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# TRANSACTIONS <br> AND <br> PROCEEDINGS <br> OF THE <br> AMERICAN <br> 111 <br> <br> PHILOLOGICAL ASSOCIATION. 

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## TRANSACTIONS

OF THE

## AMERICAN PHILOLOGICAL ASSOCIATION.

1902.

I. - Stnaies in Sophic.'es's Trachinians.<br>By Professor MORTIMER LAMSON EARLE, COLUMBIA UNIVERSITY.

I. The Trachinians and the Alcestis.

In studying the resemblances between Greek plays we have to observe, besides the more general and comprehensive resemblances of plots, as in the Choëphoroe and the Elcctras, certain other kinds of similarity of less extent and compass. These may be grouped under three heads: (1) resemblances of motives, (2) resemblances of scenic situations, (3) verbal parallels. Of these it appears that the first and third have received more attention from students of the Greek drama than has the second, though it is impossible to deal adequately with resemblances of motives without taking account incidentally of resemblances of scenic situations. In his excellent Schlafscenen auf der attischen Biihne (Rhein. Mus. 46 [1891], pp. 25-46) Dr. Dieterich has dealt with both the latter and the former and has considered verbal parallels as well. As a further example of the way in which the several sorts of resemblances are bound up together, and also of the way in which they may be complicated besides by derivation from several sources in the same passage, I may cite here the opening of the Philoctetes. The first two lines are reminiscent of the opening of the Prometheus, a play the influence of which on subsequent Greek drama has never, I think, been
adequately estimated. We have here not merely a verbal parallel, but also a resemblance of motive. In the Prometheus the hero of the play is brought to a desolate place to suffer alone; in the Philoctetes the speaker of the prologue tells, on coming to the place where the hero of the play was left to suffer alone, of the circumstances of that abandonment, of which he had been, like the speaker of the prologue of the Prometheus, the chief agent. But the resemblance of scenic situation in this passage is not primarily between the Prometheus and the Philoctetes, but between the Ajax and the Philoctetes. In both the Ajax and the Philoctetes Odysseus is discovered at the doorway of an enemy - in both cases a man that he has wronged - and desirous of learning whether that enemy is within, but fearing to enter and, in the sequel, getting his information at second hand from a companion. Furthermore, the prologue of the Philoctetes is reminiscent of the Trachinians, to which play it is a sort of sequel and in the lost close of which Philoctetes may well have figured, at
 to be an echo of крпраiou тотov in the prologue of the Tra-
 read with $\Gamma$ instead of $\beta o \hat{\omega} \nu \sigma \tau \epsilon \nu \alpha^{\prime} \zeta \omega \nu$, is repeated from Trach. 787 , where the words are used of the suffering hero of that play. But we are not at present to discuss in detail the likenesses of the Philoctetes and the Trachinians, but of the Alcestis and the Trachinians; and I now proceed to the examination of a remarkable composite parallel between those two plays that had not, to the best of my knowledge, been noted by any one.
In Trach. 322-328, after Deianira's question to Iole, instead of the latter answering, Lichas says:

In reading these verses with a class, I was suddenly struck by their verbal likenesses to a familiar passage in the Alcestis, vv. 136-140, where at the close of the parodus the coryphacus says:

Here we have three rather noticeable words in the tormer passage matched by three words in the latter that are the same in the first two instances and cognate in the third, and those words within the same compass and in the same order. That this verbal parallel is not accidental can be proved by an examination of the situation in the two passages. In both places a woman slave from whom some one is anxious to learn something weeps in silence. In the Trachinians that woman slave is a captive of Heracles, and her silence is due scenically to the lack of a fourth actor. At the close of the Alcestis (II3I-II46) one that is nominally a woman slave obtained by Heracles as a prize of victory is silent when questioned, for the scenic reason that there is no third actor. The scene was a striking one on the stage, and we should not forget -a point to which I shall revert - that Sophocles had witnessed the first performance of the Alcestis and beaten Euripides in the competition at that time. Is it not now patent that in writing the passage in the Trachinians that we are considering Sophocles, in a curious fashion but one that is quite intelligible psychologically, ${ }^{2}$ fused two passages of the Alcestis that were scenically striking to the eye and that had elements in common? That Sophocles would have written this conflate reminiscence of the Alcestis had he not seen that play acted and appreciated the power of its scenic situations may well be doubted; but it will also, I think, appear

[^0]probable in what follows that preparatory to writing the Trachinians he had deliberately refreshed his memory by a reading of the Alcestis. But of this more later. ${ }^{1}$

With the passage in the Trachinians that has just been discussed may be associated another in which again, unless I am mistaken, the Alcestis is imitated. In v. ir8i Heracles asks Hyllus to give him his right hand in confirmation of a pledge ( ${ }^{\circ} \mathrm{E} \mu \beta a \lambda \lambda \epsilon \chi \epsilon i \hat{\rho} a$ $\delta \epsilon \xi \iota a ̀ \nu \quad \pi \rho \omega \dot{\tau} \iota \sigma \tau a ́ \quad \mu \circ \iota$ ). Hyllus is reluctant, but upon Heracles fiercely urging him he stretches out his hand with the words: 'Iסò̀ $\pi \rho \circ \tau \epsilon i \downarrow \omega \omega$, кoưסèv $\dot{a} \nu \tau \epsilon \iota \rho \eta$ '$\sigma \epsilon \tau a \iota$ (v. i184). At Alc. ini8, after Heracles, on the ground that he trusts Admetus's right hand alone (v. III 5), has urged the latter to give his hand to the veiled woman (v. IIIf), Admetus does stretch out his hand with the words: $\mathrm{K} a i \quad \delta \dot{\eta}$ $\pi \rho о \tau \epsilon i \nu \omega$. The fact that this half verse occurs in a scene that we have found Sophocles imitating elsewhere, added to the fact that the scenic situation is a very striking one, makes it pretty certain that Trach. II84 is a reminiscence of Alc. 1 II 8. It is to be noted that Sophocles substituted for Euripides's $\kappa a \grave{i} \delta \dot{\eta}$ the synonymous $i \delta o v ̀$. It is possible that another Euripidean situation in which the scenic business must have been decidedly good - viz. the scene where Medea makes Aegeus take oath - may have been likewise before Sophocles's mind in writing Trach. ir8i sqq. But it is not certain.

Before taking up the reminiscences of the Alcestis that are to be found pretty plentifully in Trach. 896-946 I may note that there is perhaps more in the resemblance of Trach. 869 to Alc. 777 than has hitherto been observed. In the passage in the Alcestis Heracles describes a servant receiving him $\sigma \tau v \gamma \nu \omega ิ \iota \pi \rho \circ \sigma \dot{\omega} \pi \omega \iota \kappa a \grave{\iota} \sigma \nu \nu \omega \phi \rho v \omega \mu$ évos (as we should surely read, with Nauck, for $\sigma \nu \nu \omega \phi \rho \nu \omega \mu$ év $\nu \iota$ ). In the passage in the Trachinians the coryphaeus describes a servant coming out of the house to make an announcement $\dot{a} \dot{\eta}^{\eta} \theta \eta$ (according to the Mss.) $\kappa \alpha i{ }^{2} \sigma \nu \nu \omega \phi \rho v \omega \mu \epsilon{ }^{\prime} \nu \eta$. Now this is the announcement of the entrance of the old woman servant that is to

[^1]deliver a speech (vv. 899-946) reminiscent of the speech delivered by the woman servant in Alc. 153-198; we might, therefore, justly expect to find here a reminiscence of Alc. 136 sq. :


That there is any link between the two passages does not, at first sight, appear ; but Mr. Blaydes has suggested that the certainly corrupt $\dot{a} \dot{\eta} \theta \eta \mathrm{\theta}$ in Trach. 869, which has been changed by several scholars into ả $\eta \delta \eta \eta_{\varsigma}$, was originally кат $\eta \phi \eta_{\varsigma}$,

 contain a conflation of Alc. 777 and Med. 1012 referred to a scenic situation similar to that of Alc. I36 sq. by reason of the occurrence of the verb $\delta a \kappa \rho v \rho \rho o \epsilon i ̂ \nu$ in both Alc. 137 and Med. IO12, and should we not accept кaтךфウ̀s in Trach. 869? ${ }^{1}$

That Sophocles had Alc. 77-1 36 in his mind at this place in the Trachinians is pretty certain, not merely from the reminiscences of Alc. 153-198 in Trach. 899-946, but also from the use of hemichoria in vv. 863-867 to perform in a much shorter compass the function of the hemichoria in Alc. 77-1 36. It is also to be observed that Trach. 871-898 take the place of vv. 141-15I in the Alcestis and that Trach. 896 sq.
$\mu \hat{a} \lambda \lambda o v \delta^{\prime}, \epsilon i \pi a p o v ̂ \sigma \alpha \pi \lambda \eta \sigma_{i}^{\prime} \alpha$

are reminiscent of Alc. I 57


[^2]The words in the Alcestis are part of the prooemium of the servant's $\dot{\rho} \hat{\eta} \sigma \iota$ itself; those in the Trachinians part of the external introduction to the servant's $\dot{\rho} \eta \sigma \iota s{ }^{1}$

We come now to the most obvious likenesses between the Trachinians and the Alcestis. They are as follows (in addition to that just cited):

Trach. 900 '่ $\pi \epsilon i$ $\gamma \grave{a} \rho \dot{\eta} \lambda \theta \epsilon$ (Schaefer: $\pi \alpha \rho \bar{\eta} \lambda \theta \epsilon \operatorname{codd}$ ) $\delta \omega \mu a ́ \tau \omega \nu$ єै $\sigma \omega \mu$ о́v $\eta$

Trach. $904 \beta \omega \mu \circ$ î $\sigma \iota \pi \rho \circ \sigma \pi i ́ \tau v o v{ }^{\circ}$
Alc. 170 sq .
$\pi \alpha ́ v \tau a s ~ \delta \grave{\epsilon} \beta \dot{\omega} \mu$ о vs . .
$\pi \rho o \sigma \hat{\eta} \lambda \theta \epsilon$
Trach. 908 sq.
$\epsilon \iota ้ ~ \tau o v ~ \phi i ́ \lambda o v$ (Naber : $\phi i ́ \lambda \omega \nu$ codd.) $\beta \lambda \epsilon ́ \psi \epsilon \iota \epsilon \nu$ oíк $\epsilon \tau \hat{\omega} \nu$ ס ́́ras,
є゙к $\boldsymbol{\prime} \alpha \iota \epsilon \nu$



Trach. 915-922
ópê $\delta \grave{\epsilon} \tau \grave{\eta} \nu \quad \gamma v \nu a i ̂ \kappa a ~ \delta \epsilon \mu v i o t s$







Alc. 175-184 (omisso tamquam spurio vsu. 178)




${ }^{1}$ Zielinski's notion (Philologus 55 [1896], $5933^{16}$ ) that the ко $\mu \mu 6$ s originally began immediately after Trach. 870 is refuted by Alc. $14^{11-151}$, as shewn above. Zielinski's Excurse zu den Trachinierinnen, Phil. 55, 491-540, 577-633, contains some valuable matter. For the most part, the writer's perversity is only equalled by his prolixity.
${ }^{2}$ Noted also by Zielinski p. $593^{17}$. $\quad{ }^{8}$ Noted also by Zielinski p. $593^{17}$.





Track. $93^{8} \dot{\alpha} \mu \phi \iota \pi i \tau \nu \omega \nu$ (Wecklein: $\dot{\alpha} \mu \phi \iota \pi i \pi \tau \omega \nu$ codd.) $\sigma \tau о ́ \mu \alpha \sigma \iota \nu$ Alc. 403 потì бoîб七 $\pi i ́ \tau v \omega v$ бто́ $\mu \alpha \sigma \iota \nu$
(This and the two following are noticeable as being derived from two other places in the Alcestis. The reason in the case of the first and third of these passages is obvious : the description of the son of Deianira mourning over his dead mother is naturally assimilated to the mourning of Alcestis's son over his dead mother. The scenic situation was a striking and highly emotional one in the case of the Alcestis. ${ }^{2}$ The association of ideas that led to the dovetailing in of a suggestion of Admetus's speech is the easier to understand if we remember that Admetus's words are part of a command that he says he will give to the children.)

Trach. 938 sq.

$$
\begin{aligned}
& \pi \lambda \in v \rho o ́ \theta \epsilon v \\
& \pi \lambda \in v \rho a ̀ v \pi a \rho \epsilon \grave{\varsigma} \text { ढ̈́кє८то }
\end{aligned}
$$

Alc. 366 sq.
$\pi \lambda \epsilon v \rho a ́ \quad \tau^{\prime} \epsilon \in \kappa \tau \epsilon \in \nu a \iota \pi \epsilon ́ \lambda a s$
$\pi \lambda \in v \rho o \imath ̂ \sigma \iota$ roîs $\sigma$ ois
Trach. 942 ف̉ $\rho \phi=\nu \iota \sigma \mu$ ćvos $\beta$ íov (Wakefield: Biov codd.)
Alc. 396 sq.
$\pi \rho о \lambda \iota \pi о \hat{\sigma} \sigma \alpha$ §' $^{\mu} \mu o ̀ v \beta$ íov
$\dot{\omega} \rho \phi \dot{\alpha} \nu \iota \sigma \epsilon \nu$ (Sophocles construed á $\mu o ̀ v$ Biov with ఉ’рф́́v/ $\sigma \in \nu$ )


Before seeking to draw certain conclusions from the resemblances of the Trachinians to the Alcestis it may not be out
${ }^{1}$ Blomfield for $\mu b \nu \eta$ (see Hayley ad loc.).
2 The application of Alc. 396 sq. and 403 to Hyllus seems to make it certain that Alc. 393-403 and 407-415 are to be assigned to the boy (Eumelus), not divided between the girl (393-403) and the boy (407-415) as Lenting thought (Epistola Critica in Eur. Alc. p. 65 sq.).
${ }^{3}$ Noted also by Zielinski p. $594^{17}$.
of place to remark on an odd turn of phrase in the Trachi－． nians which has not been well understood and seems to have been derived from a particular passage in Euripides．In Trach． 914 sq．the old woman servant is made to say：


If we will compare Alc． 34 sq．（a rather striking passage）

$$
\hat{v} v \delta^{\prime} \dot{\epsilon} \pi i \hbar \eta \hat{\eta} \delta \delta^{\prime} a \dot{v}
$$


where we should construe $\chi$ є́ $\rho a$ ф $\rho о \mathbf{\rho \epsilon}$ is（＇keepest thy hand on guard＇）$\tau 0 \xi \xi^{\prime} \rho \eta \dot{\delta} \pi \lambda i \sigma a s\left(=\tau \delta^{\prime} \xi \omega \iota \quad \dot{\sigma} \pi \lambda i ́ \sigma a s\right)$ ，we shall see
 keeping my eye on guard＇：cf．ŏ $\mu \mu a \tau o s \mid \phi \rho o u \rho a ̀\langle\nu\rangle 224$ sq．）． Following out the interlocked order，we shall further connect $\lambda a \theta$ paîos（ $\lambda a \theta \rho a i ̂ o \nu$ an easy scribe＇s slip before ơ $\mu \mu$＇）$\epsilon \pi \epsilon$－ бкıa⿱亠䒑évך．Not merely the striking use of фpovpeì but the interlocked order of words is common to the place in the Trachinians with that in the Alcestis．That the former is derived from the latter seems reasonably probable when we
 фроирєì oo $\mu \mu$＇suggests the Trachinians，the construction of $\dot{\epsilon} \pi i c$ c．dat．with the phrase suggests the Alcestis．

Whether the view just explained of the origin of the idiom in Trach． 914 sq．be right or not，we may，I think，draw this conclusion incidentally from our examination of the idiom， that Trach． 914 and 915 are not to be separated by the inser－ tion of v． 903 （with $\epsilon \mu a v \nmid \grave{\eta} \nu$ for $\dot{\epsilon} a v \tau \grave{\eta} \nu$ ）．Mollweide（as quoted by Nauck）is more likely right in treating v．903， which cannot stand where it does，as due to a scholion on $\lambda a \theta \rho a i ̂ o \nu ~ o ٌ \mu \mu ' ~ \epsilon ̇ \pi \epsilon \sigma \kappa ı a \sigma \mu e ́ v \eta$ ．Its case would thus be some－ what like that of the notorious Ant． $24 .{ }^{1}$

The thesis，which with others quite as perverse Dr．Zielin－ ski defends in the writing that has been cited already，that

[^3]the Trachinians is earlier than the Alcestis and that Euripides in his play borrowed (and not very cleverly) from Sophocles, is completely refuted by the first of the parallels that I have cited between the two plays. Another thesis, proposed by the now distinguished Leyden Hellenist Professor J. van Leeuwen in his Commentatio de Ajacis Sophoclci authentia et integritate (Utrecht, 1881), that the first part of the Trachinians ( $1-875$ ) was written about 430 B.c. under the influence of the Alccstis and the Medca, the rest, which is less strict in metrical form, at a much later period, seems to be quite as convincingly refuted by the fact that the reminiscences of the Alcestis are carried pretty well through the Trachinians, as was shown above. The view taken by Dr. van Leeuwen and discussed by him at considerable length in the book just cited, that Sophocles was constantly touching up his plays, as modern poets change the text of successive editions of their works, can hardly be true, it should seem, to any great extent. Were it so, it would make the dating of many Greek plays a far worse puzzle than it is. This is not the place to discuss the metrical questions involved in the thesis further than to say that Dr. van Leeuwen in his Commentatio disregarded, as have most, the influence of emotional exaltation on the part of the fictitious speaker on the form of the Greek tragic trimeter. I have touched upon the matter in the metrical appendix to my edition of the Ocdipus Tyrannus.

It has been shown that Sophocles borrowed freely from Euripides's Alcestis in the Trachinians, and it is a priori reasonable to infer that other marked likenesses between the Trachinians and other plays of Euripides are due to borrowing by the "Attic Bee." Especially is this likely to be the case in a play the Euripidean character of which is so noticeable, as has often been remarked by scholars. We need not then wait until we have discussed the likenesses between the Medea and the Trachinians before we take the next step toward the approximate dating of our play, but may with
 $\kappa a i \quad \gamma a ̀ \rho$ óv $\sigma \iota \gamma \eta \lambda \grave{o} s \in i$. as a reminiscence of Eur. Suppl.

improvement in one word. ${ }^{1}$ We shall go further, also, and follow Dr. Dieterich's excellent confirmation of Professor von Wilamowitz-Moellendorff's view of the relations of the Hercules Furens and the Trachinians. Dr. Dieterich's discussion in his Schlafscenen auf der attischen Biihne I have already referred to, and it is unnecessary to do more here than refer to his tentative dating of the Trachinians 419 в.с. (op. cit. p. 43). Surely it would seem that 419-410 b.c. is as large a latitude as we can allow in dating the Trachinians. But we must return now to the relations of the Trachinians and the Alcestis.

To say, as Professor Jebb does in his introduction to the Trachinians (p. xxii), that the Hercules Furens and the Trachinians are the only two "experiments" in Greek literature of taking "the legend of Heracles as the basis of a tragedy" "of which we have any clear or definite knowledge" is true only in the narrowest sense of the words. It should be added that, if the legend of Heracles is not the basis of the Alcestis, yet that play is perhaps, as I have ventured to suggest in my introduction to it, the first attempt to bring Heracles as a tragic character - or, at least, a semi-tragic character - before a Greek audience. If we assume that the Alcestis was indeed a sort of dramatic exaltation of Heracles, we shall find that this tallies perfectly with a view of the relations of the Trachinians on the one hand and the Alcestis and the Hercules Furens on the other to which our discussion has been gradually leading us. Let us see what this view is. It may be put in a definite form somewhat as follows :

Sophocles, much impressed by Euripides's Hercules Furens, determines to write a tragedy on a portion of the legend of Heracles. To this end he not only studies the Hercules Furens and adopts from it what serves his purpose, but also reads carefully what is probably the other Attic tragedy, or quasi-tragedy, that deals with Heracles, a play strong in emotion and scenically striking, which he has witnessed and defeated - some twenty or more years earlier, the Alces-

[^4]tis. He writes thus under the spell of Euripides and pays his rival the sincerest compliment, that of imitation.

It would have been well for the worshippers of Sophocles and, at the same time, detractors of Euripides had they better understood their idol's state of mind towards some of Euripides's work. But to return to our subject. We shall not be surprised, when we have learned to see why and how Sophocles came thus to imitate two of Euripides's plays, if he furthermore drew for more than individual lines and brief suggestions upon another strong play of Euripides, a play that had the first place among Euripides's four in the tragic contest of 43 I b.c., when Sophocles was second and Euripides third, the Medea. But this is to encroach upon the next chapter.

## II.

## The Trachinians and the Medea.

The Euripidean character of the prologue of the Trachinians has been more than once commented upon. Hermann Schütz in his Sophokleische Studicn (Potsdam, 1890) puts the matter briefly and well when he writes (p. 390): "Der Prolog des Dramas erinnert an die Euripideische Manier, durch einen längeren Monolog den Zuschauer in die Verhältnisse einzuführen ; denn auf ihn, nicht auf die alte, mit allem genau bekannte Dienerin ist die ganze Rede der Deianira berechnet." But the prologue of the-Trachinians does not resemble that of the Alcestis; such reminiscence of that passage as is to be found, if at all, in the Trachinians is rather to be traced in v.v. 248 sqq., where Heracles's yearlong servitude and its cause are narrated. ${ }^{1}$ On the other hand, the prologue of the Trachinians is more nearly than has been observed hitherto like that prologue among those of Euripides that are extant which is generally thought the best dramatically - the prologue of the Mcdea. About this the (somewhat Wilamowitzian) remarks of Dr. Ziclinski

[^5](Philol. 55, p. $522^{6}$ ) are so apt as to deserve quotation here. They are as follows: "Interessant ist, dass auch Euripides einmal den Versuch gemacht hat, den Prolog psychologisch zu motivieren - das ist der Prolog der Amme in der 'Medea'; damit man es ihm glaube, hat er der Amme die Motivierung

 $\mu o \lambda o u ́ \sigma \eta \eta \in u ̂ \rho o ~ \delta \epsilon \sigma \pi o i v \eta s ~ \tau u ́ \chi a s . ~ G e g l a u b t ~ h a t ~ e s ~ i h m ~ a b e r ~$ doch niemand ; wenigstens hat er den Versuch nicht wiederholt." Is it going too far to conjecture that even if we had the complete works of Euripides we should find this prologue nearly, if not quite, unique, and that Sophocles exercised very deliberate choice in selecting it for imitation? But let us look further into the relations of the two prologues.

In studying carefully the prologue of the Mcdea before I had begun the examination of the Trachinians the results of which I am now presenting I found myself brought to the conclusion that not only had the excisions proposed or put in practice by various scholars been erroneously suggested and made, but that there are no spurious verses in the prologue of the Medea as handed down to us. The details of the prologue of the Medea I shall discuss elsewhere ; suffice it here to point out in passing that, if $\mathrm{vv} .40-43$ be condemned, vv. 38 and 39 and vv. 44 and 45 must keep them company. This clean sweep of eight verses where there is no apparent reason for their insertion may well stagger the boldest hewer of texts and drawer of squared hooks. As for the prologue of the Trachinians, repeated study of it has convinced me that it too contains no spurious verses. To me, as to Professor Campbell, vs. 465 is a sufficient defence of vs. $25 .{ }^{1}$ Now this prologue of the Trachinians has"likewise forty-eight verses. But is this equality in length of the two prologues anything more than a coincidence?. Is there any likeness in the situations and the persons at the openings of the two plays?

[^6]It has been noted by Dr. Dieterich (op. cit. p. 43) as part of the general Euripidean character of the Trachinizus that a трофós is introduced. It may be said in passing that the term tpoфós or 'nurse' is a convenient designation for such personages as the old woman-servant (the ma入aiò oǐкшע $\kappa \tau \hat{\eta} \mu a$ of the Medea and the rpaía of the Trachinians), but that the designation tpoфós is demonstrably correct only for the Hippolytus. However, that is a detail; Dr. Dieterich's observation is just. But we may go further. In the Mcdea it is the rpoфós (to use the stock name) that speaks the prologue, describing the misery of the heroine as a deserted wife. In the Trachinians there is a decided gain from the point of view of the action of the play in making the heroine as deserted wife deliver the prologue and describe her miseries to the rpoфós. And let it not be objected that the desertion of Deianira is different from that of Medea: Heracles has practically done what Jason had, as we find out in
 סó $\mu \circ \iota \sigma \iota \nu$ є́ $\pi \epsilon ́ \sigma \tau a$ (Med. 443-5) describe Deianira's state quite as well as they do Medea's.

So much for the prclogues: let us examine the other parallels between the Trachinians and the Medea. In both plays the heroine makes use of a poisoned garment. In the Mcdea the injured wife uses a poisoned garment (together with a poisoned diadem) to kill her rival: in the Trachinians the injured wife uses a poisoned garment to recover her husband's affection. In the Medea the injured wife uses "evil arts" wittingly: in the Trachinians the injured wife seeks to avoid the use of "evil arts," but does so unwittingly, supposing that what she is employing is but a philtre. The parallels just cited involve differences and contrasts in the conduct of the two heroines. To these contrasts may be added others. Thus, in the Medca the injured wife is a barbarian : in the Trachinians she is a Greek. The injured wife in the Medea exhibits barbarian manners: the injured wife in the Trachinians exhibits Greek manners. In the Mcilea the poisoned articles of dress are handled rather carelessly: in the Trachinians the poisoned shirt is handled with great
caution. In the Medea the heroine is a sorceress, and the element of magic is prominent : in the Trachinians the heroine is not a sorceress, and the element of magic is hardly present. Some of the points that have been set forth above call for discussion.

In Trach. 582-6 Deianira says to the chorus, after she has described the preparation of the shirt for Heracles:

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Ka\kappaás \gamma\epsilon (ego: \deltaè codd.) \taué\chívas (Blaydes: \tauó\lambda\muas codd.)
    \mu\eta\mp@subsup{\tau}{}{`}
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\mu\epsilon\mu\eta\chiáv\eta\tauа\iota \tauойр\gammaэ\nu 一 \epsiloni้ \tau\iota \mu\etaे \deltaок\hat{\omega}
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Does not this read like a tacit criticism - or, perhaps better said, a covert criticism - of Euripides's heroine? Is not the gentle and patient Deianira meant to be a foil to Euripides's fiery-souled Colchian? Indeed, do we not read in the Medea, in a speech of Jason's that must represent, to a certain extent, the Greek point of view, this criticism of Medea's murder of
 (Med. i339 sq.)? Surely the conjecture may be hazarded that Sophocles desired to depict in his Deianira the humaner spirit of the Greek wife, as contrasted with the unrestrained passion of the barbarian. The latter character did not suit the genius of him that was ever єथैкодоs.

I have noted above the careless manner in which the poisoned articles of dress appear to be handled in the Medea. ${ }^{2}$

[^7]Their magic quality is treated as a matter of course, and but little regard seems to be had by the poet to the element of verisimilitude in the working of their poison. This careless. ness must, I think, have struck other students of the Mcdea, as it had me even before I thought to compare the caution employed by Deianira in the Trachinians. The great pains taken by Sophocles in his play to lend a certain air of verisimilitude to the working of the poison - pains which have prompted Dr. Zielinski to make of Sophocles an accomplished physician and toxicologist - these are, I venture to think, but the attempt of Sophocles to improve on his rival's treatment. Whether the poisoned garment was originally a part of the legend of Medea as employed by Euripides or was imported into it by him is a question that lies beyond the bounds of our present enquiry.

It may not be out of place here to note a certain resemblance between Euripides's Medea and Clytaemnestra as she is drawn by Aeschylus in the Agamemnon. Dr. Zielinski thinks (op. cit. p. $5^{16^{11)} \text { ) that Euripides in his Electra }}$ vv. 1032 sqq. imitated Trach. 536 sqq. -a matter that we should like to be clearer about, inasmuch as it would aid us to a more exact dating of the Trachinians. The two passages are as follows:

Trach. 536 sqq.


 537


Eur. El. ro32 sqq. (Clytaemnestra loquitur)



pened to wrench off with his hand and split (v. 522, quam forle saeva sciderat avolsam manut)!
${ }^{1}$ The transposition of $v v .537$ and 538 seems to me to be pretty clearly demanded by the sense of the sentence.

We might draw up the following brief scheme of comparison:

1. Clytaemnestra and Cassandra (Agamemnon and Eur. El. l.c.).
2. Medea and Glauce.
3. Deianira and Iole.

I and 3. Clytaemnestra and Deianira kill husband.
I and 2. Clytaemnestra and Medea kill rival.
2 and 3. Medea and Deianira use poisoned garment. ${ }^{1}$
I and 3. Rival brought into house.
2 and 3. Rival a second wife (or practically so in 3).
I and 3. Rival taken in the sack of a city.
This comparison has, I venture to think, a certain value for the study of the developement of tragic motives.

Enough has been said already, I venture to think, to prove that in writing the Trachinians Sophocles .had the Medea before him, and that in the case of this play, too, he paid Euripides the compliment of imitation. But I would further call attention to two passages in the Trachinians in which Sophocles seems to have been influenced in details by the Medea. In Trach. 602 Deianira describes the poisoned shirt to Lichas as $\tau o ́ v \delta \epsilon \tau a \nu a u ̈ \phi \hat{\eta}$ (Wunder's certain correction: see Jebb ad loc.) $\pi \in ́ \pi \lambda o \nu$. The fact that $\tau a v a \ddot{u} \phi \hat{\eta}$ is glossed by the Greek lexicographers by $\lambda \epsilon \pi \tau o \ddot{\partial} \phi \hat{\eta}$ and the inappropriateness of the term $\pi \epsilon \in \pi \lambda o s$ to describe the garment in question (see on both points Jebb ad loc.) make it almost certain that Sophocles was thinking of the $\lambda \epsilon \pi \tau \grave{o} \nu \pi \epsilon \in \pi \lambda o \nu$ of Med. 786 and was improving on the adjective. Again, Heracles кó́ $\mu \omega \iota \tau \epsilon \chi$ аí $\rho \omega \nu$ каì $\sigma \tau о \lambda \hat{\eta} \iota$ ( Trach. 764) resembles, as has been noted (see Jebb ad loc.), Glauce $\delta \omega \dot{\rho} o \iota_{s} \dot{v} \pi \epsilon \rho \chi a i$ povoa (Med. II65). Even the phrase ко́б $\mu \omega \iota \tau \epsilon \kappa a i ̀ ~ \sigma \tau о \lambda \hat{\eta} \iota ~$ is more appropriate to Medea's double gift than to Deianira's single one.

[^8]
## III.

Cicero's Translation of Trach. 1046-1102.
A more careful comparison than has yet, so far as I am aware, been made of the translation of Trach. 1046-1102 which Cicero inserted in the Tusculanae Disputationes, 2. 8, 20-9, 22, will prove of value, not only for our knowledge of the text of this portion of the Trachinians, but also for our knowledge of Cicero's acquaintance with Greek and his manner of translating it. I have deemed it the clearest and simplest method of pursuing this comparison to place side by side the translation and the original and then to append thereto certain critical and explanatory notes. The text of Cicero is based on Baiter-Kayser and Mueller, that of Sophocles on Jebb. The two passages are numbered continuously to facilitate reference. I shall use L. I, 2, etc., in referring to the Latin; G. I, 2, etc., in referring to the Greek. The italics are intended to mark those words and phrases in which Cicero most closely Graeca expressit.
O multa dichu graviu, perpessu aspera,
quae corfore exanclata atque animo pertuli;
nee mihi Iunonis terror implacabilis
nec tantum invexit tristis Eurystheus mali,
; quantum una araecors Oeneo patre edita.
Haec me inretivit veste furiali inscium
quae lateri inhucerens morsu lacerat ariscera
wryuensque graviter pulmonum hausit spiritus ;
iam decolorem sam-zuinem omnem exsorbuit:
sic corpus clade horribili absumptum extabuit,
ipse inligatus peste interimor textili.
Hos nen hostilis dextra, non terra editz
moles Gigantum, non biformato impethe
Centaurus ictus corpori infixit meo,
${ }_{15}$ non Graia $\tau$ zis, non barbara ulla immanitas
non saeva kerris gens relegata ultimis
quas peragrans undique omnem efferitatem expuli,
sed fenwinae tir feminea interimormanu.
O natt, vere hoc nomen usurpa patri;
ne me occidentem matris suferet caritus.
Huc adripe ad me manibus abstractam piis;
iam cernam mene an illam potiorem putes.
Perge, aude, nate, inlacrima patris pestibus,
miserere: gentes nostras febunt miserias.
${ }_{25} \mathrm{Heu}$, virginalem me ore ploratum eilere
quem tuidit nemo ulli ingemiscentem malo.
Ecfeminata virtus addlicta occidit.
Accede, nate, adsiste, miserandum aspice
evisceratum corpus laceratum patris.
Videte, cuncti; tuque, caelestum sator,
iace, obsecro, in me zim coruscan fulminis.
Nunc, nurnc dolorum anxiferi torquent tertices,
nunc serpit arlor. O ante victrices manus,

- pectora, o terga, o lecertorum tori,
frendens efflavit graviter extremum halitum?
Haec dextra Lernam taetra mactata excetra
pacavit? Haec bicorporem adflixit manum?
Envanthiam haec vastificam abiecit beluam?












 oтpatòs 「іүávтшv oúte Oи́pstos Bia





















'Avaî, ẻ тálas, acuî.



$1085{ }^{\prime} \Omega v x \xi^{\prime} A i \delta \eta, \delta^{\prime} \xi_{a l} \mu$ '.

> tricipitem eduxit hydra generatum canem?
> Haec interemit tortu multiplicabili draconem auriferam obtutu adservantem arborem?
> Multa alia victrix nostra gustavit manus, 45 nec quisquam e nostris spolia cepit laudibus.
L. I bears witness to the fact (as has been noted: see Jebb ad loc.) that Cicero's text of Sophocles was the same as ours in the words каi $\lambda o ́ \gamma \omega \iota$, for which Bothe's коц̀ $\lambda o ́ \gamma \omega \iota$ is generally (and rightly) accepted, as above. It seems probable that the corruption $\kappa a i$ for $\kappa o \dot{v}$ was universal in the texts of Sophocles in Cicero's time, and that it is one of the very early blunders in Sophocles's text, like the confusion of the negatives at the beginning of the Antigone. (I hold är $\eta$ s ätcp in Ant. 4 to be original: see Classical Revicw XIII, 386.) It may be added that Wunder and van Herwerden thought that the error in Sophocles's text lay, not in кai, but in the following words. The latter of these scholars writes in his Exercitationes Criticae, p. 127: Quod reponendum suspicabar: кaì $\lambda o ́ \gamma \omega \nu \pi \epsilon \in \rho a$, iamdudum ante me proposuisse Wunderum nunc video. Certa est, si qua alia, emendatio.In L. 2 (where, by the way, it seems very likely that Cicero wrote exanclavi, not exanclata) it has been supposed that Cicero's animo bears witness to a text different from the traditional one. The truth seems to be, as Dr. Zielinski appears to hint ("Excurse zu den Trachinierinnen," Philologrus 55 [1896], 625), that Cicero crossed, or conflated, his translation of Sophocles with a reminiscence of Eur. Alc. 837, where
 is the more probable from the fact that we have a certain case below of a passage in which Sophocles and Euripides are conflated by Cicero in his translation. It may be noted in passing that the Greek does not warrant Cicero's treating тол入à кака̀ as a vocative, or rather in translating as if the Greek had been something like : ' $\Omega \pi \boldsymbol{\pi} \lambda \grave{a}$ $\delta \grave{\eta}$. . . какá, â . . . $\mu_{0} \chi \theta \dot{\eta} \sigma a s$ é $\chi \omega$. But this is a mere detail. - In L. 4 sq. $\operatorname{tan-}$ tum-quantum may indicate that Cicero read toroûtovö $\sigma o \nu$ in G. 3 and 5. He could just as well have written tale
-quale, so far as the verse is concerned. But this is uncertain. - L. 5 (in which I have substituted Bentley's Oenco patre for the traditional Oenei partu, on which phrase see Sorof ad loc.) is interesting, furthermore, as indicating either how Cicero's Greek text was pointed or how he thought it should be pointed. He seems to have made a full stop after $\kappa o ́ \rho \eta$ (G. 5) and to have missed the construction of oiov ró ${ }^{\circ}$ . . . кa甘 $\hat{\eta} \psi \in \nu$. This criticism, if just, does not speak well for Cicero's knowledge of Greek. But we shall find other things quite as bad. It may be noted here that vaccors is no translation of $\delta 0 \lambda \hat{\omega} \pi \iota s$. - The me inscium of L. 6 , where we should expect a translation of the iфavtò of G. 7, looks as though Cicero had read äфaעtov (sc. $\mu \epsilon$ ); but, when we come to his translation of G. 12 in L. 11, we find textili answering to $\dot{a} \phi \rho \dot{\sigma} \sigma \tau \omega t$. Had Cicero's text äфpartov in the place of $\dot{v} \phi a v$ $\tau \grave{\nu} \nu$, and $\dot{\dot{\phi} \phi a \nu \tau \hat{\omega} \iota}$ in the place of $\dot{\alpha} \phi \rho \dot{\alpha} \sigma \tau \omega \iota$ ? or did he deliberately shift those words in his translation to suit a whim? A hard question that to answer. - In L. 7 viscera seems clearly to be a translation of ėбхáтas $\sigma \dot{\rho} \rho \kappa a s$ (G. 8 sq.). - The urguens of L. 8 looks as though Cicero had had before him


I venture to think that we are not justified in assuming that such is the case. When we remember how constantly ovvor$\kappa \epsilon i ̂ \nu$ is used of wedlock, and how Horace (Carm. 1. 5, 2) uses urguere in about the sense of amplectio a lover's embrace, have we not, perhaps, the explanation of Cicero's urguens here?- In L. 9 decolorem is, of course, a bad, though in form a very literal, translation of $\chi \lambda \omega \rho o ̀ \nu$. It is plain here that Cicero did not understand his Greek. - From corpus extabuit in L. Io it is reasonably certain that Cicero's text had not $\delta_{\iota} \epsilon^{\prime} \theta a \rho \mu a \iota ~ \delta \epsilon ́ \mu a s$, the prevailing reading in G. II, but $\delta \iota \epsilon$ $\phi$ Өaptal $\delta \epsilon \mu \mu a s$, which (auctore Jebb) is the reading of B ( $=$ cod. Parisin. 2787, saec. xiv). Cicero's Greek text here departs from the current of the tradition that has come down to us, but in a minor point. - L. I3 moles. Cicero might, as we see by comparing L. 38 with G. 50, have rendered more exactly by manus. - The fact that in L. i3 sq. Ө́petos 及ía of G. I4 is answered by biformato impetia Centaurus warrants the question whether Cicero read $\theta \dot{\eta} \rho \epsilon \iota \circ$ and not $\phi \dot{\eta} \rho \epsilon \iota \circ=$ Kevtaúpelos, Centaureus. It may fairly be queried whether Sophocles himself may not have written фи́pєוos here and below (G. 5 I) $\phi \eta \rho \hat{\omega} \nu$, where we now read $\theta \eta \rho \omega \hat{\nu}$. Homer's
 would be very familiar to Cicero. - But it is of even greater interest to observe how Cicero misunderstood and mistrans-


 $a ̈ \gamma \lambda \omega \sigma \sigma o s\langle\beta i a\rangle$, and, besides that, he thought that $\beta$ ía, instead of being part of a periphrasis, had its most literal force. His impetu, vis, and immanitas demonstrate this most clearly. This is certainly staggering ; but we must accept it.-In L. 17 it may be noted that peragrans represents iкó $\mu \nu$ and undique omnem ecferitatem expuli кaӨaípш in G. I6. Cicero translated pretty frecly at this point and gets the terris relegata ultimis of L. 16 partly out of the raiav of G. 16 and partly out of the notion of extent suggested in the ö $\sigma \eta \nu$ of G. 15.-L. 18 (where feminae for the traditional feminea seems to have been suggested by Bentley first)
condenses into one verse G. 17 and 18 , and Cicero comes out almost even in number of verses with the first well-marked division of the Greek. Unfortunately, his Latin gives us no light on the original reading of the surely corrupt G. 17.
 pretty satisfactory and could easily have given rise to the traditional text. It is certainly 'elegans coniectura,' as Hermann says. - In L. 21 piis would presumably mean 'dutiful,' as acting in accordance with a father's command. But the word answers to nothing in the Greek, and it is just possible that Cicero wrote tuis ( $=\sigma a i ̂ \nu$ G. 21). - From L. 22 it is quite clear that G. 24 was not in Cicero's text. Here Cicero's text was different from that which has come down to us in lacking an interpolation. The interpolation, as Nauck rightly judged it to be, is due to some one, of a time later than Cicero's (in all probability), that failed to understand $\dot{o} \rho \hat{\omega} \nu$ in Trach. I068. It goes with eí $\hat{\omega}$ oáфa-'that I may know surely by the witness of my own eyes (op $\hat{\omega} \nu$ ) whether it is for me that you feel the more or for her'-, but our interpolator understood 'that I may know surely whether it is for me that you feel the more or for her when you see - ' and so wanted an object for $\dot{o} \rho \hat{\omega} \nu$. Surely the case is a plain one. I add that Cicero's rendering of $\epsilon i \delta \hat{\omega} \sigma a \dot{\phi} a \dot{o} \rho \hat{\omega} \nu$ by cernam is one of his best touches, really a lucky hit. - The expan-
 miserias (L. 24) reads like a reminiscence of the mourning of the nations with Prometheus in Aesch. Prom. 406-413, a passage that was doubtless very familiar to Cicero. He translates from the Prom. Vinct. in Tusc. 3. 31, 76; and here within a few lines he begins his translation from the Prometheus Solutus. - In L. 28-33 (med.) Cicero, who in the first division of the speech had kept pace very closely in number of verses with his Greek original and who up to this point has 27 verses against 29, begins to grow sketchier in his treatment, as though he were growing weary of his task. He omits the greater part of Gr. 33 ( $\delta \in i \xi \omega \gamma$ خà $\rho \ldots \kappa a \lambda \nu \mu \mu a ́-$ $\tau \omega \nu)$, and renders what remains of Gr. 32 sq. with great freedom. Of G. 34-36 only 'I $\delta o u ̀ ~ \theta \epsilon a ̂ \sigma \theta \epsilon, \pi a ́ \nu \tau \epsilon$, , is rendered.

He omits, also, to translate G. 40 sq. and G. 43 sq. from סaivvatas to $\epsilon \xi \dot{\xi} \rho \mu \eta \kappa \epsilon \nu$. What remains of G. 37-43 he renders pretty loosely and with a very free arrangement. Thus: munc serpit ardor (L. 33) is made out of G. 37 (ardor from ย้ $\theta a \lambda \psi \in \nu$ ) ; munc, nunc dolormm ...vertices (L. 32) is made out of G. 38 sq.; and tuque... fulminis (L. 30 sq.) is from G. 42 sq. ("Evбєוซov . . . кєpavขoû). Sir Richard Jebb's remark in defence of Trach. Io69, that "Cicero wholly ignores vv. 1085 ff .: he ignores vv. 1080-1084 also, except in so far as their general sense is blended with his version of 1088 f .,
 substance merely of G. 47-49 (med.) is given in L. 35 sq., and L. 36 is practically all Cicero. - It is curious to note that in L. 37 excetra represents vi $\delta \rho a \nu$ of G. 49, whereas in L. 4 I hydra is used to represent 'E $\chi$ í $\delta \nu \eta$ s of G. 54, which Cicero evidently took for a common noun. Cicero probably connected excetra and é $\chi \chi \delta \nu a$ etymologically: he therefore reversed $\tilde{v} \delta \rho a \nu$ and $\epsilon \chi \chi i \delta \nu \eta \varsigma$ (as he understood it) in his translation. This lends colour to the supposition that he reversed the adjectives in G. 7 and 12. - In rendering G. 5 I and 53 Cicero omits, as in the case of G. 48 , the somewhat trailing descriptive epithets of Sophocles. - We come now to what is in some ways the most interesting point of the whole translation. Cicero expresses G. 54 sq. тóv $\tau \epsilon \chi \rho v$ -
 the way, Nauck was probably right in thinking tóтoוs a gloss ; his $\chi$ Өovós may well be what Sophocles wrote) by : Haec interemit tortu mulltiplicabili $\mid$ draconem auriferam obtutu adservantem arborem. Here draconem represents ठра́коута, auriferam arborem fairly well reproduces $\chi \rho \sigma \sigma \epsilon \in \omega \nu \mu \dot{\eta} \lambda \omega \nu$, and adservantem (though hardly obtutu adservantem) gives the thought of фúdak'. But where does the rest come from? Plainly out of Euripides's Medea or Ennius's version of it ; for in Med. 480-482 we read: סрáкоขтá $\theta^{\prime}$ ôs $\pi a^{\prime} \gamma \chi \rho v \sigma o \nu$

 of tortu multiplicabili ( $\sigma \pi \epsilon$ ípaus $\pi о \lambda v \pi \lambda$ о́коиs) and also the

proves for the text of Cicero that the conjecture obserianten is without foundation. It looks, too, as if $\kappa \tau \in i=1 \nu a \sigma^{\prime}$ were the original of intercmit. If that be so, we have evidence as early as Cicero's time (and perhaps as early as Ennius's) for $\kappa \tau \epsilon$ iva ', for which the clever suggestion коьн $\hat{\omega} \sigma^{\prime}$ has been made. If $\kappa \circ \iota \mu \hat{\omega} \sigma^{\prime}$ is what Euripides wrote, the corruption is probably an early one. - In L. 44 it is perfectly plain that gustavit (representing '̇ $\gamma \in v \sigma \dot{a} \mu \eta \nu$ ) is what Cicero wrote, not lustravit, which is the reading of the Mss. Any intelligent scribe staggered by the unfamiliar metaphor would have been likely to substitute the familiar lustravit for the strange gustazit.

In conclusion it may be remarked that the study of this translation enables us to estimate with greater justice the degree of literalness with which we are to take Cicero's reference to the Roman plays that were doubtless his models as "fabellas Latinas ad verbum e Graecis expressas" (de fin. I. 2,4 ) ; and we can understand, too, from the kind of knowledge - or ignorance - of classic Greek that he displays how he could quote with apparent satisfaction (ad fam. 7, 6) Ennius's murdering of Eur. Med. 214 sqq. (See PAPA. 1900 [Special Session], xxviii sq.)

# II. - Remarks on the Water Supply of Ancient Rome. 

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The Commissioner of Water Supply of the City of New York, in his report for the year 1900, remarked that the question of "public water supply transcends every other subject and object of municipal government in importance and in immediate effect on every human being of whatever condition of life." Whether the Commissioner was aware that he was' merely amplifying the Pindaric ă $\rho \iota \sigma \tau o \nu \mu \hat{e} \nu$ v̈ $\delta \omega \rho$ may be matter for doubt; not so the truth which he expressed, for with it everybody will agree. What is true now of the life of a modern municipality in so fundamental a concern must in great part have been true of the life of an ancient municipality, and therefore it behooves all students of ancient Roman life to consider what can be learned of the water supply of ancient Rome. Not to go into this subject in details, I shall at present confine myself to the consideration of the amount of public water supply available in Rome down to the end of the first century a.d.

Our authority on this point is of course that honest and painstaking official, Frontinus, who became water commissioner in the year 97 A.D., and who was, to judge from his own writings, the model of what a public official ought to be. Justly, therefore, he has been compared to the late Colonel Waring by Professor Bennett, in a recent excursion from the somewhat arid, though still, I think, potential plains of syntax into the definiteness of an article in the Atlantic. But Professor Bennett is not the only American who has written on Frontinus. Mr. Clemens Herschel, a well-known hydraulic engineer, published two years ago a volume invaluable for our topic. It contains a facsimile of the manuscript of Frontinus on the Aqueducts of Rome (here published for the first time), an excellent English translation, and an explana-
tory commentary written from the point of view of the modern engineer. Both classical scholars and practical engineers owe a debt of gratitude to Mr. Herschel, who is, I believe, the only one of his fraternity who has shown during the last hundred years an intelligent interest in the ancient history of his profession.

In the course of his book Mr. Herschel endeavors to make a conservative estimate of the amount of water supplied daily to the Romans by the nine aqueducts, the last of which was completed in 52 A.D. It would indeed be very interesting if we could learn this amount, so that we could compare the water supply of ancient Rome with that of our own great cities. But unfortunately it is, I think, impossible to arrive at any figures which shall even approximate to exactness. This statement is entirely at odds with those which are to be found in modern handbooks on antiquities. For example, in Smith's Dictionary of Greek and Roman Antiquities (I, p. 150), we are told that the supply amounted to 332 million gallons a day ; in Middleton's Remains of Ancient Rome (II, p. 349), to about 340 million; in Lanciani's Ruins and Excavations of Rome (p. 58), to about 423 million ; and these are fair samples of the figures which are given in the French and German books. Now, what would such supplies amount to per capita (to use the term of modern water reports) of the population? We cannot be certain about the number of inhabitants of ancient Rome; but if we accept the estimate of a million for the time of Augustus, we should have from about 330 to 420 gallons a day as the per capita rate; or, if we suppose that the population had grown to a million and a half by Vespasian's time, ${ }^{1}$ we should have a per capita rate of from 220 to 280 gallons a day. As either of these estimates gives a much greater allowance than that made by any modern system of water supply, the books regularly go on to explain that this large allowance was made necessary by the constantly running public fountains, the

[^9]private fountains, the great public pools and baths, the provision for sham naval fights, etc. But I am inclined to think, on a priori grounds, that the requirements of ancient Rome were not greater than those of a modern metropolis perhaps even not so great. Consider, for instance, our hotels and apartment houses, great and small - in how many different public rooms, including lavatories and latrinae, is water constantly running. And so in the great business blocks and public buildings. The running water in all these is to be compared with that in the public fountains of Rome; for our public fountains are still comparatively few, although the number is larger now than formerly. Consider also the water used for street sprinkling, for mechanical and manufacturing purposes, by railroad, gas, and electric light companies, breweries and sugar refineries, etc. Many new industries unknown to Rome are gathered in our cities, and the old industries are still going on under higher developments. I find, therefore, no defence in the supposed larger requirements of ancient Rome for the enormous per capita rate which the statements in the handbooks imply. And so on this ground alone I should doubt these statements.

Mr. Herschel also doubts them, but on other grounds. He points out that they must necessarily be based on the figures found in Frontinus, who gives the water supply of each aqueduct in quinariae. But the quinaria is a variable unit and therefore absolutely unscientific. It shows us nothing about the volume, for it is merely the measure of the area of a cross section of water in a pipe of a certain arbitrary size (known to us, but not necessary to specify here). As Mr. Herschel remarks, the volume cannot thus be measured ; for it depends not only on the size of the pipe but on the velocity of the current moving in it; and this in turn on the answer to the question whether the water is discharged into free air, into still water, or into flowing water. It depends also upon the "head," that is, upon the depth of the basin from which it is drawn, and likewise upon the length of the pipe itself and its declivity. Now all these are points which Frontinus altogether ignores, if indeed in his day he could
have had any but the vaguest ideas about the causes and ef. fects of the velocity of a stream in a pipe. And further, he uses his unit quinaria of the same pipe both at its intake and its delivery, although the velocity was presumably not the same at these two points. Obviously it is impossible to reach any exact figures about volume from such data as he gives.

Whence come then the figures given in our handbooks? They appear to be based, as Mr. Herschel remarks, upon a calculation put forth very cautiously by a French savant, De Prony, in i8if. ${ }^{1}$ He tried to find the value of the quinaria by comparing it with the unit employed in Rome in his own day, and reached the conclusion that it was about 56 cubic metres, or 15,000 gallons (American) in 24 hours. Now as the total number of quinariae delivered every day by the nine aqueducts was, according to Frontinus, I4,OI8, this would give about 200 million gallons as the daily supply of ancient Rome. But De Prony deliberately based his estimate on two assumptions: first, assuming that the head acting on the quinaria was equal to its length; secondly, assuming that the quinaria was discharging into free air. But neither of these assumptions have we the right to make - certainly not the latter, for the quinariae did not discharge into free air, but out of the delivery tanks into the pipes that ran to buildings, fountains, etc. Still, De Prony's principle has been adopted and his figures in details amplified until we get in our books the vast number which I have cited.

Observing these fallacies, Mr. Herschel has tried to get a better idea of the amount of Roman water supply from some more recent investigations made by Colonel Blumenstihl, an engineer. ${ }^{2}$ His method was as follows: he measured the actual velocity of the Aqua Marcia at the present time at a point near its intake, and found it to be $3 \frac{1}{4}$ feet per second.

[^10]At about this point Frontinus says that it had 4690 quinariac. The proper calculation readily shows that a quinaria pipe running at this rate per second was discharging about 9250 gallons. But the term quinaria was, as we have seen, used by Frontinus of the amount of water at other points in the aqueduct, - at its point of discharge for instance. The term, therefore, was employed of water flowing with less velocity for example, at the rate of two feet or even of one foot per second. In other words, as Mr. Herschel remarks, the value of a quinaria might range from about 9000 gallons in 24 hours to about 2500 gallons. Taking a liberal average (say 6000 gallons), he calculates that the total of 14,018 quinariae delivered daily by the nine aqueducts may have amounted to about 84 million gallons a day. And this amount was, according to Mr. Herschel, the maximum of Roman water supply. He goes on, however, to observe that, according to Frontinus, a good deal of water was either wasted by leakage along the route or diverted by being drawn off illegally by individuals before it reached the distributing points in Rome. But the figures given by Frontinus are exclusive of such wastes and thefts. This is a fact which Mr. Herschel seems not to have observed when he proceeds to reduce his 84 million gallons by more than one-half in order to find the actual supply minus these thefts and leakages.

If, now, we accept the estimate of 84 millions, and suppose that this supplied a million people, we get a per capita rate of 84 gallons a day ; or for a million and a half of people, 56 gallons a day. It must be remembered that this estimate is almost purely conjectural, for it depends only upon the actually measured velocity of a single aqueduct near its point of intake. Still, it is obviously more trustworthy than the figures which we find in our handbooks, and it may therefore be compared with the water supplies of several cities in the United States. The figures for these are taken from reports kindly furnished to me, either in print or letter, by the water commissioners of the various cities, and are for the year 1901, except in the case of Chicago, which is for 1900. They represent actual consumption, not possible supply,
which could not be given in all cases. The figures for Rome represent supply. But the discrepancy makes no difference to my argument, for it will be seen that in all but two cases the per capita consumption in the modern cities is greater than the per capita supply of 84 gallons estimated for Rome. The figures are as follows:-

| City. | Average daily consumption in gallons. | Per capita consump. tion in gallons. |
| :---: | :---: | :---: |
| Cambridge | 7,520,976 | 80.7 |
| Borough of Brooklyn, N.Y. . | 97,000,000 | 83 |
| Baltimore . | 56,000,000 | 100 |
| Boston . . . . . . . | 101,492,000 | 120 |
| Boroughs of Manhattan and The Bronx, N.Y. | 275,000,000 | 134 |
| Chicago . . | 322,599,630 | 161 |
| Philadelphia . | 279,975,453 | 211.9 |

From these figures we see that in the city of Cambridge ${ }^{1}$ and the borough bf Brooklyn the per capita consumption is less than the 84 gallons of supply estimated for Rome. In passing we observe that Brooklyn, with a population of $1,166,000$ (or about that which is generally estimated for Rome), has a consumption ${ }^{2}$ almost exactly equal to Mr . Herschel's estimate of the Roman supply. We note further that the consumption of Boston is nearly one-half as much again as the supply of Rome; the consumption of the boroughs of Manhattan and The Bronx is more than half as much again; the consumption of Chicago is nearly twice as great ; and finally the consumption of Philadelphia is more than two and a half times the supply of Rome. If the population of Rome is taken at a million and a half, the excess of per capita rate in favor of modern cities will be vastly greater. Now the result of these comparisons is just what I should,

[^11]on my a priori grounds, have expected to reach; namely, that the water supply of ancient Rome was not so great as that which a large city in modern times requires.

We must not forget, however, that this conclusion is based upon conjectures about the amount of supply and the number of inhabitants of Rome. But it may also be reached, I believe, without any conjecture at all in an entirely different manner; that is, by showing that the public water supply in modern cities has increased from time to time in greater proportion than the supply of Rome increased. I have drawn up from Frontinus a table which shows the comparative increase of Roman water supply with the building of the different aqueducts. Necessarily it is expressed in quinariae, but this does not affect my purpose. The table gives also the dates at which the aqueducts were built.

| Aqueduct. | Date. | Supply in quinariae. | Total supply. |
| :---: | :---: | :---: | :---: |
| Appia | 312 в.c. | 704 | 704 |
| Anio Vetus . | 272-269 | 1610 | 2314 |
| Marcia | 144-140 | 1935 | 4249 |
| Tepula | 125 | 445 | 4694 |
| Julia . | 33 | 803 | 5497 |
| Virgo . | 19 | 2504 | 8001 |
| Alsietina . | Augustan | 392 | 8393 |
| Claudia | 38-52 A.D. | $2812{ }^{1}$ | 11,205 |
| Anio Novus | " | $2813{ }^{1}$ | 14,018 |

From this table it appears that it had not been found necessary to double the supply between the time of Cicero, who died in 43 b.c., and the completion of the Claudian and New Anio aqueducts in 52 A.D., a period of 95 years, including the Augustan age with all its grandeur and development. After the building of these two aqueducts it was almost tripled. But take the city of New York. The consumption in 1860 was 54 million gallons; in 1900, after a period of

[^12]only 40 years, it had become 255 million, or 4.7 times as much. I am careful here to compare only the present borough of Manhattan with what was the old city of New York. In the same period the per capita consumption has doubled. The year 1860 is the earliest for which figures could be furnished to me by the New York Commissioner of Water Supply. For Boston we can go back farther, and it appears that since 1850 , in the period of 51 years, the per capita consumption has increased nearly 2.9 times (from 42 gallons to 120). In Baltimore and Philadelphia, in the 50 years from I852 to 1902, the per capita consumption has increased 7. I and 6.3 times respectively (from 14 to 100 gallons, and from $33 \frac{86}{190}$ to 2 II. 9 gallons). Chicago (but this is of course a most peculiar case) had in 1854 a per capita consumption of 8.9 gallons, which had risen in Ig00 to 16I gallons. During the last thirty years it has increased 2.2 times.

It appears, therefore, that we cannot trust our books on antiquities, and that until other evidence is produced we should believe that the Roman uses for water, and consequently the water supply, were less than those of a modern metropolis.

III．－On Certain Sound Properties of the Sapphic Strophe as employcd by Horace．

By Professor Leon J．RICHardSon， university of california．

The Sapphic Strophe is composed of four verses：three Lesser Sapphics and an Adonic by way of clausula．

$$
\begin{aligned}
& \text { ニレ|ユ>|ユ\|~|ユレ|ユし }
\end{aligned}
$$

$$
\begin{aligned}
& \text { ニッリノ }
\end{aligned}
$$

In the Odes of Horace 55 Sapphic Strophes are found in Book I， 40 in Book II， 56 in Book III，and 54 in Book IV and the Carmen Saeculare．This amounts to 615 Lesser Sapphics and 205 Adonics．The present inquiry will take up（A）the Lesser Sapphics，（B）the Adonics，and（C）the strophe as a whole．

## A．

I．Caesura and Diaeresis．
（a）The Aeolic poets regarded the Lesser Sapphic verse as a single colon，unbroken by any regularly placed caesura or diaeresis．Horace，however，in composing verses of this kind incorporated a main caesura and thus resolved the verse into two cola，as appears from the fact that a word ends with the fifth syllable in 92 per cent of his verses，the others in every case having a word ending with the sixth syllable． Christ thinks this pause is occasioned partly by the three long syllables standing in succession in the third，fourth，and fifth places of the Horatian verse（the fourth syllable in the Greek Lesser Sapphic is generally short），partly by a strong predilection for the penthemimeral caesura induced by Horace＇s familiarity with the dactylic hexameter．It is inter－ esting to note in this connection that Horace＇s verses tended
to revert to the Greek standard, for among those of Books I, II, and III 98 per cent show a word ending with the fifth syllable, whereas among those of Book IV and the Carmon Saeculare the proportion drops to 74 per cent.
(b) The verses show in their parts unequal compactness, as appears from the fact that diaeresis or cacsura is found in:

| 43 | " | * | " | " | " | " | " |  | " |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 71 | " | " | " | " | " | " | " | 3 rd | " |
| 5 | " | " | " | " | " | " | " | 4th | " |
| 92 | " | " | " | " | " | " | " | 5th | " |
| 12 | " | " | " | " | " | " | " | 6th | " |
| $36 \frac{1}{2}$ |  | " | " | " | " | " | " | $7^{\text {th }}$ | " |
| 51 | " | " | " | " | " | " | " | 8th | " |
| 45 | " | " | " | " | " | " | " |  | " |
| $1{ }^{\frac{4}{5}}$ |  | " | " | " | " | " |  | roth | " |
|  |  | " |  |  | " |  |  | Irth | " |

(c) The verses tend to be more compact in the concluding than in the forward part. .This may be gathered from the foregoing table, and is confirmed by such facts as the following: (I) One hexasyllable occurs in the verses, and this stands at the end of a verse. (2) Two pentasyllables occur, both at the end of a verse. (3) Among the 216 quadrisyllables that occur only 14 stand before the main caesura, but 202 after it.
(d) Taking into account all possible arrangements of diaereses and caesuras, we find that Horace chose to employ but few of them. For example, only one of the 615 verses begins with two dissyllables. The reason is given in ( $f$ ) . The conclusion of a verse in the form hexasyllable monosyllable, or pentasyllable menosyllable, or quadrisyllable monosyllable was avoided. When a monosyllable was admitted at the end of a verse, the poet's feeling for rhythm seems to have been satisfied only by having another short word precede it. A good example is IV, 6,17 - a verse remarkable in more ways than one:
sed palam captis gravis, heu nefas heu.

This usage, which appears also in other kinds of verse, is sometimes violated by the poets, but generally not without a purpose. Horace's hexameter ending ridiculus mus (A. P. 139) conveys its ludicrous meaning in part by its form ; and Vergil's line ending cum ruit imbriferum ver (Georg. I, 313) has a sudden and unexpected close quite in keeping with the idea.

The fact is in any verse of eleven syllables 1024 different arrangements of diaereses and caesuras are possible. Yet among 615 verses Horace made use of only 89 arrangements, confining himself generally to 18 . For convenience we shall represent this aspect of the subject as follows: "3-5-9-1I" designates a verse whose diaereses and caesuras, as the case may be, fall after the third, fifth, ninth, and eleventh syllables. Horace's favorite arrangements are :

| 1. $3-5-9-1$ I <br> 2. 3-5-8-II | " | 43 |  | 10. $1-3-5-9-1$ I <br> II. $2-3-5-9-1$ I | " | 22 | " |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3. $2-5-8-\mathrm{II}$ |  | 34 |  | 12. $2-5-7-8-11$ | " | 16 | " |
| 4.3-5-7-8-11 |  | 33 |  | 13.3-5-7-9-1 1 | " | 16 | * |
| 5. 2-5-9-1 I |  | 33 |  | 14. 3-6-8-II | \% | 14 | " |
| 6. $1-3-5-8-11$ | / | 32 |  | 15. 2-5-7-11 | / | 14 | , |
| 7. 2-3-5-8-11 |  | 27 |  | 16. $1-3-5-7-8-11$ |  | II |  |
| 8. $2-5-7-9-11$ |  | 26 |  | 17. 2-3-5-7-9-11 | " | II |  |
| 9. $3-5-7-11$ | " | 23 | 6 | 18. $2-3-5-7-8-11$ | " | 10 | , |

Examples of these eighteen arrangements are :

1. defluit saxis agitatus umor.
2. filius Maiae patiens vocari.
3. nube candentis umeros amictus.
4. simplices Nymphae ferus et Cupido.
5. docte sermones utriusque linguae.
6. tu gravi curru quaties Olympum.
7. pone sub curru nimium propinqui.
8. dona praesentis cape laetus horae.
9. Persicos odi puer adparatus.
ro. hic dies anno redeunte festus.
ir. quaeque vos bobus veneratur albis.
10. nullus argento color est avaris.
11. inminens villae tua pinus esto.
12. Mercuri facunde nepos Atlantis.
13. cessit inmanis tibi blandienti.
14. quam Iocus circum volat et Cupido.
15. adde quod pubes tibi crescit omnis.
16. namque me silva lupus in Sabina.
(e) These arrangements seem to be preferred, because they are easily and agreeably enunciated, embodying a certain symmetry in the divisions of the verse and the requisite variety of sound. It therefore goes without saying that they avoid harsh and unmusical effects, such as verses composed entirely of monosyllables or dissyllables, such as verses wherein diaereses outnumber caesuras too greatly, or such as those wherein ictus too often coincides with word-accent.
$(f)$ The ends of words fall so that they do not generally coincide with ends of feet ; otherwise expressed, caesura is more common than diaeresis. The degree in which this is true may be gathered from the following facts. The verse arrangement wherein a single word builds each foot is indicated by the scheme $2-4-7-9-1$ I. This, however, nowhere occurs. The prevailing arrangements for the first half of the verse are the five following: 3-5-; 2-5-; 1-3-5-; 2-3-5-; $3-6-$. In none of these does an ictus coincide with each and every word-accent. The prevailing arrangements for the latter half of the verse are five in number. In three of them, namely, $-5-9-1$ I,$-5-7-8-1$ I, and $-5-7-9-1$ I, ictus and word-accent coincide throughout the final two words. In two of them, namely, $-5-8-1$ I and $-5-7-1$ I, ictus and word-accent coincide in the case of the final word. In a general way, then, non-coincidence of ictus and word-accent is common before the main caesura; coincidence, however, is common in the rest of the verse.
$(g)$ The caesuras falling within the cyclic dactyls are far more frequently masculine than feminine. See in (b) above how much more often a word ends with the fifth than the sixth syllable. This seems to point to the fact that in the case of Horace's Lesser Sapphics the cyclic dactyl should be represented $-w$ rather than $\sim \cup$.

## II. Sense-pauses.

Kiessling's edition of Horace has been made the basis of the following observations on sense-pauses. Among the 615 verses punctuation appears in :



It is at once apparent that the foregoing theses are confirmed by the evidence of the punctuation. Note for example thesis (a). Horace would hardly have placed so many sensepauses after the fifth syllable if he had not conceived the verse as having a main caesura at that point.

Punctuation occurs 124 times in the first verse of the strophe ; 158 times in the second verse; 7I times in the third. This evidence bears on the unity of the strophe, as discussed under C below.

## III. Elision and Ecthlipsis.

The cases of elision and ecthlipsis as they occur throughout the eleven syllables of the verse are summarized in the following table:

|  | syl. | syl. | syl. | syl. | syl. | syl. | syl. | syl. | syl. | syl. | syl. |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | I | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Io | II |
| Elision . . | o | I | II | 3 | I | 3 | 3 | 8 | 7 | 4 | $7=48$ |
| Ecthlipsis | 0 | 4 | I2 | 0 | 5 | I | 0 | 5 | 4 | 0 | $3=34$ |
|  | 0 | 5 | 23 | 3 | 6 | 4 | 3 | 13 | II | 4 | IO |

There are 82 cases among 615 verses; 23 fall in Book I ( 165 vv .), 16 in Book II ( 120 vv .), 32 in Book III ( 168 vv .), and II in Book IV and the Carmen Saeculare ( 162 vv ). Horace's latest work, it appears, reverts to the usage of the Epodes in showing comparatively little elision and ecthlipsis.

## IV. Word-order.

This phase of the subject may be set forth by a comparison of Lesser Sapphics and Lesser Asclepiads (on word-order in the latter kind of verse, see an article by the present writer in the American Journal of Philology, Vol.' XXII, p. 283). Lesser Asclepiads have cola of equal length, whether measured by morae or by the number of syllables; Lesser Sapphics have cola of unequal length. Lesser Asclepiads are remarkably well adapted for containing words standing in a great variety of symmetrical and balanced arrangements, such as chiasmus, anaphora, interlocked order, and the like; the asymmetrical character of the cola in L,esser Sapphics renders these arrangements much rarer. Only to a limited extent, comparatively, can these cola be said to be molds in which symmetrical word groups are cast.

## B.

Among the 205 Adonic verses there is diaeresis or caesura in :


There are sixteen possible ways of arranging the diaereses and caesuras in an Adonic line. Among these Horace employed the seven following:


Ictus and word-accent generally coincide in the concluding part of a Greek or Latin verse; and inasmuch as the whole Adonic verse is a clausula, it is not surprising that such coincidence takes place as a rule in all its parts.

Similarly the number of monosyllables employed is relatively small. Sense-pauses are almost wholly wanting ; elision and ecthlipsis absolutely so.

## C.

Light is thrown upon the poet's feeling for the strophe as a whole by such features as inter-verse hiatus, inter-verse elision, words broken between lines, and the location of the sense-pauses. There are 14 cases of inter-verse hiatus: 3 between the first and second verses of a strophe, 7 between the second and third verses, and 4 between the third and fourth verses. There are 5 cases of inter-verse elision : ${ }^{1}$ none between the first and second verses of a strophe, 3 between the second and third verses, and 2 between the third and fourth verses. There are 3 cases of a word broken at the end of a verse, ${ }^{2}$ the parts in each case being in the third and fourth verses. Sense-pauses (see II above) are numerous in the first verse of the strophes, still more so in the second verse, infrequent in the third verse, and very rare in the clausula. The Sapphic Strophe then has a marked unity, the articulation becoming closer and closer as the reader proceeds through it.

[^13]IV. - Numeral Corruptions in a Ninth Contury Manuscript of Livy.

By Professor frederick w. Shipley, washington university.

I wish to lay before the Association some data which serve in a concrete way to throw light upon the character and extent of numeral corruptions in those of our classical Latin texts which depend, directly or indirectly, upon manuscripts of the ninth century. They are drawn from an important but somewhat neglected manuscript in the Vatican Library numbered Codex Reginensis 762. It contains, with considerable mutilations at the beginning and end, the third decade of Livy, but its readings find no place in the critical apparatus of the text editions for the reason that it is a copy of the famous Puteanus (Bib. Nat. Paris, 5730), which is the chief manuscript authority for that portion of Livy's text. On this account the Reginensis has been almost entirely neglected, although, from a purely palaeographical point of view, it possesses the highest interest, partly because so much is known concerning its history, ${ }^{1}$ and partly by reason of the very fact which renders it valueless for the constitution of Livy's text, viz. : the accident that it is an existing copy of so early an original.

It is the product of the scriptorium of the famous calligraphic school of Alcuin at Tours which led the way in the revival of manuscript production under Charlemagne, a movement to which we owe the preservation of the majority of our classical Latin authors. It is thoroughly representative of the work of the school inasmuch as it is not the production of one scribe, but of eight, as is attested by their signatures at the foot of the various quaternions. The Putcanus, an
${ }^{1}$ See articles by Woelfflin in the Philologus, XXXIII, 1874, pp. IS6-1S9, by Chatelain in the Revue de Philologie, Vol. XIV, 1890, p. 79 and in his Paleographie des Classiques Latins, $9^{e}$ livraison, 1893 , and by L. Traube in the Sitzungberichse der Münchner Akademie der Wissenschaften, 1891, heft 3, p. 425.
uncial manuscript of the fifth or sixth century, was taken to pieces and divided into eight parts, each of which was apportioned to a scribe, and the eight portions were in this way copied simultaneously. We have, therefore, in this manuscript the more or less concentrated efforts of the chief scriptorium in France at the time of the Caroline reform. What is more, owing to the lucky chance which has preserved the original used in making this copy, it is possible to test the quality of the work of that scriptorium by examining the eight samples of it preserved to us in this one manuscript. A comparison of this ninth century manuscript with its fifth century original clearly reveals every corruption which crept into the text of Livy in this one process of transcription through the carelessness or ignorance of the scribes, and, in the majority of cases, the exact cause of the misunderstanding which was the starting-point of the error. At the same time, it also reflects the general character of the manuscript work done in Western Europe during the first half of the ninth century not only at Tours, where this particular manuscript was copied, but in the other scriptoria of France as well, which were more or less directly under its influence. The errors to which the eight scribes of the Reginensis were prone illustrate, without doubt, the general tendencies to error among all the scribes of France under similar conditions and during the same period.

A detailed study of the scribal errors illustrated by a comparison of the readings of these two manuscripts will appear in the Amcrican Journal of Archaeology during the coming year. In this paper I shall deal with the numeral signs ${ }^{1}$ only, which stand out as a class by themselves and are productive of a larger proportion of serious corruptions than any other cause. Indeed, the complaint of Bede (Opp. I. I49), 'numeri . . . negligenter describuntur et negligentius emendantur,' hardly prepares one for the somewhat wholesale corruption which took place in this one process of transcription, and that, too, in the most important scriptorium of the Caroline

[^14]period, the one which influenced the work of all the rest. My study covered in round terms about one-half of the portion copied by each of the eight scribes, an amount equal to about five books. Within that compass there are 31 cases of numeral corruption. Had the Putcanus been lost, and did the text of Livy depend upon the Reginensis in its uncorrected form, or some copy of it, it would be extremely difficult, in a fairly large number of cases, to restore the numerals thus corrupted.

In the examples, the Putcanus and the Regincnsis will be indicated by P and R respectively.
(I) In the Putcanus the sign regularly used for thousand is $\infty$. This symbol seems to have been entirely unfamiliar to these ninth century scribes, and to this cause is due fully one-half of the numeral corruptions in the following list. The possibility of error might have been avoided by copying the symbol as it stood, but four of the scribes, Aldo, Fredegaudus, ${ }^{1}$ Ansoaldus, and Landemarus, made the absurd blunder of supposing that $\infty$, from its form, must stand for x , even where the context ${ }^{t}$ showed that ten was entirely too small a number. For instance, the scribe Fredegaudus in xxiii, 37, 6, has transcribed correctly enough the number $\infty$ ccc, but only a page or two later, meeting with the symbol $\infty$ again (in xxiii, 40, 2), he imagined that he now knew what it meant, and wrote instead of the $\infty \overline{\mathrm{cc}}$, which hefound in the Putcanus, the number $\mathrm{x} \overline{\mathrm{cc}}$. If he had exercised a moment's thought, he might have seen that it was not at all likely that $\infty$ was the symbol for 10 , inasmuch as it was followed by $\overline{\mathrm{cc}}$; yet he continued to make the same mistake throughout his quota of the work, though once, being in doubt, he left a blank to be filled in by the corrector. Other examples of his treatment of the symbol are :
xxiii, 40, 4 ad $\infty \infty \infty$ sardorum eo proelio caesa P. Here Fredegaudus first. wrote xxx. Then, feeling that 30 was too small
${ }^{1}$ Chatelain thinks that the scribe whose signature is Fredeg is to be identified with Fridegisus, abbot of Tours and successor of Alcuin. In the longer article in the American Journal of Archaeology I shall give my reasons for expanding it, with Traube, as Fredegaudus.
a number, he drew a horizontal stroke above it, thus, $\overline{\mathrm{xxx}}$. In this way the original 3000 becomes first 30 , and then 30,000 .
xxiii, 49 , il paulo minus $\infty$ equorum $P$. In $R$ a corrector has written $\infty$ in the erasure of what was probably x .
xxiiii, 40, $5 \overline{\mathrm{~m}}$ ualerius $\infty \infty$ praesidioque P . Here the scribe left a blank space, in which the numeral was written by a corrector.
xxiiii, 40, 8 facturum se que (=quae) uellent pollicitus, $\infty \infty$ delectorum militum nauibus. longis mittit P . The number as it now stands in R is $\infty$ delectorum militum, but the $\infty$ is written by a corrector in an erasure of what was probably xx . It is to be noted that the correction is also wrong, and that the scribe has returned to writing x for $\infty$.

The above examples from the work of Fredegaudus I have given first, not because they are the most numerous, but because they illustrate the workings of his mind with regard to the symbol. There are four stages to his treatment of the symbol: (I) he does not know what it means, but writes it as it is in P ; (2) he imagines that it stands for x and writes it accordingly ; (3) he is in doubt and leaves a blank; (4) he resumes the writing of x .

Examples of the error from the work of the other scribes are:
xxvii, 38 , in equitum $\infty P$. This the scribe of $R$ copied correctly, but changed his mind, erased the $\infty$, and wrote x in its place.
xxvii, 38 , 12 et sagittariorum funditorumque ad $\infty \infty \infty \mathrm{P}$, et sagittariorum funditorumque ad $\mathrm{xxx} R$. This a corrector has altered to $\infty \infty \infty$.
xxvii, 43, in sex millia peditum $\infty$ equites $P$, sex millia peditum $x$ equites $R$.
xxviiii, 2,4 erant in celtibero exercitu $\infty \infty \infty \infty$ scutata $P$, erant in celtibero exercitu xxxx scuta R .
xxviii, 34,2 uulnerata amplius $\infty \infty \infty$ hominum P , uulnerata amplius xxx hominum R . In this and in other cases the genitive after the numeral does not seem to have troubled the scribe.
xxviiii, 36 , 9 supra $\infty \infty \infty \infty$ armatorum $P$, supra xxxx armatorum $R$.
xxii, $4 \mathrm{I}, 2$ ad $\infty$ et DCC caesi P . A corrector in R has written $m$. over an erasure of what was probably x .
xxii, 7,3 is a possible example of this confusion. P has $\infty \infty \mathrm{D}$ hostium in acie periere. In R there is an erasure before the D in
which a late corrector has written $m$. The erased letters were probably xx, as the work of the scribe Aldo shows other cases of this confusion. There is a possibility, however, that the letters were $\infty \infty$, and that the correction was a deliberate one, made with the purpose of bringing Livy into harmony with Polybius, who gives 1500 as the number.

In the two examples which follow, as well as in the second example from the work of Fredegaudus, this confusion of x and $\infty$ is responsible for a further increment of corruption.
xxvii, 40, in ad $\infty \infty \infty \infty$ hominum P , ad triginta milium hominum R. Here the scribe has made a triple error. He interpreted the $\infty \infty \infty \infty$ as xxxx. Then, being in the habit of writing xL for 40 , he supposed that the fourth $\infty$ was a scribal error and that 30 was the number. Feeling that the passage demanded a larger number than 30 he wrote ad triginta milium hominum, and the 4000 of Livy has become 30,000 .
xxiii, 13,7 ut hannibali $\infty \infty \mid \infty \infty$ numidarum in supplementum mitterentur P. R has xl numidarum. The scribe supposed that the number was xxxx , and was in the habit of writing xL for 40 . As in the preceding example, the clue for emendation is practically lost.
(2) The symbol for 1000 with which the scribes were familiar was m. Consequently the scribes Theogrimnus and Theodegrimnus sometimes write mille for M., the abbreviation for Marcus, and a number is thereby created where none had existed.
xxvi, 2 I, 13 id $\overline{\mathrm{m}}$ cornelio mandatum P , id mille cornelio mandatum R. To the scribe, if he took the trouble to translate, this must have meant: 'This thousand was entrusted to Cornelius.'
xxvi, 21, 17 inter has difficultates $m$ cornelius PR (= praetor) et militum animos etc. P , inter has difficultates mille cornelius populus romanus et militum animos R . That the scribe had little idea of the sense is shown by populus romanus, but if he concerned himself with the meaning at all he must have taken it to mean something like this: ' amid these thousand difficulties.'
xxvi, 22, 12 duobus plenis iam honorum que fabio et $\bar{m}$ marcello $P$, que fabio et mille marcello R .
xxvi, 21,5 ut $\bar{m}$. marco marcello (marco marcello $\mathrm{P}^{2}$, deleting $\overline{\mathrm{m}}$.) quo die urbe ouans iniret, imperium esset P , mille marco marcello R .

The scribe has not only produced an utter absurdity, but has gone out of his way to do so by disregarding the correction in P .
xxvii, 40, 10 ad p. tolomaeum ( $=$ ad Ptolomaeum) et cleopatram reges $\overline{\mathrm{m}}$ atilius et $\overline{\mathrm{m}}$ acilius legati P , ad populum tolomaeum et cleopatram reges $\overline{\mathrm{m}}$ atilius et milia acilius legati R. Here the scribe arbitrarily left one $\bar{m}$ as it was and wrote milia for the other.

These errors were all corrected while P was still accessible, and are so absurd that if P had been lost altogether they would, if not carried further, have presented no difficulty whatever to a modern critic. But these blunders would surely have grown in passing through the hands of later copyists, to whom it would be a great temptation, on finding these numbers standing alone, to add a noun to indicate the thing numbered.
(3) The symbol $\phi$ for 500 also gave rise to an important class of corruptions in R. In order to distinguish the numeral sign from the letter D , a stroke is regularly drawn through it in P . Unfortunately an oblique line was drawn in the same way by the correctors in P through letters which they wished to strike out, and some of the scribes of R, supposing that this was the purpose of the oblique stroke through the D , have omitted the symbol for 500 altogether. ${ }^{1}$
xxiii, $16,15 \overline{1}$ et $\not p c c c$ hostium caesos non plus $\not p$ romanorum amississet (amissis et Luchs) P, $\overline{\mathrm{I}}$ et ccc hostium caesos non plus romanorum amisisset $R$. The number of the enemy's killed has thus decreased from 2800 to 2300 , and the number of the Roman dead has disappeared altogether.
xxiii, 19,17 ex $\not \subset \mathrm{Lxx} q u i$ in praesidio fuerunt $P$, ex lxx qui in praesidio fuerunt R , a reduction from 570 to 70 . The scribe added the $\phi$ at a later time.
'xxiii, ${ }^{17}, 8$ casilinum eo tempore $\not \varnothing$ praenestini habebant P . $\not p$ was omitted by Aldo, and R first read casilinum eo tempore praenestini habebant, though the $\not p$ was inserted at a later time.
xxvii, 4I, 8 circa $\not p$ romanorum sociorumque uictores ceciderunt $P$. The number has entirely disappeared in R .

[^15]The scribe Fredegaudus seems to have regarded this as a blunder to be carefully guarded against, and in xxiii, 43, 8 where $\mathrm{P}^{1}$ has nolandos, which was corrected to nolanos by $\mathrm{P}^{2}$ by drawing a line through the $\ddagger$ (thus nolanpos), this scribe wrote nolantos, probably because he had been cautioned against omitting this symbol, a precaution which shows how great a tendency there was to errors of this kind.
(4) Another source of error in connection with the numerals was the difference in practice in the fifth century and the ninth with regard to the symbols for 40 . In the Puteanus the symbol is regularly xxxx. In the ninth century the form XL seems to have been the more familiar one. Consequently there is a slight tendency on the part of the scribes to suppose that xxxx is a mistake, and that xxx was the number intended. Thus in xxvii, 40, II the scribe in K wrote xxx for $\infty \infty \infty \infty$, supposing that $\infty$ was x . In xxvii, 8, I3 quattuor milia cccxxxxxiv, though written correctly by the scribe, has become in the hands of a corrector, who erased one x, quattuor milia cccxxxxi. And in xxiii, 37, II signa militaria ad xxxxi cepit P , became in the hands of the scribe xxxi, though a corrector has since emended to xli.

One would expect to find the same confusion in the case of viili for 9 , but of this I have found no examples.

Manuals on textual emendation have little to say on the subject of the numerals, and the illustrations which they give deal for the most part with corruptions caused by the confusion of the numeral signs with letters of the alphabet, the numeral thereby becoming part of a word. Of this variety of error I have found but two examples :
xxviiii, 36,9 paulo minus cce ui/ui capti P. Here the word uiui is divided in P by the end of a page, one half being at the bottom of one page, the other at the top of the next. In consequence, Landemarus supposed that the first $u i$ was part of the numeral and wrote cccvi ui capti.
xxii, 37, 5 uictoriam auream pondo ducentum ac uiginti is the reading of Luchs. P has uictoriam auream p.cc ai x.x. For this the scribe in R wrote uictoriam auream picca cx.x. This absurdity is
now emended in R to $\cdot \bar{p}$. cccxx, the $a$ of $a c$ being omitted and the $c$ added to the numeral, thereby increasing it 100 pounds.

From the paucity of examples, it would seem that this was not a class of error to which the scribes of the Reginensis were prone, and the actual corruption due to this cause is slight when compared with the other classes already indicated. The same may be said of the errors arising from the two uses of the horizontal stroke which was drawn above the numerals, sometimes to indicate thousands, and sometimes simply to indicate a numeral. I have found no errors from this cause in $R$, for the reason that where the horizontal stroke was already in P it was usually reproduced in R , or if omitted, omitted intelligently.

To make the list of numeral corruptions complete I shall give one more. In xxviiii, $38,8 \mathrm{P}$ reads ludi romani biduum instaurati. Here the scribe Landemarus wrote ludi romani $x d u \bar{u}$ instaurati. His reason for writing $x d u \bar{u}$ is difficult to see. He may have thought that -duum meant 2 in combination with a preceding number, and then guessed that the first part meant 10 .

It will be seen from the above examples that the great majority of the numeral corruptions involve the larger numbers. Of a total of 31 examples there are 15 in which $x$ is written for $\infty$. If we include the 5 examples in which mille was written for M., the abbreviation for Marcus, - which, however, as they occur in the work of but two scribes must not be regarded as a common species of error, - we have 2I examples, or two-thirds of the total number, involving thousands. Adding the examples of the omission of $\not p$, we have a total of 25 cases of numeral corruptions involving errors of 500 or more. The total number of numeral corruptions due to all other causes amounts to but 6. The smallest class is that to which books on textual criticism give the most attention.

The havoc made with the numerals in this one process of transcription goes to show how little reliance can be placed
upon the accuracy of the numerals in the texts of classical Latin writers which are based only upon manuscripts of the ninth century or later. The chief cause of error in the Reginensis is the lack of familiarity on the part of the ninth century scribe with the signs of notation in vogue in the fifth and sixth centuries. This same cause was operative in the case of practically all the copies of classical Latin authors made in the ninth century. Owing to the almost total inactivity in the production of manuscripts of the Pagan Latin writers, which lasted from the end of the sixth century to the end of the eighth, few of the manuscripts employed in making copies of the works of those writers can have belonged to a period later than the sixth century. The signs of notation would therefore be, for the most part, the same as those of the Putcanus. Inasmuch, then, as the Reginensis is a normal type of ninth century manuscript and the Putcanus a normal type of the manuscript employed by the ninth century scribes in making copies of the works of the classical Latin writers, it is probable that errors of the same nature as the above continued to be made until experience had given the scribes more familiarity with the notation of the older time.

Most of the errors in the Regincnsis passed through the hands of a corrector. But such supervision was not extended to all the manuscripts of the period, as is shown by some interesting corruptions preserved in the Codex Bambergensis (M. IV. 9), an eleventh century descendant of the Putcanus. The loss of the last few pages of both the Putcanus and the Reginensis raises it, together with another eleventh century manuscript, the Colbertinus, to the dignity of a manuscript authority for a few of the concluding chapters in Book xxx. In its readings, as given in the critical edition of Luchs, there occur the following numeral corruptions: ${ }^{1}$
$\mathrm{xxx}, 35,3$ mille et quingenti] $\infty$ et D Colbertinus, $\mathrm{x} \&$ Bamber. gensis (omitting D).

[^16]$\mathrm{xxx}, 3^{6,8} 8$ mille et ducenti]. B has x for mille.
$\mathrm{xxx}, 36,8$ mille et quingenti] $\infty \&$ D Colbertinus, x et (omitting D) B . $x x x, 42,6$ quattuor millibus]. Here $B$ has șimply $x$.

These corruptions are identical in character with the two most important classes in the Reginensis. There are four examples of the writing of x for $\infty$, and two of the omission of $\not p$. They all occur within a compass of seven chapters at the very end of the manuscript and of the decade. This goes to show that the scribe originally responsible for the errors had not discovered the meaning of these symbols before reaching the end of his task, and had acquired the habit of writing x for $\infty$ and of omitting $\not \equiv$ without further question. It is not improbable that these errors had their source in some other copy of the Puteanus, produced under conditions similar to those of the Reginensis, but which had not been so carefully revised. At any rate, the presence of these corruptions in this eleventh century manuscript helps to confirm the impression that manuscripts of the ninth century or later, however trustworthy in other respects, can not be trusted in their record of numbers until that record is corroborated from some independent source.

# V. - Some Forms of Complemental Statements in Livy. 

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There is frequently, in one member of a sentence, a structural anticipation of what is to follow. In such instances the parts are usually coördinate, the second being purely additive and presenting a like phase of the same object or action, as in passages containing modo . . . modo, ut . . . ita. In a smaller number the second is subordinate to the preceding, and with it forms a grammatical whole. Of this kind are causal clauses introduced by quia or quod with preceding eo; concessive clauses with cum, quamquam and etsi followed by tamen; and result clauses with ut after adeo, ita, tantum, or a similar particle. Though not grammatically parallel, the coördinate and the subordinate are alike in this that the parts are complemental, each is stated with reference to the other, and the two may be considered as a grammatical unit.

Exact formalism, however, in the use of introductory particles is not always regarded, and at times one is omitted. This is not uncommon with many of the complemental forms, and sometimes results from a reversal of the usual order of the parts, as in $21,54,3$ sed uti numero etiam, non animis modo valeatis. Omission where the normal arrangement is retained, can be sufficiently illustrated by a few eyamples of primum and deinde or an equivalent: 21, 5, 2 ne se quoque, ut patrem Hamilcarem, deinde Hasdrubalem, cunctantem casus aliquis opprimeret; ; 7, 3 Palatium primun . . . muniit . . . ; 45, 1, 2 murmur . . . pervasit . . . , dein fremitus increvit, postremo clamor plaususque . . . est exortus. In some similar passages the omission is due to the general organization of the sentence, the introduction of a kindred subordinate clause rendering the second temporal particle unnecessary, as in 44, I2, I hostes primum admiratio cepit . . . postquam patere urbem accepere . . . erumpunt.

The grammatical structure in the two parts is not always the same, but is frequently varied to suit the expression of different phases of thought, e.g., 6, I 5, 6 quod nisi facis, sive ut et ipse in parte praedae sis, sive quia vanum indicium est, in vincla te duci iubebo; and $3,33,5$ simul ut pro legatione tam longinqua praemio esset honos, simul peritos legum peregrinarum ad condenda nova iura usui fore credebant.

There may also be a variation in the second member from the usual form of statement, and the expected particle is not employed, e.g., neque ( $n e c$ ) . . . et may take the place of neque (nec) . . . neque (nec), as in 4, 16, 5 neque tulerant de honoribus Minuci legem, et criminari nunc Minucium nunc Servilium . . . non destiterant. The statement may also be continued by -ve, as in $25,8,8$ sanxerunt . . omnia habituros neque ullum vectigal Poeno pensuros praesidiumve invitos recepturos.

A close connection has been established by long association between the antithetic components of many pairs of words indicating physical completeness. As illustrations of such pairs may be mentioned ultro citroque, hinc atque illinc, and a few others which in themselves show a change in Roman political or military conditions. Domi forisque and domi militiaeque are found chiefly in the first decade, while the hundred occurrences of terra marique or similar combinations of the words are chiefly in the later books.

The Weissenborn-Müller edition has been used in the preparation of this article, and for other texts the figures here given must be taken with an allowance for the editorial equation. Whether Livy wrote deinde or dein in certain passages, and what was the original position of some words which have fallen from the Mss. cannot now be determined, and the determination would be of little moment so far as this discussion is concerned, since the passages in which there are variant readings are but a very small part of the entire number.

COPULATIVE, DISJUNCTIVE, AND ADVERSATIVE.
Passages in which there are affirmative particles aut . . . aut, vel . . . vel, or sive (seu) . . . sive (seu) are far less
numerous than those containing neque (ncc) . . . neque (ncc). In the use of the last two, consonantal succession is not carefully observed, and there are variations in the use of the particles where the consonantal ending is used before vowels, and the vowel before consonants. The strict observance of a fixed rule could not be easily carried out with two or more words, though it is quite carefully observed in the case of new and neve, which usually occur singly.

Aut : . . aut. - Fügner, Liv. Lex. pp. 1436 seqq., gives 493 occurrences of aut . . . aut, I4 of which have aut three times. Similar to these are a few instances where -ve is used in connection with aut: 5, 54, I Fidenas inde aut Gabios aliamve quam urbem ; 25, 36,5 nec terra caespiti faciendo aut ducendae fossae aliive ulli operi apta. In reverse order, 1, 29, 2 effractis portis stratisve ariete muris aut arce vi capta; $25, \mathrm{I}, 12 ; 28,14,3 ; 34, \mathrm{I}, 3 ; 34,35,4 ; 43,16,2 ; 45,25,2$ qui consules praetoresve aut legati.

Vel . . . vel. - Compared with aut . . . aut, vel . . . vel (63) is not of frequent occurrence. Its use with individual words is of no special moment, though the repetition is noticeable 9,19 , i vel numero vel militum genere vel multitudine auxiliorum; 25, 31, 6; 36, 10, 3; 42, 23, 6 ut vel ex aequo . . . disceptarent, vel permitterent . . . vel ad extremum . . . statuerent.

Sive (seu) . . . sive (seu) 127. - Sive . . . sive occurs less frequently than seu . . . seu, though in some passages sive, seu are used together: 7, 18, 2 sive duorum consulum auspicio bellum ibi gestum est . . . seu per idem tempus; io, 14, 9 sive quia . . seu quia; see also $39,51,2$ and 3 seu quia . . . seu quia widely separated. $9,26,7$ sive is timor seu conscientiae vis; 26,42 , 10 seu fiduciam . . . ostentans, sive ut ; 35, 2I, 6 sive imbribus seu motu terrae ; 45, 8,5 sive errore humano seu casu seu necessitate. Only in a part of these does sive instead of seu seem due to the following vowel. In 26 instances of sive . . . sive, nine have both the following words beginning with a vowel, ten have one, and in seven, both begin with consonants. In a few passages seu occurs more than twice: $27,16,6 ; 38,38,7$ servos seu fugi-
tivos, seu bello captos seu quis liber captus aut transfuga erit ; and especially $2 \mathrm{I}, 7,3$ ceterum in tantas brevi creverant opes seu maritimis seu terrestribus fructibus, seu multitudinis incremento seu disciplinae sanctitate.

There is a different construction in the two members I, i I, 7 seu ut . . . seu causa; 3, 26, 9 seu fossam fodiens palae innixus, seu cum araret; $6,15,6$ sive ut . . . sive quia; and 30,3 , I seu quia . . . seu ut; $8,30,8$ seu votum id deorum cuipiam fuit, seu credere libet Fabio auctori eo factum ne . . . caperet, where si is omitted after the second scu; $26,42,10$.

Neque (nec) . . . neque (nec) 648. - Neque and nec are used without distinction, and interchange is frequent : 9, 9, 14 sed neque vos tulissetis, nec nos spopondissemus, nec fas fuit; 25,36 , io ceterum neque transilire nec moliri onera obiecta nec caedere stipatas clitellas . . . facile erat; $26,45,2$ sed neque viri nec tela nec quicquam aliud aeque quam moenia ipsa sese defendebant; 8, 23, 15 nam neque facile fuisse id vitium nosci . . . neque ab consule . . . scriptum esse nec quemquam mortalium extare . . . neque augures divinare Romae sedentes potuisse. In the last the choice of neque or nec may have been influenced by the vowel at the beginning of following words. A succession of negatives is not unusual, though all may not be coördinate, e.g., $25,33,8$ Scipio postquam socii nec precibus nec vi retineri poterant, nec se aut parem sine illis hosti esse aut fratri rursus coniungi vidit posse, nec ullum aliud salutare consilium in promptu esse ; 34, 38, 7 ita obtorpuit, ut nec dicere . . . nec audire posset, nec inops modo consilii sed vix mentis compos esset. Nec . . . nec followed by ne . . quidem is found 27, 18, 9 nec tumulos nec arcem ne mare quidem armis obstitisse suis; and is also used as a continuative of non, e.g., 9, 14, io non haec furculas nec Caudium nec saltus invios esse . . . memorantes; 26, 13, i5 non videbo . . . neque . . . trahar . . . nec dirui . . . videbo, nec rapi.

Qua . . . qua. - Livy occasionally has qua . . . qua with a purely local meaning, as in 25,3, 6 item P. Lentulo qua vetus provincia in Sicilia esset, M. Marcello Syracusae et qua Hieronis regnum fuisset ; and 30, 4, 2 qua Poeni, qua Numidae
haberent. In the first decade, the words are used as the equivalent of partim . . . partim, or et . . et: 2, 35, 4 usique sunt qua suis quisque, qua totius ordinis viribus; $2,45,3$ qua consules ipsos qua exercitum increpando; 2, 45, 4 qua falsa qua vera iacere $; 2,45,16$ qua plebis, qua patrum eximia virtus fuit; 3, II, 6 qua nobilitate gentis qua corporis magnitudine et viribus; 9, 3,4 qua cibi, qua quietis immemor; 9, 8, 3 reum qua infelicis belli, qua ignominiosae pacis; 9, 4I, i6 qua in Tuscis, qua in Samnio; 10, 38, i consul insignis qua paterna gloria, qua sua.

Partim . . . partim (78). - Livy freely uses pars . . . pars, and now and then changes to pars . . . quidam, as in $2 \mathrm{I}, 5$, I 5 ; and $37,20,5$. However, partim . . . partim is the ordinary form of partitive correlation, though it is slightly varied $44,28,14$ pars (?) . . . partim ; and equivalents are admitted 23, 1,6 Numidas partim in insidiis . . . disposuit, alios . . . obequitare portis iussit; and 42,53 , I simul indignantium minitantiumque, partim iubentium bonum animum habere regem. The words are used most freely with the ablative, as in $23,14,5$ cum . . . animos partim spe, partim metu nequiquam temptasset; $21,60,3$ p. renovandis societatibus, p. novis instituendis; or with the ablative absolute 7, 4, 2 p. virgis caesis, qui ad nomina non respondissent $p$. in vincula ductis; 27, 14, 7 p . occulcatis, p. dissupatis terrore qui circa erant. At times there is not strict case parallelism, e.g., $3 \mathrm{I}, 3,5$ and $40,39,8$ p. ipse, p. per legatos ; $36,24,4$ and 6 p. per . . . p. abl. ; 35, 5 I, 6 p. ex suis, p. Aetolos.

Simul . . . simul (61). - The complete equivalence of simul . . . simul to et . . . et is shown by its use with parts of speech into which the time element does not enter, e.g., $33,21,2$ iis s. prudenter, s. magnifice utendo; 3, 68, 6 gloriaeque, s. publicae, s. privatae ; 5, 10, 3 et Romae s. dilectu, s. tributo conferendo laboratum est. Its equivalence is also felt with verbs, e.g., 33, I9, II s. . . . temptaturus urbes s. Philippum . . . exercitu navibusque adiuturus. In 29, 35, 7 the Mss. have simul et . . . simul ct, and the second simul has been bracketed. In 42, 48, 10 the logical order of the words is not observed, ibi stetit classis, s. op-
periens ut terrestres copiae traicerentur, s. ut onerariae . . . consequerentur. The words are followed by a variety of constructions, and, as is the case with other correlatives, the two members are not always parallel in form, e.g., 9, 46, 14 s. concordiae causa, s. ne . . . essent ; 27, 3, 2 s. ut . . . s. metuens ne; 27,40 , I s. recordantium, s. cum illa angeret cura; and $3 \mathrm{I}, 47,6$ s. quod... s. Gallico triumpho imminens.

Cum . . . tum (160). - Cum . . . tum occurs most frequently with pairs of contrasted nouns, e.g., I, 8, 2 cum cetero habitu se augustiorem, tum maxime lictoribus duodecim sumptis fecit. The occurrences with adjectives and verbs are about the same in number: $1,21,6$ cum valida tum temperata ...erat civitas; I, 57, I cum ipse ditari ... tum praeda delenire popularium animos studebat. Cum saepe alias, tum, as in 10, 26, 13; 25,20, 7 and $27,49,3$, is the most common expression with adverbs. As with other forms of correlation the words are found with clauses of different kinds, and grammatical parallelism is not always observed, e.g., I, 47, 7 cum de se ingentia pollicendo, tum regis criminibus locis crescere ; 6, I, 2 cum vetustate nimia obscuras . . . tum quod ; 27, 17, 5 cum a spe . . . tum quod ; 29, 26, 4 cum quod . . . tum . . . effecerant ; 6, 38, io ; and 6, 42, 8 cum, tum quod; $25,37,7$ cum impigre, tum haudquaquam abiecto animo exequebantur ; 40, 46, I4 cum alia, tum bis . . . deiectum ; 42, 52, 12 commeatum illis cum procul, tum omnibus sub casibus maritimis fore.

Tum is frequently strengthened by another particle, as in some of those cited, but ctiam is generally used, e.g., 6, 34, 5 ; $7,32,10 ; 25,8$, I ; 26, 38, 4 cum incepto, tum etiam exitu fuit ; $27,39,7 ; 29$, I, 13; $36,26,3 ; 36,43,6$, and also with ctiam separated from tum $27,49,6$ cum omnis generis, tum auri etiam argentique.
The formula is practically equivalent to non modo . . . sed etiam, but is purely affirmative. Both formulae occur in one sentence 9, IO, I movit patres conscriptos cum causa tum auctor nec ceteros solum sed tribunos etiam plebei ; and perhaps 35, 34, 4 Aetoli consilium cum rei, tum spei quoque non
audacis modo sed impudentis etiam ceperunt. Though here used interchangeably, the latter is generally chosen, and admits of a much more extended rhetorical handling.

Non modo . . . sed etiam, and Equivalents (658). - The complete formula consists of two members, the first made up of a negative with a restrictive particle - modo, solum or tantum - the. second of an adversative term - sed or verum - with an additive particle - ct, citiam, quoque, or ne . . quidem. The force is strongly contrasted with that of restrictive statements such as $45,38,3$ si triumphum imperatoris tantum et non militum quoque et universi populi Romani esse decus censetis. The negative is usually non, but Livy has neque or nec in about one-fifth of the examples, while ne does duty $6,4,12$ eodem anno, ne privatis tantum operibus cresceret urbs, Capitoliun quoque saxo quadrato substructum est. When ne . . . quidem is used in the second member, two negatives are admissible in the first, if the two members have a common predicate, though this rule is not observed by Livy 4,3 , io non modo non patricium sed ne civem quidem. The second negative is regularly admitted in such sentences as $5,38,6$ non modo non temptato certamine sed ne clamore quidem reddito ; and 35,46 , 13 non modo non recipere moenibus, sed ne societatem quidem ullam pacisci.

In the first member there are three variations from the normal form, - the use of unus; of solus instead of solum; and of the strengthened form tantummodo. Unus occurs 2, I2, io nec unus in te ego hos animos gessi, longus post me ordo est idem petentiun decus; 45, 38, 4 triumphum . . . non unius in hoc Pauli; multi etiam. Solus is relatively quite common in Cicero, in poetry, and in commentaries on the works of poets, but in Livy there are but few instances: 9, 27, II non Poetelius solus sed Sulpicius etiam; 26, 12, It non Capuam solam . . . sed se quoque; 39, 6, 6 neque ea sola infamiae erant . . . sed ea etiam magis. Tantummodo occurs in three passages $9,37,2 ; 21,32,4 ; 33,33,4$.

In the second member there are three distinct variations, the omission of the adversative particle ; of the additive particle; of the entire member. The omission of the adversative
particle is at times the result of the inversion of the usual order of the members: 21, 54, 3; 3, 7, 4 pudore etiam, non misericordia solum ; 5, 48, 6 postremo spe quoque iam non solum cibo deficiente; $7,40,7$ patribus quoque ferox esse, non solum plebi; 9, 38, i2 qui sua quoque eum, non publica solum auctoritate moverent ; also $24,13,7 ; 27$, I 5,$6 ; 28,43$, $9 ; 42$, II, $7 ; 45,39,10$; and $24,3,6$ divitiis etiam, non tantum sanctitate. Following in regular order quopuc is found only $6,4,12$, unless we count $40,14,5$ ne ego me solus nimia simplicitate tuear, ipse quoque . . . frater. Ne . . . quidem precedes in 25, 15, 2 ne Tarentum quidem, non modo arcem. The use of sed alone is so common that it may perhaps be considered as one of the regular ways of expressing the second member of the formula which was well established, and the adversative particle did service for the fuller form of statement. Defective formulae with only the first member given are avoided by many writers ; are characteristic of some others, e.g., Seneca and Pliny the Elder ; and are fairly common in Cicero and Livy. As with etiam and quoque the omission of the second member may be due to an inversion of the usual order : 5, I2, II ipsa plebes mirabatur se tantam rem obtinuisse, non is modo; 5, 48, 2 cineremque non pulverem modo ferente; 7, 18, 3 fidei iam suae, non solum virtútis; $28,40,13 ; 40,56,4 ; 3 \mathrm{I}, 43,4$ incepto forti, non prospero solum eventu; 28, 42, $15 ; 37,7,2$ si dare vere pacem, non tantum ostendere. In the passages where the negative member precedes, the connection between the two parts is not always clear: IO, 14, I8 non vero tantum metu terruere Samnitium animos. nam et Fabius Decium collegam adpropinquare exclamit, the contrasted term sed ano etiam is to be understood from the second statement. See also 39, 40,7 ; and $41,22,7$.

In the members, the parts are rarely separated by more than two words, counting as one a preposition with dependent noun, or an abbreviated praenomen. The former is very common, but the latter is found in but few passages : 39, 41, 4 non M. Porcium modo censorem fecerunt, sed collegam ei C. Valerium Flaccum adiecerunt ; 45, 38, iI non M'. Curius
tantum nec P. Cornelius, sed Romani triumpharunt ; 28, 9, 2 patres non M. Livium tantum redire ad urbem sed conlegam quoque eius C. Claudium iusserunt. In a few instances, however, where the preposition is within and the dependent noun is outside the formula, the preposition has been counted as a distinct word: $21,42,4$ non inter eiusdem modo condicionis homines erat, sed etiam inter spectantes vulgo ; 32, 17,$9 ; 34,4$, I nec de privatorum modo, sed etiam magistratuum sumptibus audistis; $38,6,8$ non ab eius solum noctis incepto recessere, sed in reliquum quoque tempus; 42, 19, 5. These, however, might be considered as enclitic, as in one member of $31,37,5$ non in praesentis modo certaminis gloriam, sed in summam etiam belli profectum foret. In the first member the negative is separated from the restrictive term in five-sixths of the instances; in the second member, the adversative is separated from the additive in three-fifths, but it is only with sed ctiam that there can be a selection, and with these words there is separation in only five-elevenths of the instances. Where there is more than one word included, one is frequently a postpositive which may be placed after the first nember, as in $22,40,8$ non solum enim nihil ex raptis . . . superabat, sed ne unde raperet quiden; 22, 60, 17 non modo enim sequi ... sed obsistere.

In the first member, the terms are separated by one word in about three-fourths of the examples, and in about onetwelfth by two or more; and exclusive of those passages in which a postpositive word is included, the number is much smaller. The few examples of separation by more than two words will be quoted: $2,19,5$ non enim duces ad regendum modo . . . sed; 26, 38, 4 neque enim indigna patientium modo abalienabantur animi, sed ceterorum etiam ; 44, 22, 9 nec, quid faciendum sit, modo statuunt, sed. . . . Counting the preposition as one, four words intervene $32,17,9$ id consul aegre passus nec eam ignominiam ad unius modo oppugnandae moram urbis, sed ad summam universi belli pertinere ratus. The usage with solum and tantum is the same: 10, 45, 2 nec populo Romano magna solum, sed per
opportuna ea victoria fuit ; $38,17,8$ non legionibus legiones eorum solum experti sumus, sed; $38,56,5$ nec inter scriptores rerum discrepat solum, sed orationes etiam ; 39, 15,13 non misereat vos eorum solum, sed etiam pudeat; 40, 10, 8 neque hercule istum mihi tantum fratri maiori, sed prope est ut tibi quoque ipsi, regi et patri, praeferant.

In the second member, separation of parts by more than two words is not at all common. Etiam is so separated 21, 54,3 sed uti numero etiam, non animis modo valeatis; 3I, iI, 8 non patrium modo recuperasset regnum, sed parte florentissima Syphacis finium adiecta etiam auxisset. In the latter, sed and etiam are separated by a long ablative absolute, though etiam is omitted in the parallel passage 37,53 , 22 non in patrium solum regnum restituistis, sed adiecta opulentissima parte Syphacis regni praepotentem inter Africae reges fecistis. More than two words are placed between sed and quoque 40, 10, 8 and 32, 40, II non aurum modo iis, sed postremo vestem quoque. More than one word is inserted between $n e$ and quidem 22, 40, 8 and 37,53, 2 ut non solum nihil quod contra me sit, sed ne quod ad ipsos quidem proprie pertineat, petere videantur.

The following table gives the number for the different combinations, though absolute exactness is impossible owing to breaks in the Mss. or variations in texts, e.g., 23, 8, 9 non venia solum peccati . . sed . . . ; 44, I3, 7 nocte moenia . . . modo sed agros etiam ; and 45, 39, 9 non tantum eum (?) sed deos etiam suo honori fraudaturi? The first we have placed under sed, the second under non I modo, and the last under non I tantum as non tantum sed I etiam is not elsewhere used by Livy. In 7, 32, 12 non factionibus modo, the modo has probably come in from the preceding statement, though in $28,40,5$ senatum ludibrio habet, non senatorem modo, there may possibly be an example of an incomplete formula as in other passages. There are different arrangements of the words of the formula in $27,39,13 ; 28,26,7 ; 29,32$, $3 ; 30,25,10$; and $42,45,3$. In $39,15,6$ both modo and solum are given: non fama modo (or solum) accepisse vos sed crepitibus etiam . . . certum habeo.

|  | \% | $\begin{aligned} & \dot{\otimes} \\ & \stackrel{\rightharpoonup}{0} \\ & \stackrel{y}{n} \end{aligned}$ |  |  |  | $\begin{aligned} & \dot{y} \\ & \ddot{0} \\ & 0 \\ & 0 \\ & \tilde{3} \\ & \stackrel{y}{0} \end{aligned}$ | $\begin{array}{\|c} \substack{0 \\ 0 \\ 0 \\ 0 \\ 0 \\ \vdots \\ 0 \\ 0 \\ 0} \end{array}$ |  |  | $\begin{gathered} \text { E. } \\ \text { 密 } \end{gathered}$ | $\begin{aligned} & \text { 苞 } \\ & \stackrel{\rightharpoonup}{0} \end{aligned}$ |  | ¢ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non Modo . | 10 | . | 5 |  | . | 1 | . | $3^{6}$ | 4 | $\cdots$ | $\cdots$ | . | 60 |
| Non I Modo . | ror | I | 76 | 62 | 2 | 28 | 1 | 10 | . | . | 1 | 3 | 285 |
| Non . . . Modo . | 13 | . | 3 | 7 | . | 2 | . | . | . | . | . | , | 25 |
| Non Solum . . | 15 | . | 16 | II | . | 3 | . | 1 | 2 | . | 4 | 3 | 55 |
| Non I Solum . | 39 | $\cdots$ | 43 | $3^{1}$ | 2 | 9 | . | 4 | . | 1 | 2 | 1 | 132 |
| Non . . . Solum . | 4 | . | 7 |  | . | 2 | . | I | . | . | . | I | 17 |
| Non Tantum |  | . | 3 | . | . | 1 | . | . | . | I | . | 1 |  |
| Non I Tantum | 35 | . | 19 | 20 | 1 | II | $\cdots$ | $\cdots$ | $\cdots$ | . | 2 | 3 | 98 |
| Non . . . Tantum | 9 | . |  | 3 | . | I | 1 | . | $\cdots$ | .. | .. |  | 16 |
| Total | 227 | I | 174 | 140 | 5 | 58 | 2 | 52 | 6 | 2 | 9 | 12 | 68 |

In the first member the occurrences for modo, solum, and tantum-370, 204, and II4-show a decided preference for the first. Cicero also prefers modo, but in the second member, in contrast with Cicero, Livy does not have verum ctiam, while sed without etiam is used much more freely as is sed . . . etiam which in Cicero occurs less frequently than sed etiam. Of the different combinations the most noticeable is non modo, sed ne . . . quidem, the second member of which is not freely used in other combinations.

## TEMPORAL.

The temporal complements are of two kinds, expressing (1) virtual simultaneity, and (2) successive actions. For a general discussion of the first see the article Was Heisst Bald . . . Bald? in the Archiv Vol. 2, 233 seqq. The second is a frequent form of correlation expressed by primum . . . deinde and equivalents.
I. Modo . . modo ; Nunc . . . nunc. - Nunc . . . nunc, which was apparently introduced into prose by Livy, is used much more than modo . . . modo - 98 to 18 . The two forms occur in the same sentence $4,43,8$, but in different connections, while nunc . . . modo is found only 8, 32, 9 nunc quereretur eundem accusatorem capitis sui ac iudicem esse, modo vitam sibi eripi . . . vociferaretur. The second nunc is reinforced
by ctiam 8, 5, 3; 24, 23, 10; 32, 5, 3. Nunc... nunc... nunc is found $24,23,10 ; 26,51,8 ; 30,42,14 ; 34,32,2$ quia nos bella nunc Punica, nunc Gallica, nunc alia ex aliis occupaverant ; and 35,49 , II nunc mendicantem . . . nunc quaerentem . . . nunc stantem et mox . . . redeuntem, where mox takes the place of munc in the last member. Like other correlatives, munc . . . nunc is used with different parts of speech and different constructions, and is noticeable with gerund forms: 7, 32,3 promptus nunc ad ferenda nunc ad accersenda adversus se auxilia; 25,36 , i nunc agendo, nunc sustinendo agmen ; 26, 21 , 17; 26, 31, 7; 26, 35, 5; 26, 35, 8 ; 27, 49, 3; 34, 22, 8 nam et Romanorum amicitiam nunc Carthaginiensis hostis eorum iuvando, nunc hic sociis nostris oppugnandis violaverat ; 34, 40, 1; 36, 37, 6; 40, 54, 8. Saepe . . . sacpe is used in connection with mune . . . munc 23, I5, 3 s . vi s. sollicitandis nequiquam n . plebe n . principibus. Cf. 34,4, i.

Iam . . . iam (23). - Livy uses iam . . . iam to express antecedent simultaneity, most generally with nouns, but occasionally with a clause as in $5,49,5$ iam verterat fortuna, iam deorum opes humanaque consilia rem Romanam adiuvabant; and 44, 24, 5 iam Prusiam Eumeni honore praeferri, iam Antiochum victorem praemio belli, Aegypto arceri. Other instances similar to these but with iam . . . iam . . . iam are $6,15,8 ; 7,39,5 ; 8,38,12 ; 30,30,10 ; 30,34,13 ; 34,6$, II ; 34, 26, II iam ab Leucade L. Quinctius ... venerat, iam Rhodiae . . . naves, iam Eumenes rex circa Cycladas insulas erat.

Tum . . . tum. - These words usually represent successive points of time in the enumeration of particulars as in 23 , 23, 6 primos . . . tum . . . tum . . . They correspond to munc . . . munc in 8, 39, 4 tum appellare, tum adhortari milites ; and perhaps 4, 33, 3 tum dictator magistro equitum equitibusque, tum ex montibus Quinctio accito proelium ciens ipse, in which tum . . . tum may be taken with the parts of the ablative absolute, or the first with the statement as a whole, and the second with the latter part of the ablative absolute.

Interdmm . . . interdmm. - This form of correlation occurs 36, 32, 3 purgare i. sese gentemque, i. de iure facti disserere.
2. In the passages containing primmm ...deinde or equivalents, primo (285) outnumbers primım (174). In onetenth of the passages the adjective form is used instead of the adverbial, but with the same sequence, e.g., $2,10,7 \mathrm{cum}$ his primam periculi procellam... sustinuit; deinde cos... cedere in tutum coegit 9, 6, I primi consules prope seminudi sub iugum missi, tum ut quisque gradu proximus erat, ita ignominiae obiectus, tum deinceps singulae legiones. Thirtyfive passages were noticed containing prius, c.g., 28, 14, 2 a Poeno prius, deinde ab Romano ; and with prior: 3, 2, 10 p . aliquanto constitit Romana acies; tandem et Aequi processere ; 28, I4, I p. Hasdrubal . . . eduxit, deinde et Romani processere; 28, I7, I6 p. H., mox Scipio et Laelius egressi. However, with prius the point of view is slightly different from that in passages where primum is used.

In the second member, there is great variety in the form of statement, and all are not exactly equivalent. Primo... nunc occurs in Livy's own words $5,55,5$; and in a speech $4,2,7$. With prius in speeches $m m n c$ occurs five times contrasting past and present conditions : 5, 11, 8; 29, 24, 5; 36, 17,$8 ; 37,54,13 ; 40,14,7 \mathrm{p}$. inquisisse aut n. criminose argumentari. The order of events is most generally indicated by deinde (326), dein (90), postremo (57), and inde (51). Some of the latter may be taken as local, rather than temporal, e.g., 22, 15, io Cales primum, inde . . . ad dictatorem perfugerunt ; and 35, 31, 3 Athenas primum, inde Chalcidem, inde in Thessaliam iere. Similar to these is $35,37,6$ Thebas primum, hinc Salganea processit. Tum is used 38 times, post or postea 24, and mox 13 , once $29,34,12$ as second of three, primo . . . mox . . . postremo. There is an occasional instance of another particle as ad extromum 22, 23,5; and deinceps, the last of three, 44, 45,5. Generally but two stages in the course of events are indicated (561), while in 53 passages more than two were observed, e.g., 2, 39, 2 primum . . . expulit . . . inde . . . ademit . . . inde . . . recepit, tum deinceps . . . cepit . . . postremum . . . ducit ; and four in

5, 39, 1 primum . . . deinde . . . postremo . . tum demum; and 23, 43, 2 primum . . . dein . . . postremo . . . tum denique, in which tum denique goes with postremo.

Principium is occasionally substituted for primum: 33, 7, 6 principio . . . deinde; 30, 14, 4 p. . . . postea; 44, 3 I, I3 principium ... postremo; and 22, 28, 10 principio ... deinde... postremo. Initium is used the same way 2, 2, 3 i . a Prisco factum ; regnasse dein Ser. Tullium ; 22, 43, 3 initio fremitus, deinde aperta vociferatio; 24, 47, 7 initio orto . . . postremo. Livy has primum . . . deinde and their equivalents with a great variety of clauses which are usually short so that the contrasted parts can be readily seen. However, the words are separated by four lines $26,49,7-9$; by five $26,48,3-4$; by more than six $5,47,7-9 ; 28,24,7-8$; 30,15, II-I 3 ; and $3 \mathrm{I}, \mathrm{I} 7,7-8$. In these the words are used with complete sentences, and illustrate elaborate periodic development.

Sometimes the introduction of a time clause after primum, causes the corresponding particle to be omitted; but generally the statement is entirely regular, and the combinations are indicated in the following table:

|  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

LOCAL.
As has been mentioned, Livy freely makes use of pairs of adversative accompanists such as terra marique, domi forisque, but the number of contrasted local particles in successive clauses is much less than the temporal. There are many
combinations of $u b i$ with other particles, and ubicumque . . . ibi occurs 6, 36, 12 ; and 39, 15, 12. Inde and unde are used less freely. Corresponding to the use of nunc . . . nunc, Livy introduces hinc . . hinc, which he has 26 times, c.g., I, I3, 2 hinc patres hinc viros orantes; and, with part of the contrasted statement supplied, 44, 35, 18 spectantibus utrimque ex vallo castrorum hinc rege, hinc consule. Illinc in one part is used less freely: 2, 11, 9 dextra laevaque hinc a porta Collina illinc ab Naevia redditus clamor; 2, 29, 9; $6,33,9$; 10, 31,$6 ; 28,14,4 ; 34,21,5 ; 34,43,5 ; 40,1$ 1, 3. The order is reversed only $25,11,17$ et illinc mari, hinc terra circumsedebimus arcem; and $37,8,5$ illinc a Pergamo Eumenes, hinc a Phocaea Erythrisque Romani sollicitabant. Hinc atque illinc, hinc aut illinc, and huc atque illnc are occasionally used to represent the changing direction of the activity of one party, and not of two, as in the other examples. See Fügner p. 218, 54 seqq. Hic and illic are also found in a few passages, as in 28, 41 , io Hannibale hic victo, illic Carthaginem expugna; and in reverse order 28, 32, 9 quippe illic et ducem Carthagiensem . . . hic latrones latronumque duces.

Alibi . . . alibi. - Another innovation of Livy's is the repetition of alibi, which is used as is hinc, and also in literary references, in some passages occurring three times: $3,28,3$ a. pavorem, a. gaudium ingens fecit ; 8, 32, 12; 22, 48,$5 ; 31,23,4$ a. sopitis costodibus, a. nullo custodiente. Referring to the sources of Livy, alibi, in every instance with inverio, is used only in the later decades: 26, 49, I; 26, 49, 2 capta a. decem milia capitum, a. supra quinque et viginti invenio; 27, I, 13 ; and three times $29,25,1$; and 30, 16, 12.

Seorsum . . . seorsum. - This rare correlation (Lucr. 4, 496; 5, 448; Macrobius Sat. 7, 15, 19) occurs 4, 26, 4 s. Aequi, s. Volsci castra communivere.

Utrimque . . . utrimque. - 30, 30, 20 u. ferrum, u. corpora humana erunt. Istinc . . . istinc indicating one position is used 7, 40, io istinc signa canent, istinc clamor prius incipiet.

## COMPARATIVE.

The most numerous of the complementals are comparative statements showing the relation of two objects or actions, and the members are related to each other in various ways.

Preferential. - We have noticed 1950 passages in which a word indicating comparison is followed by quam. This number includes the occurrences of alibi, aliud, and malle with quam, but the larger number contain the comparative of an adjective or adverb. In addition to these there are also passages in which the place of quam is taken by ac or atque. Yet there is generally a selective preference. Aliud quam in connection with a negative occurs 120 times, and three or four times without; aliud ac is found 25,29 , 10 aliam suam ac perfugarum causam esse. Aliter quam is used a dozen times; aliter ac 2, 24, I longe aliter patres ac plebem adfecere. In these, one object or action is preferred to another, and there is a simple statement of the fact. Generally nouns are contrasted, as in $2 \mathrm{I}, \mathrm{I}, 3$ odiis etiam prope maioribus certarunt quam viribus; and $2 \mathrm{I}, 2,5$ is plura consilio quam vi gerens. Actions are compared in the same way, e.g., I, 15,3 ut potius acie decernerent, quam inclusi de tectis moenibusque dimicarent ; 45, 10, 7 auxit potius timorem civitati quam minuit. However, quam is frequently followed by some form of clause in the subjunctive. This is occasionally a causal clause, as in 26,2 , 16 nihil aliud peccaverint, quam quod imperatoris similes fuerint; and 38, 41, iI nullam ob aliam causam, quam quod praedae minus . . . fuerat. Conditional clauses occur with greater frequency, e.g., 31, 29, II relicta credulius habitanda, quam si deleta foret; $33,19,7$ facilius cum singulis, quam si in unum ambo simul contulissent vires: 33, 37, 7 proelium celerius acriusque commissum, quam si . . . concurrissent. Ut clauses are the most numerous, and are found with a large number of comparatives, but are most noticeable with potius. This particle is freely used in the comparisons of actions, e.g., 5, 46, 6 imperium finiret potius, quam . . . posceret; and Io, 24, 15 populus iubeat potius, quam patres gratificentur. $U t$ is sometimes written,
as in 2, 34, II audeo dicere . . . potius cultores agrorum fore, quam ut armati ... prohibeant; 4, 2, 8; 4, I2, II ; 6, 28, 8 ; $9,14,7$ deceptos potius . . . quam ut videantur. But ut is more frequently omitted: 3, 2I, 6; 4, 2, 10 dimicationem subituros fuisse potius, quam . . . paterentur ; 5, 54, $3 ; 6$, 15, 12;7, 18, 6; 7, 40, 14; 9, 14, 16; 10, 35, 15; 21, 13, 9 haec patienda censeo potius, quam . . . sinatis: 22, 33, 10 ; $25,37,10 ; 32,2 \mathrm{I}, \mathrm{I} 3 ; 33, \mathrm{I} 3,3$.

Differential. - The use, with comparatives, of correlatives expressing the degree of difference is a common feature, quo and $e 0$ being the particles most freely employed, as in $27,3 \mathrm{I}$, 6 quo minus conspectus, eo solutior erat. The reverse arrangement is less usual, e.g., 23, 18, II eo inpensius, quo avidius; $29,34,8 ; 43,4,5$ co gratior . . . quo crudelius. There is an occasional instance in which eo does not precede : $2,35,6$ benignius in dies colebant, quo maior ira in suos eminebat ; 24, 32, I foediora etiam, quo maius; $30,36,9 ; 35$, 12, $10 ; 36,33,3$ infestiorem etiam, quo iustius irati erant; 37, I2,9 cautiorem quo minus animi erat ; 39, 40, 1; 44, 25, 3 magis, quo propior. Without eo, quo is also used in the first member: 2, 45, 9 quo minus consules velle credunt, crescit ardor pugnandi ; 2, 50, 7 quo magis hostis se inferebat, cogebantur breviore spatio et ipsi orbem colligere ; 2, 5I, 5; 22, 43, 5 quo longius . . . inpeditiora; 23, 15, 14; 25, 38, 23 quo audacius erat, magis placebat ; $25,39,8 ; 26,20,5 ; 3 \mathrm{I}$, 3 I, $17 ; 34,34,6$ sed quo plures sumus, pluribus rebus egebimus. At times hoc is substituted for co: $1,23,8$ quo propior es Tuscis, hoc magis scis; cf. 3I, 3I, I7 quo propiores Macedoniae estis, melius nostis ; $38,26,7$ quo densiores erant, hoc plura . . . vulnera accipiebant ; 38, 48, I quo longius Antiochus emotus esset, hoc impotentius in Asia Galli dominarentur. An equivalent of a comparative is used $40,22,6$ vexati omnes, et ante alios rex ipse, quo gravior aetate erat.

Equational. - Considerable latitude in the form of expres. sion is allowed when the members compared are balanced. After a few particles either ac, atque, or quam can be used, the former getting the comparative force from the association, and at times may be taken as either comparative or cop-
ulative, e.g., 28, 4 I , 17 aeque inpigro ac nobili ; 5, 6, 5 iuxta hieme atque aestate; 43, 7, II hieme pariter atque aestate. Notice also 9, I4, II caedunt pariter resistentes fusosque, inermes atque armatos, servos liberos, pubes inpubes, homines iumentaque; 29, 3I, 3 sociis pariter hostibusque; and 3I, 46, 14 vigiliis diurnis pariter nocturnisque. The equivalence of iuxta and pariter is shown by 28, 20, 6 trucidant inermes iuxta atque armatos, feminas pariter ac viros; and the two words are used with about the same frequency pariter ac 12 times, iuxta atque 8, iuxta quam 10, 6, 9 iuxta eam rem aegre passi patres, quam cum consulatum vulgari viderent. Aeque ac (19) outnumbers aeque quam which occurs four times, as in 39, 16,9 nihil aeque dissolvendae religionis esse, quam ubi non patrio sed externo ritu sacrificaretur. No distinction is shown in the use of perinde ac and perinde ac $\operatorname{si}$ (1I: 13) as can be seen by 28,38 , io perinde ac debellatum in Italia foret, and 27, 51, 9 perinde ac si debellatum foret.

Ita and sic are the particles most freely employed in the second member, with $u t$, sicut, and quemadmodum in the first, though the opposite arrangement is not infrequent, as in I, 25, 7 ita ratus secuturos, ut quemque vulnere adfectum corpus sineret ; I, 24, 8 populum Romanum sic ferito, ut ego hunc porcum hic hodie feriam ; and with the two members not parallel 6 , I2, II sic eques, sic pedes, ut praeceperat, pugnant. The two members are frequently adversative, and the particles take the coloring of the members which they introduce. In this way $u t$. . ita and its equivalents become practically equal to quamquam . . . tamen, e.g., 21, 29, 4 ut summae rerum prosperum eventum, ita haud sane incruentam . . . victoriam ; 28, 19, I Hispaniae sicut . . . quietae erant, ita . . . apparebat; 30, 26, 9 et sicut dubites . . . sic nihil certius est. The number of occurrences of $u t$ and sicut in the different combinations is as follows:

|  | as . . . so | though . . . yet |
| :---: | :---: | :---: |
| ut . . . ita | - 34 | - 37 |
| sicut . . . ita | 21 | - . $3^{8}$ |
| ut . . . sic | 15 | 11 |
| sicut . . . sic | 5 | - 4 |

Quemadmodum occurs with about the same frequency with ita and sic (19:15), but ita precedes more frequently than does sic ( $4: 1$ ), as in $9,5,3$ eum ita Iuppiter feriat, quemadmodum a fetialibus porcus feriatur (cf. I, 24, 8); and 8, 6,6 sic stratas legiones Latinorum dabo, quemadmodum legatum iacentem videtis. The choice of ita or sic does not depend on the following word, for both are used before words beginning with consonants, as well as with vowels. Prout . . . ita occurs 9, 4I, 16 prout loci natura tempusque patiebatur, ita instruxit.

Equivalent particles are freely admitted, ita is omitted, 24, 3, i3 sicut urbem prodiderat, locum prodendae arcis inveniebat ; and sic . . quam is found $9,36,6$ nec habitus sic eos texit, quam quod abhorrebat ab fide quemquam . . . intraturum. Tamquam in one of the members is not unusual.

Ita . . . tamquam. - 8, 38, 2 castra . . . ita posita, tamquam procul abesset hostis; $10,34,5$ primo ita compositus instructusque moenibus successit, tamquam idem . . . certaminis foret ; 38, 48, 6 sed quid ego haec ita argumentor, tamquam non acceperim, sed fecerim hostes Gallos; 40, 9,7 ita me audias precor, tamquam si . . . intervenisses. With order reversed: 2, 53, 2 tamquam Veiis captis, ita pavidi Veientes ad arma currunt; 40, 6, 6 tamquam de regno dimicaretur, ita concurrerunt.

Sic . . tamquam. - 10, 8, I quid autem ego sic adhuc egi, t. integra sit causa patriciorum ; 28, 28, $13 ; 28,43,4$; $28,43,5$; and $45,23,12$ quem sic locutum constat $t$. C. Popilius legatus Romanus. With different arrangement: 8, 33, 13 Papirium t. ex hostium ducibus, sic ex Romano imperatore victoriam et triumphum petere; 35, 17, 4 t . Nabidi victo, sic Antiocho.

Ut . . . tamquam. - 37, I, 4 quia non ut hostibus modo, sed $t$. indomitae et insociabili genti suscensebant.

Velut . . . ita. $-25,38,8$ velut si adhortantis signumque dantis videatis eos, ita proelia inire.

Velut . . . sic. - 4, 41, 6 arbitrari velut ipse in re trepida loci praesidio se suosque tutatus sit, sic consulem . . . loca tutiora castris cepisse ; 3I, 18, 9 cum velut Sagunti excidium

Hannibali, sic Philippo Abydenorum clades ad Romanum bellum animos fecisset ; 32, 4, 4 velut maris vasti, sic universa panditur planities.

Quoque, rarely $\epsilon t$, is used as a substitute in one member for ita or sic, and the combination may be taken as practically equivalent to ut . . . ita.
$U t$. . . quoque. - Praef. I3 si ut poetis nobis quoque mos esset ; and similarly $1,9,3$ urbes quoque ut cetera; $3,30,6$; 2I, 5, I ne se quoque, ut patrem Hamilcarem . . . casus aliquis opprimeret; 27, 37, 5 is quoque, ut Sinuessae . . . incertus; 4I, 7,6 se quoque, ut illos.

Sicut . . . quoque. - 4, 27, 3 sicut . . . viderant, ipsi quoque ...ceperunt; 29, S, 9 sicut ante...tum quoque. Quoque occurs much more frequently in the first member: $4,49,6$ qua Bolas q. sicut Labicos coloni mitterentur; 6, 37, 9 quaestores q. s. tribunos ; 21, 58, 2 eam q. gentem, s. Gallos; 23, I 5, 3; 27, 3, 2 suum q. exercitum s. Hannibalis; 29, 12, 7 ; 33, 2, 9 redit Boeotis q., s. prius Achaeis ad societatem adscitis. Of similar import are $5,27,6$ sunt et belli sicut pacis iura; $37,56,7$ et illos, sicut sese ; and with variation in form of expression $36,32,6$ sicut testudinem ... haud dissimiliter vos.

Tam . . . quam (IO2). - Tam . . . quant is usually preceded by a negative, as in $1,18,4$ instructum non tam peregrinis artibus quam disciplina tetrica ac tristi veterum Sabinorum ; 6, 36, 3 haudquaquam; 25, 29, 3 nequaquam; 27, 12, 7 neminem ; 38, 50, 8 nihil; 3I, 32, 2 nullam. There is an occasional instance with an affirmative declaration, e.g., $6,26,6$ haec mens nostra est . . . tam felix quam pia. 30, 12, 6 tam secundis quam adversis rebus non dari spatium; 45, 23, 14 tam civitatium quam singulorum hominum mores sunt ; 45, 23, 17 haec certe tam miserabilis . . . quam illa fuit.

Quam is frequently followed by a subjunctive clause, as in $2,44,7$ non tam Veientium gratia concitata, quam quod in spem ventum erat; $9,23,17 ; 21,25,2 ; 27,37,5 ; 28,22,2$; 37 , II $4 ; 38$, I 8,8 non tamen tam magnitudine memorabilis, quam quod piscium accolis ingentem vim praebet. $30,43,12$
tam lugubre fuisse Poenis, quam si ipsa Carthago arderet. $6,9,9$ non tam a spe scalis capi urbem posse, quam ut . . laxaretur labor; 6, 22, 6 non tam e republica, quam ut collegae materia ad omnem laudem esset ; 36, 24, 7; 42, 39, 7 nec tam . . . desiderati erant, quam ut appareret. 25, 24, 10 non tam vim multitudinemque metuens, quam ne qua intestina fraus per occasionem oreretur. However, there is usually the same construction in the two members, as in $25,27,8$ non tam quod . . . quam quod; $24,14,4$ non tam quid . . . quam quid ; $30,36,6$ non tam noscendi in praesentia, quam terrendi hostis causa; 33, 28, 12 non tam idoneum ad celandam rem . . . quam ad agendam. Instances with quam in the first member are uncommon: 4, 2, 4 finem . . . nec futuram donec quam felices seditiones, tam honorati seditionum auctores essent ; 8, 27 , 10 quam causam nullam tam ne fidem quidem habebat ; 21, 43, il nec quam magni nominis bellum est, tam difficilem existimaritis victoriam fore; 33, 17, 9 sed quam urbs ipsa opportuna oppugnantibus erat, tam expugnabiles hostium animi., Tam is omitted 25, 15, 9 non militum . . fiducia, quam iuventutis Thurinae.

Quantum . . . tantum. - Twenty-one instances of quantum . . . tantum were noticed, and 46 of tantum . . . quantum. The gender and case of the words depends on the construction of the members with which they are used, as in 2, 9, 3 nisi quanta vi civitates eam expetant, tanta regna reges defendant; 33, 46, 7 quantam . . . inierat gratiam, tantum . . . offenderat animos; 6, 34, I quanto magis . . . tanto . . . crescebant ; 21, 44, 3 tanto audacius . . . quanto maior. In 4I, 7,3 tantumdenn takes the place of tantum. At times, quam is used in the second member: 38, 34, 9 nulla tamen res tanto erat damno quam disciplina Lycurgi . . . sublata; 40, 46, 4 nec tantum . . . prosit, quam . . . noceat ; 27, 30, 5 non tanta pro Aetolis cura erat . . . quam ne Philippus . . . rebus Graeciae inmisceretur ; 7, 15, 10 nec in acie tantum ibi cladis acceptum, quam quod . . immolarunt ; 26, 1,$3 ; 37$, 5I, 9 quae non tantum gaudium ab recenti metu attulerunt ... quam a vetere fama, quod . . . gravis hostis et suis viribus, et quod Hannibalem rectorem militiae haberet,
visus fuerat. Quantum ...co occurs 3, 15, 2 quantum . . . se magis insinuabant, eo acrius . . . tendebant ; 44, 7, 6 quantum procederet longius a Thessalia, eo maiorem rerum omnium inopiam sentiens; 3, 8, 8 quanto longius . . . eo solutiore cura ; $30,30,23$ quanto altius elatus erat, eo foedius conruit. A comparative without eo is used: 2I, 3I, 2 se quantum a mari recessisset, minus obvium fore Romanum credens; 40, 22, 2 quantum in altitudinem egrediebantur, magis magisque . . . excipiebant ; 44, 36, 5 quantum incresceret aestus, et voltus minus vigentes et voces segniores erant ; and in reverse order 21,53 , io sciebat segnius secuturam, quanto longius ab domo traherentur.

Qualis . . . talis (8). - Qualis . . . talis is not of frequent occurrence, and is in reverse order 34, 3I, 3 si tales essetis, qualis esse Carthaginienses fama est. Cf. 42, 42, 7 talia esse scio, ut aures, ut animi audientium sint.

Quot . . . tot. - 6, I8, 6 quot . . . fuistis, tot nunc . . . eritis; 22,7 , 10 quot casus . . . tot in curas distracti animi eorum erant ; 28, 44, 4 ut tot . . . deficerent, quot defecerunt ; 30, 28, 7 tot fasces . . . quot captos. Cf. 2, I3, 2 subeunda dimicatio totiens, quot coniurati superessent.

## II.

A complete presentation of complementals with subordinate clauses belongs to a consideration of the clauses themselves, and for that reason merely a brief outline will be given.

## CAUSAL.

Quia is occasionally preceded by eo, as in $2,7,4$ eo . . insigṇis, quia matronae . . . eum luxerunt ; and 39, 32, 6 eo magis debitum, quia primo negatus erat. Eo precedes about one-tenth of the causal clauses introduced by quod, and these have the indicative twice as frequently as the subjunctive, though the latter is the more usual construction.

## CONCESSIVE.

Quamquam and etsi are followed by tamen in about onehalf the instances, the position of the concessive clause
frequently accounting for the omission, as in 1, 23, 10 haud displicet res Tullo q. . . . ferocior erat ; and 40, 15, 3 haec sentit Perseus, etsi non dicit. In a few instances $u t$ and cum concessive are followed by tamen: 23, 27, 12 cui ut omnia prospere evenirent, non tamen otiosam provinciam fore ; 28, 12, 7 ut omnis coleretur, exiguus tamen ... crat; 36, 38, 7 ut in numero scriptori parum fidei sit . . . magnam tamen victoriam fuisse apparet; 1, 31, 5 unde cum pigritia militandi oreretur nulla tamen ab armis debatur ; 2I, 3I, II; 22, I3, II ; 22, 16, $2 ; 26,45,3 ; 27,1,10 ; 28,8$, I cum ad omnia ipse raptim isset, nulli tamen se rei in tempore occurrisse; 7, I, 9 mors quamvis matura, tamen acerba M. Furi.

## RESULT.

Affirmative clauses of result and ut object clauses occur frequently, and ut preceded by some anticipatory word is a common feature. At the head of the list is ita . . . ut (348), indicating an action so performed that a certain result followed, e.g., I, 3, 5 pax ita convenerat, ut . . . finis esset ; 45, 41, 5 ita gesserunt, ut semper successori traderent gravius. Sic . . ut is found in but few passages: 3, 14, 4 sic tribunos . . . adorti sunt, ut nemo . . . ferret ; 9, 22, $5 ; 32,4,4 ; 37$, 23 , 10; $39,40,5 ; 40,58,5$ sic undique micabant, ut peti viderentur corpora. Tamı . . ut also is not freely used: I, 16,1 tam denso regem operuit nimbo, ut conspectum eius contioni abstulerit; I, 5I, 9; 4, 32, 2; 5, 5I, 4; 6, 18, 10; 8, 7,$21 ; 25,3,14 ; 27,40,2 ; 28,39,2$ tam pertinaciter geritis, ut . . . veneritis; 30, 14, 2; 33, 7, 2; 39, 34, 3; 40, 22, 3; 4I, 22, 7 nec tam atroces fuisse eas, ut non . . debuerint finiri. The occurrences of prope . . . ut are as follows: 2, 23, 14 iam prope erat, ut ne consulum quidem maiestas coerceret iras; 2, 30, $2 ; 2,65,6 ; 3,19,6 ; 3,4 \mathrm{I}, 2 ; 10,18,6$; 25, 21, 1; 26, 41, 20; 26, 48, 11; 27, 16, 7; 28, 39, 6; 40, 8, 14; 40, 10, $8 ; 40,32,5$ iam prope erat ut sinistrum cornu pelleretur.
Some demonstrative adverbial form is frequently found corresponding to ut:

Ideo . . .ut. - 5, io, 6 ideo aera militibus constituta esse,
ut . . . conficerent ; 3I, 49, 10 maiores ideo instituisse, ut legati . . . adessent.

Adco . . . ut (171). - Of the 171 occurrences of adeo . . . $u t, 70$ are with adjectives, c.g., $38,55,3$ adeo inimicum eundem, ut . . delectus sit ; 55 with verbs, e.g., 34, 14, 8 adeo turbati erant, . . . ut quosdam consul manu ipse reprenderit ; 19 with adverbs, e.g., $33,36,9$ primo adeo acriter invaserunt, ut . . . inpulerint ; and 14 belong to the entire statement, c.g., 34, 50, 1 manare omnibus gaudio lacrimae, adeo ut ipsum quoque confunderent dicentem. The remaining instances are used with a negative or with a pronoun.

An ut clause is frequently used to indicate the limitations of a preceding demonstrative statement. The occurrences of hoc . . . ut are chiefly in the speeches where the supposed speaker presents what is immediately before him, while Livy viewing the events from a distance uses $i d$, and occasionally illud.

Hoc . . . ut (21). - Hoc is most commonly used as a modifier, e.g., $5,6,8$ an hic sit terror nominis nostri, ut . . . possit ; and with forms of lex 1, 24, 3; 23, 33, 9; and 33, 30, 2. It also stands alone: 6, 29, 9 Iuppiter atque omnes divi hoc dederunt, ut T. Quinctius dictator oppida novem caperet; $8,5,4 ; 10,28,13 ; 24,3,15 ; 39,13,6$; and $36,35,4$ ne hoc quidem reliqui est, ut indignis accidisse ea videantur. In other connections: 5, 53, 5 hoc ad Aliam fuga, hoc capta urbs, hoc circumsessum Capitolium necessitatis imposuisse, ut desereremus penates nostros; 45, 39, 8 ad hoc fecimus consulem, ut bellum . . . perficeret; 2, 40, 6 in hoc me longa vita . . . traxit, ut exulem te, deinde hostem viderem!

Illud . . . ut. - 30, I7, i i illud quoque petere Masinissam ut . . . remitterent; 45, 41, 8 illud optavi ut mutationem eius domus mea . . . sentiret.
$I d$. . . ut (128). - Id is the most freely used of the demonstratives, counting the occurrences of eo (42) indicating the terminal point of an action, e.g., 10, 19, 3 eo rem adductam, ut . . . sit delegatum ; 7, 30, 9 eo ventum est, ut . . . simus. Eo is strengthened by usque 22, 57,3 ; and 25,21 , 10 eo usque est caesa, ut . . . duo milia haud amplius evaserint.

There is a dependent genitive 25,8 , 1 I consuctudinis; 32,18 , 8 neglegentiae; 41, 23, 1 irarum. The demonstrative is generally a modifier, c.g., 8, 30, 5 ea fortuna pugnae fuit, ut nihil relictum sit ; 2, 44, 8 id unum venenum, eam labem . . . repertam, ut magna imperia mortalia essent ; 1, 21 , 2 in eam verecundiam adducti sunt, ut . . . ducerent nefas; 26, 12, 2 eo cursu contendit, ut prope . . . incautos oppresserit. Id also stands alone in about a dozen passages, c.g., 6,15 , $13 ; 6,38,9 ; 6,39,10 ; 7,20,5 ; 27,17,14$ se id Scipionem orare, ut transitio sibi . . . sit ; and at times with the restrictive modo: 1, 17, 11; 3, 50, 16; 3, 52, 11; 4, 2, 7; 29, 2, 6; 39, 37, $21 ; 43,12,5$ id modo finitum, ut duas legiones scriberet. Noticeable is the use of a preposition in the first member ; ad: 4, 58, $3 ; 6,42$, 1 ad id modo valuit, ut tempus . . proferretur ; 7, 30,$4 ; 23,19,13$ postremo ad id ventum inopiae est, ut . . conarentur ; cum: 8, 14, 2 ; 8, 14, 8 ; 30, 10, 21 ; $36,5,3$ cum eo, ut caverent ; in: $32,30,8$ in id fides data consuli est, ut . . . quiescerent. 2, 17, 5 iam in eo esset, ut in muros evaderet miles ; 4, 56, 1; 8, 27, 3; 28, 22, 8; 30, 19, 3 ; 33, 41, 9 ; 35, 38, 11; pro: 22, 1, 2 postquam pro co, ut raperent. The $u t$ clause also expresses finality, as in 23,47 , I id modo moratus, ut consulem percunctaretúr ; 28, 15, 3 et ad id sedulo diem extraxerat Scipio, ut sera pugna esset; 4, if, 2 subventum eo inpensius, ut delerent . . . infamiam iudiciii.

Tantum . . . ut (211). - Tantum is used as a modifier, as in 2,7 , I tantus terror . . . incessit, ut . . . abirent; with dependent genitive, e.g., 2, 14, 6 tantum spei fecere, ut acie decernere audebant; and in the neuter as in 2,33,9 tantumque sua laude obstitit famae consulis Marcius, ut . . . memoria cessisset. Occasionally tantum has a restrictive force : 3, 15, 8 dant tamen arma, non vulgo, tantum ut incerto hoste praesidium satis fidum ad omnia esset ; 24, 1, 4; 35, II, $4 ; 40,9,5 ; 40,56,1 ; 42,53,4 ; 43,6,9$ id se tantum orare, ut in amicitiam populi Romani reciperentur ; 4I, 19, 6 moneri eum tantum modo iussit, ut . . . curaret. Tantum abesse $u t$ is found 4, 58, 2 tantum afuit ut . . . peteretur; $6,32,1 ; 26,31,5$; and followed by an ut clause $6,15,5$
tantum abest ut impedimento sim, ut . . . adhorter ; 6, 3 I , $4 ; 22,5,3 ; 25,6,11 ; 26,26,6 ; 39,28,6 ; 44,38,4$.

Talis . . . ut 34, 22, 9 in vos talis fuit, ut nobis . . . satis digna causa belli fuerit.

## SUMMARY.

Variation both in form of expression and in arrangement is the most noticeable feature of the examples collected. Especially where the members are composed of more than one term there is frequent shifting evidently for rhetorical purposes. This is well illustrated by the formula Non Modo, Scd Etiam and its equivalents with 65 different combinations. When there is but one term in each member, the reversal of the normal order often renders one particle unnecessary. This is clearly seen in the omission of tamen, leaving quamquam or etsi alone in the second member. When the parts are in their usual order, variety is attained by the admission of all manner of equivalents, as is the case with primum, deinde, and their equivalents with fifty variations. Comparative statements are set forth with equal fulness, and nearly all possible changes are illustrated in the use of the comparative particles. There are a few features peculiar to Livy, a few not of common occurrence elsewhere, and frequent indications of the broadening of Latin phraseology, a fact also evidenced by the works of Vergil.
VI. - Fragments of an Early Christian Liturgy in Syrian Inscriptions.

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The subject of this paper is, of course, somewhat remote from the daily work of most of the members of this association; but I trust that it will not be of less interest on that account, and that it will not be without some actual value.

Nearly three years ago my friend and fellow-traveller in Syria, Dr. Enno Littmann, copied for me an inscription in the ruins at Bshindelinteh, a town in the mountain country immediately to the east of Antioch on the Orontes. The inscription was found on a lintel, apparently that of a church doorway, and was so badly weathered that Dr. Littmann's copy was necessàrily imperfect. At first it seemed impossible to make anything out of this inscription, except that it was distinctly religious in character, and I despaired of being able to decipher it unless I could find a clew elsewhere. Many inscriptions of this sort, published by Waddington and others, contain more or less literal quotations from the Bible ; butt it was easy to make certain that no Biblical quotation was involved here. It then occurred to me that possibly this inscription contained a quotation from some form of public worship in use among the churches of this region, and that the passage quoted might be found in some of the Greek liturgies which have had a literary tradition. This proved to be the case (cf. C. A. Swainson, The Greek Liturgies, 1884, p. 12, n. 3, pp. 14, 226, 383), and it then became a simple matter to restore the full text of the inscription, which is as follows:
*A yıos ó ©єós, äytos i[ $\sigma](\chi)$ vpós, äyıos á ${ }^{\text {Oávatos, }}$ ( $\sigma$ ) $\tau \alpha(v) \rho o \theta(\epsilon i) s$

Holy God, holy Mighty (One), holy Deathless (One), crucified for us, have mercy upon us!

This is the famous trisagion, "Aylos ó Өcós, äycos io $\chi$ v-
 $\dot{o} \sigma \tau a v \rho \omega \theta \in i s \delta i{ }^{\prime} \eta \not \mu a \hat{a}$, inserted by the heretic Peter the Fuller, bishop of Antioch, about the year 470 A.D. The insertion of this phrase was a part of a fierce ecclesiastical controversy. The orthodox churchmen of the fifth century, believing that all such formulae of worship should apply to the Trinity, had interpreted the threefold invocation of the trisagion as referring successively to the three Persons of the Godhead, and considered the subject of the verb $\begin{gathered} \\ \lambda\end{gathered} \epsilon_{\eta \sigma o \nu}$ to be the Trinity thus invoked. On the other hand, the sect of the monophysites, which was strongly represented in Antioch at this time, applied the whole invocation to the one God, and Peter, in inserting the words "Who wast crucified for us," made the trisagion a distinctly monophysite formula, asserting that God was crucified.

The trisagion, or hymnus trisagius, is to be distinguished from the hymnus tersanctus, or "triumphal hymn," of which I shall have occasion to speak in a moment : the latter is one of the earliest hymns of the Christian Church, and had a place also in the Jewish ritual. The trisagion is not properly a hymn, but a short invocation, often thrice repeated, and is found in most of the Eastern liturgies, as for example in the Alexandrine liturgy, called the "Liturgy of St. Mark," in the so-called "Liturgy of St. James," and in the Syriac liturgies: it was usually employed in the service after the "little entrance," and before the lections. It is not found, however, in the so-called "Liturgy of St. Clement," which, although it was doubtless the early liturgy of the Roman Church, is thought to have originated in Antioch. This liturgy is probably older than the present form of any other, inasmuch as it is contained in the "Apostolic Constitutions," a compilation which is believed to have received its present form in the fourth century.

There is some uncertainty as to the age of the trisagion; but the traditional story of its origin is too edifying to pass over lightly. According to John of Damascus, a writer of the eighth century, and Nicephorus Callistus, of the four-
teenth, it seems that in the time of Theodosius the Younger, when Proclus was bishop of Constantinople, i.e. between 434 and 446 A.D., there were violent earthquakes, occasioning innumerable disasters on land and sea, great loss of life, and a general panic, so that the people of Constantinople held public services, making supplication unto God to avert their total destruction. And while they were praying, "a child was taken up from among them, and so was taught, by the teaching of the angels in some way, the thrice holy hymn : 'Holy God, holy Mighty One, holy Deathless One, have mercy upon us.' And when the child returned and told what it had been taught, the whole multitude sang the hymn, and thus the calamity was stayed." Some say that shortly afterwards the child died (Nicephorus Callistus, Eccl. Hist. XIV, 46 ; John of Damascus, Expos. Fidei Orthod., III, IO. Cf. John Dam., Epistola ad Jordanem de Hymno Tiisagio). Whatever may be the true date of the trisagion itself, however, there is a general agreement as to the origin of the heretical phrase added to it and contained in the Bshindelinteh inscription : this phrase is ascribed, as I have said, to Peter the Fuller, a cleric of somewhat unsavory reputation, who became bishop of Antioch. Theodorus Lector, a writer of the sixth century, in his Ecclesiastical History, I, 20, said: "When Martyrius held the episcopate of the church of Antioch, Zeno, the magister militum, who had married Ariadne, the daughter of the Emperor Leo, came to Antioch. In his company was a-certain Peter, who was called 'Fullo,' a presbyter of the church of St. Bassa the Martyr, which is in Chalcedon. And, coveting the throne of that city (Antioch), he persuaded Zeno to join with him in his undertaking. Then, giving money to some of the sect of Apollinarius, he stirred up countless tumults against the faith and against Martyrius the bishop, anathematizing those who did not say that God was crucified. In doing so he brought the people to faction, and in the trisagion Peter added the phrase 'o $\sigma$ taup $\omega \theta \epsilon i s ~ \delta i$ ' $\dot{\eta} \mu a ̂ s . ' " ~ T h e ~ " L i b e l l u s ~ S y n o d i c u s " ~ a d d s ~ t h a t ~ P e t e r ~ c a l l e d ~$
 the "hymn."

The first accession of Peter to the episcopal throne of Antioch, about the year 470, affords, therefore, a definite terminus post quem for this inscription. And it is, of course, possible that the new formula was carried at once to the little town in the hill country where the inscription was found. But this is unlikely. Furthermore, it is unlikely that a formula, whose orthodoxy was still a subject of fierce dispute, should be accepted by the country people, unless it were in deference to an authority which seemed to them both complete and permanent. But Peter's position in his diocese was never secure. Not long afterwards, however, when Severus was bishop of Antioch, from 512 to 519, the monophysites became dominant in all this region, and enforced with violence the acceptance of their dogmas. This Severus, who was regarded as the true founder of the organized monophysite sect, was a monk who, for his dissolute habits or his heterodox views, or for both, had been driven out from at least one monastery - some say from several and had come at last to Constantinople, where he joined with Timotheus, afterward bishop of that city (5II-517), and others in a determined war upon the orthodox faith. The Emperor Anastasius himself (491-5I8) declared in favor of the monophysites, and undertook to reduce the orthodox bishops to submission, or to dispossess them of their sees. Through all this movement, Peter's addition to the trisagion was the watchword and war-cry of the party, and crowds of heretic monks, clergy and laity, incited by the emperor and his coadjutors, together with the rabble which was hired for the purpose in various cities, singing the new version of the old formula, started the riots which preceded the downfall of recalcitrant prelates. At Constantinople mobs in two of the principal churches "in singing the trisagion added the words 'Who wast crucified for us,' so that the orthodox of necessity drove them out with blows" (Theophanes, Chronographia, p. I32). Once installed, and confident in the support of the emperor and the bishop of Constantinople, Severus seems to have entered on a career of violence and intimidation throughout his diocese. In this he had the
hearty coöperation of his subordinate, the infamous Peter of Apamea. Among the stories told of their cruelty and oppression in the memorial presented by a body of Eastern monks to Memnas, the orthodox bishop of Constantinople, in 536, is the account of how a company of "Hebrew robbers," employed for this purpose by Severus and Peter, waylaid a band of 350 old men who were travelling to the monastery of St. Simeon, doubtless the great Kal'at Sim'ân, not far from the town of this inscription. The pilgrims were killed, and their bodies stripped and left unburied (Sacr. Concilionım Coll., ed. Mansi, V, p. 998 f.). It is not impossible that at such a time the church at Bshindelinteh had the formula of the triumphant faction carved on its lintel, either to win the favor of those at that time in power, or to protect the community during this reign of terror, or perhaps even in consequence of a direct threat.

Severus's power soon came to an end. In 518 Anastasius died, Justin became emperor, and Severus was deposed: there never was another legitimate monophysite bishop of Antioch. The monophysite formula does not seem to have been forbidden at once, for even the orthodox Ephraem, who was bishop of Antioch from 527 to 545 , in a letter to Zenobius of Emesa, defended its use on the ground that those who applied the whole trisagion to Christ alone might without sin add the phrase "Who wast crucified for us" (Photius, cod. 228, a, 40 ff .). But certainly after the fall of Severus the addition of the words in question was never compulsory in the Catholic Church, and was soon discontinued in most places. Nicephorus Callistus (XVIII, 51) says: "This heresy, which was begun by Cnapheus (i.e. Peter the Fuller) and attained its growth to a great extent from Severus and his followers, not long afterward was entirely quenched, it having been abolished in the Church of God, and persisting still only among the Armenians, who do not choose to be obedient to the catholic traditions." And as a matter of fact the trisagion with the addition does not occur in any of the traditional liturgies, so far as I have been able to discover, except in that of the Armenian Church. In the ancient

Syriac liturgies which I have been able to examine, viz. through the Latin translations, the trisagion occurs without the addition. The dialogue, however, between "The Jacobite" and "The Melcite," written early in the thirteenth century by David, son of Paul, and published in part by Assemani in the "Bibliotheca Orientalis," I, p. 5 I 8 ff ., proves that in this century the trisagion with the addition was still in use in at least one branch of the Jacobite Church. Assemani also says that in the liturgical books printed in Rome for the Maronites of Syria in his time (the middle of the eighteenth century) the trisagion with the addition occurred. It is quite possible, therefore, that the church of Bshindelinteh belonged to the Jacobite denomination, which was formally organized in the time of Justinian, about 535 A.D., but which some of the Jacobites considered to have begun with Severus. This conclusion is strengthened by the fact that I found the trisagion with the addition again in a fragment of an inscription at Selemîyeh, a town about twenty miles east-southeast of Hamā. Two other inscriptions also contain the trisagion, one at Mektebeh and one at il-Khanâșir; but these are so fragmentary that it is not possible to say with certainty whether they included the heretical phrase or not. Now it is not altogether surprising, but it is of some importance to have positive proof that certain communities in Northern Syria in the fifth or sixth century employed a liturgy which contained the monophysite form of the trisagion.

The discovery of the source of the four inscriptions just described naturally suggested an examination of the unpublished inscriptions in my possession and those from this region already published, with a view to finding, if possible, other fragments of the early ritual in use there. I collected in all about fifty texts of distinctly liturgical character, contained of course in a larger number of inscriptions. These are all from the region which lies immediately to the east of Antioch, and date from the fourth, fifth, and sixth centuries: five of them, which I shall discuss first (nos. 2-6), are contained verbatim in some extant liturgy.
2. The most interesting of these, in some ways, is one found in Hâss, on a mausoleum which dates probably from the fifth century, and of which I shall have occasion to speak again : it is the so-called "Tomb of Diogenes." The inscription, published by Waddington (Inscriptious Grecques ct Latines de la Syrie, 1870), no. 2661 a, is as follows:
 фavev ijpiv.

Blessed (be) he that cometh in the name of the Lord. Godd (is) the Lord, and hath shewed us light.

This is taken from Psalm cxvii. 26 and 27 (cf. Matt. xxi. 9). But Ps. cxv.-cxviii., to quote from Mr. Warren (F. E. Warren, The Liturgy and Ritual of the Ante-Niccue Church, 1897, p. 33), "formed the second part of the Hallcl, and were sung by every Jewish family or company at the conclusion of the Paschal Supper": they are generally supposed to have constituted "the hymn recorded to have been sung by our Saviour and His disciples after the institution and reception of the first Christian Eucharist." Almost the same words as those in this inscription occur in the "Apostolic Constitutions,"
 Kúpıos ó є̇тьфаעєє̀s $\dot{\eta} \mu \hat{\imath} \nu$ є่ $\nu \quad \sigma a \rho \kappa i ́$. The first part also occurs in the so-called "Liturgy of St. James" (Swainson, p. 268), as a part of the lymmus tersanctus, or "triumphal hymn," to which I have already alluded, and which is said by Mr. Warren (p. I7I) to have "formed a part of every known liturgy." It also forms a part of the Jewish Kcdusha (Warren, p. 215).
3. Another liturgical passage occurs in two unpublished inscriptions, one found at Wâdī Martḥun and the other at il-Bârah, and again in a second inscription from il-Bârah published by Waddington, no. 2647. All these are undated. The first two are over doorways which apparently led to private dwellings, while the third is on a window lintel. The first and third are fragmentary: the second is as follows:

Glory to God in the highest, and on earth peace, grod will among men.

This passage is taken from Luke ii. I4, and is especially interesting in view of the dispute as to the reading eúסoкía or єúסoкías. It also occurs in the "Liturgy of St. James" (Swainson, p. 254), to be repeated three times, and in the Coptic liturgy (Swainson, p. 395).
4. The Gloria Patri, or "Lesser Doxology," is found in several inscriptions, one of which is in an underground rockhewn tomb at Kōkanâyā, dated in the month Lous, 369 A.D. (Waddington, no. 268I). The whole inscription is as follows:
 "Etovs そしv', $\mu \eta v i ̀ \Lambda \omega ́ v v \kappa \zeta$.

For Eusebius a Christian. Glory to the Father, and to the Son, and to the Holy Spirit. In the month Lous, (on the) $27^{\text {th }}$ (day), of the year 417.

Another inscription, published in part by Chabot, after a copy by M. Poche, in the Journal Asiat., I 90I, p. 442, contains the fuller form of this doxology. It is on the lintel of a ruined and half-buried building, probably a tomb, at il-Khanâsir: $\Delta o^{\prime} \xi a$ Патрì каì Oîov̂ каì à $\gamma i ́ o v ~ \Pi \nu є u ́ \mu а т о s, ~(\nu v ̂ \nu) ~ к а i ̀ ~ a ̉ ~(\epsilon i) ~ к а ~(i) ~$ $\epsilon(i) s$ тov̂s $[a i](\hat{\omega}) \nu a s$. 'A $\mu \dot{\eta} \nu$. These words are followed by another line, which probably contains the date and the builder's name, but which I have been unable as yet to decipher. The Gloria Patri occurs in the "Liturgy of St. James," and in the Coptic liturgy (Sw. pp. 215 ff ., 226, and 362: cf. pp. 16, 76, 220, and 373).
5. In one inscription, found at Hâss on a lintel ornamented with an almost classic egg-and-dart moulding, the Gloria Patri is followed by the words

> इêaov Kúpıs ròv גaóv aov•
> Lord save thy people!

The passage is undoubtedly taken from Ps. xxvii. 9; but it also occurs in the "Liturgy of St. James" (Sw. p. 230 f.), and near the beginning of the "Liturgy of St. Basil" (Sw. p. 76 ; cf. pp. 77 and 86): in the latter case these words are immediately preceded by what is practically the equivalent
 $\pi \rho о \sigma \kappa v ́ \nu \eta \sigma \iota \varsigma, \tau \hat{\omega}$ Патрí, каí (кт入.).
6. Another inscription, found by M. de Vogüé at il-Bârah (Wad. no. 2650), contains the sentence

The Lord is my shepherd; I shall not want.
These words are taken from Ps. xxii. I : they occur also in the "Liturgy of St. James" (Sw. p. 3I4).

Each of these six passages which I have thus far described is to be found, in precisely the same form, in one or more of the extant liturgies: all are to be found in the so-called "Liturgy of St. James." While three of them are from the Psalms, one is from the Gospel of Luke, and two are not contained in the Bible at all. Hence they are not simply quotations from the Psalter, and they show that at least some of these Syrian inscriptions do contain fragments of the liturgy or ritual employed in the churches of this region between the third and the seventh centuries. They suggest that this liturgy resembled either the "Liturgy of St. James" or the "Liturgy of St. Basil" in their present form more closely than any other of the liturgies which remain to us. They suggest also that inscriptions may furnish some new and independent evidence as to which of the various manuscripts represent most nearly the original form of the liturgies which they contain. For example, of the four Mss. of the " Liturgy of St. James," only the Codex Rossanensis and the Codcx Parisinus no. 2509 contain the passage: Kúpıos moı $\mu$ aiveı $\mu \in \kappa \tau \lambda$.

The rest of the fifty texts are not to be found verbatim in the extant forms of the liturgies; but they are not, on this account, without importance in this connection. For it must be remembered that with the exception of the few brief paragraphs in the " Didache of the Apostles," which is thought to date from the second century, and the remains of the liturgy in the "Apostolic Constitutions," we have no liturgy whose present form is known to be older than the eighth cen-
tury: the Barberini codex, containing the liturgies called by the names of St. Basil, of St. Chrysostom, and of "The Presanctified," dates from the eighth or ninth century, a fragment in the University Library at Messina, containing a portion of the "Liturgy of St. James," is dated 960, while all the rest are from the twelfth century or later. And these manuscripts do not represent a fixed tradition, like so many copies of various literary productions. This is proved by the wide divergences between the different manuscripts purporting to contain the same liturgy. But each manuscript appears to represent that form of the given liturgy or liturgies known and in use at the time and place at which the manuscript itself originated. Furthermore, nothing certain is known as to the author, the date, or the place of composition of most of these liturgies. Mr. Swainson, in the introduction to his "Greek Liturgies," says: "The first record we have of the existence of Liturgies ascribed to St. Basil and St. James is in a canon (no. XXXII) of the Council held 'in Trullo,' A.D. 692." Another canon of the same Counc̣il (no. LII) mentions the "Liturgy of the Presanctified." It is true that a treatise, attributed to Proclus, Patriarch of Constantinople from 434 to about 446, "states that both Clement and James were authors of Liturgies, that Basil reduced the length of the services as he found them in his day, and then our father John of the golden mouth cut them down still more." But this treatise is probably much later than Proclus. Mabillon, in the preface to "De Liturgia Gallicana," quotes a letter from Charles the Bald to the clergy of Ravenna, from which it appears that about the year 860 the "Liturgy of St. Basil" was in use in Constantinople, the "Liturgy of St. James" at Jerusalem. "The words quoted by Mabillon have frequently been referred to, but it is not known where the letter is to be found in full; and thus a strange doubt hangs over them. The more important portion of the letter is said to have proceeded as follows: 'Celebrata etiam sunt coram nobis missarum solemnia more Hierosolymitano, auctore Jacobo Apostolo, et more Constantinopolitano auctore Basilio: sed nos sequendam ducimus Romanam ecclesiam in missarum celebratione.'"

But the most valuable information of all on this subject is contained in the message sent by Theodore Balsamon, librarian at Constantinople and afterwards Patriarch of Antioch, to Mark, Patriarch of Alexandria, at the beginning of the thirteenth century: "We see therefore," he said, "that neither from the Holy Scriptures nor from any canon synodically issued have we ever heard that a Liturgy was handed down by the holy Apostle Mark : and the thirty-second canon of the Council held 'in Trullo' is the only authority that a mystic Liturgy was composed by the holy James, the brother of the Lord. Neither does the eighty-fifth canon of the Apostles nor the fifty-ninth canon of the Council of Laodicea make any mention whatever of these Liturgies, nor does the Catholic Church of the Oecumenical See of Constantinople in any way acknowledge them. We decide therefore that they ought not to be received; and that all Churches should follow the example of New Rome, that is Constantinople, and celebrate according to the traditions of the great teachers and luminaries of the Church, the holy John Chrysostom and the holy Basil" (Swainson, introd. pp. xxvii-xxxi).

None of our manuscripts of any liturgy therefore necessarily represent the liturgy used in the churches of Northern Syria between the third and the seventh centuries. The wide divergences, not only between the different extant liturgies, but also between the different versions of the same liturgy, make it seem highly probable that none of our manuscripts do represent such a liturgy. That there was a liturgy, however, at that time, and indeed as early as the second century - perhaps from the very beginning of the Christian religion is abundantly proved by the "Didacke of the Apostles," and by the writings of Church Fathers such as Clement of Rome and Origen. Moreover, those passages which the Greek versions and the Syriac versions of the "Liturgy of St. James" have in common make it probable, as Sir William Palmer has pointed out, that certain portions of this liturgy were in existence, and were probably in use, in Northern Syria before the schism which took place not long after the Council of Chalcedon in 45 I . It follows that the absence of the text
of an inscription from the extant texts of the liturgies does not prove that this text was not contained in a liturgy at all. On the contrary a liturgy, fragments of which are found in inscriptions of the fourth, fifth, and sixth centuries, is much older than the present form of most, perhaps all, of the traditional liturgies. And I think that we may expect to find also that the earlier liturgy made more direct use of the Scriptures, and perhaps also clung more closely to the traditional forms of the Jewish service. Most of the inscriptions of which I am speaking are of this sort. A few of them, as we have seen, are contained verbatim in an extant liturgy; but the majority of them are not. Many of these, however, are so similar in sense and phraseology to passages in the traditional liturgies, that it is possible in many cases to say in what part of the service they probably occurred. Others again, while not so suggestive of particular passages in the traditional Christian liturgies, either reflect phrases which are known to have occurred in the Jewish ritual, or contain quotations from the Scriptures - generally, of course, from the Psalms - appropriate to a Church service. Of these I can give only a brief summary here : the inscriptions themselves will appear in full in the publications of the expedition of which I was a member.
7. Among the epigraphical texts which are most akin to definite passages in the traditional liturgies are such phrases as

In the name of the Father, and of the Son, and of the Holy Spirit. Amen,
found at Dêr Sambil. With this we may compare Matt. xxviii. 19, the "Didache of the Apostles," cap. VI, and many passages in all the liturgies. Or the following, which forms the first part of an inscription on a large doorway at Bābiskā :

> 8. $\quad$ ' v ỏvó $\mu a \tau \iota \mathrm{~K}(v \rho i o) v{ }^{'} \mathrm{I}(\eta \sigma o) \hat{v} \mathrm{X}(\rho \iota \sigma \tau o) \hat{v} \cdot$
> In (the) name of (the) Lord Jesus Christ.

Cf. Acts viii. I6, and xix. 5, Warren, p. II ff. (cf. aiso "Lit. of St. James," Sw. p. 236). Or

In the name of the holy Trinity... Indiction 14, in the year 599 (i.e. 550 A.D.),
found at Dâr Kîtā, or
 $\tau \hat{\eta} \mathrm{s} \theta_{\epsilon}$ [ото́коข $\kappa \lambda \lambda$.
In the name of the Father, and of the Son, and of the Holy Spirit, and of the Mother-of-God, etc.
an inscription on two fragments of a large lintel now lying within the walls of a ruined church at Dêr Sêtā (Wad. no. 2679). Doubtless some, if not all, of these were formulae of baptism, and consequently familiar to all Christians.
ir. One of the commonest of these texts is to be found in four inscriptions, all connected with churches, one in Bākirḥā, and three in Dâr Kîtā: the latter are dated 418, 431, and 537 A.D. respectively :

(There is) one God and his Christ and the Holy Spirit.
This seems to be a kind of abbreviated creed. It may be compared, however, with such passages in the liturgies as e.g. from the Alexandrine liturgy (Sw. p. 66): Eis Пarŋ̀p äyıos,
 'A $\mu \dot{\eta} \nu$. Similar passages occur in the "Liturgy of St. Basil" (Sw. p. 86), the "Liturgy of St. Chrysostom " (Sw. p. 94), the "Liturgy of St. James" (Sw. p. 310), the "Liturgy of the Presanctified "(Sw. p. 98), and in the lectures of Cyril of Jerusalem to the newly baptized (Sw. p. 210). The Bākirḥā inscription contains, after the formula given above, the words $\beta \circ \eta \theta \dot{\eta} \sigma \epsilon(l$ ? $)$ тoùs фoußoupévous aủtov̂: He shall help them that fear Him, while in the latest of the inscriptions from Dâr Kitta the formula is followed by the word $\beta$ on $\theta \eta$ or $\beta$ o $\eta \theta \eta$ s. Similar texts occur frequently, e.g. at Djūwānîyeh: Eis Өcòs кai ó Xeıfoòs aưtov̂; at the same place, dated 398 A.D. : Eifs ©eòs
 place again, dated 374 A.D. : Eis $\Theta \epsilon \omega ̀ s$ ó $\beta \omega \eta \theta \hat{\omega} \nu$ roùs $\phi \omega \beta$ ou$\mu$ évous aủtoû.
12. A similar text is curiously combined with others in the oldest of all dated Christian inscriptions in Syria, found by Waddington on the lintel of a doorway at $\underset{C}{ }$ ātûrā : it is dated 331 a.d. (Wad. no. 2704):



Jesus Christ help (us) ! (There is) one God only. Thalasis built (this). Whatsoever thou sayest, friend, (may that be) unto thee also, twofold! In the year 380. Enter, O Christ!

The words $\epsilon \ddot{\iota} \sigma \epsilon \lambda \theta \epsilon \mathrm{X} \rho \iota \sigma \tau \epsilon ̀$ recall a passage which occurs in the "Liturgy of St. Basil" (Sw. p. 86) and in the "Liturgy of St. Chrysostom" (Sw. p. 93): Про́ $\chi \notin \varsigma$, Kúpıє 'I $\eta \sigma o \hat{v}$ X $\rho \iota \sigma \tau \epsilon ́, \ldots$. . каi є̇ $\lambda \theta \grave{\epsilon}$ єis тò á $\gamma \iota a ́ \sigma a \iota ~ \grave{\eta} \mu a ̂ s$.
13. Another sentence, very common in certain localities I found it on the lintels of three houses in il-Bârah, including Wad. no. 2646 - is the following:
 ai$\omega \nu \nu \omega v$. 'A $\mu \dot{\eta} v$.

The Lord shall preserve thy coming in and thy going out from this time forth and for evermore. Amen.

The same is found also in an inscription at Taltîtā, dated 570 A.D. The passage is taken originally from Ps. cxx. 8. It may be compared, however, with a passage at the end of the "Clementine" liturgy (Brightman, Liturgies, Eastern and

 sentence from Chrysostom's account of the service in his day (Sw. p. 218): Парака入є́ $\sigma \omega \mu \epsilon \nu$. . . 'iva єủ $\lambda \sigma \gamma \eta{ }^{\prime} \sigma \eta$ тàs єíбóסous
 andrine liturgy, Sw. p. 32.
14. The following inscription is from a tomb, in the form of a temple distyle in antis, at Ruwêhā, and contains the date 384 A.D. (C.I.G. no. 4462) :


(There is) one God only that giveth aid. For the safety and remembrance of the living. Bassimas and Mathbabea renewed (this tomb), in the year 433.

This recalls such oft-repeated passages in the liturgies, as for example in the "Liturgy of St. James" (Siv. p. 312): "Eтє סє̀ каi

 $\epsilon \iota \pi \omega \mu \epsilon \nu \pi a ́ \nu \tau \epsilon \varsigma \epsilon \in \epsilon \tau \epsilon \nu \hat{\omega} s$. In the inscription I believe that the words $\tau \hat{\omega} \nu$ ऊóv $\omega \omega \nu$ refer to those living the life beyond the grave, as in the prayer for the dead in this same liturgy (Sw. p. 300): 'Eкєî aủzoùs ả $\nu a ́ \pi a v \sigma o \nu ~ \epsilon ่ \nu ~ \chi \omega ́ \rho a ~ \zeta \omega ́ \omega \nu \tau \omega \nu, ~ \grave{\epsilon} \nu$
 case, and if the punctuation given above is correct, this inscription implies a belief on the part of these Christians of 384 A.D. in the efficacy of prayer for the estate of the dead. Much stress, however, cannot be laid on this phrase $i \pi \epsilon \bar{\rho}$ $\sigma \omega \tau \eta \rho i a s ~ к а i ~ \mu \nu \eta \dot{\eta} \mu \varsigma$, which might easily have been suggested by the stereotyped iлт̀ $\rho \sigma \omega \tau \eta \rho i a s ~ к а i ~ \nu i к \eta я, ~ w h i c h ~ i s ~ c o m-~$ paratively common in the inscriptions of Syria, e.g. Wad. nos. 2035,207 I, 2545 , etc.

I 5. The interior of a tomb at Shnân contains the following:

|  'I $\eta \sigma$ ov̂s ó X $\rho \varepsilon \iota \sigma \tau o ́ s$. | $\begin{aligned} & \text { B (or } \Theta \text { ? ) YMГ } \\ & \text { BYMए } \end{aligned}$ |
| :---: | :---: |
| Гévos $\Delta$ aovíó, oủpávios к入ádos, | BYM |
| 'İбoûs ó X X ¢וбто́s. | BYMए |
|  | BYMए |
|  | BYMए |

Though immortal, he endured many sufferings, Jesus the Christ.
Race of David, heavenly branch, Jesus the Christ.
Extolled (the) Only-begotten, Immortal (One), in all the earth, Jesus the Christ.

The four letters at the end of each line may stand for $\Theta(\epsilon 0 \hat{v})$ $\nu_{\text {(iòs) }}^{\prime} \mathbf{M}$ (apias) $\gamma(\epsilon \nu \eta \theta \epsilon i ́ s)$ : Son of God, born of Mary (cf. Waddington's commentary on inscr. no. 2145). . The second sentence of the inscription may be compared with the "eighteen Benedictions" of the Jewish ritual, sec. 14 b (Warren, pp. 213 and 243 ; cf. also Luke i. 69): "The branch of David Thy
servant speedily cause to flourish, and exalt his horn with Thy help, etc." ; but the rest resembles to no small degree the hymn which, according to Dr. Neale, is indicated by the words 'O $\mu$ ovoyev̀̀s riòs кai Móyos in the Alexandrine liturgy





 ferred to in the "Liturgy of St. James " (Sw. p. 220 f. ; cf. also Sw. pp. 303 and 308).
16. But the most interesting of all, in my opinion, is an inscription, hitherto unpublished, belonging to the so-called "Tomb of Diogenes" in Heâss :




 ${ }_{\epsilon}^{\epsilon} \gamma \lambda \epsilon(\kappa) \tau \omega \bar{\omega} \sigma[o v]$.

Thou who gavest life to the human race, and didst enjoin death on account of transgression, and in thine own loving-kindness and tender mercies didst promise the resurrection, and gavest a pledge, Christ, visit with thy salvation thy servant Antoninus son of Diogenes, and Dometia his wife, and the others who lie at rest here, that they may see the good of thy chosen.
 the latter part of the inscription is evidently taken ultimately

 the whole inscription is allied, both in phraseology and in spirit, to the traditional liturgies, may be seen by comparing the following passages, selected in the order in which they occur, from the "Liturgy of St. Basil" (Sw. pp. 76 to.83):




 $\dot{\eta} \mu \omega \hat{\nu}, \kappa \tau \lambda$.









 $\tau \omega ิ \nu \kappa є \kappa о \iota \eta \mu \epsilon ́ \nu \omega \nu, \kappa \tau \lambda$.

 ধ่ $\pi \iota \sigma \kappa o ́ \pi \epsilon \iota ~ \tau o ̀ ~ \phi \omega ̄ \varsigma ~ \tau o v ̂ ~ \pi \rho o \sigma \omega ́ \pi o v ~ \sigma o v . ~$

Lastly, there are two passages, one of which (I7) is contained in one, the other (18) in two Syriac inscriptions from this region, communicated to me by Dr. Littmann :
17. Deliver me, O Lord, from the evil man.

This is derived from Ps. cxxxix. I: 'E $\xi \in \lambda o \hat{v} \mu \epsilon$, K $\dot{\nu} \rho \iota \epsilon$, $\epsilon \xi$ $\dot{\alpha} \nu \theta \rho \omega ́ \pi o v \pi о \nu \eta \rho o \hat{,}, \kappa \tau \lambda . ;$ but the passage may also be compared with the following, from the "Didache of the Apostles"
 aúrì $\nu \dot{a} \pi \grave{o}$ тavтòs movppoû. Compare also, from the Alexandrine liturgy (Sw. p. 4): Пâ $\sigma a \nu \pi o \nu \eta \rho \hat{\omega} \nu \dot{\alpha} \nu \theta \rho \omega ́ \pi \tau \omega \nu$ є่ $\pi \iota$

 of'St. James" (Sw. p. 306 ff .) : Kúpıє . . . $\dot{\rho} v ิ \sigma a \iota ~ \grave{\eta} \mu \hat{a} s ~ a ̉ \pi i ̀ ~ \tau о \hat{v}$


## 18. Let God arise, and let all his enemies be scattered.


 ent version of the same passage occurs repeatedly in the various Alexandrine liturgies, e.g. Sw. p. 20: 'E $\xi \in \gamma \epsilon ́ \rho \theta \eta \tau \iota$,
 Sw. pp. 17, 23, and 46 f.

I have not made any thorough comparison between the texts furnished by these inscriptions and what remains to us of the Jewish ritual of the early Christian centuries. But two inscriptions resemble closely those portions of that ritual which are quoted, for purposes of comparison, by Mr. Warren in his book on the Liturgy and Ritual of the Ante-Nicene Church, to which I have already referred.
19. One of these is from il-Bârah, and has been published by Waddington, no. 2652:

Let thy mercy, O Lord, be upon us, according as we hope in thee.
This is derived from Ps. xxxii. 22: it is also contained in the "Eighteen Benedictions," or the "Prayer 'Shemonal Esrah'" of the Jewish ritual, sec. I3 (Warren, p. 212): "On us bestow, O Lord our God, Thy mercy ; give ample reward to all who trust in Thy name in sincerity, make our portion with them for ever, and let us not be ashamed, for we trust in Thee." There is something similar, but not identical, in the "Liturgy of St. Basil" (Sw. p. 86), and in the "Liturgy of St. James " (Sw. p. 308 ff.).
20. The second is from a ruined house at Djūwānîyeh :

## 

The Lorl is king for ever.
Ps. xxviii. io contains the words: Kâıєîtaı Kúpıos $\beta a \sigma \iota \lambda \epsilon$ ùs єis $\tau \grave{\nu}$ aî̂va. Compare with this the following passage from the "Kedusha" (Warren, p. 215): "And in Thy Holy Word it is written, thus saying . . . 'The Lord shall reign for ever and ever, Thy God, O Zion, from generation to generation.'" Compare also the "Didache of the Apostles," sec. 14, and the "Apostolic Constitutions," VII, 30 (Sw. p. li), the "Liturgy of St. James" (Sw. p. 270), and the Alexandrine liturgy (Sw. p. 7).

Besides these there are the following inscriptions, which contain quotations from the Psalms, and one which contains
a passage from the New Testament, appropriate to a Church service, but to which I have not been able to find a parallel in any traditional liturgy:
21. Ps. iv. 8 f., from a large house in il-Bârah (Wad. no. 2648):


22. Ps. xxiii. I (cf. also Ps. lxxxviii. I2 and cxiii. 24), from two tombs in Dêr Sambil:
 , غ̇v aủrn̂. XMए.

23. Ps. xlv. 8 and 12: two inscriptions, one on two fragments in il-Bârah (Wad. no. 2649), the other on a lintel in Dânā (Wad. no. 2676):

 E $\grave{\alpha} \kappa \omega \bar{\beta}$.

The words K $\dot{\rho} \rho \iota \epsilon \bar{\omega} \nu \delta \nu \nu \alpha \dot{\alpha} \mu \epsilon \omega \nu$ occur not infrequently in the liturgies, e.g. Sw. pp. 282, 306, 89, etc.
24. From a lintel in Dânā (Wad. no. 2677):

This seems to be from Ps. xxxiii. 9: ГєúvaनӨe каĭ ïסєтє öтt

 گovtes є $\epsilon \pi$ ' aưoóv. Cf. also Ps. 1xxxiii. 13. The first part of Ps. xxxiii. 9 occurs in the liturgies, apparently as the beginning of a hymn, the rest of which is omitted in the Mss. (e.g. Sw. p. 316 f., etc.).
25. Ps. xc. I f.: the words are painted on the lintel of a large dwelling in Ruwêhā (Wad. no. 2672):




A part of the same passage appears to be contained in a much mutilated inscription on a sarcophagus at Midjleyyā, and also in the two Syriac inscriptions mentioned above ( 17 and ${ }^{1} 88$ ).
26. From Ps. cxii. 7, on a lintel at Midjleyyā (Wad. no. 2651):


The latter part of the first line may be compared with a passage in the "Liturgy of the Presanctified" (Sw. p. 96):
 $\dot{\epsilon} \nu \dot{a} \gamma a \pi \hat{\eta}$.
27. Romans viii. 3I, on the lintels of three houses in Dellôzā, one of which has been published by Waddington, no. 2666 :

Waddington's inscription has $\dot{v} \mu \hat{\omega} \nu$ for $\dot{\eta} \mu \hat{\omega} \nu$, and after the
 has: EN $\Omega \Theta E O \Sigma$.

These are not all the liturgical inscriptions from Northern Syria; but they are the best examples. I think it is evident that many of them contain fragments of the early liturgy of that country. Of course they are very far from being sufficient in themselves to enable us to restore that liturgy. But as fragments they have a peculiar value. They represent the liturgy at a stage for which we have only the most uncertain kind of literary tradition, all of them have a definite provenance, and many of them can be definitely dated. And hence I trust that they, together with those which may yet be found in this region and those which may be collected in other fields, may be used as auxiliaries to the literary tradition in obtaining a more accurate knowledge of the ritual, and to some extent of the doctrines, of the fourth, fifth, and sixth centuries, a most important period in the development of the Christian Church.
> VII. - On the So-called Iterative Optation in Greek.

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The use of the optative mood, in Greek, in subordinate clauses (relative and conditional), referring to an indefinite number of acts or states in the past, has long been familiar to Hellenists as the 'optativus frequentiae,' 'optativus iterativus,' etc. The corresponding use of the subjunctive mood in relative clauses has likewise been recognized by many grammarians since, at least, the time of Gottfried Hermann. ${ }^{1}$ But the distinction between sentences of particular and sentences of general or iterative reference was first applied to conditional periods having $\notin \grave{a} \nu(\epsilon i)$ and the subjunctive, as late as in the year 1846, by Bäumlein. ${ }^{2}$ Having based this distinction, however, upon the general character which may be given to any class of conditions, Bäumlein failed to recognize its true significance and, accordingly, passed it over as of no importance. ${ }^{3}$ The honor of having first pointed out and emphasized the real nature and meaning of this distinction belongs to Professor Goodwin, who arrived at his results independently ${ }^{4}$ and, as is well known, the emphasis which Mr. Goodwin laid upon this distinction between 'particular' and 'general' suppositions formed one of the most striking features of his classification of conditional sentences, as presented in the first edition of his Greek Moods and Tenses (1860).

In the edition of 1865 the original arrangement was modified, ${ }^{5}$ but the same distinction was retained and was evidently a consideration of great importance in Mr. Goodwin's eyes, not only in his scheme of hypothetical sentences, but also in the development of his doctrine of the moods in Greek. This

[^17]last point is made apparent by the following remarks published in 1873: "The trouble begins when we attempt to define the use of the Greek Subjunctive. Here the whole difficulty - indeed, the whole supposed necessity for any definition at all except that of time-seems to me to arise from confounding two distinct uses of the subjunctive in protasis. . . . It seems to me that, when attention has once been called to the true position of the subjunctive in present general conditions, it will need no further argument to show that its essential character in all other cases of protasis is its designation of future time." ${ }^{1}$ And again: "When the optative in past general conditions is excluded, it is evident that the optative in ordinary protasis refers to the future." ${ }^{2}$

In the article from which these passages are quoted, no explanation was offered for this summary exclusion of the subjunctive and the optative in these constructions. But in the revised edition of the Moods and Tonses (1889) the exclusion of the optative is justified by the consideration that, "Here the optative after a past tense represents an original subjunctive after a present tense, . . . The late development of the optative appears from its almost total absence in protasis with $\epsilon i$ in Homer, . . . It may, therefore, be disregarded in considering the primitive uses of the optative." ${ }^{3}$ The exclusion of the subjunctive is similarly justified by the late development of this construction in Homer, "except in relative clauses." ${ }^{4}$ As we shall see later, these constructions, thus summarily dismissed, have never been (and probably never could be) adequately explained by Mr. Goodwin's theory of these moods. Paradoxical as it may seem, the very constructions the recognition of which was an important step in the development of his doctrine of the moods remained thereafter virtually ignored by that doctrine.

With this point, however, we are not primarily concerned. The leading purpose of this paper is to examine the validity of Mr. Goodwin's assumption that "the optative in past

[^18]general suppositions only represents the corresponding sub)junctive transferred to the past." ${ }^{1}$

This theory, suggested apparently by Kühner's classification, seems to have gained, at least among American and English scholars, a wide acceptance. ${ }^{2}$

Very similar is the explanation of Brugmann who, as usual, attempts to trace the construction historically. A Greek construction in origin, the iterative optative, he remarks, is most closely related to the optative of oratio obliqua, for both these constructions developed from the potential optative. After showing how the optative came to be used to represent an original subjunctive in such a sentence as $\dot{\epsilon} \beta$ ounev́ovto ö $\pi \eta \eta$
${ }^{1}$ Ibid., p. 389. The majority of previous scholars had been content to explain the use of the optative in generic sentences in accordance with preconceived doctrines regarding the fundamental meaning of the mood. Thus Hermann writes: "hic modus, quoniam ad cogitata tantum refertur, ibi, ubi de pluribus factis sermo est, non certum aliquod factum designat, sed quodcunque ex illis pluribus intelligere quis velit" (Ad Viger., p. 907). Bernhardy, according to whom the optative is the mood of "pure possibility," remarks that "der Modus ein öfteres Vorkommen und Wiederholen andeutet, weil in ihm eine Reihe möglicher Thatsachen enthalten ist" (Wiss. Syn. d.gr. Spr. (1829), § 405). For similar views, see Buttmann, Gr. Gram. ${ }^{18}$ (1829), § 139, anm. 6; Matthiae (trans.), $\S \$ 521$, 523, 524; etc. Seeking to improve on Hermann's explanation, Bäumlein includes this use of the mood among those where the optative expresses a purely imag nary, abstract idea. For in these sentences of general application a class of actions cr states is designated which, he says, the Greek language treats as something merely conceived and subjective (Untersutlı. iub. d. gr. Modi (1846), p. 285 f.). The classiãcation adopted by Kühner was new and suggestive. Having boldly declared the subjunctive and the optative to be primary and secondary tense-forms of a single mood - "der Modus der mittelbaren Erkenntniss oder der Vurstellung" -he was led to associate closely the subjunctive and the optative in generic relative sentences, as illustrating a sequence of tenses (moods) in Greek, analogous to that in Latin (Ausf. Gram. d. gr. Spr. (1835), § 465 , I , and see §§807, 3; 809, 2, 6). Thus, though he seems not to have included conditional clauses expressed by $\epsilon^{\prime} \dot{\nu}(\epsilon l)$ and the subjunctive, he was perhaps the first to emphasize the parallelism between the subjunctive and the optative in these classes of subordinate sentences denoting indefinite frequency. This feature of Kühner's classification seems to have been not without influence upon the development of Mr. Goodwin's theory, although his main thesis was rejected by many scholars, including even Mr. Goodwin himself.
${ }^{2}$ Bayfield, "Cond. Sent. in Greek and Latin," C'ass. Kev. IV ('90), p. 200; Donovan, "Prosp. Subj. and Optative," Chiss. Rev. VIII ('94), p. 145; Sonnenschein, Gr. Gram. § 504 ; Keep, Essential Uses of the Moods in Greek and Latin, § 26; etc.

фúyoıєv ( $\phi \dot{\gamma} \gamma \omega \sigma \iota \nu)$ ("es geschah also eine Modusverschiebung"), he says: "Den iterativen optativ aber versteht man, sobald man sich erinnert, dass unter denselben Verhältnissen nach einem Haupttempus ö $\tau \epsilon$, $\dot{o} \pi o ́ \tau \epsilon, \epsilon \ell$, mit dem Konjunctiv üblich war, z. B., I $647, \delta 400$, Soph. Phil. inf." The optative once established as the representative of the subjunctive in oratio obliqua, it was but a step to employ the optative as the representative also of the indicative. "Ein Satz wie el $\rho о \nu \tau 0$,
 mag er sein und woher mag er gekommen sein?' Nach

 ( $\chi$ 315), konnte dies leicht umgedeutet werden in: 'sie fragten, wer er wäre und woher er gekommen wäre.' Hieran schloss sich das Übrige an." ${ }^{1}$ Thus, according to Brugmann, the iterative optative, closely allied to the optative of oratio obliqua, is the representative, as his words seem to imply, after a secondary tense of the subjunctive after a primary tense in general conditional (relative) periods. This last point was not so clearly suggested in the second edition of his grammar (1889), ${ }^{2}$ but as now set forth Brugmann's view seems not essentially different from that advocated by Mr. Goodwin. ${ }^{3}$

But this explanation of the optative in these clauses, as the representative of the subjunctive, has not passed unchallenged. It is rejected by Lange, ${ }^{4}$ whose doctrine of the optative as the mood of the imagination (Einbildungskraft, p. 38) easily accounts for this use of the mood, and who, moreover, systematically opposes the assumption of a shifting of mood. It is attacked also by Professor I. Flagg with the follow-

[^19]ing cogent argument : "A strict division of subordinate clauses shows that pure conditions, as might be expected, belong to a class in which the use of the optative does not specifically result from the principal clause being past in time. Otherwise, we ought to find the subjunctive also, as we never do find it, side by side with the optative in a pure condition, when the time of the conclusion is past, exactly as either mode is found after a past tense, in final clauses for example." ${ }^{1}$ Finally, we may note that the view expressed by Professor Gildersleeve, in an article published in 1876, that "the socalled optative of indefinite frequency is nothing but the oratio obliqua of the subjunctive," ${ }^{2}$ seems later to have given way to the view that the past generic condition is an ideal, not an oblique anticipatory, condition: "As in the anticipatory, so in the ideal, condition we have the classification into particular and generic." ${ }^{3}$

As already stated, it is the purpose of this paper to examine the validity of the theory that the iterative optative is the representative, by a change of mood, of an original subjunctive. To this end the writer has made a study of the usage of the optative and the subjunctive, not only in general conditional periods, but, for the sake of comparison and adequate perspective, in all logically antecedent conditional and conditional relative clauses in Homer. After presenting the results of this investigation, we shall pass to the interpretation of the facts previously set forth and the discussion of the bearing of these facts upon the theory in question.

## I. ${ }^{4}$

The difficulty of determining with exactness the degree of grammatical parataxis or hypotaxis in many expressions,

[^20]interpretable either as wishes or as conditions, renders impossible a certain and final enumeration of all strictly conditional clauses in Homer. This is well shown by the varying treatment of individual cases by different scholars. ${ }^{1}$ From the following list those clearly containing a wish are omitted, as B 37 I . The sentences here included are divided, first with respect to the form of the apodosis, second with respect to the introductory word of the protasis.

## I. Apodosis - Optative.

## A. Optative zuith $\kappa \in(\nu)(a ̆ \nu)$.

1. Protasis introduced by $\epsilon i(a i), \epsilon i ้ \kappa \epsilon(\nu)$, etc.
a. Protasis prepositive - 49 cases (Il. 25; Od. 24).
(a) $\epsilon i(a i) . \Delta 34 ;$ Z 284 ; H 129; I 379 (385), 515 ; N 276 ( $\epsilon$ ү áp . . . but clearly not a wish); $\Xi 208 ; \Pi$ 746; P 102 ; $\Psi 274$ (contr. to reality); $\Omega$ 366, 653; a 163; $\gamma 115,223$ (clearly conditional); $\epsilon 206 ; \lambda$ 356, 501 (cond.); $\pi$ 10弓; $\rho 223,407 ; \sigma 223,246,254=\tau 127 ; v 42,49 ; \chi 6$ 1.

The following are interpretable as wishes or as conditions:

So La Roche, Lange, Monro, Leaf; Ameis-Hentze read $\epsilon \not \epsilon \sigma \sigma \sigma \theta^{\circ}$ and interpret it as a wish. So also Delbrück, S.F. I, S. 24 I . $\pi$ I48 (interpreted as a condition by Ludwich, Lange, etc., as a wish by Am.-H. and Delbrück). O 49 (condition, La Roche, Monro, Leaf; wish, Delbrück, Lange, Am.-H.). $\Pi_{623}$; $\mathrm{P}_{156,160 ; ~} \mathrm{P}_{313} ; \sigma 384$. Add also $\sigma 376 .{ }^{2}$
( $\beta$ ) єї ( $a \check{\prime}$ ) $\kappa \epsilon(\nu) .^{3} \quad \beta 76 ; \tau 589 ; \nu 389$; єi $\delta \epsilon ́ \kappa \epsilon \nu \mathrm{I} 14 \mathrm{I}=283$;
 В $123 ; \Theta 205 ; \mathrm{N} 288 ; \beta 246$.

[^21]b. Protasis postpositive - 31 cases (Il. 12; Od. 19).
(a) єi (ai). А $255 ; \Delta 347 ; \Theta 21 ; \Lambda 134 ;$ Э 333; П 71, 747 ; P 398 (unreal); X 20; $\beta 62$, 250 (text doubtful, but $\epsilon i$ with optative fairly certain) ; $\gamma 227 ; \delta 224,225 ; \epsilon 177 ; \theta_{216}$; $\iota 277$; $\kappa 342 ; \mu 77,88$ (rejected by Aristarchus); $\nu 291$; 0435 ; $\sigma 357$; $v 326 ; \phi$ 195; $\chi$ 13, 62. In P 488 the indicative $\dot{\epsilon} \theta \epsilon \dot{\epsilon} \lambda \epsilon \iota$ is well supported and is to be preferred.
( $\beta$ ) $\epsilon \check{\imath}(a \iota ้) \kappa \epsilon(\nu) . \quad$ Z 49 ; I 444 ; K 380 ; $\theta 352$.
2. Protasis introduced by ös ( $\tau \iota \varsigma$ ).
a. Prepositive - $\delta 222$.
b. Postpositive - 26 cases (Il. 10; Od. 16).
(a) ös ( $\tau \iota s$ ). $\Delta 539$ (unreal); Z 329, 521; I $125=267$; M 228; N 118, 32I, 343 (unreal); ヨ 91; a 229; $\beta$ 336; $\delta 205 ; \theta 239 ; \kappa 383 ; \lambda 489 ; \nu 291 ; \xi 404 ; 0317$ (text doubtful, but optative certain) $; \pi 386 ; \chi$ I $38 ; \psi$ I $00=168$.
( $\beta$ ) ös $\kappa \epsilon . \quad \beta 54$ (v.l. subj.); $\pi 39 \mathrm{I}=\phi$ 161.
3. Protasis introduced by ö $7 \epsilon$.
a. Prepos. ${ }^{1} \Theta$ 23. b. Postpos. 8 (Il. I ; Od. 7): $\beta 31$; $\epsilon 188$;


4. Protasis introduced by $\epsilon \pi \pi \epsilon\left(\begin{array}{c}\epsilon \\ \epsilon \\ \eta \\ \nu\end{array}\right)$.
$\dot{\epsilon} \pi \epsilon \grave{\iota}$ ă้ $\nu \mathrm{I} 304$; $\dot{\epsilon} \pi \dot{\eta} \nu \mathrm{T} 208$. In the last the opt. $\tau \iota \sigma a i \mu \epsilon \theta a$ is said by some (e.g. Am.-H., Monro) to be due to the mood of áv́́yoı $\mu \tau$; others rightly dissent. But see below page 120, note 1.
5. öбos, $\lambda 360$.
B. Pure Optative (wish, concession, etc.).
I. $\epsilon i(a i)$.

Prepos. $\Delta$ 17. Postpos. E 214; $\pi$ 102; $\eta 314$ (oikov $\delta \epsilon ́ \tau$

2. ös $(\tau \iota \varsigma)$.
 Monro).

Postpos. Z 57; a 47; o 359; $\sigma$ I42.

[^22]3. ӧтє and о́тто́тє.

Postpos. $\Sigma 464 ; \Phi 429 ; \mu$ IO5; $\sigma$ I46.
4. є่ $\pi \eta \dot{\eta} \Omega 226 . \quad$ 5. о́тто́тєроя $\Gamma 299$.

One anomalous passage remains for special consideration. This is $\epsilon 483$ :
ஸ̈p! $\chi \epsilon \iota \mu \rho \frac{1}{\eta}$, єỉ каì $\mu \alpha ́ \lambda \alpha \pi \epsilon \rho \chi^{a \lambda \epsilon \pi x i v o u . ~}{ }^{1}$

The optative in this sentence is incorrectly classed by Goecke with that of $\Omega 768$ as an optative of indefinite frequency in past time. ${ }^{2}$ Less incorrect is the interpretation of Lange. ${ }^{3}$ Because of similarity of form in the concessive clause, Lange cites together this passage and $\theta$ I38:
and $\theta$ 2I5 ( $\pi \rho \hat{\omega} \tau o ́ s ~ \kappa ’ ~ a ้ \nu \delta \rho a ~ \beta a ́ \lambda o \iota \mu \iota . ~ . ~ ., ~ \epsilon i ́ ~ к а i ~ \mu a ́ \lambda a ~ \pi o \lambda \lambda o i ~$ $\dot{\text { є́ } \alpha \hat{\imath} \rho о \iota \mid a ̈ \gamma \chi \iota ~ \pi а \rho a \sigma \tau a i ̂ \epsilon \nu ~ к . т . \lambda .) . ~ A f t e r ~ n o t i n g ~ t h a t ~ t h e ~}$ optative in all three examples is concessive, and, farther, that if the second and the third passages seem to contain the opt. de iter. actione, this arises simply from the fact "dass die gesetzte Handlung der Natur der Sache nach oft vorkommen kann," he continues: "Uebrigens bezieht sich der $\epsilon i$-Satz in zweiten Beispiele, $\theta$ 138, nicht auf den Begriff des im Praesens stehenden Verbums, sondern auf den des Infinitivs $\sigma v \gamma \chi \epsilon v ̂ a \iota$, dessen Zeitsphäre aber natürlich durch $\phi \eta \mu i ́$ bestimmt ist. . . . Im erstern Beispiele geht im Hauptsatz ein Tempus der Vergangenheit vorher, aber der $\epsilon i$-Satz bezieht sich nicht auf $\notin \eta \nu$, sondern auf das in dem mit ö ö $\sigma \sigma \nu$ beginnenden Satze hinzuzudenkende $\boldsymbol{\epsilon} \sigma \tau \boldsymbol{\tau} \boldsymbol{\nu}$. Wenn man diess berücksichtigt, so entsteht auch in diesem Beispiele der Schein des Opt. de iter. actione, und zwar auf dieselbe Weise, wie in den andern." A brief consideration will suffice to show
${ }^{1}$ Some Mss. read $\chi$ a入єтаive.
2 " Der Gebrauch des Konjunktivs u. Opt. bei Homer," Progr. zu Malmedy, $\mathbf{1 8 8} \mathrm{r}$, p. xix. This is a carelessly assorted collection of Homeric usage, and abounds in typographical errors.
${ }^{8}$ Partikel $\in l$, p. 470 f.
that this explanation is inadequate. For it must be clear that $\epsilon i . . \chi^{a \lambda \epsilon \pi a i ́ v o \iota ~ d o e s ~ n o t ~ r e f e r ~ t o ~ a n ~} \epsilon \in \sigma i ́ \nu$ to be supplied (only possible in the order ${ }^{\prime \prime} \sigma \tau \iota \nu$ ö $\left.\sigma \sigma \sigma \nu, \kappa . \tau . \lambda.\right)$ ), but only to ö $\sigma \sigma o \nu . .$. épvo $\rho a l$, and that without regard to any verb-form which might conceivably be supplied to introduce the clause ö $\sigma \sigma o \nu \kappa . \tau . \lambda$. For, whereas in $\theta$ I 38 (which is equivalent to
 statement of an universal truth, and readily admits of being resolved into как $\hat{\varsigma} \sigma v \gamma \chi$ é $є$; in $\epsilon 483$, on the contrary, ö $\sigma \sigma o \nu$ e้pvoAa is not a statement of an universal truth, but can only be resolved into ö $\sigma \sigma о \nu \kappa \epsilon \ldots$. . є́рv́oьто, or the like, while $\epsilon i .$. $\chi a \lambda \epsilon \pi a i \nu o \iota$ refers to a merely conceived case. Clearly, therefore, this sentence, though of irregular form, may more properly be classed with conditional periods whose apodoses contain a potential optative than.with those that have a verb of present tense in the apodosis.

## II. Apodosis - Imperative or Subjunctive of Exhortation.

 tive avoids assuming that the case will ever occur" (Monro),

III. Apodosis - Future Indicative or Equivalent. A. Future Indicative.
I. $\epsilon$ i. (a) Prepositive. K 222; $\Upsilon 100 ; \rho 539 ; \mu 345$ ( $\epsilon$ ĭ $\kappa \epsilon)$; X 35 I. ( $\beta$ ) Postpositive. A 59 (see Lange, Partikcl $\epsilon i$, p. 5 12) ; I 388 and probably B 597 (Lange, p. 514)
 (see Leaf's note).

## B. Subjunctive.

I. $\epsilon i . \quad \Lambda 386$ (by some interpreted as a wish, as also K 222
 (Lange, pp. 464, 478) ; $\Psi 344 .^{2}$

[^23]


## C. Present Indicative referring by Anticipation to the Future.



## IV. Apodosis - Present Indicative, not referring to Future. ${ }^{2}$




 but see Delbrück, S.F. I, 226, and Am.-H., Anhang.




 Monro, H.G. § 308.) $\Lambda 543$ lacks manuscript support.

## V. Apodosis - Indicative, Secondary Tense. ${ }^{3}$

These are passages containing the so-called Optativus Iterativus.

1. $\epsilon i . \Omega 768$.
2. ös( $\tau \iota \varsigma)$. (a) Prepositive - B 188, 198; $\Delta$ 232, 240 ; K 489; O 22, 743 ; ८ 94.
( $\beta$ ) Postpositive-B215; M 267 ; O 730; Ф 610 ( $\sigma a \omega ́ \sigma a \iota$, so Arist.) ; $\xi 220 ; \rho 316,420=\tau 76 ; \chi 315,414=\psi 65 .{ }^{4}$
${ }^{1}$ The subjunctive with $\kappa \varepsilon$ is employed (cf. 1. 31) "um seine Bereitivilligkeit
 See also Monro, H.G., p. 258.
${ }^{2}$ See below, page 124; see also Lange, 「artikel $\varepsilon l$, p. 446 ff.
${ }^{8}$ Imperfect or the Ionic Iteratives in $-\sigma \kappa^{\epsilon} / \mathrm{o}$, unless otherwise stated.
${ }^{4} \operatorname{In} \mu 33^{\circ}$


the clause $\phi$ i $\lambda$ as . . . そкоьто appears to be logically subsecutive. Ameis-Hentze,
 kam." Delbrück's interpretation is similar (S.F. I, p 226). But in this case we must translate 'When they went in quest of game, catching (i.e. trying to catch) fishes and birds, whatever,' etc.

# 3. Temporal conjunctions. $a$. ötє. (a) Prepositive 17 cases (Il. 9; Od. 8). Г 216 ; K II, 14; P 732 (apod. тра́тєто); $\Upsilon$ 226, 228; X 502; $\theta 87,90 ; \iota 208 ; \lambda 510,513$, 596; $\mu$ 237, 240. <br> There belong here also 





and $\Gamma 22 I^{2}(216-224)$









That the clause öтє $\delta \dot{\eta}$ оैта . . єï $\eta$ is the protasis of a socalled past general (relative) condition cannot be questioned; for, as in all past general conditions (e.g. that in $\Gamma$ 216), reference is distinctly made to a repeated past event. Accordingly, the apodosis cannot be found in oưk $\hat{a} \nu$. . . є́píб $\sigma \epsilon \epsilon \epsilon$ (223); for then we should have a contrary-to-fact condition, an interpretation which the context clearly makes impossible. And, moreover, the protasis of oúк ầ . . . є́pí $\sigma \sigma \epsilon \iota \epsilon$ can only be 'if he had tried,' or 'had desired,' or the like. The real apodosis of $\check{\sigma} \tau \epsilon \ldots \epsilon \ddot{\eta}$. . $\boldsymbol{\epsilon}$ is furnished by the words of the often, but unnecessarily and indeed incorrectly, rejected line 224. Those scholars who (e.g. Bentley, Heyne, Payne-Knight, Bekker, Köchly, etc.) pronounce line 224 spurious perhaps fail to observe that, as in lines $216-220$, there occurs a general condition (öтє . . . $\dot{\alpha} \nu a t \notin \epsilon \iota \epsilon \nu . . . \sigma \tau \dot{\sigma} \sigma \kappa \epsilon \nu$ ) followed by a detached potential optative referring to the past, фаíŋs $\kappa \epsilon$;

1 The only instance of öтє $\kappa є \nu$ in these clauses, or indeed elsewhere, in Homer.
See Monro, M.G., p. 283; Delbrück, S.F. I, p. 236.
2 Not mentioned by Delbrück, Syn. Forsch. I.
${ }^{8}$ So best Mss., v.l. iec.
so in lines 221－224 the same elements occur，though in a different order，the general period being broken by the in－ tercalated past potential for the sake of emphasis．This becomes clear if we reverse the order of the lines 223 and 224，just as we might have had above ör $\ldots$ ．．ảvaï $\xi \epsilon \epsilon \nu \cdot \phi a i \neq s$ $\kappa \epsilon, \kappa . \tau . \lambda . \cdot \sigma \tau \dot{\alpha} \sigma \kappa \epsilon \nu[\gamma \dot{\alpha} \rho] \ldots{ }^{1}$ Accordingly，the sense of the passage is：＇But whenever he spoke，then we ceased to wonder thus ${ }^{2}$ at his appearance；after that no other mortal could have vied with Odysseus．＇
（ $\beta$ ）Postpositive－ 13 cases（Iliad 6；Odjsscy 7）．A 6ı0；

 $\gamma^{\prime}$ ö́tє $\delta \grave{\eta} \ldots$ ．．ă $\left.\left.\sigma a \iota \mu\right)\right)^{3}$
b．отто́тє．（a）Prepositive．$\Sigma 544 ; \lambda$ 591；$\xi 217$.
（ $\beta$ ）Postpositive－ 6 cases（Iliad 4 ；Odyssey 2）．
「 232 （Apod．$\pi 0 \lambda \lambda \alpha^{\prime} \kappa i s . . . \xi \epsilon i \nu \iota \sigma \sigma \epsilon \nu$ ）；N 710 ； O 283 ； T 315 （Apod．тотє́（＂nearly＝＇many a time，＇＂Monro）．．．é月 $\eta к а$ ）； ү $282 ; \mu 380$ ．
c．є́ $\pi \epsilon \epsilon$ í．（a）Prepositive．$\Omega$ 14；$\Theta 269$（ $\epsilon \pi \epsilon \iota$ ．．．$\beta \epsilon \beta \lambda \lambda_{\eta}^{\prime}-$ коь（Arist．）or $\beta \epsilon \beta \lambda \eta \eta_{\kappa \epsilon \iota}$（Mss．））is doubtful．${ }^{4}$
（ $\beta$ ）Postpositive．$\beta$ IO5；$\tau$ 150；$\omega$ I40．
d．і́бба́к九．Postpositive．Ф 265 ；X 194 ；$\lambda 585$.
4．Protasis introduced by other conjunctions（all post－ positive）．

отоїоя，$\rho 420=\tau 76$.


ӧ $\pi \pi \omega \varsigma, \Sigma_{470 .}$
${ }^{1}$ The bold suggestion of Giseke（Ebeling，Hom．I．ex．s．v．ärauaı）that line 224 be placed immediately after 220 does not serve to elucidate or to remedy the irregularities of this difficult passage．
${ }^{2} \tilde{\omega} \delta \epsilon$ with reference to 220 ，not to 223 （Ameis－Hentze），nor yet to $\epsilon i \delta o s ~ \$ \delta b \nu-$ $\tau \epsilon \varsigma$ ，as though it were rocỗov（Bayfield）．For the broken conditional period， cf．I 524 （quoted above）；for $\delta \tau \epsilon \ldots$ ．．$\tau \delta \tau \epsilon$ in a past general condition，cf．$\lambda$ 596； for the aorist in the apodosis of such a condition，here made more natural by the irregular order of the clauses，cf．P 732，$\Phi$ 610，$\Gamma$ 232，T 315 ．The neglect of the digamma does not prove line 224 spurious．
${ }^{3}$ For $\pi \rho l \nu$ in such sentences see Monro，H．G．，§ 297，also § 308 d ，and G．M．T．， §§ 645，646；613，5．
${ }^{4}$ See Monro，H．G．，§ 83， 3.

There remain to be mentioned a few miscellaneous passages, in which the optative may represent a subjunctive after a primary tense, or may, indeed, be original, but which in post-Homeric Greek would regularly be explained as resulting from a change of mood. These are as follows:


in which "der Opt. bezeichnet die Vorstellung des Heroldes" (Am.-H.). So, if genuine, $\Theta$ 189. In $\Delta 263$ read ả $\nu \omega \dot{\gamma} \eta$ (see Monro, H.G., § 308, 1 ).





Similar are $\nu 22 ; \iota 333$.


Similar is $\Sigma$ 507, and


This passage is incorrectly interpreted by Hayman as a negative past general condition: "The case of one's not driving the cattle was a case of Neleus' not giving, which seems to show that there is nothing properly frequentative in the optative itself." ${ }^{1}$ No, not here, certainly ; seeing that Melampus was the only man that ever made the attempt ( $\tau \dot{a} s \delta^{\prime}$ oios


 So P 8 and, finally, the difficult and isolated passage H 387,

 the clause aĭ $\kappa \epsilon \ldots \gamma \epsilon{ }^{\prime} \nu o \iota \tau o$, probably a courteous formula, is


[^24]Quite anomalous is $\Gamma 453$

Of the various well-known interpretations of this familiar passage that suggested by Lange (Partikel $\epsilon i, \mathrm{p} .400$ ) that
 is combined the wish 'if I could but see him !,' is perhaps the most satisfactory. Other interpretations are based upon the supposition that the construction is elliptical. The condition is certainly not general, although so interpreted by Ameis.

The following table (I) is a summary of the facts thus far presented. For purposes of comparison, the Homeric usage of the subjunctive in conditional and conditional relative sentences is exhibited in a second table.
I.

Optative in Conditional (Relative) Sentences in Homer.

| Protasis introduced by | Apodosis Optative. |  | Apodosis Future Indic. or equivalent. |  | Apodosis Imperative. |  | Apodosis Pres. Indic. |  | Apodosis Secondary Tense Indic. |  | Totals. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\overline{\text { Pre- }}$ pos. | Postpos. | Prepos. | Postpos. | Prepos. | Postpos. | Prepos. | Postpos, | Prepos. | Postpos. |  |
| $\epsilon i(\alpha i)\left({ }_{\text {a }}(\nu), \kappa \epsilon(\nu)\right.$ | $50^{2}$ | $36^{3}$ | 7 | 6 | . | 1 | $\cdots$ | 5 | 1 | . | 106 |
| $8 \mathrm{~s}(\tau \leqslant s)$ | 2 | 30 | . | 3 | I | . | $\cdots$ | 2 | 8 | II | 57 |
| (o่ $\pi$ ) ör $\tau$ | 1 | 12 | . | 3 | $\cdots$ | - | - | 1 | 20 | 19 | 56 |
| ¢' $\pi \in 1$ | $\cdots$ | 3 | . | . | $\cdots$ | . | - | I | I | 3 | 8 |
| óvoákıs | . | . | . | - | $\cdots$ | - | $\cdots$ | $\cdots$ | 3 | . | 3 |
| öros | $\cdots$ | 1 | . | -• | $\cdots$ | - | - | - | . | - | 1 |
| ó $\pi \pi \delta \tau \tau \rho$ os | 1 | $\cdots$ | $\cdots$ | - | - | $\cdots$ | $\cdots$ | $\cdots$ | $\cdots$ | . | 1 |
| ómoios | - | . . | . | . . | - | . | $\cdots$ | $\cdots$ | - | 2 | 2 |
| 806 | $\cdots$ | . | . | . | $\cdots$ | . | . | $\cdots$ | . | 1 | 1 |
| $8 \pi \eta$ | - | $\cdots$ | - | $\cdots$ | - | - | - | $\cdots$ | - | I | I |
| $\delta \delta^{\prime} \pi \pi \omega s$ | . | . |  | $\ldots$ | $\ldots$ | . | . | $\ldots$ | $\ldots$ | 1 | 1 |
| Totals. | 54 | 82 | 7 | 12 | I | 1 | $\bigcirc$ | 9 | 33 | 38 | 237 |
|  | $\begin{array}{r} 136= \\ 57.5 \% \end{array}$ |  | 19 |  | 2 |  | 9 |  | $7 \mathrm{I}=30 \%$ |  |  |

[^25]Vol. xxxiii.] The So-callcd Iterative Optative in Greck. 115
II.

Subjunctive in Conditional (Relative) Sentences in Homer.

| Protasis introduced by | Apodosis Future Ind. |  | Apodosis Imperative. |  | Apodosis Subjunctive. |  | Apodosis Oprative. |  | Apodosis Present Indic. = Future. |  | A podosis <br> Present Indic. 'gencral cond.' |  | Totals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Pre- } \\ & \text { pos } \end{aligned}$ | Postpos. | $\begin{aligned} & \text { Pre- } \\ & \text { pos. } \end{aligned}$ | Postpos. | $\begin{aligned} & \text { Pre- } \\ & \text { pos. } \end{aligned}$ | Post. pos. | $\begin{aligned} & \text { Pre- } \\ & \text { pos. } \end{aligned}$ | Postpos. | $\begin{aligned} & \text { Pre- } \\ & \text { pos. } \end{aligned}$ | $\begin{aligned} & \text { Post- } \\ & \text { pos. } \end{aligned}$ | $\begin{aligned} & \text { Pre- } \\ & \text { pos. } \end{aligned}$ | $\begin{aligned} & \text { Post } \\ & \text { pos. } \end{aligned}$ |  |
| $\varepsilon l$, el $\kappa \varepsilon$, etc. | 40 | 43 | 24 | 4 | 8 | $1^{1}$ | $7^{2}$ | $6^{3}$ | IS ${ }^{4}$ | 12 | 11 | $9^{5}$ | 183 |
| ös(TıS) | 8 | 35 | 11 | 20 | $\ldots$ | - | $2^{3}$ | $4^{8}$ | 1 | 6 | 2 | $64^{7}$ | 153 |
| ( $0 \pi$ ) 8 \% $\tau$ | 4 | 18 | 11 | 7 | $\cdots$ | $\cdots$ | $\cdots$ | $\mathbf{I}^{8}$ | 1 | $3^{9}$ | 5 | $42^{10}$ | 92 |
| ¢ $\pi$ ¢ ${ }^{\text {l }}$ | 11 | 14 | 16 | 4 | -• | $1{ }^{11}$ | $1^{12}$ | $\cdots$ | . | 2 | 3 | 17 | 69 |
| ยบิтย | - | 2 | - | 1 | $\cdots$ | - | $\cdots$ | $\cdots$ | . | $\ldots$ | 1 | 5 | 9 |
| 万 $\mu$ о |  |  | - | - | . | $\cdots$ | - | $\cdots$ | .. | . | 1 | . | 1 |
| $\gamma \phi \rho \alpha$ | 1 | 6 | 3 | 4 | - | . | . | $\cdots$ | $\cdots$ | . | . | 5 | 19 |
| cis ö кe | $\cdots$ | $\mathrm{I}^{13}$ | . . | . | . | . . | - | . | . | . | . | . | 1 |
| $\pi \rho / \nu$ | . | $3^{14}$ | . . | 3 | . | -. | . | . | . | $2{ }^{15}$ | . | . | 8 |
| $\dot{\omega}$ | . | . . | 10 | 1 | $\cdots$ | . | . | . | . | - | . | . | 11 |
| $\delta \pi \pi(\pi) \omega s$ | . | $\ldots$ | -• | . | $\cdots$ | $\cdots$ | - | . | - | - | -. | 3 | 3 |
| $\dot{\text { ó } \pi \pi \delta \sigma \epsilon}$ | . | 1 | $\cdots$ | . | -• | $\ldots$ | $\ldots$ | . | . | . | $\cdots$ | . | 1 |
| ¢̀ $\pi \pi \sigma \tau \epsilon \rho \circ$ ¢ | I | . | 2 | . | . | $\cdots$ | $\ldots$ | . | . | $\cdots$ | . | $\cdots$ | 3 |
| ठбббоs | $\cdots$ | . | - | . | . | - | . | . | . | 1 | . | 2 | 3 |
| $8 \pi(\pi) \eta$ | - | . | $\cdots$ | . | . | . | . | $1{ }^{1}$ | . | . | 1 | $1^{17}$ | 3 |
| $\dagger$ | $\cdots$ | . | . |  | . | . |  | $1{ }^{18}$ | . | $\cdots$ |  |  | 1 |
| ¢ $\pi$ moios | $\cdots$ | $\ldots$ | . | . | . | . | $1{ }^{19}$ | . | $\cdots$ | . | . | . | 1 |
| otos | - | - | . | . | . |  | - | $\ldots$ | . | $\ldots$ | . | 1 | 1 |
|  |  | . |  |  |  |  |  | . . |  | $\cdots$ |  | 1 | 1 |
| Totals. | 65 | 123 | 77 | 44 | 8 | 2 | 11 | 13 | 20 | 26 |  | 150 | 563 |
|  | $\begin{gathered} 188= \\ 33.5 \% \end{gathered}$ |  | $\begin{array}{r} 121= \\ 21 \% \end{array}$ |  | 10 |  | 24 |  | 46 |  | $\begin{array}{r} 174= \\ 3 . \% \end{array}$ |  |  |

```
    1 \delta 391 (к\varepsilon єlп\eta\eta\sigma\iota).
    8 Pot.-opt. }\mp@subsup{}{}{4}\mathrm{ Including I 412,414 (む\єтo).
```




```
Cauer cj. к\varepsilon).
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```
    9 Z 224,к 508,\pi 71. \Omega 369 is doubtful.
    10 Including \omega 87.
                            \mp@subsup{}{}{11}\textrm{K}63 (0\epsilon\epsilon}\omega\mathrm{ , subj. dubit. = future).
    12 II 246 (wish).
```



```
= future, see Am.-H.
    14 \beta 374 ( }\pi\rhol\nu\gamma`\mp@code{*
    15 \delta 474; \nu 336.
        16 O 452 (\kappa\varepsilon . . . đ\lambda\phiO\iota, %\pi\eta).
    17 0 45. }\mp@subsup{}{}{18}
```



Conditional clauses dependent upon and assimilated in form to other dependent clauses (e.g. final, etc.) have been omitted. A few cases of aposiopesis might be mentioned; viz. : A 580 ; Ф 556,567 ; X 1 II ; $\zeta 262 ; \psi 319$.

Besides the clauses included in this table, I have counted twenty-nine instances of the subjunctive in relative clauses in comparisons ; see G.M.T. § 549.

We might add also the subjunctive in comparisons after $\omega$ © ötc, etc. ; see G.M.T., p. 210, footnote.

## II.

We are now in a position to consider the use of the optative in generic conditional (relative) ${ }^{1}$ sentences in Greek: its beginning and its extension, and the relation of this so-called iterative optative to the corresponding generic subjunctive. We shall first present and discuss certain differences in form and in meaning between past and present generic conditions in Greek. Brugmann's statement, quoted above, p. IO4, that the iterative optative originated in sentences
 $\gamma \epsilon \dot{\rho} \in ́\} o l$, may serve us as a convenient point of departure. For two reasons, however, this example is not adequately representative of the beginning of the use of the optative in past generic sentences. For in the first place, its subordinate clause is introduced by the relative pronoun ö $\sigma \tau \iota$, whereas the iterative optative appears to have been employed first in temporal clauses. This is shown by Tables I. and II. (pp. II4-II 5 ), from which we obtain the following statement ( A ):

| Protasis introduced by | $\text { in (a) }\left\{\begin{array}{c} \text { Past } \\ \text { general } \\ \text { cond. } \end{array}\right.$ | $\text { (9) }\left\{\begin{array}{c} \text { All other } \\ \text { opt. } \\ \text { cond. } \end{array}\right.$ | $(\gamma)\left\{\begin{array}{l} \text { Present } \\ \text { general } \\ \text { cond. } \end{array}\right.$ | $(\delta)\left\{\begin{array}{c} \text { All other } \\ \text { subj. } \\ \text { cond. } \end{array}\right.$ |
| :---: | :---: | :---: | :---: | :---: |
| $\epsilon i$ | 1 | 105 | $20=11 \%$ | 163 |
| \%s( $\tau$ ts) | - $19=27 \%$ | 38 | $66=38 \%$ | 87 |
| Temp. conj. | - $46=65 \%$ | 21 | $79=45 \%$ | 112 |
| Other words | 5 | 2 | 9 | 37 |
| Totals . | - 71 | 166 | 174 | 3 S 9 |

[^26]Thus it appears that out of a total of 71 past generic conditional (relative) sentences in Homer, having the optative mood, only 19 (or $27 \%$ ) are introduced by the relative pronoun ös ( $\tau \iota \varsigma$ ), while temporal conjunctions introduce 46 (or $65 \%$ ) ; whereas for all other optative conditional (relative) sentences the corresponding figures are for ős ( $\tau \iota 5$ ) 38 or ( $23 \%$ ) and for temporal conjunctions 2 I (or I $3 \%$ ). Compared absolutely the proportions are :

$$
\begin{aligned}
& \text { Temp. conj. . . . . } 46: 21=2: ~ t \\
& \text { \%s( } \tau \iota s) \text {. . . . . } 19: 38=1: 2
\end{aligned}
$$

These facts are in keeping with the temporal character of the past general period, which has been probably universally recognized. ${ }^{1}$

The direction of extension of the iterative optative was from temporal to conditional clauses introduced by $\epsilon i$, of which the beginning appears as early as in Homer. Relative (ös( $\tau \iota \varsigma)$ ) clauses occupy in Homer a middle ground, forming about one-fourth both of the past generic and of all other optative conditional (relative) clauses. ${ }^{2}$

A period, therefore, whose subordinate member was introduced by öt $\epsilon$ or óто́тє, would have indicated more accurately the beginning of the use of the iterative optative, than that selected by Brugmann.

But Table A (p. II6) not only proves that the iterative optative originated in temporal clauses. It shows a marked contrast between past general and present general conditions, in respect of the character of the protasis. For while some two-thirds of the past generic conditions are introduced by temporal cọnjunctions and only twenty-seven per cent by

[^27]ős ( $\tau \iota \varsigma$ ), of the present general conditions only forty-five per cent are introduced by temporal conjunctions, whereas thirtyeight per cent have ös $(\tau \iota \varsigma)$ and eleven per cent, $\epsilon i$. That is to say, the proportion of clauses introduced by ös ( $\tau \iota s$ ) and $\epsilon i$ in present general conditions in Homer is almost twice what it is in past generic periods - forty-nine per cent in the former, twenty-seven per cent in the latter. In contrast with this the proportion of temporal clauses decreases from sixty-five to forty-five per cent. Again, sixty-eight per cent of all instances of temporal conjunctions followed by.the optative occur in the past generic periods, while only forty-one per cent of these conjunctions followed by the subjunctive appear in the present
following table, for whose various items, however, absolute completeness is not claimed:

|  | ${ }_{\text {e }}$ |  | \%s\%(tis) |  | Temp. conj. |  | Other conj. |  | Sub-totals. |  | Totals. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Past } \\ & \text { gen. } \\ & \text { cond. } \end{aligned}$ | $\left\|\begin{array}{c} \text { Other } \\ \text { opt. } \\ \text { cond. } \end{array}\right\|$ | $\begin{aligned} & \text { Past } \\ & \text { gen. } \\ & \text { cond. } \end{aligned}$ | $\begin{array}{\|l\|} \text { Other } \\ \text { opt. } \\ \text { cond. } \end{array}$ | $\begin{aligned} & \text { Past } \\ & \text { g.n. } \end{aligned}$ | $\begin{aligned} & \text { Other } \\ & \text { cond. } \end{aligned}$ | $\begin{aligned} & \text { Prt } \\ & \text { g. } \end{aligned}$ | Other | $\begin{aligned} & \text { Past } \\ & \text { gn. } \end{aligned}$ | Other cond. |  |
| Homer | 1 | 105 | 19 | $3^{8}$ | 46 | 22 | 5 | 2 | 71 | 167 | 238 |
| Homeric <br> Hymns and Hesiod | 1 | $11^{(12)}$ | 4(5) | 2(3) | 8 |  | 1 | 1 | 14 | 14 | 28 |
| Pindar |  | 9(ro) |  | 1 |  |  |  | 1 |  | 11 | II |
| Aeschylus | 1 | 20 | 1 |  |  | 2 |  | 1 | 2 | 23 | 25 |
| Sophocles | 2 | 41 | 1 | 3 |  | 2 | 3 | 1 | 6 | 47 | 53 |
| Euripides | 17 | 63 | 3 | 2 | 3 | 1 | 2 |  | 25 | 66 | 91 |
| Aristophanes | 15 | 58 | 4 | 5 | 9 |  |  | 1 | 28 | 64 | 92 |
| Herodotus | 8 | 31 | 3 | 2 | 56 |  | 10 |  | 77 | 33 | 110 |
| Thucydides | 29 | 73 | 15 | 1 | 31 | 1 | 29 | 1 | 104 | 76 | 180 |
| Sub-totals | 74 | 411 | 50 | 54 | 153 | 28 | 50 | 8 | 327 | 501 | 828 |
| Totals |  | 85 | 10 |  |  |  |  | 8 |  | 28 |  |

general conditions. Forös( $\tau \iota \varsigma$ ) the corresponding figures are thirty-eight per cent and forty-three per cent. Thus in general cond. (rel.) sentences with the subjunctive, in Homer, as compared with those that have the optative, the proportion of clauses introduced by ös ( $\tau \iota \varsigma$ ) and $\epsilon i$ rises; of those with temporal conjunctions, falls.

But for a second reason, $\chi 315$ does not adequately represent the past generic conditional (relative) sentence as found in Homer. For an examination of Tables I and II (pages II4-II5) reveals the striking and doubtless significant fact that in this class of sentences in Homer the subordinate clause shows a remarkable tendency to precede its principal clause in its place in the sentence. In this respect, indeed, this class of conditional (rel.) periods differs from (with one exception ${ }^{1}$ ) all other hypothetical sentences in Homer that have the subjunctive and the optative. Thus if we let the figures that precede the sign of ratio represent the prepositive protasis clauses, those that follow this symbol, the postpositive, we may state the facts concisely as follows:

| $\begin{gathered} \text { Protasis } \\ \text { introduced by } \end{gathered} \quad \text { in (a) }\left.\right\|_{\text {gen }} ^{\text {Past }}$ | $(\beta)\left\{\begin{array}{l} \text { All other } \\ \text { opt. cond. } \end{array}\right.$ | ( $\gamma$ ) $\left\{\begin{array}{l}\text { Pres. } \\ \text { gen }\end{array}\right.$ | $\text { (8) }\left\{\begin{array}{l} \text { All other } \\ \text { subj. cond. } \end{array}\right.$ |
| :---: | :---: | :---: | :---: |
| ős $(\tau / s)^{2}$. . . 8: 11 | 3:35 | 2:64 | 22:65 ${ }^{8}$ |
| Temp. conj. . . 24 : 22 | 1:20 | 10:69 | 48: $64^{8}$ |
| All words . . . 33: 38 | 62:104 | 24:150 | 181:208 |
| $\left.\begin{array}{c} \text { All words except } \\ \epsilon l, \notin a \nu . . . \end{array}\right\} 32: 38$ | 5:56 | 13:141 | 84: 142 |

${ }^{1}$ Those that have an imperative in the conclusion, see Table II.
${ }^{2}$ Clauses with $\epsilon l$ should, of course, be excluded for the reason that $\epsilon l$ introduces both prepositive and postpositive clauses with approximate equality. In post-Homeric Greek, accordingly, when the use of os( $\tau \iota s$ ) and of temp. conjunctions with the optative becomes comparatively rare, except in generic suppositions, there is not so striking a difference between these classes of conditional. periods. But even here the protasis in past general conditions usually precedes its apodosis, as is shown by the following table for Thucydides and Herodotus:

|  | Thuc. <br> Pre. Post. | Hdt . <br> Pre. Post |
| :---: | :---: | :---: |
| $\epsilon l$. | 20: 9 | 7: I |
| \%s(Tis) | 10: 5 | 2 : |
| Temp. conj. | 22: 9 | 50: 6 |
| Other conj. | $18: 11$ | 4: 6 |
| Totals . | 70: 34 | 63:14 |

8 Omitting those which have an imperative in the apodosis, for $8 s(T / 5) 11: 46$, for temp. conj. 18:45.

Or, to state the matter in a different form, the number of past general (rel.) sentences in Homer, in which the protasis precedes its principal clause is almost equal to the number of those whose subordinate clause is postpositive $(33: 38)$, whereas for all other optative conditional (rel.) periods the corresponding figures are-63:104, or, omitting those conditions which are introduced by $\epsilon i, 5: 55=1: 11 .{ }^{1}$ The contrast is greatest in the case of the sentences introduced by temporal conjunctions ( $24: 22$ as contrasted with $1: 20$ ), and if the iterative optative was first used in this class of sentences, it seems fair to conclude that such an example as $\Gamma 216$ :
would more perfectly represent the origin of this construction than $\chi 315$.

Of great significance, too, is the contrast between the past and the present general conditional (rel.) sentences in respect of the ratio of prepositive to postpositive protasis clauses. In the former the ratio is $33: 38$; of the latter, less than one-seventh have the protasis preceding ( $24: 150$ ). Confining our attention to clauses introduced by ös ( $\tau \iota \varsigma$ ), the corres ${ }_{i}^{\circ}$ onding figures are $8(=42 \%): 11$, as contrasted with $2: 64$. Again, of the past general temporal clauses more than onehalf are prepositive (24:22), of the present general only one-eighth (10:69).

Similar striking differences appear if we compare the past general sentences, that have the iterative optative, with all the other optative and subjunctive conditional (relative) periods.

The explanation of these two differences in form between these two classes of generic periods seems not far to seek. They arise from the fundamental distinction between all past and most present general conditional (relative) sentences. For the former always refer to action which is strictly iterative. ${ }^{2}$ They imply occurrence or repetition of an act in the

[^28]experience of a certain designated individual or definitely limited group of individuals. ${ }^{1}$ That is, they are always abstract-concrete, ${ }^{2}$ and always retain a temporal coloring even when not introduced by conjunctions of time.

But of present general conditional (relative) periods only a portion refer to strictly iterative action, in the sense just stated. The larger number, ${ }^{3}$ at least in Homer, state rather a general truth, based indeed upon experience, but of universal application. They are abstract, ${ }^{4}$ not abstract-concrete; and though, like the former, these, too, imply the occurrence of the action of the protasis and so of the whole, ${ }^{5}$ this implication is somewhat obscured, owing to the absence in these sentences of time-distinction.

While, therefore, to the past generic periods conjunctions that express temporal relations seem the better adapted; to the present general sentences, which are not so clarly temporal either in origin or character, the words $\epsilon i$ and ös $(\tau \iota \varsigma)$.

The same fundamental distinction between all past and most present general periods probably accounts also for the contrast between these classes of conditional (relative) sentences, in respect of the order of their clauses. In the case of the former the clauses that contain the iterative optative show a remarkable tendency to precede their principal clauses, thus presenting first the circumstances that condition the action of the leading verb, and preserving both the logical and the chronological order of the events. In contrast with these, ${ }^{6}$ the present general period is usually, in form, a simple state-
${ }^{1}$ Thus in Homer, in 68 out of the 71 instances where the iterative optative occurs, the experience is stated to be that of a designated individual (or of several individuals) : eg., $\Phi 265$ (Achilles), $\gamma 76$ (Odysseus), etc. In only three instances is the person concerned somewhat indefinite, viz., $\Sigma 544,566$, ploughers and harvesters (shield of Achilles), I 524, ancient warriors.
${ }^{2}$ For the meaning of this term see Paul, Principien ${ }^{2}$, §§ 99, 174, 460, 503.
${ }^{8}$ About two-thirds in Homer.
${ }^{4}$ See Paul, loc. cit.
${ }^{5}$ In this respect all general conditions differ from purely hypothetical statements.
${ }^{\varepsilon}$ There appears to be, however, in Homer a slight tendency even on the part of protasis clauses of the subjunctive conditions of strictly iterative action to precede the main clause.
ment of fact, to which is added a limiting clause, defining the circumstances under which the customary action takes place, or expressing a condition which gives to the whole the force of an universal truth. In the latter case, the subordinate clause is only an expanded adjective.

Thus there are in Greek certain marked differences in form between past and present generic periods, which we have tried to show are due to a fundamental distinction between all past and some present general conditions, on the one hand, and most present generic periods, on the other. It now remains to consider the assumption that the optative in these past conditions is the representative, after a past tense, of an original subjunctive (see p. 102). We may begin by calling attention to a corollary of the distinction pointed out above, that all past general conditional sentences express iterative action, whereas most present generic conditions are statements merely of an universal truth. This corollary is that the conditions of the latter class, whether used with specific reference to the present, past, or future, remain unchanged in form. For the present in such sentences "fulfils the function of an absolute tense." ${ }^{1}$ To such present generic periods, therefore, as
there can be no corresponding form in past time. An attempted transference to the past would immediately alter the character of the statement. The reference to the past would of itself destroy the universality of its application. ${ }^{2}$ Hence the larger number - about two-thirds in Homer - of present generic conditional (relative) sentences, that have the subjunctive mood, have no corresponding form in past time.

[^29]They admit of no change to the past. This fact alone casts suspicion upon the validity of the theory under discussion.

But proof that the assumption is entirely without support, in the case of the other sentences also, lies in the fact that in these past generic periods the subordinate clause is, without exception, logically prior or antecedent ${ }^{1}$ to the leading clause. This antecedence is strongly emphasized, too, in these sentences by the tendency (noted above) of the protasis clause to precede its apodosis, whereas in all clear cases in Homer of the use of the optative as the representative of the subjunctive in oratio obliqua the optative occurs in a postpositive clause, as after $\dot{\omega}$, i $i v a, \mu \eta$, etc., and in so-called objective conditions. There is, therefore, no justification for linking such logically prior or antecedent clauses with those that are posterior or subsecutive, which, because they not only "complete the judgment begun in the superior clause, but also mark some act of feeling, perception, or declaration, or some effort of intention on the part of its subject," ${ }^{2}$ admit such a change of mood when following an historic tense. For that the Greeks themselves clearly observed this distinction is shown by two facts. First, by the fact that in past general conditional clauses the double construction of optative or subjunctive - so common in oratio obliqua - was never admitted. ${ }^{3}$ And that this was no mere caprice of language becomes at once evident, when one finds many sentences like $\Xi ~ 163 \mathrm{f}$, and Thuc. VII, 59, кai тả $\lambda \lambda a, \hat{\eta} \nu$ ยै $ั \iota$
 sentences in which the subordinate clause assumes a subjective force, and therefore allows either the subjunctive or the optative after a past tense, after the manner of final (iva, ${ }_{o}^{0} \pi \omega \varsigma$, etc.) clauses, and clauses in indirect discourse.

In the second place, this is shown by the fact that the optative frequently follows a verb of primary tense, not only in logically subsecutive (final), but also in antecedent (conditional) clauses. Thus in

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the words $\epsilon \ell{ }^{\ell} \pi_{0} \theta_{\epsilon \nu}{ }^{\prime \prime} \lambda \lambda \theta o \iota$ express a wish, as originally conceived in the mind of Eurycleia, who longs for the return of her master; and the optative, ${ }^{\ell} \lambda \theta o \iota$, is employed regardless of the mood or the tense of $\phi u \lambda a \dot{\sigma} \sigma \epsilon \epsilon s{ }^{1}$. Now, if an original optative may appear in these subsecutive conditional clauses in connection with a primary tense, evidently the optative in such subsecutive conditional clauses may be original, even when following a secondary tense, ${ }^{2}$ as in $\delta 317, \tilde{\eta}^{2} \lambda v \theta o \nu, \epsilon^{\ell} \tau \iota \nu \alpha$
 the case of subsecutive clauses, it ought to be a probability in the case of clauses of pure condition which express a merely limiting circumstance. And that this is a probability, not to say a certainty, is shown by the occurrence of the optative in such antecedent clauses grammatically dependent upon a verb of primary time, as in a 413 :
in which $\epsilon \ell^{\prime \prime} \pi o \theta_{\epsilon \nu} \epsilon^{\prime} \lambda \theta o \iota$, though postpositive, is logically antecedent, and the optative, used without any thought of sequence, describes a purely imaginary case. ${ }^{3}$ Other similar passages are $\omega$ 253, 341, Aesch. Ag. 1042 ( ่̇ $\pi \iota \rho \rho$ étoı, Flor.), Thuc. I, 52, 2, etc.
The evidence of such passages militates against the theory that "the optative in past general suppositions only represents the corresponding subjunctive transferred to the past" (G.M.T., p. 389). ${ }^{4}$ Like the optative of oratio obliqua, it was

[^31]in origin a Greek construction, ${ }^{1}$ and was apparently an extension at first to temporal clauses - and that without any notion of sequence of moods or of a change of mood - of a mood already freely employed in ordinary conditional clauses. ${ }^{2}$ It is beside our purpose to discuss the question why the Greek, as contrasted with other languages, employed the optative and the subjunctive, instead of the indicative, in general conditions. But why the Greeks used the optative in past generic periods in contrast with the subjunctive in present general conditions ${ }^{3}$ may probably be explained in the words of Monro, not written, however, with specific reference to this construction: "If the occasion to which the whole sentence refers is past, or is a mere possibility, or an imaginary case, these two meanings of the Subjunctive [expressing will or expectation] are generally out of place, and we can only have the Mood which expresses a wish, or an admission of possibility." ${ }^{4}$

Instead, therefore, of calling the iterative optative the representative, by a change of mood, of the subjunctive in generic periods, let us say rather that the adaptability of the optative to use with past tenses, which is suggested by its secondary personal endings, and is illustrated by the optative in past general conditions, was the starting-point and ground of its use in oratio obliqua. And perhaps this is all that Brugmann means (see page 104). If so, his statement of the connection between these constructions is certainly obscure and misleading.

In conclusion, we may note incidentally that in view of the fact that one of the prominent features of Professor Goodwin's classification of conditional sentences was the attempt "to carry out the analogy between these [cond. sent.] and conditional relative sentences more completely," by which arrangement only "the true nature of analogous relative sen-

[^32]tences can be made clear," ${ }^{1}$ his statements, that the use of the optative and the subjunctive in general conditions are constructions which are still undeveloped in Homer, "except in relative clauses," ${ }^{2}$ are particularly unfortunate.

In Homer there are seventy-one past general (relative) conditions, equal to thirty per cent of all the optative conditions, and one hundred and seventy-four present generic conditions, equal to thirty-one per cent of all conditional (relative) sentences having the subjunctive in the protasis. ${ }^{3}$ Certainly no justification can be offered for the exclusion of such widespread constructions. And we may add, these same general conditions, with the subjunctive and the optative, the recognition of which, as we have seen, was an important step in the development of Professor Goodwin's doctrine of the Greek moods, but which, divorced from other subjunctive and optative conditions, were summarily and without good reason thrust to one side and ignored as being late-born constructions, thus stubbornly return to assert their right to a more adequate and fair treatment. ${ }^{4}$

It may be, therefore, that "the whole supposed necessity for any definition at all except that of time" (see p. 102) is, after all, not a matter of the imagination merely. ${ }^{5}$

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## VIII. - Herodotus's Account of the Battle of Salamis.

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Our chief sources of knowledge concerning the battle of Salamis are Aeschylus, Persians, 345 ff ., and Herodotus VIII, 70-95. Of only secondary value - possibly, as some have thought, of no independent value - are Diodorus (Ephorus) VIII, 17, 2-19, 2, and Plutarch in the Themistocles. ${ }^{1}$ The vulgate account, basing upon Herodotus, and placing the battle inside the straits, was first seriously called in question by Loeschke, Jalurb. f. Phil. 1877, pp. 25 ff. Finding Aeschylus and Herodotus in discord, he prefers to follow the former, who was an eye-witness, and prepares an account of the battle which he believes to be supported by the statements of Aeschylus and in harmony with those of Diodorus. He makes no attempt to harmonize the statements of Herodotus, except to suggest a correction of the text at the point of most serious discrepancy. The battle he believes to have occurred outside the narrows made by the point of Cynosura and the opposite headland of Attica. His main points are the following:
(I) It is not credible that the Persian ships the night before the battle could have entered the straits 2000 metres distant from the Greeks without being observed by them.
(2) Psyttaleia was evidently expected by Xerxes to be in

 hence the disembarkation of troops there. If the battle were fought inside the sound, it would be too far away to be sought as a refuge by the Greeks (cf. Aesch. 450 ff.).
(3) Aeschylus confirms Diodorus when he indicates (Pcrs. 366-68) that one detachment of ships was sent around the south of Salamis to block the northwest passage, and the rest

[^34]in three ranks were set to guard the strait at Psyttaleia. If the Greeks were surrounded by a movement of Persian ships inside the straits, there were no need of this outside manoeuvre.
(4) The Persians are represented by Aeschylus as having heard the Greeks, their paean, the trumpet blast, the stroke of the oars, before they saw them. This can only be explained on supposition that Cynosura intervened. The Persians in question were therefore at the southwest passage between Psyttaleia and Cynosura. The Greeks became visible as they bent around the point of Psyttaleia. Hence the right wing was seen first.
(5) The $\hat{\epsilon} \nu \sigma \tau \epsilon \nu \hat{\varphi}$ (Aesch. 4 I 3 ) refers to the narrows between Cynosura and Attica. The turning point of the battle was the confusion into which the Persians fell when forcing their way into this strait.
(6) The statement of Herod. VIII, 85 that the Phoenicians occupied in the Persian line the wing toward Eleusis and the west, and the Ionians that "toward the east and Peiraieus" is from Loeschke's point of view unintelligible. It yields meaning for him, however, if only $\sum a \lambda a \mu i \nu \nu o s$ be substituted for 'Eגєưivos, so that the Phoenicians be assigned the wing toward Salamis and the west.

Loeschke, therefore, arranges both lines across the straits from shore to shore, - from east to west.

A somewhat different solution is attempted by W. W. Goodwin in Vol. I, Pafers Amer. School, pp. 239 ff. Starting with an acceptance of Loeschke's criticism of the vulgate theory, he joins with him in thinking it incredible that the Persians should have taken up their position, on the night before the battle, within the straits. He does not, however, follow Loeschke in amending the text of Herodotus, but rather seeks to harmonize Herodotus's account with the others by a different interpretation of the vexed passage Herod. VIII, 85. He seeks, namely, to locate the struggle within the straits, but makes the Persians enter in the morning, and ascribes their defeat to the fact that they were attacked before they had formed their line, and before they
had recovered from the confusion incident to passing the narrows.

His main points, additional to those of Loeschke, are:
(I) "Aeschylus beyond doubt represents the Persians as entering the straits after daybrcak:" So Diodorus and Plutarch.
(2) "Their line (called by Aeschylus $\dot{\rho} \epsilon \hat{v} \mu a$ ) fell into some confusion in entering the narrows; and they never succeeded in regaining their order of battle, being immediately met by the Greeks as they passed the long point of Salamis."
(3) "There is nothing inconsistent with this view of the battle except the common interpretation of two passages of Herodotus": the first of these, VIII, 76, which represents "the Persians as bringing up their west wing to Salamis $\kappa \cup \kappa \lambda о v ́ \mu \in \nu o \iota ~ d u r i n g ~ t h e ~ n i g h t ~ b e f o r e ~ t h e ~ b a t t l e, " ~ h e ~ e x p l a i n s ~ a s ~$ referring to the sending of ships around the south of the island to close the northwest passage (cf. Diod. XI, I7 ; Plut., Themist. 12); and the second passage, VIII, 85, he explains by applying the points of the compass to the order of the Persian line as it entered the straits, i.e. it entered end on with the right wing leading, so that the right wing thus lay to the west or northwest. The Greeks are made to take a position at first across the sound, between Magoula and the Perama (corresponding to Diodorus's statement), i.c. south to north, and then, by advancing their right wing first, to assume a position southeast to northwest sufficient to bring them near to the desired line, i.c. with their left wing slightly west of north.

Professor Goodwin's statement gives a clear, consistent story of the battle, and has the merit of establishing an apparently complete reconciliation between the accounts of Herodotus and Aeschylus. It is, however, rather an attempt at reconciling with the Aeschylean account two conflicting passages in Herodotus than any attempt at reconciling the two accounts taken as a whole. To Aeschylus, as an eye-witness, must be given undoubtedly the preference in case of ultimate conflict. We submit, however, that the account of Herodotus must be interpreted as a whole. It can scarcely be doubted that Herodotus, who certainly
visited the scene of the battle within thirty-five years after its occurrence, must have had when he wrote a selfconsistent plan of the battle in mind, whether that plan was right or wrong. We believe that a review of Herodotus's account as a whole will show that the two passages cited above are not the only ones which appear to be inconsistent with the plan suggested by Professor Goodwin ; we believe that it will also appear that he misunderstands Aeschylus.

The essential features of Herodotus's account may be discussed in the chronological order as he gives them.
(i) In the forenoon of the day before the battle the Persian ships were beached at Phaleron, and the leaders were in council. So soon as it was decided to give battle, the ships were pushed off and headed for Salamis, $\bar{\epsilon} \pi \grave{\imath} \tau \grave{\eta} \nu \sum a \lambda a \mu \hat{\imath} \nu a$ ( $\S 70$ ), just as the land troops were at nightfall headed $\epsilon \pi i$ $\tau \grave{\nu} \nu$ Пєлото́v$\nu \eta \sigma o \nu$. Contrast $\pi \rho o \grave{s} \tau \grave{\eta} \nu \sum a \lambda a \mu i ̂ \nu a, \S 75$. In the open sea off Peiraieus the ships were sorted out and arranged $\kappa a \tau^{\prime} \dot{\eta} \sigma v \chi^{i} \eta \nu$. As night was, however, approaching, it was found necessary to postpone battle until the next day. At night the Persian army broke camp and started along the shore toward the Peloponnesus. Hence it was in the midst of his army, already on its slow march, that Xerxes had his seat the next morning $\dot{v} \pi o ̀ ~ \tau \hat{\omega}$ ov̂p $\epsilon \iota \tau \hat{\varphi}$ ả $\nu \tau i ́ o \nu \sum a \lambda a \mu i ̂ \nu o s(§ 90)$. The whole Attic shore was Persian.
(2) The Greeks, especially the Peloponnesians, seeing how completely they would be isolated in case of a naval defeat, were in great perturbation, and the withdrawal of the Peloponnesian contingent, or perhaps even of the whole fleet, to the Isthmus was all but determined upon. Themistocles sent Sikinnos to warn Xerxes of the proposed movement. Xerxes believed. The story was probable enough, for it seemed surely the wise course for the Greeks to pursue. Why should they at great risk of complete isolation of the army stay to defend a country already lost? Xerxes acted promptly. His purpose was to prevent the withdrawal of the Greek fleet.

First, he immediately disembarked $\pi 0 \lambda \lambda o \dot{s} \tau \hat{\omega} \nu$ חєр $\sigma \epsilon \in \omega \nu$ upon the island of Psyttaleia, thus securing with troops this shore, as he had already the Attic shore. This marks the
proposed line of his battle. Ancient naval battles were by preference, as Duncker (Gesch. d. Altert.) has shown, fought from shore to shore, i.e. from friendly shores respectively, and not with the wings reposing, the one upon a friendly, the other upon an unfriendly, shore. The Greeks were at Salamis and held the island, and if, as seems a priori natural, the Persians were proposing in general to make the Attic shore their background, Psyttaleia would be at the end of their left and, as lying in the face of the strait, could well be viewed as
 affording a fine vantage point from which to succor friends or hew down foes according as the refugees from either side might seek it.

The second part of Xerxes's movement took place at night and concerned the fleet. It consisted of two distinct manoeuvres ( $\mu$ è $\nu-\delta \grave{e}$ ):


 $\tau \grave{\nu} \nu \pi o \rho \theta \mu \grave{\nu} \nu \tau \hat{\eta} \sigma \iota \quad \nu \eta \nu \sigma i ́$.

Concerning the first of these manoeuvres, two difficulties face the interpreter: (a) Which is the west wing? (b) Was the movement one around the south of the island or inside the sound?

Professor Goodwin's interpretation makes Herodotus use "west wing", in § 85 of the right wing and in § 76 of the left wing, and this in a connected account of the same battle. Regarding the wings as named by their temporary position, he naturally is forced by the specification that the other or
 locate the west wing out along the shore of the island, though no possible ratio for leading the fleet over there can be discovered. Dr. Lolling (Meerenge zion Salamis, Aufsätze an Curtius geveidmet) attempts to solve the difficulty by reading Leros for Keos. This is impossible, not only for grammatical reasons (viz. the use of $\tau \epsilon \kappa a i$, and the necessity of making $\tau \epsilon$ balance $\mu \epsilon ̀ \nu$, while $\delta \grave{e}$ introduces a parenthetical clause), but for the plain reason that if the Persian ships were already at

Leros, the Greeks were already surrounded, and there was no need of doing anything further (cf. Hauvette, Herod., p. 412 ).

The whole difficulty finds a ready solution when we take into account that we are dealing here with a continuous, consistent, and well-considered account in which the Persian fleet is always spoken of in terms of the Attic shore against which it was located on the day before the battle, before which it was drawn up on the day of the battle, and which was regarded as its permanent "point of departure." Precisely the same thing is done in. § 85 , where, if I may anticipate somewhat, it will be shown that the wings are again named in terms of the trend of the Attic shore. The $\pi \rho o{ }^{\prime}$ $\dot{\epsilon} \sigma \pi \epsilon \dot{\rho} \eta \varsigma \kappa$ ќिas is throughout the right wing.
The movement described by Herodotus as $\kappa v \approx \lambda о u ́ \mu \varepsilon \nu o \iota \pi \rho o ̀ s$ $\tau \grave{\eta} \nu \sum a \lambda a \mu i ̂ v a$ is by some understood as within the sound toward a position by the Perama, by others as a circumnavigation of the island. No one gives a proper value to кvклоú$\mu \varepsilon \nu o l$. If, now, this movement consisted in sending a part of the right wing around the island, кvкдоú $\mu \in \nu 0$ is the perfectly natural description of the movement which sends this detachment of the right wing around behind the left wing. It seems to me probable that such a detachment was sent around the island, and for the following reasons:
 $\pi \epsilon \in \rho \iota \xi(\tau a ́ \xi a \iota)$ seems to refer to such a movement ; if not, it refers to something otherwise unmentioned in our sources.
(b) Diodorus XI, I7 says: He sent out the naval force of the Egyptians with orders to close the strait between Salamis and the land of Megara. The same is implied by Plutarch. Two hundred is just the number of ships assigned by Herodotus to the Egyptians. For this see Goodwin, p. 248. The Egyptians would naturally belong in the right wing with the Phoenicians.
(c) The enemy's ships, which Herodotus reports Aristeides as having seen in his passage from Aegina, may well have belonged to this detachment. See Goodwin, p. 25 I
(d) The objections which have been raised on the score
of the distance and the darkness of the night are not of weight. The weather, as usual in September, was probably calm ; the triremes were moved by oars and were swift ; the distance was not such as to require over four or five hours; i.e. the triremes would reach the straits before daybreak.
(e) The movement was an exact parallel to that of sending two hundred ships around Euboea with the design of shutting up the Greeks in the Euripus.
$(f)$ The flight of the Corinthian Adeimantus through the sound to the west may be a base libel, but the very introduction of the story shows that Herodotus did not think of a Persian fleet as posted off St. George. The second manoeuvre of the fleet consisted in bringing the left wing over to enter and occupy the strait. In consonance with his general way. of viewing the plan of battle, Herodotus here also expresses this occupation in terms of the Attic coast, - " occupied clear down to Munychia all the strait with the ships." The temptation to justify an oracle cited later undoubtedly aided in dictating the choice of word. If these ships had been already lying off the straits, as is shown by $\dot{a} \mu \phi \grave{i} \tau \grave{\eta} \nu \mathrm{~K} \dot{\epsilon} o \nu \tau \epsilon$ $\kappa a \grave{\tau} \tau \grave{\nu} \mathrm{~K} v \nu o ́ \sigma o v \rho a \nu$, something new must have happened, something radically new. The theory of Professor Goodwin really leaves nothing to be done. That Herodotus believed the ships occupied the straits inside, and were posted along the shore facing the bay of Ambelaki, we think certainly proven by what follows. If he did not think they did something of this sort, why should he specifically add, "They did this in silence, that those on the other side might not know of it"? (§ 76). It is, indeed, only by what I must think a misinterpretation of Aeschylus (Pers. 382) that Professor Goodwin refuses to think that the Persians began entering the straits before daylight. Aeschylus says (1.381): they sail off each to his appointed station, and (11. 382-3) all the night keep sailing through until (11. 384-5), when the night is passed, no place is left for the Greeks to sail out. The antithesis of $\delta \iota a ́ \pi \lambda о о \nu ~ к а Ө i ́ \sigma \tau а \sigma a \nu ~ a n d ~ e ̂ к т \lambda о \nu \nu ~-~ к а Ө i \sigma т а т о ~$ is too apparent ; the word-play (кäívaaro) points it out ; note

interpretation of 1.382 is given on p. 246, "the Persian ships are kept rowing about all night." Aside from the common meaning of the language and the implication of the antithesis, there arises the consideration : how were they sailing to their appointed stations by "rowing about all night"? The interpretation of this passage is not, however, of prime importance to us, - to Professor Goodwin and his theory it is of fatal importance. Loeschke and Goodwin lay great stress upon the impossibility of effecting such a movement in the face of the enemy without attracting their attention. Goodwin in the first place is surely mistaken in asserting that it was a moonlit night. The statement of Aesch. v. 365 is against this, and Busolt, Gr. Gesch. ${ }^{2}$ (II, 702, note 2), shows that at the time of the battle the moon must have been well advanced in its last quarter and probably did not rise before about two o'clock. The Greeks were deep back in the bay of Ambelaki some four miles from the opposite Attic coast. That there was doubtless danger of attracting the attention of the Greeks is shown by the fact that the Persians moved in silence, but that it was possible to do it under cover of the darkness must be undoubted. That the south passage, i.e. that between Cynosura and Psyttaleia, was not entirely blocked is suggested by the arrival of the Aeginetan trireme the next morning.

Herodotus's account turns now in $\S 78$ to the Greeks. They were busy in discussion. "They did not know yet that the barbarians were surrounding them with their ships, but supposed them to be in the same positions as they saw them by daylight." According to Professor Goodwin's theory, they would be, except for the ships sent around the island. Then follows the arrival of Aristeides, ${ }^{1}$ from whom as an "eye-witness" Themistocles first learns that the Persians have moved as he desired.

Not until Aristeides's report is confirmed by the Tenian deserters do the Greek leaders really believe they are surrounded. Once convinced, they directly prepare for battle.

[^35]The dawn is breaking. The men are assembled to hear some words of exhortation. They hurry to their places on the ships. The trireme with the blessing of the Aeacidae arrives. They push off. Hardly are they off when the barbarians are upon them. At first the Greeks recoil, and some were just beaching their boats again, but Ameinias on the left pushes ahead, joins fight, and the rest follow. The night begins off the mouth of the bay of Ambelaki. Mr. Goodwin's plan makes it begin at the other side or the middle of the sound, before the Persians have reached their position and formed their line. The Greeks, according to his plan, would have been obliged to back water at at least $1 \frac{1}{4}$ miles before beaching. In § 89 Herodotus says Greeks whose ships were lost swam ashore. If the Greek line had been across the sound, this were unlikely. Near those of the left wing would have been a hostile shore. Most of the others could have reached shore only by swimming by and around many friendly ships.

Passing to the details of the battle, Herodotus, § 85, makes the statement: "Opposite the Athenians had been arranged the Phoenicians, for they held the wing toward Eleusis and the west ; opposite the Spartans the Ionians; they had the wing toward the east and Peiraieus." As we have already seen, this statement has given rise to abundant controversy, but yet it is just the statement that it was most natural for Herodotus in accordance with his entire conception of the plan of battle to make. He viewed the Persian line as arrayed before the Attic coast. This coast opposite the mouth of the bay of Ambelaki lies exactly east and west. Herodotus had not studied out the battle on a map, but on the spot. It was of slight matter that the map shows Eleusis to be to the northwest. The plain fact is that the shore runs east and west, and the west end of the sound opens toward Eleusis, the east end toward Peiraieus. A fleet arrayed along this shore has therefore its right wing toward the west and Eleusis, its left toward the east and Peiraieus.

The story of the battle, aside from the personal incidents, is brief. The Greeks preserved their order, but the Persians, as they crowded down to fall upon the Greeks in their nar-
rower position, interfered with each other, raking one another's oars, and making themselves an easy prey. The position of the Greeks forced the Persians into narrower quarters, èv $\sigma \tau \epsilon \omega \hat{\varphi}$, so Aeschylus puts it. The result could not have been different, as Herodotus says. The ancient naval battle was a ramming match. A fully equipped trireme carried only eighteen fighting men to 170 oarsmen. The great consideration was speed, and the ability to drive the 100 feet long barge against the enemy's ship and disable it. Once the Persians were crowded upon each other, the battle was settled. This was the reason why the Greeks kept the shelter of their narrow bay. It is inconceivable that they should, as Mr. Goodwin would have them, leave the shelter of a friendly shore, and lean their left wing upon a hostile shore.

The confusion of the Persians was increased by the ambition of those in the rear lines (Aesch. says they were drawn up three deep) to make a good showing under the eye of the king who sat on the shore behind them. The Phoenicians were driven back by the Athenians ( $\epsilon \varsigma \tau \eta \eta_{\nu} \gamma \dot{\eta} \nu$ Plutarch says), and Herodotus tells of their coming up to make a certain complaint to the king. The flight became general. All the ships pushed for the north passage. Here the Aeginetans, who had moved forward from their position on the right Greek wing at the tip of Cynosura, were waiting for them, and taking them in the flank made havoc of the fugitives, earning themselves the chief glory of the day.

This is Herodotus's perfectly intelligible and self-consistent account. From it it seems to us clear that he thought of the Persians as already drawn up at daybreak along the Attic shore and closing the north passage of the strait, so as to extend from Psyttaleia on the Attic shore opposite it to a point westward therefrom opposite the northern cape bounding Ambelaki bay. This makes a line of $2 \frac{1}{2}$ miles, or if extended to the Perama, of 4 miles. The Persian fleet, after the withdrawal of the 200 Egyptian ships, could not have exceeded 600 ships. Aeschylus says these were drawn up three deep. This allows, on the basis of a $2 \frac{1}{2}$-mile extent of line, 65 feet waterway for each ship, considerably more
than was necessary to operate it, being more than double the width covered by ship and oars. The Greek fleet of about 300 ships, probably drawn up in double line, had from point to point (east and west) of Ambelaki bay a space of $\mathrm{I} \frac{1}{2}$ miles, affording 50 feet per vessel. The whole sea-room was $10,000,000$ square metres, or reckoning 1000 ships, 10,000 square metres per ship.

It is chiefly in deference to certain statements of Aeschylus that Loeschke and Goodwin have constructed their theories of the battle. These theories are in certain and unreconcilable conflict with Herodotus. They are too inherently improbable. Loeschke locates the battle at the south passage, which is narrow and broken by an island and by shoals. Not over thirty-five to fifty ships could have passed it abreast. He is chiefly influenced in selecting this position by belief that Aeschylus's statement that the Greeks were not seen till the last moment required them to be hidden by Cynosura. This implies that the Greeks entered battle by a complete wheeling of their line, which would not only be difficult, but would expose the flank. It would furthermore be the left wing, and not, as Aeschylus says, the right, which the Persians would see first. Goodwin's plan obliges the Persians to enter battle through a waterway of less than three-quarters of a mile in width, where not over fifty to seventy-five triremes could move abreast. Though off the strait all night, and wide awake, and though a shore held by their own troops invited their entrance, they are made to await the risk of daylight to accomplish this dangerous movement. And yet Herodotus says éтєтáxaтo.

Two or three presumed implications of Aeschylus's language are all that remain of the supposed reasons for positing this hypothesis, contrary as it is to the entirety of Herodotus's account as well as to all good reasons in general. These are :
(a) Aeschylus says that the Greeks suddenly appeared in view (Pers. 390). When the sun had risen there burst out from the camp of the Greeks the sound of the paean echoed over the wave from the island cliffs, smiting dismay to the hearts of the Persian host. For, lo, this blessed note of the
paean was not the song of men who meditated flight, but rather of men hastening in inspired courage to the battle. Then the blare of the trumpet set all the air afire, and straightway came the dash and the swish of the oar as it smote the brine to the boatswain's call. And with a rush they were all before their eyes.

This fits Herodotus's account. The Greeks tarried in council till day was dawning. Then came late the decision to fight. The sailors were addressed just as the sun was rising. With an enthusiasm they are off to their boats. The trumpet gives the signal for launching. Suddenly they are off, and way down in the recesses of the bay four miles away, where just before all had been quiet in the gray of twilight, the Persians see the water covered with the advancing triremes.
(b) The expression $\dot{\rho} \in \hat{\jmath} \mu a$ is believed by Goodwin to refer to the columnar order of the Persians in passing the straits. The cause of their confusion which resulted in their defeat was, according to his view, that in passing the straits ( $\bar{\epsilon} \nu \sigma \tau \epsilon \nu \hat{\varphi})$ they were obliged to narrow this column. They were then attacked before they recovered from their confusion. This is not what Aeschylus says. He says the reverse. "For the first the stream of the Persian host held on its way, but when the mass of the ships had been crowded together into close quarters, they were no help to each other, but rather a hindrance and destruction, etc.," and then the Greeks smote them hip and thigh. This crowding $\dot{\epsilon}^{\dot{\nu}} \sigma \tau \epsilon \nu \hat{\varphi}$ comes at the end, not at the beginning. Compressed into a narrower bed, what had been a steady stream now becomes a confusion of waters. It is the same thing which Herodotus describes. As they came down upon the Greeks in their narrower position off the mouth of the bay, they crowded together, touched oars, and were disabled.

Herodotus's account is not only self-consistent; it is in entire consistency with the other accounts.

> IX. - The Nikias of Pasiphon and Plutarch.

By Professor B. PERrin,

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Of the four usual divisions of a Life by Plutarch - the
 two, the $\dot{\eta} \theta o s$ and the $\pi \rho \dot{\alpha} \xi \epsilon \iota$. It is generally inferred from this that no special biography of Nikias, either Peripatetic or Alexandrine, was available for Plutarch's use. At any rate, in his opening chapter, Plutarch gives us an unusually precise programme of his procedure in the composition of this Life. He will not presume, like Timaios, to vie with Thoukydides and Philistos, the primary historians of the Peloponnesian war and the Sicilian expedition. But "those doings which Thoukydides and Philistos have set forth, since I cannot pass them utterly by, especially as they indicate the man's nature and the disposition which lay hidden beneath his many great sufferings, I have run over briefly, and as I felt compelled to do in order to escape the reputation of being altogether careless and slothful; but those details which have escaped the notice of most curiters, and which others have told in disconnected fashion ( $\sigma \pi \sigma 0 \alpha \dot{\delta} \eta \nu \nu$ ), as they found them on ancient votives or decrees ( $\dot{a} \nu a \theta \dot{\eta} \mu a \sigma \iota \nu \hat{\eta} \psi \eta \phi i \sigma \mu a \sigma \iota \nu)$, I have tried to collect ( $\sigma v \nu a \gamma a \gamma \epsilon i \nu$ ), not massing together useless material of research, but handing on only such as furthers the appreciation of natural character."

Nothing could be more frank or clear. Thoukydides and Philistos were not biographers of Nikias, but historians of the Peloponnesian war and of Sicily, for both of whom the Sicilian expedition was a major episode. Their stories of this expedition Plutarch will condense and combine, with the special aim of illustrating the "nature and disposition" of Nikias, and to such condensation and combination he will add sundry details which he has compiled from other writers, who found them on votive offerings or in decrees, again exer-
cising his discretion in using only such details as will illustrate the character of Nikias.

In the main body of his Nikias, the $\pi \rho a \xi \epsilon \epsilon \varsigma$, cc. VI.-XXX., Plutarch clearly carries out this programme to the letter. Thoukydides furnishes him with the main framework, upon which are skilfully brought covering and ornamental material from Philistos, who was an eye-witness in Syracuse of the events of the Athenian siege ; from Timaios, in a third degree, in spite of the more than Polybian censure of this censor with which the opening chapter is weighted down ; and from Philochoros, Krateros, and Theophrastos, whom he here, as often, gladly uses. No essential exception can be taken to Busolt's able analysis ${ }^{1}$ of this part of the Life.

But for the first main division of the Life, the $\hat{\eta} \theta o s$, comprising cc. II.-V., I find myself inclined to differ with Busolt, who insists that the literary mosaic here is due, not so much to Plutarch as to a certain unknown "learned editor of Theopompos," who has already been much used by Plutarch in his Kimon and Perikles (Busolt, Griech. Geschichte, III, pp. 35 f., 238 f.). It is not my purpose to argue out here in all fulness my position on a question where subjective propensity must after all give the decisive impulse. Suffice it to say that I believe Plutarch himself to be the "learned editor of Theopompos," both here and in the Kimon and Perikles. This is not to claim for Plutarch the name of a learned investigator, but simply that of a learned compiler, to which I am sure he is entitled. Nor is it to claim that all or even most of his citations are at first hand. Some of them certainly are not. The programme which he so carefully lays down for himself at the beginning of the Nikius promises compilation, and compilation from compilers. He is admittedly true to his programme in the second and major part of the Nikias; he is no less so, I believe, in the first.

A brief analysis of this first main division of the Nikias - the $\dot{\eta} \theta o s$, comprising the four chapters immediately following the eminently original chapter of introduction - gives the following result: (1) A citation is made by name from Aristotle's

[^36]Athenian Polity (c. XXVIII. 5), ranking Nikias, Thoukydides son of Melesias, and Theramenes as Bé̀тьбтol of Athens (c. II. i). But the citation is so garbled, and is succeeded by a passage of such contradictory strain, as to justify the general belief that it was made at second hand. (2) The political position and military career of Nikias before and immediately after the death of Perikles are then briefly described (c. II. 2), necessarily from some source other than Thoukydides. For Thoukydides has only two brief notices of Nikias prior to the affair of Pylos and Sphakteria, viz., his expedition against Minoa, in the summer of the fifth year of the war, 427 B.c. (iii. 5 1), which was measurably successful, and that against Melos, in the summer of the sixth year of the war, 426 в.c. (iii. 9 ) ), which was unsuccessful, and resolved itself into a predatory foray into Boiotia. This source other than Thoukydides may have been that part of the tenth book of the Philippica of Theopompos which was devoted to a characterization of the Athenian demagogues, although what we can learn of this digression does not warrant us in assuming in it much detail of actual event.
(3) Plutarch next contrasts Nikias and Kleon as leaders of the people, in a passage which goes back ultimately, whether through Theopompos or not, to contemporary comedy (c. II. 2-4). Next (4) the methods of Perikles and Nikias in winning the favor of the people are contrasted, and the liturgies and dedications of Nikias are described in great detail, especially his brilliant conduct of a $\theta \epsilon \omega \rho$ ía to Delos (c. III. I-6). This material clearly comes from Philochoros, Kleidemos, or other Atthis-writers.
(5) The fourth chapter of Plutarch I shall cite entire. "In this course it is clear that there was much ostentatious publicity, looking toward increase of reputation and gratification of ambition ; and yet, to judge from the rest of the man's bent and character, one might feel sure that such favor and control of the people as he secured were rather a corollary to his reverent piety, for he was one of those who are excessively terrified at heavenly portents, and was $\theta \epsilon \iota a \sigma \mu \hat{q}$ п $\pi \rho \sigma \kappa \epsilon i \mu \epsilon \nu \circ$, as Thoukydides says (vii. 50).
"And in one of the dialogues of Pasiphon it is recorded that he sacrificed every day to the gods, and that he kept a diviner at his house, ostensibly for the constant inquiries which he made about public matters, whereas most of his inquiries were really made about his own private affairs, and especially about his silver mines; for he had large interests in the mining district of Laureion, and they were exceedingly profitable, although worked at great risks. He maintained a multitude of slaves in these mines, and the most of his substance was in silver bullion. For this reason he had a large retinue of people who wanted his money, and who got it too; for he gave to those who could work him harm no less than to those who deserved his favors, and in general his cowardice was a source of revenue to the base as his liberality was to the good.
"Witness to this can be had from the comic poets. Telekleides composed the following verses on a certain public informer:





"And the personage who is held up to ridicule by Eupolis, in his Marikas, fetches in a sort of lazy paùper, and says:






П. í $\mu \epsilon i s \gamma^{\alpha} \rho$, ${ }^{\text {B }} \phi \rho \in \nu o \beta \lambda \alpha \beta \varepsilon i s$,

"And the Kleon of Aristophanes blusteringly says :

"And Phrynichos gently hints at his lack of courage and his panic-stricken air in these verses:

Of the following chapter, the fifth, which closes the $\dot{\eta} \theta o s-$ division of the Life, I wish to speak later, after due discussion of the fourth. This fourth chapter, it is seen, readily falls into three parts, adducing three testimonies to the timidity of Nikias, one from Thoukydides, one from a dialogue of Pasiphon, and one, or rather several, from Old Comedy. The testimony of Thoukydides is anticipated chronologically from his description of the eclipse of the moon as the Athenians were preparing to leave Syracuse, and its effect upon Nikias and the army (vii. 50, 1). The passage is so impressive and notorious that no suspicion of Plutarch's taking it at second hand is justifiable. The farrago of citations from Old Comedy, on the other hand, Plutarch may well have taken bodily from ${ }^{\circ}$ some scholiastic source, or possibly from Theopompos, and so have been saved the labor of such compilation. On the citation from Pasiphon's dialogue I wish to dwell more at length.

Pasiphon is so rare an author now, and for the modern scholar, that Wilamowitz-Moellendorff and Busolt have assumed without hesitation that Plutarch cites hin at second hand; and Busolt makes this citation, as well as the farrago of extracts from Old Comedy, part of the apparatus with which his imaginary "learned editor" enriched Theopompos. Now one need not differ at all from Eduard Meyer's estimate ${ }^{1}$ of Plutarch's method of procedure in composing his Kimon, and yet may consistently hold to a different method in the Nikias, where, as has been said, there are distinct indications that Plutarch had no ready-made biography before him. And if it can be shown that Pasiphon was an author with whom Plutarch, from the nature of his favorite studies and readings, would naturally be acquainted, and that the particular dialogue here cited would naturally contain much of just that sort of testimony about Nikias in which the citation is here imbedded, and which can be traced to no other source with

[^37]exclusive probability, then the claim that Plutarch cites Pasiphon here at first hand becomes, to say the least, tenable.

The wonderful personality of Socrates called into being a new form of literary expression - the dialogue. Among the immediate disciples of Socrates who, after the Master's death, cultivated and excelled in this literary form, were, besides Xenophon and Plato, Aischines, Phaido, Eukleides, and Antisthenes. The last three were regarded as founders of philosophic schools, the Elean, the Megarian, and the Cynic. The essential similarity of their styles and methods seems to have led to much confusion among ancient writers as to the authorship of their various dialogues, especially as it became a not infrequent practice of their successors and pupils to attribute to them dialogues of their own composition. In many cases this was doubtless literary fraud, committed, as Susemihl suggests, in order to profit by the feverish demand for philosophical works to stock the rival libraries of Diadochi and Epigoni. In others it was doubtless literary artifice with no intent to deceive.

Either as literary deceiver, or as literary artist, or both, Pasiphon of Eretria - probably a pupil of that Menedemos who practically constitutes the Eretrian school, into which the Elean school was merged, and who in his turn was a pupil of Phaido - seems to have busied himself with the composition of Socratic dialogues which he attributed to the immediate disciples of Socrates. At least that must be the general impression to be had from the somewhat confused and uncertain testimony of Diogenes Laertios. On Aischines he says (ii. 60, 61), "accusations were made against Aischines, and especially by Menedemos the Eretrian, of appropriating most of his dialogues from Socrates through the mediation of Xanthippe. Of these dialogues, the so-called áкє́ $\phi a \lambda o \iota$ are very diffuse, and show nothing of the Socratic vigor. Peisistratos the Ephesian said they were not the work of Aischines. And even of the (other) seven, Persaios says that most were the work of Pasiphon the Eretrian, and were by him imputed to Aischines. So the Little Kuros and the Lesser Herakles and the Alkibiades of Antisthenes, and simi-
lar works of the other disciples, were imputed to them by Pasiphon." Then follows a list of the seven genuine dialogues of Aischines which display the real Socratic character, viz., the Miltiades, Kallias, Axiochos, Aspasia, Alkibiades, Telauges, and Rhinon.

Whatever the worth of this testimony, the fact remains that so competent and sane a judge as Persaios - the pupil of Zeno, the literary counsellor of Antigonos Gonatas, and his "philosophical governor," as Plutarch calls him (Aratos, XVIII.), when he wished his most trusty men to hold the prize of Akro-Korinthos - attributed most of the seven dialogues usually ascribed to Aischines to Pasiphon. Even if we hold, with Susemihl (Alex. Lit. i. p. 201), that Diogenes is in error, and believe that Persaios spoke, not of the seven genuine dialogues of Aischines, but of the áкé $\phi a \lambda \circ \iota$, the most essential fact for our argument will still remain, that Pasiphon composed dialogues under the name of Aischines. If Diogenes is right in his report of what Persaios said, he composed them so successfully as to deceive the very elect, and in the real Socratic manner.

One of these genuine dialogues of Aischines, which Diogenes says Persaios said were mostly the work of Pasiphon, was entitled Kallias. There can be no reasonable doubt that it is from this dialogue that Plutarch cites the long and dramatic story of the rich Kallias and the poor Aristeides (Aristeides, XXV.). Considering the direction of Plutarch's special studies, his philosophical sympathies, and especially his fondness for and familiarity with Panaitios the Stoic, and there is no good ground for denying Plutarch's acquaintance at first hand with this Kallias of Aischines, or his knowledge of the fact that Pasiphon of Eretria was held by good judges to be the author of many dialogues attributed to Aischines. If the dialogue of Aischines had been an Aristcides instead of a Kallias, our belief that Plutarch consulted it at first hand in writing his own Aristeides would be all the stronger. And if a dialogue entitled Nikias by either Aischines or Pasiphon were current, it would surely, in the dearth of material for the life of Nikias before Thoukydides begins to note his
career, be a most welcome and fruitful source for Plutarch's use.
"Of all the Socratic dialogues," Diogenes goes on to say (ii. 64), "Panaitios thinks that those of Plato, Xenophon, Antisthenes, and Aischines are genuine ; about those attributed to Phaido and Eukleides be is doubtful ; the rest he rejects entirely." Panaitios, then, a writer with whom Plutarch shows great familiarity in his Aristcides (not to mention also his Kimon and Demosthenes), was a prime authority for Diogenes on the subject of the authenticity of the multitudinous Socratic dialogues, and he was doubtful about the authenticity of those attributed to Eukleides and Phaido. With these Megarian and Elean disciples of Socrates the Eretrian school, through Menedemos its founder and chief representative, would naturally be in most sympathetic touch, and it would not surprise us therefore to find that Pasiphon the Eretrian - a presumable pupil of Menedemos, who, in turn, was a pupil of Phaido - was a successful imitator, not to say counterfeiter of the dialogues of Phaido, as he notoriously was of those of " Aischines, Antisthenes, and the other disciples," according to the passage first cited from Diogenes (p. 144).

Two genuine dialogues are allowed Phaido by Diogenes (ii. IO5), the Zopyros and the Simon. About a Nikias, also attributed to him, Diogenes says there was some doubt, and other dialogues attributed to him were claimed by some critics for Aischines, whom Pasiphon so successfully imitated. It does not seem, therefore, an unauthorized step which Susemihl (Alex. Lit. i. p. 21) and Wilamowitz (Autigonos von Karystos, p. 142, note) confidently take, in holding that the Socratic dialogue Nikias, which Diogenes hesitates to attribute to Phaido, was really the work of the great imitator of the Socratic disciples, Pasiphon, and that it is from this dialogue that Plutarch cites in the fourth chapter of his Nikias (see p. 142). The chain of reasoning is not as perfect as we could wish, and Hirzel (Der Dialog, i. p. III, note) hesitates to accept it ; still it is better than we usualiy get in matters of this sort: Pasiphon of Eretria was a wholesale imitator or
counterfeiter of Socratic dialogues; Phaido, the spiritual founder of the Eretrian school to which Pasiphon presumably belonged, wrote Socratic dialogues; a Nikias is attributed to him by some and denied him by other ancient critics; a Nikias attributed to Pasiphon is to be posited from Plutarch's Nikias, c. IV.; this presumptive Nikias of Pasiphon is identical with the dubious Nikias of Phaido.

With such a Socratic dialogue, in the absence of any formal biography of Nikias, we should expect Plutarch, in writing his Nikias, both from the trend of his philosophical reading, and from his evident familiarity with Aischines the Socratic and Panaitios the critic of the Socratic dialogue, to be acquainted, and acquainted at first hand. It would rather surprise us if he were not. "Rare" the book may have become in time, but not surely in the schools of philosophy when Plutarch studied under Ammonius at Athens.

How fruitful a source for biographical material such a Socratic dialogue might be, can be seen from the most cursory glance at some of the Platonic dialogues - the Laches and the First Alkibiades, for instance - from which many details of the family and daily life of Nikias and Alkibiades may be culled. The more authentic these details, the more the dialogue gains in dramatic verisimilitude. Even unauthentic and invented details must be given an air of plausibility, as was done by Praxiphanes in his dialogue $\pi \epsilon \rho i$ iotopias, with invented details of the life of Thoukydides which find a place in the late biographies of that author. ${ }^{1}$ In the case of the Nikias of Pasiphon, which may safely be assigned to the first half of the third century b.c., the artistic verisimilitude in biographical details must have been secured by reference to good historical sources for the private life of Nikias. The most natural and accessible sources must have been the comic poets, whose testimonies can be shown to supply many a Platonic dialogue with the personal details desired. ${ }^{2}$ Theopompos also would have been accessible to, and a fruitful source for Pasiphon.

[^38]Now it is in citations from the comic poets and reminiscences of Theopompos that we find the citation from Pasiphon's Nikias imbedded in the fourth and fifth chapters of Plutarch's Nikias. The fourth chapter has already been cited (pp. 3 f.), and the fifth may now follow :
(6) "Since he was disposed to such caution as this in his attitude toward the public informers, he would neither dine out with any citizen nor indulge in public interchange of views or social intercourse. Indeed, he had no time at all for such axocations, but when he was general he remained at the war department till night, and when he was senator he was first to reach and last to leave the senate. And even if he had no public business to transact, he was inaccessible and hard to come at, keeping closely at home with his doors bolted. His friends used to accost those who were waiting at his door and beg them to be indulgent, for that Nikias was even then engaged upon sundry urgent matters of public business.
"The man who most aided him in playing this rôle and helped him assume his costume of pompous dignity was Hiero, who had been reared in the household of Nikias and thoroughly trained by him in letters and poetry. He pretended to be a son of Dionysios surnamed Chalkous, whose poems are actually extant, and who, as leader of a colonizing expedition to Italy, founded Thourioi. This Hiero it was who managed for Nikias his secret dealings with the seers, and who was forever putting forth among the people moving tales of the life of severe hardships which Nikias led for the sake of the city. 'Why!' said he, 'even when he takes his bath and when he eats his dinner some public business or other is sure to confront him ; he neglects his private interests in his anxiety for the common good, and scarcely gets to sleep by midnight. That is why he is physically all run down, and is not affable or pleasant to his friends. Nay, he has actually lost his friends also, in addition to his substance, and all in the service of the city. Other public men not only win friends, but enrich themselves by means of their influence with the people, and then enjoy themselves and make a plaything of the service of the city.'
"In point of fact, such was the life of Nikias that he could say of himself as Agamemnon did:

$$
\begin{aligned}
& \text { ' } \pi \rho \circ \sigma \tau \alpha ́ \tau \eta \nu ~ \delta \grave{~} \tau \text { тov̂ ßíou }
\end{aligned}
$$

All the material of this fifth chapter of Plutarch's biography is of just that spicy sort which Old Athenian Comedy loved to deal out to its public, and may well have been taken from that source, or from Theopompos, or from both, by Pasiphon, to give vivacity and verisimilitude to his Nikias. No "learned editor" is needed for Theopompos. He was a learned investigator himself, and may himself have compiled the passages from Old Comedy in which we find fragments of his testimony imbedded, not only here but elsewhere. Pasiphon used him freely (either with or without independent recurrence to Old Comedy), to get biographical material for his setting of a dialogue Nikias; and Plutarch used Pasiphon's dialogue (with or without independent recurrence to Theopompos), for that early part of the life of Nikias where his main sources, Philistos and Thoukydides, failed him entirely. My inclination is to regard most of the material of the fourth and fifth chapters of Plutarch's Nikias as due to the Nikias of Pasiphon directly.

# X. - The Duenos Inscription. 

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I need not review the history of the elucidation of the Duenos inscription. ${ }^{1}$ Jordan made an important advance in the grammatical interpretation. Conway accepted his text with three deviations, adopting the io uei sat of Deecke for the earlier division iouci sat, the duenoi ne of Bréal and Pauli for the dze noine of earlier interpreters, and the malo of Comparetti rather than mano:-
io uei sat deiuos qoi med mitat nei ted endo cosmis uirco sied, asted noisi ope toitesiai pacari uois.
duenos med feced en manom, einom duenoi ne med malo statod.

## This Conway translates:-

- May the gods Jove, Vejove, and Saturn (grant) that Proserpine, to whom they suffer this vase to be despatched, show thee no favour; unless indeed thou art willing to make thy peace with (or make atonement to, or be appeased towards) Ops Toitesiai. Duenos made me (as a curse) against Manus, and let not evil fall to Duenos from me.

Conway is the only commentator who has given a reasonable and consistent interpretation of the inscription. His general position, namely, that we have before us a curse, and most of his explanations are brilliant and convincing, and it is strange that minor infelicities in his interpretation sufficed to blind the eyes of other scholars to its unique satisfactoriness. My interpretation is based upon his and, while, in certain details, undertaking to extend and rectify it, confirms its essential correctness. The most important point in which

[^39]my interpretation differs from Conway's lies in my rejection of his theory that the scribe was a Greek and betrayed his nationality in certain graphical errors and corrections. I shall not attempt to repeat Conway's arguments and rehearse the evidence he brings forward ; I shall simply take up those points in which I disagree with him. This will leave certain things unexplained and unjustified that I assume as established, and I must therefore warn the reader who is unfamiliar with Conway's paper that an acquaintance with it is essential to a just appreciation of my position.

Since Conway's article appeared, various scholars have attacked the problem and have poured out about the old inscription a flood of learning and conjecture, - but, unfortunately, to comparatively little purpose. It would be superfluous for me to consider or refute the many theories that have been put forward; for that has been done sufficiently by others, each commentator having been keen to see and expose the weaknesses of the position of his predecessor.

After the fourth letter of the first line there is a straight perpendicular mark, rather longer than the adjacent letters are high. Some commentators (for example, Jordan) regard this as an I that was inserted after the neighboring letters had been written ; others (for example, Dressel) regard it as an attempt at punctuation ; still others (for example, Maurenbrecher) assume that it was more or less accidental ; and Thurneysen goes so far as to say that it is intended to show that the correction of E into A in sat was a mistake and that, instead, the E in ue should have been changed! That the line was deliberately made is beyond all question. That it indicates punctuation is contrary, not only to the writer's practice in all the rest of the inscription, but also to what we know of ancient punctuation in general. Thurneysen's idea will certainly find acceptance nowhere. We must then go back to Jordan's conception that the mark is an inserted I , certainly the most obvious interpretation. It has been objected by Dressel and Maurenbrecher that the mark is too long and too slight to pass for an I. This argument
would hold, if it were claimed that the letter had been made from the start, along with the others; but it has, of course, no weight whatever when we consider that the letter is a correction and obviously a later insertion. To demand that it should have been made thicker, is simply absurd, for the simple reason that there was not room for a thicker mark; indeed, the line, thin as it is, could hardly be squeezed in between the neighboring characters. The form of the letter is, in fact, just such a one as was to be expected under the circumstances. And this applies to the extra length as well as to the thinness; for, in insertions of this kind, the erect shaft of an inserted I, J, T, L, or the like, is almost invariably longer than those of the letters between which it is inserted. But, aside from that, altogether too much has been made of this matter of length. A glance at the facsimile will show that there was little attempt at uniformity. I do not refer to the psychological phenomenon of small round $O$ and $\supset$ by the side of large letters made of straight lines. But the shafts of M in med are actually twice as long as the shaft of the adjoining $E$ and those of the preceding $N$ and $D$. They are, in fact, longer than the 1 in question. Moreover, not only is the I such as we should expect under the circumstances; but the very reason for its omission and subsequent insertion is not difficult to trace. The engraver wrote 10 for iouis and then wrote in like manner the first two letters of ueiouis and began to write the abbreviation of saturnos when it occurred to him that the VE would be more likely to suggest uenos than ueiouis. He consequently stopped and inserted an I after the VE. Returning to complete what he was writing, he wrote, instead of $A$, the $E$ he still had in mind, and then, discovering his error, had to smooth out the arms of the E and make an A of it.

Conway was perhaps the last to regard deiuos as a nominative plural with the original ending of $o$-stems, which was retained in Oscan and Umbrian (Planta, II, § 274, Brugmann, II, §3I4). To this it has been repeatedly objected that the old nominal ending had been displaced in Latin by the pronominal ending oi, later $-\bar{\imath}$. To be sure, we have not yet
found the ending -oi in early Latin plurals, but we find quoted in later texts such plurals as poploe, pilumnoe, etc., which are generally, and doubtless correctly, regarded as transcriptions of poploi etc., made at a time when the old stressed oi that (instead of becoming normally $\bar{o}>\bar{u}$ ) had been artificially preserved in the reading of archaic documents, had become oe. I shall, however, show (p. 155) that weak oi had in all probability passed on to $e i$ at the time that the Duenos inscription was written, and we must, therefore, suppose that the time when the pronominal oi entered the nominal declension was still earlier. In other words, when the Duertos inscription was written, the nominative plural of o-stems generally ended in ooi. I say generally, for we must not forget that the change of $-o s$ to $-o i$ was not a phonological change but an analogical change, and analogical changes do not affect all the members of a group with equal force. That some remain unaffected, for example, in technical expressions, fixed phrases, or the formal language of the law and of religion, does not surprise us. Thus, we know that, when the pronominal -orom -ōrum displaced the nominal -om -um, and $-a i$ displaced $-\bar{\alpha} s$ in the genitive of the $\bar{a}$-stems, the old endings succeeded in maintaining themselves in various phrases and technical uses: praefectus fabrum, triumvirum, nummum, paterfamiliās, etc. It is of interest that among these is the very word we are now dealing with, deus, whose old plural genitive deum long held out against the new deorum. That, in like manner, we could have a nominative plural deiuos even at a time when the nominative plural of $o$-stems generally ended in -oi, admits of no doubt. That religious conservatism may have had more or less to do with the maintenance of the old form is not improbable. Thus, in America, where the Old-French spelling -our has, for the most part, yielded to the Latin -or, we still write The Saviour, not The Savior.

Conway holds that mitat stands for mittant. To this he was led chiefly by "the discrepancy of mitat with -t from sied feced with -d." But there is no more difficulty with mitat by the side of sied and feked than there is with dedit by the side of fecid on the Cista Ficoroniana. This $d$ was
becoming $t$ (and so coinciding with the $t$ that arose out of older - $t i$ ), and we have here the evidence of transition. The sound was, doubtless, at the stage of the unvoiced but still weak stop, and thus intermediate between the old voiced weak $d$ and the voiceless strong $t$ that it ultimately became (Sievers, Phonetik ${ }^{4}$, § 480, 774). At this stage, T and D were equally good, and equally inexact, spellings for it. We have, therefore, no reason for taking mitat to be anything but mitat (whether mitat or already mittat) and are at liberty to give to io uei sat deiuos qoi med mitat the most natural rendering : " May the Gods, Jove, Vejove, and Saturn (grant) to him who is going to send me." Mitat is the future, or prospective, subjunctive.

Conway (p. $45^{2}$ ) suggests that qoi may be nominative plural, in which case "the clause qoi med mitat will be attached simply to the preceding words." This would give the very improbable rendering: "May the Gods Jove, Vejove, and Saturn, who suffer this vase to be despatched." But Conway (p. 454) prefers to follow Pauli in regarding qoi as dative singular and referring anticipatorily to uireo, as shown in the translation above (p. 150). This strikes me as violent and as a suggestion that could be entertained only in despair of anything better. But we have just seen that there is nothing desperate in the situation and that the clause admits of a perfectly simple and satisfactory explanation.

Maurenbrecher's claim (p. 624, 625) that we cannot take $n e i$ as a final conjunction, because the earliest certain case of its use in this function is 186 b.c., does not hold, in view of the fact that we have so very few records that are of an earlier date.

Conway accepts Jordan's interpretation (p. 235) of the beginning of line two as asted, that is, an archaic form of ast, like postid for post. This Thurneysen (p. 197) and Maurenbrecher (p. 625) have, as it seems to me, satisfactorily disproved. Bréal and Thurneysen hold that asted $=a s t(t) c d$, with $t$ written but once, cf. manom (m)einom below. This strikes me as an excellent idea. For the position of the reflexive, see p. 162 below.

The oi in noisi and uois has caused much trouble. Of the explanations made by those who interpret the words as $=n i s \bar{\imath}$ and $v \bar{\imath} s$, Conway's is the least objectionable. He regards the $o i$ as related to $e i$ by vowel gradation. But even this has not stood the test, and must be abandoned. There is, however, a very simple explanation. In the inscription we find $o i$ five times:-

| qoi | noisi |
| :--- | :--- |
| opetoi | uois |
| duenoi |  |

In the first three we expect oi (qoi being the strong form, afterwards displaced by the weak, Brugmann², I, p. $228 \Lambda_{\text {I }}$ ); in the last two we expect $e i .(>\bar{e}>\bar{i})$. In these two cases the oi is followed by $s$. Now, we know that in the dative, ablative, locative, instrumental plurals of the $o$-stems, the ending -ois became -eis ( $>\bar{e} s>\bar{i} s$ ). That the old spelling was kept up for a time by analogy to the other cases with -owas natural. This ending was exceedingly common (see p. i56 below) and thus the spelling ois for eis was very familiar and may be expected in cases where the $e i s$ did not arise out of ois; - exactly as, when ans had become $\bar{a} s$, the spelling ans was used for any $\bar{a} s$, for example, occansio (Lindsay, Latin Language, p. 69); and as, when $\epsilon i$ had become $\bar{i}$, the spelling $e i$ was used also for $\bar{i}$ that had not arisen out of ci (see p. 156 below). This explanation ${ }^{1}$ of the spellings noisi and uois is a perfectly well grounded and consistent one. Thus, in the Duenos inscription $e i$ is ordinarily spelled $c i$ (deinos, $n e i,[m] e i n o m$ ), but $e i s$ is spelled ois (noisi, uois). noisi, then, is $n e i-s \bar{\imath}(<n c i+s e i)$ and is a cousin to the classical nisī ( $<n e+s e i$ ).

That the weak $s \bar{i}(<s e i)$ in nei-si$(" n o i s i ")$ is written -si and not -sei, has caused Thurneysen (p. 197) and others unnecessary difficulty. It is, in fact, very interesting and instructive. It proves that weak $e i$ had become $\bar{z}$ at the time when weak oi had not yet become $\bar{i}$, but was identified with

[^40]$e i$. This is just what was, from a phonological point of view, to be expected; for $e$ stands nearest to $i$, and would yield to it sooner than other vowels would. Thus, in Germanic languages, $i$ mutated $e$ long before it mutated $a, o, u .^{1}$

If Solmsen (IF., 4, 24, Brugmann², I, p. 184, ft. 2) is right in deriving $s \bar{\imath}$ from weak ${ }^{*}$ sai $=$ Oscan svai (compare the like loss of $w$ in Old-English $s(w) \bar{z}<$ Germanic swai), as I think he is, we must take it for granted that not only weak original $e i$ had become $\bar{\imath}$ but also the weak $e i$ that had arisen out of $a$. This is in harmony with what we are led by phonological considerations to believe was the chronological development of $\bar{z}$ out of the various diphthongs :-


At the time of our inscription, Latin had arrived at the stage (3). It will be observed that this accords with the theory proposed above, namely, that at this time the vast majority of existent eis's were found in the dative and ablative plural of $o$-stems, the -ais of feminine stems having already passed on through -eis to -is and being, in all probability, written with $i$, as the $\bar{\imath}(<\epsilon i<$ weak ai) in neisi$(" n o i s i ")$ was.

When, at a later period, stressed $e i$ and the weak $c i$ that had arisen out of oi had likewise passed on to $\bar{i}$, the spelling $e i$ was used to represent also the $\bar{\imath}$ that had arisen earlier out of weak $e i$ and out of $\varepsilon i<$ weak $a i$ (hence the spelling ni-sei) and even that $\bar{i}$ that had always been $\bar{i}$ (hence ueiuos), cf. Brugmann, I, pp. 102, 184. We thus see the significance of the later spelling nisei and its relation to the noisi of our inscription. But the spelling nise, often cited from the Lex Rubrica, has no significance. This form is found only once and that in nise ici. Now, it is clear that we have here one of those countless cases of the loss of a final letter because

[^41]identical with that beginning the next word. It was not the practice of the engraver of the Lex Rubrica to write but one letter in such cases, for he separates his words by points; but as mise ends the line, there was no occasion for a point, and he went on with the $i$ in $i e i$. In the only other case that the word is used in the Lex Rubrica, three lines below nise $i e i$, it is spelled nisei.

To return, - there is thus no reason why noisi and uois should cause any difficulty so far as their phonology is concerned, while their meanings are certainly just what is wanted.

Conway (p. 455) regrets that he is not able to perfect Jordan's interpretation of the second line. He sees the difficulty in regarding ope as a dative, and suggests that it might be an instrumental, ope Toitcsiai being 'by the aid of Toitesia.' The hopelessness of any interpretation that recognizes the form Toitesiai is frankly confessed: "Who or what Toitcsia is, human or divine, or whether she really exists at all, no one yet knows. . . . I am far from certain that the words are rightly separated." They surely are not. For a long time scholars were bewitched by the suggestion of Ops, but of late two or three new divisions have been made. Of the attempts of Bréal and Pauli, Maurenbrecher (p. 627) says : "Ihre abstrusen Wortgebilde bedürfen keiner Widerlegung." But he himself proposes (p. 628): asted noisi, ope Toitesiai pakari uois $=$ adstet nobis, ut opera Tuteriae cum uobis pacemur! And Thurneysen (p. 198) asks us to accept as(t) ted noisi op et oites iai pa(c)ari uois = ast te, nobis ad id utens, ci pacari uis!

It is strange that the oi has not suggested to some one that this is the dative masculine ending of an adjective agreeing with the proper name ending in the dative in $-a i$ : opetoi tesiai. This opetoi is evidently the dative of opetos, the displaced positive ${ }^{1}$ of opitumos, later optimus, which is thus a true superlative in -umos -imus and not, as generally said (cf. Stolz und Schmalz ${ }^{3}$, p. I48), a positive in -tumos -timus that came to be used as a superlative. The positive opetos
${ }^{1}$ On another occasion I shall show that irregular comparison is largely due to the displacement of the positive by the encroachment of some other word.
earlier *opitos is an adjective from ops, meaning 'helpful, useful, good'; whence the verb optō 'regard as useful or good,' 'like,' 'choose,' as well as the masculine noun optiō 'assistant, helper,' cf. mīriō from mīrus (Brugmann, II, p. 337-338, and the paper mentioned on page 163).

It is not necessary to suppose with Jordan (p. 246) that the $s$ of tesiai, by the side of the $r$ in pacari, shows that the scribe was a foreigner, or with Conway (p. 455) that the word is foreign or that the writer was employing an archaic form ; for $s$ would be a correct early spelling for either ss or $n s$. Tesiai, in all probability, stands for Tensiai, with the frequent, even very early, omission of the weakened nasal (Brugmann ${ }^{2}$, I, p. 37 I ). Compare also malo (m) statod below. Te $[n]$ sia I would explain as an old abstract (from tensus 'stretched,' 'strained,' 'tense,' 'stiff') in -i $\bar{a}^{1}$ (Brugmann, II, p. 443, I I 7 , etc.), used as the name of a person having the quality denoted by the participle tensus (Brugmann, II, § i57, p. 443 top). The name might be imitated in English by Stiffness or Stretchy, cf. the English family names Strain, Stretch, Stiff. For the use of abstracts as names of persons, compare Potestas, Nice, Victoria, Fortuna, Auctoritas; the Christian use of Spes, Concordia, Constantia; the English family names Bliss, Joy, Pride, etc.; our Puritan given names Grace, Faith, Mercy, etc.; the playful designations Miss Impudence, Miss Simplicity, and the like; the dignified His Holiness, Hor Majesty, Your Honor; and the hosts of Germanic names like Gaman 'joy,' Agis 'fear,' Craft 'strength' (cf. Modern German Herr Kraft, Herr Muth, etc.), Frio' 'peace,' and compounds like
 EXelmund (mund 'protection'). Observe that Cyncotryd, Eadmund, etc., like Tensia, are feminine abstracts used as names of men. I need hardly refer to masculine names like Hadria, Scaevola, Mürēna, etc., and masculine nouns like scriba, nauta, aurigga, etc. Of course, the fact that we do not find elsewhere the name of the man who made or sent the vase is not at all serious, as certainly would be our
${ }^{1}$ This old abstract was displaced by tensio, formed with the younger compound ending -i.ön (Brugmann, II, p. 336 top, 338).
inability to find any other trace of such a goddess as Toitesia, if we were to suppose her mentioned here. Furthermore, while it was customary for one to curse another for an offence suffered at his hands, and we may well imagine that our Tensia desired to make it hard for his enemy if he carried his resentment toward him into the other world; it would, on the other hand, be strange if, as Conway seems to assume, a mortal took up the cause of a god and ran the risks incumbent upon the practice of cursing, all in order that a dead man might be frightened into making his peace with one of the divinities.

It is generally said (compare, for example, Conway, p. 447448) that in pakari and feked we have a K changed to a C . As Dressel's facsimile does not betray which lines are the later, one at a distance must judge by other considerations. In feked we find $コ$. This is certainly not a $K$ changed to a $C$. In the first place, there appears to be no trace of a change of any kind. The side strokes are rather heavy, that is all, and we find similarly heavy lines elsewhere in the inscription; observe the top arm of the preceding $E$, the shaft of the $I$ in meinom, and one or another stroke of some of the O's, for example, that before statod. In the second place, the C 's of this inscription, including the one in pakari, are all small superior $\boldsymbol{\rho}$. Our character is simply one of the forms that the old zeta $I$ assumed in Italy, namely LLF, retrograde $\beth コ$, etc. This, having no phonological use in Latin, came to be regarded as a variant of the similar kappa $k k$ and was employed as a $k$, ultimately getting separate recognition with the value of $g$, - as I showed in detail some years ago in a paper read before this society (The Origin of the Latin Letters $G$ and $Z$, Trans. vol. 30, p. 24-41). The character in pakari is clearly 3 . This certainly does contain such a $C$ as is characteristic of this inscription. But it is hard to understand how this can be regarded as a K changed into a C . If we take away the $\supset$, we have $\rfloor$ left. This could be nothing but a part of a $K$ of the form $\mathcal{Y}$, like that in feked. It might be said that the engraver discovered his mistake before he had completed the K. To this there are two objections. In
the first place, it is not likely that any one would make the lower arm before he made the upper one. In the second place, had he done so and then decided to change the K to a C , he certainly would not have left the obtrusive $\rfloor$ standing ; for we find that he was in the habit of smoothing out incorrect lines, for example, the E first written after the S of sat and the D first written after manom. On the other hand, there is nothing in the way of supposing that the scribe wrote $\rho$ and then corrected it into a $k$ (as held by Dressel, Jordan, and Maurenbrecher) by adding the erect shaft and the lower oblique bar. In this way the upper part of the 5 was allowed to serve as the upper bar of a $\beth$, for which it was a trifle too short, and only the lower part of the 3 was superfluous and escaped erasure. But in this, the corrected letter was no more different from the $\beth$ in feked than the second E in feked, with its four arms, was from all the other E's. We see, therefore, that we have in the letters representing the voiceless velars in pakari and fcked no evidence whatever that a Greek had written his native K and then tried to change it into a C, "consciously following a recognized Latin usage " (Conway, p. 448). Instead, we have simply a vacillation in usage between C and a form of K . The C was evidently already getting the upper hand; but after writing it in pacari, the scribe, in accordance with a well known usage, decided to change it to a K before the following A .

The $r$ in pakari has been much discussed. It is generally taken for granted that it represents an original $s>z>r$. Thurneysen objects (p. 210) that the retention of the old vowels, diphthongs, and final consonants indicates a Latin that must be older than that of the time of rhotacism; he fails, however, to give of the $r$ any other explanation that is at all acceptable. Thurneysen errs in two directions. We must not suppose that the writing of $R$ began in the entry of proper names in public documents and that we are, therefore, to date the change of $z$ to $r$ at the time of the Papirii, Valerii, and Furii, that is, at the middle of the fourth century b.c. Proper names retain archaic spellings long after these are abandoned in ordinary words (observe the retention of the

3 -like Old-English $g$ or $y$ in the name Mackensic - until it was actually taken for a $z$ and so pronounced), and legal documents are similarly conservative. If we date the change of $z$ to $r$ fifty or seventy-five years earlier, we shall probably not be far out of the way. In the second place, Thurneysen overestimates the archaic character of our inscription. It is not true that we have "tadellos erhaltene vocale, diphthonge und auslautende consonanten." For I have shown that weak oi had become $\varepsilon i$, while weak $e i$ and weak $a i$ had become $\bar{i}_{\text {. }}$ Moreover, opetoi, with its $e$ for the older $i$, shows a degeneration of the weak vowel that had not yet taken place in the elsewhere-recorded opitumos. In other words, our inscription represents that intermediate stage in the development of Latin in which the vocalic elements of the stressed syllables still remained intact (unless, perhaps, $c i$ had become a close $\bar{e}$ ), while those in weak syllables had yielded to a considerable extent. So far as the consonants are concerned, we have seen (p. 158) that a nasal consonant before $s$ had degenerated into an unwritten nasalization of the preceding vowel; and (p. I54) that final verbal $d$ had become unvoiced but not yet identical with strong voiceless $t$. What gives the inscription its most archaic look is the use of 9 without V. But this is largely a matter of writing and we must not fall into the error of confounding it with phonological development. The inscription on the Forum stele, in whose usage I can see nothing younger, has $P V$ and $P Y$.

I agree with Thurneysen (p. 197, 200) in his conception of the words ted . . . pakari uois: "Die stellung des ted unmittelbar hinter dem satzeinleitenden worte ist die zu crwartende, auch die ganze construction ted . . . pa(c)ari uois die regelmässige, wenn pacari passivisch als 'ausgesöhnt werden' oder ähnlich zu fassen ist. Sie fält aber auch nicht auf, wenn pacari neutral 'sich aussölunen' bedeutet, vgl. uolt placcre sese amicae Plaut. Asin. 183 und die vielen ähnlichen fälle. Endlich Könnte $p a(c) a r i$ mit Kurzem $i$ zu lesen sein und als ältere form des activen infinitivs pacare $z u$ betrachten sein, ted also das object bezeichnen. . . . es scheint eine construction wie gr. $\delta \iota a \lambda \lambda a ́ \tau \tau \epsilon \iota \nu \tau \iota \nu i ́$ vorzuliegen." Thurney-
sen is quite right in saying that the sentence is normal : it is so in every respect, and I need quote but three or four of the vast number of similar sentences: Sed se iul laac urbe floreve voluerunt, Rabir., 3, 25 ; Equidem me Caesaris militem dici volui, B. C., 2, 32, 14 ; Hi se praetores appellari volebant, Leg. Agr., 2, 93 ; qui se popularis haberi volunt, Cat., 4, 10 ; quantam vos in me esse voluistis, Balb., I. The only point that might arouse criticism is the placing of the reflexive between two closely connected words. But this, too, is thoroughly justified. We find it occasionally in such neutral sentences as: Qui se ex his minus timidos existimari volebaut, B. G. I, 39 ; but more usually where one or both of the two separated words are particularly emphatic, as is the case in the clause in our inscription. Compare the following from Caesar and Cicero: qui se ipse scurram improbissinum existimari volt, Verr., 3, 146; omnia se.cetera, Verr., 4, III; rem se totam, Verr., 3, 139; multis sese nobilibus, B. G., I, 44 ; optimis se viris, Cael., 12 ; isdem se copiis, Quir., 66 ; his se rebus, Verr. a. pr., I5.

Conway regards duenos and manom as proper names; the former is, rather, the common adjective duenos $>$ duonos $>$ $>$ bonus, while the latter is the old singular of mānes and has here the meaning 'the spirit of a dead man.' In the paper referred to below I have shown that the old o-stem nānos (man-uo-men-uo-, cf. maneo $=\mu$ év $\omega$ ) is a gradation variant of нóvos (mon-uo-) 'alone' and $\mu$ avós ( $m n-\mu u_{0}$ ) 'rarus, loose in texture, porous, scanty.' mãuos shows the loss of $u$ in -nuothat we find in -suo- and -quo-; whence, by analogy, Mã̀a, but*Manuāua with the $u$ preserved before $\bar{a}$, cf. Jannuıs and the analogical Jāna, but the phonetic jāuua, Jānuālis, etc. The change of $o$-stems, especially adjective $o$-stems, to $i$-stems, is characteristic of Latin. Compare similis with $\dot{\boldsymbol{o}} \mu \boldsymbol{\lambda} \boldsymbol{o}^{\prime}$ s and observe inermis by the side of inermus (Brugmann, II, p. 265). The o-stem lingered for a time as a sort of proper name. With Genita Māıa compare the Cerus Mānus of the Salian Hymns (Paul. ex Fest., Müller, p. 122, 4). Whether the word ever really had the meaning 'good,' as stated by Varro (De Lingua Latina, 6, 4) and later grammarians, may be
doubted; for it is when they are employing it as an etymon of other words that they ascribe to it that meaning. The idea may have arisen from the use of both Duonos Ccros and Ceros Manos in the Salian Hymns, which were learned and sung long after they had ceased to be understood. The mānés were the 'rare ones' or the 'thin ones,' the 'spirits' or 'shades' of the dead, otherwise known as animae tenuēs and umbrae tenules. On the new $\bar{i}$-stem was based Mānia, with much the same meaning as the older Māna.

None of the attempts to explain einom as a Latin word are such as would be seriously entertained except in despair of anything better. Thurneysen recognized that we might have in manomeinom a manom meinom. This meinom he attempts to identify with a Celtic $u$-stem, meaning 'desire, lust,' by calling in the meaning 'intention' found in modern Gaelic and translating en manom meinom 'zu guter absicht.' This explanation has, as was to be expected, found no favor. But there is a meinom quite at hand whose meaning fits perfectly into our sentence. Old-Latin meinom is identical in form and meaning with the Greek $\mu \epsilon(\nu)$ ov 'less, inferior,' seen in $\dot{a}-\mu \epsilon i \nu \omega \nu$ and $\mu \epsilon^{i} \omega \nu$ ( $\mu \epsilon i \nu \omega \nu$ and $\pi \lambda \epsilon^{\prime} \omega \nu$ became $\mu \epsilon \dot{\epsilon} \omega \nu$ and $\pi \lambda \epsilon^{\prime} \omega \nu$ by mutual concession), as I have shown at length in a paper that will probably appear soon in Indogermanische Forschungen. For its use as a conjunction, or quasi conjunction, compare the later use of its cousin minus with quo in Latin, the use in Old-English of less, modern lest and unless, the phrases um so weniger and desto weniger in German, and similar idioms in other languages.

Grienberger (IF., I I, p. 342) undertakes to do away with the I of [m]einom by claiming that it is only "ein Substanzverlust im weichen Thon ohne irgendwelche litterale Bedeutung." At first sight there is a kind of plausibility in this suggestion. The fact that the H ( of duenos med runs down into the 93 of deiuos qoi, proves (if any proof were needed) that the line beginning with duenos was written later than the line io uei sat etc. But the plate (figure 2) shows an extension of the I of $[\mathrm{m}]$ einom downward, and it is clear that this line was made before the arms of the E of endo, for they cross
it. If, then, this mark was made before the first line was written, it was there before the second line was written and, therefore, has no significance in the line. But this argument takes it for granted that the line that is crossed by the arms of the E of endo is really an extension of the 1 found in [m]einom above. This is, however, only an assumption. A glance at figure 4 shows that the 1 of $[\mathrm{m}]$ einom is as clear and distinct an I as there is in the inscription and that its foot simply chances to coincide with a very different slight line that starts at the foot of the E of endo and grows fainter as it approaches the I of [m]einom. This faint line is, then, obviously nothing but a slight impression made by the stylus because the engraver did not lift it quite high enough when he had completed the erect shaft of the E of endo and was passing up to make the arms - just such a " Bindestrich aus dem Duktus der schreibenden Hand" as Grienberger points out in duenos. ${ }^{1}$ The foundation of Grienberger's argument is thus clean cut away. But even if this were not so, Grienberger's supposition is in itself so very improbable that it could not be seriously entertained. We must not forget that the clay was soft when the letters were written. Now, if we find the engraver smoothing out his errors (cf. p. 160, above), we surely cannot assume that he would calmly permit an accidental mark that was exactly like an I to stand in the middle of one of his words.

The old idea that the letter inserted between the $D$ and the E of duenoi is some form of zeta, has been so often and so thoroughly exploded that I shall add only a reference to my paper on The Origin of Latin $G$ and $Z$ (p. I 59 above). When considering the form of this letter, as in considering that of

[^42]the 1 of $u e i$, we must not forget, as so many have done, that we are dealing with a letter that was inserted after the neighboring letters had been written, and that it had to be crowded into such space as there was. Thurneysen is undoubtedly correct in saying ( p . 207) that the little hook at the top of the $V$ of duenoi is accidental ; it is evidently due to inaccurate placing of the style in starting the letter, a thing that could easily happen to one when trying to squeeze a $V$ into so small a space. But Thurneysen is in error in saying we have to deal with a $V$ of the form $Y$; it is a $V$ with a long shaft at the right, and a short one at the left; compare the $V$ of uois. In duenoi the long shaft had to stand nearly erect, because there was no room for it to slant. For the same reason, the short shaft, in order to have any length at all, had to pass the foot of the long one.

As me stands before med, it is clear that its force falls upon med. Its use after meinom, which implies a negative, is to be compared to the use of $n e$-quidem after a negative. It is not, however, equivalent to ne-quidem; for ne - quidem brings prominently under the negation a factor that might otherwise be supposed to lie outside the range of the preceding negative, but our ne directs the negation particularly to med as that which should by no means, or last of all, be the cause of such mischief, - a task that meinom hardly could perform. Its force might be brought out in English by the translation: 'the less may any evil attach itself to the good man, especially not through me.' The common ne - quidem, with me standing before the word it specifically negates, is, then, probably a last relic of a time when ne could be placed before the word particularly to be negated, although there was already a general negative in the sentence (cf. Fowler, The Negatives of the I. Io-European Languages, 1896, p. 6, 2) - just as in Old English (pæt hira ne mehte nān tō otrum 'so that there couldn't neither of them [get at] the other') and other Germanic languages, and, for that matter, in vulgar modern English ("I hain't seen nobody"). Probably the most frequent occasion for the introduction of such an extra negative was when the word before which it was placed
might otherwise be regarded as exempt from the general negative, that is, under exactly those circumstances under which a Roman would say ne-quidem and we not even; hence the persistence of the extra negative in this connection after it had fallen away in less common ones.

Besides the velars in pakari and feked, there is another letter which Conway, like Comparetti, believed shows traces of a change from a Greek to a Latin form: "In the last word but one, malo, there is a curious $\operatorname{sign}(\triangle)$ which was at first read as $n(\mathrm{~N})$, but seems clearly to be $\Lambda=\lambda$, corrected into a Latin $\lambda=l$ " (p. 447). The form shown by Conway is (doubtless through lack of care on the part of the printer) quite inaccurate. It will be best to reproduce the whole word: ODSM. The third letter (from the right) is certainly not the normal form of any letter. I find but two possible explanations. (I) The letter was intended for $K$, but, as the line was crowded and bent by the line below, the letters were tipped and the first (right-hand) stroke of the $n$ leaned to the right and the medial stroke, instead of being oblique, became practically horizontal. Then the engraver attached the third stroke to the first, which had the position that the second should have had; whether he did this consciously or inadvertently, would be a matter of little moment. (2) The engraver intended to write malom, but, under the influence of the preceding manom, started to write man, when he discovered his mistake and changed the $n$ to an $l$. In support of this idea, it may be said that the facsimile represents the top stroke (the one that would be superfluous in an ل ) as partially erased. Of the two explanations, I regard the second as the more likely. Both are more natural and simple than Conway's, which assumes the otherwise unsupported theory of the Greek nationality of the engraver. The suggestion that the letter is an A erroneously written (through the influence of the preceding A) for some other letter and left uncorrected (Dressel, Bücheler, Jordan, etc.) is quite improbable. In the first place, it contradicts what we know of the engraver's practice, namely, his habit of smoothing out erroneous letters. In the second place, the character differs from
all the A's in the inscription, without there being any obvious reason for such difference.

Conway takes statod intransitively and renders let not evil fall to Duenos from me. Thurneysen objects that this is a rendering that can hardly be called a translation. To be sure, it is no literal translation, to render stare by 'fall'; but the same idea can be expressed in different languages by very different figures. Stāre here has the common value of 'stand, continue, persist.' The maker of the vase is trying to prevent any contamination of the curse from affecting (or, as one would say in German, anhaften) the curser. That this danger was feared and was guarded against by such a clause is thoroughly established (Conway, p. 456).

I read : -
10. VEI. SAT. DEIVOS QOI MED MITAT NEI TED ENDO COSMIS VIRCO SIED;
AST [T]ED NOISI OPETOI TE[N]SIAI PAKARI VOIS.
DVENOS MED FEKED EN MANOM, [M]EINOM DVENOI NE MED MALO[M] STATOD. ${ }^{1}$

This I translate:-
(May) the gods Jove, Vejove, (and) Saturn (grant to him) who is going to send me, that the maid $[=$ Proserpine $]$ be not gracious to you; unless indeed you are willing to become reconciled to the excellent Tensia. A good man made me against the spirit of a dead man; the less may any evil persist through me to the disadvantage of the good man.

I may add one or two inferences that are to be drawn from our inscription. We have seen above (p. 158) that the engraver, like the makers of other early inscriptions, ignores, in writing, the nasal which, before a voiceless fricative, had degenerated into a nasalization of the preceding vowel. This, too, we find that he does in the case of a final nasal followed by an initial fricative : - malo $[\mathrm{n}]$ statod. It might be asked: Is

[^43]not the latter simply a case of the disappearance of weak final $m$ ? That it is not, is shown by the spelling [ $m$ ] einom duenoi, in which the final $-m$ is written before the initial $d$ - Appeal cannot be made to the writing of but one $m$ in manomeinom for manom meinom; for this is but a case of the writing of a single consonant for a double one, the usual practice in early inscriptions and repeated in this inscription in asted for ast [t]ed. Moreover, by a peculiar accident, we have evidence that the $m$ 'written in manomeinom really belongs to the manom. When the engraver had written manom, he for a moment supposed that in writing nom he had written the last three letters of the meinom that was to follow and that he already had in mind, and so he started to write the next word, duenoi. When he had made the D, he discovered that he had left out meinom and, therefore, smoothed out the bow of the $D$ and wrote einom, without repeating the $m$ already written at the end of manom. The trace of the bow of the $D$ is still discernible under the oblique bars of the E. Baehrens' attempt (Neue Jakrbiicher, I29, p. 834-835) to explain this trace of an erased $D$ as a sign that the bottom stroke was inadvertently made and should not be counted (in other words, that the letter is F, not E) is one of those marvellous suggestions that philologists, in some unaccountable way, are at times guilty of making. Compare Thurneysen's explanation of the added 1 of uei (p. I5I, above), and Schroeder's contention (Jahreshefte des öster. archäolog. Instituts, 3) that the seventh letter is an A changed to an E .

But the ignoring of the nasal, whether $n$ or $m$, before a voiceless fricative, at the same time that final $-m$ before other consonants (in [m]einom duenoi and in manom $d$-which was changed to manom [ m ]einom) was consistently written, has for us grammatical significance. It implies that the change of the consonant nasal before a voiceless fricative into a nasalization of the preceding vowel took place earlier than the disintegration of final $-m$.

Furthermore, from what has been said above, it is clear that the proper expansion of such forms as manomeinom and
asted is manom [m]einom and ast [ $t$ ]ed and not mano[m] meinom and as $[t]$ ted, as found in Thurneysen. The latter method of expansion was doubtless suggested by the expansion of texts with loss of final consonants, for example, malo $[m]$ statod. But in cases like asted we are not dealing with a phonological phenomenon, but with a graphic one namely, the neglect of a letter just written.

## PROCEEDINGS

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OF THE
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## THIRTY-FOURTH ANNUAL SESSION

## OF THE

# American Philological Association 

HELD AT SCHENECTADY, N.Y., JULY, 1902,

ALSO OF THE SESSION OF THE

PHILOLOGICAL ASSOCIATION OF THE PACIFIC COAST

HELD AT SAN FRANCISCO, CAL., DEC., 1901.

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Charles Forster Smith, University of Wisconsin, Madison, Wis.

Herbert Weir Smyth, Harvard University, Cambridge, Mass.
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James R. Wheeler, Columbia University, New York, N. Y. Alexander M. Wilcox, University of Kansas, Lawrence, Kan.

## AMERICAN PHILOLOGICAL ASSOCIATION.

Schenectady, N. Y., July 8, 1902.
The Thirty-fourth Annual Session was called to order at 3.30 P.m. in Silliman Hall of Union College by the President, Professor Andrew Flemming West, of Princeton University.

The Secretary of the Association, Professor Herbert Weir Smyth, of Harvard University, presented the following report : -
I. The Executive Committee has elected as members of the Association: -

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Prof. W. W. Baden, Central University, Richmond, Ky.
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Paul Baur, Esq., Yale University, New Haven, Conn.
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Prof. Wilbert Ferguson, University of Illinois, Champaign, Ill.
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Charles B. White, Esq., Denison University, Granville, O.
Prof. Clarence H. White, Colby College, Waterville, Me.
Prof. William Holme Williams, University of Wisconsin, Madison, Wis.
Prof. Harry Barnes Wood, Hamilton College, Clinton, N. Y.
C. Christopher Wright, Esq., University of Virginia, Charlottesville, Va.
2. The Executive Committee authorized the Secretary to present nominations to membership at any time during the year. Members elected at such times shall ordinarily rate from the preceding July.
3. The Transactions and Proceedings were issued in January. Separate copies of the Proceedings may be obtained of the publishers.
4. The Report of Publications by members of the Association since July I, igor, showed a record of books, pamphlets, and articles by ninetyfive members.

- Professor Smyth then presented his report as Treasurer for the year 1901-1902:-


## RECEIPTS.

Balance from $1900-1901$. . . . . . . . . . . . . . . $\$ 994.96$
Sales of Transactions . . . . . . . . . . . . $\$ 252.58$
Membership dues . . . . . . . . . . . . . $\mathbf{1 3} 82.00$
Dividends Central New England and Western R. R. . 6.00
Offprints . . . . . . . . . . . . . . . . 15.26
Interest . . . . . . . . . . . . . . . . . 43.63
Philological Association of the Pacific Coast (less expenses) 179.22
Total receipts for the year
$\$ 1878.69$
$\$ 2873.65$
EXPENDITURES.
Transactions and Proceedings (Vol. XXXII) . . . . \$1512.08
Contribution to the Platonic Lexicon (£40) . . . . 196.80
Salary of Secretary . . . . . . . . . . . . . 300.00
Postage . . . . . . . . . . . . . . . . 70.42
Printing . . . . . . . . . . . . . . . . 57.92
Expressage . . . . . . . . . . . . . . . 3.25
Stationery . . . . . . . . . . . . . . . . 3.15
Incidentals . . . . . . . . . . . . . . . 4.84
$\begin{array}{lll}\text { Total expenditures for the year . . . . . . . . . . } & \$ 2148.46 \\ \text { Balance, July 5, 1902. . . . . . . . . . . . . } & \frac{725.19}{\$ 2873.65}\end{array}$

The following committees were appointed by the President : -
On Time and Place of Meeting in 1903: Professors Harry, Sanders, and Harrington.

On Officers for 1902-03: Professors Hart, Hewitt, and F. A. Hall. To audit the Treasurer's accounts: Professors Paton and Kirk.
e
1 The reading of papers was then begun.
> 1. A Note on Seneca, Medea 378-382, by Dr. Curtis C. Bushnell, of Syracuse University.

> Venient annis saecula seris quibus Oceanus vincula rerum laxet et ingens pateat tellus Tethisque novos detegat orbes nec sit terris ultima Thule. - Sen., Medea vs. 378 -382.

The metaphor involved in vincula rerum laxet, when considered in connection with et . . . tellus, seems at first sight to be the release from fetters of a prisoner, who is thenceforth free to range at will. If rerum meant only the known world, this would be appropriate to its imprisoned inhabitants; but the plural of res, when it refers to material things and is unqualified or is not so placed as to be practically qualified, has nearly or quite the meaning 'all things' or 'universe.' For illustration see Lucr. I. 629, 1. 635-636, Luc. 10. 266-267, and cf. Lucr. 1. 797 with 1. 857. Since rerum has this meaning, embracing the notion of both the known and the unknown world, the metaphor cannot be the one stated.

I suggest that Seneca has in mind the opening of a door, and that vincula rerum may be translated 'the fastened door of the universe.'

The metaphor of a closed door for an obstacle to discovery is a natural one. It has, in fact, been used by Seneca forty lines earlier in this same chorus to describe the Symplegades as preventing an entrance to the Euxine, dzo montes claustra profundi. The metaphor had been used also by Lucretius in a passage closely parallel to the one under discussion, effringere arta naturae portarum claustra (1. 70-71).

It does not seem strange that a poet should use vincula (' means of fastening') in this sense when we consider the wide latitude with which others have applied it : Tibullus (2.1.7) to a yoke and (2. 1. 28) to the stopper of a wine-cask, Ovid (M. 8. 226) to wax in which feathers are imbedded.

Laxare is used (with claustra) to describe the opening of a door in Ver. Aen. 2. 259 and Juv. 8. 261 .

The diction of $378-380$ (and to some extent that of $381-382$ ) seems to have been taken from Aen. I. 261-296. The resemblances between the passages are as follows :

## Medea.

venient annis saecula seris, 378 .

Oceanus, 379.
vincula, 379.
rerum, 379.
ingens, 380 .
orbes, 38 I .
terris, 382 .

## Aeneid.

veniet lustris labentibus aetas, I. 283. annos, I. 272.
saecula, 1. 291.
Oceano, 1. 287.
Furor vinctus ä̈nis nodis, 1. 294-296.
rerum, I. 278 and 282.
ingens, 1. 263.
orbis, I. 269.
terras, I. 280.

Since Seneca has so thoroughly in mind Aen. I. 261-296 (in 378-380 especially Aen. 1. 282-296), it may be inferred that in his laxet vincula rerum he is thinking of the clusae Belli portae dirae ferro et compagibus artis of Aen. I. 293-294. The word vincula itself is from the description of Furor vinctus, but is used in this metaphorical sense.

Tennyson uses this figure three times in his Columbus. The discoverer is said to have "open'd a door to the West," to have been " given the keys of the great Ocean-sea," to have "unchain'd the Atlantic sea."

It may be added that the diction of $380-382$ seems to be derived from Vergil, G. I. 12-34, a passage whose subject in part is related to that of Aen. I. 286-290.

## The paper was discussed by Professor Knapp.

2. Notes on the Medea of Seneca, by Professor Charles Knapp, of Barnard College, Columbia University.
(I) 447. ${ }^{1}$ Here all Mss. give ' Fugimus, Iason, fugimus - hoc non est novum,' etc. In Vol. II, p. 379, of his edition, Leo insists that the first fugimus must be a perfect: 'scilicet olim se fugisse, i.e. Colchis, nunc iterum fugere dicit. quod sententiae acumen captasse poetam certum est ut qui tribrachyn in trimetrorum initiis non admisit.' This statement contains an unaccountable error; in Leo's own text the Medea and the Troades each show at least four instances of a tribrach at the beginning of an iambic trimeter; cf. Med. 53, 556, 895, 937; Tro. 607, 642, 908, 973. In Med. 53 and Tro. 642 the first two feet are tribrachs. In two instances the verse begins with quid, anime, once with quid agis, and once with quid agimus. The whole matter deserves further investigation, but enough has been said to disprove Leo's assertion. The present tense throughout 447 gives better sense.
(2) 385,386 . The author objected to Peiper and Richter's transposition of these verses. The only apparent reason for the transposition is the desire to make these verses conform to the theory which Peiper and Richter held that Seneca arranged his verses in a series of strophes and antistrophes. The author held with Teuffel that this theory is utterly untenable; it is sufficiently disproved by the desperate lengths to which Peiper and Richter were driven in their attempts to apply it.

[^44](3) 390, 391. The author objected to Leo's transposition of these verses, holding that we should here fullow the inferior manuscripts in reading the indicative, not the subjunctive, in 391. If the manuscript order is kept, omnis specimen affectus capit, 389 , is far more effectively defined than it is with Leo's text, for it then plays a double rôle in that it sums up what the nurse has already said and at the same time forms a starting-point for a fresh treatment of the same subject. For other examples of verses which play such a double rôle, cf. e.g. Seneca, Med. 353, 354 (these verses form the predicate to the question that follows as well as to that which precedes), Horace, Epp. i. 1. 32, i. I. 52. A colon or semicolon (not, as in the usual printing, a period) should be set after 390. The whole $=$ 'She runs through the whole gamut of emotions: indecision, threats, fiery passions, plaints, moans.' With 390 the nurse's description of Medea's present condition and conduct ceases; she then gives vent, in the excited questions of 391,392 , to her fears about Medea's future conduct as based upon a knowledge of her present temper. In comparison with this arrangement Leo's text is feeble indeed. 393-396 form a comment, in quieter tone, on Medea's mood and the fears suggested by them, and give that calmer ending for which ancient literary art so often shows a preference.
(4) The author suggested that in 387 a comma should be set after facies, maintaining that in the usual pointing the verse is unintelligible. With the proposed punctuation it should be noted that though the grammatical subjects of the two clauses thus created differ, the logical subject is the same. The nurse means, of course, that Medea is insane; the language, however, deserves more than passing notice. By comparing Plautus, Capt. 594, 595, Men. 828, 829, and Aen. iv. 642,643 , we shall see that in this verse the nurse is restating in pathological terms what she had already said in terms of bacchic frenzy ( $382-386$ ).
(5) 301-339. The discussion of these verses formed the main part of the paper; only the barest outline, however, can be given here. The author defended the order of these verses as given in the Mss., noting first of all that the Mss. are a unit in regard to the order, and that there are also remarkably few variants anywhere in these verses, and then seeking to show, by a careful analysis of the thought of the verses, that the Mss. order is not only in itself unobjectionable, but is decidedly better than any rearrangement proposed by others. The author called attention also, in passing, to the subtlety with which Seneca had reproduced, in this chorus, parts of Horace, Carm. i. 3 .
(6) 566,567 .

Perge nunc, aude, incipe quidquid potest Medea, quidquill non potest.

It was suggested that this passage might help to explain that much vexed passage, Aen. vi. 95, 96; Seneca's language seems to confirm the interpretation which so many have been unwilling to put on Virgil's words, 'face your troubles more boldly even than your destiny will permit.' Cf. also Catullus, LXXVI, i5, 16 .
(7) 191. monstrumque saevum horribile iam dudum avehe. One thinks at once of Aen. ii. 103 iam dudum sumite poenas. Few instances of iam dudum with an imperative have been cited; Conington gave two from Ovid, and Nettleship added a third from Seneca's Epistles. Similar is Seneca, Tro. 65, iam dudum sonet fatalis Ide.
(8) 194-196. The Mss. all seem to give

Me. Si iudicas, cognosce, si regnas, iube.
$\mathrm{C}_{\mathrm{R}}$. Aequum atque iniquum regis imperium feras.
Me. Iniqua numquam regna perpetuo manent.
Leo gives si regnas, iube, 194, to Creon, and deletes 195. Kingery refuses to folluw Leo - rightly, so the author held. It is true that in Leo's text Creon's iube is a fine taunt, answering mockingly Medea's use of the imperative cognosce. On the other hand, not only is Mss. evidence against the change, but the omission of 195 makes 196 less distinctly in point. Again, 195 has its justification in the immediate context; cf. regium imperium pati aliquando discat, 189,190 , said by Creon of Medea. Creon is a believer in the divine right of kings.

Several other passages were also discussed, but the limits allotted to this abstract have already been exceeded.
3. Studies in Sophocles's Trachinians, by Professor Mortimer Lamson Earle, of Columbia University.

This paper is printed in full in the Transactions. Remarks were made by Professors Smyth and Smith.
4. Note on Velleius 2. 42. 2, by Professor William Hamilton Kirk, of Rutgers College.

Veil. 2.42.2 contracta classe et privatus et tumultuaria, invectus in eum locum in quo ipsi praedones erant, partem classis fugavit, partem mersit.

The words et privatus et tumultuaria have been variously emended; Mr. Ellis, retaining (like Haase) the manuscript reading, interprets by contracta classe, quanvis et privatus (ea inveheretur) et tumultarie conscripta. To the form of this paraphrase exception may be taken; the notion expressed by inveheretur, being contained in the second participial clause (invectus), is out of place in the first; and the unofficial character of Caesar called for remark less because he was present with the fleet than because he raised it, thereby usurping an official function. The more exact paraphrase is cum privatus classem contraxisset; the nominative privatus is appositive to the subject implied in contracta. On the combination of a nominative with an ablative of participle or gerund, most familiar in quisque, ipse, plerique, and predominantly Livian, see especially Riemann, Etudes, pp. 259-261, and Naylor "On the So-called 'Indeclinable or Absolute' Use of Ipse," Cl. Rec., XV, pp. 314 ff . Mr. Naylor's confusion of such cases as Liv. 4.44. ro, causa ipse pro se dista damnatur, with such as Liv. i. 7. II dextra Hercules data ait, may be corrected from Naegelsbach, Stilistik ${ }^{8}$, p. 388: "nicht ipse damnatur soll gesagt werden, sondern causam ipse pro se dixit." Of words other than ipse, quisque, plerique in such connection Riemann cites seventeen instances; add Hor. S. 2. 6. 11, where mercennarius is not incorporated antecedent, but belongs with thesauro invento (" having found a treasure while serving for hire"); the contrast is with mercatus ( $=$ dominus) aravit. Professor J. C. Rolfe, in his recent edition of Horace's Satires and Epistles, implicitly recognizes this relation in explaining mercennarius as $=$ cum mercennarius esset.

In these combinations, ipse, quisque, and plerique, formally appositive to the main subject, are logically subject of the participle (or gerund); so, too, the nouns in Liv. 24.5.8, 38. 17.8, which, like quisque, bear a distributive relation to the main subject. Elsewhere the appositive noun (or participle) is logically appositive to the implied subject of the participle (or gerund), and has the value of a secondary subordinate clause. In the Velleian passage this value is further brought out by the coördination through et . . . el of privatus, agreeing with the logical subject of contracta and tumultuaria, agreeing with the logical object. A near parallel is Liv. 21.63.8, ne senatum, invisus ipse et sibi uni invisum, videret; in Cic. Fam. 3. 12. 4, decedenti mihi et imperio terminato, and Tac. $H$. I. 45, vinciri iussum et poenas daturum affirmans exitio subtraxit, the shock of the irregular coördination is lightened by the feeling that the passive perfect participle supplies the place of the missing active form.

## 5. Stöhr's Algebra der Grammatik, by Andrew Ingraham, Esq., of New Bedford, Mass.

This is not algebra even in the generalized sense of that term now prevalent. Nor is it a way of reckoning. It is simply another language, if that can be called a language which no one uses or is likely to use for communication. It is a method of expression, by letters ( $a \ldots z$ ) capped with numerals ( $\circ \ldots n$ ), of a universe made up of classes in two relations, Apposition and Derivation. The contents of consciousness are not habitually arranged in this way even for expression; and an English-speaking man, though a philologist, might be puzzled to describe the classes denoted by $a$, the, is, in, might have loved.
$a+b$ (Apposition) is the class of individuals common to the two classes $a$ and $b$; and may reduce to one, or vanish.
$i a$ (Derivation) is the class that stands to the class $a$ in the relation $i$.
If $a$ means saint and $b$ means scientist, $a+b$ means saints who are scientists, or, what some do not discern to be the same class, scientists who are saints. If $a$ denotes sons, ia may denote fathers of sons; if $a$ denotes tailors, ia may denote the class of actions in which tailors are being acted upon.

Let a represent all instances of lightning, present, past, or future, real or imaginary; b, all things (acts, persons, etc.) that existed, exist, or will exist here, in any sense of the word existence; c, all that exists now anywhere, in mind or not in mind; $d$, all (objectively) real things whatsoever. Then $a+b+c+d$, in this or any other order, represents, though in another way, what is represented by: It is lightening here nowv; or, to burst conventional bonds, Now-thing real-thing here-thing lightening-thing.

In Stöhrish there are no parts of speech, simply class-names; a sentence is a class-name. Complex sentences should look like simple; but the author somewhat inconsistently, but perhaps necessarily, while asserting that everything may be expressed by Apposition and Derivation, introduces special signs for conjunctions, and also uses such symbols as $v(a b)$, in which $a b$ is not a Derivation, but $v(a b)$ is a Derivation from the two classes $a$ and $b$; is, for instance, the class of things between $a$ and $b$, or any other class equally related by derivation to the two. Abbreviations are effected by putting one letter for any complex of Derivations and Appositions, but they are not indispensable, nor even desirable till the
system comes into use, unless perhaps as a device for illustrating the possible relations of classes in such a form as amavissent. Brackets are often needed to obviate misgroupings.

The underlying conception with its disclosure of generally unnoticed relations, the symbolism for designating at least temporarily any class, the glimpses occasionally afforded of the nature, the 'unmysteriousness' of language, ought to interest philologists in a work which, despite its name, is nowise mathematical; nor should they be repelled by the trivial classification of Derivations, by the apparent demonstration that a whole and a whole of any part of that whole are identical, and by the implied conviction that communication by accepted signs is as easy as expression by signs chosen at will and made to mean what one chooses.

Remarks were made by Professor West and by the author of the paper.
6. Citations of Plato in Clement of Alexandria, by Frank Lowry Clark, Ph. D., of Washburn College (read by title).

Although the works of Clement of Alexandria have been much studied by philologians for the rich store of classical quotations which they contain, and although the theologians have had much to say of the influence of Platonism on the Church Fathers, there has never been heretofore an even approximately complete register of Clement's citations of Plato and allusions to him. The edition of Dindorf, the only one which aims at completeness in this respect, is doubly insufficient, for it not only does not give, in many instances, the section of the page of Plato cited (A, B, C, etc.), but omits many references entirely. It is especially the allusions to Plato or reminiscences of him which Dindorf fails to note. Since a new edition of Clement is being prepared for the Berlin Academy by Dr. Otto Stählin, it is especially appropriate that the work of registering Clement's references to Plato, begun by Dindorf and earlier editors, should now be carried forward to completion.

There is also another reason for the study of Clement's references to Plato; for several scholars, particularly Elter (de Gnomologiorum Graecorum historia atque origine, Bonn, 1893 sq.), and Schürer (Gesch. des jüdischen Volkes im Zeitalter Jesu Christi, Vol. III), and quite recently von Christ (Philologische Studien zu Clemens Alexandrinus - aus den Abhandlungen der bayer. Akad. der Wiss., I Cl, xxi. Bd., III. Abth., Munich, Ig00), have shown that many of the poetical quotations in Clement are not derived from the poets' own works, but from florilegia, of which many are known to have existed in the time of Clement. We may well doubt, therefore, whether the Platonic citations, of which there are a considerable number in Clement, are not from the same sources as the poetical. The question in regard to the source of Clement's citations of Plato, this paper attempts to answer.

In two chapters of Clement, Strom. V, cap. 14 and Strom. VI, cap. 2, we may especially suspect our author of drawing from florilegia, for in both chapters long series of poetical quotations are found, some of which have been traced to florilegia. It is important, therefore, to consider whether the Platonic and the poetical quotations in these chapters are from the same sources.

As to the poetical quotations of Strom. V, cap. 14, sections 107 and 113 , it can hardly be doubted that they are derived from Aristobulus, or from pseudo-Hecataeus, whom Schürer (op. cit., Vol. III, p. 454) considers to be the source of Aristobulus. For the same passages are found in Aristobulus ap. Euseb. Craep. ev. lib. XIII, cap. 12. Further, Aristobulus in this same passage which is cited by Eusebius affirms that the Scriptures were translated into Greek long before the time of the Septuagint and were known to the Greek philosophers, especially to Plato, while Clement makes the same statement, in almost the same words, in Strom. I, sec. 148. If only the Plato-citations were to be found in Aristobulus, it would then seem that Clement had derived his quotations of Plato in this chapter from the same source as his poetical quotations; but it is noteworthy that Eusebius, l.c., derives the Plato-citations which appertain to this argument of the earlier translation of the Scriptures into Greek not from Aristobulus but from Clement. It is, therefore, probable that Eusebius, since he found more puetical quotations in Aristobulus, took his poetical quotations from this source; and that, for a like reason, he took his Platonic quotations from Clement. Furthermore, von Christ (Philolog. Stud. zuc Clem. Alex., p. 476) shows that all the last part of this chapter is inconsistent with the first part, which contains nearly all the Plato-citations, for the passages of Scripture promised in the first part are not actually adduced; and, again, the words $\dot{\epsilon} \kappa \grave{\omega} \nu \pi a \rho a \lambda \epsilon i \pi \omega \tau \grave{\alpha} \tau \hat{\omega} \nu \phi \iota \lambda \sigma \sigma \delta \phi \omega \nu$ $\delta \delta \gamma \mu a \tau a$ entirely ignore the first part, which is chiefly taken up with these very $\phi i \lambda o \sigma \delta \phi \omega \nu \delta \delta \gamma \mu a \tau a$. It is clear that the two parts of this chapter are from different sources.

In Strom. VI, cap. 2, where there is a greater body of poetical quotations than is to be found elsewhere in the works of Clement, we may, if anywhere, expect to find specimens of the sort of material Clement was wont to derive from florilegia. Note that among so many poetical quotations only three citations of Plato are to be found. It would appear, therefore, that the sources from which Clement drew in this chapter contained few or no passages from Plato.

It has been shown, then, that in neither of the chapters in which Clement is most suspected of drawing poetical quotations from florilegia are his citations of Plato derived from the same sources as his citations of the poets.

How is it with the whole body of the quotations from Plato? If Clement derived them from florilegia, such collections have lung since disappeared. In Stobaeus we have, however, a forilegium forilegiornum; and the best that we can do in this case is to see how many of Clement's Plato-citations can be paralleled in the descendant and absorber of the florilegia which he may have used. Of the whole number of Clement's quotations of Plato, amounting to about one hundred and sixty, only thirty-eight, or a little more than the fifth part, are to be found also in Stobaeus, and these are, in most instances, quoted at much greater length in Stobaeus than in Clement.

One of the clearest indications of Clement's first-hand acquaintance with Plato is to be found in his reminiscences of the words of the great Athenian - instances where Clement, without mentioning Plato's name, falls unconsciously, as it were, into the language of Plato. If the consideration that Clement quotes the works of Plato oftener than any other writings except the Scriptures does not convince us of his first-hand acquaintance with this author, reminiscences of the kind described above ought to do so; for they are characteristic rather of the lover
of Plato who has an intimate knowledge of his favorite author than of the skimmer of florilegia.

An excellent example of reminiscence of Plato is to be found in Strom. I,








Other instances of reminiscence are:


 points out that Clement in this passage has in mind Resp. X, 61I D.

 p. 281 sq., would emend $\bar{\epsilon} \kappa \tau \hat{\omega} \nu$ to $\dot{\epsilon} \kappa \dot{\omega} \nu$, and believes that Clement has in mind the common Platonic phrase $\tau \hat{\eta} s{ }_{\mathrm{a}}^{\lambda} \eta \theta \epsilon \mathrm{las}$ är $\tau \epsilon \sigma \theta a \iota$. Cf. Phaedr. 65 B; Resp. IX, 572 A; Resp. X, 600 E; Phaedr. 260 E; Theaetet. 186 D.
 $\pi a \tau \epsilon i ̄ \theta \theta a \iota ~ \pi \rho \partial s \tau \hat{\omega} \nu \sigma o \phi \iota \sigma \tau \hat{\omega} \nu \tau \grave{\eta} \nu \dot{a} \lambda \eta \theta \theta \epsilon \iota a \nu$. I believe that in this passage Clement



 Mnemos, Vol. XI, p. 390, emends to $\kappa l \nu \eta \sigma \epsilon \iota \gamma \epsilon \lambda \omega \tau \alpha \alpha$ каl $\mu \grave{\eta} \gamma \epsilon \lambda a \sigma \epsilon l o v \sigma \iota \nu \dot{\nu} \mu \imath \nu$, following Eusebius, and believes that Clement imitates Phaedo, 64 B: $\nu \grave{\eta} \tau \delta \nu l a$,

 divaltıos. Bywater, in Journal of Philol. Vol. IV, p 216, emends to $\dot{\eta} \delta \grave{~ c a i r l a, ~ a n d ~}$


 emends to é $\lambda \in i ̂ \tau a l$, and sees in Resp. X, 617 E the source of this passage also.

 water, in Journal of Philol. Vol. IV, p. 215 , points out that $\dot{\eta} \mu \stackrel{\varepsilon}{\nu} \nu$ should be omitted and that Clement has in mind Symp. 203 E.

Indications of Clement's study of Plato may also be derived from the circumstances of his life. Zahn (Forschungen zur Gesch. des Neutestamentlichen Kanons, Vol. III, pp. 60-61) shows that a certain interpreter of Platonic glosses, named Boethius, whom Cobet recognized as the author of a book entitled ovva$\gamma \omega \gamma \grave{\eta} \lambda \epsilon \xi \epsilon \omega \nu \Pi \lambda a \tau \omega \nu \iota \kappa \omega ิ \nu$ and of another work entitled $\pi \epsilon \rho l \tau \hat{\omega} \nu \pi a \rho \alpha ̀ ~ \Pi \lambda \alpha ́ \tau \omega \nu$
 tion of a certain Clement, when explaining Platonic glosses. Zahn believes this to be our Clement; and he further notes that Buethius dedicated his book $\pi \in \rho$ l

the Athenagoras whom Philippus Sidetcs names as the founder of the Catechetical School of Alexandria and the teacher of Clement.

There is thus reason for believing that a friendship at least existed in Clement's time between Christian teachers of Alexandria and Platonic scholars. It is possible that they were engaged in similar studies, - the one party from the Christian, the other from the pagan point of view; and I think that Clement may well be referring to his own labors in this field when he says, Paed. II,




Again, Clement, born perhaps of heathen parents (Euseb. Praep. ev. 11, 2, 64; Clem. Paed. I, sec. I; Paed. II, sec. 62; Protrept. cap. 2 passim), speaks of the Christian religion as a form of philosophy (Strom. I, sec. 28), and expressly says (Protrept. sec. 68) that he has not rejected Plato. Cf. Eugène de Faje, Clément d'Alexandric, Paris, 1898, p. 17 sq.

When Clement, upon the death of his teacher Pantaenus, became the head of the Catechetical School of Alexandria, it is probable that Greek philosophy, for which Clement had a special inclination (cf. Strom. VI, sec. 162), had already an important place in the course of study. Cf. Strom. VI, sec. 83, and A. Harnack in Herzog's Realencyclopädie für prot. 7\%eologie u. Kirche, Vol. I, p. 358. Not only was Greek philosophy Clement's favorite study, but Ilato was his favorite author; at least, it is upon him that Clement bestows his highest praises. Cf. Paed. III, sec. 64; Faed. II, sec. 18; Strom. I, sec. 42.

Further, Faye shows (op. cit. p. 118 sq.) that Clement defends the study of Greek philosophy against those who sought to bring it into disrepute.

We inay conclude, then, both from the internal evidence of the citations themselves and from the external evidence derived from the facts of Clement's life and from his writings, that his citations of Plato are at first hand, from this author's own works, and not from compilations made thercfrom.

If, then, Clement's citations of Plato are at first hand, they are important as testimonia, representing, as they probably do, the text of Plato current in the Alexandrian schools of the time. Compare what J. Bernays says of Clement's testimonia to Aristotle in his Gesammelte Abhandlungen, ed. Usener, p. 160.

## Table of the Citations of Plato in Clement.

An asterisk before a citation signifies that it had already been located in Plato in Dindorf's edition of Clement.

## Protrepticus.



Paedagogus, Lib. I.

* Paed. I, sec. 67 - Gorgias, 477 A.
* " " " 82 -Soph. 230 D, E.

Paedagogus, Lib.II.


Stromata, Lib. I.
Strom. I, sec. 4 -Resp. X, 617 E (Bywater).
" "" io -Leges, VIII, 844 A, B.
"، II $-\left\{\begin{array}{l}\text { Phaedr. } 274 \mathrm{E} \text {. }\end{array}\right.$
$11 \quad-\left\{\begin{array}{l}\text { Phaedr. } 274 \mathrm{E} \text {. } \\ \text { Phaedr. } 276 \text { D. }\end{array}\right.$
" 33 - Resp. III, 424 A.

* " " " 42 (a) - Crito, 46 B.
". "" 42 (b) - Resp. III, 412 E sq.
" " " 44 - Gorg. 462 D sq.
" " " 47 -Resp. III, 413 A.
" " " 48 (a) - Polit. 26I E.
" " " 48 (b) - Theatet. 184 C.
" " " 59 - Protag. 343 A.
* " " " 60 - Leges, I, 64 I E.
* " " " 66 - Phaedo, 78 A.
" " " 67 (a) - Symp. 209 D, E.
" " " 67 (b) - Tim. 47 B.
" " " 68 (a) - Phaedr. 274 C sq.
" " " 68 (b) - Charm. 156 D.
" " " 69 (a) -Resp. X, 617 D.
* " " " $69($ b $)$-Tim. 22 B.
* " "، 92 - Phaedo, 69 C.



Stromatu, Lib. V.

* Strom. V, sec. 7 - Epin. 973 C.
* " " " $9(a)-$ Tim. 22 C .
* " " " $9(b)$-Tim. 22C, D.
* " " " 9 (c) - Tim. 22 D, E.
* " " ". 14 (a) - Crito, 48 B.
* " " " 14 (b) - Phaedr. 248 sq.
* " " " 15 -Symp. 206 C, D.
* " " " 16 (a) - Resp. 16 Phaedr. 247 C.
* " " " 17 (a) - Alc. I, 109 E.
* " " " 17 (b) - Resp. VI, 494 A.
* " " " 17 (c) - Phaedo, 69 C.
* " " " 19 - Phaedo, 67 B.
* " " " 33 - Thenetet. 155 E.
* " " " 65 (a) - Epist. II, 312 D.
" " " 65 (b) - Epist. II, 314 B.
* " " " 66 (a) - Epist. VII, 34I C.
" " " 67 - Phaedo, 65 E.
" " " 73 - Resp. VI, 508 C (?).
" " " 74 - Resp. VII, 532 A.
* " " " 76 - Leges, XII, 955 E, 956 A.
" " " 77 - Epist. VII, 341 C.
" " " 78 (a) - Epist. VII, 341 C.
" " " 78 (b) - Tim. 28 C.
*Strom. V, sec. 79 - Tim. 31 A.
* " " " 83 (a) -Meno, 100 B. " " " 83 (b) - Meno, 99 E.

Strom. V, Cap. XIV.

* Strom. V, sec. 89 -Tim. 48 C.
* " " " 90 -Resp. X, 6r5 E.
" " " 91 (a) - Phaedo, cap. 61, 62.
* " " " 91 (b) -Resp. X, 620 D.
" " " 92 (a) - Tim. 28 B.
" " " 92 (b) - Tim. 28 C.
* " " " 92 (c) - Leges, X, 896 E.
* " " " 93 - Phaedr. 240 B.
* " " " 95 (a) - Phaedr. 255 B.
" " " 95 (b) -Ly'sis (general).
* " " " 95 (c) -Leges, IV, 716 C.
* " " " 96 - Tim. 90 D.
" " " 97 (a) - Phaedr. 279 B.
" " " 97 (b) - Protag. 309 C.
" " " 97 (c) - Theaetet. 185 E.
* " " " 98 (a) - Resp. III, 415 ^.
* " " " 98 (b) - Theaetet. 173 C, E.
" " " 99 - Leges, XI, 917 C.
" " " 102 (a) - Epist. VI, 323 D.
" " " 102 (b) - Tim. 41 A.
* " " " 103 (a) - Epist. II, 312 E
* " " " 103 (b) - Resp. X, 614 B.
* " " " 105 - Resp. VII, 52I C.
* " " " 106 -Resp. X, 616 B.
* " " " 108 -Resp. II, 361 E.
* " " " 133 (a) - Resp. VII, 519 C.
* " " " 133 (b) - Resp. III, 415 A.
* " " " 136 -Resp. X, 617 E.
* " " " 138 - Phaedr. 250 B, C.

Stromata, Lib. VI.


Stromata, Lib. VII. Strom. VII, sec. 20 - Resp. X, 617 E (Bywater).<br>" " " 28 - Leges, VII, 803 C.

Stromata, Lib. VIII.
Strom. VIII, sec. 10-Tim. 77 B.
7. Notes on the Meaning and Use of $\phi_{i}^{\prime} \lambda \omega \nu$ and $\xi \in v \omega v$ in Demosthenes, De Corona, 46, by Professor W. S. Scarborough, of Wilberforce University.

Kennedy tells us that, in his translation of this passage, he has made no distinction in meaning between $\phi(\lambda \omega \nu$ and $\xi \in \nu \omega \nu$ simply for the reason that the English language furnishes us no equivalent for the latter in the sense in which it is employed here by the orator.

He further adds that the word $\xi \in \ell_{0}$, as used here, denotes absent friends those who would be $\phi\left(\lambda_{0}\right.$ if they dwelt in the same place, but being separated can only correspond or occasionally visit each other and exchange hospitality. If we follow his suggestion, the reading would be somtthing like this: "For instead of friends ( $\phi(\lambda \omega \nu$ ), as they were named when bribed, they are now called parasites and miscreants (enemies to the gods) and such befitting names." The omission of $\xi \ell \nu \omega \nu$ plainly weakens the thought and, in a sense, destroys the force of the passage. Evidently' they were not only friends ( $\phi(\lambda o c$ ) in a general sense, but friends ( $\xi \in \nu o \iota$ ) in a more restricted sense - " plighted " friends - Gastfreunde, as some editors translate it - bound one to the other by reciprocal pledges of hospitality. Mark the time. It was during the period of bribery. May we not go a step farther by adding that this friendship ( $\xi \in v i a \nu$ ) was influenced by bribery?

The context seems to suggest, and the sequel seems to imply, this conception of the passage - For at one time those (whom Philip had deceize:t and bribed, sc. $\phi(\lambda \omega \nu \kappa a l l \not \xi \nu \omega \nu)$ were regarded as friends ( $\phi(\lambda o i$ ) -friends in the ordinary sense-also friends ( $\xi=10 \mathrm{vol}$ ) in the sense of parties mutually pledged by giffs or otherwise to support each other regardless of the nature of the cause or compact.

During the pari)d of bribery they (sc. Philip and those who had sold themselves to him) were friends - both $\phi$ ( $\lambda 0$ ot and $\xi \in \nu_{0}$ - but after that period, after the aspirants for power and influence had gained their object they hated and despised those through whom they had obtained it. - $\tau \delta \tau \epsilon$ кal $\mu \tau \sigma \hat{\imath}$ кal $\dot{a} \pi \tau \sigma \tau \epsilon \hat{\imath}$ кal $\pi \rho о \pi \eta \lambda a \kappa i \zeta \epsilon \iota$.

Prospectively the term ( $\xi \notin \nu \omega \nu$ ) may then refer to the bribe-givers and bribetakers - Philip and his adherents. I think this is the orator's meaning, and that $\phi i \lambda \omega \nu$ and $\xi \in \nu \omega \nu$ are used in a derisive sense.





Adjourned at 5.30 P.m.

## Second Session.

The Association assembled in the chapel of Union College at 8.ro p.m. to listen to the address of the President of the Association. President Raymond of Union College welcomed the Association to the hospitality of Union College and of Schenectady, and then presented the speaker of the evening.

## 8. The Lost Parts of Latin Literature, by Professor Andrew F. West, of Princeton University, President of the Association.

Alike in the time of grammar, the earlier part, and in the time of logic, the later part of the Middle Age, Latin literature seems all but non-existent - forever gone. Little of it is known, and that little is so poorly understood as to seem unknown. But it at last appears again in some fulness at the Renaissance. The humanistic enthusiasm continues a long time, and is followed and largely supplanted in these latest times by scientific precision. We have escaped, we say, from the childish mediaeval world and from the youthful exuberance of the humanists. In rigorous adherence to scientific method we are determining what ought to be thought about the ancient writers. Being no longer children or youthful enthusiasts, we shall act as befits seasoned manhood, - we shall not rest until we penetrate to the real truth which is concealed beneath the deceptive surface of tradition. Away with all that cannot be squared with this rule! Literary canons, as well as linguistic laws, must be scientific or must be discarded.

It is here, I think, the criticism of Latin literature, as well as of classical antiquity generally, is in some danger of leading to conclusions which are both unserviceable and false. Unserviceable, because attention is diverted from the supremely important fact that the chief value of Latin as well as Greek literature for the modern world does not lie in its quality as material for science, but in its nature as art. As science all our knowledge of the classical literatures, and languages too, cannot compare with any of the greater physical sciences either in universality of range or in promise of discoveries. If this is the be-all an end-all of our efforts, then the study of the antique literature must be relegated to a comparatively humble place in the hierarchy of learning. But as art, resting of course on scientific determination of what the literature is and means, no science and no other foreign literature may be matched against it. Consequently to exalt the scientific handling of Latin literature as the end, or as a great end of its study, rather than as the laborious self-sacrificing preparation for displaying it as art, is to prevent the manifestation of its real usefulness to the modern world.

Moreover, the apparently rigorous scientific disposition is also leading, I think, to conclusions which are false, or at least unverifiable. Of course it goes without saying that the debt of classical study, Alterthumswissenschaft in general, to scientific method is the debt of its own life. The marvel of the discovery of the laws and of the membering of the parts of the reconstructed record of antiquity by students of the nineteenth century is fully as great, and has, moreover, been attested by proofs as rigorous as support the inductions of natural science. It has
also been prolific in results beyond its own limits. Let it not be forgotten that comparative philology, as the organon of universal language, is a creation of classical philology. Let it never be forgotten that it was from classical philology, and not from any of the sciences of nature, the impulse came which founded the German Seminar in all departments of the higher learning. Endless are the obligations and boundless should be the gratitude of all who care for things intellectual toward those men who laid the strong scientific foundations on which our best hopes of progress rest.
'Let us admit all this, but let us also recognize some other aspects of the question. In the case of Latin literature, - to confine ourselves once more to our particular theme, - the trouble is not only that its chief value for the modern world is not as science, but also that, even from the standpoint of science, its record is not complete enough to warrant many sweeping conclusions which have been drawn. We may, of course, omit here any account of the clearly conflicting conclusions, which eventually refute themselves. Leaving them out of view, let us look at another class of inferences. We cannot be sure, in particular, that many of the negative conclusions in the way of distrusting ancient literary judgments are true even when they are consentient, and the reason why we cannot trust such negative conclusions is not only the fact that they often rest on an unsympathetic attitude toward the supposed incompetency of Latin writers, as well as on a general a priori distrust of tradition, but also the stubborn fact that they are in many cases necessarily based on an insufficient record. It is here attention should be centred. The question is this: After all the piecing and patching done in the way of scientific recovery, to what degree of completeness has the record been restored, and what judgments, in the way of literary evaluation, may we safely make?

For this purpose the register of what has been lost is not without its importance. It is well worth while to take a fresh look at it, if only in a general way. In so doing let us take into our view everything from the beginnings of pagan Latin down to the year 500 of our era, excluding all Christian Latin and all Greek books written by Romans. The total number of writers regarding whom any notice has been preserved to us is 772 , so far as recorded in the pages of Schanz and Teuffel. How many more actually figured iu the course of Roman literary history we have no means of knowing, or even of guessing with a fair chance of coming near the truth. There were more, of course, perhaps a great many more, for our list yields an average of only one writer a year from the beginning to the end, and the total is far less than the number of different books issued nowadays in one year either in Germany, France, Great Britain, or America. Perhaps - yes, alm ist certainly - these unrecorded writers were in the main the chroniclers, pamphleteers, pedants, scribblers, and nobodies who swarmed about the greater figures. Yet we may think it credible there were hundreds, even thousands, of them, and that their loss has at least deprived us of many aids to understanding the environment in which, or out of which, a good deal of Latin literature emerged.

But take what remains, whether in actual books or in notices about them. Our total, as already said, is 772 . From this we must at once subtract 276 writers. not one word of whose writings is known to remain, and $35^{2}$ others, known to us in small fragments of their works. These two classes, wholly or
lmost wholly lost, comprise four-fifths of the entire list. This one fact ought , be learned by heart, and to be held in awe by all adventurous generalizers. ${ }^{1}$
It may be that this enormous proportion of loss is not so regrettable as it cems. The rhetoricians, annalists, lawyers, and grammarians are there in abunance, and seem to verify Lord Bacon's opinion that in the cuurse of history the deavier things go to the buttum - the works of erudition sink. Yet there are ther losses of a different surt. If we can easily spare the scribblers in verse, uch as Aquinus, Caesius, and Suffenus, quem probe nosti, known because they are pilloried to our gaze in the poems of Catullus, it is not quite so easy to part with so many of the literary friends of Horace: -
> animae quales neque candidiores
> terra tulit.

Virgil, the best of all, the "half of his soul," fortunately remains, and so we may zonsole ourselves. But there is little of what Augustus wrote, unless we have the hardihood to count the Monumentum Ancyranum as literature, and to believe it his own composition. The rest has perished, except six lines of his Epigrams, some slight parts of his speeches, and a few traces of the thirteen books of his autobiography. Of his poems, his letters, his memoir of Drusus, and his other compositions, we have nothing. Maecenas fares even worse. He wrote much, but twenty lines of his verse and a few other stray quotations are all we have. Asinius Pollio fares a little better. Three of his letters remain. But his extensive History of the Civil Wars, in seventeen books, is scarcely more than a memory. His account of the battles of Thapsus and Pharsalus, and of the death of Cato and Cicero, would surely be interesting reading. Varius, commended by Horace for his epic verse, Valgius Rufus, the writer of elegies, Aristius Fuscus, unforgettable so long as Integer Vitae shall be sung, Viscus and Fundanius, are known to us, not by their writings, but because Horace knew them.

How the losses extend in every direction! Turn again to the historians and look at the devastation wrought in their accounts of the Civil Wars. More than the book of Asinius Pollio has disappeared. Sulla's twenty-two books of Commentaries, full of Roman superbia, Sisenna's account, and the five books of Sallust's histories - all documents of the first order - are lost. Follow the line of lost histories still farther. How much better would be our understanding of Tacitus if we had Pliny's History of the German Wars, and how lonely an adventure it is to traverse the labyrinthine windings of that portion of later imperial history where we have no guide save the sober but inexpert Ammianus Marcellinus.

Take a closer look at Sallust. What are we to make of the conflict of opinion regarding his literary and historical merits? Antiquity held in the main to one view. Modern critics lean to another. The famous sentence of Quintilian, comparing Sallust to Thucydides, has been a shining mark for aspersion. The express testimony of Martial (XIV, 191) that the Roman critics rated Sallust as the first Roman historian is given little weight. The fact that Tacitus, greatest of all their writers of history, styles him rerum Romanarum forentissimus auctor (Ann. III, 30) and that Augustine cites him as nobilitatae veritatis historicus (De Civ. Dei, I, 5) seems not so very important. Were they mistaken? or are we to make
${ }^{1}$ For assistance in the collection of these data, I am indebted to Mr. N. Wilbur Helm, Instructor in Latin in Princeton University.

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great allowances for their rhetoric and consider their statements perfunctory compliments? Are we to acquiesce in such a statersent as the following, in a respectable history of Roman literature: "Of his (Sallust's) histories we have but a few fragments, mostly speeches, of which the style seems a little fuller than usual; our judgment of the writer must be based upon the two essays that have reached us entire." And again: "His style is peculiar. He himself evidently imitated, and was thought by Quintilian to rival, Thucydides. But the resemblance is in language only." Itane vero? We are then to form our opinion solely on the Catiline and Jugurtha, and Quintilian's opinion that Sallust rivalled Thucydides is to be allowed only so far as it relat es to resemblance in language. Did this writer seriously weigh what Quintilian said and what he meant ? Did he remember that what Quintilian is talking about is histories most useful for an orator to know, and that to assume he meant more is to assume a good deal ? But whether the question is one of the style or of more than the style, the point to remember is that Quintilian's opinion was based on the whole of Sallust, and therefore had reference not so much to the Catiline and Jugurtha, two short essays, as to Sallust's master-work, the lost histories. Why, then, are we to discredit his opinion without at least knowing the lost book? And why should any one talk of basing any opinion on Sallust, as a whole, without taking his greatest work into some account ? Why, again, are we to suppose the estimate of an ancient critic, based on a knowledge of the whole, is antecedently less trustworthy than a modern estimate based on the smaller and less valuable part of that whole?

But suppose the opinion of Quintilian does involve more than the question of style, and means that he thought Sallust was the first of Roman historians and was fit to be compared with Thucydides. It sounds audacious enough, but how do we know - not feel sure - there was not substantial truth in it ? If he means that Sallust is the Roman Thucydides, just as Livy is in his view the analogue to Herodotus, we are not then compelled to believe Quintilian meant that Sallust was absolutely as great in every way as his Greek prototype, but merely that he was worthy to be compared with him. What do we need most in order to revise, discard, or confirm Quintilian's judgment ? The lost book of Sallust. With this in our hands, we might hold as advantageous a position for observation as Quintilian held.

Let us consider, however, some of the things that may help us to respect his judgment, even if we cannot settle its precise value. Fortunately we have some fragments of the histories, enough at least to warrant the belief that, if they are representative, they show a superiority both in thought and style over Sallust's earlier works. They have less artificiality and greater maturity, penetration, and elevation. I do not see how any one can fail to be impressed by this instantly when he reads the extracts embedded in Augustine's discussion of Roman history in the earlier part of the City of God. ${ }^{2}$ Consider, also, that down to the end of the Empire Sallust figured not only as a writer of brilliant style, but that his well-earned reputation for truthfulness - not the truthfulness that depends on chronological accuracy, but the inner truthfulness of insight into characters and causes - made him the first authority on the times of which he wrote and the

[^45]text-book for Roman schools. When Augustine wants a witness pagan Romans will accept, he cites Sallust. Jpsum Sallustium potius adhibebo, he confidently writes, and then begins quoting the histories. ${ }^{1}$ And a little later, as he gives them glimpses at the dark pictures of Roman degeneracy in Sallust's histories, he adds: "Nor should good and wise Romans be angry at us because we thus speak; and since, however, it is most certain they will not be angry in the least, there is of course no need for any such warning. For we are saying nothing severer than their own authors, to whom we are wholly unequal in ease of style, authors they have toiled to learn and compel their own sons to study. And, if any do become angry, how could they endure me, if I were to say the things Sallust has said ?" 2

And what of the relation of Tacitus to Sallust? Does it not help our confidence in Quintilian? A century and a half had passed since Sallust wrote. Time enough had elapsed for his books to live down the sour remarks of Asinius Pollio about his fondness for old-fashioned words plundered from the vocabulary of Cato, and other dispraise of like nature. The judgment of cultivated men, ' doctarum corda virorum,' as Martial puts it (XIV, 191), swung decisively in his favor as the greatest of their historians. Tacitus, who found in Cicero his earliest model, soon found and acknowledged in Sallust the spirit most in accord with his own mood and the writer most worthy to develop his style until he should attain one almost wholly his own. The parallel in the progress of the two is most striking in thought as well as in style. The stage of advancement shown in the Agricola and Germania answers to Sallust's Catiline and Jugurtha, and both reach full maturity in their histories. ${ }^{3}$ How much this helps us toward the belief that Quintilian, in praising Sallust as the Roman mate to Thucydides, did not fail to take into account Sallust's greatest, most characteristic, and most truly historical work, and that the loss of this book helps to explain the inability of modern critics to see things in the main as Quintilian saw them. How easily the relation of Tacitus to Sallust also helps us to believe that Quintilian's estimate, while too complimentary, if pressed to an extreme interpretation, is nevertheless in the main a sound one.

Four-fifths of our writers, as already remarked, have disappeared. What of the remaining fifth ? -the one hundred and forty-four survivors. Sixty-four of these have lost the majority of their books on the way. Ennius, Cato, Varro, Sallust, Livy, Petronius, Suetonius, Hadrian, and perhaps Julius Caesar and the elder Pliny, are among them. Forty-three remain with the greater part of their writings, - as Cicero, Catullus, Nepos, Virgil, Propertius, Ovid, Quintilian, Martial, Tacitus, Gellius, Ausonius. Only thirty-seven come with practically or absolutely all their books, -among them, Terence, Lucretius, Tibullus, Juvenal, Claudian, and, to our delight, Horace. How significant it is that these last two groups include nearly all the best poets. They, at least, are ours. Their boasts about surviving the flight of time have been made good. Perhaps they may outlast the Pyramids too.

Some of the best remains, but four-fifths of our writers and apparently more than four-fifths of their writings are beyond our reach. This is an ever-present cause which will silently operate to produce conflicting judgments so long as men are willing to generalize on the basis of an insufficient record. What, then, will

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help toward a clearer, a really more stable agreement ? First of all, I think, the willingness to stay ignorant when knowledge is unattainable, and the consequent readiness to identify and avoid the regions where exploration is not at present possible. Another help is the disposition to recognize that some traditional views may be true, even when we cannot verify them, or at any rate to recognize that the mere fact that a view is traditional is not in itself a highly suspicious circumstance, and, lastly, that to justify a suspected tradition is at least as great a triumph of criticism as to suspect a justified tradition.

## Third Session.

Schenectady, July 9, 1902.
The Association was called to order at 9.35 A.M., and the reading of papers was begun.
9. On Pliny's Prefecture of the Treasury, by Professor Elmer Truesdell Merrill, of Wesleyan University.

This paper will appear in the American Journal of Philology, Vol. XXIII, No. 4.
10. Studies in Hesiod by Professor E. G. Sihler, of New York University.

The resourcelessness of Greek scholarship in its efforts at literary history together with the characteristic craving to establish $\delta$ la $\delta 0 \times \eta$ is manifest in the vitae of Westermann's collection. The father $\Delta$ ios is, of course, evolved from $\delta$ ĩov $\gamma \in \mathfrak{v o s}$, Opp. 299. To Flach's note (Hermes VIII, p. 458, cf. Christ d. g. ed. 3, p. 86)



## I.

"Die Hesiode" of Welker's speculation have probably no believers at the present time. As a matter of fact, voraussetzunglose Forschung will show how Theogony and Opera illumine one another. One of their common features is the blending of a moralizing strain with mythological construction.

Thus Hesiod takes Sleep and Death from Homer as Twins, but expands the family, Sons of Night, with obvious symbolism, through the addition of
 Deception, and Love, Old Age, and Discord, which in turn bred Labour, Oblivion, Hunger, Pain, Battles and Manslaughter, Quarrels, Lies, Talks and Disputations, etc. - slight advance on the way from Abstraction to Personification. This passage Virgil had before him when he composed Aen. VI, 273.

At the very beginning of the Works Hesiod, in sermonizing at brother Perses, the shiftless and faithless, constructs a parallel Eris, a beneficent twin-brother of the familiar evil one of the brood just named, the mainspring of all wholesome effort of men.

Over both epics is the sober gloom of a hard and bare life, a spirit conversant
with its disappointments and troubles, a gray firmament so strikingly different from the sunny and splendid atmosphere of Homer.

Common to both epics, specifically speaking, is the conception of Woman, a gift of Zeus which he bestowed upon mankind in his wrath. The Pandora myth in both epics is episodical; but favorite themes and favorite plaints are apt to crop out or to steal in -as episodes - particularly in didactic poetry. If anything, the Pandora episode of the Works is more malicious (94sqq.) because there woman is made responsible for the diffusion of evils in the world, evils tempered only by the retention of Hope. Hesiod's Ethics, as those of Cato Censorius and Franklin's Poor Richard, are largely based on the virtues clustering around Frugalitas. And so the only elaborate simile in Homer's vein is where women (Theog. 594) are compared to the drones in the hive.

The curious phrase $\delta 6$ dos almús Theog. 589 occurs in $O \not p p .83$, a phrase unknown to the Homeric epics and puzzling to the editors of Stephanus's Thesaurus.

## II.

## Homer and Hesiod.

A close student of Hesiod's elaboration of Homeric Olympic legends will readily accept the verdict of Schoemann (Opuscula Vol. II, p. 57): "Scilicet Hesiodus nihil Jove genitum vult nisi quod bonitati eius et sapientiae conveniens sit." Preëminently Hesiod expands, specifies, names; he is indeed the nomenclator of Epic Religion. See Schoemann on Hesiod's lists of Nereids and Okeanids.

But the present study is mainly concerned with matters of literary form. As to metrical units - hexametric phrases - mainly in cadences of the verse - a close count, taking C. E. Schmidt's Parallel Homer of 1885 as the standard, presents these results: In the 1022 lines of the Theogony there are some 126 instances of set Homeric phrase; in the 822 lines of the Works some 87 , giving for the specifically heroic poem a little more than 12 per cent, and in the poem on husbandry about $10 \frac{1}{2}$ per cent. Of course we think now of the common property of the Fahrende Sänger who incessantly heard one another in the agones. We note specifically the place of the phraseological units. They occur substantially at the same point of the hexametric measure where they occur in Homer. Such phrases







 epic for the hexameters on husbandry we find there, as of sea, and navigation, and



 $\dot{\omega} \kappa v \pi \delta \delta \epsilon \sigma \sigma เ \nu-$ and so on.

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But in Hesiod we also find units of Homeric phrase occurring but once in
 renders well enough concinnatores (really - trices) verborum: in Hom. 1l. 22, 28I, in a decidedly different, in fact, an evil, shade of meaning, almost synunymous with the attendant $\epsilon \pi i \kappa \lambda о \pi o s$; or the peculiar phrase $\ddot{\partial} \psi \lambda \epsilon \epsilon \rho \iota \epsilon \sigma \sigma \sigma$, of the $\tau \epsilon \tau \tau \iota \xi$ in $I l .3,15^{2}$, used of the muses, and that, too, in a different place of the hexameter and different case: Th. 41. Again, the phrase $\delta \omega \tau \hat{\eta} \rho \epsilon s{ }^{\text {éd }}$. $\omega \nu$ occurs only in Od. 8,325 (givers of good things): it occurs three times in Hesiod for the gods: 7 h. $46,633,664$. The phrase oủpav $\hat{\varphi} \epsilon \mu \beta a \sigma \iota \lambda \varepsilon \dot{\varepsilon} \epsilon$, Th. 7 I , compare with Od. 15, 413 ,

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at the same point of the hexameter. Again, in Hom. Il., in a simile, the bull among the cows: $11.2,48 \mathrm{r}$,

$$
\dot{\delta} \gamma \dot{\alpha} \rho \tau \epsilon \beta \delta \epsilon \sigma \sigma \iota \mu \epsilon \tau \alpha \pi \rho \epsilon \in \epsilon \epsilon \mathfrak{a} \gamma \rho \rho \mu \notin \nu \eta \sigma \iota \iota .
$$

and in Hes. Th. 92, the wise $\beta \alpha \sigma \iota \lambda \epsilon$ ús in a great assembly of the people:

$$
\mu \epsilon \tau \dot{d} \text { dè } \pi \rho \epsilon \in \pi \epsilon \iota \text { à } \gamma \rho o \mu \epsilon \in \nu 0 \iota \sigma \iota . . .
$$

both appropriation and adjustment are quite specific here.
 with the single occurrence of this particular phrase Od. 20, $511, \nu \hat{\eta} a \mu \dot{e} \nu$ aúroû $\kappa \epsilon \lambda \sigma \alpha \iota \ell \pi^{\prime}{ }^{\prime} \Omega \kappa \epsilon \alpha \nu \stackrel{\varphi}{\omega} \beta \alpha \theta v \delta l \nu \eta$ in the same place of the hexameter. The phrase
 ment uttered by Agamemnon; at beginning of hexameter: by Hesiod, Th. 237,
 $\beta a \theta v \rho \rho \epsilon i$ ins is used but once in Hom. Il. 21, 195 (variant of $\left.\beta a \theta v^{\prime} \rho \rho o o s\right)$, and then with
' $\Omega_{\text {кeapls }}$.

and recurs in Hes. Th. 265,

## 

in the same case, i.e. the same metrical adaptation. In the cadence of the hexameter we meet $\dot{\alpha} \pi \varepsilon \delta \epsilon \rho \rho \sigma \sigma \mu \eta \sigma \epsilon \nu T h .280$,

and in the three occurrences in Homer it is also always in cadence: Il. 18, 336,



 but once, $1 / \mathbf{I}$. 11 19, and once in Th. 395,

$\chi \eta \rho \omega \sigma \tau \eta{ }^{\prime} s$, next of kin, heir-at-law, occurs in $11.5,158$,

and in almost identical phrase, Hes. 7h. 606, of the celibate
 $\chi \eta$ р $\omega \sigma \tau a l .$.
metrical position the same, as well as tmesis. 'Avtıфєpl\}ety in Homer occurs but twice, $11.21,357$, and 488 (vie with, equal) in cadence- $\alpha \nu \tau \iota \phi \in \rho!\zeta \epsilon \iota \nu$, ג̀vтьфєpljєı, and so, too, in Hes. Th. 609,
'Aкdкך $\boldsymbol{\prime} a$ in Homer occurs but twice, and then in set phrase (Saviour), of Hermes: Il. 16, 185 (and Od. 24, 10, a spurious book according to Aristarchos), 'Epuelas áкккпта. The application of the epithet to Prometheus is mythologically very fit in Th. 614. - $\dot{\eta} \kappa \epsilon \phi \delta \omega \sigma \delta \varepsilon$ occurs but once in Hom., of the snake in 11. 2, 309, interpreted by Kalchas,
with which compare Hes. Th. 679, of the Titans,
in the same metrical place. The phrase $\delta \sigma \sigma \varepsilon$ a $\mu \epsilon \rho \delta \varepsilon \epsilon \nu$ occurs but once in Hom. Il. 13, 340,

$$
\begin{aligned}
& \text {... } \delta \sigma \sigma \epsilon \delta^{\prime} \not{ }^{\alpha} \mu \epsilon \rho \delta \epsilon \nu
\end{aligned}
$$

with which there is in close responsion Hes. Th. 698,

aưخウ̀ $\mu a \rho \mu a l \rho o v \sigma \alpha$ кє $\rho a \cup \nu 0 \hat{v} \tau \epsilon \sigma \tau \epsilon \rho \circ \pi \hat{\eta} s \tau \epsilon$.
The adv. rpiotolxl occurs once only in Il. 10, 473, of armor placed in threefold row, at night, in camp : in Th. 727, of Tartaros:
. . . ả $\mu \phi l \delta e ̀ ~ \mu e ̀ \nu \nu \nu ̀ \xi$

clearly no reminiscence whatever.
The line Od. 11, 604,

 line in Hom. containing this epithet, even thus: it is found, however, in the complete line, referring to Hebe in Th. 952. Or was Onomakritos charged with borrowing from Hesiod?
 11.7,228.
$\tilde{\eta} \beta \eta s \mu \hat{\tau} \tau \rho \circ \nu$ iкє́ $\sigma \theta a l$ is a phrase occurring in the $O d$. alone, 11, 317; 18, 217; 19, 532 :

$$
\begin{aligned}
& \text { — } \eta_{\beta} \beta \text { s } \mu \in \tau \tau \rho о \nu \text { iкd́ } \nu \in \iota . .
\end{aligned}
$$



## XXX

$$
\begin{aligned}
& \text { то入ıoкрбтафоs occurs but once in Homer, 1l. 8, 518, }
\end{aligned}
$$

in the same metrical adjustment. $\delta v \sigma \kappa \epsilon \in \lambda \alpha o s$ occurs only once in Homer, Il. 16, 357,

$$
\begin{aligned}
& \text {. . . ol dè } \phi b \beta \text { oto }
\end{aligned}
$$



 Homer but Il. 2, 93, of the Achaians streaming to the assembly; it occurs but once also, in an entirely different application in Hes. Opp. $28_{7}$, $\tau \grave{\eta} \nu \mu \notin \nu \tau о \tau \kappa \alpha \kappa 6 \tau \eta \tau a$
 angry at) of $O p p$. 331, is found in Hom. Od. 20, 16, alone. - $\delta \iota \phi \alpha \omega$ in Il. 16, 747, of the fisherman searching for oysters, recurs in Hes. Opp. 374, of the coquettish woman setting her cap for the bachelor, $\tau \epsilon \grave{\eta} \nu \delta \iota \hat{\omega} \sigma a \kappa \alpha \lambda \iota \dot{\eta} \nu-f i s h i n g$ for your





A curious and, to my mind, palpable and definite borrowing from Homer we meet in $O p p .705$. In Hom. Od. 15, 350 sqq., the faithful swineherd Eumaios tells the disguised Odysseus how the death of the wife of Laertes caused the latter to age prematurely, for which Homer uses $\dot{\omega} \mu \mathrm{b}$ s:

and Hesiod of the effect of the spendthrift drone-like wife:

And thus we see a goodly number of specific and unique words, phrases, ideas, palpably appropriated, not merely from the general recitation-practice of the wandering and touring doobol, but from specific places in the extant epics. It is difficult not to conceive these epics as a fait accompli when the Hesiodean poetry was making.

## III.

There is, further, the general metrical resemblance of what we may call the metrical place; i.e. that a word is used, on the whole, in the same form, or same form and place: a forceful reminder of the phonetic rather than literary transmission of the older Epical practice and art.

| $\{$ Hom. 1l. 22, 307 | $\mu^{\prime} \gamma \alpha$ т $\tau \in \sigma \tau \iota \beta a \rho \delta \nu \tau$ |
| :---: | :---: |
| Hes. Th. 2 |  |
| \{ Hom. Il. 10, 467 |  |
| ใHes. Th. 30 |  |
| $\{\mathrm{Hom}. \mathrm{Od}. \mathrm{7} 265$, |  |
| es. Th. 43 |  |



But these examples must suffice as types of this metrical practice.

## IV.

But there are strong traces of another kind of regard for the Humeric poetry. This is the profound interest in the Trojan legends themselves. We neet a mode of reference which to the unprejudiced reader suggests the great reputation of these legends or of these lays; more likely the latter. We shall, I believe, state the whole problem more fairly when we say that these particular lays ennobled these particular legends. It is true that the Homeric epics themselves refer to legends of Curinth, of Thebes, of Mykenai, of Aetolia, of Argos, of Crete, of Thessaly, as well as to the Argonauts and Jason, showing that the touring dotool, according to time and place, practised them all.

It is curious, too, that Hesiod has added Simois and Skamandros to the company of noble or notable streams born to Okeanos by Tethys. The author has palpably set out to present a survey fairly encompassing the utmost limits of his geographical knowledge, from northern Italy to the Caucasus and to Egypt. But would the streamlets of the Trojan plain have been named and marshalled with Nile, and Po, with Strymon, Maeander, and Danube with Phasis, Achelous, Granikos, Hermos, and Sangarios, had they, Simois and Skamandros, not become eunobled, nay classical, in the Hellenic world?

A still more impressive demonstration of the classic prestige even then held by the Trojan legends is found in the peculiar economy of Hesiod's succession of generations, Opp. 109 sqq.

First the Golden Age, of known time, when Kronos reigned in heaven - the ideal state in Hesiod's mind, comparable to the Homeric Phaeacians, but distinctly a finer and nobler ideal, followed by the Silver Age, the Bronze Age (down to 1. 155). And here the regular succession of decadence and decay is checked, for a place must be made and set aside for the heroic age preceding the present actual generation and age of the poet himself. To Hesiod's mind the men of the heroic age cluster around two chief matters: the wars about seven-gated Thebes and those stirring on account of the flocks of Oidipūs, and the others were destroyed by war having carried them beyond sea to Troy, on account of the fair-tressed Helen: the heroic survivors being translated in the end to the isles of the blessed, etc. Follows the actual Iron Age - in which the poet bewails himself as being. Now

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the heroic or Trojan generation is a wedge-like insertion in this naive and mythical philosophy of history, an interruption in the systematic process of decay.
11. A Reason for the Length of the First Choral Ode of the Agamemnon, by Professor F. A. Hall, of Washington University.

Why should a choral ode of such unusual length constitute the early part of this play? An answer may be found, I think, in the consideration of four points, viz. the prologue; the character of the ode; the time of the herald's entrance and the nature of his report; the time of Agamemnon's arrival.

The play has 1673 verses, divided about equally between the chorus and all the other characters, so that the choral passages take a larger proportion than is elsewhere found; but that a single ode of two hundred verses should stand almost at the beginning suggests some special purpose.

Look first at the prologue. The watchman upon the roof is slow to begin his part. The man is seen to move, to stretch, to turn from side to side as if to rest his body grown stiff and weary with uninterrupted watching. But, though he seeks change and ease from cramped position, he never turns his face from that distant object.

At last he breaks the gloomy silence, vv. I-2I. With this soliloquy, spoken slowly, often broken with turn and stretch and yawn, he settles down again intently gazing for the first gleam of that desired beacon.

But twenty verses have been uttered thus far. Two minutes would suffice if one were to speak them as fast as he naturally would. I imagine, however, that several times that number of minutes were actually used in their delivery. The question is not in how brief time could they be spoken, but rather how much time could be spent upon them with increased effect ? The watchman must be very deliberate; action would count for more than words.

When the light is seen, the watchman hastens to announce the fact, but even before he leaves the roof he reverts to the condition of affairs in Agamemnon's home, vv. 21-39. Thus at the very beginning, the spectators' minds are turned to the past rather than to the immediate present.

Again, as the chorus enter the orchestra, their presence emphasizes the past rather than the present. During the king's absence they have seldom been together, for the queen had depended upon Aegistheus for advice. Called to meet at this unusual hour, and that without explanation, they naturally recall the frequency of their gatherings under Agamemnon, and at once they begin: "This is the tenth year since Agamemnon and his fleet set sail for Troy," vv. 40-83. See how adroitly all thought of present victory has been removed from the spectators' minds as they see these aged statesmen and review affairs of long ago.

The interest is heightened as the queen comes from the palace and proceeds to light the altar fires kept ready for the gods. When, however, the chorus ask her reasons for this strange conduct she pays no heed to them, vv. $84^{-103}$. Why ? Aeschylus wanted to conceal the present till greater emphasis was laid upon the past.

In the six strophes and antistrophes which follow, the poet has the chorus review the history of the ten years' siege: the events before the preparation, as seen by the prophet Calchas; the assembled army; the setting out; the deten-
tion at Aulis; the sacrifice of Iphigenia; the awful threats of Artemis. Thus for a half hour or more the spectators have had their attention riveted upon events dating far back and covering a period of ten years. They are thercfore oblivious to the fact that it was only last night that Troy fell, and that this day they have learned the news.

Nor is any one concerned with the impossible when, at verse 500 , the herald is seen hurrying from the shore to the city to confirm by word of mouth what the beacon-light had heralded in advance. He, too, instead of laying stress upon the recency of Troy's fall, dwells upon his long absence; rehearses at length the army's trying experiences upon land an l sea, and expresses his joy at reaching the home he had yearned for years to see.

Thus he, as the chorus, lays emphasis upon the past and, when, in verse 800 , Agamemnon enters, slowly riding cityward, accompanied with his capturcd slaves and with wagons laden with booty, no offence is given to the multitude of listeners in the reflection that he could not possibly return from Troy in less than the space of a day.

The element of time has been removed, or at least reduced to a subordinate position.

Here is the situation briefly stated. Troy fell at night. At break of the following day a light was seen from Mount Arachnaea, as a pile of gathered brush blazcd skyward. An hour later a mcssenger came rushing upon the stage as though he had come in person from Troy. Half an hour after the herald's arrival Agamemnon, seated upon his chariot, drove into the orchestra as having travelled, with the dignity becoming his station, all the way from Troy.

May not this pusition then be a fair answer to the question at the head of this paper?

Aeschylus arranged the play so that the time of Troy's fall and the return of the victorious king, though impossibly near in reality, would not mar the effectiveness of the play as presented upon the stage.

One who reads the tragedy simply as a piece of literature will have small concern about the impossibilities in the situation; but will be ready with the ancients to recognize Aeschylus's masterly hand as an artist in so hiding the historical relation of events as to make all seem probable and harmonious.

## Remarks were made by Professors Earle and Smith. <br> The following resolution was then presented by Professor Morgan :

Resolved, (i) That the American Philological Association cordially recommends to the Trustees of the Carnegie Institution the proposal of certain members of the Association to have prepared a new Latin-English Lexicon. The need of such a book, felt nut only by classical students but also by educated men in gencral, and the large expense which its proper preparation would necessarily entail, seem to mark the project as one of those to which the Carnegie Institution may give its help with the prospect of doing much good to the cause of linguistic study and research.
(2) That the Executive Committee be authorized to coöperate with the members of the Conference on the Dictionary in laying the matter before the Trustees of the Carnegie Institution.

After remarks by Professors Earle, Sihler, and West, the resolution was unanimously adopted.

The Secretary was authorized to communicate with President Gilman of the Carnegie Institution with regard to the attitude of the Institution on the subject of endowing linguistic research.
12. The Prologue of the Agamemnon, by Professor Mortimer Lamson Earle, of Columbia University.

This paper will appear in the Classical Reviezu. Remarks were made by Professor Harry.
13. The Nikias of Pasiphon and of Plutarch, by Professor B. Perrin, of Yale University.

This paper is printed in full in the Transactions.
14. Poetical Words and Constructions in Xenophon's Anabasis, by Professor Charles Forster Smith, of the University of Wisconsin.

Having been long interested, doubtless from my first reading of the Anabasis as a schoolboy, in the matter of Xenophon's poctical usage, I have brought together here the results of observations made recently during the preparation of notes for an edition of the Anabasis. For stimulation and help in this direction, I am indebted chiefly to remarks made by Rehdantz in his notes. In Thucydides poetical terms are to be found chiefly, I think, in the speeches and wherever the occasion seemed to call especially for elevated diction; in Xenophon, on the contrary, the use of poetic words seems to be due generally to no such influence. They may occur in one place as well as another. It cannot be hoped that the list of words given here is complete, and it will inevitably be found most defective in the matter of syntactical constructions.

For a list of un-Attic words and forms in Xenophon, see Rutherford, The New Phrynichus, pp. 165 ff.

## A. Epic Words.

áyopá ( $=\epsilon \kappa \kappa \kappa \lambda \eta \sigma$ la $)$, v. 7. 3. Freq. in Homer, several times in Hdt., only here in Xen. (Rehdantz).


ả入ध́sarөat, ward off, i. 3. 6, etc. Hom., Archil., Hdt., Soph.
ảvaxă̧山, draw hack, iv. 1. 16; 7. 10. In Homer in this sense mid., as in Cyrop. vii. 1. 34 .
$\alpha \pi a \mu \epsilon(\beta \epsilon \sigma \theta a \iota$, ii. 5. 15. The compound, as well as the simple, verb freq. in Homer, and both almost exclusively poetic.
oi árobavóvtes, the deceased, iii. 4. 5; iv. 2. 23, as in Thuc., "relic of Homeric
 Trases. 1900.

むтоvoणтท̂бaь，return home，iii．5．16．The only other Att．prose cxample， Thuc．viii．87．26．It occurs in Hom．，Hes．，Hdt．，Eur．
dráp，but，iv．6．14；vii．7．10．This furm very freq．in Hom，and fund also in Hdt．，Plato，Aesch．，Soph2 Eur．
araodalia，wantonness，iv．4．I4．Freq．（plur．）in Hom．，found also in Hes． and Simon．
סıáprєрєs，clear throusch，iv．1．18．Hom．，Hes．，Aesch．，Soph．，Plato．
סıס́́át（for $\delta$ fovai），v．8．24．＂Isolated in prose，here to keep form with $\dot{\alpha} \phi \iota a ̂ \sigma \iota "$（Rehd．）Cf．Hom．Il．xi．105；Od．xii． 54.
ठv́vw（＝$=\delta \dot{o} \rho \mu a \iota$ ），ii．2．3．Hom．，Hes．，tragedy．
Soumé $\omega$ ，i．8．IS．＂Lpic verb，occurring but once even in Att．poetry＂（L．\＆．S．）． Freq．in Hom．Cf．Eur．Alc． 104.
Sov̂mos，ii．2．19．Freq．in Hom．，rare in tragedy．Cf．Thuc．iii．22． 24 （one Ms．）．
éga入amáそ $\omega$ ，vii．1．29．Evidently borrowed directly from Homer．

$\eta$ ŋ̀（ßatos，precipitous，i．4．4．In Hom．（freq．），Hes．，Theog．，Pind．，Aesch．， Eur．，Theocr．
кvéфàs，dusk，iv 5．9．Homer（freq．）．Cf．к $\nu^{\ell} \phi \alpha{ }^{\prime}$ ，dawn，Hell．vii．1． 15.
ó $\lambda_{0}$ iтpoXos，round stone，iv．2．3．Cf．Hom．Il．xiii． 137 ；Hdt．viii．52；Theocr． xxii． 49.
 $\tau \in \lambda \epsilon \theta \in L v(=\gamma i \gamma \nu \in \sigma \theta a i)$ ，iii．2．3．＂Used by the poets and in Ion．and Dor． prose＂（Rehd．）．

## B．Poetical Words not so distinctly Epic in Coloring，though found in Epic．

ä入oos，sacred grove，v．3．12．Hom．，Hes．，Hdt．，Pind．，Aesch．
$\beta$ ios（＝$\beta$ iotos），vi．4．8．Hes．，Pind．，Soph．，Eur．，Hdt．，Thuc．
ya入 $\eta \dot{\imath} \eta$ ，calm，i．5．8．Hom．tragedy，Ar．，Thuc．，Plato．
סá $\pi \in \delta o v$, ground，iv．5．6．＂Mostly poetic＂（L．\＆．S．）．Hom．，IIt．，Pind．， Eur．，Ar．
ध́ $\xi a \pi \ell \nu \eta s$ ，on a szdden，iii．3．7．Five times in Nen．，six times in Thuc．，Hom．， Alcae，Pind．，Ar．，Plato．See Proc．r892．
trus，rim of shield，iv．7．12．Hes．，Tyrt．，Eur．Cf．Hom．Il．iv．4S6；v．724， rim of wheel．
Kteive，ii．5．32．The simple verb in Xen．only here，and not at all in the orators， but freq．in Thuc．＂Mostly used by Hom．and all poets，like катактeive＂ （L．\＆S．）．
катактєiva，ii．5．Io（cf．IFiero，6．14；7．12）．Hdt．and freq．in IIum．and tragedy．
$\mu$ абтєv́w，seek，iii．1． 43 （cf．v．6．25；Cyrop．ii．2．22）．Hes．，Find．，Aesch．，Eur． Homer uses $\mu a \tau \epsilon \dot{\omega} \omega$ ．
$\mu \mathrm{O} \epsilon \mathrm{i} \mathrm{v}$ ，vii．1．33．Hom．，tragedy，Pind．，Ar．（in lyrics or in the mouth of a Laconian）．
Hox $\theta$ eiv，vi．6． 3 I （cf．Mem．ii．1．17；Oec．18．2）．Hum．，Soph．，Eur．，Ar．， Thuc．（2）．See Trans． 1900.

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$\mu v X^{\mathbf{o}} \mathbf{s}$, iv. 1. 7. Twice in Thuc., once in Aristotle; mostly poetic and Ionic. Hom., Hes., Hdt., Pind., tragedy.
ö $\mu \mu$ a, vii. 7.46 (cf. Hell. vii. 1. 30; Cyrop. viii, 7. 26). Freq. in all the poets, but rare in prose. Cf. Thuc. ii. 11. 29; Plato, Tim. 45 E.
${ }^{6} \mathrm{X} \boldsymbol{\theta} \boldsymbol{\eta}$, bank, iv. 3. 3, 5, '17. Hom., Pind., Aesch., Soph.
$\tau \rho \epsilon \epsilon \omega$, fear, flee from, i. 9. 6. Hom., Aesch., Soph., lyric. Cf. the term ol $\tau \rho \epsilon \in-$ бavtes as used at Sparta.

## C. Borrowed from Tragedy, or other Poetry.

ả入a入ágal, shout the battle-cry, iv. 2. 7. "Poetic word used by Xen. and late prose " (L. \& S.).
àvi(topos, opposite, iv. 2. 18. Prob. first in tragedy (Aesch, Eur.).
éктєpaivédal, to be accomplished, v. 1. 13. Only in tragedy, though $\pi \epsilon \rho a i v \omega$ occurs in Hom. and all subsequent authors.
катакаivetv, kill, i. 6. 2, and freq. The comp. may be Xenophontean, though каiveıv (Cyrop. iv. 2. 24) is freq. in Aesch., Soph., Eur.
$\lambda v ̃ \epsilon เ v$ aủtov́s (= $=\lambda v \sigma \iota \tau \epsilon \lambda \epsilon i ̂ \nu$ aủroîs), iii. 4. 36. Cf. Soph. El. ı005; O.T. 316; Eur. Med. 566, 1112, 1362; Alc. 627; Hipp. 441 .
voreîv, to be sick, i.e. disordered (fig.), vii. 2. 32. Cf. Soph. Ant. 1015; Eur.

$\pi p \circ \xi \in \epsilon \in \hat{\epsilon} v$, vi. 5. 14. "Freq. in tragedy" (Rehd.). Cf. Soph. O.T 1483; O.C. 465; Trach. 726; Eur. Ion. 335.
äт $\lambda \epsilon$ тos, boundless, abundant, iv. 4. II. Emped., Pind., Soph., Hdt., Plato.
Stamopevítv, set over, ii. 5. 18. "Only here, also mopev́elv, mostly poetical" (Rehd:).
$\lambda a ́ x o s(=\mu \notin \rho o s)$, v. 3. 9. Theog., Pind., Aesch., Soph.
Өauıvá, oft-times, iv. х. 16. Cf. Mem. iii. 11. 5; Pind. O. 1. 85; Ar. Ptut. 292.
$\pi \epsilon \pi \hat{\alpha} \sigma \theta a l(=\kappa \epsilon \kappa \tau \hat{\eta} \sigma \theta a \iota)$, i. 9. 19. Cf. iii. 3. 18; vi. 1. 12. Freq. in lyric and tragedy.

## D. Poetical Constructions. a. Prepositional.

$\dot{a}^{\mu} \boldsymbol{\phi}$ l c. gen., iv. 5. 17. Only here in Att. prose.
For ${ }^{\alpha} \mu \phi l$ c. acc., which is "not used freely by any prose author but Xen." (Marchant), see Trans. 1894.
ảvá c. acc., iii. 5.16 ; vii. 4. 2, etc. Twice in Thuc., Homer, and all poets. See Trans. 1894.
iк c.gen. (ii. 6. I).
rapá c. gen. (i. 9. I). \} Rare in Att. prose with passives.
тpós c.gen. (i. 9. 20).)
For ék c. pass., see Trans. 1894.
mapá c. acc. rei, ii. 4. 17. "Elsewhere only in poetry" (Rehd.).
 298; iv. 528; xv. 388; Aesch. Pers. 737; Soph Phill. 383; Eur. Hel. 990.
$\sigma$ iv, iii. 2. 8, etc. "Belongs in the good period almost wholly to the elevated language of poetry, and to Xenophon" (Mommsen). See Trans. 1894.

## $\beta$. ※s Constructions.

$\dot{\omega} s(=\dot{\omega} \sigma \tau \varepsilon)$ c. inf., ii. 3. 10, etc. See GMT. 608.
où ${ }^{\prime}$ w̌s, i. 8, 21. etc. Epic survival. See Trans. 1894.
 verbs of striving, etc., see GMT. App. iv.

## $\gamma$. Varia.

 oi $\theta \in \omega ิ v$ őpkot, oaths by the gods, ii. 5. 7, etc. "Freq. in Homer" (Kehd.).
Tòv $\theta \in \omega ิ v \pi \delta \lambda_{\epsilon} \mu \mathrm{ov}$, war with the gods, ii. 5. 7. "More appropriate to poets" (Rehd.).
aủtoùs $\AA \mu \dot{\mu} \mu ф є т о$, ii. 6. 30. Cf. Oec. 11. 23. "Elsewhere even Xen. construes $\mu \epsilon \mu \phi \epsilon \sigma \theta a t$ with dat. of person" (Rehd.). For acc. of pers., cf. Hes. $O p$. 184; Theog. 795, 871 ; Pind. N.Z. 94; Aesch. Prom. 1036; Soph. El. 384 ; acc. of thing, Hdt. i. 207; iii. 13.
ท่ ソoíтo (opt. of command), iii. 2. 37 (cf. Eq. 1. 8). Cf. Hom, Il. xi. 791 ; xxiv. 179; Od. iv. 735; Aesch. Ag. 91I; Prom. 1049 f. See GMT. 725.

Remarks on the paper were made by Professors Harry, Morgan, and Smyth.

The Secretary then called the attention of the Association to the fact that, during the past year, he had been in receipt of numerous communications from members in different parts of the country, and especially from the Central West, on the subject of the desirableness of changing the date of the meetings to a more convenient season. It was urged that nearly all of the scientific associations of the country now meet in the winter ; that members from the Central West find it difficult to attend the annual gatherings in the summer by reason of the Summer Sessions that are held in many of the colleges in that locality; and that many scholars living in that section prefer to organize a branch of the Association on the ground that they are prevented from attending the meetings in July. On the other hand, it was pointed out that the traditionary method of meeting in the summer has been highly prized for the past thirty years, since it afforded the members the opportunity of visiting many colleges at a season when they are best able to offer their hospitalities to us, whereas winter-sessions would of necessity be held only at colleges situated in a limited number of cities.

After a lengthy debate on the subject, which was participated in by Professors Snith, Harrington, Fowler, Wilcox, Knapp, Sihler, Morgan, and Wheeler, it was resolved that the Secretary be instructed to ascertain the opinion of all the members by taking a postal-card ballot.
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The Secretary was also instructed to represent the Association at a meeting of the Council of the American Association for the Advancement of Science, which was to deal with the question of the assembling of various scientific associations shortly after Christmas Day, during "Convocation Week."

## Fourth Session.

The Association assembled at 3 P.M.
15. Numeral Corruptions in a Ninth Century Manuscript of Livy, by Professor F. W. Shipley, of Washington University.

This paper is printed in the Transactions. Remarks were made by Professors Sihler, Merrill, and by the author in reply.
16. Some Forms of Complemental Statements in Livy, by Professor R. B. Steele, of Vanderbilt University.

This paper is printed in the Transactions.
17. Verbs Compounded with Prepositions in Aeschylus, by Professor Edwin L. Green, of South Carolina College (read by title).

It is the purpose of this paper to answer for Aeschylus the questions that originate from an inquiry into the range of prepositions in composition with verbs, the relative affinity of verbs for prepositions, and the lines of favoritism between verbs and prepositions. Dr. D. H. Holmes, in a dissertation presented to the Johns Hopkins University, entitled, "The Limitations of the Composition of Verbs with Prepositions in Thucydides," has made a similar inquiry into the composition of verbs with Prepositions in Thucydides.

The individual prepositions first receive attention, and after them the verbs in monoprothetic, diprothetic, and triprothetic composition. Then follows a comparison of Thucydides and Aeschylus, and at the end are placed statistical tables.

## Individual Prepositions.

All of the proper prepositions appear in Aeschylus both in simple form and in composition with verbs. The most common preposition in composition is $\dot{\epsilon} \pi \ell$, the least common $\dot{\alpha} \mu \phi \ell$. The statistics of the prepositions have been arranged in the table on following page.

## Monoprothetic Verbs.

There are 403 monoprothetic compounds, of which fifty-two per cent are $a \sim \pi a \xi$ єip $\eta \mu \ell \nu a$. Only six are found more than half a score of times. One ( $\beta a l \nu \omega$ ) is compounded with twelve prepositions.

Inasmuch as the proper prepositions are in their origin adverbial words that served to define more closely the direction of the activity expressed through the

| Prepositions |  |  |  |  |  | $\begin{aligned} & \stackrel{y}{0} \\ & \frac{y}{n} \\ & \frac{3}{u} \\ & \text { ax } \end{aligned}$ |  |  |  |  |  | Preferred Verbs. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d $\mu \boldsymbol{\phi} \boldsymbol{l}$ | 43 | 4 | 4 | . | . | $\cdots$ | 3 | 2 | . | 18 | 11 | $\beta \alpha \lambda \lambda \omega$ |
| dıá | 7 | $3^{8}$ | 38 | $\cdots$ | . | 8 | 29 | 5 | 3 | 7 | 8 | $\alpha \gamma \omega, \quad \chi \omega$, โбт $\boldsymbol{\tau} \mu \mathrm{s}$ |
| devt | 12 | 19 | 2 | $\ldots$ | . | 2 | 14 | 4 | 1 | I 3 | 17 | $\delta i \delta \omega \mu \epsilon$ |
| d $\pi 6$ | 64 | 73 | 73 | . | . | $\ldots$ | 41 | 13 | 10 | 3 | 8 | ठ $\lambda \lambda \nu \mu \varepsilon$ |
| $\delta$ c\& | 51 | 36 | 36 | - | . | 12 | 28 | 6 | 2 | 8 | 10 | $\pi \rho \alpha \sigma \sigma \omega$ |
| cis | 131 | 12 | 12 | $\cdots$ | . | 1 | 9 | 12 | 1 | 16 | 4 | elidov |
| ek | 200 | 113 | 106 | 7 | . | 51 | 70 | 9 | 12 | 2 | 2 | $\beta \alpha \lambda \lambda \omega, \tau \epsilon l \nu \omega$, $\phi \in \dot{\gamma} \gamma \omega$ |
| $z^{2} \nu$ | 281 | 36 | 34 | 2 | . | 12 | 24 | 5 | 3 | 8 | 1 | $\pi l \tau \nu \omega$ |
| $t \pi i$ | 131 | 129 | 116 | 13 | - | 42 | 78 | 18 | 20 | 1 | 4 | єธัхоرаи |
| катá | 60 | 69 | 69 | . | - | 27 | 46 | 12 | 8 | 4 | 9 | ย̌ $\chi \omega, \kappa \tau \epsilon 1 \nu \omega$ |
| $\mu \in T d$ | I 5 | 15 | 15 | $\cdots$ | $\cdots$ | 3 | 10 | 6 | 2 | 14 | 16 | i $\eta \mu \iota$ |
| $\pi$ a ${ }^{\text {a }}$ | 35 | 36 | 33 | 3 | $\cdots$ | 9 | 20 | 38 | 3 | 8 | 12 | $\epsilon l \mu l$ |
| $\pi \epsilon \rho ¢$ | 23 | 6 | 6 | . | $\cdots$ | 2 | 5 | 4 | . | 17 | 13 | $\beta \delta \lambda \lambda \omega$ |
| $\pi \rho 6$ | 16 | 33 | 33 | $\ldots$ | I | 9 | 22 | 8 | 5 | 11 | 14 | $\delta \ell \delta \omega \mu \iota$ |
| $\pi \rho 6$ s | 176 | 54 | 54 | 9 | . | 14 | 24 | 8 | 6 | 6 | 3 | $\tau \backslash \theta \eta \mu$ |
| oúv | 67 | 61 | 52 | 9 | . | 13 | 36 | 7 | 6 | 5 | 7 | $\phi t \rho \omega$ |
| $\dot{v} \pi \epsilon \rho$ | 16 | 14 | 14 | . | $\cdots$ | 1 | 9 | 3 | 2 | 15 | 14 | $\beta \delta \lambda \lambda \omega,{ }^{\text {¢ }} \chi \chi \omega$ |
| $\dot{v} \pi 6$ | 84 | 25 | 24 | 1 | . | 8 | 17 | 3 | I | 12 | 6 | d $\nu \tau \iota d \zeta \omega$ |

verb, it follows that certain verbs will have a greater affinity for certain prepositions than for others. The more purely, or the more freely from color, a verb expresses any form of activity, the greater the number of directions its activity may be directed, and the more prepositions it may combine with. When the activity of the verb already has a definite character, its capacity for direction is limited, and the verb combines with few prepositions.

Of the verbs that express motion, $\epsilon \bar{j} \mu$, $\bar{\epsilon} \rho \chi \circ \mu a l$, and $\beta a i \nu \omega$ are the nearest approach to pure motion. The first two supplement each other. $\beta a l \nu \omega$ is combinable with the largest number of prepositions-12; ${ }^{\epsilon} \rho \chi о \mu \alpha \iota$ has $10 ;$ cl $\mu \ell$ has only three. When the character, or kind, of motion is defined, there is a curtailment in the number of prepositions. This will be illustrated by the following verbs, the numerals after each indicating the number of compounds: i $7 \mu \mu$ (9), $\ell \sigma \tau \eta \mu \iota$ (9), $a \gamma \omega$ (8), $\phi \hat{\epsilon} \rho \omega$ (8), $\beta \dot{a} \lambda \lambda \omega$ (7), $\pi i \pi \tau \omega$ (7), $\tau \rho \epsilon \pi \omega$ (7). And the curtailment in the number of compounds is still greater, as the direction of the motion is expressed with greater definiteness, which appears in the following


The purest representative of the verbs of Existence, which may be called verbs of potential motion, is $\boldsymbol{\epsilon i \mu i}$. It is compounded with nine prepositions ( $\gamma / \gamma r o \mu a \boldsymbol{\varepsilon}$ has only two). As soon as the character of the existence is determined, the range of the combinable prepositions is limited. One example, evi $\delta \omega$, which has two prepositions, will suffice to illustrate the limitation.

Verbs of Speech represent another form of activity. The most colorless representative of this class is $\lambda \epsilon \gamma \omega$ ( $\epsilon \bar{i} \pi 0 \nu$ ), which is used in composition with six prepositions. Composition is restricted in range in propurtion to the assumption of color on the part of the verb. This is illustrated in єढ̈ $\chi \circ \mu a l$ (5), aivé $\omega$ (5), d $\gamma \gamma \epsilon \lambda \lambda \omega$ (4),


Verbs of Thought and Perception form a class, whose purest representative in Aeschylus is $\gamma \iota \gamma \nu \omega \sigma \kappa \omega$. It has five compounds. Again, as the verb receives color, the number of compounds decreases. So we have d́pd́w (4), ג́коúw (2),


In diprothetic verbs there is a similar gradation in the range of combinable prepositions: $\beta a i \nu \omega$ (4), $Z \sigma \tau \eta \mu$ (2), ${ }^{\chi} \chi \omega$ (2), the others being $\ddot{a} \pi a \xi \in \epsilon \rho \eta \mu \hat{\ell} \nu a$.

## Diprothetic Verbs.

Aeschylus uses thirty-two verbs in diprothetic composition, of which only four are used more than once. The first elements, in the order of their frequency, are

 do not appear as second elements; ávź, da $\pi \delta$, and $\epsilon i s$ are not found as first. катd́ and $\overline{\epsilon \pi} \ell$ have a decided preference for the first place; $\bar{\epsilon} \nu$ for the second.

Triprothetics have only one representative, $\pi \rho o v \xi \in \pi l \sigma \tau a \mu a \iota$ (Prom. IoI).
The tables show that certain verbs are fonder of certain prepositions than of others. This is due, for the most part, to the desire to extend and reënforce the idea that is most prominent in the verb. So $\dot{\alpha} \lambda \lambda \dot{\alpha} \sigma \sigma \omega$ and $\epsilon \bar{l} \rho \gamma \omega$, with their idea of separation, combine chiefly with $\alpha \pi \delta ; \dot{\alpha} \mu \varepsilon \ell \beta \omega$, "exchange," unites with $\delta$ da. This favoritism is carried to the point of excluding all other prepositions- $\sigma \tau \epsilon \rho / \sigma \kappa \omega$ is used only with $\dot{\alpha} \pi \delta$, and $\dot{\alpha} \mu a \rho \tau \alpha \dot{\alpha} \omega$ with $\dot{\epsilon} \kappa$. This exclusion may also affect the simple form; as $\dot{\alpha} \nu o i \gamma \nu v \mu \iota$ and $\bar{\epsilon} \pi o \pi \tau \epsilon \dot{v} \omega$ serve to show.
18. Remarks on the Water Supply of Ancient Rome, by Professor M. H. Morgan, of Harvard University.

This paper is printed in full in the Transactions. It was discussed by Professors Sihler, Wheeler, Ashmore, Harrington, and by the author, in reply.
19. The use of кє́к $\lambda \eta \mu \alpha \iota$, and the Meaning of Euripides, Hippolytus 1-2, by Professor J. E. Harry, of the University of Cincinnati.

Of the four interpretations of Hipp. I-2 three are false and the fourth but

 of the third theory conceive that there is a twist in the sentence: $\pi 0 \lambda \lambda \grave{\eta} . .$.
 understood at the end of the first verse. But, as Aristotle says, $\delta \lambda \omega s$ $\delta \dot{\epsilon} \delta \epsilon \hat{\imath}$
 $\ddot{\omega} \sigma \pi \epsilon \rho \tau \grave{\alpha}$ 'H $\mathrm{H} a \kappa \lambda \epsilon i \tau o v$. And the rotunda volubisque sententia of Euripides is of

 the very opening of a masterpiece.

The poet's object is nut to inform his audience how renowned the $\theta \in$ is, but who she is, just as in the vase paintings of the archaic type the goddess is labelled A $\varnothing$ POДITH for the information of the beholder. So in half the plays the speaker's purpose in the prologue is to acquaint the audience with his identity. In the Phoenissae the positive statement is made that 'Ioкd $\sigma \tau \eta$ is the speaker's name, not $\phi \dot{\sigma} \sigma \epsilon \ell$, but $\theta \dot{\epsilon} \sigma \epsilon \iota$ ( $\pi a \tau \grave{\eta} \rho \stackrel{\epsilon}{\epsilon} \theta \epsilon \tau 0$ ); hence we are not surprised to find
 connection with the foreguing verses. Not to speak of the pointlessness of the utterance in the bare form "I am renowned and not without renown," such a
 which contains the $\delta \ell$ corresponding to $\mu \hat{\ell} \nu$ in I ), nor, indeed, with the rest of the prologue, which is only an amplification of this verse. It is the power of the goddess that is to be manifested in the following story. At the end of the play (after Aphrodite has manifested her terrible power) the chorus hastens to recognize and exalt this power in an ode, the beginning of which bears a striking resemblance to what the goddess says of herself in the first two verses: $\sigma v \tau d v$


 oi катд $\chi \theta 6 \nu \dot{\nu}$ éкүovor. What is more natural, then, than that she should be (and that the poet should declare in the very first verse that she is) $\pi 0 \lambda \lambda \grave{\eta} \boldsymbol{\varepsilon}^{2} \nu$ Bporoĩat?
 . . . $\delta \sigma \eta \theta \in b s$ ). When Euripides sneers at Aeschylus (in the Ranae) for not
 scholiast says $\pi 0 \lambda \lambda \eta$ means $\delta v \nu a \tau \eta, \theta a v \mu a \sigma \tau \eta, \mu \varepsilon \gamma i \sigma \tau \eta$. Cp. Soph. Ai. 714


 ch. 7).

If $\kappa \epsilon \kappa \lambda \eta \mu a \iota$ Kúmpıs were in I and $\pi 0 \lambda \lambda \eta \dot{\eta}$ in 2, no other meaning than ich heisse Kypris would have suggested itself. кéк $\lambda \eta \mu a \iota$ with Kún $\rho \iota s$ and $\kappa \hat{\varepsilon} \kappa \lambda \eta \mu a \iota$ with $\pi 0 \lambda \lambda \eta$ are two different verbs.

The so-called perfect $\kappa \kappa \kappa \lambda \eta \mu a t$ is not used of the transitory, but of the fixed, whereas the present designates the fleeting, that which is for the time being. The character of the person inheres in the name (Io, Apollo, Polynices, Aias, Dolon, Ion, Thoas, Polus, Draco, Thrasyboulos). Cp. Aesch. Ag. 68ı ff, Eur. Bacch. 367, Tro. 990, Hipp. 400, 1304, Plato, Crat. 383 A, 388 B, Ar. Rhet. III, 6, Cic. Or. III, 37, 149; 39, 159, Pro Caecina XVIII, 51, Genesis xxvii. 36. The nomen el omen meant much more to the ancients than to us. Kypris would call herself by a name which would accord with her character, which would indicate

 perfect $\kappa \epsilon \kappa \lambda \eta \mu a \iota$.

It is significant that the perf. active barely emerges in Greek literature (only six times, and all but one the regular perf. of калєiv, adrocare). The ordinary meaning of $\kappa \hat{t} \kappa \lambda \eta \mu a t$ is ignored, and $\kappa \hat{\varepsilon} \kappa \lambda \eta \kappa \alpha$ is used as the perf. of $\kappa a \lambda \hat{\omega}$ (instead
 phrases. The perf. pass. in this sense is extremely rare. But $\kappa \epsilon \kappa \lambda \eta \mu a \iota$ occurs over a hundred times, and regularly in the sense of je me nomme.

The tense is fatal to the Earle-Weil theory. An exact parallel to $\pi 0 \lambda \lambda \dot{\eta}$ $\kappa \epsilon \in \kappa \lambda \eta \mu a \iota$ cannot be found. The common adj. is not used as often in the pred. as are other forms. The first example of $\kappa \epsilon \kappa \lambda \bar{\eta} \sigma \theta a t$ appears in $A, 250$. There are five examples in Homer. The pres. is common and regularly used of that which is so named at certain times, in certain places, by certain persons or under certain conllitions. There is one example of $\kappa \epsilon \kappa \lambda \hat{\eta} \sigma \theta a \iota$ in Hesiod, six in the lyric poets, eight in Aeschylus, five in Sophocles, twenty-two in Euripides, and three in Aristophan=s. Herodotus has ten examples, Thucydides fuur, Nenophon four, Plato six, and the orators one. These argue against taking $\pi 0 \lambda \lambda \grave{\eta} \kappa \epsilon \in \lambda \lambda \eta \mu \iota$
 the only instance of its use in a passive sense. Aristophanes employs the form often, but regularly as a middle, contrary to the rule with other verbs. The pres. and fut. middle and passive of кал $\epsilon \hat{\nu} \nu$ are identical in Attic; hence the fut. of $\kappa \epsilon \kappa \lambda \bar{\eta} \sigma \theta a \iota$ had to serve as fut. of $\kappa a \lambda \epsilon \bar{i} \sigma \theta a t$ as well. The regular fut. pass. of $\kappa \alpha \lambda \hat{\omega}$ is $\kappa \epsilon \kappa \lambda \dot{\eta} \sigma \sigma \mu \alpha \iota$ (rarely $\kappa \lambda \eta \theta \dot{\eta} \sigma \circ \mu \alpha t$ ). Consequently, the so-called fut. perf. is often found where the principles enounced for the pres. and perf. would not seem to warrant the use of this form. It is merely a makeshift ( $\kappa \epsilon \kappa \lambda \eta \eta_{\sigma} \mu a l$ for $\kappa \alpha \lambda о \hat{\nu} \mu a l$ ). On the other hand, where the pres. is usel, the meaning is regularly "called for the nonce." The participle meaning "so-called" is exceedingly common and almost always present.

Euripides endeavored to keep his trimeters intact. If $\pi 0 \lambda \lambda \dot{y}^{\prime}$ is read with $\kappa_{\epsilon}^{\epsilon} \kappa \lambda \eta \mu a \iota$, the verses are not Euripidean. But when one gets an idea that a certain passage has a certain meaning, it is very difficult to get rid of that idea. ${ }^{1}$ The indicative in Luke ii. 29 is generally quoted as an imperative. So the Latin version (dimitte instead of dimittis). Schömann translates $\tau i \not \chi \alpha \lambda \hat{a} \mu \alpha \nu t \omega \nu \nu$ (Aesch. Prom. 1057) "wie zähmt' er die Wuth?" Another scholar renders "wie ver-
 (Hipp. 167) "she walks in the number of the gods." Paley translates "thanks to the gods." Van Herwerden says, "requiro $\overline{\epsilon \nu} \theta \in o i ̂ \sigma$, ," which shows that his conception is equally erroneous. These to show how well the language of the tragic poets is understood by eminent scholars. Many think tis is predicate in Hipp. 369 . Bat the few examples of $\tau$ is in the pred. without $\dot{\omega} \nu$ are different. To the Greek the juxtaposition of $\tau i s$ with $\sigma \epsilon$ is sufficient to justify his conceiving the words as subject and object respectively. The tragic poets do not separate,

${ }^{1}$ Cp. Ludwig Schmidt's reason for taking ò päte (Aesch Prom. rig) as imperative. Humphreys' note on Sophocles, Ant. 806, fell under my eye just too late to notice in my paper in the last volume of the Transactions. The fact that a note is necessary shows the doubt that lurks in the reader's mind. ذр $\mathbf{p}$ тє imperative of actual perception is practically never employed - the one or two supposed examples are not certain. I take this opportunity to explain my remarks on $\sigma \kappa \dot{\varepsilon} \psi a l$ and $\sigma к о \pi e \bar{\tau} \epsilon$ in the same paper. The statements refer to common prose usage. They are made in the paragraph on the orators; but, of course, I do not include that pink of perfection, Isocrates, who is faultily faultess and icily regular (using oxé $\psi$ at to correspond with (rке்षаб $\theta \epsilon$ ). In Aeschines $\sigma \kappa \dot{\&} \psi a \sigma \theta e$ occurs ten times, $\sigma x \circ \pi \epsilon i \tau e$ not at all. Lysias employs
 never: $\sigma \times 0 \pi \epsilon i \tau \epsilon$ eight (all orations), $\sigma$ кé $\psi a \sigma \theta \in$ fifty-nine times.

 extension of a phenontenon familiar in smaller complexes, like $\mu \tau \kappa \rho \delta \nu \breve{\epsilon} \chi \omega \nu \chi \iota \tau \omega \nu \alpha$, where $\tilde{\epsilon} \chi \omega \nu$ is mortised into the adjective-substantive phrase. As Weil says elsewhere, the Greek language is "le déseppuir des grammairiens rigides." A little tot says "me no get fur you." There is no analysis; the sounds are all there; the transposition (for-get) matters little to the unanalytic mind. The Grecks likewise manipulated language fruitfully without the interference that comes from


The whole trouble seems to have arisen from the accidental circumstance that á $\nu \omega \dot{\nu} \nu \mu o s$ bears a certain synonymical relation to $\kappa \hat{\varepsilon} \kappa \lambda \eta \mu a \iota$. But in this sentence



In the play on the passion of Christ the verses read -

$$
\begin{aligned}
& \dot{\alpha} \gamma \nu \dot{\eta} \times \epsilon \kappa \lambda \eta \eta_{\sigma \epsilon \iota} \tau \hat{\eta} \sigma \delta \epsilon \gamma \hat{\eta} s .
\end{aligned}
$$

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Remarks were made by Professor Earle, and by the author in reply.
20. The Carmen Figuratum as shown in the works of Publilius Optatianus Porphyrius, by N. Wilbur Helm, Esq., of Princeton University (read by title).

Although the period of decline in any great literature offers little of value from the standpoint of literary content and excellence, it is not always without some features which are interesting and often almost amusing from the standpoint of structure and form. At such a period in the history of a literature the carmen figuratum finds soil especially adapted to its luxuriant growth. Among Latin writers Publilius Optatianus Porphyrius, of the time of Constantine, stands forth as one of the best representatives of composers of this class of poetry. In fact, L. Müller (de re metrica, p. 466) thinks that he excels all such writers of every age and race. It is really remarkable to what a degree of perfection he has carried the art of the most difficult tricks of versification. Judged from a literary standpoint his poems have little to commend them, since his choice of thoughts and words must include those which will permit his acrostics to be properly formed.

It is difficult, in fact almost impossible, to determine how much Optatianus was influenced by his predecessors. The carmen frymratum is found in the literature of the East, and it is reasonable to suppose that these Eastern poems were known to the Greeks and perhaps to the Romans. Of the Greek poems it is probable that he used the Ara of Dosiada as the model of his Ara, and the Fistula of Theocritus for his Fistula. Haeberlin, who hes editel the Greek carmina figurata, ${ }^{1}$ comes to the conclusion that an edition of these Greek poems was

[^47]extant in the time of Optatianus, and that it was known to him. On the Iatin side preceding him were acrostical poems by Ennius and Commodianus Afer, while some of the poems of Vergil and Ovid and Martial might be classed under this head; but it is not probable that they had much to do in influencing him.

He may be identical with the Publilius Optatianus, who was praefectus urbi in 329 and 333 A.D. Barth (Adversaria XXII, 18) advances the theory that he was born in Africa. For some unknown reason he was sent into exile, but by his poems in praise of Constantine secured removal of the sentence and became a favorite of the emperor. Little else can be found about his life.

To the poems forming part of this panegyric of Constantine are added some addressed to a certain Bassus of uncertain identity. Accompanying the collection is a letter of praise from Constantine and one by Optatianus, in which he thanks the emperor for his acceptance of the poems written in his honor.

In view of the fact that the poet uses the monograms of the Church and the word "Jesus" in his poems one would suppose that he were a Christian, but the following from Beda (De arte metrica) would seem to indicate otherwise : "Reperiuntur quaedam et in insigni illo volumine Porphyrii poetae, quo ad Constantinum Augustum misso, meruit de exsilio liberari. Quae quia pagana erant, nos tangere non libuit."

The manuscripts are Bern. 212 of the ninth or tenth century; Philippicus 1815 of the tenth; Vatican Regin. 733 of the tenth; two Paris numbers, 2424 and 7806; and Eporadiensis 70 of the tenth. In the Mss. the monograms and acrostical figures are in red, the rest of the text being black. For a full discussion of the Mss. cf. L. Havet, "Observations sur l'histoire des manuscrits d'Optatianus," Revue de Philologie I (1877), p. 282.

Among the editions of these poems are P. Pithoeus, Poemata vetera, Paris, 1590; Marci Velseri opuscula, Nuremburg, 1682; and Migne's Patrologia Latina, Vol. 19, pp. 391 sqq . The latest edition is that of L. Müller, Leipsic, 1877.

The following articles deal with the subject: " Zu Optatianus Porfyrius," G. Götz and G. Löwe, Leipziger Studien zur Classischen Philologie, 1878, Vol. 1, p. 377. "Jahresbericht über die römischen Epiker," von E. Bährens in Jahres bericht über die Fortschritte der classischen Alterthumswissenschaft, 1877, p. 58. " Kritische Analekten," von W. Fröhner in Philologus, Suppl. Band, Vol. 5 (1889), p. 74.

I will discuss some of the poems, taking them in the order in which they occur in Migne, and will pay attention to the metrical side rather than to the literary side.

No. I is quite normal, being composed of alternate hexameters and pentameters. It reminds one not a little of Martial.

No. II is the Ara. It is composed of 24 verses, all being senarii, and so arranged that they form an ancient altar, with remarkable fidelty. The first verse, "vides ut ara stem dicata Pythio," at once suggests Horace, Odes 1. 9, "vides ut alta stet nive candidum Soracte." For notes on this poem cf. Wernsdorf, Poetae Latini Minores, Vol. 2, p. 380.

In No. III the first verse is composed of dissyllables, the second of trisyllables, the third of tetrasyllables, the fourth of pentasyllables. In the fifth verse the first word has one syllable, the second two syllables, etc. The sixth verse has
five words, the first four being interchangeable. The seventh verse has eight words, no part of speech occurring twice. The eighth verse has each of its five words in the same case.

The following figure is formed in No. V by the acrostical verses:


It is composed of thirty-five lines, each of thirty-five letters, the poem as a whole forming a so-called square. Each line is regular and makes thought. By employing certain letters of certain lines in order various verses are formed, which make sense and form the outlines of the above figure. This is the general plan followed in forming the varying figures in the different poems.

No. VI has the following figure:


It is the square of thirty-five lines, each of thirty-five letters. The first line reads, "sancte tui vatis Caesar miserere serenus." The line on the left of the figure, made by taking the first letter of each verse in succession, reads the same. The last line reads thus; and the line on the right, formed by taking the last letter of each line, reads thus. The eighteenth verse reads thus, and the eighteenth letter of each line in order reads thus. It is a skilful piece of work.

No. VII has eighteen verses of thirty-nine letters each. Its figure is as follows:


No. VIII forms no regular figure, as its twenty lines are unequal in length. The first letters of all the verses together read "fortissimus imperator," the fourteenth letters, "clementissimus rector," the last letters, "Constantinus invictus."

The figure of No. IX is the symbol of the early Christians:


The line \extends from letter one, line one, through letter two, line two, and so on successively to line thirty-five, last letter.

No. X forms no intricate figure. It has thirty-eight lines of unequal length. The first letters form a verse. The tenth letters form this Greek verse, Neîmév $\sigma 0$,

 кal Aüбovloo $\sigma \iota$ à à $\alpha \sigma \sigma \epsilon \iota$.

No. XI is quite odd and picturesque in figure. The acrostic is shaped thus:


No. XII is the Fistula, or Syrinx, of fifteen lines, each line having one less letter than its predecessor. Wernsdorf, that he may preserve the traditional fistula of seven reeds, places the first three lines closely together, and divides the remainder into pairs, the lines of each being placed closely together. Owing to the intricate versification, the thought is necessarily obscure.

No. XIII is composed of two sections, each of twelve lines, which are unequal in length. Only the first section has any special peculiarities. The first letters together read "Pius Augustus," the last, "Constantinus." The second section has its lines composed of the same words as the corresponding lines of section one, but in just the reversed order.

No. XIV has but ten lines. Its figure is an inverted W.
No. XV has worked out in the body of the poem, which is a square, the monogram:


No. XVI has the same figure as No. IX.
No. XVII is quite unique. It has the monogram of the Christians and the word "Jesus" arranged thus:


No. XVIII forms a figure like lattice-work, and is very intricate. It has thirtyseven lines of thirty-seven letters each.


No. XIX is thus formed:


It is the square of thirty-five lines and thirty-five letters each, and is a splendid specimen of our poet's skill. The first and last lines each read "alme tuas laurus aetas sustollet in astra." The first letters of the lines and the last letters also form this same sentence. The other lines of the figure form various verses, the whole a piece of difficult work.
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No. XX forms the figure of a palm :


Because they cannot extend to their full length, the first branches on each side of the stock are joined to the second branch on their respective sides. The poem has thirty-six lines, each of thirty-seven letters.

No. XXI is extremely fanciful. Its figure is:


The cross-lines and each of the V's make sense, and vary in length according to the position of each.

No. XXII forms its acrostic by employing two verses of five words each, and each word of seven letters. They are "dissona Musarum vinciri stamine gaudens" and "grandia conabor Phoebo carmina plectro." The figure is a peculiar one:


The two upper vertical lines of the figure read "grandia" and "plectro," the two lower read " dissona " and "plectro."

No. XXIII is the usual square. Its figure is:


Nos. XXIV and XXV furm the "Organ," which, because of its skilful composition, is considered by Wernsdorf to be the masterpiece. It is really made up of two poems, each of twenty-six verses. The first is written in iambics, and each verse contains eighteen letters. Between this and the second poem runs this verse, "Augusto victore iuvat rata reddere vota"; which, so to speak, forms the channel, such as is found in hydraulic instruments. The second poem has twenty-five letters in its first verse, each succeeding verse containing one letter more than its predecessor, the last having fifty letters.

No. XXVI is composed of these verses:
" Ardua componunt felices carmina Musae Dissona connectunt diversis vincula metris, Scrupea pangentes torquentes pectora vates, Undique confusis constabunt singula verbis."

They are so arranged that, if the last words of each line are kept in that place, the others may be changed to any position in the sentence one pleases, provided the corresponding words of each line occupy the same corresponding position after being changed. By these rearrangements of order it is possible to make seventy-two verses, no two of which shall be alike, and which shall yield a sort of meaning.

On the whole, Optatianus pays careful attention to his verse-construction and prosody, although some weak points appear, which, however, are more the fault of the time than the man.

He has added to each poem a piece in prose, giving instructions as to how to form the acrostic.

I have intentionally omitted, from a paper of the scope of this one, any special treatment of style or literary merits of the poems, leaving this field for another time and place.
21. The Duenos Inscription, by Professor George Hempl, of the University of Michigan (read by title).

This paper appears in the Transactions.
22. Note on Tacitus, Agricola, 3r. 5, by Professor Charles Knapp, of Barnard College, Columbia University.

All three Mss. of the Agricola read here in libertatem non in penitentiam laturi (see O. Leuze, Philologus, Supplementband, VIII, 550). That there is some corruption is manifest.

Of the emendations hitherto proposed two, arma laturi (Wex), and in patientiam belluturi (Wölflin), have been considered least unsatisfactory. Yet neither is free from serious objections; both depart widely from the Mss.; neither supplies any explanation of the corruption.

Wölflin objected (Philologus, XXVI, 99) that at the time of this speech the Calcdonians were already in arms, that is, that they were arma ferentes, not arma laturi. If this objection were being urged against a manuscript text, we might lightly brush it aside ; we might say that Calgacus was projecting himself in fancy to the moment when the fight should actually begin, instead of prosaically describing existiug conditions. But since arma laturi does not represent manuscript tradition, Wölflin's objection to the phrase must receive consideration.

Professors Furneaux and Gudeman rightly hold that there is no excuse for Wölflin's change of paenitentiam to patientiam. The alteration is due to a failure to grasp the interrelations of the various parts of the paragraph ; see more below. Halm's reference to Agr. 16, 2, quam unius proelii fortuna veteri patientiae restituit, as a support for Wölflin's change seems without furce, for the manuscript testimony and the context in the two passages are widely different. patientiae veteri in 16, 2 is but an echo of nihil profici patientia, 15, 1. In 31, 5 there is no reference to suffering ; there is, however, definite reference to change of heart.

An emendation has occurred to me which seems so simple that I wonder that it has not been presented before. Why not delete the in before libertatem? (With this reading there will, of course, be no comma after libertatem.)

In justification of libertatem . . . laturi, it is enough to cite the familiar phrases, laudem ferre, victorian ferre, honorem ferre; here fero $=$ aufero, 'win.' For phrases of this sort in Tacitus, see Gerber and Greef, s.v. fero, B, 2, c. The combination libertatem non . . . laturi is indeed harsh, but not unusually so fur Tacitus; besides, in this very harshness we may find the origin of the corruption by which the non before libertatem was injected into the text. A scribe with the text I have suggested before him would miss the antithesis to non in paenitentiam, and would think also of the frequency with which Tacitus uses in + accusative to express purpose; on both grounds he would be led to insert in before libertatem. This would give the antithesis which he failed to find in the text otherwise. It should be remembered that the antithetical forms non . . . sed and . . . , non are very common, and must have been familiar to every scribe. (We might explain the corruption also as a simple case of dittography.)

It may be urged that the proposed text is inconsistent with integri et indomiti. But Wex's and Wölflin's readings are open to the same objection, though no one seems to have noticed this point. In so impassioned a passage inconsistency is not to be wondered at ; cf. also in excidium . . . reservemur, 3I, 3 , with hic dux . . . poenae, 32, 5 (but see Professor Gudeman ad loc.). Again, in these two chapters there is much wcakness of thought. In 31, 2 the famous sentence, Britannia servitutem suam cotidie emit, aotidie pascit, which sounds so well, will not bear close examination, for it makes the Britons at once slaves and slave-
owners. In 31, 3 Tacitus has not worked out his thought consistently; in view of what has preceded novi . . . petimur ought to $=$ nos novi tanto opere in ludibrio sumus ut conservi ipsi nos petant ut nos excidant, but they mean nothing of the sort, and all Tacitus's fine language on close analysis breaks down.

We must remember, also, that though the Caledonians are in fact free, yet inasmuch as, if they shall be defeated, they will forfeit their independence (cf. 32,5 ), it is no great stretch of language to speak of victory as involving the winning of their independence.

An analysis of the whole section will reënforce what has been said. There is an obvious antithesis between Brigantes and nos. The juxtaposition, Brigantes femina duce deserves notice; the fact that the Brigantes made no move to regain their independence till they were stirred to action by a woman throws light on their character. One would expect not simply nos to balance Brigantes femina duce, but nos (me) viro duce, or the like. Yet the self-gratulatory nos, reënforced as it is below by viros, amply tells the story. Desides, the omission of (me) viro duce is tactful; Calgacus was not technically imperator or dux of the Caledonians; he was only dux inter plures virtute et genere praestans (cf. 29, 4).

There is contrast, too, between exuere iugum and integri et indomiti. When the Brigantes were at last spurred to rebellion, they were domiti iam atque viribus exhausti. There is antithesis again between in socordiam, which virtually $=$ in paenitentiam, and non in paenitentiam, and lastly, to some extent, between exuere iugum and libertatem . . . laturi. The argument is: 'The Brigantes fought to throw off the yoke; we are fighting to gain (retain) our independence ; the advantage is all on our side, for we have the stronger motive; if, then, they did so much, what may not we hope to accomplish ?'

The force given to the paragraph by these antitheses can be brought out only by a paraphrase. 'The Brigantes (even after they had been enslaved, and their strength had been thus impaired, and), though they had only a woman to lead them, were able to burn a (Roman) colony, to storm a (Roman) camp, and, had they not repented them, had thrown off the (Roman) yoke; let us, whose strength is unimpaired and who have never yct been subdued (who have no woman but a man to lead us), who are resolved to win our independence, not that we may repent of it (as the Brigantes did, but that we may possess it for ever), let us, I say, . . . show what MEN Caledonia has had in reserve for its defence.'
(A word now on another topic. With femina duce, 31, 5, cf. Agr. 16, 1, Boudicca generis regii femina duce . . . sumpsere universi bellum, and Aen. i. 364 , dux femina facti. Neither Gudeman nor Furneaux has cited this Virgilian parallel. For another Virgilian reminiscence not noted by these editors cf. Agr. 13, 3, mox bella civilia et in rem publicam versa principum arma, with Aen. vi. 833, neu patriae validas in viscera vertite vires, and Lucan, i. 2, 3, ius ... canimus populumque potentem In sua victrici conversam viscera dextra. Gudeman ( $p$. xxxvi, $d^{\prime}$ ) notes Tacitus's fondness for Lucan.)

Remarks were made by Professors West, Kirk, and Morgan, and by the author in reply.

Adjourned at 4.50 P.M., whereupon the members of the Association attended a tea given in Jackson Garden by the ladies of Schenectady.

## Fifth Session.

The Association assembled in the College Chapel, at 8.1o p.m.
23. Cicero's Puteolanum, by Professor Karl P. Harrington, of the University of Maine (illustrated by lantern slides).

Did Cicero have a separate villa which he called his "Puteolanum," as O. E. Schmidt (Cicero's Villen, p. 50 sqq.) argues? Or was "Puteolannm" sometimes another name for "Cumanum," and, at others, for a purchase from the estate of Cluvius, but not for a villa, as Beloch (Campanien, p. 175) contends?
I. It is impossible to prove that Cicero made a practice of designating his Cumanum by the term " 「uteolanum"; while various passages indicate that he distinguished two estates under these appellations:

Ad Att. XIV. 16, 1 : haec Futeolana et Cumana regna.
Ad Att. XIV. 20, 1: accepi tuas litteras, quas tuus tabellarius in Cumanum attulisse dicebatur Nonis Maiis datas. A Lucullo postridie eadem fere hora veni in Puteolanum. Ibi accepi duas epistolas, alteram Nonis, alteram VII Idus Lanuvio datas. Audi igitur ad omnes. (Atticus distinguished between the Cumanum and the Putcolainum in addressing the different letters to which reference is here made.)

Ad Att. XV. 1a, I: Heri dederam ad te litteras exiens e Puteolano deverteramque in Cumanum.
II. Some important indications that the ruteolanum was properly a villa are the following:

1. Cicero seems to have had facilities there to entertain Caesar on his famous visit (Ad Att. XIII. 52) (note also the expression, villa defensa est). For (a) the adjoining villa of Philippus, where Caesar spent the preceding night, is understood to have been in, or near, Puteoli ; (b) the tradition is that this letter (which was composed soon after Caesar's departure) was written at the Puteslan'm!; (c) the expression in Sec. 2, Puteolis se aiebat unnum diem fore, implies that he was intending to stay where he was; (d) Caesar's walk on the beach (ambulavit in litore) could have taken place as well from the Puteolanum as from the Cumanam.
2. The estate of Cluvius comprised, besides the money (nummos, magnum pondus argenti), praedia (' farmstead,' Tyrrell and Purser) (Ad Att. xiii. 45, 3) horti (xiii. 46, 3), and rents (xiv. 10, 3 ; xiv. 11, 2). Some of the rents were 'shops' (xiv. 9, 1). The farmstead and gardens would fitly have gone together ; and in an estate of this magnitude the house itself must have been worthy of the name of "villa" when considered in connection with its surroundings.
3. The amount of time spent at Puteoli during the last year of Cicero's life is so large, and the persons there entertained so important, that it must be placed on a par with the other villas.
III. Certain consecutive letters to Atticus imply carefully-planned sojourns at the Puteolanum, as if that were a satisfactory place for such a stay: (a) the group beginning with xiv. 7 , and ending with xiv. 12, in which we see him part of the time at the Cumanum, part of the time at friends' houses in, or near

Puteoli, and part of the time on his own estate at Puteoli; (b) the group beginning with xiv. 15 and ending with xv . 1 a , in which we see him by turns in the Cumanum, the Pompeianum, and the Puteolanum, a considerable portion of the time being spent at the Puteolanum - as much as at either of the others - while he was apparently unable to see any difference between the general character and attractiveness of each.
IV. It is, of course, very difficult to-day to gain an accurate idea of what was in Cicero's time the topography of the region of which the Monte Nuovo is at present the centre. The sudden appearance of that volcanic crater in the sixteenth century not only obliterated the Lucrine Lake, but was also attended by other important changes in the relations of the immediate neighborhood. The exact situation of the villa "ad Lucrinum" depends largely upon the classical extent of the Lucrinus; and the vicinage of the horti Cluviani is of a very different character from that of twenty centuries ago. But it may be regarded as reasonably certain that the gardens of Cluvius were not in the narrow limits of the town of Puteoli itself, but were doubtless on some of the neighboring heights. The approximate location of the Cumanum may also be confidently settled in the general district once occupied by the lower slopes between the Lucrine Lake and the Lake of Avernus. Bearing in mind, now, the well-known fondness of Cicero for commanding sites, and his willingness to be enriched by the corner of his neighbor's land, he never having read the self-righteous disclaimer of Horace to any such covetousness, I make bold, in view of the considerations and descriptions alrcady noted, to advance the theory that the estate of Cluvins was a large one, which either immediately or approximately joined the part of the Cumanum which stretched back into the interior and upon the higher ground ; and that Cicero's interest in acquiring these famous gardens lay partly in the fact that they would help form, with what he already possessed in that vicinity, a great park, at the extremes of which would be spacious residences. The approach from the sea at the Puteoli end would naturally be at some distance from that to the Cumanum; and communication between the two would be most simple by water. Near the entrance to the Puteolanum would be the shops; farther back, the residence. In the rear the gardens extended toward the Cumanum. Cicero could easily and often, as he actually did, pass from one to the other, as the letters quoted show.
24. The Music and Poetic Rhythm of the Greeks in the Light of
Modern Research, from a Musical Point of View, by Professor John
A. van Broekhoven, of Cincinnati.

To the modern musician, as well as to the scholar, the subject of Greek music and poetic rhythm has remained as much a sealed book - in spite of Westphal's labors - as it was to Boethius. Westphal has not cleared the mist surrounding the technical aspect of the matter, owing to his want of technical musical knowledge necessary to a solution of this most intricate subject. And the practical musician has been hampered by a lack of classical scholarship on the one hand, and on the other by the consequent unfamiliarity with the material. Thanks to the indefatigable labors of modern scholars, the mass of material relative to the subject has been collected and translated, and thus made accessible to the prac-
tical musician. Since it is generally conceded that the question is exclusively a musical one, it is apparent that its solution can result only by the aid and application of a practical method. Hitherto, the error has been made of seeking to impose on the Greeks our modern system of music and instrumental rhythm, of which the Greeks had no suspicion, owing to a totally different phase of historical development. The historical basis must be fuund before the practical evolution can be demonstrated. This has been made possible of late by new facts brought to light by archaeological research. We can now trace the development of the music system of the nations anterior to the Greeks; and from this source we obtain the evilence that the simplest of all musical instruments, the trumpet, was the basis of the music system of ancient man, and that the step in the religious dance of ancient man was the source of rhythm. For the hexameter - the most ancient metrical form element - owes its origin to the six steps required for a complete turn in the round dance. In these historical factors - the trumpet and the hexameter - are embraced the elements of the system ; and with these as the basis can be presented the logical and practical evolution of Greek music and poetic rhythm. As a result of this historical starting-point, every vestige of information now for the first time finds its practical application and justification. Technical details hitherto thought worthless prove most valuable links in the chain of evidence. And the original text, which in many instances has been perverted by Westphal and others, constitutes the most conclusive proof in the present exposition.

It has never been surmised, for instance, that in the six steps of the hexameter are embraced, in embryo, the original eleven verse rhythms of Greek poetry, as employed in the Apollo hymns, in the first archaic period of Greek music represented by the first poet-musician, Terpander of Lesbos, who was also the inventor of the seven-string lyre.

The limitation of this paper will not permit a presentation of the musical phase, nor that of the rhythmical development as a whule; I can but point out some of the characteristic features of the rhythmic system, and its divergence from the modern practice. No one has as yet attempted to present the archaic type of Greek verse rhythm, nor point out its course of evolution. And yet we are told by Plutarch, Aristides, and others that the archaic conditions of music and rhythm, as represented by Terpander about 700 B.C., were in vogue throughout the whole classic period of Greek poetry down to the time of Euripides. Of these conditions Westphal takes no notice, or if he dues, he is unable to conceive the historical aspect. Hence his failure to present the subject in its true light. The archaic forms of verse rhythms were called Tropos Spondeiazon, and Aristides tells us that in this form the time value of the syllables were augmented fourfold; each short syllable receiving four time fractions (semoi) instead of one, as in the ordinary verse rhythm, and the long syllable receiving eight fractions instead of two. Thus the four fractions of each short syllable in these hymns were equivalent (in time value) to one step, and the eight fractions in the long syllable to two of the six steps in the hexameter. In this augmented form of short and long syllables we find eleven different verse rhythms embraced in the six steps of the hexameter; namely, two iambics, two trochees, three spondees, two molussi, one cretic, two forms of the paean, the bacchius, and the choriambus, or Ionic. In this furm - the so-called Tropos Spondeiazon - the iambos orthios, the trochaeos

Semantus and the Spondeion (Meizon) were employed by Terpander, as Plutarch claims, in his Apollo hymns. From a fragment of one of these hymns, we see that the stanza was composed of four lines; six syllables in the first and third, and five syllables in the second and fourth line. Each of these syllables being delivered to one step in the hexameter, we have the prinitive form of the elegy - hexameter followell by pentameter - the pause on the sixth step in the pentameter (required as a breathing place for the singers) completing another hexameter. These forms of verse rhythms were used in a different manner by Archilochus, who introluced a complete reform by their application to the worship of Dionysus, of which the dithyramb was the dominant factor. In the latter the hymns were sung to a quick and boisterous movement of the dancers, and the iambic rhythm was delivered to one step, as a single verse foot. Archilochus, furthermore, transfurmed the rhythmic propurtions by combining, in his satiric poetry, this rapid rendition of the iambic rhythm with a dignified carriage of the body; that is, by delivering two iambic rhythms to one step. Archilochus invented the iambic dipody, the so-called trimeter - six iambics sung as three iambic dipodies - to three steps, viz.:


The Greeks thus employed the same verse foot in three different syllabic proportions, which, as Athenaeus tells us, were sung in three different styles of dances; the Gymnopaedic, the Hyporchematic, and the Pyrrhic. The three styles of dances were in vogue in dramatic as well as lyric poetry. These technical features of Greek rhythm are indicated by two terms, Agogè and Pous. Neither Westphal, Boeckh, nor any other scholar of all those who have attempted a reconstruction of Greek rhythm, has been alle to apply the technical feature of these terms. Westphal defines agogè as equivalent to the term tempo, or time, in modern music, and the word pous as identical with bar, or measure.

Pous was in reality the augmented proportion of a verse foot which served the poet as a metrical basis, each step of which, as a tropos spondeiazon, could be subdivided by a single verse rhythm (a monopody) or a double verse rhythm (a dipody). In this manner each verse foot was adaptable as a metrical basis, and thus was established a most varied and artistic system of rhythm, of which there is no indication in our modern method. As each verse foot had a different place for the thesis, so the augmented podes, or pous, had a different place for the sectional accent. The term agogè indicated this proportion. The rhythm was arranged in the gymnopaedic agrgè, the hyporchematic agogě, or the pyrrhic agogè. We have the most reliable and unimpeachalle evidence transmitted to us of this practice in the Hymn to Calliope, in which the composer clearly dictates the metrical form of the hymn in the superscription, viz.: iambos - spond., iambos, baccheios. The meaning of this is more fully explained by the additional direc-



This very valuable bit of information has never been practically applied, nor its meaning solved. And yet from the present point oif view, it is clear and con-
clusive proof of the method just described. The trochaic pous $-v$ is placed in opposition to the iambic pous $\cup$ _. This constitutes, as Aristides states, a baccheios, as also the reverse. The two together establish six steps - an hexameter, viz.:

| Trochaic Pous |  | Iambic Pous |  |
| :---: | :---: | :---: | :---: |
| $\overline{R L}$ | R |  | $\overline{R L}$ |

The augmented proportions are not only indicated by the word "Spond.," which stands for Spondeiazon - and not Spondee, as all transcribers of this hymn have concluded - but the augmented proportions of the pous are distinctly called for by the poet, who states that the rhythmic group in one of twelve fractions $=\dot{\delta} \dot{j} v \theta \mu \dot{\partial} \delta \delta \omega \delta \epsilon \kappa \dot{\alpha} \sigma \eta \mu$ оs.

With the technical features clearly understood, the whole course of evolution of Greek rhythm, as well as music, can be presented in a logical and practical manner. But this can never be done by the sole aid of the Alexandrian and Roman grammarians, as Westphal attempted to do. They were led by the rules of rhetoric, which had discarded both the ancient musical phase of poetry as also the rhythmical basis dictated by the dance or choral movement. Hence the rhetoricians were obliged to invent signs for the syllabic accent, and reconstruct a new rhythmical system to conform to the needs of musical delivered prose. But having obtained the advantage of an historical starting-point, we can follow the course of development forward, as the result of technical and scientific requirements, dictated by the nature of the conditions. It is not necessary to impose on the Greeks our system, which was entirely foreign to them, considering the means employed by the Greeks. Taking into account the nature of these means, we can now unravel the subtle method of reasoning employed hy Aristoxenus, since we know what the conditions were. And we can trace the nature of the scientific speculations, which led to the complete perversion of the ancient practice, in the form transmitted to us by the Alexandrian and Roman grammarians.
25. On the Relation between the Scene-Headings and the Miniature in the Mss. of Terence, by Dr. John C. Watson, of Cornell University (read by title).

The full text of this paper will appear in the Harvard Studies in Classical Philology, Vol. xiv.

Adjourned.
Sixth Session.
Schenectady, July io, 1902.
The Association met at 9.35 A.m.
26. The First Four Feet of the Hexameter of Horace's Satires, by Dr. Curtis C. Bushnell, of Syracuse University (read by title).

This study is based upon the text of the Greenough edition. Statistics for Cicero are calculated from data given in Professor Tracy Peck's article Cicero's Hexameters, published in TAPA., Vol. XXVIII, 1897. Statistics for other
writers than Horace and Cicero are calculated from the data of Drobisch's article Ueber die Unterschiede in der Grundanlage des lateinischen und griechischen Hexameters, Berichte der Gesells. d. Wissens. 2u Leipzig, Shil.-1Iist. Classe, 1873, p. 7 ff.

Table I. The Sixteen Possible Arrangements.
d. indicates a dactyl, s. a spondee.

| Arrangements |  |  |  |  |  |  |  |  <br> 安高 <br> 든 <br>  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 1 | 1 | 12.8 | 13.4 | 1 | 16.8 | 4(Enn.) | 28.8 (Ca |
| s. |  | 2 | 2 | 2 | 11 | 10.7 | 11. | 10.0 | 2.9 (O) | 15.1 (Cat.) |
| d.s.d.s. | 1. | 3 | 3 | 3 | 10.3 | 9.7 | 10. | 9.5 | 5.8(Enn.) | 11.9 (Cat.) |
| d. |  | 4 | 4 | 4 | 9.3 | 9.5 | 9. | 11.7 | 5.8(Enn.) | 14.8 (Per.) |
| s.s.s.s. | 1. | 5 | 5 | 5 | 8.8 | $7 \cdot 5$ | 8.1 | 8.2 | 1.6 (Ov.) | 15.5 (Enn.) |
| d.s.s.d. | 1. 1. 23 | 6 | 7 | 6 | 6. | 6.2 | 6.3 | 6.7 | 3.4 (Cic.) | 13.7 (Ov.) |
| s. | I. 1 | 7 | 6 | 6 | 6.2 | 6.4 | 6.3 | $5 \cdot 4$ | 1.4 (Ov.) | 8.5 (Enn.) |
| d. d. ċ.s. | 1. 1.7 | 10 | 8 | 8 | . 9 | 5.9 | $5 \cdot 4$ | $5 \cdot 9$ | 3.5 (Cat.) | 7.8 (Ov.) |
| s.d.d.s. | 1. 1.8 | 8 | 10 | 9 | 5.9 | 4.7 | $5 \cdot 3$ | 4.2 | 1.6 (Cat.) | 6.8 (Cic.) |
| ss.s.d. | 1.1.10 | 9 | 11 | 10 | 5.7 | $4 \cdot 3$ | 5.0 | 3.0 | . 7 (Cat.) | 6.0 (Enn.) |
| d. d.s.d. | 1.1.61 | 13 | 9 | 11 | 3.6 | 5.1 | 4.35 | 5.1 | 1.4 (Cat.) | 11.9 (Ov.) |
| s.d.s.d. | I. 1. 32 | 11 | 11 | 12 | 4.2 | -3 | 4.25 | 3.9 | 1.9 (Cat.) | $5 \cdot 5$ (Hor.) |
| d.s.d.d. | 1. 1.45 | 12 | 13 | 13 | 4.0 | 4.1 | 4.05 | 3.6 | 1.2 (Cat | 6.6 (Ov.) |
| s.s.d.d. | I. 2.55 | 15 | 14 | 14 | 2.6 | $3 \cdot 3$ | 3.0 | 1.7 | . 7 (Cat.) | 3.0 (Hor.) |
| s.d.d.d. | 1. 1. 31 | 16 | 15 | 15 | 1.26 | 3.2 | 2.27 | 1.77 | .7 (Ov.) | 3.6 (Enn.) |
| d.d.d.d. | I. 2.20 | 14 | 16 | 16 | 2.9 | 1.6 | 2.22 | 2.4 | . 2 (Cat.) | 4.8(Enn.) |

The order of frequency for the arrangements is about the same for the two books. d.d.s.d. is the most marked exception.

The percentages are about the same for the two books. s.s.s.s., d.d.d.d., d.d.s.d., s.d.d.d. are the chief exceptions.

The ratio of the percentage for the most common arrangement to that for the least common is about 6:1. The corresponding ratio in Cicero is 22:1, in Catulius 144: 1.

The reverse of the most common arrangements are the least common. (By "reverse" is meant the result obtained by substituting for every dactyl a spondee, and vice versa.) Thus d.s.s.s. is first in frequency, s.d.d.d. is fifteenth; s.d.s.s. is second, d.s.d.d. is thirteenth; d.s.d.s. is third, s.d.s.d. is twelfth; d.d.s.s. is fourth, s.s.d.d. is fourteenth; s.s.s.s. is fifth, d.d.d.d. is sixteenth.

The first five of the sixteen arrangements have $5^{2}$ per cent of the cases. This is a small proportion. In Ennius, who in this respect is the lower extreme of the authors of Drobisch, the leading five have 49 per cent. Catullus, the opposite extreme, has 79 per cent; Cicero has 64 per cent, Vergil 55 per cent.

It frequently happens that the same arrangement occurs in two successive lines, more rarely in three successive lines. Such repetition occurs 73 times in the First book, 59 times in the Second book, 132 times in all the Satires, or on an average about once in every seventeen lines. The most striking case is the occurrence of s.d.s.s. in $2.5 .96,97,98,99,100,102$. The highest per cent of occurrence of any one arrangement in any one satire is d.s.s.s. in 1, 1, 21.5 per cent.

Table II. Per Cent of Spondees in the First, Second, Third, and Fourth Places.

|  | First Pl. | Second Pl. | Third Pl. | Fourth Pl. |
| :---: | :---: | :---: | :---: | :---: |
| Per cent of Spondees in | 45-3 | 55.9 | 61.6 | 68.7 |
| Average per cent of Latin poets of Drobisch in | 38.2 | 55.0 | 65.5 | 71.8 |
| Smallest per cent of any Latin poet of Drobisch in . | 14.6 (Ov.) | 51.5 (Cic.) | 60.2 (Ver.) | 56.7 (Ov.) |
| Latin poet of Drobisch with highest per cent and per cent in | 55.6 (Enn.) | 62.9 (Cat.) | 74.2 (Cat.) | 89.5 (Cat.) |

The spondees increase in frequency for the Satires from the First to the Fourth place. This is true of most Latin poets.

In both tables the statistics for the Satires closely approach the average.
27. The Grave of Tarpeia and the Origin of the Name of the Tarpeian Rock, by Professor H. A. Sanders, of the University of Michigan.

The various passages mentioning the grave of Tarpeia and the yearly libations made at the same were discussed and the conclusion reached, that the Tarpeia buried on the Capital must have been an early Vestal virgin.

The libations were therefore the yearly offerings to the dead Vestal made at the Parentalia on the Ides of February. From the Fasti of Dionysius Philocalus, it was shown that the chief Vestal began these rites presumably at the graves of former Vestals.

It was to this ceremony that Horace referred in Car. 3, 30, 9: dum Capitolium scandet cum tacita virgine pontifex.

In the second part of the paper proof was given that the Tarpeian rock took its name from an earlier residence there of some branch of the Tarpeian family, and a derivation of the name Tarpeia, compatible with this use, was suggested.

The chapters，of which the foregoing is an abstract，form part of a discussion of the myth of Tarpeia，which will appear in full in the University of Michigan Studies，Vol．I．


#### Abstract

28．Fragments of an Early Christian Liturgy in Syrian inscrip－ tions，by Professor W．K．Prentice，of Princeton University．

This paper appears in the Transactions．Remarks were made by Professor Hart，Mr．Gould，and by the author．


29．The Proprieties of Epic Speech in the Argonautica of Apol－ lonius Rhodius，by Professor Edward Fitch，of Hamilton College．

In general，Apollonius was a purist，in that he held himself strictly to the style of the earlier epic．To fix the degree of strictness which he observed is a matter of many details，and the purpose of this paper is to discuss certain points of metre， vocabulary，and syntax for the sake of representing concretely the poet＇s manner．

The exceptions to the rule of the old epic that a mute and liquid in the verse make position，are in proportion fewer and of narrower range than in Homer． The individual words have been noted by Spitzner，De Versu Heroico，pp．Ior seqq．， but since his list of references is not exhaustive，the fullowing summary is given： The combination $\pi \rho$ permits shortening before $\pi \rho \hat{\omega} \tau o \nu, \pi \rho \hat{\omega} \tau \alpha$ ，in II．I26，III． 1230，IV．867，1080，each time in the second thesis：before $\pi \rho \circ \sigma \in \nu \nu \in \pi \in \nu$ in I． 711 ， 792，III．51，78，433，474， 710 ：before $\pi \rho 6$ in II．809，III． 1198 ，IV． 84 ：before
 before Про $\quad \eta \theta \in \dot{\prime} s$, III．845，II．I249．All of these cases save the last are in the third thesis．$\beta \rho$ makes position save in II．230，$\beta \rho 0 \tau \hat{\omega} \nu . \quad \phi \rho$ save in III．1315，
 $\tau \rho$ makes position except before $\tau \rho a \pi \xi \zeta \eta$ 信 of III． 377 （cf．／liad，11，636），T $\rho \iota \kappa \kappa a l o t o$ of II． 955 （cf．Iliad，4，202），and K $\boldsymbol{\epsilon \epsilon} \epsilon \pi \pi a ́ \tau \rho \eta \nu$, II．239．$\delta \rho$ makes position，except in the case of $\delta \rho \alpha \kappa \omega \nu$, in the four passages where it．occurs，II．405，III．II7 8 ， 1215，IV．154I．$\theta_{\rho}$ except before $\theta_{\rho} \delta$ vos，IV．692， 719 ，and before $\theta_{\rho \eta ı \kappa i \eta, ~ I . ~}^{799}$.
 סакр́́o七எ九，III． 805 （cf．Odyssey，18，173），краті，III．1228，крךขaîal，III．1392， Kрátaulv，IV．829．Homeric precedent is found for all of these save крє́ $\mu a v \tau a \iota$,
 П $\lambda \eta \iota \alpha \delta \epsilon \sigma \sigma \iota$, III．226，$\kappa \lambda$ except before $\kappa \lambda \nu \delta \delta \omega \nu \circ$ ，II．73，$\phi \lambda$ except before $\phi \lambda \epsilon \gamma \rho a i \eta$ ， III．234．Of the few innovations of Apollonius，six are proper names．Even here he is so conservative as altogether to avoid the use of ${ }^{\prime} A \phi p o \delta i \tau \eta$ ，which in the hexameter requires a shortening before $\phi \rho$ ．In the tiventy－one cases where the goidess is named，Kúrpis and Kvetpela are used．

Rzach in his Grammatische Studien zu Apollonius Rhodius，Wien，1878，has discussed certain words where the epic form differs from the Attic，and where the long vowel or diphthong of the epic form is important for the etymology of the word；e．g．，İoos，voûros，छॄîvos，etc．On the basis of his investigation he has restored кồpat，in I．8II，for к $\delta \rho a \iota$ of the manuscripts．To the facts adduced by

Rzach may be added these：Apollonius does not waver in the use of the epic $\kappa \bar{\alpha} \bar{\lambda} \delta \delta$, and he is altogether free from the affectation common in the Alexandrian period of introducing the same word twice in the same verse with different measure，as Kúmpıs in Theocritus 18，51，or кa入＇́s in Theocr．6，19，Callimachus 1，55．On the other hand，Apollonius sometimes adopts the laxer usage of his
 occurs in I．673，IV． 127.

In word－formation Apollonius endeavors to conform to the analogy of epic
 confusion of $\epsilon t$ and $\iota$ is a frequent source of error in manuscripts．The word in question，which is probably a coinage of Apollonius，should be formed like dןєiरa入коs，IV．973．Epic compounds where this first element is used have opeo－， $\dot{\delta} \rho \in \sigma_{l}$－，or $\delta \rho \epsilon \iota-$ ．＇$\rho \rho \iota$－occurs in the drama，metri gratia，but it is a superfluous license for the hexameter．

In II． 916 read for $\Phi \epsilon \rho \sigma \epsilon \phi 6 \nu \eta$ ，Пє $\rho \sigma \epsilon \phi b \nu \eta$ ．There is no such authority for $\Phi$ as to relieve $\Phi \in \rho \sigma \epsilon \phi 6{ }^{\circ} \eta$ in the Argonautica from the suspicion of being a corrupt form．Фєp $\epsilon \phi \phi \nu \epsilon a$ of the thirteenth Homeric $H y^{\prime} m n$ is equally doubtful．The occurrence of $\Phi \epsilon \rho \sigma \epsilon \phi \delta \nu \eta$ in an epigram of Simonides（105，Hiller），is not positive evidence，for the dialect of these epigrams is not pure epic．

In the construction following verbs of thinking，saying，etc．，Apollonius has， in the main，kept to the simplicity of the earlier epic manner．As in Homer，no optative is found representing an indicative of direct statement，and there is but one optative representing an indicative of direct question，I．963．There are at least three optatives in the protasis of a conditional sentence，standing for an original subjunctive，III．I190，IV．342， 1057 （cf．Il．2，597）．The participle in indirect discourse is used，but not freely．There are two cases after oid a，I．I 35 ， II． 65 ，and one after vot $\omega$ ，I．1283．As in Homer，the predominant construction is the infinitive．Besides the more familiar verbs，we find $\dot{\alpha} \kappa o v i \omega$ ，II． $1142,{ }^{\ell} \nu \in \in \omega$ ， II． 905 ，IV． 586,1057 ，cimov，III．1106，IV．255．The following verbs by an

 way peculiar to Apollonius，to mean＇suppose．＇The verbs $\kappa \lambda \epsilon \epsilon \omega$ and $\epsilon \pi \iota \kappa \lambda \epsilon \epsilon \omega$ ， I．59，18，and the noun фátıs，I．172，481，II．854，III．1094，IV． 984 ，are followed by the infinitive，like $\phi \eta \mu$ l．

The force of the various tenses of the subordinate infinitives is carefully calcu－ lated．The following cases call for remark：IV．I4，where a present and future infinitive are coördinated after bifoato．Translators often render them both as futures，but the poet means to say，＇She suspected unerringly that her help was no secret and that she should pay for all her folly．＇Passing over the aorist infini－ tive $\mu 0 \lambda \epsilon i v$, II． 1223 ，which is to be taken ingressively，we find a remarkable com－ bination of infinitives in III． $767-769$ ，a future，two aorists，and then two futures， all subordinated to $\phi \hat{\eta}$ ，and all apparently referring to the future．The abrupt change of tense is not a deviation from the grammatical norm，but the application of a construction as old as Homer，which conjures up the future so vividly as to make it seem past．In $/ l .9,413,415$ ，డ几єто is so used，and in Od．9，496， this same use of the aorist is subordinated to a verb of saying．Apollonius applies this principle，in a more elaborate way，to heighten the impression of irresolution and revulsion of feeling．

This passage leads up to another where the tense of the infinitive presents a
 will not refuse,' and the question is whether the present infinitive may be so interpreted. A very old conjecture, presumably of Stephanus, is $\alpha \theta \epsilon \rho \ell \xi \epsilon t$. Wellauer justifies the present as a prophetic present. This construction in the indicative is one thing; in a subordinate mood it is not so easily supposable. Yet the analogy of the passage just discussed favors this interprctation. Moreover, the principal verb, $\delta о \kappa \epsilon \omega$, is scarcely more than "methinks," and the whole weight of the thought falls directly upon the infinitive.

A deviation from the simplicity of the earlier epic is the habit of reporting a speech or negotiation in the form of indirect discourse. The most remarkable passage of the sort is the harangue of Aeetes, III. 579-608. Similar, though less elaborate, are the report of the first interview with Aeetes, III. 495-500; the report of Medea's dream, III. 6I9-63I; and a second threatening speech of Aeetes, IV. 23I-235, where the verbs have been changed from second to third person as in indirect discourse, but without any change of mood and without introductory particle. Further, the terms of a truce made between the Colchians and Argonauts are stated in the form of indirect speech in IV. 341-349. The
 of saying.

The peculiarity in this group of passages is not grammatical but stylistic. In Homer, if the angry Aeetes were to address his people, an assembly would have been summoned: the picture would have been painted in detail and in lifelike colors, and the words of the monarch would not have been trammeled by the limitations of indirect speech. In like manner the truce between the Argonauts and Colchians would have formed an episode by itself, and the actors would have spoken directly as do the truce-makers inthe Iliad. Here, however, the picturesqueness of the older epic gives way to a business-like despatch of the matter in hand. The later poet has not made the most of his possibilities, and the reason is a typical one. For the sake of completeness of detail, the substance of the speeches of Aeetes and the provisions of the truce needed to be given. But to treat them as independent scenes, and to elaborate them into artistic episodes, would have prolonged the poem overmuch. Consequently the episodes are treated with all possible brevity and are introduced for the sake of their contents, not from any love of opulent narrative. That artistic effect is thereby sacrificed is true, but the same criticism is true for the poem as a whole. Its strength is in particular scenes, like those which analyze and portray the emotions of Medea. Its weakness is due to the antiquarian's desire to tell the whole story with all its variants, and to tell it within a ceirtain compass. While, therefore, the Alexandrian poet shows himself to be, in the nain, a careful observer of the proprieties of epic speech, his relation to the Homeric epic is, after all, formal rather than essential.
30. Two Lexicographical Notes, by Professor James R. Wheeler, of Columbia University.

This paper will be printed in the Classical Reviez.
31. Varia, by Professor John C. Rolfe, of the University of Pennsylvania.

\author{

1. On Hor. Carm. iii. 6. 21. <br> Motus doceri gaudet Ionicos <br> Matura virgo et fingitur artibus <br> Iam nunc et incestos amores <br> De tenero meditatur ungui: <br> Mox iuniores quaerit adulteros . . .
}

In this passage de tenero ungui is interpreted by nearly all the recent editors of Horace as 'with all her soul' (Shorey), or something similar, after Unger, pro Valg. p. 401. Many editors cite Cic. ad Fam. i. 6 sed praesta te eum, qui mihi a teneris, ut Graeci dicunt, unguiculis es cognitus. Here some intepret $a$ teneris unguiculis as 'thoroughly,' and hence as parallel with de tenero ungui; others as 'from early youth.' The latter seems to me unquestionably right ; cf. Thes. Ling. Lat. s.v. ab, I. p. 37, l. 39. I believe that there was, originally at least, a clear distinction between ex (ab, de) ungui (unguiculis), Plaut. Stich.

 further Otto in A.L.L.v. 375 f., who cites Apost. vii. $51^{\mathrm{A}}, \boldsymbol{\xi} \xi \dot{\alpha} \pi a \lambda \hat{\omega} \nu \delta \omega^{\prime} \chi \omega \nu$ : divcl $\tau 0 \hat{v} \nu \eta \pi \iota 6 \theta \epsilon \nu$, but recognizes the possibility of a different interpretation in our passage.
The adjective tener in the Latin examples, and the same seems to be true of $\dot{a} \pi a \lambda \delta^{\prime}$ in Greek, certainly suggests at once the idea of youthfulness, on account of the many expressions in which it has that meaning: e.g. Ov. ex Pont. ii. 3.73 teneris ab annis; Virg. Georg. iii. 73 a teneris; Vitr. I. I. 12 a teneris aetatibus; Hor. Epist. i. 2. 64 fingit equum tenera docilem cervice magister; Suet. Ner. 7 tener adhuc necdum matura pueritia; Tib. 44 pueros primae teneritudinis; Stat. Theb. vi. 121 teneros manes, of the shades of children; etc.

In the light of this list the interpretation of tenero in de tenero ungui, as conveying a meaning other than that of youthfulness, certainly requires strong evidence in its favor. The usual explanation is that it means 'to the quick,' where the nails are tender, and hence 'to the fingertips,' 'thoroughly.' But this idea is expressed by ex unguiculis without an adjective. When an adjective is used we have ab imis unguibus, e.g. Cic. Ros. Com. 7. 20. Cf. cis akpous tò̀s ${ }_{\text {brvxas, Eur. Cycl. 159, and the adverb ákpovvұl, Anth. Pal. } 12 . \text { 'To the quick' }}$ is differently expressed: e.g. Hor. Serm. i. 1o. 71 vivos et roderent ungues; Cic. Lael. 5. 18 neque id ad vivum reseco; etc. There seems to be absolutely no authority for interpreting de tenero ungui and similar expressions as 'to the fingertips.'

On the other hand, there are serious objections to taking de tenero ungui as meaning 'from early youth.' Bentley connects iam nunc and de tenero ungui, citing Hor. Epist. ii. I. 127. His feeling for the general relationship of tenero (tenerum) and iam nunc seems to me entirely correct in both passages; yet in neither, it seems to me, can the two phrases be directly connected. In the first place, Horace elsewhere uses iam nunc alone, without a modifying phrase ; and, secondly, while such expressions as iam a, iam inde a, iam inde usque a, statim $a$,
are common enough, I have nowhere found an instance of iam nunc modified by such a prepositional phrase.

Furthermore, while $d_{e}$ is occasionally found of Time after (German nach), e.g. Plaut. Most. 697 non bonust somnus de prandio, and in such idionatic phrases as de die, de nocte, etc., I find no instance of its use in the sense of German von . . . an, like $a b$ in a pueris, a pueritia, etc. My opinion is that Horace has combined two different idioms in de tenero ungui, and that the meaning is 'with all her youthful soul.' To this interprctation matura is no obstacle, for de tenero ungui, and similar expressions, do not connote infancy, but m=rely youthfulness, and that extreme youthfuiness is consistent with the meaning of matura is shown by Harkness, TAPA. xxvii. p. 35 ff.

If there is after the time of Horace a tendency to take $\bar{\xi} \dot{\xi} \dot{\alpha} \pi a \lambda \hat{\omega} \nu \delta \nu \dot{\chi} \chi \omega \nu$ in the sense of 'with all one's soul,' we may charge the confusion to his use of de tenero ungui in this passage and to a misunderstanding of its full force. Porphyriv, for instance, finds no difficulty in taking it as equivalent to a prima pueritia. I have examined all the passages which I have been able to find in both Latin and Greek, and I doubt whether $\dot{\xi} \xi \dot{a} \pi a \lambda \hat{\omega} \nu \delta \nu \dot{\prime} \chi \omega \nu$, or its Latin equivalents, ever mean 'with all one's soul.' In Plut. de Lib. Educ. 5 there seems to be no authority for $\dot{a} \pi a \lambda \hat{\omega} \nu$, and in the only passage in which the phrase is generally interpreted as 'to the fingertips' (Anth. Pal. v. 129), the other meaning is certainly possible, and is preferred by Liddell and Scott. It may be added that while the diminutive and the primitive are used in Latin without apparent difference of meaning, the latter only is used in Greek.

On the meaning of canicula.
Lewis and Short, s.v. canicula, give as one meaning 'the lesser dog-star (canis minor),' citing Hor. Carm. i. 17. 17, and other passages. The commentators on Horace, however, if they express an opinion at all, mostly explain canicula as referring to Sirius, and that is, I believe, the meaning of the word in all cases. The lesser dog-star was properly called Procyon or anticanis; the only passage in which either word is used in a non-technical sense appears to be Hor. Carm. iii. 29. 18.

Canis, too, is always used in the sense of canis maior. The examples cited by the lexicons for the meaning canis minor rest on a misconception; for while the reference as a whole is obviously to the lesser dog-star, can is has simply the meaning 'dog.' Thus in Ov. Fast. v. 732 nocte sequente diem canis Erigoneius exit, the phrase canis Erigoneius, 'the dog of Erigone,' designates the lesser dog-star, but canis alone means simply 'dog.'

This view of the meaning of canicula is confirmed by the words of Pliny, N. H. xviii. 263 Aegypto vero Procyon matutino aestuosus, quod sidus apud Romanos non habet nomen, nisi caniculam hanc volumas intellegi, hoc est minorem canem. Evidently canicula $=$ canis minor was not a familiar term to Pliny, and in N. H. ii. 123; xviii. 272 he calls the constellation (sidus) Canis Major canicula.

The use of the diminutive is peculiar to Latin, and does not occur in Greek. It probably arose first in the sermo rusticus, perhaps as a (euphemistic) term of affection. Although it occurs first in poetry (the earliest instance cited is in Hor.

Serm. ii. 5. 29), it probably was not used metri gratia, since the most reasonable explanation of the $\bar{i}$ is that of Priscian, ii. 106. 5 k , that it is due to metri necessitas. This is the view of Stolz, Hist. Gr. i. 579, who curiously cites the word only from Juvenal. It occurs in the Odes and Sermones of Horace, in Ovid, Manilius, and Persius; the lexicons and indices do not cite it from Juvenal.

It is noteworthy that the color of Sirius has changed materially since the first century. The color adjective applied to it by the Romans is rubra, and that it is a genuine color term, and is not suggested merely by the heat associated with the dog-star, is clear from Sen. Nat. Quaest. i. I. 7 cum in caelo quoque non unus appareat color rerum, sed acrior sit caniculae rubor, Martis remissior.

## 3. On Varro, L. L. v. 3.

Wölflin has pointed out, in the Kev. de Phil. xiv. (1890) 120, that in Ter. Eun. 728 postquam surrexi, neque pes neque mens satis suum officium facit, the rhyme of neque pes neque mens requires that the last word be pronounced mes. A parallel case, which I noted some years ago, but have not seen referred to, is found in Varro, L. L.v. 3 ita fieri apparet, quod recto casu quom dicimus impos obscurius est esse a potentia quam quom dicimus impotem; et eo obscurius fit si dicas pos quam impos, videtur enim pos significare potius pontem quam potentem. The words of Varro are clear only if the pronunciation of pos and that of pons were practically identical.

## 4. Notes on ellipsis.

(These will be published in full elsewhere.)

## 32. The Pestilences mentioned by Livy, by Professor R. B. Steele, Vanderbilt University (read by title).

The account by Thucydides of the plague at Athens in 430 B.C. gave to later writers both Greek and Latin the model for the presentation of pestilences, but the parallel passages in Livy are not numerous, and the details given seem necessary, generally stating merely the simplest facts in regard to the cause and the destructiveness without regard to preceding descriptions, unless we assume that scattered details are the membra disiecta of some original. Livy might have given an elaborate account of a plague about 430 B.C., but this he did not do. Of those occurring between 437 and 429 B.C., most are incidentally mentioned because of the effect on military operations.

The wrath of the gods is the cause most frequently given, and, as a result, the help of the divinities was sought to effect a cure. An obsecratio or a supplicatio was the common means, but sometimes in seasons of dire distress the sacred books were consulted, and from this came an extension of their religious rites, in the introduction of the lectisternium, the driving of a clavus, and services to individual gods, especially the bringing of Aesculapius from Epidaurus.

The description by Vergil, A. 3, 137 seqq., resembles several given by Livy when the pest fell on crops and beasts and men. Of the common people little is said, as in $3,6,7$ et per ignota capita late vagata est vis morbi, but there is frequently given the names of the famous dead, especially of the priests.

Omitting symptomal details and presenting other features with considerable fulness, it is the religious significance which is made most prominent by Livy, evidencing the care of the priest in keeping the records, and his own devoutness, though he sometimes mentions the failure of the religious formulae to stay the noisome pestilence, and this failure did not pass without criticism by Christian writers. Cf. Augustine ae Civ. Dei, 3, 17.

## 33. Nature Aspects of.Zeus, ${ }^{1}$ by Dr. Arthur Stoddard Cooley, of

 the Allen School, West Newton, Mass. (read by title).II. Closely akin to the notion of Zeus as the Heaven or the al日خp is the idea that he is the Air. A passage of Ennius well sets this forth. It is quoted by Varro (De Ling. Lat. V. § 65, Müller), who says:
"These same gods, Heaven and Earth, are Jupiter and Juno, because, as Ennius states, 'There is he whom I call Jupiter, whom the Greeks call the air, which is wind and cloud, afterward rain, and from rain becomes cold, later wind, then air again. These things which I mention to you are Jupiter for this reason, because he helps mortals and cities and beasts.'"

Here Jupiter apparently is "the father who aids," from iuvo.
Of great importance on account of its age is fragment 48 (Bergk) of Alcman:
"Such things as the Dew nourishes, daughter of Zeus and Selene."
Plutarch (Quaest. Conviv. iii. 10, 3, p. 659 B) explains this as follows:
"At the time of the full moon the air drops dew most plentifully, being melted, as Alcman, the melic poet, also says in one place, enigmatically, that the dew is the daughter of the air and the moon."

Compare also De facie in orbe lunae, 25, p. 940 A:
"For now he calls the air Zeus, and says it is turned into dewdrops, being liquefied by the moon." ${ }^{2}$

And Natalis (Com. Myth. iii. 255) says:
"Certain have taught that the moon was the wife of the air by whom she conceived and brought forth a son, the Dew, as Alcman, the melic poet, states in that poem of his :
"The dew, son of the moon and the air, makes the mule-grass grow." "
This opinion, that Zeus is the air, was held by Diogenes Apolloniates, a philosopher of the fifth century B.C., but his contemporary Democritus, according to Clement of Alexandria (Protrep. V. § 68, p. 59, Pott.), declared that "few of the learned say . . . that all which we Greeks now call air is Zeus, thinking this knows and gives and takes away all and is king of all."

The statement of Diogenes (Fr. 6, Mullach, F.P.G. i. p. 254 b) is as follows:
". . . That which has intelligence is what is called air by men . . . this both governs all things and controls all things. For it appears to me that this is the source of mind, and has reached everything and arranges all and is in everything."

Probably it is this Diogenes who Philodemus (De pietate, p. 70, Gomp.) says "praises Homer for discoursing about the divine, not as in myths, but truly; for
${ }^{1}$ Continuing and completing a paper entitled "Zeus the Heaven," presented at the meeting of the Association at Harvard University in July, rgor; see PAPA., 190x, pp. cxl-cxlii.
${ }^{2}$ See also Plut. Aet. Phys. 24, p. 918 A.
he says he regards the air as Zeus, because he declares Zeus knows everything and -." Here the quotation breaks off.

A most charming statement of this notion in the next century is by Philemon, the comic poet (Fr. $9 \mathrm{I}, \mathrm{Kuck}$ ):
"Whom not a one escapes, nor single deed one does or means to do or has done long ago, or god or man, - that one am I, the Air, whom you might e'en call Zeus. And I am everywhere, - who but a god is such? - right here in Athens, in Patras, in Sicily; in all the cities, in the houses all, in all of you; there's not a place where Air is not. And being present everywhere all by necessity he knows, fur everywhere he is." ${ }^{1}$
III. The conception of Zeus as the Sun was a favorite one in post-classical times, ${ }^{2}$ but before 300 B.C. we find a few indications of it. An old inscription on a rock at Amorgos has the words "Zevs "H $\lambda[$ to $]$," of which Dubois says (B.C.H. vi. (1882), p. 191): "It is the first mention of Zeus Helios in these remote times. The other examples are of the Roman period."

One Pherecydes, as Laurentius Lydus has recorded (de Mens. iv. 3), thought Zeus to be the sun. I doubt whether this is Pherecydes of Syros, for according to Hermias (Irris. Gent. Philos. c. 12) he taught plainly that Zeus was the Heaven. Yet he may have changed his opinion.

A third example is in a doubtful fragment of Sophocles (1017, Nauck). An unknown biographer of Aratus says: "Those who think Zeus the sun state that Sophocles also calls Zeus the sun, when he says:
' O Sun, may'st thou pity me, whom the wise declare to be the begetter of gods and father of all.'"

Possibly we might find a fourth instance in the O.T. wv. 660, 661:

## "Not the Sun, the chief god of all,"

but comparison with such passages as Aristotle, Fr. 621 (p. 1583 a, 2) and Menander, fr. 609 (Kock) make this somewhat doubtful.

Finally the epithets $\Lambda v к \alpha i o s ~ a n d ~ \pi a \nu b \pi \tau \eta s ~ m i g h t ~ w e l l ~ a p p l y ~ t o ~ Z e u s ~ a s ~ t h e ~ s u n . ~$
IV. There are scholars, among them the late Professor F. D. Allen of Harvard, who incline to think Zeus originally the Lightning, which later became one of his chief attributes. There is some support for this idea even in early writers.

Such passages as that in Iliad, K, 5 ,
"As when the husband of fair-haired Hera lightens,"
are so easily explained in another way that they can hardly be adduced as evidence, but Heraclitus the Obscure, who taught that fire is the prime element of all things, seems to refer to Zeus, when he says, on the authority of Hippolytus (Haeres. ref. ix. 10, p. 283, Miller $=$ fr. 50, Mullach) :
"The lightning holds the helm of all things." ${ }^{3}$

[^48]Aristophanes in the Lysistrata（ $\mathbf{1 2 8 5}$ ）uses the expression＂Zeus blazing with fire，＂and Sophocles（O．C．95）has＂Or earthquake or some thunderclap or gleam of Zeus．＂

The scholiast explains the first as＂blazing or setting ablaze with thunderbolts，＂ and the Sophocles passage may be rendered＂a gleam from Zcus，＂which seenis more probable，as in O．C．1471，Zeus apparently is identified with the al $\theta$ 亯．

Another passage of Sophocles（Philoct．1198，1199）：
＂Not even if the fire－bearing lightener shall come setting me on fire with gleam－ ing thunderbolts，＂
perhaps looks this way，though it easily admits another explanation，as does Aristophanes，Peace， 722 ：
＂Harnessed to the chariot of Zeus he bears the lightning．＂
Perhaps the strongest evidences fur the conception of Zeus as the lightning are the epithet катaıßatךs，used by Aristophanes（Peace，42），${ }^{1}$ and an old inscrip－ tion at Mantinea（Roehl，I．G．A．IOI），which has the words $\Delta i \partial s$ кєpauy $\omega$ ．

V．Finally we have one ancient statement of a theory held by certain phi－ losophers of the Alexandrine and Roman periods；namely，that Zeus is the Universe or All Things．Two verses are ascribed to Aeschylus（fr．70，Nauck）by Clement of Alexandria（Strom．V．14，§ 115，p．718，Pott）：
＂Zeus is the alOض $\rho$ ，Zeus the earth，and Zeus the Heaven．Yea，Zeus is all things and whatever trąnscends these．＂

Perhaps I may add one other passage clearly post－classical，but found in a book on the Universe ascribed to Aristotle（c．7，p．401 a，25）：
＂And to speak in general 〈Zeus〉 is oúpávos and $\chi$ Oóvos，having surnames from everything in nature and from every occurrence，inasmuch as he himself is the cause of all．And so it is well said in the Orphic poems：
＇Zeus came into being first，Zeus last－he of the gleaming thunderbolt． Zeus is the head and Zeus the middle，and from Zeus are all things made．Zeus is the foundation of both earth and starry heaven．Zeus is a male，Zeus an immortal nymph．Zeus is the breath of all and Zeus the rush of tireless fire， Zeus the root of the sea，Zeus sun and moon．Zeus is king，Zeus ruler of all－ he of the gleaming thunderbolt．For after concealing all 〈men？〉 he brings them up again into the gladsome light out of his sacred heart，doing deeds of mischief．＇＂

To sum up，in classical times before 300 B．c．，we have literary evidence of the identification of Zeus with the Heaven，air，sun，lightning，and finally the whole universe．
 Professor H．C．Tolman，of Vanderbilt University（read by title）．

The Supreme God：The formulaic phraseology of the Old Persian inscrip－ tions describes Ormazd as＂greatest of gods＂Matişa bagânâm（Darius，Per－ sepolis；Xerxes，Elvend，Van．cf．Pahlavi Dinkarod 8． 15 ＂highest of gods＂

[^49]
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[bakán]); also as "creator of earth and heaven, of man and bliss for man," Hya imâm bumim adấ hya avam asmánam adâ hya martiyam adà̉ hya łiyâtim adấ martiyahyâ (Dar. Elv., Suez c, Nakş̌-i Rustem a, b; Xerx. Pers. a, b, ca, [cb], da [db], Elv. Van; Artaxerxes, Pers. Cf. Avestan Yasna, 37, 1). But most especially is he that sovereign Lord which gives to the Achaemenidae the divine right of kings, vašná $A^{\text {a }}$ uramazdâháa, "By grace of God" (Dar. Inscr. $4^{1}$ times; Xerx. Inscr. 6 times; Art. II. Inscr. once); Anuramazd\& xצabram maná frabâra, " Ormazd intrusted the realm to me" (Dar. Inscr. 7 times) ; Hya (mâm) x̧âyađiyam akunau\}, "who made me king" (Dar. Inscr. 5 times; Xerx. Inscr. 6 times; Art. III. Inscr. once). Very likely it was religious and political zeal as well as dialectical differences that led to the stereotyped $A^{h} u r a m a z d a ̂$ of the inscriptions (but vasnâ $A^{n} u r a h y a ~ M a z d a ̂ h a, ~ X e r x . ~ P e r s . ~ c a, ~$ [cb]) beside the Avestan Ahura Mazda "Lord Wisdom" (cf. Jackson, Zoroaster, the Prophet of Ancient Iran, p. 17 I ; Easton, JAOS., XV. 199 fg.). As we should expect from the unfortunate confusion of foreign gods in the classical



Similar identification appears in the Greek-Pahlavi Inscription of Nakš-iRustem. (Cf. Dieulafoy, L'Art Antique de la Perse, V. 114.) As we infer from late reports from Dr. Koldewey (Mittheilungen der deutschen Orientgeselschaft cf. Tolman PAPA. 32 XCVI.) our historian, in his description of the temple of Zeus Bêlos of Babylon (I.183), cites under the name of Zeus, not Marduk of Esagila, but Nabu of Borsippa.

Other Gods: Herodotus as well as other classic writers (cf. Rapp, Die Religion und Sitte der Perser und übrigen Iranier nach den griechischen und römischen Quellen, ZDMC., XXX. 143 fg .) speaks of a plurality of Persian gods:
 $\theta \epsilon o \hat{\sigma} \iota \iota$ of $\Pi \epsilon \rho \sigma l \delta a \quad \gamma \hat{\eta} \nu \lambda \epsilon \lambda \delta \gamma \chi a \sigma \iota$, VII. 53. Polytheism seenıs clearly marked in the Deirmenjik Inscription of Darius ( $\tau \grave{\eta} \nu \dot{\nu} \pi \grave{c}_{\rho} \theta \epsilon \hat{\omega} \nu \mu 0 v \delta \dot{L} \theta \epsilon \sigma \tau \nu$, cf. CousinDeschamps. Bull. de corr. hell. 13,530 ). Although, as we shall see later, such phraseology may be due simply to political considerations, yet even the Achaemenian inscriptions are by no means entirely monotheistic. On the contrary, a polytheistic tone (cf. Stave, Einfluss des Parsismus auf das Fudentum, p. 119) is evident in the passages cited below, where occurs undoubted recognition of other gods than Ormazd: An $\not$ uramazdî maiy upastâm abara utâa aniyâ bagâka tyaiy hantiy, "Ormazd gave me aid and the other gods which are" (Bh. IV. 6I, 63); Ma iista bagânâm " greatest of the gods" (see above) ; mám A"uramazdâ pâtuv Kaldâ bagziibiş, "May Ormazd protect me with the gods" (Xerx. Pers. b. ca [ch] twice, da [db], Van).

The interpretation of the somewhat doubtful phrase vi日aibiצ bagaibis (Dar. Pers. d [three times]) has an important bearing here, since upon the old meaning "clan gods" de Harlez (Muséon, XIV, 363 ) based his belief that there is no allusion in the inscriptions to the Amešaspentas and Yazatas, but simply to the bagá of the vig. Such inference may be set aside should we accept Bartholomae's rendering "all the gods" (vi9a fr. Ui-xo. Cf. Grundr. d. iran. Philol. I. 226; Foy, KZ., XXXV. 70; Gray, JAOS., XX1. 181). It by no means fullows, however, that we should seek to identify the "all gods" with the "clan gods," as Brunnhofer will have us do. Certainly among the viAaibis bagaibix are
 III. 65 and V. 106.

In I. 131, Herodotus has confused Mithra and Anahita. Since these deities are not mentioned in the inscriptions of Darius or Xerxes, the occurrence of their names in the empty formulism of Artaxerxes II. and III. seems to mark a decay of religious ideas: Ahuramazdâ Anahita utâ Mitra (Mitra) mảm pâtuv, "May Ormazd and Anahita and Mithra protect me" (Art. Susa, a, Hamadan); mâm A"uramazdâ utâ Migra baga pâtuv, "May Ormazd and the god Mithra protect me" (Art. Pers. a, [b]).

DUALISM: Although there is no mention of Ahriman (Anra Mainyu) in the ancient Persian inscriptions, yet, without going into the mooted question of the Zoroastrianism of the Achaemenian kings (Wilhelm, ZD.VG., XL. 105; de Harlez, Muséon, XIV. 363 ; Horn, Beilage zur Allg. Zis., 1895 ; Bang, ZDMG., XLIII. 533; Darmesteter, Zend-Avesta, III. 70; West, SBE., XLVII. Introd. 79 ; Foy, $K Z .$, XXXV. 69 ; Jackson-Gray, JAOS., XXI. 170), we can safely note the recognition of a spirit of evil. Ormazd, as guardian of Truth and Avenger of Deceit, is opposed to that force embodied in the Lie (Foy, KZ., XXXV. 71 ). Herodotus testifies to the Persian veneration of truth and abomina-

 The Druy (Drauga, "Lie" of the inscriptions) is certainly a personification of Evil (cf. Jackson, Grundr. d. iran. Philol., II. 630). It is the Druy which is the source of rebellion : draugadis hami ${ }^{\text {riyá }}$ akunaus," The Lie made them rebellious" (Bh. IV. 34). The prayer of Darius is that his country may be saved from the Dru̧; imám dahyáum Ahuramazdâ paituv hacá haináyá hacá dušiyârâ hacá drauçâ, " May Ormazd keep this realm from Invasion" (Avestan haena), from Drought (Avestan dušyâirya), from the Lie" (Pers. d. 3); abiy imâm dahyâum mâ âjamiyâ mâ hainâ mâ dušiyâram mâ drauga, "Upon this realm let come no Invasion, nor Drought, nor the Lie" (Pers. d). The same king warns his successor to guard against the Druf and to punish the liar ; haca draugá darsam pati力ayauvâ mar(tiya hya) draujana ahatiy avam hufrasatam (cf. Bartholomae, Iran. Gr. I. I Io) parsá (Bh. IV. 38 ; cf. Bh. IV. 68). It was because Darius was not under the influence of the Druy that he became the favorite of Ormazd: Ahuramazdâ upastám abara - yata - naiy draufana dham, "Ormazd helped me because I was not a liar" (Bh. IV.63). Morality is to walk in the path of Truth patim tyâm râstâm (Dar. Nr, a, 59. Cf. Avestan razistem). This personification of the Avestan Druy in the Old Persian Drauga found, as we should expect, no correspondence in the Babylunian thought (cf. Gray, JAOS., XXI. 181). How strikingly is this seen in the contrast between Drauga dahyauvá vasiy abara, "The Drus" (the Lie) dominated the provinces," and the lame Babylonian version par-ṣa-a-tu ina mâtâti lu ma-du i-mi-du, "in the land lies became numerous" (Bh. I. 34). So each rebel is represented as a follower of the Drus (adurus fiya occurring in Bh. over twenty times, Babyl. $\begin{array}{r}\text { Ja }\end{array}$ ip-ru-su um-ma).

In Herodotus, as well as in the native inscriptions (cf. de Harlez, Musion, XIV. 373) there is no reference to Zoroaster (Zaratustra). The following citation of Cephalion in Georgius Syncellus (cf. Jackson, Zoroaster, p. 155, $=\int A O S .$, XVII. 5) may be taken to imply that at least the name of the prophet


 Nivou $\beta$ aбi入eias，I． 315.

Recognition of Foreign Gods：Herodotus speaks of the Persian fondness
 （I．I 35）．It was doubtless purposes of statecraft that led the Achaemenidae to represent themselves as the protégés of the gods of other countries．The same king who repeatedly declares on his own monuments that Ormazd gave him his kingdom，allows himself to be called in the Egyptian inscription of Tell el－ Maskhutah＂the son of the goddess Neith，image of Ra，who put him，Darius，on the throne and helped to conquer his enemies＂（cf．Gray，JAOS．，XXI．183）． Again the Greek inscription of Darius at Deirmenjik（which has been noted above）shows presumably a diplomatic recognition of foreign divinities．So Cyrus styles himself in the language of the Babylonian kings＂builder of Esagila and Ezida，＂while the Jews，in their turn，believed him the servant of Yahweh（cf．Ezra I．2）．Cambyses，as we learn from an Egyptian inscription， presented offerings to Osiris and restored the temple of Neith at Sais（cf．Nikel， Herodot．und die Keilschriftforschung，p．88；Tolman－Stevenson，Herodotus and Empires of the East，p．93）．Bang（Mélanges de Harlez，11）has already pointed out how the curse upon the would－be destroyer of the royal memorial，$i m$ âm handưgâm apagaudayâhy（Ahuramaz）dâtay jatâ biyâ，＂who would destroy this monument，let Ormazd slay thee＂（Bh．IV．58）resembles in the Babylonian ver－ sion，lirur，＂may he curse＂（cf．Foy，$K Z$ ．，XXXV．72），the phraseology of an inscription of Ašur－nâṣir－pal；Ǎur bilu rabu－u ilu ał̌－su－ru－u bil si－ma－a－ti $s(i-m) a-t i-s u$ li－r $u-u r i p-s i-t i-3 u$ lu－na（ $k-k i)-i r$ ，＂Ashur the great Lord，the Assyrian God，Lord of Fate，may he curse the fate of him（who destroys this monument）and annihilate his works＂（Schrader，Keilinschriftliche Bibliothek， Vol．I．p．122）．

Furthermore，I do not agree with the view of many scholars concerning the account of the Gautâma rebellion that Magian fanaticism was directed chiefly against the sanctuaries（Persian âyadanâ；Elamite ${ }^{a n}$ ziyan an nappanna；Baby－ lonian bîtutti sa ilâni）of foreign gods．

## 35．Notes on Cicero，De natura deorum，I，by Professor Mortimer Lamson Earle，of Columbia University（read by title）．

1．The broken connection of thought is to be mended thus：de qua 〈tamen〉 tam variae sunt doctissimorum hominum，etc．

3－4．The original order may well have been as follows：Sunt enim philosophi et fuerunt qui omnino nullam habere censerent rerum humanarum procura－ tionem deos．Quorum si vera sententia est，quae potest esse pietas，quae sanctitas， quae religio？Sin autem di neque possunt nos iuvare nec volunt nec omnino curant nec quid agamus animadvertint nec est quod ab iis ad hominum vitam permanare possit，quid est quod ullos dis immortalibus cultus，honores，preces adhibeamus？Haec enion omnia pura atque caste tribuenda deorum ita sunt，si animadvertuntur ab iis et si est aliquid a dis immortalibus hominum generi tri－ butum．In specie autem fictae simulationis，sicut reliquae virtutes，item pietas
inesse non potest，cum qua simul sanctitatem et religionem tolli necesse est；atque haud scio an pietate adversus deos sublata fides etiam et societus generis humani et una excellentissima virtus，iustitia，tollatur，quibus sublatis perturbatio vitae sequitur el magna confusio．In the Mss．the words Haec enim amnia ．．．homi－ num generi trilnutum follow quae religio？and the words quibus sublatis ．．． confusio follow tolli necesse est．The transposition of the latter sentence seems first to have been suggested by Wyttenbach．

16．We should，I think，read：Peripateticos，qui honesta $\langle i l a\rangle$ commiscerent cum commodis，ut ea ．．．differrent．

22．We should probably read：Quid autem erat quod concupisceret deus mundum signis et luminibus，tanquam aedilis，ornare？Si，ut ipse melius habi－ taret，etc．，omitting the word deus between ut and ipse．

25．For Anaximandri autem opinio est nativos esse deos longis intervallis orientes occidentesque，eosque innumerabiles esse mundos should probably be read Anaximandri autem opinio est nativos esse deos，cosque ．．．mundos longis inter． vallis orientes occidentesque．

37．In the explicative clause qui aether nominatur should be written rather than q．ae．nominetur．

S8．Cicero seems to have written：Ita fit ut mediterranci mare esse non cre－ dant 〈at〉que sint tantae animi angustiae，ut，si Seriphi natus esses ．．．non crederes，etc．For $\langle a i\rangle q u e ~ s i n t ~ t h e ~ M s s . ~ h a v e ~ q u a l e ~ s u n t . ~ . ~$

90．The traditional text is：sed hoc dico，non ab hominibus formae figuram venisse ad deos；di enim semper fuerunt，nati numquam sunt－si quidem aeterni sunt futuri；at homines nati；ante igitur humana forma quam homines ea qua erant forma di immortales：non ergo illorums lumana forma，sed nostra divina dicenda est．The conclusion of the syllogism I would correct thus：ante igitur quam 〈qua〉 homines ea qua erant forma di immortales：non erso illo－ rum kumana，sed nostra divina dicenda est．

101．A particle needs to be inserted thus：Dant enim arcum sagittus，hastam clipeum，fuscinam fulmen；〈nam〉，etsi actiones quae sint deorum non zident， nikil agentem tamen deum non queunt cogitare．

107．I conjecture that we should read：Quo modo illae ergo（so Reid）et quo－ rum？omitting，as a mere gloss，the traditional imagines after quorum．

36．The Use of the Infinitive in Lucan，Valerius Flaccus，Statius， and Juvenal，by Dr．Willard K．Clement，of Evanston，Ill．（read by title）．

Three years ago（A．J．P．XX．195－197）I discussed briefly the use of the infinitive in Silius Italicus，showing the utterly unsatisfactory treatment of the subject by the accepted authorities，Schinkel ${ }^{1}$ and Schmidt．${ }^{2}$ At the time I expressed the hope that I might be permitted to extend my investigations to Lucan and Vale－ rius Flaccus，also treated by Schmidt in his dissertation，as I believed such study would prove rich in results．I am at last able to present my collections，together with those from Statius and Juvenal．Lest I be accused of failing to practise

[^50]what I have constantly advocated as the first requirement in all syntactical work, completeness, I wish to say at the outset that I shall make no attempt to give all instances of the occurrence of the infinitive in the four authors, although they have been carefully noted. When two dissertations, in more than 150 pages, contain omissions by the hundreds, it would be an utter impossibility, in the limited space at my disposal, to give what they have failed to do. I shall give, however, a complete list of words occurring with the infinitive in each author. That my gleaning has not been in vain is best shown by the results - 62 new words in Lucan, 60 in Valerius Flaccus, 77 in Statius, and 32 in Juvenal.

A word or two on the dissertations themselves, which, as I have said, have hitherto been cited as authoritative, and without criticism. Of Schmidt's treatment of Lucan and Valerius Flaccus, I can but repeat my criticism expressed in my earlier paper. The dissertation is of decidedly uneven character, with marked excellences and serious defects. He had read widely, far more than scholars of his age usually do, and his collections contain a wealth of passages from all periods of classical Latinity. Had Schmalz and other syntactical authorities read him with the care he merits, more than one of their statements would have been changed to conform to the facts of usage. It is to be regretted that so much that is meritorious should be marred by careless proof-reading and numerous omissions. Reference after reference I have been unable to verify, while not content with omissions of many words, h: gives several instances of a usage, only to omit as many or more.

Lohr's work ${ }^{1}$ is far inferior. Scarce!y a reference is made to any author outside his special field, and if his range of reading be wide, he never betrays it. He is not guilty of the false references with which Schmidt is chargeable, though the omissions are as numerous. He gives long lists of constructions parallel to the infinitive, leaving his reader half-grateful, half-exasperated, grateful for the information given, exasperated because the time spent in collecting the material might have been employed in making his discussion complete and satisfactory.

I shall now give the words occurring in the various authors, alphabetically arranged (nouns, adjectives, adverbs, and verbs), in each instance giving first Schmidt's and Lohr's lists and then my additions. I trust this arrangement will prove clear rather than the reverse.

## Lucan.

animus, ars (artis), adsuetus, audax, avidus, adfero, adspicio, aveo; causa, crimen, cura, certus (certum), consuetus, contentus, crudele, cupidus, cano, celo, cerno, certo, cesso, cogo, compello, comperio, concessum est, contingit, curo; damnum, decus, decorus, difficilis, docilis, doctus, decerno (decretum), deprecor, deprehendo, desino, desisto, dico, dignor, do, duro; eximius, expertus, extremum; emereo, erubesco, evaleo; fabula, fama, fas, firles, foedus, funus, furor (et licentia), facilis, felix, facio (palam), fero (animus), festino, fido, fingo, fleo; gloria, genitus, gnarus, gaudeo; habilis, horridus; ius (iuris), ignavum, impar, impatiens, indig. natus, indignus (indignum), indocilis, impello, impero, incipio, incoho, indignor, invideo, iuvat; labor, laus, luctus, lentus (lenti), laboro, liquet; merces, mos, munus, melior, meum, mirum, miserum, memini, mentior, mereo, metuo, minor,

[^51]monstro ; nefas, nescius, nego, nocet, nosco ; omen, oppositus, olliviscor, opto: ordior; pietas, poella, potestas, pudor, paratus, patiens, peius, perosus, pollens, promptus (promptum), pronus (pronum), pulchrum, palam, paenitet, parco, paro, paveo, permissum est, peto, piget, placet (placitum est), pono (positum est), praesto, precor, probo, prodest ; res, robur, rumor, recuso, refero, relinquo (relictum est), rogo ; saevitia, salus, secta, sors, spes, summa, segnis, sufficiens, sollicito, sperno, stimulo, superest, sustineo ; tanti, turpe, tutum, tempto, testor, timeo, trepido ; venia, virtus, vacat, vaco, valeo, venio, vindico, vito.
abstineo, accipio, adsuesco, audeo ; coepi, conor, conspicio, constituo, corrumpo, credo, cupio ; damnatus, debeo, decet, doceo, doleo, dubito, duco ; fallo, fateor; gratum, gaudeo; iubeo; laetor, libet, licet ; malo, miror, moneo; necesse, notus, nequeo, nescio, nolo; praemium, potens; patior, perdo, possum, prohibeo, puto; quaero, queo, queror; reor; solamen, solitus, satis, scio, sentio, sino, solet, specto, spero, stimulo; timor, tardus; vereor, veto, video, videor, volo.

## Valerius Flaccus.

animus (est), ars, aequum, assuetus, abnuo, admon"o, adspicio, aggredior, agito, ago, ardeo, aveo; bonus; cura, certus, contentus, can.", cerno, certo, cogito, cogo, conticeo, contingit, cunctor, curo ; dolus, dignus, docilis, doctus, durus, desino, destino, differo, dignor, disco, dissimulo, do; est ; facultas, fama, fas, furor, facilis, fero, fingo, fleo, for, fremo ; gemo ; hortor; ignarus, immemor, impello, impero, incipio, insto, invigilo, iuvat; lex, libertas, locus; mens (stat), mos, mereo, mereor, meo, metuo, molior, moneo, monstro; nefas, nuntius, nego, nosco; opus, opto, ordior, oro; potestas, pretium, pudor, paratus, patrium, parum, parco, paro, permissum est, pergo, persto, piget, placet, posco, praecipito, precor, proclamo, prodest, promitto, pudet; queo; recuso, requiro, restat, rogo; sors, spes, studium, serum, suetus, sedet, significo, sileo, spargo, stat, stupeo, suadeo, sufficio, suspicio, sustineo; tempus, tanti, turpe, tempto, tendo, tribuo; voluptas, venio, volo (-are), vulgo.
accipio, aio, audeo, audio; calleo, coepi, conor, conspicio, credo, cupio ; dictum, dignum, débeo, decerno, decet, doceo, doleo, duro; fateor, fert (rumor); gaudeo; hoc; iubeo; laetor, libet, licet; mandatum, malo, miror; nequeo, nescio; obicio; pluris, pote, patet, patior, paveo, possum, prohibeo, puto; quaero, queror; refero, reor; satis, scio, sentio, sino, soleo, spero, spondeo, statuo; tardus, timeo, tueor ; vacat, veto, video, videor, volo.

## Statius.

amor, animus, ardor, audacia, aequus (aequum), aptus (aptum), audax, avidus, ablatum, abnuo, accelero, adnuo, adorior, adparo, affecto, aggredior, ago, ambeo, arceo, ardeo, aspernor, assuesco, audeo ; blandus, bonus; calor, causa, cupido, cura, calens, capax, certus, clarus, contentus, cupidus, certo, cesso, coepi, cogito, cogo, compello, concedo, connitor, conor, consuesco, contemno, contendo, contigit, credo, cupio, curo; degener, difficilis, dignus (dignum), docilis, doctus, dubius, dulce, durum, decerno, decet, demonstro, deprecor, descendo, desisto, destino, dico, dignor, disco, do, doceo, doleo, domo, dono, dubito ; egregius, electus, exiguus, edomo, eligo, emptum, eo, erubesco, exeo, exhortor, exposco, extimeo; facultas, fas, fiducia, furor, furtum, facilis, fatale, fertilis, fortis, frequens,

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fretus, facio, fateor, fatisco, fero, festino, fido, flagro, fremo, fugio, furo ; grande, grave, gaudeo, gemo, gestio, glorior ; honor, horror, hortamen, habilis, hilaris, habeo, hortor; impetus, ius, ignarus, ignotum, immanis, immeritus, incertus, indocilis, inscius, impello, impero, incipio, indignor, indulgeo, insto, iubeo, iuvat ; labor, lex, licentia, ludus, luxus, laetus, longum, laboro, libet, licet, luctor ; mens, metus, modus, munus, maestus, manifestus, melior, memor, meritus, minor, miserum, maereo, mando, memini, metuo, miror, mitto, moneo, monstro, moror; nefas, nefastum, nescius, notus, necesse, nego, nescio, novi ; opus, ordo, optimus, oportet, opto, ordior, oro; pondus, potestas, pretium, pudor, paratus, parvus, potior, praecipuum, promptus (promptum), pronum, propior, pulchrum, parum, paenitet, paro, parco, patior, pergo, permitto, persevero, persto, peto, piget, placet, praebeo, praecipito, praestat, precor, probo, proclamo, prodest, prohibeo, prolabor, propero, pudet, puto; quantum, quietus, quaero, queror; reverentia, reus, recuso, relictum, reor, rogo, ruo ; sententia, sitis, solamen, species, spes, studium, sudor, secundus, serum, servatus, sollers, suetus (suetum), supervacuum, satis, scio, sedet, sequor, servo, simulo, sino, soleo, sperno, spero, spondeo, stat, studeo, suadeo, subeo, sudo, sufficio (it), sum, superbio, superest ; tempus, timor, tanti, triste, turbidus, turpe, taedet, tempto, tendo, testor, timeo, transmitto, trepido ; urgeo ; virtus, vis, voluntas, voluptas, votum, velox, vile, vaco, vado, valeo, venio, vereor, veto, video, vinco, vocifero, voveo.
auctor, adsuetus, accipio, adigo, admoneo, adspicio, appeto, aio, audio, auguror; cordi, curae, comis, consuetus, cano, cerno, coepi, committo, conqueror, conspicio, contueor; debeo, deprehendo, differo; experientia, extremum, edisco, edo, evaleo, exspecto, exsulto; fama, fides, ferale, fortius, fingo; hoc; invidia, insuetus, iustius, iacto, ingemino, ingemo, immineo, impono; lectus, laetor, luo; mos, malo, mereo, mereor ; nuntius, narro, nequeo, nolo, noto, nuntio ; obtestor; patrium, palam, pendeo, perfero, perhibeo, possum, potior, prospicio; queo; religio, recuso, refero, renuo, respicio, restat, retexo, rideo; sentio, subigo; tardus, tutius, trado; videor, volo, vulgo.

## Juvenal.

abnuo, affecto, audeo ; clementia, constantia, contentus, calleo, cesso, cogito, cogo, concedo, constituo, contigit, convenit, credo, cupio, curo; deterius, difficile, dignus (dignum), doctus, durum, decet, destino, disco, doceo, dubito ; est ; fas, furor, facile, fateor, festino; grave, gaudeo ; incipio, indignor, iubeo ; leve, libet, licet; maestitia, mos, miserum, memini, metuo; nefas, nescius, necesse; opus, oportet, opto; poena, pretium, paratus, parum, paro, patior, piget, placet, prodest, propero, propono, pudet, puto ; saevus, superbus, scio, soleo, sufficit, sustineo; tempus, turpe, tempto, tendo, timeo; utile; venerabile, valeo.
anticum (et vetus), adfirmo, audio; coepi; debeo, dico, duco; fructus, facilis, fingo; instituo ; longum (et tardum) ; malo, mereor, monstro; narro, nequeo, nescio, nolo ; patior, perago, pereat, possum ; queo ; rumor, respondeo ; sentio, sino; veto, videor, volo, voveo.

It will be seen that the largest list is that used by Statius, the smallest that found in Juvenal, who approaches prose usage the most closely of the four. It is in Juvenal, too, that the percentage of omissions is relatively the largest. It will be admitted that many of the omissions are those of common words, which occur or are likely to occur in every author ; but as Professor Postgate (who has antici-
pated part of my criticism) justly observes in the Classical Review for May, 1902, "the professed investigator of some detail of syntax through a literature or a considerable number of authors has the general reader entirely at his mercy; and he is in literary honor bound to see that his material is complete before he prints a line." Still more is the criticism deserved, when, as in the present instance, the investigation is limited to two or three authors.

A full, complete treatment of the infinitive should include every instance, whether the verb, adjective, or noun is followed by an infinitive with a subject accusative or not. When no limitations are set in the preface, and no exceptions expressly made, the only logical conclusion is that the words do not occur. In the same way, when it is distinctly stated that there are six or eight instances of a usage, one does not expect to find, as I have done repeatedly in the preparation of the present paper, that there are twelve or fifteen.

The classes of omission are varied. It is not so hard to explain the nonappearance of such words as nescio, puto, sentio, and volo, for they are almost universal in their occurrence. Why, however, Schmidt should cite queo from Valerius Flaccus, but omit it from Lucan is not clear. What led Lohr to mention the occurrence of quaero and queror in Statius and Schmidt to fail to do so in Lucan is a mystery. Such instances might be multiplied. There are other words (this is probably true of the nouns and adjectives) which are not common, some quite unusual. Here there is no excuse. Haste or carelessness or both must be held responsible. It is not my purpose to go farther into details. Scholars interested can easily make their comparisons and draw their own conclusions.

## 37. The Uses of the Preposition cum in Plautus, by Professor William E. Waters, of New York University (read by title).

In all cum occurs about 814 times; 60 per cent of the instances of its use, including manner, time, means, show the sense of accompaniment; in the other 40 , it has the added force of vicissim, i.e. signifying mutuality in the action of the verb or verbal noun with which it is connected. I. Signifying accompaniment, it is strengthened by simul or una or by both. Where the accompaniment is one of rest or motion in one place, the force of the preposition shades into that of apud. Esse, aetatem, agere (degere, exigere), vivere, employ cum in its most literal use. Perpotare, cenare, prandere, are used with cumz $=$ apud. These two uses of cum exhaust 120 of all its occurrences. II. With transitive and intransitive verbs of motion cum has its most abundant use. This includes expressions of anger, as Cas. 612: eas in maximam malam crucem cum hac; Most. 148: cum fundamento perierint (aedes), "lest the house perish, foundations and all"; also some fifty instances of its superfluous use, as in Aul. 449: idl mecum feram, with which cf. Bacch. 939: habere secum. More puzzling is its classification in Rud. 1380: quicum habeam iudicem, or Cas. 966, Most. 557. III. It occurs between nouns with the force of et, as in Am. 422: cum quadrigis Sol exoriens. The development of this usage out of the primary sense of accompaniment is apparent. IV. But cum thus used easily shades into the sense of habens, or gestans, or continens, or ferens. In at least 11 instances cum $=$ habens, as in Aul. 256: fliam despondebo cum illa dote, $=$ habentem illam dotem; so 1. 554: cocos cum manibus senis. Closely resembling cum $=$ habens is cum $=$ gestans,
of which there are some 27 instances, as Am. 117: processi sic cum servili schema, $=$ gestans servilem schemam. Equally frequent is cum $=$ ferens, as in Am. 149: cum lanterna advenit; As. 147: cum fustist ambulandum. So cum $=$ continens in Men. 702; Most. 248. In all there are about 122 cases ( $=15$ per cent) of cum $=$ et or a participle signifying possession, and joined with a noun or pronoun. V. Closely allied with cum indicating possession is its use to indicate with its noun some quality or description, especially when that noun is modified by an adjective. At times no certain line of demarcation can be drawn between possession, especially of some peculiar bodily member, and description. There are but four clear instances of cum with a mere noun indicating description: Bach. 398 cum cura esse, "be watchful"; Cap. 203 cum catenis sumus, "we are in chains" ; cf. Poen. 852 and Trin. 219. But of cum with the ablative limited by an adjective, and denoting possession with the added sense of description, there are at least some 47 instances; and about one-half of them indicate a bodily description, as Aul. 41, circumspectatrix cum oculis entissiciis.
VI. Of cum . denoting manner there are about 48 cases; in 18 there is no word limiting the noun. Examples are Am. 175, ferendum hoc onust cum labore; Aul. 681 ; Men. 785. This latter case furnishes some evidence of how easily the primary sense of accompaniment passes over into the sense of manner. Compare Curc. 291. One of the most striking uses is cum eo cum quiqui in Poen. 536 a and 588 , in the sense of cum hac condicione cum quaqua condicione, "with this proviso, with any proviso at all," on which cf. Buecheler, Archiv I, 280. Another striking usage occurs in M.G. 1351, ite cum dis benevolentibus; cf. Pers. 332. In both passages the accompaniment of the favoring gods becomes the manner of the action. The expression is of Greek origin; compare Il. ix. 49; Od. xiii. 391; Pind. Nem. viii. 28. The remaining 30 cases of cum with the ablative expressing manner have a limiting adjective. Here belong those threats and imprecations in which cum tuo malo magno, or cum cruciata maxumo and like phrases occur. Of these there are 16 instances.
VII. Of cumt and its noun denoting an accompanying circumstance, but with the added sense of "time when," there are not more than six cases. Am. $6_{3} 1$, cum vino simitu ebibi imperium tuum is a doubtful example. Compare Am. 743 ; Cist. 525 ; Merc. 255 ; Stich. 364 ; Truc. 660.
VIII. The use of cum with its noun to express means is naturally rare. Compare Curc. 289, suffarcinate cumt sportulis and cum libris, and Rud. 937, hic rex cum aceto pransurust. Whether in Capt. 1003 we have a fourth case is doubfful.

So far cum expresses some accompaniment or union. There remains about 40 per cent of the instances of the use of cum, in which it has the sense of " mutuality" or "reciprocity," whether affectionate, hostile, or neutral.

First are the instances of cum after osculari (all in the Miles) or limare caput. Once amare cum occurs, viz. Bach. 564 ; cf. voluptatem capere cum in Am. 114; morigerare cum, which implies mutuality more clearly than vivere or aetatems degere cum. Nubere cum or its equivalent occurs seven times.

Next is cum after pugnare and the like, and litigare and the like. Of this use there are some 29 instances.

Commoner, however, in the third place, is cum expressing the mutuality of ordinary commercium between men. Agere cum occurs 24 times; rem or negotium or quid rei (= quid negoti) habere is found with cum 30 times.

Fourth ; the dative with logui is supplanted by cum and its ablative some 31 times; and on the model of logui cum Plautus has in Epid. 651 the opposite, taceas tecum. There are $\mathbf{1 4}$ other instances in which verbs or expressions similar to loqui are used with cum and the ablative, in all of which the reciprocity of conversation is indicated.

Fifth; peculiar to Plautus is cum with orare. There are at least 12 instances. Compare As. 662; Bach. 554; Pers. 117; Rud. 773.

Sixth; about 19 cases of cogitari cum belong here, in some of which it is difficult to decide whether or not cum may have a different sense from that of mutuality. Thus in cogitari cum animo a common expression in Plautus, cum animo may denote means, and is so understood by Holtze.

Seventh ; cum is used after verbs of harmony, agreement, and the like, many of which aiready have the prepositional prefix con; cf. coniungere cum, sentio and consentio cum, consociare, convenire, pacisci, and the like, of which there are about 27 .

Finally, cumz occurs seven times after verbs of dividing and sharing.
Cum also occurs after a large number of verbal nouns, or nouns implying some action, in which the same reciprocal idea rests. There are at least 45 cases. Examples are bellum, litigium, cum; inimicitia, cum; sermo, controversia, postulatic, mentio, cum; gratia, pactio, pignuss, fides, amicitia, mutuom, tessera, signum, pax, commerciume, cum and the like.

Lastly; of instances of cum after adjectives of likeness there are five. In Capt. 302 occurs aequabilis cum; in Cist. 532 and Trin. 452, aequus cum; in Poen. 47 aeque cum; in Trin. 467 aequiperabilis cum. Alternus cum is found once: in As. 918. This usage, I believe, is extremely rare. Communis cum occurs thrice. One very good example of a common Greek brachylogy occurs in Capt. Arg. 6: suo cum domine veste versa, "his coat having been changed with his master," i.e. "having been changed with the coat of his master."

Naturally it is only a small number of the uses of cum in Plautus that can be pointed out as exceptional or noteworthy. In comedy, and with such a free and easy writer as Plautus was, such exceptional uses would be found in those categories where the preposition is used with some force superadded upon the strict and literal force it usually has, or where for picturesqueness it supplants some well-established but too prosaic construction. Such constructions are noteworthy therefore as amare cum, where the direct object would naturally be used; aedes cum fundamento as a Hellenism, meaning "house foundations and all"; scire or nescire cum aliquo, "to know" or "to be ignorant as much as anybody else"; pignus or tessara cum, where inter with a plural accusative might have been expected ; cum cura esse, "to be with care," i.e. "careful," somewhat as in Eng. lish "to be with child" = "to be pregnant"; ire cum dis benevolentibus, "to go fortunately"; osculari cum, "to kiss with," where the direct object would be natural; and loqui cum, where the dative after the verb would be the normal construction.
38. On Aristophanes's Testimony to Social and Economic Conditions in Athens, by Professor Arthur Fairbanks, of the State University of Iowa (read by title).

This article will appear in the American Journal of Sociology.
39. The Asyndeton of Participles in the Attic Orators, by Professor Robert R. Radford, of Elnira College (read by title).

An abstract of this article has not been furnished.
40. Notes on Sophocles's Antigone, by Professor Mortimer Lamson Earle, of Columbia University (read by title).

This paper will be printed in the Classical Review.
The Committee to Nominate Officers for 1902-1903, through Professor Hart, made the following nominations :-
President, Charles Forster Smith, University of Wisconsin. Vice-Presidents, George Hempl, University of Michigan. Mortimer Lamson Earle, llarnard Cullege. Secretary and Treasurer, Herbert Weir Smyth, Harvard University. Executive Committee, The above-named officers, and

Sidney G. Ashmore, Union University.
Francis A. March, Lafayette College.
Morris H. Morgan, Harvard University.
James M. Paton, Wesleyan University.
Bernadotte Perrin, Yale University.
The Secretary was instructed to cast the ballot of the Association for the persons named, and they were declared duly elected.

The Committee on Time and Place of Meeting in 1903, through Professor Harry, recommended that the Association accept the invitation from Yale University to hold the thirty-fifth annual session at New Haven, beginning July 7. Adopted.
The Committee to audit the Treasurer's accounts reported, through Professor Paton, that the Committee had examined the books and vouchers submitted, and found them correct in every particular.

On behalf of the Committee on Spelling Reform, Professor March then reviewed the work of the Committee during the past year.

The following motion was then presented by Professor Morgan, and unanimously adopted:

Resolved, That the members of the American Philological Association, assembled in Schenectady for the thirty-fourth annual session, heartily thank the President of Union College and Mrs. Raymond for the hospitable and kindly welcome with which they have been received in this beautiful spot; that they are grateful to the ladies of the college and of the city for pleasant entertainment and for many acts of kindness, and to the college fraternities for the use of their chapter houses ; and that to Professor Sidney G. Ashmore they are under much obligation for the careful arrangements made by him for their comfort and convenience.

Adjourned.

## PHILOLOGICAL ASSOCIATION OF THE PACIFIC COAST.

The Third Annual Meeting was held in the Lecture Room of the Mark Hopkins Institute of Art on December 26, 27, and 28, 1901.

San Francisco, December 26, igoi.
The Association was called to order at 2.30 p.m. by the President, Professor Ewald Flügel, of Leland Stanford Jr. University.

The Secretary of the Association, Professor John E. Matzke, of Leland Stanford Jr. University, presented the following report :

1. The Executive Committee has elected the following new members of the Association :

Mr. Albert H. Allen, 160I Taylor Street, San Francisco, Cal. Miss Mary Bird Clayes, 2420 Dwight Way, Berkeley, Cal. Mr. A. Horatio Cogswell, 2135 Santa Clara Ave., Alameda, Cal. Prof. L. W. Cushman, Nevada State University, Reno, Nev. Mr. Winthrop L. Keep, Mills College, Cal.
Mr. Tracy Randall Kelley, 1809 Jones Street, San Francisco, Cal.
Prof. H. B. Lathrop, Leland Stanford Jr. University, now University of Wisconsin, Madison, Wis.
Rabbi Jacob Nieto, 1719 Bush Street, San Francisco, Cal.
Prof, A, Putzker, University of California, Berkeley, Cal.
Miss Beatrice Reynolds, 1020 Polk Street, San Francisco, Cal.
Prof. F. G. G. Schmidt, University of Oregon, Eugene, Ore.
Through transfer from the American Philological Association there have been added:

Prof. J. E. Church, Jr., Nevada State University, Reno, Nev. Dr. B. O. Foster, Leland Stanford Jr. University, Cal.
Dr. H. W. Prescott, University of California, Berkeley, Cal.
Prof. M. M. Ramsey, Leland Stanford Jr. University, Cal.
2. Upon the suggestion of the Executive Committee the Secretary of this Association proposed to the Secretary of the American Philological Association that the Philological Association of the Pacific Coast be permitted to have its distinct membership list, elect its own new members, and collect its own dues. All of these requests were readily granted. In regard to the collection of the annual dues, Professor H. W. Smyth, Secretary of the American Philological Association, wrote as follows under date of October 5, 1901:
> "At the last meeting we voted that the Treasurer of your Association should collect its dues, and that the same be forwarded to the Treasurer of this Association in June."

> In consequence, the members of this Western Branch of the American Philological Association will receive their annual bills henceforth directly from the Treasurer of this Association, who will forward the aggregate sum once a year to the general Treasurer of the American Philological Association.

> Professor Matzke then presented his report as Treasurer of the Association. The collection of dues was undertaken after the receipt of the above cited letter from Professor Smyth.

## RECEIPTS.

Membership dues, Oct. 5 to Dec. 24, 1901 . . . . . . . . . . . $\$ 33.00$

EXPENDITURES.
Treasurer's and Secretary's books . . . . . . . . . . $\$ \mathrm{I} .65$
Stationery . . . . . . . . . . . . . . . . . . 2.20
Postage . . . . . . . . . . . . . . . . . . . 8.73
Printing . . . . . . . . . . . . . . . . . . . 13.75
Total. . . . . . . . . . . . . . . . . . . . . . . . $\$ 26.33$
Balance, Dec. 24, 1901 . . . . . . . . . . . . . . . . . 6.67
$\$ 33.00$
The President appointed the following committees:
Nomination of Officers for 1901-02: Professors Fairclough, Richardson, and Lange.

To Audit the Treasurer's Report: Professors Merrill and Murray.
On Time and Place of Meeting in 1902: Professors Pease and Schmidt and Dr. J. T. Allen.
The Association then proceeded to the reading and discussion of papers.

1. On Hiatus in Pindar, by Professor E. B. Clapp, of the University of California. ${ }^{1}$

Hiatus in general is far less frequent in Pindar than in Homer.
I. In detail, apparent hiatus [due to an obsolete consonant], which occurs in Homer with an average frequency of once in nine verses, appears in Pindar only about once to the Teubner page. This difference is due to several causes. (a) About 30 of Homer's digammated words do not occur in Pindar. (b) A number of words which are digammated in Homer show no trace of the influence of an omitted consonant in Pindar's usage. (c) Even in the case of the 24 words or stems which show the influence of the digamma, the consonant is
${ }^{1}$ This paper will form a part of a more comprehensive discussion of hiatus and elision in the Greek melic poets, and is therefore withheld from publication in full for the present.
ignored by Pindar almost twice as often as it is respected, while in Homer, according to Hartel, the force of the consonant is felt six times as often as it is neglected. Only in the case of for is Pindar's usage overwhelmingly in favor of the digamma.
2. Hiatus aiter a diphthong or long vowel [usually with the metrical value of a short syllable] occurs in Homer about ten times to the page; in Pindar but twice to the page. The diphthong or long vowel is shortened in 215 cases out of 230 , or more uniformly than in Homer. (a) In 162 out of the 215 cases, the correption appears in a diphthong consisting of a short vowel followed by $t$. These cases are easily explained in accordance with the views of Hartel and Grulich, viz. that the 'passes into the corresponding consonant sound, preventing hiatus, and the preceding vowel is thus left alone, and takes its natural [short] quantity. (b) The diphthong $-o v$ is shortened 23 times, always as a genitive ending, to be explained as an elided $-\infty$ [so F. D. Allen]. (c) The diphthong $-\psi$ is shortened 14 times, always as a dative ending. This is best explained, with Grulich [see under (a)], as due to the old dialectic dative in -oc. (d) The diphthong $-a$ is shortened eight times, always as a dative ending. These cases are usually left unexplained, or accounted for by analogy. The writer would suggest that there seems to be abundant evidence for the existence of an old dialectic dative singular of the first declension in $\alpha$, , whish would bring these cases, too, within the sphere of the law of Grulich, cited above. (e) The vowels $-\bar{\alpha},-\eta,-\omega$ are shortened in hiatus eight times.

The metrical range of this shortening of diphthongs or long vowels in hiatus is very limited. Of the 215 cases of this license, 206 appears in dactylic feet, viz. 149 in the third syllable, 57 in the second syllable, the latter group being mostly confined to cases of кal as short. In cretics the correpticn occurs four times, in tribrachs three times, in trochees twice. In both places where the shortening takes place in trochees [O. 14. 1, P. 8. 96, Christ's edition of 1896], emendations have already been proposed on other grounds. These emendations should be accepted, since the correption in a trochaic fout is scarcely justifiable.

The diphthongs and vowels which remain long in hiatus are: (a) -at in I. 8. 56, to be emended with Hermann or Schroeder. (b) -ov in N. 9. 55, I. 1. 16, Frag. 177. 4. Read, in each case, -ot' [-oto] for -ov, comparing O. 13. 35, P. 1. 39. (c) $-q,-\varphi$, seven times. These cases fall under Grulich's law, and offer no difficulty. (d) $\bar{\alpha},-\eta,-\omega$, four times. These cases seem to be anomalous, but see Mommsen, Supplement, on O. 13.34.
3. Hiatus strictly 'illicit' scarcely occurs in Pindar. See O. 5. 11, N. 5. 32, in both of which places $F$ is suspected.

## Note on Elision in Pindar.

1. $-a$ is elided 444 times [ 257 times in endings of declension, 69 times in prepositions].
2. -0 is elided 86 times [ 41 times in verbal endings, 29 times in prepositions].
3. $-t$ is elided 68 times [ 56 times in prepositions, nine times in verbal endings, once in $-\sigma \iota$ of the dative plural, once in $\check{\epsilon} \tau \iota]^{1}$
4. -at is elided 22 times, always in verbal endings. ${ }^{1}$
${ }^{1}$ Yet Christ $[$ on O .12 .6$]$ says " ut enim elisio vocalis trara est, ita frequens elisio diphthongi -ac."

The following table shows that Pindar felt a marked preference, in the case of certain words or endings in -al, for elision as against shortening or hiatus, and vice versa.


Remarks were made on this paper by Professor Richardson and Miss Reynolds.
2. An Important but Neglected Elizabethan Dramatist, Henry Porter, by Professor C. M. Gayley, of the University of California.

The writer attempted to show (1) that the identity of Porter was not as hitherto conjectured; that our knowledge of the author of the Two Angry Women extended over a period of three years and included several facts not ordinarily known concerning the esteem in which he was held by contemporaries of his profession.
(2) That, in the comedy of manners and of the 'characteristic' or humour, he should be regarded as closely connected with Ben Jonson; that if his Two Angry Women was first known as the Comodey of Umers he anticipated Jonson in that style of drama, but that even if this cannot be proved, his importance in the 'humours' movement was as great in 1598 as that of Chapman or Jonson.

The article as a whole will appear in the first volume of the writer's Representative English Comedies, published by the Macmillan Company.

The paper was discussed by Professor Flügel.
3. Some Notes on the Sources of Deloney's Gentle Craft, by Professor Alexis F. Lange, of the University of California.

In attempting to ascertain the source or sources of each of the six tales of the Gentle Craft (Parts I. and II.), as well as Deloney's use of his raw material, it was found necessary to include his poems and the novels that preceded the Gentle Craft within the scope of study, and to trace the origin and development of his story-writing. Only these wider aspects of the problem were discussed in the paper presented. For the whole discussion, see the writer's edition of the Gentle Craft, Palaestra, Vol. XVIII.
I. Deloney's extant ballads fall into two main classes, - the journalistic and the historical. The sources of the former are contemporary actualities; of the latter oral tradition and English chronicles. The treatment of the themes of the first class is realistic; of the second essentially romantic.
2. The change from ballad-writing to prose fiction involved to a large extent only a change of medium of expression, the themes being supplied by the life,
traditional lore, and documentary history of industrial civic instead of agricultural feudal society, and the realistic mode of handling being combined with the romantic.
3. The point of view remains that of the popular ballad. Thomas of Reading, Jack of Newobury, the Gentle Craft, exhibit - in varying degree - the influence of the romances of chivalry and of the rogue tale, but the characteristic attitude disclosed by the principle of selection is that of popular English traditions.
4. The method of plot-construction appears to have been influenced less by contemporary fiction than by the popular drama, which depended for its material on the same kind of sources.
5. So far as sources are concerned, the stories of the Gentle Craft exemplify the following formula: Two separate threads, spun out of historical or legendary stuff - for the warp; the filling - actuality, reminiscences, and the yarn of fancy.

The paper was discussed by Professor Flügel.
4. The Genuineness of the Greeting in the Letters to Appius, by Professor E. M. Pease, of the Leland Stanford Jr. University.

No abstract of this paper is available.
5. The Fountain Episode in Chrétien de Troies's Yuain, by Professor O. M. Johnston, of the Leland Stanford Jr. University.

In this episodic poem Chrétien relates a curious adventure of Yvain at the fountain of Barenton in the forest of Broceliande. The fountain was a boiling spring, colder than marble and overshadowed by the fairest of trees. On the trunk hung an iron bowl, by a chain that reached to the fountain; beside was a stepping-stone, and opposite a small chapel. When Yvain filled the bowl and poured the water on the stone, there arose such a storm that the entire forest was destroyed. When the tempest was past, the pine sheltering the fountain was covered with singing birds. Before they had ended their song Yvain was assailed by Esclodos le Ros, the protector of the fountain and the husband of Laudine, who dwelt in a castle near by. After a hard battle, lvain killed his foe and married Laudine. Soon after the marriage, Yvain was granted a year's leave of absence by his lady. But remaining away from her longer than the time agreed upon, her love for him was changed into hatred, and it was only after having performed wonderful feats of courage in company with his faithful lion that he regained her favor.

In this episode two sets of Celtic stories have been welded together.
The principal theme of the fountain myth is the rain-producing stone, which probably goes back to the Welch tradition connected with lake Dulyn, or to the Irish legend of Gilla Daker. A protector of the fountain similar to the one described in the Yvain is also found in the Irish story of Gilla Daker. The chapel that stands near the fountain is a relic of the Druids, and its original purpose was doubtless to appease the fountain when disturbed (compare Giraldus Cambrensis's description of a fountain in the Irish province Munster, Topographia Hibernica, 2, 7). The tree with its singing birds Kölbing, traces back to the Brandan legend (Zeitschrift fiur Vergleichende Litteraturgeschichte, XI. 443).

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According to Gaston Paris and Ahlström (Romania, XXVI. 106), the legend of Laudine is a variant of the swan-maiden story. One will readily see, however, that the usual motives of the swan-maiden story are not found in Chrétien's account of the episode of Laudine, Esclodos le Ros, and Yvain. There is nothing in the Yvain that would lead one to believe that Laudine is a swan-maiden. Besiles, the way in which the heroes come into relations with the heroines in the two stories is entirely different. The swan-maiden is forced to marry a young man who gets possession of her clothes while she is bathing in the fountain, and refuses to give them up until she grants him her love. On the other hand, Laudine is induced to marry Yvain through the persistent effort of her maid Lunete. Another difference between the swan-maiden story and the legend of Laudine lies in the attitude of the fairies toward the heroes after marriage. In the original story of Wayland and the swan-maidens, the fairy required no promise of the hero. Laudine, on the contrary, makes Yvain promise not to remain away from her longer than a year. Finally, the companion of Laudine is her servant, while the companions of the swan-maiden are her equals.

The basis of the legend of Laudine is the Celtic fairy tale in which a superior being, receiving a mortal into favor, requires some promise or a test of obedience in the resistance of some temptation. The temptation is usually not resisted, and the penalty of such disobedience is, as a rule, temporary banishment from the presence of the fairy.

This Celtic fairy tale lies at the basis of the Lanval cycle of lays. In the lay of Lanval, as in the legend of Laudine, it is a question of love between a mortal an.l a supernatural being. In both cases a maid of the heroine prepares the way for the meeting and marriage. In both cases the relations of the hero and the heroine are broken off because the hero fails to keep his promise. Even the incident where Yvain takes leave of Laudine to return to his country finds a parallel in the lay of Guingamor, which is connected with the Lanval cycle of lays, although the swan-maiden story has been inserted. Guingamor married a fairy with whom he lived three hundred years, at the end of which time he asked permission to return to his own country. The fay grauted his request, but comman led him not to eat or drink anything after crossing a certain river until he should reach his destination, else he should become old and decrepit. The hero bruke his promis $\approx$, and was punished therefor.

The principal theme of the Celtiz fairy tale, of which the legend of Laudine is a variant, is also found in Partenopeus de Blois, Floriant et Florete, Le Bel Inconnue, La Chdtelaine de Vergi, Ogier le Danois, and in the lays of Desiré and Graelent. However, in some of these legends, the swan-maiden episode has been inserted in the original fairy story.

It is possible that Chrétien took the material for his fountain episode from a story in which the fountain traditions and the fairy tale had already been combined. However, it is more probable that he found the fountain story in a form similar to the one given in his poem, and that he added to this the legend of Laudine. Having described the faithfulness of Enide in the castle of Limors, he desired to give the picture of an unfaithful woman in the castle near the fountain of Barenton (the Yvain being the counterpart of the Erec).

Adjourned at 5.20 P.M.

## Second Session.

The Second Session was called to order by the second Vice-president, Professor Pease, at 8 P.m., to listen to the address of the President, Professor Ewald Flügel, of the Leland Stanford Jr. University, on the subject of 'The History of English Philology and its Problems.'

The address gave a list of the main representatives and an outline of the principal achievements in the field of English Philology. The paper will be published in full in the Anglia. The conclusions were summarized as consisting (1) in the recognition of the aim and purpose of Philology as the comprehensive Science of the Life of the Human Soul as revealed in the Word; (2) in the absolute recognition of the Historical Method as applied to all the different branches of English Philology.

The development of this recognition is the History of English Philology. It dawned in the seventeenth century, and was worked out in the period between Hickes and Grimm. It had not to wait fur Darwin, as some seem to think; on the contrary, the Philological Sciences may proudly assert that the careful observation of the development of their object was an established working principle with them before it was ever applied to the Natural Sciences; it was the workingprinciple of Junius, Wallis, and Hickes.
i. The recognition of the Historical Method in the Grammatical Field was accomplished when Grammar gave up being categoric and legislative, when it emancipated itself from the 'Thou shalt' of Mediaeval Latin Grammar and from practical ends; when it became descriptive, observing the Phenomena as they are, when it became Historical.
2. In the Lexicographical Field this method was established when the Dictionary, although for practical purposes still arranged in the unscientific alphabetical order, gave up dictating as to the right or wrong use of words, and more humbly tried to serve as a storehouse of information as to word-history, to give the biography of words.
3. In the field of Literary History it became established when histories of literature ceased to be biographical Dictionaries, catalogues of authors, summaries of this part of literature or that, when the private individual likes and dislikes ceased to be the standard of measuring, when the literary studies ceased to be directed by, and depend upon, individual enjoyment of literature ; when the History of Literature was recognized as the connected account of literary movements, as one of the most important disciplines dealing with the development of the intellectual and spiritual life of mankind; when the critique, the causerie, and the eulogistic biography became History; when dilettantism gave way to Science.
4. In the field of Textual Criticism this recognition became established when the edited texts were not polished up and wilfully changed to suit the linguistic and aesthetic standards of modern times, but when the purity of the literary tradition, its preservation or rehabilitation, became the editorial ideal.

That it took a long time for this critical-historical method to conquer, that there were relapses and standstills, is one of the instructive facts which we observe.

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The more important problems that seem to be still waiting their solution are :
In the grammatical field English Philology still lacks a comprehensive Phonology of Middle English Dialects, careful investigations (phonological, morphological, and lexicographical) of the language of the sixteenth century, of the language during its important transition period from Middle to Modern English. Another desideratum is a comprehensive Historical Syntax of the language. Lexicography is waiting for a comprehensive Anglo-Saxon Historical Dictionary, for a MiddleEnglish Dictionary based on exhaustive collections of the Old French as well as the Late Latin Language. Only when these preparatory works shall be completed, will a final History of English Words become possible; a History of Words which in its turn will serve as a sound basis for an English Semasiology, for which the fulness of time has not yet come. An Early English Onomasticon is still waiting for its compiler. In the field of English Antiquities a great deal of systematic scholarly work is still to be done. A serious desideratum is a comprehensive English Palaeography.

As far as editions, texts go, the relics of Anglo-Saxon Prose are not yet completely collected, neither are the Glosses. We have not yet a Collection of the Earlier English Songs" (to the sixteenth century), no complete collection even of such an important branch as the Historical Songs. Further, we want critical, conscientious, and accurate editions of all the Elizabethan and Jacobean dramatists. And, finally, THE 'History of English Literature' is still to be written.

Drawing some lessons from the history of English Philology, we see

1. The truth of Döllinger's saying: that all progress in science was brought about by men who had the mastery of more than one discipline and study; 2. we see that even the greatest promoters of English Philology were merely links in a great chain, that even the greatest results grew from small beginnings, and that coöperation, unselfish international coöperation, has been most fruitful.
2. We see that the highest work has resulted from unselfish devotion, a clear recognition of the problems and true enthusiasm. It seems that the more recent class of scholars has the first element, but lacks the proper perspective, the courage to tackle great problems and that divine enthusiasm which inspired the great Masters.

## Third Session.

The Third Session was called to order by the first Vice-president, Professor Clapp, at 9.45 A.m.
6. On the So-called Iterative Optative in Greek, by Dr. James T. Allen, of the University of California.

This paper is printed in full in the Transactions.
7. Homeric Song and the Mode of Rhapsodizing, by Professor H. R. Fairclough, of the Leland Stanford Jr. University.

This paper has been published in full in the Studies in Honor of Basil Gildersleeve, pp. 205-229.

## 8. The Semasiology of Germ. schenken, Engl. skink, by Professor Hugo Schilling, of the University of California.

Jacob Grimm tried to explain the obvious connection of schenken' to pour or serve drink' with schenkel, schinken 'shank' by assuming that at some early period a shank bone had been used as a tap or faucet on casks. This theory was generally accepted until Johann Franck declared it to be a mere "einfall" unsupported by any evidence, and proposed to derive schenken from schank, attributing to this word the primary meaning "Gestell für Trinkgeräte," i.e. 'cupboard, buffet.' But in this he obviously reverses the natural order of things. The verb *skankjan must have existed long before a cupboard was thought of; the very invention of such a contrivance presupposes extensive skinking; the verb is common to most of the Germanic dialects, and dates back to Primitive Germanic, while Franck's "primary " meaning of schank is found only in German, and even there only in certain dialects. A similar anachronism is involved in the more recent theory of Francis A. Wood, who thinks it probable "that 'shank' was named because it was hollow like the horns or drinking cups in use," and who would derive O.E. scencan 'give to drink' from scenc 'cup,' in view of "the similar correspondence between O.E. steap 'drinking vessel' and O.N. steypa 'pour out,'" and of O.E. scencing-cuppe 'cup. from which drink is poured.' In point of fact, the probability is that shank got its name earlier than the horn or drinking cup, especially if, as Wood thinks possible, the cup was at first a hollow bone (shank bone); O.N. steypa does not come from staup, O.E. steap, but is a causal answering to stupa 'stoop, sink down'; and the modifying element scencing shows that a scencing-cufpe was not an ordinary drinking cup, but like the analogous skenki-fat of the O.S. Prudentius glosses, a cyathus or calathus, a dipper or ladle.

As between schenken and the cognate nouns schank, schenk, schenke, O.E. scenc, O.N. skenkr, everything points to the priority of the verb. The relation of schank to schenken was primarily that of a verbal extract, like schrank< schränken, trank<tränken; its original meaning 'the serving of drink' is the only one attaching to the O.N. equivalent skenkr, and has survived in German to the present day. From this meaning alone can all the variant meanings found in different periods and localities be easily and naturally derived. It developed along two lines: I. (1) the pouring or serving of drink, (2) the drink served, (3) the vessel containing the drink, (4) a liquid measure holding about the quantity ordinarily served; II. (1) the pouring or serving of drink; (2) the place where drink is poured or served: a. a buffet; b. a tavern. Compare $\pi \hat{\omega} \mu a$ 'drink, draught '; 'drinking cup '; Latin potus 'a drinking '; 'drink, draught'; 'drinking cup.'

The final problem of explaining the undeniable connection of schenken with schenkel 'shank' admits of a perfectly simple solution. The earliest large receptacles for liquids were, of course, skins. For obvious reasons a skin would be filled through its largest aperture, the neck, while inversely, except in the case of very small skins, the drawing of the contents would best be done by means of the long and tapering skin of the shank. That this was actually the general practice is shown both hy archaeological and philological evidence. A wall painting in a tavern in Pompeii represents a market scene where a wine vender

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fills the amphora of a customer from the shank of a large skin resting on a wagon. Another similar picture in the same house shows the string with which the shank had been tied up hanging loose from the lower part of the shank. The peculiarly shaped Greek cup termed $\dot{\alpha} \sigma \kappa \delta \delta$, which is fashioned, as the name indicates, in imitation of the wine skin, shows likewise at one end a large opening for use in flling, and at the other a long, tapering spout. In the Medea of Euripides Aigeus tells Medea (1.679) that the oracle has enjoined him

$$
\dot{\alpha} \sigma \kappa o \hat{v} \mu \epsilon \tau \grave{\partial} \nu \pi \rho \circ v ́ \chi \circ \nu \tau \alpha \mu \grave{\eta} \lambda \hat{v} \sigma \alpha \iota \pi b \delta a .
$$

Paley's note on this passage reads: " $\lambda \hat{v} \sigma a \iota \pi \delta \delta a$ or $\pi 0 \delta \epsilon \hat{\omega} \nu \alpha \dot{\alpha} \sigma \kappa o \hat{v}$ signified 'to untie the foot-skin of a wine-bag,' i.e. to let out the liquor through the projecting skin of the animal's foot, which served (as it still does in wine-producing countries) as a spout or tap." The scholiast explains: " $\mathfrak{\alpha} \sigma \kappa 0 \hat{v}$ oũ $\nu \hat{\eta} s \quad \gamma \alpha \sigma \tau p b s, \pi \delta \delta \alpha$




Schenken, accordingly, is derived from the Germanic noun skank-as applied to the leg of the wine-skin, and means literally 'to shank out.'

Incidentally an interesting vista is opened by the derivation of the synonymous $z a p f e n$ 'to tap' from $z a \neq f(e n)$ 'tap,' cognate with zipfel 'tip' $=\pi o \delta e \omega \omega^{\prime}$ in its extended meaning of a thin, tapering end generally.
9. The Fable in Archilochus, Herodotus, Livy, and Horace, by Professor H. T. Archibald, of Occidental College. ${ }^{1}$

Fable is nowhere in Greek or Roman literature defined or limited. The terminology, as in modern usage, is everywhere generic. But generic fable presents too broad a field for a connected literary study. Hence, fable proper has been limited, for convenience, to the following: a fictitious narrative wherein one or more animals or inanimate objects are introduced as speaking or acting, or both, in the manner of types, to illustrate either a parallel set of circumstances or a general principle, personification being normally employed only in so far as to enable the characters to set forth their typical relationships.

Four typical phases of the literary use of fable may be shown in two Greek and two Roman writers, one each in prose, one in poetry. The contrast is emphasized by the grouping: Herodotus, Livy; Archilochus, Horace.
I. Herodotus may be taken as denoting the type of nearest approach in literature to the norm of fable as a popular literary form. The characteristics of the fable of Herodotus (Piper and Fishes, Bk. I, c. I4I) are: (I) à $\phi \in \bar{\epsilon} \epsilon \epsilon a$, indicated by: (a) order of words, being almost without exception subject - verb-object, with adjuncts also in similar " natural" order; (b) $\epsilon i \rho \eta \mu \hat{\ell} \nu \eta \lambda \epsilon \xi \neq s$ very pronounced; (c) gen. abs. of conversational type; (d) direct, unadorned style, with no descriptive adjectives, no type coloring. (All these naive qualities appear also in the fables of Aristotle (Rhet. II, 20), and these as well: non-avoidance of

[^52]repetition; strong $\delta \rho \sigma \delta \tau \eta s$; story-telling imperfect; clear types.) (2) $\bar{v} d \rho \gamma \in t a$, shown in (a) $\delta \rho \iota \mu \nu \dot{\tau} \eta s$ of avoidance of $\pi \lambda a \gamma \iota a \sigma \mu \delta$ s, the 0.0 . form also heightening the effect of the few words in O.R.; (b) characterization, in irony, surprise, etc.; (c) accurate use of prepositions and technical terms; (d) charm of Ionic, with poetical terms added; (e) picturesqueness of scene.
II. In striking contrast is the fable of Livy (Belly and Members, II, $3^{2}$ ), a manner of $\lambda$ oros évarúvos. It is marked by: (a) continued antithesis and parallelism of phrase and of thought, accompanied by alliteration; (b) tautology and variety of phrase; (c) the use of descriptive adjectives and poetical phraseology; (d) vivid personification, showing even the passion of conflict; (e) $\mu$ aкро-入orla; ( $f$ ) rhetorical use of types.
III. The fable in Archilochus ((1) Fox and Eagle, frgs. 94. 86. 38, 88. 109. 87, 110. 126, 96. Bk.; (2) Fox and Ape, frg. 89) is pure invective. To this end are employed both artistic and popular elements. Distinctly artistic are : (a) the dramatic setting, plot, and characterization ; (b) poise, variety, and finish of dialogue; (c) the use of epic epitheton ornans, semi-epic word-pairing, a quasiepic patronymic. Partly artistic and partly popular elements are the metre and the animal types. (1) The iambic metre is popular in its origin, and suited to dialogue, being also the most practical of metres. It is artistic in its epodic form, suited to lampoon, and in the mock-sportive modification of the epocle to heighten the effect of sarcastic iteration (cf. frg. 89). (2) The types are well known and pronounced, hence popular. The Eagle, as a bird-character, is fanciful (cf. Hesiod's Hawk and Nightingale, $O p .203$ ff.). So with the secret meeting of the Fox and Ape. The passion back of these clear types is vulgar, and reënforced by metre and scene produces a very effective lampoon.
IV. Horace has more of fable than any other classical writer (nine fables in all, five by way of allusion). He does not use fable as invective, as Archilochus and Lucilius, or as a motif of boorishness, as Aristophanes does. Like Phaedrus, he denies that he is writing purely popular poetry, makes the humor of the fable a means to an ethical end, and never makes fun with malice prepense; but, besides, Horace has always a direct satiric purpose, and his fable is personal and subjective. The fable imago typifies the phase of life he is dealing with and draws the lesson.

The importance of the fable as a vehicle of Horatian Satire is shown by the variety of themes with which it deals; hypocrisy, fickleness, greed, integrity, false emulation, and the relation of luxury to happiness, - the last treated from three sides. The satiric effect is heightened by sly humor, table turning, clear and popular types, inevitable appropriateness.

The range is from the distinctly popular to the highly ornate. (i) The former may be illustrated in the Frog and Calf (Sat. II, 3.314 ff ). Significant are: (a) the parody of the popular tenets and teaching of the Stoics, with a thrust also at the prevailing vices of the day; (b) the imparting of tragic color by modifying the story, and the increasing of $\pi \dot{d} \theta o s$ by the use of rime and alliteration; (c) the six well-marked colloquialisms in five lines, with broken metre and short abrupt cola; (d) complete animal dialogue. (2) The most artistic fable is the City and Country Mouse (Sat. II, 6.79 ff .) : (a) in its natural rise from theme and scene; (b) its realistic portrayal of contrasted types, heightened by contrast of scene and by mock-heroic touches; (c) its grace, dignity, and sympathetic de-
velopment; (d) the attractive and pointed enforcement of the moral, the lesson Horace himself had learned from experience.

This paper was discussed by Professor Pease.
10. The Anglo-Norman poet Simund de Freine, by Professor John E. Matzke, of the Leland Stanford Jr. University.

Simund de Freine is the author of two hitherto unpublished Old French poems, one being the Roman de la Philosphie, the oldest known French adaptation of Boethius, the other a Vie de Saint Georges, containing a version of the passion of this saint. Both poems are unique from the point of view of versification, inasmuch as they are written in lines of seven syllables, riming in pairs. The question of authorship is solved by the acrostic Simund de Freine me fist, found in the opening lines of both.

The Roman de la Philosophie is known to exist in three manuscripts, - in London, Brit. Mus. 20 B. XIV., in Oxford, Bodleian Library, Douce 210, and in Cheltenham, Sir Thomas Philipps Library, 8336. The Vie de Saint Georges is found only in Paris, Bibl. Nat. F. Fr. 902.

Nothing is known about the personality of the author. The few facts which may be established are based on the study of two Latin poems addressed by him to Giraldus Cambrensis, published Giraldi Cambrensis Opera, Rolls Series, I. p. 382. From these it appears that he was a Canon at the Cathedral of Hereford in Wales. The first was written in the year 1203; the second according to the traditional explanation is said to refer to an incident whish took place in 1216, but the matter does not seem entirely clcar, and Simund de Freine appears to refer to himself as older than Giraldus, who was born in 1147.

A study of the language of the French poems shows that they belong between Chardri (beginning of the thirteenth century) and Adgar (about ir60), but seemingly nearer to the former than to the latter. The Roman de la Philosophie seems to have been written first. The Vie de Saint Georges must, without question, be referred to the return of the members of the third crusade under Richard Coeur de Lion (1189-1193). In fact this expedition had camped for six weeks at Lydda near Jerusalem, where one of the most famous churches of Saint George stood, and after this crusade Saint George became the patron saint of English knights. In 1222, the 23d of April, the calendar day of the saint, was designated as a national holiday at Oxford. The version of this legend, utilized ly Simund de Freine, differs from that current in Western Europe in the tenth to the thirteenth centuries, and it agrees with the original form of the legend known in Asia Minor and Palestine.

An edition of both poems prepared by the present writer has been accepted for publication by the Société des Anciens Textes and a study of the legend of Saint George is in course of publication in the Publications of the Modern Language Association, Vol. XVII.

Adjourned at 12 M .

## Fourth Session.

The Fourth Session was called to order by the President at 2.30 P.m.
The Committee to audit the Treasurer's Report reported through the Chairman, Professor Merrill, that the statement had been examined and found correct. The report was accepted.

Upon motion of Professor Clapp the Secretary was instructed to send telegrams of greeting to the Archaeological Institute in session at Columbia University, and to the Modern Language Association in session at Harvard University.
xi. The Position of the Greek Fleet at Salamis - in the light of the account given by Aeschylus and Herodotus, by President B. I. Wheeler, of the University of California.

This paper is published in full in the Transactions.
The paper was discussed by Professors Clapp and Murray.
12. On Certain Sound Properties of the Sapphic Strophes as employed by Horace, by Professor L. J. Richardson, of the University of California.

The paper is published in full in the Transactions.
The paper was discussed by Professor Merrill.
> 13. "La Moglie Involata" in the Orlando Innamorato I. XXII., by Professor Colbert Searles, of the Leland Stanford Jr. University.

Brandimarte and Orlando having rescued Leodilla from some giants, she tells them her history. She had been married against her will to an old man, Folderico. In spite of the jealous watchfulness of her husband, her old lover, Ordauro, succeeds in carrying her off by means of an underground tunnel. This story is evidently taken from the Historia Septem Sapientium, or the Italian version known as $I$ Sette Savi, published by D'Ancona, Pisa, I864, in which our story bears the title " La Moglie Involata"; in other versions it is sometimes called "L' Inclusa." According to the editor this story of La Moglia Involata furnished Bojardo with material for his Folderico episode. However, Bojardo's version differs in some details from that of $I$ Sette Savi, and these may be traced back to the Miles Gloriosus of Plautus, the first two acts of which in a general way resemble this story. We conclude therefore that Bojardo's version is a fusion of the two rather than a renovation of the one.

This paper is in course of publication in Modern Language Notes, Vol. XVII.
14. Chinese Poetry, by Professor John Fryer, of the University of California.

For the ordinary Chinaman, with his prosaic, utilitarian nature, his queersounding language, and his awkward-looking writing, to be capable of satisfying all the different requirements of poetry, seems at first sight to be an impossibility. Yet, strange to say, when our European ancestors were little better than savages, Chinese poets had already begun to flourish. Their poems, handed down from ancient times, were collected about three thousand years ago in that grand old book called the Shi-king. The art has gone on progressing ever since, so that poetry forms one of the most interesting, voluminous, and important parts of the national literature.

To appreciate thoroughly Chinese poetry one must learn the language in which it is written. No translation can begin to give more than a vague notion of its many excellent features. Sir John F. Davis, Professors James Legge and Herbert Giles, Mr. C. Stent and other Sinologues have published translations of more or less merit, varying from extreme dryness, through a slavish attempt to be literal, up to extreme freedom, through the desire to produce something pleasant to read. A middle course, such as is generally taken in the translations of the poetry of other nations, whether ancient or modern, is evidently what should be aimed at.

## I. Construction.

In considering the construction or outward form of Chinese poetry, we have to take into account some of the rules fur sounds, tones, accents, metrical feet, the caesura, rhyme, parallelism, brevity, and denouement.

There is no poetical difficulty in the sounds of the Chinese language, which are not less euphonious than those of English or German. The tones are of great assistance in giving cadence and modulation. There are only two accents recognized, which are the " $p$ "ing" or even and the "tsê" or deflected. These bear some resemblance to our grave and acute accents. The rules for metrical feet require the "p"ing" and the "tsê" to follow in a prescribed order in every line; while those in one line have to balance or oppose those in another. For example, in a verse of regular poetry with five words to a line one of the usual formulae is as follows:

$$
\begin{aligned}
& \text { 1. p'ing p'ing ... tsê tsê p'ing. } \\
& \text { 2. tsê tsê ... p'ing p'ing tsê. } \\
& \text { 3. tsê tsê ...tsê p'ing p'ing. } \\
& \text { 4. p'ing p'ing . . . p'ing tsê tsê. }
\end{aligned}
$$

Here it will be noticed that the accents of the first and third lines are opposite; and also those of the second and fourth.

Another requirement is the caesura or pause. This comes between the second and third words of each line of five-word poetry, and between the fourth and fifth in seven-word poetry. The position of the caesura is not fixed in irregular poetry, but depends considerably on the sense of the words or on the construction of the sentence.

As to rhyme, it is considered one of the first essentials in Chinese poetry. In regular four-line poetry it occurs at the ends of the lines of even number; that is to say, the second and the fourth. The rhymes were fixed a thousand or more
years ago. As the pronunciation has since varied, the sound is now no criterion; but the rhyming dictionary settles which words ought to rhyme and which not. Irregular or popular poetry depends mostly on modern sounds for its rhymes.

Parallelism is another important feature, and bears a close analogy to that found in Hebrew poetry. The characters of one line have to bear a certain relation to those in another line, such as synonymous, antithetic, and synthetic. In no other language could these parallelisms be carried to such a high pitch of ingenious word-for-word correspondence. English translations cannot begin to show this feature, much less to do it justice. The patient ingenuity displayed in some of these poetical compositions is almost incredible.

Brevity is highly essential. As a rule, four or eight lines, or twenty to twentyeight words, is the limit for an ordinary poem; which is valued not so much for what it actually says as for what it implies, leaving the sense to go on, as it were, in the reader's mind.

Lastly may be noticed the surprise or denouement in the last line, and growing out of the preceding lines which lead up to it. This denouement contains the gist of the whole poem, and shows the idea that the poet had in view.

## II. Spirit.

The spirit or inwardness of Chinese poetry is most difficult to understand or appreciate. However good may be the style and language, if it is not animated by something which appeals directly to the heart and soul, it falls flat and useless, so that it at once goes into oblivion. It is strange, but true, that some of the poems most prized by the Chinese have their counterpart, as far as sentiment is concerned, in the works of our ancient and modern Western poets. Some are so closely allied as to show this resemblance almost word for word throughout. Our limited space will admit of only one illustration.

China's greatest poet, Li-tai-po, who lived in the T'ang dynasty, when poetry was at its highest point of development, wrote a poem which has been translated by Sir J. F. Davis as follows:

See how the gently falling rain
Its vernal influence sweetly showers;
As through the calm and tepid eve, It silently bedews the flowers. Cloudy and dark the horizon spreads, Save where some boat its light is burning;
But soon the landscape's tints shall glow
All radiant with the morn's returning.
The twenty-second ode of Anacreon, as translated by Thomas Moore, reads thus:
Observe when mother earth is dry
She drinks the droppings of the sky;
And then the dewy cordial gives
To every thirsty soul that lives.
The vapors that at evening weep
Are beverage to the swelling deep;
And when the rosy sun appears
He drinks the ocean's misty tears.
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The likeness of the ideas is so strong and the order so perfect that it would almost appear as if the great Chinese poet had, a thousand years after Anacreon's time, studied his' odes and made a Chinese adaptation of them.

Justness of sentiment, beauty of imagery, and harmony of construction are the great essentials of poetic composition in China; while the emotional element, which we value so highly, seems only a secondary consideration.

## iII. Classification.

The Chinese classify their poetry under four general heads, according to the closeness of its conformity to the fixed rules. A more practical arrangement is under three great divisions: first, the ancient odes and songs, or classical poetry, such as that in the Shi-king; second, the moral and didactic poetry, which conveys the doctrines and precepts of teachers and sages, and often contains satirical and mythological allusions; third, the descriptive and sentimental rhymes, which form the most important and attractive element, and which revel in the expression of the romantic and picturesque.

Two varieties of poetry are almost unknown in China. One is the epic and the other is the pastoral. The former is unsuited to the genius and requirements of Chinese poetry, while the other is not to be expected from a people strictly agricultural rather than pastoral, having beef and milk tabooed as articles of diet.

In conclusion, Chinese poetry is worth a far better acquaintance than has hitherto been accorded to it. Our Chinese friends show in it that they are richly endowed with imagination. Their verse has helped to lift them above the level of the savage, and has enabled them to frame an ideal world, wide and spacious, filled with forms of nobleness and beauty. We have hardly yet begun to enter into that world of theirs, and hence the Chinese are still to us a comparatively sealed book. If they can only engraft some of our Western ideas upon theirs, there is no knowing what such a good old stock is not capable of developing. The future will show.

The Committee on Nomination of Officers presented the following nominations for the year 1901-02 through the Chairman, Professor H. R. Fairclough.

President, C. M. Gayley, University of California.
Vice-Presidents, E. M. Pease, Leland Stanford Jr. University. W. A. Merrill, University of California.

Secretary and Treasurer, J. E. Matzke, Leland Stanford Jr. University.
Executive Committee, The above-named officers and
F. G. G. Schmidt, University of Oregon.
J. Goebel, Leland Stanford Jr. University.
M. L. Margolis, University of California.
F. M. Padelford, University of Washington.

Upon motion of Professor Clapp the Secretary was instructed to cast the ballot of the Association for the gentlemen as nominated.
15. The Middle English Origin of Many a Man and Similar Phrases, by Mr. Edward K. Putnam, of the Leland Stanford Jr. University.

In Old English many a man was expressed by manig mann, or by menigu monna. A study of this and of corresponding phrases in Layamon throws light on the origin of the parasitic $a$ found in the modern idiom. The nominative manig appears regularly in the A text as moni (14356). In no case is there a trace of a following $a$ or an. Nor does a following article occur in the neuter accusative, also uninflected in Old English. In the inflected cases, on the other hand, the terminations are often confused with the corresponding forms of the indefinite article, and are frequently detached. Cf. for the accusative masculine or neuter (O.E. manigne): monine, 2282; monienne, 7993; moni enne, 6591; and moni without inflection, 2283. For the dative (O.E. manigum): moniane, 28966; moni ane, 5131 ; and uninflected moni, 7515 . For the feminine genitive and dative (O.E. manigre) : moniare, 14905 , and meni are, 555. In the other cases the forms confused with the indefinite article seem to be due to analogy. Cf. for the masculine genitive (O.E. man(i)ges) : the regular monies, 1710, and moniennes, 7554. For the accusative feminine (O.E. man(i)ge): the regular monie, 27966, and moniane, 17977 , and moni ane, 2285. The plural is regularly monie, which may possibly have aided in the introduction of the $a$ in the nominative singular. In the A text of Layamon, therefore, the a or one fullowing many is found only in the inflected cases, where the inflectional terminations of many have become confused with the forms of the indefinite article, and in some instances have become detached. In its origin the a or one is merely the survival of a detached inflection, carried by analogy to all cases.

In the case of each the situation is similar. In the uninflected nominative the regular form in the A text is relc, 1996 (possible exceptions, 1825, 4262, 13145). On the other hand, the dative (O.E. clcum) has for its regular form alchen or alche, 13940, 251 1, but alc an appears 14593, and elc ane 24153 , each time in the epic phrase, "Of each evil he was ware." This a following each is interesting, because in modern English it has become lost except in the Scotch dialect (ilka bird, Burns). In late Middle English, however, it is not uncommon, especially in such phrases as on echëe side (cf. Chaucer, upon ech a syde, D, 256). In these phrases the dative inflection of each is preserved in much the same way as in the occasional petrified dative nouns in Chaucer (cf. on lyve, alive, G. L. Kittredge : Language of Troilus, § 14).

Another common idiom in Layamon, which may be explained as a case of detached inflection, is wunder ane swioe, 18599, and he wes wunder ane long, 14222. The ane cannot be the conjunction and, the article $a$, or an adverb meaning " only." This epic phrase corresponds with the O.E. zuundrum fager, Phomix, 85 (cf. Beowulf, 1451, 2687). With the restoration of the syncopated vowel, and the weakening of the termination to -on and -an (eventually -en), this dative adverb would become wunderan (cf. O.E miclum > muchelen, 5256; muchele, 4346). With the addition of a final e, which though irregular is not at all unusual in Layamon, zuunderan would become wunderane (cf. muchelene, 1746). In a phrase like this the separation into wunder ane would present no great difficulties, especially as wunder exists in an uninflected form and as $a$ and
an occur in so many different forms, and with so many different meanings, that their appearance would cause no surprise until some reflective man discovered that they had no meaning. The scribe of the B text did this, for in practically every case he has changed this idiom to something more easily understood, as zwunderliche, 18599 . (As in the other steps, the actual separation is paralleled by miclum. Cf. mucle an, 2209, and muchul a, 3202.) It seems safe to assume, then, that the ane in this idiom is a survival of the detached inflection, and that the phrase wunder ane is derived from O.E. wundrum.

If the possibilities of inflections becoming detached, and remaining as more or less permanent parasites, is kept in mind, the origin of a number of idiomatic expressions may be explained. Some are obvious, as the use of his for the genitive -es, and the transfer of the final $n$ from the article to the noun in for the nonce. Others are more complex and demand further study, but the results are none the less interesting. This paper is based on a study of the A text of Layamon, but work on later writers tends to confirm the results here obtained.

Any language changes, especially in such periods of confusion as early Middle English, can generally be traced to more than one cause, so that positive exclusive statements one way or the other are dangerous. In the present paper nothing more is attempted than to place emphasis on one way, perhaps one of several, in which these parasitic particles may have originated.

Remarks on this paper were made by Professor Flügel.
Adjourned at 5 P.m.

## Fifth Session.

The Fifth Session was called to order by the President at 9.30 A.m.
16. Nicander and Vergil, by Dr. B. O. Foster, of the Leland Stanford Jr. University.
"Nicandrum frustra secuti sunt Macer atque Vergilius?" These words of Quintilian (Inst. Or. 10. I. 56) raise the question,'In what way and to what extent did Vergil imitate Nicander ?' The slight evidence furnished by ancient writers has already been presented (see e.g. H. Morsch De Graecis auctoribus in Georgicis a Vergilio expressis. Halle, 1878). Macrobius (Sat. 5. 22. 9) notes that the story of Pan and Lutna (Geor.3.391) is derived from Nicander, and this is confirmed by Servius (addit. Dann. ad loc.). Again, on Geor. 2. 214, Servius says that Vergil's statement about the haunts of watersnakes is denied by Nicander. On Geor. I. 399, alcyones, Probus indicates Nicander as a source for the myth. Finally, Columella, 9.23 f., gives Nicander as authority for the Cretan origin of bees (cf. Geor. 4. 153).

From the extant works of Nicander modern scholarship has also gleaned a few sources of Vergilian inspiration. Of these the most noteworthy is Theriaca 366-371, from which passage Vergil has borrowed for his description of the Calabrian serpent (Geor. 3. 425-439). Compare also Ther. 51-56 with Geor. 3.414 ff.; Ther. 179 f. with Geor. 3. 421 ; Ther. 138 with Geor. 3.437 . These places and one or two more are discussed by Wagenigen, de Vergili Georgicis, Utrecht,
1888. Without dwelling upon this phase of the study it may be regarded as shown that the Roman poet knew the poems of the Greek and several times assimilated portions of them, and further, that these borrowings were now in the field of practical precepts and again in matters of poetical adornment.

But Quintilian's words cannot have been based on these few, mostly unimportant, imitations, and we turn naturally to the fragments of Nicander's other works for further light. Only two of these can have been of help to Vergil in the composition of his Georgics. These are the $\Gamma \omega \omega \rho \gamma \iota \kappa$ d́, a hexameter poem in two books, and the Meोıorovpyıkd, a work on bee-keeping.

Of these two books we have twenty-six fragments. Unfortunately these are nearly all excerpts made by Athenaeus for his cook-book, and are so short as to afford very little evidence for the subject matter or treatment of the whole book. It is therefore a task requiring some imagination as well as ingenuity to reconstruct the poem. O. Schneider (Nicandrea, Lips., 18;6) has perhaps come as near to doing this as is possible without more evidence than has come down to us. From the mode of citation in Athenaeus we learn that it was in two books. Frag. I (Schneider) is about groats and is cited as from book I. It was in book I then that tillage was treated. Here belong, probably, 22 and 23 about gathering straw, and plowing. The mention of the oak (2) is cited as from book 2. In this book then are to be placed the other fragments which deal with trees. This book also contained the instruction in gardening, for 3 and 5 , mentioning turnips and pumpkins, are cited as belonging here. It is a plausible assumption that book 2 contained also the directions for the cultivation of grapes, for this subject must have been included in the treatise, though the only fragment mentioning the subject is not cited as from this particular work. Flower-gardening was apparently discussed at some length. The longest fragment is about flowers, and occupies seventy-two verses. Probably they were treated of in the second work also. It seems unlikely that stock-raising was quite ignored, though one may not be able to follow Schneider in holding a mention of 'wood-pigeons' in 6 as evidence that Nicander wrote De tota re pecuaria.

We may safely conclude that the $\Gamma \epsilon \omega_{p} \gamma \iota \kappa \alpha$ was, as the name implies, a genuine treatise on farming, not, as Bernhardy thought, a work on medical botany. Bernhardy contends that among so many fragments we should find some trace of similarity with something in Vergil were it true that Nicander wrote on a similar theme, but we cannot lay too much stress upon the singular source of our citations from the book. Moreover, Cicero (de Orat. 1. 69) says that Nicander wrote De rebus rusticis, adding poetica quadam facultate, non rustice . . . praeclare.

What was the nature of Vergil's indebtedness to this book? Morsch (op. cit.) went to an absurd extreme, as subsequent studies in Vergil's sources have shown, in claiming for Nicander a relationship to the Georgics similar to that of Theocritus to Vergil's Bucolics. Schneider errs as far on the other side. He holds that Quintilian means that Vergil was incited to the composition of the Georgics by the perusal of Nicander's poem, but that the resemblance went no farther. But this is a strange interpretation to put upon the words of Quintilian, who must have been aware that this sort of "following" was no criterion of Nicander's worth. A poor book might, by its very inadequacy, incite another man to the preparation of a better. . The second book would, however, by no means reflect credit upon the first.

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Wagenigen's theory makes the imitation consist in the selection of suitable subjects for poetic treatment and in the arrangement, order, and general method of composition. This view is as little satisfactory as the others, for it robs the Roman poet of one of his peculiar titles to greatness; namely, the rare taste and unfailing discrimination shown in the structure and proportions of his poem, and the grace with which he introduces more or less extraneous embellishments.

It is more probable that Vergil's debt to Nicander was, like his debt to Varro, of a more practical sort. Wagenigen has shown that in books 1,3 , and the earlier portion of 4, Varro was Vergil's great storehouse of imitation. Morsch has made out a good case for Hesiod's 'Hoía as the source of the latter part of book 4. This leaves book 2 (trees and vines) unaccounted for, and it is just here that I think lay Vergil's chief indebtedness to Nicander, who wrote on this topic, as we have seen, in his second book. Doubtless, other portions of the Г $\epsilon \omega \rho \gamma \iota \kappa \alpha$ were used by Vergil for poetic adornment or practical suggestions in various parts of his poem. Taken in connexion with a substantial borrowing, such as I suppose in the case of book 2, these would help to make the impression which Quintilian records in his question, but of thenselves they would nct be enough to justify so sweeping a judgment.
17. Some Notes on Chaucer's Treatment of the Somnium Scipionis, by Professor E. P. Anderson, of the Leland Stanford Jr. University. .

## 1. The book alluded to in 1. 19 ff . of Chaucer's Parlament of Foules was a

 Ms. of Macrobii in Somnium Scipionis ex Libro Sexto Ciceronis de Republica Eruditissima Explanatio. This appears from the fact that Macrobius is mentioned, and the high opinion of the Somnium Scipionis expressed by him at the end of the second book of his commentary is spoken of in l. III of the Parlament, and the classification of dreams which he gives in his first book is alluded to in 1. 99 ff . It is also apparent that a Latinist like Chaucer need not read "al the day" (1.28) and "The longe day ful faste . . and yerne" (1.21) upon the 228 lines of easy Latin, which we find in Jan's edition of the Somnium, unless he concerned himself with something besides the bare text. Moreover, after examining Jan's Prolegomena and the Catalogue of Harleian Mss. in the British Museum, the author of the paper was unable to discover any separate Ms. of the text of the Somnium, which was extant in Chaucer's time.2. The expression " chapitres sevene," in Chaucer's Parlament of Foules, 1. 32, refers, not to seven old chapter divisions in the Ms. of the Somnium, as Mr. Skeat suggests in his Chaucer: The Minor Poems, Oxford, 1888, and in The Complete Works of Geoffrey Chaucer, Oxford, 1894, but to the seven main heads or topics of the Somnium. This appears from the absence of chaptering in editions before about 1700 A.D., while the later editions have nine chapters; from the unequal divisions that would result if these topics were taken as chapters, and from the contemporary use of the word capitulum to mean main topic, as given in Du Cange, Glossarium Mediae et Infimae Latinitatis, and in Forcellini, Totius Latinitatis Lexicon, and of chapitre to mean main topic, as cited by Murray in Nezv Englis/2 Dictionary of the Philological Society for 1400 A.D., from Apol. Loll. 5 1, and for 1393 A.D. from Gower's Confessio Amantis.

## 3. Although Chauccr says:

"Chapitres sevene it had of hevene and helle
And erthe and soules that therinne dwelle,"
and Mr. Skeat adds in his note on this passage: "The treatise speaks, as Chaucer says, of heaven, hell, and earth, and men's souls," there is no mention of hell, or Tartarus, or Avernus, or the underworld in the Sommium, the nearest parallel being in the kind of purgatory mentioned in the last sentence but one of the Somnitum, and interpreted by Chaucer in Stanza 12 of the Parlament. A parallel passage in Dante's Inferno, 5. 31-38, may have led Chaucer to speak of it as "helle."
4. In his interpretation of Stanza 9 of the Parlament, Skeat is wrong in making the primum mobile the ninth sphere, inasmuch as the Somnium, which Chaucer is interpreting, says nothing of a primum mobile, but makes the earth itself the ninth sphere or globe. This sphere, being conceived as unmoved, must be thought of as producing no sound. Two of the remaining eight spheres are said by Cicero to have eadem vis. Commenting on the words:
"And after that the melodye herde he That comth of thilke speres thryes thre,"

Mr. Skeat says: "Chaucer makes a mistake in attributing this harmony to all of the nine spheres," but Chaucer simply says that the melody comes from the nine spheres, not that each individual sphere unites in making the harmony.

As to the two spheres that have eadem vis, Mr. Skeat says: "By the two that are sounded alike, the spheres of Saturn and the fixed stars must be meant; in fact, it is usual to ignore the sphere of fixed stars and consider only those of the seven planets. Macrobius in his Comment., lib. II. c. 4, quite misses this point, and clumsily gives the same note to Venus and Mercury." But the sphere of the earth, being motionless, is soundless, and only eight spheres remain to produce sounds. Those revolving at a greater distance from the earth are thought of by Cicero as whirling with greater rapidity to perform their daily circuit, and thus producing a shriller sound. So the lunar sphere produces the gravest, and the sphere of fixed stars the shrillest sound, an I the only way in which two can be thought of as having eadem vis is by their bting in unison at the interval of an octave. This unison can only occur between the first and the eighth. This agrees with the ancient astronomical theory of music, as given in the article on the "History of Music" in the Encyclopaedia Britannica, by Sir. George A. Macfarren. According to this, each of the spheres beyond the earth corresponded to a different string of the lyre and so to a different note of the scale, except the starry sphere, which could therefore be the only one which had eadem vis with one of the others, but Cicero implies that the starry sphere produces the acutest sound, hence eadem vis must mean, not the same sound, but a sound in unison, and the starry sphere can only be in unison with the eighth or lunar sphere an octave away.

Remarks on this paper were made by Professors Clapp, Foster, Matzke, and Flügel.
18. Cicero's Lost Oration, Pro Muliere Arretina, by Professor F. S. Dunn, of the University of Oregon.

This paper was the first of a projected series of studies on the "Lost Orations of Cicero." An analysis of the locus classicus, Pro A. Caec. 33, 97, reveals the following suggestive facts: The Pro Muliere Arretina is the earliest of the lost orations of which mention is made. It is the only lost oration that can be referred to the first two years of Cicero's career as orator, forming with the Pro Quinctio and Pro S. Roscio the only three orations known to have been delivered in this period, though we know there were a great many more. The case is decidedly unique, as being the only one, so far as known, in which Cicero advocated directly or indirectly the claims of a woman. It was a iudicium privatum of the sort known as actio in rem, the plaintiff in this instance seeking to wrest from the woman by law the concession of servitus. It was a causa liberalis, hence referred to the decemviri litibus iudicandis-one of the few direct evidences that such a court existed at all, and especially at this time. The Pro Muliere Arretina is the only case mentioned by name as having been brought before this ancient tribunal, thus standing out sui generis in the history of Roman jurisprudence. Cicero's defence of the woman as citizen of a town that had been disenfranchised by Sulla entailed magnificent courage on the part of the young orator, for it meant practically an impeachment of Sulla's edicts. The arguments he probably employed in her defence may be safely assumed to be identical with those advanced in Pro A. Caec. §§ 33-35, and Pro Domo Suen, §§ 29 and 30, namely, once a citizen, always a citizen, and no edict of dictator or people could legislate otherwise.

The paper was discussed by Professor Richardson.

## 19. Faust as a Document of Goethe's Inner Life, by Professor J. Goebel, of the Leland Stanford Jr. University (read by title).

## 20. Plutarch's Theory of Poetry, by Professor F. M. Padelford, of the University of Washington.

Intrinsic excellence in poetic criticism is not found in the Moralia of Plutarch, but the essays are of historical significance, as showing the attempts of decadent fireece to deal with an art which had been the glory of the classical period. Accordingly, this paper attempts to formulate Plutarch's theory of poetry from a synthetic study of his essays. The subject is treated under the following heads: the more apparent differences between poetry and prose, the relation of poetry to nature and to truth, the end of fine art.

Wherein do poetry and prose differ? Although Plutarch does not follow Aristotle in threatening the tradition which made metrical form essential to poetry, he does agree with him that the nature of the subject largely determines whether a composition is poetry or prose. With quaint disdain he criticises the early Greek philosophers and naturalists for presenting didactic subjects metrically: "The verses of Empedocles and Parmenides, Nicander's verses on antidotes to poisons, and the maxims of Theognis borrowed the poetic form and
dignity only as a sort of riding carriage, to avoid footing it." Didactic subjects are purely intellectual, but poetry is highly emotional, and demands the sensuousness of verse. Further, poetic power is a gift, though a gift that must be refined by training.

The relation of poetry to nature and to truth. Does poetry copy nature or transcend it, is it truthful or untruthful, is it universal or restricted? Plutarch's use of the word imitation, studied with respect both to the subjects of imitation and its nature, shows that he regards poetry as reproducing life with only an acceptable degree of probability; as inferior to philosophy, which expresses the largest measure of truth. In this conception of artistic imitation he falls far short of Aristotle, who holds that poetry is more truthful than history, because, not being limited to the actual deeds of men who have lived, it portrays men nobler than nature, though such as nature's tendencies would ideally produce.

The end of fine art. The claim of pleasure to be the end of fine art, a claim half timidly recognized by Plato and championed by Aristotle, is ignored by Plutarch, who follows the traditional Greek view that poetry is a kind of elementary philosophy, and that pleasure is to be regarded as a sauce for making palatable those doctrines which would fail to interest if stated in philosophical and serious form. Poetry should be the fitting school for philosophy, the vestibule to its temple; it should "prepare and predispose the young man's mind to the teachings of philosophy," so that "without prejudice he may advance to the study of it in a gracious, friendly, and congenial spirit."

This paper constitutes a part of the Introduction to a translation of the essays on poetry ( $\Pi \Omega \Sigma \quad \triangle E I$ TON NEON HOIHMAT $\Omega$ N AKOTEIN and AOLOE
 by Plutarch and Basil the Great, which is to appear as No. XII. of the Yale Studies in English, under the title of Essays on the Study and Use of Pootry.

This paper was discussed by Professors Clapp and Flügel.

## 21. History of the Word Religio in the Middle Ages, by Professor Ewald Flügel, of the Leland Stanford Jr. University.

This paper gave the preliminary results of an extended investigation of the history of the word religion in England. By way of introduction the fate of the word religio was traced in Late Latinity (the Church Fathers, the Vulgate, etc.) and Old French. The earliest uses of the word in the sense of " monastic order, monastery," etc. (sixth century), occur apparently on French soil.

From the time of the earliest introduction into Middle English the word is used in the narrower sense, as well as in the older, broader one; the narrower sense gaining gradually the upper hand until during the second half of the fourteenth century the old broad sense becomes extinctum, as Wycliffe states (De Apostasia 2).

The endeavors of Wycliffe to rehabilitate the word are strongly opposed in the fifteenth century by Pecock, but the old, broad sense of the word was finally recovered during the age of the Reformation. (An excursus dealt with the earlier history of the word in German, especially in Luther.)

The phrase man of religion, homo religionis, homme de relgion, was never
used in English, Latin, or French in the sense of a "pious man," but exclusively in the sense of a man belonging to a religious order.

The paper will be published in full in the Anglia.
Adjourned at II. 45 A.M.

## Sixth Session.

The Sixth Session was called to order by the first Vice-President, Professor Clapp, at I. 30 P.M.
22. Some Phases of Alliteration and Rime in Modern English and German, by Charles R. Keyes, Esq., of the University of California.

This paper was in the nature of a preliminary report on a large and, as yet, not fully defined subject. It concerned itself principally with that considerable body of alliterative and riming expressions in both modern English and German, which have unconsciously passed into common use and become, as it were, part and parcel of the living, spoken language. These usually exist in word pairs, in which the parts are often so closely connected that one is seldom used without the other. Some classification seems possible.
(1) By far the largest class of alliterative expressions is that in which the words used are either identical in meaning, similar in meaning, or connected in the same line of thought. Such are in English "might and main," "hale and hearty," "warp and woof"; in German "ganz und gar," "Wert und Würde," "Land und Leute." Hundreds of examples could be given. (2) These expressions contain words which are in contrast or opposition, thus giving two distinct ideas, whereas the preceding, in many cases, give only one. In English we have "do or die," "weal or woe"; in German "Freund und Feind," "Wohl und Weh." This class is not so large as the last, still examples are numerous. (3) Compound adjectives, in which the two components alliterate, constitute another and still less numerous group. Examples are "weather-wise," "stormstaid," " purse-proud," " nagelneu," "fehlerfrei." (4) English contains a large number of alliterative and ablauting pairs; that is, pairs which give the appearance of ablaut. Many examples could be given, such as "knick-knack," "singsong," "dilly-dally." In German these seem to be less popular. Examples are "zickzack," "wirrwarr," "gickgack." (5) Stock comparisons and, to some extent, proverbs are given to alliteration. We say "as blind as a bat," " busy as a bee," "good as gold," "give an inch, take an ell," "so grün wie Gras," "so rot wie ein Rubin," "vergeben ist leichter als vergessen." (6) Aside from these there are a number of more or less set expressions which are not easy to classify, but which seem to be used in their present form because they alliterate. Such are, "the favored few," "wear the willow," "widow's weeds," and many others.

So far as riming expressions are concerned, they do not appear to differ in their inner essence from the alliterative ones, and they might almost have been treated together. English evidently does not contain many. Five examples only have been noted: "high and dry," "wear and tear," "name or fame," "hook or crook," "make or break." They seem to be much more numerous in

German. "Gut und Blut," "Not und Tod," "Saus und Braus," "Legen und pflegen," are a few examples out of many.

The question of the unconscious use of alliteration and rime is a much broader one than here indicated. It pertains to all of the Indo-Germanic languages, apparently, so that, for practical purposes, further investigation will have to seek some limited field. Further study will also naturally seek to explain modern phenomena by a constant reference to history.

This paper was discussed by Professors Matzke, Schilling, and others.
23. Sudermann's Dramatic Development, by Professor F. G. G. Schmidt, of the University of Oregon.

At the close of the nineteenth century, German literature has again entered upon an epoch of unrest and disturbance that resembles at first sight an eddy or whirlpool, rushing and roaring with prodigious energy, apparently leading nowhere. Modern critics have therefure styled the latest literary movement in Giermany "Modern Storm and Stress," believing that German literature is once more to take the lead in the strife for social progress. That the leading note of German literature is "revolt" can hardly be doubted, but whether this will lead to a classic epoch of social regeneration is a question that cannot be answered for some time to come. Much indeed is expected from the present school of German dramatists, but our hopes and expectations have yet to be realized. To make with literary clearness a classification at once satisfactory and definite, seems impossible, especially in regard to Sudermann, who is undoubtedly a most fiercely disputed problem in German literat ure. To give a conclusive judgment about the dramatic development of an author who is not more than forty-four years of age, would be hazardous. In the first place, new products of his genius might contradict the result of our speculations, and then again the literary movements of the present time do not permit a critic to gain a firm standpoint from which he could survey with objective calmness the present tendencies. It has bcen emphasizcd by Professor Francke 'that the literary career of Sudermann has from the very outset been distinguished by a deep moral fervor, by a holy zeal for truth, by a passionate longing for purity of thought and life, and that even his darkest and seemingly hopeless pictures of social distress and depravity have a glow of that enthusiasm that must fill the heart of a sceptic even with some hope for the future of the German drama.' Every one of Sudermann's dramas betrays the environment of the years of his literary development in Berlin. There his formative years were those of ferment and revolution. His profession as a journalist brought him into closest touch with all the literary 'fads and fashions of the day,' which moulded the character of the struggling young author who had always been more or less susceptible to outside literary influences. He has been an observant student of Zola, Maupassant, Daudet, and Sardou. He has studied Ibsen and the Russian authors Tolstoi and Turgeneff. To some extent his dramas as well as his novels reflect all the passing phases of German literary development during the past twenty-five years. They even show to a marked degree the influence of the philosophy of Nietzsche, the apostle of the "Uebermensch."

To appreciate Sudermann's works, one must be in touch with his environment.

It is in Berlin that he became acquainted with city life and the social problems of the time. It is from that point of view then that we must examine his dramas during the last twellve years. Some have called him a pessimist, others a naturalist. He cannot be classed with any school or cult.

In discussing the different plays of Sudermann it was emphasized, that the success of his first drama, Die Ehre (1890), entitled the public to the highest hopes of a national dramatic revival. The author has followed the principle of dramatic development. Critics had every reason to see in Sudermann a dramatist of unusual talent, in spite of the unsatisfactory ending of the play. The second play, Sodom's Ende, showed an advance in power and tcchnique. From an ethical point of view, it is an indiscreet play. With his third drama, Heimat (1893), also called Mâgda in England and America, because of its principal rôle, Sudermann has reached 'the greatest maturity of his talent.' The author who had so rapidly risen in public favor met with a most crushing disaster in his comedy Schmelterlingsschlacht, 1894. The characters are arbitrarily exaggerated and overdrawn for the sake of comic effect. Its ending is unnatural. Das Glück im Winkel (1895) is an improvement upon the unsuccessful play just mentioned. The same can be said of his three one-act plays that appeared in 1896 under the collective title Morituri. The dramatic poen Die drei Reiherfedern cannot be classed with his other dramas, and received but little attention. In 1898 the tragedy Johannes was published. It is based upon the biblical incident of John the Baptist, Herodias and Salome. From a strictly biblical point of view the picture of the hero is not true to facts as represented in the Scriptures. This play, however, as well as the following Johannisfeuter (1900), furnishes convincing proof of Sudermann's mastery of the art of dramatic construction.

It has repeatedly been emphasized 'that Sudermann has not yet joined his faculties in their happiest combination, nor realized our highest expectations.' His latest drama, Es lebe das Leben, issued a short time ago, must likewise be considered a disappointment. The question is whether he will adhere to his radical programme to the very last. In his attitude toward reality he is all for truth. As a 'champion of unhampered individuality' he has shown unparalled boldness, apparently caring more for results than for the consistency in the observance of any school dogma. He evidently believes in selecting from different systems or sources according to his taste and judgment, and adjusting his practice more or less to the taste of the times. Perhaps he finds it easier to follow the public taste than to form it. And the result is, that his works show not the development in genuine artistic power and high literary quality so much as in technique. His success is in great measure due to his dramatic talent and theatrical skill, and perhaps also to the subject matter of the dramas. In his intentions, which Sudermann shares with his associates of the modern drama - 'to battle for the reconstruction of society' - he seems to be backed by a strong popular opinion, which is surely a matter of no slight moment in noting the tendency of his poetic development. In his radical programme he has propounded the most intricate questions. We are still waiting for the answers. Lack of consistency in the prosecution of his own cause is his greatest fault.

Remarks on this paper were made by Professors Schilling and Chambers.
24. Two German Parallels to the Daphnis-myth, by Dr. Henry W. Prescott, of the University of California.

The Sicilian version of the Daphnis-myth, the essential features of which are reported consistently by Timaeus in Parthenius $\pi \epsilon \rho l$ द́p $\rho \tau \iota \kappa \hat{\omega} \nu$ $\pi a \theta \eta \mu \dot{\alpha} \tau \omega \nu$ 29, Diodorus 4. 84, Aelian Var. Hist. 10. 18, Ps.-Servius and Philargyrius on Vergil Ecl. 5. 20 (cf. Harvard Studies in Classical Philology, X. 121-125), should be added to the material which Professor Child has gathered in connection with the several versions of the Clerk Colvill Ballad (English and Scottish 「opular Ballads, II. 371 ). ${ }^{1}$

The Greek myth shows a closer resemblance to some than to others of the stories collected by Professor Child. It resembles the accounts of Clerk Colvill's experiences and the version current in the early part of this century of Ritter von Stangenberg's amour (Sagen aus Baden und der Umgegend, - published anonymously in 1834, -pp. 107-122), in so far as the supernatural woman concerned is a water-sprite. It belongs to a small subdivision, recognized by Professor Child, of stories in which the mortal lover's faithlessness is the cause of his punishment; the hero is not guiltless; his intercourse with his supernatural mistress precedes his marriage with one of his own kind. Finally, both versions of the German story - the poem of the fourteenth century (Zivei Alddeutsche Ritlermaeren, edited by Schröder) and the oral version of the present century - have in common with the Daphnis-myth a definite understanding, bet ween the mortal and his supernatural mistress, of the pains and penalties incident to faithlessness on his part (cf. also the story of Rhoecus and the Hamadryad in the scholia on Apollonius Rhod. 2. 477). The form of punishment in the Daphnis-myth, and the wiliness of the mortal mistress, may perhaps be peculiar to the Sicilian story.

While the reading of this paper was in progress, a message of greeting was received from the Modern Language Association.

## 25. On the Early History of Conditional Speaking, by Dr. H. C. Nutting, of the University of California.

All investigators assume a paratactic stage of conditional speaking, out of which the hypotactic construction arose. Attention has been centered mostly on the problem of reconstructing a parataxis that would explain the presence of other moods than the indicative in protasis. The current theories refer such protasis (e.g. in the case of the subjunctive) to a volitive or like origin. These theories are open to question for the following reasons:
(a) They take for granted that early modal usage was clear-cut and distinct, as in the historical period.
(b) They neglect the elliptical nature of a parataxis whose first member is (e.g.) a bona fide volitive expression.
(c) They fail to note that the change from a parataxis whose first member is a volitive or like expression to a hypotactic conditional period involves something more than a normal change from parataxis to hypotaxis.
${ }^{1}$ I owe the reference to Professor G. L. Kittredge.

The paper closed with some suggestions looking toward psychology for light on the history of conditional speaking.

The paper was discussed by Professor Pease and Mr. Gleason.
The Committee on Time and Place of the next Meeting then recommended through the chairman, Professor Pease, that the fourth annual meeting be held at the Mark Hopkins Institute of Art in San Francisco on December 29, 30, and 3r, 1902. The report was adopted.

On motion of Professor Pease a vote of thanks was passed to the Regents of the University of California for the use of the room in which the meetings of the Association were held.
26. Jeremiah a Protesting Witness of the Act of 621, by Professor Max L. Margolis, of the University of California.

The "book of the law," found, promulgated, and accepted as the law of the Judean realm in the eighteenth year of Josiah, 621 b.c. ( 2 Kings xxii. and xxiii.), is identified by the majority of critics with the "kernel," i.e. chapters xii.-xxvi., of our book of Deuteronomy.

Jeremiah became a prophet in the thirteenth year of Josiah (Jer. i. 2).
There is a marked resemblance between the phraseology of Jeremiah and that of Deuteronomy. Colenso made of Jeremiah the author of Deuteronomy; Cheyne, in his Life of Jeremiah, calls the prophet an itinerant preacher of the Josianic law book. Driver believes Jeremiah influenced by Deuteronomy. On the other hand, Wellhausen has proved to himself that those passages in Deuteronomy which have a phraseology of Jeremianic coloring are modelled upon the productions of Jeremiah, and represent, therefore, late accretions to the original law book. And Duhm, the latest and ablest commentator of Jeremiah, considers the "secondary" portions of the bock of Jeremiah influenced by Deuteronomy.

The French sch.lar, M. Vernes, would make of Deuteronomy in its entirety a production subsequent to Jeremiah. He maintains that the prophet's portrayal of the religious life and practices of his day is such as to preclude the possibility of a reformation in the spirit of Deuteronomy.

The German and English critics answer : Jeremiah alludes either to the practices in vogue before the act of 621, or else to the recrudescence of earlier superstitions under Jehoiakim, Josiah's successor.

A careful study of the book of Jeremiah has led me to distinguish three main layers in the book, each with the inevitable accretions peculiar to the prophetic literature: (a) The prophecies in poetical form, in so far as they are genuine, are on a level with the "kernel" of Deuteronomy ; neither "borrows" from the other, but naturally enough, as products of the same age, - we may say of the same day, - they speak sometimes the same language. (b) The portions in which Jeremiah speaks of himself in the first person were committed to writing, or better, reduced to literary form by younger men who belonged to the
school from which came the supplementers of Deuteronomy; the "secondary" parts of Jeremiah and the "secondary" parts of Deuteronomy are contemporary productions, hence verbal similarities. (c) There are a number of chapters in Jeremiah in which the prophet is referred to in the third person; these "tertiary" portions were later than the "secondary" parts of Deuteronomy, and are replete with language borrowed from them, quite as much as the so-called Deuteronomistic supplements in the book of Kings. So much for the phraseology.

Dicl Jeremiah know of the contents and introduction of the Josianic law book? Of course he did. He could not help being a witness of the act of 621 ; but - and this is my thesis - he was a protesting witness.

Jer. xi. 1-14, and the related account, iii. 6-10, belong to the layer designated above as B. When that document was writen the Deuteronomic law book had become invested with a sacred character. Jeremiah's lack of enthusiasm for it was explained as due to disappointing experiences in Jehoiakin's reign. The reformation of 621 was ineffectual, half-hearted (in xi. 9 read "falsehood" for "a conspiracy").

In Jer. vii. 21-27, verses 21 and 22 alone are genuine; the rest is spurious. As Amos, Hosea, Micah, Isaiah before him, Jeremiah (see vi. 20) emphatically Ir rtests against the doctrine of the Deuteronomic law book, which would make of the sacrificial cultus a divine and Mosaic institution.

Jer. viii. 8, "How do ye say we are wise, and the law of the Lord is with us? Indeed, in wain hath labored the pen of the scribes," proves beyond doubt that Jeremiah was acquainted with a written law. But the prophet protests against its pernicious effects, for, for its sake, the living "word of the Lord" (verse 9) is being placed in the background.

These two protests may be said to come from the time of Jehoiakim, but chapters ii.-iv. 4 clearly belong to the earliest utterances of the prophet; iii. 6 and, following verses belong to layer B . There are also toward the end of the chapter spurious additions. In chapter ii. we have a number of genuine fragments welded together. One set speaks of the foreign alliances; another ii. 20-28 (omit supplements), 33-35; iii. 1-5; iv. 3, 4-of idolatry. Now the commentators claim that the prophet is alluding to pre-Deuteronomic practices. So Duhm. I claim that Jeremiah speaks in full view of the Deuteronomic reformation. Jeremiah, indeed, speaks of the past. But the prophet is mainly concerned in its bearing upon the present. After so sinful a past, there is no return possible (iii. 1). Jeremiah knows himself in full accord with Amos. The conduct of the people who are a party to the Deuteronomic compact is likened to that of a harlot. With a harlot's countenance, Judah plays the innocent, faithful spouse, and caressingly calls the national God the companion of her youth (iii. 3 and 4). Ignoble fear of national disaster is the motive of this return at the eleventh hour. It is a time of evil (ii. 28); perhaps that the divine anger may be turned away (ii. 35 according to the Septuagint; iii. 5 a). The whole thing is a farce. For "thou spokest, but didst evil things" (iii. 5 b). Let thy gods help thee (ii. 28). No lye or soap will wash away the stain of thy past sins (ii. 22). These introductory chapters - provided we leave out the spurious supplements - are not "largely consolatory," but absolutely without a ray of hope. There was indeed a "far-reaching contrast between the men of Deuteronomy and Jeremiah." To the prophet this act of 621 was a compromise,
a sowing among thorns (iv. $3^{b}$ ). The soil should be broken up entirely (iv. 3 a). The people of Judah are called upon to circumcise the foreskin of their heart (iv. 4). A reformation in externals will be ineffectual; a moral, spiritual regeneration is what the people are in need of. The right kind of a law is one put in one's inward parts, written in the heart (xxxi. 33).

Such, I maintain, was the attitude of Jeremiah towards the promulgation of the Deuteronomic code. No wonder that the men of Deuteronomy were forced to look around for another sponsor of their undertaking. Huldah the prophetess gave the sanction which a Jeremiah was compelled to refuse (2 Kings xxii. 14 and following verses).

So the law of Deuteronomy was launched without the aid of Jeremiah. His was a different spirit. It was reserved for a younger generation to infuse it into the framework of the "secondary" portions of Deuteronomy. It is those chapters that constitute what is best in Deuteronomy ; there is much in them of the language and spirit of the great protesting prophet.
27. Is "We" the Plural of "I"? by Professor C. B. Bradley, of the University of California.

In the absence of the author this paper was read by Professor Clapp. It was discussed by Professors Padelford and Matzke.

The paper has appeared in full in Modern Language Notes, Vol. XVII, col. $\mathbf{1}-6$.

The Chair then declared the meeting adjourned at 4.15 P.m.

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## BIBLIOGRAPHICAL RECORD.

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Languages; $A \mathscr{Y} T=$ American Journal of Theology; $A r c h i v=$ Archiv für latein. Lexicographie;
Bookm. $=$ The Bookman; $C R=$ Classical Review; CSCP $=$ Cornell Studies in Classical Phi-
lology : $E R=$ Educational Review; $H S C P=$ Harvard Studies in Classical Philology; $H S P L=$
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Miss Amy L. Barbour, Smith College, Northampton, Mass. 1902.
Phillips Barry, 33 Ball Street, Boston, Mass. 1901.
J. Edmund Barss, Hotchkiss School, Lakeville, Conn. 1897.

George K. Bartholomew, Evanswood, Clifton, Cincinnati, O. 1893.
Dr. F. O. Bates, 77 Reed Place, Detroit, Mich. 1900.
Prof. William N. Bates, University of Pennsylvania, Philadelphia, Penn. (220 St. Mark's Square). 1894.
Prof. William J. Battle, University of Texas, Austin, Tex. 1893.

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Paul Baur, 74 Lake Place, New Haven, Conn. 1902.
John W. Beach, Mount Morris, Ill. 1902.
Dr. Edward A. Bechtel, University of Chicago, Chicago, Ill. 1900.
Prof. Isbon T. Beckwith, General Theological Seminary, Chelsea Square, New York, N. Y. 1884.
Charles H. Beeson, 652 East Fifty-seventh St., Chicago, Ill. 1897.
Prof. A. J. Bell, Victoria University, Toronto (17 Avenue Road). 1887.
Prof. Allen R. Benner, Phillips Academy, Andover, Mass. 1901.
Prof. Charles E. Bennett, Cornell University, Ithaca, N. Y. (7 South Ave.). 1882.
Prof. John I. Bennett, Union University, Schenectady, N. Y. 1897.
Prof. George R. Berry, Colgate University, Hamilton, N. Y. 1902.
Prof. Louis Bevier, Jr., Rutgers College, New Brunswick, N. J. 1884.
William F. Biddle, 4305 Spruce St., Philadelphia, Pa. 1894.
Dr. C. P. Bill, Adelbert College of Western Reserve University, Cleveland, O. (853 Logan Ave.). 1894.
Rev. Dr. Daniel Moschel Birmingham, Walden University, Nashville, Tenn. (addr.: Park Kow Building, New York, N. Y.). 1898.
Prof. Charles Edward Bishop, College of William and Mary, Williamsburg, Va. 1890.
J. Remsen Bishop, Walnut Hills High School, Cincinnati, O. 1902.

William Warner Bishop, 74 Pitcher St., Detroit, Mich. 1895.
Prof. Robert W. Blake, Lehigh University, So. Bethlehem, Pa. (440 Seneca St.). 1894.

Prof. M. Bloomfield, Johns Hopkins University, Baltimore, Md. 1882.
Prof. Willis H. Bocock, University of Georgia, Athens, Ga. * 1890.
Prof. C. W. E. Body, General Theological Seminary, New York, N. Y. (4 Chelsea Sq.). 1887.
Dr. George M. Bolling, Catholic University of America, Brookland, D. C. 1897.
Prof. D. Bonbright, Northwestern University, Evanston, Ill. 1892.
Prof. A. L. Bondurant, University of Mississippi, University, Miss. 1892.
Prof. Campbell Bonner, University of Nashville, Nashville, Tenn. (1500 Hawkins St.). 1899.
Dr. George Willis Botsford, Columbia University, New York, N. Y. 1894.
Prof. Benjamin Parsons Bourland, Adelbert College of Western Reserve University, Cleveland, O. 1900.
Prof. B. L. Bowen, Ohio State University, Columbus, O. 1895.
Prof. Charles F. Bradley, Garrett Biblical Institute, Evanston, Ill. 1886.
Prof. J. Everett Brady, Smith College, Northampton, Mass. 1891.
Prof. H. C. G. Brandt, Hamilton College, Clinton, N. Y. 1876.
Dr. Josiah Bridge, Westminster School, Simsbury, Conn. 1888.
Prof. Walter R. Bridgman, Lake Forest University, Lake Forest, Ill. 1890.
Prof. James W. Bright, Johns Hopkins University, Baltimore, Md. 1887.
Prof. John A. van Broekhoven, Fairview Avenue, Hyde Park, Cincinnati, O. 1902.
Miss Caroline G. Brombacher, Erasmus Hall High School, Brooklyn, N. Y. (399 Clermont Ave.). 1897.
Prof. Jabez Brooks, University of Minnesota, Minneapolis, Minn. (1708 Laurel Ave.). 1887.
Dr. Carroll N. Brown, Asheville School, Asheville, N. C. 1899.

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Prof. Demarchus C. Brown, Butler College, Irvington, Ind. 1893.
Prof. F. W. Brown, Franklin College, Franklin, Ind. 1893.
Prof. Mariana Brown, Earlham College, Richmond, Ind. 1892.
Prof. Carleton L. Brownson, College of the City of New York, N. Y. (17 Lexington Ave.). 1892.
C. F. Brusie, Mount Pleasant Academy, Sing Sing, N. Y. 1894.

Prof. Carl D. Buck, University of Chicago, Chicago, Ill. 1890.
Miss Mary H. Buckingham, Wellesley Hills, Mass. 1897.
Walter H. Buell, Hotchkiss School, Lakeville, Conn. 1887.
Dr. H. B. Burchard, Syracuse University, Syracuse, N. Y. 1900.
H. J. Burchell, Jr., Barnard College, Columbia University, New York, N. Y. 1895.

Isaac B. Burgess, Morgan Park Academy, Morgan Park, Ill. 1892.
Dr. Theodore C. Burgess, Bradley Polytechnic Institute, Peoria, Ill. 1900.
Prof. John M. Burnam, University of Cincinnati, Cincinnati, O. I899.
Prof. Sylvester Burnham, Colgate University, Hamilton, N. Y. 1885.
Dr. William S. Burrage, Bryn Mawr College, Bryn Mawr, Pa. 1898.
Prof. Harry E. Burton, Dartmouth College, Hanover, N. H. 1899.
Prof. Henry F. Burton, University of Rochester, Rochester, N. Y. 1878.
Dr. Curtis C. Bushnell, Syracuse University, Syracuse, N. Y. 1900.
Pres. Henry A. Buttz, Drew Theological Seminary, Madison, N. J. 1869.
Miss Miriam A. Bytel, Gilman School, Cambridge, Mass. (io Avon St.). igoI.
Prof. Edward Capps, University of Chicago, Chicago, Ill. 1889.
Prof. William H. Carpenter, Columbia University, New York, N. Y. 1884.
Prof. Mitchell Carroll, Columbian University, Washington, D. C. 1894.
Prof. Frank Carter, McGill University, Montreal, Canada. 1897.
Pres. Franklin Carter, Camden, S. C. 1871.
Prof. Jesse Benedict Carter, Princeton University, Princeton, N. J. 1898.
Prof. Mary Emily Case, Wells College, Aurora, N. Y. 1895.
Prof. Clarence F. Castle, University of Chicago, Chicago, Ill. 1888.
Dr. William Van Allen Catron, West Side High School, Milwaukee, Wis. 1896.
Prof. Julia H. Caverno, Smith College, Northampton, Mass. 1902.
Miss Eva Channing, Exeter Cbambers, Boston, Mass. 1883.
Prof. A. C. Chapin, Wellesley College, Wellesley, Mass. 1888.
Prof. Henry Leland Chapman, Bowdoin College, Brunswick, Me. 1892.
Prof. George Davis Chase, Wesleyan University, Middletown, Conn. 1900.
Dr. George H. Chase, Harvard University, Cambridge, Mass. (24 Grays Hall). 1899.

Prof. S. R. Cheek, Centre College of Kentucky, Danville, Ky. 1890.
Prof. Clarence G. Child, University of Pennsylvania, Philadelphia, Pa. (2312 De Lancey Place). 1897.
Miss Emma Kirkland Clark, 545 A Quincy St., Brooklyn, N. Y. 1896.
Dr. Willard K. Clement, Evanston, Ill. 1892.
Prof. Charles Nelson Cole, Oberlin College, Oberlin, O. 1902.
Prof. George Stuart Collins, Polytechnic Institute, Brooklyn, N. Y. 1897.
Prof. Hermann Collitz, Bryn Mawr College, Bryn Mawr, Pa. 1887.
William T. Colville, Carbondale, Pa. 1884.
D. Y. Comstock, St. Johnsbury, Vt. 1888.

Prof. Elisha Conover, Hollyville, Del. 1897.

Dr. Arthur Stoddard Cooley, 387 Central St., Auburndale, Mass. 1896.
J. Randolph Coolidge, Jr., Chestnut Hill, Mass. 1884.

Dr. Frederic T. Cooper, New York University, New York, N. Y. (177 Warburton Ave., Yonkers, N. Y.). 1895.
Prof. William L. Cowles, Amherst College, Amherst, Mass. 1888.
Edward G. Coy, Hotchkiss School, Lakeville, Conn. 1888.
Prof. IV. H. Crogman, Clark University, South Atlanta, Ga. 1898.
William L. Cushing, Westminster School, Simsbury, Conn. I888.
Prof. William K. Denison, Tufts College, College Hill, Mass. 1899.
Prof. Walter Dennison, University of Michigan, Ann Arbor, Mich. 1899.
Pres. George H. Denny, Washington and Lee University, Lexington, Va. 1897.
Prof. Samuel C. Derby, Ohio State University, Columbus, O. 1895.
Sherwood Owen Dickerman, Yale University, New Haven, Conn. (267 Lawrance Hall). 1902.
Prof. Howarl Freeman Doane, Doane Çollege, Crete, Neb. 1897.
Prof. B. L. D'Ooge, State Normal School, Ypsilanti, Mich. 1895.
Prof. Martin L. D'Ooge, University of Michigan, Ann Arbor, Mich. 1873.
Prof. Louis H. Dow, Dartmouth College, Hanover, N. H. 1895.
Prof. Joseph H. Drake, University of Michigan, Ann Arbor, Mich. 1897.
Prof. Maurice Edwards Dunham, University of Colorado, Boulder, Col. 1890.
Prof. Frederic Stanley Dunn, 76 Hillside Avenue, Arlington Heights, Mass. 1899.
Miss Emily Helen Dutton, Vassar College, Poughkeepsie, N. Y. 1898.
Prof. Mortimer Lamson Earle, Columbia University, New York, N. Y. 1890.
Prof. William Wells Eaton, Middlebury College, Middlebury, Vt. 1882.
Dr. Herman L. Ebeling, Haverford College, Haverford, Pa. 1892.
Prof. William S. Ebersole, Cornell College, Mt. Vernon, Ia. 1893.
Prof. W. A. Eckels, Miami University, Oxford, O. 1894.
Thomas H. Eckfeldt, Concord School, Concord, Mass. 1883.
Dr. Homer J. Edmiston, Bryn Mawr College, Bryn Mawr, Pa. 1894.
Prof. George V. Edwards, Olivet College, Olivet, Mich. 1901.
Prof. Katharine M. Edwards, Wellesley College, Wellesley, Mass. 1893.
Prof. James C. Egbert, Jr., Columbia University, New York, N. Y. 1889.
Prof. Wallace Stedman Elden, Ohio State University, Columbus, O. (1462 Neil Ave.). 1900.
Prof. A. Marshall Elliott, Johns Hopkins University, Baltimore, Md. 1884.
Prof. W. A. Elliott, Allegheny College, Meadville, Pa. 1897.
Prof. Herbert C. Elmer, Cornell University, Ithaca, N. Y. 1887.
Prof. L. H. Elivell, Amherst College, Amherst, Mass. 1883.
Miss E. Antoinette Ely, The Clifton School, Cincinnati, O. 1893.
Prof. Edgar A. Emens, Syracuse University, Syracuse, N. Y. ( 727 Crouse Ave.). 1895.

Prof. Annie Crosby Emery, Brown University, Providence, R. I. 1896.
Prof. George Taylor Ettinger, Muhlenberg College, Allentown, Pa. 1896.
Rev. Orishatukeh Faduma, Troy, N. C. 1900.
Prof. Arthur Fairbanks, State University of Iowa, Iowa City, Ia. 1886.
Prof. Charles E. Fay, Tufts College, Mass. 1885.
Prof. Edwin W. Fay, University of Texas, Austin, Tex. 1889.
Pres. Thomas Fell, St. John's College, Annapolis, Md. 1888.

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F. J. Fessenden, High School, Pottstown, Pa. 1890.

Dr. George Converse Fiske, University of Wisconsin, Madison, Wis. (609 Lake St.). 1900;
Prof. Edward Fitch, Hamilton College, Clinton, N. Y. 1890.
Prof. Thomas Fitz-Hugh, University of Virginia, Charlottesville, Va. (Life member). 1902.
Miss Helen C. Flint, Mount Holyoke College, South Hadley, Mass. 1897.
Dr. Benjamin O. Foster, State Normal School, Ypsilanti, Mich. 1899.
Prof. Herbert B. Foster, University of South Dakota, Vermilion, S. D. 1900.
Prof. Frank H. Fowler, Lombard College, Galesburg, Ill. 1893.
Prof. Harold N. Fowler, Western Reserve University (College for Women), Cleveland, O. (49 Cornell St.). I885.
Prof. D. E. Foyle, Georgetown College, Georgetown, Ky. Igoi.
Dr. Wilmer Cave France, Bryn Mawr College, Bryn Mawr, Pa. 1900.
Dr. Susan B. Franklin, Bryn Mawr, Pa. 1890.
Dr. I. F. Frisbee, 8 Story St., Cambridge, Mass. 1898.
Prof. Charles Kelsey Gaines, St. Lawrence University, Canton, N. Y. ISgo.
Dr. William Gallagher, Thayer Academy, South Braintree, Mass. 1886.
Frank A. Gallup, Packer Collegiate Institute, Brooklyn, N. Y. 1898.
Prof. Henry Gibbons, University of Pennsylvania, Philadelphia, Pa. (405 South 4 Ist St.). 1890.
Prof. Seth K. Gifford, Haverford College, Haverford, Pa. 1891.
Prof. John Wesley Gilbert, Payne Institute, Augusta, Ga. 1897.
Prof. Basil L. Gildersleeve, Johns Hopkins University, Baltimore, Md. 1876.
E. W. Given, Newark Academy, Newark, N. J. 1902.

Clarence Willard Gleason, Roxbury Latin School, Roxbury, Mass. (6 Copeland St.). 1901.

Prof. Thomas D. Goodell, Y̌ale University, New Haven, Conn. (35 Edgehill Road). 1883.

Prof. Charles J. Goodwin, Lehigh University, South Bethlehem, Pa. 1891.
Prof. William W. Goodwin, Harvard University, Cambridge, Mass. (5 Follen St.). 1870.

William Elford Gould, Johns Hopkins University, Baltimore, Md. 1902.
Prof. Roscoe Allan Grant, Fisk University, Nashville, Tenn. 1902.
Dr. Louis H. Gray, 53 Second Avenue, Newark, N. J. 1900.
Prof. E. L. Green, South Carolina College, Columbia, S. C. 1898.
Prof. Herbert Eveleth Greene, Johns Hopkins University, Baltimore, Md. 1890.
Prof. John Greene, Colgate University, Hamilton, N. Y. 1902.
Prof. Wilber J. Greer, Miami University, Oxford, O. 1892.
Prof. Alfred Gudeman, Cornell University, Ithaca, N. Y. 1889.
Dr. Roscoe Guernsey, Johns Hopkins University, Baltimore, Md. 1902.
Prof. Charles Burton Gulick, Harvard University, Cambridge, Mass. (I8 Walker St.). 1894.
Miss Elizabeth Hazelton Haight, Vassar College, Poughkeepsie, N. Y. 1902.
Prof. William Gardner Hale, University of Chicago, Chicago, Ill. 1882.
Prof. Arthur P. Hall, Drury College, Springfield, Mo. 1886.
Prof. F. A. Hall, Washington University, St. Louis, Mo. (53I Spring Ave.). I896.
Frank T. Hallett, Brown University, Providence, R. I. (283 George St.). 1902.

Prof. T. F. Hamblin, Bucknell University, Lewisburgh, Pa. 1895. Prof. Adelbert Hamilton, Elmira College, Elmira, N. Y. 1895. Miss Clemence Hamilton, Vassar College, Poughkeepsie, N. Y. 1901.
Prof. William A. Hammond, Cornell University, Ithaca, N. Y. (29 East Ave.). 1897.

Principal John Calvin Hanna, High School, Oak Park, Ill. (209 South East Ave.). 1896.

Prof. Albert Harkness, Brown University, Providence, R. I. 1869.
Prof. Albert Granger Harkness, American School of Classical Studies, Rome, Italy. 1896.

Pres. William R. Harper, University of Chicago, Chicago, Ill. 1887.
Prof. Karl P. Harrington, University of Maine, Orono, Me. 1892.
Prof. W. A. Harris, Richmond College, Richmond, Va. (403 Lombardy St.). 1895.

Prof. William Fenwick Harris, Harvard University, Cambridge, Mass. (8 Mercer Circle). 190I.
Prof. J. E. Harry, University of Cincinnati, Cincinnati, O. 1896.
Dr. Carl A. Harstrom, The Folly, Norwalk, Conn. 1900.
Prof. Samuel Hart, Berkeley Divinity School, Middletown, Conn. 1871.
Eugene W. Harter, Erasmus Hall High School, Brooklyn, N. Y. (264 Grand St., Newburgh, N. Y.). 1901.
Prof. Paul Haupt, Johns Hopkins University, Baltimore, Md. 1884.
Dr. Edward Southworth Hawes, Polytechnic Institute, Brooklyn, N. Y. 1888.
Rev. Dr. Henry H. Haynes, 6 Ellery St., Cambridge, Mass. 1900.
Prof, Adeline Belle Hawes, American School of Classical Studies, Rome, Italy. 1902.

Prof. F. M. Hazen, Mount Holyoke College, South Hadley, Mass. 1896.
Dr. Theodore Woolsey Heermance, American School of Classical Studies, Athens, Greece. 1897.
Prof. W. A. Heidel, Iowa College, Grinnell, Ia. 1900.
Prof. F. B. R. Hellems, State University of Colorado, Boulder, Col. 1900.
Prof. Otto Heller, Washington University, St. Louis, Mo. 1896.
N. Wilbur Helm, Princeton University, Princeton, N. J. 1900.

Prof. George Hempl, University of Michigan, Ann Arbor, Mich. (1027 East University Ave.). 1895.
Prof. G. L. Hendrickson, University of Chicago, Chicago, Ill. 1892.
Prof. John H. Hewitt, Williams College, Williamstown, Mass. 1886.
Edwin H. Higley, Groton School, Groton, Mass. 1899.
Prof. Henry T. Hildreth, Roanoke College, Salem, Va. 1896.
Prof. James M. Hill, Central High School, Philadelphia, Pa. 1900.
H. H. Hilton, 29 Beacon Street, Boston, Mass.

Dr. Gertrude Hirst, Barnard College, Columbia University, New York, N. Y. 1902.

Archibald L. Hodges, Wadleigh High School, II4th St., near 7th Ave., New York City. 1899.
Prof. Arthur W. Hodgman, Ohio State Üniversity, Columbus, O. (164 West Ninth Ave.). 1896.
Charles Hoeing, University of Rochester, Rochester, N. Y. 1899.

Prof. Horace A. Hoffman, University of Indiana, Bloomington, Ind. 1893. Dr. D. H. Holmes, Eastern District High School, Brooklyn, N. Y. (878 Driggs Ave.). 1900.
Prof. W. D. Hooper, University of Georgia, Athens, Ga. 1894.
Prof. E. Washburn Hopkins, Yale University, New Haven, Conn. (235 Bishop St.). I 883.
Dr. Herbert Müller Hopkins, Trinity College, Hartford, Conn. (4 Trinity St.). 1898.

Prof. Joseph Clark Hoppin, Bryn Mawr College, Bryn Mawr, Pa. 1900.
Prof. William A. Houghton, Bowdoin College, Brunswick, Me. 1892.
Prof. Albert A. Howard, Harvard University, Cambridge, Mass. (I 2 Walker St.). 1892.

Prof. Frederick H. Howard, Colgate Academy, Hamilton, N. Y. I 894.
Prof. George E. Howes, American School of Classical Studies, Athens, Greece. 1896.

Prof. Frank G. Hubbard, University of Wisconsin, Madison, Wis. I896.
Prof. J. H. Huddilston, University of Maine, Orono, Me. 1898.
Dr. Ray Greene Huling, English High School, Cambridge, Mass. (ioi Trowbridge St.). $\quad 1892$.
L. C. Hull, Polytechnic Institute, Brooklyn, N. Y. (29 Schermerhorn St.). I889.

Prof. Milton W. Humphreys, University of Virginia, Charlottesville, Va. 1871.
Prof. A. J. Huntington, Columbian University, Washington, D. C. (1010 N St., N. W.). 1892.

Dr. George B. Hussey, East Orange, N. J. I 887.
Frederick L. Hutson, 5727 Monroe Ave., Chicago, Ill. 1902.
Dr. Walter Woodburn Hyde, Northampton, Mass. 1902.
Prof. Henry Hyvernat, Catholic University of America, Brookland, D. C. 1897.
Prof. J. W. D. Ingersoll, Yale University, New Haven, Conn. (3II Crown St.). 1897.

Andrew Ingraham, Swain Free School, New Bedford, Mass. (39 Grove St.). 1888.
Prof. A. V. Williams Jackson, Columbia University, New York, N. Y. 1884.
Prof. George E. Jackson, Washington University, St. Louis, Mo. 1890.
Prof. M. W. Jacobus, Hartford Theological Seminary, Hartford, Conn. (I4 Marshall St.). I893.
Prof. Hans C. G. von Jagemann, Harvard University, Cambridge, Mass: (II3 Walker St.). 1882.
Miss Anna S. Jenkins, Girls' High School, Brooklyn, N. Y. 1899.
Dr. Charles W. L. Johnson, Princeton University, Princeton, N. J. (I56 Nassau St.). 1897.
Henry C. Johnson, 35 Nassau St., New York, N. Y. 1885.
Prof. William H. Johnson, Denison University, Granville, O. I895.
Prof. Eva Johnston, University of the State of Missouri, Columbia, Mo. 1902.
Dr. George W. Johnston, University of Toronto, Toronto, Can. 1895.
Principal Augustine Jones, Friends' School, Providence, R. I. 1896.
Prof. J. C. Jones, University of the State of Missouri, Columbia, Mo. 1902.
Dr. Robert P. Keep, Free Academy, Norwich, Conn. 1872.
Dr. George Dwight Kellogg, Yale University, New Haven, Conn. (307 Welch Hall). 1897.

Prof. Francis W. Kelsey, University of Michigan, Ann Arbor, Mich. 1890.
Prof. John B. Kieffer, Franklin and Marshall College, Lancaster, Pa. 1889.
Prof. William Hamilton Kirk, Rutgers College, New Brunswick, N. J. 1898.
Chancellor J. H. Kirkland, Vanderbilt University, Nashville, Tenn. 1887.
J. C. Kirtland, Jr., Phillips Exeter Academy, Exeter, N. H. 1895.

Prof. George Lyman Kitttedge, Harvard University, Cambridge, Mass. (9 Hilliard St.). 1884.
Dr. William H. Klapp, Academy of the Protestant Episcopal Church, 1324 Locust St., Philadelphia, Pa. 1894.
Prof. Charles Knapp, Barnard College, Columbia University, New York, N. Y. (1773 Sedgwick Ave.). 1892.
Charles S. Knox, St. Paul's School, Concord, N. H. 1889.
Prof. Gordon J. Laing, University of Chicago, Chicago, Ill. (5833 Monroe Ave.). 1902.

Prof. A. G. Laird, University of Wisconsin, Madison, Wis. 1890.
Prof. William A. Lamberton, University of Pennsylvania, Philadelphia, Pa. 1888.
Prof. W. B. Langsdorf, Miami University, Oxford, O. 1895.
Prof. Charles R. Lanman, Harvard University, Cambridge, Mass. (9 Farrar St.). 1877.

Lewis H. Lapham, 28 Ferry St., New York, N. Y. 1880.
Prof. H. B. Lathrop, University of Wisconsin, Madison, Wis. 1900.
Prof. William Cranston Lawton, Adelphi College, Brooklyn, N. Y. (1 7 Clifton PL.). 1888.

Prof. Abby Leach, Vassar College, Poughkeepsie, N. Y. 1888.
Dr. Arthur G. Leacock, Phillips Exeter Academy, Exeter, N. H. 1899.
Dr. Emory B. Lease, College of the City of New York, N. Y. (II6I Amsterdam Ave.). 1895.
Dr. J. T. Lees, University of Nebraska, Lincoln, Neb. 1888.
Prof. Thomas B. Lindsay, Boston University, Boston, Mass. 1880.
Prof. Henry F. Linscott, University of North Carolina, Chapel Hill, N. C. 1896.
Prof. Charles Edgar Little, University of Nashville, Nashville, Tenn. 1902.
Miss Dale Livingstone, 1100 Harmon Place, Minneapolis, Minn. 1902.
Prof. Gonzalez Lodge, Teachers College, Columbia University, New York, N. Y. 1888.

Prof. O. F. Long, Northwestern University, Evanston, Ill. 1900.
Prof. George D. Lord, Dartmouth College, Hanover, N. H. 1887.
D. O. S. Lowell, Roxbury Latin School, Boston, Mass. 1894.

Prof. Frederick Lutz, Albion College, Albion, Mich. 1883.
Prof. A. St. Clair Mackenzie, State College of Kentucky, Lexington, Ky. IgoI.
Pres. George E. MacLean, State University of Iowa, Iowa City, Ia. ( 603 College St.). 1891.
Miss Grace H. Macurdy, Vassar College, Poughkeepsie, N. Y. 1894.
David Magie, Jr., Princeton University, Princeton, N. J. (33 Prospect Ave.). Igor.
Prof. H. W. Magoun, Redfield College, Redfield, S. D. 1891.
Prof. J. H. T. Main, Iowa College, Grinnell, Ia. 1891.
Prof. J. Irving Manatt, Brown University, Providence, R. I. 1875.
Prof. John M. Manly, University of Chicago, Chicago, Ill. 1896.
Prof. W. G. Manly, University of the State of Missouri, Columbia, Mo. 1902.

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Prof. F. A. March, Lafayette College, Easton, Pa. 1869.
Prof. F. A. March, Jr., Lafayette College, Easton, Pa. 1884.
Prof. Allan Marquand, Princeton University, Princeton, N. J. 1891.
Prof. Winfred R. Martin, Trinity College, Hartford, Conn. 1879.
Miss Ellen F. Mason, I Walnut St., Boston, Mass. 1885.
Dr. Maurice W. Mather, 13 Mt. Auburn St., Cambridgé, Mass. 1894.
Prof. Nelson G. McCrea, Columbia University, New York, N. Y. 1890.
Dr. Walton Brooks McDaniel, University of Pennsylvania, Philadelphia, Pa. 1901.
Prof. J. H. McDaniels, Hobart College, Geneva, N. Y. 1871.
Prof. George F. McKibben, Denison University, Granville, O. 1885.
Miss Harriet E. McKinstry, Lake Erie College, Painesville, O. 1881.
Prof. H. Z. McLain, Wabash College, Crawfordsville, Ind. 1884.
Prof. W. J. McMurtry, Yankton College, Yankton, S. D. 1893.
Dr. John Moffatt Mecklin, Washington and Jefferson College, Washington, Pa. 1900.

Prof. Frank Ivan Merchant, University of South Dakota, Vermilion, S. D. 1898.
Prof. Elmer T. Merrill, Wesleyan University, Middletown, Conn. 1883.
Truman Michelson, Harvard University, Cambridge, Mass. 1900.
Prof. C. W. E. Miller, Johns Hopkins University, Baltimore, Md. 1892.
Prof. Walter Miller, Tulane University, New Orleans, La. 1900.
Dr. Richard A. v. Minckwitz, De Witt Clinton High School, Manhattan, New York, N. Y. (Amsterdam Ave. and Io2nd St.). 1895.

Charles A. Mitchell, Asheville School, Asheville, N. C. 1893.
Prof. Clifford Herschel Moore, Harvard University, Cambridge, Mass. (34 Shepard St.). 1889.
Prof. Frank G. Moore, Dartmouth College, Hanover, N. H. 1888.
Prof. George F. Moore, Harvard University, Cambridge, Mass. (Divinity Ave.). 1885.

Prof. J. Leverett Moore, Vassar College, Poughkeepsie, N. Y. 1887.
Prof. Lewis B. Moore, Howard University, Washington, D. C. 1896.
Paul E. More, 265 Springdale Ave., East Orange, N. J. 1896.
Prof. Edward Clark Morey, Allegheny College, Meadville, Pa. 1899.
Prof. James H. Morgan, Dickinson College, Carlisle, Pa. 1897.
Prof. Morris H. Morgan, Harvard University, Cambridge, Mass. (45 Garden St.). 1887.

Prof. Edward P. Morris, Yale University, New Haven, Conn. (53 Edgehill Road). 1886.

Frederick S. Morrison, Public High School, Hartford, Conn. 1890.
Prof. Lewis F. Mott, College of the City of New York, N. Y. (17 Lexington Ave.). 1898.

Prof. George F. Mull, Franklin and Marshall College, Lancaster, Pa. 1896.
Prof. Wilfred P. Mustard, Haverford College, Haverford, Pa. 1892.
Prof. Francis Philip Nash, Hobart College, Geneva, N. Y. 1872.
Dr. K. P. Neville, University of Illinois, Champaign, Ill. (904 S. Busey Ave., Urbana, Ill.). 1902.
Dr. Charles B. Newcomer, Drury College, Springfield, Mo. 1900.
Prof. Barker Newhall, Kenyon College, Gambier, O. 1891.
Prof. Frank W. Nicolson, Wesleyan University, Middletown, Conn. 1888.

Dr. William A. Nitze, Columbia University, New York, N. Y. $\mathbf{2}$. 2.
Prof. Richard Norton, American School of Classical Studies, Rome, Italy (Via Vicenza 5). 1897.
Charles James O'Connor, University of Wisconsin, Madison, Wis. 1900.
Dr. George N. Olcott, Columbia University, New York, N. Y. 1899.
Prof. Edward T. Owen, University of Wisconsin, Madison, Wis. 1896.
Prof. W. B. Owen, Lafayette College, Easton, Pa. 1875.
Prof. William A. Packard, Princeton University, Princeton, N. J. 1872.
Prof. Arthur H. Palmer, Yale University, New Haven, Conn. (42 Mansfield St.). 1885.

Miss Elisabeth H. Palmer, Vassar College, Poughkeepsie, N. Y. 1902.
Prof. Charles P. Parker, Harvard University, Cambridge, Mass. (1075 Massachusetts Ave.). 1884.
Prof. James M. Paton, Wesleyan University, Middletown, Conn. 1887.
John Patterson, Louisville High School, Louisville, Ky. (1117 Fourth St.). 1900.
Prof. Joseph Francis Paxton, University of Oklahoma, Norman, Okla. 1902.
Dr. Charles Peabody, Phillips Academy, Andover, Mass. (Brattle Street, Cambridge, Mass.). 1894.
Prof. E. M. Pease, 1423 Chapin Street, Washington, D. C. 1887.
Prof. Harry Thurston Peck, Columbia University, New York, N. Y. 1887.
Prof. Tracy Peck, Yale University, New Haven, Conn. 1871.
Miss Frances Pellett, Kelly Hall, University of Chicago, Chicago, Ill. 1893.
Dr. Daniel A. Penick, University of Texas, Austin, Tex. 1902.
Prof. Charles W. Peppler, Emory College, Oxford, Ga. 1899.
Miss Alice J. G. Perkins, Schenectady, N. Y. 1899.
Prof. Emma M. Perkins, Western Reserve University (College for Women), Cleveland, O. 1892.
Prof. Bernadotte Perrin, Yale University, New Haven, Conn. (136 Farnam Hall). 1879.

Prof. Edward D. Perry, Columbia University, New York, N. Y. (542 West 114th St.). 1882.
Prof. William E. Peters, University of Virginia, Charlottesville, Va. 1892.
Prof. John Pickard, University of the State of Missouri, Columbia, Mo. 1893.
Dr. William Taggard Piper, 179 Brattle St., Cambridge, Mass. 1885.
Prof. Samuel Ball Platner, Adelbert College of Western Reserve University, Cleveland, O. ( 24 Cornell St.). 1885.
Prof. William Carey Poland, Brown University, Providence, R. I. (53 Lloyd St.). 1872.

Prof. William Porter, Beloit College, Beloit, Wis. 1888.
Prof. Edwin Post, De Pauw University, Greencastle, Ind. 1886.
Prof. Franklin H. Potter, University of Iowa, Iowa City, Ia. 1898.
Henry Preble, 42 Stuyvesant Place, New Brighton, Staten Island, N. Y. 1882.
Prof. William K. Prentice, Princeton University, Princeton, N. J. (12 Nassau St.). 1895.

Prof. Ferris W. Price, Swarthmore College, Swarthmore, Pa. 1895.
Prof. Benjamin F. Prince, Wittenberg College, Springfield, O. 1893.
Prof. John Dyneley Prince, New York University, University Heights, New York. N. Y. 1899.

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Prof. Robert S. Radford, Elmira College, Elmira, N. Y. (7ro Park Place). 1900.
Dr. Edward Kennard Rand, Harvard University, Cambridge, Mass. (ro4 Lake View Ave.). $\quad 1902$.
Prof. John W. Redd, Centre College, Danville, Ky. 1885.
Prof. A. G. Rembert, Woford College, Spartansburg, S. C. 1902.
Prof. Horatio M. Reynolds, Yale University, New Haven, Conn. (213 Durfee Hall). 1884.

Dr. Ernst Riess, De Witt Clinton High School, Manhattan, N. V. I895.
Prof. Edmund Y. Robbins, Princeton University, Princeton, N. J. IS95.
Dr. Arthur IW. Roberts, Brookline High School, Brookline, Mass. ISS.
Prof. James J. Robinson, Hamilton College, Clinton, N. Y. 1902.
Prof. W. A. Robinson, Lawrenceville School, Lawrenceville, N. J. 1888.
Prof. Joseph C. Rockwell, Buchtel College, Akron, O. i896.
Prof. F. E. Rockwood, Bucknell University, Lewisburg, Pa. 1885.
George B. Rogers, Phillips Exeter Academy, Exeter, N. H. 1902.
Prof. John C. Rolfe, University of Pennsylvania, Philadelphia, Penn. (4408 Locust St.). 1890.
C. A. Rosegrant, Potsdam State Normal School, Potsdam, N. Y. 1902.

Prof. August Rupp, College of the City of New York, New York, N. Y. 1902.
Dr. Arthur W. Ryder, Harvard University, Cambridge, Mass. (72 Perkins Hall). 1902.

Dr. Julius Sachs, Classical School, 38 West Fifty-ninth St., New York, N. Y. 1875.
Benjamin H. Sanborn, Wellesley, Mass. ISgo.
Dr. Henry A. Sanders, University of Michigan, Ann Arbor, Mich. (213 South Thayer St.). 1899.
Prof. John A. Sanford, Adelphi College, Brooklyn, N. Y. 1901.
Prof. Myron R. Sanford, Middlebury College, Middlebury, Vt. I894.
Miss Catharine Saunders, Vassar College, Poughkeepsie, N. Y. 1900.
Joseph H. Sawyer, Williston Seminary, Easthampton, Mass. 1897.
Prof. W. S. Scarborough, Wilberforce University, Wilberforce, O. IS82.
Prof. J. J. Schlicher, State Normal School, Terre Haute, Ind. Igoi.
Prof. H. Schmidt-Wartenberg, University of Chicago, Chicago, Ill. 1894.
Edmund F. Schreiner, 4 S6 N. Clark St., Chicago, Ill. 1900.
Dr. Charles P. G. Scott, Radnor, Pa. IS8o.
Prof. John Adams Scott, Northwestern University, Evanston, Ill. (21 10 Orrington Ave.). 1898.
Miss Annie N. Scribner, University of Wisconsin, Madison, Wis. 1900.
Prof. Henry S. Scribner, Western University of Pennsylvania, Allegheny City, Pa. 1889.

Dr. Helen M. Searles, Mount Holyoke College, South Hadley, Mass. 1893.
Charles D. Seely, State Normal School, Brockport, N. Y. 1888.
Prof. William J. Seelye, Wooster University, Wooster, O. 1888.
J. B. Sewall, 17 Blagden St., Boston, Mass. 1871.

Prof. T. D. Seymour, Yale University, New Haven, Conn. ( 34 Hillhouse Ave.). 1873.

Prof. Charles H. Shannon, University of Tennessee, Knoxville, Tenn. 1900.
Prof. R. H. Sharp, Jr., Randolph-Macon Woman's College, Lynchburg, Va. (College Park P.O.). I897.

Prof. J. A. Shaw, Highland Military Academy, Worcester, Mass. 1876.
Prof. Edward S. Sheldon, Harvard University, Cambridge, Mass. (I I Francis Ave.). 1881.

Prof. F. W. Shipley, Washington University, St. Louis, Mo. 1900.
Prof. Paul Shorey, University of Chicago, Chicago, Ill. 1887.
Dr. Grant Showerman, University of Wisconsin, Madison, Wis. 1900.
Dr. Edgar S. Shumway, University of Pennsylvania, Philadelphia, Pa. 1885.
Prof. E. G. Sihler, New York University, University Heights, New York, N. Y. 1876.
Prof. Charles F. Sitterly, Drew Theological Seminary, Madison, N. J. 1902.
Prof. M. S. Slaughter, University of Wisconsin, Madison, Wis. 1887.
Princ. M. C. Smart, Claremont, N. H. 1900.
Prof. Charles Forster Smith, University of Wisconsin, Madison, Wis. 1883.
Prof. Charles S. Smith, Columbian University, Washington, D. C. ( 2122 H St.). 1895.

Prof. Clement L. Smith, Harvard University, Cambridge, Mass. (64 Sparks St.). 1882.

Prof. Harry de Forest Smith, Amherst College, Amherst, Mass. 1899.
Prof. Josiah R. Smith, Ohio State University, Columbus, O. 1885.
Prof. Kirlby F. Smith, Johns Hopkins University, Baltimore, Md. 1897.
Prof. Herbert Weir Smyth, Harvard University, Cambridge, Mass. (91 Walker St.). 1886.

George C. S. Southworth, Salem, Col. Co., O. 1883.
Prof. Edward H. Spieker, Johns Hopkins University, Baltimore, Md. 1884.
Dr. Sidney G. Stacey, Erasmus Hall High School, Brooklyn, N. Y. (1 50 Montague St.). 1901.
Prof. Jonathan Y. Stanton, Bates College, Lewiston, Me. 1888.
Miss Josephine Stary, 3 I West Sixty-first St., New York, N. Y. 1899.
Prof. R. B. Steele, Vanderbilt University, Nashville, Tenn. (2401 West End). 1893.

Prof. J. R. S. Sterrett, Cornell University, Ithaca, N. Y. (2 South Ave.). 1885.
Prof. F. H. Stoddard, New York University, University Heights, New York, N. Y. 1890.

Dr. Duane Reed Stuart, University of Michigan, Ann Arbor, Mich. 1901.
Dr. E. H. Sturtevant, Maryville College, Maryville, Tenn. 1901.
Dr. Charles W. Super, Ohio University, Athens, O. 1881.
Dr. Marguerite Sweet, 13 Ten Bronck St., Albany, N. Y. 1892.
Prof. Frank B. Tarbell, University of Chicago, Chicago, Ill. 1882.
Prof. Joseph R. Taylor, Boston University, Boston, Mass. 1902.
Prof. Julian D. Taylor, Colby University, Waterville, Me. 1890.
Prof. Glanville Terrell, Georgetown College, Georgetown, Ky. 1898.
Prof. William E. Thompson, Hamline University, Hamline, Minn. 1877.
Dr. Charles H. Thurber, 29 Beacon St., Boston, Mass. 1901.
Prof. F. W. Tilden, Indiana University, Bloomington, Ind. 1902.
Prof. Fitz Gerald Tisdall, College of the City of New York, N. Y. (80 Convent Ave.). 1889.

Prof. Henry A. Todd, Columbia University, New York, N. Y. 1887.
Prof. H. C. Tolman, Vanderbilt University, Nashville, Tenn. 1889.
Prof. Edward M. Tomlinson, Alfred University, Alfred, N. Y. 1885.

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Edward M. Traber, State Agricultural College, Fort Collins, Colo. 1896. Prof. J. A. Tufts, Phillips Exeter Academy, Exeter, N. H. 1898.
Prof. Milton H. Turk, Hobart College, Geneva, N. Y. 1896.
Prof. Fsther Van Deman, American School of Classical Studies at Rome, Italy. 1899.

Addison Van Name, Yale University, New Haven, Conn. (12I High St.). 1869.
Dr. W. H. Wait, University of Michigan, Ann Arbor, Mich. 1893.
Dr. John H. Walden, 13 Mt. Auburn St., Cambridge, Mass. 1889.
Prof. Arthur T. Walker, University of Kansas, Lawrence, Kan. 1895.
Dr. Alice Walton, Wellesley College, Wellesley, Mass. 1894.
Dr. Edwin G. Warner, Polytechnic Institute, Brooklyn, N. Y. 1897.
Andrew McCorrie Warren, care of Brown, Shipley \& Co., Founders' Court, London. 1892.

Prof. Minton Warren, Harvard University, Cambridge, Mass. (105 Irving St.). 1874.

Prof. William E. Waters, New York University, University Heights, N. Y. (604 West 11 5th St.). 1885.
Dr. John C. Watson, Cornell University, Ithaca, N. Y. 1902.
Prof. Helen L. Webster, Wellesley College, Wellesley, Mass. 1890.
Prof. Raymond Weeks, University of the State of Missouri, Columbia, Mo. 1902.
Miss Mary C. Welles, Уale University, New Haven, Conn. (33 Wall St.). 1898.
Prof. Andrew F. West, Princeton University, Princeton, N. J. 1886.
Prof. J. H. Westcott, Princeton University, Princeton, N. J. 1891.
Prof. J. B. Weston, Christian Biblical Institute, Stanfordville, N. Y. 1869.
Prof. L. B. Wharton, College of William and Mary, Williamsburg, Va. 1888.
Albert S. Wheeler, Sheffield Scientific School, New Haven, Conn. (P.O. Box 1298). 1871.

Prof. Arthur L. Wheeler, Bryn Mawr College, Bryn Mawr, Pa. 1899.
Prof. James R. Wheeler, Columbia University, New York, N. Y. 1885.
Prof. G. M. Whicher, Normal College, New York, N. Y. I891.
Dr. Frederic Earle Whitaker, St. Paul's School, Garden City, L. I. 1900.
Dr. Andrew C. White, Cornell University, Ithaca, N. Y. (424 Dryden Road). 1886.

Prof. John Williams White, Harvard University, Cambridge, Mass. (i8 Concord Ave.). 1874.
Vice-Chanc. B. Lawton Wiggins, University of the South, Sewanee, Tenn. 1892. Prof. Alexander M. Wilcox, University of Kansas, Lawrence, Kan. 1884.
Prof. Henry D. Wild, Williams College, Williamstown, Mass. 1898.
Charles R. Williams, Indianapolis, Ind. 1887.
Prof. George A. Williams, Kalamazoo College, Kalamazoo, Mich. 1891.
Prof. Mary G. Williams, Mt. Holyoke College, South Hadley, Mass. 1899.
Prof. Harry Langford Wilson, Johns Hopkins University, Baltimore, Md. 1898.
Dr. J. D. Wolcott, University of Chicago, Chicago, Ill. 1898.
Prof. E. L. Wood, Amherst College, Amherst, Mass. 1888.
Prof. Henrv Wood, Johns Hopkins University, Baltimore, Md. 1884.
Dr. Willis Patten Woodman, Princeton University, Princeton, N. J. ( 27 William St.). 1901.
Prof. Frank E. Woodruff, Bowdoin College, Brunswick, Me. 1887.

Prof. B. D. Woodward, Barnard College, Columbia University, New York, N. Y. ( 462 West 22nd St.). 1891.
C. C. Wright, University of Virginia, Charlottesville, Va. 1902.

Prof. Ellsworth D. Wright, Lawrence University, Appleton, Wis. 1898.
Prof. Henry P. Wright, Yale University, New Haven, Conn. (128 York St.). 1883. Prof. John Henry Wright, Harvard University, Cambridge, Mass. (38 Quincy St.). 1874.

Prof. Clarence H. Young, Columbia University, New York, N. Y. (312 West 88th St.). 1890.

Prof. R. B. Youngman, Lafayette College, Easton, Pa. Igoi.
[Number of Members, 50\%.]

## WESTERN BRANCH.

## MEMBERS OF THE PHILOLOGICAL ASSOCIATION OF THE PACIFIC COAST.

## (Established 1899.)

Membership in the American Philological Association prior to the organization of the Philological Association of the Pacific Coast is indicated by a date earlier than 1900.
W. H. Alexander, University of California, Berkeley, Cal. (260I Durant Ave.). 1900. Albert H. Allen, Visalia, Cal. 1900.
Dr. James T. Allen, University of California, Berkeley, Cal. (1633 Arch St.). 1898. Miss Mary G. Allen, 240 Thirteenth St., San Francisco, Cal. 1901.
Dr. E. P. Anderson, Leland Stanford Jr. University, Stanford University, Cal. $1 g 01$.
Prof. Louis F. Anderson, Whitman College, Walla Walla, Wash. 1887.
Prof. M. B. Anderson, Leland Stanford Jr. University, Stanford University, Cal. 1901.

Prof. H. T. Archibald, Occidental College, Los Angeles, Cal. igor. Prof. Mark Bailey, Jr., Whitworth College, Tacoma, Wash. 1901.
Dr. J. W. Basore, University of California, Berkeley, Cal. 1902.
Prof. C. B. Bradley, University of California, Berkeley, Cal. (2639 Durant Ave.). 1900.

Rev. William A. Brewer, San Mateo, Cal. 1900.
Valentine Buehner, High School, San Jose, Cal. 1900.
Elvyn F. Burrill, 2536 Bancroft Way, Berkeley, Cal. 1900.
Prof. Luella Clay Carson, University of Oregon, Eugene, Ore. 1900.
Martin Centner, University of California, Berkeley, Cal. 1900.
Samuel Chambers, University of California, Berkeley, Cal. 1900.
Prof. J. E. Church, Jr., State University of Nevada, Reno, Nev. 1901.
Prof. Edward B. Clapp, Froben str. $3^{611}$, Berlin. 1886.
Miss Mary Bird Clayes, 2420 Dwight Way, Berkeley, Cal. 1900. •
A. Horatio Cogswell, 2135 Santa Clara Ave., Alameda, Cal. 1900.

Prof. W. A. Cooper, Leland Stanford Jr. University, Stanford University, Cal. Igor.
Mrs. Frank A. Cressey, Modesto, Cal. 1900.
Prof. L. W. Cushman, Nevada State University, Reno, Nev. 1900.
J. Allen De Cou, Red Bluff, Cal. 1900.

Prof. J. Elmore, Leland Stanford Jr. University, Stanford University, Cal. 1900.
Prof. H. Rushton Fairclough, Leland Stanford Jr. University, Stanford University, Cal. 1887.
G. E. Faucheux, University of California, Berkeley, Cal. 1900.

Dr. W. S. Ferguson, University of California, Berkeley, Cal. 1899.
Prof. Ewald Flügel, Leland Stanford Jr. University, Stanford University, Cal. 1900.
Prof. P. J. Frein, Leland Stanford Jr. University, Stanford University, Cal. 1900.
Prof. John Fryer, University of California, Berkeley, Cal. 1900.
Dr. John Gamble, Haywards, Cal. 1900.

Prof. Charles Mills Gayley, University of California, Berkeley, Cal. 1895.
Charles Bertie Gleason, High School, San Jose, Cal. 1900.
Prof. Julius Goebel, Leland Stanford Jr. University, Stanford University, Cal. 1900.
Walter H. Graves, 1220 Linden St., Oakland, Cal. 1900.
Miss Rebecca T. Greene, Salinas, Cal. 1900.
Prof. James O. Griffin, Leland Stanford Jr. University, Stanford University, Cal. 1896.

Prof. A. S. Haggett, University of Washington, Seattle, Wash. Igor.
E. V. Henderson, University of California, Berkeley, Cal. 1901.

Edward Hohfeld, 14 Grove St., San Francisco, Cal. 1900.
Miss Lily Hohfeld, Siskiyou Co. High School, Yreka, Cal. 1900.
C. H. Howard, University of California, Berkeley, Cal. 1900.
M. C. James, IIigh School, Berkeley, Cal. 1900.

Prof. Oliver M. Johnston, Leland Stanford Jr. University, Stanford University, Cal. 1900.

Winthrop Leicester Keep, Mills College, Alameda Co., Cal. 1900.
Tracy R. Kelley, 2214 Jones St., San Francisco, Cal. 1900.
Prof. Martin Kellogg, University of Califurnia, Berkeley, Cal. 1884.
Chas. R. Keys, University of California, Berkeley, Cal. 1901.
Prof. S. F. Lange, University of California, Berkeley, Cal. 1900.
Rev. James O. Lincoln, San Mateo, Cal. 1900.
Miss Alice Marchebout, Girls' High School, San Francisco, Cal. . 1900.
Prof. Max L. Margolis, University of California, Berkeley, Cal. 1900.
Prof. John E. Matzke, Leland Stanford Jr. University, Stanford University, Cal. 1900.

Prof. William A. Merrill, University of California, Berkeley, Cal. 1886.
Francis O. Mower, Napa High School, Napa, Cal. 1900.
Edward J. Murphy, Cabias, Nueva Ecija, Philippine Islands. 1900.
Prof. Augustus T. Murray, Leland Stanford Jr. University, Stanford University, Cal. 1887.

Carl H. Nielsen, Vacaville, Cal. 1900.
Rabbi Jacob Nieto, 1719 Bush St., San Francisco, Cal. 1900.
Dr. George R. Noyes, University of California, Berkeley, Cal. 1901.
Dr. H. C. Nutting, University of California, Berkeley, Cal. (2125 Cedar St.). 1900.
Dr. Andrew Oliver, San Mateo, Cal. 1900.
Prof. F. M. Padelford, University of Washington, Seattle, Wash. Igor.
Prof. F. V. Paget, University of California, Berkeley, Cal. 1900.
E. Pitcher, High School, Alameda, Cal. 1900.

Dr. Henry W. Prescott, University of California, Berkeley, Cal. 1899.
Dr. Clifton Price, University of California, Berkeley, Cal. 1899.
E. K. Putnam, Leland Stanford Jr. University, Stanford University, Cal. 1901.

Prof. A. Putzker, University of California, Berkeley, Cal. 1900.
Prof. M. M. Ramsey, Leland Stanford Jr. University, Stanford University, Cal. 1894.

Prof. S. B. Randall, California College, Oakland, Cal. 1900.
Miss Cecilia L. Raymond, 2407 S. Atherton St., Berkeley, Cal. 1900.
Prof. Karl G. Rendtorff, Leland Stanford Jr. University, Stanford University, Cal. 1900.

Miss Beatrice Reynolds, 244 Myrtle Ave., San Francisco, Cal. 1900.
Prof. Leon J. Richardsom University of California, Berkeley, Cal. 1895.
Prof. H. W. Rolfe, Leland Stanford Jr. University, Stanford University, Cal. 1901.

Prof. H. K. Schilling, University of California, Berkeley, Cal. 1901.
Prof. F. G. G. Schmidt, University of Oregon, Eugene, Ore. 1900.
Prof. Colbert Searles, Leland Stanford Jr. University, Stanford University, Cal. 1901.

Prof. Henry Senger, University of California, Berkeley, Cal. 1900.
Principal Leigh Richmond Smith, Santa Clara High School, Santa Clara, Cal. 1896.

Rabbi Jacob Voorsanger, 1249 Franklin St., San Francisco, Cal. 1901:
C. M. Walker, Lowell High School, San Francisco, Cal. 1900.

President Benjamin I. Wheeler, University of California, Berkeley, Cal. 1879. Miss Catherine E. Wilson, 3043 California St., San Francisco, Cal. 1900.
[Number of Members, 87. Total, $507+87=594$.]

## The Following Libraries and Institutions (alphabetized by Towns) subscribe for the Annual Publications of the Association.

Albany, N. Y.: New York State Library.
Amherst, Mass. : Amherst College Library.
Ann Arbor, Mich.: Michigan University Library.
Auburn, N. Y.: Theological Seminary.
Austin, Texas: University of Texas Library.
Baltimore, Md. : Johns Hopkins University Library.
Baltimore, Md.: Peabody Institute.
Berkeley, Cal.: University of California Library.
Boston, Mass. : Boston Public Library.
Brooklyn, N. Y.: The Brooklyn Library.
Brunswick, Me.: Bowdoin College Library.
Bryn Mawr, Pa.: Bryn Mawr College Library.
Buffalo, N. Y. : The Buffalo Library.
Burlington, Vt.: Library of the University of Vermont.
Cambridge, Mass. : Harvard College Library.
Champaign, Ill.: University of Illinois Library.
Chicago, Ill.: The Newberry Library.
Chicago, Ill.: Public Library.
Chicago, Ill.: University of Chicago Library.
Clermont Ferrand, France: Bibliothèque Universitaire.
Cleveland, O. : Library of Adelbert College of Western Reserve University.
College Hill, Mass. : Tufts College Library.
Columbus, O.: Ohio State University Library.
Crawfordsville, Ind.: Wabash College Library.
Detroit, Mich. : Public Library.
Easton, Pa.: Lafayette College Library.
Evanston, Ill.: Northwestern University Library.
Gambier, O.: Kenyon College Library.
Gieencastle, Ind.: Library of De Pauw University.
Hanover, N. H. : Dartmouth College Library.
Iowa City, Ia. : Library of State University.
Ithaca, N. Y.: Cornell University Library.
Lincoln, Neb.: Library of State University of Nebraska.
Madison, Wis. : Library of the University of Wisconsin.
Marietta, O.: Marietta College Library.
Middletown, Conn.: Wesleyan University Library.
Milwaukee, Wis. : Public Library.
Minneapolis, Minn. : Athenæum Library.
Minneapolis, Minn.: Library of the University of Minnesota.
Nashville, Tenn.: Vanderbilt University Library.
Newton Centre, Mass. : Library of Newton Theological Institution.
New York, N. Y.: Astor Library.
New York, N. Y. : Library of Columbia University.
New York, N. Y.: Library of the College of the City of New York (Lexington Ave. and Twenty-third St.).

New York, N. Y.: Union Theological Seminary Library (700 Park Ave.). Olivet, Eaton Co., Mich. : Olivet College Library.
Philadelphia, Pa.: American Philosophical Society.
Philadelphia, Pa. : The Library Company of Philadelphia.
Philadelphia, Pa.: The Mercantile Library.
Philadelphia, Pa.: University of Pennsylvania Library.
Pittsburg, Pa. : Carnegie Library.
Poughkeepsie, N. V.: Vassar College Library.
Princeton, N. J.: Library of Princeton University.
Providence, R. I.: Brown University Library.
Rochester, N. Y.: Rochester University Library.
Springfield, Mass. : City Library.
Tokio, Japan: Library of Imperial University.
Toronto, Can.: University of Toronto Library.
University of Virginia, Albemarle Co., Va.: University Library.
Vermilion, South Dakota: Library of University of South Dakota.
Washington, D. C. : Library of the Catholic University of America.
Washington, D. C. : United States Bureau of Education.
Wellesley, Mass.: Wellesley College Library.
Worcester, Mass. : Free Public Library.
[Number of subscribing institutions, 64.]

To the Following Libraries and Institutions the Transactions are annually sent, gratis.

American School of Classical Studies, Athens.
American School of Classical Studies, Rome (Via Vicenza 5).
British Museum, London.
Royal Asiatic Society, London.
Philological Society, London.
Society of Biblical Archæology, London.
Indian Office Library, London.
Bodleian Library, Oxford.
University Library, Cambridge, England.
Advocates' Library, Edinburgh, Scotland.
Trinity College Library, Dublin, Ireland.
Asiatic Society of Bengal, Calcutta.
Bombay Branch of the Royal Asiatic Society.
North-China Branch of the Royal Asiatic Society, Shanghai.
Japan Asiatic Society, Yokohama.
Public Library of Victoria, Melbourne, Australia.
Sir George Grey's Library, Cape Town, Africa.
Reykjavik College Library, Iceland.
University of Christiania, Norway.
University of Upsala, Sweden.
Stadsbiblioteket, Göteborg, Sweden.

Russian Imperial Academy, St. Petersburg.
Austrian Imperial Academy, Vienna.
Anthropologische Gesellschaft, Vienna.
Biblioteca Nazionale, Florence, Italy.
Reale Accademia delle Scienze, Turin.
Société Asiatique, Paris, France.
Athénée Oriental, Louvain, Belgium.
Curatorium of the University Leyden, Holland.
Bataviaasch Genootschap van Kunsten en Wetenschappen, Batavia, Java.
Royal Prussian Academy of Sciences, Berlin, Germany.
Royal Saxon Academy of Sciences, Leipsic.
Royal Bavarian Academy of Sciences, Munich.
Deutsche Morgenländische Gesellschaft, Halle.
Library of the University of Bonn.
Library of the University of Freiburg in Baden.
Library of the University of Giessen.
Library of the University of Jena.
Library of the University of Königsberg.
Library of the University of Leipsic.
Library of the University of Toulouse.
Library of the University of Tübingen.
Imperial Ottoman Museum, Constantinople.
Smithsonian Institution, Washington, D. C.
[Number of foreign institutions, 43.]

To the Following Foreign Journals the Transactions are annually sent, gratis.
Athenæum, London.
Classi al Review, London.
Revue Critique, Paris.
Revue de Philologie (Adrien Krebs, II Rue de Lille, Paris).
Société de Linguistique, à la Sorbonne, Paris.
Berliner Philologische Wochenschrift, Berlin.
Deutsche Litteraturzeitung, Berlin.
Indogermanische Forschungen (K. J. Trübner, Strassburg).
Literarisches Centralblatt, Leipsic.
Musée Belge (Prof. Waltzing, 9 Rue du Parc, Liège, Belgium).
Neue Philologische Rundschau, Gotha (F. A. Perthes).
Wochenschrift für klassische Philologie, Berlin.
Rivista di Filologia, Turin (Ermanno Loescher).
Direzione del Bolletino di Filologia Classica, Via Vittorio Amadeo ii, Turin.
Zeitschrift für die österr. Gymnasien (Prof. J. Golling, Maximilians Gymnasium, Vienna).
L'Université Catholique (Prof. A. Lepitre, io Avenue de Noailles, Lyons).

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[\text { Total }(594+64+43+1+16)=718 .]
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# CONSTITUTION 

## OF THE <br> AMERICAN PHILOLOGICAL ASSOCIATION.

## Article I. - Name and Object.

1. This Society shall be known as "The American Philological Association."
2. Its object shall be the advancement and diffusion of philological knowledge.

## Article II. - Officers.

1. The officers shall be a President, two Vice-Presidents, a Secretary and Curator, and a Treasurer.
2. There shall be an Executive Committee of ten, composed of the above officers and five other members of the Association.
3. All the above officers shall be elected at the last session of each annual meeting.

## Article III. - Meetings.

1. There shall be an annual meeting of the Association in the city of New York, or at such other place as at a preceding annual meeting shall be determined upon.
2. At the annual meeting, the Executive Committee shall present an annual report of the progress of the Association.
3. The general arrangements of the proceedings of the annual meeting shall be directed by the Executive Committee.
4. Special meetings may be held at the call of the Executive Committee, when and where they may decide.
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\text { Proccedings for July, } 1902 .
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## Article IV. - Members.

1. Any lover of philological studies may become a member of the Association by a vote of the Executive Committee and the payment of five dollars as initiation fee, which initiation fee shall be considered the first regular annual fee.
2. There shall be an annual fee of three dollars from each member, failure in payment of which for two years shall ipso facto cause the membership to cease.
3. Any person may become a life member of the Association by the payment of fifty dollars to its treasury, and by vote of the Executive Committee.

## Article V.-Sundries.

1. All papers intended to be read before the Association must be submitted to the Executive Committee before reading, and their decision regarding such papers shall be final.
2. Publications of the Association, of whatever kind, shall be made only under the authorization of the Executive Committee.

## Article VI. - Amendments.

Amendments to this Constitution may be made by a vote of two-thirds of those present at any regular meeting subsequent to that in which they have been proposed.

## PUBLICATIONS OF THE ASSOCIATION.

The annually published "Proceedings" of the American Philological Association contain an account of the doings at the annual meeting, brief abstracts of the papers read, reports upon the progress of the Association, and lists of its officers and members.

The annually published "Transactions" give the full text of such articles as the Executive Committee decides to publish. The Proceedings are bound with them as an Appendix.

The following tables show the authors and contents of the volumes of Transactions thus far published : -

## 1869-1870. - Volume I.

Hadley, J. : On the nature and theory of the Greek accent.
Whitney, W. D.: On the nature and designation of the accent in Sanskrit.
Goodwin, W. W.: On the aorist subjunctive and future indicative with ó $\pi \omega \boldsymbol{c}$ and ov่ $\mu$ च́.
Trumbull, J. Hammond: On the best method of studying the North American languages.
Haldeman, S. S.: On the German vernacular of Pennsylvania.
Whitney, W. D.: On the present condition of the question as to the origin of language.
Lounsbury, T. R.: On certain forms of the English verb which were used in the sixteenth and seventeenth centuries.
Trumbull, J. Hammond: On some mistaken notions of Algonkin grammar, and on mistranslations of wurds from Eliot's Bible, etc.
Van Name, A.: Contributions to Creole Grammar.
Proceedings of the preliminary meeting (New York, 1868), of the first annual session (Poughkeepsie, 1869), and of the second annual session (Rochester, 1870).

## 1871. - Volume II.

Evans, E. W.: Studies in Cymric philology.
Allen, F. D.: On the so-called Attic second declension.
Whitney, W. D.: Strictures on the views of August Schleicher respecting the nature of language and kindred suljects.
Hadley, J. : On English vowel quantity in the thirteenth century and in the nineteenth.
March, F. A. : Anglo-Saxon and Early English pronunciation.
Bristed, C. A. : Some notes on Ellis's Early English Pronunciation. cxlvi

Trumbull, J. Hammond: On Algonkin names for man.
Greenough, J. B. : On some forms of conditional sentences in Latin, Greek, and Sanskrit.

Proceedings of the third annual session, New Haven, 1871.

## 1872. - Volume III.

Evans, E. W. : Studies in Cymric philology.
Trumbull, J. Hammond: Words derived from Indian languages of North America.
Hadley, J.: On the Byzantine Greek pronunciation of the tenth century, as illustrated by a manuscript in the Bodleian Library.
Stevens, W. A.: On the substantive use of the Greek participle.
Bristed, C. A.: Erroneous and doubtful uses of the word such.
Hartt, C. F.: Notes on the Lingoa Geral, or Modern Tupí of the Amazonas.
Whitney, W. D.: On material and form in language.
March, F. A.: Is there an Anglo-Saxon language?
March, F. A.: On some irregular verbs in Anglo-Saxon.
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[^0]:    
    ${ }^{2}$ For the psychology of such " associated reminiscences" see Mr. A. B. Cook's interesting and suggestive article Class. Rev. XV (1901), 33S-345. I gladly acknowledge the impetus which Mr. Cook's paper has given to my studies.

[^1]:    ${ }^{1}$ It may be added here that the parallel in the Trachinians is a proof of the unsoundness of M. Henri Weil's $\epsilon \check{\gamma} \boldsymbol{\gamma} \omega \sigma$ тov in Alc. 139 (on which see also Hayley's note).

[^2]:    ${ }^{1}$ A very pretty example of a conflate reference to Homer by Sophocles may be cited here as illustrating the tendency of his mind. In Trach. 144-6 Td $\mathrm{rd} \rho$
    
     there is a reference to Hom. $\epsilon 478$ sqq., where it is said of the two $\theta a \mu \nu 0 t$ : rovs
    
     $\mu a ́ \tau \omega \nu$ oư $\delta \in \grave{\nu} \kappa \lambda_{0} \nu \in \in \hat{\imath}$ is not to be explained from the passage just cited but from another, a little farther on in the Phaeacian Episode, which was naturally, owing to both its proximity and its similarity to the former, running in Sophocles's mind at the same time. This is the famous description of Olympus ( $543-5$ ), $80 \iota$ фaनt
    
    

[^3]:    ${ }^{1}$ I add here what seems like an isolated reminiscence of the Alcestis in the
    
    
    

[^4]:    ${ }^{1}$ Cf. Trach. 1184 and Alc. 1118.

[^5]:    ${ }^{1}$ Cf. especially $\tau \hat{\omega} \iota \lambda o ́ \gamma \omega \iota$ (as it seems that we should read for $\tau 0 \hat{v} \lambda \delta \gamma \gamma v$ ) $\delta^{\circ}$
    
    

[^6]:    ${ }^{1}$ Schütz (Soph. Studien, p. 391) woukd keep the vs., but with some change.
     of an improvement on Sophocles's verse.

[^7]:     Wunder (followed by Nauck) as spurious. It seems to belong to a familiar type of interpolation.
    ${ }^{2}$ It seems reasonable to suppose that at Med. 956-8 the magic articles of dress are brought out openly, not in a box, and so entrusted to the children that one takes the dress, the other the diadem. The poison will work only on the bride. - It may be noted here that Seneca, or whoever wrote the Hercules Oetaeus, not only in other respects (see Herc. Oet. 500 sqq .) made a much more reasonable account of the adventure at the Evenus (Sophocles managed it pretty badly, as was anciently noted: see Schneidewin-Nauck on Trach. 568), but also took much better care of the poison there than Sophocles had done; for he makes Nessus give it to Deianira enclosed in one of his hooves, which he had hap-

[^8]:    ${ }^{1}$ A garment, but not a poisoned one, is an important part of the apparatus of the murder in the Agamemnon.

[^9]:    ${ }^{1}$ For the various theories and estimates, with references to the literature of the subject, see Friedlaender, Sittengeschichte Roms, I8, pp. 5s-70.

[^10]:    ${ }^{1}$ Mém. de l'Institut: Acad. des Sciences, Math., et Phys., II, P. 417.
    ${ }^{2}$ Brevi Notizie sull' Acqua Pià : 1872. Lanciani himself approved the method of these investigations in his large Italian work on the aqueducts, I Commenfarii di Frontino, p. 362.

[^11]:    ${ }^{1}$ With a population of 93,000 - the only city on the list having less than half a million people.
    ${ }^{2}$ The water commissioner, however, reports that the available supply is wholly inadequate for the demand.

[^12]:    ${ }^{1}$ We know the amount supplied by these two aqueducts together, but not by each singly.

[^13]:    ${ }^{1}$ II, 2, 18-19; II, 16, 34-35; IV, 2, 22-23; IV, 2, 23-24; C. S., 47-48.
    ${ }^{2}$ I, 2, 19-20; I, 25, 1I-12; II, 16, 7-8.

[^14]:    ${ }^{1}$ In the Puteanus a large proportion of the numbers is written out in full. With these we are not concerned, as they are productive of no corruptions.

[^15]:    ${ }^{1}$ Even as early as the copying of P in the fifth or sixth century the omission of D was not unusual, as is shown by its occasional omission in P .

[^16]:    ${ }^{1}$ The examples are drawn from Book xxx, chaps. 30 , II to 42,21 . From xxx , 42,21 to the end of the book the text of the Bambergensis is not drawn from the Puteanus, but from some other source.

[^17]:    ${ }^{1}$ Hermann, Ad Viger., p. 900 ; Buttmann, Gr. Gram. ${ }^{13}$, § 139 (Engl. trans.); Matthiae, Gr. Gram., §§ 521, 523 (Engl. trans.); etc.

    2 Untersuch. iub. d. gr. Modi (1846), pp. 208, 221.
    ${ }^{8}$ See Trans. A.Ph.A. 1873, p. 66; 1876, p. 106; A.J.Ph. III (iSS2), p. 436.
    ${ }^{4}$ A.J.Ph. III (1882), p. 436, footnote.
    ${ }^{5}$ See also Trans. A.Ph.A. 1873, p. 67, footnote.

[^18]:    ${ }^{1}$ Trans. A.Ph.A. 1873, p. 65 ff.; see also M.T. ${ }^{2}$ (i865), p. iv.
    ${ }^{2}$ Trans. A.Ph.A. 1873, p. 69.
    ${ }^{8}$ § 17 ; cf. §§ $176,463,53^{2}$ and App. I, p. 389. ${ }^{4}$ Ibid., § II, b.

[^19]:    ${ }^{1}$ Gr. Gram. ${ }^{3}$ (1899), § 562.
    ${ }^{2}$ In the second edition the corresponding clauses with the subjunctive are not mentioned in this connection, but the author states, respecting the iterative optative: "Ausgegangen wer dieser Gebrauch von Sätzen wie $\chi 315$ " (quoted above), § 167.
    ${ }^{8}$ But see below, p. 25 .
    ${ }^{4}$ Der homer. Gebrauch d. Partikel $\epsilon$ ( 1872 ), p. 140 f., and see pp. 66, 87, 89. Lange seems to have Kühner in mind, although he does not say so; cf. p. 88. Delbrück (Conj. u. Opt. p. 223 ff., 236) only mentions the iterative optative to warn against ascribing the idea of repetition to the optative itself.

[^20]:    1 Outlines of the Temporal and Modal Principles of Altic Prose (publ. by Univ. of Cal., Berkeley), 1893, p. ix.

    2 "On $\epsilon$ with the Future Indicative," etc., Trans. A.Ph.A. (1876), p. S.
    8 "Studies in Pindaric Syntax," A.J.Ph. III (1882), p. 437.
    ${ }^{4}$ The enumeration is based upon the text of Ameis-Hentze, carefully compared with La Roche, Homeri Ilias, 1873, and Ludwich, Homeri Odjssea, IS89. For other editions and works consulted, see the footnotes.

[^21]:    ${ }^{1}$ Compare the discussions of Lange, Partikel cl, p. 346 ff ., with those of Hentze, Die Parataxis bei Homer, Progr. Abhandl., Göttingen (1888, 1889, 1891), Th. II, 1889, and see Delbrück, S.F. I, p. 236 ff.
    ${ }^{2}$ See Hentze, Parataxis bei Homer, Th. II, p. 17.
    ${ }^{8}$ For $\kappa \epsilon(\nu)$ in these clauses, see G.M.T., $\S \S 460$ f. and Brugmann, Gr. Gram. ${ }^{8}$ $\S 560 \mathrm{~d}$.

[^22]:    ${ }^{1}$ For the discussion of $\Gamma \mathbf{2 2 1}$, see page 11 .
    ${ }^{2}$ For these sentences, see Lange, Partikel el, p. 465, and Leaf's note on § 319 .

[^23]:    ${ }^{1}$ So Delbrück, Lange, Am.-H., Leaf, etc., following the reading of AGHL. Many good Mss. read $\epsilon^{\epsilon} \epsilon^{\epsilon} \lambda \epsilon t s$, so La Roche, Monro, etc. But see Lange, p. 443.

    2 All Mss. read $\pi a \rho \epsilon \lambda \theta$ oc (La Roche). But see Lange's note, p. 516 f., in which, however, $\delta 367$ is a misprint for $\delta$ 596(?).

[^24]:    ${ }^{1}$ Odyssey, I, App. A, 9 (20), p. xxiii.

[^25]:    ${ }^{1}$ See page 9.
    ${ }^{2}$ Besides eight instances of $\dot{\omega} s \epsilon$ with the opt., viz.: B 780; $\boldsymbol{\Lambda} 389,467$; X 410; เ 3I4; к 4I5, 419; $\rho 366$.
    ${ }^{8}$ Including $є 483$, see page 108 .

[^26]:    ${ }^{1}$ Including, of course, temporal and all other clauses, in which the iterative optative occurs. To avoid the repetition of so clumsy an expression, we shall at times use the abbreviated forms 'generic cond. sentences,' 'generic periods,' etc., in the same sense.

[^27]:    ${ }^{1}$ Some grammarians (e.g., Matthiae, §524,5) have even termed $\epsilon l$ in these clauses a kind of particle of time. If $\epsilon i$ was originally temporal, which seems improbable (see Brugmann, Gr. Gram. ${ }^{8} \S 594$, 1), the figures given above prove that in the language of Homer, it possessed no temporal connotation.
    ${ }^{2}$ In later Greek, however, the use of the relative pronoun in either of these constructions becomes, with certain exceptions (e.g., in Thucydides), unimportant. The strictly hypothetical periods are introduced almost exclusively by $\epsilon l$; while, on the other hand, the past general condition, though by certain writers $e l$ is here frequently employed, preserves throughout to a significant degree its temporal character. The past-Homeric history of this construction is shown in part by the

[^28]:    ${ }^{1}$ In the majority of these 56 instances the optative is due apparently to assimilation to a preceding optative.
    ${ }^{2}$ Due, of course, in large part to the tense of the verb of the apodosis.

[^29]:    ${ }^{1}$ Paul, Principien der Sprachgeschichte ${ }^{2}$, § 459 (Engl. trans.).
    2 "Das Praeteritum bedeutet psychologisch ein Plus, eine Beziehung auf den Sprechenden; logisch ein Minus, indem es ein individuelles Erlebnis und keine allgemeine Behauptung enthält. Sowie letzteres der Fall ist, nimmt das Urtheil die Form des zeitlosen Praesens an," u.s.w. W. Jerusalem, Urtheilsfunction (1895), S. I33.

[^30]:    ${ }^{1}$ For these terms see Delbrück, S.F. I, p. 101; Lange, Partikel el, p. 18.
    ${ }^{2}$ Flagg, op. cit., § 68.
    ${ }^{8}$ Ibid., p. ix.

[^31]:    ${ }^{1}$ A similar passage is $v 224$ f., with which we may compare $\alpha$ I14 f., Aesch. Pers. 523 ff. (Weil), and many other passages.
    ${ }^{2}$ Lange, op. cit., p. 88 f.
    ${ }^{8}$ See also Lange's comment, op. cit., p. I40 f.
    ${ }^{4}$ A further argument against the theory is afforded by the fact that, whereas such a sentence as 'I came that I might see' implies an "original" ' I am coming or going that I may see,' a past generic period, as 'Whenever I met him, I struck him,' does not rest upon or imply the corresponding form 'Whenever I meet him, I strike him.' There is a fundamental difference between these two classes of sentences.

[^32]:    ${ }^{1}$ Brugmann, Gr. Gram. ${ }^{8} \S 562$.
    ${ }^{2}$ Probably the potential optative, see Brugmann, Gr. Gram. ${ }^{8}$ § 562 .
    ${ }^{8}$ In origin the volitive subjunctive, according to Professor Hale, 'Subjunctive and Optative Conditions in Greek and Latin,' Harvard Studies, xii (1901), p. 111, footnote 2.
    ${ }^{4}$ Hom. Gram. ${ }^{2}$ § 301 , see also Lange, op. cit., p. 140 f.

[^33]:    ${ }^{1}$ M. \& $T .^{2}$ (1865), p. iv.; see also J.Ph.V (1874), pp. 192, 201, and M. \&o T. ${ }^{5}$ (1873), Preface.
    ${ }^{2}$ G.M.T. (1889), §§ if, b; 17.
    ${ }^{3}$ To these should be added the large number of cases of the subjunctive in comparisons.
    ${ }^{4}$ Professor Goodwin's remark (M.T. (1889), § 11, b) that "the subjunctive in general suppositions is the only one which does not refer to future time, . . . the Greek in its desire to avoid a form denoting present time generally fell into one which it uses elsewhere only for future time," reminds one strongly of the same writer's words, published fifteen years before, in criticism of Kühner's theory, " where he says that the subjunctive properly refers to future time, although sometimes in dependent clauses it seems to refer to present time, really, however, expressing what is 'assumed as present.' It is almost needless to say that the examples of this singular exception are found in the general conditional sentences above mentioned" (J.Ph. V (1874), p. 193). It is interesting and instructive to note that the same construction was for each the " $\lambda \lambda$ (此 $\pi \rho о \sigma \kappa \delta \mu \mu а \tau о s$ каl $\pi \epsilon \tau \rho a \quad \sigma \kappa a \nu \delta \alpha \lambda o v . "$
    ${ }^{6}$ See also Hale, Harvard Studies, XII, p. III.

[^34]:    ${ }^{1}$ Cf. Perrin, B., Plutarch's Themistocles an.l Sristides; note pp. 206 ff.

[^35]:    ${ }^{1}$ Aristeides may have landed on the south shore of Cynosura, whence a five or ten minutes' walk over the ridge would have taken him to the Greek camp, or he may have rounded the point.

[^36]:    ${ }^{1}$ Plutarchs Nikias und-Philistos, Hermes, xxxiv. (1899), pp. 280 ff.

[^37]:    ${ }^{1}$ Forschungen zur alten Geschichte, II, pp. 22 f.

[^38]:    ${ }^{1}$ Hirzel, Hermes, xiii. p. 47.
    ${ }^{2}$ Socrates' citation from the Clouds in Plato's Apology will occur to every one.

[^39]:    ${ }^{1}$ For the literature of the subject see Maurenbrecher, Thilologus, 54, p. 620, and Herbig, Bursian's Jahresberichte, 1900, 3. p 40. The reader will find it of great assistance to have a facsimile at hand. I refer in all cases to Dressel's facsimiles in the Annali dell' Instituto, $\mathbf{1}$ SSo, plate L. They are not perfect, for they do not exactly accord with one another. Still, they are the source of all others. Egbert's copy of the projection is perhaps most accessible.

[^40]:    ${ }^{1}$ After I had worked this out, I discovered that Solmsen (Studien, pp. S7, 88) had suggested a similar explanation. I would not, however, have the two confounded: Solmsen's position and mine are really quite different.

[^41]:    ${ }^{1}$ From this it must not be inferred that I am confounding these changes with $i$-mutation. On another occasion I shall have something to say on the phonology of the changes that Latin diphthongs suffered.

[^42]:    ${ }^{1}$ But when Grienberger says that the mark between the $D$ and the $V$ of duenoi (see p. 165) is such a Bindestrich and that there is another between the medial consonant and the $O$ of the word before the last, he permits his theory to run away with his judgment - as a little consideration will make clear to any observer. Furthermore, it is puzzling to understand how Grienberger can regard his " Buchstaben-Berührungen " as "Ansätze zu einer zusammenhängenden Kursive." Cursive writing arises out of neglect to raise the stylus and there is nothing whatever in such contacts as Grienberger points out that could lead to cursive writing.

[^43]:    ${ }^{1}$ In this the [] indicate letters that were omitted, not by error, but in accordance with the practice of the writer.

[^44]:    ${ }^{1}$ The verse numbering is according to Leo's edition.

[^45]:    ${ }^{1}$ Cruttwell, History of Roman Literature, pp. 203. 204.
    ${ }^{2}$ De Cǐitate Dei, I, 74, 75, 79, 119, 121, 122, 132. Dombart's edition.

[^46]:    ${ }^{1}$ De Civ. Dei, I, 74. ${ }^{2}$ De Civ. Dei, I, $122 . \quad{ }^{3}$ Teuffel, 335, 2.

[^47]:    ${ }^{1}$ Carolus Haeberlin: Carmina Figurata Graeca. Adfidem potissimum codicis Palatini edidit prolegomenis instruxit apparatum criticum scholia adiecit C. Hacberlin. Hannoverae, 1887.

[^48]:    ${ }^{1}$ For other passages see Chrysippus ap. Philodemus, De piet. p. 8o; Aratus, ap. Schol. Lat. Arat. ii. p. 36 (ed. Buhle); Crates, cited in the same scholia, ii. p. 37; Schol. Nov. Aesch. Prom. 428.
    ${ }^{2}$ E g. Plut. Aet. Rom. 77, p. 282 B; Heraclides, Alleg. Hom. c. 26; Arnob. adv. Nationes, iii. з०; Laur. Lyd. De mens. iii. 10; same, De ostentis, 46, p. 174 D (ed. Hase).
    ${ }^{3}$ Quoted also by Philodemus, De piet. p. 70.

[^49]:    ${ }^{1}$ See also Liddell and Scott，$s v$ ；Clearchus ap．Athen．xii． 522 F：Lycophron，Alex．1390； Paus．V．14，10；Plut．Demet．10，p．893；Cornutus，Theol．Gr．9；Deגt．ápX．1890， 144.

[^50]:    ${ }^{2}$ Quaestiones Silianae，Leipzig， 1884.
    ${ }^{2}$ De usu infinitivi apud Lucanum，V＇alerium Flaccnm，Silium Italicum，Halle，288ı．

[^51]:    ${ }^{1}$ De infinitivi apud $P$. Pap. Statium of Fuvenalem usu, Marburg, 879.

[^52]:    ${ }^{1}$ A full treatment of the fable as a literary form in Hesiod, Aristophanes, Xenophon, Callimachus, Babrius, Phaedrus, Avianus, etc., besides the above-mentioned, is to be published by Benj H. Sanborn and Co., Boston.

[^53]:    ${ }^{1}$ This list has been corrected up to December 1, 1902; permanent addresses are given, as far as may be. Where the residence is left blank, the members in question are in Europe. The Secretary and the Publishers beg to be kept informed of all changes of address.

