluded, from the evidence furnished by the Heliand, that Mariolatry was already established in Northern Germany during the first half of the ninth century.
V. This class contains didactic or moral generalizations, often couched in the form 'so each man does,' ' will do,' or 'shall do.' They are such as naturally arise in the consideration of topics bearing most directly upon the duties of life. Here are also included predications of good or evil as attendant upon contrary actions and dispositions. Instances are: 1072-5, 1458-60, 1769-70,1824-6, 2226-31, 3659-60, 4114-7, 4375-7. This moralizing strain is in imitation of the commentators (cf. 5046-9).
VI. Under this head are collected poetical expansions and additions, often original and of great beauty, which do not fall under any of the preceding divisions.

197-8. Flight of the winter-year:
Skred the uuintar ford, geng thes geres gital.
199-20. The comeliness of John the Baptist:
Lik uuas im sconi,
uuas im fel fagar, fähs endi naglos, uuangun uuarun im uulitige.
Gentility was indicated among the Germans as well by naglos as by fel and fahs.

Further: 292-5, 327-9, 350-6, 383-6,438-40, 447-9, 526-8, 548-62, 732-44, 790-2, 1020-4, 1049-52, 1482-3, 2077-87, 2097-9, 2119-24, 2136-8, 2161-7, 2206-12, 2238-41, 2264-8, 2284-90, 2524-8, 2543-4, 2639-46, 2696-8, 2796-9, 2805-10, 2952-60, $3193-5,3207-15,3345-7,3405-11,3428-31$, 3749-50, 3755-7, 4103-14, 4203-5, 4256-69, 4331-3, 4440-3, 4663-6, 4757-60, 4946-8, 5117-21, 5134-6, 5142-4, 5172-4, 5286-91, 5298-5303, 5365-7, 5376-9, 5394-6, 5418-20, 5562-4, 5631-3, 5827-31.

> C.

A complete syntax of the Heliand is still wanting, but Behaghel's Modi im Heliand will be of much service to the
future grammarian who shall undertake to supply this desideratum. Only a few scattered observations are presented below.

The abundance of reflexives must instantly strike the scholar. Following Mätzner, Englische Grammatik, they may be divided into reflexives with intransitive verbs:
(a) of Rest ; (b) of Motion; and (c) of Mental Action.
(a) Verbs of Rest:

Wesan: 79, 87, 253, 506, 654, 782, 962, 987, 1027, 1052, 1121, 1175, 1193, 1227, 1233, 1234, 2112, 2187, 2219, 2401, $2465,2495,3294,3329,3953,3969,4239,4632,5695,5716$, 5865, 5964, 5983. Sittian: 988, 1176, 1286, 1291, 3332, 4273, 5946, 5976. Witan: 653, 4184, 4558. Standan: 1811, 2378, 3758. Werdan: 1198, 2401, 2408. Libbian: 81, 4034, 4113. Gisittian: 5805. Wonôn: 989. Buan: 2706. Liggian: 3336. Bîdan: 5721 .
(b) Verbs of Motion:

Giwîtan: $458,531,650,677,712,780,806,832,873,960$, 1024, 1113, 1134, 1189, 1248, 1994, 2088, 2167, 2236, 2282, 2290, 2305, 2693, 2799, 2802, 2973, 2982, 3033, 3110, 3163, $3170,3182,3458,3585,3663,3706,3906,4010,4185,4198$, 4212, 4237, 4554, 4628, 4715, 4718, 4769, 4786, 4796, 5159, $5312,5440,5729,5743,5762,5870,5910,5974$.

Gangan: 102, 477, 1127, 1150, 2000, 2334, 2381, 3878, 3893, 3913, 4270, 4478, 4526, 4798, 4804, 4838, 5001, 5061, $5150,5176,5232,5584,5693,5703,5715,5722,5906$. Faran: 683, 718, 796, 1136, 1228, 2292, 2488, 2676, 2698, 2894, 3482, 3541, 5163, 5776, 5956. Gehnîgan: 981, 3122, 4744. Wendian: 699, 3293. Kuman: 1235, 3184. Fiscôn: 1156. Kînun: 2409. Talôn: 2471. Farfâhan: 2503. Stîgan: 2681. Thurugangan: 3488. A'rîsan: 4714. A'wahsan: 859.
(c) Verb of Mental Action :

Andradan: 116, 1903, 1907, 2252, 3157, 4882, 5818.
Besides, a reflexive is found with biginnan: 312,1148 , 2389, 2395, 2402, 2499, 2710, 2942, 3233, 3325, 3478, 3485, 3495, 5062, 5072, 5959.

In 859,4100 , the dative should probably be coupled with was and not with the participle. The frequent use of a reflexive with wesan might easily be the occasion of this idiom.

Appositives with the definite article after a vocative are common (March, Anglo-Saxon Gram. §289, a). So Herro the godo (1588), Drohtin the godo (1607), Fro min the godo (2099). Further, 2105, 2423, 2550, 2824, 2935, 3258, 4032, 4080, 4292, 4403, 4509, 4517, 4685.

Genitives with the definite article or demonstrative are also of frequent occurrence. The place of the latter varies.
(a) Before the genitive: Thana godes sunu (1384), themu is liohte (1548), them is godun uuercun (1687), thin godes lera (2479), thene godes sunu (2671), them is godun iungarun (3176), them is lerun (4196), them is uuordun (4205), them is iungarun (4635).

An adjective precedes the genitive: Thie guodo godes suno (4011, 5089).

An adjective follows the genitive : Mid thiu is godum gumscepi; cf. the attributive genitive in Greek (Hadley, § 531).
(b) After the genitive: Is thana fader (228), is thane endi (1356), is thero gesteo (2045).
.The repetition of the same thought in two consecutive lines often brings two synonymous words or phrases to stand on opposite sides of a part of speech relatively superior, which accordingly may be regarded as goveruing or supporting either one of the two, while the other is appositional. Abbott deals with a somewhat similar phenomenon in his Shakespearian Grammar, $\S 513$. An example of the peculiarity in question is found at 1306 :

## Thie motun thie marion erde ofrittien that selbe riki.

Other instances occur at 1988, 2018, 2672, 2711, 4000, $4114,4204,4216,4337,4379,4612,4742$.

## V.-On the Development of the Latin Subjunctive in Principal Clauses.

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It is the object of this paper to give a brief outline of the probable development of the Latin Subjunctive in Principal Clauses. It aims to trace the steps by which the various meanings of this mood, as seen in Latin authors, have been gradually developed out of the simple etymological force of its original forms.

The Latin Subjunctive contains the forms of two moods, originally distinct, though closely related,-the subjunctive proper with the sign $a$, and the optative with the sign $i$. These forms, however, are used without any difference of meaning, and are made to supplement each other. Thus the subjunctive forms are found in the present tense of the second, of the third, and of the fourth conjugation, as moneas, moneatis, regam, regamys, audiat, audiant, while the optative forms are used in all the other tenses of these conjugations, and in all the tenses of the first, as monerem, rexerim, audivissem, amem, amarem, etc.

Moreover the Latin Subjunctive contains the meanings, as well as the forms, of two distinct moods-the subjunctive and optative, of the cognate tongues, and what is especially noteworthy in this connection is that while in Sanskrit and Greek the subjunctive and optative meanings are denoted by separate forms, in Latin they are both expressed by the same form.

Again in Latin the subjunctive and optative forms are not by any means confined to the significations ordinarily ascribed to those moods in the cognate tongues, but have a much wider range of application. Thus:

1. They supply the place of the future indicative in all verbs of the third and of the fourth conjugation. Thus the subjunctive form regam, 'let me rule,' also supplies the future
'I shall or will rule ;' audiam, 'let me hear,' is also future, 'I shall or will hear.' But in the other persons, the optative forms supply the future. Thus reges, reget, etc., though optatives in origin and form, are never used in an optative or a subjunctive sense, but only with the force of the future indicative, not 'may you rule,' ' let him rule,' etc., but, ' you shall or will rule,' etc.
2. The forms of the Latin Subjunctive not only thus supply the future indicative, but they are also used with their own proper force in various subordinate clauses which originally must have taken the indicative. They thus occur in causal and temporal clauses, in dependent questions, and in the subordinate clauses of the oratio obliqua.

Such are some of the peculiarities of the form and use of the Latin Subjunctive, peculiarities whose complete explanation can be found only in the general development of the mood itself. Special discussions of separate points are of course indispensable, but they often rest upon too narrow a basis to give the best results. Such discussions of special usages in the Latin Subjunctive have often been for this very reason but partially successful. Constructions, closely connected both with each other and with the general subject, have been taken out of their proper comnections, as parts of one complete whole. But any trustworthy discussion of the Latin Subjunctive, or of any vital points connected with it, must rest upon a much broader basis. It must gather light, not only from the whole range of the Latin language, but even from the cognate tongues. Such a discussion will accordingly involve:

1. The general development of the subjunctive and optative moods, as shown by constructions common to the Sanskrit, the Greek, and the Latin.
2. The later special development of the mood on Latin soil.

What then, we inquire, was the origin of the two classes of forms appropriated to the subjunctive and optative moods, and what was their original force?

It is well known that the Indo-European language developed various methods of forming the present stem from the root.

The stem thus formed differed in meaning from the root simply in the fact that it denoted continued action, while the root expressed only the general idea of the action itself, without any reference to its continuance. Of the various forms of the present stem originally used, three became especially important in the subsequent development of verbal inflections. These were:

1. The reduplicated present stem, from which was developed the Indo-European perfect. For a discussion of this subject, it is only necessary to refer to an able paper read before this Association four years ago by Professor Alonzo Williams.
2. The present stem in $a$, from which was developed the Indo-European subjunctive.
3. The present stem in $j a=i$, 'to go,' as seen in $\varepsilon i \mu c, e o$. From this were developed the optative mood and the future indicative.

Thus both the subjunctive and the optative mood are in their origin only special developments of certain forms of the present tense, a view now generally accepted, I think, by the leading scholars of the new school. Let us now briefly illustrate this point in its relation to each of these moods. We shall thus find, I trust, that these etymological forms throw light upon the subsequent development of the Latin Subjunctive.

It will be remembered that in the mother-tongue of the Indo-European family, from which the Latin, the Greek, and the Sanskrit alike derived their various inflections, the original type of a verb consisted simply of the union of a verbal root with a pronominal root or stem. Thus from the root $d a$ was formed da-ta, Latin dut, 'he gives;' from root bhar, bhar-ta, Latin fert, 'he bears.' Subsequently these roots were developed into stems in various ways, especially by the addition of the determinative $a$. These stems were then inflected by the addition of pronominal roots or stems. Thus from the root bhar was formed the stem bhara, from which comes the verb bhara-ta. The language then contained two sets of forms, one denoting simply the action of the verb, the other that
action in its continuance, progress, as bhar-ta, 'he bears,' bhara-ta, ' he is bearing,' 'is trying to bear,' or 'is one who bears.' This latter form, denoting as it does continued or prolonged action, is especially fitted to emphasize the idea of effort. Indeed the conative use of the present indicative is distinctly recognized in all ages of the Latin literature. But earnest effort readily suggests desire, as one strives only for that which one desires to attain. Hence bhara-ma, 'I am bearing,' or 'trying to bear,' comes also to mean 'I desire, intend, purpose, to bear.' But vigorous effort suggests not only desire, but also possibility or probability, as one will very likely accomplish that which one is already attempting. Here then we have, as I conceive, the original form and meaning of the Indo-European subjunctive, a special form of the present indicative used in a somewhat special sense to denote, first, an attempted action, and secondly, a desired, possible, or probable action. The development of the mood was doubtless exceedingly slow and gradual. At first the difference in meaning between this particular form and the other forms of the present tense was scarcely perceptible, but it gradually became more and more marked until at length a new mood was recognized. Then for the first time in the history of the Indo-European language did the subjunctive mood have a recognized existence, as distinct from the indicative.

But the Latin Subjunctive, as we have already noticed, also contains the Indo-European optative, a mood developed from that form of the present stem whose formative element is the verb $j a$, or $i$, 'to go.' The stem in $j a$, which, like all forms of present stems, denoted originally duration, continued action, became the basis of several important verbal inflections, of which we notice the following:

1. The present indicative, as $\dot{a} \gamma \gamma^{\dot{\varepsilon}} \lambda \lambda \omega=\dot{a} \gamma \gamma^{\dot{E} \lambda} \lambda-j \omega$, ' $I$ go as a messenger, am a messenger, $I$ announce.'
2. The future indicative, as erit $=e 8-i t$ for $e 8-i-t i$, 'he is going to be;' $\delta \dot{\omega} \sigma \omega=\delta \dot{\omega} \omega \sigma-j \omega$, 'I am going to give.'
3. The optative, as $s i t=e s i t=e 8-i e-t i$, identical with the original form of the future, and like that meaning originally 'he is going to be ;' $\delta o i \eta s=\delta o-i \eta-\sigma t$, ' you are going to give.'

Now these etymological facts are instructive in various ways. They show

1. That the Indo-European optative was identical in origin both with the future indicative and with one form of the present.
2. That it was used originally to denote a contemplated, future, or probable action, as $\delta o i n \nu$, 'I am going to give,' almost synonymous with $\delta \dot{\omega} \sigma \omega$, ' $I$ shall give.' Here we recognize at the very outset in the development of the mood one of the familiar uses of the Greek optative, viz., its potential use with $a \nu$, often best rendered into Finglish by the future indicative with which it was identical in origin.

But this etymological meaning of the optative naturally suggests desire, wish, as $\delta o i \eta \nu, I$ am going to give, intend to give, readily suggests the kindred thought, $I$ would like to give, may I give.

We have thus reached for the Indo-European optative two distinct but closely related meanings, which may be regarded as primitive and etymological,-meanings, moreover, which accord very exactly with those previously found for the subjunctive.

From the facts now presented it seems clear that originally the subjunctive and the optative were closely related, both in form and meaning, not only with certain parts of the indicative, but also with each other.

But we have already noticed the fact that the Latin Subjunctive contains the general meanings of the subjunctive and the optative of the cognate tongues, and that these meanings are denoted sometimes by subjunctive forms, and sometimes by optative forms, i. e., indiscriminately by either. We have also observed that these same forms in a large class of verbs regularly supply the place of the future indicative.

What now is the explanation of this remarkable confusion in the use of forms, a confusion so great that different forms, subjunctive and optative, occur with precisely the same meaning, and the same forms with different meanings? Did the Latin lose important distinctions which it had inherited from the Indo-European, or were these kindred forms which we
have been considering so closely related in meaning when that language first began to have a separate existence, that they might be used with comparatively little difference of meaning? That the Latin may have lost some distinctions that it once had, is not at all improbable, but that it ever possessed the nice and delicate distinctions seen in the Greek subjunctive and optative is in the highest degree improbable. Indeed these distinctions are, I think, now regarded by those whose opinions are entitled to the greatest weight as the special product of the Greek mind. Accordingly, in my judgment, the indiscriminate use in Latin of subjunctive and optative forms in connection with the regular use of those same forms to supply the place of the future indicative in many verbs, contains an important historical fact in the development of these moods. It shows that, when the Latin first became a separate language, the forms of the subjunctive, of the optative, and of the future indicative were used with little or no difference of meaning, a view fully contirmed, as we have just seen, by the etymology of the forms themselves.

Having thus examined the etymological meaning of the Latin Subjunctive forms, we proceed, in the second place, to inquire what relation this meaning sustains to that which is actually found in the works of Latin authors. In conducting this inquiry we shall find it necessary to study the Latin Subjunctive, first in simple sentences and principal clauses, and secondly in subordinate clauses.

What then appears to be the primitive or fundamental meaning of the Latin Subjunctive as seen in Principal Clauses? That the primitive features of the mood were first developed in principal rather than in subordinate clauses scarcely admits of a doubt. The old theory which made all subjunctive clauses subordinate by supplying supposed ellipses, is so completely exploded as scarcely to require a passing remark, yet traces of its influence may be discovered, even in valuable works of recent date. The most trustworthy scholars, however, are all agreed in the opinion that the subjunctive and optative moods, in all their general and characteristic features, as seen in the Sanskrit, the Greek, and the Latin, were developed in principal clauses.

But what has already been said in regard to the etymological meaning of the subjunctive forms renders it clear that we must not expect to find, as the result of this inquiry, any broad and well defined line of distinction between the provinces originally occupied respectively by the indicative and the subjunctive. Accordingly, when we turn to the Vedas, which furnish us our earliest specimens of Sanskrit, and to the poems of Homer, which furnish us our earliest examples of Greek syntax, we often meet the subjunctive in uses much more closely related to that of the future indicative than in later works. Indeed, in such examples as the Homeric

'for I have never seen, and I do not expect to see such heroes,' the substitution of the future indicative for the subjunctive would scarcely make a perceptible change in the thought. It is also well known that in the Homeric poems the aorist subjunctive and the future indicative are often identical in form, and that the difference in meaning between them is sometimes so very slight that it is not possible even to distinguish the one from the other. We have already noticed the familiar fact that the optative with $\ddot{\alpha} \nu$ is often used in a future sense. But the Latin, Greek, and Sanskrit, in the use of moods, conform to the same general analogy. Indeed the use of subjunctive and optative forms in Latin to supply the place of the future indicative does not differ at all in kind from the Homeric use of similar forms in a future sense; it is in fact simply the result of carrying out that analogy on a larger scale. In view of these facts the conclusion seems inevitable

1. That when the Sanskrit, the Greek, and the Latin first became separate languages, the distinction between the indicative, on the one hand, and the subjunctive and optative on the other, so clearly recognized in the classical period, was only partially developed.
2. That among the various meanings denoted by subjunctive and optative forms in the earliest writers, those which are most closely related to the general meaning of the indicative may safely be regarded as the earliest. We recognize, therefore, in the signification just noticed, as belonging to the early

Sanskrit, Greek, and Latin, one of the most primitive uses of these moods, the potential use denoting expectation, likelihood, a contemplated action.

But the Latin Subjunctive, like the Sanskrit and Greek subjunctive and optative, also denotes desire, wish. It is thus used :

1. In prayers and wishes: Di bene vertant, ' may the gods cause it to turn out well,' Plaut.
2. In exhortations and entreaties: Consultamus bonis, • let us consult for the good,' Cic.
3. In commands, admonitions, warnings, and especially in negative commands, prohibitious: Scribere ne pigrere, 'do not neglect to write,' Cic.
4. In admissions and concessions: Fuerint pertinaces, ' grant or admit that they were obstinate,' Cic.

This use of the subjunctive, like the potential, is readily developed out of the etymological signification of the subjunctive form, as we have already seen, since earnest effort naturally implies desire. Indeed, in the Vedas and in the Homeric poems we sometimes find the subjunctive of desire apparently in the very first stage of its development, scarcely distinguishable, on the one hand, from the future indicative, and on the other from the potential subjunctive, but perhaps differing from the latter very much as the two ordinary signs of the English future -shall and will-differ from each other. In the Homeric expression already quoted, oi $\gamma \dot{\alpha} \rho \pi \omega$ iòur, ovò̀ io iownac, the subjunctive involves no idea of desire; it is eutirely potential in its nature, but is as yet so imperfectly developed as to be scarcely distinguishable from the future. It may even be rendered by the future shall, but not by will. In some passages, however, as
 ' here, you two follow me, I wish to see what has happened,' the subjunctive denotes desire, yet it is so closely related to the future that it may be rendered by our auxiliary will, I will see. Indeed, in some instances in Homer, it is very difficult to determine even from the context whether a given subjunctive
should be interpreted as potential, or as expressive of desire, or even to say why the subjunctive is used at all, as

' but come, I will myself try and see, or let me try and see;' or again,

'but come, now wait, let me put on my martial armor,' or 'I will put on,' etc. The subjunctive in such instances appears to be still in embryo.

We have now seen that these two uses of the Latin Subjunctive, and of the corresponding moods in the cognate tongues, the subjunctive and optative, appear in different stages of development in the very earliest literary records that have come down to us from any branch of the IndoEuropean family, and that they are readily and naturally derived from the etymological meaning of the forms themselves. Moreover it is well known that these two meanings, which for convenience we may call potential and optative, run through the whole range of Sanskrit, Greek, and Latin literature, and that in their several forms they embrace all the meanings known to the Latin Subjunctive in Principal Clauses.

If the doctrine of this paper is correct, it is quite clear that the view once so generally received that the potential subjunctive was first developed in conditional sentences is no longer tenable. We have already seen that the potential use of the subjunctive springs directly and naturally from the etymological force of the forms, and that it is also found fully developed in simple sentences in the earliest literary records extant. I may also add that there are strong reasons for believing that it was long used before conditional sentences were known.

But before we close this part of our discussion, I must anticipate an objection from those who adopt without qualification the views of Professor Delbrück, as set forth in his masterly treatise on the use of the subjunctive and optative in Sanskrit and Greek, a work, let me add, greatly superior, in my judgment, to all others upon the sulject which it treats.

Delbrück, in his attempt to find the primitive meaning of these moods, assumes without authority, as it seems to me,
that it is to be sought only in the first person singular, thus excluding from his investigation all plural forms, and all forms in the second and third persons. He does so simply because, as he himself says, it is generally admitted that the primitive meaning of the optative is that of wishing, and that this meaning is expressed in its greatest purity in the first person singular. His own words are: "Es wird vermuthlich jetzt allgemein angenommen, dass die älteste Bedcutung des Optativs der Wunsch sei." But if the common opinion that the idea of wishing lies at the basis of the optative is correct, what occasion is there for a special investigation on the part of Professor Delbrück to ascertain the primitive use of that mood? On the other hand, if the correctness of such an opinion is questioned, what right has the Professor to limit his inquiry to the particular person and number in which that meaning appears, and to reject the other persons in which a different idea is prominent? How does he know in advance that the latter may not be as truly primitive as the former? This assumption, it seems to me, has led Professor Delbrück to overlook one important element in the primitive use of the subjunctive and optative. Assuming that the original force of each is seen in the first person singular, he reaches the conclusion that the subjunctive originally denoted will, determination; the optative wish, desire.

Now if we examine subjunctive and optative forms in the second and third persons in the identical classes of sentences examined by Delbrück, we shall find the potential idea, in the form of likelihood, probability, possibility, just as distinctly and clearly expressed as is that of desire in the first person. I claim, therefore, that we have the strongest possible reasons for believing that two distinct meanings, apparently equally primitive, were developed at a very early period, that of desire in the first person, and that of possibility, likelihood, in the second and third, and that subsequently these two meanings, though especially conspicuous in the particular forms in which they were respectively developed, were extended to all the persons.

We have thus far considered the development of the Latin

Subjunctive only in those clauses which remained independent throughout the classical period, but the subjunctive in many subordinate clauses also belongs to our theme, as it was developed while those clauses were yet independent. Modern linguistic research has clearly established the fact that originally the syntax of sentences in the Indo-European family of languages was exceedingly simple. Even in connected discourse, thoughts were presented separately in simple sentences, or followed each other in coördinate clauses, and yet the thoughts thus expressed were by no means equally important. In fact, one of them might be quite subordinate to another, and yet be presented as entirely coördinate with it. Homer and Plautus furnish abundant illustrations of this.

Subordinate clauses, originally, unknown, were subsequently developed, by a slow and almost imperceptible change, out of simple sentences and principal clauses. Every subordinate clause therefore represents an independent sentence or clause, and accordingly in examining a subjunctive in such a clause, our first inquiry must relate to the history of the mood in this special instance. We must ascertain whether it owes its origin to the nature of the thought itself, or has been developed by the subordinate character of the clause. Upon investigation I think we shall find that in conditional sentences and in concessive, final, and consecutive clauses in Latin, the subjunctive is entirely independent of the character of the clause in which it stands, and was in fact developed before the clause became subordinate, but that in causal and temporal clauses, in dependent questions, and in the subordinate clauses of the oratio obliqua, the mood in many instances has been developed simultaneously with the subordinate character of the clause, and is entirely dependent upon it.

We proceed to examine the cases in which the subjunctive appears to be original, that is, to have belunged to the clause in its original and independent form. Some of these in the use of moods conform, to a considerable extent, to the corresponding constructions in Sanskrit and Greek. For this particular part of our discussion, therefore, we shall find abundant material and important aid in the work of Delbrück to which I have already referred.

We begin with conditional sentences. That the mood in the condition does not depend upon the conditional particle is obvious from the following facts:

1. The conditional particles $\varepsilon i, s i, n i 8 i$, are used with different moods. In fact, in Latin $8 i$ is used, or may be used, in every conceivable form of condition.
2. A conditional particle is not even an essential part of a conditional sentence. The force of such a sentence may be expressed in Greek, Latin, or English without any particle whatever. Thus: Negat quis, nego, 'does any one deny, I deny' = if any one denies, I deny. Roges me, nihil respondeam, 'ask me, I will make no reply.' Lacesse ; jam videbis furentem, 'provoke him, i. e., if you provoke him, you will see him frantic.' In these examples, it will be observed, we have the full force of conditional sentences expressed without any conditional particles, in clauses entirely independent, yet containing all possible varieties of finite moods, the indicative, subjunctive, and imperative. Moreover, in such examples as these, we find, I conceive, the original type out of which conditional sentences were developed. Originally the two clauses, the condition and the conclusion, were entirely independent, as in the examples just noticed, and the mood in each was determined by the ordinary principles which regulate the use of moods in principal clauses. The indicative was used in treating of facts, and the subjunctive or imperative in all other cases. Si, probably the locative case of an indefinite pronoun, meaning at any time or in any manner, has nothing whatever to do with the mood, but merely serves to show that the action in the conclusion is connected in time or manner with that in the condition. 'Thus, without the particle, negat, nego, 'he denies, I deny;' with the particle, si negat, nego, literally ' he denies (at some time, then or at that time), I deny.' Here we have the indicative, whether with or without the conditional particle. Let us now analyze a case with the suljunctive: Dies deficiat, si velim numeräre, etc., 'let me at. any time wish to recount, etc., then the day would fail me.' Here we have distinctly before us the subjunctive of desire in the condition, and the potential subjunctive in the conclusion, the identical
forms which we have met in principal clauses. The subjunctive in conditions is always a subjunctive of desire, that in the conclusion is generally potential, though that also sometimes denotes desire, as, peream, si poterunt, etc., 'they will sometime be able, etc., then let me perish.'

Concessions are so closely related to conditions that they scarcely require separate notice. The subjunctive is the same in both. Thus the subjunctive of desire is easily recognized in the following examples: Quamvis sit magna exspectatio, tamen eam vinces, ' let the expectation be as great as you please, even then, or even thus you will surpass it.' Absolvite. Verrem qui se fateatur pecunias cepisse, 'acquit Verres, let him admit that he accepted money.' We must not forget that the clause introduced by qui was originally independent. Licet, irrideat, plus tamen ratio valebit, 'it is permitted, let him deride, with all this derision reason will avail more.' In this short sentence we have three clauses, each one of which retains the identical mood which it adopted when it was an independent sentence.

Again final clauses need not detain us long, as purpose necessarily involves desire, and is readily developed out of it. Such clauses therefore always contain a proposed or desired action, and accordingly in Latin require the sulyunctive, as: Punit ne peccetur, 'he punishes, let not crime be committed.' Here the second clause contains the desire, command, purpose involved in punit. The independent sentence out of which it was developed already contained the subjunctive of desire, and in fact remains unchanged in form in the final clause before us. Servis imperat ut filiam defendant, 'he commands his servants, so let them defend his daughter.' By thus restoring the final clause to its original independent form, we can appreciate, in a measure, the true force of the subjunctive of desire. I'e rogo ut eum juves, 'I ask you, so aid him.' Legum idcirco servi sumus, ut liberi esse possimus, 'we are servants of the law for this reason, accordingly let us be able to be free.' Vereor ne laborem augeam,' I fear, let me not increase the labor.' Periculum est ne ille te verbis obruat, 'there is danger, let him not overwhelm you with words.'

Moreover, in the Homeric poems, where final clauses are less fully developed than in later Greek or in Latin, we sometimes meet with passages in which it is difficult to say whether we have before us an independent clause containing the the subjunctive of desire, or a dependent clause expressing purpose. Such passages are especially instructive on the question of the origin of final clauses. Thus

'let me go forth alone to the ships of the Achaeans that I may supplicate this man.' But perhaps the original conception is here preserved, let me supplicate this man. Again, take a negative sentence,

as purpose, let not sleep take possession of any one, lest we become a joy to our enemies, but perhaps better as independent clauses, let not sleep take possession of any one, let us not become a source of joy to our enemies.

Consecutive clauses are in origin, form, and history closely related to final clauses. Both refer to the result of the action, the former contemplating it as probable, as something to be expected, the latter as something desired, intended, proposed. While, therefore, the subjunctive in final clauses is found to be a subjunctive of desire, that in consecutive clauses, denoting simply expectation, is potential : Non is sum, qui his utar, 'I am not the one who is likely to use these things.' Aristides ita vixit ut Atheniensibus esset carissimus, 'Aristides so lived that he was likely to be very dear to the Athenians.' Observe that the subjunctive, in examples like this, did not originally express an actual result, but only a contemplated one, that which would follow as a matter of course. Then, in relation to a past event, the transition became very simple and natural from a contemplated result which was to be expected in a given case, and which would follow as a matter of course, to that which did follow as a matter of fact. Hence the Latin, which meant, originally, he so lived that he would of course be very
dear to the Athenians, may be not improperly rendered, he 80 lived that he was very dear to the Athenians.

An additional argument in support of the view that the subjunctive in consecutive clauses is potential in origin and force, is found in the fact that it takes the negative non, the regular negative of the potential subjunctive, while final clauses take $n e$, the regular negative for the subjunctive of desire, as: Ita vixi, ut non frustra me natum existimem, ' I have so lived that I do not think, or, more literally, that I am not likely to think, that I was born to no purpose.'

In the cases which we have thus far examined, the Latin Subjunctive appears to be original, that is, to have been required by the very nature of the thought contained in these clauses in their original and independent form. We find here no new use of moods, but simply the two distinct and well recognized uses of the Latin Subjunctive which run through all departments of Latin literature in all ages of its history, uses moreover not at all peculiar to the Latin, but belonging equally to the Sanskrit and the Greek.

In conclusion, it only remains for us to notice the fact that these two primitive uses of the subjunctive sometimes occur in still other classes of subordinate clauses, having been developed in them while they were still independent. As they appear, however, in forms much less disguised than those already examined, they will in general be readily recognized. A few brief examples will be a sufficient illustration of this point, as : Etiam tum vivit, quom esse credas murtuam, said of infamy, 'even then it lives, when you would suppose it to be dead,' the potential subjunctive in a temporal clause. Differant, dum defervescat ira, 'let them defer it till their anger cools, i. e., that it may cool, or to come still nearer the original conception, let them defer it, in the mean time let their anger cool.' In most other cases, as in dependent questions, and in the dependent clauses of the oratio obliqua, an original subjunctive is so easily recognized that it does not even require illustration.

We have thus endeavored to trace in outline the development of the Latin Subjunctive in Principal Clauses from its origin
in the Indo-European tongue to its latest uses in the works of Roman authors. We have seen :

1. That its forms, etymologically examined, denote effort, attempted action, and are closely related in origin and force to the conative present.
2. That attempted action suggests :
a. Desired, proposed action.
b. Probable, possible action.
3. That the uses of the subjunctive actually found in principal clauses in the works of Latin authors naturally arrange themselves in two classes, corresponding to the two meanings already derived from the etymology of the forms, and authorize us to distinguish :
a. An optative subjunctive, or a subjunctive of desire.
b. A potential subjunctive.
4. That to one or the other of these two classes belong:
a. The subjunctive in all principal clauses.
b. The subjunctive in conditional, concessive, final, and consecutive clauses.
c. All original subjunctives in other subordinate clauses.

But our discusssion now brings us to a use of the Latin Subjunctive in subordinate clauses, which is peculiar and special, which finds few analogies in Sanskrit or Greek, which is not strictly potential or optative, and which seems to have few clains to be regarded as original. It occurs in causal and temporal clauses, in dependent questions, and in the subordinate clauses of the oratio obliqua. Unlike the uses already considered, it seems never to have been developed in principal clauses. It does not therefore fall within the scope of this paper, and the discussion of it must be reserved for a future occasion.

## VI.- The Original Recension of the De Corona.

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Just what relation the speech of an Athenian orator delivered in court, in answer to a counter-plea, holds to the same speech as subsequently revised and publislred, is a question that can never be settled as to details. But as regards the more general features, such as consistency of argument, evenness of finish in all parts, unity of plan, direct reference to points made by the first speaker,-in all these matters it would seem that the internal evidence gained from a careful comparison of two rival speeches would be sufficient to determine, with some degree of accuracy, not only the relation of two such speeches to each other, but also of each speech in its revised form to the same speech as originally planned and delivered.

An examination, for example, of the speech of Demosthenes vs. Timocrates shows verbal repetitions, contradictions, and less careful finish in the second half. These facts led Benseler to suppose that this oration is a patchwork made up of the speech of Demosthenes vs. Androtion, of that of Euctemon vs. Timocrates, and of a speech of Demosthenes vs. Timocrates. Schaefer regards the speech as a combination of two drafts or sketches by Demosthenes, an earlier and a later; the earlier was directed, he thinks, against both Androtion and Timocrates; but, since Androtion and his associates paid the prize-money while the action was pending, the orator prepared the second draft to meet the changed situation. This is substantially the opinion, also, of Blass. That in the prooemium the payment of the mouey should be denied, in the statement of the case (cf. $\S 11-16$ ) be granted, then again denied in the second part of the speech (cf. 121, 131), not to mention the cases of hiatus and violations of the Demosthenic law of $\varepsilon \dot{\rho} \rho v \geqslant \mu i a$ to be found in the second half of the oration, is sufficient evidence that this speech cannot originally have been cast in a single mold.

This oration against Timocrates affords at once both an illustration of Kirchhoff's theory of the original recension of the de Corona, and, by way of contrast, as we shall attempt to show, a reason for doubting the soundness of that theory.

Kirchhoff's theory of the origin of the de Corona in its present form, is contained in the Abhandlungen der Königlichen Akademie der Wissenschaften zu Berlin, 1875, and is substantially as follows: It is well known that the trial of Ctesiphon was, for some reason, delayed for several years. Demosthenes, according to Kirchhoff's theory, wrote out a plea soon after the bringing of the indictment, in 336 or 335 b. c. This plea could have been directed only against the formal writ of complaint, for beyond this nothing could be definitely known of the attack of Aeschines. The de Corona in its present form plainly divides itself into four parts: first, § 1-8; second, § 9-53; third, § 53-121; fourth, § 122-324. The third part is that which contains the reply to the specific charges of the indictment.

It is this part (53-121), plus 3,4 , and 8 of the pronemium, which constitutes the original plea.

But when the trial came off, some six years later, the situation was changed. Ctesiphon and Demosthenes then agreed to divide the material of the defence, Ctesiphon taking the legal points and Demosthenes the political issues. Accordingly, Demosthenes, after careful preparation, but in extemporized language, replies to his antagonist's attack upon his political carcer, and makes no use of the original plea drawn up six years before. After his case was won, Demosthenes concluded to publish his speech.

In preparing his oration for publication, it was the purpose of Demosthenes to incorporate with the speech actually delivered by him at the trial, the original plea on the legal points, so as to present the entire defence in a complete form. But in remodeling the old plea he must, of course, notice the statements of his opponent, and, by interpolated passages, meet the points he had not anticipated. In proof of this recasting and interpolating, Kirchhoff cites § 73-79 and

discovers an interpolation out of all harmony with the context; A. Mommsen, however, takes this, it seems with good reason, as a passage inserted by the author of the spurious documents immediately following.

But Demosthenes soon lecame convinced that this attempt to recast the old plea, so as to make it seem an organic part of the speech spoken at the trial, could not succeed, and the project was abandoned. Thereupon he contented himself with reducing to writing the speech actually delivered by him, reproducing, as closely as possible, the language and the arguments employed. Thus arose the second or younger speech, which is preserved in $\S 1,2,5,6,7,10-52,122-324$. It was the intention of Demosthenes to publish only this younger speech and to keep the older in retirement. But circumstances unknown to us prevented this intention from being realized. The unknown editor of the de Corona found among the literary remains of the orator both the older plea, bearing the marks of an uncompleted recasting, and the completed transcript of the speech delivered at the trial; and, in the belief that the orator intended that both these pleas should be united, the editor took up the task of interjecting the older into the body of the younger speech, so as to form one united and complete defence. The work, though mechanical, was done with discretion. In conclusion, Kirchhoff expresses the hope, that, while many may not be inclined to adopt his theory without more proof, he has at all events succeeded in shaking the universal admiration of the de Corona as a faultless masterpiece of rhetorical art.

Kirchhoff starts out with the assumption that Demosthenes could not have arranged the subject matter of the de Corona in its present form, without possessing a minute acquaintance with the contents of the speech of his opponent. With this assumption we cannot agree, except so far as it may apply to certain direct references to the speech of Aeschines which will be noticed below. Furthermore, Kirchhoff thinks that Demosthenes had no expectation that Aeschines would charge him with being the promoter and author of the peace of Philocrates, and regards, therefore, the entire second division, § 9-53, as a
part of the later and actually delivered speech inserted in the earlier plea. .

But this charge of Aeschines is only a degree more bold than that which he had made some thirteen years before, in his defence concerning the embassy. From a comparison of Aeschines, de Falsa Legat., § 53-61 and 79, with contra Ctesiphontem, $\S 60-71$, it appears that the difference in the attitude of Aeschines is simply this: in the latter speech he is almost silent about his own relation to the peace, and in the former he charges upon Demosthenes, in company with Philocrates, not the authorship of the peace, but bribery in its negotiation. When we take into the account the course of events after 344, it is not at all surprising that Aeschines, in his desire to charge the policy of Demosthenes with as many disastrous results as possible, and with his talent for misrepresentation, should, in 330, have modified the more general charge of copartnership with Philocrates in bribery, to the more specific charge of being the joint cause of the peace. It does not seem at all likely that Demosthenes was "completely surprised," as Kirchhoff supposes, at the charges of his opponent in relation to the peace; and, bating a few direct allusions to the very words of Aeschines, no good reason can be shown why Demosthenes should not have treated this topic from the very first substantially as we find it. Nor can the supposed surprise of Demosthenes be inferred from the language in § 22:), as Kirchhoff would have it. These words refer, if to anything definite, to the Theban alliance, but are best understood as a rhetorical remark upon the desperate means to which Aeschines resorts.
 language in § 209 where the allusion is decidedly obscure. The whole passage ( $\$ 9-53$ ) on the peace may be regarded as antedating the trial in origin, with the exception of the following direct allusions to the words of Aeschines: $\$ 27-28$, beginning with raũra rà $\chi \omega \rho i a, \S 41, \S 51, ~ \check{i 2}$, and possibly one or two more that are not so clearly distinguishable.

Kirchhoff passes now to examine the formal reply to the bill, which is contained in $\S 53-121$. From the nature of the case, Demosthenes could more easily anticipate the course
of the attack upon the legal questions involved than upon the political issues to be discussed. So completely had Demosthenes anticipated in his preparation this part of the case, that he needs to stop but seven times in this part of his defence to notice the very words of his opponent. This is just what we should expect. But in discussing the relation of this part of the de Corona with the speech of Aeschines, Kirchhoff leaves it an open question whether the final recension of the speech of Aeschines was prior or subsequent to that of the speech of Demosthenes. Now a comparison of these two speeches justifies the belief that the reviser of the Aeschines had before him the present revision of the Demosthenes. Though not proved, it is properly inferred from a comparison of Aeschines, § 225, 226, with Demosthenes, § 243, and of Aeschines, § 189, with Demosthenes, § 319. So again from a comparison of the arguments of the two rival orators on the question of the place of proclamation, it seems reasonable to infer that Demosthenes could not have had the argument of his opponent in its present form before him when he made his own ; for, while he might not have made a satisfactory defence upon this point, it does not appear probable that he would have made so little show of defence against the elaborate argument of Aeschines.

But the main support of Kirchhoff's theory lies in the relation which the passage § 53-110, in which Demosthenes treats of his public career in answer to the first count of the indictment, is made to bear to the rest of the oration. It is worthy of notice, to be sure, that Demosthenes should not, in this part of his speech, review his administration beyond the reform in the trierarchal law (Olymp. 110, 1). But is it reasonable to suppose that the orator, when he composed this part of his oration, had no intention of making any allusion to the important rôle he played in the events just prior to Chaeronea? The part Demosthenes had in withdrawing Athens from the war about Amphissa, in bringing about the alliance with Thebes, in fortifying the city after the capture of Elatea, the confidence the people continued to repose in him after the great catastrophe-all this Demosthenes had no idea of men-
tioning in vindication of his policy, if we must believe the theory of Kirchhoff. And why? Because Demosthenes says in § 110:





But this language is nothing more than a rhetorical artifice common enough in transitions and introduction of new topics.
 turns in the seventeenth and twentieth prooemia of Demosthenes. We understand the orator to mean that he passes by these most important of his public deeds for the present
 ing that he does not intend to speak of them later. To account for this silence about events subsequent to Olymp. 110, 1 , Kirchhoff supposes that Demosthenes, at the time of the composition of his original plea, judged it to be politically inopportune to discuss the affairs connected with Chaeronea when they were still so fresh in memory. But supposing the trial had occurred when the action was first brought, is there not a moral certainty that the connection of Demosthenes with these very events would have formed a prominent part of the attack, and would have required a correspondingly rigorous defence?

In confirmation of his theory, Kirchhoff cites those passages in this division of the oration ( $\$ 53-121$ ) which are direct answers to the points of Aeschines, and claims that they are recognizable as later insertions and additions, since they can be detached from the context without breaking the connection, and in some instances seem to interrupt the course of the narrative or argument. Kirchhoff mentions $\$ 70,73-79$ as
 later origin than the body of this part of the oration.

It is not with Kirchhoff's view of these passages that we find fault, but with his argument; for it involves the position that in what he holds to be the real speech of Demosthenes- $\$ 10-52$ and 121-324-the direct allusions to the words of Aeschines
are not thus easily separable and do not break the connection, on the ground that they are not later insertions in the body of a speech composed before the trial. It is here that Kirchhoff's theory seems to break down. If passages of a like character with those above mentioned can be found in the supposed extemporized oration, then is not only Kirchhoff's theory disproved, but the opposite claim that the entire oration has the same genesis and was composed and written altogether, either before or after the trial, is established.

To this question let us now turn. There are in the de Corona twenty-nine distinct references to the language of Aeschines. Of this number seven are found in the formal reply to the indictment, three in the prooemium, and the rest, nineteen, are divided between divisions two and four, i. e. five in § $9-53$, and fourteen in $\S 122-324$. This seems like a distribution of points controlled rather by a pre-arranged division of the entire subject matter, than like one resulting at the moment of the trial from the order pursued by the first speaker. The speaker who extemporizes in reply to an attack is likely to follow, to some extent at least, the order of his antagonist.

It is quite remarkable how widely Demosthenes departs, alike throughout his entire speech, from the order which his rival chose in attacking him. Numbering the allusions made by Demosthenes to the words of Aeschines in the order of succession in which they occur in the speech of Aeschines, we find the corresponding sequence in the de Corona to be as follows: $22,23,5,9,7,15,8,3,12,26,27,10,2,4,18,29,13$, $14,6,17,11,19,21,16,24,1,28,25,20$. It is just this disagreement in order, as compared with the speech of the plaintiff, that we should expect to find in the speech of the defendant if the structure of his speech was fixed in advance of the trial.

The question now is, are the allusions in what Kirchhoff calls the real speech of Demosthenes any less separable from the context, and any more consistent with the connection than those in the supposed original plea. While Kirchhoff does not claim this, it is yet the necessary inference from his
argument. What Kirchhoff claims to have shown in respect to the allusions in $\S 54-121$ to the language of Aeschines, may equally well be shown, we think, in respect to similar allusions in other parts of the de Corona. Without pretending to be able to point out the stitches which fasten these passages to the body of the speech, we may find traces of the seams. Take, e. g., $\S 126-128$. A glance at this passage shows that its original structure has been disturbed for the sake of ridiculing the high-flown peroration of Aeschines. The anacoluthon occasioned by $\delta_{\varepsilon}$ in the second line (a reading of the best authority), is possibly an incidental mark of the departure from the original form.

The addition in § 161-2, beginning with oiv $\dot{\operatorname{a}} \pi \grave{o} \tau \bar{\eta} s \dot{\varepsilon} \mu a v r o \bar{u}$ $\gamma^{r} \dot{\omega} \mu \eta \mathrm{~s}$, the object of which is to show the false conduct of Aeschines toward Aristophon and Euboulus (cf. Aeschines, $\S 25,139$ ), weakens the sentence whose natural close is with סıetélouv.

Examine next the passage from § 218 to § 247, inclusive. The consummation of the alliance with Thebes has just been discussed. There were two points connected with that transaction which required defence: first, the favorable terms granted to Philip; second, the results of the alliance. The passage has these peculiarities: $\S 227-231$ is evidently a later insertion. Demostheues turns the point of the illustration, but with reference to an entirely different matter.
 have suggested the entire passage from $\$ 232$ to $\S 237$, inclusive. It is worthy of notice that in $\S 941$ Demosthenes repeats the enumeration of the results of his policy already named in § 230, adding only one new item, sc. каi $\tau \bar{\eta} c$ аєтотонтias. § 244-246 is apparently called forth by the taunt of Aeschines upon the bravery of Demosthenes. The connection of § 247 with § 239 is so close that they seem to belong together. The original part of this passage (i. e. the part composed in advance of the trial) may possibly be $\$ 218-294,238,239,247$.

Demosthenes had still to point to the survival, after Chaeronea, of the confidence reposed in him, as evidenced by his election to the office of grain commissioner and of public
eulogist of those who had fallen. We cannot suppose that he prepared beforehand any plan of his speech without including these two points. They are treated in § 248-290. But this passage contains also three direct allusions to the speech of Aeschines, and a comparison of the fortunes of the two rivals. The reference to the case of Cephalus ( $\S 251$ ) is rather loosely joined to the context by Nai, $\phi \eta \sigma i v$. If we take $\S 252-275$ as a part of the original composition, $\pi a v \tau a \chi^{\circ}{ }^{\circ} \varepsilon \nu$ of $\S 252$ seems to fit in well with the closing sentence of $\S 250$. $\S 276-284$ seems to be one of the clearest instances of later insertion in the whole oration. The opening sentence, cai mpòs roịc ädлoç, helps make the transition, but does not hide the seam. The break between $\S 284$ and 285 is the most abrupt in the oration, and has been noticed as a rhetorical defect by many critics.

The allusions to the language of Aeschines found in the remainder of the speech are so brief and so unimportant to this discusssion as not to require any notice. We need not examine Kirchhoff's analysis of the Prooemium. He has confused there, as elsewhere, the notion of a subsequent revision, in which the orator incorporates extempore passages spoken at the trial, with the idea of two distinct speeches welded together by some later hand.

The theory of Kirchhoff involves other difficulties:
(1) Demosthenes is supposed to have prepared at the outset a plea on the legal points of the indictment, but when the trial occurred to have assigned this part of the defence to Ctesiphon. But for this change of plan no reason can be found, and nowhere is there any allusion by Demosthenes to a plea made by Ctesiphon.
(2) In $\S 238$ Demosthenes repeats the allusion to the Byzantians by Aeschines already referred to in $\S 95$, which favors rather the supposition of Schaefer, that Aeschines omitted from his revised speech what he had said on this point, out of regard for the Rhodians, than that of Kirchhoff, who belicres (apparently overlooking the second allusion in $\S 238$ ) that Demosthenes misquoted Aeschines.

But on Kirchhoff's supposition that Aeschines had not
mentioned the Byzantians, the allusion in § 238 as well as in $\S 95$ would be an instance either of erroneous anticipation or of later insertion, and would go to prove that the parts of the de Corona in which they occur are of contemporaneous origin.
(3) The theory of Kirchhoff forces us into this dilemma: either the unknown arranger and combiner of the two speeches succeeded remarkably well in accomplishing a task which the orator himself abandoned as impracticable, or Demosthenes did not succeed, when he put his speech in writing, in giving it that unity of structure and closeness of connection in all its parts that should characterize a production carefully composed out of material fully known and at hand. The only explanation of these instances of loose connection and abrupt insertion, is to suppose that the body of the oration was composed before the trial, and that the orator in a subsequent revision inserted these originally extemporized passages as best he could.

It may be oljected that too much stress has been laid in this discussion on the supposed blemishes of structure in the last division of the oration, and that the hope expressed by Kirchhoff, that he has succeeded, at least, in shaking the universal admiration with which critics have regarded the de Corona, seems to be confirmed by our own demonstration. The answer to this charge is three-fold: (1) In combating the theory of Kirchhoff we have employed his own weapons, and made the most of every point. The evidence brought to sustain the thenry might properly be assailed as an illustration of a kind of criticism which "strains at a gnat and swallows a camel." (2) On our theory it is to be expected that the interpolated passages should be easily separable from the context, and should sometimes show the seam by which they are, so to say, stitched into the whole. The skill with which this is done in most instances is itself worthy of admiration. (3) A comparison of the de Corona with other speeches of Demosthenes argues the essential unity of origin of this oration.

Take, for example, the oration of Demosthenes on the False Embassy.

In this oration critics have discovered grave faults of arrangement and composition, and have proposed bold changes and excisions. One of the latest and boldest of these critics is 0 . Gilbert (die Rede des Demosthenes $\pi \varepsilon \rho \grave{\imath} \tau \pi \tilde{\eta}_{s} \pi a \rho a \pi \rho \epsilon \sigma ;$ Etiac, Berlin, 1873). The latest defender of the present plan of the speech is Blass, who seconds the views of Schaefer except as regards the relation the written speech holds to the spoken. From the discrepancies between the speech as we have it and the allusions to it found in the reply of Aeschines, Blass argues that the written speech was prepared some time before the trial, and was not afterward revised so as to meet the change of situation brought about by the condemnation and flight of Philocrates; while Schaefer, on the other hand, explains these discrepancies by supposing that Demosthenes, in revising his speech, suppressed some passages and added others.

However that may be, the point that concerns us more particularly is that the most radical view of the origin and character of the de Fals. Legat. goes no farther than to point out displacements and later insertions in the text, and throws no doubt upon the original oneness of origin of the oration.

It would be interesting in this connection to make a minute comparison between the oration of Aeschines de Fals. Legat. and the de Corona, particularly with reference to the direct allusions which each orator makes to the words spoken by the other. From such a comparison it would appear that Aeschines pursued, in the subsequent revision of his speech, the same course that we suppose in the revision of the de Corona. We have space to notice only a few of the twenty direct allusions made by Aeschines to the words of Demosthenes.

In $\S 56$ Aeschines refers to the attack of Demosthenes upon
 and proceeds to show that Demosthenes falsified, referring particularly to the statement of Demosthenes, de Fals. Legat., $\S 13-16$. This statement covers two points: (1) That Aeschines spoke against the peace of Philocrates the first day, and in favor of it the second day of the Assembly; (2) that he thus changed his attitude in the presence of the envoys
sent by the Greek states to act in concert with Athens. The answer of Aeschines to (2) is contained in § 57-62; to (1),
 к. т.. ., is plainly intended to form the connecting link between the inserted passage and the body of the speech.

An examination of Aeschines' de Fals. Legat., § 144-171, warrants the helief that this entire passage is a later iusertion. The beginning of this passage marks what is, perhaps, the most abrupt transition in the oration. Aeschines has been ex. plaining how Phocis came to be ruined, "first through fortune which is the arbiter of all, then through the length of time and the ten years' war." He calls for testimony from Boeotians and Phocians to show how he had benefited their states, and then asks $\pi \tilde{\omega} \varsigma$ os $\nu$ ouvk к. r. $\dot{\varepsilon}$., § 143. Then without any introduction, without any sentence to make the transition,
 he passes to consider, in $\S 144-171$, matters of a personal nature in response to the attacks of his opponent. The close - of this passage is but little less abrupt than its beginning. In § 170 Aeschines calls up testimony to his honorable record as a soldier; § 171 forms the connecting link between these personal considerations and a review of the history of Athens.

An analysis of the passage itself, including § 144-171, shows the sutures of the different parts. In § 144-145 Aeschines tries to turn the point of the quotation of Demosthenes about $\phi \dot{\eta} \mu \eta$. In $\S 146-152$ he meets the charge of betraying his country into the hands of Philip. In this passage occurs the allusion to the attack of Demosthenes on Philon, no reference to whom is found in the speech of Demosthenes as handed down. § $153-159$ is occupied, as far as the sentence $\dot{\alpha} \lambda \lambda^{\prime}$ oi íac к. $\tau . \dot{\varepsilon}$., with a reply to the contrast Demosthenes had drawn between the conduct of Aeschines and of Satyrus towards the Olynthian woman and the prisoners of war. What follows in § 159-161 seems intended to lead the hearer (reader) back to the main issue; but presently this is forgotten, and in § 162-163 the charge is noticed that he joined with Philip in singing paeans after the destruction of Phocis. The abruptness of the opening sentence in
§ 162, its want of connection with what precedes, is apparent at a glance. In § 164-166 Aeschines answers the charge that he so suddenly changed his attitude towards the peace. Then follows, in $\S 167-170$, the defence of his military record, already mentioned above.

The last part of this oration, from $\S 172$ on, seems originally to have been directly connected with the passage immediately preceding § 144-171. In § 130-138 Aeschines aims to show that through the agency of Demosthenes and his associates Athens was prevented from joining with Philip in an honorable attempt to put an end to the Phocian troubles. In § $172-178$ he proceeds to show that it was in the line of ancestral precedent to make peace as well as to carry on war, and that peace had generally been productive of more good than war.
 к. т. $\varepsilon$, in $\S 171$, is plainly intended to recall the expression in
 have been written for the very purpose of connecting these. disjointed parts.

Enough has been shown of the structure of the de Fals. Legat. of Aeschines to make it appear that in its present form it is to some extent-just how far may not be exactly determined-a reconstruction and recension of the one original speech delivered at the trial, and a fit parallel of the de Corona in its genesis and composition.

While we may never be able to show just how far this process of recasting and revising an oration for publication extended, we trust that this discussion has, at least, made apparent the wide distance that separates an oration like the de Corona, and the de Fals. Legat. of Aeschines, from a production like the Timocratea, which, as was shown at the outset, is confessedly not simply a revision of what was originally one speech, but a combination of two or three different pleas, characterized, in spite of the skill shown in the work of combination, by contradictions, by literal repetitions, and by unevenness of finish.

# VII.-The Authorship of the Dialogus de Oratoribus. 

By TRACY PECK,

PROFESBOR OF LATIN IN CORNELL UNIVERBITY.
As far as our knowledge extends, it was Beatus Rhenanus who, in his editions of Tacitus early in the sixteenth century, started the discussion in regard to the authorship of the Dialogus de Oratoribus. About fifty years later, Lipsius maintained with more force that Tacitus could not have written the work, and his judgment-based mainly on the wide difference between the style of the Dialogus and that of the admitted writings of Tacitus-greatly influenced his contemporaries, and is still not without adherents. But the broad question whether the work is the composition of Tacitus, or of Quintilian, or of the younger Pliny, or even of Suetonius or Maternus, by the consent of modern scholars has been narrowed to this question,-whether Tacitus was or was not the author. The arguments once advanced in favor of all others except Tacitus are so easily overthrown by considerations of chronology, literary style, judgments of men and things, and mental characteristics, that, if I mistake not, these quasi-claimants are now without champions. The current of criticism, so far as it has been publicly expressed, is to-day setting strongly in favor of Tacitus. It is hoped by this paper not so much to add materially to this discussion-now nearly three hundred and fifty years old-as to excite among us greater interest in a work which singularly merits and rewards study as the outcome. of and protest against the literary condition of Rome in the first century of the Empire, and because of its fertile suggestiveness of thought, its exquisite Latinty, and the freshness of its style.

The Dialogus is nowhere distinctly mentioned in extant classical Latin, but in a letter of the younger Pling (Ix. 10) to Tacitus it is in all probability quoted from. Pliny's words are these : Poëmata quiescunt, quae tu inter nemora et lucos commodissime perfici putas. Now, the exact idea and the essential words appear in chapters 9 and 12 of the Dialogus, nor are
the words in such a use elsewhere found in Tacitus. This contemporary evidence should seem conclusive : but it has been urged that the quotation is from some work or part of a work of Tacitus now lost. It is hard to see how the thought could have found pertizent expression in any of his historical compositions. Of course the passage might have been in the vanished correspondence of Tacitus, but this explanation can hardly appear probable to one who examines the question with a judicial rather than a partisan frame of mind.

It seems like trifling to mention the other ground on which the authority of this letter has been impugned. Heinrich Gutmann maintains that the letter was written by Tacitus himself in reply to Pliny's (i. 6) communication. But in the earlier letter there is nothing to which this could serve as a fit answer. The style of the letter is through and through that of Pling himself. There is no evidence that Tacitus wrote poetry, and had he thus written, Pliny would in all probability have added his name to the list of versifiers in Ep. v. 3. . And by what strange chance should this single letter of Tacitus have alone been preserved, while all other epistles from Pling's many correspondents (save only those from the Emperor Trajan) were excluded from the collection? If Pliny had thought to honor Tacitus by the insertion of one of his letters, would he have chosen this exceedingly light specimen?

The testimony of the manuscripts is in favor of Tacitus alone. All existing mss. of the Dialogus have the important lacuna between chapters 35 and 36 , and other corrupt passages, and are doubtless derived from the copy that was brought to Rome in or very near the year 1457. In all mss. the title runs, Cornelii Taciti Dialogus de Oratoribus. Additions to this are of late and known origin. Thus Gronovius in his edition increases the codex-superscription with the words sive de causis corruptae eloquentiae. This was the subject of an early work of Quintilian (Inst. Or., vi. prooem. 3), but Spalding (l. c.) has clearly proved that the Dialogus cannot be this treatise of Quintilian. Furthermore, the Dialogus is not found with the mss. of the Histories or Annals, so that it cannot thus by accident or blunder have been identified with the works of Tacitus.

Diplomatic tradition thus speaks only in favor of Tacitus, and if we ignore this, the door is opened wide for scepticism in regard to the authorship of nearly all ancient literature.

Of no little weight is the testimony of Pomponio Leto of Calabria, who died not later than 1498. His words are: C. Tacitus scripta Maecenatis appellat calamistros. The epithet is found in the Dialogus, cap. 26, nor is it elsewhere in extant Latin applied to this effeminate litterateur. Lipsius endeavors to rebut this evidence for Tacitus with a contemptuous remark about the ignobleness of the witness. Of illegitimate birth he certainly was: so, too, is he freighted in history with many names; but nothing is known of him that justifies us in supposing him guilty of falsehood or of easy credulity in regard to our present question.

In the chronology of the Dialogus there is nothing inconsistent with the theory that Tacitus was its author. The work professes (cap. 1) to be an accurate reproduction of a discussion held in the sixth year (cap. 17) of Vespasian's reign. The reporter was at that time juvenis admodum,-a tantalizingly elastic expression. Tacitus applies (Agr. 7) the words to Domitian when he was eighteen years old, and to Vespasian (H. in. 78) and Helvidius Priscus (H. iv. 5) with much vagueness. The birth-year of Tacitus is not known, but it was probably 54 A. D., so that in 74 or 75 A. D. he could properly have been spoken of as juvenis admodum. The time of composition of the Dialogus can only be conjectured. The objective way in which the writer speaks of himself in the first two chapters, implies, to my mind, a considerable interval between the discussion and its report. Nor does it seem natural that Justus Fabius, to whom the work is addressed, should have 'frequently' (saepe ex me requiris, cap. 1) requested a juvenis admodum to undertake the discussion of so weighty a theme. But the fact of a youthful writer seems unmistakable from the entire warp and woof of the piece itself, and if Quintilian (Inst. Or., x. 3, 22), as is altogether probable, alludes to the work, it must have been given to the public some time before the death of Domitian in 96 . The Dialogus may thus have been published late in Vespasian's
reign, or under Titus. Nor do I see anything fatal to the view that it came out in the first years of Domitian's rule. Tacitus in the Agricola (3) certainly says that the fifteen years of that monster's reign were passed in silence; but he is apparently characterizing the entire reign from its last terrible years, and is referring to the capital danger of faithfully writing history or the lives of outspoken, freedom-loving individuals, rather than to the composition of such inoffensive pieces as the Dialogus. Under Domitian Quintilian certainly wrote, as did Statius, Silius Italicus, Martial, and many others whose names are better known than their writings. I do not think that the style or temperament of the piece will allow us to place its composition after Domitian's death. Too late, also, appears the mysterious absence of Tacitus from Rome for four years (Agr. 45) just before Agricola's death in 93. So late in Domitian's jealous and vindictive period Tacitus would hardly have ventured to speak in such praise of Vespasian (capp. 8,17), nor could he then have spoken with such buoyant cheerfulness of the imperial régime (41). Even the work of the calm and impartial Quintilian (I. O., x. 1, 91, 92) is marred by the servile flattery of the times, but we need not suspect that the grave Tacitus-and that, too, gratuitouslythus prostituted his powers.

Learing these exterual considerations, we are now prepared to question the personal motive, the sentiments, and the literary style of the Dialogus. Reading between the lines, I think we may find that Tacitus intended the work as a kind of pro domo sua, a vindication of his withdrawal from the career of a forensic orator and devotion to literature. As Cicero in his de Oratore speaks his own views through Crassus, so here Tacitus probably puts forth Maternus as his representative. Maternus is certainly the leading character: the discussion takes place at his house; he is introduced as a well-known person; his tragedies give rise to the debate; he directs and closes the argument, and twice recalls the disputants from digressions. In early life Maternus had gained prominence as a lawyer, but was now absorbed in the writing of plays; Tacitus, too, was educated as a lawyer and entered upon the
practice of the law, but abandoned this career for that of a historian. That the writer of the Dialogus had had a legal training like that of Tacitus is beyond a doubt: the discussion is introduced as an actual trial, in which we have plaintiff, defendant, advocate, and judge; the closing speech of Maternus bears the character of a judicial verdict; in the body of the work are many legal terms, as cui bono? formula, interdictum, and frequent reference is made to speeches that deal largely with legal technicalities and processes.

The Dialogus and the acknowledged writings of Tacitus show a quite remarkable consistency of views of men and events, and a like conception of life. In all we see a regret for the grander life and opportunities of the republic, but at the same time a philosophic acquiescence in the empire as the inevitable, and thus a strong tendency to fatalism. Here as there we find a cordial recognition of woman's influence in the prudent training of her children; a rich vein of satirethe genuine Roman satire-worked against the present, but with an earnest desire for its improvement; a disposition to concede greatuess in men of the times, provided they are not measured by the superior standards of the past; a keen insight into human nature and motives, and a portrayal of character and action with real dramatic effect; pregnant, epigrammatic utterances-not accumulated and paraded, as in Seneca, as sheer rhetorical tinsel, but naturally suggested by the course of thought. Here as there we see that Cicero-particularly his rhetorical writings-and Vergil had been sympathetically studied, and have left their stamp upon thought and expression.

In the youth of Tacitus there were two antagonistic schools of style, whose chiefs were Quintilian and Seneca. There seems no doubt that Tacitus was first drawn to the formera modified type of Ciceronianism. The younger Pliny (Ep. viI. 20) clearly implies this, and the Dialogus is the best extant specimen of this literary renaissance. The prevailing fulness of expression, the rhythmical periodic structure, the thoughts brocaded with an almost gaudy rhetoric, and at the same time frequent instances of tautology and an almost cloying richness of language, show both the author's success and failure in this
tour de force. But Tacitus was not one to wear long the garb of any school or model, and from the Dialogus on through the Agricola, and the Germany, and the Histories, and the Annals, we can trace the steady development of that marvelous method of expression which finally puts Tacitus apart from all who have ever written. The difference between the styles of the extremes in this series is certainly very great. But style naturally varies with the subject, changes with the times, and is modified by maturer years and wider experience. The historical studies of Tacitus, and his observation of the whimsical and brutal use of power, and of the apparently inevitable decline of his country, had profoundly affected his whole soul, and his style could not have remained stationary. Tacitus had not always been the austere, almost gloomy man that might be inferred from his latest writings: from the letters of Pliny he appears to have been a very genial and companionable friend ; there is even a tradition that he once wrote a book of witticisms (liber facetiarum), and certainly the Dialogus shows in its author a cheery and hopeful disposition.

The Latinity of the Dialogus, though based upon a close study of Cicero, reveals in all its texture the traits of the "Silver Age," and has many of the peculiarities of the later writings of Tacitus. Among these peculiarities may be mentioned a fondness for using pairs of words of like meaningespecially nouns and adjectives; a decided poetic coloring, as in the free use of metaphor and of personification; the reversal of the traditional order of the nomen gentile and cognomen; and the reckoning of the roign of Augustus from his first consulship, instead of from the battle of Actium or from the time of receiving the title of Augustus.
VIII.-On the Date of the Prometheus of Aeschylus.

By T. D. SEYMOUR, PROFESAOR OF GIREEK IN WESTERN RESERVE COLIEGE.

All efforts to determine the date of the representation of the Prometheus Bound have failed to discover convincing arguments. Concerning the date of no other Greek drama do scholars differ so widely. While Schoemann and others hold this to be the earliest of the extant plays, Moriz Schmidt classes it with the Rhesus as the rear-guard, the stragglersder Nachtrab-of Greek tragedy. To Westphal and Dindorf the character of the metres seems to point to a late epoch in tragic art; to Wecklein the careful formation of the trimeters seems to indicate that the play was written before the Persians. Gottfried Hermann believes that only two actors were employed, and assigns the play to an early date; Karl Otfried Müller thinks that three actors were necessary, and that the play is one of the poet's latest works, produced after Sophocles had introduced the third actor. Donaldson selects for the date of representation "the year 464 в. c., when the news would reach Athens that 'lhemistocles had entered the service of the Persian king. The warrior of Marathon and Salamis, and the friend of Aristides, would at such a time with peculiar force utter that abomination of treason, which the poet puts into the mouth of his chorus." Who, unacquainted with the play, would suppose that this "abomination of treason" referred to lines 1067 fg . :



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nouk !̈\sigmat\ vó\sigmaos
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It is indeed childish, as Haupt says, to seek or accept in the plays of Aeschylus or Sophocles allusions to the politics of their time. This notion of Donaldson is shown in its full absurdity by the equally improbable hypothesis of a later English writer,
that this play was intended, on the other hand, as a glorification of Themistocles. In that event it would be best dated before the Persians.

All the above arguments are based upon the metre, the language, and the construction of the play, or upon some uncertain political allusion. From the very nature of the arguments and the known facts of the poet's life they are inconclusive. According to the Marmor Parium, Aeschylus was born Ol. LxiII 4, 525 в. c., and contended with Pratinas Ol. lxx, 500 в. c. With the latter date agrees the statement
 The Persians, the first tragedy of which the date is fixed, was represented in the archonship of Meno, 472 в. c.; the Orestean Trilogy, the last presented by Aeschylus at Athens, was put upon the stage in the archonship of Philocles, 458 b. c. These fourteen years were by no means the Lehrjahre of Aeschylus. At the beginning of this period he had been writing tragedies for twenty-eight years, and was probably then fifty-three years old. While he was ready to accept suggestions from his younger rival, Sophocles, and modify his stage arrangements, we have no reason to suppose that he materially changed his style of composition or metres. The history of the Athenian stage of that period is by no means clear. We do not know even whether the third actor was first introduced by Aeschylus or Sophocles. Much less are we informed as to the date of other innovations. We have too few of our author's works to justify us in the assertion, from internal evidence, that one play belongs to his fifty-fifth year and another to his sixtyfifth year. We do not know what is accidental in the play and what belongs to the period of development and work. The simplicity of language and construction of the Prometheus may be explained as natural to the earliest age of tragedy, or as the result of Sophoclean influence.

A comparison with the Suppliants has been suggested as affording an indication of the date. In both plays the fortunes of Io are referred to in similar language, and the return of the Danaids to Greece is alluded to in the Prome-

























 709 fg . and 792 fg ., a list of the many tribes through which Io must pass before she finds rest.

Aeschylus shrank no more than Homer from the repetition of a thought in similar words, and might be as willing to give the substance of his Suppliants in a later tragedy as to amplify into a new tragedy the sketch given in the Prometheus. It is not easy, then, to draw from this comparison any definite conclusion as to priority of composition. Moreover the exact date of the Suppliants is unknown.

A surer criterion we may perhaps find in a comparison with the works of Pindar, of which Aeschylus was a careful student, as he was a student of the other lyric poets and of Homer, and did not hesitate to borrow from Phrynichus. He trans-
ferred és rò càò̀ ér roũ ca入oũ. His originality was so great and undisputed that he could afford to borrow. We think no less of Milton's genius when other nations claim the original plan of the Paradise Lost, and when we find in Spenser the germs of some famous passages. The great Teutonic poet is in our time not accused of lack of originality, though Greene claimed that Shakespeare was decking himself in borrowed plumes. So Aeschylus' genius is manifested in all the changes which he made in the plan of the Phoenissac. He gave the prologue of the Persians (if it may be called a prologue, in the parodos) to the chorus of old peers, and not to the eunuch dusting the throne. Wisdom was shown also in the constitution of the chorus from Persian peers, and not from Tyrian women brought to Susa without sufficient motive. It is an evidence of our different estimate of Euripides that we are not quite sure how much of the Medea's beauty is due to Neophron.

As then the Persians, perhaps the earliest tragedy which has come down to us, bears witness to the willingness of Acschylus to study and profit by the works of other poets, and as he himself said that his dramas were but scraps from the sumptuous banquets of Homer, we need not be prejudiced against the thought that he not only studied but borrowed from his great contemporary.

The resemblance between the most tragic of lyric poets and the most lyric of tragic poets has been often noted. Bom in the same lustrum, educated in the schools of the same city, though widely separated by their different relations to the wars for the freedom of Greece, and differing in some minor points, as in their treatment of the strife of the Gods, they were alike in their ethical views, in their sublime, rugged, and sometimes grandiose style, and, as we should expect, were alike in their use of words and constructions. Thus a comparison with Pindar has not only restored $\dot{\boldsymbol{a}} \boldsymbol{\lambda} \dot{\text { ácou }}$ for
 many other passages.

Both poets use the present tense in predictions. So Prom.



 лакєбаіноขоя.

The emplatic position of the proper name at the end of the sentence is not indeed peculiar to Aeschylus among the tragic







Common to both poets is the use of a noun as an adjective.





 frequently and in various constructions. Ol. ix, 42 : $\Delta i u ̀ s ~ a i \sigma q, ~$ Pyth. iv, 107: кar aigar, Pyth. viif, 13: $\pi a^{\circ} \rho^{\prime} a^{i} \sigma a v$, Frag. i, 2 : बі̀v $\ni_{\varepsilon \omega \nu}$ aï $\sigma$, Supp. 545 : $\dot{\varepsilon} \nu$ aí $q, 79$ : $\pi a \rho^{\prime}$ aírav, Choeph. 927 :


 671: ăкоvaà äкш้.

Both fancy the appositional use of $\pi o v i n$ and similar words.



Constructions which were later less frequent were not uncommon in these two pocts. Such is $\pi \varepsilon \rho i$ with a dative of








 this similarity might be indefinitely multiplied．

But not infrequently we find coincidence of thought or language，which seems to be the result of conscious imitation， and with perhaps only a single exception，we find from the known dates of ode and tragedy that it is Aeschylus who borrows．We may perhaps regard as accidental the similar allusions to the punishment of Aesculapius，Ag．1022，Pyth． III， 55 ；and to the crime of Ixion，Eum． 718 （ $\pi \rho \omega t o \kappa t i r o l a t$

 on his own duhghill，Agam．1671，Eum． 861 （but in a sus－ pected passage），Ol．xiI，14．In other cases，however，the connection is more evident．
 övaן $\mid \tilde{a} \nu \vartheta \rho \omega \pi о \varsigma$ was in the mind of Aeschylus，we may well believe，when he wrote Agam．839：ímidas кároxtpov，हídu入ov oxcäs，unless we accept the possibility that both are later than

 haps as close，though not so obvious，in Prometheus 545 fg ．：

$$
\begin{aligned}
& \text { ö入ırodpavıar ä̀кıкvข }
\end{aligned}
$$

 Prometheus， 545 fg．，it may be remarked in passing，has been noticed by Heinrich Schmidt for its Pindaric form；and in the first strophe we find the dactylo－epitritic measure which prevails in Pindar，but which is found in Aeschylus only there and in the same play 887 fg ．，and perhaps once in the Suppliants．

But among the more specific points of resemblance between odes of Pindar and the Prometheus of Aeschylus，the most remarkable is the description of the hundred－headed monster， Typhon，Pyth．I， 15 fg．：

Tvфஸ̀s éxатоขтакápavos' тóv тотв



ék $\mu \nu \chi \bar{\omega} \nu$ paraí ктл.
The Prosodion to Aetnaean Zeus, of which we have fragments 92, 93 , seems to have been written about the time of the first Pythian ode, when Hiero honored in every way the city which he founded on the site of Catana: Kєivч $\mu \dot{\varepsilon} \nu$ Aírva $\delta \varepsilon \sigma \mu o ̀ s ~ i ̀ \pi \varepsilon \rho . ~$




The monster is mentioned also in Pyth. viif, 15: Bia dè каi
 Here we see that Typhon was not yet Aetnaean, and Strabo intimates that Pindar was the first to transfer him to Sicily.*

With these passages we have to compare Prometheus 351 fg. :

xहita九 $\sigma \tau 8 \nu \omega \pi \sigma \tilde{v} \pi \lambda \eta \sigma l o \nu \vartheta \alpha \lambda \alpha \sigma \sigma l o v$





That the resemblance here is beyond the workings of chance is evident; but which is the original? Perhaps the answer to this question might be left to the scholarly instinct of each

[^10]reader. Schoemann says that Aeschylus' description of the eruption might have been written if the poet had never seen Sicily. It would hardly have had its present form if he had never seen or heard the first Pythian ode of Pindar. We may be supported in our decision by an examination of the ode. Hiero of Syracuse had gained the victory in the chariot-race at Delphi. Six years or possibly only two years before, he had driven out the inhabitants of Catana and had founded there a Doric city, named from the mountain on whose slope it lay. He was therefore to be celebrated as Aetnaean, and the glory of the city Aetua is the real subject of the ode. The poet
 xal lo thy biddings. Thou dost quench the thunderbolt of ever-
 Zeus. Thy notes soothe the hearts of the divinities. But all the creatures which Zeus does not love are frightened at the


 dedetac xopupuis, the transition is natural and easy to the mountain and the city named from it, which, with the founder's victory, is to be celebrated in the ode.

It is obvious that Typhon is an essential link in Pindar's chain. He is not introduced as a mere ornament or illustration, or as Philoctetes, 52 fg., to exalt the Syracusan king. Let us now look at the parallel passage in the tragedy. After
 olxi;ropa x $\tau \lambda$. At the conclusion of this description, Prometheus abruptly changes the subject by addressing Oceanus:

I am so far from agreeing with Wecklein that the mention of Atlas is only a transition to the description of Typhon and the eruption of Aetna, that the mention of Atlas seems to be complete in itself, while Typhon is only introduced to give a local allusion which would be appreciated best at the court of Syracuse. For an Athenian audience Typhon did not stand on the same footing as the Titan Atlas, and the Athenians
felt no particular interest in the eruption of Aetna. It is to be noted, moreover, that in the epode of the following chorus, Typhon is ignored and Atlas alone referred to in $\mu \dot{o} v o \nu \quad$ or
 if it were true that the Titan was mentioned only as a transition to the monster. Considering then, the necessity of the myth to this ode of Pindar's, and the loose and episodical way in which it is introduced in the tragedy, I think we may find some confirmation of our opinion that the Prometheus was written after the ode, which latter is dated by Boeckh 474 в. c., but by Bergk assigned to 470 в. с.

In the second Pythian ode, which was composed for Hiero, probably 477 or 476 в. c., we find:




We find the same thought in Prometheus 322: ofxouv zuocy



 the time of Euripides it was becoming proverbial, as it was a mere maxim in the time of St. Paul. In this connection it is to be remembered that in Acts ix, 5 the words $\sigma \times \lambda \eta \rho \sigma y$ oo
 inserted in the textus receptus from Acts xxvi, 14. In the latter passage St. Paul is giving to Agrippa an account in the Greek language of the vision and the voice which addressed him "in the Hebrew tongue." The Apostle, then, undoubtedly gave a free translation, in a current Greek proverb, of the words which he had heard. Commentators have been, perhaps, too hasty in assuming that this was already such a common expression in the time of Pindar and Aeschylus. In this they have neglected the ptyeur $\delta$ \&nacoüs xid. It would not be in the manner of lindar to develop the figure as he has, if it were not his own fresh expression.

xata̧̧uyvín | $\sigma \boldsymbol{\vartheta} \dot{\varepsilon}$


In the same ode, verse 34 , in speaking of Ixion's passion
 The same thought is expressed in Prometheus 890: ws iò


With a hyporchema written for Hiero at the same time as

 Prometheus 709-710:
 oixoy.

It is instructive, also, to compare the prophecy of Themis concerning Thetis, as given in the two poets. Isth. viII, 34 fg .:





This evidently is the prophecy to which reference is made in the Prometheus 908:

920:

The Titaness Themis is referred to in the tragedy once and again as the source of her son's knowledge of futurity, and we notice that Aeschylus adds two lines which did not affect the danger of Zeus. The poet had in mind Pindar's ì $\Delta_{i o s}$ $\pi a \rho^{\prime}$ à $\varepsilon \lambda \phi \varepsilon о і ̈ \tau \nu$.

It is noteworthy that all but the last of these Pindaric passages to which parallels have been found in the Prometheus are from the odes and the hyporchema which were composed for Hiero of Syracuse. For this there is no easier explanation than that the tragedy also was prepared for the court of Syracuse. No other reason appears why the Prometheus should be fuller of Pindaric expressions and allusions than the Agamemnon. This is especially true of the Typhon episode. This monster is mentioned again in the Seven against Thebes, but the name is not found in any other Attic writer, except once in the Phaedrus of Plato, Aristophanes' Clouds 336, and, according to Hesychius, in a lost play of Sophocles. Neither in these passages just mentioned, nor in Herodotus, is he brought into connection with Sicily. As the description of the Aetnean eruption serves a dramatic purpose, to show the prophetic power of Prometheus, the prediction concerning the Amazons, verse 723 fg ., has been compared with it. This prediction is very brief, however, and the more natural as the Amazons were far more interesting than Typhon to Aeschylus as an Athenian.

That Pindar should have seized upon the story of Typhon is natural. Sicily was colonized after the beginning of the historical period. The island is not rich in myths, and strangely enough, in all his Sicilian odes Pindar never mentions the Cyclops. Moreover the Syracusan tyrant was not descended from the ancient heroes. When an Aeginetan received the victor's crown the poet had an embarras de richesse in the justice and honor of Aeacus, in the exploits of Telamon and marriage of Peleus, and the brave deeds of Ajax and Hector. When Diagoras of Rhodes was victor we have the story of the first appearance of the island, and the betrothal of the island's nymph to the sun. For Theves cf. Frag. 29 :







This abundance of mythical subjects was not to be found in Sicily, and thus Aeschylus' conscious imitation is more natural and obvious. In the prediction conceruing the eruption of Aetna, in the mention of the "smooth fields of fertile Sicily," and of the monster, where, as Wecklein says, the poet speaks rather than Prometheus; in the warning not'to kick against the pricks; in the exhortation to marry in one's own rank; in the Scythian wheeled houses-in all this, Hiero heard allusions to his victories, and to the Epinikia of Pindar in his honor-allusions which were well understood by his court and the Greeks generally. We cannot suppose that these allusions were introduced for an audience at Gela or at Athens.

The abundance of nautical metaphors in the Suppliants indicates to Teuffel the possible Sicilian origin of that play. There is no lack of such figures in the Prometheus; e. g. 149:



 perhaps, do we find more sea words and phrases than in the Seven against Thebes, which begins:


or̀ $\alpha x \alpha \nu_{\omega} \mu \bar{\omega} \nu$,

and ends,




From this then we draw no conclusion. Aeschylus has merely proved himself what Dionysus was not, a true La入apivos. I would lay no stress either upon the Sicilianism of ápmoi of verse 615 of the Prometheus.

I would rest the argument upon the comparison with Pindar. This alone makes it probable that the tragedy was composed in Sicily, and after the first Pythian ode and the hyporchema which Pindar wrote for Hiero. This ode is in honor of the chariot victory which was gained at the 29th Pythiad. Accord-
ing to Bergk and the earlier authorities, who reckon from the first orequvitys à $\boldsymbol{j}_{\boldsymbol{\omega} \boldsymbol{\nu}}$ in Ol. xlix 3 , this would be in the early autumn of 470 в. c. Boeckh, however, reckons from the establishment of the áỳ̀ $\begin{aligned} & \text { xpquaritns, and his date for the ode, }\end{aligned}$ 474 в. c., is adopted by Dissen, Schmidt, and others. This fixes the latter part of 474 or 470 в. c. as the earliest date possible for the tragedy. But in the Spring of 472 Aeschylus produced the Persians at A thens. It has been suggested that it was the fame of that play which gained for Aeschylus an invitation to the court of Syracuse. The Persians would naturally arouse the tyrant's interest. He loved to hear the conflict with the Carthaginians, in which he had a share, compared with the battle of Salamis. As the conflicts were near in time, they were alike in results. It does not surprise us, then, to find Himera and Salamis united in that first Pythian ode. Aeschylus reproduced (qa⿱ì ìvadióákac roùs Mépoac ì עıceliá) his Persians on the stage of Syracuse. We may well believe that it was during this visit that he composed the Aetnean Women and the Prometheus Bound. The satyric drama of the Persian trilogy was, as is well known, the Prometheus חupфópos or חupkacús. That there was a trilogy devoted to Prometheus has been assumed since Welcker, and is perhaps probable. In that case it is natural to suppose that the satyric drama which accompanied the Persians was written before the Promethean trilogy, and in the חuparevs the poet saw how the subject could be treated in a trilogy. It is not easy to believe that a Promethean trilogy was produced in 473 b. c., with a satyric drama on another theme, while the חupraiv's was put upon the stage a year later. Moreover there is no positive evidence that Aeschylus was in Sicily between 475 and 472 b. c.

The duration of the visit of Aeschylus at Syracuse after the spring of 472 , is uncertain. According to Plutarch he was again at Athens in 468, when Sophocles gained his first dramatic victory. The Seven against Thebes was presented in 467. In this latter year Hiero died and his court was in confusion.

If, then, we accept the Pythiad reckoning of Bergk and the
older authorities, there is reason to believe that the Prometheus Bound was written at Syracuse between the autumn of 470 and the early spring of 468 в. c. If we follow the Pythiad reckoning of Boeckh and Dissen, we may believe that it was written between 472 and 468 в. c.

## American Philological Association.

1878-9.

## MEMBERS IN ATTENDANCE AT THE ELEVENTH ANNDAL SESSION.

(From the autograph register.)

Stephen Pearl Andrews, New York, N. Y.
William Hyde Appleton, Swarthmore College, Swarthmore, Pa.
Albert N. Arnold, Pawtuxet, R. I.
Charles J. Buckingham, Poughkeepsie, N. Y.
L. H. Buckingham, English High School, Boston, Mass.
W. C. Cattell, Lafayette College, Easton, Pa.

Albert S. Cook, Johns Hopkins University, Baltimore, Md.
Edward P. Crowell, Amherst College, Amherst, Mass.
Martin L. D'Ooge, University of Michigan, Ann Arbor, Mich.
T. T. Eaton, Petersburg, Va.

James M. Garnett, St. John's College, Annapolis, Md.
B. L. Gildersleeve, Johns Hopkins University, Baltimore, Md.
W. W. Goodwin, Harvard University, Cambridge, Mass.
A. Harkness, Brown University, Providence, R. I.

Samuel Hart, Trinity College, Hartford, Conn.
M. W. Humphreys, Vanderbilt University, Nashville, Tenn.

Mary H. Ladd. Chauncy-Hall School, Boston, Mass.
Charles R. Lanman, Johns Hopkins University, Baltimore, Md.
Robert F. Leighton, Brooklyn, N. Y.
John R. Leslie, Newport, R. I.
F. A. March, Lafayette College, Easton, Pa.
A. C. Merriam, Columbia College, New York, N. Y.

Wilfred H. Munro, Bristol, R. I.
C. K. Nelson, St. John's College, Annapolis, Md.

Charles P. Otis, Institute of Technology, Boston, Mass.
L. R. Packard, Yale College, New Haven, Conn.

Tracy Peck, Cornell University, Ithaca, N. Y.
William T. Peck, High School, Providence, R. I.
J. B. Sewall, Thayer Academy, South Braintree, Mass.
T. D. Seymour, Western Reserve College, Hudson, Ohio.

William E. Thompson, Genesee Wesleyan Seminary, Lima, N. Y.
Crawford H. Toy, Norfolk, Va.
Julia E. Ward, Mt. Holyoke Seminary, South Hadley, Mass.
Benjamin I. Wheeler, High School, Providence, R. I.
J. Colver Wightman, Taunton, Mass.

Alonzo Williams, Brown University, Providence, R. I.

## AMERICAN PHILOLOGICAL ASSOCIATION.

Newport, R. I., Tuesday, July 15, 1879.
The Eleventh Annual Session was called to order at 3 o'clock p.M., in the hall of the Rogers High School, by the President, Mr. Jotham B. Sewall, of Thayer Academy, Braintree, Mass.

An address of welcome was made by His Excellency Governor Van Zandt, to which the President replied.
Mr. Sewall announced the death of the Secretary, Professor Thomes C. Murray, of the Johns Hopkins University, Baltimore, Md., and the appointment of Professor Charles R. Lanman, of the same institution, to serve in his stead from March until the next election of officers.
The Treasurer, Charles J. Buckingham, Esq., presented his report, showing the receipts and expenditures of the past year. [See p. 38.]
The Chair then appointed Professor A. C. Merriam and Professor J. M. Garnett a committee to audit the Treasurer's report.

The Secretary pro tempore, Professor Lanman, presented a report from the Executive Committee, announcing the prompt publication of the Transactions for 1878, and the election to membership of

Professor Albert S. Cook, Johns Hopkins University, Baltimore, Md. ; Professor Walter Q. Scott, Wooster University, Wooster, Ohio; Rev. Ambrose J. Faust, Ph.D., Washington, D.C. ; and Mr. Joseph R. Anderson, Jr., Richmond, Va.

On motion, Professor B. L. Gildersleeve, Professor C. H. Toy, and Professor F. A. March were appointed a committee to draw up resolutions in commemoration of the late Professor Murray.

On motion, Professor F. A. March, Mr. Charles J. Buckingham, and Colonel John R. Leslie were appointed a committee to arrange the hours for the sessions.
The first paper was by Dr. E. G. Sihler, of New York, on "The Critical and Rhetorical Labors of Dionysius of Halicarnassus and
the Ars Rhetorica." In the absence of the author, it was read by the Secretary.
I. The extant rhetorical and critical works of Dionysius were all written at Rome, with one probable exception. They are not a continuous and systematic exposition of rhetorical theory and practice, but detached treatises illustrating the mature convictions and tenets of the practical teacher. Mr. Sihler endeavored to explain the principles and practices therein embodied. Of the latter, the most important is the Atticism of Dionysius, the rigorous and absolute exclusion of any models but the standard-bearers of classic Attic prose, of the century from Andocides to Demosthenes. The practical instruction of Dionysius was therefore necessarily merged into literary criticism. His criticism, again, to be appreciated, must be judged from the one-sided, practical (non-historical) stand-point of its author. The degree of suitableness of the several classic Attic authors for practical imitation and the purposes of rhetorical culture seems to have served as the basis of Dionysius' canon. This explains his strictures on the orations in Thucydides, on the fullness and poetical flights of Plato, and on the padding and the monotonous rise and fall of the Isocratean periods.

What we may call the system of Dionysius was then set forth: viz., 1 . His oivveacs or construction, rising from the analysis of sounds and the metrical consideration of prosody in prose to that of clauses and periods; 2. His diction and vocabulary (òv $\mu$ a a a).
II. Very many critics have denied the Dionysian authorship of the so-called Ars Rhetorica. It is an aggregate of detached pieces referring exclusively to the epideictic kind of oratory. It holds in high esteem the models of Plato and Isocrates. The former of these is often imitated in minute terms and phrases, and even Demosthenes is made an imitator of Plato.

Mr. Sihler suggested that the Ars may have been a performance of the younger years of Dionysius, written in his Greek home (this piece alone is dedicated to a man bearing a Greek name); and that the Lysianic and Demosthenean standard influencing the other and later writings of Dionjsius may to some extent be due to his association and close coöperation with the Atticist and purist, Caecilius of Calacte.

## Mr. Stephen Pearl Andrews, of New York City, read a paper on "Ideological Etymology as a distinct Method in Philology."

Mr. Andrews' paper concerned the classification of words on the basis of the Ideus which they express. He stated as a fact that from Jacob Grimm to August Fick, the opposite method of etymology, that of classifying words upon the basis of their phonetic structure and affliations, had exclusively prevailed, as if there were no other possible method. Still, it is perfectly obvious, on reflection, that every etymological process has two factors, or concerns itself with two things: first, the words in question, as phonetic structures or bundles of sounds; and secondly, the deas involved, the meanings of the words; and that either of these two
may be given the first rank, and the other be subordinated to it. Consequently, there are two elementary methods of etymologizing possible, besides an ulterior compound method resulting from the coaction of the former two.

For example, break, breech, and brag are three words which have a certain double relation to each other: first, phonetically, which is pointed out when we say that $k$, ch, and $g$ are consonant sounds capable of being interchanged by certain phonetic laws (and so of the vowels, ea, ee, and a); so that one or another of these words is, presumably, an earlier form, and the other two later, and derived from it. This is the prevalent, and what we may call the Historical, Physical, or German Method of etymological investigation.
But we may consider the whole matter from the opposite point of view, thus: A breach is something brok-en, or which has undergone the process of break-ing. Breach is, therefore, a derivative idea from broak, and the phonetic similarity of the two words may be incidentally alluded to, as a consequence of this natural alliance of the two ideas. So, to brag is to break out, to throw one's self into notice (Lat. jacto), and the similarity of the word brag to breach and break may be again incidentally brought in, to illustrate and confirm the natural or inherent alliance of the three ideas. This latter method, which deals with the nature and affliations of ideas or meanings, as embodied in words, as of the first importance, and of the phonetic phenomena of the words as secondary, is the New Method now proposed, which Mr. Andrews calls Ideological or Psychical, or again, the American Method. In this latter case, there is a distinct place for a Science of Ideology, as underlying and controlling the study of the higher aspects of Etymology; but an Ideology, still, studied and perfected through the reflex potency of the direct study of words, and hence not merely metaphysical, but distinctly philological.
Mr. Andrews does not wish it to be understood that the term American Method has reference to himself (and his own nationality) as the first to propound it, as a distinct method; it is a recognition of the merits, in this regard, of Noah Webster, who somewhat unconsciously inaugurated it when he reduced the meanings of the verbs of the English and allied languages to thirty-four in number (see Introduction to Webster's Dictionary). Mr. Andrews, taking his departure from this spontaneous first effort, of Webster, in the right direction, analyzes and further generalizes his thirty-four classes of ideas, reducing them all to no more than three grand major classes: 1. The idea of division or apartness (of, off, from), Spencer's Differentiation; 2. The idea of unity or togetherness (at, to, with), Spencer's Integration; and, 3. The idea of transition or vacillation between these two (over, through, across, between).

The gist or core of Mr. Andrews' paper, which was long and elaborate, dealing extensively with the Indo-European Roots, is contained in the two following propositions:
I. The Prepositions (as the words of Relation) contain in themselves or represent all the primitive ideas, from which are derired the meanings of all the other parts of speech (or words in language).
II. The Prepositions themselves, though very few in all languages, are nevertheless susceptible of being reduced, in respect to their meanings, to a very much smaller group, ending, indeed, in the absolutely fundamental difference between of and at (or from and to), and their hinge-wise connection with each other (between, etc.).

A recess was then taken from 5 until 8 o'clock.

Newport, Tuesday, July 15, 1879.

## Evening Session.

The Association met at 8.15 .
The Annual Address was delivered by the President, Mr. Jotham B. Sewall.

After some congratulatory words by way of introduction, "Our Duty to our Mother Tongue," was announced as subject.

First. As to its purity. Ought we to labor for it? We wish to speak a pure language and to maintain its purity. But what does "purity of the English language" mean? If we mean by it freedom from admixture with other languages, it is to be remembered that there is no such thing as an English language by itself, simple and pure. From the time when it could first properly be called "the English language," it has been a composite. Trench's estimate is sixty parts Anglo-Saxon, thirty Latin, five Greek, and five parts from other languages. The Anglo-Saxon is the chief part. The other parts have been added and assimilated, a process not of a moment and then done, but still going on and always to go on as long as English-speaking people are active-minded and inventive, and come to need terms which their own tongue does not supply. The purity of the English language, therefore, does not require an obstinate resistance to the admission of words from a foreign source, nor to the formation of new ones. Indeed, it would be useless, because a resistance of the law of growth. A needed word, or an apt one, must and will come. All that can be meant by "purity of the English language," besides this, is freedom from pedantry, vulgarisms, and barbarisms, and its correct use, and distinct and full enunciation as a written and spoken language. And for this, obviously, it is important to labor.

Second. As to its restoration. By this is meant the bringing forward of the Anglo-Saxon element to such predominance as to displace the other elements as far as possible-indeed, completely. The advocates of restoration wish to bring back and re-instate the language of England in the time of Alfred the Great as the English language, and banish Latin, Greek, and all other elements from use. There arise two questions: Can it be done? and, Is it desirable? As to the first, a work so completely revolutionary would seem impossible. Not that the laws of the growth and change of language would have to be set aside, but that the manipulation required is a greater one than could possibly be brought into exercise. Something, much indeed, is possible if desirable. The law of stimulus avails here as
well as elsewhere, and influence can be exerted upon language for its growth and change as upon other things. An eminent illustration of this is the act of Edward III. (whereby English was substituted for NormanFrench in law use), and its result. If an increased interest in the study of Early English should arise and the English language should take a more important place in the studies of our higher schools and colleges, the knowledge thus more commonly acquired would put the earlier language back within more common reach, and familiarity with its store of words would tend to bring back into use all such as were apt and needed; and if it proved as available a source for new terms as the Greek or Latin, it would naturally be so employed. We resort to Greek and Latin for new words, not so much because they are a superior store-house of material, but because their superior place in our methods of education has made them more familiar and put them within easier reach. Is it then desirable? The revolutionary work aimed at by some is not desirable. There is neither reason nor sense in shutting ourselves out from other stores and denying ourselves the liberty of borrowing and assimilating from other languages, if we wish. Why deny the discoverer and the scientist their resource in the Greek, or refuse to accept so apt a word as cañon from the Spanish, or even taboo from the savages of Polynesia? We shall not all allow that the contributions to the English from other languages have not been an enrichment rather than otherwise. Nevertheless, has not something been lost which it would be well to regain, and is there not a labor in this direction worth performing to avail ourselves of the riches of strength and beauty which once dwelt in the tongue? From the nature of things, the language of the tenth century could not be the language of the nineteenth, and the labor to make it so would be an attempt to do the impossible. There was, however, an undue influence exerted upon the language from exterior sources: first, through the Norman conquest; and secondly, through the advent of the "new learning," to the detriment of the language as the language of the English. There was a loss on the Anglo-Saxon side, and while we take the position that purity does not require of us unyielding resistance to the income of foreign words, we may also take the position that we may well labor to recover what has been lost. No one needs to be convinced that simplicity, strength, and beauty will be gained by the recovery of old English words.
Third. Ae to its orthegraphy. Dhere ie need of reform. Our orthegraphy it truly a kakegraphy. What ar the objectione to reform? Nun, seve prejudiç and inertia. But theee ar great obstaclec. 'Dhey will yield only to rationally directed and unremitted effort. Sumthing will be gaind perhaps by the introduction of new charactere for sounde reprezented by several lettere. Sumthing too mey be dun by returning to the original spelling of wurde which hav been corrupted.
Fourth. As to its study. Our mother tongue has not the place it ought to have in the curricula of our schools and colleges. It ought to have a place of equal importance with any. Considering it as a language, and its stores of history, poetry, oratory, etc., why should not a man of equal abilities be able to do as much with it for himself as Demosthenes did for
himself with his mother tongue? In these days of March, Morris, 8keat, and others, there is no want of means and instrumentalities. Aside from the direct results which it is easy to see would flow from the study of English with the same thoroughness and exactness which are now given to Greek and Latin as to discipline and culture, obvious arguments in its favor are to be found in the aid thus furnished to the work in behalf of purity, restoration, and reform of orthography. Indeed, it is easy to see, how, beginning with a historical study of the language, a logically connected and well-defined course might be laid out, embracing literature, rhetoric, and logic, and ending in these.

Professor A. C. Merriam, of Columbia College, New York City, then read a paper "On some Passages of the Odyssey."

It has appeared to some weak and pointless to tell Nausicaa, $\zeta \mathbf{3 5}$, either that she is a Phaeacian, or that she is noble, and this consideration has led Bekker to omit the line. On the contrary, it was argued in this paper that the poet had composed the line for the speciflc purpose of hinting that the princess was wooed by native suitors and those only, and thus to intimate at this early stage how distasteful they are to her, and the effect which the coming of Odysseus may produce. For, the distinction in Greece between the aristocracy and the royal family was so broad a one in the Homeric period that the latter were accustomed to contract a marriage only with royalty beyond their own borders, as is the custom among the reigning families of Europe at the present day. Since Phaeacian manners and customs are essentially Greek, simply a trifle more god-favored and effeminate, the same custom may be supposed to obtain in Scheria. Indeed, there is presumptive evidence of this in the history of the royal family. Nausithous, a grandson of the king of the Giants, becomes king of the Phaeacians perhaps by marriage, as Menelaus obtains the throne in Sparta. His son Rhexenor may likewise have married from a distance before their removal to Scheria, but he dies young, leaving an only child, Arete. Soon after, the migration probably took place to their isolated home in Scheria, and there Alcinous, loath to wed among the aristocracy, in time, partly driven by the custom and their isolation, matches with royalty by espousing his niece Arete. Compare the case of the sons of Aeolus, $\kappa 5-7$. Two sons of Alcinous have taken wives in Scheria, but there was no other resource if they were to be married at all. Yet there remains a lingering hope in the family that for the only daughter, the darling of them all, some Nausithous may be thrown in their way by Providence, and she may thus be rescued from the nobles she despises, and sustain the dignity of her station. It is such a state of affairs that the line in question seems to disclose by reminding us that she is wooed by native suitors, and if so, it is far from weak and pointless, since it explains the uttered wish of the princess, $\zeta 244-5$, that Odysseus might remain and become her husband-lines which were rejected by Aristarchus as too bold to suit the maidenly character of Nausicaa; but it is to be observed that they are spoken to her attendants, and the position of the group is such that they are quite out of earshot of Odysseus. The thought of her approaching
marriage is continually before her, and is naturally a subject of frequent conversation between herself and her maids. The change wrought in the squalid sea-waif has been so wondrous that he must needs have been sent by Heaven to their land, a thought which awakens at once the hope that he may be the one looked for to bring her deliverance from an alliance beneath her dignity. He has already hinted his former importance in the world, and it is not unusual in the poems to find the outer comeliness taken to argue mental and moral qualities of worth, which in this case have been proved as well by his speech as by his bearing throughout. All this conspires to present the thought to her in the light of a possibility, and the frankness of her nature reveals it to her companions, but the poet has been careful that it shall not reach the ears of Odysseus.

Again, closely connected with these two passages are the lines $\zeta$ 276-88, which were likewise rejected by some of the ancient commentators for the same reason as 244-5. But Goethe, with his true poetic instinct and clear insight into the workings of the human heart, has divined the real character of the maiden, and vindicated both the passage and the purpose of the elder poet. Besides a frankness and a naïveté so open that the thoughts which spring in the heart fall naturally from the lips, Homer here develops more fully, though covertly and by the dramatic method, that predilection for Odysseus which has already been seen to be springing up in the maiden's breast. It is this first feeling of love which makes her so sensitive to the thought of the gossiping tongue that would couple her name with Odyseeus, and the poet with consummate art has veiled it carefully by causing the maiden to put into the mouth of another what she censures in her words, though she wishes in her heart. An engaging forwardness is thus rescued from the verge of boldness by an expedient which Pope declares to be "an instance of the great art of Homer in saying everything properly." These lines, too, contain as a whole the strongest confirmatory evidence of the theory advanced on 35 . Nitzsch would retain the remainder of the passage, while disposed to reject 280-1; but these are exactly to the point. Despairing of a release from the threatened indignity, the maiden's prayer turns even to the gods. Nor need such a prayer be considered as presumptuous on her part. Poseidon himself is her great-grandfather, and the gods are wont to come familiarly to fraternize and feast with the Phaeacians who are of their kin. The poet who represents the sea-nymph Thetis as married to Peleus and living for many years in his palace, would surely feel no difficulty in the idea of such a union among the semi-divine Phaeacians. In fact we have a similar prayer from the Greek Antiope of the Odyssey, $\lambda 261$.
Lastly, $\eta 311-16$ was discussed. These six lines fell under the suspicions of Aristarchus, and doubtless because of Alcinous' startling offer of his daughter's hand to a total stranger; but the king is plainly quite captivated by the commanding presence and bearing of his guest, and by the eloquence and delicacy of sentiment he has displayed. His high station in life has been directly asserted, and the immortality which Calypso designed for him argued a lofty lineage befitting such a fate and such a love. His sentiments have already met the approval of the courtiers, and
though Alcinous dissents from the thought that he might be angered at Odysseus' return with Nausicaa, yet he respects and approves the delicacy that prompted the action of the hero, to the degree that he feels assured that Odysseus' feelings are at one with his bearing and eloquence. To infer kingly station in a stranger from his appearance and comportment only is not confined to the impetuous Alcinous in the Odyssey; cf. $\delta 63, \nu$ 223, $\omega 253$. A fair parallel to the case of Alcinous was cited from the Gaelic poem of "Evir-allen," claimed to have been discovered by Baron de Harold in Ireland and translated by him. That Alcinous believes Odysseus to be no impostor, but the hero his words and appearance proclaim, he tells us himself $\lambda$ 363-7. When to all this there is added the strong predilection to a foreign marriage with royalty, the offer from so impetuous a person loses its startling features, and becomes eminent!y characteristic of the man. That the offer is not pressed is doubtless due to a strong gesture of dissent from Odysseus at $\eta 315$. No allusion is made to it later, and on the following day it is assumed by king and court that Odysseus has a wife and family. The princess, too, has settled back to the same conviction, and her few simple words of parting are tinged with the melancholy of a shattered hope, though her dream had been all too short to leave a sting behind. Homer has not handled this episode as many a follower of his has done. Here we have no Medea, no Dido, nobut their name is legion. It was quite within his purpose to enthrall us with his beautiful creation of the Phacacians, but it must in no wise thwart the grander scheme of his greater epic.

In relation to the theory advanced this much was claimed: For three long-suspected passages it supplies a thread that runs through them all, knitting them together into unity and coherence, and connecting them back to a fourth to which it gives a weight and significance that can scarcely be overestimated, standing where it does and striking the keynote of so many strains throughout the whole episode.

The committee on the hours of meeting reported. The report was accepted with slight amendment, so that the hours were arranged as follows: from 9 o'clock to 1 ; from 4 to 6 ; and from 8 to 10.

The Association adjourned to $90^{\circ} \mathrm{clock}$, Wednesday morning.
Newport, Wednesday, July 16, 1879.

## Morning Session.

The Association resumed its session at 9.20 A. м., the President, Mr. Sewall, in the chair.

The appointed committee presented the following resolution commemorative of the late Professor Murray, which was unanimously adopted:

The American Philological Association desire to give expression to their sense of the eminent services of their late Secretary, Professor

Thomas Chalmers Murray, and to their deep sorrow at his untimely death.* From the beginning of his connection with this Association. Professor Murray showed on every occasion the utmost readiness to further the interests of our body, and as Secretary distinguished himself by his promptness, his accuracy, and his uniform kindness. A scholar of rare attainments, an investigator of great acuteness and excellent balance, an admirable expositor of the results of his studies, a teacher of unusual power and suggestiveness, Professor Murray seemed destined to eminence in his chosen department; but by the members of this Association his memory will be cherished especially for his faithful discharge of duty and his winning and self-sacrificing courtesy. Therefore,

Resolved, That this testimony to the worth of Professor Murray be entered upon the proceedings of the Association and a copy be sent to the surviving members of his family.

The Secretary announced, in the name of the Executive Committee, the election of six new members:

Mr. John Tetlow, Girls' Latin School, Boston, Mass. ; Mr. Wilfred H. Munro, Bristol, R. I. ; Mr. William C. Collar, Boston, Mass. ; Dr. George W. Ingraham, Cornell University, Ithaca, N. Y.; Mr. Benjamin I. Wheeler, Providence High School, Providence, R. I.; Mr. Edwin De Merritte, Chauncy-Hall School, Boston, Mass.

On motion, Professor W. W. Goodwin, Professor M. L. D'Ooge, and Professor E. P. Crowell were appointed a committee to nominate officers for the ensuing year.

On motion, Professor L. R. Packard, Professor T. D. Seymour, and Professor Samuel Hart were appointed a committee to recommend a suitable time and place for the next meeting.

Professor M. W. Humphreys, of Vanderbilt University, Nashville, Tenn., read a paper on "The Nature of Caesura."

1. Caesura serves two general purposes: (a) in long verses it gives the reciter an opportunity to inhale, but falling in the midst of a foot prevents him from taking too much time; and (b) it serves as a vinculum to hold the two portions of the verse together, and docs not separate them. In short verses, the latter is the chief office of caesura, and hence it can fall between words closely connected: between the subject and the verb, e. g., Theb. 15; between the verb and its object, ibid. 270; between an adjective .and its substantive, ibid. 18; between the article and its substantive, Philoct. 964; after a preposition, ()ed. Rex 615; after oi, Iph. in Taur. 684; before $\mu \grave{v} \nu, \gamma a ̀ \rho$, etc., Orest. 360 ; even before an enclitic, a break is better than no caesura, e.g., Ion 574; and in other similar positions it

[^11]must be recognized. If it be claimed that such verses lack chief caesura, we refer to verses which are admitted always to have a fixed caesura or incision, as the trochaic tetram. cat.; cf. Troades 454, 458, etc., etc. In 454, it falls before an enclitic: this is not so surprising when we consider that a grammatical pause may immediately precede an enclitic; as, Androm. 747; Hec. 432, etc. Many other arguments to sustain such caesurae are here omitted, and many illustrations from Latin, and from the socalled dactylic pentameter. The examples are very numerous, those cited above being mere illustrations.
2. It is not necessary that a break, to constitute a genuine caesura, must follow a polysyllabic word; but in some verses an incision or diaeresis immediately before a chief caesura is objectionable. This is proved by many examples taken from authors who otherwise never neglect caesura: as, e. g.,

Quid amplius vis? || 0 mare et terra, ardeo.
8. The last section of the paper contained strictures on Hermann's ridiculing hephthemimeral caesura in trimeters and J. H. H. Schmidt's rejecting the penthemimeral.

## Dr. Robert F. Leighton, of Brooklyn, N. Y., then read "An Account of a New Manuscript of Cicero's Letters ad Familiares."

Scholars have felt renewed interest in Cicero's letters ad Familiares since the discovery of the manuscript of these letters at Vercelli in 1474. But little is known of the history of this original MS., except that it is the oldest MS. of these letters now known. The question has long been agitated whether this MS.-the codex Mediceus xlix, No. ix, now in the Laurentian library at Florence-is the only standard in determining the text of these letters, or if other MSS. exist whose text is independent of this, and can therefore serve as a means of comparison and correction. Orelli, after a critical examination of all the MSS. in Italy and Germany known to him, maintained that, with the exception of one page of a Turin palimpsest, all MSS. of the letters ad Fam., were directly or indirectly copies of the Mediceus. Baiter agrees with Orelli; Hofmann, however, eonsiders the codex Parisinus Notre Dame 178, to be of independent authority for the books which it contains: viz., $i$ to viii, 8,6 as far as the words impediendi moram. In 1827, the Erfurt MS. was discovered, and Orelli pronounced it a copy of the Mediceus; but Meyncke and Buecheler after a critical examination proved that it was independent of the Mediceus. The passage chiefly relied on by M. and B. was ad Fam. xv, 2, 5, where, instead of the one word cohortatus, the five words et tamen adolescentem essem cohortatus are found. Orelli had noticed this; but he regarded the words as a gloss of cohortatus.
In 1874, M. Thurot had the Tour MS. brought to Paris and examined. This MS. had been known since 1829, having been mentioned by Haenel (Cic. quaest. acad. crit. Ep. ad Fam., Sec. xii, m. 4-p. 482); but Orelli contested the date assigned to this MS. ; the other editors of Cicero's letters have not even mentioned it. M. Thurot proved that it is a copy dating from the twelfth century, and that it is independent of the Mediceus.

In 1839, Oehler called the attention of Orelli to the codices Harlejani in the British Museum; but these MSS. remained unnoticed until 1874, when Franz Ruhl gave a brief account of them in a note to Ritschl, published in Rhein. Mus., vol. 30, pp. 26 et sq.

In 1876, the writer had an opportunity to examine these two codices, and carefully collated them. They were purchased by Lord Harley in 1750, and were brought to England from the monastery of Cusa, in Holland. One is from the eleventh century (codex Harlejanus 2883), and the other (codex Harlejanus 2773), from the twelfth century. They are beyond a doubt independent of the Mediceus. In xv, 2, 5 are, besides the word cohortatus, the same four words chiefly relied on by Meyncke and Buecheler to prove the independence of the Erfurt MS. A number of passages from these letters where the text is doubtful were quoted, and the value of these new MSS. proved by the aid they furnish in revising the text. The reading of several passages which have hitherto baffled the ingenuity of critics is satisfactorily settled by these new MSS. The conclusion is that all known MSS. of these letters are either copies of the Mediceus, or like the codd. Par., Erfurt., Harl. primus et secundus and Turonensis, independent of the Mediceus, but copies of the same archetype, and therefore serviceable in correcting the Mediceus and thus settling the original text of these letters.

## Professor Albert Harkness, of Brown University, Providence,

 R. I., read a paper on "The Development of the Latin Subjunctive in Principal Clauses."The paper aimed to show the steps by which the various meanings of this mood as seen in Latin authors were developed out of the simple etymological force of its original form. The Latin subjunctive contains both the forms and the meanings of two moods, originally distinct, the subjunctive proper with the sign $a$ and the optative with the sign $i$. These forms, however, are used without any difference of meaning, and are made to supplement each other. While, therefore, in Sanskrit and Greek the subjunctive and optative meanings are denoted by separate forms, in Latin they are both expressed by the same form. Moreover the subjunctive and optative forms in Latin supply the place of the future indicative in the regular verbs of the third and fourth conjugations. What now is the explanation of this remarkable confusion in the use of forms, a confusion so great that different forms, subjunctive and optative, occur with the same meaning and the same form with different meanings? In this singular anomaly we recognize an important historical fact in the development of moods. It shows that when the Latin first became a separate language, the forms of the subjunctive and optative, and of the future indicative were used with little or no difference of meaning, a view fully confirmed by the etymology of the forms themselves. The subjunctive and the optative moods are in their origin only special developments of certain forms of the present indicative, and originally denoted continued or prolonged action, from which was developed the idea of effort-attempted action. But earnest effort readily suggests on the one hand desire, as we strive only for that which we desire
to attain, and on the other possibility or probability, as we may very likely accomplish that which we are already attempting.

But secondly, what relation does this etymological meaning of these forms sustain to the meaning actually found in the works of Sanskrit, Greek, and Latin authors? If we have interpreted the etymology aright, we must not expect to find any broad and well-defined line of distinction between the provinces originally occupied respectively by the indicative and the subjunctive. Accordingly, in the Vedas and the Homeric poems, our earliest specimens of Sanskrit and Greek, we often meet with the subjunctive in senses much more closely related to that of the future indicative than in later authors. Indeed, in the works of Homer, the aorist subjunctive and the future indicative are often identical in form and so closely related in meaning that it is not always possible to distinguish one from the other. But the Latin, Greek, and Sanskrit all conform to the same analogy in the use of moods. Indeed, the use of subjunctive and optative forms to supply the place of the future indicative does not differ at all in kind from the Homeric use of similar forms in a future sense. It is in fact simply the result of carrying out the analogy on a large scale. In all these facts we discern the germ from which was developed the potential subjunctive.

But the Latin subjunctive, like the Sanskrit and Greek subjunctive and optative, also denotes desire, wish, a meaning which like the potential may be readily developed out of the etymological signification of the forms. Indeed, in the Vedas and the Homerjc poems, as well as in the early Latin, we sometimes find the subjunctive of desire apparently in the very first stage of its development, scarcely distinguishable on the one hand from the future indicative and on the other from the potential subjunctive, differing perhaps from the latter very much as the two ordinary signs of the English future, shall and will, differ from each other.

The two meanings now noticed for the Latin subjunctive, and for the corresponding moods in the cognate tongues, the subjunctive and optative, appear in different stages of development in the very earliest literary records that have come down to us from any branch of the Indo-European family, and are readily derived from the etymological meaning of the forms themselves.

Moreover it is well known that these two meanings, which for convenience we may call potential and optative, run through the whole range of Sanskrit, Greek, and Latin literature, and that in these several forms they embrace all the meanings known to the Latin subjunctive in principal clauses.

But the subjunctive, in many subordinate clauses, also belongs to our theme, as it was developed while those clauses were yet independent. Thus in conditional, concessice, final, and consecutive clauses in Latin the subjunctive is entirely independent of the character of the clause in which it stands, and was, in fact, developed before the clause became subordinate. The paper closed with an illustration of this point.

Remarks were made upon this paper by Professor Alonzo Williams, by Mr. S. P. Andrews, and by Professor W. W. Goodwin.

A paper by William A. Goodwin, C.E., of Portland, Maine, on "Chaucer's Cecilia," was read for the author by the President, Mr. Sewall.

Dhis paper discust the several interpretetione of the name Cecilia (az recited in the Seconde Nonnes Tale of the Canterbury Telee), of which the commentatore hav taken no notiç.

According to the nun'e first interpretation of the neme,
"It is to seye in englissh | heuenes lilie:"
i. e. caeli lilium, by reazon of her chastity; or 'lily,' becauce of her whitness of henor, vitality of consçienc, and sweet sevor of good fame.

In the next stanza she interprets the neme az ' $\alpha$ wey to the blind' (caecia via?), becauze by good teaching she waz a guịde. Dhis derivetion ie far-fetcht, and the vowele alone of the wurde thus cennected agree together; but what more closely analogous wurde ar ther of the requieit méaning?

Dhe rest of the stanza give a derivation from caelum and "lia." Iz "lia" Greek? Níav meane "exceedingly, very much;" and $\lambda$ cía (which, when pronounçt with iotaçizm, might be fairly reprezented by lia), 'smooth, flat,' mey be conceivd of with the same transition of meaning ae in the Latin plane, German glatt weg, dijalectic platterdings, and our flatly, and so positioly, complétely. The first part, then, saye the nun, "is set for thoght of hoolynesse;" and the secund, "for hire lastynge bisynesse" or activity. Dhe whole would then mean 'completely intent on holiness.'

For the nun'e next hermeneutic venture,
"Cecile | may eek be seyd | in this manere Wantynge of blyndnesse,"
We may adopt the desperate suppozition that caecitatis and sum form of $\lambda_{\varepsilon i} i \pi \omega$ (' to lack') floated veguely before the poet's mind.

Dhe nun esseys, for the fifth and last time, to "expowne" the neme as followe:

> "Or elles loo | this maydens name bright Of heuene and leos comth."

She adde that men might rightly call her the heven (caelum) of people ( $\lambda c \omega 0$ ), and illustrates in detail (stanza 16) the aptness of the name in this signification. Spenser'e understanding of the neme mey be gatherd from the couplet in Faerie Queene, i. x. 4:

> "Dame Coelia men did her call, as thought
> From heaven to come or thether to arise."

Remarks were made upon this paper by Professor F. A. March:
He theght ther coud be no doubt that the "Lia" of the third interpretation ie Leah, Latin Lia, Leban'e daughter, who waz a familiar reprezentativ of laborious activity in contrast with Rechel, the reprezentativ of the centemplativ life; ae may be sien in the Latin Hymne; for example, in Bernard of Clugny'? rhythm, well known in Dr. Neale'z transletion under the name of "The Çelestial Country" (March'e Lat.

Hymne, p. 280); and, az Dr. Lanman suggests, in Dunte (Purgatorio, xxvii, 101, and the cemmentatore).
For the uther interpretatione, in which it iz taken for granted by the poet that he will be understood, familiar wurde ar to be preferd. The French laie, Old French lée with which Chaucer would assoçiete hip aley (alley) ia better than via for the secund interpretation; and in the fourth lees i. e. -less ie better in itself than dein $\omega$, and naturally leade to the leos of the fifth.

Professor M. W. Humphreys, of Vanderbilt Unıversity, Nashville, Tenn., presented in brief abstract a paper on "Certain Effects of Elision in Versification." The character of the paper involved too much quotation to admit of reading in full.

1. Diaeresis with elision in the middle of iambic trimeters serves as a sort of hephthemimeral caesura, the elided vowel in this case not being entirely suppressed. The author gave at length the reason why elision at the end of the first dipody can not create penthemimeral caesura (except when the elision is between two speakers), and also a reply to Hermann's objections. Elision at the middle creates caesura or quasi-caesura; and this may be shown by statistics.
(a) If we take the strict but false view of caesura, as explained abovepage 11, we find, in verses apparently without chief caesura,

(b) If we take the liberal and correct view of caesura, the results, tabulated as before, are :

| In Aeschylus, | with quasi-caesura 42 instances; | without quasi-caesura : 19 instances. | Percentages: 69 to 31 |
| :---: | :---: | :---: | :---: |
| In Sophocles, | 44 | 9 " | 83 " 17 |
| In Euripides, | 123 | 1(?) | 99 " 01 |

These tables were followed by a list of instances of quasi-caesura after the first dipody, in which elision seems to take place between two speakers, but where there is in reality no elision at all.
2. Elision among the Romans never being total, the partially pro. nounced vowel produced less effect than in Greek where the elision was usually total; hence quasi-caesura among the Romans was unusual, except between two speakers, and then it took place after the first dipody as well as in the middle of the verse. Many examples might be given from Plautus and Terence ; thus, Casina 352, 509, etc. ; Andria i. 1. 7; i. 1. 92, etc.
3. The quasi-caesura was explained and illustrated by many other metrical phenomena.
4. Elision at the end of the verse. This is not employed in Latin iambic trimeters, nor in Greek heroic hexameters; but in Greek trimeters and

Latin hexameters, especially those of Sophocles and Vergil. The conditions under which it is admitted or required were explained, and a note was given discussing the lengthening as well as the elision of -que.
5. This section contains a full discussion of the Porsonic Law, and shows that the Greek Tragedians, before they were "emended," allowed clision to excuse the neglect of this law, the elision being total, and forcing or allowing the two words to be pronounced nearly as one word.
6. Discussion of the Porsonic Law among the Romans, with a special note on the metres of Seneca.
7. Relations of ictus to accent as modified by elision. See Transactions of the Am. Phil. Assoc. for 1876.
This paper is a sequel to the one on "Elision, especially in Greek," published in the Transactions for 1878, and to the paper on "The Nature of Caesura," of which an abstract is given above, page 11.

Remarks were made upon this paper by Professor D'Ooge, Mr. Sewall, and Professor Merriam.

A paper by Professor S. S. Haldeman (University of Pennsylvania), Chickies, Pa., "On Spurious Words," was read by Dr. C. K. Nelson.

Among the phases of words to which I hav givn names, is one termed parop'sis (implying a false view),* due to bad writing and consequent type errors, as in printing 'Hebrides' for 'Hebudes,' where, as in other cases, the false form has been legitimised.
In the useful, condenst, and generalli accurat English Dictionary of Hyde Clarke, D.C.L., we find, in its alphabetic place- 'ag'non' (for ' ag'rion,' a kind of dragon-fly) and 'inli'dan' (for 'ru'lidan,' a milliped), which Webster and Worcester giv wrongli as 'rü'lidan,' with ' 1 ,' which Webster also puts in 'rū'lus' (for 'Yalus' or 'julus'), a concurrence of long sounds opposed by a law of English speech, and seldom ad missible. $\dagger$
In some dictionaris, we find 'mis'gum' or 'mis'gurn,' defined as a fish like an eel in size and form. The nativ countri is not mentioned, which leavs the language and etimologi in doubt. The spellings hav a Celtic (' $c$ ' as $k$ ) appearance; 'misgurn' has a Welsh look, but this language seems to giv no clu. In Gaelic we find 'easgann' (an eel; 'easg,' a ditch), which, when badli writtn, accounts for both forms of the supposed word.
'Fi'orin' (a kind of pasture-grass), is thus givn, with Italian 'fiore' (flower) as the probabl etimologi, which the assignd accent contradicts. The plant is a nativ of Ireland, and we may associate its name with Irish 'féur' (grass, fodder), 'fiurán' (a weed eaten by cattl), 'feoran' (a green, a grassi field); Welsh 'pori' (to graze), 'pawr' (pasture, grass), pl. 'porion.' Compare 'g-wyr-dd' (green), Latin viridis.
'Fr'orite' (a kind of mineral) follows the preceding word. Being derived

[^12]from 'Fiora ' (an Italian_localiti), the proper word seems to be 'fió'rite,' in two syllabs.

Altho 'pregnable' is from French 'prenable,' it seems to hav borrowd the gay of 'expugnable.'

When 'daalder' (= dalder, the $d$ educed from $\eta$ ), a Dutch form of ' dollar,' is given as da-̌l'-der by the lexicographers, they invent a spurious word and demonstrate the absurditi of pronouncing foreign words, and even certain English speech-words, according to pretended "analogies" of the English alphabet.*

A 'cŭpel' ( $=$ cŭpl) is a kind of cup used by refiners and by them calld cup'l and cop'l, but the dictionaris indicate the sound as cü-pel. Pryce (Mineralogia Cornubiensis, 1778), describes the "cuppel" and "cuppella-tion"-thus pronounst in the lectures of the late Professor Hare, University of Pennsylvania.
Lecturers on anatomi hav a term 'poplite'al,' which lexicographers (who do not-hear anatomic terms) misred as 'poplit'eal.' So the speech-word 'either' is sometimes misred 'eye-ther.'
Formerli Worcester had ' Xang'ti' which he markt as 'zang'te,' with English 2 and obscure e. This is an important word in theologic controversi, upon which volumes hav been writtn. The ' $x$ ' $(=s h)$ is Portuguese, and the word has such spellings as 'Shang-Te' and 'Shangti.'

If the word 'sacciform' (= sakkiform, from sac or sack), is spoken as 'saxiform,' it should mean rock-shaped. As Latin discus has given 'disc' and 'dish' to English, a supposed word 'dissiform' would be spurious, because, to follow the law of English speech, the first syllab of disc-i-form shud be pronounst 'disk' or 'dish,' but not 'diss.'

In Old English, 'e' had the Europe'an power, and 'meet' was pronounst ' mate' as in 'helpmeet,' a helper, or in modern spelling-' helpmate.'
In some encyclopedias the accent of words is given, except where it is not known; but the orthoepists pretend to supply the correct sound and accent for the entire vocabulari, including such spurious forms as never had a pronunciation.

A paper by Dr. Anton Sander, of Lawrenceville, N. J., "On Greek Negatives," was read by Professor Packard, of Yale College.

This paper maintained three propositions :

1. That the sequence in Greek of compound negatives after a simple one may be more intelligible to us if we observe that these compound negatives are not disjunctives (like "neither-nor"), but correspond to " and not" or " but not," "and never," etc. They simply repeat the negative with each repetition of the conjunction, though in actual use this is sometimes overlooked and another conjunction used also.
2. The much discussed combination oi $\mu \eta$ is not, as is commonly thought, a stronger, but a weaker negative than ov. It is not used where an emphatic negation would be expected, e. $g$., in oaths, in answer to a ques-

[^13]tion, with the imperative, or with the present or past indicative. . The $\mu \boldsymbol{\eta}$, as a weaker negative than ov, can not reverse it entirely, but does so partially, and the phrase oi $\mu \boldsymbol{j}$ is therefore a weaker negation than oi alone, and may be translated hardly, scarcely, not always, etc.
3. In expressions of fear ( $\delta \varepsilon \delta o \iota \kappa a \mu\rangle$ [ $\mu \eta\rangle \stackrel{i}{ }$ ] $\varepsilon \lambda \vartheta \eta$, timeo ne [ut or ne non] veniat) the negative $\mu \boldsymbol{\prime}$ or no reverses the negative idea of the verb to fear, thus leaving an affirmative result, "I fear he will come;" but the second negative, oi or non, restores the negation, "I fear he will not come." The same negative idea is expressed in Latin by $u t$ alone, for then the negation in the verb timeo is not destroyed by a negative after it.

Remarks were made upon this paper by Professor Gildersleeve.
The Association then took a recess until 4 o'clock.

Newport, Wednesday, July 16, 1879.

## Afternoon Session.

The Association resumed its session at 4 P. m.
Professor T. D. Seymour, of Western Reserve College, Hudson, Ohio, read a paper "On the Date of the Prometheus of Aeschylus."

All efforts to establish the date of the representation of the Prometheus have failed to discover convincing arguments. While Schoemann and others hold it to be the earliest of the extant plays, Moriz Schmidt classes it with the Rhesus, as the stragglers-der Nachtrab-of Greek Tragedy. To some the simplicity of language and construction seems to savor of the earliest times; to others it seems to be the result of Sophoclean influence. To Westphal the character of the metres seems to point to a late epoch in tragic art: to Wecklein the careful formation of the trimeters seems to indicate that the play was written before the Persians. Some think that only two actors were employed, and assign the play to an earlier period; others think that three actors were necessary, and that the play must have been produced after Sophocles had introduced the third actor. A muchquoted English authority selects for the date of representation 464 в. c., "the year when the news would reach Athens that Themistocles had entered the service of the Persian king," and refers to this act "the abomination of treason which the poet puts into the mouth of his chorus;" but another Englishman supposes that the play was intended as a glorification of Themistocles, in which case it must have been written before the Persians.

These arguments are all based upon the metre, the language, and the construction of the play, or upon some uncertain political allusion. From the very nature of the case they are inconclusive. Between the Persians and the Orestean trilogy only fourteen years passed. These were by no means the Lehrjahre of Aeschylus. He had been writing tragedies for twenty-eight years, and was probably fifty-three years old. While he was ready to accept suggestions from his younger rival and modify his stage arrangements, we have no reason to suppose that he materially changed
his style of composition or his metres. We have too few of his works to justify us in the assertion, from internal evidence, that one play belongs to his sixtieth year and another to his sixty-fifth year. We do not know what is accidental in the play, and what belongs to his period of work.

A surer criterion we may perhaps find in a comparison with the works of Pindar, of which Aeschylus was a careful student, as he was a student of Homer, and did not hesitate to borrow even from Phrynichus.
The resemblance between the most lyric of tragic poets and the most tragic of lyric poets has been often noted. Born in the same lustrum, educated in the schools of the same city, though widely separated by their different relations to the wars for the freedom of Greece, they were alike in their ethical views, in their magnificent and sublime style, and, as we should expect, were alike in their use of words and expressions. Thus a comparison with Pindar has emended at least one line of Aeschylus, and has explained many another.
But not infrequently we find coincidence of thought or language, which seems to be the result of conscious imitation, rather than of the like time and character of the poets. We may compare Pindar, Pyth. viii, 95:
 memnon 839 : ei $\delta \omega \lambda o v$ бк $\alpha \bar{s}$. The resemblance is perhaps as close, although





But among the more specific points of resemblance between odes of Pindar and the Prometheus of Aeschylus, the most remarkable is the description of the hundred-headed monster Typhon. Pindar, Pyth. i, 15


 $\pi \nu \rho \grave{s} \dot{a} \gamma \nu \delta \tau a \tau a \iota \mid \dot{\varepsilon} \kappa \mu \nu \chi \omega ̃ \nu \pi a \gamma a i k \tau \lambda$. See also Pyth. viii, 16 (where we see that Typhon was not yet Aetnaean), and Fragg. 92, 93, Bergk. With



 $\pi \nu \rho \pi \nu \sigma o v \zeta \measuredangle \lambda \eta \zeta$.

That the resemblance here is beyond the workings of chance is evident; but which is the original? From the structure of the first Pythian ode, and from the cardinal importance of the mention of Typhon there, viewed in connection with the fact that it is no essential link in the chain of the tragedy, the writer of the paper considers it probable that the tragedy, or at least that passage, was written after the first Pythian ode, which is dated by Boeckh 474 b. c., but by Bergk 470 в. c. The only limitation of date for Fragg. 92, 93 is that the hymn from which they were taken must have been written before the death of Hieron in 467, or at all events before the overthrow of his dynasty in the next year.

In the second Pythian ode, in honor of a victory gained by the same

 in substance in Agamemnon 1624: $\pi \rho \partial_{\varsigma} \kappa \in \nu \tau \rho a \mu \grave{\lambda} \lambda a \kappa \tau \iota \zeta \varepsilon$, and in Prom.
 became a proverb, but that it ${ }^{-}$was not such already in the day of Pindar is shown by his treatment of it. He would hardly have developed the figure if it were not his own fresh expression.

In this same second Pythian ode, verse 11, we find: $\varepsilon \nu \vartheta^{\prime}$ äp $\mu a r a$ $\pi \varepsilon \iota \sigma \iota \chi a b-$ $\lambda_{\iota v a} \kappa a \tau a \zeta \varepsilon v \gamma \sim i 力 \mid \sigma \vartheta \ell \nu o s i \pi \pi \omega v$, by which we are reminded of Prom. 465:


In the same ode, verse 34, in speaking of Ixion's passion for Hera, the
 $\kappa а \kappa \delta т а \tau^{\prime} \dot{a} \vartheta \rho \sigma a \nu \mid \varepsilon \beta a \lambda o v$. In Prom. 890 the same thought is expressed: $\dot{\omega} \varsigma$


The paper calls attention further to the prophecy of Themis concerning Thetis, as given in Isth. viii, 34 fg ., and Prom. 908-909 and 920 fg .; also to the hyporchema written for Hieron, Frag. 105 Bergk, according to the scholion on Pyth. ii, of the same date as that ode, as compared with Prom. 709-710, which seems like a dramatic development of Pindar's expression.

How are we to account for the fact that Aeschylus borrows expressions and allusions from Pindar more frequently in the Prometheus than in any other play, and mainly from the odes or hymns in honor of Sicilians?

Not long after 473-2 b. c. Aeschylus visited Syracuse, and at the request of Hieron presented his Persians. How long he remained in Sicily at that time is uncertain. We know he was again in Athens 467 в. c., when he brought upon the stage his great Theban trilogy; moreover in that very year Hieron died and his court was in confusion. During this visit to Syracuse, between 472 and 467 в. c., besides giving a new representation of the Persians, it is intimated that Aeschylus wrote his Aetnaean Women, and may well have written the Prometheus also. That the Prometheus was written after the Persians, i. e. after 472 в. c., is made probable not merely by the fact that the first Pythian ode may not have been composed until 470 B. c., but also by the probability that the satyric drama of the Persian trilogy, Prometheus the $\Pi v \rho \phi \rho \rho o s$, was written before the Promethean trilogy.

No reason appears why the Agamemnon should not be as full of Pindaric expressions as the Prometheus, except that it was not written for the court of Hieron. In the prediction concerning the eruption of Aetna; in the mention of the smooth fields of fertile Sicily and of the monster, where, as has been remarked, it is the poet rather than Prometheus who speaks; in the warning not to "kick against the pricks;" in the exhortation to wed in one's own rank; in the Scythian wheeled houses-in all this, Hieron heard allusions to his victories at Delphi and the Epinikia of Pindar in his honor-allusions which were well understood by his court and the Greeks generally. From this, then, it seems probable that the Prometheus was written in Sicily between 471 and 468 B. c.

Professor C. H. Toy, of Norfolk, Va., read a paper "On Shemitic Derived Stems."

Professor Toy said that one peculiarity of the Shemitic family of languages is its symmetrical system of derived verbal stems, Reflexives, Causals, and Intensives. Such forms exist in other languages, but not with the regularity of the Shemitic. The latter approaches in this respect the agglutinative tongues (as Turkish, and especially Hottentot), which put out their strength on the expression of objective verbal conceptions to the comparative neglect of the subjective.

This paper offered some remarks on the general table of Shemitic derived verb-stems. First, the close similarity of those forms in all the dialects. Omitting a few rare and doubtful stems, we may infer that the system was the same in all, and that it therefore existed in primitive Shemitic. This makes it the harder to reach the original forms and meanings, since there are no different forms with which to compare these. Next, the regularity of the formation, and the simplicity of the material. The little phonetic degradation discoverable simplifies the statement, but increases the difficulty of analysis. The material falls into two divisions with two corresponding classes of significations: (1) Internal modifications of the stem by doubling a letter or a syllable, by broadening a vowel, or by inserting a weak consonant ( $w, y, n$ ), or by combinations of these. They express intensity, or the affecting an object by the action, and are called intensives and affectives. (2) External modifications of the stem by various prefixes, $n a$ and ta making reflexives, and $s a$ and $h a$ (or $a$ ) making causals.

As to the origin of these modifications not much that is definite can be said. The reduplication is apparently symbolical, and some insertions of $w$ and $y$ may be referred to reduplication, while others seem to involve the addition of separate syllables. The vowel-broadening also may be symbolical. The prefixes offer great difflculties, so that we have either to assign them very general meanings (demonstrative, for example), or else to suppose that they are remnants of earlier longer forms now lost. All that seems probable is that the Derived Stems were originally nouns: we may compare them with other nouns in Shemitic, but no satisfactory results are obtained.

In the local distribution of the stems some diversities are observable. The $n a$ is most used in Assyrian, the $t a$ in Assyrian and Aramaic, the sa in Assyrian and Ethiopic, the ha in Aramaic, Hebrew, Arabic, and Ethiopic, the reduplication and vowel-broadening in Arabic and Amharic. The north-eastern group (Assyrian-Babylonian) has the greatest development of reflexives, which, however, it often uses as passives; the northern (Aramaic) regularly makes passives of its reflexives; the central (Hebrew or Canaanitish) has made the greatest reduction in the number of the stems, but kept two passives made by internal vowel-modification, while the southern (Arabic and Ethiopic) exhibits the greatest general richness of form and signification, the Arabic alone also having a regularly-formed passive. The tendency has been to drop stems, not only in the antehistorical period, but also later.

Professor F. A. March, of Lafayette College, Easton, Pa., read a paper "On the English Dictionary of the Philological Society."

An "Appeal" haz just been issued to the Epglish-speaking and Epglishreading public to read books and make extracts for The Philological Soçiety'e new Fgglish Dictionary. Dhe dictionary has now been more than twenty yeare in preparation. It began with a rezolution to prepare a supplement to existing dictionariez, adopted on the suggestion of a peper by Dean Trench, red in November, 1857. Dhé wurk upon this opend up so many defiçiençiea, and suggested a dictionary so different frem the old that the plan waz soon enlargd, and in January, 1859, a "Propozal for a new Epglish Dictionary" waz issued. It waz to be etymological and histerical. Dhe original propozal mede much of the etymolegical silde. Every body waz askt to send in etymelogiez. But the historical side prover to be the more important. It ie propozed to read substantially all the books in the language, and make quotetiona for all the wurde which occur in them. Dheae quotetione ar to be made on a uniform plan, tach on a slip of peper of the size of a half sheet of note paper. Dhoze for each wurd will be broght together from all the books, classified accerding to their meaninge, and arrangd in historical order, so ae to giv the history of the wurd.

Dhe wurk of preparing this material went on with zeal for yeare. Dhe original editor, Mr. Herbert Coleridge, dịed, but hie pleçe wą taken by Mr. F. J. Furnivall, who not only urgd the wurk forward, but started the Early Epglish Text Soçiety to print and reprint rare old texts and put them into the hande of readere. Material accumulated so fast that it seemd impossible to find any publisher to print the Dictionary, and for a number of yeare interest in it had almost died out.

Lately, however, ernest efforts to arrenge for publication hav been mede, and, fịnally, the Delegatez of the Clarendon Press, in the University of Oxford, hav assumed the entire finançial respensibility of the undertaking. Dr. Murray, the Preaident of the Soçiety, will edit it, with a number of sub-editore. Dhe letter A, four hundred pegez, ie to bé out in 1882, and the rest ie to follow in the course of ten yeare, if possible.

Dr. Murrey finde sume two tune of slips on hand. In the erliest period, when the books ar few, the wurk ie fairly dun or promist; but in the later çenturiee, many books remein untucht. Q new "Appeal" is now issued for help. $\mathbf{a}$ thouzand volunteere ar askt for to complete the reading within the next two yeara.

American books hav hardly been tucht. Dhey ar all left for American readere, ą ar also books of British authore of the 18th Çentury. Four or five hundred American readere ar needed in order to complete so soon this liberal allotment. Dr. Murray says that any wun can help, espeçially with modern books; hic pupile hav supplited him with fịve thoueand good quotetione in a munth. But of course persone who hav acçess to original editione of authore of the 18th Century, and who hav sum scholastic preparetion for the wurk, must do the most important part of it. Membere of this Assogietion ar lookt to with hope. Volunteere ar requested to giv the titlez of four or five books which they hav at hand and ar
inclined to undertake, so that a selection mey be mede at wunce. If original editione of eighteenth çentury books ar to be had, they ar to be preferd; if net, American authore of uther dete ar to be taken.

In American-books the first theght ie to secüre quotatione for all the wurde theed to neme the fizical featurez, productione, and uther objects, and the pectliar acts, habits, and relatione to be found here. Erly books of travel, law, or recerde ar to be seght, in which such nemee would be likely to meke their first appearanc; so also books and pamflets on natural history, surveye, and exploratione.

Besidee theze noveltiea, it iz to be rememberd that quotatione ar wanted for all the commun worde in their commun meaninge for tach generation. We ought to send in a large body of theze from our great American authore, our stetesmen, lawyere, and theologiane, and our men of scienç, az well az our poets, novelists, and historiane. Every happy expression of thoze thoghts which Americane most value and act upon, which can be found in print in suitable cumpass for quotetion, mey well be put upon its slip and sent to Dr. Murray, so that American theght may be fairly and fully reprezented in the Dictionary.

Local Dialect ie net to bé included in this Dictionary. Ofter it ie dun, it ie propozed to begin on a Dialect Dictionary uniform with it. Readera in the United States ar notified by Dr. Murrey that "they will seve tipme by first communicating with Prof. F. A. March, of Lafayette College, Easton, Pennsylvenia, whom," he saye, "we hav askt to erganize and guide the wurk of our American frende." Dr. Murray mentione that he will furnish readere with printed slips, bearing the dete, author, and title of their books, so az to save mechanical lebor ae much ae possible. Dhe Referençe list of Booke at the end of the Dictionary will record the namea of their Readere.

Any wun able and willing to act ae Sub-editor in arranging, classifying, and completing the preparetion of the materiale for the Editore revicion, ie requested to commünicate with Dr. Murray. Hia address ie Mill Hill, Middlesex, N. W., Eggland.

## The Association took a recess from 6 to 8 P.M.

Newport, Wednesday, July 16, 1879.

## Evening Session.

The Association came together again at 8.20 P. m.
Professor M. L. D'Ooge, of the University of Micnigan, Ann Arbor, Mich., read a paper examining critically the views of Professor Kirchhoff, of Berlin, "On the Final Recension of the De Corona."

In the Abhandlungen der Königlichen Akademie der Wissonschaflen eu Berlin, 1875, Kirchhoff presents the following theory of the origin of the de Corona of Demosthenes in its present form:

Demosthenes wrote out his plea soon after the indictment was first
brought, 330-5, B. C. This plea could have been directed only against the formal complaint; beyond this nothing was definitely known of the attack of Aeschines. The original draft of the oration, accordingly, is found in $\S \S 53-121$ plus $\S \S 3,4,8$ of the Prooemium. But when the trial occurred, some six years later, Ctesiphon and Demosthenes agreed to divide the matter of the defense in such a way that Ctesiphon should make the reply to the legal points and Demosthenes should pay exclusive attention to the political issues of the case. Accordingly, Demosthenes replies to his opponent without making use of the old draft drawn up in defense of Ctesiphon, and in extemporized language. In writing out his oration subsequently, Demosthenes, in order to give completeness to the defense, recasts the old speech and seeks to engraft it upon the body of the speech actually delivered by him. Kirchhoff regards $\$ 75$ and $\S \S$ $95-101$ as interjected into the body of the older speech. Demosthenes, finding it impossible to make one consistent whole out of the two speeches, contented himself with reproducing, as accurately as he could, the speech on the political issues. This later speech is contained in $8: 51,2,5-7,10$ 52, 122-324 of the de Corona as we have it.

There were found, therefore, among the literary remains of Demosthenes these two distinct speeches with traces of an attempt at combination. The unknown editor of the oration in its present form completed what Demosthenes set out to do. One of the connecting links is § 9.

Kirchhoff believes that the plan of the oration and the frequent allusions to the words of the rival speech imply an acquaintance with the contents of the speech of Aeschines that argues a recasting of the de Corona subsequent to the trial. He further thinks that the entire passage on the peace and the embassy, $\S \S 9-53$, was composed after the trial, and connected by Demosthenes, or his editor, with the earlier speech.

This paper aims to show that Demosthenes had reason to expect a renewal of the charges with reference to the peace of Philocrates previously made by Aeschines in the de Falsa Legatione, and that, excepting a few direct allusions to the words of Aeschines, there is no good reason for supposing that this part of the de Corona was not composed in advance of the trial.

But the main support of Kirchhoff's theory lies in the supposed relation between that part in which Demosthenes treats of his public career, $\$ \S 53-110$, in answer to the first count of the indictment, and the rest of the oration. Kirchhoff infers from the language in § 110 that when the orator composed this part of his speech he had no expectation of entering upon the vindication of his policy subsequent to the trierarchal law, Olympiad 110, 1.

The unreasonableness of this inference is shown (a) from the nature of the case, and (b) from the natural interpretation of the language in $\S 110$ as a rhetorical artifice, when compared with similar expressions found elsewhere. From Kirchhoff's theory it must follow that the direct allusions to the words of Aeschines found in the supposed older part of the oration, sc. $8: 53-120$, are more easily recognized as later insertions, and do more violence to the connection of thought than is the case with similar
allusions found in the supposed younger part of the speech, sc. $8510-52$, 121-324. This point is fully considered. It is shown that out of the twenty-nine direct references in the de Corona to the language of Aeschines, eight are found in the supposed older part, and nineteen in the supposed younger part of the oration, not counting the prooemium; that the distribution of these allusions seems controlled by a predetermined arrangement of the subject-matter; and, above all, that these allusions are not any more consistent and more closely connected with the context in the part of the oration supposed to have been written after the trial, than in the supposed older part. The comparatively loose connection of $\S \S 126-128,225-226$, with the context is noticed. $£ \Sigma^{227-231}$ are discussed as a later insertion. The passage $\$ 8232-237$ seems to owe its existence to an allusion in Aeschines. $\$ 247$ seems displaced, naturally following close upon $\S 239$. § 241 seems to be a repetition of $\S 230$; it may be that $\S 230$ is the later passage inserted in response to the illustration of Aeschines with reference to accounts. In $\S \S 276-284$ are pointed out clear instances of later insertion. It seems natural to connect $\$ 8285-290 \mathrm{di}-$ rectly with $\& 250$, and to suppose that in the original draft the honors conferred upon Demosthenes immediately after Chaeronea were named in close connection.
The theory of Kirchhoff involves also the following difficulties: (1) There is not the slightest intimation by Demosthenes that the legal points are to be treated by Ctesiphon, or have been treated by him. (2) The dilemma is presented that either Demosthenes was not successful in giving his oration unity and finish of composition, or the unknown editor and arranger succeeded to a wonderful degree in accomplishing a task which the orator himself gave up as impracticable.

The oration is further compared with the de F. L. of Demosthenes, and it appears that that oration is less compact and consistent in its structure than the de Corona.

From a comparison with the de $F$. L. of Aeschines, which holds the same relation to the speech of Demosthenes as a rejoinder which the de Corona holds to the speech of Aeschines against Ctesiphon, it appears that Aeschines pursued the same course as we believe Demosthenes to have done with regard to the subsequent insertions into the body of his speech, in direct reply to the language of his opponent.

Several passages from the de F. L. of Aeschines are examined, to show that in its present form this speech is a later recension of the speech delivered at the trial, bearing all the marks of original unity and harmony of composition, in spite of later insertions, and presents therefore a fit parallel to the de Corona in its genesis and structure. A comparison with the Timocratea shows the wide difference between a revised speech like the de Corona, cast originally in a single mould, and a production like the Timocratea, which is plainly not a simple recension of what was originally one speech, but a combination of two or three distinct drafts, characterized by contradictions, by repetitions, and by unevenness of finish.

Professor L. R. Packard, of Yale College, New Haven, Conn., read a paper "On Geddes' ' Problem of the Homeric Poems.'"

The main difference between this theory and Grote's, with which it coincides in its division of the Mliad, is that Mr. Geddes regards the nonAchillean portions of the Iliad as written by the same poet who composed the Odyssey. This poet he regards as properly entitled to the name Homer and the traditions therewith connected, and as an Ionic Greek of Asia Minor. The poet of the Achilleid, on the other hand, he regards as earlier in time and belonging to the Dorian stock of Thessaly. The theory seems open to several objections. 1. It assumes the connection in time and authorship of the various Ulyssean portions of the Iliad with one another and with the whole Odyssey. 2. If it is answered that this is not an assumption but a conclusion based on proofs, it is to be observed that in many cases the proofs are found in a single book or in two or three books only, whereas the peculiarity shown by them is ascribed to the whole Achillean or Ulyssean portion of the poem. 3. This theory seems to ignore too much the influence of the poet's subject upon his choice of words and his representations of life and character. A number of the differences insisted on are probably due to the change from the comparative barbarism of war to the civilization of peace. 4. This theory, like that of Grote, fails to take due account of the inconsistencies that run through the whole texture of the poem. It emphasizes some contradictions, but ignores others of no less importance.

Professor C. H. Toy read the last paper of the evening. It was upon "Expressions of Modal Ideas in Shemitic."
I. Command: 1. Imperativ; 2. Jezma-form; 3. Imperfect in an. (The Imperativ probably collateral with Imperfect, and not derived from it.) II. Wish: 1. Perfect (in Arab., Eth., Phen., any wish; in Heb., a fulfilled wish); 2. Imperfect in an; 3. In Heb. and Aram., Imperf.; 4. In Assyr., a special form, the Precativ. III. Determination of will: Imperf. in an (Voluntativ). IV. Purpose: Imperfect (in Arab., the $a$-form; in Eth., the shortened form). V. General result or limit: Arab., Imperf. in $a$ and Perf.; Eth., both forms of Imperf. VI. Object sentences: 1. Perf. in Arab. and Heb. (real act); 2. Imperf., Arab. $a$-form after verbs of wishing, etc., $u$ or $a$-form after verbs of supposing, etc., Eth. short form. VII. Conditional: 1. Ideal: Arab. Jezma-form in protasis and apodosis, or Imperf. in an (emphatic); Heb., Imperf. in both clauses; Eth., usually Perf. in protasis, Perf. or Imperf. in apodosis. 2. Present existing fact: Arab., Perf. in protasis, Jezma-form in apodosis (or Imperf. in u); Eth., as in the Ideal; Heb., Imperf. (or, sequence-construction); Aram., Imperf. or Participle. 3. Real: usually Perf. or Partcp. 4. Unreal : the same.

Thus the functions of the several forms are: 1. Perfect: pure Opt., and ideal, real, and unreal condition; 2. Imperf. in $u$ : Opt., and exhibition of an act as merely an object of thought, whether condition or result; 3. Imperf. in $a$ : dependence-ideal result, purpose, limit or sequence; 4. Jezma-form: Opt., command, condition; 5. Imperf. in an: emphatic wish, command, condition; 6. Imper.: affirmativ command.

Examination of these uses shows: (1) that the modal senses belong to both Perf. and Imperf., and (2) that they flow from the completional (Perf.) or inchoativ (Imperf.) force of the two forms. The particular employment is determined by usage, but the original sense is never lost sight of, and must always be considered in interpretation, each dialect being studied for itself under the guidance of the facts obtained by general comparison.
As to the historical development: It may be inferred from the usages of the various dialects that the mode-distinctions existed in primitiv Shemitic. The tendency has been to drop these distinctions, indeed to compress all senses flowing from the inchoativ into the Jezma or shortest form (leaving, however, the Imperativ unaffected), as is evident from an examination of the different Shemitic languages, ending with modern Arabic, which stands in this respect about on the same plane with Hebrew and A ramaic.

The Association then adjourned to Thursday morning.

## Newfort, Thursday, July 17, 1879. <br> Morning Sesbion.

The Association resumed its session at 9.15 A. . .
The minutes of the proceedings of Tuesday and Wednesday were read and accepted.
In the absence of Professor Crowell, Professor March was appointed to fill his place in the committee on nominations.

The Secretary announced the election of four new members:
Mr. Winfred R. Martin, Jersey City High School, Jersey City, N. J.; Miss Mary H. Ladd, Chauncy-Hall School, Boston, Mass. ; Dr. B. Perrin, Hartford High School, Hartford, Conn. ; Mr. Eben Alexander, East Tènnessee University, Knoxville, Tenn.

The committee on the time and place of meeting recommended that the next session be held at Philadelphia, Pa., July 13, 1880; but left the matter open and subject to modification by the Executive Committee.
The Society then listened to a paper by Professor Albert S. Cook, of the Johns Hopkins University, Baltimore, Md., entitled " Studies in the Heliand."

Since the investigations undertaken by Grein, Windisch, and Sievers to determine the sources of the Heliand, and the proportions in which they were utilized in its composition, the poem is understood to rest upon the basis of the Pseudo-Tatianic Gospel Harmony, supplemented by the commentaries of Hraban, Alcuin, and Bede.
This paper has for its object:
I. To separate those expansions or embellishments that have originated with the poet, from the body of the composition and particularly from the merely periphrastic portions to which they are adjoined or with which they are incorporated.
II. To collect and classify those passages in which the author displays his full originality, i. e., is entirely independent of his sources.

These passages fall under six heads:

1. Those that motive a statement or event which otherwise would want an explanation.
2. Those that present an issue or sequence, not expressly warranted by the sources, but contained in them by implication.
3. Those that mark transition, having of themselves no distinctive character.
4. Passages descriptive of Old Saxon manners, morals, or religion, or indicative of current theological views.
5. Didactic and moral generalizations.
6. Poetic ornaments, often assuming the shape of poetic formulae.
III. To call attention to a few of the more remarkable syntactical peculiarities of the poem.

The committee to nominate officers for the year 1879-80 presented nominations as follows:

For President-Professor Crawford H. Toy, Norfolk, Va.
For Vice-Presidents-President William C. Cattell, Lafayette College, Easton, Pa.; Professor Lewis R. Packard, Yale College, New Haven, Conn.

For Secretary and Curator-Professor Charles R. Lanman, Johns Hopkins University, Baltimore, Md.
For Treasurer-Charles J. Buckingham, Esq., Poughkeepsie, N. Y.
For additional members of the Executive Committee-
Professor Basil L. Gildersleeve, Johns Hopkins University, Baltimore, Md.

Professor William W. Goodwin, Harvard University, Cambridge, Mass.
Professor Milton W. Humphreys, Vanderbilt University, Nashville, Tenn.

Dr. J. Hammond Trumbull, Hartford, Conn.
Professor William D. Whitney, Yale College, New Haven, Conn.
The report was accepted, and the persons therein named were declared elected to the offices to which they were respectively nominated.

Professor F. A. March, chairman of the Committee on the Reform of English Spelling, appointed in 1875, and continued in 1876, 1877, and 1878, reported:
Dhe Committee haz not been calld on during the last year for any offlcial action. Dhe Philological Soçiety in England, which it waz theght might appoint a Committee of Cenferenç on the subject, hae not dun so. We can however report progress in the reform. Dhe Memorial to Copgress in favor of the appointment of a Commission to examin and report on the reform, and on the expediençy of moving the Guvernment of Great Britain to anjte in a joint Commission, which waz prepared by
membere of this Committee, haz been signd by reprezentative of more than fifty Collegee and Universitiea. It hae also led to similar memoriale from Dhe American Institute of Instruction, and many uther teachere' assoçietions. Dhe Department of Public Instruction of the city of Chicago unanimously rezelvd to correspend with uther Boarde on the subject. Great reading of pepere and discussion of them went on all over the country at the winter meetinge of the assoçiations. Action in fevor of reform haz been taken by the State Teachere' Associetiona of Pennsylvania, New Jerzey, New York, Massachusetts, Ohịo, Illineis, Iowa, Miçhigan, Wisconsin, Missouri, Virginia. Action hae also been teken by the State Legisleturee of Cennecticut, Pehnsylvenia, Wisconsin, Howa. Dhe report of the Committee of the Legislature of Wisconsin in fevor of putting a fonetic dictionary in the public schoole has been printed, and is an eble argument for the reform. Many uther reform papera hav been printed in the journale, magazinee, transactions of lerned soçieties, and, within a few yeare, in books like thoze of Hadley, Whitney, Maller, Ellis. Volamez devoted to fonetics and reform hav appeard from Mr. Sweet, sumtime Preaident of the Philological Soçiety of London, and Mr. J. H. Gladstone; pamflets also from Prof. J. L. Jehnson of the University of Mississippi, Prof. L. H. Carpenter of the University of Wiscensin, Prof. Edward North of Hamilton College. Dhe Bpelling Reform Assoçiation it to hold its annuial meeting this year at Philadelphia under the most favorable auspiçez as a Department of the National Edücetional Assoçiation. Max Muller, Dr. Murray, Preaident of the Philological Soçiety of Epgland, and ex-Preeidents Mr. Sweet and Dr. Morris, with Rev. W. W. Skeat, Prof. of Apglo-Saxon in the University of Cembridge, and Rev. A. H. Seyçe, Prof. of Philology in the University of Oxford, hav consented to act as Viçe-Precidents.

In Epgland it will be rememberd that in 1876 the National Union of Elementary Teachere, reprezenting sum 10,000 teachere in Epgland and Welee, past almost unanimously a rezolution in fevor of a royal Commission on Spelling Reform. More than a hundred and thirty School Boarde, including those of London, Liverpool, and Birmingham ünited in the recolution, and the movement led to a conferenç in London, at which Prof. Sayçe of Oxford preaided, and Dr. Murrey, Mr. Sweet, Dr. Morris, Mr. Ellis, Mr. J. H. Gladstone, Sir Charlea Reed, and many uther dignitariee of Church and State took part in the discussione. a committee from the Conferenc weited on the Lerd Preaident of the Counçil in the Department of Education with a seriez of rezolutione. An organization of theae reformere for permanent prosecution of the reform has been formd, with a Secretary and plenty of uther efflgere, and they will publish an organ.

Dhe National Assoçiation of Great Britain for the Promotion of Soçial Sçienç, before whom the subject wae broght by Prof. Newman at their last Copgress, after long deliberation by a Cemmittee, haz a report before it in fevor of an alternativ spelling for sçientific purposez, and for teaching, and to guide the progress of reform. Dr. Murray, Preaident of the Philological Sogiety, who hat undertaken the editorship of the Sogiety'e Historical

Dictionary, wishee to hav the pronunciation of that wurk in a key alfabet, which may be an agreed fonetic alfabet az is propozed by the Soçial Sçienç Assoçietion. It ie a tịme of rapid progress, aud it seeme not unlịkely that sum occesion mey arize düring the next year when a Committee of the Assoçiation mey bé needed. Perhaps it mey be wize to contịuue the Committee anuther year.

The report was accepted, and the committee continued for another year.

The Auditing Committee reported that the accounts of the Treasurer had been compared with the vouchers and found correct. The report was accepted.

The Society then returned to the regular order of the day, and listened to a paper by Professor B. L. Gildersleeve, of the Johns Hopkins University, Baltimore, Md., "On the Encroachments of $\mu \bar{\eta}$ upon oi in Later Greek."

Every one who has read much Greek of the post-classic period must have noticed that the negative $\mu \boldsymbol{\eta}$ is used in various relations in which it would not be employed so readily, if at all, in model prose. It is easy enough to charge all such variations to the account of a gradual breaking down of the language, and indeed the whole matter may be learnedly despatched by calling these misuses specimens of the so-called solocismus Alabandicus. But such corruptions do not come in without cause. If the appreciation of the negatives was indeed so much enfeebled, we should expect the two to be interchanged pell-mell, whereas it is $\mu \boldsymbol{\gamma}$ that has encroached on $o \dot{v}$ and $\dot{v}$ has troubled $\mu \boldsymbol{\eta}$ comparatively little.

As a slight contribution to the history of these encroachments, I have examined anew the usage of one of the best of later Greek writers, with a view to employing the results thus gained as categories for further investigation. This author is Lucian, who was a careful student of Attic Greek, and in his Soloecista notices not only such gross blunders as $\delta \phi e \lambda o v ~ d v v \eta \sigma \eta$ but such pardonable lapses as $\sigma v v \eta \sigma \omega v \dot{a} v$, so that it could hardly have been absolute heedlessness of the earlier usage; and, indeed, we find him every now and then reverting to the classic norm. The explanation is to be sought in the popular speech of the time. Lucian, man of the world as he was, avoided all affectation and followed the drift of the spoken language, so far as it was not rude or solecistic.

The classic differences between ov and $\mu \boldsymbol{j}$ are here assumed as well known, even if not sufficiently well formulated. Between these two negatives there is a certain border land which in the classic period was occasionally invaded by $\mu \boldsymbol{j}$. It is just this border land on which $\mu \boldsymbol{\eta}$ has squatted so resolutely in the post-classic time. In less figurative language, the later use of $\mu \eta$ is not so much an innoration as an extension ; and the following seem to be the lines of intrusion :

First, $\mu$ 斤 with the inflinitive of oratio obliqua. The natural negative of the inflinitive as such is $\mu i$; and it was not until the inflinitive had begun to represent the indicative that the negative oi could have been tolerated. But
this toleration was established before our record, and we can now only guess at the primal state before the incoming of the future infinitive, which marks unmistakably a new function of the infinitive, just as the incoming of the future optative marks a new function of the optative. Still there is a group of verbs of saying and thinking, which retain the old negative. Such are verbs of asseveration and belief, such verbs as ópvivas, $\mu a \rho \tau v \rho e \bar{\nu}, \pi<\sigma \tau \varepsilon ย \varepsilon \iota \nu, \pi \varepsilon \pi \varepsilon i \sigma \vartheta a \iota$ and the like. Cf. Il. 9, 132-3; Od. 5, 179 ; Hdt. 1, 165 ; 2, 179 ; Ar. Vesp. 1047, 1281 ; Andoc. 1, 90 ; Lycurg. 76 ; Dem. 21, 119, etc. So $\mu a \rho \tau v \rho \bar{\omega} \mu \eta$, Dem. 45, 15, cf. 40, 47 ; $\pi \iota \sigma \tau \varepsilon \dot{i} \omega \mu \eta$, Andoc. 1, 2 ; Dem. 21, 221 ; $\pi \varepsilon \pi o \iota \vartheta a \mu \eta$, Pind. Ol. 1, 104 ; $\pi \varepsilon \pi \varepsilon \iota \sigma \mu a \iota \mu$, Plat. Apol. 37 A. Occasionally $\phi a ́ v a \iota$ and $\lambda \ell \gamma \varepsilon \iota v$, occasionally ole $\sigma \forall a$ and $\nu 0 \mu \zeta \zeta \varepsilon \nu$ join the ranks of these verbs, which involve the will, where the utterance strives to make the statement good and the thought is at once a wish ; although it must be observed that grammarians have not always been careful to distinguish the legitimate use of $\mu \boldsymbol{\eta}$ with the infinitive in apposition, from this extended use of $\mu \eta$ with the infinitive.

Now it is evident that this form of expression carries with it the emphasis of the witness on oath, so to speak, the emphasis of desire, and hence the tendency to use it in the later time, which always leans to the impressive. M $\eta$ with the infinitive is equivalent to "I swear," "I vow," "I bet," instead of quieter forms. How common this oratio obliqua $\mu \dot{\eta}$ is in Lucian is known to every reader of the Pantagruelist of Samosata, as George Saintsbury has happily called him.

Again in clauses with $\delta \tau \iota, \mu \eta$ is sometimes found in classic times, a phenomenon due to the influence of the leading verb. So when the leading verb is a verb of swearing, as in the well-known passage : ovo' ó $\mu$ óvat
 imper., as in the famous instance Antiphon 5, 21. But such deviations are so rare that we must not insist on them as possible misleaders. We must rather connect the $\dot{\partial} \tau \iota \mu$ in declarative sentences with the use of $\mu \dot{\eta}$ with the infinitive in oratio obliqua. It is clear that in a period when $\mu \dot{\eta}$ could be used freely after a verb of saying this form ít $\mu \dot{\eta}$ would suggest a convenient equivalent for an oratio obliqua expression, especially after a principal tense from which the oratio obliqua optative is excluded. It were indeed worth inquiry whether this form ót $\mu \dot{\eta}$ with ind. did not help to thrust out $\dot{\delta} \boldsymbol{\sigma} \subset \dot{v} \dot{y}$ with the optative. At all events we find the opt. form of oratio obliqua becoming rarer and rarer.

Another important extension is to be noticed in the relative sentence. Even in classic times the negative of a relative clause is $\mu$ i when the relative gives the notion of characteristic, and as the characteristic sometimes gives a ground, the clause with $\mu \boldsymbol{\eta}$ seems to be causal outright. Here the subjective element represented by $\mu \boldsymbol{j}$ would appear in standard Latin as the subjunctive. Causal relatives then began to take $\mu \boldsymbol{\eta}$, and with causal relatives adversative relatives, which are thus fused with concessive relatives, and this is extended to the integral parts of the relative sentence. And not only so, but we must further take in the equivalent of the relative, the participle. So, often in later Greek, where we should expect the negative oi with a participle, we find the negative $\mu \boldsymbol{\eta}$, which is a phenom-
enon analogous to the familiar Latin combination in which qui with subjunctive is used as a parallel for a characteristic adjective.

The widest divergency from classic usage has been touched on already, the use of causal particles such as $k \pi e l(b \pi t)$ and the like with the negative $\mu \eta$. This variation is due sometimes to the oratio obliqua element just recognized, and sometimes to the relative characteristic, which elements run into each other. So that even here we have a development of doctrine rather than a bold and bad heresy.

Remarks were made upon this paper by Professor W. W. Goodwin, Professor M. W. Humphreys, and Mr. S. P. Andrews.

Professor Tracy Peck, of Cornell University, Ithaca, N. Y., then read a paper "On the Authorship of the Dialogus de Oratoribus."

After briefly sketching the history of this discussion since its rise early in the sixteenth century, the speaker examined the external and internal bearings of the subject and reached the conclusion that Tacitus must have written the work.

A passage in a letter of the younger Pliny to Tacitus (IX. 10), was cited and shown to be in all probability a quotation from the Dialogus, and thus conclusive in regard to its authorship.

It was seen that the manuscripts of the Dialogus testify only in favor of Tacitus. Changesin, or additions to the MS. title of the work were shown to be of late origin, and with the evident purpose of supporting theories of a non-Tacitean authorship. Pomponio Leto's quotation from the work, as a work of Tacitus, was given as signiffcant of the belief in the fifteenth century.

From a discussion of the probable time of composition of the Dialogus it appeared that there are no chronological objections to Tacitus as the writer.

A strong personal motive that may be detected in the Dialogus-the justification of the withdrawal of the leading interlocutor (Maternus) from forensic pursuits, and devotion to literature-was claimed to be in harmony with a natural impulse of Tacitus to vindicate his own change in literary work.

Attention was called to a like conception of life and to a consistency of judgment of men and events in the Dialogus and in the admitted writings of Tacitus.

The literary style of the Dialogus was admitted to be widely different from that of the latest compositions of Tacitus. But it was shown that Tacitus was, in his earlier years, an advocate of the revived Ciceronianism of the Dialogus, and it was maintained that the difference in subject and motive as well as in the age and experiences of the writer would sufficiently account for the great dissimilarity or development of style.

Professor W. W. Goodwin, of Harvard University, Cambridge,

Mass., read a paper "On Greek Verbs which add Epsilon to the Stem in certain Tenses not belonging to the Present System."

The only question raised here is a practical one of classification, and there is no thought of discussing the origin of the phenomenon. George Curtius, in his Grammar and in his treatise on the Greek Verb, includes under one class (the E class) those verbs which add $\varepsilon$ to the stem in the present, like $\delta o \kappa-\varepsilon-\omega$, and those which have no $e$ in the present but add $\varepsilon$ in
 ( $\mu a \theta-$ ), $\mu a \theta \eta \sigma o \mu a \iota(\mu a \theta \varepsilon-)$. It is obvious that, although these two phenomena may depend on the same principle, the latter cannot be made the basis of a classification which proposes to show the relation of the present to the simple stem of the verb; for $\mu a \theta_{\varepsilon}$ - has nothing to do with the formation of $\mu a \nu \theta a v o$ - from $\mu a \theta$-, and the stems in $\varepsilon$ have no claim to the title of "simple stems." Hadley saw clearly this weak point in the E class of Curtius, and rightly excluded from this class all verbs except those which have $\varepsilon$ in the present (like $\delta o \kappa \varepsilon-\omega$ ), and which alone can be said to form the present by the addition of $\varepsilon$ to the simple stem. But he does not introduce under a single head the far more numerous class of verbs which have $\varepsilon$ in other tenses than the present. He gives under the "First Class" a list of such of these verbs as belong to this class; but, as he does not do the same in the other classes, the impression is given that the phenomenon in question is in some way specially connected with class I., although this false impression is guarded against by a remark under 331. Now the verbs of other classes which take $\varepsilon$ are nearly as numerous as those of the first class. Further, examples of this formation are found in every one of the eight classes of Curtius (except of course the seventh), and it cannot help confusing any classification to introduce into it a peculiarity which is common to all the classes already marked off on other grounds. Curtius includes in the second division of his seventh class only those verbs which would otherwise belong to the first, and those which form the stem in $\varepsilon$ from the present stem. As, now, no verb can belong to this division which does not belong also to some one of the other classes of Curtius, it is plain that it can add nothing to this classification to bring the division into it at all.
I have therefore thought it better to class the addition of $\varepsilon$ to the stem in other tenses than the present among the many modifications of the stem which are peculiar to certain tenses of verbs, like the lengthening of the stem-vowel in $\tau \mu \mu \dot{\alpha}, \tau \tau \mu \hbar \sigma \omega$, the insertion of $\sigma$ in $\tau е \tau \ell \lambda \varepsilon-\sigma-\mu a \iota$, and the change of $\varepsilon$ to $o$ in $\sigma \tau \varepsilon \rho \gamma \omega$, $\varepsilon \sigma \tau o \rho \gamma a$, and to $a$ in $\sigma \tau \varepsilon \lambda \lambda \omega$, $\varepsilon \sigma \tau a \lambda \kappa a$.

Remarks were made upon this paper by the President, Mr. Sewall.

The next paper, on the "Nomenclature of Early California," by Mr. E. L. Williams of Santa Cruz, California, was read by Prof. F. A. March.

Nemea of plaçea in California ar generally honorary, scriptüral, or deacriptiv Spanish namee, or original Indian namee. Henorary namea
ar few. Only three wer mentiond: Mendocino, a cape, nemed in henor of the Viçerey of New Spain, under whom it waz discuverd, in 1542: Monterey, also in honor of a Viçeroy, in 1602; Branciforte, also for the Víceroy, 1797.

Scriptural nemez ar very commun. Erly missionariez introduçt the custom of using them, and it hat been followd. a large number wer mentiond. Descriptiv nemea wer mentiond in still larger numbera, and many of them expleind. Sum of the descriptiva, which appear little grafic now, wer verified ae having been sumtịme fitting. Dhoze explaind ar Spanish.

Into the Indian namea the paper did net go at lepgth.
The last paper was by Mr. Albert S. Gatschet, Linguist of Professor J. W. Powell's United States Bureau of Ethnology, Washington, D. C. It was "On Syllabic Reduplication as observed in Indian Languages, and in the Klamath Language of South-western Oregon in particular."

The author of this paper had peculiar facilities for studying the reduplicative feature of Western Indian Languages on his trip made in 1877 to Oregon. In no other linguistic family of the West studied by him does this mode of grammatical synthesis hold a more prominent place than in the Klamath language, which is also spoken by the Modoc tribe. But reduplication is common to all languages of the world, and a more profound knowledge of all the facts relating to it must prompt scholars to distinguish between two different kinds of reduplication: (a) the iterative, used mainly in the formation and derivation of words, and (b) the distributive, used for inflectional purposes. Instances were given from several of the Indian tongues, in which either one of the two kinds or both have been observed. Both kinds are very prominent in the Malay-Polynesian dialects, and Steinthal has given a very lucid exposition of duplications observed in Dayak. Fr. Müller has done the same for the Eastern and Western Malay-Polynesian dialects. In America we find distributive reduplication in the Flathead-Selish of Montana, in Klamath, and in the Santa Barbara dialects of Southern California. Some instances can be traced in Kalapuya_and Algonkin_dialects, and it seems to be or to have been general in the dialects of the Nahuatl stock (Aztec, Tarahumara, O'pata, Pima, etc.). Iterative reduplication exists in all the above languages, in the Maya, Yuma, and Shoshoni linguistic families, and in the Wayiletpu, Pomo, and Mutsun (Olamentke dialect). Many Sahaptin dialects, like the Warm Spring and Nez-Perce, use it to form diminutive nouns and adjectives describing the surface-quality of objects of nature. As stated above, the Klamath language is prominent in the use of both kinds of syllabic reduplication, as will appear from the following particulars:

In Klamath the iterative reduplication repeats the entire radical syllable without vocalic or consonantal changes, a few instances excepted. Reduplication of the first two syllables of the word in an iterative sense is observed only in words (nouns and verbs) commencing with the sounds
$k, l, n, u$ (or $v u, w$ ), and some of them show a diphthong of an adulterine character, as te-ukté-uksh, 'long-tailed chicken-hawk.' Terms formed by iterative reduplication also assume the distributive form. We find it in onomatopoetic terms: yaúyaua, 'to be noisy,' wekwékash, 'magpie;' in frequentative and usitative terms: nidshonidehua, 'to make grimaces,' tuahtüshla, 'to shiver,' cf. Latin titubare; in adjectives of colors: metomettali, 'sky-blue, purple;' in adjectives describing surface-quality: lakt. lakli, 'polished, smooth;' in adjectives describing external shape or form: кotroli, 'round, spherical, annular, cylindrical;' in adjectives marking intensity: litchlitchli, 'strong, powerful.'

The distributive reduplication in Klamath doubles the first syllable or the first two syllables, but does not extend beyond the vowel which is included in the doubling process. A prefix may be reduplicated as well as the radical syllable; and if its vowel is short, and the reduplication monosyllabic, the vowel of the second syllable will be $a$. This grammatical synthesis prevails throughout the whole language; for not only verbs and nouns, but even most particles are subject to it. The idea of severalty or distribution is expressed by it: thus, ktélena, 'to cut a hole into one object,' or 'to cut holes into many articles by one single cut;' distributive, ktektakna, 'to cut holes into different, separate objects by cuts repeated at different times, for every object separately.' Nép means 'hand, hands, the hand, the hands, a hand;' nenap, 'each of the two hands, the hands of each person considered as an individual distinct from any other individual.' This will suffice to show that the distributive form in Klamath has nothing to do with what we call plural. No plural exists in that language as a regular form.
Different modes of distributive reduplication exist, all of which are dependent upon the phonetic laws of the language. Thus in monosyllabic reduplication we find seven different modes. (1) Regular doubling, with -a- in the second syllable: thus, tiplipli, 'dusky;' distr., titaptipli; ztpa, 'to lay down;' distr., $i$-atpa. (2) Duplication with syncope of $a$ : ttlak, 'waistcoat;' distr., tétlak, instead of tétalak. (3) Duplication without vocalic change: tmú, 'grouse;' distr., tmútmu; lokanka, 'to go astray;' distr., lolo'kanka. (4) Duplication of diphthongal radicals: teini, ' recent;' distr., telini; tuexa, 'to perforate;' distr., tustoxa; ydki, 'seed-basket;' distr., yd-iki. (5) Duplication with vowel inverted: tchuaish, 'buzzard;' distr., tchatchuish, instead of tchí-tcha-ish; puélxa, 'to throw down;' distr., pepuélxa, instead of pupă-élxa. (6) Duplication with elision of consonant: tloxo, 'brain;' distr., totlxo; tmokkil, 'green lizard;' distr., t6tmkel. (7) Duplication with apocope of verbal suffix: kshena, 'to carry on the arms;' distr., kshakehha, instead of kshekeshana.

Dissyllabic distributive reduplication is subject to the same phonetic laws as monosyllabic duplication. The following examples illustrate this fact. Thus udélgatko, 'checkered,' has for its distributive, ude-udalgatko; utchin, 'to fish with a net,' utchi-utchdn; udama, 'to cover a vase,' uddudma; udúmtchna, 'to swim on the surface,' udüddmtchna; ulayuce, 'to scatter,' ula-uliwe; kawakdga, 'to rip up with the teeth,' karoakaukdga; ibéna, 'to dig,' ipspa, ibépa.

Both forms, the absolute as well as the distributive, go through all the declensional and conjugational inflections of the noun and verb.

On motion, it was
Resolved, That the thanks of the Association are due and are hereby tendered to Colonel John R. Leslie for his unwearied efforts for the comfort of the members, and to the Master and Trustees of the Rogers High School for the use of their building.

On motion, the Association then adjourned.
Charles J. Buckinghar, Treasurer, in account with the American Philological Association,


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Mrs. A. E. Weston, Antioch College, Yellow Springs, O.
Albert S. Wheeler, Shefficld Scientific School, New Haven, Conn.
Benjamin I. Wheeler, Brown University, Providence, R. I.
John Williams White, Harvard College, Cambridge, Mass.
W. H. Whitsitt, Southern Baptist Theological Seminary, Louisville, Ky.

William D. Whitney, Yale College, New Haven, Conn.
J. Colver Wightman (Life Member), Taunton, Mass.

Alonzo Williams, Brown University, Providence, R. I.
Edwin H. Wilson, Yale College, New Haven, Conn.

The Executive Committee herewith announce that the Twelfth Annual Session of the Association will be held at Philadelphia, Pa., beginning Tuesday, July 13, 1880, at 3 o'clock P. m.

Members intending to read papers at the next session of the Association are requested to notify the Secretary at as early a date as possible.





[^0]:    ＊This paper contains the substance of a dissertation published in Latin at Leipzig in 18i4．The edition was so small that its reproduction in Eng－ lish seems justifiable．As a review of the dissertation in Bursian＇s Jahres bericht for 1877 misrepresents it，great care has been taken to make no changes of any importance，except such as were necessary in order to reduce its size．

[^1]:    * Sec the argument by Professor Morris, Transactions for 1874.

[^2]:    N. L. Andrews, Madison University, Hamilton, N. Y.
    H. C. G. Brandt, Johns Hopkins University, Baltimore, Md.

    Charles J. Buckingham, Poughkeepsie, N. Y.
    Henry F. Burton, University of Rochester, Rochester, N. Y.
    William C. Cattell, Lafayette College, Easton, Pa.
    B. L. Gildersleeve, Johns Hopkins University, Baltimore, Md.
    W. W. Goodwin, Harvard College, Cambridge, Mass.
    8. S. Haldeman (University of Penna.), Chickies, Pa.

    Albert Harkness, Brown University, Providence, R. I.
    Charles R. Hemphill, Theological Seminary, Columbia, S. C. M. W. Humphreys, Vanderbilt University, Nashville, Tenn.
    A. C. Kendrick, University of Rochester, Rochester, N. Y.
    F. A. March, Lafayette College, Easton, Pa.
    A. C. Merriam, Columbia College, New York City.

    Edward North, Hamilton College, Clinton, N. Y.
    C. K. Nelson, St. John's College, Annapolis, Md.
    J. Sachs, Classical School, 649 Madison Ave., New York City.
    A. Duncan Savage, Johns Hopkins University, Baltimore, Md. William C. Sawyer, Lawrence University, Appleton, Wis.
    T. D. Seymour, Western Reserve College, Hudson, Ohio.
    J. B. Sewall, Thayer Academy, Braintree, Mass.
    L. A. Sherman, Hopkins Grammar School, New Haven, Conn.
    W. A. Stevens, Rochester Theological Seminary, Rochester, N. Y.
    C. H. Toy, Southern Baptist Theological Seminary, Louisville, Ky.
    J. Hammond Trumbull, Hartford, Conn.

[^3]:    * Printed according to the five following rules of the Spelling Reform Association. The capitals of proper adjectivs ar dropt:
    1.-Omit $a$ from the digraf ea when pronounst as e-short, as in hed, helth, etc. 2.Omit silent $e$ after a short vowel, as in hav, giv, etc. 3 -Write $f$ for $p h$ in such words as alfabet, fantom, etc. 4.-When a word ends with a donbl letter, omit the last, as in shal, clif, eg, etc. 6.-Change $\epsilon d$ final to $t$ where it has the sound of $t$, as in lasht, imprest, etc.

[^4]:    * To gir capitals to the personal and possessiv pronomns in address and letters is a matter of etiquette.

[^5]:    *See my article on "the nominal basis of the Hebrew verb" in vol. viII. of the Transactions (18i7).

[^6]:    *The Assyrian offers no real exception, for it is generally agreed that if it had a true present tense it has borrowed it from the Accadian, or made it under Accadian influence, so that the tense cannot be regarded as properly Shemitic.
    $\dagger$ Um, umma, imma also in Assyrian (Oppert, Assyrian Grammar, p. 50) ; and there are traces of an $i$-form in Arabic.

[^7]:    *A similar phenomenon exists in the Latin use of quum with the Subjunctiv.

[^8]:    

[^9]:    2906-9. 'Then let they on the strengthful stream High-horned ship the clear waves Part the sheer water. Sank light of day, Sun ueared its setting.'

[^10]:    *In Hesiod, Theogony 860, for $\dot{a} \delta \delta v j{ }^{2} s$, the reading of the mbs., Schoemann conjectured 'Airvns. This has been received into the text by Flach. But, besides the uncertainty of the emendation, the passage in the Theogony is quite distinct in style from the rest of that work, and may be of later date than Pindar and Aeschylus.

[^11]:    * Mr. Marray wan Profeasor of Shemitic Languages at the Johns Hupkins University. After an illness of a week, he died at Baltimore on the 20th of March, 1879, aged 29 years. He left in manuscript a conres of lectares on The Poctical Books of the Old Teatament. soon to be published: papers on The Home of the Shemitic Peoples, and on The Original Case-Form in Shemitic; and a work on Hebrew Synonyms, well advanced towards completion.

[^12]:    - Ontlines of Etymology. Philad., J B. Lippincott \& Co., 1878.
    + Clarke gives wrongli the genus of the spider-monkeys (Ateles) as a plaral, defined as 'monkeys.' The name means imperfect, and is in allusion to the hands, of which the tham is incomplete, or wanting.

[^13]:    - See forther apon this word and its affinities in my address, Spelling Reform Bulletin, No. 1, April, 1877.

[^14]:    E. E. CHARLES J. BUCKINGHAM, Treasurer.

    There is also in the hands of the Treasurer, one Bond of the Connecticut Western Railroad Company, for Five Hundred Dollars, with seven over-due coupons of the same, of $\$ 17.50$ each, not at present collectible. C. J. B.

    Having examined the above accounts, and compared them with the vouchers, we certify the same to be correct. We have also personally examined the Bond of the Connecticut Western Railroad, with seven over-due and unpaid coupons.
    (Signed) J. C. MERRIAM, $\}$ Auditing Committce.

