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# TRANSACTIONS 

## AND

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## CONTENTS OF VOL. XXXV.

## TRANSACTIONS.

I. Historical Value of the Twelfth Chapter of Plutarch's Life of Pericles ..... 5
W. S. Ferguson.
II. On the Distinction between Comitia and Concilium ..... 21
George Willis Botsford.
III. Studies in Latin Accent and Metric ..... 33
Robert S. Radford.
IV. The Accentus of the Ancient Latin Grammarians ..... 65
Charles W. L. Johnson.
V. The Çântikalpa of the Atharva-Veda ..... 77
George Melville Bolling.
VI. Notes on Ovid ..... 128
Edward Kennard Rand.
VII. The Etymology of Mephistopheles ..... 148Julius Goebel.
$\qquad$
PROCEEDINGS.
Proceedings of the Annual Session, September, 1904 ..... i-li
A Misinterpreted Greek Optative ..... iv
J. E. Harry.
Horace as a Nature Poet . ..... v
Karl P. Harrington.
Critical Note on Catullus, LXVIII. 93 ..... viiF. W. Shipley.
Accent and Ictus in Late Latin Hexameters ..... xFrank G. Moore.
On the Meaning of $\pi \rho о \mu a v \tau \epsilon i \alpha$ ..... xi
M. L. D`oge.
The Homeric Hades and the Dead ..... xiiiThomas D. Seymour.
The Problem of $\dot{\alpha} \lambda \lambda o \omega^{\prime} \omega \sigma \iota s$ in Pre-Socratic Philosophy ..... xiv
W. A. Heidel.
Supplementary Note on the Arch of Trajan at Beneventum ..... xiv Elmer Truesdell Merrill.
The Oxyrhynchus Epitome of Livy, Julius Obsequens, and Cassio- dorus ..... $x y i$
Clifford H. Moore.
Notes on the Influence of Lucretius on Vitruvius ..... xviW. A. Merrill.
The Criticism of the Atharva-Veda ..... xxi
Charles R. Lanman.
Plato's Simile of the Cave ..... xxii
Johy H. Wright.
A Proposed Supplement to the Thesaurus Linguae Latinae ..... xxii
Walter Hullihen.
Some Grammatical Myths ..... xxiv
J. E. Harry.
On the Minor and Problematic Indo-European Languages ..... xxvii Maurice Bloomfield.
A Suggestion for a New Latin Dictionary ..... xxxiv
H. C. Elmer.
Contributions to the Study of Suppletiozvesen ..... xxxvii
Mary C. Welles.
Critical Note on $\pi \rho 0 \theta_{\text {fovor, Iliad 1, } 291}$ ..... xlii
H. C. Tolman.
A Quantitative Difficulty in the New Metric ..... xliii
Edward B. Clapp.
Method of Publishing the Papers of the Association ..... xlvi
Charles P. G. Scott.
Proceedings of the Philological Association of the Pacific Coast, December, 1903 ..... lii-lxxiv
The Plural of Segolates ..... liiiMax L. Margolis.
Concessive Si -Clauses in Plautus ..... livH. C. Nutting.
The Subjunctive in the So-called Restrictive Quod-Clauses ..... lv
J. Elmore.
The Chinese Drama ..... $1 v$John Frier.
The Etruscan Nekropolis of Abbadia del Fiume ..... lviiiAlfred Emerson.
Lucretiana ..... lxiiW. A. Merrill.
Cabala and Alchemy in Goethe's Faust ..... 1xii
Julius Goebel.
On Hiatus in Greek Melic Poetry ..... JxiiiE. B. Clapp.
The Pronunciation of Gallic Clerical Latin ..... Ixiv
C. C. Rice.
The Parodos of Sophocles' Antigone . ..... 1xv
B. I. Wheeler.
Numeral Systems of the Native Languages of California ..... 1xixA. L. Kroeber.
The Study of English Etymology during the Seventeenth Cen- tury ..... 1xxEwald Flügel.
The Construction of Juvenal, Satire I ..... lxxi
J. E. Church, Jr.
Cretati pedes ..... 1xxiv
Charles J. O’Connor.
Proceedings of the Philological Association of the Pacific Coast, December, 1904 ..... lxxv-xcvii
On Iliad 1X, 334-343 ..... lxxv
A. T. Murray.
Athenian Politics in the Early Third Century before Cbrist ..... 1xxix W. S. Ferguson.
Luigi Pulci, the First of the Courtly Cantastorie ..... lxxix
C. Searles.
The Siamese Vocabulary: its Formal and Conceptual Features ..... 1xxx Cornelius Beach Bradley.
The Vowel $R$ and the Coronal Vowels in English ..... lxxx
Samuel A. Chambers.
Notes on the Conspiracy of Catiline ..... lxxxiii
H. C. Nutting.
The Derivation and Meaning of Luscinia lxxxvi
E. W. Martin.
A Plan for the Republication in a Revised Form of the Hebrew-
Aramaic Equivalents in the Oxford Concordance to the Sep- tuagint
M. L. Margolis.
The Master Playwright of Wakefield lxxxix
C. M. Gayley.
The Figurative Expressions in the Works of Heinrich von Kleist lxxxix J. H. Senger.
Romance Etymologies ..... xCCarl C. Rice.
Duration of English Vowels in Monosyllabic Words ..... xcP. E. Goddard.
The Correption of Diphthongs and Long Vowels in Hiatus, in Greek Hexameter Poetry ..... xcii
Edward B. Clapp.
Notes on Horace, Sat. I. 6. 126, and Aristophanes, Peace, 990 ..... xcii
J. Elmore.
Sources of the Lay of Yonec ..... xciv
Oliver M. Johnston.
Direct Speech in Lucan as an Element of Epic Technic ..... xciv J. W. Basore.
Old Problems in Horace and Vergil ..... xcvi
J. E. Church, Jr.
The Name of the Slave in Plautus' Aulularia . ..... xcvii
H. W. Prescott.

## TRANSACTIONS

## AMERICAN PHILOLOGICAL ASSOCIATION.

1904.

## I. - Historical Value of the Twelfth Chapter of Plutarch's Life of Pericles.

By Prof. W. S. FERGUSON, university of california.

The following is the substance of our chapter: That which alone remains, according to Plutarch, to bear witness to the ancient power of Greece is the 'offering of sacred edifices' made in the days of Pericles. Yet no proposal of that statesman was more severely criticised by his adversaries than that which outlined his building policy. They cried out iss $\dot{\delta} \mu \grave{\varepsilon} \nu$








 $\chi$ длıota入ávtovs. Whereupon Pericles made the following defence: "We owe the allies," he said, "no account of the funds, so long as we fight for them and protect them from the Persians, while they contribute neither horse, ship, nor hoplite, but money alone. What they pay belongs not to the givers, but to the receivers, provided these perform what they receive it for; $\delta \epsilon \hat{\imath} \delta \grave{\epsilon}$ (he continued) $\tau \hat{\eta} \varsigma \pi \dot{\delta} \lambda \epsilon \omega \varsigma \kappa a \tau \epsilon-$







Pericles' phrase - "distribute wages to practically the whole city" - is explained ${ }^{1}$ by the observation that wages were already paid to men of military age and strength for service in the army, navy, and garrisons, and by calling attention to the diversity and extent of the interests involved in the construction of statues and temples. "The materials used were marble, bronze, ivory, gold, ebony, cypress-wood : the arts which put them into shape and place engaged carpenters, moulders in clay and bronze, stone-cutters, stainers of gold and softeners of ivory, painters, enamellers, and engravers: those that were concerned in furnishing and transporting the materials were, on the sea, merchants, sailors, pilots; on the land, wheelwrights, ox-breeders, teamsters, rope-makers, weavers, leather-dressers, road-makers, and miners. And each art, like a general with his army, had under it its mob of day-laborers and unskilled workmen - an instrument and body, as it were, for the service." As a matter of fact, concludes Plutarch, the result was the $\epsilon \dot{d} \pi 0-$ pia, or material well-being of the whole state.

There are difficulties of interpretation in the passage, but they do not affect the general sense, and need not be discussed here. It is to the historical value of the subject-matter that we are to devote our attention.

To determine this it is necessary to inquire into the sources of Plutarch's knowledge. It may be stated at the outset that the controversy whether Plutarch based his several biographies upon older historical works, merely adding here and there a thought culled in the course of his desultory reading, or, not unlike modern scholars, used extracts made from

[^0]books of all kinds, of history, comedy, philosophy, romance, biography, travel, of speeches, decrees, etc., - this controversy, it should be said, has not much affected the conclusions hitherto reached in regard to the present passage. For it was recognized from the first that the kernel of Chapter XII, the debate between Pericles and his adversaries, was different in character from what preceded and followed it. ${ }^{1}$ Hence even those who thought that the bulk of the Life of Pericles was taken from Theopompos, or some other historian, admitted for the debate a distinct source.

It will fairly summarize the work already done in the quest of this collateral source to say that three opinions have been entertained: ist, that Plutarch used either the memoirs of Ion of Chios, or the book on Themistocles, Thucydides, and Pericles by Stesimbrotos of Thasos, both of whom are held to have recorded similar disputes between Athenian statesmen; 2d, that Plutarch used more or less rhetorical and imaginary speeches inserted by Ephoros into his Universal History, or by Theopompos into the excursus on demagogues appended to his Philippica; 3d, that Plutarch, or his immediate authority, used the work of Theopompos, but that Theopompos composed the speeches from materials derived in part from the reliable reports of Stesimbrotos or Ion; in part, and specifically in respect to the purpose of Pericles in inaugurating his building policy, from the partisan oligarchic pamphlet written, according to Professor U. von Wilamowitz ${ }^{2}$ by Theramenes, according to Professor Dümmler ${ }^{3}$ by Critias, according to more conservative scholars ${ }^{4}$ by some unknown aristocrat, and used, alas! by Aristotle in his Constitution of Athens.

For the first of these views stood Sauppe, ${ }^{5}$ Oncken, ${ }^{6}$ Adolf Schmidt, ${ }^{7}$ and Dr. L. Holzapfel, ${ }^{8}$ the two former advocating Ion, the two latter Stesimbrotos. Positive proofs none of
${ }^{1}$ See Sauppe, o.c., p. 498 ff. $\quad{ }^{2}$ Arisloteles u. Athen, I., p. 165.
${ }^{3}$ Hermes, 27 (1892), p. $260 \mathrm{ff} . \quad{ }^{4}$ Professors Meyer and Busolt, for example.
${ }^{6}$ o.c. ${ }^{6}$ Staatslehre des Aristoteles, II., p. 509 ff .
${ }^{7}$ Das perikleische Zeitaller, II., p. 222 ff.
${ }^{8}$ Untersuchungen ïber d. Darstellung d. griech. Gesch. von 489 bis 453 vor ( $/ 2 r$, p. 144 ff .
them has adduced. The general probability of such an origin was all they sought to make out.

For the second of these views stood Rühl, ${ }^{1}$ Köhler, ${ }^{2}$ and Professor Curt Wachsmuth. ${ }^{3}$ The most telling argument against a contemporary and in favor of a fourth-century source was made by Köhler, who claimed that the statement attributed to Pericles, that "the allies contributed neither horse, ship, nor hoplite, but money alone,' contained too gross an error to have originated while the Athenian empire existed.

For the third of these views stands most notably Professor Busolt. ${ }^{4}$ The ultimate origin of the debate in contemporary reports of discussions which actually took place between Pericles and Thucydides, son of Melesias, he holds for selfevident. That Theopompos was concerned in the tradition of the material to Plutarch he argues from a number of causes ${ }^{5}$ : I. The appearance of redundant synonyms in this chapter of Plutarch betrays the style of Theopompos. 2. The error pointed out by Köhler is repeated in a portion of Plutarch's Cimon which probably originated in Theopompos. 3. The survival of $\dot{\eta} \mu a \hat{s}$ in the attack of Pericles' adversaries shows that the composer of the indictment was one who identified himself with the aristocratic party in Athens. ${ }^{6}$ 4. The design of distributing wages to all Athenians, imputed to Pericles by both Aristotle and Plutarch, reveals the work of the oligarchic pamphleteer used by Aristotle and Theopompos.

At this point a new turn was given to our present inquiry by Professor Eduard Meyer's study of Plutarch's methods of writing biography. ${ }^{7}$ Professor Meyer, in his wonted catholic fashion, was the first to formulate the net results of modern investigations into Plutarch's sources for his Lives of Greeks. ${ }^{8}$

[^1]Plutarch used neither Herodotus, Thucydides, Xenophon, Aristotle's Constitution of Athens, Ephoros, nor Theopompos. Those who attempt to connect his work directly with that of these historians forget that in the course of four hundred years before Plutarch's time the material suited for biography had been collected and sifted by generations and generations of scholars, notably by the Alexandrians. All Plutarch did was to make over in each case one of the already existent biographies. In his Vorlage were the quotations, the citations, the documents, the discussions, the anecdotes, etc. Plutarch chose such material as pleased him, and gave it new written expression. The style is mainly his. Fortunately for the modern historian Plutarch is not responsible for the ideas, except where these are ethical and conjunctive. Nor is he the originator of the form in which his biographies are regularly set. This Professor Friederich Leo ${ }^{1}$ has recently shown. The rules for biography were as well established as those for oratory. The type to which Plutarch conformed had been created centuries earlier, and, as Professor Leo has convincingly set forth, through the activity of the Peripatetic School of Philosophy. This being the case, it is obvious that, while the value of Plutarch's material is enhanced, the possibility of determining his sources is lessened. ${ }^{2}$ To put the matter concisely, what likelihood is there that the style of Theopompos, of Thucydides, of the comic poets, can be detected in the twelfth chapter of his Life of Pericles? This has been repeatedly attempted. Thus Sauppe noticed in the comparison between Athens decking herself out with thousand-talent temples and a courtesan, a reminiscence of the trenchant phraseology of some comedian, ${ }^{3}$ while Professor Dümmler saw in it the contempt of an embittered oligarch. ${ }^{4}$ Thus Professor Busolt lays the many lax synonyms of the chapter to the charge of Theopompos, ${ }^{5}$ - beyond all doubt erroneously, as Professor Wilamowitz's remark ${ }^{6}$ in confirmation

[^2]of my own observation has convinced me, - and Professor Bruno Keil ${ }^{1}$ finds in it a flavor of the fourth-century rhetoric. Professor Busolt, moreover, sees in the speech of Pericles words and phrases which point to conscious or unconscious imitation of Thucydides. ${ }^{2}$ How far is it justifiable to dissect Plutarch in this fashion with stylistic instruments? It is not an entirely unwarranted procedure. That Professor Meyer grants. Plutarch had a fine appreciation for the effectiveness of an antique turn of thought, and no scruples against using it without acknowledgment. He had, of course, read his classics, such as Herodotus and Thucydides, and had a retentive memory for striking expressions. He found in his biographical authorities an abundance of quotations which he borrowed freely. His composition, however, is a web, not a patchwork. Hence thought, not style, must be the prime test of the derivation of passages in Plutarch. ${ }^{3}$

Let us apply this test anew to our chapter. There can be no doubt that if we establish the substantial correctness of Plutarch's narrative, we shall strengthen the contention that a reliable contemporary of Pericles was the biographer's ultimate authority, while that contention will be weakened, if not overthrown, as Köhler perceived, by the detection of considerable errors.

It should be observed, in the first place, that the adversaries of Pericles mentioned in the chapter are Thucydides, son of Melesias, and his party. That is clear from Chapters XI and XIV. Thucydides became the leader of the oligarchs at Athens after the death of Cimon in $449 / 8$ в.с., and was influential till he was ostracized in 443 . Thucydides, Plutarch tells us, pointed out the odium incurred by the transference of the treasury of the Confederacy from Delos, and, at the same time, impeached the building policy of Pericles. When it was held to be established that the treasury was transferred in 454 , and the Parthenon, the first of the Periclean buildings, was begun in 447, it was apparently an inaccuracy on

[^3]Plutarch's part that the two events are represented as jointly criticised by Thucydides. Nor did it seem reasonable that Pericles should be abused for the removal of the treasury, so long as we believed, on the authority of Theophrastos, whom Plutarch elsewhere quotes with approval, ${ }^{1}$ that it was effected on the motion of the Samians. Now, however, thanks to the Anonymus Argentinensis, ${ }^{2}$ we are better informed. In the first place we learn that ten years intervened between the adoption of the plan for the Parthenon and the beginning of its execution in 447 . Inasmuch as we had learned before that the temple of Nike Apteros was decreed apparently in or about $450,{ }^{3}$ it is clear that the building policy of Pericles was under discussion earlier than 447 . Hence, even if the transfer of the treasury was made in 454, as Professor Eduard Meyer ${ }^{4}$ and others still maintain, it would not be objectionable that the two events should be associated by Plutarch. It would indeed be awkward to suppose Thucydides in a position to lodge an indictment against them in that year. Hence it must be regarded as a pleasant confirmation of Plutarch to observe that the Anonymus Argentinensis, by which alone a date is assigned to the occurrence, sets the transfer of the treasury in $450 / 49,{ }^{5}$ i.e. just at the time we should infer from Plutarch that Thucydides organized his party in opposition to Pericles. And it is equally reassuring to find, as we do from this same document, that Pericles, after all, not Samos, was responsible for the transfer.

How, in the second place, does it stand with the inaccuracy detected by Köhler in the statement that "the allies contributed neither horse, ship, nor hoplite, but money alone"?
${ }^{1}$ Aristides, 25. $\quad{ }^{2}$ Edited by Professor Bruno Keil, Strassburg, 1902.
${ }^{8}$ Prof ssor W. Dittenherger, Syllege ${ }^{2}$, No. 9II. ${ }^{4}$ Gesch. d. Alter. V., p. vi.
${ }^{5}$ Mr. Underhill, in the English Historical Revievv, 1903, p. 760, denies that the reference in the Anonymus is to the transfer of the treasury from Delos. He reminds us that $\Delta \eta(\lambda) \varphi$ is a modern conjecture for $\delta \gamma \mu \varphi$ in the papyrus, which, in turn, is a correction made in antiquity for the original $\delta \eta \mu \mu$. That is true. But the conjecture is no doubt right. In what other connection could the assessment of Aristides and the enormous sum of five thousand talents have been mentioned ? Professor Meyer, l.c., calls the date of the Anonymus, 450/49, völlig unniöglich. But he gives no good reason for his judgment. Professor Keil's argumentation, o.c., p. 116 ff ., seems to me sound.

Did the allies who paid tribute furnish either horse, ship, or hoplite for the defence of the confederacy? That is the question, as Dr. Holzapfel ${ }^{1}$ pointed out years ago. It is not universally answered in the affirmative even yet. ${ }^{2}$ But granted that they did, as seems to me probable, the error is not a positive one. It is simply an exaggeration of the truth; for it is certain that the Athenians performed the bulk of the military service themselves, and rarely employed the land forces of the tributary allies. Therefore, an epitomizer might well think he had presented, in what we possess, the essential content of the statement, even if he omitted the reservations with which it had, perhaps, been originally accompanied. ${ }^{3}$

Next, let us ask the questions: Was the calculation that the construction of statues and public buildings would distribute wages to practically the whole city a reasonable one for a statesman like Pericles to make? Was it such as a party leader like Pericles would publicly announce?

It is the prevalent opinion that Athens in the fifth century had gone fully over to a capitalistic development of industry. Thus, for example, Professor Eduard Meyer says: ${ }^{4}$ "In Wirklichkeit steht Athen im fünften und vierten Jahrhundert ebenso sehr unter dem Zeichen des Capitalismus wie England seit dem achtzehnten und Deutschland seit dem neunzehnten Jahrhundert." Many apparently free handicraftsmen the capitalists had reduced to economic dependence upon themselves. Such as otherwise might have withstood the competition of the factory were being destroyed by the competition of the metics, upon whom the military and political tasks fell

[^4]less heavily, and whom, as being less pretentious, the capitalists favored in distributing work. And, moreover, the capitalists imported slaves to make labor still cheaper. By means of slaves they worked the mines, ran the factories, and even pushed the free handicraftsmen from their tiny shops. Now, if that was the case, it would have been natural for such a regular business as building at the time of Pericles to fall entircly into the hands of wealthy contractors, who would, of course, have employed slaves and metics rather than citizens. And if this was the issue, state subvention of building enterprises would have been to the detriment rather than to the advantage of the ob $\chi$ 入os, or mob of Athenian citizens. ${ }^{1}$ As it is hardly conceivable that Pericles sought to promote the interests of the capitalists alone, or that by oo $\chi$ गos is meant the alien population, we cannot, in the premises, think that Plutarch is right in attributing to Pericles economic as well as ideal ends.

But was industry capitalistically organized in the fifth and fourth centuries? M. Francotte, ${ }^{2}$ by a very careful collection and arrangement of the evidence, has made it clear, to me at least, that it was not. The irregularity of the foreign demand, due to the incessant wars, made factory production unprofitable, especially when slaves were employed. For even though they were stimulated by the receipt of living wages to the hope of some day purchasing their freedom, and hence worked quite as well as free men, slaves remained a dead weight upon the shoulders of their employer, whenever war interrupted business. The local demand required factory production no more then than it does now. Hence the forge as distinguished from the factory maintained itself as the characteristic form of industrial life.

[^5]But who ran the forges and the similar work places? In the case of the building trades we are able to give an answer for the last years of the fifth and for the fourth century b.c. I quote from M. Francotte, ${ }^{1}$ who has compiled the statistics of the subject. Among those whom the inscriptions show to have earned money on the Erechtheion in 409 and the following year were 24 Athenians, 40 metics, 17 slaves, and 21 whose status is doubtful, but who were mostly either slaves or metics. Among those whom the inscriptions show to have been paid for services in connection with the temple and portico at Eleusis during the last third of the fourth century were 36 Athenians, 39 metics, 12 foreigners, and 57 of doubtful status, but who were probably metics. In this case the state, i.c. the temple, owned 17 slaves, who were regularly employed and, like other workmen, paid for their labor. It is possible that private slaves were employed also, but their number is not determinable. From these statistics it is clear that from 409 to 309 the citizens received much less of the money disbursed by the state for its public buildings than did non-citizens. Was the same true for the time of Pericles ? I do not think that, if we disregard the present passage, we have the means of answering this question definitely. But it must not be forgotten that the payments made for public services in the last half of the fifth and in the fourth century alienated from industrial occupations many citizens who, before the time of Pericles, and at the time when his building policy was first proposed, gladly sought remunerative employment of any kind. In the fourth century Lycurgus notoriously spent money on public works. Yet he escaped the charge of seeking to provide work for poor constituents. Nor has Augustus or Hadrian been credited with economic motives. Pericles stands at the beginning of that long period during which paid labor was flouted. He belongs with Pisistratus and the enlightened despots of the seventh and sixth centuries b.c.; but, more fortunate than they, he controlled tributary allies, and was thus enabled to disburse public funds

[^6]to Athenian citizens without increasing the taxation of his constituents.

In the explanatory remarks ${ }^{1}$ which are added to the contention of Pericles that wages would be distributed to practically all the citizens, we are told that all but the $\beta$ ávavoos ö $\chi \lambda o s$ already received state aid for service in the navy, garrisons, and army. In Aristotle's Constitution of Athens, ${ }^{2}$ Aristides is made to predict that as a result of the Empire support will be furnished "to all, to some for service in the expeditions, to some for garrison duty, and to others for transacting the public affairs." And Aristotle appends a calculation from which it appears that during the thirty years' peace twenty thousand citizens obtained pay annually for these various services. Of the twenty thousand, the hoplites alone amount to twenty-five hundred. These were doing garrison duty. No other hoplites are specified, and Aristotle informs us that it was only when the Peloponnesian War broke out that the classes liable for hoplite duty regularly obtained pay. ${ }^{3}$ This contradiction proves at most exaggeration in Plutarch's report; for at an earlier time.they may have been paid irregularly, just as the service was irregular, and certainly, if they did not get the usual wage of a drachma a day, they received the usual indemnity of three obols a day. ${ }^{4}$

In the words attributed by Plutarch to Pericles, not only is an economic purpose enunciated for the building policy, but the employment thereby afforded is represented as one of its laudable features. How admirably that harmonizes with the ideas imputed to Pericles by Thucydides when he makes him
 $\kappa a i ̀ ~ \tau o ̀ ~ \pi \epsilon ́ v \epsilon \sigma \theta a \iota ~ o u ̉ \chi ~ o ́ \mu о \lambda o \gamma \epsilon i ̂ \nu ~ \tau \iota \nu \iota ~ a i ̈ \sigma \chi \rho o ́ \nu, a ̉ \lambda \lambda a ̀ ~ \mu \eta ̀ ~ \delta \iota a \phi \epsilon ט ́ \gamma \epsilon \iota \nu$

 $\dot{\epsilon} \nu \delta \epsilon \omega \hat{s}$ y $\nu \hat{\omega} \nu a u$. How little it accords with the creed enunciated by Plutarch himself in this same Life of Pericles ${ }^{6}$ that even a great artist's work - to say nothing of an artisan's -

[^7]reduced him to the level of a slave! In Aristotle's Constitution of Athens neither the construction of buildings nor the despatch of cleruchies is mentioned among the measures employed by Pericles to better the condition of the masses. The latter, however, Aristotle recognized as a legitimate means of preserving a democracy, and he commended highly a similar procedure of the Carthaginians, but of the former (employment for wages on public works as distinct from setting individuals up in commerce or industry) he speaks as follows: "We may find instances of this practice in the pyramids of Egypt, the votive offerings of the Cypselidae, the erection of the Olympieum by the Pisistratidae, and the great works of Polycrates at Samos, all of which have the same effect, viz., that the subjects are kept in constant occupation and poverty." Aristotle is here interpreting fourth-century Greek opinion.

It is to be noted that it is in the explanatory note in Plutarch that a motive similar to that which underlies the construction of public buildings is predicated of Pericles' policy of paying government officials. Therefore the two rest on different supports. Should the view that payment for office was Pericles' way of bribing the poor be false, and, as is commonly claimed, of oligarchic manufacture, no suspicion is thereby attached to the original statement to which it is appended.

The explanatory remarks continue with a list of the materials and professions employed in "the construction of the sacred offerings" - a list embodied in the narrative of practically all modern historians of Greece. Some parts of it, indeed, have sorely puzzled several of them. It is easy to see how buildings and statues called for carpenters, modellers of clay, bronze-moulders, stone-cutters, etc. But observe the stress laid upon the transport of materials. Observe, too, that there were concerned with it, on the sea, " merchants, sailors, pilots," but not ship-builders, sail-makers, etc.; on the land, " teamsters, ox-breeders, miners, rope-makers, weavers, leatherdressers," but also "wheelwrights and road-makers."

[^8]The distinction is intentionally made. But Curtius ${ }^{1}$ does not correctly explain it by remarking that "the very transport of the materials was the occasion of great progress in mechanical science in that inventive age," etc. The true explanation is given by the inscriptions which deal with the construction of the portico and temple at Eleusis in the fourth century. From them it is clear that three processes were involved in the land transport. ${ }^{2}$ I. The construction of vehicles. 2. The building of roads. 3. The actual transport. Ships were already in existence. Pack animals, the ordinary means of carrying loads, and trails, the ordinary paths for these, needed to be replaced by stout wagons and level roads when immense blocks of marble had to be transported. The wagons were drawn by oxen, and we have records to show us how it took three days, thirty to forty teams, and as many teamsters to bring each drum for the columns from Mt. Pentelicus to Eleusis. Harness of leather, fastenings of great ropes - the undergirdings from the dockyards were sometimes used - employed leather-dressers and rope-makers; in fact, the state made payments of money directly to each and every class of craftsman in Plutarch's list. The payments, moreover, were made to the workmen - citizens, metics, and slaves - for day labor or for petty contracts. No considerable sum was disbursed to any one man, or for any one piece of work. The interests involved were thus precisely those enumerated by Plutarch. To be sure, this confirmation of Plutarch comes from the fourth century, but it holds good for the latter part of the fifth century also, ${ }^{3}$ and it is a fair inference that in the age of Pericles circumstances were in this respect not essentially different.

How did Plutarch come to know the building methods of the fifth and fourth century Athens? In the first place, it is quite likely that the whole explanatory note, to which the enumeration belongs, was part of the biographical apparatus

[^9]which Plutarch used. It may have been appended to the debate from the fourth century on. Or did Plutarch simply observe how temples were erected in his own day, and thence infer the old-time methods?

This idea involves the conclusion that building remained practically unchanged during the interval of five hundred years or more. Is that true? In certain minor particulars alterations had taken place. Thus, whereas state officers ( $\epsilon \pi \iota \sigma \tau a ́ \tau a \iota)$ had in the fifth century employed artisans at a daily wage, or given a small piece of work on contract, in Roman times the imperial or municipal officials made a contract with one or more contractors ( $\epsilon$ 'pyo $\lambda a \dot{\beta} \beta o \iota$, redemptores), whom they held responsible under security for the money advanced them by the state and for the proper completion of the work. ${ }^{1}$ It is difficult to say in what proportion citizens, freedmen, and slaves took part in the operations. It was no doubt different in different regions. It is clear, however, that all three classes performed industrial work under the Roman régime. They were organized in guilds (collegia), wherever they were present in sufficient numbers to make an organization worth while. The guilds, though made up of citizens, freedmen, and slaves, who worked individually at their trades, seem yet to have had a relatively large proportion of freedmen. The following list of the chief guilds engaged on the public buildings of Rome is given by M. Waltzing in his Étude historique sur les corporations professionnelles chez les Romains, vol. II., p. II 5 ff.: -

Collegium fabrum $=$ Collegium fabrum tignarionum. This included all concerned with building operations, and one existed in most of the chief towns of the empire. In Milan the guild had at one time twelve hundred members; in Rome as many as sixteen hundred. Fabri $=$ тéктоves in Plutarch.

Collegium dendrophorum - those who furnished and transported timber; lumber-dealers.

Collegium acrariorum fabrum $=\chi^{a \lambda \kappa о т и ́ т \tau о \iota ~ i n ~ P l u t a r c h ~}-$ coppersmiths or bronzesmiths.

[^10]Collegium fabrum ferrarium - workers of iron and other metals.

Collegae marmorarii $=\lambda_{\iota}$ Goupyoi in Plutarch - workers in marble.

Mensores aedificorum - architects.
Collcgium pavimentariorum - paveurs.
 nistes.

Conleg. sectorum serrarium - stone-sawyers.
Collegium structorum - masons.
A complete list of the industrial guilds of the Romans can be found in M. Waltzing's work, Vol. IV., p. I ff. It includes : Lapidurii $=\lambda \iota \theta o v \rho \gamma o$ ó, Cisiarii $=\dot{\eta}$ vióo $^{\circ}$, Lignarii plostrarii $=\dot{a} \mu a \xi o \pi \eta \gamma o i$, Linarii $=\lambda \iota \nu o v \rho \gamma o i$, Metallarii $=\mu \epsilon \tau a \lambda \lambda \epsilon i ̂$, Navicularii marini $=\nu a v ́ \kappa \lambda \eta \rho o \iota ~ \kappa a i ̀ ~ \epsilon ̆ \mu \pi о \rho o \iota, ~ N a u t a e ~=~ \nu a u ̂ t a \iota, ~$ Sutores $=\sigma \kappa v \tau о \tau о \mu o \iota$. These are not specifically connected with public buildings, but undoubtedly were interested in their construction. Many artisans remained outside the guilds. ${ }^{1}$

Plutarch, speaking of the Periclean age, says: $\dot{\epsilon} \kappa \dot{a} \sigma \tau \eta \delta_{\grave{\epsilon}}$
 $\kappa a i ̀ ~ i \delta \iota \omega ́ \tau \eta \nu \quad \sigma v \nu \tau \epsilon \tau a \gamma \mu \epsilon ́ v o \nu$ єỉ $\ell \nu$. Aurelius Victor, speaking of Plutarch's age, tells us of the emperor Hadrian that ad specimen legionum militarium fabros, perpendiculatores, architectos, genusque cunctum extruendorum moenium seu decorandorum in cohortes centuriaverat. One cannot help thinking that the two writers had something similar in mind. Plutarch, of course, lived to see Hadrian revive the old glories of Athens, though he had written his Pericles before the revival began in 125 A.D.

In summary, it may be said that the debate between Pericles and his adversaries contains no substantial inaccuracies. On the other hand, not only does it reveal close knowledge of the issues raised by Thucydides in his campaign against Pericles, but it attributes to Pericles motives which could hardly have suggested themselves to another than a contem-

[^11]porary - motives unnatural even in the fourth century ; for at that time it could hardly have been imputed as a virtue to a statesman that he sought to entice citizens into tasks which public opinion held to be unfit for them to perform, or that he aimed to give bread to poor citizens by offering them work without first having debarred metics and slave-owners from applying for it. ${ }^{i}$ In the Greece of the fourth century the question seems to have been, not how carpenters, stonemasons, etc., could get work, but how cities could get enough artisans to construct their public buildings. The local supply did not suffice to complete insignificant edifices at Athens, to say nothing of small places like Delphi, Epidauros, Delos, Lebadea, etc. The explanatory note is different in character and origin. In part it betrays kinship with the dominant thought of the fourth century, in part it discloses careful observation of ancient building processes - nothing more.

[^12]
## II. - On the Distinction betwecn Comitia and Concilium.

By Dr. GEORGE WILLIS BOTSFORD, COLUMBIA UNIVERSITY.

All inquiries into the relation between comitia and concilium have hitherto set out from the definition of Laelius Felix, ${ }^{1}$ quoted by Gellius xv. 27(Is qui non universum populum, sed partem aliquam adesse iubet, non comitia, sed concilium edicere debet); they have limited themselves to illustrating it, and to setting down as lax or inaccurate the many uses of the two words which cannot be forced into line with it. The object of this paper, on the contrary, is to consider all the occurrences of the two words in the principal extant prose writers of the Ciceronian and Augustan ages, - a period in which the assemblies were still living, - for the purpose of testing the definition of Laelius, and of establishing new definitions by induction in case that of Laelius should prove wrong.

All are aware that Livy pays little heed to the definition, if indeed he knows anything of it; but modern writers insist that his use of the two words is inaccurate, and that for the proper usage we should go back to the republican authors. In view of this general agreement as to Livy's frequent violation of the rule of Laelius, it will be enough to state here some conclusions I have drawn from complete statistics regarding his usage:
I. As to Comitia:
I. Livy frequently uses comitia to denote the tribal assembly of the plebs.
2. He always uses comitia to denote the assembly for the election of priests, consisting of but seventeen tribes, and hence of a minority of the people.

## II. As to Concilium:

1. He frequently uses concilia (rarely comitia) to denote foreign assemblies of all the people.
2. Less frequently he uses concilia to denote Roman assemblies of all the people.
${ }^{1}$ Probably the jurist who lived under Hadrian, and who is mentioned by Paulus, Dig. v. 4. 3.

Turning to the republican period; we find that though Sallust has little occasion for using either word, he certainly makes comitio include the plebeian assembly in Jug. 37: P. Lucullus et L. Annius, tribuni plebis, resistentibus collegis continuare magistratum nitebantur, quae dissensio totius anni comitia impediebat.

Cicero, however, is the author on whom scholars rely in support of the definition of Laelius. Following Berns, de comitionum tributorum ct conciliorum plebis discrimine (Wetzlar, 1875), p. 35, they say Cicero has violated the rule but once, Att. i. I. I, in which occurs the phrase comitios tribuniciis (cf. Mommsen, Staatsrecht, iii. p. 149, n. 1). Berns' examination of Cicero must have been exceedingly hasty, as he has left a number of instances unnoticed. The following passage is especially to the point, $Q$. fr. ii. 14 ( I 5 b ). 4 : Tribunicii candidati compromiserunt HS quingenis in singulos apud M. Catonem depositis petere eius arbitratu, ut, qui contra fecisset, ab eo condemnaretur. Quae quidem comitia si gratuita fuerint, ut putantur, plus unus Cato potuerit quam omnes leges omnesque iudices. The tribunician comitio are the only comitia concerned in Cato's transaction. Again in Att. ii. 23. 3 (Permagni nostra interest te, si comitiis non potueris, at, declarato illo, esse Romae) Cicero is thinking of the election of Clodius to the tribuneship, and hence the comitia he refers to here are comitia tribunicia. In Fam. viii. 4. 3, aedilium pl.comitiis must refer to the plebeian assembly, in which the plebeian aediles were elected (cf. Mommsen, Staatsrccht, ii. p. 482).

Another important passage is Scst. 51. 109: Venio ad comitia, sive magistratuum placet sive legum. Leges videmus saepe ferri multas. Omitto eas, quae feruntur ita, vix ut quini, et ii ex aliena tribu, qui suffragium ferant, reperiantur. De me, quem tyrannum atque ereptorem libertatis esse dicebat illa ruina rei publicae, dicit se legem tulisse. Quis est, qui se, cum contra me ferebatur, inisse suffragium confiteatur? cum autem de me eodem ex senatus consulto comitiis centuriatis ferebatur, quis est, qui non profiteatur se adfuisse et suffragium de salute mea tulisse? Utra igitur causa popu-
laris debet videri, in qua omnes honestates civitatis, omnes aetates, omnes ordines una mente consentiunt, an in qua furiae concitatae tamquam ad funus rei publicae convolant? The law which Cicero dwells on with such bitterness in the beginning of this passage, and recurs to at the end, is the tribunician law which pronounced on him the sentence of exile; in this connection, therefore, comitia distinctly includes the plebeian assembly in its legislative capacity.

Even more telling is Leg. iii. 19. 44-45: Ferri de singulis nisi centuriatis comitiis noluerunt. Descriptus enim populus censu, ordinibus, aetatibus plus adhibet ad suffragium consilii quam fuse in tribus convocatus. Quo verius in causa nostra vir magni ingenii summaque prudentia, L. Cotta, dicebat nihil omnino actum esse de nobis; praeter enim quam quod comitia illa essent armis gesta servilibus, praeterea neque tributa capitis comitia rata esse posse neque ulla privilegii: quocirca nihil nobis opus esse lege, de quibus nihil omnino actum esset legibus. Sed visum est et vobis et clarissimis viris melius, de quo servi et latrones scivisse se aliquid dicerent, de hoc eodem cunctam Italiam, quid sentiret, ostendere. Cicero is here contrasting the comitia centuriata, which recalled him, with the tribal assembly of the plebs, which pronounced the sentence of exile. Now as he was condemned by the plebeian assembly, it is clear that in this passage Cicero calls the plebeian assembly comitia. How Mommsen, Römische Forschungen, i. p. 161, n. 53, can make this citation refer to his "patricio-plebeian" comitia tributa no one can possibly explain.

In Att. iii. I2. I, comitia expressly includes the tribunician elections. The same elections are twice called comitia in Att. iii. 14; and in iii. 13. 1, Cicero, again mentioning these comitia, says: In tribunis pl. designatis reliqua spes est. From all these passages it becomes evident that Cicero regards the plebeian assembly as comitia.

In many passages comitia seems to include all the elections of the year, of plebeian as well as of patrician magistrates; for the elections were usually held in the same season, and could not well be separated in thought (see list of citations
for elective assemblies, p. 28). In fact, according to Cicero's usage, comitia includes all kinds of national assemblies which do not come under the term contiones; cf. Sest. 50. 106: Tribus locis significari maxime populi Romani iudicium ac voluntas potest, contione, comitiis, ludorum gladiatorumque consessu ; cf. also 54. II 5 ; 59. I25.

The very expression comitia populi (Rcp. ii. 32. 56; Div. ii. 18.42 ) implies the existence of other comitia, for instance comitia plebis.' It is not strange, therefore, that Cicero should use the following expression: Qui (optimates) non populi concessu, sed suis comitiis hoc sibi nomen adrogaverunt; Rtp. i. 33. 50. Here he makes it evident that there may be comitia of the nobles in contrast with the populi concessus.

Furthermore, Cicero speaks of comitia, consisting of but seventeen tribes, for the election of sacerdotes; Cael. 8. 19; Leg. Agr. ii. 7. 18; Brut. i. 5. 3 f.; 14. 1; Fam. viii. 12. 4 ; 14. I.

From his point of view, a tribal assembly of the whole people was one which consisted of all thirty-five tribes, irrespective of the number present in the several tribes, irrespective, too, of the rank of those who attended. An assembly tributim of a part of the people, on the other hand, was one in which some of the tribes were unrepresented. All this is clearly expressed in Leg. Agr. ii. 7. 16 f. : Iubet enim tribunum plebis, qui eam legem tulerit, creare decemviros per tribus septemdecim, ut, quem novem tribus fecerint, is decemvir sit. Hic quaero, quam ob causam initium rerum ac legum suarum hinc duxerit, ut populus Romanus suffragio privaretur . . . Etenim cum omnes potestates, imperia, curationes ab universo populo Romano proficisci convenit, tum eas profecto maxime, quae constituuntur ad populi fructum aliquem et commodum, in quo et universi deligant, quem populo Romano maxime consulturum putent, et unus quisque studio et suffragio suo viam sibi ad beneficium impetrandum munire possit. Hoc tribuno plebis potissimum venit in mentem, populum Romanum universum privare suffragiis, paucas tribus non certa condicione iuris, sed sortis beneficio fortuito ad usurpandam libertatem vocare. Even if the tribes were repre-
sented by no more than five men each, and these men not voting in their own tribes, the assembly was nevertheless comitia tributa populi with full law-making power; Sest. 5 I. 109. The comitia culiata, too, which in Cicero's time was made up of thirty plebeian lictors, in which accordingly no patrician voters were present, was still an assembly of the whole people. This distinction, - recognized by Cicero and his contemporaries, - between an assembly of the whole people as represented by all the voting divisions and an assembly of a part of the people as represented by some of the voting divisions, is incompatible with the distinction formulated by Laelius. Though an antiquarian might make much of the presence or absence of a few patricians, a man who lived in the present, as did Cicero, probably never troubled himself about such unpractical matters.

From the evidence as to Cicero's usage given above, we must draw the following conclusions:

1. He often uses comitia to denote the plebeian tribal assembly, just as Livy does.
2. He regularly uses comitia to denote the assembly of seventeen tribes for the election of sacerdotes. In this respect his usage is the same as Livy's.
3. His distinction between an assembly of the whole people and an assembly of a part of the people is incompatible with the definition of Laelius.

Concilium is a comparatively rare word with Cicero. In a few cases he seems to make concilia include all kinds of organized national gatherings; cf. Rep. vi. 13 (3). 13: Nihil est enim illi principi deo . . . acceptius quam concilia coetusque hominum iure sociati, quae civitates appellantur ; Fin. iii. 19. 63 : Natura sumus apti ad coetus, concilia, civitates. In the first citation concilium must, and in the second it may, include all the citizens. Cicero could hardly mean that we are by nature adapted to assemblies of a part of the people, or that nothing could be more satisfactory to the Supreme Being than the concilium plebis which interdicted him from fire and water. In Fin. ii. 24. 77 (Mihi quidem eae verae videntur opiniones, quae honestae, quae laudabiles, quae gloriosae, quae in senatu, quae ad populum, quae in omni coetu
concilioque profitendae sint) he could not be thinking simply of the plebeian assembly, for he placed far greater value on the opinions expressed in and by the comitia centuriata.

From all that has been said it is evident that Cicero's usage does not differ materially from Livy's. It is thoroughly established, therefore, that in the late republic, as well as in the early empire, the distinction between comitia and concilium was not a distinction between the whole and a part; in fact, it becomes doubtful whether the definition of Laelius was known to the writers of this period.

The results thus far reached, though negative, are of great importance; the definition of comitia and concilium formulated by Laelius has been set aside, and the ground prepared for the establishment of new definitions by induction. From the material afforded by the authors under discussion, the following conclusions relative to the general uses of the two words may be drawn:
I. (a) The . phrases comitia curiata, comitia centuriata, comitia tributa constantly occur; whereas (b) the phrases concilium curiatum (or -tim), concilium centuriatum (or -tim), concilium tributum (or -tim) cannot be found in the authors of the period under discussion.
(a) is too well known to need illustration; (b) may be sufficiently established by an examination of the references for concilium given in this paper.
II. (a) Concilium may apply to a non-political as well as to a political gathering; (b) comitia is wholly restricted to the political sphere.
(a) Concilium is non-political in Cicero, Div. i. 24. 49 (deorum concilium); Tusc. iv. 32. 69; N. D. i. 8. 18; Off. iii. 5.25 ; 9.38 ; Sen. 23. 84; Fin. ii. 4. 12 (virtutum concilium); Rep. i. 17. 28 (doctissimorum hominum in concilio); Sest. I4. 32 (applied to the meeting of a collegium); Livy i. 2I. 3 (Camenarum concilia); ii. 38. 4 ; xxvii. 35.4 .
III. Within the political sphere, again, (a) concilium is the more general term, - it suggests neither organization nor lack of organization; whereas (b) comitia is restricted to the organized assembly.
(a) Concilium is the more general term in Cicero, Fin. iii. 19. 63 ; ii. 24.77 ; Rep. vi. 13 (3). 13 (all three passages are quoted on p. 25). In all these citations concilia, denoting assemblies of the whole people, must certainly include organized meetings, probably without excluding the unorganized. In Lcg. iii. 19. 42 (Invito eo qui cum populo ageret, seditionem non posse fieri, quippe cui liceat concilium, simul atque intercessum turbarique coeptum sit, dimittere) concilium is probably the organized assembly. On the other hand, the concilium of all the people mentioned by Livy, i. 8. I, may have been unorganized.
IV. Within the province of organized national gatherings, on the other hand, (a) comitia is the wider term, applying as it does to all assemblies of the kind, whatever their function; whereas (b) concilium as an organized national assembly is wholly restricted to legislative and judicial functions. ${ }^{1}$
(a) Comitia is used in its most general sense in Cicero, - Div. i. 45.103 ; ii. 18. 42 f. ; 35.74 (quoted in footnote below); Tusc. iv. 1. r. For separate lists of the elective and the legislative and judicial comitia, see VI, where will be found sufficient illustrations of (b).
V. (a) Applied to foreign institutions, comitia always designates electoral assemblies; (b) as at Rome, concilia are always legislative or judicial assemblies.
(a) Comitia is used of foreign states in:

Caesar, B. G. vii. 67 ; Cicero, Verr. II. ii. 52. 128 (three occurrences), 129. 130; 53. 133; 54. 136; Fam. viii. 1. 2; Livy v. 1. 1; xxiv. 23. 1; 26. 16; 27. 1; xxxii. 25.2 ; xxxiii. 27.8; xxxiv. 51. 5 .
(b) Foreign concilia are mentioned by:

Caesar, B. G. i. 18. 19, 30 , 31, 33 : iii. 18; v. 2, 6, 24, 56 f.; vi. 3, 20 ; vii. 1, 14, 15, 63, 75, 89; viii. 20 (Hirtius); Sallust, Frag. ii. 22 ; Nepos,

[^13]Tim. iv. 2; Livy i. 6. 1; 50-52; iii. 2. 3; 10. 8; v. 1.8; 17.6; 36. 1 : vi. 10. 7 ; vii. 25.5 ; viii. 3 . 10; ix. 45.8 ; x. 10. 11; 12. 2; 13. 3; 14. 3 ; xxi. 14. 1; 19.9, 11; 20. 1; xxiv. 37. 11; xxvi. 24. 1; xxvii. 9. 2 ; 29. 10; 30.6 ; xxix. $3.1,4$; xxxi. 25.2 ; 29. 1, 2, 8; 32. 3, 4; xxxii. 10. 2 ; 19. 4, 5, 9; 20. 1; 21. 2; 22. 3, 9, 12; xxxiii. 1.7; 2. 1, 7; 3.7; 12.6; 16. 3, 5, 8; xxxiv. 41. 5; 51. 5; xxxv. 25. 4; 27. II; 3I. 3; 32. 3. 5 ; 33. 1,4 ; 34. 2 ; 43. 7; 48. 1; xxxvi. 6. 3 ; 8. 2 ; 26. 1; 28. 7, 9; 31.9, $10 ; 32.9$; 34. 1; 35.7; xxxviii. 9.11; 10.2; 31.1; 32. 3 ; 34. 5 ; 35.1; xxxix. $33,35,36,37,48$, 50 ; xli. 24 ; xlii. $6,12,38,43,44,47$; xliii. 17 ; xiv. 18.

Although most of these concilia are known to have been assemblies of the whole people, nobles and commons, very rarely, as in Livy x. 16. 3, the word denotes a council of a few men, - in this case, of the leading men of Etruria (cf. Caesar, B. G. i. 33 ; vii. 75 ; Livy xxxvi. 6. 6); and twice we hear of a concilium plebis at Capua; Livy xxiii. 4.4; xxvi. 16. 9.
VI. In the Roman state, in a great majority of cases comitia are electoral assemblies; in fact, the word may generally be understood to signify electoral assemblies, or simply elections, unless the context indicates a different meaning.

Comitia are electoral in:
Caesar, B. C. i. 9; iii. 1, 2, 82; Sallust, Cat. 24 ; Jug. 36, 37 ; Cicero, Imp. Pomp. 1. 2 ; Leg. Agr. ii. 7. 18; 8. 20; 10. 26; 11. 27; 12. 31; Dill. $9.24,25 ; 15.41$; 16. 42 ; Mur. 1. 1; 17. 35 ; 18.38; 19. 38; 25.51; 26. 53; Phil. ii. 32. 80, 81 ; 33. 82; 38.99; viii. 9. 27; xi 8. 19; Planc. 3. 7, $8 ; 4.9,10 ; 6.15 ; 8.21 ; 20.49,50 ; 22.53,54$; Verr. I. 6. 17 ; 7. 19; 8. 22, 23 ; $9.24,25$; 18. 54 ; II. i. 7.19 ; Frag. A. vii. 48 ; Rep. ii. 13.25 ; 17.31; 31. 53 ; Att. i. 1. 1, $2 ; 4$. 1; 10.6; 11.2; 16.13; ii. 20. 6 ; 21. 5 ; 23. 3; iii. 12. 1; 13. 1; 18. 1; iv. 2. 6; 3. 3, 5; 13. 1; 17.7; 19. 1; xii. 8; Brut. i. 5.3 ; 14. 1; Fam. i. 4.1 ; vii. 30.1 ; viii. 2.2 ; 4.3: 14 . 1; x. 26; Q.fr. ii. 1. $2 ; 2$. $1 ; 11.3 ; 15.3$; iii. 2. 3 ; 3. 2 ; Varro, R. R. iii. 2. 1; Nepos, Att. v. 4 ; Livy i. 32.1 ; $35.1 ; 60.4$; ii. $8.3 ; 56.1,2 ; 58.1$; 60. 4,5 ; iii. 6. 1; 19.2 ; $20.8 ; 24.9$; $306 ; 34.7$; $35.1,7,8 ; 37.5,6$ :

 14. 1; 31. 1; vi. 1. $5 ; 22.7 ; 35.10 ; 36.3,9 ; 37.4 ; 39.5 ; 42.9$, 14 ; vii. 9.4 ; 17. 10, 13 ; 19.5; 21. 1; 22.7, 11; viii. 3.4 ; 13. 10; 16. 12; 20.1; 23.11, 14, 17; ix. 7.12, 14; x. 5.14; 11. 3; 15.7; 16. 1; 21. 13; 22.8; xxi. 53.6 ; xxii. 33.9 , 10 ; 34 . 1, 3,$9 ; 35.2,4$; xxiii. $24.3 ; 31.7$. 12 ; xxiv. $7.11 ; 9.5$, 9 ; 10.2; 11.6; 43.5,9; xxv.2. $3.5 ; 5.2 ; 7.5 ; 41$. 10; xxvi. 2 .2; 18.4;22.2;23.1,2; xxvii.4.1; 8. 1; xxviii. 10. 1, 4; 38. II; xxix.
10. 1, 2 ; 11. 9.10 ; xxx. 40.5 ; xxxi. 49.12 ; 50.6 ; xxxii. 7.8 , 12 ; 27. 5, 6; xxxiii. 21. 9 ; xxxiv. 42 . 3,4 ; 44.4 ; 53 . 2 ; xxxv. 6. 2 ; 8. 1; 10. 1 , 9; 20.7; 24. 3; xxxvi. 45.9; xxxvii. 47. 1, 6; xxxviii. 35 . 1; 42. 1, 2, 4 ; xxxix. 6. 1; 23. 1; chs. $32,39,40,41,45$; xl. 18, $37,45,59$; xli. $6,8,14$, 16, 17, 18, 28 ; xlii. 9,28 ; xliii. 11, 14 ; xliv. 17.

Comitia are legislative or judicial in :
Cicero, Dom. 28. 75 : 30. 79; 32. 86; 33.87; Har. Resp. 6. II; Mil. 3. 7; Phil. i. 8. 19 ; x. 8. 17 ; xiii. 15.31 ; Pis. $15.35,36$; lied. in Sert. 11. 27 ; Sest. 30. 65; 34. 73; 51. 109; Leg. iii. 19.45; Rep. ii. 31. 53; 35.60; 36.61; Att. i. 14.5 ; ii. 15.2 ; iv. 1. 4 ; xiv. 12. 1; Livy iii. 13.9; 17.4; 20. 7 ; 24. 7 ; 29.6 ; 55.3 ; vi. 36 . 9 ; viii. 12 . 15 ; xxv. 4.6 ; xxvi. 3.9 , 12 ; xxxi. 6. 3. 5 ; xxxiv. 2. 11 ; xlii. 30 ; ${ }^{\circ}$ xliii. 16 ; xlv. 35 .

As these lists are nearly exhaustive, they represent substantially the relative frequency of the two uses of comitia.
VII. (a) Rarely is either the centuriate assembly or the so-called patricio-plebeian tribal assembly termed concilium; (b) the plebeian tribal assembly is rarely termed comitia except when elective.

The principal instances of the rare use of concilium under (a) are Livy i. 26.5 ; 36.6 ; iii. 7 I. 3 ; vi. 20. II. (b) In its legislative or judicial capacity the plebeian tribal assembly is called comitia in Cicero, Leg. iii. 19. 45 ; Sest. 5 1. 109; Livy iii. 13. 9; 17.4 ; vi. 36 . 9 ; xxv. 4 . 6; xxxiv. 2. II; xlv. 35.

This classification covers without exception all the cases in the authors under discussion. An attempt may now be made to trace the development of these uses.

The first thing to be considered is that whereas concilium is singular, comitia is plural. Undoubtedly it is a plural of the parts of which the whole is composed; in other words, the curiae, or centuries, or tribes were thought of as little assemblies, whose sum total formed the comitia. Comitia therefore always has reference to the parts - the voting units - of which the assembly is composed, whereas concilium as a singular views the assembly without reference to its parts. For this reason, whenever it is advisable to add a modifier to indicate the kind of organization of the assembly, comitia is always used. We find, accordingly, comitia curiata, comitia
centuriata, and comitia tributa in common use, but never concilium curiatum (or -tim), concilium centuriatum (or -tim), or concilium tributum (or -tim). These last expressions, which are modern inventions, do not accord with the Roman way of viewing the assemblies. This consideration satisfactorily explains the first general use (p. 26).

As a non-political gathering is not made up of groups, similar to the voting divisions of the national assemblies, - it cannot be called comitia. Concilium is the only term appropriate to it ; hence we have the second general use of the two words (p. 26).

The same consideration makes concilium the more general term within the political sphere; the assembly it designates may be organized or unorganized, whereas comitic applies only to assemblies organized in voting divisions. This is the third general use (pp. 26-27).

For explaining the four remaining uses it is necessary to take into consideration a fact regarding the meaning of concilium not hitherto understood: to the Romans the word suggested deliberation, discussion; it connoted the idea which has passed to its English derivative, "council." Not without reason, therefore, is concilitum connected with cogitatio by Varro, L. L. vi. 43 : A cogitatione Concilium, inde Consilium, quod ut vestimentum apud fullonem cum cogitur, Conciliari dictum. When it refers to non-political gatherings, accordingly, concilium is always more than a mere crowd; it is at least a company, which converses, consults, discusses. The deliberative character of most non-political concilia is very evident, - cf. the citations under II ( $a$ ), p. 26. With this meaning concilium could not designate an electoral assembly, which did not allow discussion; ${ }^{1}$ it was restricted to legislative and judicial assemblies, in which the voting was preceded by deliberation. This is the fourth use (p. 27).

Rarely did a Roman writer have occasion to mention an election in a foreign state. Whenever he did so, however,

[^14]he always used comitia. Most of the business of foreign assemblies referred to by Roman writers was concerned with international affairs, - was legislative, - and hence foreign assemblies are generally termed concilic. ${ }^{1}$ This consideration accounts for the fifth general use (pp. 27-28).

The sixth (pp. 28-29) may be easily explained. The tendency was to restrict comitia to electoral assemblies, just as concilium was restricted to legislative and judicial assemblies, though this tendency never became a rule.

The seventh (p. 29) may be accounted for by the fact that after the passing of the Hortensian Law, the centuriate assembly and the so-called patricio-plebeian tribal assembly came to be almost wholly elective, while the plebeian tribal assembly became the chief statute-making body in the state. Hence the centuriate assembly became the comitia, and the plebeian tribal assembly the concilium.

The cause of the error into which Laelius ${ }^{2}$ fell is now apparent. Finding the plebeian tribal assembly frequently termed concilium and the centuriate assembly of the whole people generally termed comitia, he hastily concluded that comitia should apply only to assemblies of the whole people and concilia only to assemblies of a part of the people.

This paper has proved, on the contrary, that in the Ciceronian and Augustan ages the distinction between the two

[^15]words is not a distinction between the whole and a part, and that all the uses of comitia and concilium in this period may be explained by two simple facts: (I) that whereas concilium is singular, comitia is plural; (2) that concilium suggests deliberation, discussion.
III. - Studies in Latin Accent and Metric.

By Prof. ROBERT S. RADFORD, ELMIRA COLLEGE.

## I. Introduction.

In a former paper (Trans. Am. Phil. Assoc., 1903) I sought to show that in tribrach word-groups, the first word of which is a monosyllable, the accent receded upon the monosyllable, e.g. séd erus, séd ego, liúc equos, and I have since shown (A.J.P., No. 98 ff .) that this is regularly the case also in many dactylic word-groups of the same kind, such as hóc facis, séd scio, á patre.

The question at once arises, - What is the explanation of this striking phenomenon? Why docs the accent recede so constantly in these groups? Although monosyllables are usually connected closely in pronunciation with the following word, it is evident that this fact alone is insufficient as an explanation, unless it can also be shown that the great majority of these groups follow some usual arrangement of words, some usual and preferred word-order. This proof I have attempted to supply by pointing out (A.J.P. XXV, 256 ff .) that groups like hüc homo, lic dies follow the I.-Eur. traditional word-order by which the demonstrative pronoun immediately precedes the substantive, groups like quid agis, quod facis the traditional order by which the object immediately precedes the verb, groups like séd erus, séd ego the traditional order by which the sentence-introducing conjunction immediately precedes the subject, and so on. The principle here involved is that, in every I.-Eur. word-order containing a monosyllable, so many frequent and usual phrases must arise like quid agis, quód facis, etc., that a general type is eventually established to which the accent even of rare combinations is made to conform. Finally, there is some evidence to show that even in the case of polysyllabic words a traditional order, such as that of object and
verb, sometimes admits in Plautus the recessive accent, e.g. aquám velim.

In the present paper I wish to show the influence of the traditional word-order still further by treating the accent of the conjunctions and pronouns in the Latin sentence. The numerous peculiarities of accent and metre which these parts of speech exhibit, have long been a cause of perplexity to Plautine scholars, and, with the notable exception of the treatment of the accentuations illim, istiom, ipsím by Skutsch, have usually been inadequately explained. I shall further discuss the accent in the traditional order adjective + noun, and finally, since recent accentual studies have considerably modified and, in some cases, seriously unsettled the views of Latin scholars in this field, I shall attempt to state concisely the general relation which appears to exist between word and verse-accent in Latin verse.

## II. Accent of Conjunctions.

The grammarians repeatedly assert that the conjunction quando is often accented quandó (Schöll, De acc., p. 173 f.). In accordance with their favorite method they wish to make the difference of accent depend, it is true, upon a difference of meaning, and no two of them can agree just what this difference of meaning shall be. Nevertheless the original statement appears to be essentially correct, and is confirmed by the independent statement of Donatus (Ter. Eitn. III, i, 47) upon the accents siquando, néquando. Similar testimonies respecting the oxytonesis of other conjunctions (igitur, quoniam, saltem, postquam) are collected by. Schöll, l.l., 194 ff., 175. A monosyllabic sentence-introducing conjunction, as I have shown elsewhere (A.J.P. XXV, 259), regularly coalesces with the verb, e.g. si-scio, si-volo, and, by extension of this usage, sometimes with other parts of speech. We find three cases of a similar proclisis of quando in the critical feet of Plautine verse, viz. Ba. 224 quandó volt; Cap. 86 quandó res; Men. 664 quando ${ }^{4}$ quid. ${ }^{1}$ In all these cases

[^16]quardo coalesces with a following monosyllable, just as the prepositions in the frequent combinations proptér me, praetér spem, and the like. When a preposition or conjunction coalesces with an iambic word, as in proptér mare (Ru. 34), quandó sciet (Cap. 406), quandó lubet ( 4 times ${ }^{1}$ ), the resulting combination of spondee and iambus is regularly needed for making the verse-close, and this is the true explanation of its rare occurrence in the critical feet. Moreover, the proclisis of quando is not invariable; for we find Am. 1097 quándo sátis instead of quandó satis; cf. Cap. 886. ${ }^{2}$

With respect to the other polysyllabic conjunctions, an examination of the critical feet yields a similar result, viz. the proclisis of the conjunctions is admissible but not invariable. ${ }^{3}$ Thus we find in all fourteen examples of oxytone conjunctions, viz. two examples of tampuam (Tri. 913 tamqua ${ }^{5} \mathrm{~m}$ me, where Ritschl writes unnecessarily tam quam me; As. 427 tamquám si); one of etsi (Tri. 527 etsí sceléstus est); one of sicut (Syr. Sent. 39 sicút fax, Ribb.; Meyer with one Ms.: ita út fax) ; three of immo (Tri. 427 immó quas; Phor. 644 immó malum hércle; Poe. 151 immó mihi); three of etiam (Mer. 728 etiám vis; Ad. 279 etiăm maneo ótiosus; Syr. Sent. 557 etiám $^{2}$ querí) ; two of săquidem (Mi. 624 siqui$\mathrm{de}^{4} \mathrm{~m}$ te; St. $616^{3}$ siquide ${ }^{4} \mathrm{~m}$ mea); one of quidui (Mi. 554 quidní fateáre); one of quam obrem (Phor. 715 quam obrém dem $)^{2}$; one perhaps of postquam ( $A \mathrm{~m} .806$ postqua ${ }^{6} \mathrm{~m}$ cenávimus); two perhaps of quia (Phor. 162 tibi quiắ super est, cf.
${ }^{1}$ Serviceable examples of quando are collected by Schubert, Temporalconjunktionen bei Pl., p. 16 ff .
${ }^{2}$ Quando might equally well be classed with the pronouns and pronominal adverbs treated below, i.e. olim, inile, unde, etc.
${ }^{3}$ For this study I have used chiefly the dissertations of O. Brugman, De iambico senario, Bonn, 1874;' Mohr, De iambico ap. Pl. septenario, Leipzig, 1873; Köhler, De trochaicis septenariis Plaut., Halle, 1877; Podiaski, De tetrametris iambicis et trochaicis Terent., Berlin, I882; W. Meyer, Beobachtung des Wortaccentes in d. altlat. Poesie, München, 1884 ; Schrader, De partic. -ne prosodia, Strassburg, 1885; Ahlberg, De proceleusmaticis antiquae poesis Lat., Lund, 1900; Ritschl, Proleg. cap. xv; C. F. W. Müller, Plaut. Prosodie; Klotz, Grundzüge, etc.

Podiaski, l.l., p. 12 ; Ad. 523 nísi quia ${ }^{8}$ propést ; cf. Tri. 938 nísi quia ${ }^{2}$ lubet). ${ }^{1}$ Also, in the case of apparently broken dactyls with atque (Tri. 935 a $^{4}$ tque cuníla; Men. 508 ; Mi. 958; cf. St. 7OI du ${ }^{1}$ mque se exórnat), the assumption of syncope is not necessary, but the proclisis of the conjunction is an alternative explanation; cf. the similar example with sicut, p. 45. From this survey I conclude that the oxytonesis of the conjunctions, which is asserted by the grammarians, is confirmed by the evidence of dramatic verse. ${ }^{2}$

## III. Accent of Pronouns.

As early as the time of Quintilian the ancient grammarians had noted the exceptional oxytonesis existing in the pronouns and derived adverbs (in adverbiis fere solis ac pronominibus, Quint. I, 5, 26), and similar statements are often made later, usually with an explanation drawn from the fatal differentiae causa method (Schöll, l.l., 170 ff.). So far as concerns illum, istum, ipsum, a thoroughgoing oxytonesis of these pronouns is indicated by the derivative Romance forms, and has been justly vindicated for the Plautine period by Skutsch, Forsch., p. I 30 ff. ${ }^{3}$ Skutsch has also assumed that the oxytonesis first arose through the proclisis of the pronoun in such traditional orders as illim-patrem, illim-videt, and was subsequently extended beyond its original limits. This account is undoubtedly correct, so far as it goes, but the full logical consequences of the proclisis of ille are not developed by Skutsch. The phenomena to be discussed are curious enough, and if each one of them be studied separately, as

[^17]has hitherto been the case, they are of a kind to baffle the most practised investigator, but I hope to show that they form a simple and harmonious whole when studied together. Hence in order to exhibit the accentual and metrical peculiarities of the pronouns in full, I shall first take the pronoun cited by Quintilian, viz. quális or qualis, and illustrate its uses theoretically. A pronoun like qualis occurs as a proclitic chiefly in two traditional word-orders, viz. pronoun + noun, as qualis homo, quales senes, and object or subject + verb, as quales videt, qualis crat; more rarely in simple extensions or variations of the orders just named. By saying that qualis is a proclitic in such cases, I mean that it coalesces in pronunciation and in accentuation with the following word, and that the pause which falls after most words (and which may be termed the word-end), very largely vanishes in the case of the pronoun; in short, pronominal combinations like those just named are commonly treated in Latin as quadrisyllabic words, and accented qualis-homo, qualés-senes, qualésvidet, qualis-erat. The consequences that flow from this cardinal fact, that no full word-end falls after the Latin pronouns and pronominal adverbs, are fivefold.
A. Although the accentuation of a spondaic word upon the ultima is not permitted in the critical fect, pronominal combinations like qualés senes, qualés zidet enter these feet freely.
B. Although the accentuation of a trochaic word upon the ultima is very strictly forbidden in the critical feet, pronominal combinations like quali's homo, quali's erat, undé venis are admitted freely.
C. Although it is forbidden in all feet, except the first foot of a colon, ${ }^{1}$ to separate by a word-end the two shorts composing the thesis of a trochaic dactyl, yet dactyls like qualizs hömó, quálïs ërát, úndĕ věnís are admitted freely, since the division of the two shorts is for the most part only apparent; cf. the case of prepositions, as in próptèr ămórem, interr istás.
D. The Lachmann-Ritschl law, which forbids a foot to be

[^18]filled by a dactylic word-form, is waived in favor of all the dactylic pronominal forms, viz. haecine, istucine, sicine, etc., illuzus, and largely also in favor of the similarly used adjectival forms, omnia, omnibus, omniŭm.
E. The initial syllable of ambó, omnís, ccquis, ciuís, huiuis, etc., as well as of illé, isté, ipsé (cf. also ctsí, crgó), being now unaccented, is freely shortened after a Brevis Brevians (for examples of this well-known use, cf. Klotz, Grundz., p. 46 f. ; Ahlberg, De corrept. Plaut., p. 69 ff.).

The evidence in support of these uses will be presented in order:
A. Oxytonesis of Spondaic Pronouns. - Exclusive of the very numerous cases of illim, istiom, ipsuim (Skutsch, Forsch., p. 132 ff.), also olim (And. 22 I ), huiuius (Poc. 389), etc., we find in the critical feet thirty-seven examples of the oxytonesis of the spondaic and anapestic pronouns haccin (1), quantus (4), ecquis ${ }^{1}$ (4), numquis (3), siquis (4), quisquam (1), aliquis (3), alius (2), ullus, nullus (2), ìdem (2), noster, voster (3), omnis (4), ambo (1), perhaps also vobis (2). To this number we should add eight examples of oxytone pronouns with res.

Haccin: Ad. 379 haecińn[e] flagitia, cf. 408; cf. Au. 746 ístacin te orátióne; As. 932 ístosci${ }^{2}$ ne patrém; -quantus : Hau. 1013 quantu ${ }^{5} \mathrm{~m}$ malí; Per. 517 quantu ${ }^{4} \mathrm{~m}$ tu; Cap. 51 quantí sunt; $A d .700$ quantu ${ }^{5} \mathrm{~m}$ potést (a frequent phrase which Pl. always needs for the verse-close (eleven times), except once ( $A m .97 \mathrm{I}$ ), but which Ter. places more freely); very exceptional is Por. 534 qua $^{5}$ ntum ve ${ }^{6}$ lis, corrected in ed. mai. to quántum vís; -ecquis: Per. 108 ecquíd meminísti; Ps. 482 ecquám scis; Au. 16 ecquí maiórem; Phor. 474 ecquid spê (iamb. oct.); numquis: ${ }_{5}^{3}$ Cur. ${ }_{5} 16$ numquíd vis; Hec. 272 numquíd vis (iamb. sep.); And. 235 numquíd nam haec túrba; -síquis: And. 258 siquiés nunc mé roget ; Ad. 941 siquíd te máius óret; $C i$. III siquiid tibi ópus est; $E p$.

[^19]449 siquid vis, cf. Am. 453 ; Terentianus Maurus 2288 siquís velit (incomplete collection). Only in the first foot of a colon do we find And. 333 síquid po5tes; Poe. 1200 quícquid sápit; -quisquam: Au. 76 quicquám meliúst mihi; cf. Necr. 1021 neu quisqua²m posthac; cf. ${ }^{4}$ Cap. 346 ;-aliquis: And. 957 aliquís fors[itan] mé putét ; Hau. 752 aliquót diés; cf. Ad. $509 \mathrm{in}_{3}^{\mathrm{in}}$-aliquód magnúm malum, cf. $R u .575^{3}$ in-aliquo ${ }^{4}$ tibi, and, for examples of aliquid boni (mali) in non-critical feet, v. Lodge, Lex. Pl., p. 93 ;-alius: Tri. 458 aliúd vis; And. 189 aliám vitạm áffert; —ullus, ullus: Poe. 991 nullús me est ; cf. ${ }^{3}$ Cap. 91 nullúm perículúmst (quadrisyllabic word in verse-close) ; Men. 594 ullu ${ }^{6} \mathrm{~m}$ tenéri vídi ; cf. Ep. 497 ullá pecúnia; -idem: Am. 447 ide $^{5} \mathrm{~m}$ sum; cf. 808 in-eode ${ }^{4} \mathrm{~m}$ lectó; —noster, voster: Phor. 609 nostér Chremés; cf. Am. 22 I nós nostràs móre (cretic) ; Eur. 418 di vestrám fidem: hóminem (a frequent phrase, which is elsewhere always utilized for the verse-close (sixteen times) in Pl. and Ter., cf. Brugman, l.l., p. 30); cf. Ci. 550 filiám nostrám sustóllere (quadrisyllabic word); cf. Cap. 15; cf. also ${ }^{4} A m .356$ horu ${ }^{4}$ nc servós sum; -omnis: Eul. 1092 omne $^{5}$ s amárent (subject); Mo. 192 di deáequẹ omnés me péssumís exémplis ínterfíciant (often corrected, cf. Mohr, l.l., p. 19); Halu. 26 omnés vos óratós voló; cf. Am. ioi3 ápud omnibs aedís sacrás; add omném remt, omnés res (Cas. 506; Hcc. 194; Ad. 364; Lucil. XXVIII, io ; Hcc. 738 ; 483) and, in the case of other pronouns, tantám rem (Tri. 682), aliás rcs (Hcc. 826), ipsá re (And. 359; Hau. 266), etc. A general or indefinite 'enclisis of res,' such as is sometimes assumed (Klotz, Grundz., p. 324, and Bursian's Jahresb., r 883 , p. 427), seems improbable; -ambo: Ad. 131 ambós curáre; cf. Ru. 1104 hasce amba²s ut; - perhaps tibi and vobis: As. 654 tibi-dabó (double iamb. in colon-close); cf. Per. 847 vobís dabo (iamb. sep., acc. to Ritschl, cf. Mohr, l.l., p. 18, but anap. oct., acc. to recent edd.); Per. 855 vobis do (iamb. dim. cat., cf. Mohr, l.l., p. 24).

A similar oxytonesis may be proved for the iambic pronominal forms eum, co, meum, meo, tuom, utrum, etc. Thus these forms are often (nine times) found in the third foot of the senarius (Brugman, l.l., p. io ff.), as Tri. 794 eás resígnatás sibi ; Ci. 568 ; Tru. 85; Tri. arg. 6; Mi. 484; Turp. com.fr. 130; And. 442 (eám rem); Tru. 656 (meó); Ba. 344 utrúm velím (an apparent double iamb., which Ritschl, Prol. ccxviii, would emend). Similarly we find enim in apparent double iamb. verse-closes, as $A m$. 991 eúm-sequór ; Men. 880 átque eám-meáe ${ }^{1}$; perhaps also Naev. trag. fr. 13 meá-manú | moriáre, where R. ${ }^{3}$ needlessly corrects : mea móriarís manú.
B. Oxytonesis of Trochaic Pronouns. - We find in the critical feet thirty-five examples of the oxytonesis of the trochaic pronouns ille, illă (8), illǐc (4), iste (1), unde (2), cf.' tute, haecin (3), ecquis, quisquis, siquis (13), nostră (1), omnis (1 ?), quisque (3).

Examples, in the critical feet, of illé quidem ( $B a .103$; Mer. 540; Mo. 375; St. 561 ; Phor. 754) and illic homo (Ep. 666 ; Men. 992; Mi. 334; Ru. 1297) are cited by Luchs, Comm. pros. II, 4, and Hermes, VI, 279, respectively ; istic homo (Ep. 488) and mullis homo (Ba. 808) occur in the extant literature only in the first foot. Further, the well-known Latin word-orders, by which the demonstrative pronouns and

[^20]adverbs immediately precede possessive pronouns and oblique cases of personal pronouns (Kämpf, Pronom. Personal., pp. 27, 30 ff ., 35), give rise to the accents illé-mihi, undé-tibi, etc.; e.g. Ad. 139 isté tuos ; Cas. 631 unde ${ }^{4}$ meae ; $E p$. 179 illắ mihi (cf. Skutsch, Forsch. 136), and cf. Mer. 45 I ; Ad. 457 (first foot); cf. St. 133 ille $^{2}$ meus (cf. Skutsch, l.l., 118); cf. also Cap. 461 ipse ${ }^{3}$ sibi. ${ }^{1}$ In association with the verb, ille ${ }^{3}$ reprehéndit, Tri. 624, happens not to fall within the critical feet, but Commodianus, who observes the accent in the close of his hexameters, writes Inst. I, 35, 15 : unde ${ }^{5}$ licet ille (Hanssen, Dissert. Phil. Argent. V, 24), ${ }^{2}$ cf. the adverb undélibet. The developed oxytonesis is seen in Tru. 309 ille $^{6}$ meretriculis; note further that no example of innde or inde rédis (dissyllabic verb) occurs in the dramatists, but iunde rédeam (trisyllabic verb) occurs repeatedly (Tri. 937; Eut. II; Mo. 865 ; Hec. 377). Examples of oxytonesis in the first foot are very frequent, e.g. Cas. 432 ut illé trepidábat, Poe. 620 et illé chlamydátus (cf. Seyffert, Bur'sian's Jahresb., 1894, p. 282), St. 24 neque illé sibi méreat (cf. Skutsch, l.l., 118, n. 2), where the proceleusmatici, as usual, follow closely the grammatical accent ${ }^{3}$; very doubtful, however, is St. 175 quia indé iam ă pausillo ( $\epsilon d$. min.: quia inde iam á); Ps. 503 illúd erat ; Lucil. XXIX, 43 M. tum illúd $\dot{\epsilon} \pi \iota \phi \dot{\omega} \nu \epsilon \mathfrak{\imath}$; doubtful is $A s$. 123 nam illúd ego (so ed. mai.; ego illud Mss.); Cas. 932 indé foras; $\stackrel{1}{P} o o .1055$ indé sum oriúndus; -tuté tibi Cap. 371 , Ci. ${ }_{5}^{1} 63$, Cur. 9 , hence also ${ }^{1}$ Per. 573 tute ${ }^{3}$ tibi $;{ }^{1}$ for still other examples, cf. Ahlberg, De corrept. Pl., p. 50, n. I, and Luchs, l.l.

Haecin and laecine: Hec. 771 haecine east; ib. 282 haecine ego vitam (resulting from the traditional word-order, which attaches other pronouns to the sentence-introducing pronouns,

[^21]cf. Kämpf, l.l., pp. 3ı, 36); cf. Phor. ioi 3 haeci²ne erat éa. Hence it is apparently largely due to accident, or rather to the natural position of the sentence-introducing pronouns in the beginning of the verse, that examples of this kind occur chiefly in the first foot, viz. And. I 86 hocine agis; Eu. 99 and $A d$. 28 sicíne agis (cf. ídagis, hóc-agis, síc-agis); Hau. 203 huncíne erat; Eir. 77 I hancíne ego. Similarly it is apparently accidental that hancine e ego occurs in Pl. only in anap. verse ( $R u$. I88, 189). We may perhaps, if we wish, assume always for Pl. the syncopated forms haecin, etc., though this is going much beyond the available evidence (cf. Schrader, l.l., p. Io ff., and the numerous examples there cited), but in any case there can be no serious objection, on the score of accentuation, to examples like Mo. 26 hocínemodó (cf. hócmodo); 27 hocíne-boni; Tru. 7 I9 hīcine tu erás ; $A m$. 5 I4 hocine placet; As. I 28 hòcine preti, etc. (cf. also Spengel on Ad . I83).

Ecquis, numquis, quisquis, siquis: Poc. 364 ecqui ${ }^{6} \mathrm{~d}$ ais; cf. Cas. 913 and 914 nisi quidqui²d erat; - always siquid agis: Ep. 196; Mi. 215; Per. 659; St. 715; 7I7; Tri. 981; —cf. Phor. 553 siqui ${ }^{2} \mathrm{~d}$ opis; $A u$. 193 siqui ${ }^{6} \mathrm{~d}$ opust; $A s$. I I 7 siquíd opus; $A d .877$ ecqui ${ }^{6}$ d ego. Often in other feet, especially the first, as Au. 653 quicqui ${ }^{3}$ d habes; Poe. 505 quicquiid agit; Cas. 456 ecquíd amas; Eul. 475 numquíd habes; -quicqui ${ }^{5}$ d erat, etc. $: \stackrel{1}{P}$ er. $46 ; 47$; Ru. 58 ; I308, cf. nullús erat, Ru. I253; - Mcn. 439 siqui${ }^{5}$ d ego; Eu. 523 ecquís eam; As. 559 and Mo. 416 sicút ego; cf. Mi. I 206 quo $\mathrm{mo}^{3}$ do ego. In short, if we take a trisyllabic word (verb or pronoun) like inerit and a dissyllabic word like erit, we shall always find in the one case the accent quidquid ínerit (Ru. II34), in the other the accent quidquíd erit (quidquid erít). This accentuation long continued in use, e.g. Sen. Oed. 263 quidquíd ego; Rufinus 34 I G. quidquíd agis (quoted by Ribb., Com. Frgm. ${ }^{2}$ cii). ${ }^{1}$ In a former discussion (Trans.

[^22]Am. Phil. Assoc. XXXIV, 84)I assumed with Ritschl and other critics the divisibility of compounds like ecquid into their constituent parts, i.e. ec quid ego, but this is a desperate remedy, as Maurenbrecher, Hiatus, p. 3I, n. 3, and Ahlberg, Proccl. I, 81, have already observed, and is improbable for the period of Pl . or Sen. At the most, the pronunciation might be derived from an earlier formative period, when the two monosyllables were still independent, i.e. ec-quíd-ego, hence ecquidego; but even this assumption is unnecessary, and no reason exists for separating the treatment of ecquid and quidquid from that of other pronouns.

Nostru, omuis (?), quisque: St. 74I nostră ${ }^{4}$ placet; perhaps Tri. 329 měúmst, omne ${ }^{6}$ meum autém tuómst, - so Schöll in ed. mai., but the ed. min. retains the reading of $A$, etc., and scans mêumst, ómne mê ${ }^{6} \mathrm{mst}$ autém tuom; Ep. 214 suís quaeque ${ }^{6} \mid$ amatóribus (ed. mai. quaeque ibi); so the phrase suo quique loco (also suo quicque loco, St. 62; cf. Prehn, Pronom. Indef., p. in) is always accented suó quiqué loco, viz. Mo. 254 (troch. ${ }^{2}$ ), St. 62 (tr. ${ }^{3}$ ), Poe. II78 (anap. ${ }^{6}$ ), Titin. com. fr. 130 (tr. ${ }^{4}$, acc. to Müller, Pl. Pr., p. 6ı, but Ribb. ${ }^{3}$ scans as anap., quíque locó); cf. St. 693 suóm quemque ${ }^{2}$ decet, and also Aut. 732 quoí tanta ${ }^{2}$ mala. ${ }^{1}$
C. Apparent Division of Trochaic Dactyl. - Exclusive of the first foot, we find thirty-four examples of a divided dactyl, such as quísquis homó, with illic, ille, unde, inde (10), cf. hasce (2), haecin, sicin, istücin, tute (4), qualis, omnis, quisquis, ecquis, numquis, siquis, quisque (18), and apparently many more with huius, eius, quoius. ${ }^{2}$

[^23]Examples of ille quidém (twice within the verse: Ep. 673; Mo. 1081) and illic homó (once within the verse: Tru. 593; sixteen times in first foot) are cited by Luchs, Comm. Pros. II, 4, and Hermes, VI, 278, respectively ; cf. also Skutsch, Forsch. II5. Since the sentence-introducing pronouns are placed especially in the verse-beginning, it is probably due only to accident that we find examples of the similar combinations iste quidém (Mer. 945), ille senéx (Mer. 446; St. 559), ipsus homó (Tri. 1070), écquis homó (Mo. 354); cf. sérvos homó (St. 58 ; 442 ; for the combination v. Asmus, De appositionis collocat., p. 18) only in the first foot. Again, while I accept with Skutsch the weakening of the final syllable of ille, inde (also of hocin, quidquid, etc.), in sequences where it is regularly unaccented, I do not admit any need of this explanation (Skutsch, l.l., 1 IO f., 81) in cases like Ba. 281 ille mihí (cf. illắ mihi, illé meus, etc., above); Am. 660 i${ }^{6} l l e ~ r e v o ́ r t i t u r ; ~$ Hau. 197 immo illĕ fŭít senex ínportúnus (cf.. also Ahlberg, Procel. I, IIo); Cas. 903 índe voló; St. 67 i$^{3}$ nde vocátote ; Poe. 902 inde surrúptus; Per. 150 únde surrúpta, not to mention the numerous cases occurring in the first foot, as únde lubét ( $E p$. 144), ille iubébit (Mi. I192), or ille misérrumum (Mi.713). Even hásce tabéllas (Ba. 787), hásce corónas $(A u .385)$ admit of some defence ; for, although Pl. never allows the particle -ce in these pronouns to have the full value of a mora and so to form the whole thesis (Schmidt, De pronom. demonstr. form. Plautinis, p. I6 ff.), he may well have allowed this particle to form part of the swift thesis of the 'cyclic' dactyl; cf. Tri. I 86 hascé mihi (acc. to A and ed. min.).

Haecin, sicin, istucin, tute: And. 236 hócinest óffficiúm; Per. 42 si${ }^{3}$ cine hoc té; Eu. 830 istúcine intérminata; Tri. 386 tu $^{3}$ te concilies (unnecessary is tut' with Skutsch, Forsch. 151); numerous examples for the first foot, as Phor. Ioiz hae ${ }^{1}$ cine eránt; Eu. 804 sil ${ }^{1}$ cine agís (cf. haecíne erat, etc., above, p. 42); Poe. 512 silcine opórtet,
are quoted by Müller, Pros., p. 441 ff., and Schrader, l.l., p. 17 f. ${ }^{1}$

Qualis, omnis, quisquis, ecquis, siquis, quisque: Hec. 766 qua ${ }^{4}$ lis sim amícus (the insertion, in accordance with Wackernagel's law, of an 'enclitic' in the second position does not affect the connection); Cap. 536 ómnis in íncertó ; Am. 309 qui $^{2}$ squis homo húc ; Ps. 713 qui²dquid opúst ; Men. 772 sed quícquì̀d ǐd est (bacch.; needlessly corrected in ed. min.); Mi. 3 II quiicquid ĕst; Tri. 218 quídquid audítum; Ps. 740 $\mathrm{e}^{6} \mathrm{cquid}$ habét; -écquĭs hŏc áperit óstium as verse-close : Ba. 582, $A m$. 1020, $C_{a p}^{3}$. 830; $-\stackrel{1}{B} a$. 581 ecquĭs [his] in aédibust; Tru. 839 si $^{6} q u i s$ eúm; St. 182 síquis me essúm ; And. 258 si ${ }^{6} q u i s$ nunc mé ; $A u .340$ síquid utí ; Ep. 729 si $^{3}$ quid imprúdens; As. 326 qui ${ }^{3}$ dque derógito. Often in the first foot, as Tri. 655 and $R u$. 1100 ómnia ego ístaec; Ru. 1359 ómnia ut; Hec. 287 ómne quod; Ru. II21 qui${ }^{\text {ºd }}$ quid ibíst; Ep. 677 and Hau. 96ı quídquid egó; Ep. 293 númquid cgo íbi; Poe. 506 sícut ego hós; St. 576 néquid ădvéniens; -écquid agis Au. 636, Ep. 688, Ci. 643 ; - écquid amás Tru. 542, Poe. 327 ; - Ci. 67 síquid est quód; Ep. 647 síquid erit ; ctc. ${ }^{2}$ (cf. Ahlberg, l.l., p. 8o).
${ }^{1}$ I have purposely not quoted examples like Mi.61 hicine Achilles; Phor. 992 hicine ut tíbi. The long quantity of the first syllable of hicine (pronoun) is very doubtful, and is not proved, as Müller, l.l., thinks, by the iamb. sep. Ad. 709 hic nón amándus? hícine nón-gestándus, since no diaeresis neeessarily falls after a monosyllable, as ${ }^{3}$ shall ${ }^{4}$ show more fully elsewhere. On the other hand, the quantity in hōcine, hāecine, sicine is often attested.
${ }^{2}$ Among other cases of the broken dactyl which appear to be justified by the regular word-order, I would specify the following: 1) the phrases composed of a pred. a.j. . incedo, like Mi. 897 ornátus incédit (also As. 405; Ba. 1069; Mer. 600; Poe. 577); cf. Mer. 887 amícus advénio. This combination bas the same value as adv. or adj. + copula, as Poe. 922 íntus-ero ódio; cf. also Cap. 321 únicŭs-súm. 2) Common alliterative phrases, or combinations of related words, viz. Ps. 704 trina triplícia; Mer. 385 amícus amícis, similarly Mi. 660; Pomponius fr. 145 ; cf. also Ba. 401 cómmódŭs íncominodís. Cf. the not very different view which Leo takes of these combinations, Forsch., p. 244, and observe that in etymological phrases like amicus amicis the order is fixed, i.e. ' nominativus casus obliquos praecedit' (Kellerhoff, Studem. Stut. II, $5^{8}$ f.). 3) Perhaps adj. or gen. + noun, viz. Men. 268 mágnus amátur ( P ; A mag.) ; Accius fr. 501 hórrida honéstitudo;

Huius, cius, quoius: These forms, instead of being always taken as monosyllabic, ought probably often to receive their regular scansion as dissyllables in the very numerous cases like Cap. 887 quo ${ }^{3 i}$ ius erát tunc ; St. 545 quo ${ }^{5 \text { iius erát tibícina; }}$ $R u .52$ éius eránt; 1204 éius amátiost; see the examples collected by Ahlberg (De corrept. Pl.., pp. 84-90), whose conclusions probably require some modification at this point. ${ }^{1}$
D. Admission of Dactylic Pronominal Forms. - Exclusive of the first foot, we find about twenty-nine examples of a foot filled by the dactylic pronominal forms kaecine, istaecine, illaccine (7), illiuus (20), omnia, omnibus (2).

Haccine, istaecine, illaccine: Pue. 1166 haécine meaé sunt; Ps. 83 istócine pácto; 847 ista $^{3}$ cine caúsa; Ru. 110 ístīcine vós; Tru. 537 ho $^{2}$ cine míhi; 606 istúcine míhi; Haul. 751 illáncine múlierem. The examples quoted above (p. 44) of hocine, etc., ${ }^{2}$ with elision, i.e. hócinest ófficium, show clearly that the problem presented by hócinnĕ without elision is not solved by the assumption which is sometimes made (Klotz, Grutndz., p. 308 ; Ahlberg, Procel. I, 20, 112), that the final syllable of this form was always syncopated in pronunciation; besides, this assumption of constant syncope after a short vowel appears to be unwarranted (Schrader, l.l., io, 14). For the frequent occurrence of haécine and similar forms in the first foot, see Schrader, l.l., 10.

Illǐus: Haur. 367 íllius ánimum; Ad. 26ı íllius ópera; 722 illius ádulescentis; $572 \mathrm{i}^{2} 1$ llius hóminis, and more generally

Enn. tr. fr. 40 virginális modéstia; And. 857 tri'stis sevéritas; As. 509 ma $^{1}{ }^{1}$ tris impérium; St. 432 frátris ancillulam. In most of the common phrases so far quoted, the elision of final $s$ before an initial vowel, which Leo advocates (Forsch. 229 ff .), may also afford an explanation. 4) Inf. + auxiliary verb, viz. Ps. uS2 íre licébit (cf. ilicet); Ru. 112 ésse decét; Ep. 573 férre iubés. Cf. esse-vullt used as equivalent of a trisyllabic word in verse-close not only often in Pl., but also in Syr. Sent. A 51, and dare-vis placed in the pentameter-close by so perfect a master of technique as Martial ( $7,75,2$ ); cf. also dare-néscil, Syr. Sent. 46, the only divided anapest, according to Meyer, l.l., p. 27, which Publilius admits in the third foot.
${ }^{1}$ The view tbat huius, cius, etc., may also be pyrrhics, advocated, so far as I know, only by Exon, Hermathena, XI, 208 ff., does not seem probable.
 see Leo, l.l., 290 ff., Ritschl, Opusc. II, 678 ff., and Ahlberg, De corrept. Pl., p. 91 ff. The proclisis of ille is, in fact, so far developed that there is no diaeresis in the iamb. sep., Mi. 1231 quámquam illúm-multaé sibi éxpetéssunt, and this is the real explanation of this much-discussed verse. The scansion illius which I have here assumed has been successfully vindicated for Pl., in my judgment, by Ritschl and Leo, ${ }^{1}$ although the scansion illīs must also be admitted for a few examples like Phor. 648 míttam illius inéptiás. - Omuia, omnibus, omniŭm: Tru. 447 ómnia quí ; Am. 55 ómnibus ísdem. Often in the first foot, viz. Mi. 1148 ; Poe. 834 ; 905 ; St. 114; 336; 526; 684; Tri. 933; Hec. 380; Ad. 97r. Several of these examples are of the type ómnia génera (Poc. 834); in the case of dissyllabic words, however, accents like ómniá mea (Hau. 575; Phor. 248), ómniá bona (Hau. 942) possibly correspond sometimes to the actual pronunciation.

While proclitic tendencies exist in all the pronouns, they have not necessarily been developed in all to the same extent. The proclisis is most nearly complete in ille, iste, ipse, and an accent ille-sénex, istuc-ágo is probably nearly as exceptional as altrimsécus (Ps. 357) or amabilis (St. 737); thus illic loómo occurs twice (Ep. $45=$ troch. ${ }^{6} ; 67 \mathrm{I}=$ troch. ${ }^{2}$ ) against twentyfour cases of illic homo and illic homó. Pl. and Ter. have only istuic-agóo, - twice within the verse (Tri. 819; Eu. 349), four times in verse-close (As. 358 ; Ba. 708; Haut. 346 ; 558); scior is as frequent in the dramatists as scio, yet we find only once tantindem scío (Per. 517) against eight cases of illímsció, illić-sció, etc. (Am. 922 ; Men. 246; Per. 16ı ; Poe. 1028; As. 869; Mi. 236; Tru. 8 ı ; St. 474). Many combinations, however, vary, cf. Eu. 536 ístuc íta, and while Pl. regularly accents tuté tibi (four times; on the order, cf. Seyffert, Plilol. XXV, 459 f.), thite $t^{2} b i$ seems the correct scansion in Men. init.

We have seen in this investigation that the proclisis and

[^24]oxytonesis of the pronouns as a class, which the ancient grammarians strongly attest, is confirmed in every possible way by the evidence of dramatic verse, ${ }^{1}$ and we have found at the same time, as I hope, an explanation for several phenomena of the verse which have hitherto remained unexplained. Since the study of the pronouns is the main object of this paper, my treatment of the topics which remain will be brief.

## IV. Accent of Adjectives.

Although the I.-Eur. word-order, adjective or genitive + substantive, is very imperfectly preserved in Latin, we might, perhaps, expect to find that it had exerted some influence upon the Latin accent. The critical feet offer, however, very few direct evidences of recession at this point, and we find hardly more than half-a-dozen certain examples of a recessive accent like rectá via in the critical feet Yet the rare occurrence of such an accent may be explained as due in part to the structure of the verse. Thus, to take illustrations from the structure of the senarius, the combination of spondee and iambus which is found in recta via, needs, as a rule, to be utilized for the verse-close, and this fact of itself would largely prevent its occurrence in the critical feet. Again, the combination cannot be placed without elision in the second foot, since it would then produce an inadmissible conflict in the third, i.e. rectá viá, nor can it be placed without elision in the fourth, since it would then introduce an iambus into the fifth foot, i.e. rectá viá; it follows that it can, as a rule, be placed only in the third foot, and we find in fact

[^25]several examples of its use in this place, viz. Hec. 177 primós diés; Haut. 6I pró deum átque hominúm fidém; cf. Tri. 425
 non ést turpís cicátrix ; Am. 481 decumó post ménse; Hcc. 198 pro deum átque hominúm fidém (oct.); Ep. 249 hominu ${ }^{4} \mathrm{~m}$ me vís; cf. Ba. 968 unó mendáció (oct.); cf. Phor. 867 suspenso ${ }^{2}$ gradu. Cases ${ }^{2}$ of adj. ${ }^{3}$ quadrisyllabic noun in the verse-close, as Hec. 462 una $^{6}$ senténtia; Am. 840 sedatu ${ }^{6} \mathrm{~m}$ cupídinem; 841 cognatu ${ }^{6} \mathrm{~m}$ concórdiam; As. 298,-are inconclusive.

That the non-occurrence of the type is partly due to the verse-structure seems confirmed by the notable fact that the accent trigintá-minas, etc. (numeral + .noun), which is attested by nearly all the Romance languages, also does not occur a single time in the definitely critical feet, ${ }^{1}$ and we find only one example in these feet of the quantitative type frātrêml-mĕım ( $A n d .540$ gnatám tuam ét; cf. Ru. I341), although the occasional existence of this accent seems indicated by verse-closes like pătrềm-mé̆úm (Men. 750 ; Mer. 972 ; Titin. fr. 65 ; Asin. 64). Very serious difficulties, however, still remain ; for the combination of iambic or cretic adjective + noun, i.e. malá-manu, dexterí-manu, is always avoided in the verse-close, and we find instead dexterá retinéns manú, Cap. 442 , and the like; the only exception is the phrase boná( $n$ ) fidé Tru. 586 ; Mo. 670 (v. Luchs, Studem. Stud. I, 21 , and Köhler, l.l., 31). We must conclude then upon the whole that, in the case of adjective combinations, there is no sufficient evidence for the existence of an accent malí manu, except in the case of a few special phrases.

## V. Relation of Word and Verse-accent.

The results reached in the preceding study afford a fresh proof of the frequent agreement which exists between word and verse-accent in the verse of Plautus. It is important,
${ }^{1}$ All the examples cited by Skutsch, Forsch. 163, involve the second arsis of the septenarius.
however, not to exaggerate the extent of this agreement and not to misinterpret its meaning. Thus at the present day we sometimes hear the belief confidently expressed that a complete or almost complete agreement of word and verse. accent will eventually be proved for Latin dramatic verse, and further, that all those kinds of verse which, like the dactylic hexameter, show serious disagreement, are artificial verse-forms in Latin. Such extreme views have littie or no basis in fact, for both the agreement between word and verseaccent in Plautus is far from being complete on any scientific hypothesis, and the quantitative poetry of the Romans is a thoroughly genuine and national product.

Importance of Quantity. Problem of Ictus.- It is difficult for the modern student - who has rarely, if ever, heard an exact quantitative pronunciation - to understand the unique importance which attaches to quantity in the pronunciation of the classical languages; and this general difficulty is vastly increased, so far as concerns the pronunciation of Latin, by the numerous special problems which Latin here presents. Hence many scholars have sought an escape from this difficulty by supposing that a strict observance of quantity formed no part of the original Latin language, but was adopted later by the educated Romans in consequence of Greek influence. The actual predominance of quantity, however, in the genuine Roman pronunciation - or, at least, in some widely prevalent form of this pronunciation - is indisputable. Not only has Latin inherited its system of quantity from I.-Eur. in an essentially unchanged form (Bergaigne et Henry, Manuel Védique, p. 38), but under certain conditions Latin quantity is invariably accompanied by an important secondary product, viz. intensity; for any regular alternation of long and short syllables in Latin prose or verse, provided a careful enunciation of the quantities be employed, produces naturally ${ }^{1}$ a rhythmic beat or ictus (impressio, Cic.

[^26]de Or. III, 48, 185; percussio, ib. III, 186; quasi pulsus, Quintil. IX, 4, 136), which approaches the value of a stressaccent, ${ }^{1}$ or, to state the fact more briefly, variations in quantity
${ }^{1}$ In connection with Professor Bennett's attempt to show that 'ictus' was not identified with elezatio vocis 'before the fifth century' (A.J.P. XIX, 368 ff .; cf. also Vendryes, l.l., 66), I cannot refiain from calling attention to a question of chronology involved in this claim. To obtain such a result, it is not only necessary to explain away many early testimonies, but also to assign a very late date to Terentianus Maurus, who says very clearly with respect to arsis and thesis, v . 1345: parte nam attullit sonorem, parte reliqua dejrimit; v. 2249: (necesse est) scandendo et illic (sc. in secundo loco) ponere adsuetam moram ( T . is discussing the principal ictuses of the trimeter). While T.'s date is not certainly known, according to the judgment of all the best recent authorities he is probably to be assigned to the close of the second century (Schultz, Mermes, XXII, 275 f.; Werth, Jahrb. Sp. XXIII, 295 ff., and preface to dissertation, Leipzig, 1896; TeuffelSchwabe, Köm. Lit. II, 945; Schanz, Köm. Lit. III, 26); in addition, his statements are usually drawn from good early sources. In Greek also, references to the existence of a metrical ictus are not so rare as Professor Goodell appears to think in his recent book (Greek Metric, 156 ff.). Thus, besides Christ's examples of крovév. (Metr., p. 50) and the frequent marking of the $\sigma \tau \iota \gamma \mu a i$ in musical schemes (Gleditsch', p. 322), Plutarch, Dem. 20, describes I'hilip after the battle of Chaeronea reciting the tetrameter verse $\Delta \eta \mu \dot{\sigma} \sigma \theta \epsilon \dot{\nu} s \Delta \epsilon \mu \dot{\sigma} \theta \theta \in \nu o u s, ~ \kappa \tau \lambda$., dividing
 $\pi \epsilon \rho l$ i' $\psi$ ous, $\mathbf{c} .4 \mathbf{1}, 2$, states that the rhythmical clausulae of the orators often have the effect of dance-music upon their auditors, who sometimes cannot refrain from stanuping their feet in time with the speaker (úmoкрoúcıv roîs $\lambda$ érougı кal . . . $\pi \rho o a \pi o \delta \iota \delta \delta \nu a \iota ~ \tau \grave{\eta} \nu \beta \alpha \sigma(\nu)$. Similarly an ictus in the oratorical cola and clausulae is constantly affirmed by the ancients (Cic. de Or. III, 47, 182; Or. 18, 59; cf. Quintil. 1X, 4, 31), and is assumed by all modern writers in this field. To the ancient testimonies upon the verse-accent cited by Hendrickson, A.J.P. XX, 198, add the very late Vergilius Grammat. Exc., K., Suppl., 190, 12, who mentions an accent regés 'secundum rationem metrorum.' At times the ancients do not appear to distinguish sharply between word and werse-accent, cf. Auson. Ep. XXII, 47; Cassiodor. Var. 9, 21, 3, and the striking use of tovos in Greek to denote both word-accent and rhythmical cadence. Hence 1 am disposed to justify, against the objections of Crusius, Litt. Centralbl. 1891, 7, 213, the use which Klotz, Grundz. 269, 348, makes of Dionysius' $\sigma \nu \lambda \lambda a \beta \grave{\jmath}$ b̧̧́rovos (de Comp. Verb., c. 11) in questions relating to the ictus, and even suggest for comparison in part Dionysius' other statement (de Admir. Vi Dem. c. 48), that Demosthenes has produced wonderful 'melody' through the arrangement of 'sharps' and 'graves' in his cola. Since the ictus, in all poetical recitation, largely takes the place of the tone, such a lack of distinction, though inexact, is not wholly unnatural. Similarly, in his discussion of volücres ( $1,5,28$ ), Quintilian perhaps employs syllaba acuta 'inexactly' of the ictus; such at least is the view of some metricians (e.g. Havet, Métr. ${ }^{4}$ § 491 ; Schöll, De acc., p. 26), although the passage seems to me to admit of another interpretation (cf. Humphreys, Trans. Am. Phil. Assoc. VII, 109).
naturally produce variations in intensity. Hence Latin possesses, in all carefully enunciated quantitative sequences, a natural series of stress accents, and this series assumes many

Cf. also Cassiodor. Var. 2, 40: naturalis rhythmus animatae voci cognoscitur attributus: qui tunc melos pulchre custodit, si apte taceat, congruenter loquatur et per accentus viam musicis pedibus composita voce gradiatur ; where taceat and loquatur are doubtless to be explained from Arist. Q. de Mus., p. 31, 17 M. á $\rho \sigma \iota \nu$ каi $\theta \epsilon \sigma \iota \nu, \psi \delta \phi \circ \nu$ каi $\eta \dot{\eta} \rho \mu i a \nu$. In addition to the passages usually quoted, a clear testimony upon the rhythmical accent in prose and verse is found in Sen., de Brev. Vit. 12: quid illi qui in conponendis, audiendis, dicendis canticis operati sunt : dum vocem cuius rectum cursum natura ef optimum et simplicissimum fecit inflexu modulationis inertissimae torquent? quorum digiti aliquod intra se carmen metientes semper sonant. quorum, cum ad res serias adhibiti sunt, exaudita tacita modulatio. That the interpretation of Dionysius given above is. correct, and that he refers to the 'ictus' in the Demosthenic melodies, appears to be confirmed by the very similar passages in which Lucian speaks of 'the beat and accent and melody of the Demosthenic rhythms,' 'the beat of the Demosthenic



 tion of a song accompanied by the pipe); according to Passow's Lex. кpótos is here "der Klang einer Rede, eines Gesanges"; in oratory, rò èmixpotov rî̀ $\lambda 6 \gamma \omega \nu$ is very aptly described by Herodes Atticus in Philostr. 539 Boiss. Somewhat late is the use of la ${ }^{\text {ßókpotos, 'iambic-beaten,' in the meaning 'iambic,' }}$


 accent, this relation in Latin is undoubtedly largely one of similarity in kind; cf. Schöll, De acc., 23. This fact is not only clear from the statement of Annianus ap. Gellius VI, 7, 4, and other similar passages named above, but is made even more obvious by the frequent employment of precisely the same terms in reference to both, viz. modulari, modulatio, moderare, flectere, etc. Thus in the well-known passage Cic. Or. 18, 58 modular $i$ is employed of the word-accent: ipsa natura, quasi modularetur hominum orationem, in omni verbo posuit acutam vocem ; cf. Mart. Cap. III, p. 65, 19 Eyss. On the other hand Quintilian (I, io, 22) employs modulatio of the 'beat' which accompanies rhythm: $\dot{\rho} v \theta \mu \dot{s} s .$. modulatione constat, and shortly afterwards (25) explains the meaning of modulatio more definitely by the terms intentio vocis, remissio, flexus (cf. Hendrickson, A.J.P. XX, 206). Both uses are found together in Victorinus VI, 206, 12 K.: metrum est ratio cum modulatione, rhythmus sine ratione metrica modulatio. plerumque tamen invenies rationem metricam in rhythmo, non artificii observatione servata, sed tono et ipsa modulatione ducente. Similarly Gellius (XIII, 6, 1) uses moderamenta of the word-accents, but Caesius Bassus (ap. Rufin. VI, 555 K.) moderare of the verse-accent: nisi percussione ita moderaveris. Again, flectere, flexus, etc., are constantly employed of the ictus (e.g. Quintil. I, 8, I quo flexu...
different forms corresponding with the various forms of metre employed. So much is perfectly clear, but since the Latin word-accent appears to have possessed from an carly time an element of intensity (probably varying greatly in strength according to the quantitative relations, i.c. moderately strong in cúl( $(\mathfrak{l}) d u s$, weak in ū̀rbánū; cf. L. Müller, R.M. ${ }^{2}$ 468), it is evident that, unless we are able to explain away the internal evidence which the language affords in favor of an accent of intensity, we must admit the existence in Latin of a second series of quasi-stress accents.

Song-like Recitation of Ancient Poetry. Effect upon Quantity and Word-accent. - The difficult problem presented by the conflict which often arises in Latin poetry between these two series of accents has given rise to many discussions. Instead of attempting in this place a general treatment of the subject in the usual way, I wish to limit my inquiry to several definite and special questions, viz. What was the form of delivery adopted by the ancients in the recitation of their poetry? What was the probable effect of this delivery both upon the quantities and upon the word-accents? Although the Greek word-accent was, down to the beginning of our era, primarily a musical accent, and although its relation to the rhythmic accent has often been discussed in a general way ( $\epsilon . g$. Westphal ${ }^{3}$, III, 3 I f.; Christ ${ }^{2}$, 55; Gleditsch ${ }^{3}$, 81 f.), I shall, for obvious reasons, include the recitation of Greek poetry in the present discussion, and make free use of the statements of Greek writers. The whole subject may be treated under two principal heads:
I. Character of Poetical Recitation. - In that part of their poetry which was sung, the Greeks, according to the well-
dicendum), but Diomedes ( $\mathrm{I}, 456,18 \mathrm{~K}$.) observes that whenever the inflections (fexus) of the voice come into play, the 'accents' come into play: tenor in flexibus vocis servandus est; nam quaedam acuto tenore . . . desiderant enuntiari. With reference to Greek usage, one must speak with extreme caution, and there is no express identification of the oxytone syllable with ictus to be found earlier than the mediaeval fragments of Pletho (fifteenth century); yet, as we have seen, Lucian joins kpbros and $\tau 6 v o s$, and a certain degree of similarity is indicated even for the classical periud by the twofold use of towos already mentioned. See further, A.J.P. XXV, 420 (421), n. 5.
known statement of Dionysius Hal. (de Comp. Verb., c. in), subordinated the usual pronunciation to the melody, and entirely disregarded the word-accent. ${ }^{1}$ This statement is commonly thought to apply exclusively to song, and to have no bearing upon the poetry which was spoken or declaimed; but such a view can scarcely be correct, since all poetry was, in a certain sense, sung among the ancients, and 'declamation' appears to have differed in degree, and not in kind, from 'song.' This fact is often overlooked, and has scarcely received from metricians the attention which it deserves; for while the technical employment of song, recitative and declamation in the delivery of ancient poetry has often been carefully discussed, ${ }^{2}$ one will seek in vain in our standard metrical works for any account of the real character of ancient 'declamation'; valuable notices of the subject are to be found, however, in several works of a more general character, viz. Friedländer, Sittengesch. III ${ }^{6}$, 337 f.; Teuffel-Schwabe, Roman Lit. I, § 34, 3; Grasberger, Erzichung it. Unterricht im
${ }^{1} \mathrm{Cf}$. the description which Heliodorus (3, 3) gives of the rendering of a

 retention of the word-accent here. On the other hand Schöll, De acc., p. 18, wholly misapplies the very late scholiast on Diunys. Thrax., p. $8_{30}$ Bk., in his attempt to prove that the Greek accent was sometimes observed in song. The schuliast belongs to a time when short syllables were lengthened by the word-
 and word-accents were often made to agree. For the earliest examples of this tendency, v. Monro, Modes of Greek Music, p. 90.
${ }^{2}$ fig. W. Christ, Die Parakataloge im gr. u. röm. Drama, Münch. 1875; Metrik², 676; Zieliński, Cliederung d. att. Köm., Lpz. 1885, 2S8-314. In general, Christ's views upon these questions seem to me much less correct than those of Zieliński; according to the latter, the Greek tragic trimeter was commonly rendered through recitative, the purely comic trimeter through the $\psi \Delta \lambda \eta$ $\lambda \epsilon \xi$ s. So far as concerns this last statement, its correctness depends upon the meaning given to $\psi(\lambda \grave{\eta} \lambda$., which in itself is an ambiguous term. If the absence of musical accompaniment alone is meant, no exception can be taken to the use of this term; but if it be meant that the recitation of the comic trimeter is ' mere speech' or 'mere declamation' in the modern sense (cf. $\psi \iota \lambda \grave{\eta} \phi \omega \nu$ ', Dion. H.
 such a conclusion appears to me to be quite false ; cf. Quintil. II, 10, 13 ; XI, 3, 183, and see esp. Klotz, Grundz. 38 r . The Latin equivalent of $\psi(\lambda \dot{\eta} \phi \omega \nu \dot{\eta}$, in still another sense, is assa vox, Non. pp. 76-77 M.
klass. Alt. 279 ff., 384 ff; Norden, Kuiastprosa, I, 55 ff.; cf. Murray, "Connection between Greek Music and Poetry," in Studies in Honor of Professor Gilderslecve, p. 205 ff.; O. Jahn, Hormcs, II, 418 'ff. A few ancient testimonies, several of which are not quoted in any of the works just named, but are of the same general character as these quotations, may be mentioned here: Quintilian ( $\mathrm{I}, 8,2$ ) shows at some length that the reading of poetry in the schools should be different from the reading of prose (non quidem prosac similis), and should bear some resemblance to song (carmcn); cf. id. I, 10, 29; Plin. Ep. IX, 34, 2; this was the regular custom of the schools in the reading of Vergil, Euripides, and other poets, cf. Macrob.
 Cassiodor. Var. 9, 2I, 3 (decantare); Auson. Ep. XXII, 47 P. (fexu of acumine vocis). ${ }^{1}$ Aristides $\dot{Q} u i n t$. , who belongs to the fifth century A.D., but who often draws from authoritative early sources, expressly names a movement of the voice intermediate between song and speech, which is to be used in
 $\left.\nu \eta \sigma \iota \varsigma), \eta{ }_{\eta} \tau \grave{a} \varsigma \tau \hat{\omega} \nu \pi o \iota \eta \mu a ́ \tau \omega \nu \dot{a} \nu a \gamma \nu \omega ́ \sigma \epsilon \iota \varsigma \pi o \iota o v ́ \mu \epsilon \theta a\right)^{2}$; this statement of Aristides is discussed in the Trans. Am. Phil. Assoc. XXX, 48, by Dr. C. W. L. Johnson, who, after referring to the fact that the points of pitch must have been more stationary in this movement than in conversational utterance, reaches the conclusion that "the metrical quantity of the syllables must have been made more evident than is possible in the case of the spoken sentence"; similarly Nicomachus states that if, in any form of utterance, the quantities of the several tones are distinctly rendered and also the intervals, the voice passes naturally from speech to song (Enchirid., p. 4 M. $\epsilon i$

[^27]

 repeatedly describes the Pythia as giving her responses ( $\lambda \epsilon_{-}$ $\gamma \epsilon \epsilon \nu, \chi \rho \hat{a} \nu)$ in the hexameter or trimeter 'tune' ('musical mode,'
 I, $174^{2}$; cf. the similar use of $\left.\dot{\epsilon} \nu \tau \epsilon i v \epsilon L \nu\right)$, and Plato expressly ascribes both rhythm and musical modulation (áp $\mu o \nu i a=$ Lat. concentus) to 'spoken' poetry (Rcp. $397 b ; 398 d$ ), which he classifies under $\mu$ ovaıк $\eta^{\prime}$ (Rep. $376 e \mathrm{ff}$.;.Phaed. $60 e \mathrm{ff}$.). I may quote also the definition of prose given by Donatus (on Ter. Eun. 2, 3, 14) as 'that form of speech which is not modulated by song' (prorsa oratio, quam non inflexit cantilena). Further, although the ordinary recitation of poetry is usually indicated by the expressions 'speak,' 'read,' 'declaim,' we find the terms 'modulate' and 'sing' also at times in use
 or vox canora (Petron., c. 59; 68; Gell. XVIII, 5, 2). From these and similar notices we may fairly draw the conclusion that no part of the elevated poetry of the ancients was intended for 'mere declamation' in the modern sense, that is, intended for the simple $\sigma v \nu \epsilon \chi \grave{\eta} s$ кiv$\sigma \sigma \iota$ or speaking voice. The case is altogether similar with the chanting of the oratorical rhythms; here also the rhetor's voice adopted a movement intermediate between speech and song, as is expressly stated by Longinus ( $R / h c t$. I, 312 , 14 Sp .), and is well attested for all periods of antiquity (Norden, l.l.). Finally, the view of

[^28]Christ and Westphal, that, in cases of conflict, the Greek musical accents were fully preserved in recitation, seems improbable; more likely is Gleditsch's view (Metr. ${ }^{3}$ 86) that they were preserved only in part ('in gewissem Grade').
2. Probable Effects. - The ancient Greeks and Romans had not passed that stage of development in which a rigorously exact rhythm is viewed as the chief essential of poetry (Gummere, Beginnings of Poctry, pp. 82-115). Hence, as is well known, they required in poetical recitation such a scrupulous observance of the rhythm as can only be paralleled by the insistence of a modern audience upon correctness of tune in singing (Dion. H. de Comp. in med.; other references in Haigh, Attic Theatre ${ }^{2}$, 309). To this end the long and short syllables which vary greatly in length in ordinary speech and do not exist, according to Westphal, in the form necessary for exact rhythm, must be measured more exactly in terms of the time-unit, the $\chi$ póvos $\pi \rho \hat{\omega} \tau o s ;$ especially must a long syllable be given approximately twice the value of a short one, the ratio which Aristoxenus (p. 18 W .) states existed in song, but which did not exist in speech according to Westphal (III ${ }^{3}, 8 \mathrm{ff}$.). The careful enunciation which in this way becomes necessary for the rhythmizing of speech is often mentioned by the ancients. Thus Dionysius Thrax (first century b.c.) declares that 'prosody' must be observed in reading verse, and that the metrical art ( $\tau \epsilon \in \chi \nu \eta$ ) of a poem is perceived through 'trained reading according to prosody'
 evidently meant such a precise rendering of the quantities, i.c. such an enunciation of the syllables in terms of the $\chi$ póvos $\pi \rho \hat{\omega} \tau o \varsigma$, as will produce rhythm ${ }^{2}$; cf. also Dion. H. de Comp.

 esting account of the reading of verse in the schools, states that he was required to recite with an observance of the rhythm as well as of the pauses and clausulae (Colloquia Scho-

[^29]last., Röder, p. 14: versus ad numerım et distinctum et clausulam . . . reddo ad praeceptorem); cf. Quintilian's remarks upon obscrvatio ('precision'), IX, 4, IO4 and 95, and the frequent references to poetry as 'moulding' the pronunciation of the young (e.g. Hor. Ep. II, I, 126 os . . . figurat). This 'moulded' pronunciation in its extreme form is the well-known $\pi \lambda a \dot{a} \sigma \mu a$, the use of which the ancients often ${ }^{1}$ disapprove for the simpler metres (Quint. I, 8, 2; 1I, 6), but require in the rendering of the more difficult rhythms (Christ ${ }^{2}$, 90 , 682 ; cf. Westphal ${ }^{3}$, III, 8). It is evident that the effect of a carefully moulded $\pi \rho o \sigma \omega \delta i a$ (cf. under I above) upon the word-accent must often have been very great, especially in the case of an accent which is partly expiratory like the Latin, and the variable quantity of many syllables in early Latin seems to result from this fact. Thus the final syllable of dómi, under the influence of the word-accent, tended to shorten in popular speech, and is often so used by Pl . in the first foot, before the beating of the time was fully begun; but in those parts of the verse where the time was strictly observed this syllable has regularly the value of two $\chi$ póvol, i.e. dom $\bar{\imath}$, and in this pronunciation the expiratory accent must have been practically wiped out (cf. V. Henry, Comp. Gr. ${ }^{2}$, Eng. tr., p. 87; L. Müller, R. M. ${ }^{2}$, 468) ${ }^{2}$; cf. obmitttébat (where the verse-accent also assists in the

[^30]shortening) and omizttēbat. In a similar way our ancient authorities recognize also for prose an easy and colloquial pronunciation, which is called sermo, or oratio remissa (Auct. ad Her. III, 13, 23), but they prescribe for elevated language an emphatic kind of utterance which involves a sustained effort of the voice and is called contentio, or oratio acris (Auct. ad Her. ibid.; Cic. Off. I, 37, 132 ; II, 14, 48, etc.); cf. de Or. III, 45, 177: non enim sunt alia sermonis, alia contentionis verba, . . . sed ea nos cum iacentia sustulimus e medio, sicut mollissimam ceram ad nostrum arbitrium formamus et fingimus. This contentio zocis, or tense voice, passes readily over into the singing or modulated voice ; cf. Cic. Off. I, 37, 133: sine contentione vox nec languida nec canora.

It is probable, then, that the limits of variable pronunciation have been sufficiently great in Latin to admit the existence of two distinct forms of pronunciation: 1) A formal and dignified pronunciation which is strictly quantitative, and which in its extreme form - the $\mu \in ́ \sigma \eta$ kívךбıs - usually possesses no appreciable stress-accent. ${ }^{1}$ 2) An easy and
normal accent (i.e. Zieliński's 'Vulgäraccent'); for the popular speech pronounces dóm', with 'half-long' ultima, and hence, as is well known, the Romans do not admit in their poetry two iambic words in succession in the rhythmized form domit. Consequently I greatly prefer the form of statement adopted by Zieliński, p. 242: "Die quantitativ bevorzugte Silbe hatte die Tendenz, im Redefluss zu einer tonisch hevorzugten zu werden. . . . Vollends in der rhylhmisch bewegten Rede lag die Versuchung nahe, die accentuirte Kürze vor der Länge zurücktreten zu lassen." On the other hand, I am not prepared to accept Zieliniski's conclusions upon facerint as the sole form of the oratorical accent for anapestic words, since he himself hesitates greatly (p. 231) between the accents ficerìnt and fàcerént. Finally, Zielinski's conjecture (p. 241 f.) that the 'oratorisch-poetischer Accent' is identical with the archaic popular accent of the third century b.c., seems to me unnecessary; it is rather to be viewetl as the accent which the rhythmizing process and a precise observance of quantity ( $\mu \dot{\epsilon} \sigma \eta \kappa i \nu \eta \sigma / s$ ) engender in the language of all periods. One very late ancient grammarian, Vergilius Maro (Keil, Suppl., 190), actually professes to recognize in some form of Roman pronunciation the accents règés, amd, etc., but we can of course give little credence to such a source.
${ }^{1}$ Uppgren, Metrisch. Komp.d. Ter., who has a general discussion of this subject, does not go so far, yet he writes (p. 113, n. 1): "Bei den verschiedenen Bewegungen innerhalb der konstanten Versbewegung kann doch gar recht diese Stimmhöhe . . . wenig oder schwach herausgehört worden sein, . . . wie solche Nebenbewegungen beim musikalischen Dirigieren immer eingehalten werden";
colloquial pronunciation, in which a weak stress-accent is developed at the expense of quantity. ${ }^{1}$ All Roman poetry, since it is at once quantitative and a form of the $\mu \dot{\sigma} \sigma \eta \kappa i \nu \eta \sigma \iota \varsigma$, is based (with the exception of the unusual quantities in early Latin) solely upon the strict quantitative pronunciation; it is to be noted, however, that, under certain favorable quantitative conditions, an accentual pronunciation has been developed in the Latin language as a whole, and has greatly weakened all short syllables immediately preceding or following the accent, e.g. génĕ̌re, péctŏre, àpĕrire, etc.

Law of the Relation between Word and Verseaccent. - In any case, whether the Latin accent be wholly musical, or, as seems more probable, in part also expiratory, it is certain that Latin possesses a single colloquial 'cadence' or 'harmony,' viz. the accentual ${ }^{2}$ (Aristotle's $\dot{\eta} \lambda \epsilon \kappa \tau \iota \kappa \grave{\eta}$ á $\rho \mu о \nu i ́ a$, Poet. 6; Aristoxenus's $\lambda o \gamma \omega \hat{\omega}$ és $\tau \iota \mu \epsilon ́ \lambda o s$, Harm. Elcm. I, 17 W.); with the employment, however, of a stricter quantitative pronunciation and a special arrangement of the quantities, it acquires a score or more of metrical 'cadences' or 'harmonies,' such as the hexameter cadence (Hdt.'s é $\xi \dot{\alpha} \dot{\alpha} \epsilon \tau \rho \circ \boldsymbol{\tau}$ тóvos), pentameter cadence, Sapphic cadence, iambic trimeter cadence, etc. As is natural in different spheres of time and tone, the metrical cadences in general are entirely independent of the accentual cadence, but among them all there is one, the iambic, whose distinguishing characteristic in both Greek and Latin, as we know from many ancient testimonies, ${ }^{3}$
cf. aloove, p. 54 ff. Perhaps we can only say with certainty that the word-accents were very greatly weakened; for so good an authority as Hanssen writes (Zur lat. u. roman. Metrik, Valparaiso, 1901, p. 51): "Es können ohne die geringste Schwierigkeit in einem und demselben Verse zwei rhythmische Strömungen neben einander hergehen." Cf. also Christ, ${ }^{2}$ 59, Schöll, De acc., p. 25 ff., and Professor Hale, Proc. Am. Phil. Assoc. XXIV (1895), p. xxix. It is certain, however, that the verse-tone is the predominant tone in all cases where the words are properly rhythmized.
${ }^{1}$ These variant pronunciations explain the well-known fact that Greek loanwords often assume a double form in Latin, one furm showing a retention of the Greek accent, as Phïlappus (PI.), tÿrănnus (Sergius, IV, 52 S K.), cf. Apollinis ('A $\bar{\delta} \delta \lambda \lambda \omega \%$ ), the other a retention of the Greek quantity, as Philīppus, tyrānnus.
${ }^{2}$ Cf. Cic. Or. 17, 57 : est etiam in dicendo quidam cantus obscurior.
${ }^{3}$ Arist. Poet. 4 fin.; Rhet. 3, 8; Demetrius, $\pi . \dot{\epsilon} \rho \mu .43$; Hephaestion, p. 19
is to approach more closely than the rest to the tone of colloquial speech. ${ }^{1}$ Hence it is not surprising that the poet or poets who arranged the Latin iambic and determined its original form, imposed upon it the law that it should agree with the accentual cadence in the pronunciation of ginize, äpęrire, etc., ${ }^{2}$ and doubtless also in the phenomena of the dipodic law; further, since the popular iambic cadence tends to be associated more or less closely in the Roman mind with the accentual cadence, it is possible that the popular poets, even after the determination of the original verse-form, tended, in some measure, to prefer agreement to disagreement in neutral cases, i.c. in those cases where disagreement was not the usage of the verse (in the manner explained below). Such a tendency as this last would, however, be contrary to the usual rule of Latin verse, and its existence must consequently be considered doubtful. ${ }^{3}$

Finally, we may state the general law which appears to have governed Latin verse in its relation to accent. The Latin metrical cadences or verse-forms were originally constituted entirely without reference to accent, and solely in accordance with metrical laws; no sooner, however, had they assumed a definite form in this way than they began to
W. ; Aristid. Q., p. 38, 19 M. ; Cic. Or. 55, 184; 56, 189 ; 57, 191; 58, 196, etc.; Hor. $A . P .8 \mathrm{I}$; Quintil. IX, 4, 75 f. - Some of these passages are cited by Christ ${ }^{2}$, 315 .
${ }^{1}$ Yet even here the $\pi \lambda \dot{d} \sigma \mu a$ was employed to some extent, as is expressly stated for the comic iambic trimeter by Quintilian, XI, 3, 183: pronuntiatio gesticulationibus molesta et vocis mutationibus resultans; cf. also Klotz, Grundz. 38 I .
${ }^{2}$ See the really excellent discussion of the verse-accents genere, corpore, in Klotz, Grundz. 268-280.
${ }^{8}$ The most general principle that can be stated here is that, after the determination of the norm, any considerable deviation, whether favorable or unfavorable to the accent, was a departure from literary usage and, to that extent, a vulgar usage; see the striking examples cited by Munro. The literary language is especially careful to avoid too close an approach to the accentual cadence (the ordinary tone), as is clearly implied in Cicero's statement, Or. 55, 184 ; cf. Christ ${ }^{2}$, p. 59. On the other hand, popular poetry must not be entirely removed from the spoken tone, and the iambic poets have perhaps sought to avoid a succession of disagreements (continuatio oxytonarum rocum) in the neutral parts of the verse; fur the usage of Phaedrus, cf. Langen, Rhein. Mus. XIII, 198.
respond to the influence of the accent in accordance with a simple psychological law. In view of the uniformity of the Latin accentual system, the result of observing the metrical rules was to produce at certain points of almost every cadence 1) agreement of accent and ictus in the great majority of cases, 2) disagreement of accent and ictus in the great majority of cases. Wherever this result is brought about, the Roman ear is quick to note the relation which usually exists, and to require in the end, i.e. in the course of the historical development, that it shall always exist, that is, to require that the agreement or disagreement shall be made invariable; in other words, the Roman ear remembers the hexameter or the Sapphic or the trimeter cadence at certain points by the relation which it bears to the accentual cadence, which is its simplest and most familiar standard of measurement. In those more numerous parts of the verse, however, where no usual relation between accent and ictus was established, but the effect of observing the metrical rules was to produce sometimes agreement and sometimes disagreement, the metrical cadence remained wholly unchanged, wholly unaffected by the accent, so long as the Roman quantitative system endured.

What relation, it will be asked, does the explanation just given of the development of Latin verse bear to the views of Ritschl and his numerous followers? So far as concerns cases of agreement in caesurae and in verse-closes, this explanation agrees with Ritschl's in recognizing the fact that the agreement has been brought about through the influence of the accent, but differs from Ritschl's in holding that agreement is not sought per se, but in consequence of familiar association. So far as concerns cases of disagreement in caesurae and in verse-closes, the divergence from Ritschl's view is still greater. For Ritschl, as is well known, started from the assumption that the Roman poets found actual pleasure in the agreement of ictus and accent, and hence sought to produce this agreement as often as possible. So acute an observer did not, however, fail to recognize that the Romans had unmistakably sought to produce disagreement
also in many parts of their verse, e.g. while agreement is sought in the second half of the dactylic hexameter, disagreement is required in the first half of the same verse. Hence, in a well-known passage of his writings (Opusc. II, Leipzig, 1868, p. xii), Ritschl sought to explain this latter fact by his famous assertion that the special charm of ancient verse lay in the balancing of agreement and disagreement, in the production of an 'harmonische Disharmonie.' According to this theory, after having sought agreement in one part of the verse for the pleasure which it gave, the Romans next sought with pleasure ('suchten mit Wohlgefallen') to produce disagreement, in order to contrast the two parts of the verse, and seemingly also (though this is not expressly stated) in order exactly to balance the two opposing forces, quantity and accent. Every one will recognize that Ritschl in this account has truly and graphically described an effect which has been actually produced in many kinds of Latin verse; at the same time the process, through which this effect has come about, is explained in a quite impossible manner, or rather is left in large measure wholly unexplained. For how could the Romans seek agreement with pleasure, and then for the sake of an abstraction, such as 'balance ' or 'contrast,' seek with pleasure - disagreement? In point of fact, neither aesthetic pleasure nor aesthetic pain plays any part in this process, which is purely a psychological matter of association.

It remains to note that the general law of the accentual development of Latin verse, which I have given above in my own language, was first clearly stated by an eminent American metrician and a former student of Ritschl's, Professor M. W. Humphreys, in a careful study published in the Trans. Am. Phil. Assoc. IX (1878), pp. 39-58. ${ }^{1}$ The article in question deals chiefly with cases of agreement in the dactylic hexameter, but the same principle is expressly applied

[^31]in one passage to the explanation of cases of disagreement (p. 40). Again, Professor Humphreys has limited his rule in its formal statement to the dactylic hexameter, but I cannot doubt that he regarded it as applicable to other Latin verseforms also. ${ }^{1}$ Since Professor Humphreys' solution of this difficult problem leaves none of the phenomena unexplained, and is in accord, as he has very fully shown, with the historical development of Latin verse, it seems probable that it needs only to be better known to supersede in this field the less complete and less carefully constructed theories of Ritschl and of Meyer. ${ }^{2}$

I Professor Humphreys does in fact state his conclusions in a more general furm, Trans. Am. Phil. Assoc. VII, 112.
${ }^{2}$ Addenda:
P. $53, \mathrm{n}$. - For supposed cases of the use of the apex in Latin Inscrr. to denote the ictus, v. Christiansen, De apicibus, p. 20.
P. 56, n. 2. - The interpretation which I place upon the phrase $\delta \dot{\epsilon} \xi$. $\tau 6 v o s$ requires perhaps to be more distinctly stated. In my judgment $\dot{o} \dot{\epsilon} \xi$. tovos is the hexameter mode, and is parallel to the Lydian mode, the Phrygian mode, and the like. The spoken tone also belongs, as the ancients often recognize in a general way, among the musical modes, but, in the chanting or intoning of verse, it is regularly made subordinate to the new mode which accompanies the verse. If this interpretation of $\tau$ bvos is correct, there will be found no real inconsistency in the various references which I have made to the meaning of the term ; cf. also A.J.P. XXV, 420 (421), n. 5 .
P. 59 (60), n. 1. - Compare the somewhat similar views of Goodell, Chapters in Greek Metric, New York, 1goi, p. 167 f . Several other topics mentioned in the preceding discussion are also very clearly treated by Professor Goodell, viz. the elasticity of syllabic quantity ( $\mathrm{pp} .100,112$ ), the strict observance of rhythm (p. 125), the use of $\pi \lambda \dot{\alpha} \sigma \mu \alpha$ (p. 129, etc.). Professor Goodell is quite right in rejecting (p. 125) Westphal's doctrine of "a sharp separation between the rhythm of song and that of spoken verse"; on the other hand he appears to rely too much in his exposition upon modern parallels (p. 128), and to take too little account of the very important change which has taken place within historical times in the usual method of poetical delivery, although, to be sure, we find $\pi \lambda \dot{\sigma} \sigma \mu a$ aptly defined (p. 50) as "the more exact observance of rhythm that goes naturally with the singing voice."

## IV. - The Accentus of the Ancient Latin Grammarians.

By Dr. Charles w. L. JOHNSON, baltimore, md.

The evidence from which we must derive our conception of the nature of the accentuation of the Latin language is very complex. There is no unanimity among scholars even upon the general character of the accents, although it may be claimed that a considerable majority hold the view that these are stress-accents. They base their conclusions chiefly upon a study of Indo-European accentuation in general, and upon the indications which the etymology of the language and that of the languages derived from Latin afford. The direct evidence of the ancients, however, is strongly in favor of a melodic or musical accent, similar to the Greek accent, if not actually identical with it. An explanation of this state of affairs is often given, to the effect that the ancient Latin grammarians were so completely under the influence of the Greek scholars to whom they owed their erudition that they imposed upon the Latin language a Greek doctrine for which there was little or no justification in the facts. But one can not long remain satisfied with this. Is it possible for such an imposition to hold its ground for centuries? Is it possible for men, whose judgement and whose statements upon other matters we accept as sound, to be so self-deceived or so unscrupulous? Perhaps so; but even then it is our duty to dispose of their evidence by showing clearly how their misapprehension arose, or why they conspired to spread falsehood. I do not know that this has been done. At any rate, here is one aspect of the subject of Latin accentuation which deserves consideration. An exhaustive review of the situation might result in a reconciliation of the two opposing views upon the nature of the Latin accent.

So far as the scope of the present paper is concerned, we shall put narrow limits upon it. We shall ask, not " What was
the Latin accent?" but "What did the ancient Latin grammarians mean to be understood by the term accentus?" It is almost as important to know what they meant, as to know what were the facts; to know what they thought they heard, as to know what they really heard.

In the first place it must be admitted by all that the changes in pitch which accompany speech received recognition at the hands of the ancients, no less when the Latin language was under consideration than when the Greek language underwent an analysis of its character. The musical theorists and the grammarians attacked the subject from slightly different points, and their evidence is clear that in Greek speech there ran through the sentences a sort of melody, and that in Latin also of the period when the language was brought within the purview of Greek scholarship there existed a melodic element which resembled that of the Greek sufficiently to be identified with it. When Cicero (Orator, 57 ) speaks of a cantus obscurior, he is referring to the Latin language, such, presumably, as it was in his own time. The existence, at any rate, of these pitch-changes was acknowledged. Indeed, we could expect little else with the example of the Greeks before them. But we must now ask, "How much further did the ancient students of the Latin language go in their adoption of the Greek terminology, and what were the facts upon which they based their work ?"

The Greek term for the melodic element in the constitution of words and sentences was oftenest $\pi \rho o \sigma \omega \delta i ́ a$. Other terms are found, like the $\lambda o \gamma \omega \bar{\omega} \delta^{\prime}{ }^{\prime} \tau \iota \mu$ é $\lambda o s$ of Aristoxenus (Harmonica Elementa, I, § 42, p. $18 \mathrm{M}, \mathrm{p} .17 \mathrm{~W}$ ), like the $\delta \iota a \lambda$ е́кто⿱ $\mu e ́ \lambda o s ~ o f ~ D i o n y s i u s ~ o f ~ H a l i c a r n a s s u s ~(d e ~ C o m p o s i t i o n e ~ V e r b o . ~$ rum, XI) and his $\tau o ̀ \tau \hat{\eta} s ~ \phi \omega \nu \hat{\eta} s ~ \mu e ́ \lambda o s, ~ \lambda e ́ \gamma \omega ~ \delta ' ~ o u ̉ ~ \tau \eta ̂ s ~ \omega ̣ ं \delta \iota \kappa \hat{\eta} s$
 the most usual expression was $\pi \rho \sigma \sigma \omega \delta i ́ a$, and the diacritical marks with which Aristophanes of Byzantium endowed the language, the written accent signs, were called $\pi \rho \sigma \sigma \omega \delta i a l$, as well as tá $\boldsymbol{\sigma} \epsilon$ s and tóvou. ${ }^{1}$
 $\pi \rho о \sigma \boldsymbol{\sigma} \boldsymbol{i}$ а.

This term $\pi \rho o \sigma \omega \delta_{i} a^{a}$ was taken over into the Latin language in the form accentus, and in those passages where the term accerutus is explained it is asserted, as clearly as words can assert anything, that the Greek $\pi \rho 0 \sigma \omega \rho \delta i a$ and the Latin accentus are one and the same thing.

Aulus Gellius, XIII, 6: quas Graeci $\pi \rho o \sigma \omega \delta i ́ a s$ dicunt, eas veteres docti tum 'notas vocum,' tum 'moderamenta,' tum 'accentiunculas,' tum 'voculationes ' appellabant.

Diomedes, Keil, I, p. 43I, i: accentus est dictus ab accinendo, quod sit quasi quidam cuiusque syllabae cantus. apud Graecos quoque ideo $\pi \rho o \sigma \omega \rho_{\text {ía }}$ dicitur, quia $\pi \rho o \sigma a ̣ ́ \delta \epsilon \tau a \iota ~ \tau a i ̂ s$ $\sigma \nu \lambda \lambda a \beta a i ̂ s$.

Idem, K. I, p. 456, 8 : tenor, quem Graeci dicunt tasin aut prosodian, in flexibus vocis servandus est.

Servius, de Fin. K. IV, p. 45 I , 10 : accentus autem est quasi adcantus dictus, quod ad cantilenam vocis nos facit agnoscere syllabas.

Martianus Capella, III, p. 65, 19, Eyssenhardt: et est accentus ut quidam putaverunt anima vocis et seminarium musices, quod omnis modulatio ex fastigiis vocum gravitateque componitur, ideoque accentus quasi adcantus dictus est.

There is, so far, no suggestion that the imported Greek doctrine of the accents needed amendment to apply to the Latin language. The phenomenon is the same, even if the laws governing it turn out to be different in the two languages.

Proceeding with their analysis of the sounds of the Latin language, the grammarians report that the language possessed, like the Greek, three accents, - the acute, the grave, and the circumflex. These are musical terms and translate Greek words in which also the musical idea is obvious. Just as Dionysius of Halicarnassus speaks from the standpoint of a musician, when he uses the expressions $\dot{\eta}$ óseia $\tau \dot{a} \sigma \iota s, \dot{\eta}$ Bapeía táбıs, ó óg̀̀s tóvos, etc., so do the Latin grammarians employ musical terms without the least reservation or warning, when in analysing the Latin accentus they make their classification of accentus acutus, accentus gravis, and accentus circumflexus.

Varro ap. Sergium, K. IV, p. 531 : prosodiam ibi esse dicimus ubi aut sursum est aut deorsum. quae demissior est a pluribus Bapeía appellatur Graece, Latine vero gravis, ideo quod deorsum est in sede scilicet ponderum graviorum. at eam quae sursum est Glaucus $\dot{\epsilon} \pi \iota \tau \epsilon \tau a \mu \epsilon \in \nu \eta \nu$, item alius aliter, sed nemo adhuc levem vocavit, quamvis id erat gravi contrarium; verum ea nomen obtinet ógeiav, Latine acuta, ideo quod tenuis et omne acutum tenue. inter has est $\mu \dot{́} \sigma \eta$, Latine media, quia limes est per quem duae supra dictae ultro citroque commeant. quartae illi, quia ceteris perplexior est, plura sunt vocabula [i.e. ógúßapus, $\pi \epsilon \rho i ́ \sigma \pi a \sigma \iota \varsigma, ~ \delta i ́ t o v o \varsigma, ~ \sigma u ́ \mu \pi \lambda \epsilon \kappa \tau o \varsigma$, $\kappa \epsilon \kappa \lambda a \sigma \mu \epsilon ́ v \eta$ ]. verum ea nunc ab omnibus $\pi \epsilon \rho \iota \sigma \pi \omega \mu \epsilon ́ \nu \eta$ Graece vocatur, apud nos flexa, quoniam prima erecta rursus in gravem flectitur.

Nigidius Figulus ap. Aul. Gell. XIII, 25 : P. Nigidii verba sunt ex commentariorum grammaticorum vicesimo quarto, hominis in disciplinis doctrinarum omnium praecellentis: Deinde, inquit, voculatio qui poterit servari, si non sciemus in nominibus, ut Valeri, utrum interrogandi an vocandi sint? nam interrogandi secunda syllaba superiore tonost quam prima, deinde novissima deicitur; at in casu vocandi summo tonost prima, deinde gradatim descendunt. sic quidem Nigidius dici praecipit. sed si quis nunc, Valerium appellans, in casu vocandi secundum id praeceptum Nigidii acuerit primam, non aberit quin rideatur. 'summum' autem 'tonum' $\pi \rho o \sigma \omega \delta i a \nu$ acutam dicit et quem 'accentum' nos dicimus 'voculationem' appellat et 'casum interrogandi' eum dicit quem nunc nos 'genetivum' dicimus.

Vitruvius, de Archit. V, 4, 2: vox enim mutationibus cum flectitur alias fit acuta, alias gravis, duobusque modis movetur, e quibus unus affectus habet continuatos, alter distantes. [Aristoxenus's continuous and intervallar motions of the voice are then given.] ${ }^{1}$

Donatus, K. IV, p. 37I, I : tonos alii accentus, alii tenores nominant. toni igitur tres sunt, acutus gravis circumflexus.

[^32]Diomedes, K. I, p. 430, 29: accentus est acutus vel gravis vel inflexa elatio orationis vocisve intentio vel inclinatio acuto aut inflexo sono regens verba. nam ut nulla vox sine vocali est, ita sine accentu nulla est, et est accentus, ut quidam recte putaverunt, velut anima vocis.

Sergius, K. IV, p. 482, 14 : his ita se habentibus sciendum est quod acutus et gravis et circumflexus soli sunt qui, ut superius diximus, naturalem unius cuiusque sermonis in voce nostra [Keil: vocem nostrae] elationis servent tenorem.

Priscian, K. II, p. 5I, 2 I: accidit unicuique syllabae tenor, spiritus, tempus, numerus literarum. tenor acutus vel gravis vel circumflexus.

Ps.-Priscian, K. III, p. 5 19, 25 : accentus namque est certa lex et regula ad elevandam et deprimendam syllabam uniuscuiusque particulae orationis, qui fit ad similitudinem elementorum, litterarum, syllabarumque, qui etiam tripertito dividitur, acuto gravi circumflexo. acutus namque accentus ideo inventus est, quod acuat sive elevet syllabam; gravis vero eo, quod deprimat aut deponat ; circumflexus ideo, quod deprimat et acuat.

The next step is to determine the laws governing the disposition of the accents. It was found that every Latin word, with the exception of those we call enclitic and proclitic, had one point of acuteness and one only. As in the Greek theory of accentuation, so in the Latin, every syllable was regarded as having one of the three accents, but it was not considered important either to mark the grave accents or to refer in every case to their existence, provided the other accents were attended to. Both of these contained a high pitch, for the circumflex was but a combination of acute and grave, and one or the other was found to be always present in a word. Writers would then speak of the accent of a word when they meant the acute or the circumflex, that is, the acute element. With this understood they formulated the law of Latin accentuation, by which the accent was confined to the last three syllables of any word (in which particular it was like the rule for Greek), and, furthermore, had the restriction placed upon it that, except in the case of monosyllables, it could not occupy
the last place (in which particular it differed from the Greek). But it was not sufficient to find the position of the accent only ; it was necessary also to determine its kind, and for this there were laws which stated the facts as observed. A long penultimate syllable bore a circumflex if it was long by nature and the last syllable was short, but an acute in any other circumstances, while a short penultimate threw an acute accent back upon the antepenultimate in words of more than two syllables.

This surely is the meaning of the following passages :
Cicero, Orator, 57-58: mira est enim quaedam natura vocis, cuius quidem e tribus omnino sonis, inflexo, acuto, gravi, tanta sit et tam suavis varietas perfecta in cantibus. . . . in quo illud etiam notandum mihi videtur ad studium persequendae suavitatis in vocibus: ipsa enim natura, quasi modularetur hominum orationem, in omni verbo posuit acutam vocem, nec una plus nec a postrema syllaba citra tertiam, quo magis naturam ducem ad aurium voluptatem sequatur industria.

Quintilian, Inst. Orat. I, 5, 30: namque in omni voce acuta intra numerum trium syllabarum continetur, sive hae sunt in verbo solae sive ultimae, et in his aut proxima extremae aut ab ea tertia. trium porro, de quibus loquor, media longa aut acuta aut flexa erit, eodem loco brevis utique gravem habebit sonum, ideoque positam ante se id est ab ultima tertiam acuet. est autem in omni voce utique acuta, sed numquam plus una nec umquam ultima, ideoque in disyllabis prior; praeterea numquam in eadem flexa et acuta, quia in omni flexa est acuta. itaque neutra cludet vocem latinam. ea vero quae sunt syllabae unius, erunt acuta aut flexa, ne sit aliqua vox sine acuta.

Cicero's acuta wox is the acute element which characterizes every word, whether marked as an acute or as a circumflex accent. Schöll ${ }^{\mathbf{1}}$ argues that Cicero was not acquainted with a circumflex like the Greek circumflex, or he would have referred to it in the passage quoted above, which seems to mention only an acute accent. But in the passage from

[^33]Quintilian it is clear what is the point of view of both writers, for the latter explicitly states that an acuta is a part of every flexa. The doctrine hangs well together.

Other passages where the laws of accentuation are given are the following :

Donatus, K. IV, p. 37 I, 1-30; Diomedes, K. I, p. 431, 6 ff.; Servius, K. IV, p. 426, 6-16; Sergius, K. IV, p. 482, 19 ff.; Ps.-Serg. K. IV, p. 524, 21 ff. ; Pompeius, K. V, p. 127, 12 ff. ; Ps.-Priscian, K. III, p. 520, 17 ff. ; p. $52 \mathrm{I}, 5 \mathrm{ff}$.

In these passages words are given which show all possible combinations of quantities, and the proper accent for each is stated.

Let us now consider some of the difficulties which confront those who see in all these passages a perverse determination to force upon the stress-accents of the Latin tongue rules which were invented for the musical accents of another language.

If, under the term "grave accents," we are to understand unstressed syllables, it follows that stressed syllables are those which are called in the theory acute or circumflex. The question then arises, Was such an acute accent identical with the circumflex in everything but name? That is, was the difference purely imaginary? The assumption forces us into a curious attitude toward the writers quoted. We must believe that they went to the trouble to expound rather complicated rules for the fixing of these accents upon the proper syllables, when not only was this unnecessary from the point of view of the written language, but the distinction they drew could not even be detected by the ear. The statement that the circumflex is an acute followed by a grave becomes absolutely meaningless with the new definitions. In the case of monosyllables, the absurdity of the grammarians' conduct is even greater, for here the presence of a stress-accent hardly declares itself until the word is joined with other words to form a sentence or a phrase.

The following from Donatus is an example of the manner in which this subject is dealt with by the grammarians:

Donatus, K. IV, p. 37I, 8: ergo monosyllaba, quae correptam vocalem habebunt, acuto accentu pronuntiabimus, ut fáx, píx, núx; quae productam vocalem habebunt, circumflexo accentu pronuntiabimus, ut rês, dôs, spês. in disyllabis quae priorem productam habuerint et posteriorem correptam, priorem syllabam circumflectemus, ut mêta, Crêta: ubi posterior syllaba producta fuerit, acuemus priorem, sive illa correpta fuerit sive producta, ut népos, léges: ubi ambae breves fuerint, acuemus priorem, ut bónus, málus. In trisyllabis et tetrasyllabis et deinceps, si paenultima correpta fuerit, acuemus antepaenultimam, ut Túllius, Hostílius: si paenultima positione longa fuerit, ipsa acuetur et antepaenultima gravi accentu pronuntiabitur, ut Catúllus, Metéllus, ita tamen si positione longa non ex muta et liquida fuerit; nam mutabit accentum, ut látebrae, ténebrae: si ultima brevis fuerit, paenultima vero natura longa, paenultima circumflectetur, ut Cethêgus, perôsus: si ultima quoque natura longa fuerit, paenultima acuetur, ut Athénae, Mycénae.

Here and in the other passages it is not a case of confusion between quantity and accent, although the latter depends upon the former.

A number of writers comment on the contrast presented by the two languages, Greek and Latin, in the matter of the laws governing their accentuation. Now, if the Latin accent was radically different from the Greek, what point is there in these comments? Quintilian complains that the Latin language is the poorer for the restriction which prevented an acute or circumflex from falling on a final syllable.

Quintilian, Inst. Orat. XII, IO, 33: sed accentus quoque cum rigore quodam, tum similitudine ipsa minus suaves habemus, quia ultima syllaba nec acuta unquam excitatur, nec flexa circumducitur, sed in gravem vel duas graves cadit semper. itaque tanto est sermo Graecus Latino iucundior, ut nostri poetae, quotiens dulce carmen esse voluerunt, illorum id nominibus exornent.

Is it likely that Quintilian is here comparing two such dissimilar things as a Latin stress-accent and the Greek
melodic or musical accent and remained unconscious of the difference? And if so, how did the introduction of Greek words help the Latin poets?

Athenaeus (Deipnosoph. X, 425 a) says that the Romans imitate the Aeolians in all things, even in their accentuation. Both languages are barytone. It is easier to hold that the Aeolic dialect was stressed in the time of Athenaeus than that a faulty comparison was here drawn between essentially different things.

We are told that Greek words retain their Greek accents when they occur in Latin :

Donatus, K. IV, p. 371, 27 ; Servius, K. IV, p. 427, 10 ; Sergius, K. IV, p. 483, 33 ; Ps.-Sergius, K. IV, p. 525, 8: Diomedes, K. I, p. 433, 4.

Now, what is it that they really retained - a musical accent or a stress-accent occupying the place of the musical accent? Servius on Virgil, Gcor. I, 59, remarks that we must pronounce Epiros with an acute on the first syllable, besides keeping the Greek termination os. See Lindsay, The Lat. Lang., p. 155. What is the real difference in the pronunciation? It can not be a matter of stress accentuation, for the penult is long in either case, and according to the prevailing doctrine in regard to ictus, we must suppose the accents to have become obliterated in verse. If, however, the accents are musical or melodic, this difficulty of a conflict between ictus and accent vanishes. Accent and ictus mingle harmlessly.

Interjections, moreover, are reported to have no definite accents. In the case of monosyllabic interjections this remark would seem to be quite superfluous, if their accents are stress-accents, of which neither definite nor indefinite sorts are readily conceived.

Donatus, K. IV, p. 371, 24: accentus in integris dictionibus observantur, in interiectionibus et in peregrinis verbis et in barbaris nominibus nulli certi sunt. Cf.:

Diomedes, K. I, p. 433, 31 ; Sergius, K. IV, p. 483, 29 ; Ps.-Priscian, K. III, p. 520, 23.

Certain light is also thrown on the belief of the ancient writers by their definition of the syllable. The syllable is a group of elementary sounds uttered in one breath and with one accentus. This definition contemplates the difference in the sound of a syllable according as it is spoken with an acute, a grave, or a circumflex, and the distinction between stressed and unstressed syllables does not seem to be tangible enough to call for mention when the syllable is considered, as it were, in vacuo.

Marius Victorinus, K. VI, p. 26: syllaba est coniunctio litterarum cum vocali vel vocalibus sub uno accentu et spiritu continuata.

Now the evidence given above is not presented as an exhaustive collection of the passages bearing on the subject. As already stated, the nature of the Latin accent is not to be derived solely from the testimonia of the ancients. I have not considered the evidence of the language itself, as revealed in its etymology, nor the evidence of verse-forms; but then the field of the inquiry was narrowed so as to exclude all these. The object was to ascertain what phenomenon in the Latin language was originally understood by the term accentus. I believe that it was a melodic or musical accent, but this does not preclude a belief in the simultaneous existence of a stressaccent. Such an accent may have existed from early times; it may have been present in the Saturnian metre and in the verse of Plautus and Terence; it may never have died out from the language, even that spoken at Rome; or it may have done so only to revive again when Latin was in its decline. We know that the Greek accents were converted from musical to stressed accents, and the corresponding phenomenon in Latin may have taken place at the same time or even earlier. At any rate it is curious that the direct evidence of ancient writers should contain so little in support of a stress-accent. It is not my wish to conceal such evidence if I could ; it is all in Schöll's article. But we must handle all this grammatical lore of the ancients with constant recollection of the fact that, while most of the matter is traditional, some of it may always be original contribution,
or may be so modified as to become such. Many of the later grammarians lived at a time when there is no difficulty in admitting that the accent was stressed. The rules of accentuation were obsolete in their day, and it is not strange that they should have made positive errors in transcribing the doctrine which had come down to them, or should have attempted to make an adjustment to meet the existing situation. The following passages should be considered together. They seem to contain the doctrine of Donatus.

Servius, in Don. K. IV, p. 426, 16: accentus in ea syllaba est quae plus sonat. quam rem deprehendimus, si fingamus nos aliquem longe positum clamare. invenimus enim naturali ratione illam syllabam plus sonare quae retinet accentum, atque usque eodem nisum vocis adscendere.

Pompeius, Comm. Artis Don. K. V, p. 126, 18 : [The grave accent is superfluous. Every word has either an acute or a circumflex.] ut puta malesanus; sa circumflexum habet, ma le nus istae tres syllabae gravem habent accentum. nam ideo dictus est gravis hac ratione, quod minus sonet, quam sonat ille legitimus. . . . sa plus sonat. ideo dictae sunt illae habere gravem accentum, quod et pigrum et minus sonent.

Idem, K. V, p. 126, 32 : ergo illa syllaba quae accentum habet, plus sonat quasi ipsa habet maiorem potestatem. et quo modo invenimus ipsum accentum ? et hoc traditum est. sunt plerique qui naturaliter non habent acutas aures ad capiendos hos accentus, et inducitur hac arte. finge tibi quasi vocem clamantis ad longe aliquem positum. [In the word orator it will be found that ra plus sonat.]

Codex Bernensis 16, K. Suppl., p. xlv: accentus est anima verborum sive vox syllabae, quae in sermone plus sonat de ceteris syllabis. accentus autem a cantu vocatus est, quia in ipso cantu producitur modulatio vocis.

Here it is said that the accented syllable of any word sounds louder than the others. This may very well be true for the time of Donatus (fourth century), but it is curious that Servius and Pompeius consider it necessary to give a criterion for the accent, as if it were a difficult matter to discover it.

The most important question with us is, How much weight are we to attach to these statements in determining what was the nature of the Latin accent at the time when the laws governing it were first formulated? For that time the weight of the evidence is for the existence of what we may safely call, not an accent, but an accentus of a melodic or musical character.

## V. - The Çāntikalpa of the Atharva-Veda.

By Dr. GEORGE MELVille bolling, catholic university of america.

## A. Material for the Constitution of the Text.

The text is based on Weber's transcript of No. 363 (Chambers 144) in the Verzeichniss der Sanskrit Handschriften der königlichen Bibliothek zu Berlin (Vol. I, p. 89), the only Ms. of the Çäntikalpa mentioned by Aufrecht. This Ms. bears the date, samiat 1658, and is written in devanägari. Weber distinguishes two hands, of which the second has generally but not invariably preserved the better reading. The Ms. is evidently a good one, its chief failure being a tendency to interchange long and short $i$; besides this occur interchanges of the sibilants with one another and of $k / 2$ with $s$, though in these and other respects it is far superior to the Mss. of the Pariçiṣtas.

Weber's transcript is the property of the Library of Congress, having recently been purchased by it, together with the rest of his library. It is written in Latin letters, and with separation of the words. No attempt, however, at emendation is made beyond the correction of the most glaring errors. These are obviated in various ways: (I) by a selection between the readings of the two hands; (2) missing letters are supplied in parentheses; (3) the correct form is written with the Ms. reading above it, e.g. ghr $\begin{gathered}\text { taktā, with }\end{gathered}$ " tkā Cod." above; (4) much more frequently a dot is placed under an offending letter or a line under a syllable; exclamation points sometimes emphasize the absurdity of a variant. Upon kandikās 7-II the readings of the Chambers codex of Naksatrakalpa 37-4I have been collated.

These matters I detail here because I have not considered it to be my duty to reproduce them in detail in the critical apparatus, in which it has been my purpose merely to record the readings of the codex. Any emendations which seem to
me of importance, I have discussed in the commentary or introduction. For these I am responsible except in so far as explicit statements to the contrary are made. Credit for all other corrections may be given to Weber, and I am of course solely responsible for any mistakes.

No other Ms. of this text is recorded by Aufrecht, but one apparently calling it, as Sāyaṇa does, the Naksatrakalpa was used by Shankar Paṇdit for his edition of the Atharva-Veda. The library of His Highness the Mahārāja of Bikāner also contained two copies of an Atharvavedī̀ya-muhāçānti that must have corresponded (cf. Rājendralāla Mitra's catalogue, Nos. 299, 300) with the second part of our text. The same is probably true of the Atharvan Çāntikādlyyāya and Çāntividhi, belonging to the Mahārāja of Alwar (cf. Peterson, Detailed report of operations in search of Sanskrit Mss. in the Bombay Circle, 2. 182). A Mahaçāntipaddhati in 260 çlokas, which is described by Rājendralāla Mitra in his Notices of Sanskrit Manuscripts, No. 835, is connected with our text; but this is not the case with the Çantikalpadīpikā, ib. No. 904 . I was informed at the British Museum in 1899 that it possessed a copy of an Atharvan Mahaçcinti, related to the Berlin Ms. of the Çantikalpa, but as I then had no intention of editing the text I made no collation of it. The short quotations from the Indian Mss. show a very corrupt text.

Kandikās 7-1 I of the Çantikalpa are identical with Nakṣatrakalpa 37-4I ; for these I have employed also six manuscripts of the Naksatrakalpa. Five of these have been previously described (cf. Hatfield, JAOS. XV, 207); the sixth (St) is a copy of a Ms. which was sent to me from India by my friend, the late A. W. Stratton, Registrar of the Punjab University, and Principal of the Oriental College of Lahore. A complete collation of the variants of these Mss. is reserved for my edition of the Naksatrakalpa, but all the variants of importance are mentioned in the commentary.

A considerable portion of this text is quoted by Sāyaṇa, as the Naksatrakalpa; these quotations I have collected in the critical apparatus, and have added all variants of the Mss. of his commentary ( $\mathrm{S}^{\prime} \mathrm{Kd}$.), and also of the editor's Ms. of the

Çāntikalpa (P.) whenever reported, by Shankar Pandit. Quotations occurring in portions of the commentary supplied by the editor are included as giving the testimony of P., but are distinguished by being enclosed in parentheses.

## B. Contents of the Text and its Position in the Atharvan Literature.

The text takes its name from the fact that it contains the ritual for the adbhutamaliaçānti or "great ceremony for averting the evil effects of omens and portents" which is most frequently spoken of in the Atharvan ritual as simply the mahā̧̧ãnti and even occasionally as the çānti, кат' $\epsilon^{\prime} \xi \circ \chi \eta \eta^{\prime} \nu$. With four other texts it constitutes the five kalpas mentioned in the Caranavyūha, AVPar. 49. 4. 3: "pañca kalpā blavanti.
> naksatrakalpo vāitānakalpas trtīyah sainhitāvidhih: caturtha āngirasakalpah ̧āntikalpas tu pañcamah.

This classification is so persistently maintained by the Hindu tradition that pañcakalpin," one who possesses (i.e. operates with) the five kalpas," has become a designation of certain adherents of the Atharva-Veda (cf. Bloomfield, The Atharva-Veda, p. 16). Nevertheless, it is obvious that this classification has brought together, for unknown reasons, ${ }^{1}$ works of very different value. Among them are found the Käuçika and Väitäua Sütras on the one hand, and on the other, three texts, which as far as we can see might properly have been included among the Pariçiştcas. The Nakşatrakalpa is, in fact, regularly counted as the first Pariçiş̣a, but there is no evidence to show that either of the other two kalpas was ever included in that collection. Of these three minor kalpas the $\bar{A} \bar{n} g$ irasakalpa is known only from a short abstract by Sāyana, Introduction to his commentary on the

[^34]Atharva-Veda, p. 28. The other two texts are known from manuscripts, and it is my intention to publish shortly an edition of the Naksatrakalpar together with the other Pariçiṣtas.

The position of the text in the Atharvan literature may be summarized as follows: it presupposes a knowledge of the Atharvan Sainhitā in the C̦āunaka recension and also of the Kāuçika Sütra. Its dependence upon the latter text is evidenced, not only by the fact that it cites (15.5; 18.2) by pratīka the mantras of Kāuçika 97.8, but also by a very consistent maintenance of the Kāuçikan tradition of the manipulation of the hymns that not infrequently extends even to verbal correspondences. This cannot fail to strengthen the credit of our text for the treatment of such hymns as are not rubricated in the Kāuçika. Such hymns are found especially in the nineteenth book of the Sainhita $\bar{a}$, upon which our text draws freely in a way that shows its advance from the standpoint of the Kãuçika, a fact that is evinced also in its greater elaboration of ceremonies common to both texts.

Of the Pariçisțas our text seems to have drawn upon the Naksatrakalpa, though perhaps the relations of the two texts may better be explained by the assumption of a common source. It also is acquainted with the ceremony of the Tiladhenu, which is the subject of the ninth Pariçişta. On the other hand, the Uktapariçiştānuàin Kartavyakālāhl, AVPar.
 AVPar. 32, arranges its first nineteen ganas in the order in which they are employed at the Manaçānti; the Caranavyūha (cf. above) cites our text; and finally, most of the Pariçistas, beginning with 3I, prescribe a Mahaçānti (cf. in addition to passages cited below, $33^{\text {b }}$. 4 ; 52. 1. 81; 58. 1. 13; 58 ${ }^{\text {a }}$. 3 . 3 I; 59. I. 19; 68. 5. 28). There is no reason to doubt that the ceremony meant is the one described in our text, with which there are not infrequently coincidences of detail.

The ceremony itself must be preceded by a series of preliminary ceremonies for the propitiation of various powers. The first of these in our text is a naksatranuam upacārah. This is probably the cause of Sāyana's mistake of citing this text as the Nakşatrakalpa, which he does consistently, cf.

Bloomfield, SBE. XLII, p. 233, except for a variant $\epsilon_{\bar{a}}^{n} t i-$ kalpe, at AV 19. 13, p. 317. Two passages in the Pariçistas show a further elaboration in virtue of which a grahayagah is prefixed to this naksatrayagal?. These are:

AVPar. 70. 9. 2 ff. :
devatānāin tato yāgain yathāçuti samācaret.
Yāsamin krticua grahānā̀i the naksatrāanā̀i tatah param:
retīn athā "rtavànç cāi' 'va mahādevaganāāhipān.
Diça̧ ca vidiça̧ cāi' 'va yamendravarınāns tathā :
ví̧veçvarain ca viṣnumin ca yajetā 'dbhutakarma ca.
Süryācandramasāv agnini sarvān grahaganāins tathā:
vāyum tathā 'รvināu cāi' 'va makạ̄āntividhānatah.
AVPar. 18 ${ }^{\text {a }}$. 15 . I :
pratidinaìm grahayāagal. pratidinain naksatrayāgah. pratidinam daçaganā mahā̧ $\bar{a} n t i h$.

Now Sāyana's quotations from the text which he calls the Çantikalpa, show that it was the ritual for a grahayaga, and we may with great probability assume that it is the one referred to in these passages. The Naksatrakalpa, as we know it, is never referred to by Sāyaṇa.

The naksatrānām upacārall is performed as follows: the celebrant, clothed in a new garment, covers with a new cloth the seats for the Naksatras, which are situated to the east of the fire. To these he brings pictures, or images made of wood or metal, of the Naksatras, which are placed with their faces towards the west, i.e. to face the fire. The bringing in of each Nakştra is accompanied by a laudatory çloka, which are perhaps the nakşatrastutayall of Nakṣatrakalpa, 42. 4. These verses are given in sakalapatha, and may be compared in general with those similarly employed at the bringing in of the image of Skanda in the Skandayaga, AVPar. 20. 2 ; ed. by Goodwin, JAOS. i890, p. v. ff. The most interesting thing in them is the astrological classification of the Naksatras into the däruna, ugra, mrdu, dhruva, cara, ksipra, and sādhārana. Compare Weber, Die vedischen Nachrichten von den Naksatra, II, p. 385, who fails to note that this text applies
the term sädhäraṇa to the Kr̛ttikās and Viçākhā. This correction reduces to a minimum the discrepancy with Mādhava. The classification in Bṛh. Sam. 98. 6-II is also identical, except for the omission of Abhijit ; its employment may be seen besides in Bṛh. Sam. 32. 19; 55. 31; 60. 21 .

The color for each Nakṣatra is prescribed, and flowers, garments, and ointment of corresponding colors must be given to them with AV 9. 3. 23-28, and the words, "May their worships the Naksatras receive these." Then at the end of the $\bar{a} j y a b h a \bar{a} g \bar{a} u$ he offers $\bar{a} j y a$ with AV 19.7 and $8 ;{ }^{1}$ havis, with the nakṣatradāivatà mantrāh; ājya again with AV 19. 7 and 8. He then puts fuel on the fire, worships with the abhaya hymn (according to Sāyaṇa AV 6. 40, but more probably with the abhayagana, for which, cf. Käuç. 16. 8; 104. 3 notes), and brings the tantra to its close. The verses with which the offering of the havis is accompanied are twenty-eight in number, and recur also in sakalapātha in Nakşatrakalpa, 37-41. 'In Nakṣatrakalpa, 42. 5, they are rubricated under the designation naksatradāīatā mantrāhl at the naksatrasnānavidhi. As to the origin of these verses - the Vedic Concordance, as far as printed, shows no parallels. In language and metre they are more archaic than either of these kalpas. The text is practically identical in both kalpas, even where it is manifestly corrupt, and consequently was probably stereotyped in a corrupt form before the composition of either kalpa. . Accordingly, I conceive my duty to be to reproduce this text, reserving all emendations for the commentary. The verses may have come originally from the latest portion of some other çākhaz of the Atharva, in which case we may compare the perpetuation of the corruptions of AV 19.7 and 8 in the Naksatrakalpa. The fact that these verses are given in sakalapatha and not cited by pratika, makes it improbable that our text was drawing directly upon the Naksatrakalpa.

The haviniṣi for each Naksatra are listed in a separate section; occasionally the same substance and Nakşatra are
${ }^{1}$ These hymns are here cited by pratika, whereas in NK they are given in sakalapàtha.
brought into correlation in the Naksatrakalpa, either by prescribing it to be eaten under the Nakṣatra, or its use in the Naksatrasniña.

A similar list of daksingas is given, evidently drawn from a metrical source which (or a reproduction of which) is found in the Nakṣatrakalpa, 47-50.

This ceremony must have had other applications than serving as an introduction to the Mahaccāntı, and its independence is recognized by the marked transition with which our text turns to the Malāaçanti itself. The name of this ceremony occurs in the Käuçika, 39. 7, 27; 43. 5; 44. 6; 46. 7; 69.7 (cf. also 9.5 note), but in all these passages it seems to refer to a caturganī çāntilh, a ceremony so much simpler that it has in common with our text little except the name. Furthermore the Kāuçika does not employ the Mahaçānti in its thirteenth adhyāya, which deals with the subject of omens and portents, while this is the very purpose for which the Mahāçãnti of the Çāntikalpa and Pariçiştas is intended.

First the celebrant worships with the mantras specified the Diças, Vidiças, Yama, Indra, Varuna, Viçoç̧vara, Viṣnu, the sun and moon ; or according to others Agni, the Grahas, Väyu, and the Açvins. These alternative series are combined in the passage AVPar. 70. 9. 2 ff., quoted above. Sāyaṇa ignores the use of the mantras of the second series, and perhaps P omits them as its reading : çivàs te sainto osadhaya iti süryäcandramasā̃v (!) iti, looks like the end of the kandikā. The author's adherence to tradition may be seen from the following : Kāuç. 127. 4-8 furnishes the mantras for Varuụa, Vāyu, the Diças, and Agni ; Kāuç. 81. 34, 35 that of Yama;
 used at the worship of the rising sun, Käuç. 58. 22, and in case the sun is eclipsed, Käuç. 99. 3; for Indra's mantra cf. Vāit 2. 14; 3. 3; the Açひvins', Vāit 19. 4; Viṣ̣̣u's, Vāit ro. I, the mantra being AV 7. 26. $3^{\text {c }}$ (Sāyaṇa), not VS 5. 38, etc. (Garbe). In two cases the author has made his own selection, both times judiciously, viz. AV 8. 2. 15 for Süryãcandramasaü, and AV if. 4. 23 for Viçvç̧vara, as it begins yo asya viçvajanmana ǐç.

The mention of the $\bar{a} d i t y \bar{a} d a y o ~ g r a h a ̄ h ~ w o u l d ~ f i x, ~ a c c o r d i n g ~$ to Jacobi, $Z D M G$. XXX, 306, the time of composition of the text as later than 200 A.D.; on the other hand it is older than the Pariçiştas, which precede by some interval the Bŗhat Sainhita, the author of which is said to have died 587 A.D.

The next step in the preparations is the propitiation of Nirgti, the goddess Destruction. This indeed seems to be requisite at all ceremonies to secure prosperity (cf. Kāuç. 18. 6) prosya tām uttarasyāin sāmpadain kurute, Caland following Dārila's: brahmacārisāmpadam limits it to the ceremonies of Kāuç. il. i-13. 12, but Keçava takes a broader view: tatah karmāni kuryāt pāusṭtikāni sāmpadāni ca, which is borne out by the arrangement of the Kauuçika, in which the ceremonies to propitiate Nir rti are placed immediately before the pāusṭikāni. The Çāntikalpa contains two ceremonies for this purpose, that were doubtless originally intended as alternatives. The employment of both, however, is required at the Mahāçãnti as the omission of the latter part is mentioned 24. 3, as one of the characteristics of the Daçagaṇa $\bar{a}$ Çāntill. That they are an essential part of the ceremony is recognized by the Kotilhoma, AVPar. 31. 5. 6 :

> Mahāçantividhānena nirmath $\bar{a} \bar{a}$ 'gniin samāhitah :
> tāvat kuryād budhah sarvaini yāvan no nāirrtain krtam.

The celebrant clad in a black garment kindles by night in aìrana-grass (andropogon muricatus) a fire at a cross-roads to the southwest of his village, taking the light from a funeral fire. To the south of this fire he erects a clay image representing Nirpti in a black garment - the image is placed with its face towards the north. He adorns it with black flowers, burns incense, and makes a bali-offering of split(?) and bearded grains, certain cakes, ground sesame, liquor, meal, sour gruel of fruits, meat, honey, edible bulbs of the dioscorea alata, fruits, flowers, a porridge of rice and sesame, fish and cakes. Then with his face towards the statue (consequently with his back to the fire?), he offers with the mantras specified raw flesh, iñgiḍa oil instead of $\overline{a j} j a$, chaff, the points and panicles of reeds, thorns of a plant called "dogstooth," and
grains, each separately but mixed with pebbles, then reed points without such mixture, then an oblation of pebbles. He makes an oblation of chaff in a saucer that has been in contact with the fire, and breaks the saucer over the back of an ass with the words, "Slain are the haters of the Brahmans."

Or he may offer a kettle of rice to Nirrti. He goes down to the water (after both of these ceremonies?) muttering AV 6. 26. i, fastens to the bank of a navigable river, where it makes a bend to the south, a mat of drift reeds, sprinkles it while reciting the apäin süktäni, throws the black garment in the water, puts on a new garment, utters a benediction, puts on sandals, turns round while reciting AV Io. I. 32 (7. I3. I, according to Sāyaṇa), and returns home.

The last part of the ceremony is the clearest ; its kernel is composed of the faribhāṣās for nirrtikarmāni, Kāuç. 18. 2-5; to this is added a prescription from Kāuç. 39. 26, where there is also question of getting rid of dangerous substances; and finally the author has prefixed, apparently of his own accord, the direction for the muttering of AV 6. 26. I.

The first part is alluded to in the Ghrtakambala AVPar. 33. ${ }^{\text {a }}$. 3 f.:
.niçākāle bahirgrāme kuryād agniniveçanam.
Yajeta nirrtimin tatra krṣnavāsā( () catuspathe:
yathoktāir nāirrtāir mantrā̀(r) hazirbhiç ca yathākramam.
Its offerings of flowers, incense, and the multiplicity of gifts are characteristics of the later ritual, that have abundant parallels in the Pariçisṭas. The time, place, black garments, and virana-grass are familiar elements in the nirrtikarmani and other uncanny practices. The kraayäda agnily seems most naturally to mean a fire kindled from a funeral fire, though that it may have a wider meaning may be seen from Caland, p. 149, Anm. 6; comparable is the Kotihoma, AVPar. 31. 9. 2, with its use of uncanny fires:

> cāndālāagnāu citāgnāu vā sūtikāgnāv athā 'pi vā hāvayed (cf. the fuller text ap. Caland, p. 183).

For the offering of split (?) grains, cf. Hillebrandt, RitualLitteratur, p. 176; the beard of grains evidently has the
same evil symbolism as the thorns of trees (cf. Kāuç. 83. I I, where the direction is given to select a place on which grow thornless trees and plants). Raw flesh is the food of demons, AV 8.6. 23, and employed accordingly in witchcraft, $\mathrm{AV}^{\circ} 4$. 17.4; 5. 3I. I. For iñgidı oil, cf. the witchcraft paribhāsāa, Kāuç. 47. 3; for chaff, cf. Bloomfield, 557, 6I7; for reeds, Kauç. 47. I, and the use of çarablusstci at the sinister performances of $36.14 ; 47.43$. Pebbles are mixed with the offerings in a nirrtikarman, Kāuç. 18. 13, and in the exorcism of the storm, ib. 38.5 .

Of the mantras, AV 8. 2. 12, I3 and ape 'ta etu nirgtily are employed in Kāuç. 97, in case of quarrelling in the family, when it is considered nirrtigrthittann ; AV 6.63 and 84 are rubricated in Kāuç. 52. 3 at a ceremony for freeing one from fetters. The hymns show that the fetters meant are those of Nirṛti, and if in the Kāuçika more material bonds are meant, our text has returned to a conception more in accord with the primary purpose of the hymns. AV 4. 36 is an imprecation against Piçāaas, evil-disposed demons; in the last stanza they are delivered over to Nirgti. The celebrant of our ceremony desires this to be done with all malevolent powers, and accordingly employs this hymn while the other mantras are to secure his own liberation.

Of the Mahāçãnti thirty variations are named, partly from their divinities, partly from the objects to be secured. None of these names occurs in the earlier ritual, but about half of them in the Pariçistas. These, with the number of their occurrences, are: Amrtā (iI); Rāudrī (io); Mähendrü (5);
 Brā̀mì Prājāpatyā, Gāyatrı̄̀(?), Kāuberī, Ādityā Yāmyā (1). Vàyavi is employed at $70^{2}$. 4. I instead of Vāyavyā; a Sauıryù çantilu is mentioned at $70^{\circ}$. 6. 5, which is not identical with the $\bar{A} d i t y \bar{a}$ of our text, and at $70^{\mathrm{b}}$. 29. I a Kāpotā çāntill. But apart from these no çãnti, except those of this list, is prescribed in the Pariçisṭas.

The occasions on which each variety is to be used are next specified. The scope of many, however, is so badly defined that it is impossible to justify each prescription of a certain
form in the Pariçistas; the following passages, however, may be quoted: AVPar. 72. 5. I f.: yatra yac chayanc và 'tha vastre
 nrnuān || atra brāhmīm mahā̧̧āntion kāraycd; 72. 5. 2: rājyakāmo 'rthakīmo vā pūjayet tu bṛhaspatim; 70. 13.2: prājāpatyāin tatah çāntiò prajārthī kāraycn nuphah; 3I. 8. I: paracakrāgame tv aindri, and at 65. 3. 6 it is: aurș̣tes tu vināaçan̄; for the Rāudrī cf. 64. 10. Іо: sariarogapraçamanīn, 31. 8. 2 : rāudrı̄ sarvādbhutotpattāu, $7 \mathrm{O}^{3}$. 10. I : vrkẹãdbhutavi-
 the Vāyavyā is prescribed in case of vāyavyeṣu (utpāteṣu), which include an akāliko vāyutl; at 60 . 1. 6 the Abhaya is prescribed in case of danger, bhaye.

The ceremonial differences between these varieties of the Mahā̧̧ãnti consist in the employment of different mantras
 different amulets. These are next specified.

For the $\bar{a} v a \bar{a} i k a \bar{a}$ mantrāh, whenever a gana of the same name exists, it is employed - thus the rudra-, aparajita-, vāstospatya-, and abhayaganas - except that the ādityagana, AVPar. 32. $19^{\text {b }}$, is not employed. ${ }^{1}$

Similarly the nirrtimanträlh (the term is new) are employed at the Näirritu; sometimes the connection is etymological ; so the bhäuma anuvāka at the Pārthivíu and the citrāgana at the Bhärgavi. Sometimes the hymns are similarly employed in the Käuçika, either in the worship of the same god (cf. Prājäpatyä and Kāuç. 127.9; Bārhaspatyā and Kāuç. 59. 19) or to obtain a similar object at the kāmyāni karmañui-cf. Vāiçvadevī and Kāuç. 59. I; $\bar{A} g n e y \imath ̄ ~ a n d ~ K a ̄ u c ̧ . ~ 59 . ~ 15 ; ~ A ̄ i n d r i ̄ ~$ and Kāuç. 59. 5. The vyāhrti- and chando-ganas do not occur elsewhere. In harmony with our text, AVPar. 70 $0^{\text {a }}$. 4. I: vāyavyām eva çăntāu ca viāyoh savitur. àvapct.

Setting aside the hymns from the nineteenth book, all the hymns except three are rubricated in the Käuçika for the

[^35]tying on of amulets of the same substance as are here prescribed. In one of these cases, the same substance is used in Kāuç. 28. 9, but not as an amulet. Noteworthy is the fact that our text substitutes for mantroktam of Kāuç. 26. 35, sahasrakandam found in the third stanza of the hymn, while the commentators explain it as yavamani for reasons given by Bloomfield, p. 285.

The Amrtā is then explained as the tantra of all the forms ; that is, their performance differs only in the substitution of the proper $\bar{a} v a \bar{a} p i k \bar{a}$ mantra $\bar{a} h$ and of another amulet with its corresponding mantra. The celebrant, who must know AV 19. I. I, takes pure water from rivers or pools and recites over it that mantra. He then performs the Full Moon Sacrifice to the end of the $\bar{a} j y a b h \bar{a} g \bar{a} u$ (note that this may be done on any day (cf. above pratidinain daçagan̉. çāntilh), a fact that bears on the discussion ; Caland, p. vi f., and Bloomfield, Gött. gel. Anz., 1902, p. 495 f.); he then consecrates the holy water, afterwards reciting AV 19. 2. 1; 8. 7. 26 [close parallels are Kāuç. 44. 3, 4; 53. 6, 7; 136. 9; cf. the commentators to the first two passages]; he thrice sprinkles the fire. with the water, places part in a jar for washing (certain unspecified objects), and retains part for the rest of the ceremony. He then makes an oblation of fibres of the açvattha tree (?), rice, barley, horseradish, water, bdellium, and poison(!).

Another oblation of pepper, abrus precatorius, lagenaria vulgaris, reed panicles and points, accompanied by the $c \bar{a}$ tanagana; another oblation of inizida oil with the same gana; then various kinds of wood are placed on the fire, and he worships with the same gana. Then without a mantra he makes an oblation of various plants.

At this point is intercalated a ceremony which is an elaboration of that described in Kāuç. 5I. 14, for the protection of a house. Its requisites are a staff of tumbara-wood, a sadani$p u s p \bar{c}$-plant, yellow mustard plants with ten leaves, ten stones, and sand. These are covered with the leavings of an oblation (of ajpa) made with AV 5. Io, some of which is also placed in the holy water. He draws circles in all parts of
the house (one in each corner, in the middle of each side, in the centre, and on the roof, i.e. one for each of the diçis), pours the sand into them, sprinkles them with holy water, and puts a stone in each one. Above the door he draws another circle, proceeds as before, and places the staff, etc., in it. He makes separate oblations to the diças with AV 3. 26, and worships them with AV 3.27. The leavings are placed in a jar while oblations are made with the subsequent mantras.

Then he recites ten ganas and the Apratiratha hymn (AV 19. 13); this must be muttered a second time, and he must recite AV 4. 13. I; 5.30. I; 8. I. I; 2. I, and II.4. I-12; then AV II. 4. 13; then the $\bar{a} v \bar{a} p i k \bar{a}$ mantrăh and the rest of AV II. 4 ; then the Rudra- and Räudra-ganas (this seems an interpolation, as it is inconsistent with the arithmetic of 24. 3, 4).

Then eight other ganas are recited; the omission of these and the "lower part" of the nairytam karma constitutes the difference between the Mahaççanti and the Daçaganua çāntilu. At the end of all the ganas he must have the Brahmans pronounce benedictions (cf. AVPar. 33: 3. $3:$ ganāntesu yathāçakti brāhmanān svastivācayet).

Then follows an oblation of bdellium in silence, the bestowal of a gift upon the Raksas, oblations with the ayn-sya- and patnivanta-ganas, the leavings of which are placed respectively upon the yajamāna and his wife. The washing (äplavanam; cf. Caland, p. 12, Anm. 9) of the person for whom the rite is performed follows.

The amulet of rice and barley is next fastened on, after it has been anointed with the leavings of an oblation made with AV il.4. A pot of rice is cooked according to the pazkayajina ritual, offered with the $\bar{A} v \bar{a} p i k \bar{a}$ mantrāh, and then the Full Moon Sacrifice is brought to a close. Feasts to the Brahmans are given and fees, the specifications for which are in concord with Kāuç. 94. 16, 17 (cf. Weber, Omina und Portenta, p. 354).

The ceremony is characterized by such a heaping up both of mantras and ceremonies as to preclude the hope of finding much clear symbolism underlying either.

## C. Language and Metre.

Three strata are to be distinguished: the text proper, the twenty-eight çlokas of the āvāhana, and the Nakşatradāivatā mantrāk, the last two being quotations.

The Naksatradāivatā manträh: on account of the condition of the text it is profitless to attempt a detailed account of their peculiarities. The metre is jagatī mingled with tristubh; unlike the jagatì verses of the Pariçiştas, they do not conform to the classic requirements, but show the freedom of the older period and the imperfections that are characteristic of Atharvan metres (cf. Bloomfield, The Atharva-Vcda, p. 4i). Hiatus, resolution of semivowels, and protraction of long vowels occur; a clear case of double sanidhi, nobragāil. for $n a$ uragāil., is warranted by the metre in 8. 2 , but this test fails in 10 . 3, where the Mss. are divided. The weight of Ms. authority is in favor of the omission of visarga before st-. Noteworthy are the following grammatical peculiarities, all of which are, however, textually uncertain. In noun inflection: äpah, acc. plur. in 10. 3; rohinũ, instr. sing. in 7.2 ; in verbal inflection : viniyoja, unreduplicated perf. in.7. 2 ; ceti, form of stem attested only for RigVeda, in 8.4 ; prasarjata[ $k$ ], unaugmented impf. and rare stem in 10. I; patave, a dative infinitive in II. I.

The çlokas of the $\bar{a} v \bar{a} h a n a$ are constructed with greater freedom than those of the text itself. The following deviations from the classic standard occur: hypermetric padda in 5. 2; hiatus within päda, 2. 2; between pädas, 2. 3, 5; 3. 5 ; 4. 3.4 (bis); $5.4,8$; only twice ( $4.3 ; 5.4$ ) is it written; in odd
 5.3,8. Double saimdhi occurs but once, 2.4, and as it is between two pädas must certainly be removed. Metrical shortening is found in $2.4 ; 4.4 ; 5.7$ and 8 . No grammatical peculiarity occurs, unless punarvaso in I. 6 be treated as pragrhya, which involves less departure from the manuscript; cf. manyo iti in 18.7 and Bloomfield, Käuç., p. xxxviii. Lexically noteworthy is the fact that the feminine sadhaki is found
in 4.4 instead of sādhikā; and that pūrvapūrvaka in 4.3 is an unrecorded extension of pürvapürva.

The text proper consists of about one thousand words of prose and forty-two çlokas. In kandik $\bar{a} s \mathrm{I} 3$ and 17 the prose betrays the fact that it was drawn from a metrical source. The metre of the çlokas is practically in conformity with the classic standard. The only deviations are: a hypermetric $p \bar{a} d a$, in 22. I ; hiatus within $p \bar{a} d a$ is found in $6.6,-a r-$; cf. Wackernagel, $A I G .$, p. 314, but the case in 24.8 is a Vedic quotation; between pādas, 6. 2; 21. 4; in odd pādas a closing cadence $-\cup \_\simeq$ occurs in 6 . 1,5 ; and - - $^{\smile}$ in 6. 4. Noteworthy is the shortening in 24. 1, tathā 'bhay $\check{a}$ parājitāu; metrical lengthening is perhaps to be assumed in 15. 2: sthäpaycn nirrtūbhägìm. There is but one clear case of double sanidhi: ahatavāsägnelh, 1. I, as dhruvasthänopasādinãm, 6. 6, and sarvãuṣadhayah, 12. 2, may be compounds, while khalaisṭakāh, 13. 2, is an emendation. Grammatical irregularities: çaşkulyah, acc. plur., 15.3; julıvan in 22. 2 is best emended.

A number of new or rare words may be noted :
sam̈pātayati, 22.2, denom. from sainpāta (cf. Bloomfield, Kāu̧., p.lvi). sarpi for sarpis, 12.5 ; 13. 1; probably to be emended.
$\bar{a}$ valekhanī, "image,". 15.2 (cf. Bloomfield, $K \bar{a} u ६$, ., p. xlvii).
bha $\bar{g}_{\mathrm{g}}^{\mathrm{z}}$, "image," 15.2 . Such a word must be assumed to defend the Ms. reading: nāirrtimi bhāg $\bar{i} m$, and may have originated from a substantive use of e.g. nirṛtibhāg $\bar{\imath}$, "representing Nirrti" " (sc. pratikrtih), but it seems simpler to assume lengthening in the compound (cf. Wackernagel, $A I G ., \S 264$ b.), and emend to nirrtīh $\bar{a} g i m$.
lomaka, "hairy," 15.3 , of grains "bearded," hitherto quotable only in compounds.

Various botanical names:
¢vadanti, 15. 5 (M: szadantí) is not in PWW.; its formation is similar to that of vyaghradanti AVPar, 5. 1. 5, which is also new. Synonymous are çvadaisstraka (tribulus lanuginosus), vyāghra-dainstra- (same), and çvadañsṭīa (asteracantha longifolia).
kroọā, 15.4 ; PW. s.v. krodacūdā mentions krodā as $=$ mahāçravanik $\bar{a}$ on the authority of the Räjanighantu. But as kroda $=$ the edible
bulb of the $v \bar{a} r \bar{a} h \bar{\imath} k a n d a$ (dioscorea alata) and krodī according to the same authority also has this sense, we may either equate krod $\bar{a}$ and kroḍ $\bar{z}$ or emend: madhu-kroḍ̄- -phatāni ca, or better madhu krodān phatāni ca.
pūtadāru, 19. I: pūtudru, pūtadru, pìtudāru are the forms hitherto known.
$k r$ shnati, 2 I. I: this fem. has not been hitherto attested. The form given by the lexicographers, but not quotable, is krsnalà.

¢atimga, 21. 4 : probably corrupt.
$\varsigma \bar{a} l m u l a$, ibid.: in sense of "cotton" $=\varsigma \bar{a} l m a l i$; quotable only in compounds; given by lexicographers but not quotable in sense of "rosin of the cotton plant." The first meaning is more probable here.
malā, bbid.: flacourtia cataphracta, hitherto not quotable.
Technical designations of Ganas and Hymns:
$k r t y a \bar{a} \bar{u} s a n a, 23.1=k r t y a ̄ p r a t i h a r a n a$.
yaksmopaghāta, $23.2=$ takmanāacana.
svapnāntika, ibid. $=$ duhsvapnanā̧ana.
¢āntī̀a, 23. $4=$ çantātīya.
In conclusion I wish to express to Mr. Herbert Putnam my gratitude for the courtesy and kindness with which he, as librarian, has extended to me all possible facilities for utilizing the resources of the Library of Congress.

## D. Text of the Çĩntikalpa.

I. 1. Atha nakṣatrāṇām upacārań vakṣyāmo n 'hatavāsā̀gneḥ purastād a ahatena vastreṇo 'dagdaçenā "'sanāny avachādya kṛttikādīny ṛ̂kṣaṇy āvāhayed ^ āvāhayiṣyāmi çubhām kṛttikām ity aṣtāviñçatyā ||
2. Āvāhayiṣyāmi çubhām kṛttikām devapūjitām | ehi sādhāraṇe devi jyeṣthe dakṣa-sute çubhe ॥

Double samdhi is marked by the sign for crasis in Greek. In prose passages, where punctuation seemed necessary, I have employed a wedge ( $\wedge$ ) to avoid disturbing the samdhi as presented by the manuscript.
I. 1. Sāyaṇa, at AV 19.7, p. 283: atha . . . vakṣyāmaḥ. M upācāram. M kṛtikādiny. M kṛkṛkām. M asṭāviǹçatyām.
3. Ā vāhayāmi varadānin rohiṇīn candra-vallabhām | ehi rohiṇi dharmajñe dhruvakarmasu çobhane \|f
4. Āvāhayāmi varadām andhakām çaçi-vallabhām| ehi me andhake devi mṛlukarmasu çobhane ||
5. Ārdrā̀m āvāhayiṣyāmi nakṣatrañ bāhu-sanjinakam | ehy ärdre cāru-sarvānge dāruṇe rudra-sammite ||
6. Resṣın āvāhayiṣyāmi dharmajĩam tu punarvasum! punarvasa ihā "gaccha carakarma-prasādhaka || 1 ||
II. 1. Puṣyam āvāhayiṣyāmi nakṣatram kṣipra-samjũakam| ehi puṣya mahābhāga poṣan vardhaya sarvatah ||
2. Āvāhayāmy açleṣàm bhaktānām çrī-vivardhanīm| açleṣe tvam ihā 'bhyehi dāruṇe vijaya-prade \|
3. Maghām āvāhayiṣyāmy ugrañ nakṣatram ojasā| ehi me subhage devi sarvāgha-v̇iniṣūdani $\|$
4. Ṛkṣm āvāhayiṣyāmi pūrvaphālguni-samjiñakam | ehi bhāgya-mahābhāga ugrakarma-prasādhaki\|
5. Ṛkṣam āvāhayiṣyāmy uttarāin phālgunīn çubhām| ehi tvain subhage devi dhruve sarvān̄ga-sundari || $\mathbf{2}$ ||
III. 1. Hastam āvāhayiṣyāmi sāvitraǹ kṣipram añjasā| chi sāvitra dharmajña bhaktānām̉ pāpa-nāçana ||
2. Citrām āvāhayiṣyāmi citra-rūpānı manoharām | ehi me varade citre mṛlukarmasu çobhane \|
3. Svātim āvāhayiṣyā!ni nityam uttaramārga-gām| devi svāti tvam abhyelii carakarmasu çobhane II
4. $\operatorname{Ṛkṣam~āvāhayiṣyāmi~viçākhām~ugra-tejasām~|~}$ viçākhe tram ihā 'bhyehi devi sādhāraṇe çubhe \|
5. Ṛkṣam āvāhayiṣyāmy anurādhāǹ varapradām | anurādhe tvam abhyehi mṛdukarmasu çobhane || 3 ||
IV. 1. Jyesṭhām āvāhayişāāmi nakṣatrañ çakra-dāivatam jyesṭhe devi tvam abhyehi dāruṇe cāru-locane ||
I. 3. M candravalabhäm. - 4. Mäihi. M deví. - 6. Ma punarvasor; b punarvasvor. II. 3. Ma ārāhayissuamy. M ojatā. Māihi. Mdevi. -4. M ${ }^{\circ}$-mahābhāgograkarma-ㅇ.- - . Ma ${ }^{\circ}$ sundarí. III. 1. M āihi. Ma pāpabhāçanaḥ; b pāpanāçanaḥ. -2. Ma āvāhayişyāmi. - 3. Ma uttaramārgakāmं ; gām in marg. -4. M devi. IV. 1. Ma dāru.
2. Mūlam āvāhayiṣyāmi nakṣatram dāruṇam mahat| ehi mūla mahābhāga bhaktānām abhaya-prada ||
3. Ŗkṣam āvāhayiṣyāmi pūrvāṣāḍe 'ti-samijũakam| ehi tvam ugre varade āṣạḍhe pūrvapūrvike \||
4. Rlkṣam āvāhayiṣyāmy uttarāṣạdha-sanjnñakam | uttare tvam samabhyehi āṣāḍhe dhruva-sādhaki \||
5. Ṛkṣam āvāhayisyāmi yat tad abhijid ucyate ehi dhiṣnya variṣ̣̣hā 'dya kṣiprakarma-prasādhaka $\| 4$
V. 1. Ṛkṣam āvāhayiṣyāmi çravaṇam sarvakāmadam| açvattha tvam ilıā 'bhyehi carakarma-prasādhaka ||
2. Dhaniṣṭhām āvāhayiṣyāmi nakṣatram çaçi-vallabham | dhaniṣṭhe tvam ihā 'bhyehi carakarma-prasādhaki ||
3. Ṛkṣam āvāhayiṣyāmi nāmnā çatabhiṣāin çubhām | āgaccha tvaḿ çatabhiṣe carakarmasu çobhane \|
4. Rkṣam āvāhayiṣyāmi pūrvabhadrapadānin mahat| ehi bhadrapade pūrve ugrakarma-prasādhaki\|
5. Dhruvam āvāhayiṣyāmi deçe bhadrapadottarām| ehi tvam sumahābhāge mama bhadrápadottare ॥
6. Ṛkṣam āvāhayiṣyāmi revatīm cārudarçanām| ehi revati dharmajñe mṛdukarmasu çobhane '|
7. Ṛkṣam āvāhayiṣyāmi kṣipram açvini-sañjñakam| ehy açvini mahābhāge varade kāmadāyini \||
8. Rkṣam āvāhayiṣyāmy ugram bharaṇi-samjinakam| ehi tvań devi bharaṇi subhage cāru-da(r)ça(na)
ity āvālıya varṇakamayīr verkṣamayīr dhātumayīr vā nakṣatiapratimāḥ pratyañ-mukhīr āsaneșū 'paveçayati \| $5 \|$
VI. 1. Raktain varṇam kṛttikānām phalgunī-dvitayasya tu| hastasya cāi 'va pāuṣuasya māitrasya ca tathāi 'va ca $\|$
2. Pitañ ke-"çasya puşyasya çākra-vāsavayos tathā | çvetann sāumyasya rāudrasyā "pya-vāruṇayos tathā ||
3. Āditya-sārpa-pāitryāṇām brāhmya-vāyavyayos tathā| prosṭhapadā-dvayasyā 'tha çvetam eva vidhīyate \|l
IV. 3. Ma pưrvapūrvike. - 5. M āihi. Ma variṣṭā; b varisṭā. Ma kṣiprakarmaprasādhake. V. 1. Ma çravaṇān. Ma carakarmaprasādhakam. - 2. M dhaniṣtām, or dhaniṣṭā.-3. M çitabhise.-4. M pūrvabhadrapadan. Ma āidi.-6. M āidi revati. -7. M āihy.-8. Ma āvāhyan varnakamayir. VI. 1. M kṛtikāuặ̆n. Ma phālgunīdvitayasya. -3 . Ma ${ }^{\circ}$ duayasya pya.
4. Vicitrarūpañ tvāṣtrasya vāiçvadevasya cā 'py atha | āçvinasya tathā kāryan̉ nityam eva vijānatā\|
5. Kṛṣañ yāmyasya mūlasya pāāạain çravanasya tu| viçākhayoh pitarakte kartavye hi phala-prade \|
6. Eteṣāni cāi 'va ṛkṣaṇānin dhruvasthāno-'pasālinān| yathāvarṇāni puṣpāṇi vāsānisy evà 'nulepanam ||
7. Imā āpa ity etāih ṣaḍbhih pratigṛhṇantu bhagavanti nakṣatıāṇí 'ty etāir yathoktań kṛtvā a 'thā "jyabhāgãnte citrāṇi sākañ divi rocanāni yāni nakṣatrạ̣̄i 'ty ājyań hutvā a 'gnir devo yajvana iti haviṣo hutıā "jyain juhuyāt a samidha ādhāyo 'patiṣ̣̣ate || 6 ||
VII. 1. Agnir devo yajvanaḥ lirṣ̣̣avartmā vāiȩvānaro jātavedā rasāgrabhuk|
sa nakṣatrāṇān prathamena pāvakaḥ kṛttikābhir jvalano no 'nuçāmyatām ||
2. Prajāpatir yaḷ sasṛje prajā imā devānt sa srṣṭvà viniyoja karmasu|
sa sarvabhuk sarvayogeṣu rohiṇī çivāḥ kriyāḥ kṛ̣̣utāun karmasiddhaye ||
3. Vidyāvido ye abhiçocamānavā arcanti çakram saha devatāgaṇāi(h) |
sa no yoge mrgaçiraḥ çivāḥ kriyāḥ çrestharājạ̣ kṛ̣utāin karmasiddhaye ||
4. Devañ bhavain paçupatini haram krçam mahādevain çarvam ugrani çikhaṇ̣inam | sahasrākṣım asitańn yan gṛ̣anti sa no rudraḥ paripātu na ārdrayā ||
5. . . . yā viprāiḷ kavibhir namasyate dākṣāyaṇī devapurādibhir mụbhiḥ |
sā na stutā prathamajāh punarvasuḥ çivāḥ kriyāḥ kṛ̣utān karmasiddhaye || 7 ||
VI. 4. Ma rā py. M āçinasya.-6. Quoted by Sāyana, AV 19. 7. p. 283.-7. Sāyaṇa, l.c., quotes imā . . . hutvā. (S' pratigṛ̣hanti; tantrailh for ity etāih; nakṣatrüni abhayenopaty ājyani.) Ma naksatrāṇity, bis. M samidādhāyo. VII. 1. M nnçãumyatām.-2. Mb sasrjet. Ma çimrā krīyāh. - 3. Of abhiçocamānavā, nav seems to have been read ly Weber on authority of NK. M çukrain? - 4. Ma sarvam. Masiuam. M no 'rdrayā. - $\quad$. Ma viprāi. Mb stutāḥ. Ma prathamajā. Ma çivà.
VIII. 1. Yasya devā brahmacaryeṇa karmaṇā mahāsurain tigmatayā 'bhicakrire |
tam subudhan devagurum brhaspatim arcāmi puṣyeṇa sahā 'bhipātu mā ||
2. Yā na[h] stutaḥ parihiṇomi medhayā tapyamānam ṛ̣̣ibhị̣ kāmaçocibhiḥ|
jaratkāra-sūnor ṛ̣̣ibhir maniṣibhis tā açleṣā abhirakṣantu nỏragāih ||
3. Ye devatvam puṇyalịto 'bhicakrire ye cā 'pare ye ca pare maharsayah $\mid$ arcāmi sūnur yamarājagān pitṛ̂̃ chivāḥ kriyāh kṛ̣̣utām ca no maghā $\|$
4. Yo yojayan karmaṇā carṣaṇidhṛto bhūminin ceti bhaga (h prajāḥ) prasādayan ! taddevatye çivatamām alamkerte phalgunyor iḍe bhajatam ca pūrvayoh ||
5. Stutam pūrvāir aryamaṇañ manịṣibhiḥ stāumi devań jagativācam āirayan l
taddevatye çivatamām alam̉kṛte phalgunyāu na uttare devatātaye || 8 ||
IX. 1. Ç̄̄vāir yuktah çitipād dhiranyayo yasya rathah pathibhir vartate sukhāih| sa no hastena savitā hiraṇyabhug ghiraṇyapäṇị̣ savitā no "bhirakṣatu ||
2. Tvaṣtre namaḥ kṣitisrje manīṣine bhūtagoptre paramakarmakāriṇe |
sā na stutā kṛnutāñ karmasiddhaye citrā [in] devī [ñ] saha yogena rūpabhṛt ||
3. Yaḥ prānināñ jīvayan khāni sevate çivo bhūtvā mātariçvā rasāgrabhuk|
dhvajo 'ntarikṣısya sa sarvabhūtabhṛd vāyur devah svātinā no "bhirakṣatu ||
VIII. 2. Ma kāmaçocībhiḥ. Maçlekhā. - 3. Ma devatỵañ. M sunur. M yarmarājagān. Ma omits pitịn. Ma chīvāḥ. Mb maghāḥ. - 4. M yo yo japan. Ma phalgunyo. - 5. Ma maniṣibhị. M jagañtivācam. M phalgunyo. IX. 1. M hiraṇyabhuk hiraṇyapāṇih. - 2. Ma maniṣiṇe. M bhūtagoptrṇe. Mb naḥ.
4. Yāv iḍitāv ātmavidbhir manị̄iblịh sahitāu [yāu] triṇi savanāni sāmagāu|
indrāgnī varadāu namaskṛtau viçākhayoḥ kurvatām āyuṣe çrīh ||
5. Viçve devā yam ṛ̣̣im āhur mitrañ bharadvājam ṛsitah prasāmavit|
tam jagatyā gāthayā stāumy ugrāị̣ sa mām anurādhäbhir [bhrtakaṇvo] 'bhiraksatu || 9 ||
X. 1. Çatakratur yo nijaghāna çambaram vṛtrañ ca hatvà saritah prasarjata[h]|
sa na stutah prītamanāh puram̉daro marutsakhā jyesthayā no 'bhiraksatu ||
2. Yā dhārayati ojasā 'tideva-padani mātā pṛthivi ca sa sarvabhūtabhṛt|
sā na stutā krụutām karmasiddhaye mūlam devì nirṛtiḥ sarvakarmasu ||
3. Parjanyasrstā̀s tisṛ̣̣ibhir āvṛtain yās tarpayanty abhitaḥ pravrddhaye |
tā stāumy āpo vāruṇī (h . . .) pūrvā "ṣạ̣hā svadhayā 'stu yojane ||
4. Yās trinçatam trīņ̧ ca madanti devā devanāmno nirmitāȩ ca bhūyasaḥ |
tā no 'ṣạḍhā uttarā vaso viçve (çivāḥ) kriyāḥ kṛ̣utām suramatīh ||
5. Yaḥ sarvajñah sarvakṛt sarvabhūtabhṛd yasmād anyan nā 'param kim canā 'sti | nirmitah satyajitah purustutah sa no brahmā 'bhijitā no 'bhiraksatu || 10 ||
XI. 1. Sthānācyute sthānam indrāya pātave devebhyaç ca ya īrayañs trị vicakrame|
tam svid dhi svargam nākaprṣṭham svarvid viṣ̣ur devaḥ çravaṇenā 'bhirakṣatu ||
IX. 4. Ma ị̣atāv. Ma sāhitāu. Ma indrāgni. Ma çroh.-5. Ma jatyā. Ma bhūtakaṇvo. X. 1. M çanvaraù.-2. Ma omits sa; b has for it ca in marg. M nah. - 3. Ma ainbhitah. M pravardhaye. Ma stã stāumy. - 4. Ma traç ca. - 5. M nirmitāḥ. M brāhmā. XI. 1. Mb tāñ. Ma omits svid dhi; Mb sighiḥ. Ma nākaprsṭhāin svarvid; Mb nākaprṣṭāsthavid, with çvavi in marg.
2. Aṣtāu çatāni çvetaketūnāñ yāni tvamcasatvam nijaghāna bhūyasaḥ |
anādeçeno 'bhayaç ca vị̄itāḥ çraviṣṭhābhir no 'bhirakṣa(n)tu vājinaḥ ||
3. Vājā devī devamṛṇānikākubhāv ubhāvājasya natakarmaṇā çivã
tava vrājañ stāumasi devabhojanāu pratyagbhiṣak çatabliṣak çivāu nah ||
4. Çunāsīrāu na(h) pramumota jihmasāu tāu tāu pitṛ̂hyo dadatu stanāu çivāu |
tāu pūrvajāu kṛ̣utām ekapād ajo pratiṣ̣̣hānāu sarva-kāmā-'bhayāya ca ||
5. Sarvārthāya kṛ̣omi karmasiddhaye gaviṣtutāyā nekakāriṇe namạ̣ |
so "hir budhnyah kṛ̣utām uttarāu çivāa pratiṣ!̣ā̃:āa sarvakāmā-’bhayāya ca $\|$
6. Yain mahāhemamṛ̣itah prasāmavid bharadvājaç candramasāu divākaram |
sajuṣtānām açvayujāu bhayāya ca sa naḥ pūṣā kṛ̣utāin revatīn çivām ||
7. Jīrṇanin santań yāu yuvānañ hi cakratu(r) ṛ̣̣in dhị̃ā cyavanain somapāu kṛtāu|
tāu naç cittibhir bhiṣajām asya satkarāu (. . .) prajām açvinyām açvināu çivāu ||
8. Yasya ç̧āma-çabalāu rakṣatạ̣ svadhā duḥkṛt-sukṛdvividhā carsaṇīlhṛtāu
tāu saviț̣̣̄ịc ca savitur dha(r)macāribhir yamo rājā bharaṇībhir no ('bhi)rakṣatu || 11 ||
XII. 1. Atha nakṣatra-haviniṣi a ghṛtam kṛttikābhyah ${ }_{\wedge}$ sarvabījāni rohiṇyāi a pāyaso mṛgaçirase a madhv ārdrāyāi $\wedge$ taṇụulạh punarvasubhyām ^ ghṛta-pāyasah pusyāya^
XI. 3. M natakarmarṇā. M chatabhisak.-4. Ma daddatu. M ajāu.

- 5. Ma sarvärthā. M karmasiddheye. - 6. M yamañ hṇāhe hamrṣitaḷ, with interrogation point above hịā. - 7. Ma cakratuin. M açvibhyäm ( n ? is written over bh). -8. M çămaçabalāu. Mb vamacāribhir. XII. 1. Sāyana, AV 19. 7, p. 283 : atha . . . rohiṇyāi. M ${ }^{\circ}$-haviṣi. M kṛtikābhya. M tuṇ̃ulā.
 a priyang gavah pūrvābhyāǹ phalgunibhyām a akṣatā uttarābhyāñ ^ dadhi hastāya ^ ghṛtapāyasaç cittāyāi ^ ghṛtāktā yavāh srātaye ${ }^{\text {a }}$

3. yavāu-'danāu viçākhābhyām ${ }_{\wedge}$ masurā anurādhāābhya(ḥ) a Kanakañ jyesṭlāyāi a oṣadhimūlāni mūlāya a çālayaḥ pūrvābhya āsạḍhābhyah ^ paya uttarābhyaḷ ^ sarvaratnāny abhijite ^
4. taṇ̣ulā(h) çravaṇāyāu a "dumbara-vaṭa-çuñgāh çraviṣthābhyo a ${ }^{\text {bbjānai puspāṇi çatabhiṣaje a çālayah pūrvābhyān }}$ proșthapadābhyāñ a vrīhiyavā uttarābhyām a ghṛtākṣatā revatyāi ${ }_{\wedge}$
5. kṣīravṛkṣā'n̄kurā açvayugbhyām a krṣuatilāh sarpirmadhumiçrā bharaṇiblyaḥ ^ citrạ̣̄i sākan (divi rocanāni yāni nakṣatrāṇi) ity ājyam hutvā 'bhayeno 'pasthāya tantram parisamāpayet ${ }^{\wedge}$
6. kṛttikābhị̣ pāyasamin sarpiṣā sahe 'ty uktā nakṣatradakṣiṇā ${ }_{\text {a }}$ brāhmaṇān blakteno 'pepsanti || 12 ||
XIII. 1. Kṛttikābhị̣ pãyasam̉ sarpiṣā saha brāhmaṇebhyo dadāti a rohiṇyām akṣatāir māsāị̣ sarpirmiçram sahāu
 dadyāt tāilamiçram upoṣito $\wedge_{\text {A }}$ madhu-sahitān apūpān punarvasvoh ${ }_{\wedge}$
7. suvarṇam pussye a ©çleṣāsu rukmañ a maghāsu madhumiçratilāih çrā(d)dham kuryāt ^ pūrvayoh phalgunyor mañḍakāiḷ phāṇitam khalāiṣtakā a evañ cen madhunā saho 'ttarayor a haste hastiratham yuktam a citrāyānin vrṣalím alamkrṛtāńn gandhāir anuliptāñ a svātāv ekadhanañ dadyād (yad yad) asya grhe priyañ ${ }_{\wedge}$
XII. 2. Maçleṣābhyah. Ma phālgunibhyām. M akṣitā. M ghṛtātkā. -3. M vic̣ākhābhyo. Mb abhijitaye. - 4. M ${ }^{\text {o}}$-vaṭaçringāh. M puşyāṇi. M çălayah ||. Ma vrīha; b vrihiyava. M ghṭtākṣitā. - 5 . Sāyaṇa, l.c., kṣiriveṛkṣākkurā açvinibhyānin krṣnatilạh sarpirmadhumiçrā ( $\mathrm{S}^{\prime}$ omits sarpiḥ${ }^{\circ}$ ) . . iti hutvā . . . parisamāpayet. • M sarpimadhu-º. M omits words in ( ). M parisamāpayeta.-6. M. kratikābhyah. Ma brāhmaṇā ; b brāhmaṇāni. XIII. 1. M kratikābhyaḥ. M akṣitāir mān̄̄āi sarpimic̣ra. M àjāni. Mkrẹarani. M madhusahitān yūpāna.-2. Ma pŭrvayoh phālatunyor maṇ̣akāi. M svalāisṭakā. Ma gṛhe ṣiyam.
8. dhenum rūpasamipannām anaḍvāhāu voḍhārāu madhumanthena saha viçākhayor ${ }_{\wedge}$ anurādliāsu prāvaraṇam $\wedge_{\wedge}$ annain ca çuci jyesthhāyām $\wedge_{\wedge} \operatorname{surā}(\dot{\mathrm{m}})$ mūlena mañhetā 'nnena saha strïbhyo na brähmaṇībhyah ^ pūrvāsv āṣāḍhāsu saktumantha $(\mathrm{m})_{\wedge}$ uttarāsu madhumantham ${ }_{\wedge}$ abhijiti duhitaram visāho'Ktena vidhinā $\wedge_{\wedge}$ veṇu-sahitam kambalan̉ çravaṇe ${ }_{\wedge}$ dhaniṣ̣thāsu vastra-yugam $\wedge$
9. sarvagandhāñ chatabhiṣajy ^ ajamāñsenāu 'danañ pūrvayor ^ urabhramāñsenāu 'danam uttarayo(h) proṣthapadayo(r) ^ dhenuin rūpasamípannām vatsatarīii prasūtām kān̄syadohana-pūraṇīm revatyāñ ${ }_{\wedge}$
10. vastreṇā "chāditāv anaḍvāhāv açvayuji ^ bharaṇiṣu tiladhenum vidhānenā a 'nena vidhinā nakṣatradạkṣiṇā yo dadāti sa nakṣatrāṇāñ yathā somo jyotiṣām iva bhāskaro bhāti sarveṣu lokeṣv iti || 13 ||
XIV. 1. Athāto 'dbhutamahāçāntāu diço yajate vidiço yamam indrani varuṇam viȩveçvaram viṣ̣um sūryācandramasāv agni( $\dot{m})$ grahān vāyum açvināv ity eke ${ }_{\wedge}$ 'tha mantrāḥ \|l
11. āçānām iti diçām vidigbhyah svahe 'tí vidiçāñ ^ yamo no gātum iti yamasye a 'ndre 'mañ pratarań krdhī 'tī 'ndrasyā $\wedge$ ' $p s u$ te rājann iti varuṇasya ^ yo asya viçvajanmana iti viȩveçvarasyo a 'ru viṣṇo vikramasve 'ti viṣṇoh a çivās te santv oṣadhaya iti sūryācandramasor ^ apām agnir ity agner ^ viṣāsahim ity ādityādīnān grahān̄ām uktā ^ vāyav ā run(d)dhi na iti vāyor ^ açvinā brahmaṇā "yātam ity ardharcam açvinor iti || 14 ||
XIII. 3. M dhenur upasaṃpannāv. Ma anūrādhāsu prāraṇam. M mehitā. Ma ākhāḍhāsu; b aṣāḍhāsu. Ma sakturmantha. M madhumantho 'bhijiti. M çravaṇāya. - 5. Ma jyotiṣām ikmāsrāreti; b corrects adding bhā in marg. M ita. XIV. 1. Sāyaṇa, AV 1. 31, p. 162 : athāto . . . diço yajate vidiço yajate; AV 6. 5, p. 12: athāto . . . diço yajate. M atho. - 2. Sāyaṇa, AV 1. 31, p. 162 : āçānām iti. Ma ttyāçānām. Sāyaṇa, AV 6. 5, p. 12: indre 'maṃ . . . 'ndrasya; 7. 87, p. 485: indre 'maṃ . . . varuṇasya. M pratamam. M psu re, with psu also in marg. Sāyaṇa, AV 8. 2, p. 575: uru viṣṇo . . . sūryācandramasoḥ (so $\mathrm{S}^{\prime}$; $\mathrm{P}^{\circ}$ candramasāv iti) and 7. 26, p. 354, uru viṣṇ . . . viṣṇḥ. Ma udityādayo; bāadityādayo.
XV. 1. Athāto nāirrtain karma catvare dakṣine 'pare| kravyādam vīruṇe rātrāu krṣ̣avāsạ̄h pradīpayet ||
12. Sthāpaye(n) nirṛti-bhāgīin kārayed vā "valekhanīm| kravyādād dakṣị̣e deçe kṛ̣navastiān udañmukhīm ||
13. Arcitvā krṣ̣apuṣpāis tān dagdhvā dhūpain bali(iii) haret
balimāinl lomikā dhānāḥ çaskulyah palalañ suıām\|
14. Piṣ̦̣-kulmāṣa-māñsāni madhu-kroḍā-phalāni ca|
puṣpāni kṛsarańn matsyãn apūpān upahārayet ||
15. Atha nirrty-a(bhi)mukho "bhi tain nirṛtir dhattān yat te devī nirṛtir yasyās ta āsani ghore juhomy ārād anātim iti dve ape 'ta etu nirṛtir ity etāih savapāmāñam a iñgiḍam ājyain ^ kambūkāh çarablurṣ़̣ayaḥ çaratūlāni çvadantī-kanṭakā dhānā ity etāni pratyekan çarkanā-miçrạ̣̄i hutvà 'miçrạ̄̆ çarabhṛṣ̦īr atha çarkaā-hutin juliuyāt a sāgnāu kapāle kambūkā-hutini hutvā a hatā brahmadviṣa iti kapālam rāsabhasya prṣṭhe bhinatti ^nāirṛtanin vā carum juhurād ^
16. ava mā pāpmann iti japann udakam abhigacchen a nadya nāvyāyāḥ pradakṣiṇāvarte çāpe-'ṭain nikhaned $\wedge$ apāni sūktāir avasiñcaty a apsu kṛ̣̣nani jahāty a ahatavāsāh punyāhan vācayitvo 'pānaliāv upamucya ^ yathā sūrya ity āvṛtyā "vrajati || 15 ||
XVI. 1. Athāto mahā̧̧āntīr vyākhyāsyāmo ^ 'mṛtā vāiçvadevy āgueyì bhārgavi brāhmī bārhaspatyā prājāpatyā sāvitrī gāyatry ān̄girasy āindrī māhendrī kāubery ādityã vāiṣ̣avī rāstoṣpatyā ,āudry aparājitā yāmyā vāruṇi vāyavyā samtatis tvạstrīi kāumāri nāirṛti mārudgaṇī gāndharvy āirāvatī pärthivy abhaye 'ti || 16 ||
XV. 1. Sāyaṇa, AV 8. 2, p. 575 athāto nāirrtañ karma. - 2. M nāirṛtī̀n bhāgīm. - 3. M çaḥkulyaḥ. - 4. Ma markukroḍā-․ M kṛ̣arani. — 5. Sāyaṇa, 1.c., ārād . . . etāiḥ samamāñsam (so S'; P svavapurmāñam) ī̄giḍam ājyam. M svadantīkantakā. M prasṭhe. 6. Săyaṇa, AV 6. 26, p. 51, ava mā . . abhigacchen. With rest cf. Kātç. 18. $\unrhd_{-2}$. Ma pāpsanv. Ma pradikṣinamāvartañte; b pradakṣinamāvartañte. M krṣṇāu. Sāyaṇa, AV 7. 11, p. 329 : upānahāv upamucya (l avamucya) yathā . . . "vrajati. Ma apanucya; b aramucya. M ārvṛṭā. Ma bujati; b brjati. XVI. 1. Ma mahāçãntir. Ma mṛtyā. M kāuvery. M vāyavyāri Msañtatīs. Ma mārudaṇi; b mārudgaṇi.
XVII. 1. Amṛtāñ divyā-'ntarikṣa-bhāumeṣu prayuñjīta ^ vāiçvadevīin gatā-" yuṣām ^ āgneyīm agnibhaye sarvakāmasya ca a bhārgaviin naksatragrahopasrsṭabhayārta-rogagṛhitānām ^ brāhmīin brahmavarcasa-kāmasya vastraçayanā'gnijvalane ca ${ }_{\wedge}$ bārhaspatyā̀m rājyārtha-çrī-brahmavarcasakāmasyā ’bhicarato 'bhicaryamānasya ca a
17. prājāpatyām prajā-paçv-anna-kāmasya prajākșaye ca ^ sāvitrīm çuddhikāmasya a gāyatrīm chandobrahmavarcasakāmasyā a "n̄girasīn sampatkāmasyā 'bhicarato 'bhicaryamānasya cāi a "ndrīn vijaya-bala-vrṣ̣̦i-paçu-kāmasya paracakrāgame ca ^
18. māhendrini rājyakāmasyā 'dbhutotpatti-vikāreṣu ca ^ kāuberīn dhanakāmasya dhanakṣaye cā ^"dityān çrītejodhanāyuṣkāmasya ^ vāiṣnavīm annakāmasyā 'innaksaye ca ^ rāstoṣpatyām rāstusam̉skārakarmaṇi bhūtikāmasya ca a rāudrīn rogārtasyā 'nāmnāteṣu ca kāmeṣv āpatsu vividhāsu cā ^
19. 'paañitān vijayakāmasya ^ yāmyān yamabhaye ^ vāru-
XVII. 1. Sā̌aṇa, AV 11. 6, p. 86 : aṃ̣tāñ . . prayuñjita. Săyaṇa, AV S. 2, p. 568 : vāiçvaderīm gatāyuṣàm. Sāyaṇa, AV 2. $\mathfrak{6}, \mathrm{p} .220 ; 7$. 87, p. 484: āgneyīm . . ca. Sāyaṇa, AV 2. 7, p. 2295: bhārgavīin . . . ${ }^{\circ}$ gṛhîtānām. Sāyaṇa, AV 3. 22, p. 466; 4. 1, p. 512 brāhmìm ( $\mathrm{S}^{\prime}$ Kd brāhmī, once) . . . ca. 11 bramhma- ${ }^{\circ}$, and repeatedly hereafter. Mb ${ }^{\circ}$ gnirjvalane. Sāyaṇa, 1. 9, p. 59; 7. 52, p. 394; 7. 54, p. 402: bārhaspatçān rājyaçribrahmavarcasakāmasya; 2. 11, p. 244: same phis 'bhicarato . . . ca. ( P with Ma rājyārtham cribrahmavarcasa- ${ }^{\circ}$.) —2. Sāanana, AV 4. 15̄, p. 590 : prājāpatyāin . . . ca; 19. 27, p. 373 : same omitting ${ }^{\circ}$ anua ${ }^{\circ}$. M ${ }^{\circ}$-kāmasyā. Sāyaṇa, AV 19. 21, p. $3 \overline{5} \overline{5}$ : gāyatrīn
 Sāyaṇa, AV 3. 5, p. 360 : ān̄yirasìm sampatkāmasya; 3. 6, p. 366, abhicarato 'bhicaryamāṇaşa ca. Ma ñgīrasīm. Sāyạ̣a, AV 19. 28, p. 383:
 -3. Sāyaṇa, AV 1. 2?, p. 148: mãhendrīin ( $\mathrm{S}^{\prime}$ Kd māhendrī) . . . ca. M dbhutotyabhikāreṣu. Sāyaṇa, AV 19. 31, p. 394; kānberīin . . . dhanaksaye ( $\mathrm{S}^{\prime}$ omits) ca; cf. (5. 3, p. 734). M kāuverìm. Sāyaṇa,
 çritejo ${ }^{\circ}$ (so P: $\mathrm{S}^{\prime}$ Kd, ç̣tatejo $0^{\circ}$ ). $\mathrm{M}^{\circ}$-dhanā̀yuḥk̄masya. Sāyaṇa, AV 7. 25. p. 353 : rāispuavim . . .'mnaksaye ( $\mathrm{S}^{\prime}$ amajaye) ca ; cf. (5. 28, p. 786). Sāyaṇa, AV 8. ⿹勹, p. 622 : rāudrīn rogārtasya. M nānmāteṣu;
 Sāyana, AV 19. 32, p. 404 : yāmyām yamabhaye. Sāyaṇa, AV 4.10, p. 560 : rāruṇin jalabhaye; 18. 4, p. 243: vāruṇinin jalabhaye jalasamikṣaye (ca).

ṇini jalabhaya-jalasanıksayayor ^ vāyavyāńn vāta-vāty $\bar{y} y a \bar{a} n_{\wedge}$ Sumtatinin kulaksaye ^
5. tvāstrīn vastrakṣaye ^ kāumārīi vyādhitasya bālasya ^ nāirṛtī̀m nirṛti-gṛhītasya ^ mārudgaṇini balakāmasya ^ gān-
 kāmasyā ${ }_{\wedge}$ 'bhayān bhayārtasye 'ti || 17 ||
 çāntir asi mahāçāntir asi bhūyasī vasīyasī çreyasì namo 'stu paramāyu(r) dirgham āyuḥ kṛ̣̣otu ma iti a viçve devā iti vāiçvadevyānı a samās tvā 'gne ‘bhyarcate 'ty ārqueyyām ^
2. citrāgaṇo bhārgavyā̀m a brahma jajñānain brahma bhrājad iti brāhmyāin a bṛhaspatir naḥ paripātu paçcād amutrabhūyād iti bārhaspatyāyāiin
3. prajāpatiḥ salilāl iti prājāpatyāyām ^ vyāhṛtigaṇa(h) sāvitryām ^ saptasu chandaḥsv reah kalpayitvā gāyatryādi gāyatryāi ssāhe 'ty evam yathāchandaç chandogaṇo gāyatryā̀n ^ samās tve 'ty āngirasyām ^

Ma jalabhaksayayor; b jalabhaye jalasanksapayor, the addition in marg. Sāyaṇa, AV 4.25, p. 644; 19.34, p. 415: vāyavy̌āin vātavātrāyām. M rātarātyādyām. Sāyaṇa, AV 19. 36, p. 495: sanintatinin kulakṣaye prayuñjīta. M sañtati. - 5. Sāyaṇa, AV 7. 26, p. 354: trạṣ̣rīin vastraksaye; 19. 24, p. 361 : adds prayuñjīta. Sāyaṇa, AV 3. 7, p. 371 : kāmıārīm . . . bālasya. Ma balaça; b halasya. Sạ̄aṇa, AV 19. 44, p. $4 \overline{1} 1$ : nāirṛtam nirṛti- ${ }^{-}$. Sāyaṇa, AV 4. 27, p. 654; 7. 84, p. 475: mārudgaṇīn balakāmasya; 19. 46, p. 463 : adds prayuñjīta. Sāyaụa, AV 4. 37, p. 705: gāndharvīm açva- ${ }^{\circ}$; 19. 25 , p. 367, adds prayuñjita. Ma gāndharvim. Maçrakṣaye. Sāyaṇa, AV 1.9, p. 59 ; 1.30, p. 154; 4.9, p. 554 : āirāvatīm gajakṣaye. (Sāyaṇa, AV 10.6, p. 762; 12. 1, p. 202) : pārthivīủ bhūmikāmasya. (Sāyaṇa, AV 10. 3, p. 743) : abhayān bhayărtasya. XVIII. 1. Sāyaṇa, AV 2. 5, p. 214: athā "vāpikāḥ çāntayaḥ ; 19. 24, p. 361 athā "vāpikāh ( $S^{\prime}$ atha vāpikāḥ) çāntaya ity amṛtāyām. Ma atha vāpikā syātaya; b atha vāpikāḥ çāntaya. Sāyaṇa, AV 2. 6, p. 220 : samās ... āgneyyām; 7. 87, p. 484 : abhyarcate 'ty āgneyyām. - 2. M bhyargavyāin. Sáyaṇa, AV 4. 1, p. 512: brahma . . . bhrājad. Săyaụa, AV 7. 51, p. 394; 7.54, p. 402 : bṛhaspatir . . bārhaspatyāyām. - 3. Sāyaṇa, AV 4. 15, p. 590 : prajāpatiḥ . . . prājāpatỵāyām. Sāyaṇa, AV 19. 22, p. 356: saptasu . . . yathāchandaḥ . . gāyatryāuin samāsaḥ (29, 23) (S saınāsam) ān̄girasyām. M chandast ṛcaḥ. M gāyatryādhi. M yathāchandah chandagano; the visarga in margin.
 mahãă indro ya ojase 'ti māhendry ām a mamā 'gne varca iti kāuberyānın ^
5. Salila-gaṇa ādityāyānı ^ viṣnor nu kam iti vāiṣnavyām ^ vāstoṣpatyagaṇo vāstoṣpatyāyām ^ rudragaṇo rāudryām ^ aparājitagaṇo ‘parājitāyānı ^
6. yad derā devahedanam iti yāmyā yānı candramā apsv antar iti vāruṇyām ^ vāyoh savitur iti vāyavyāgām ^ prānāya nama iti samintatyāńn ^ yena devañ savitāram iti tvāṣṭy āuin ^
7. tvas à manyo yas te manyo iti kāumāryān@ ^ nirṛtimantrā nāirṛtyām $\wedge_{\wedge}$ marutãin manve prajāpate na tvad etāny anya iti mārudgaṇyām ^ açrāntasya tvā manasā yunajmí 'ti gāndharvyām $\wedge$
8. āyuṣyah çāntị̣ svastigaṇa āirāvatyānin ^ satyani bṛhad ity anurākaḥ pārthivyām ^ abhayagano 'bhayāyām iti || 18 ||
XIX. 1. Prāṇãya nama iti vrīhiyavam amṛtāyāti badhnīyād ^ ārabhasve 'ti pūtadāruin vāiçvadevyām ^ agneḥ prajātam pari yad dhiraṇyam iti karṇ hiraṇyam āgneyyām ^ aghadviṣtā devajāte 'ti sahasrakāṇ̣̣ain bhārgavyānin ^
XVIII. 4. Sāyaṇa, AV 2. 5, p. 214 : indra . . . āindryām. (Sāyaṇa, AV 5. 3, p. 734 ) : mamā . . . kāuberyām. Ma namā gni vardha. M kāuveryām. - 5. Sāyaṇa, AV 1. 5, p. 38; 17.1, p. 2: salilagaṇa ādityāyām. Sāyaṇa, AV 7. 26, p. 353 : viṣṇor . . . vāiṣṇaryām. Sāyaṇa, AV 6. 93, p. 190: vāstoṣpatyagaṇo vāstoṣpatyā yàm. Sāyaṇa, AV 1. 2, p. 16; 6. 97, p. 198: aparājitagaṇo ©parājitāyām. - 6. Sāyaṇa, AV 6. 114, p. 233: yad . . . yāmyā̧ām, 18. 4, p. 243: yad devā devahelanam iti yāmyāyā(rin) candramā apsv antar e 'ti rāruṇyām. Sāyaṇa, AV 4. 25, p. 644: vāyoḥ . . . vāyavyăyām. Sāyaṇa, AV 19.24, p. 361 : prānāya . . . trāsṭryām. 7. Sāyaṇa, AV 4. 27, p. 654; 7. 84, p. 475: marutān . . . mārudgaṇyām. Sāyaṇa, AV 19. 25, p. 36S: açrāntasya . . . gāndharvyām. Ma nuyunaṣmī; b nuyunajmī.. M gāndharryāmim. - 8. Sāyaṇa, AV 1.9, p. 59; 1. 30 , p. 154 : āyuşyah (so $\mathrm{S}^{\prime} \mathrm{Kd}$; P: āyusya) çāntisrastigaṇa āirāvatyām; 3. 8, p. 375 ; 19. 10, p. 304 ; 19. 25 , p. 368 : āyusyaḥ çantiḥ svastigaṇa āirā vatyām; 19.9, p. 293 : same, omitting āirāvatyām. (Sāyaṇa, AV 12. 1, p. 202) : satyañ . . . pārthivyām. Sāyana, AV 19.15, p. 323: abhayagaṇo "bhayāyām. XIX. 1. Sāyaṇa, AV 11. 6, p. S6: prāṇāya . . . badhnīyāt. Sāyaṇa, AV 8. 2, p. 568: ārabhasve 'ti pūtidāruin (so $\mathrm{S}^{\prime} ; \mathrm{P}$ : pūtudārum̉) rāiçvaderyām. Sāyaṇa, AV 19. 26, p. 369 : agneḥ . . . iti ( $\mathrm{S}^{\prime}$ inserts karṇam; P : omits it) hiraṇyam āgneyyām. Sāyaṇa, AV 2. 7, p. 225: aghadviṣtā . . . bhārgavyām. M aghadviṣ̣̣hā.
2. hastivarcasam iti hastidantam brāhmyām ^ asmin vasv iti yugma-kṛ̣ṇalañ bārhaspatyāyānin a dūsyà dūṣir asī 'ti sräktyam abhicarato 'bhicaryamāpasya ca a gobhiṣ ṭā pātv rṣabha iti trivṛtan prājāpatyāyām ^
3. akṣitās ta iti yavamaṇim sāvitryām ^ uttamo 'sí'ti mantroktań gāyatryām ^ ā'yam agann iti mantroktam āngirasyā̀in a pumān pumsa iti mantroktam abhicarato 'bhicaryamāṇasya ce ^
4. 'mañ badhnāmi te maṇim dīrghāyutvāya tejasa iti darbhamaṇim āindryām ^ abhivartene 'ti rathanemimaṇim māhendryām ^ āudumbareṇa maṇinā pusṭikāmāya vedhase 'ty āudumbarain kāuberyām ^
5. yad ābadhnann iti yugmakrṣ̣alam ādityāyām ^ nava prān̄ān iti trivrrtam vāiṣ̣̣avyām a abhy arcate 'ty āudumbaram vāstoṣpatyāyām $\wedge_{\text {a }}$ ayam pratisara iti mantroktam rāudryām $\wedge$
6. nec chatrur iti pātā-mūlam aparājitāyām ^ çatakāṇ̣o duçcyavana iti darbhamaṇim yāmyāyām ^ vātāj jāta iti çañkham vāruṇyām ^ jan̄giḍo 'si (jañgiḍo rakṣitā 'sī) 'ti jañgiḍam vāyavyāyām ${ }_{\wedge}$ çatavāro anīnaçad iti çatavāram samtatyām ^
7. agnih sūrya idañ varca iti trivrrtain tiāsṭryān a hari-
XIX. 2. Sāyaṇa, AV 3. 22, p. 466 : hastivaream . . . brähmyām ( $\mathrm{P}:$ some variant for hastidantam̀). Sāyaṇa, AV 1. 9, p. 59 : asmin . . . bārhaspatyāyām. M vāsv. Sāyaṇa, AV 2. 11, p. 244 : bārhaspatyāyăm . . . ca (S'Kd: sraktyam). M asi. Ma srāktyām. Sāyaṇa, AV 19. 27, p. 373 : gobhiṣ. . . sāvitryām (in 3; $\mathrm{S}^{\prime}$ yomaṇim for yava ${ }^{\circ}$ ). - 3. Sāyaṇa, AV 3. 5, p. 360: à 'yam . . āāgirasyām; 3. 6, p. 360: āngirasyāṇ. . . . 'bhicaryamāṇasya ca. - 4. Sāyaṇa, AV 19.28, p. 383 : imañ . . . māhendryām; 1.29, p. 149: abhivartene ... māhendryām. M rathanemimaṇi. Sãyạa, AV 19, 31, p. 394 : āudumbareṇa . . . kāuberyām. M kāuveryām. - 5. Sāyaṇa, AV 1. 3̄̄, p. 179: yad . . . ādityāyām. Mābradhnam. (Sāyaṇa, AV 5. 28, p. 786) : nava . . . väiṣnavyām. M tṛṿtam. Sāyaṇa, AV 7. 87, p. 484: abhy . . a āudumbaram. Sāyaṇa, AV 8. 5, p. 623: ayam̀ . . rāudryām. - 6. Sāyaṇa, AV 2. 27, p. 291: nec chatrur iti pāthāmūlam aparājitāyām; 19. 32, p. 404 : nec . . . pāṭhāmūlam . . . yāmyām (P: yāmyāyām). M ne chatrūr. M duçcavana. Sāyana, AV 4. 10, p. 560 : vātāj . . . vāruṇyām; 19. 34, p. 415 : vātāj . . . rāyavyāyāın M omits words in (). Ma jan̆gị̣am. Sāyaṇa, AV 19. 36, p. 425: çatavāro . . . çatavāram̀ (so $\mathbf{S}^{\prime} ; \mathbf{P}$ : çātāvarī) saḿtatyām. M traninaçad or aninaçad. M çatāvaram. - 7. Sāyaṇa, AV 7. 26, p. 354: agniḥ sūrya idañ viṣ̣̣ur iti . . . tvăş̣̣ryām. Sāyaṇa, AV 3. 7, p. 371: hariṇasye . . . kāumāryām ; 19.44, p. $4 \overline{1} 1$ : harị̣asye . . . nāirṛtyām; 19.46, p. 463 :

ṇasye 'ti viṣāṇāgrań kāumāryām ^ āyuṣo 'si prataraṇam ity āñjanam nāirrtyām ^ prajāpatiṣ ṭā 'badhnād ity astṛtan mārudgaṇyãnin ^
8. tvayā pūrvam ity ājaçṝ̆gañ gāndharvyām ^ ehi jīvam ity āñjanamaṇim āirāvatyām a arātīyor iti phālam pārthivyām.a ayañ me varaṇo maṇir iti vāraṇam abhayāyānı ^ pratisarańn vā sarvatra || 19 ||
XX. 1. Tantrabhūtāñ mahāçāntim pravakṣyāmo yathāvidhi $\mid$
anyāsān̉ viçvaçāntīnām amṛtān viçrabheṣajīm ||
2. Nadībhyo vā hradebhyo vā jalam puṇyan samāharet sañ saun sravantu tad-vidvān abhimantrayate tataḥ ||
3. Çań ta āpo hāimavatīr yāvatīṣu manuşȳā iti| pāurṇamāsam atas tantram ājyabhāgāu yadā hutāu ||
4. Tadā çāntyudakam kuryā( t ) tanmantram anuyojayet | trị̣ proksyā 'gnim tataḥ kumbhe snapanā-'rthā nisecayet ||
5. Paçyann anyāni kāryāṇi na sarvā nikṣiped apaḥ| aȩvatthas tasya lomāni vrīhīneç cāi 'va yavān̉s tathā çigruin hutvā jalaḿ cāi'va guggulum viṣam eva ca || $20 \|$
XXI. 1. Pippalīm krṣnalinn cāi 'va sahān cāi 'va tv alābunā çaratūlāni bhṛṣtiniç ca juhuyāc câtanena tu ||
2. Etenāi 've 'n̄giḍan hutvā samidho 'bhyādadhā̄ti cal ātasīr jātuṣiç cāi 'va trāpusīr māuṣalīs tathā ||
āyuṣo 'si ( $\mathrm{S}^{\prime}$ hi) prataraṇam . . . 'badhnād iti trivrrtain ( $\mathrm{S}^{\prime}$ tanim) mārudgaṇām. M kāuunāryāmāyumãryā̀n āyıṣo. Mb atastrtam. - 8. Sáyaṇa, AV 4. 9, p. 554 : ehi . . āirāratyām. (Sāyaṇa, AV 10. 6, p. 762) : arātīyor . . pārthiryā̀m. M phāūlam. (Sāyana, AV 10. 3, p. 743): ayan̆ı ... abhayāyām. Sāyaṇa, AV 2. 11, p. 245 : pratisaraṇ rā sarvatra. XX. Sāyaṇa, AV 19. 1, p. 249, quotes 1.2 ; p. 250 , quotes $1^{\text {c }} ;$ 19.2, p. 252.2, quotes $2,3^{\text {a }}$; and 4. 37 , p. 705 , quotes $\tilde{o}^{\text {ef. }}$. 1 . M mahâçânti. Ma prarakş̌āmi. M yathāvidhim. S'P sarvaçāntinā̀m. M ric̣rabheṣajam. 2. M sasanisravanítu. $\mathrm{S}^{\prime}$ once, abhimantrayeta. - 3. M pāurnamāsamaghas tantram. - 4. Ma snapanārthañ; b snapanārthāti. - 5. M sarvāṇi kṣaped. M çigru. M gugulañ; $\mathrm{S}^{\prime}$ Pgalguluui. M caḥ. XXI. Sāyaṇa, AV 4. 37, p. 705, quotes as if in succession: $1^{\text {ad }}$, and $5 .-1$. M pisyalim. Ma krṣ̣alāim. Ma saha.-2. M bhyādadhīti. Ma ātūsir; b ātusir. M māuṣalis.
3. Khādirīr atha pāāçis tārsṭāghịh samidhas tathā apāmārgīr athā "'̧̣vatthīr etenāi vo 'patiṣthate \||
4. Oṣadhīin khadiram cāi 'vā 'pāmārga(ì) mahāuṣadham| baja-pin̄gāu çatinganin ca çālmalan malayā saha ||
5. Oṣadhīin sahamānānin tu pŗ̛̣iparṇinin tathā parām | ajaç̣ñginin samasyāi 'tām amantraui juhuyāt sakịt || 21 ||
XXII. 1. Tumbara-danda(h) sadampuṣ|ā tathā 'nye gāurasarsapạ̣̄|
daçapattrā daçā 'ȩmānaḷ sikatā pratisarasya vāi ||
2. Açmavarme 'ti sūktena juhvat sampātayed imān| ānayed apsu çāntāsu sampātān uttarān budhah ||
3. Sarvāsu veçmano dikṣu maṇdalāny anulepayet | nikīrya sikatās teṣu çāntādbhiḥ prokṣayet tataḷ ||
4. Nidadhyād açmanas tatra dvārasyo 'pari lepayet| nidadhyāt tatra daṇdādi nikīrya sikatā iti $\|$
5. Ye 'syāni pratidiçan hutvā prācī dig upatiṣthate | sampātān ānayet kumbhe juhvan mantrāir atho 'ttarāiḷ || 22 ||
XXIII. 1. Prayojyaḥ çānti-samjũo 'taḥ kṛtyādūṣ̂ına eva cal
cātano matṛnāmā ca vāstoṣpatyo tha pāpmahā ||
2. Tato yaksmo-'paghātas tu tata(ḥ) svapuā-'ntikaḥ paraḥ| gaṇāv āyuşaz-varcasyāu tathā 'pratirathan smṛtam ||
3. Punas tad eva japyam tu çantātīyam athā "vataḥ| antak $\bar{a} y \bar{a}$ "rabhasve 'ti prāṇādyā dvādaça tv ṛcaḥ |l
XXI. 3. Ma apāmārgir. - 4. Ma āmärga; b amārga, with pā in marg. M bajanpigāu. Ma çatīingaii. Mb balayā̄. - 5. M âuṣadhinin. XXII. Sāyaṇa, AV 3. 26, p. 482̨, quotes, $\tilde{5}^{\text {ab }} ; 2$. 2, p. 199, quotes, $\tilde{j}^{\text {cld }}$. 1. M sadaumpusyā. M daçaputrā.-2. Ma çūktrena. M juhvan. Ma budha. - 3. Ma daṇdadina nikirya. - 5. M prācī dì. Ma upatiṣṭhati. M juhvana. Ma ttarāuḥ. XXIII. Sāyaṇa, AY 2. 2, p. 199, quotes, 1 cd ; 2. 11, p. 243; 8. 5, p. 622, quotes, $1^{\text {bi }} ;{\text { 2. 14, p. 259, quotes, } 1^{\text {c }} \text {; 19. 13, }}^{2}$,
 ṣaṇa aiva. M pāṣmahā.-2. Ma svapnāntika. Ma ganavāyuçcavavasyā; b gaṇāvāyuçca varcasyā; P gaụa āyusyavarcasya. $\mathrm{S}^{\prime}$ smrtilu. - 3. Ma punas tud. M drāvaças tṛcaḥ; cf. comın.
4. Vyatiṣaktās tu tā sarvāḥ çāntīyena saha smṛtāh | vyatiṣakte tu çāntīye prānāpānāv iti smṛtāh ||
5. Atha mantrān yathākāmam āvapet pūrvacoditān| prāṇasūktasya ya(c) cheṣan kevalañ tat samãpayet| rudrarāudragaṇāv atra nityam çāntān prayojayet || 23 ||
XXIV. 1. Atha svastyayanaç cāi 'va tathā 'bhayă-'parājitāu|
çarmavarmā tatah proktas tathā devapurā smṛtaḥ||
2. Rudrarāudragaṇāu cai 'va tataç citrāgaṇaḥ paraḥ| çānt (y)ādayo daçā ' ${ }^{\prime} m n a ̄ t \bar{t}$ asṭāu svastyayanādayah ||
3. asțādaçagaṇāị̣ sarvāi(r) mahāçāntiḥ smṛiā budhāiḥ | parān astāu gaṇā.ı muktvā yac cā 'dho nāirṛtasya vāi||
4. Eṣā daçagaṇā proktā çāntir nityā manīṣibhiḥ | etām arvānayānādāu snapanārthan niṣecayet ||
5. Pratiṣthāpya tathāi 'va rcām etām eva prayojayet| ganānteṣu ca sarveṣu brāhmanān svastivācayet ||
6. Tūṣṇīn gugguluhomaç ca rakṣobhyo dānam āpnuyāt| namo rakṣobhyo namo mahārakṣoblyo namo rakṣo'dhipatibhyah | namo gaṇebhyo namo mahāgaṇebhyo namo mahāganādhipatibhyaḥ|āyusyam gaṇan hutvā "tmani sampātān ānayati | patū̄va(n)tain hutvā patnyām sampātān ānayati ||
7. Dadhimantham surāmantham் saktumanthaǹ prayacchati| rakṣobhyo dakṣinenā 'tha mantrāir āplāvayet tatah ||
8. Ye purastāt tathā "çānām samam jyotir uto asi| punantu mā tathā vāyoh pūto vāiçvānaras tataḷ \| $\mathbf{2 4} \|$
XXV. 1. Prāṇa-sūktena sampātya bandhyo vrīhiyavāu manị̣ |
alam்kṛtya tathā 'bhyarcya tato dvāu paridhāpayet ||
XXIII. 4. Ma vyatiṣiktās. Ma sarvā?. Maçāntiyena. Maryatisrikte. In marg. tha for tu. Ma çāntiye proṇāpānāvyatismṛtāḥ; b çāntīye prāṇāpānāvyatismrtāḥ. XXIV. 1. Ma adhā. - . Ma citrāgaṇa. 3. Ma aṣt̄̄daçagaṇāi. M māhāçāntih. M parānn. - 4. Mb ekādaçagaṇā. Ma maniṣibhị̣. Ma āitām. Mb arvanayānādāu. - 5 . Ma brāhmaṇonin; b brāhmaṇām. - 6. M guggulahomaç. M rakṣādhipatibhyaḥ.-8. M tathāi. Ma rāiçrānaraḥ smṛtaḥ. XXV. 1. M rrihiçarāu. M dro; tam Bikāner 299 in midst of corruptions.
2. Pākayajña-vidhānena çrapayit̄̄ā caruin budhaḥ| $\bar{a} v a ̄ p i k e n a ~ t a m ~ h u t v a ̄ ~ t a n t r a n ~ s a n i s t h a ̄ p a y e t ~ t a t a h ~|\mid ~$
3. Tad anvāhārya çeṣan tu brāhunanāı bhojayct tataḥ| bhojayet peçalani cā 'nnam tusyeyur yena sā dvijāh |l
4. Brāhmaṇo daça gā dadyād anaḍvāhan tato 'dhikam| sïrādhikain tato vāiçyas tathā prādeçiko hayam ||
5. Rājā dadyād varańn grāman samūho rājavat tathā yathoktāun dakṣiṇāin dadyāt sakallain phalam açnute \| sakalam phalam açnuta iti || $25 \|$ iti çrī atharvavede çāntikalpa(h) samāptah ||
XXV. 3. Ma pāiç̧lain. Ma jena. - 4. M gām. Ma çirādhikam. M vāiṣas. - 5 . Ma samuho rājavart. M çrāu atharvavede.

## 'E. Translation of the Çāntikalpa.

I. 1. Then we shall tell the service of the Naksatras. Clad in a new garment, to the east of the fire, after covering the seats with a new cloth, its fringe to the north, lie must bring hither the asterisms, K!̣ttikā, etc., with the twenty-eight verses. "I shall have brought hither the beautiful Krttikā."
2. I shall have brought hither the beautiful Kṛttikā, honored by the gods: come hither, O neutral goddess, the eldest daughter . of Dakṣa, the beautiful.
3. I an having brought hither the granter of wishes, Rohinī, the beloved of the moon: come hither, O Rohinī, thou knower of the right, thou who art propitious to " constant" works.
4. I am having brought hither the granter of wishes, Andhakā, the beloved of the moon : come hither, 0 goddess Andhakā, thou who art propitions to "kind" works.
5. Ardrä, I shall have brought hither, the nakṣatra that is termed Bāhu: come hither, O Ārdrā, beanteous in every limb, cruel, devoted to Rudra.
6. The asterism that knows the right, Punarvasu, I shall have brought hither: O Punarvasu, come hither, thou who art favorable to " mobile" deeds.
II. 1. Pusya, I shall have brought hither, the naksatra that is termed "swift": come hither, O prosperous Puṣy, increase prosperity (poṣa) on every side.
2. I am having brought hither Açleṣă, she who increases the
welfare of her worshippers: O Açleṣā, do thou come hither, thou cruel giver of victory.
3. Maghā, I shall have brought hither, a nakṣatra harsh in its might: come hither to me, $O$ lovely goldess, thou destroyer of all $\sin$.
4. The asterism, I shall have brought hither, that is termed Pürvaphālgunī: come hither, thou who art distinguished for thy fortune, thou helper of "harsh" deeds.
5. I shall have brought hither the asterism Uttarā Phālgunī, the beautiful: do thou come hither, 0 lovely goddess, constant, beautiful in every limb.
III. 1. Hasta, I shall have brought hither, the asterism of Savitar, swift in its speed : come hither, thou asterism of Savitar, thou that knowest the right, that destroyest evil for thy worshippers.
2. I shall have brought hither the captivating Citrā of various (citra) forms: come hither to me, thou granter of wishes, 0 Citrā, thon who art propitious to "kind" works.
3. I shall have brought hither Svāti that always travels on the northern road: O goddess Svāti, do thou come hither, thou who art propitious to "mobile" works.
4. I shall have brought hither the asterism Viçākhā whose brilliancy is harsh: O Viçākhā, do thou come hither, 0 goddess, neutral, beautiful.
5. I shall have brought hither the asterism Anurādhā, the granter of wishes: O Anurādhā, do thou come hither, thou who art propitious to "kind" works.
IV. 1. Jyesṭhā, I shall have brought hither, the nakṣatra whose divinity is Çakra: O Jyesṭhā, thou cruel, fair-eyed goddess, do thou come hither.
2. Mūla, I shall have brought hither, the great, cruel nakṣatra: come hither, O Mūla, the distinguished, thou granter of safety to thy worshippers.
3. The asterisin, I shall have brought hither, that is termed "Pūrvāṣädhā": come hither, thou harsh granter of wishes, $O$ Āṣạdhā Pūrvapūrvikā.
4. The asterism, I shall have brought hither, that is termed UUttarāṣădhā: O Uttarā Āṣāḍhā, effecter of "constant" (works), do thou come hither.
5. The asterism, I shall have brought hither, which is called Abhijit: come hither, O best asterism, to-day, thou helper of "swift" works.
V. 1. I shall have brought hither the asterism Çravaṇa, the granter of all desires: 0 Açvattha, do thou come hither, thou helper of "mobile" works.
2. Dhanișthā, I shall have brought hither, the nakșatra beloved of the moon : O Dhanișṭã, do thou come hither, thou helper of " mobile" works.
3. I shall have brought hither the asterisın by name Çatabhiṣã, the beautiful: do thou come hither, O Çatabhiṣā, thou who art propitious to " mobile" works.
4. I shall have brought hither the great asterism Pūrvabhadrapadā: come hither, O Bhadrapadā Pūrvā, thou helper of "harsh" works.
5. I shall have brought hither to its place the constant asterism Bhadrapadottarā • do thou come hither for me, O glorious Bhadrapadottarā.
6. I shall have brought hither the asterism Revati, of lovely appearance: come hither, $O$ Revatī, thou who knowest the right, and art propitious to "kind" works.
7. I shall have brought hither the "swift" asterism that is termed Açvinī: come hither, $O$ Açvinī, the distinguished, the giver of wishes; the granter of desires.
8. I shall have brought hither the harsh asterism that is termed Bharaṇi : come hither, O lovely goddess Bharaṇí, of lovely appearance.
9. After having had brought in with these verses images of the nakșatras made out of colors, wood, or metal, he must place them in the seats with their faces towards the west (i.e. so as to face the fire).
VI. 1. (He must make) red the color of the Kṛttikās, of both Phalgunīs, of Hasta, and of the asterisms of Pūṣan and Mitra.
2. Yellow of that which has Ka for regent, of Pusya and those of Çakra and the Vasus: white of those of Soma, Rudra, the Waters, and Varuṇa.
3. White is also prescribed for the asterisms of Aditi, the Serpents, the Manes, Brahman, and Vāyu, and for the two Proṣṭa. pada.
4. A form of diverse colors will always be made by a wise man for the asterisms of Tvaştar, the Viçve Devās, and the Açvins.
5. Black for the asterism of Yama and for Mūla; palaça-color for Çravana; yellow and red must be made (the colors) of the Viçākhe, bringers of reward (they will prove to be).
6. To these asterisms seated in a firm place (he must give) flowers, garments, and ointment of corresponding colors.
7. Having done as stated with the six verses AV 9. 3. 23 ff . and (the words) "May their worships the nakṣatras receive these"; then at the end of the ājyabhāgãu after offering ājya with (the two hymns) AV 19. 7 and 8; after offering from the havis with the verses of sections $7-11$ (=Nakṣatrakalpa 37-41), he must offer ājya. After putting fagots on the fire, he worships.
VII. 1. Agni, the god of the pious, whose track is black, Vãiçvānara, Jātavedas, the eater of the best essences, may he the fire, flaming with the first of the Nakṣatras, the Krttikās, prove propitious for us.
2. Prajapati who created these creatures (prajā), he after creating the gods made them dependent upon the (sacrificial) works; may he the devourer of all together with Rohiṇi, make our rites propitious, in all our undertakings, that (our sacrificial) work may succeed.
3. Çakra, whom the knowers of knowledge, the brilliant men, praise together with the troops of deities; may he, the best of kings, O Mrgaçiras, in our undertaking make our rites propitious, that our work may succeed.
4. May he, Rudra, whom they praise as the god, Bhava, the lord of cattle, the robber, the lean one, the great god, Çarva, the terrible, Çikhaṇ̣in, the thousand-eyed, the black, protect us together with Ārdrā.
5. (The goddess Aditi) who is revered by seers and poets, by gods and then by men, the daughter of Daksa, may she the firstborn, O Punarvasū, being praised by us make our rites propitious that our work may succeed.
VIII. 1. By whose piety, (sacrificial) work, and acuteness, the gods practised witchcraft (abhicāra) upon the great Asura, him the wise guru of the gods, Brhaspati, I praise; may he together with Pusya protect me.
2. Those whom, praised by us, I impel by my wisdom, who
were inflamed by the Rishis whose desires were as flames, the wise Rishis of the son of Jaratkāra; may they, the Açleṣās, together with the Serpents, protect us.
3. The meritorious great Rishis both of later and former times, who wrought out godliness; $I$, the son, praise the fathers who belong to King Yama; and may Maghā make our rites propitious.
4. Bhaga who brings into union with the (sacrificial) work the supporters of mankind, and observes the earth, bringing joy to creatures; $O$ ye two who have him for divinity, most propitious, (well) adorned, I choose the worship of (ye) the Pūrve Phalgunyāu.
5. Raising my voice in the jagatī I praise the god Aryaman who was praised by the wise men of former times; may the Uttare Phalgunyāu, who have him for divinity, the most propitious, (well) adorned, (be propitious) to our worship of the gods.
IX. 1. Whose golden chariot yoked with brown, white-footed steeds moves on the pleasant paths; he, Savitar, whose food is gold, Savitar, whose hand is gold, may he protect us together with Hasta.
2. Obeisance to Tvastar, to the creator of the world, to the wise, to the protector of the world, to the performer of the greatest deeds; may she, the goddess Citrā, the bringer of beauty, praised by us, together with our undertaking, make for the success of our (sacrificial) work.
3. Mātariçvan, the eater of the best essences, who having become propitious, giving life frequents the mouths of them that breathe ; may he, the flag of the air, the support of all creatures, the god Vāyu together with Svāti protect us.
4. The two who are chosen by the wise, the knowers of the $\overline{\mathrm{A}}$ tman, the two singers of samans who together (come to) the three pressings (of the Soma); may they, Indra and Agni, the revered granters of wishes, under the Viçākhe make good fortune for long life.
5. Bharadvãja the Rishi, whom all the gods called friend (mitra) . . .; him I praise with the jagatī song; may he together with the harsh (asterisms) the Anurādhās protect me.
X. 1. He of a hundred powers who smote down Çambara, and after slaying Vrrtra let loose the streams; may he, the breaker of fortresses, whose friends are the Maruts, may he, praised by us, with gladdened spirit, protect us together with Jyesthan.
2. Mother Earth who with her might supports the place of the great gods, she is also the supporter of all creatures; may she, praised by us, the goddess Nirṛti, at all our works, make Mūla (propitious) to the success of our (sacrificial) work.
3. Those who let loose by Parjanya, gladden on all sides for its increment that which is enclosed by the three sickles; them I praise, the Waters, sacred to Varuṇa. . . . May Pūrvā Āṣāḍā be with svadhā at our yojana.
4. Those who delight the thirty-three gods, and the more numerous, infinite ones whose names are gods; may they, the Uttarā Āṣādhās, O all ye Vasus, being well pleased, make our rites propitious.
5. He who is the knower of all, the creator of all, the supporter of all creatures, apart from whom there is nothing else; may he, the infinite, truthful, much praised Brahmā, together with Abhijit, protect us.
XI. 1. He who made three strides bringing forth an abode for Indra, who shakes not in his abode, that he might drink (the Soma) and for the gods; may he that knoweth all upon the back of the firmament with Çravaṇa protect heaven for us.
2. . . . may the heroes being strengthened together with the Çraviṣṭhās protect us.
3. . . . thy host we praise, may the two who serve as food for the gods, Pratyagbhiṣaj and Çatabhiṣaj, be propitious to us.
4. He has set in motion for us the slow-moving Çunāsīrāu; they have given to the Fathers their kindly breasts; may Ekapād Aja make the first-born Pratiṣthānāu (propitious) to all our desires and our freedom from danger.
5. For all purposes and for the success of my (sacrificial) work I make obeisance to the worker of many deeds that was praised by the seers; may he, Ahi Budhnya, make the Uttarāu Pratiṣṭānāu propitious for all my desires and freedom from danger.
6. . . . may he, Pūṣan, make Revatī propitious for us.
7. The two who having been made drinkers of the Soma by their wiscom made the Rishi Cyavana young. when he was old; may they, the two physicians, his benefactors, the kindly Açvins, by their knowledge . . . our offspring under Açvinī.
8. He whose (dogs) Çyāna and Çabala keep guard over the svadhā, the friends of men (but) not alike to the doer of evil and of grod ; . . . may he King Yama together with the Bharaṇis pro-
tect for us them and the Fathers (?) together with them that follow the laws of Savitar.
XII. 1. Then the gifts offered to the naksatras: ghee to the Kṛttikās; all seeds to Rohiṇi; milk-rice for Mṛgaçiras; honey to $\bar{A}$ 'drā ; (rice) grains for the Punarvasū; milk-rice with ghee for Puṣya; 2. all plants to the Açleṣãs; sesame and (rice) grains to the Maghās; panicum italicum to the first Phalgunyāu; unhusked (grains) to the second; curds to Hasta; milk-rice with ghee to Citrā; barley smeared with ghee to Svãti; 3. two porridges of barley to the Viçākhe; lentils to the Anurādhās; gold to Jyesṭthā; the roots of plants to Mūla ; rice to the first Asạdhās; milk to the second; all jewels to Abhijit; 4. (rice) grains to Çravaṇa; budsheaths of the udumbara and the ficus indica to the Çraviṣthās; water-growing flowers to Çatabhiṣaj; rice to the first Proṣṭhapadāu; rice and barley to the second; ghee and unhusked grains to Revatī ; 5. sprouts of milky trees to the Açvayujãu; black sesame mixed with clarified butter (sarpis) and honey to the Bharaniis. After offering the ajya with the hymns AV 19. 7 and 8, after worshipping with the abhaya (gana or hymn?) he must bring the tantra to a close. 6. The nakṣatra-fees are stated in the following section. They propitiate the Brahmans with food.
XIII. 1. Under the Krittikās he gives to the Brahmans milkrice with clarified butter; under Rohinī a porridge mixed with clarified butter along with unhusked grains and beans; under Mrgaçiras a milch goat; under Ārdrā, fasting himself, he must give a dish of rice and sesame mixed with sesame oil; cakes with honey under the Punarvasū; 2. gold under Pusya; under the Açleṣās gold; under the Maghās he must perform a çrāddha (offering to the Manes) with sesame mixed with honey; under the first Phalgunyāu along with certain cakes (mandaka) thickened sugar-caue-juice and oil cake bricks (?); the same with honey under the second; under Hasta an elephant-chariot harnessed; under Citrā a female of the Çūdra caste (vrṣalī) adorned and anointed with perfumes; under Svāti he must give as a gift of honor (whatever) in the house is dear to him ; 3. a beautiful cow, a pair of draught oxen with a beverage of honey under the Viçãkhe; under the Anurādhās a mantle; and pure food under Jyeș̣̣hā; under Mūla let him bestow spirituous liquor together with food for non-brahmanical women; under the first Aṣãạhās a beverage made of barley;
under the second one of honey; under Abhijit his daughter with the wedding ritual; a woollen cloth and a flute under Çravanaa; under the Dhanisṭhās a pair of garments; 4. all perfumes under Çatabhiṣaj; a porridge with goat's flesh under the first, a porridge with ram's flesh under the second, Proṣthapadāu; a beautiful cow, a heifer, one that has had a calf and can fill a brass milkpail, under Revatí 5. a pair of oxen covered with a cloth under Açvayuj; under the Bharaṇīs a sesame cow according to ritual. He who according to this rule gives the nakṣatra fees, shines in all the worlds like the moon among the naksatras, like the sun among the heavenly bodies.
XIV. 1. Next at the great ceremony for averting (the evil effects) of portents he sacrifices to the cardinal points, the intermediate points, Yama, Indra, Varuna, the lord of the universe (Çiva), Viṣuu, the sun and moon, Agni, the planets, Vāyu, and the Aegrins according to some. Then the mantras.
2. AV 1. 31. 1, for the cardinal points; "To the intermediate points. Svāhā." for the intermediate points; AV 18. 1. 50, for Yama; AV 6. 5. 2, for Indra; AV 7. 83. 1, for Varuna; AV 11. 4. 23, for the lord of the universe; AV $7.263^{\text {c }}$, for Viṣnu; AV 8. 2.15 , for the sun and moon; AV 4. 15. 10, for Agni; AV 17. 1.1 ff ., are said (to be the mantras) for the planets, the sun, etc.; Käuç. 127. 5 , for Vāyu; the half of AV 5. 26. 12, for the Aęvins.
XV. 1. Next the ceremony of Nirrti : at a cross roads to the southwest, clad in a black garment he kindles in the night a funeral fire in vīraṇa grass.
2. He must erect or have made to the south of the funeral fire, a clay image representing Nirṛti clad in a black garment, with her face to the north.
3. Having honored her with black flowers, having burned incense, he must make a bali-offering: he must give split (?) and bearded grains of corn, certain cakes, ground sesame, liquor, (4) meal, sour gruel of fruits, meat, honey, kroḍā, fruits, flowers, a porridge of rice and sesame, fish, and cakes.
5. Then with his face turned towards (the image of) Nirpti, with AV 4.36. 10; 6. 63.1; 84. 1; 8.2.12, 13; Kãuç. 97.8 , after offering separately the following substances mixed with gravel, raw meat, ingiḍa-oil as ājya, chaff, reed points, and panicles, "dogstooth" thorns and grains of corn, reed points unmixed
(with gravel) ; then he must offer an oblation of gravel, (and) an oblation of chaff on a heated saucer; with the words "Slain are the haters of the Brahmans" he breaks the saucer over the back of an ass. Or he must sacrifice a kettle of rice to Nirrti.
6. Muttering AV 6.26.1, he must go to the water. In a place on the bank of a navigable river where it makes a bend to the south he must fasten a mat of drift grass. With the hymns of the Waters he sprinkles (the mat). He leaves the black (garment) in the water. Clad in a new garment, after uttering a benediction, he puts on his shoes, turns round with AV 10.1. 32 (or 7. 13.1), and comes back.
XVI. 1. Next we will tell the Mahāģāntis (the great ceremonies for averting the evil effects of prodigies). (They are) the Amṛta (immortal), those of the Vięve Devās, of Agni, of Bhrgu, of Brahmā, of lḷ̣haspati, of Prajāpati, of Savitar, of the Gāyatrí, of An̄giras, of Indra, of Mahendra, of Kubera, of Aditi (or Āditya), of Viṣṇu, of Vāstoṣpati, of Rudra, the Aparājitā (unconquerable), those of Yama, of Varuṇa, of Vāyu, (the one called) Continuance, those of Tvastart, of Kumāra (Skanda), of Nirrti, of the troops of the Maruts, of the Gandharvas, of Airāvata (Indra's elephant), of the Earth, and (the one called) Abhaya (the one that produces immunity from danger).
XVII. 1. One should employ the Amrrtā in case of portents of sky, air, or earth; that of the Viȩve Devās for the dead; that of Agni in case of danger of fire, or for one who wishes everything; that of Bhrgu for those who are tormented by danger produced by the nakșatras or planets, or seized by disease; that of Brahmā for one who wishes preëminence in theology or virtue (brahmavarcas), or in case of fire blazing out in one's garment or bed; that of Brrhaspati for one who wishes a kingdom, wealth, good fortune, or brahnavarcas, or is practising witcheraft, or is its victim;
2. That of Prajāpati for one who wishes offspring (prajā), cattle, or food, or in the case of the death of offspring; that of Savitar for one who wishes purity ; that of the Gayatrī for one who desires to be a preëminent theologian in the department of metre; that of Angiras for one who desires success, or is practising witchcraft, or is its victim; that of Indra for one who desires victory, strength (or troops), rain (v.l. prosperity), and cattle, or in case of the coming of a hostile army;
3. That of Mahendra for one who desires a kingdom, or in the case of the occurrence of portents or monstrosities; that of Kubera for one who wishes wealth or in case of the destruction of wealth; that of Aditi (or Āditya) for one who desires good luck, brilliance, wealth, or life; that of Viṣnu for one who desires food or in case of the destruction of food; that of Vāstospati at the performance of the consecration of a house, or for one who desires welfare ; that of Rudra for one tormented by disease or in the case of desires not specified, or in case of various misfortunes;
4. The Aparājitā for one who desires victory; that of Yama in danger of death (yama); that of Varuna in danger of water or in case of the destruction of water; that of Vayu in the case of a wind or whirlwind; Continuance in case of the destruction of the family;
5. That of Tvastar in the case of the destruction of a garment; that of Kumāra (the boy) for a sick child; that of Nirrti for one in the grasp of misfortune (Nirrti); that of the troops of the Maruts for one who desires strength (or troops) ; that of the Gandharvas in case of the death of a horse; that of Airāvata (Indra's elephant) in case of the death of an elephant; that of the Earth for one who desires the earth; the Abhaya for one tormented by danger (bhaya).
XVIII. 1. Next the Āvāpikāḥ Çāntayaḥ: at the Amṛtā, "For the çānti thou art the çānti, thou art the great çānti, the greater, the better, the more excellent. Obeisance be to thee. May it make for me long life that reaches old age." AV 8. S. 13, at that of the Viçve Devās. AV 2.6.1; 7. 82.1, at that of Agni.
2. The Citrāgaṇa at that of Bhrgu. AV 4.1.1, and Kāuç. 97. 8, at that of Brahmā. AV 7. 51. 1, and 53.1, at that of Bṛhaspati.
3. AV 4. 15. 11, at that of Prajāpati. The Vyähṛtigana at that of Savitar. After arranging verses in seven metres with the gāyatrī first, "To the gāyatrī. Svāhā," and so forth according to the metres (he uses) the Chandogana at that of the Gayatri. AV 2.6.1 at that of An̄giras.
4. AV 2.5.1 at that of Indra. AV 17. 1. 18, and 20. 138. 1 at that of Mahendra. AV 5. 3.1 at that of Kubera.
5. The Salilagana at that of Aditi (or Āditya). AV 7.26.1 at that of Viṣnu. The Vāstoṣpatyagana at that of Vāstoṣpati. The Rudragana at that of Rudra. The Aparājitagaṇa at the Aparājitã.
6. AV 6. 114. 1 at that of Yama. AV 18. 4. 89 at that of Varuṇa. AV 4. 25. 1 at that of Vāyu. AV 11.4.1 at the Continuance. AV 19.24. 1 at that of Tvastar.
7. AV 4.31. 1, and 32. 1 at that of Kumāra. The mantras of Niṛti at that of Nirṛti. AV 4. 27. 1, and 7. 80. 3 at that of the troops of the Maruts. AV 19. 25.1 at that of the Gandharvas.
8. The Āyusya, Çānti and Svasti ganas at that of Airāvata. The (bhãuma) anuvāka beginning AV 12. 1. 1 at that of the Earth. The Abhayagana at the Abhayā.
XIX. 1. With AV 11.4. 1 let him bind on as an amulet rice and barley at the Amrrtã. With AV 8. 2. 1 an amulet of the pinus deodora at the çānti of the Viçve Devās. With AV 19. 26. 1 (let him fasten) a piece of gold in his car at that of Agni. With AV 2. 7. 1 an amulet of a thousand stalks at that of Bhrgu.
2. With AV 3.22.1 an amulet made of ivory at that of Brahmã. With AV 1. 9. 1 a pair of kṛṣala-berries at that of Bṛhaspati, with 2.11. 1 an amulet made of the sraktya-tree (clerodendrum phlomoides) for one who is practising witcheraft or is its victim. With 19. 27. 1 a triple amulet at that of Prajāpati.
3. With AV 6.142. 3 an amulet of barley at that of Savitar. With AV 6.15. 1 (et al.) an amulet of the substance mentioned in the mantra, at that of the Gayatri. With AV 3.5. 1 (et al.) an amulet of the substance mentioned in the mantra at that of Angiras; with 3.6.1 (et al.) an amulet of the substance mentioned in the mantra, for one who is practising witchcraft or is its victim.
4. With AV 19. 28. 1 an amulet of darbha grass at that of Indra. With AV 1. 29. 1 an amulet made of the felloe of a wheel at that of Mahendra. With AV 19. 31. 1 an amulet of udumbara wood at that of Kubera.
5. With AV 1. 35. 1 a pair of kṛ̣̣̣ala berries at that of Aditi (or Āditya). With AV 5. 28.1' a triple amulet at that of Viṣnu. With AV 7. 82. 1 an amulet of udumbara wood at that of Vāstoṣpati. With AV 8.5. 1 an amulet of the substance mentioned in the mantra at that of Rudra.
6. With AV 2. 27. 1 an amulet made from the root of the pāteaplant (clypea hernandifolia) at the A parājitā. With AV 19. 32. 1 an amulet of darbha grass at that of Yama. With AV 4.10. 1 a shell as an amulet at that of Varuna. With AV 19. 34. 1 an amulet of the jangida-tree at that of Vāyu. With 19.36. 1 an amulet of a hundred hairs at the Continuance.
7. With AV 5. 28. 2, and 19. 37. 1 a triple amulet at that of Tvastar. With AV 3. 7. 1 the tip of a horn at that of Kumāra. With AV 19. 44.1 an amulet of ointment at that of Nirrti. With AV 19. 46. 1 an invincible (v.l. triple) amulet at that of the troops of the Maruts.
8. With AV 4. 37. 1 an amulet of odina pinnata at that of the Gandharvas. With AV 4.9.1 an amulet made of ointment at that of Airāvata. With AV 10. 6. 1 an amulet made of a ploughshare at that of the Earth. With AV 10.3.1 an amulet made from the varaṇa-tree (crataeva roxburghii) at the Abhayā. Or (he may tie on) a pratisara-amulet on all occasions.
XX. 1. We will duly describe the Mahāçānti, the Amṛtā, the cure of all (ills), that has become the scheme for all the other Çāntis.
2. Let him who knows AV 19. 1. 1 fetch pure water from rivers or ponds. Then he recites over it (AV 19. 1. 1).
3. AV 19.2.1 and 8.7.26. The scheme (of the sacrifice) is that of the full moon sacrifice. When the ājyabhāgāu are offered, (4) then he must make the çāntyudaka and follow it with the mantra (AV 19. 2. 1; 8. 7. 26). After thrice sprinkling the fire he must pour (the water) into a jar in order to wash with it.
5. With a view to the other ceremonies he must not pour all the water (into the jar). After sacrificing fibres of the açvattha tree, rice and barley, (leaves of) the horseradish-tree and water, bdellium and poison.
XXI. 1. He must make an oblation of pepper, the kṛ̣̣alaplant (abrus precatorius), sahā-plant, together with lagenaria vulgaris, reed panicles, and points with the Cātanagana.
2. After making an oblation of ingiḍa oil with this same gana, he puts on the fire additional fagots of atasī, and others smeared with lac, others from the trapusi-plant, and others in the shape of a club.
3. Likewise fagots coming from khadira, palāça, and tārşṭāgha trees, from the apāmārga-plant and the açvattha tree. With this same gana he worships.

4, 5. Once without a mantra, he makes an oblation of the plant khadira, the great plant apāmārga, the plants baja, pinga, and çatinga, (the rosin of.?) the cotton-plant and the malã-plant (flacourtia cataphracta), the sahamānā-plant, the prȩniparṇi-plant
(hemionitis cordifolia), and the ajaçr̄̄̄i-plant (odina pinnata), having thrown this in with (the rest).
XXII. 1. (There are needed) for the pratisara a staff from a tumbara-tree, a sadauin puspā-plant (calotropis gigantea), also yellow mustard plants with ten leaves, ten stones, and sand.
2. He must sacrifice with the hymn AV 5. 10 and cover these with the remainder of the oblation. The wise man must afterwards put the leavings in the consecrated water.
3. In all the diças of the dwelling he must smear circles, pour the sand into them, and then sprinkle them with the consecrated water.
4. He must place the stones in them. Above the door he must smear a circle, there he must put the staff, etc., after pouring sand, etc.
5. With AV 3. 26. 1 he must make oblations separately to the diças and worship with AV 3.27.1. He must put the learings in a jar, offering oblations with the subsequent mantras.
XXIII. 1. (These ganas) must be uttered, the Çānti, Kṛtyādūṣaṇa, Cātana, Mātṛnăman, Vāstoṣpatya, Pāpmahan (2), Yakṣmopaghāta, Svapnāntika, Āyuṣya, Varcasya, also the A pratiratha hymn (AV 19. 13).
3. This must be muttered a second time (and there must be employed), AV 4. 13. 1; 5. 30.1; 8. 1. 1; 2.1 (et al.), and the first twelve verses of the Präna-hymn (AV 11. 4).
4. It is taught that all these are involved with the Çāntīyahymn (AV 4. 13.1); and since the Çāntiya-hymn is involved it is taught that the verses AV 11. 4. 13 ff . (must be employed).
5. Then according to his wish he must insert the mantras given before (in kandikā 18), and bring to a close all the rest of the Prāna-hymn. At this point in the Çānti he must always recite the Rudra and Rāudra ganas.
XXIV. 1,2. (These ganas) are prescribed next, the Svastyayana, Abhaya, Aparājita, Çarmavarman, Devapură, Rudra, Rāudra, and Citrā. Ten beginning with the Çāntigana are cited, eight beginning with the Svastyayana.
3. It is taught by the wise that the Mahāçãnti (nust be performed) with all eighteen ganas. If the last eight ganas are omitted and the lower part of the ceremony of Nirrti, (4.) it is always termed by the wise the ten-gaṇa Çãnti. This (!) he
shall pour (into a jar) for the purpose of washing his horses, carts (?), wagons, etc.
5. He shall use it after setting aside half. At the end of all the gaṇas he shall have the Brahmans pronounce benedictions.
6. (There must be) an oblation of bdellium in silence, and he must get a gift for the Rakṣas (saying), "Obeisance to the Rakṣas; obeisance to the great Raksas; obeisance to the lords of the Rakṣas. Obeisance to the Gaṇas; obeisance to the great Gaṇas; obeisance to the lords of the Ganas." After making an oblation with the Ayuṣya gaṇa he puts the leavings on himself. After making an oblation with the Patnīvanta gana he puts the leavings on the wife (of the yajamāna).
7. He gives a beverage of curds, one of spirituous liquor, and one of barley with his right hand to the Rakṣas. Then with the mantras he washes (the person to be benefited by the rite).
8. AV $4.40 .1 ; 1.31 .1 ; 4.18 .1 ; 19.1 ; 6.19 .1 ; 51.1 ; 35.1$ (et al.) (are the mantras).
XXV. 1. With the Prāna-hymn he must put the leavings of the oblation on rice and barley and tie it on as an amulet. After adorning and praising them he must make him wear the two.
2. The wise man, after cooking a pot of rice with the ritual for a pākayajña, and offering it with the Āvāpika mantra, must bring the tantra to its close.
3. After completing the rest, he must give a feast to the Brähmans. He must feast them on excellent food or on whatever the twiceborn like.
4. A Brāhman must give ten cows and an ox besides; a Vãiçya a plough-ox besides; and a dealer with foreign countries a horse.
5. A king must give a good village; and a group of men the same as a king. If one gives the fee as stated, he obtains the whole fruit (of the ceremony).

With the words "he obtains the whole fruit of the ceremony," the Çāntikalpa in the revered Atharva-Veda is ended.

## F. Commentary.

Kaṇ̣ikā 5.
4. Pūrvabhadrapadām: I have introduced the feminine on account of the following bhadrapade pūrve, taking mahat to agree with r. k sṣam, cf. 5. 5; 9. 5. Weber, Naks. ii. p. 375 makes no change.

Kaṇ̣ikā 7.
2. ABDE sasrijet; St samisrjet.

ABCDESt viniyoja. An unreduplicated perfect seems unlikely; to change to niniyoja, an abnormal form found AB 7. 16, is palaeographically easier, but otherwise less satisfactory than to read niyuyoja. The decision of this and most of the following difficulties hinges on the date to be assigned for the composition of these verses.

Sarvayogeṣu: an astronomical meaning, "at all thy conjunctions, O Rohiṇi," is also possible.

Rohinī : possibly a Vedic instrumental, or nominative for vocative, or rohiṇi may be read.
3. ABCDESt ye: smoother syntax may be obtained by reading yam.
4. ADESt sarvam ; C tsarvam ; B çarmam.

ABCDESt asinam.
ABCDESt no rdrayã: corrected by Weber.
5. Lacuna in all manuscripts.

ABCDESt prathamajā: less archaic than the reading of Mb .
ABCDE punarvasuh ; St punarvasu: nominative for vocative; or emend to rocative either singular or dual.

Kaṇdikā 8.

1. ACDE tigmataya cakrire.
2. ABCDESt na, also stutaḥ and tapyamānam. Read stutāḥ and either tapyamānā or tapyamāna, preferably the former. The son of Jaratkāra is mentioned on account of his relation to Vāsuki, king of the serpents.
3. ABCSt sūnur; D sūnu; E mūnu.

ADE yamarājagān; A corrected to yamarajayān, which is read by BSt. C is blotted.

ABCDESt piṭ̣̣n çivāh.
4. ABCDESt yo yojayan.

ABCESt bhaga prasādhayan ; D bhaga prajā dadhat. According to Weber a second hand in C has added a visarga to bhaga.

AD yaddevate; BCE taddevate; St taddevatye.
ABCESt çivatamām alamkṛte; D çivatamâlamintṛe: read çivatame.

ACDESt bhajatam; B bhajanam: the latter is correct.
5. ADE jagativãcam; BC jagatim vãcam, in C the anusvāra is deleted; St jagañtivăcam. Jagatini vãcam would be the most
natural, cf. 9. 5, and the versifier was not above such metrical imperfections: but jagativācam can be retained as a metrical shortening for jagatīvācan.

ABCDESt āirayan : read erayan.
ACDE taddevatya; St taddāivatye.
ABDESt phalgunyo.
ABCDESt devadātaye.
Kaṇ̣ikā 9.

1. ABCDESt çāvāir and çitipād dhiraṇyayo: read çyārāir and çitipadbhir hiraṇyayo, cf. RV 1. 35. 5.

ABCDESt hiraṇyabhuk hiraṇyapāṇị̣. There appears to be no warrant for making the first = hiraṇabāhu.

The second no is metrically superfluous.
The verse recurs with the same variants and hiranmayo besides in AVPar. 14. 1. 11.
2. ADE bhūtagoptriṇe; C ionūtagãuptrị̣e; St pūtagodhriṇe; B bhūtagomaparapṛnekarma ${ }^{\circ}$ - i.e. bhūtagopṛ̣̣e paramakarma ${ }^{\circ}$ transposed. Corrected by Weber.

ADE devī; BCSt devìn.
ADE rūpabḥ̣k; CSt rūpaḳ̣t.
It is also possible to read: sa na stutaḥ . . . citrānúu devīm . . . rūpakrt, cf. 10. 2.
4. All manuscripts contain yãu, and lack two syllables before or after indrāgnī.

A dual would be expected instead of kurvatām.
5. We expect a verse to the god Mitra.

Pāda c: only variants are: St bharadrājah mrṣ̣itaḥ; B prasānavit. Comparison of 11.6 yields no solution.

ADE jatyā; B jatityā; CSt jagatyā.
ACDESt bhụtakaṇvo; B bhūtakaṇvo.
Kandikikā 10.

1. ABCDESt prasarjatah.

ABDE na; CSt nah.
2. ABCDESt ca sa: read sā ca (suggestion of Bloomfield). Apparently mātā pṛthivī and nirṛti are identified; cf. Henry, La Magie dans l'Inde antique, p. 161.

ABCDE na; St nah.
3. ADE tisrụībhir; B tisrṛebhir; St tisrụibhir; C trisrṇ̣ībhir: read trisrṇibhir with metrical lengthening. The mythology is
hard to unravel; ãrrtan may be neuter or masculine. If the latter, Agni is perhaps meant; for his three tongues, ef. RV 3. 20.2; for the comparison of his tongues with sickles, ib. 1.58.4, and inasmuch as he is latent in plants, the waters might be said to gladden him for his increment.

ADE yā devīs tarpayanty; B yāsas tarpayanty: the metre permits no addition, but the variant may point to a devīs in the following defective päda.

ABCDE pravrddhaye; St pravarddhayet.
$B$ alone vāruṇịh.
ABCDE pūrvā āạạhā.
4. ABDE vasu; CSt vaso.

Read: devān . . . anirmitāņ̣̃ . . . vasavo . . . çivāḥ kriyāḥ kṛ̣̣vatān surãmităḥ.
5. Anyain in all manuscripts is a defective writing for anyan.

B kim cid asti.
Read: anirmitaḥ.
Kaṇdikā 1i.

1. ADE tain svivi svargam; $B$ tan svid dhi svargam; $C$ ti svid dhi svargam; C (corrected) St tań svargam. ADE nākaprṣthāsthaviçcad; C nākaprṣthăınsthaviçcad; B nākaprṣ̣thāsthaviçcid; St nākaprsṭthāsthaviçvad. This seems the result of the fusion of two readings, that of the text and tam svargam nākaprsṭhasthaviçvavid.

ABCE çravaṇe no.
3. ABCDESt çatabhiṣak.
4. AD pramulhūtu; BCESt pramumūtu; read perhaps pramumoca.

With pāda b cf. RV 4. 57. 5.
ABDESt jihmasāu: read jihmagāu.
ABDESt ajāu; C ajo, the correctness of which Weber indicated.
5. ABCDESt gavisṭutūāyā: read kaviștutāyā.
6. ADE yamıahāhemamṛ̣itaḥ; BCSt yamañhāhehamrṛsitaḥ.

St candramaso.
E divākarāu.
7. ABCDESt bhiṣajām : read bhiṣajāv (Bloomfield).

ABCDESt açvibhyām: cf. Weber, Nakṣ. ii. p. 376 for its correction to açvinyām.
8. AE sarvatrṛncę; D sarvatryañç; B savihṛ̣ ; C savitrrẹ; St saviträñç: perhaps sa piṭ̣̆nç.

Kaṇạikā 12.
4. Read perhaps: çravaṇāyo 'dumbara-‥
6. Kṛttikābhih, demanded by the syntax, I have restored from NK 47. 1.

Upepsanti : the sudden shift to the plural and indicative is due to the fact that this is a quotation of Kāuç. 68. 40; 140.21. So AVPar. 72. 4. 7

Kaṇạikā 13.

1. NK akṣatāir māṣāiḥ.

Madhusahitān apūpān is Weber's correction. It is confirmed by NK madhv apūpāns tv anuttamān.
2. NK açleṣā rajatain dadyāt.

The addition of yad yad is from NK.
3. Saktumanthain: NK udamantham.

Kaṇạikā 14.
2. $\bar{A}$ dityādayo grahanṇàm uktā: probably uktā should be omitted, in addition to the change to ādityādinām.

Kaṇ̣ikā 15.
3. Balimant is quotable only as meaning "having received a gift" -a sense evidently impossible here. A slight change valinā would mean "wrinkled," a possible designation for split grains.
5. Cf.'Keçava to Kâuç. 18. 16, nirṛtyabhimukho bhūtvā.

Read: ity etāir āmamāñsam, which is a very slight change from Sāyaṇa's reading.

Kaṇdikā 19.
2. Hastidantam: Kāuç. 13.2 has hāstidantàm. Probably this is the unrecorded variant of P , and it might be introduced into the text.

Kaṇadikā 19.
6. Çatavāram: I have followed Sāyaṇa in so reading. For the use of hairs as amulets, cf. Bloomfield, p. 477. Other possibilities are to read çatāvarīm. This plant (asparagus racemosus) is used in the Pariçisṭas, and its name puns with çatavārah of the hymn. Or çãtāvaram "made from this plant." The last two readings involve but slight changes from $P$ and $M$ respectively; Sāyana's reading is liable to have been secondarily assimilated to the text of the hymn.

Kandikā 20.
3. Weber placed a dot under the a of ksaped, but made no further ehange.

Perhaps read: açvattliasya tu lomāni.
Kaṇạikā 22.

1. Daça putrã is unintelligible: I have changed it to daçapattrā.
2. Weber wrote prānāādyādvāvaças treah, with a query as to whether da should not be substituted for va, and a note that seems to mean that Mb omits the s.

Kandikā 24.
4. Four pādas beginning with e seem misplaeed here. I suspect an original association with $20.4,5$. The text is also unsatisfactory, but there can be little hope of improving it as long as it is out of its original connection. Weber places a dot under the a of reām; I would rather read: tathāi 'vā' rdhām.
6. The Ganamālā twice has the form patnīvanta.

## VI. - Notes on Ovid.

By Dr. EDWARD KENNARD RAND, harvard university.

## I. A Manuscript of Ovid's Heroides, xxi. i-144.

The final edition of Ovid's Heroides has not yet appeared. In spite of the achievements of Dilthey, Palmer, Sedlmayer, Peters, Ehwald, and others, much remains to be done for the text, since, despite Sedlmayer's conviction, the classification of the manuscripts does not yet rest on a sure foundation. ${ }^{1}$ A problem which must be settled before a genealogy of the manuscripts can be constructed is furnished by the interpolations, or possible interpolations, large and small, with which the text abounds. The most important portions which come under this category are the Epistula Sappluts, Epist. xvi. 39-142, Epist. xxi. $13-248$, and the prefatory distichs to some of the letters; but these are not all. ${ }^{2}$

Yet matters have been simplified, first of all, by the acceptance of the last two passages as genuine by the majority of the best authorities; ${ }^{3}$ this matter, I am convinced, needs no further discussion. The double letters may now be considered all of a piece, whether Ovid is their author or not. Perhaps, too, the tide of opinion regarding the authorship of the double letters may ultimately turn, as in the case of the letters which Lachmann doubted and, more recently, the Epistula Sappluts. Schanz doubtless expresses the current opinion in deciding for the genuineness of this latter work, and though he does not accept the double letters, a voice is heard here and there in their defence ; indeed, it would not be surprising if the entire collection were restored to its author before long.

[^36]Internal evidence on this question shows us poems which bear the marks of carelessness, yet which only a very clever imitator could have written. The pseudo-Ovid, Dilthey declares, ${ }^{1}$ is a poet " qui hoc in genere facultatem Ovidii fere aequiparaverit." External evidence requires us to assume a second edition of the Heroides if the double letters are Ovid's. We have no notice of such an edition, but also no proof that it could not have existed. It doubtless was not a product of the days of exile, but there was plenty of time for its achievement before 8 A.D. It is sheer assumption - almost impertinence - to imagine that the facile Ovid was too busy with his other poems to dash off half-a-dozen epistles. It has been suggested that the story of Byblis, Mct. 9, 529, is evidence that no second edition of Heroides had appeared at that time, since otherwise the letter of Byblis would have appeared rather in this edition than in Ovid's longer poem. But the supposition is belittling to Ovid's genius. On the contrary, he is apparently introducing here an intentional novelty - an epistula Heroidis in a narrative setting. He welcomes the chance to describe the events leading up to the heroine's act - her passion, her vacillation, the arguments whereby she nerves herself to the act, her succeeding irresolution at the moment of writing, her faltering attempts to start, the resistless rush of words when the letter once begins. This is a situation which the poet could not connote in the letter itself, after the fashion followed in some of the Heroides. It may well be that the Byblis story turned Ovid to the old path once more, this time to take up a conceit that his friend Sabinus had suggested in providing his first Heroides with answers. ${ }^{2}$

[^37]But to return to the consideration of the text of the Heroides, since the double letters are surely of one piece, whatever their authorship, manuscripts containing the omitted parts are at once important as representing a new tradition. The Cydippe letter was discovered probably about the middle of the fifteenth century in a codex antiquissimus, and the new text was at once copied into other manuscripts or editions. Obviously a fifteenth-century manuscript, of which Epist. xxi is an integral part, is a great desideratum. ${ }^{1}$ Moreover, if further investigation should pronounce the double letters genuine works of Ovid, the interpolations in them would naturally rest on the same footing as in the other poems, and not require a different treatment, as at present. ${ }^{2}$ Finally, as to the minor interpolations, von Winterfeld in his review of Traube, Regula Sancti Benedicti, ${ }^{3}$ makes it clear that more is to be expected from the later manuscripts in case, like the Codex Etonensis, they are connected with the tradition from Monte Cassino. It would be presumptuous to attempt new stemmata illustrating possibilities of descent ; we need first a more careful study of manuscripts of the mixed class. But several promising clews are already at hand for any investigator who would attempt the maze. The purpose of the present article is merely to publish a collation of a Harvard manuscript which contains the text of Epist. xxi. I-I44.

The manuscript in question (I will refer to it as H) bears the number L 25 : it is of the fifteenth century, written on parchment, in what seems Italic script. It was acquired by Harvard College in 1902 from the bookseller Quaritch, being formerly the property of Sir Thomas Phillips. A fuller description of the manuscript will appear elsewhere. For the present it is enough to state that the volume consists of three distinct parts. (I) A manuscript (I) containing a letter of the humanist Rinucci da Castiglione written to

[^38]Poggio, and including translations from the Greek. (2) A manuscript (II) containing various humanistic works among them translations by Bruni (Leonardo Aretino) - as well as important classical texts. These latter are the Germania of Tacitus, Book xiv (the metrical de Arte Insitionis) of Palladius, and the above-mentioned passage from Ovid's Heroides. Collations of the Tacitus and Palladius texts will be published shortly elsewhere. (3) A few leaves added at the beginning by some scholar of the fifteenth century, who combined manuscripts I and II, and on one of these initial leaves wrote in capital letters a table of contents for the entire volume.

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IN . HOC . VOLVMINE . CONTINETVR . | . . . CORN .
TACIT.DE.ORIGINE.ET.SITV゙.GĖMANIE. | ... PAL-
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VITER - REPERTA | | . .
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The whole was then encased in a fifteenth-century binding of wood covered with leather.

One may make further surmises as to the exact date of the manuscript. The presence of Tacitus's Germania in manuscript II shows that this part of the volume was written after 1455, since the Germania was not discovered till about that year. ${ }^{1}$ This date may be taken as a terminus post quem, since the humanistic works here included - the translations of Bruni and the Liber Augustalis of Rambaldi-are all earlier. The letter of Rinucci in manuscript I was written certainly before 1459, when Poggio died, probably before 1453, when he left Rome, and may have been much earlier still, as he came to Rinucci for instruction in Greek as early as $1425{ }^{2}$ The present copy might well have been made about the middle of the century. The two manuscripts were put together by a scholar of the fifteenth century, as is evident from the style of the capitals in which the table of contents is given, and from the style of the cover. That the manuscripts were

[^39]combined early rather than late in the second half of the century seems probable from the title which Ovid's work is given in this list, OVIDII - EPISTOLA - NOVITER • REPERTA. The exact date of the discovery of Heroides xxi is not known, but may safely be assumed as about the middle of the century. Certainly it was before 1471, when verses 1-I44 of this letter appeared in the Roman editio princeps. The binding of our book, it would seem, preceded this date, since one would not be apt to refer to the letter as a novelty after the printing press had introduced it to the reading public. Still, this reasoning needs further examination, for it is conceivable that a tradition started from some manuscript which called attention to the discovery, and that such a notice was copied mechanically in other manuscripts, although the printed edition had appeared. There are, in fact, manuscripts extant containing precisely such a notice. Two codices mentioned by Sedlmayer, ${ }^{1}$ Cremifanensis 329 and Vindobonensis 3198, show the superscription (I quote the form given in the latter manuscript) CIDIPPE • ACONTIO - HEROIDVM - OVIDII • VLTIMA . EPISTOLA • RECENS - REPERTA, and this appeared likewise in the manuscript from which the editio princeps was prepared. ${ }^{2}$ Now the Cremifanensis contains several works copied from printed editions, one copy being made as late as 1479. The title given for Ovid's letter : Cydippe Aconcio herodum Ouidii ultìa recens reperta, is exactly the same in the editio princeps (except Acontio), and this is the case also with the superscription to the Epistula Sapphus. The titles of Heroid. i differ, yet from the above indications it would not be surprising if the manuscripts were copied directly from the editio princeps. Or does it present, after all, an independent, though closely related text? As for the Vindobonensis, if all the pieces it contains were part of the original volume, it could be dated later than the Roman edition, 1471, the Venice edition of 1474, and the Parma edition of 1477; for the volume contains several works written after $1478 .{ }^{3}$ But I cannot be sure on this point, since Sedlmayer states that the

[^40]manuscript is the product of several hands. Both of these codices, then, may have been written before the appearance of the Roman edition, yet may equally well have followed it by several years. Now the superscription in the Harvard manuscript agrees with the titles in the above-mentioned codices, except that the words recens reperta do not appear. The text, moreover, bears a close relation to the Roman edition, though not a copy of it, and to the Vindobonensis, ${ }^{1}$ so that the title in the manuscript from which H was copied may well have contained the additional words. But the owner of the volume who combined the two manuscripts did not borrow from some other copy the notice which he inserted in the table of contents, for he has it noviter (not recens) reperta. He is probably describing a fact which was true when he made up the volume; he is not mechanically reproducing a title from a manuscript, as he might perhaps do even after the printed edition had appeared. Now if the table of contents was written prior to the editio princeps, manuscript II must be placed earlier still. Its date would be, then, somewhere between 1455 and 147 I ; the year assigned in Quaritch's Catalogue ${ }^{2}$ - 1460 - may not be far from correct.

Three classes of manuscripts for the text of Epist. xxi define themselves readily by external marks. ${ }^{3}$ One consists of manuscripts which contain the entire epistle. Here we may reckon with certainty only on the archetype of the Parma edition of 1477 . It was for some time supposed that a fifteenth-century leaf, added to Laurentianus, xxxvi 27, offered an independent text, but according to Sedlmayer ${ }^{4}$ and Peters ${ }^{5}$ this is a copy from the edition. So, too, the Harleianus 2565 ,

[^41]s. XV, to which Palmer ${ }^{1}$ first called attention, believing it to be the basis of the Parma edition, seems to Ehwald ${ }^{2}$ to have been copied from that edition. A detailed comparison of the manuscript and the edition, neither of which is at my disposal, would readily settle this question. Sedlmayer mentions also ${ }^{3}$ an apparently important source in Codex Lipsiensis 47, s. XV, of which Goetz had furnished him a description. But the volume has since disappeared. ${ }^{4}$ The entire letter is found in various Venice editions, of the years 1486, 1489, and 14921498; the latter bears a close resemblance to the Vicenza edition of $1480 .{ }^{5}$

A second class of manuscripts, recognized already, of course, by Sedlmayer, ${ }^{6}$ is made up of those which contain only verses 1 -144. This we may now, aided by the information given by our new codex, subdivide into two groups: a) Manuscripts containing the title CYDIPPE . . . VLTIMA EPISTOLA • RECENS • REPERTA. Here belong Cremifanensis 329 , if this should be assigned the value of an independent manuscript ; Vindobonensis 3198 ; doubtless also H ; and the manuscript from which the Roman edition was taken. b) Manuscripts without this notice. The following perhaps represent the earlier tradition, before the title was altered: Gudianus 297, s. XV, and Parisinus (formerly Mazarinus), s. XV (XV-XVI, Palmer). ${ }^{7}$ In these manuscripts, it would seem, Epist. xxi forms an integral part of the text. They also, like the Venice edition of 1492, ${ }^{8}$ which follows a codex antiquissimus, give the division of the Heroides into books. As Sedlmayer uses for the Gudianus a collation made in 1774, while the Mazarinus has been examined only for Epist. xxi, a careful study of both these manuscripts might lead to valuable results for the text of the Heroides.

It would be fruitless to tabulate the distinctive readings of these apparent classes until all available information has been

[^42]collected. Meanwhile we may note the additional evidence presented by H for the truth of Birt's statement ${ }^{1}$ that nearly all the existing manuscripts are not copied from the editions, nor, probably, the editions from these manuscripts, and that thus the text, as we have it, has experienced a complicated history. Further, the new codex contributes something toward the solution of this complexity in suggesting an external criterion for subdividing the second class of manuscripts, and in supplying new material for determining the characteristics of that group to which the Roman edition belongs. Various noteworthy readings will be noticed in the following collation, and while there are flagrant errors, these very errors are proof that the manuscript was not copied from an edition. I have collated the manuscript with the edition of Merkel as revised by Ehwald, 1888, p. $166 .^{\circ}$

## CYDIPPE ACONTIO] CEDIPPE.ACONTIO HEROIDVM|

 OVIDII - VLTIMA - EPISTOLA • (minio).[Littera . . . meis] om.
6 Saevae] seue; e pro ae ubique
7 tura] thura
8 favet ] fouet
io Hippolyto] hypolito
14 Adjuvor] Adiuuor
15 vix] ui (x supra adscripsit man. prim.)
16 putas] puta
19 agamque ] agam $\bar{q}$
25 inperfecta] imperfecta
26 tegitur] cogitur
cauta ] clausa
27 meos digitos ] meus digitus
28 ipse] iste
29 Quo] Que
30 quamque mereris ego ] quanque moreris ero
32 poenas] penas; e prooe ubique
36 ope ] operi
38 Perditis] Proditis

40 obstas ] optas
41 uelut ] ueluit ; corr. man. prim.
44 Inmodicus] Immodicus adest ] inest
45 Ei] Nunc
$47 \mathrm{sim}] \mathrm{sum}$
49 at] et
${ }_{51}$ nihil] m
54 submota ] summota
55 dic mihi] dicam
ne decipe ] me despice
58 uelis] nolis
59 Aut tibi iam nullast ] Aut iam nulla tibi est
62 Qua ] Quid
nulla tuast ] tua nulla est
63 quid] quod
61 difficili] diffcilis
64 tuist ] tui est $u b$ ique
70 Picta citae ] Pictatite
72 a] ah

[^43]74 inpediebat ] impediebat
77 Delon] delum
79 convicia] conuitia
81 Myconon ] alicon iam Tenon] antennon
82 Delos] bosphor
84 numquid ] nunquid ut ante mari] om.
90 vestes] uestem
umeris ] humeris
91 sacrast] grata est
92 tura ] thura
96 Erramusque] Enamusque
102 Quidquid] Quicquid
106 ecquis ] et equis
$108 \mathrm{Ei}] \mathrm{Hei}$

115 Inprobe ] Improbe
II8 Penthesilea ] pantasilea
119 balteus] baltheus
120 Hippolyte] hypolite
123 Cydippen] Cydippem
Schoeneida] ceneyda
124 Hippomenes ] hyppomenes
126 vices ] faces
127 bonis] boni
129 Cur me cum ] Cur cum me ea ] om.
profitenda ] proficienda
132 condicione ] conditione
134 Linguaque ] Lignaque
140 tori] thori

## II. Imitation of Ovid in Horace.

It has not been imagined that the poet Horace felt any particular admiration for Ovid. "There is no indication in the works of either the reigning or the rising poet of any intimacy between them," says Sellar, in his brief but admirable essay on Ovid's life and works. ${ }^{1}$ There is evidence that the two were acquainted, and crossed each other in the social round. When Ovid tells us that "tuneful Horace charmed his ears," ${ }^{2}$ he means not merely that he found the Odes agreeable reading, but, as Sellar implies, ${ }^{3}$ that Horace gave recitals now and then - by exception - and invited Ovid to them. In this same passage Ovid says gracefully of his
${ }^{1}$ Encyc. Brit. 9th ed. XVIII, 78.
${ }^{2}$ Trist. iv. 10, 49: Et tenuit nostras numerosus Horatius aures | dum ferit Ausonia carmina culta lyra.
${ }^{8}$ Ibid. "Even the fastidious Horace sometimes delighted his ears with the music of his verse." Ovid, speaking of Macer, says explicitly legit (v. 43), of Propertius, recitare (v. 45). The word would weary if expressed again, so for Ponticus and Bassus (vv. 47-48) the idea is implied. With the mention of Horace, the point, for clearness' sake, is made again, but more allusively than at first. This is but the technique of successful description, an art in which Ovid was not amiss. Then, in contrast with the preceding poets, Virgil is at once named (v. $\mathrm{5}^{\mathrm{I}}$ ), whom Ovid " merely saw." So with Tibullus - nec avara Tibullo | tempus amicitiae fata dedere meae. Strict logic prompts the deduction that relations of amicitia did exist between Ovid and the poets first mentioned Horace included.
illustrious predecessor that he smote an Ausonian harp the lyra Romana which the poet imagined he used, ${ }^{1}$ not the pseudo-Hellenic instrument with which some modern critics would equip him. A fine compliment this, and one finer still, at least as obvious, is the frequent imitation of Horace evident in the younger poet's work. ${ }^{2}$ There is no question as to Ovid's feeling for Horace, ${ }^{3}$ but nobody has imagined that his homage awakened any enthusiastic response - other than an invitation to a recital. What, then, if it can be shown that Horace, in one of his most significant odes, imitates a characteristic verse of Ovid's with the intent of paying his young admirer a palpable compliment?
${ }^{1}$ c. iv. 3, 23, Romanae fidicen lyrae.
${ }^{2}$ See A. Zingerle, Ovidius und sein Verhaltniss zu den Vorgängern und gleichzeitigen römischen Dichtern, Heft III, Innsbruck, 1871. The only review I have been able to find of this part of Zinger'e's important work is by Gross, Blätter f. d. Bay. Gym. VIII (1872), p. 127. He adds a few imitations not mentioned by Zingerle.
${ }^{3}$ Except by Tcuffel, Gesch. der röm. Lit. § 219 (4th ed., p. 431, N. 4), who detects a coolness on Ovid's side because he fails to mention Horace with the other poets in $A$. A. iii. 329, and " erteilt ihm erst nach seinem Tode das ziemlich magere Lob: tenuit nostras numerosus Horatius aures." But the praise assumes plumper dimensions with the line which Teuffel does not quote. His opinions have been refuted by M. Hertz, Analect. ad carm. Horat. hist., Breslau, 1876, II, p. 1, and O. Hennig, De P. Ovidii Nasonis poetae sodalibus, Breslau, 1886, p. 52. One might consider further whether the inclusion of Horace in the demi-monde's Parnassus - which is as paedagogically special as Quintilian's prescription would be in place. Callimachus, Philetas, Anacreon, Sappho (quid enim lascivius illa?), and the poet who sings of the fond father "by cunning Geta's art beguiled " -this is fast company for Horace, taking him all in all. To the above number are now appropriately added Propertius, Gallus, Tibullus, then Varro, with his poem on the golden fleece. This last work is cited doubtless for the tale of Medea, erotically significant, and also, possihly, because gay ladies should at least make a feint of familiarity with high epic as well. This explains the introduction of the Aencid, which follows now ; for though one might think of Dido and - nec legitur pars ulla magis de corpore toto | quam non legitimo foedere iunctus amor (Trist. ii. 535), still, the emphasis is laid here on profugum Aenean and altae primordia Romae - light-o'-loves must talk Shakespere on occasion. But the mention of Virgil - quo nullum Latio clarius extat opus - is enough ; more seriousness would spoil the point. Horace falls between two stools: he is not frolicsome enough for a place with the amatory, and Virgil is the natural type of great and royal poetry. Ovid ends the tale, then, with his own works. It is not contempt, but the sense of the appropriate, that excludes Horace here and in the somewhat similar list in the second book of the 7'ristia.

In the opening ode of his fourth book, Horace tells his readers that since he now is out of the lists, Venus should betake her to his young friend Paullus Fabius Maximus, "a youth of an hundred arts, who will carry far afield the standards of thy war,"

Late signa feret militiae tuae.
This verse has been tentatively rearranged by various editors from Meineke down in a form which appeals at once as more consonant with Horace's usual manner -.

Late militiae signa feret tuae.
It is strange that a line of Ovid's has not been adduced in support of this transposition. In the twelfth poem of the second book of Amores the poet describes triumphantly his conquest of Corinna, and after magnifying his own bloodless victory above other conflicts - such as the fight for Helen of Troy - in which much damage had been done to gain a similar prize, concludes that Cupid has given him uncommon privileges, and with them the behest "to carry far afield the standards of his war."

Me quoque, qui multos, sed me sine caede Cupido
Iussit militiae signa movere suae.
We should naturally reckon this coincidence merely as one more Horatian echo in the poetry of Ovid - with incidental gratitude for the support here given to the proposed rearrangement of Horace's verse ${ }^{1}$ - if a simple proposition in chronology did not stare us in the face. A moment's consideration makes it most probable that Horace is the imitator. The fourth book of the Odes, it is commonly argued, appeared in or about the year 13. ${ }^{2}$ The first poem in this new collection bears, it seems to me, like most dedications, the earmarks of a date near that of publication. The poet has filled his ten lustres - more or less, as circa implies. Some editors place the poem, therefore, somewhat before, others, somewhat after I 5 b.c. On the strength of a consideration to be suggested

[^44]later, ${ }^{1}$ I am inclined to the latest possible date. ${ }^{2}$ More difficult it is to determine when Ovid's Amores appeared, and what was the relation between the first edition in five books and the second in three. The earliest date fixed by external evidence for the collection in its present form is given by iii. 9 , an elegy on Tibullus, who died i9 b.c.; the latest date externally determined is marked by the mention in i. 14, 45, of Augustus' conquest of the Sigambri in 15 b.c. Internal evidence, despite various appeals to it, has so far yielded no certain clew. ${ }^{3}$ Still, our present question requires only the proof that Amores, ii. 12, one of the poems on Corinna, was already in circulation when Horace published the fourth book of his Odes. Such proof, I believe, is furnished us by Ovid himself. The Corinna poems, he tells us, were the product of his earliest youth - but once or twice had the barber clipped his beard - and they took the town by storm.

Carmina cum primum populo iuvenalia legi,
Barba resecta mihi bisve semelve fuit.
Moverat ingenium totam cantata per Urbem
Nomine non vero dicta Corinna mihi. ${ }^{4}$
On the strength of this passage it is generally agreed that the poems on Corinna, Ovid's earliest work, were written and known about 22 b.c. ${ }^{5}$ Now it is most likely that in the extant collection of fifty odd poems the scant dozen in which Corinna is sun and centre ${ }^{6}$ constitute the poet's choice from

[^45]the many effusions of his earliest muse. Further, the poem ii. 12 holds a significant place in the imaginary history; it gives the very moment of his first success - not an idea, one would think, that the poet elaborated in some later addition. ${ }^{1}$ There is one internal test that may be profitably applied to this poem, and the others in which Corinna is definitely the theme. Leaving out of account for the moment the verse under discussion (ii. $\mathbf{1 2}, 28$ ), if we find in these poems indubitable imitations of later works, like Horace's fourth book of Odes or Virgil's Aeneid, the verse from ii. 12 must be considered an imitation, too, and the assumption of an early date for the Corinna poems must fall; but so far as I am able to discover, such imitations do not exist. ${ }^{2}$ Since, then, we may reasonably
poems: i. $5,11,12$; ii. $6,7,8,11,12,13,17$. Corinna is not mentioned in i. 12 , or ii. 7 , but these are inseparable from neighboring poems in which she appears. In ii. 19, she has become a reminiscence, as in the poems of the third bock, I. 7, I2. In the last-mentioned article, Ehwald further declares: "Sehr characteristisch für die Beurtheilung der Corinnagedichte scheint mir, ii. I2. 3 (quam vir, quam custos, quam ianua firma, tot hostes $\mid$ servabant) wo die vorher in anonymen Gedichten behandelten Züge, i. 4 (on the deception of the vir), ii. 3 (on the custos), i. 6 (to the ianitor), auf Corinna übertragen werden." This remark need not imply that ii. 12 is necessarily late, for one may as logically conceive the poems in question as developments from the suggestions offered in ii. 12, 3. Ehwald may mean merely to emphasize the fact that Corinna is an imagination, a lay figure for familiar erotic costumes.
${ }^{1}$ This aspect of ii. 12 so impresses Martinon, who thinks the Corinna poems narrate sober history in chronological order, that he concludes Ovid "forgot" to include it in Book I.
${ }^{2}$ Ehwald, Jahresbericht, XLIII, p. 126, declares, without specifying, that there are traces of the influence of Carm. iv on the Amores; perhaps these may pertain to other than the Corinna poems. The following coincidences with the Aeneid are noted by Zingerle, none of which is sure proof of an imitation : (p. 86) Am. ii. 1I, 27 exasperet undas ; Aen. iii. 285 asperat undas - the situations are quite different ; (p. 78) Am. ii. 12, 1 tempora laurus; Aen. v. 246, 539 tempora lauro; Am. ii. 12, 21 nova bella movere and Aen. vi. 820 nova bella moventes; but Ovid might have developed this from Ennius' satis bella moveri, through his own fera bella movebas, $A m$. ii. 6, 25 (p. 4). There is at least one coincidence, also, with Horace's first book of Epistles. Am. i. in, 13 (to Corinna's maid, Nape) si (Corinna) quaeret quid agam spe noctis vivere dices, Fpist. i. 8.3 (to the Muse, who is to inform young Celsus of the poet's unphilosophical discontent) si (Celsus) quaeret quid agam, dic (Musa) multa et pulchra minantem | vivere nec recte nec suaviter. The connection between the two passages cannot, I think, be denied, yet again, I believe it is Horace who adapts. The simpler message of Ovid's
place ii. 12 among the Corinna poems, which constitute Ovid's earliest work, the date of either of the editions of the Amores is of no consequence for our present consideration. The poem ii. 12 may be safely regarded as antedating the first ode of Book iv, even though this were written and published as early as 17 в.c.

Granting that we have to deal with a palpable imitation, and that Horace is the imitator, the purpose of this tribute is not difficult to discern. At the beginning of the ode, in telling us that he has bidden Love's service a final adieu, Horace quotes one of his own verses. ${ }^{1}$

## Desine, dulcium <br> Mater saeva Cupidinum -

The line is laden with reminiscence. It is a symbol of what his lighter poetry of the earlier time had meant to him; and it had meant much. For are not Horace's loves real? We may not know their street and number; yes, even the honest endeavor to distinguish good Cinara from the imaginary throng is, I suspect, something like the consoling faith that Plato wrote one authentic letter. This endeavor we may forego, but not the conviction that the love-poems of Horace are real: in them he has created the imaginary reminiscence, sympathetic, chivalrous, pleasantly illumined with wit and genial self-ridicule - as real emotions, these, as others which find expression in Venus' liturgy. So it is a reminiscence of a reminiscence that we have here - mater saeva Cupidinum. But these days are over, Horace declares - splendide mendax, for he was just in the prime of them. Hot youth has sped, so Venus may speed too - to the court of young Paullus Fabius Maximus, " noble and comely, a lad of an hundred arts, who shall carry far afield the standards of thy war."

[^46]Now Paullus Fabius Maximus was a most intimate friend of Ovid. Already conspicuous as an advocate, already climbing the rounds of political distinction, he had also the interests of literature at heart. Juvenal mentions him among typical patrons of poetry in the Augustan age. ${ }^{1}$ Horace doubtless saw in him the promise of a new Maecenas. With this direct mention of Fabius and no less pointed, because allusive, citation of Ovid, he takes off his cap to the rising generation, to Ovid, who heads the coming school. Why not pay a decent courtesy to a youngster who writes clever poetry and shows his sense by copying some of the good things in one's own verse?

The line that Horace adapts makes a good symbol. What more characteristic of Ovid's elegies than the idea - militat omnis amans? We cannot point surely to Amores i. 2, 7, 9, ii. 9 as specimens of his earliest work, but the conceit appears in one of the Corinna poems (i. II, i2) as well, phrased in the same words, which fall into similar positions in the verse -

In me militiae signa tuere tuae.

Horace seized intuitively on a most typical bit in Ovid's verse and - a point that adds new support to Meineke's suggestion - he doubtless reproduced the metrical effect of the line, as well as the phrase, to make his meaning unmistakable. Book iv has sometimes been thought to suffer from lack of a dedication: both Maecenas and Augustus are absent ịn the

[^47]opening ode. This is because Horace is devoted to an ideal still higher than attachment to a friend and patron or loyalty to the saviour of the state. The Muse claims his first homage - si spiro et placeo, tuum est. The prospects of poetry are uppermost in his mind. ${ }^{1}$ Old Horace, modern of the moderns, turns with enthusiasm to greet his young compeer. Mater saeva Cupidinum - that is his own past. Late militiae signa feret tuae-that is the future, big with hope. There is something of the true ring in the Amores.

In what way does Ovid show his gratitude for this striking commendation? To his outspoken admiration for Horace in the previously quoted passage from the Tristia ${ }^{2}$ should be added the steady stream of imitation running through all his works - no subsequent poet, an eminent critic declared, ${ }^{3}$ can show so many reminiscences of Horace's verse. This is in itself acknowledgment enough; yet, looking farther, the reader, I think, will discover a peculiar significance in some of Ovid's borrowings. He does not simply appropriate thoughts or "beauties"; he imitates mit einem Tone, intentionally brings before us the whole context from which he

[^48]selects, incorporating that, reminiscentially, in his own description. Thus when we read the verse (Mct. 3. 353)

Multi illum iuvenes, multae cupiere puellae,
followed (v. 355) by
nulli illum iuvenes, nullae tetigere puellae,
we not only note a clever adaptation which dispenses with a harsh elision, ${ }^{1}$ but can image something of the splendor of Ca tullus' wedding-hymn, skilfully put into a new setting. This quality appears often in Ovid's imitations, ${ }^{2}$ and is very marked in his reminiscences of Horace. Reminiscence is the exact word - not mere imitation of an idea or phrase, but the suggestion of a situation, and of the poet who created it. One may turn for further illustration to Ovid's reminiscences of his own verse. The ending of Trist. iv. io, for instance, with the repetition of the last line from the epilogue to the Metamorphoses, shows that the poet is thinking of his greatest work in connection with his coming immortality; or again, the imagery in the opening verses of Trist. iii. 8 takes us back at once, with something of the pain of contrast, to the lighthearted days when Amores iii. 6, I 3 ff. was written. This last is a reminiscence strikingly akin in spirit to Horace's mater saeva Cupidinum. An instance of similar imitation of Horace meets us at the very start in Amores i. 15. This poem, in character an epilogue, ${ }^{3}$ may possibly have appeared in the first edition of the Amores, serving as an envoy. If this is so, and if the first edition preceded Carm. iv, then the passage in question should be ranked with the imitations of Carm. i-iii already noted. ${ }^{4}$ If, however, it appeared after the publication of Carm. iv - Zingerle ${ }^{5}$ notes the possible influence of

[^49]Carm. iv. 9-it is the poet's first distinct acknowledgment of Horace's favor. The poem strikes the chord which sounds so clearly in Horace's later odes - the thought of the poet's immortality. Ovid looks forward to a choir invisible in which Homer, Hesiod, Callimachus, have their place. Sophocles is there, Aratus, Menander. Of his countrymen, he names Ennius, Accius, Varro Atacinus, and Lucretius, in whose eulogy he gracefully interweaves one of the poet's own verses -

Carmina sublimis tunc sunt peritura Lucreti
Exitio terras cum dabit una dies. ${ }^{1}$
But the list is becoming long. The next immortal, then, is introduced by allusion, -

Tityrus et segetes Aeneiaque arma legentur
Roma triumphati dum caput orbis erit.
But something there is, the poet continues, as permanent even as eternal Rome;

Donec erunt ignes arcuque Cupidinis arma
Discentur numeri, culte Tibulle tui.
The mention of Tibullus is capped by that of Gallus. Is Propertius omitted because he was still living, or because there was not room? Catullus, too, had not figured. The closing lines sound again the praises of poetry and end with the words,

Ergo etiam cum me supremus adederit ignis
Vivam parsque mei multa superstes erit.
We picture at once the monument imperishable that Horace's fancy had reared. ${ }^{2}$ Non omnis morior multaque pars mei, -Ovid's meaning is as clear as though he had inserted the poet's name, as he had just done in the similar quotation from Lucretius; he prophesies for himself the renown that his great friend had attained. The whole poem illustrates the same quality of description that we have observed before; ${ }^{3}$

[^50]Ovid is not averse to the catalogue, but when the catalogue begins to pall, it shades into connotation. And the most important thought may not be the most directly expressed.

Other instances of this allusive imitation might be cited. In close connection with the above is the epilogue to the Metamorphoses, which may be briefly described as a summary of Horace Carm. iii. 30 in a different metre. An interesting case to which Zingerle ${ }^{1}$ does justice is Tristia iv. 8, 19, where Ovid describes his retirement from letters in the manner of Horace's first epistle. In particular, Ovid's references to his work and fame will be found to have some touch of Horace about them. Without dwelling further on these passages, I would call attention, in concluding, to one of the latest of Ovid's poems, Epist. ex Ponto i. 9. This is a letter to Maximus, on the death of their common friend Celsus; it is in essence a threnody. Celsus, I believe, is the youthful poet whom Horace mentions in his epistles, ${ }^{2}$ and Maximus is Paullus Fabius once more. Some scholars think differently, assuming "some other" Celsus, ${ }^{3}$ and for Maximus, Ovid's friend Cotta Maximus, son of Messalla. ${ }^{4}$ Truth to tell, there is no absolute evidence on either side. But is not the situation crystallized with the following lines? Ovid is speaking of the esteem in which Maximus was held by his departed friend (v. 35) -

Nam tua non alio coluit penetralia ritu
Terrarum dominos quam colis ipse deos.
Terrarum dominos evehit ad deos, ${ }^{5}$ - the verse is transplanted from Horace, rendering its original effect despite the new metrical setting, even as Horace refashioned

Iussit militiae signa movere suae.

[^51]Does not the poet, once more, call up a definite picture? These friends of his must be the young Celsus and Fabius whom Horace had fathered; and in this mention of their intercourse, the reminiscential verse brings to mind their relations with him. It is the same scene that we know from the Epistles - Horace in years, surrounded by young devotees, receiving homage and dispensing advice. ${ }^{1}$ If this interpretation is correct, Ovid was thinking both of Horace and of the first ode of Book iv when he wrote this letter to Maximus on the death of their common friend. Am I reading too much into Ovid? Not if one grants, what I think we may safely accept, namely, that Horace in Carm. iv. i imitates a verse of the younger poet. Bearing in mind the importance of this compliment and the nature of Ovid's imitations in general, we need not be surprised if some of his reminiscences of Horace are symbols of a further meaning.

[^52]
# VII. - The Etymology of Mephistopheles. 

By Prof. JULIUS GOEbel, STANFORD UNIVERSITY.

Of all the pet-names and titles which have been conferred upon the devil in the course of his long career none has troubled the philologists more than the name Mephistopheles. The first to express an opinion concerning the origin of this name was probably Georg Rudolph Widmann, who says in his Faustbook ( 1599 ), I, cap. II: " Letzlich wird auch allhier in dieser Erzehlung angezeiget, dass sich D. Fausti Geist Mephostophiles nennen lasse, welches sonsten ein Persianischer Name seyn soll." It is interesting to compare with this opinion of one of the early compilers of the Faust story the view of the poet. November 20, 1829, Goethe writes to his friend Zelter: "Woher der Name Mephistopheles entstanden sei, wüsste ich direct nicht zu beantworten; beyliegende Blätter jedoch mögen die Vermuthung des Freundes bestätigen, welche demselben gleichzeitig-phantastischen Ursprung mit der Faustischen Legende giebt; nur dürfen wir sie nicht wohl ins Mittelalter setzen: der Ursprung scheint ins sechzehnte und die Ausbildung ins siebzehnte Jahrhundert zu gehören." Goethe makes no attempt at an etymology of the name, but quotes, for the sake of showing the highly dignified position of Mephistopheles, a chapter from Faust's Höllenzwang, a magic book printed in 1612, in which the various dignitaries of the demonocracy are described according to their rank and position.

The etymologies which have since been given by commentators on Goethe's Faust and others may be divided into two classes: those which explain the name from the Greek, and those which interpret it from the Hebrew.

The interpreters who derive the name from the Greek start from the supposition that the last part of the word Mephistopheles is the ending - $\phi \iota \lambda \eta s$ or - $\phi \iota \lambda$ os as in Theophiles or Theophilos. Thus Professor Dürr of Altdorf writes as early
as July 18 , 1676 , in a letter to Georg Sigismund Führer that in his opinion Mephistopheles originated from $\mu$ ézas and $\phi i \lambda o s, " u t$ intelligatur se magnum et prae aliis eminere velle." W. Ernst Weber in his commentary on Goethe's Faust derives the name from mefitis or meplitis, "Schwefeldampf," and $\phi i \lambda o s($ or $\dot{\omega} \phi \in \lambda \epsilon i \nu)$, and interprets Mephistopheles as "homo quem mephites juvant." Düntzer's explanation Mì-ф $\omega \tau 0$ $\phi i \lambda \eta s$, "der das Licht nicht liebende," and Hagemann's M ${ }_{\eta}$ $\phi a v \sigma \tau o-\phi i \lambda \eta s$, "Nicht-Faustlieb," I need only mention as curiosities born of philological despair.

A recent etymology by W. H. Roscher in the appendix to his treatise on "Ephialtes, Eine Abhandlung über die Alpträume und Alpdämonem des klassischen Altertums" (Abhandlungen der phil. hist. Klasse der königl. sächs. Gesellschaft der Wissenschaften, Vol. XX), deserves more serious consideration. Starting from the theory that Mephistopheles had originally been a spiritus familiaris, a Germanic Hausgeist or Kobold, he derives the name from the Greek ' $\Omega \phi \bar{\epsilon} \lambda \eta$ ), by which name Ephialtes was known also, and sees in Mephistopheles a corrupted form of Megistopheles, "der höchst Nützliche." While it must be admitted that Mephistopheles acts for a time as Faust's servant, thus showing certain features of the Germanic Kobold, his character as a whole will scarcely appeal to any one but our etymologist as "highly useful."

> Nein, nein! der Teufel ist ein Egoist Und tut nicht leicht um Gottes willen Was einem andern nützlich ist.

Although the Hebrew etymologies at first sight seem to promise better results, they do not explain the character of Mephistopheles. According to Krenkel, Jahrbuch fïr deutsche Theologie, XXII, 474 ff ., our name is composed of mepliz, " Zerstreuer," " Vernichter," and tophel, "Lügner." But the compound mephiz-tophel, according to the rules of Hebrew noun-composition, would mean "destroyer of liars," a name far more fitting to Jehovah than to Mephistopheles. The same is true of the etymology proposed in Brockhaus's ConversationsLexicon, which explains the first part of the name as the

Hebrew mephir, "Zerbrecher," and the second as tophel, "Lügner."

Before I give the etymology of the name which suggested itself to me recently, it is necessary to enumerate the principal forms of the word which have been handed down to us.

1. Mephostophiles (Faustbook of Spies, 1587 ; Versified Faustbook, 1587; Widmann's Faustbook, 1599; Pfitzer's Faustbook, 1674).
2. Mephostophilis (Marlowe's Faust. Shakespeare has Mephostophilus).
3. Mephistophiles (Dr. Fausti dreyfacher Höllenzwang, Rom, 1501 ; Dr. Fausti vierfacher Höllcnzzeang, Rom. 1580; Faust's (dreifacher) . . . Höllenzwang, Romae in vaticano unter Papst Alexander VI, Anno 1520). The places and dates of publication in these and other magic-books are, of course, purposely given incorrectly by the publishers, who desired to escape detection, and at the same time wished to have their productions appear old and rare.
4. Mephistopheles (Dr. Joh. Fausti Nigromantia et Cabbala alba, Mephistopheles ct Auerhalnn; Faustbuch des Christ-lich-Meynenden, 1728; Goethe's Faust).
5. Mephis-Dopholus (old parchment scroll, dated 1509 ; old German manuscript entitled: Doctor Faustens geheime Manuscripta. Both documents are in possession of K. Engel).
6. Mephistophiel (Praxis Cabulae nigrae Doctoris Johannis Fausti, Passau, 16́12).

The peculiar diversity of the form of our name in books, which appeared almost contemporaneously, indicates that the authors themselves were not sure of its etymology. This could not have been the case had the name been originally an epithet or a nickname of Satan, whose many surnames were generally known and understood. That Mephistopheles is, however, not originally identical with Satan, as most commentators of Faust assume, is clearly shown by Chapter XXIII of Spies' Faustbook, in which the various devils are described. These form a regular state or kingdom under the leadership of Satan - Lucifer. When the belief in this kingdom originated cannot be ascertained, but it is evident that it was fully
developed in the sixteenth century, as is shown by several magic-books.

According to Doctor Johann Faustens Miracel- Kunst. und Wunderbuch oder die (!) schwarze Rabe, Lion, 1469, the demonocracy consists of : i, Lucifer, "König "; 2, Belial, "Vice Roi"; 3, "Vier Gubernatores" (Satan, Beelzebub, Astaroth, Pluto); 4, "Sieben Grossfürsten" (Aziel, Mephistophiles, Marbuel, Ariel, Ariguel, Anisel, Barfael); 5, "Fünf Geheimde höllische Räthe"; 6, "Ein Geh. Reichs-Secretarius"; and finally, 7 , twelve "spiritus familiares." While it seems at first sight that the constitution of Lucifer's kingdom was patterned after that of the Holy Roman Empire, we may learn from several magic-books whence the seven Grossfiirsten really originated. According to the Wagnerbook they are identical with the spirits of the seven planets: "Und sind erstlich der fürnemesten Fürsten sieben, nach den sieben Planeten, die regieren fürnemlich auch in ihren besonderen tagen und stunden, und heissen: i, Aratron(Saturn); 2, Bethor (Jupiter); 3, Phaleg (Mars); 4, Och(Sonne); 5, Hagith(Venus); 6, Opliel (Mercur); 7, Phul (Mond)." A similar account is given in the magic-book Arbatel, a Latin version of which is contained in the works of Heinrich Cornelius Agrippa von Nettesheim, printed at Lyons about 1550: "Spiritus Olympici dicuntur illi, qui in Firmamento et in Astris Firmamenti habitant. . . . Septem sunt gubernationes seu officiorum differentiae Olympi, quibus Deus voluit universam hanc mundi machinam administrari. Visibilia autem eorum astra sunt: Aratron (Saturn), Bethor (Jupiter), Phaleg (Mars), Och (Sol), Hagith (Venus), Ophiel (Mercurius), Phul (Luna)." According to the Praxis Cabulae nigrae Doctoris Johannis Fausti magi celeberrimi (1612) the names of the seven planetary spirits ("Unter Lucifer gehören die sieben Churfürsten der Teufel, welche mit ihren Namen nach Ordnung der Planeten heissen ") are: 1, Lucifer; 2, Marbuel; 3, Ariel; 4, Aciel ; 5, Barbiel ; 6, Mephistophiel; 7, Agadiel.

The fact that the names of the spirits given by the last book differ from those given in the preceding books may be explained by the following passage in the magic-book

Arbatel: "Olympicorum spirituum nomina ab aliis alia traduntur, sed tantum illa sunt efficacia, quae unicuique traduntur per revelatorem Spiritum visibilem vel invisibilem." It will be noticed, however, that in the list of names of the Praxis Cabulae nigrae Mephistophiel takes the place of Ophiel in the lists of Arbatel and the Wagnerbook, and that both names stand for Mercury. It is, therefore, in the astrological demonology, which we find fully developed as early as Jamblichus, that we must look for the origin of the name Mephistopheles, and there is no question in my mind that the etymological explanation must start with the form Ophiel, contained in Mephist-Ophiel, the forms in -les and -lus being of later origin.

The word Ophiel is evidently composed of the Greek ö $\phi \iota \varsigma$, serpent, and the Hebrew ending $-e l$, which frequently appears not only in old Hebrew names of demons, but also in the demon-names that were manufactured after the Hebrew pattern, owing to the influence of the Cabala, by writers of magic-books during the sixteenth and seventeenth centuries. From the long list of such names I quote for the sake of illustration the following: Kyriel ( $\kappa u ́ p \iota o s$ ), Kyniel ( $\kappa v ́ \omega \nu$ ), Leoniel (leo), Cancriel (cancer), Tauriel (taurıs), Ariel (aries).

That the spirit of the planet Mercury, or rather the demon Mercury, should be called Ophiel = serpent-god, is explained by the fact that Mercury-Hermes was represented during the later Hellenistic period with the кпрúкєוod or the caduceus. This $\kappa \eta \rho \tilde{\prime} \kappa \epsilon \iota \circ \nu$ is above all the symbol of Hermes Trismegistos or Maximus Mercurius, the guardian-god of the magicians, alchemists, and astrologers. I do not doubt for a moment that Mephistophiel is a corrupted form of Megist-Ophiel, and that Mephistopheles is originally identical with Hermes Trismegistos. ${ }^{1}$

The expressions " Hermetic art," "hermetically sealed," etc., still point to the great rôle which Hermes Trismegistos played in the science of the ancients and of the middle ages. Originally the Egyptian god Toth (cf. R. Pietschmann, Hcrmes Tris-

[^53]megistos, Leipzig, 1875), he was identified with the Greek Hermes when the family of the Ptolemies took possession of the Egyptian throne. Thus Toth is called in the inscription on the famous Rosetta stone: ‘Epuฑ̂s ò $\mu$ é $\gamma a s$ кaì $\mu$ éyas. The epithet $\tau \rho \iota \sigma \mu \epsilon \in \gamma \iota \tau \sigma o s$ appears, however, for the first time in Tertullian ( $\dagger$ ca. 220), who speaks of him as: " Mercurius ille Trismegistus, magister omnium physicorum." A century later Lactantius says concerning him: "Mercurius, qui tametsi homo fuerit antiquissimus tamen et instructissimus omni genere doctrinae, adeo ut ei multarum rerum et artium scientia Trismegisto cognomen imponerct. Hic scripsit libros et quidem multos ad cognitionem divinarum rerum pertinentes, in quibus majestatem summi ac singularis Dei asserit."

The truth, however, is that the writings of Hermes mentioned here by Lactantius were attributed originally to Toth, and consisted of forty-two sacred papyrus scrolls. These scrolls were first called 'Epuov $\beta \iota \beta \lambda i ́ a$ by Clemens Alexandrinus, Strom. vi, 4, § 35 . When Jamblichus, a century after Lactantius, wrote his work de Mysteriis, he could mention as many as twenty thousand books of Hermes, in which the principles of all our knowledge had been revealed by this $\operatorname{god}(d e$ Myst. viii, i). The belief that Hermes Trismegistos, $\theta \in o ̀ s ~ o ́ ~ \tau \hat{\omega} \nu \lambda o ́ \gamma \omega \nu \quad \dot{\eta} \gamma \epsilon \mu \omega \dot{\omega}$, as Jamblichus calls him, had written these books or had inspired holy men to write them as his teachings, was handed down through the middle ages not only by St. Augustine, who gives long extracts from these writings in the eighth book of de Civitate Dei, but also by the alchemists, astrologers, and magicians. For these claimed Hermes Trismegistos as their special god, and to him they ascribed numerous books on magic and astrology. "Fertur," says Fabricius, Bibliotheca Graeca, I, 74, "scripsisse imaginum sive praestigiorum (an praesagiorum) libros: De annulis, Liber i; De charactere, Lib. i; De sigillis, Lib. i; De imaginibus Martis, Lib. i; De imag. Jovis, Lib. i; De imag. Saturni, Lib. i; De septem annulis planetarum, Lib. i; De medicinis et conjunctionibus planetarum, Lib. i; De confectionibus ad capiendum animalia silvestria, Lib. i; De verbo perfecto, Lib. i; Ad Asclepium, Lib. i; De mathesi, Lib. ii." How
numerous the astrologers were during the early middle ages may be learned from the fact that the Codex Justinianus has the following: "Ars mathematica [astrology] damnabilis est et interdicta omnino" (IX, I8). With the alchemists of the middle ages the most famous of the writings of Hermes Trismegistos was the so-called Tabula smaragdina. According to the legend this emerald table, which had a most valuable inscription, was found by Sarah, the wife of Abraham, in the grave of Hermes, in the valley of Hebron, and taken by her from the hands of the corpse. "Meminit tabulam smaragdinam," says Fabricius, l.c., " Aristoteles junior, Chemicus, De perfecto Magisterio, meminit Senior Zadith, Magister Ortholanus sive Hortulanus, nescio quis; Avicenna, Arnoldus de Villa Nuova, Isaacus Hollandus, Albertus Magnus, Bernhardus Trevisanus et anno 1330 Petrus Bonus Lombardus."

It is evident from the list of authors here quoted that the memory of Hermes Trismegistos was still alive when the revival of alchemy, astrology, and magic took place during the fifteenth and sixteenth centuries. That he was considered also the greatest of all magicians may be seen from the following passage in the fourth book of Agrippa von Nettesheim's De occulta philosophia: "Omnium siquidem, qui de nominibus spirituum eliciendis tractarunt, primus ille [Trismegistus] extitit."

It is my opinion that Hermes Trismegistos, who was worshipped during the first centuries of the Christian era in many parts of the Roman empire, and who was the special god of the alchemists, astrologers, and magicians, was considered by later Christian writers a demon, and appears as such under the name Ophiel and Mephist-ophiel (= Megistophiel) in the demonological literature of the sixteenth and seventeenth centuries.

The mediæval belief that the devil was the inventor of the game of dice ("der tiuvel shuof daz würfelspil") seems to show that Satan and Mercury were identified quite early. Thus Hincmar von Reims ( $\dagger 882$ ) says: "sicut isti qui de denariis quasi jocari dicuntur, quod omnino diabolicum est, et, sicut legimus, primum diabolus hoc per Mercurium prodidit, unde et Mercurius inventor illius dicitur." The Mercury
mentioned here is without question Maximus Mercurius, for according to a passage in Plato's Phaedrus it was the Egyptian god Teuth $=$ Toth (or Hermes Trismegistos), who invented



It is, moreover, significant that several of the teachings of Hermes Trismegistos were condemned as heresies by the early church. Thus Philastrius in his Liber de Haeresibus (fourth century) says: "Hermes ille vanus paganus Trismegistus docuit, post Dominum omnipotentem non alium nisi Solem debere ipsum et homines adorare, qui cum ad Celtarum provinciam perrexisset, ipse eos dignoscitur docuisse, atque huic errori ut succumberent eisdem suasisse."

That Hermes Trismegistos played an important rôle in magic as early as the thirteenth century may be guessed from the following passage from Albertus Magnus (cf. Pietschmann, l.c., 58): "Quales sunt imagines Belini [i.e. Apollonius or Asklepios] et Hermetis quae exorcitantur per liv nomina angelorum, qui subservire dicuntur imaginibus lunae et circulo ejus et forte potius sunt nomina daemonum."

We may, therefore, easily understand why Mephistopheles should appear in close connection with Faust, the greatest of all magicians, astrologers, and alchemists. When the latter conjures up the devil, it is not Satan, or Lucifer, who makes his appearance, but the very demon who had been the god of the magicians. While it is possible that, owing to the identity of Mercury and Wodan, certain characteristics of the latter were transferred to Mephistopheles, there are, nevertheless, certain features in Faust's conjuration of Mephistopheles which still remind us of Hermes, the old wind-god and inventor of music. Thus we are told in the Faustbook of Spies (p. 14) how wind and music precede the apparition of Mephistopheles: "Denn als D. Faustus den Teuffel beschwur, da liess sich der an, als wann er nicht gern an das Ziel und an den Reyen käme, wie dann der Teuffel im Wald einen solchen Tumult anhub, als wollte Alles zu Grunde gehen, dass sich dic Bäum biss zur Erden bogcn. . . . Und sind im Wald viel löblicher Instrument, Music und Gesäng gehört worden."

Moreover, in several places Mephistopheles is called "der fliegende Geist" (pp. 17, 27); he appears as "Diener des Hellischen Printzen im Orient" (p. 20), and he tells us that he is well-informed in astrology (p. 42). ${ }^{1}$

In conclusion, a word concerning the transition of MegistOphiel into Mephist-Ophiel is necessary. The fact that the phrase $\theta \epsilon \hat{\omega} \mu \epsilon \gamma i \sigma \tau \omega{ }^{\text {' }} \mathrm{E} \rho \mu \hat{\eta}$ occurs several times in inscriptions (cf. Corp. Inscr. Gr. III, 5703,5100, etc.) proves that $\mu$ érıotos was perhaps as frequent an epithet of Hermes as $\tau \rho \iota \sigma \mu \epsilon^{-}$ ructos. The change of megist- to meplist- will not astonish any one familiar with the treatment of Greek words in magic literature. A striking example of this is furnished by the word io $\sigma v \rho o{ }^{\prime}$ s occurring in the Trisagion of the ancient church :
 these words were considered especially effective, we find them frequently used, though mostly in a distorted shape, in the incantations of magic-books. Thus the word iozupós appears in one of the incantations of the Praxis Cabulae nigrae D. Joh. Fausti as a noun: Hischacos. According to Frauenlob (Leiche und Spriiche, No. 409: 'Ôschiros, got gewaltec') there existed also a form ôschiros of io $\quad$ voós. This form seems to be at the basis of Osphadiel (from Oschra in incantations), the name of a demon, showing transition of $\chi=p h$.

Another example of how such words and names in magic literature boldly defy strict phonetic laws may be found in the history of the words Zabulon, Sabilon, Sabulon, Savilon, Savelon, all of which must be traced back to diabolus.

The final reason for changing megist- to mephist- may, however, be attributed to the desire of concealing the identity of Hermes Trismegistos, which the attribute $\mu$ é $\gamma \iota \sigma \tau o s$ would easily have disclosed. For Ficinus in the introduction to his translation of the Poemander of Hermes tells us: "Nomen ejus proprium ob reverentiam quandam pronunciare vulgo ac temere non licebat."

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## PROCEEDINGS

 of theTHIRTY-SIXTH ANNUAL MEETING

## of the

## American Philological Association

Held at St. Louis, Missouri, September, 1904
al.So of the fifth and sixth anduial meetings of the
Philological Association of the Pacific Coast
Held at San Francisco, California

December, 1903
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December, 1904
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## MEMBERS IN ATTENDANCE AT THE THIRTY-SIXTH ANNUAL MEETING (ST. LOUIS, MISSOURI).

Louis F. Anderson, Whitman College, Walla Walla, Wash. R. Arrowsmith, New York, N. Y.<br>Silney G. Ashmore, Union University, Schenectarly, N. Y. Francis M. Austin, Illinois Wesleyan University, Bloomingtón, Ill. C. P. Bill, Adelbert College of Western Reserve University, Cleveland, O. M. Bloomfield, Johns Hupkins University, Baltimore, Md. George M. Bolling, Catholic University of America, Washington, D.C. George Willis Botsford, Columbia University, New York, N. Y. Demarchus C. Brown, Butler College, Irvington, Ind. Carl D. Buck, University of Chicago, Chicago, 111. Charles Nelson Cole, Oberlin Cullege, Oberlin, O.<br>Martin L. D'Ooge, University of Michigan, Ann Arbor, Mich. Herman L. Ebeling, Hamilton College, Clinton, N. Y. William S. Ebersole, Cornell College, Mt. Vernon, Ia.<br>Herbert C. Elmer, Cornell University, Ithaca, N. Y. Herbert IB. Foster, University of South Dakota, Vermilion, S. D. Frank H. Fowler, Lombard College, Galesburg, 111. George Depue Hadzsits, University of Cincinnati, Cincinnati, O. Walter David Depue Hadzsits, Smith College, Northampton, Mass. William Gardner Hale, University of Chicago, Chicago, Ill. F. A. Hall, Washington University, St. Louis, Mo. Karl P. Harringtun, University of Maine, Orono, Me. J. E. Harry, University of Cincinnati, Cincinnati, O. W. A. Heidel, Iowa College, Grinnell, la. George Hempl, University of Michigan, Ann Arbor, Mich. Walter Hullihen, Grant University, Chattanonga, Tenn. J. H. Kirkland, Vanderbilt University, Nashville, Tenn. Charles R. Lanman, Harvard University, Cambridge, Mass. Emory B. Lease, College of the City of New lork, N. Y. F. A. March, Lafayette College, Easton, Da. Walter Miller, Tulane University, New Orleans, La. Frank G. Moore, Dartmouth College, Hanover, N. H. Daniel A. Penick, University of Texas, Austin, Tex. Edward D. Perry, Columbia University, New York, N. Y. John Pickard, University of the State of Missouri, Columbia, Mo. Rufus B. Richardson, New York, N. Y.<br>W. S. Scarborough, Wilberforce University, Wilherforce, O.<br>J. J. Schlicher, State Normal School, Terre Haute, Ind.

John Adams Scott, Northwestern University, Evanston, Ill.
T. D. Seymour, Yale University, New Haven, Conn.
F. W. Shipley, Washington University, St. Louis, Mo. Paul Shorey, University of Chicago, Chicago, Ill.
M. S. Slaughter, University of Wisconsin, Madison, Wis. Herbert Weir Smyth, Harvard University, Cambridge, Mass. Arthur T. Walker, University of Kansas, Lawrence, Kan. Andrew C. White, Cornell University, Ithaca, N. Y. Alexander M. Wilcox, University of Kansas, Lawrence, Kan. John Henry Wright, Harvard University, Cambridge, Mass.

## AMERICAN PHILOLOGICAL ASSOCIATION.


#### Abstract

St. Louis, Mo., September 16, 1904. The Thirty-sixth Annual Meeting was called to order at 3.1o p.m. in a recitation-room in the new buildings of Washington University, by the President, Professor George Hempl, of the University of Michigan.

The Secretary of the Association, Professor Herbert Weir Smyth, of Harvard University, read the following list of persons who had been nominated for membership in the Association. At a later meeting they were declared elected by the Executive Committee :


Prof. George Henry Allen, University of Cincinnati. Edmund C. Cook, Esq., New York, N. Y.<br>Prof. Eli Dunkle, Ohio University, Athens, O.<br>Miss Susan Fowler, Columbia University.<br>Prof. George D. Hadzsits, University of Cincinnati.<br>Dr. Walter D. D. Hadzsits, Smith College.<br>Prof. Archer Wilmot Hendrick, Whitman College.<br>Adam Fremont Hendrix, Esq., University of Kansas.<br>Prof. Walter Hullihen, Grant University, Chattanooga, Tenn.<br>Dr. Samuel A. Jeffers, State Normal School, California, Pa.<br>Dr. Elizabeth Mary Perkins, Washington, D. C.<br>G. E. Scoggin, Esq., Cambridge, Mass.<br>Dr. Andrew Shedd, University of Florida.<br>Eric Arthur Starbuck, Esq., Worcester, Mass.<br>Prof. William F. Swahlen, De Pauw University.<br>Prof. Frank Vogel, Massachusetts Institute of Technology.<br>Dr. Arletta L. Warren, State Normal School, Madison, S. D.

The Secretary also reported that the annual volume had been published in April, and that the Bibliographical Record was still incomplete at the time of this meeting.

Professor Smyth then presented his report as Treasurer for the year 1903-1904: -

RECEIPTS.

| Balance from 1902-1903 | \$658.65 |
| :---: | :---: |
| Sales of Transactions | \$139.46 |
| Membership dues | 1401.00 |
| Initiation fees | 90.00 |
| Dividends Central New England and Western R. R. | 6.00 |
| Offprints . . | 6.00 |
| Interest . | 8.00 |
| Philological Association of the Pacific Coast | 214.97 |
| Total receipts for the year | 1865.43 |
| expenditures. | \$2524.08 |
| Transactions and Proceedings (Vol. XXXIV) | \$1074-43 |
| Salary of Secretary . | 300.00 |
| Postage | 33.93 |
| Printing | 16.00 |
| Expressage | 3.78 |
| Incidentals | 7.83 |
| Total expenditures for the year | \$1435.97 |
| Balance, July 6, 1903. . | 1088.11 |
|  | \$2524.08 |

It was further reported that the Executive Committee had voted to continue for three years more its annual contribution of $£ 40$ towards the expense of preparing the Platonic Lexicon under the direction of Professor Lewis Campbell.

The reading of papers was then begun.

1. A Misinterpreted Greek Optative, by Professor J. E. Harry, of the University of Cincinnati.

The one hundred and eighty-sixth verse of the Ajax of Sophocles ( $\ddot{\eta} \kappa 0$ rà $\rho$
 heaven sends madness, it must come." This is incorrect; $\eta_{\kappa 0<} \alpha \nu$ is not equivalent to $\dot{\alpha} \nu \dot{\alpha} \gamma \kappa \eta \dot{\epsilon} \lambda \theta \epsilon \hat{i} \nu, \dot{\alpha} \nu \alpha \dot{\gamma} \kappa \eta \dot{\alpha} \phi \iota \kappa \dot{\epsilon} \sigma \theta a \iota$. A proper conception of the tenor of the whole passage depends upon a correct understanding of $\tilde{\eta}_{\boldsymbol{\kappa}} \boldsymbol{\alpha} \not \partial \nu$. The Greek optative varies in significance from " may" to " must"; sometimes means "can" and "will." Cf. Soph. Phil. 1302, oủk à $\nu \mu \in \epsilon \in i \eta \nu$; Eur. Heracl. 344, oủk à $\nu$



 request (veuillez parler) is answered by $\lambda \in \xi \omega$. Cf. Euml. 94, $\epsilon \ddot{\nu} \delta o \iota \tau^{\prime} a_{\nu} ; 117$,

when Meno speaks to his slave he says $\delta \epsilon \hat{\rho} \rho \sigma \pi \rho \delta \sigma \epsilon \lambda \theta \epsilon(82 A)$. The modals in the dialogue between Isabella and Angelo in Measure for Measure are the despair of the foreigner. But "must" is particularly difficult for the novice. Our "must bave" is reserved to express an idea which is generally rendered in modern European languages by the future perfect indicative: "Il lettore sarà certamente maravigliato" (Fanfani, Cecco d' Ascoli, ch. 45). Cf. George Sand, Lélia, ch. 64 : "Ils auront voulu pêcher les truites du lac; le plus hardi des deux se sera risqué trop avant ; il aura crié au secours, mais l'autre aura eu peur et la force lui aura manqué." In like manner the Salaminian sailors have come to the conclusion that their chieftain lies stricken by frenzy sent from heaven. The perfect optative middle and passive (with $\alpha \nu$ ) must have been a favorite method with the Greeks, of expressing subjective conviction with reference to the past. But the verb which would have been naturally most employed happens to be without a perfect, hence was unable to form an optative with $\alpha \nu$ in the perfect to express the idea which is usually rendered in modern European languages by a future perfect (wird gewesen sein, aura été, sarà stato, habrd sido). Hence the Greek was content to use the present for the perfect: Herodotus i,
 optative active in any verb is exceedingly rare. In Xen. $A n .5,7,26$, is found
 $\dot{\epsilon} \mu \pi \epsilon \pi \tau \omega^{\prime} \kappa 0 \quad$ ). This sentence almost paraphrases the passage in the Ajax. The mariners, who constitute the chorus, fear that madness has seized their leader. But the optative in this sentence is doubly disguised, is really a perfect masquerading as a present and a passive as an active (zentum sit). The chorus
 the light we need from the mariners themselves. In responding to Tecmessa in 278 f., they repeat what they say here - only the sentence is given a different
 preted by the commentators, there would have been no controversy as to the correct reading in 279 ( $\ddot{\mu} \kappa \epsilon$ or $\tilde{\eta} \kappa 7$ ). Mekler reads the indicative, Jebb the sub-
 $\pi a ́ v \tau^{\prime}$ àv $\epsilon \xi \eta \dot{\eta} 0<\sigma a \phi \hat{\eta}$. Even Tecmessa sees in Ajax's behavior evidence of a $\delta c a \phi \theta 0 \rho d \quad \phi \rho \epsilon \nu \omega \hat{v}$, a $\theta \in \dot{l} a$ vboos (243). It is the subjective conviction of the chorus that a $\theta \epsilon \rho \beta \lambda a \dot{\beta} \epsilon \iota a$ or $\nu \delta \sigma o s \quad \phi \rho \in \nu \omega \hat{\nu}$ has visited their chief. Consequently,
 von einem Gott getroffen sein, quelque dieu l'aura atteint de folie, la pazzia gli sarà venuta dal cielo.

This paper is published in full in the Classical Reziezo, April, 1905.
2. Horace as a Nature Poet, by Professor Karl P. Harrington, of the University of Maine.

If, judged on grounds of antecedent probability and environment, Tibullus and Propertius, as we have previously shown, exhibit but a disappointing amount of appreciation of nature in its sim.plicity and its most palpable relations, and it is evident that nature exerted but a meagre influence on the subject-matter, the illustrations, or the general tone of their writings, our surprise is rather in the
opposite direction, as we discover that Horace, the most carefully polished, the most laboriously concise, the most artfully naïve of all Ruman puets, who taught Rome to appreciate Greek models of lyric verse in abounding variety, who could lay away his unfinished beginnings for an indefinite period till the best callida iunctura should be worked out, who could carve out a poem on any subject, from Lalage's rippling laughter to the analysis of those qualities that should inhere in the ideal Roman citizenship, - that this Horace is so permeated with affection for, and appreciation of, the simple beauty of the fields and flocks, the groves, the babbling brooks, the wind in the tree-tops, and the moon-lit heavens, that we can ever see the humble rustic lad from the back-country village of Venusia, underneath all the external niceties of Roman society in the metropolis, and amid the folly and frippery of the Augustan court.

For it is mostly the pictures that Horace knew when a boy in Apulia, or those other ones which he loved so well among the Sabine mountains, which he presents to us in his poetry, with more or less directness and definiteness. Not that Horace omits the conventional refcrences to Erymanthus and Tempe, to the Cyclades, and to the dust of Troy, to Proteus lording it over his seals, and to Enceladus prone beneath the roaring fires of Aetna. But, to our infinite satisfaction, he prefers to draw his parallels, and no small amount of his inspiration, from the dearest scenes of his childhood, or from those amid which his ripening years were so well at ease.

Even if we admit that sometimes he poses a little for effect, we cannot doubt that he is a true lover of the country. His picture of the delights that Alfius enjoyed in the country are really but a snapshot of himself upon his Sabine estate.

It must have been on that poor little Venusian farm of his father's that Horace had grown so close to nature. When in childhood he wandered off on the slopes of the Mons Voltur, the experience left only a fond reminiscent longing (Carm. iii. 4, 6-24). We may well believe it is this same dominating height which he has in mind when speaking of the life of the hills, or of the streams that sweep down so suddenly from their slopes, as in Carm. i. 23, 1-8; 15, 29-32; iv. 2, 5-6.

The stream that naturally impressed Horace most in his boyhood days was the Aufidus. To this he refers again and again, either by name or by implication; so in Serm. i. 1, 58, et passim; Carm. iv. 14, 25-28. And even the simile in Carm. iii. 29, 33-41 probably includes Etruscum for merely conventional considerations of politeness towards Maecenas, while really picturing the stream that Horace knew best. Peace and gladness at other times and places are suggested by the same river. It is still the Aufidus that we may see in such a passage as Carm. ii. 5, 5-9. Similar scenes of rustic life are found in Carm. iii. 11, 9-10; iv. 2, 27-31, where perhaps both the Calabrian and the Sabine country are really in the mind of the poet.

Something, too, of wild life Horace surely knew in his early days, as we may judge from Carm. iii. 12, 10-12. Nor did he forget the fierce storms of southern Italy (Carm. i. 28, 25-27). And though he was no sailor, he knew by experience something of the dangers off the eastern horizon of his boyhood home, as is indicated, e.g., by Carm. iii. 27, 17-24; i. 33, 15-16. To Apulia also it seems natural to refer such other scenes as are described in Carm. iii. 27, 5-7, 9-12, and elsewhere.

Once, however, away for all time from his childhood surroundings, he turns
for rural joys to the Sabine mountains near Rome, where so many of his new associates could afford summer homes. Beautiful Tibur especially inspires him, as in Carm. i. 7, 10-17; iv. 3, 10-11; i. $18,1-2$; ii. 6, 5-8.

But when Horace was at length possessed of his darling estate on the slopes of the valley of the Digentia, all other spots on earth were to him of secondary beauty and importance. Here he was supremely content, as poem after poem clearly shows, e.g. Carm. i. 17 ; ii. 18, 11-16; iii. 18; 16, 29-32. Here is most probably to be located the Bandusian spring (Carm. iii. 13); and here from time to time he describes his life in communion with the rustic world about him (Carm. iv. 5, 29-30; 12, 3-12; 7, 1-4; iii. 1; 29-32).

More minute analysis of his preferences in describing nature phenomena shows unusual interest in the sea and the winds, less appreciation of day and night. Fire, the stars, rain, and the seasons have impressed him less than we should have expected.
3. On the Distinction between Comitia and Concilium, by Dr. George Willis Botsford, of Columbia University.

This paper appears in the Transactions.
4. Notes on Ovid, by Dr. Edward Kennard Rand, of Harvard University (read by Professor Frank G. Moore).

This paper also will be found in the Transactions.
5. A Critical Note on Catullus, Carm. 1xviii, 93, by Professor F. W. Shipley, of Washington University, St. Louis.

Of the numerous difficulties which the text of Catullus still presents, none is more baffling than the corruption in lxviii. 93 : Quae uetet id. The whole context is as follows :-

Nam tum Helenae raptu primores Argivorum
90
Coeperat ad sese Troia ciere uiros,
Troia (nefas) commune sepulchrum Asiae Europaeque,
Troia uirum et uirtutum omnium acerba cinis,
Quae uetet id nostro letum miserabile fratri
Attulit. Ei misero frater adempte mihi,
95
Ei misero fratri iucundum lumen ademptum, Tecum una tota est nostra sepulta domus, Omnia tecum una perierunt gaudia nostra Quae tuus in uita dulcis alebat amor.
The unintelligible Quae uetet id is substantially the reading of all the manuscripts. ${ }^{1}$ Many emendations have been offered by scholars. I quote from Ellis : " nuper Passeratius nunc et Marcilius Ungerus uitai nostrae Ribbeckius in
${ }^{1}$ The app. crit. of the edition of Ellis gives the readings as follows: Quae uetet id ACD G H $\mathrm{L} \mathrm{La}^{2} \mathrm{O} V$ Quae uectet id BLa , sed in B ultima littera wocabuli uectet ita producta est, ut uecter esse potuerit. Quae uetat id ad. Quae ueter b P.

Jahn. Ann. lxaxv, 378 uelut id Coningto uelut his uel eis Eduinus Palmer (Queis ueluti id iam antea Froelichius) ueterum id Heysius ueter id ed. Parm. 1473, quod in ed. 1 retinui Quaene etiam Heinsius G. Hermannzus in Jahn. Ann. xxxiii, 245." Ellis, after retaining in his first edition the Quae ueter id of the ed. Parm. 1473, has, in his second edition, adopted an emendation of his own, Qualiter id. He cites, in support of the use of the somewhat rare word Qualiter, its occurrence in Ov. Am. 1. 7. 58, Martial, and Valerius Flaccus.

While I can agree with Ellis in rejecting the other conjectures, I cannot feel that his own emendation is at all satisfying, even if it does involve but a slight change in the text from Quae uecter id of $\mathbf{B}$. After all, the examples which he cites of the use of qualiter simply help to confirm the rarity of the word. It is not found elsewhere in Catullus, or indeed in any writer until Ovid. But, aside from the rarity of qualiter, and the fact that it does not occur elsewhere in Catullus, and granting for the moment that as is the sense needed, there is still a difficulty in id. Whether it is used in the sense of idem or in that of illud, its force in either case is much weaker than that of either word. It could, in fact, be omitted altogether without serious loss of emphasis. So far as the $i d$ is concerned, it results in producing a weak line, where a strong one is evidently intended.

To return now to Qualiter. The passage in which Catullus speaks of his brother's death is no mere incidental comparison, such as would be introduced by this word. It contains the strongest vein of lyric feeling in a poem otherwise constructed in a somewhat mechanical way upon an Alexandrian plan. The exclamation nefus is evoked, not so much by the thought of the Trojan war, as by the sense of his own bereavement which the name of Troy calls back to his mind. The same is also true of the words acerba cinis. Acerba has the double sense of "bitter" and " untimely," and is much more pregnant with meaning in connection with the death of his brother than it would be if it applied merely to the legendary heroes of Troy whose promising careers were cut short. The bitterness of his brother's untimely end is again the keynote of his plaint in Carm. ci, Heu miser indigne frater ademple mihi. The two expressions, nefins and acerba cinis, form then the point of departure from the conventionally treated story of Protesilaus and Laodamia to the deeper personal feelings of the poet in the clause which follows containing the corruption. The clause should therefore present, not a mere incidental comparison, such as Qualiter might introduce, but a reason for the intensity of the feeling expressed in nefas and acerba cinis: "Troy a curse upon her - the common burial ground of Europe and of Asia, of brave men and brave deeds untimely grave, since she has brought sorrowful death even to my own brother, alas my brother! " etc.

It is with diffidence that I attempt to add to the list of suggested emendations, already abnormally large. I believe, however, that the emendation which I propose: Quandoquidem et, which makes the lines read, Quandoquidem at nostro letum miserabile fratri $\mid$ attulit. Ei misero frater ademple mihi, has much to recommend it, not only in giving the necessary force to the line, but also in accounting for the corruption.

Nostro is clearly the emphatic word in the line - my own brother - and needs an et or some other word with the sense of "even" to bring this emphasis out. Quandoquidem gives the reason for the expression of feeling in nefus, "a
curse upon her," and acerba cinis, "untimely grave." Quandoquidem is a word in frequent use by Lucretius in this position in a hexameter line, and is not only used by Catullus himself in this way, but is actually used in another passage (Carm. ci, 5) which also treats of his brother's death. The passage in question contains, in addition to similarity of sentiment, a repetition of several words which occur in the couplet lxviii, ll. 93-4: Quae uctet id nostro letum miserabile fratri | attulit. Ei misero frater adempte mihi. The passage in Carm. ci reads as fulluws :-

> Multas per gentes et multa per aequora uectus
> Advenio has miseras, frater, ad inferias, Ut te postremo donarem munere mortis
> Et mutam nequicquam alloquerer cincrem, Quandoquidem fortuna mihi tete abstulit ipsum, Heu miser indigne frater adempte milhi.
> Nunc tamen interea, etc.

5

Comparing now the couplets lxviii, 93-4, and ci, 5-6, it will be seen that the second half of the one couplet is almost identical with that of the other. It would, therefore, not be surprising if the first word of the couplet ci, 5-6, echoed unconsciously the first word in the couplet lxviii, 93-4. When Quandoquident it occurred to me as the probable reading for Quae uetet id, I had not thought of the presence of Quandoquidem in the corresponding passage in Carm. ci. Its presence there came, accordingly, as a fairly strong piece of corroborative evidence.

There still remains the task of explaining how Quandoquidem et can be deduced from the manuscript reading Quae netet id, or Quae uetet id from Quandoquident et. To begin with, it is no ordinary corruption which has caused scholars for centuries to puzzle over four syllables in a passage in which the sense is as clear as it is here. I believe that the corruption, which was already in the lost Verona manuscript, began with the abbreviated forms of quando and quidem, e.g. $q \bar{n} q i \delta$. The passage may have been written in some such way as $q \bar{n} q i x e t$. Out of the first letter of the abbreviation of quando the quae might easily have grown, and out of the quidem et, with a partial abbreviation of the former, may have arisen a corruption which contained as an intelligible residuum id et. I b lieve that some scribe or corrector, attempting to make sense of the passage, n $\because w$ corrupt, suggested as a variant $e t i d$, thus : uel et $i d$; and that out of this variant g:ew the reading uetet id, the remainder of the corruption.

## Second Session.

Friday evening, September 16.
The Association met in the hall of the Library at $S$ p.m. to hear the address of the President.
6. America and the English Language, by Professor George Hempl, of the University of Michigan.

This address will appear elsewhere, and the author has preferred to omit the customary abstract in this place.

## Third Session.

Saturday morning, September 17.
The Association convened at 10.15 A.m., and proceeded at once to the reading of papers.

7. Accent and Ictus in Late Latin Hexameters, by Professor Frank G. Moore, of Dartmouth College.

The discussion was limited to the last two feet of the hexameter, with special attention to the admission of pyrrhic words in the fifth foot. It was shown that the general statement of an agreement between word-accent and verse-ictus in the clausula of the verse ${ }^{1}$ is subject to considerable modification, in view of the wide differences of practice among the later Latin poets, especially in the treatment of pyrrhic words in the fifth foot. For while one poet. will admit such unaccented words only where they are excused by some form of enclisis, another goes any length in accepting the pyrrhic word, even though emphasis nakes it difficult to dispense with accent, - and that with such frequency as to strain even the most elastic theory of enclisis or proclisis. In the former case there is an evident effort to secure ccincidence of ictus with phrase-accent, - a more important kind of stress, it was argued, than word-accent. On the other hand, in the second case one must feel that the poet in question allowed any pyrrhic word, being indifferent to the loss of accent in a single word, so long as the general movement of the clausula was maintained.

The poets examined ranged from the end of the third century to the beginning of the sixth, i.e., from the Catonis disticha to Priscian, with a total of above thirty thousand hexameters. Commodian was excluded, as belonging to a class by himself. From a statistical table covering the poets mentioned it was proved that Claudian and Prudentius differ in their treatment of pyrrhic words in the fifth foot to an extent which would at first appear almost incredible, Claudian having but six examples in 9326 hexameters, while Prudentius admitted no less than 221 in a total of 5149 verses (neglecting sine and super). An analysis of Claudian's instances showed that all are easy of explanation, three being clear cases of enclisis or proclisis (ac simul and et vice mira and haec mihi [pers. pron. enclitic to the demonstr.]; Gigant. II r, VI Cons. Honor. 533, in Rufin. i. 204). In the three remaining cases, also, the same principle sufficiently covers the ground. Two of these follow et (and in each instance a tetrasyliabic Greek word precedes), the pyrrhic itself being an unemphatic word of rather indefinite meaning, immediately defined by a following phrase upon which the emphasis falls (et freta, in R'ufin. i. 173, et nova, Bell. Poll. 9). Finally, an example of a predicate noun enclitic to its subject, with verb omitted (telae labor, R.P. iii. 204).

That Claudian so very rarely allowed a pyrrhic word in the fifth foot is all the more remarkable because so many instances can be found in Vergil ( 162 cases may be obtained from Professor Iumphreys's table, TAPA., 1878, p. 43). The only possible inference is that Claudian, with a more definite aim to secure

[^55]coincidence of accent and ictus in the cadence of the verse, declined the Vergilian liberty of inserting an unaccented dissyllable, as disturbing to the desired harmony, and not to be defended as merely a trifling discord, especially in the case of unemphatic words. Thus Claudian attempts to go much further than his master in this direction, and in isolated instances only does he admit the principle of phrase-accent, which in Vergil appears to cover a large number of the examples.

In contrast with Claudian's excessive strictness is the freedom of Prudentius, who saw no violation of any metrical canon in the frequent admission of words which in the nature of the case must lose their accent. And in a great many of these instances it is quite absurd to apply the theory of enclisis, or attempt otherwise to deny the very mechanical methods of composition. While he evidently desired coincidence of accent and ictus in this part of the verse, he was quite ready to insert even an emplatic word with neither an accent of its own, nor a substitute in the form of phrase-accent. Of the other poets examined Avienus and Ausonius are found on the side of Prudentius, with 117 instances in 3331 hexameters and 61 in a tutal of 3427 , respectively. The others are rather to be classed with Claudian. Priscian has but three cases in 1399 verses, all fully covered by enclisis, in spite of the difficulty of placing the proper names in a geographical poem.

The paper also included statistics of monosyllabic endings for the same list of poets, showing Claudian and Prudentius again at opposite poles. The former was found to have but nine monosyllabic endings (omitting si quis, and the like, as practically dissyllables; also ille est (for the same reason)), while the latter bas 116 examples, Ausonius 61 (neglecting the Technop.), and Avienus 27. Claudian's examples are (1) prepositional phrases, in te, ex quo, per te; (2) a stereotyped expression, fas est (bis); (3) a monosyllable following a quadrisyllable, as occiduus sol (bis), etc., - reminiscences of Ennius and Vergil. Here also Claudian endeavored to follow a stricter canon than Vergil.

## 8. On the Meaning of $\pi \rho о \mu a v \tau \epsilon i a$, by Professor M. L. D'Ooge, of the University of Michigan.

The traditional definition of this word is precedence in consulting the oracle. So
 $\pi \rho o s \delta \rho i a \operatorname{td}$ aúrb. The word occurs frequently in inscriptions recording the decrees of the Delphic priesthood and of the Amphictyons, and is coupled in such decrees with $\pi \rho \circ \xi \in v i a, \pi \rho o \epsilon \delta \rho l a, \pi \rho o \delta ı x i a, ~ a ̀ \sigma u \lambda l a$ (cf. Bull. Corr. Hellen. XXI, 104 ff .).

Since these decrees are so numerous, the question arises how can пронаитela mean this and this only, and how could this right be exercised when so many clients could lay claim to it at the same time? The object of tbis present discussion is to show that apouavtela may also mean the consulting of the oracle on behalf of or for another, and probably does mean that generally. When, therefore, a state or a person had decreed to it or to him the $\pi \rho \rho \mu a v \tau e l a$ by the Delphic priesthood a privilege was bestowed to which such a state or person had no natural right. The traditional meaning, on the other hand, implies that any one had the right to consult the oracle who chose, and that the $\pi \rho о \mu a v \tau \epsilon i \alpha$ simply conferred the first chance or priority.

The first scholar to throw doubt on the correctness of the traditional meaning of $\pi \rho \rho \mu a \nu \tau \epsilon i a$ is Homolle in a discussion of an inscription found at Delphi (cf. Bull. Corr. Hellen. XIX, 1), which belongs to the end of the fifth century b.c. and deals with the regulations concerning the phratry of the Labyadae.

The pertinent part of the inscriptiou is this (p. 12): $\pi \dot{d} \nu \tau \omega \nu$ кal ftot $\boldsymbol{\omega} \nu \mathrm{k}$ каl
 Homolle points out that the meaning of $\pi \rho \circ \theta v^{\prime} \epsilon \iota \nu$ here is determined by another inscription from Delphi which runs thus (Dittenberger, Syll. ${ }^{2} 4 \mathrm{~S}_{4}$ ): каil $\epsilon \pi \epsilon \iota \delta \dot{\eta}$


 tion it appears that Matrophanes was charged with the duty of consulting the oracle (this is stated in line 2 of the inscription not quoted here), and to do this he must first sacrifice. For this purpose he needs the services of a $\pi \rho \sigma \xi \in \nu 0$. But Sardis had at that time no $\pi \rho \delta \xi \in v o s$ at Delphi. Matrophanes, therefore, asked
 $\pi \delta \lambda \iota \nu$, i.e. to offer a sacrifice for him. This interpretation of $\pi \rho_{0} \theta \dot{v} \epsilon \iota \nu$ is confirmed by two inscriptions cited by Dittenberger (op. cit. 565,627 ) of which what

 $\left.\delta \nu \bar{a} \nu \theta \in \lambda \eta \dot{\delta} \xi_{\xi} \nu_{0}\right)$. According to these inscriptions a stranger must obtain an intermediary to offer sacrifice for him. $\pi \rho o \theta \dot{v} \epsilon \iota \nu$ then means to sacrifice on behalf of or for.

This is, however, not always its sense. E.g. in Plato Crat. 40 I D, $\tau \grave{\partial} \gamma \grave{\alpha} \rho \pi \rho \grave{d}$ $\pi \alpha \dot{\alpha} \nu \tau \omega \nu \theta \epsilon \hat{\omega} \nu \tau \hat{\eta}$ 'E $\sigma \tau l \dot{q} \pi \rho \omega \dot{\omega} \tau \eta \pi \rho o \theta \dot{\varepsilon} \epsilon \iota \nu$, the temporal sense of $\pi \rho \delta$ is clear. Since this paper was presented, an article on $\pi \rho 0 \theta \dot{v} \epsilon \nu$ has appeared in the Rheinisches Museum, N.F., LXIX, 39I ff., by Ziehen, in which the writer tries to show that in the classical period $\pi \rho 0 \neq \dot{v} \epsilon t \nu$ can only mean to offer before (vorker opfern). This view does violence, me judice, to the use of $\pi p 0 \theta \dot{v} \epsilon \iota \nu$ in several passages, as
 connected with $\pi \rho 0 \theta \dot{v} \sigma \omega \nu$, and in the alleged letter of Olympias to Alexander (Athen. xiv, p. 659) : $\delta \sigma \alpha \pi \epsilon$ ' $O \lambda \nu \mu \pi \iota \dot{\alpha} s \pi \rho o \theta \dot{\varepsilon} \epsilon \tau a l$, where Ziehen suspects the genuineness of the word $\pi \rho \circ \theta \dot{v} \epsilon \tau a l$. The effort to show that the $\pi \rho \delta$ in $\pi \rho \circ \theta \dot{\varepsilon} \epsilon \iota$ always must have the temporal sense of before overshoots the mark.

I hold with Homolle that $\pi \rho \circ \mu a \nu \tau \epsilon l a$ stands on the same footing as $\pi \rho o-$ $\theta v \sigma i a, \pi \rho o \delta \iota \kappa i a$, and that in these compounds the sense of $\pi \rho \delta$ oscillates between a temporal and a local sense out of which grows the derived meaning of for, in behalf of. In $\pi \rho o \epsilon \delta \rho i a$ the local sense is of necessity fixed. The view that $\pi \rho \delta$ in $\pi \rho о \mu a \nu \tau \epsilon i a$ does not indicate priority or precedence receives support from the word $\pi \rho 6 \mu a v t i s$ which is applied to the Pythia, where the $\pi \rho \delta$ certainly does not refer to priority, but may be equivalent to our forth in such a word as to speak forth, or pro in proclaim. The meaning of $\pi \rho \rho \mu a v t e l a$ for which I contend seems further to be confirmed by the regulation according to which priority in consulting the oracle was determined by lot, except in the case of Sparta and possibly a few other states which seem to have possessed this privilege as an ancient right.

That such a right of priority in consulting the oracle was sometimes granted is not denied, and is shown, e.g., by a Thessalian inscription (cf. Athen. Mitt. VII,

 is not denied, as, e.g., probably in Dem. ix, 32 ; xix, 327 ; our only contention is that $\pi \rho o \mu a \nu \tau \epsilon i a$ may also mean the consulting of the oracle for or in behalf of another, or through an intermediary, and then for oneself. The $\pi \rho \delta$ thus in one case $=$ before, in another for, just as it does, e.g, in $\pi \rho \circ \theta \nu \eta{ }^{\prime} \sigma \kappa \omega=$ to die before, or to die for. ${ }^{1}$

Remarks were made by Professors Seymour and Smyth.
9. The Homeric Hades and the Dead, by Professor Thomas D. Seymour, of Yale University.

In the discussion of no question pertaining to the life and thought of the Greeks of the Homeric Age, is common sense more needed than in the attempt to determine what was the belief of the Homeric puet with regard to the existence of the soul on its departure from the body, but in no discussion have the reins of fancy been left so free, and in none has thę element of common sense been more frequently and conspicuously lacking. Sentimental motives for honorable treatment of dead budies have often been disregarded, yet in this matter sentiment is almost supreme. Many old Greek custums find parallels in modern usages from which no one dares to infer even the beliefs of preceding generations. Another frequent error of writers on this subject is the demand for consistency. The Funeral Games in honor of Patroclus are thought to be so inconsistent with the belief that the soul of Patroclus was as incorporeal as smoke, that some scholars would attribute the one vicw to an Aeolic and the other to an Ionic poet, requiring of the epic poet greater consistency than is found in Pindar, or even in Plato or in Dante. That many customs in the burial of the dead and in the honors paid at their tombs were based originally on beliefs with regard to the connexion of the soul with the body, is not disputed. The analogy of modern usages, however, warns the scholar that the belief may have ceased long before the practice which is based upon it, and great caution should be exercised in making inferences from usages.

The paper closed with two theses, briefly sustained : I. The Homeric Tartarus does not differ from Hades as the mediaeval Hell differed from Purgatory. The punishment of the gods who were sent thither consists, not in their physical discomfurt, but in their separation from their kindred. 2. The belief that Homeric perjurers are punished in Hades rests only on Hiad, iii. 278, where the peculiar use and position of кaرbivas indicate that the text is not in good condition. The office of the Erinyes was not to punish after death, but during life; and nuthing elsewhere indicates that Hades and Persephone ever punished any one, - this was not their function.

Remarks upon the paper were made by' Professor Shorey and the author.

[^56]10. The Problem of $\dot{\alpha} \lambda \lambda o i \omega \sigma \iota s$ in Pre-Socratic Philosophy, by Professor W. A. Heidel, of Iowa College.

Historians of Greek philosophy have much to say of $\dot{\alpha} \lambda \lambda_{0} \boldsymbol{i} \omega \sigma \boldsymbol{\iota}$, or qualitative change, and assume, even when they do not state in express terms, that the Aristotelian conception, essentially unchanged, may be found in the pre-Socratics. Nobody seems to have considered the question critically to ascertain whether this view is tenable. The truth or falsity of the view is however of the greatest interest, as the conception is all but fundamental to a knowledge of the development of Greek thought.

It is impossible to epitomize the study which the writer has made of the preSocratic philosophies in his desire to determine the mode of change which we have come to call "qualitative." But it may be said that the traditional view rests entirely upon the Aristotelian reports, whereas the original documents, wherever available, strongly support the theory that the pre-Socratics one and all regarded this kind of change as mechanically conditi ned and as essentially identical with $\mu i \xi c s$. Even where $\mu i \xi \iota s$ and $\dot{\alpha} \lambda \lambda o i \omega \sigma \iota s$ appear to differ, the latter rests upon the primitive conception of " quality," as constituted by the ingredients of a substance, change of quality being nothing but change of ingredients.

The greatest difficulty is met in determining the nature of the changes wrought by condensation and rarefaction. This process itself suggests a mode of transformation wholly mechanical ; and in its historic application it is constantly associated with the segregation of like unto like from a mass only nominally unified or homogeneous. The typical process of segregation of like unto like is found in the scheme of evaporation and precipitation, which is in turn equated with rise and fall in temperature. These associated changes are all mechanical, and, in the pre-Socratics, reveal no connection with occult processes such as are implied in the Aristotelian theory of $\dot{a} \lambda \lambda 0 t \omega \sigma$ ts.

The paper signalizes numerous instances in which Aristotle and the doxographic tradition import into the thought of the pre-Socratics notions which were of later origin. It is hoped that the study will serve to clarify the history of Greek thought in a most important direction.

This paper was requested for the Transactions, but will appear in the Archiv für Geschichte der Philosophie. It was discussed by Professors Shorey and J. H. Wright.
r1. On the Principle and Terminology of Motion in the PreSocratic Cosmogonies, by Professor Paul Shorey, of the University of Chicago (read by title, with a brief résume).

This paper is reserved for the next volume of the Transactions.
12. Supplementary Note on the Arch of Trajan at Beneventum, by Professor Elmer Truesdell Merrill, of Wesleyan University (read by title).

Three years ago I had the honor of reading before the Association a paper on the historical interpretation of the sculptures of the Arch of Trajan at Beneventum,
which paper was published in full in the Transactions. Since that time I bave had opportunity to review thoroughly in the presence of the Arch itself the views therein expressed, and to weigh against them on the sput the published articles referred to in my former paper, as well as certain later suggestions and criticisms with which various friends have kindly favored me. I cannot take space in this short note in the Proceedings to enter upon extended argument, but must content myself here with the brief and crude statement that the added two-days' study of the sculptures under favorable conditions has not led to any change in my earlier views on matters concerned with interpretation. Nor could I convince myself that the eyes of the friends who have differed with me on points of actual fact in the mutilated stone have not been in error. For example, in the relief that depicts the mustering in of recruits (the upper relief on the left pier of the outer face) I was unable to make out that the measuring rod was of any other than the $\Gamma$-shape. The rod hild in the left hand of the 'centurion' appears not to run in the right direction to make it a part of the measuring-rod (which would then be of the $\Pi$-shape). Furthermore, it is not of the right section to be a part of the measuring-rod. It seems, to be sure, to be cut somewhat angularly on the left side, so as to throw it into clear relief against the folds of the recruit's tunic, in the approximate plane of which it lies; but its general roundness otherwise does not appear to be due to accident or to the wear of time. It quite surely never had the strictly rectangular section of the measuring-rud as depicted in the lowest plane of the relief.

May I venture to go one step farther, and this time outside of the determination of actual fact into the realm of probability? If there is no direct evidence that the military stature-gauge was of the $\Pi$-shape (and if there be any, I must plead guilty to ignorance of it), it would not seem impertinent to suggest that the Roman mind might see very good reason for avoiding that especial shape. It was precisely that of the ill-famed 'yoke.' Is it likely - is it readily conceivable - that a people who attached so much importance to omens would usher a recruit into the service from 'under the yoke'?

A careful inspection of the curious and mutilated object held in the left hand of Jupiter, in the lowest relief on the outer face of the arch, to the left of the arcade, revealed nothing more satisfactory to my puzzled conception. It still does not appear to me to be the remains of a thunderbolt, nor yet does it suggest precisely enough the usual form of a neolithic celt, - if the progress of palaeoethnology still allows us to use that antiquated term. But I must stand by my former interpretation.

To the evidence that the inner face of the arch was considered and treated as its principal face I may add two points omitted in my former paper. The conventional representation of Victory crowning the emperor that fills the centre of the crown of the arch-vault is placed with the heads of the figures toward the city; that is, a person passing out of the city through the arch on looking up sees the figures in their natural position. The architect had the choice of two orientations for his group. Does it seem likely that, if he had considered the outer face of the arch to be its principal face, he would deliberately have chosen to place this group so that an observer approaching the arch from the direction of its principal face would see Victory and the emperor standing on their heads ?

The other point I may preface with the reminder that Professor Petersen,

I think, was the first to point out that in every scene on the faces of the arch in which Trajan appears, his figure is turned toward the centre of the arch. Such a uniformity of orientation was of course not mere chance. Now I desire to remark that in each of the two reliefs (of the congiarium and the imperial sacrifice) that flank the arcade on either side, the figure of the emperor is so placed that it faces the spectator approaching from the city, and turns its back upon him if he enters from without. It does not appear reasonable to believe that, if the architect thought of the outer face of the arch as its principal face, he would plant the emperor's back toward the spectator approaching from that direction. Here, then, are two additional reasons for believing that the inner, and not the outer, face of the arch was meant to be viewed as its initial and principal face.

This paper was requested for the Transactions, but the author has preferred that it should appear in the form of an abstract.
13. The Oxyrhynchus Epitome of Livy, Julius Obsequens, and Cassiodorus, by Professor Clifford H. Moore, of Harvard University (read by Professor Slaughter).

That the Oxyrhynchus Epitome and the list of consuls drawn up by Cassiodorus come from a common source is proved (i) by their agreement in the names of the consuls for 149 b.c.: O 1. 88, L. Marcio Censorino M. Manlio cos.; Cass., L. Marcius et M. Manlias; but the correct form of the name is given by ail other authorities-Manilius; (2) by the notice under the year 186 b.c.: O ll. 42 f., at[hletarum cer]tamina primum a Ful[vio Nobilior]e edita; Cass, His consulibus athletarum certamina primum a Fulvio edita. Livy's words (30, 22, 2) are, athletarum certamen tum primo Romanis spectaculo fuit. Mommsen (Die Chronik des Cassiodorus, 1861, p. 552) showed that Julius Obsequens and Cassiodorus drew from a cummon source, so that legically we can postulate the same relation between $O$ and Obsequens as between $O$ and Cassiodorus. Specific proof is given by the general style of Obsequens, agreement with O in phraseology, and by a comparison of the notice of the sacrarium and sacred laurel, Obs. 19, with O ll. 127-129. Furthermore, a comparison of these three authors with others who drew directly or indirectly from Livy shows that the source of O, Obsequens, and Cassiodorus was not used by the majority, at least.

This paper has appeared in full in No. 99 of the American Journal of Philology.

## 14. Notes on the Influence of Lucretius on Vitruvius, by Professor W. A. Merrill, of the University of California (read by Professor Bill).

So far as I know, attention has not been called to the influence of Lucretius on Vitruvius, and it has seemed worth while to note their similarity in diction, and their mutual relation in other respects. Vitruvius names Lucretius once indeed (ix. $3,17=\mathrm{p} .218$, 5, ed. Rose-Müller-Strübing), but he not only discusses from time to time matters that had been previously touched upon by Lucretius, but alsu in many parts of his work he has empluyed parallelisms of ex-
pression. Att the very beginning of the treatise Vitruvius has one of his laborious prooemia that seems to have much in common with the latudes Epicuri in the ist, $5^{\text {th, }}$, and particularly the 3 d book of Lucretius, as may be seen from the following parallel columns: -

## Vitruvius I. Proem.

Cum divina tua mens
et numen . . .
inperio potiretur orbis terrarum invictaque virtute . . .
victoriaque tua
cives gloriarentur
et gentes omnes sulactae . . .
liberatus timure . . .
gubernaretur
magnis cogitationibus edere . . .
maiestas imperii . . .
in sedibus inmortalibus . . .
fui praesto . . .
et commoda accepi.
quae . . . tribuisti . . .
eo beneficio essem obligatus . . .
non haberem inopiae timorem . . .
praescriptiones terminatas . . . aperui ...

## Lucretius.

3, 15 divina mente.
3. 18 divum numen.

2, 13 rerumque potiri.
1, 68 quem neque fama deum nec fulmina nec minitanti| murmure compressit caelum, sed eo magis acrem | inritat animi virtutem.
1, 79 nos exaequat victoria caelo.
5,3 qui fingere laudes | pro meritis eius possit.
5, 49 qui cuncta subegerit.
3, 16 diffugiunt animi terrores.
5, 77 natura gubernans.
1, 72 vivida vis animi.
1, 21 Ennius edens.
5, 7 maiestas . . . rerum.
3, 18 apparet divom numen sedesque quietae.
2, 1068 locus est praesto.
3, 2 commoda vitae.
3, 10 suppeditas praecepta.
5, 50 nonne decebit | hunc homincm numero divum dignarier esse.
3, 65 acris egestas $/$ semota ab dulci stabilique videtur.
1, 77 alte terminus haerens.
2, 182 faciemus apcrta.
1, 105 vitae rationes.

Probably Vitruvius had read and admired the prooemia of Lucretius, and in composing bis dedication to Imperator Caesar he was influenced by the Lucretian praise of Epicurus. Somewhat farther on he gives one of Epicurus's definitions: praeterea de rerum natura quae graece $\phi$ voro ${ }^{2}$ orla dicitur philosophia explicat (p. 5, 20). On p. 16 sq . there seems to be another localization of Lucretian influence:-

Vitruvius I, 4, 3.
calor cum excoquit . . .
vaporibus fervidis
(Vapor is frequent elsewhere in V.) ferrum...tinctum frigida redurescit...

## Lucretius.

calor, passim. - 6, 962 terram sol excoquit.
vapor, passime.-1, 491 ferventia vapore.
6, 968 umor aquae porro ferrum condurat ab igni.

Vitruvius I, 4, 3 .
non possunt durare sed
dissolvuntur . . .
non laborant . . .
namque e principiis quae Graeci $\sigma$ rot$\chi$ đĩa appellant . . .
figurantur . . .
generatim . . .
fervidum . . . caelum . . .
apertas venas.

## Lucretius.

6,969 mollit durata calore.
6,963 glaciem dissolvit.
3, 730 quareve laborent ; cf. 6,395 , etc.
1, 198 sine principiis. (Principiis is the Lucretian dative and ablative furm of primordia.)
2,412 organici quae figurant.
1, 20 generatim.
5,282 inrigat caelum candore.
5, 659 caelum . . . accendere . . .
5, 812 venis . . . apertis.

The sketch of the beginnings of society given in the second chapter of the second book (p. 33, 14 sq .) has much in common with Lucretius: -

Vitruuvius II, i, i.
Homines veteri more ut ferae in silvis et speluncis et nemoriluus nascebantur ciboque agrasti vescendo
vitam exigebant.
interea quodam in loco ab tempestatibus et ventis densae crebritatibus arbores agitatae et inter se terentes ramos ignem excitaverunt . . .
nutu monstrantes
cotidiana consuetudine vocabula ut obtigerant constituerunt . . .
ergo cum propter ignis inventionem conventus initio apud homines et concilium et convictus esset natus,
et in unum locum plures convenirent...

## Lucretics.

5,955 sed nemora atque cavos montis silvasque colebant.
5,939 glandiferas inter curabant corpora quercus.
5,932 vitam tractabant more ferarum.
5,1096 et ramosa tamen cum ventis pulsa vaccillans | aestuat in ramos incumbens arboris arlor, $\mid$ exprimitur validis extritus viribus ignis | et micat interdum flammai fervidus ardor, | mutua dum inter se rami stirpesque teruntur . . .
5, 1022 gestu cum balbe significarent.
5, 1029 utilitas expressit nomina rerum.
5, 1105 inque dies magis hi victum vitamque priorem | commutare novis monstrabant rebus et igni $\mid$ ingenio qui praestabant. [Thus et igni should be retained, and rogi-1i60 should not be bracketed.]
5, 1108 condere coeperunt urbis arcemque locare . . .
5, ioli casas . . . pararunt.
5,954 cavos montis silvasque colebant. 5,984 fugiebant saxea tecta.

Probably both followed a common authority, yet I cannot but believe that Vitruvius has some Lucretian reminiscences liere.

In $\S 6$ (p. 35, 26) sollertia ingenia exercento per consuetudinem ad artes pervenissent may be compared with Lucretius 5, 1452 usus et impigrae simul experientia mentis | paulation docuit pedetemtim progredientis | . . . namque alid ex
alio clarescere corde videbant, $\mid$ artibus ad summum donec venere cacumen. And p. 36, 4 natura . . . subiecisset cetera animalia sub potestate agrees in thought with Lucretius, 5, 860 sq. On p. 50, 1. 22, Vitruvius's humanitatis dulcedine mollitis animis reminds one of Lucretius, 5, 1014 genus humanum primum mollescere coepit.

In Book vi, prooem. 2, there is another series of reminiscences :-

Vitruvius (p. 132, 5).
difficilesque fortunae sine timore posse
despicere casus, at qui non doctri-
narum sed felicitatis praesidiis puta-
ret se esse vallatum
Epicurus . . . ait pauca sapientibus for-
tunam tribuere, quae autem maxima et necessaria sunt,
animi mentisque
cogitationibus gubernari.

## Lecretius.

2, 7 sed nil dulcius est, bene quam munita tenere | edita doctrina sapientum templa serena, | despicere unde queas alios.
2, 20 pauca videmus \| esse opus . . .
5, III8 divitiae grandes homini sunt vivere parce.
3, I39 animum mentemque.
5,1117 si quis vera vitam ratione gubernet.

In treating one of the stock illustrations of the physicists Vitruvius also agrees with Lucretius: -

Vitruvius VI, 2, 2 (p. 139, 13).
in navibus remi cum sint sub aqua directi, tamen oculis infracti videntur,
et quatenus eorum partes tangunt summam planitiem liquoris, apparent uti
sunt directi, . . .
fluentes imagines . . .
sive simulacrorum inpulsu
falsa iudicia oculorum habeat aspectus . . .
vera falsa.

## Lucretius.

$4,43^{8}$ nam quaecumque supra rorem salis edita pars est | remorum, recta est, . . . quae . . . liquorem obeunt, refracta videntur.
$4,29+$ planitiem ad speculi veniens.

4, 63 debet imago $\mid$ ab relus mitti.
4, 156 apparet imago; | perpetuo fluere ut nuscas e corpore summo.
4, 164 simulacra ferantur.
4, I9I simulacra . . . transcurrere . . . quod . . . causa . . . propellat.
4, 464 pars horum maxima fallit \| propter opinatus animi.
4, 520 ratio tibi rerum prava . . . falsis . . . sensibus.
4, 519 iudiciis fallacibus.
4, 48 I veris . . . falsa.

In the prooemium of Book vii he again seems to remember the praises of Epicurus, but I have noted no special imitation unless possibly unde nos uti fontibus haurientes aquam - Lucr. 1,928 - may be one. In vii, 5, 4 (p. 173, 9) haec autem nec sunt nee fieri possunt nec fuerunt reminds one of Lucr. 5,878 neque Centauri fuerunt, nec tempore in ullo | esse queunt duplici natura.

The prooemium of Book viii has also a Lucretian coloring. I note, however, sine quibus mortalium vita non potest esse tuta, ea fudit ad manum parata
per omnem mundum, - Lucr. 6, 9 nam cum vidit hic ad victum quae fiagitat usus | omnia iam ferme mortalibus esse parata | et, proquam posset, vitam consistere tutam. And in the prooemium to Book ix there is a reminiscence - perpetua vita (p. 212, 10) $=$ Lucr. 3, 13. His account of Berosus's theory of the moon (p. 224, 22) is similar to Lucretius's discussion in 5,720 sq.

Simulacra natura divinaque mente designata, ut Democrito physico placuit, exposui (p. 231, 18) might be regarded as Lucretian prose.

I add a list of Lucretian words and phrases that occur in Vitruvius's vocabulary: -
ab rerum natura procreata, 172,22
adaugebitur, 95, 5
aeris raritas, 56 , 10
breviter percipere, 103, 26
candens, 108, 25
capita fluminum, 190,10
coaluerint (coluerint), I8I, 4
confervescendo, 181, 4
confervefaciunt, 182,20
conglomeretur, 180, 30
corporum figuris, 138 , 14
dilabantur, 186 , 10
doneque, 129, 22, etc.
excoquit, 108, 26
flatus, 27, 16
impetum caeli, 188,12
inminuit, 108,26
intactus, 104, 7
iactari, 133, 26
liquescant, 186 , 10
montium radices, 188,4
mundi ( $=$ caeli), 198,3
mundi versatione, 232,5
notities, 133, 9
offensa, 103, 12
planitia, 130, 2
potestatibus, 56,5
recidere, 183, 22
summatim exponam, 148, 29
tacta pruina, 53, 17
umores, 108,26
vehemens aquae vis, 284,7
versatile, 263, 21
viduatus, 119, 9

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Lucr. 2, 880.
2, 296.
6, 1024, etc. .
Cf. 4, II5.
6,148 .
6, 636 .
2, 106 I .
6, 353 .
6, 353 .
3, 210.
I, 685 .
5, 3II.
donique, 2, III6, etc.
6, 962 .
5, 689 .
5, 200.
5, 626.
6, 1060.
3, 47.
4, III4.
6, 695 .
4, I 34 .
mundi versatile templum, 5, 1436 .
5, 1047.
3, 941 ?
planitiem, 4, 294.
2, \(5^{8} 7\).
I, 857 .
s. attingere, 3, 261.
6,903.
6, II 76.
vemens imber, 6, \(5^{17}\).
aquai vim, \(1,285\).
5, 1436.
5,840 .
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The conclusion that I would draw from this examination is that Vitruvius in his prooemia was influenced by the Lucretian laudes Epicuri, and that owing to a similarity in subject-matter he sometimes used Lucretian words of a some-
what technical nature. He had read and studied the de Rerum Natura, particularly the 4 th, 5 th, and 6 th books.

The paper was discussed by Professors Shorey, Heidel, Lanman, and Slaughter.

As members of the Committee to audit the Treasurer's Report, the President appointed Professors Lanman and Heidel.

The following Committee on the Time and Place of Meeting in 1905 was also appointed: Professors Elmer and F. G. Moore, and Dr. Bolling.

Adjourned at 12.15 P.M.

## Fourth Session.

Saturday afternoon, September 17, 1904.
The Association was called to order at 3.15 P.M.
15. The Çântikalpa of the Atharva-Veda, by Dr. George Melville Bolling, of the Catholic University of America.

This text has been printed in the Transactions, with introduction, critical notes, translation, and commentary.
16. The Criticism of the Atharva-Veda, by Professor Charles R. Lanman, of Harvard University.

Professor Lanman presented to the Association a brief account of the contents of his Critical Introduction to the Atharva-Veda, which he had recently finished, and which is to precede the translation of that Veda made by the late Professor Whitney of Yale. Whituey's translation is accompanied by an elaborate critical and exegetical commentary. The Critical Introduction takes up, one after another, the various sources of traditional information which may serve to guide us in forming a critical opinion respecting the original form of the text of the AtharvaVeda. Since the whole system of oral tradition by memory in India is so entirely different from the system which has obtained in the handing down of the great literary monuments of classical antiquity, it was thought that an explanation of the peculiar situation in India might be not without its peculiar interest for the students of classical text-criticism. In particular, the value of what we may call the living manuscripts, that is to say, the oral reciters of the text, was explained, and it was shown how their testimony was often of use to check errors which might very easily be made by the eye, but could not possibly be made through the medium of the ear. Attention was also called to the famous phonetic treatises called Prātiçākhyas, which the Hindus produced with a special view to the conservation of the purity of the sacred texts, and the prevention of any, even the slightest, errors of orthography and accent. Since the Critical Introduction itself is already printed in full in the seventh volume of the Harvard Oriental Series, it is unnecessary to go into further detail here.

## 17. Plato's Simile of the Cave, by Professor John H. Wright, of Harvard University.

The use of the figure of a cave to illustrate human life and knowledge (in Book VII of the Republic) may have been suggested to Plato by the words of Empedocles, or by Orphic lore, if it was not inevitable in the development of the illustration, used in the preceding book, of the sun as a symbol of the Form of Good. But many of the peculiar features of the cave that are described in detail by Plato seem to point to a more specific source of influence. The speaker hazarded the - conjecture that in elaborating the picture of the cave, Plato was influenced by recollections of the cave at Vari, which in many respects is unlike other Greek caves, and in several particulars very remarkably meets the requirements of Plato's description. The cave at Vari - a seat of the worship of Pan and the Nymphs was, at the time Plato might have visited it, richly supplied with images and votive offerings. Near the end of its broad, but very deep slope, was a long platfurm, upon which worshippers evidently performed dances in honor of Pan and the Nymphs, the platform being roughly parallel with the wall of the cave in front of it. The reflection of these dancing ligures, possibly carrying their offerings, in the firelight upon the interior of the wall of the cave may well have suggested to Plato the figure of a made roadway, upon which, according to him, images were carried, the reflections of which appeared as realities to the prisoners who are conceived as chained at the broad base of the slope, along the front of the wall, and facing it. (It may be noted that in the Phaedrus, which appears to have been composed at about the same time as the seventh book of the Republic, Pan and the Nymphs, with their votive offerings, figure conspicuously.) Such an association of Plato with this cave is justified by the familiar legend of his babyhood, according to which he was carried by his parents to a spot on Hymettus, sacred to Pan and the Nymphs (Aelian, V.H. 10, 21 ; Olympiodorus, Vita Platonis, p. 1; cf. Weller, A.J.A. VII (1903), p. 28). What is more probable than that Plato revisited this cave in later life? He mentions no other caves in his works, and the grottos of Syracuse, with which he was familiar, are so unlike the cave that is described in the Republic as to rule out the idea that they could have been suggestive.

The paper was discussed by Professors Perry, Seymour, Smyth, D'Ooge, Shorey, and the author.
18. Alphabetic Notation of Variant Sounds, by. Professor F. A. March, of Lafayette College.
19. A Proposed Supplement to the Thesaurus Linguae Latinae, by Dr. Walter Hullihen, of Grant University, Chattanooga.

The Thesaurus Linguae Latinae, perhaps the most colossal undertaking in the history of modern scholarship, is an object of deep interest to every student of the classics, more particularly to Latinists. So small a fraction of the whole, however, has up to this time appeared that scholars generally have not yet had an opportunity to test its completeness or lack thereof; and it is with this, viz. completeness of citation, that this paper is concerned.

No one questions that a lexicon giving every occurrence of every word in the Latin language, between certain fixed puints in its literature, would be an incalculable benetit to Latin scholarship. Other things being equal, the value of a lexicon to scholars varies as the number of examples quoted; but the lexicon which gives all examples leaps at once to a place by itself, so far does it transcend in usefulness any which are incomplete. All other considerations must, it seems to me, give precedence to this one of completeness. If the investigator have before him all examples of a ceftain word, which he is examining, he is unhampered by the disquieting fear that somewhere in the litelature there may be examples that would impair or falsify his conclusions; he has the complete premises ; if his conclusions are erroneous, the fault lies with himself. The difference in the degree of confidence inspired by a treatise based upon the consideration of all that bears upon its subject, as compared with one based upon only part, is very great ; the truth of which is so obvious that it needs no argument to support it.

The assertion, therefore, may be made that the value and usefulness of the Thesaurus would be tremendously increased, if it cited every example of every word. The material has been collected and arranged in the buildings devoted to that purpose in Munich. Why shall it not be further utilized to make an already great work the greatest boon to Latin scholarship that can be conceived ?

The extent in which the Thesaurus falls short of completeness may be seen from the following statistics in regard to the word antequam, of which word the writer bas collected all examples from Plautus to Suetonius: under the word antequam in the Thesaurus (Vol. II, fasc. I) only about two-ffiths of the examples occurring in the literature from Plautus to Suetonius are cited; among those omitted are many of great importance to one investigating the syntax of antequam. It would not be pertinent to the object of this paper to enumerate and discuss these examples here. It is fairly evident that, in editing such a work as the Thesaurus, no human mind can make a selection of examples such that it will meet the needs of every investigator. Completeness is the remedy.

A lack of funds, Professor Wölffin says, is the chief reason why the Thesaurus, as now being edited, is not more nearly complete. The income for the purpose of editing, subscribed almost in its entirety by five German Universities, is limited in amount and in the number of years it is to run; arrangements have been made with the Teubner press to issue twelve folio volumes of one thousand pages each; to this limit the editors are restricted, and estimated by that which has appeared they will even now exceed their limit. It thus becomes evident that following their present plan as to extent of quoted language, which has doubtiess been considered with much care and critical judgment, the absence of valuable material becomes inevitable. ${ }^{1}$

The purpose of this paper is to ask the American Philological Association to take under consideration the publication of supplementary volumes, containing all of the examples omitted by the Thesaurus. For economy of space and expense these supplementary citations should be given without text, by numerical indices only. A careful calculation based upon the article on antequam shows that all of the examples omitted could be given by numerical indices in about one-eighth

[^57]of the space occupied by the article as it stands in its present form. If, then, the word antequam can properly be taken as a basis for estimate, the supplementary volumes which will make the Thesaurzus complete in its most essential particular, will add only a small fraction to the bulk of the publication, a.d will cost a correspondingly small fraction of the expense now being incurred. It is, of course, possible that the same proportion would not obtain for other words than antequant; but, even if this should prove true, and the fraction should prove to be greater, as much as one-fourth (which is highly jmprobable), is not that a small addition for so notable an increase in the value and usefulness of this monumental work ? Cannot America raise this small fraction of the amount contributed by five German Universities? There seems little reason to doubt that the money can be raised. if the matter is put into the hands of the right men. An appeal to the Carnegie Institute may solve this difficulty. It is possible that such an appeal will have a better prospect of success than attended the pruject for an American Latin Dictionary several years ago, since the Thesaurus is an undertaking of universal interest and usefulness, and one which will stand out for centuries to come as one of the landmarks of classical research, as important in one country as in another. The amount needed will not be very great ; probably not more than $\$ 2500$ or $\$ 3000$ a year, reckoning from the amount now being expended annually upon the Thesaurus.

If the Carnegie Institute is unwilling to give the money, it is conceivable that fifteen or twenty American Universities may be induced to combine to subscribe the amount needed; which will be employed to support two or three Latin Fellows at Munich, who shall work there under the control of a Committee of Direction in this country. (Of course, this presupposes that permission can be obtained from the Editors of the 7hesaurus for such Fellows to use the already collected material.)

It seems probable that two or three men doing nothing but collecting and arranging citations, and freed from many of the embarrassing questions involved in the quotation of text, could keep pace with the rest of the work. It will be observed that these workers will have the tremendous advantage of having before them in the published fascicles of the Thesaurus, that part of the work which costs most labor and research. Revision of the work of these Fellows by a sufficiently large number of our maturer schulars will insure that degree of accuracy and scholarship which the Thesaurus must possess, as well in the supplementary volumes as in the main treatise.

Any further consideration of the r'etails of the plan herewith presented would carry this paper beyond the limit prescribed. It is, therefore, sub)mitted thus to the members of the Philological Association in the hope that some action will be inaugurated toward the accomplishment of the publication advocated.

The Auditing Committee reported that it had examined the Treasurer's Report and found the same correct.
20. Some Grammatical Myths, by Professor J. E. Harry, of the
University of Cincinnati.

Of the twenty-five or thirty Greek grammars examined, all gave as much prominence to the perfect subjunctive, optative, and imperative active in the
paradigms as to the perfect indicative. Instead of throwing obstacles in the way of the beginner by compelling him to learn such mythical forms as these, we should help the tyro on his way by excising everything from our manuals, except essentials, both in form and in syntax. Sonnenschein in his preface claims that he has done this. His "scheme dispenses with a large number of unnecessary paradigms." In the advertisement of the authorized English translation of Kaegi's grammar a reference is made to the German grammarian's "omitting entirely or relegating to all unimportant place in his grammar all peculiarities or irregularities rarely met with." To the Ruman the perfect subjunctive was indispensable; for the Greek the present and aorist sufficed; and the persistence of the perfect active in our grammars is doubtless due to a prepossession that Latin syntax and Greek syntax run on strictly parallel lines. The first sentence of Sonnenschein's preface runs : "The main object of this book is to turn to account for teaching purposes the close relation which exists bitween Latin and Greek . . . in . . . grammatical structure." Much that we find in Krüger and Kühner and Kaegi, as well as in Goodell and Babbitt and Goodwin and Hadley-Allen with their $\pi \epsilon \pi a u ́ k \omega$ 's and $\pi \epsilon \pi a \iota \delta \epsilon \dot{v} \kappa \omega$ 's and $\lambda \epsilon \lambda \hat{\prime} \kappa \omega$ 's would bave made Sophocles and Thucydides open their eyes in wonderment. Jelf writes $\beta \epsilon \beta$ ovג $\epsilon$ úk $\omega$. So Kühner, who translates : ich habe geraten. Krüger gives $\lambda_{\epsilon} \lambda_{u ́ k} \omega$ and translates : ich habe gelöst, and $\lambda_{\epsilon} \lambda_{u ́-}^{-}$ кot $\mu$, möge gelöst haben. Croiset and Petitjean (Paris, 1896) write $\lambda_{\epsilon} \lambda_{u ́ k} \omega$ and render: que j’aie fini de delier. Isocrates uses the adverb $\pi \in \pi a \downarrow \delta \epsilon \nu \mu$ évos; Plato employs the perfect indicative, infinitive, and participle of $\pi$ aidevelv by the score; but not a solitary example of the subjunctive, optative, or imperative active, which are so conspicuous in the paradigms of Kaegi and Kleist and Romana, can be found anywhere in Greek literature - oì oc rá $\rho$ nov $\mu \dot{v} \theta_{o u s ~ r o i s ~}^{s}$
 tion, comes nearer the truth than any of his predecessors or successors. Adjoining $\lambda_{\epsilon} \lambda \dot{v} \kappa \omega$ (in parenthesis) is the number 720 . This is to warn the unwary pupil to be on his guard. But how many would even take cognizance of the marginal reference - to say nothing of their being misled if they did? The note in Hadley-Allen (457) is even more misleading. Goodwin is a little more explicit with reference to the imperative.

There are only three or four perfect subjunctives in Greek literature. One of




 hardly counts, while Demosthenes' $\pi \epsilon \pi 0 \iota \eta$ 向n $(19,3)$ is not surprising to one who has watched the behavior of "active" and "passive" verbs ( $\pi \dot{\alpha} \sigma \chi \epsilon \epsilon \nu$ and $\pi=\epsilon \epsilon \hat{i} \nu$ ). Even the quasi-perfects (the periphrastic subjunctives) are practically confined to Xenophon (one or two in Plato, one or two in the whole Demosthenean corpus), and in Xenophon the participle is often a mere adjective. Periphrases in any mood with the aorist are rare, with the perfect frequent. Forms like $\delta \lambda \dot{\omega} \lambda \eta$


[^58]
## xxvi

$\dot{\epsilon} \sigma \tau \dot{\eta} \kappa \omega \mu \epsilon \nu$ (Xen. Anab. 6, 5, 10), though not common, are found, inasmuch as they are virtual presents, in all periods of the literature.

Even the periphrastic active, which is emphasized by all the manuals, is very rare and is confined to one or two verbs. In some cases the periphrastic furm is merely a variant for the regular perfect (present), e.g. Xen. Cyrop. 8, $7, \dot{\epsilon} \pi \epsilon \iota \delta \dot{d} \boldsymbol{\nu} \nu$ $\dot{\epsilon} \sigma \tau \eta \kappa \dot{\sigma} \tau a \dot{\eta}$. The participle here is felt as an adjective pure and simple, the verbal idea in the participle being neutralized by the verb with which it is juxtaposed.

The grammarians cannot escape criticism for giving such a prominent place to the perfect subjunctive in the paradigm by saying that it was intended to be a model for such forms as $\dot{\epsilon} \sigma \tau \dot{\eta}_{\kappa} \boldsymbol{\eta}$, for they invariably - German, French, Italian, English - attempt to give the force of the perfect in translation.

There are very few examples of the perfect optative in -коı $\mu$, -коьs, -коь.
 Plato shows $\pi \epsilon \pi \delta \nu \theta o \iota$, but under circumstances that prove that it was yielded only under pressure. The pure perfect optative middle and passive is even rarer than
 any other writer would probably have used the periphrastic form, e.g. Xen. An.
 Present optatives in perfect form occur as early as Homer ( $\Omega 745, \mu \epsilon \mu \nu \nu^{\prime} \mu \eta \nu$ ) and appear in all departments of literature. The form $\tau \epsilon \theta \nu a i \eta \nu$ is common. Euripides has $\kappa \epsilon \kappa \tau \psi^{\prime} \mu \epsilon \theta a$, Aristophanes $\kappa \epsilon \kappa \lambda \dot{\eta} \mu \epsilon \theta a$, $\mu \varepsilon \mu \nu \hat{\eta} \tau 0$, Andocides $\mu \epsilon \mu \nu \hat{\eta} \sigma \theta \epsilon$, Xenophon кєкл $\hat{\eta} \tau 0$. Even the periphrastic forms of the perfect optative active are very rare in the earlier language, and are not frequent in any authors except Plato, Xenophon, and Demosthenes; and the passive is not so common as might be supposed, hardly appearing in the language at all before Euripides, and in prose by no means frequent except in Xenophon and Plato.

Krüger is the only grammarian who has been careful enough to bracket the perfect imperative active. That the passive is often used is well known ; but even this form is not found very frequently outside of Plato's Lazes. In the orators hardly any other form besides the inevitable $\epsilon i \rho \eta \sigma \theta \omega$ occurs, and even this not painfully frequent. But in Plato, who uses more imperative passives (and actives too for that matter) in the third person (hundreds in the Laws alone) than all the Greek authors together, the perfect imperative passive would be expected, and we are not surprised to find an occasional $\dot{\omega} \mu \nu \lambda o \gamma \dot{\eta} \sigma \theta \omega, \tau \epsilon \tau 0 \lambda$ $\mu \dot{\eta} \sigma \theta \omega, \dot{\alpha} \pi \epsilon \iota \rho \gamma \dot{\alpha} \sigma \theta \omega, \pi \epsilon \pi \lambda \dot{\alpha} \sigma \theta \omega, \dot{\alpha} \pi о \lambda \epsilon \lambda o \gamma / \sigma \theta \omega, \dot{\omega} \nu \alpha \mu \dot{\alpha} \sigma \theta \omega, \delta \dot{\delta} \delta \delta \sigma \theta \omega, \lambda \epsilon \lambda \epsilon \chi \theta \omega$, $\pi \epsilon \phi \dot{\alpha} \sigma \theta \omega, \dot{\eta} \rho \omega \tau \dot{\eta} \sigma \theta \omega, \kappa \epsilon \chi \rho \eta \sigma \mu \varphi \delta \dot{\eta} \sigma \theta \omega, \dot{\epsilon} \pi \iota \delta \epsilon \delta \epsilon \ell \chi \theta \omega, \pi \epsilon \pi \epsilon \rho \dot{\alpha} \nu \theta \omega, \gamma \epsilon \gamma \rho \dot{\alpha} \phi \theta \omega, \dot{\eta} \tau \iota \mu \dot{\alpha}-$ $\sigma \theta \omega, \delta \epsilon \delta \delta \chi \theta \omega, \nu \in \nu 0 \mu \circ \theta \epsilon \tau \eta \sigma \sigma \omega \omega, \dot{\omega} \rho l \sigma \theta \omega,{ }_{\epsilon} \pi \tau \tau \epsilon \tau \rho \dot{\alpha} \phi \theta \omega$.

This paper, with complete statistics, will be published as a University of Cincinnati Bulletin.

Adjourned at 6 P.M.

## Fifth Session.

Monday morning, September 19, 1904.
The session was opened at 10.20 A.M.
The President, Professor Hempl, reported for the Joint Committee on a Phonetic-Alphabet.

On motion of Professor J. H. Wright it was
Voted, That the Association accepts the preliminary report of the Committee, and has a serious interest in the deliberations and recommendations of the Committee ; that it requests the members of the Juint Committee that now represents the Association to continue in their present capacity, and to submit their final report, when this shall be ready; and that the Executive Committee be authorized to expend one hundred dollars, or thereabouts, towards the expenses of the Juint Committec.
21. The Latin Subjunctive of the.Second Singular Indefinite as a Mood of Statement, by Professor William Gardner Hale, of the University of Chicago.

This paper will appear, it is hoped, in the next volume of the Transactions. Remarks were made by Professors Ashmore and Elmer, and the author.
22. On the Minor and Problematic Indo-European Languages, by Professor Maurice Bloomfield, of Johns Hopkins University.

This article was requested for the 'Transactions, but appears here in abstract by the author's preference.

The question of the number and extent of the Indo-European peoples has both a positive and a negative side. Positively, the addition of an Indo-European people to the familiar list (Indo-Iranian, Greek, Latin, etc.) serves to increase our knowledge of I.-E. speech and I.-E. ethnology. Negatively, the exclusion of certain peoples from the I.-E. sisterhood calls attention to the limitations and foreign surroundings of our family of speech, and helps to determine its scope among the remaining linguistic families. This is a necessary preliminary to the question of the home of the Indo-Europeans before their separation into the ethnical units of historical times.

The Scythians that roamed to the north of Iran, in the Russian steppes about the Black and Caspian seas, were Indo-Europeans, connecting the Asiatic East Indo-Europeans (Indo-Iranians, or Aryans) with the Slavs in the northeast of Europe, and, through them, with the remaining North-Europeans, the Teutons and Celts. In this great belt there is no record of minor or problematic I.-E. peoples. With all the intricacies of ethnic and geographic interrelation between Celts and Teutons, and Teutons and Slavs, there is in the north of Europe no I.-E. dialect whose broader family traits are obscure, and no claimant for membership in the I.-E. family that is not freely admitted. Even in this region, however,
there may have existed other I.-E. peoples of independent character. There are no linguistic records from this area earlier than the first centuries after Christ: its remoteness from the ancient centres of civilization, Greece, Kome, and Western Asia, may have silenced records, either of other I.-E. languages, or of non-I.-E. languages in the northern continent of Europe. The solidarity of recorded I.-E. speech in the same area does not of itself prove that the proper or original home of the Indo-Europeans is to be sought there rather than elsewhere.

All records of minor or problematic I.-E. peoples are from the regions adjacent to the northeastern Mediterranean, that is to say, from the countries that came most directly under the influence of Greece and Rome. Beginning where France joins Italy in the ancient land of Liguria; stretching from there and adjoining Etruria across Venetia to Illyria, Thrace, and the rest of the Balkan peninsula; from there again, across Hellespont, Propontis, and Bosporus, in and clear through Asia Minor, including Armenia, until we touch again the Asiatic Iranians - that is the territory within which existing records of some sort point to the presence of varieties of Indo-Europeans outside of the well-known families.

Egyptian records and the Cuneiform inscriptions of western Asia might have shown, but they do not show additional traces of independent I.-E. languages. Recent attempts to pass the Kossaean, Mitani, and Arezawa languages, or dialects, recorded in Cuneiform, as Indo-European have been confidently disproved by the present writer in an article, "On Some Alleged Indo-European Languages in Cuneiform Character" (A.J.Ph. XXV, Iff.). But, incidentally, there came to light the fact that the Mitani and other Western Asia records are sprinkled generously with Iranian, or 'Iranoid,' proper names. In the single Mitani letter, written by a Mitani king of the name of Dusratta to an Egyptian Pharaoh, there figures Dušratta himself, his brother Artašuvara, their father Sutarna, and their grandfather Artatama. The Mitani correspondence is part of the famus collection of tablets found in Tel-el-Amarna in Upper Egypt. The Mitani dynasty dates back to 1600 b.C.: we have therefore in these proper names the earliest recorded I.-E. word-forms. The existence at such a time of the West-Iranian stem arta- = Achemenidan arta- $=$ Avestan $a_{3}^{5} a-=$ Vedic $r$ rta - will tend to reduce the dislike to assume ancient dates for I.-E. texts like the Veda. The present writer, for his part, feels much more inclined to listen to the date 2000 b.c. (or earlier) after this discovery than before.

The language of the so-called Hatti, Hatians, or Hittites is found in inscriptions dating from the first half of the first millennium b.c. in Cilicia and Commagene, just at the bend where Syria passes into Asia Minor. These inscriptions are written in a mixed pictographic (ideographic), syllabic, and alphabetic writing of very obscure nature. That Hittite is Indo-European, a kind of prehistoric Armenian, is urged very vigorously and repeatedly by P. Jensen, the protagonist of these studies; ${ }^{1}$ but careful critics like Winckler and Messerschmidt ${ }^{2}$ do not agree with him. These studies are far from ripe ; they are ripe enough to say that it seems more than unlikely that the Hittite is Indo-European. Certainly Jensen's most recent statement will appear to few as convincing as it seems to be to its author.

Cuneiform inscriptions in Assyrian and also in a non-Shemitic language, dating

[^59]from the ninth century b.C., show the existence in the land of Urartu, on the lake of Van in Armenia, of a pre-Armenian language. The name of this language is Chaldic, or Vannic ${ }^{1}$ : it is neither Indo-European nor Shemitic. The presence of a non-I.-E. language in Armenia supports the theory that the Armenians were Europeans who migrated from the Thraco-Phrygian region into Armenia, subduing the allophylic natives. It also helps to clear the ground of Asia Minor, whose aboriginal inhabitants seem everywhere to have been neither Indo-Europeans nor Shemites.

The native languages of Asia Minor, especially the I ycian, oi which the stele of Xanthos offers a connected specimen, were non-Indo-European. ${ }^{2}$ Greek colonies on the one hand and early off-shoots from the Thraco-Phrygian stock, the Trojans, Phrygians, Bith!nians, and Armenians, on the other, have brought Asia Minor under I.-E. influences at a very early time. The allophylic character of Asia Ninor, to our mind, offers good reason to assume that the IndoEuropeans originated somezohere in Europe, and not somewhere in Asia, providing we include the Scythian steppes in the name Europe. If the spread of the Indo-Europeans had been from Asia to Europe the omission of contiguous Armenia and Asia Minor is hardly explainable; on the other hand, a gradual spread of nomadic Indo-Europeans from continental Europe through Scythia into the Aryan region could easily have passed around the waterhedged peninsula of Asia Minor. At a later time, a sea-faring time, Asia Minor was settled sporadically from Hellas and Thrace; then the Aegean Sea Hellespont, Propontis, and Bosporus cemented rather than put apart the two peninsulas of the Balkans and Asia Minor.

Ancient Greece dues not show a single trace of a non-Hellenic I.-E. language, leaving out of the question Macedonian, which seems to be an isolated Greek dialect. ${ }^{3}$ - The excavations at Mycenae, Tiryns, Crete, Troy, and various other parts of Greece, have brought to light a Pre-Hellenic civilization which precedes the literary age of Greece by many centuries. ${ }^{\ddagger}$ A marked feature of this advanced civilization, rich in skilful architecture, plastic art, and treasures of gold, is the absence, in general, of inscribed monuments, or any other form of written records. With one notable exception: Crete has yielded engraved articles of pottery and stone and engraved gems with what is unquestionably some form of writing. The excavations at Knossos, on the northern shore of Crete, moreover, have unearthed formal wall inscriptions. The system, or perhaps systems, of writing seem to have been both pictographic (ideographic or hieroglyphic) and linear or syllabic. Not a single one of these inscriptions has been deciphered; all theories as to their nature and origin, whether they coquette with the idea of Hittite, Phoenician, or Egyptian sources, are mere guesses.

In the eastern part of Crete, in the neighborhood of the town of Praisos, the home of the so-called 'Eteo-Cretans,' two inscriptions in Greek character, but not in Greck speech, have been found of recent years. ${ }^{5}$ Herodotus, vii, 170-171,

[^60]states that Crete was depopulated by early migrations under Minos to Italy, and that 'in Crete, however, as the men of Praisos report, after it had been stripped of inhabitants, settlements were made by various nations, but especially by Hellens.' These inscriptions, dating, perhaps, from 500-400 B.C., seem to show that the Eteo-Cretans nevertheless continued their speech into historic times. The scant material leaves the character of the language undefined; antecedently it is not unlikely that it is related to the indigenous languages of Asia Minor.

The isle of Lemnos, at the head of the Aegean, shares with Crete the distinction of harboring a trace of speech that is not Greek. This also is a record engraved in Greek character. In 1886 two French scholars, G. Cousin and F. Durbach, ${ }^{1}$ discovered in the village of Kaminia a stone containing two inscriptions of somewhat similar content on two of its sides. The same French scholars noted at once certain resemblances with Ettuscan; also the reports of Thucydides, Strabo, and Plutarch that Lemnos and Imbros were colonized by Tyrrhenians or Pelasgians, who dwelled there until the Athenian conquest, 510 b.c. Pauli, Bugge, and others also concluded that the Lemnos inscriptions are a form of Etruscan, or, as Pauli expresses it more precisely, 'The Lemnic Tyrrhenians are Viking-like pirates facm Etruria.' ${ }^{2}$ He is struck especially by the resemblance of the words $\leqslant|A| \Psi F E|S, \leqslant|A| \Psi F| S$ (sial $\chi$ veiz, sial $\chi$ viz) on each of the two inscriptions with the numeral ceal $\chi$ ls, cial $\chi$ us of an Etruscan inscription on a mummy band in Agram, found by the Vienna Egyptologist, J. Krall. There is, to be sure, some doubt about the identity of $\Psi$ with $\chi$, since the value of $\psi$ in the Aeolic alphabet is $\psi$, not $\chi .{ }^{3}$ Nevertheless the relationship of the Lemnic with Etruscan is rather more probable than lies in the habit of such combinations.

The two most prominent tongues of land which the continents of Europe and Asia hold out towards one another, the Balkan peninsula and Asia Minor, contain the remnants of the most prominent of the minor I.-E. languages, the Thraco-Phrygian. ${ }^{4}$ In the northeast of the Balkan peninsula, adjoining Macedonia, lies Thrace, a country inhabited from earliest times by l.-E. tribes. Perhaps as early as the third millennium b.C. there began a series of successive migrations into Asia Minor. The inhabitants of Troy in Homer's time were of Thracian origin and Thracian culture, immigrants from Europe who settled right at the door of Asia Minor. The Mysians to the north of Lydia in Asia Minor were Thracians, as also the Bithynians, and probably the Arınenians. The most important migration from Thrace into Asia Minor is that of the Phrygians who occupy a large region east of the coastlands of Caria, Lydia, and Mysia. The Phrygians are the single one of the minor I.-E. peoples whose records, scant and broken as they are, suffice to lift their language out of the depths of profound obscurity.

Phrygia was the main locality of the orgiastic worship as a supreme divinity of the 'Great Mother,' Matar Kubile (Kvßє $\lambda \eta$, Cybele), the same worship which was introduced into Greece about 500 B.C., into Rome about 200 B.c. ${ }^{5}$ It is

[^61]likely, however, that the worship of the Mother, as well as the characters associated with her : her lover Attis, his mother Kana, and her mythical attendants, the noisy Corybantes, were of Pre-Phrygian origin, somewhere in Asia Minor. From their native Thrace the Phrygians brought with them a god, Savazios ( $\Sigma a v a j$ jos, $\Sigma$ apajsos), of uncertain origin and meaning. Another goddess, Zemelō, has been identified doubtfully with $\Sigma \in \mu \epsilon \lambda \eta$, as the Thraco-Phrygian Goddess of Earth (cf. Old Bulg. zemlja ' earth,' Lat. humus, Gr. $\chi \alpha \mu a l$ ). According
 being under the special name Bagaios. That this name is connected with lndoIranian Bhaga 'god of fortune or goodness' (Skt. Bhaga, Avestan Bagha, Achememian Baga) is quite certain. Torp's attempt ${ }^{1}$ to explain Zev̀s Baraios as an oak god, quasi Zeis $\Phi \eta \gamma \omega \nu a i o s$, seems to me quite fanciful. Hesychius seems, moreover, to mean Iranians rather than Phrygians: in another gloss, Masés • $\delta$ Zev̀s mapd $\Phi \rho v \xi$ l, the god Mazeus (popular etymology upon Zeus) is surely Ahura Mazda, the chief god of the Iranians. Bagaios is the Iranian Baga and nothing more.

Phrygian inscriptions are of two kinds, dating from periods possibly 1000 years apart. Old Phrygian, ${ }^{2}$ dating perhaps from the sixth century b.c., is engraved on the so-called grave of Midas in the valley of Doganlu, and other rock monuments, about a dozen in number. Neo-Phrygian, ${ }^{3}$ a kind of Pigeon-Greek, is exposed upon bilingual inscriptions from late Roman times. They are for the most part curses written upon tombs, hoth in Greek and Phrygian, and directed against possible violators of the grave: ' Whosoever does evil to this grave cursed
 $\kappa а к о \nu) ~ a \delta \delta a \kappa \epsilon \tau$ (or $a \beta \beta \epsilon \rho \epsilon \tau$ ) $\epsilon \tau \iota \tau \epsilon \tau \iota \kappa \mu \in v o s \epsilon \iota \tau \circ \nu$ (or $\eta \tau \sigma \nu$, or $\eta \tau \omega$ ). In addition to the two Neo-Phrygian verbs addaket and abberet (quasi afficit and afferit) Old Phrygian contains the interesting verbs edaes and egaes (doubtful as to reading) to which may be alded, as a third, estaes on an inscription of Tyriaion. ${ }^{4}$ They seem to be augmented preterites, doubtfully sigmatic aorists, from the I.-E. roots dhe' 'set,' $g \bar{i}$ 'go,' and sti 'stand.' The space of an abstract forbids the closer analysis of the Thraco-Phrygian. So much, however, is clear: it is an independent I.-E. language, sharing certain qualities, as it should, with its neighbors in every direction. It is 'European' rather than 'Asiatic' in its vowel triad e, $o, a:$ ios, tekikmenos, and the augment e. It is a satem-language as appears from semoun, semou, plausibly identified with Old Bulg. semüu from an I.-E. stem k̂e-smo. ${ }^{5}$ The I.-E. voiced aspirates lose their aspiration : -daket: stem dhekk, and -beret from root bher. The most noteworthy point of contact with Greek, aside from loanwords, are the formation of the perf. middle participle in -menos (tetikmenos) and the declension of the Old Phrygian 'third declension' type, genitive Akenolafos, accusative Akenolafin.

The collective name Illyrian ${ }^{6}$ is understood to refer to Indo-Europeans northwest of Greece and west of Thrace, i.e. to begin with, the ancient Illyrians them-

[^62]selves. North of Illyricum dwelled the Istrians or Histrians on the small peninsula of Istria, and west of them, in Italy, the Venetians. Moreover, Illyric migrations across the Adriatic into Calabria are indicated by identical or similar proper names of places and persons on both sides of the Hadria. What is more important, in Calabria are found certain inscriptions, which are neither Greek nor Italic, but are ascribed to the Messapians or Japygians who came there from Illyria. The remnants of Illyrian speech are supposed to be the modern Albanian, a development of ancient speech in Illyria herself; the Venetian, and the Messapian. The character of Albanian is relatively clear, but its relation to Venetian and Messapian, as also the interrelation of all three, is far from clear. The 300 inscriptions, in round number, gathered in the ancient province of Venezia and adjacent districts contain all together but little material, and that of very uncertain character. ${ }^{1}$ They contain the two parallel words exo and mexo which are generally rendered ' I' and 'me,' but may equally well mean respectively 'this' (nominative) and 'this' (accusative). ${ }^{2}$ Especially noteworthy is a type of dedicatory inscriptions which state that some person ' has given me,' or, 'has given this' (mexo zonasto, or, mexo zoto) to some divinity, especially a gorddess Rehtia (Rectia) whose name suggests a Goddess of Justiee, a kind of $\theta \in \mu \mathrm{s}$ or $\Delta \leqslant \kappa \eta$ :
mexo zonasto rehtiiah nerika lemetorina $=$ me (or hoc) dedit Rectiae Nerica Lemetorina. Another reads

| vhremahstna | zoto | rehtiiah. |
| :--- | :--- | :--- |
| Fremaxtina |  |  |
| dedit |  |  |$\quad$ Rectiae.

The verb zonasto is explained as a sigmatic aorist middle third sing. from a verb $=$ Lat. donāre; the verb zoto as a non-thematic 'second' aorist middle third sing. $=\mathrm{Gr}$. бото.

The phonetic indications of Venetian are scant and precarious. Owing to the uncertain meaning and etymology of exo and mexo it is impossible to say whether Venetian is a satem-language, as is Albanian, or a centum-language. But in one certain and important particular Venetian differs from the rest of the supposed Illyrian dialects : it treats I.-E. o as $o$, not as $a:$ e.g. zoto with I.-E. ending $-t o=\mathrm{Gr}$. -то; or in the numerous nominatives and accusatives of the second declension like Voltiomnos (nom.) or Ostiiakon (acc.). It is possible, though not certain, that Venetian is a North-Illyrian dialect, marked off pretty sharply from Albanian and Messapian, and inclining in its main characteristics toward the Italic languages. But there is, after all, very little but geographical vicinity, and a moderate correspondence with Messapian proper names. Perhaps it is not too much to say that but for these two facts, there is nothing to prevent the Venetian from being an independent I.-E. language. ${ }^{3}$

The Messapian inscriptions, ${ }^{4}$ about 160 in number, are also mnstly brief, and crowded with proper names. Two larger ones, one at Basta (Vaste), the other at Brundisium (Brindisi), are unfortunately of uncertain tradition and great

[^63]obscurity. The opening statement of the inscription of Basta, a kind of contract, is reconstructed and translated variously : -

## Klohi zis 日otoria martapidogas tei busta veinan aran,

'Hear every one! Thoturia (daughter) of Martapidox sold to the town of Basta this field.' ${ }^{1}$

Or again,
Klohisis өotoria marta pido gastei basta veinal! aran,

- Hear thou. Thotoria Marta made over to the town Basta her field.' ${ }^{2}$

Under such and other similar circumstances the character of the language is not easily established. The comparisun of Messapian should be with Albanian, but Albanian is modern and mixed; Messapian, ancient, fragmentary, and corrupt. Direct lexical comparisons with either Albanian or Venetian words are practically wanting. The Messapian family name, genitive Barzidihi, is supposed to be derived from a stem barza = All. barr' white' (cf. Skt. root bhräj'shine'). This would make Messapian a satem-language. The most important phonetic correspındence of Messapian an 1 Albanian is the treatment of I.-E. o as $a$. The genitive sign of consonantal stems in Messapián is as, eg. kalatoras, gen. of kalator, 'herald.' The stem vowel of I.-E. o-stems (sec. decl.) is a : nom. Dazomas, gen. Dazimahi; in this respect Messapian differs markedly from Venetian (above). All together the ties between Messapian and the other Mllyrian languages are rather ethnological and geographical than linguistic. Its character, like that of Venetian, remains undetermined.

Passing from the Venetian across the Etruscan, which is certainly not IndoEuropean, we arrive at the last of the prollematic I.-E. languages, the Ligurian. ${ }^{3}$ In historical times the Ligurians were situated in the northwest of Italy in the province known to this day as Liguria. The stem horm-, clearly connected with the idea of warm springs, appears in the name of the town of Bormio (Bagni di Bormio) and wher proper nouns. It is clea:ly derived from I.-E. ghormo'warm,' in Skt. gharma 'heat,' Gr. $\theta \in \rho \mu \delta$ s, Lat. formus, Germ. warm, etc. The initial $b$ of borm- marks the Ligurian as independent from the Celtic where the treatment is as $g$ : Old Irish gorim, guirim 'to heat '; Breton gor 'burning.' In 1890 two cemeteries containing inscriptions were discovered near the town of Ornavasso. The most important inscription is on a vase : LATUMARUI SAPSUTAIPE VINOM NASOM = Latumari Sapsutaeque vinum Naxium; it seems to contain a dedication of wine of Naxos to a deceased couple, Latumaros and Sapsuta, whose names are connected by the enclitic conjunction $p e=$ I.-E. qe, Lat. que, Oscan-Umbrian $-\rho$, Greek $\tau \epsilon$, Sanskrit-Avestan ca. Furthermore, an epitaph found in the vicinity of the lake of Lugano,

> slaniai : verkalai : pala
> tisui : pivotialui : pala

[^64]commemorates a husband and his wife: 'Of Slania Verkala the grave. Of Tisius Pivotialos the grave.' Kretschmer identiies pala plausibly with Celtic *qalo 'I dig,' in Old Irish to-chlaim 'I dig,' Cymric palu 'fodere.' All three, stem borm-, $p e$, and pala show that Ligurian is a centu,n-langu. ge.

Certain proper names of the Ornavasso inscriptions exhilit a close resemblance to Gallic (Celtic) proper names : Latumaros in its first part suggests Latobrigi, Latobici, etc.; the second part -maros is one of the communest elements in Gallic names. Vasamos, a name on another Ornavasso vase, suggests Gallic names in Vass-, like Vassorix and Dagovassus. But the treatment of the I.-E. labio-velar explosives as labials in $p e$, and especially in borm-, shows of itself enough distinction between Ligurian and Celtic to admit the provisional conclusion that Ligurian is an independent I.-E. language, clusest to Celtic, but yet not Celtic.

## 23. A Suggestion for a New Latin Dictionary, by Professor H. C. Elmer, of Cornell University.

The aim of this paper was to show that in a revision of such a work as Harper's Latin Dictionary, or some of our smaller general dictionaries intended for less advanced students, a vast amount of matter might be omitted altogether, not merely without detriment to any class of dictionary-users, hut with decided and important gains to all. The treatment of the word bibere in Harper's Dictionary was used for purposes of illustration and examined in detail. As the paper appears in full in the Classical Review (April, 1905), I will content myself here with merely making an extract from it that will suffice to illustrate the general character of my criticisms. I select for this purpose that part of the paper that concerns itself with the treatment of such uses as those found, for instance, under I, $3(\beta)$ of Harper's Dictionary. Under this subdivision bihere is defined as meaning "arrive at," "come to." This is a good example of what seems to me to be one of the most serious faults of our Latin dictionaries, viz., their treatment of figurative expressions. It will do very well for the instructor of a class in rhetoric to analyze every rhetorical figure, and to point out the various methods by which rhetorical effects are prorluced. But such a method of procedure on the part of a Latin dictionary seems to me very unfortunate. I have frequently noticed in the course of my teaching that a student was losing all the charm and beauty of a passage solely because he had unfortunately consulted his dictionary, and the dictionary had deadened his susceptibility to the finer points of style. Let me give a few illustrations. If a student had learned from his dictionary merely that bibere means to drink, drink of, drink in, he would be prepared to translate each of the following passages in the manner indicated immediately after it: -

Verg. E. 1, 62: Ante . . .
Aut Ararim Parthus bibet aut Germania Tigrim, Quam nostru illius labatur pectore voltus.
Sooner will the Parthian drink of the Arar, or Germany of the Tigris, than the countenance of that man be effaced from my heart.
Verg. Aen. 11, 803: Hasta . .
. . . virgineumque alte bibit acta cruorem.
The spear, driven home, drank decp of virgin blood.

Mart. 1, 42, 5 :
. . . ardentes avido bibit ore favillas. She drank in with greedy lips the fiery sparks.

## Hor. Od. 2, 13, 32 :

Pugnas et exactos tyrannos
Densum umeris bibit aure volgus.
The throng, pressing together shoulder to shoulder, drinks in with eager ear the accounts of battles and the banishing of tyrants.

Verg. Aen. 1, 749 :
Infelix Dido longum . . . bibebat amorem.
The unhappy Dido drank in long draughts of love.
In translating the bibere of these passages in the manner indicated, he would be doing full justice to the meaning and the style of his author. Is there any schoolboy who, in translating thus, would not at once catch the meaning and the spirit of each and every one of the passages? If there is, it would be only because his soul is dead and the study of language and literature is hopelessly beyond him. For the boy of ordinary intelligence such translations would breathe with life and vigor, would quicken his interest in the author he is studying and his appreciation of the poet's style. The boy would catch sumething of the real atmosphere surrounding the words. He would know, even before he was told, that such expressions are nut to be found in ordinary prose styles. But if, in an unhappy moment, he notices that his dictionary treats of these very passages, he feels in duty boun 1 , of course, to read what it says about them, and to profit by its suggestions. And he there finds these passages treated as follows: Ante Ararim Parthus bibet is translated sooner will the Parthians "come to" Germany, etc. ( $1,3, \beta$ ); hasta virgineum bibit cruorem is said to mean the spear "drew" the virgin's blood, or "killed" the virgin ( $1,5, \beta$ ); avido bibit ore favillas, "breathed in" the sparks with greedy mouth (I, 6, a); pugnas . . . bibit, "eagerly listens to" the accounts of battles ( $\mathrm{I}, 6, b$ ); bibebat amorem, "was affected with" love $(I, 6, b)$. When a student has read all that the dictionary says about such expressions, what has he accomplished? In the first place, he has wasted a considerable amount of valuable time, for he has been compelled to read very many lines of very fine print without reaping the slightest benefit therefrom. Worse than that, he has been lured away from all that places his author above prosaic common-place. And if, after being thus treated by the highest authority with which he is familiar, he still gets some appreciation of the grace and charm and the vigor of his author's style, it is only because he has something within him that can rise superior to his dictionary. I am inclined to believe that it would be a decided gain to omit all explanations and translations of purely figurative uses of a word, or at the very least to reduce them to the smallest possible compass. It may be objected that it is frequently difficult to tell when a word ceases to be felt as purely figurative in a certain connection and acquires an entirely different literal meaning. Very well - if it is uncertain whether in a certain connection a word is used figuratively or literally, certainly nothing whatever is gained by treating it in a dictionary as figurative. If the dictionary merely cited such

## xxxvi American Philological Association.

cases, without comment, there could be no possible loss to any one, and every reader would have a full and adequate appreciation of the word's meaning. When a word has clearly ceased to be felt literally and has acquired a distinctly different meaning, then, of course, the new meaning must be recognized and duly illustrated in the dictionary. But purely figurative uses, and even possibly figurative uses, may best be left to take care of themselves except in treatises on rhetoric and style. Full justice will be done them by merely citing them. If all the explanations and translations of the passages belonglug to this class, which every one would be sure to understand perfectly without help, were umitted from the distionary, there would be a saving of some twenty lines under bibere.

In my complete paper I attempt to show how a similar anount of space is wasted under other su'divisions of the treatment of bibere in Harper's and also in smaller dictionaries. This waste of space involves a similar and equally deplorable waste of time, energy, and money on the part not only of the students who use the books, but on the part of authors and publishers as well. The makers of our dictionaries of the various grades should consider more carefully the needs of the various classes of people for whom their works are intended. It seems to me that the faults I have pointed out are very serious faults, and of far-reaching consequences to the welfare of classical studies among us. In spite of the increase of late in the number of pupils engaged in the study of Latin in our schools, it is a fact, nevertheless, that the stuly of the classics is in a sense upon the defensive. The objection that is most frequently and most furcibly urged is that the time required to accomplish anything with the classics is altogether out of proportion to the results attained. It is in recognition of the furce of this objection that men have rushed to the front with no end of "easy methods" and "short cuts" - with what lamentable results, we all know too well. We may as well recoguize at the outset that there is no easy method of learning the classical languages. To gain anything like a fair mastery of Latin or Greek must ever require years of concentrated study. But this is the best of reasons why, in preparing aids for the students, one should not increase their inevitable burden. I am fully persuaded that a classical student is often compelled to sacrifice unnecessarily a vast amount of valuable time and energy because he has not the right sort of tools with which to work. What seems to me to be imperatively needed all along the line of his classical studies is the elimination of nonessentials, and the elevation of essentials into greater prominence, a more thorough grounding in general principles and less memorizing of divisions and subdivisions and of apparently isolated rules and facts, a more skilful and logical grouping of everything possible about a common centre with a view to aiding the memory by a closer assuciation of related ideas. I have attempted in the paper from which this extract is made to indicate in the most general way how such a reform might be carried out in our Latin dictionaries, not only without loss, but with a positive gain, to the student in his appreciation of the language and literature, and in the interest and enthusiasm with which he pursues his sturly. For it seems to me that, with his present dictionaries, he is often compelled to work his way through thickets where he might be led through groves.

The paper was discussed by Professors Lanman, J. H. Wright, Slaughter, and F. G. Moore.
24. The Accentus of the Ancient Latin Grammarians, by Dr. C. W. L. Johnson, of Baltimore, Md. (read by title).

This contribution appears in full in the Transactions.

## 25. Contributions to the Study of Suppletivwesen, by Dr. Mary C. Welles, of Newington, Conn. (read by title).

$A$. In the works of the Latin grammarians the phenomenon of composite inflection or "Suppletivwesen" attracts general attention, the obvious cases of it are noted, and some unscientific attempts are made to explain it by the principles of authority, usage, euphony, and difference.

Probus distinguishes between fusion of inflected endings as illustrated by mula, mulabus; and fusion by substitution as illustrated by Iuppiter, Iovis, and adds that such irregularities run through all the parts of speech. (Keil, IV, 48.)

Its extent is appreciated by Priscian alone, who groups together as kindred phenomena instances of it in the different parts of speech. He places in the same category: -

1. Iuppiter, Iovis, iter, itineris, femur, feminis, supellex, supellectilis, hospes, hospita, gracilis, gracila.
2. ego, mei, quis, quae, quod, alius -a -ud, ipse -a -um.
3. fero, tuli, volo, vis, vult, edo, es, est, sum, eram, ero, and sum, fui.
4. bonus, melior, optimus.
5. masculine and feminine pairs of words, as eg.: pater, mater, frater, soror, patruus, amita, avunculus, matertera (K. II, 418, III, 413, 415).

He calls attention to the irregular derivation of the numeral adjectives and adverbs; unus, primus, singuli, semel, duo, secundus, bini, bis (K. III, 413, 415), though he fails to form definitely these two groups, as Osthoff does (vom Suppletivivesen d. indog. Spr. 1899), and to associate unus, primus with fero, tuli, etc.

The following instances of composite inflection are given by the grammarians in addition to those just mentioned : -
I. Of nouns: fidicen, fidicinis, fidicinae, jecur, jecoris, jecineris, pecus, pecudis, pecoris, penus, peni, penoris, semis, semissis, senex, senis, tibicen, tibicinis, tibicinae (Charisius, K. I, 83, 134, Prisc. K. II, 229, 279) ; the feminine nouns which take the ending -abus differentiae causa, nata, filia, dea, equa, mula, liberta, asina (Prisc. K. II, 293).
II. Of pronouns: ego, tu, ille (Sergius, K. IV, 546) ; ego, mei, nos (Prisc. K. III, 144-145); those which take the genitive in -ius and dative in $-i$ (Prisc. K. III, 5) ; the relative, interrogative, and indefinite pronouns, which form the dative and ablative, quibus (Char. K. I, 158-159).
III. Of adjectives: ambo and duo, which form ambabus and duabus by analogy with deabus, etc. (Prisc. K. II, 294); duo, which forms duum for duorum in the neuter differentiae causa (Prisc. K. II, 310); malus, peior, pessimus; magnus, maior, maximus ; parvus, minor, minimus ; senior, magis anus (Cledonius, K. V, 38, Pompeius, K. V, 153) ; cases of the substitution of one grade for another in phrases: Juno sancta dearum, Juno magna dearum, in which the positive is a

## xxxviii American Philological Association.

superlative in force (Donatus, K. IV, 390) ; Juppiter optimus maximus, in which the superlative is a positive in force (Donatus, K. IV, 375. See also I, 325, V, 39, 158, 342).
IV. Of verbs: 1) those in which forms from different roots are grouped into one system: arguor, convictus sum ; facio, fio; ferio, percussi, ictus; fero, tuli, latum; furis, insanisti; medeor, medicatus suum ; reminiscor, recordatus sum; sido, sedi; sum, fui; vescor, pastus sum (Char. K. I, 249, 380 ).
2) those in which active and deponent are combined, called neutro-passica by Priscian (K. II, 566) : audeo, fido, gaudeo, soleo, and fio, factus sum.
3) those in which a periphrastic form supplies the place of an inflected form: angor, anxius sum ; memini, memorem futurum; meto, messem feci, messus; novi, notum habuerim, notum habiturum esse, notum habiturus.
4) those in which a prepositional compound supplies the place of a simple form: odi, exosus, perosus (Servius, K. IV, 440-44I, Char. K. I, 257) ; tollo, sustuli, sublatum.
5) those in which there is a fusion of two conjugations: sono, sonare, sonui (Eutyches, K. V, 386, Prisc. K. II, 445, 571) ; nexo (Prisc. K. II, 409) ; mico (i3.472) ; plico (ib. 473); meio (Char. K. I, 245, 262, Diom. K. I, 369); similar verbs whose parts are given without comment.

The fact is observed that sumetimes forms which the simple verb has lost are retained in prepositional compounds: absens, praesens, abiens, praeteriens, exosus, perosus (Prisc. K. II, 435) ; -fendo, -fragor, -perio, -pleo, -specio, which occur only in composition (Consen. K. V, 379) ; and that in some cases the lost form has been supplanted by an analogical formation or a form from another inflected system : applicui, etc., but duplicavi, etc. (Prisc. K. II, 469, 473) ; conficior, etc., but adsuefio, etc. (Char. K. I, 248, 251 ; Diom. K. I, 358 ; Prisc. K. II, 377, 398, 401, 402, III, 269) ; perf. sevi, but -serui in prepositional compounds (Prisc. K. II, 532).
V. Masculine and feminine pairs of words: puer, puella (Prisc. K. II, 231, $23^{2}$ ) ; senex, anus (Probus, K. IV, 61).
VI. Composite groups of phrases: pondo duo, tria, etc., but una libra, etc. (Char. K. I, 35) ; miramur opera, admiramur virtutes (Agroecius, K. VII, I16); vir ducit, mulier nubit (Beda, K. VII, 28I) ; stipulor abs te and quaero abs te for interrogo te (Prisc. K. III, 275).
$B$. A reading of the text of Plautus brought to light the following composite groups : -
I. The composite verb: fio, factus sum, futurus. ${ }^{1}$

Priscian gives three participles to fio: fiens, factus, futurus (K. II, 566), and Charisius three future infinitives : fiendum esse, factum iri, futurum esse (K. I, 251). That futurum supplied the place of a future participle to $f o$ is confirmed by the following group of sentences from Plautus, in which futurum (or fore) is used parallel with some form of fio:-

Fit quod futhurum dixi. Cas. 788.
Quae futura et quae facta eloquar. Am. 1133.
Quod certe scio nec fore nec Fortunam id situram fieri. Poen. 624.

[^65]> Quo id sim facturus pacto, nil etiam scio, Nisi quia futurumst. Ps. 567.
Me.) (Auctionem) fore quidem die septimi.
Mes.) Auctio fiet . . . mane sane septimi. Men. 1156-7.
Sed quid futurumst, quom hoc senex resciverit?
Quom se excucurrisse illuc frustra sciverit
Nosque aurum abusos, quid mihi fiet postea ? Ps. 358.
Pa.) Atque huius uxorem tu volo adsimulare. Ac.) Fiet.
Pa.) Quasi militi animum adieceris sinulare. Ac.) Sic futurumst. Miles, 908-9.
Again, futurum is used with the dative of the indirect object, and in this construction is to be associated with fieri, not esse.

Quid illis futurumst ceteris, qui te amant ? (Mos. 331) is to be compared with Si sic aliis moecbis fat (Mil. 1436), and

Reliquit deseruitque me : tibi idem futurum credo (Mos. 202) is parallel with Quod . . . ceteris omnibus factumst ${ }^{1}$ (Poen. 1183 ; cf. Truc. 418, 633).
II. The composite group : act. sino, pass. licet.

The verb regularly used in the active in the sense of 'permit' in Plautus is sino:-

$$
\text { Immo neque habebis neque sinam. Bac. } 145 .
$$

Patior occurs, but always with the accessory idea of sufferance, as e.g. : As. 240, 738, 739, 810; Aul. 88; Bac. 1191; Cis. 500; Ep. 148; Mil. 395 ; Poen. 368, 965 .

Permitto occurs, but in the sense of 'yield ': -
Ut eam illi permittat. Cas. 270.
Tibi permittimus. Curc. 703. Cf. Cas. 394.
The regular and only passive of sino is some form of licet: ${ }^{2}$ -
Ab eo licebit quansvis subito sumere. Bac. 339.
The perfect passive of sino occurs, but in the sense of 'be placed,' and has become a synonym of esse :-

Res omnis in incerto sitast. Cap. 536.
Ego, quoi libertas in mundo sitast. Ep. 618.
Quoi cor modeste situmst. Men. 971.
Cf. Aul. 609, 615; Bac. 178, 179; Mil. 1156 ; Poen. 342, 625, 1178 ; St. 53, 62.

Two phrases which occur in Plautus should be mentioned, one a synonym of sino and the other of licet, which stand therefore in the relation of active and passive to each other and to these verbs : -
veniam dedit. Bac. 532. habent licentiam. Tri. 1034.

[^66]III. Dico and its synonyms loquor, aio, inquam.

The following sentences illustrate the degree to which these verbs have become synonymous:-

Sic est ut loquor. Bac. 468.
Sicut dicis. Aul. 294.
Bal.) Erus tuos? Har.) Ita dico.
Bal.) Miles ? Har.) Ita loquor. Ps. 1152.
Ita vosmet aiebatis. Cap. 676.
Audin quae loquitur? Bac. 861.
Audis quae dico? Am. 977.
Audin quid ait? Cap. 592.
Loquere quis is est. Bac. 553 -
Dic mihi quis tu's. Bac. 600.
Quidquid istaec de te loquitur. Mil. 1012.
Velim de me aliquid dixerit. Poen. 1206.
Str.) Pergin male loqui mihi ?
Ast.) Quid tibi ego maledico ? Truc. 265-6.
That they should be more exact synonyms than appears from the above illustrations is not necessary to this discussion.

The study of these four verbs produced the following results : -
a) In comparisons, only loguor is used in the first person, and only dico in the second person; always ut loquor, but always ut dicis. This may be due to the frequent use of loquere as an imperative.
b) In the imperative : dic igitur is a stock phrase; loquere both when joined with porro and often when alone means 'speak on.'

Br.) Sine me dicere . . . Am.) Loquere. Am. 1090. Cf. Aul. 820, Bac. 739, Truc. 796, 799.
Quid fit deinde ? porro loquere. Am.1119. Cf. Bac. 745, Merc. 199, 615.
When Plautus wished to use dico in this sense, he substituted for the simple imperative a phrase : -
Perge dicere. Cis. $5^{17}$,751. Perge porro dicere. Cis. 754, Tri. 777.
Inque and inquito express no distinction in time, but are used alike always of the immediate future, "Say now." Dicito is always used of the more distant future : -
'Ita di faxint' inquito. Aul. 7 S8. Cf. Tri. 427 ; Rud. 1342 ; Bac. S83 $_{3}$; Ps. 538. Ubi tu lepide voles esse tibi, mea rosa, mihi dicito 'Dato qui bene sit.' Bac. 83. Cf. Aul. 94, 97 ; Bac. 228; Cap. 395, 401.
c) Aio alcne is used in exclamatory questions; dico and loquor always in questions which receive an answer.
d) Inquam alone is used in parenthesis with quotations.

The following typical sentences illustrate the way in which these verbs have differentiated in usage :-

Decies dixi : domi ego sum, inquam. Am. 577.
' Ita di faxint' inquito. Aul. 788.

Tum aquam aufugisse dicito, siquis petet. Aul. 94.
Quid ais tu ?
Dic igitur.
Loquere porro.
Ut loquor.
Ut dicis.
IV. The composite question and answer, Quid agis ? Valeo. As a greeting, quid agis is a synonym of ut vales:-
Phr.) Quid agis ? ut vales? Co.) Valeo. Truc. 577.
Both greetings may be put into the passive : -
Quid agitur, Sagaristic ? ut valetur ? Per. 309.
It is frequently unanswered, but may receive a direct reply : -
Di.) Quid agis? Ast.) Valeo et validum teneo. Truc. 126.

Pa.) Salveto: quid agis? Ca.) Vivo. Curc. 235.
Ly.) Quid agis, mea salus? Ol.) Esurio, hercle, atque adeo hau salubriter. Cas. 801.

The same idiom occurs in the third person : -
Ep.) Quid (agit) erilis noster filius ?
Th.) Valet pugilice atque athletice. Ep. 20.
Ca.) Tua uxor quid agit ? Me.) Immortalis est. Tri. 55.
The verb ago in its literal use does not occur as a reply. It is found once in an idiomatic expression : -

Tr.) Salve, Ampelisca : quid agis tu ?
Am.) Aetatem haud malam male (ago). Rud. 336-7.
And once quid agis ( $=$ ut vales) is purposely understood as quid agis $(=q u i d i$ facis) and answered in this vein: -

Str.) Quid agis, mea commoditas ?
Ep.) Quod miser (agit). Ep. 6i4.
V. Instances of composite inflection in nouns appear to be rare in Plautus. Two obvious cases occur:-
a) Sing. aedes, aedium, a house.

Plu. aedificia, houses.
b) Sing. aedes, aedis, a temple ( $=$ fanum).

Plu. aedes sacrae, temples ( $=$ fana).
The plural aedificia, hnuses, occurs but once:-
Haec argumenta ego aedificiis dixi: nunc etiam volo
Dicere, ut hominis aedium esse similis arbitremini. Mos. 118-119.
The noun templum in the meaning of temple does not occur in Plautus. Two synonyms appear to have been in common use, aedes and fanum:-
ego in aedem Veneris eo. Poen. 190. Cf. Curc. 481; Bac. 312.

In the Rudens, fanum is used with the same meaning: -

In fanum Veneris. Rud. 128. Cf. Curc. 204.

The plural fana is twice used :-
Heus tu, qui fana ventris causa circumis. Rud. 140. Cf. Rud. 821.
In the same sense we find aedes sacrae:-
apud omnis aedis sacras
Sum defessus quaeritando. Am. 1013 .
26. Critical Note on $\pi \rho \circ \theta$ ध́ovat, Iliad I, 29.1, by Professor H. C. Tolman, of Vanderbilt University (read by title).

Line 291 remains a locus desperatissimus as it did in antiquity, for all difficulties connected with $\pi \rho 0 \theta$ éova $h a v e ~ n e v e r ~ b e e n ~ e x p l a i n e d ~ a w a y . ~ T h e ~ w e l l-~$ known theory (which is as old as Aristarchus) that the verb is the simple $\pi \rho \circ \theta \epsilon \omega$ "run" forces us to account for the bold personification of $\delta v e i \delta \epsilon a$. Shall we say "disgraceful zoords (like warriors) rush forth to his lips"? If so, we are bound to feel that the natural word which the poet would use for such hasty
 Furthermore this interpretation gives to $\mu v \theta \dot{\eta} \sigma a \sigma \theta a \iota$ a harsh construction; yet I don't accept Schöll's view that it is an impossible one. Even Döderlein's attempt to make the infinitive dependent on $\delta \boldsymbol{v} \epsilon \delta \in a$ in the sense of the adjective $\quad$ vel $\delta \epsilon \iota a$ (dictu contumeliosa) would give a construction not a bit more violent than the Aeschylean $\theta \rho a v ́ \mu a \tau^{\prime} \epsilon \mu 0 i \kappa \lambda \dot{v} \epsilon \iota \nu$ (Agam. 1166), which is regarded by most critucs as the sound reading.

The more common theory that $\pi \rho o \theta \epsilon_{0}{ }^{2} \sigma$ is for $\pi \rho o \tau t \theta \in a \sigma \iota$ must, of course, involve the loss of all reduplication in the transfer of the verb from the unthematic to the thematic conjugation, thus giving us a form absolutely unique.

Even in the Indo-Iranian languages reduplicated forms of this same root (I.-E. DHE) are retained when the verb has become thematic (cf. Sanskrit $d a d h-a-t i$, Avestan $d a \beta-a-i t i)$. Freytag's conjecture that we read $\pi \rho 0 \theta \epsilon \omega \sigma t$ for $\pi \rho o \theta$ éor would avoid this difficulty, while the subjunctive might with some degree of plausibility be regarded as a dubitative subjunctive with implied negation, "Can it be that the gods would permit," etc., yet the justification of the meaning "permit" (freistellen, Voss) presents a serious problem. It seems impossible to reconcile such meaning with the ordinary signification of the verb,


 dative of the participle (iis qui auctoritate potiores sunt, cf. xxiii, $890, \pi \rho \circ \beta \epsilon$. $\beta \eta \kappa a s \dot{\alpha} \pi \dot{\alpha} \nu \tau \omega \nu)$. This interpretation not only forces a foreign signification upon the word but gives certainly a colorless expression for the "king of men."


 Homeric poems (Od. xii, iI), I would take as the dative of the participle with
the familiar interpretation as seen in H. Hom. Cer. 151, $\delta \eta \mu \mu \nu \tau \epsilon \pi \rho o \check{\chi} \chi o v \sigma=\nu$. Furthermore, we coull understand an ellipsis of $\varepsilon \sigma r l$ in the line and translate "For this reason is it his right to speak contemp'uous words to his chiefs?"

Such an interpretation, I believe, finds support from (1) Nicanor's remark
 $\dot{\omega s} \dot{\psi} \dot{\eta} \eta \eta \eta \sigma \alpha \nu \tau(\nu \epsilon s)$, which certainly shows that some supposed an ellipsis in the passage; (2) the interpretation of the Scholiast to B. L. ( ${ }^{2} \rho a$ ódel $\lambda \epsilon \iota$ dıd roûto
 by the word in question $\beta a \sigma i \lambda e a s$ was understood; (3) the gloss of Hesychius
 of $\operatorname{k\rho a\tau \epsilon \epsilon \epsilon \nu ,~a~word~which~actually~occurs~three~lines~above.~}$
27. On the Date of Pliny's Governorship in Bithynia, by Professor Elmer Truesdell Merrill, of Wesleyan University (read by title).

The object of the paper was to prove that rog-lil A.D., rather than (as Mommsen thought) ini-113, was the date concerned. It is expected that the paper will be published in full elsewhere.
> 28. Studies in Latin Accent and Metric, by Professor Robert S. Radford, of Elmira College (read by title).

> This article will be found in the Transactions.
29. A Qnantitative Difficulty in the New Metric, by Professor Edward B. Clapp, of the University of California (read by title).

The shortening of diphthongs and long vowels in hiatus is an Epic practice, and in later Greek poetry is consequently confined for the most part to dactyls. E.g., in the extant remains of Greek melic poetry [some 8000 verses], shortening in hiatus occurs 352 times. According to the ordinary scansion 338 of these 352 instances of shortening appear in dactyls, five in tribrachs, four in cretics, while in dissyllabic feet there is no instance where text and scansion can be regarded as certain.

These facts are adduced as casting some doubt upon the substitution of
 is characteristic of the new metric. This change of scansion involves the breaking up cf many so-called "cyclic dactyls" into trochees and iambs, and, as a consequence, the frequent occurrence of shortening in hiatus in dissyllabic feet. This is so difficult to accept, in view of the facts mentioned above, that the present writer is inclined to query whether, after all, it is not probable that $\_\cup \cup$ in the Glyconic, and similar series, was felt by the poets as a dactyl, rather than as a trochee plus half an iamb. If it were not so felt, why should they resort so often to the characteristic dactylic shortening in hiatus under these circumstances?

This paper is printed in full in the Classical Reviez for October, 1904.
30. The Puteanus Group of Mss. of the Third Decade of Livy: A Revision of the Classification of $\beta$ and $\lambda$, by Professor F. W. Shipley, of Washington University, St. Louis (read by title).

The President announced that in lieu of the customary Report from the Standing Committee on Spelling Reform, its Chairman, Professor F. A. Marc', had asked Mr. E. O. Vaile, editor of Intelligence, to make a statement to the society of what had been done in the National Educational Association in the interest of simplified spelling.

Mr. Vaile:
The first practical step in this matter taken by the national organization of teachers was the adoption of a resolution in 1897 by the Department of Superintendence directing the secretary in publishing the Proceedings of the Department to adopt, until further instructed, such amended spellings as might be prescribed by the following committee: Dr. W. T. Harris, Commissioner of Education, Dr. F. L.ouis Soldan, Superintendent of Schools, St. Louis, Missouri, and Dr. T. M. Balliet, Superintendent of Schools, Springfield, Massachusetts. This committee designated the following amended spellings for the secretary to adopt : program, tho, altho, thoro, thorofare, thru, thruout, catalog, prolog, decalog, demagog, pedagog.

This action was approved by the Board of Directors, and made to apply to all matter issued by the N. E. A.; and these spellings have been regularly used since, excepting in a few papers in the Proceedings, the authors of which objected to the use of these new forms and were allowed to have their papers printed in the regular spelling. The adoption of these twelve shortened forms by the N. E. A. was followed by their adoption by a growing number of publications and advertisers.

In the meeting of the Department of Superintendence in 1901, another advance step was proposed in the shape of a resolution petitioning the Board of Directors of the N. E.A. (I) to appoint a commission of twenty eminent scholars and business men - they were named in the resolution, with their approval - to become a head to the movement, and (2) to give this commission $\$ 1000$ a year for five years, to be used by it according to its judgment in furthering the cause. This resolution brought on an animated debate, but it was defeated by a vote of roj to 97, I believe.

In 1904 at the meeting of the Department of Superintendence in Atlanta, the same proposition was introduced, slightly modified, petitioning the Board of Directors to appoint a commission and appropriate for its use \$2000 a year for five years, providing that only as much of the appropriation should be given to the commission each year as should equal the amount of money raised for its use from other sources. These resolutions were passed by the superintendents by a majority of about four to one. This action was supplemented by a canvass of the entire N. E. A. active membership on the subject of the petition, with the result that 1545 active members signed the petition to the Board of Directors, while only 171 signed the petition in opposition.

The petition was duly presented to the Board of Directors at the late meeting (in St. Louis), who, according to the regular order in such matters, referred it for advice to the Committee on Investigations and Appropriations of the Council of Education. This committee, after considerable deliberation, thought it advisable to take expert advice on the subject, and so referred it to a special committec consisting of Professor Calvin Thomas, of Columbia University, Professor George Hempl, of the University of Michigan, President H. H. Seerley, of the Iuwa State Normal School, Superintendent C. M. Jordan, of Minneapolis, Minnesuta, with the President of the N. E. A. (Superintendent William H. Maxwell, New York City) chairman ex officio. This committee is to report to the president of the Council Ly June 1, 1905.

Here is where this movement rests at present, so far as the N. E. A. is concerned. The sentiment expressed in favor of having the N. E. A. provide an efficient business organization for wisely encouraging and directing this movement and of devoting a small portion of its large annual resources under wise safeguards, for the use of this committee, is so pronounced that strong confidence is felt that the course outlined in the petition of the Department of Superintendence to the Board of Directors will be approved by the committee to whom the matter has been referred, each member of it being on record as favoring moderate and reasonable steps in the interest of the movement. It is generally understood that if this committee of experts so reports, all further opposition to having the N. E. A. lend its moral and financial support to this cause will be withdrawn.

The Committee on the Time and Place of the Meeting in 1905, by Professor Elmer, Chairman, reported its inability to make a definite report, whether to hold the next meeting at Cornell University or at Dartmouth College. Professor Perry expressed a desire to have the next meeting at Columbia University in 1905, and moved that after the adjournment of the Association the Committee have the power to decide the place and time of the next meeting. Carried.

Professor J. H. Wright reported for the Committee on the Nomination of Officers, presenting the following list of officers for the ensuing year : -

[^67]The report of the Committee was accepted, and the Secretary was directed to cast the ballot of the Association for the persons nominated.

Professor Wright's term of service as a member of the Standing Committee to Nominate Officers expiring in 1904, the President appointed Professor M. L. D'Ooge, of the University of Michigan, to serve for five years from 1904.
The present membership of the Committee is as follows : -
To serve for one year, Professor W. G. Hale, Chairman. To serve for two years, Professor T. D. Seymour. To serve for three years, Professor Samuel Hart. To serve for four years, Professor M. W. Humphreys. To serve for five years, Professor M. L. D'Ouge.

On motion of Professor Smyth the office of Assistant Secretary was created. Due notice to this effect was given by the Executive Committee at the last annual meeting (see Proceedings for 1903, p. xix). The Assistant Secretary is to assist the Secretary during the sessions of the Association, but is not to be a member of the Executive Committee.

Professor Smyth then reported for the Executive Committee that at the last meeting Dr. Scott had proposed the following resolution : -

Resolved, That the Executive Committee be requested to consider and to report at a future meeting of the Association, whether it is expedient to change the method of publishing the papers read before the Association; and whether, in particular, it is desirable to publish the papers, or those chosen for the purpose, each in a separate monograph with a separate title-page, but all bearing the name and sanction of the Association, and a serial number; and whether, if this be done, it is expedient to abolish the Transactions as such and to reduce the Proceedings to a mere official record.

In accordance with the request of the proposer of the resolution, who desired that his argument in favor of the change be printed in brief in the next number of the Proceedings, the Executive Committee has decided to postpone consideration of the matter, and to report at the next meeting.

The argument presented by Dr. Scott is as follows :-
The Method of Publishing the Papers of the American Philological. Association.

From the beginning of the Association the papers have been published in two series, one called the Transactions, consisting of papers chosen for publication in full, and printed in large type; the other called the Proceedings,
consisting of abstracts of the other papers, in connection with the minutes of the meetings, and printed in small type.

The papers in the Transactions have been printed in an order determined each year according to the length or subject or importance of the papers, or to other considerations necessarily left to editorial discretion. The papers in the Proceedings have been printed, in abstract, in the order in which they were read, intermingled with the minutes.

It has been the custom to print off a number of separate copies of each paper for the use of the author. No separate copies are issued to other members. The separate copies are not provided with a separate title-page. They are not always so printed as to begin with a recto, as convenience of separate publication requires. 1 his plan is possible only by happy accident or by adjustment involving some extra expense.

The Transactions and Proceedings together constitute two long miscellanies, in two principal sizes of type. They extend now over a period of thirty-five years. They contain many hundred papers on many hunilred tupics. These papers are not classified. They are indexed in one general index, not now covering the whole period, and in many annual indexes.

On adjacent shelves the members of the Association and other subscribers may possess many feet or many yards of other philological miscellanies, as the Publications of the Modern Language Association, the Journal of the American Oriental Society, the publications of the Archaeological Institute, the Transactions of the Philological Society of London, and an indefinite number of long sets of other philulogical transactions and journals. On other crowded stachs of stuffed shelves there are other "continuing series" of other scientific transactions and journals, taking up a great deal of space, and involving no small expense in the acquirement and care thereof.

All these miscellanies are to the owner or consulter confused heaps of material containing much that is to him of the highest interest and value, papers that he would gladly place on his shelves as independent books, and also much that may be of interest and value to others, but is not to him - papers that he does not understand, that he will never attempt to read, and that he would never buy as separate works. But he has no choice, either to pick out what he wants, or to place it with other matter on the same subject. The method of publication blocks his choice, checks his study, chills his interest.

This should not be so. No method of publication, indeed, no bibliographic device, will ever enable any one to attain learning without hard labor and long research. But it is the dictate of science that all unnecessary obstacles be removed. All the time devoted to learning should be productive of results, either in knowledge or in discipline.

The method of publishing scientific matter in the form of miscellaneous and insequent papers inseparably printed and bound together is not scientific. It originated in an unscientific age, out of accidental conditions. It was circumstances of place, expense, temporary convenience, literary amateurism, forced expediency, that determined the form of the early Transactions of the learned societies of Italy, France, and England. It is custom that continues whet accident began.

The result is that there is an immense number of valuable papers, and what
should be recognized as valuable books, buried beyond easy reach and sight in great heaps of printed blocks. These heaps are, indeed, provided with labels, but the labels are vague and nearly futile. The title or label "Philosopbical Transactions" or "Transactions of the American Philological Association" is only a very general indication of the matters contained in the blocks of paper so labelled. Considered as scientific classification or practical guidance, the information is too meagre. What is wanted is precise information. This requires close classification. The guiding title should be, not "Philosophical Transactions," not "Observations on Fishes," but "The Shad," "The Fishes of Ireland," "The Freshwater Fishes of County Cork "; not "The Transactions of the American Philological Association," but "The Greek Dialects," "The Ionic Dialect," "The Vowel System of the Ionic Dialect"-always the closest classification, the most definite direction, that is convenient.

That papers on such subjects are published or sanctioned by the Royal Society or the American Philological Association is a fact of interest and value in interpreting or judging the work, but it is a subordinate fact, to some extent a mere accident, and it is unscientific to make this accidental fact, in effect, the title of the paper, or what is worse, to make the name of the publishing society a blanket title for a score or a thousand of works whose real title is hidden from view.

The acquirement of learning is best subserved by an abundance of separate books, each one dealing squarely and in detail with one subject, and not printed or bound inseparably with books or papers on other subjects, or on remote branches of the same subject. That a book contains 400 , or 40 , or 20 , or 4 pages, is a mere accident. If it deals with one subject, call it book or paper or pamphlet or what not, it is entitled to a separate existence, to go whithersoever the owner wills. If not actually separate, it should always be separable. If two works are very closely related, they may indeed be bound together, like the Siamese twins. The condition is inconvenient, but it may be tolerable. But diverse works should be twain, not twins. Think of the annoyance and mortification of a gentle Siamese who finds himself an inseparably ligatured twin with a Rough Rider or a Congo cannibal!

The general principle is, that except for temporary purposes and within a convenient minimum, it is unscientific to print or publish scientific works or any matter that constitutes a distinct item in the sum of knowledge, in any other than (a) a classified form, namely, either as a systematic treatise, or as a part of a dictionary or encyclopedia, where the perfectly known alphabetic classification is for the general convenience better than any logical classification; or (b) a classifiable form, namely, as an individual work, or as one of a series of individual works, not previously classified or ossified or hopelessly ankylosed with other works by a printer or binder, and therefore left to the classification of the user, who may put it where it will best serve bis purpose.

It may be said that the published Transactions and Proceedings of learned societies throughout the world have failed of a certain part, sometimes of half or three-fourths or nearly all, of their possible utility, because of difficulties due to their style, their bulk, their weight, their print, their cost, their rarity, their language, their unknownness, their inaccessibility, their indexlessness, or their method of publication. No one can compute how much farther science would have progressed by this time if in these respects the conductors of these societies had
used the best judgment of their period. It is clear that in many cases mere custom, vanity, indolence, ignorance, parsimony, timidity, and wher unscientific qualities have determined or deteriorated the form and the contents of scientific publications.

Few of the difficulties mantioned exist in the case of the Transactions and Proceedings of the American Philological Association. In style, in bulk, in weight, in size, in type, in print, they are models. In these and other respects open to choice they reflect the judgment, the taste, and the scholarship of the executive officers, and in particular of the eminent scholais who have borne the burden of editorship. The method of publi, ation was not, and has not been, a matter of deliberate choice and preference. It was and is an inherited custom.

The custom is not followed by all societies. A number of scientific societies publish their papers separately. Publishing soci sties like the Early English Text Society keep their issues distinct, in several numbered series. The series are cummonly catalogued and shelved together, but scientific librarians break up such series, and place the separate works with their subject. It is unreasonable to keep such works together merely because they were issucd by the same publisher. No library would keep in one series all the works published by the Clarendon Press or by John Murray. No library should be compelled to keep in one series all the works published by the Early English Text Society or the American Philological Association.

To a housemaid it looks nice to see a long row of Transactions of the same height, the same thickness, and the same color, with the same gilded labels. To a user of books it is a melancholy sight. The slight difference of thickness, when there is any, is a redeeming feature. I once had occasion to send to the binder a set of the publications of the English Dialect Society. They came back bound as ordered; but I did not order him not to pad out the thinner volumes, so, with great intelligence and judgment he padded them all to a double or triple thickness, so as to produce an elegant housemaid unifurmity, devoid of all distracting individuality.

For the reasons I have mentioned, and for others which will appear on a consideration of the matter, I offered the resolution looking to a change in the method of publishing the papers of the Association. Put intu concrete form, subject to changes in detail after discussion, $\mathrm{m}_{j}$ suggestion is this:-

That the rapers chosen for publication shall be issued in the present size of page and the same, or any chusen, size and style of print, each in a separate or separable pamphlet, with an independent title-page, or a separate title on the first page, with a stiff, colored, paper cover, hearing the same title. That the title shall begin with the actual title of the paper, followed by the name of the author, as in an independent pamphlet or book. That the author's name be followed by a fixed formula, showing that the paper is published by the American Philological Association, and that it was read at a session, place, and date stated. That this formula, which would be in effect the series-title (and should therefore not come first on the title-page), be followed ly a serial number, and then by the usual imprint. That each paper contain also a complste list of all the papers of the Association read at the same session, and thus retain all the advantages of the present method of publication.

The principle of separate publication should be applied so far as possible to the papers now printed in the Proceedings. Some of these are in fact full papers, covering several pages. Such papers could be printed in a four-page or larger folder. Shorter papers could go together on another folder, and the official minutes on another. All could be issued together, bound in one pamphlet, but still separable by the user. This would reduce the necessary miscellany to a minimum. It cannot be wholly abolished, in respect to the Proceedings.

The papers could be sent to the members and subscribers in separate pieces but all in one package, or at intervals when they are ready. Members and subscribers who so desired might receive them bound. They would still be separable. The main point is, that the present inseparable order shall not forever remain the only one. Let the receiver have the power to place the papers where he will.

There are two objections to the proposed separate publication.
One objection is, the greater expense, caused by the separate printing and, handling, and especially by the addition of a separate title-page and cover for each paper. This objection deserves consideration. It may be at present a serious one. The Secretary will be able to estimate the probable difference, and to state other objections related to this one. My belief is, that the added expense will not be great, and that it will be amply balanced by the added advantages. And the added expense could be met by assessing it upon the authors themselves, or by the sale of the separate papers to non-members, or of extra copies to members. The amount of such sales would probably exceed the present sales of the bound Transactions.

The other objection is, that many of the papers, as separately published, would be so thin (I refer of course to their physical dimensions) as to leave no room, if they were bound, for a title on the back edge. The statement is true, but it applies to all pamphlets, and I think that all scientific librarians agree in the opinion that pamphlets should be kept distinct, bound if possible, but each within its own covers. The conventional distinction between pamphlets and books is merely conventional, and can be abolished by any binder. It ought to be abolished as soon as the owner can meet the expense.

Other objections and apparent difficulties will occur to the mind, but they will not prove serious. The thing proposed can be done. It has been done by other societies. Indeed, I doubt whether any member of the Association, if the method of miscellany publication were a new one, proposed for adoption against an existing method of separate publication, would vote for miscellany publication. For he would say, the separate publication is better.

1 wish to add that this proposition arose from my own experience in the consultation and management of large quantities of miscellaneous material in the form of scientific transactions and journals, and that it reflects an acquired sympathy with the efforts of practical librarians to bring within some control the ever-growing floods of miscellanies and polygraphs. The matter requires consideration. My object in these remarks is simply to open the discussion, with the hope that the Executive Committee will deem it worth while to report the matter to the Association in a way favorable to its further consideration and discussion.

If the Executive Committee and the Association are favorable to the proposition, they may deem this a fitting year to make the change. But I am inclined to think that the special circumstances of the present meeting, amid the pressure and distractions of a world's fair and crowding congresses, will make it inex-
pedient to do more than to state the case to the Association, call for a general expression of opinion, and then remand the matter to the Committee for a report next year.

But I think that there never will come a year in which it will be scientific to publish scientific matter in an unscientific way.

Professor Bloomfield then raised the question of the advisability of holding the regular annual session of the Association in the winter, instead of in the summer vacation. In the discussion that ensued remarks were made by Professors Lanman, Seymour, Smyth, Hale, D'Ooge, and F. G. Moore. At the request of Professor Bloomfield an informal ballot was taken on his motion that it was the sense of the members present that the annual meetings be held in the winter, with the following result: twenty-five in favor, five against the proposed change. After further discussion Professor Bloomfield moved that, by way of experiment, the next two meetings of the Association be held during Convocation Week in $1905^{\circ}$ and 1906. Carried.

It was understood that, if practicable, a meeting should be arranged conjointly with the Archaeological Institute of America, or with the Modern Language Association.

Professor Perry moved the following vote of thanks, which was adopted unanimously by a rising vote : -

Whereas, Professor Herbert Weir Smyth has performed the arduous duties of the Secretaryship and Treasurership of the American Philological Association for the past fifteen years with singular devotion and success, be it

Resolved, That the hearty thanks of the Association be extended to Professor Smyth for his untiring and efficient services as its Secretary and Treasurer from 1889 to the present time.

Adjourned at 12.50 P.M.
In accordance with the resolution adopted upon motion of Professor Bloomfield the next meeting of the Association will be held during Convocation Week, 1905 .

The place of the meeting haying been left to the decision of a committee, that committee has reported in favor of accepting the invitation of Cornell University for a joint meeting with the Archaeological Institute of America, at the time above indicated.

## PHILOLOGICAL ASSOCIATION OF THE PACIFIC COAST.

The Fifth Annual Meeting was held at the Mark Hopkins Institute of Art in San Francisco on December 28, 29, and 30, 1903.

San Francisco; December 28, 1903.
The Association was called to order at 2.30 P.m. by the first Vicepresident, Professor W. A. Merrill, of the University of California, the President, Professor A. T. Murray, of Leland Stanford Jr. University, being unable to attend the meeting.

The Secretary of the Association, Professor John E. Matzke, of Leland Stanford Jr. University, presented the following report :
I. The Executive Committee has elected the following new members of the Association:

Prof. W. F. Badè, Pacific Theological Seminary, Berkeley, Cal.
Mr. C. Bransby, University of California, Berkeley, Cal.
Mr. B. H. Cerf, University of California, Berkeley, Cal.
Prof. M. S. Cummins, Occidental College, Los Angeles, Cal.
Mr. L. J. Demeter, University of California, Berkeley, Cal.
Mr. H. B. Dewing, University of California, Berkeley, Cal.
Prof. A. Emerson, Affiliated Colleges of the University of California, San Fran cisco, Cal.
Mr. W. M. Hart, University of California, Berkeley, Cal.
Miss Hodgkinson, Lowell High School, San Francisco, Cal.
Mr. I. M. Linforth, University of California, Berkeley, Cal.
Mr. E. W. Martin, Leland Stanford Jr. University, Stanford University, Cal.
Mr. C. Paschall, University of California, Berkeley, Cal.
Prof. T. F. Sanford, University of California, Berkeley, Cal.
Mr. M. J. Spinello, University of California, Berkeley, Cal.
Prof. C. W. Wells, University of California, Berkeley, Cal.
Through transfer from the American Philological Association there has been added:

Dr. Charles J. O'Connor, University of California, Berkeley, Cal.
2. Professor Matzke then presented his report as Treasurer of the Association for the year 1902-1903:


1. The Plural of Segolates, by Professor Max L. Margolis, of the University of California.

In the plural of Hebrew segolates (forms of the type malk-, etc.) we find a vowel (a) between the second and third radicals (e.g. molak-im). Whence this $a$ ? The following answers have been given: (1) The plural is derived from a parallel singular form : molik-im from malak-. This statement is usually accompanied by the assumption that malk- itself goes back to malak-. So Luzzatto (Prolegomeni, 1836, 116 ff.; Grammatica, 1853, 358), Philippi (BSS., 2 (1894), 373, 376 f.: the preservation of the $a$ in the plural is put to the account of the accent of which it was the bearer; Philippi enumerates the traces of the $a$ in the plural in the other Semitic dialects, as Aramaic malk-in with spirantization, Arabic 'araḍ-īna, Ethiopic kalab-āt). (2). The Ethiopic and Arabic forms just quoted afford Praetorius ( $B S S$., 1 ( 1890 ), 374-377) the opportunity for a different explanation. Observing that the supernumerary vowel appears to be limited to the feminine plural, he concludes that it arose by conforming to the vowel in the singular, which is either an original or a helping vowel in front of the consonantal ending $t$; then it spread into the masculine plural. In adjectives the supernumerary vowel is wanting, because of the analogical influence of the masculine. Praetorius' conception about the character of the consonantal suffix $-t$ is certainly erroneous when applied to primitive Semitic speech. Lagarde (1884, 1889) derives mollk-im from malak-, which latter he considers to be a corruption of malik-. He is quite right about deriving certain malk-forms from malik-; but his explanation of the plural is not convincing. Stade (1879) speaks of the analogical influence of the plural of the dobür-im type; but Ungnad (see below)
rightly asks for the cause inducing the analogy. (3) König (Lehrgebäude, 2 (1895), 408 ff .) and, in an improved form, Ungnad (ZA., 17 (1903), 333-334) see in the supernumerary $a$ a parasitic vowel the insertion of which is connected with accentual conditions. Ungnad misinterprets the dual karint-aim and (this is the vulnerable spot) explains the spirantization in malk-ai as due to the
 Lambert ( $R E J ., 24$ (1892), 104-106). He compares the Arabic broken plurals of the type fial- and fuial-, and arrives at the conclusion that originally the plural of segolates was distinguished from the singular only by giving the characteristic vowel a different position. His explanation of malk-ail is phonetically impossible. (5) The explanation which I have made my own is that given by Salter Brooks, Vestiges of the Broken Plural in Hebrew, Dublin, 1883 (the pamphlet appears to be unknown in Germany). Brooks, it seems, was unaware of the fact that he had been anticipated by Ernst Meier, Die Bildung und Bedeutung des Plural in den semit. und indogerman. Sprachen, 1846. The German publication just referred to contains much that is confused ; hence the oblivion to which it has been consigned. Nevertheless, it elicited the praise of Johannes Schmidt (see his Pluralbildungen der indogerman. Neutra, 1889, 10, footnote). Meier sees in the plural suffix -im an abstract suffix. Hence $z z k \underline{u} n-i=1 m$ "old age," etc. But the abstract may be used for the concrete (comp. Sult-ān; hence Elōh-īn, Deity, God). Abstract nouns become collectives, then plurals. He points to the broken plural of malk- forms (Hebrew, Arabic, Ethiopic). He knows of the plural of the plural: rağul-, riggäl-, riğăl-ät-. Accordingly he explains maliak-im on p. 78 as the plural of a plural. The shortening of the vowel is explained neither by Meier nor by Brooks. Here Barth's Law of Compensation (Nominalbildung, xiii.) steps in to furnish the wanting explanation. Barth unnecessarily confines himself to the feminine suffix ; his law, however, holds good of any abstract suffix. Hence molalk-int (nevertheless we find 'ělōh-imm without compensative shortening, cf. ' $\mathfrak{c} \underline{b} \bar{b} \bar{d}-\dot{a}(h))$. Compensative forms are found also in Arabic (also in broken plurals). Malk-aị (with a) I explain as due to the analogical influence of the singular. The consonantal environment is another influence. Cf. kanffai by the side of digr-ai. (Ultimately compensative shortening will be found to rest upon accentual conditions; perhaps some light will come from Grimme's forthcoming essay on the Semitic "ablaut.")
2. Concessive Si-Clauses in Plautus, by Professor H. C. Nutting, of the University of California.

In this paper a distinction is made between simple and intensive concessive clauses. The latter are characterized by intentional exaggeration, e.g. "Though Jupiter himself should come to your assistance." The usage of si and each of its compounds is examined from this point of view. The tables at the end show the peculiarity of the intensive type, with reference to both the introductory particle and the mood of the verb. A discussion of the reason for these peculiarities is appended.
The paper was discussed by Professors Clapp, Merrill, Elmore, and Fairclough.
3. The Subjunctive in the So-called Restrictive Quod-Clauses, by Professor J. Elmore, of the Leland Stanford Jr. University.

After discussing the views of this construction which are held by the grammarians, the paper sought first, with respect to the mode, to establish the actual usage of the language, many examples being brought to show that in every type of these so-called restrictive clauses both indicative and subjunctive are found. The reason for this modal behavior is to be looked for in the logical relation of the clauses to the sentences in which they stand. It was held that this logical function is to denote the special consideration (or considerations) in view of which a statement is made; that is, to constitute the inental point of view from which the speaker utters his thought. In this case the antecedent, of which these quod-clauses were originally an expansion, would be a demonstrative in the ablative case, - the so-called ablative of specification or respect, - by means of which the clauses would be closely connected with the rest of the sentence. The mode was determined by the relation existing between the antecedent and its clause. If the clause was felt as merely determinative, the indicative occurred; if, on the other hand, it was descriptive of the antecedent, there resulted naturally the subjunctive of characteristic. Each mode gave to the clause a special shade of meaning. After the mode had become established, we need not, of course, assume a definite consciousness in the speaker's mind of its origin. The modal coloring, however, was no less strong on this account.

This paper was discussed by Professors Nutting, Clapp, Fairclough, Noyes, and Merrill.
4. The Chinese Drama, by Professor John Fryer, of the University of California.

The Chinese drama has hitherto received but little critical attention from European and American students of the language, literature, and customs of the country. Hence by those who are strangers to China and the Chinese it has been inferred that the drama does not occupy a very conspicuous place in the general esteem of the literati and better classes of the people. Such, however, is not the case; but, on the contrary, it has been made one of the greatest and most popular means of enlightening the masses as to the important events in their national history, and of illustrating the great ethical principle laid down by the ancient Chinese sages, that "virtue is its own reward, while vice is its own punishment." Hence the drama has been fostered and promoted by some of the best of the officials and guardians of public morals in China, who have sought to elevate its tone by encouraging what is good in it, and eliminating what is evil.

## i. Origin of the Chinese Drama.

Chinese history seems to point to about one thousand years before Christ as the date when dramatic plays were first dimly conceived of. This is about the time of Solomon, who had " multitudes of singing men and singing women," and whose elegant dramatic composition known as the Song of Solomon is supposed to have been written for his marriage-feast celebration.

The origin of the Chinese drama is usually traced to the Emperor Ming-Huang. The legend states that one of his three souls took a journey to the moon, which the Chinese believe to be inhabited. When he reached the Palace of Jadestone in the moon, where the ruler of that orb resides, he found the people were engaged in some theatrical perfurmances to which he paid particular attention. On the soul's return to his body he remembered what he had seen, and started to produce the Chinese drama in imitation of it. He engaged several of his people to train themselves as performers. Being very fond of music, he estallished a sort of musical school, held in a pear orchard, where about three hundred people of both sexes were instructed and prepared for carrying on various kinds of amusements for the entertainment of the imperial court. There were instrumentalists, singers, and dancers or actors, who were known as "Youths of the Pear Orchard,"-a term still applied to all folluwers of the Thespian art. The exact nature of these performances is not very well known or understood. They probably partook considerably of the nature of the opera, or of the lyric drama, very much as the Greek tragedies did.

In recognition of the efforts of the Emperor Ming-Huang in starting the first school of performers, he has been canonized, and is still worshipped under another name as the patron god of play-acting. Hence, in the chests containing the accoutrements or properties of a troupe of players, there will always be found, on a larger or smaller scale, an image of their god of the theatre, which is superstitiously carried about with them wherever they go.

The drama as we now find it in China is evidently of foreign or Mongol-Tartar origin, and was introduced from that country when the Mongolian conquest of China took place and the Yuan dynasty was established. The "Hundred Plays of the Yuan Dynasty" have become as much the standard work on the subject of the drama as the plays of Shakespeare have with us. During that dynasty there were eighty-one authors of more or less note who had written separate plays to the total number of five hundred and sixty-four. Thise are all regarded as of a classical character.

Since the Mongol dynasty the Chinese drama has originated an immense amount of literature, in spite of all the imperial restrictions that have been imposed upon it, for it supplies a universal want. Hence every class of society in China has its own popular dramatic entertainments of a higher or a luwer order.

## 2. The Actors and Arrangements of Chinese Theatres.

It is interesting to find that the Chinese drama has several points of similarity with that of the Greeks. In Greece the plays would commence at sunrise and continue all day until sunset, just as they do still in the open-air stages of the country districts in China. Women were not allowed to perform ; there was no interval between the pieces; there was no curtain, no scenery, no prompter, and 110 attempt at realism. The words of the play were partly spoken and partly sung, - the quality of the voice of the actor being of the utmost importance. Before masks were invented, the Greek actor painted his face and wore shoes with very thick soles or "cothurns." These and other points of resemblance are all to be found in the better class of Chinese theatres of the present day.

A full company of actors consists of about sixty men, each of whom has com-
mitted to memory from one hundred to two hundred plays. There being no prompter, it is only an excellent memory that can retain so much. The actors are generally divided into five classes, according to the nature of the parts they have made a special study of.

Those who take the better class of women's parts have to wear imitation small feet, and have to sing or say their parts in a shrill falsetto that requires much practice to produce the best effects.

The songs and words are generally in the ancient Mandarin language, which differs entirely from the local dialects of different places, and is, of course, unintelligible to the masses. Hence the audience does not go to listen to the words, but to see and hear the skill of the actor.

The stage has only two doors, - one for entrance and one for exit. As the performers of one set leave the stage those of the next part enter by the other door, so that there is never a break in any performance or set of plays. What cannot be inferred from the more or less gorgcous clothing, or the movements of the actors, has to be told to the audience by the actor himself, who states whom he represents, what he has done, and what he has to do.

## 3. The Literature of the Chinese Drama.

The Chinese divide their classical dramatic literature into three principal groups, according to the age when the plays were written. First come the earlier plays produced during the T'ang dynasty, or, roughly, between the years 720 and 960 A.D. Second, those dating from the Sung dynasty, or from 960 to 1127 A.D. Third, those written during the Yuan dynasty, or between 1127 and 1368 A.D. Since the Yuan dynasty, the number of plays that have been published is enormous, but they have never succeeded in supplanting those of the older classic times in the estimation of cultured Chinese.

Among the thousands of plays that might be mentioned, the pathetic drama in twenty-four acts entitled "Record of a Pi-pa" (or Chinese guitar) partakes as much of the nature of the novel as of the drama. The first representation of this affecting play took place at Peking in A.D. 1404 during the Ming dynasty. It is said that this masterpiece, which gives an account of the sad life of a talented singing girl, if performed by a highly trained troupe, not only brings tears to the eyes of the whole audience but even the actors themselves are so much affected as to be unable at times to continue their parts.

Modern plays are nearly all of the " $W u$," or the military, kind. They pander too much to the popular demands for noisy display and fierce fightings, to say nothing of licentiousness. The "Wen," or civil, plays are usually of a much higher order, and certainly teach a better class of moral sentiments, but are little patronized even in the great cities.

A wealthy Chinese gentleman of a philanthropic.turn of mind, named Liang-yu-chih, not long since attempted to reform the tone of the popular theatres by encouraging the performance of what may be called " morality plays," of which he published an original collection and sent me a copy, which suggested the writing of this paper. The title of one of these plays is "The Story of Grinding at the Mill," and it may be taken as a sample of the whole collection. The heroine is a young girl, the daughter of respectable parents of the poorer middle
class, who is betrothed to the son in another family, living at some distance. She is brought up in the future mother-in-law's house, as is sometimes the Chinese custon. Though treated in the most cruel manner, she meekly submits till the very gods are moved by her dutiful conduct to interfere on her behalf. Yet the mother-in-law is professedly a devout Buddhist. Her visits to temples to burn incense and pray to Buddha, as well as her invocations of Buddha's name, are introduced in the midst of all her cruelty in order to ridicule the foltowers of that religion. She makes the poor, half-starved child turn the heavy flour mill half the night and grind for the whole family, beating her every now and then fur imaginary offences. Her gross hypocrisy when the mother of the child comes to visit her is only too true to the life. The play finishes by the mother-in-law being struck down by one of the gods and lying dangerously ill, when the girl cuts out a piece of her own flesh to make soup for her cruel tormentor, according to the popular belief that such means would insure recovery. Then comes the old lady's restoration to health, her knowledge of this piece of self-sacrifice, and her bitter repentance; while the dutiful conduct of the daughter-in-law is promulgated by official authority far and near.

The style of these twenty-seven plays is chiefly adapted to the common people, but they have the usual amount of poetry and songs, without which they could never hope for popularity. Even with these accompaniments, there is doubtless too much of the "goody-goody" element in them to make it at all likely they will ever please the vitiated taste of the general Chinese public enough to grow into much demand.

Adjourned at 4.30 P.M.

## Second Session.

The second session was called to order at 8 p.m. by Professor E. B. Clapp, of the University of California.

In the place of the address scheduled to be given by Professor A. T. Murray, the Association listened to the following lecture :
5. The Etruscan Nekropolis of Abbadia del Fiume, near Pitigliano, by Dr. Alfred Emerson, of the University of California.

Abbadia del Fiume is an uninhabited hill on the west bank of the river Fiora, a little more than halfway from Orvieto to the seacoast. One leaden slingshot with the inscription STAT came to light among the ruins of a tricellar Etruscan temple which has been identified at the northern end of the hill. The document has been invoked in behalf of identifying Abbadia with the Roman Statonia. Signore Riccardo Mancinelli, an experienced explorer, whose headquarters are at Pitigliano, discovered and excavated the Etruscan cemetery and town-site, between 1895 and 1898. The locality was frequented at that period by a band of outlaws who had one of their safest refuges in the forest of Lamone, five miles across the river, and whose exploits were a recent memory when I visited this section of southern Tuscany in 1902. Seven complete tomb-outfits from Mancinelli's harvest of Etruscan antiquities on this spot were secured for the Phoebe.
A. Hearst collections at the University of California, in July of that year. Other specimens have found their way to the Museo etrusco in Florence, and to the Royal Museum of Berlin. Pellegrini and Boehlau have reported upon them in the Giornale degli scavi ( $\mathbf{1 8 9 6}, 1898$ ), and in the Jalirbuch des deutschen archaeologischen Instituts for 1902. Mancinelli's plans of the principal tomb-types, and his careful records of the conditions in which the leading varieties and shapes of sepulchral earthenware occur in this cemetery, and in other Etruscan cemeteries explored by him, increase the value for science, both of the tombs and of their contents. A door is opened to a more exact chronology than experts have ordinarily attempted.

Lantern illustrations from drawings and photographs, made at Pitigliano, were presented. They showed the variety of tomb plans and sections, the probable evolution of sepulchral architecture, and the principal classes of pottery as found in the pit, trench, lateral recess, simple and multiple chamber-tombs of Abbadia del Fiume. A coincident progress can be traced in the variation of tomb designs, and in the occurrence of special types of earthenware in tombs of shifting plan. Members of the Association and visitors verified these general indications on the morrow of the lecture, by a personal inspection of seven tomb-units from Abbadia, in the State University's temporary Museum of Anthropology. The seven Abbadia tombs are lettered A to G. They comprise 430 exhibits, of which 366 are specimens of plain and of decorated earthenware. Iron and bronze weapons and other utensils constitute most of the remnant. There is a predominance of iron over bronze. Bronze belt-buckles, frequently adorned with heads of horses, more rarely with little dogs, bronze bracelets, fragments of bronze bits, spear-heads and spear-shoes, knives and plowmen's hoes of buth metals accompanied the bodies of men. Lighter bracelets, bronze fibulae of the leech-bow shape (fibule a sanguisuga), other bronze pins, reënforcements for wooden-soled Tyrrhenian sandals made of both metals, accompanied the bodies of women. Wine-goblets of heroic proportions and armies of normal wine-cups were buried with the men, sets of conical spinwhorls, of cylindrical and clubbed weaving-spools, were buried with the women, to help the shades of the dead realize the missions of their sexes in Hades. They are of terra-cotta. The absence of precious metal, amber, and ivory, in the Abbadia tombs, and their scant wealth, even of bronze, persuade us that sumptuary laws forbade the burial of costly objects with the dead more severely there than they did in other Etruscan cities. It is true that many tombs were surely pillaged in the sixteenth century, when the hill of Abbadia got its alternative name of Poggio Buco.

In the trench and lateral recess tombs the dead were laid with their heads to the west. Antique worshippers of Greece and Italy normally faced the rising sun. The faces of the dead would turn easiest as their feet lay.

Only one cremation tomb was discovered at Abbadia. It is a round pit (tomba a pozzo), and contained a cinerary urn with the customary footless, oneeared drinking vessel of coarse gray ware for cover. One cup of this type occurs in our plain trench-tomb A. Tomb D, a trench with two lateral recesses, has one with a foot. But the older rite of inhumation held its ground triumphantly. Our tomb B was a large trench-tomb, with one lateral recess for the occupant's body. Thirty-seven drinking vessels found in it include no example of the urnlid type. Earless goblets of a finer gray ware, handsome gadrooned cups of
black composition with loop handles have taken its place. Earthenware stands accompany the gadrooned vessels. A little tumbler (poculum) of uncolored and unpolished clay is the earliest type of wine-cup in this tomb. Signore Mancinelli tells me he has found tumblers of this sort in Etruscan graves of every period, in Roman graves of the Republican and Imperial periods, in Christian graves of late Roman and of Lombard periods. Plain forms often survive adrances of technique and changes of fashion and faith better than the ornate do. The early gray and fambé earthenware, polished by hand, - hardly sized with wax, as Boehlau supposes, - will presently develop, ly gradual stages, into the so-called Etruscan bucchero pottery of finer cumposition and blacker hue. The uniform red firing of some pieces (rosso rame) was a development, like the uniform smoked blacks, of the earlier flambés. Prehistoric earthenware in Phrygian mounds, and the predynastic potteries of Egypt, offer examples of the same accidental effects followed by intentional bichrome and monochrome firings black and red.

The dominant class of pottery in the recessed and unrecessed trench-tombs, after the buccheri italici, is the indigenous imitation, interspersed with imported specimens, of the painted geometric patterns of prehistoric Greece. Is it true that these rectilinear patterns succeeded the earlier profusion of animal and floral and spiral motives, and to the richer ceramic palette of the Mycenaean styles, coincidently with the Dorian invasion's overthrow of Achaean dynasties in the Peloponnesus? If so, we can assign the early pupularity of Greek geometric putteries in Etruria, and the first reproductions of these Greek models by native hilns, to about 1000 b.c. Montelius has proposed an earlier, Boehlau a later date. Certain distinctly Etruscan amphibia, as painted on geometric ware from other Etruscan tombs, persualle me to describe most of the geometric make from Abbadia as native manufacture of perceptibly later period. An exquisite pink and orange skyphos with a trellis of delicate parallel lines, in Tomb B, is a manifest Greek importation. It is the counterpart of a specimen which Schliemann found in the ruins of Tiryns.

Broad and narrow horizontal stripes of black, brown, red, and purple alternate with friezes of straight and waved verticals, and of cross-hatched lozenges, on the coarser geometric ware. The vertical bars recall the triglyphs and metopes of a Doric frieze, by their alternate crowdings and blanks. The ground is oftenest the pink or yellow body of the clay. Some grounds are creamy white and pale buff.

Purely native patterns include two striking varieties. Small bowls and amphoras of brown clay, and of bulbous shapes, often show regularly distributed bars, squares, and triangles, and rectilinear decorations of opaque white. A close examination proves it to be oxide of lead. A still closer scrutiny discovers that the crocks were plated with laminac of metallic lead. Distributions of tiny, cuplike impressions served to hold the leaden plates tighter in place. Many big jars and a few drinking vessels of the same period wear singular patterns in applied relief. Vertical and horizontal bands alternate with systems of horseshoe ridges. 'These overarch the handles. Rams' heads and plainer protuberances, midway between the handles, are similarly arched, and appear to be a reminiscence of spouts. Paired and multiplied nipples recall the humanized jars and pitchers of Troy and Thera.

The geometric styles did not long survive the substitution of sepulchral chambers
for open trench-tombs. The native smoked ware of smooth finish did. Painted Corinthian pitchers, with round bellies and trilobate mouths, flat plates, low, bulbous cups with horizontal handles, globular and alabastroid flasks, superseded the Tuscan imitations of Greek geometric ware. The Corinthian polychrome effects, in buff, brown, black, purple, and white, the Greek style's painted processions of panthers and geese across flowered fields, contrast strangely, in the chamber-tombs, with the Etruscan potter's crude incised drawings of birds and fishes, on dark gray amphoras of silicious bucchero. Native imitations of the Corinthian forms in ivory-white clay remain rare enough to be classed as a tradesmanly experiment. A pearl-gray monochrome ware appears to resist the encroachment of the shiny black pottery for a moment. The black bucchero that is found in the tricameral tombs presently assimilates the Corinthian shapes. These shapes were themselves copies primarily of metallic forms. The latest of the Abbadia del Fiume tombs contain black Etruscan pitchers covered with blunt reliefs, like hammered metal. Their designs of petals, of walking men and women, of passant lions, are retouched with engraved lines. The two-chamber tomb, with an open trench between, has given place by this time to tricameral avenue-tombs. One avenue-tomb at Poggio Buco, the latest in order of rational development, shows a tandem arrangement of two chambers, separated by two pillars of rock. The burials at Abbadia stop short of the underground complexes which can be seen in other Etruscan cemeteries. The imported vases do not reach the red-figured style. Only one specimen of the black-figured style has been recorded. The terra-cotta friezes of the three cellas of the temple, on the crest of Poggio Buco, represent war-chariots, infantry, and wild animals, in late seventh-century or early sixth-century Greek style. All the later remains are Roman. We conclude that the crest and slopes of Abbadia del Fiume were vacated by its Etruscan burghers about 600 b.c.

## Third Session.

The third session was called to order by Professor W. A. Merrill on Tuesday, December 29, at 9.30 A.M.

The Committee on Time and Place of the next Meeting reported through the Chairman, Professor Cooper, a recommendation that the Association meet for its sixth session, as heretofore, at the Mark Hopkins Institute of Art in San Francisco, on December 27, 28, and 29, 1904.

The question of the advisability of changing the time of meeting to some other season of the year having been raised, the report was received, but its final adoption was postponed, on motion of Professor Clapp, to the afternoon session.

The Committee appointed to audit the Treasurer's report announced through the Chairman, Mr. Mower, that the books had been examined and found exact.

The report was adopted.

The second Vice-president, Professor Goebel, of Leland Stanford Jr. University, was then called to the chair, while Professor Merrill read the first paper of this session.

6. Lucretiana, by Professor W. A. Merrill, of the University of California.

In this paper all the passages in Lucretius' poem where the name of Memmius occurs were examined, and the hypothesis was set up that all references to Meminius after i. 62 were due to a recasting of the poem in Memmius' honor, the work having previously been addressed to the general reader. An effort was made to show that spondaic and trochaic words, common in Lucretius' vocabulary, could easily have been withdrawn to make way for the word Memmi without changing the sense materially. Even in the mure difficult passages, such as v. 8, the original form may have been dicendum est, deus ille fuit, deus inclutus acer, cf. i. 40,66 ; iii. 10 ; and in $\mathbf{v} .867$ the earlier form was possibly omnia denique sunt tutelae tradita nostrae. In most cases a Lucretian substitute for Memmi may be made without disturbing the rest of the verse. Some remarks were made on ii. 1080, where doubt was expressed as to the propriety of the conjecture Memmi. The general conclusion reached was that the poem was written for the general reader who was not an Epicurean; that the poet prefixed an Introduction to the entire poem, mainly complimentary to Memmius; and that in a few places in the remainder of the poem he replaced spondaic or trochaic words by the noun Memmi. For some reason unknown he did not continue the revision throughout the poem.

## This paper was discussed by Professors Clapp and Randall.

7. Cabala and Alchemy in Goethe's Faust, by Professor Julius Goebel, of Leland Stanford Jr. University.

Goethe's sources for the first soliloquy of Faust and the subsequent conjuration of the Earth-spirit are not to be found in the writings of Swedenborg (E.Schmidt, M. Morris), but in the alchemistic and cabalistic literature which Goethe studied, according to his own account, after returning from the University of Leipzig to Frankfurt. The revival of the study of Alchemy, Astrology, and the Cabala, which began during the latter part of the fifteenth century, had spread into all classes of society; in Goethe's immediate circle we find the family physician of his parents and Fräulein von Klettenberg devoted to this study. Despairing of human knowledge and believing in the possibility of obtaining an intuitive insight into the secrets of nature and of the deity, certain religious sects, such as the Pietists, the Moravians, and others, indulged in alchemistic and cabalistic speculations and practices. The oldest scenes of Goethe's Faust are the product of the spirit of these mystic movements of the seventeenth and eighteenth centuries to a degree much greater than of the spirit which found expression in the Faust story of the sixteenth century.

In connection with this fact it is significant that Faust's father, according to

Goethe, was an alchemist, and that young Faust assisted him in his alchemistic quackery, believing at the same time, like a " pietist," in the efficacy of prayer:

> An Uoffnung reich, im Glauben fest, Mit Thränen, Seufzen, Händering - $n$ Dacht ich das Ende jener Pest Vom Herrn des Hinmels zu erzwingen.

Alchemistic and cabalistic terms and conceptions are frequent in Faust's soliloyuy. The explanations of these, which were offered in the present paper, will be contained in the author's forthcoming edition of Goethe's Faust.

The paper was discussed by Professor Schilling.
The Committee on Nomination of Officers, originally named, being absent, the Chair appointed Professors Bradley, Randall, and Searles in their stead.

The Secretary presented the following resolution:
Every member desiring to read a paper at the annual meeting shall furnish the Secretary, not later than two weeks before the first session, with a short abstract of not more than two hundred and fifty words, outlining the argument and the conclusions of his study. These abstracts shall be printed on the programme for the purpose of allowing members to inform themselves about the nature of the papers, and forming a basis for discussion. The author shall also furnish the Secretary with an estimate of the length of time, not exceeding twer.ty minutes, which he wish is to occupy.

Upon the suggestion of the Chair, action on this resolution was postponed to the afternoon session.

## 8. On Hiatus in Greek Melic Poetry, by Professor E. B. Clapp, of the University of California.

This paper is printed in full in the first issue of the rublications in Classical Philology of the University of Califurnia. An abstract of a portion of the paper was printed in Vol. XXXIII of the Proceedings, under the title Hiatus in Pindar. The writer uses the term "hiatus" loosely to include all cases where a word ending in a vowel is followed immediately, in the same verse, by a word beginning with a vowel.
I. Hiatus due to the loss of $f$ occurs in Pindar about one-third as often as in Homer. The pronoun ol is the only word which regularly shows the influence of $f$, both in Pindar and in the other melic poets. Less consistent are $\alpha_{\nu a \xi}$,
 as regularly as Homer. Alcaeus, Sappho, and Bacchylides show approximately the same usage as Pindar. Simonides exhibits few traces of $f$, and Anacreon practically none. In a fragment of Timotheus we find $\dot{\alpha} \kappa \lambda \in \mathcal{A}[f] \in \rho \gamma a$, but in the Persians there is no instance of hiatus before a digaminated word.
2. Hiatus after a diphthong or long vowel, with the metrical value of a short syllable, is frequent in all the melic poets. Curreption in hiatus seems to have
originated with the diphthongs -at and -ot, where it is best explained in accordance with the views of Grulich. From these it spread, with the assistance of certain dialectic forms of the genitive and dative endings of the first and second declensions, to the other diphthongs, and even to the long vowels. Grulich should have included the Boeotian dative in -ăı in his discussion.

According to the older metric, correption in hiatus is practically confined to dactyls; but, if we accept the views of the new school, we must admit numerous cases of shortening in trochees and even in iambs. The writer has elsewhere ${ }^{1}$ called attention to this fact as having an important bearing upon the whole metrical question.
3. Most of the instances of hiatus after a diphthong or a long vowel, with long quantity retained, may be explained as by Grulich. The evidence does not justify us in laying much weight on the effect of the dactylic ictus in explaining the hiatus.
4. Hiatus after a short vowel, or "illicit hiatus," scarcely occurs in melic poetry. Here, as in the other kinds of hiatus, the melic poets occupy a middle ground between the freedom of Homer and the extrenie finish of the Attic tragedians, though their usage is, on the whole, nearer the latter than the furmer.

This paper was discussed by Professors Allen, Merrill, Fairclough, Emerson, and Noyes.
9. The Pronunciation of Gallic Clerical Latin in the Merovingian and Later Periods, by Professor C. C. Rice, of Leland Stanford Jr. University.

The chief sources utilized in the investigation were the following: (i) Latin spellings; (2) Old French spellings; (3) the forms of Old French loan-words; (4) the testimony of grammarians. The most important Merovingian spellings were found in the documents transcribed by Tardif in his Monuments historiques de la France. In doubtful cases the facsimiles of the Mss. (published by Letronne) were consulted. For the spelling of the Carolingian and later periods, some hundred volumes of cartularies were examined. The significance of the forms of Old French loan-words was pointed out by Paris (Journal des savants, 1900, pp. 294 ff., 356 ff .), who showed that a reform in the pronunciation of Latin must have taken place in the time of Charlemagne, when $\bar{i}$ and $\bar{i}$ were phonetica'ly identified in order to prevent the graphic confusion of $\bar{z}$ and $\bar{c}$. It is generally assumed that the "correct" pronunciation of Latin was not affected by the operation of vulgar sound-laws; cf. Meyer-I.übke, Einfiil/rung in d. Stud. d. rom. Sprw., p. 83. This assumption will not explain the linguistic material of any period, and cannot be reconciled with established physiological principles. The learned pronunciation must have followed all the gradual vulgar soundchanges for long periods, after which it was subject to correction or refurm. The spelling of early French monuments reflects faithfully the Latin pronunciation of French scribes, who naturally assigned to the letters of the alphabet the value
${ }^{1}$ In the Classical Review for October, 1904.
which they had in their Latin. The Strassburg Oaths (842), which, as is generally admitted, cannot belong to a southern region where free $d$ remains $a$ (note the neutral vowel in fradre, fradra, fazet, suo part, sendra, Karlo, Karle, Karlus) apparently show no trace of the important vowel-changes which are clearly attested in the Euialia (881).

| Latin source, | $d$ | $\ddot{e}$ | $\dot{e}, \dot{i}$ | $\ddot{o}$ | $\dot{o}, \ddot{u}$ |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Symbol in 842, | $a$ | $e$ | $i$ | 0 | $u$ |
| Symbul in 88ı, | $e$ | $i e$ | $e i$ | $u o$ | $o u$ |

It is not clear that all the sounds from the same source are identical, for the reason that, although Paris assigns the monuments to the same region, the dialect of the Oaths is not established. In the case of nearly every vowel, however, surprise has been expressed at the apparently archaic phonology of the Oaths; note, for instance, salvar, fradra; meus, sendra, er; sit, savir, podir ; vol, poblo; amur, suo. Paris and others consider the much-discussed d"a graphic expression of a sound which was no longer a." Many scholars also regard the $i$ in podir, etc., as a reminiscence of the countless Merovingian spellings in which $i$ had the same value as $\bar{e}$ (cf. habire, fedilis, ligebus, simet, fimena, deberimus, etc.). It has never been shown that the scribe of the Oaths spoke a form of French different from that of the scribe of the Eulalia, in point of antiquity or of dialect; and all the peculiar spellings of the former seem to be due to the Merovingian pronunciation of Latin which, as was held by Paris, we should assume as the phonetic basis of this monument. No vowel-shift can be dated after 842 on the ground that the development is not indicated in the spelling of the Oaths. All the important vowel-developments ( $a>e, \hat{e}>e i, \check{e}>i e, \stackrel{o}{o}>o u, o b>u o$ ) should be set back into Merovingian or earlier periods, although they naturally found no graphic expression until after the Carolingian reform. The correct pronunciation of th: accented vowels in the eighth century was as follows: free $a>e$-a front vowel not identical with $e<\ddot{i}$ nor with $\varepsilon<\check{e}$, but probably identical with the $e<d$ in the Eulalia; checked $\bar{e}, i>e$; free $\bar{e} . \bar{i}>e i$; free $\bar{e}>i e$; checked $\bar{o}, \bar{u}>\rho$; free $\bar{o}, \bar{u}>o u$; free $\breve{o}>u \boldsymbol{}$; $\bar{u}>\bar{u}$ or $u$ as in the vernacular. No account is here taken of nasalization, and cases in which no change occurred are not mentioned. The unaccented vowels seem to have followed the vulgar development to $\rho$; cf. the English pronunciation of domus, puellas, with the same final vowel. After the Carolingian reform, the vowels, accented and unaccented, were sounded as follows: $a=a ; \bar{e}, \check{e}=\ell ; \bar{i}, \bar{\imath}=i ; \bar{o}, \breve{o}=\ell ; \bar{u}, \bar{u}=\ddot{u}$ or $u$. The distinct artizulation of post-tonic vowels made necessary a transfer of the accent to the ultima, where it has remained to this day. The reformed pronunciation did not remain fixed, but followed all the later French sound-changes step by step for long periods. At the time of the Renaissance, a new reform-movement changed the quality of certain vowels which had become nasal, and reintroduced consonants which had become silent in obedience to vulgar sound-laws; after which Latin was pronounced practically as it is pronounced in France nowadays.

## The paper was discussed by Professor Matzke.

10. The Parodos of Sophocles' Antigone, by President B. I. Wheeler, of the University of California.

The choral passages of Sophocles, particularly in the Antigone, are distinguished by an elaborate harmonic arrangement of ideas and figures which, however delicately presented or suggested, betrays to careful inspection a highly conscious and almost artificial analysis. In marked contrast hereto, the current interpretations of the parodos of the Antigone yield a lack of balance in the ideas, a confusion of the imagery, and an absence of all unity of plan. The belief that all this is the fault of the interpretations and not of the parodos instigates the writing of this paper.

Leaving out of account the final anapaestic system, which heralds the appearance of Creon, the subject-matter of the ode proper is set forth in seven stanzas, four strophes (or antistrophes), with three alternating anapaestic systems. The first stanza (i.e. the first strophe) welcomes the beams of the rising sun, dispelling the terrors of the night, bringing peace to the battle-leaguered tuwn, "fairest light that e'er shone on Thebes of the seven gates, at last hast thou appeared, O lid of golden day." The seventh stanza (i.e. the second antistrophe) brings the echo hereto in the personal embodiment of Nike, who alvances "smiling to greet Thebe of the many chariots," appointing men to furget the battle and strife. In the first, the beams of the sun are driving the white-shielded Argive foe "a headlong fugitive, prodding him on with ever tightening bit." In the last, Nike, as counterpart and exponent of the gladsome sun, sends the folk of Thebes in festal procession to the temples of their gods. The $\bar{j} \lambda \theta \epsilon$ Niкa re-



Framed between these two stanzas, which reveal the spiritual attitude of the song and yield the atmosphere of the picture, - which voice the exceeding joy of light out of darkness, and of victory out of impending defeat, - stands the body of the ode, the five central stanzäs, which tell the story of the battle itself. The battle is presented in its three phases - the onslaught of the foe, the evenmatched struggle, the sudden discomfiture and rout of the Argive at the moment when his triumph seemed sure. The story is not told, however, as a continuous narrative, but is fashioned rather as a thrice-told tale. Stanzas two and three tell it all, - onslaught, struggle, and rout, - under the figure of the conflict between the white-winged eagle and the serpent. Then stanzas four and five tell it again, - onslaught, struggle, and rout, - but under another figure, and introduce the second tale as an explanation or epexegesis of the first. Of this epexegesis the particle ráp, of line $\mathbf{1 2 7}$, is the symbol. Thereupon again stanza six begins the tale, this time without figure and in the directer language of fact: "For seven captains at the seven gates arrayed, equals matched against equals," but again introducing it as epexegesis of the preceding with the particle $\gamma \dot{\alpha} \rho$ of line 141. Three times under three forms or figures the onslaught has been set forth, each time with use of an anapaestic system.

The third form of the statement, namely that of stanza six, which, as we have seen, reaches at last the plain language of fact, lays its stress on the even matching of strength against strength, man against man; it is "seven against seven," "equal against equal"; yea, with one of the pairs, the contest is even matched to the extent of $\pi a \tau \rho \dot{\delta} \dot{\epsilon} \dot{\varepsilon} \delta \dot{s} \mu \eta \tau \rho \delta \delta s \epsilon \mu \bar{a} s$, and therefrom arises no issue of victory; with them the battle remains drawn; forever evenly matched ( $\delta$ iкpareis . . . коเขои . . . $\alpha \mu \phi \omega)$. For the others there is a decision, as shown by the $\pi \dot{\alpha} \gamma \chi a \lambda \kappa a$

тên, the symbols and prizes of victory (cf. Pindar, Olym. 11, 67; Isthm. 1, 27) left in the hands of the arbiter Zeus.

Returning now to the first form of the story, that contained in stanzas two and three, I believe there can be no doubt that the imagery suggested by the words is that of a self-consistent picture, namely, the picture of a contest between the eagle representing Argos and the serpent representing Thebes. The Thebans are the $\delta \rho a к o v \tau o \gamma \epsilon v e i s$. . The eagle comes from without - flies over to the land. It comes in noisy and defiant onset, shrill screaming ( $\delta \xi \in \dot{\epsilon} \alpha \lambda \alpha j \zeta \omega \nu$ ), for lo, it was from out of the wrangling strifes of Polyneikes that it had taken wing. Over the snake as genius of the place and symbol of home, over the roof-trees of Thebes ( $\dot{\operatorname{j} \pi} \boldsymbol{\varepsilon} \rho \mu \epsilon \lambda \dot{\alpha} \theta \rho \omega \nu)$ it poises itself, and its blood-thirsting beak yawns before the seven-gated mouth of its prey. But before it could glut its jaws with Theban blood, - before Hephaestus could lay his grip on the coronet of towers, - it was gone, scared away by the din that Ares raised. ${ }^{1}$ That the imagery of metaphor is here, and that it is presented according to a self-consistent picture, there can be no doubt; but it is only a pattern glimmering through the fabric, sketched in golden threads. So we shall find it to be in the second form of the story, though there the pattern is still more dimly sketched. .

This second form of the story is presented in stanzas four and five. The parallelism with the first form, i.e. stanzas two and three, is unmistakeable. The onset of the antagonist is loud and defiant; there are the "boasts of a haughty

 $\left.\dot{e} \chi \theta l \sigma \tau \omega \nu \dot{d} \nu^{\ell} \mu \omega \nu\right)$. Defeat overwhelms the foe just as he is "hasting to raise the cry of victory" ( $\nu i \kappa \eta \nu \dot{\circ} \rho \mu \hat{\omega} \nu r^{\prime}$ à $\lambda a \lambda a \xi \xi^{\prime}$ ). Zeus is here, too, the arbiter, the supreme $\beta \rho a \beta \epsilon$ '́s, whose will allots defeat and victory. "H申aiбтov (1. 123) returns as the $\pi u \rho \phi$ boos (1. 135). Ares appears as the helper of Thebes at the crisis; $\mu \dot{\epsilon} \gamma a s$ " $A \rho \eta s$ s $\delta \xi \xi \delta \sigma \epsilon \epsilon \rho o s$ at the end of stanza five echoes and exactly parallels the $\pi \dot{d} \tau a \gamma o s$ "Apeos at the end of stanza three. Of the picture of eagle and serpent there is, however, no longer a trace; that, having served its purpose, has faded away, and another takes its place. The scene shifts to the stadion, and the contest assumes the form of the four-horse chariot race. We can hear the shouts of the charioteer in the lead, the rattle and clank of harnesses and trappings, the snort of the steeds. Already the foremost chariot is making the last turn to the goal $\beta a \lambda \beta l \delta \omega \nu \quad \epsilon \pi^{\prime} a_{k \rho \omega} \omega \nu$, and its driver is impatient to raise the claiming cry of victory ( $\nu l_{\kappa \eta \nu} \dot{\partial} \rho \mu \hat{\omega} \nu r^{\prime} \dot{\alpha} \lambda a \lambda \alpha \xi a \iota$ ), when the competing team, in which great Ares is the right trace-horse ( $\delta \epsilon \xi \iota \sigma \sigma \epsilon(\rho o s)$, surges against him, and, pushing him and his aside ( $\sigma \tau \nu \phi \in \lambda i j(\omega \nu)$, hurls him from his car to the earth (avrivúng $\delta^{\prime} \notin \pi i$



That the effect of the picture lingers on, even in the seventh stanza, is betrayed by the appearance of Nike advancing with smiles of congratulation to meet the victorious Thebes, Thebe of the many chariots. It is not a Nike like that of Paeonius which the poet has here in mind, but the type familiar to us from the vase-paintings, the cupid-like Nike who, with the fillet as badge of victory in her

[^68]
## lxviii

hand, flits down to greet and decorate the victorious charioteer (eg. Reinach, Peintures; Millin, Pl. II, 60; II, 72; cf. also Millin, I, 43, 45, and Baumeister, Denkmäler, fig. 2137; Panofka, Cabinet Pourtalès, Pl. 33; Arch. Zeit. 1867, Pl. 226).

If the interpretation here offered for stanzas four and five may appear from internal evidences possible and even probable, it is raised to what we must consider a demonstrated certainty, as certainty goes in things so human as these, by reference to the full-drawn picture of the four-horse chariot race of the Pythian games, which the same artist has left us for comparison in the pages of the Electra (ll. 696-760). The two passages differ in their character, and especially in their use of scenes and incidents taken from the chariot race, as widely as in their date of composition. One uses the material delicately in suggestive metaphor and as decoration; the other introduces it directly in narration. And yet it appears, if our interpretation of stanzas four and five be correct, that in both similar features and similar incidents dominate the poet's attention as characteristic of the event. There is the shout of the drivers and the clatter of the cars; "And all with one accord shouted at their horses, and shook the reins with both hands; the whole course was filled with the din of clattering cars." And there is the snorting of the horses as they come on; "And all in confused mass plied their goads and spared not, each that he might pass the wheels of his rivals and the snorting of their steeds, for alike at their backs and at their advancing wheels the breath of the horses foamed and cast its spray." Here, too, the right trace-horse ( $\delta \epsilon \xi \iota 6 \sigma \epsilon \iota \rho \circ s$ ), as $\delta \epsilon \xi \iota \grave{\rho} \nu \sigma \epsilon \iota \rho \hat{\imath} o \nu i \pi \pi 0 \nu$, plays a distinguished part, though mentioned, I believe, nowhere outside of these two passages in all Greek literature. Here, too, chariots collide and are scattered in ruin about, "till the whole arena of Crisa was strewn with the wreck of chariuts." And then at the last, and as the supreme incident, just as the foremost driver was making the last turn to the goal with victory all but in his grasp, he is thrown from his car with all the swing of the Antigone's ravra $\lambda \omega \theta \epsilon i$ and dashed to the ground (cf. àvtivúmą $\delta^{\prime}, \dot{\epsilon} \pi i \gamma \hat{q}$, Antigone, 134).

This paper was discussed by Professors Fairclough, Emerson, and Merrill.

## Fourth Session.

The Fourth Session was called to order at 2.30 p.m., by Professor Merrill, in the lecture room of the Museum of the Department of Anthropology, of the University of California, in the Affiliated Colleges in San Francisco.

The Committee on Nomination of Officers for the ensuing year made the following nominations:

President, W. A. Merrill, University of California.

Vice-Presidents, J. Goebel, Leland Stanford Jr. University.
E. B. Clapp, University of California.

Secretary and Treasurer, J. E. Matzke, Leland Stanford Jr. University.

Executive Committee, The above-named officers and
H. R. Fairclough, Leland Stanford Jr. University.
A. F. Lange, University of California.
J. E. Church, Jr., University of Nevada.
H. K. Schilling, University of Califurnia.

On motion of Professor Clapp, the report was adopted, and the Secretary was instructed to cast the ballot of the Association for the gentlemen as nominated.

The question of time and place of the next meeting was then called up again, and after some discussion it was voted not to make any change, and to adopt the recommendation of the committee, that the sixth annual meeting be held on December 27, 28, and 29, 1904, at the Mark Hopkins Institute of Art, as heretofore.

The resolution of the Secretary affecting the form of the programme, was called up, and after reading and discussion, was adopted on motion of Professor Bradley.

I r. A Neglected Source of Corneille's Horace, by Professor J. E. Matzke, of Leland Stanford Jr. University.

The paper has appeared in full in Modern Philology, I, pp. 345354. It was discussed by Professor Clapp.
12. Influence of Greek and Roman Art on Vergil, by Professor H. R. Fairclough, of Leland Stanford Jr. University.

This paper, to be published elsewhere in full, was prompted by a recent visit to the principal European museums of Greek and Roman art. It presented in outline a study of the influence of earlier or contemporary art upon Vergil, as seen in his descriptions, mythology, similes, and otherwise:

This paper was discussed by Professors Merrill, Goebel, and Emerson.
13. Numeral Systems of the Native Languages of California, by Dr. A. L. Kroeber, of the University of California.

The numeral systems of the many and often unrelated Indian languages of California show great variability. Frequently the numeral words of two closely kindred dialects differ in great part. This is due to the fact that the numerals above three are often compound or derivative words, descriptive of an arithmetical process, and that quite different processes are sometimes followed even by cognate languages. Besides the more common quinary, decimal, and vigesimal modes of counting, there are frequent traces of a quaternary method, and one numeral system of Northern California is quaternary throughout. Other processes that occur in the formation of numerals are subtraction, duplication, and
multiplication. The variety of the systems found proves that there is no necessary or even usual relation of the quinary and vigesimal methods, as opposed to the decimal ; quinary-decimal and decimal-vigesimal systems occur. Though numeral systems, visibly descriptive of the process of counting, have usually been considered undeveloped, so far as known the systems of all the languages of California extend into the bundreds. Phonetic analogy exerts considerable influence, the words for two and three being often similar. On account of the diversity of structure of the numerals, they are of less value in California, for determining linguistic affinity, than is usuaily the case.

This paper was discussed by President Wheeler, Professor Clapp, and Mr. Goddard.

The meeting was then adjourned at 4.15 P.m., and the remainder of the afternoon was spent in an examination of the collection of Etruscan, Greek, and Peruvian antiquities of the Museum.

## Fifth Session.

The Fifth Session was called to order by Professor Merrill at the Mark Hopkins Institute of Art at 9.45 A.M.
14. Notes on Chapter XII of Plutarch's Life of Pericles, by Professor W. S. Ferguson, of the University of California.

This paper appears in full in the Transactions.
It was discussed by Professor Clapp.
15. Word-Accent in Latin Verse, by Dr. B. O. Foster, of the Leland Stanford Jr. University. The author having been called to his home, the paper was read by title.
16. The Study of English Etymology during the Seventeenth Century, by Professor Ewald Flugel, of the Leland Stanford Jr. University.

The author characterized briefly the etymological remarks in Camden, Verstegan, Selden, Howell, Sir Thomas Browne, Fuller, and the earlier Lexicographers from Minsheu to Somner. He dwelt more fully on Casaubon, De lingua Saxonica (1650), and Passeratius, De literarum inter se cognatione ac permutatione (i650), an essay containing a number of observations which make him a forerunner of Jacob Grimm. Stephen Skinner (died in 1667; Etymologicon published after his death in 1671) stands highest among the etymologists of the seventeenth century ; he is the first systematic etymologist who works with the idea of etymological laws (which were ridiculed by Casaubon, and not recognized by Junius). His Prolegomena contain in their Canones Etymologici the first methodical equations for the sound changes (of $a$ into $o, c g$ into $d g, d$ into $t h$, etc.). Skinner is
the first to recognize the facts of a history of the changes of meaning and of popular etymology (voces exterae cum in nostram linguam transeunt saepe per errorem zulgi propinquilate soni decepti, mirificis terminationibus ex sermone nostro depromptis donantur). His great fault is the lack of application of his Canones in the articles of the Etymological Dictionary. Even if he is freer from the habit of introducing Greek etyma than Casaubon before him, or Junius after him, he falls constantly into the mistake of all the seventeenth-century etymologists of not being satisfied with establishing the relationship of a word with the nearest related language, but of trying to hunt his words through half a dozen remote languages, adding from each one a new fantastic etymon, so that the vel's and sive's become numberless.

Franciscus Junius was a great pathfinder in other fields than etymology. Here he was not in advance of his time. The idea of a law, of a necessary mutation of sounds according to certain fixed principles, was yet fureign to him, and is scarcely traceable in George Hickes' Institutiones, 1689.

## This paper was discussed by Professor Merrill.

17. The Construction of Juvenal, Satire I, by Professor J. E. Church, Jr., of the University of Nevada.

In the absence of the author, the paper was read by Professor Elmore.

Regarding the date, original form, and coherence of Juvenal, Satire I, considerable diversity of opinion still exists.

An analysis of the satire in question reveals two facts: first, that this satire is purely introductory in purpose, and second, that it is largely argumentative in style. The method of argument is, however, peculiar, since it consists of a series of word-pictures - after the style of modern newspaper cartoons - accompanied by rhetorical questions to present and enforce the argument. This argument advances consecutively from beginning to end, although at one point the transition is abrupt, and the latter part of the satire unduly extended by a digression.

These statements may be best illustrated by an outline of the satire :

## Exordium, vs. 1-21:

1. Shall I always be a listener merely, though tormented by wearisome and worn-out themes? 1 -I 4 .
2. I too have had an education and it is foolish when you meet so many poets everywhere to spare paper that will surely go to waste, 15-18.
3. But I shall be a satirist, and if you have the time, I'll tell you why, 19-2 1 . Confirmatio, 22-146 :
I. I am overwhelmed with living examples of prosperous incapacity and successful villainy, 22-80.
4. The scope of my activity shall be all the extremes of human life known since the Flood, 81-86; for when were vices more abundant or more extreme? 87-146.

## Peroratio, 147-171:

Vice has reached its climax. Now's the time to make the effort of one's life.

To pass into detail, it will be seen that the author's main purpose is to defend his choice of a career as a satirist, and to ciiscuss briefly the scope and method of his work. The tone of the poet is declamatory, rather than epistolary, and the public is his audience. The argument broadly follows the lines of the simpler orations of classical times, while refutations of supposed ubjections freely occur.

The exordium is skilfully wrought out. The "sarcastic indignation" with which he attacks the wearisome tribe of poets and declaimers, and threatens to turn poet in self-defence, wins attention for the new aspirant and a keen desire to hear him further. He ends his exordium by declaring his intention to specialize in satire.

In the confirmatio the impetuosity of his indignation increases until it reaches its climax at $\mathbf{v}$. So, when it comes to an abrupt close. This effort is made up of a series of outbursts, each more indignant than the preceding, and occasioned by a series of scenes, each group of which is more exasperating than the one before. To illustrate again by an outline of the verses in question, but with the class substituted for the person:

1. (a) When a eunuch marries, 22,
(b) and women have lost their pristine modesty, 22-23,
(c) and money is preferred to ancestry, 24-25,
(d) and slaves have become insufferable dudes, 26-29,

- it is difficult not to write satire.

2. For who is so tolerant and emotionless that he could restrain himself at sight of
(a) disgusting pettifoggers, 32-33,
(b) informers and betrayers, 33-36,
(c) and men who earn their lega:ies at night ? 37-39.

Digression in illustration, 40-44.
3. Why tell how my blood boils at the arrogance of
(a) successful betrayers of innocent wards, 46-47, and the defeat of justice by
(b) the betrayers of a public trust ? 47-48.

Digression in illustration, 49-50.
The outburst now takes the form of a refutatio. The intensity increases and the illustrations, although chosen at random, have been selected, with one exception, frum the worst class of offenders, viz., from the criminal and very immoral.
4. Do I not consider such themes unworthy of Horace? Not treat them, but rather tales of Hercules and the winged carpenter! 5i-54,
(a) when the adulteress' husband inherits the property of her paramoar, if she be debarred, 55-57,
(b) and the young sport is permitted to look forward to an army captaincy, 58-62.
One feels impelled to choose more modern subjects and write them up in full when
(c) the luxurious forger rides by in state, 64-68,
(d) and the influential husband-poisoner confronts you, 69-72.

Rhetorical outburst : Do something worthy of the penitentiary if you wish to be anybody, 73-76.
Who can rest in the presence of
(e) the seducer,
( $f$ ) betrothed maidens ruined,
( $g$ ) and adulterers in their teens! 77-78.
If nature refuses, indignation will write as best it can, - such verse as $I$ write, or Cluvienus.

The central thought which binds this portion of the confirmatio together and gives it unity is the overwhelming awfulness of human perversity, which compels one to cry out against it. The external evidence of this unity is the arrangement in order of climax of rhetorical outbursts, as for example, "it is difficult not to write satire," " who is so emotionless that he could restrain himself," "my blood boils," and "if nature refuses, indignation will write." Furthermore, in one place a transitional particle is employed, while the refutatio, which forms an organic part of this climax, is skilfully employed to relieve the strain of the long recital of examples, and yet to increase their cumulative effect. The short epigrammatic digressions in illustration and the rhetorical outhurst, 73-76, need no defence.

There are some exceptions to the increasing emphasis from our point of view, but not from Juvenal's; yet these are few. The allusion to Matio, the pettifogger, in class 2 , instead of class 1 , is probably due to Matho's trickiness, together with his disgusting physique. That the latter was in large measure the reason, is shown by Juvenal's ready eye for corpulent individuals. (See 2. 141, 8. 147, 12. II.) The mention of the young sport looking forward to an army captaincy, 58-62, in connection with things morally black, is strong evidence of a biassed judgment on the part of Juvenal. He seems to have been disappointed in his military ambition and to have magnified his wrongs.

Verses $77-78$ : "Who can rest for thought of the seducer who plays on his daughter-in-law's greed, of betrothed girls ruined, and adulterers in their teens?" on the ground of distortion have been attacked by Teuffel, who was inclined to consider them, or the preceding rhetorical outburst, as a later insertion. Though Juvenal is open to the charge of unnecessary diffuseness, still no one would charge him with great lack of judgment for placing unnatural moral depravity at the climax of his recital of vice. .

The portion of the satire beginning with verse $8 \mathbf{1}$ is more moderate in tone and abounds in reminiscent digression. The first verses are abrupt. For these reasons, the unity of the poem and the integrity of the text have been assailed.

Pearson and Strong (Thirteen Satires of Juvenal, 1892) suggest that "the author had written two different prefaces at various times, and had then decided to weld them together." The difficulty in the way of this interpretation is that the two introductions referred to are in no particular alike, and furthermore that the second half of the satire is supplementary to the first. Even if verses $8 \mathbf{1} \mathbf{1 4 6}$, i.e. the second half of the confirmatio, as they propose, were inserted into the poem at a later date, the unity of the whole was thereby in no wise impaired. If, however, any portion were inserted at a later date, I should be inclined to suggest verses $8 \mathbf{r}-86$; for with verse 87 the argument ending at verse 80 is resumed. But such concession is scarcely necessary, in view of Juvenal's tendency to state
general truths which lead skilfully back to the main theme (Vahlen, Ind. lect. aest., Univ. Berlin, 1884), and the frequent instances of abrupt, and even awkward transitions found in his works, as $7.36,13.86$, and others.

The earliest date at uhich this book was published seems according to all evidence to be 100 A.D. The latest date, however, has not been so unanimously agreed upon. Friedländer has proposed a date between the years 112 and 116 , in order that this book may not be separated from Book ii by a longer interval than that which separates the other books of Juvenal's satires. F. Haverfield, quoted by Wilson, Juvenal, p. xii, n. i, on the other hand, thinks that these poems, which "reek of Domitian's reign," were published soon after 100 a.d. The real difficulty in the way of assigning a date nuch later than 100 , was pointed out by Lewis, in his translation of Juvenal as early as 1882; namely, that Juvenal could not have mentioned "informers" ahd "accusers" after Trajan "had put an end to their nefarious trade," a thing that must have occurred before the delivery of Pliny's Panegyric, or at least before its present revision was published.

This argument should receive greater consideration in view of the fact that Juvenal ceases entirely his references to the acts of Domitian in the other books of his satires.

Though the time allowed for writing is quite short, yet it is possible, by assuming that the first satire was written last, or that the statement regarding Marius was a later insertion, to place the publication of Book i before Trajan proceeded against the informers. The long interval that would in that case elapse before 116 A.D., when the second book was published, may have been employed, as the poet's earlier life had been, in declaiming.

This paper was discussed by Professors Flügel, Merrill, and Elmore.
18. Cretati pedes, by Dr. Charles J. O'Connor, of the University of California.

The paper was an attempt to account for the practice of whitening the feet of slaves who were imported and sold in the markets at Rome, a custom which is referred to in Tibullus 2. 3.60, Ovid, Amores, 1. 8. 64, and Juvenal I. III. The theory proposed is that the chalk and gypsum were applied to the feet and legs of slaves as remedies for ulcers and other ailments which were induced or aggravated by the hardships of confinement. It seems that only newly imported slaves had their feet whitened. There are numerous passages in Celsus and Pliny the Elder which show that diseases of the feet played an important part in Roman medical practice. Instances are given of diseases of this nature introduced into Italy from other countries. The crowding on shipboard, the use of fetters, the salt water, must have affected the feet and legs considerably. In Celsus and Pliny there are many passages which indicate that Roman physicians considered chalk and gypsum valuable therapeutic agents, employing them frequently in the treatment of ulcers. Although these may not have possessed great healing properties, they would have formed a protecting crust when applied to a sore, and thus might have afforded relief and prevented the spread of the disease.

Adjourned at II 45 A.m.

## PHILOLOGICAL ASSOCIATION OF THE PACIFIC COAST

The Sixth Annual Meeting was held in San Francisco at the Mark Hopkins Institute of Art on December 27, 28, and 29, 1904.

San Francisco, December 27, 1904.

The meeting was called to order on Tuesday, December 27, at 2 P.M., by the President, Professor W. A. Merrill, of the University of California.

The Secretary read his report.
The Report of the Finances of the Association, presented next, was as follows :RECEIPTS.
Balance on hand, Dec. 27, 1903 . . . . . . . . . . . . . . $\$ 30.10$
Annual dues and Initiation fees . . . . . . . . . . . . . . . 240.00
EXPENDITURES.
Sent to Professor Smyth, June 25, 1904 . . . . . . . . . $\$ 214.97$
Postage and expressage . . . . . . . . . . . . . 15.30
Printing . . . . . . . . . . . . . . . . . . 23.00
Incidentals . . . . . . . . . . . . . . . . . . 50
Total
$\$ 253.77$
Balance on hand, Dec. 26, 1904 . . . . . . . . . . . . . . 16.33
$\$ 270.10$
The Chair then appointed the following committees:-
Nomination of Officers: Professors Murray, Bradley, and Ferguson.
Time and Place of Next Meeting: Professors Chambers, Elmore, and Mr. Mower.

Treasurer's Report: Professors Margolis, Searles, and Mr. Burrill. The reading and discussion of papers was then begun.

1. On Iliad IX, 334-343, by Professor A. T. Murray, Leland Stanford Jr. University.

In the great speech in which Achilles declares his refusal to accept Agamemnon's overtures and his scorn of his gifts, occurs the well-known passage (I, 334343), the most splendid outburst in the whole impassioned speech.

For poetic quality and force the passage has commanded universal admiration.

## lxxvi

One thing only calls for comment : Achilles speaks of Briseis, the captive slave, as his anoxos. Objecting to this, some of the older editors altered the punctuation, putting a period, or at least a semicolon, after $\epsilon \epsilon^{\prime \lambda} \lambda \tau^{\prime}$, and in this they have been followed by Cauer, van Leeuwen and da Costa, Leaf in his second edition, and, most recently, Ludwich.

We may first say frankly, in the light of what we know of the Heroic Age, that Briseis certainly was not the a $\lambda_{0}$ ooos of Achilles. That word properly denotes a wedded wife, and she was an alien and a captive. She had been given to him by the Greeks as a prize of valor, as his share of the spoil. She was a chattel, according to the ethics of the age (see II, 57), and Achilles himself speaks contemptuously of her in T, 58, asking Agamemnon if it had been worth while for
 put into the mouth of Agamemnon, B, 377. More than this; Agamemnon offers to give to Achilles any one of his own daughters in marriage (I, 144 ff ., 286 ff .), and Achilles speaks of taking a wife on his return to Phthia (I, 393 ff .).

Yet there are other aspects of the case. This very fact that Achilles is unwedded proves that Briseis does not occupy the position of a $\pi a \lambda \lambda a \kappa i s$ beside a lawful wife. If she did, we may say that the word anoxos could not possibly be used of her. Again we must note the deep and mutual affection existing between the two. This is manifest in $A, 348$ ff., and especially in the passage before us. We may refer also to T, $\mathbf{2 8 2} \mathrm{ff}$. Now, because of this love of Achilles for Briseis, she holds a place different from that of the other captive women ( $\delta \mu \psi a i, \Sigma, 28$ ). This is seen plainly if $\Omega, 643$ be contrasted with $\Omega, 675$ ff. Here the $\begin{gathered}\tau \\ \tau\end{gathered}$ apol and $\delta \mu \varphi a l$ are bidden to wait on Priam and the herald, and to make beds for them without in the corridor. Achilles naturally sleeps in the $\mu \nu \chi$ ós of the house, and Briseis at her lord's side. This is the place that is hers. The language used is closely parallel with that applied to Alcinous and Arete ( $\eta, 346$ f.), to Menelais and Helen ( $\delta, 304$ f.), to Zeus and Hera (A, 611). This is only in part weakened by the fact that very similar language is used of Achilles and Diomede ( $\mathrm{I}, 663 \mathrm{ff}$ ). In that case there is no hint that Diomede occupies a place hers by recognized right ; there is no contrast between her and the other $\delta \mu \psi a l$, no suggestion that she is beloved by Achilles. These facts account for the use of the epithet $\theta v \mu a-$ $\rho \epsilon a$ in the passage under consideration. Besides $\kappa, 362$, where it is used of the bath, it occurs, $\psi, 232$, of Penelope: -

## 

We are, therefore, justified in using a strong equivalent in translating.
The passage is clearly interpreted by the scholiasts and by Eustathius : $\eta \check{\square} \xi \eta \sigma e$


With this the following lines are in complete accord. Cauer, Rheinisches Museum, XLIV, 357, finds the passage incoherent, so that an analysis may be permitted. The sense of the wrong done him leads Achilles to utter the bitter words $\tau \hat{y} \pi a \rho \iota a v ́ \omega \nu ~ \tau \epsilon \rho \pi \epsilon \sigma \theta \omega$. He has given up Briseis; Agamemnon may keep her ; but these words show the impossibility of a reconciliation. Great as was his love for Briseis, his wrath against Agamemnon is greater; he will not be appeased by her return. Similarly in $T$ there is no reconciliation; there a new and vaster passion, the thirst for vengeance for his fallen friend, fills his soul. To this, even his hatred of Agamemnon is subordinated. "But," he goes on, " why must the

Argives war against the Trojans? Why has he marshalled and brought hither a host, this son of Atreus? Was it not for fair-tressed Helen's sake? Do they then, alone of mortal men, love their wives, the sons of Atreus? Nay, since whoso is a good man and of right mind loves and cherishes his own, even as I, too, loved her with all my heart, captive of my spear though she was." For comment we need go no further than the scholiast on vs. 339 : $\epsilon l \mu{ }^{2} \nu \gamma$ dà $\rho \mu \kappa \rho \delta \nu$




The passage is one of great power. It is the rhetoric of passion; and it is this passion that justifies the employment of the word diozos.

We turn now to the altered punctuation. A full stop is put after $\epsilon \boldsymbol{\lambda} \boldsymbol{\lambda} \boldsymbol{r}^{\prime}$. The following passage then means : "He has a wife, the darling of his heart ; let him have joy of her, not rob another of his prize - a slave-girl." In regard to this, I note the fullowing points : (1) The splendid rhetoric, the passion is gone. This is, of course, no argument, if the old interpretation is philologically untenable, the new philologically sound. (2) We are asked to refer the phrase adoxov $\theta v \mu a \rho \neq a$ to Clytemnestra, - to her, concerning whum Agamemnon had publicly said that he preferred the captive Chryseis (A, 113). This may, of course, be said with irony, and may refer back to Agamemnon's words in A; but Cauer's further suggestion that mention of Clytemnestra is needed to lead up to the mention of Helen seems to me based upon a misapprehension. (3) The phrase $\tau \hat{y} \pi a \rho c a i ́ \omega \nu$ $\tau \epsilon \rho \pi \epsilon \sigma \theta \omega$ also refers, on this interpretation, to Clytemnestra. Yet she is in Argos, and has been there these nine years past, so that the words, thus read, are, at best, an empty mockery. (4) The sacrifice of so much of the force and spirit of the passage is wholly in vain. - Even if we read it thus, Achilles still speaks of Briseis as his adoxos. This is inherent in the argument ; it cannot be eliminated. "If they love their wives, do not $I$ luve mine?" Leaf, a staunch advocate of the altered punctuation, is, in his note on 339 , honest almost to the point of naīeté, "i.e. were we nut brought hither on account of a stolen wife by one that is himself a wife-stealer?"-a paraphrase that virtually admits the identification which he so strenuously denies.

Finally I add some notes on the use of the word ädoxos. This, with ákotrıs, $\pi a \rho a ́ k o c t \iota s, \delta a ́ \mu a \rho, \quad$ ठaן (rarely), and very often $\gamma u v \eta$, is regularly used in the meaning, wife. The corresponding masculines are dкoitns and tapakoitns, with avip and $\pi b \sigma \iota s$. $\dot{\alpha} v i f \rho$ and $\gamma u v \dot{\eta}$ are so common in other than these special meanings that they hardly concern us here. There are in Homer more than one hundred and fifty occurrences of these feminine words (omitting $\gamma v \nu \dot{\eta}$ ). They all denote properly a wedded wife; with anoxos, in particular, the epithets kovpıסin and $\mu \nu \eta \sigma \tau \dot{\eta}$ often occur. Further, it should be observed that $\alpha \lambda о \chi o s$, akoctis, and

 denote that the union is a lawful one.

The ethics of the Heroic Age regarded union of an irregular character, with captives eg., as a matter of course. The injured wife might object (Aesch. Ag. 1438 ff .), though she did not always. Two remarkable passages, Soph. Trach. 445-449 and 459 ff. and Eur. Andr. 222 ff., point to the contrary. But for a woman standing in this relation to one of the princes, Homer has no fixed term.

The word $\pi a \lambda \lambda a k i s$ occurs but thrice (I, 449 and 452 , and $\xi, 203$ ), always denoting a concubine, as contrasted with a lawful wife. We have, of course, סov́̀n and $\delta \mu \psi a l$, but these words have no special reference to the relationship which we are considering.

It will be seen at a glance, therefore, that in speaking of Briseis, Homer was practically forced to use one of the words normally denoting wife; she was no mere $\pi a \lambda \lambda a \kappa i s$.
a ${ }^{\text {a ooxos }}$ beyond question denotes properly a wedded wife. It is contrasted with $\delta o u ́ \lambda \eta, ~ \Gamma, 409$ (cf. Eur. Andr. Fr. $132 \mathrm{~N}^{2}$ ), with $\pi a \lambda \lambda a \kappa i s, \xi$, 202. It appears as a synonym of akoıtıs, $\mathrm{I}, 399$, and akoıtıs is contrasted with $\pi \alpha \lambda \lambda a \kappa l s, \mathrm{I}, 450$. The following passages, however, suffice to show that we are entirely justified in claiming a certain laxity in the use of these words. Save the doubtful instance,
 a dooos applied to a slave; but it will appear that these terms are applied to those who cannot strictly be called lawful wives.
 N, 626, таракоıтьs, $\mathrm{\Gamma}, 53$ ). Yet she speaks of herself as the akoıtıs of Paris, Z, 350 ; the poet so speaks of her, $\Gamma, 447$; and Paris calls her his ${ }^{\alpha}$ גoxos, $\mathrm{Z}, 337$. We may pass over the fact that she was to be the ${ }^{\prime}$ кout $\iota s$ of the victor, $\mathrm{r}_{1} \mathrm{I}_{3} 8$, but if she is herself the ädoxos of Paris, and the word is restricted to this meaning, how can she say to Aphrodite, -


So, too, we must note her attitude toward her union with Paris, as seen in her better moments ( $\mathrm{\Gamma}, 4 \mathrm{IO} \mathrm{ff}$.).

Hera is constantly called the adoxos and mapákotris of Zeus, nor will any one question her right to the title. Yet in $\lambda, 580$, this title is given to Leto, and in $\Phi, 498$ f., Hermes says to Leto that he will not fight with her : -

$$
\begin{aligned}
& \text { àp } \gamma a \lambda \neq 0 \nu \gamma \text { à } \rho
\end{aligned}
$$

So in Soph. Trach. 1149, Alcmena is called the akoırıs of Zeus.
In $\epsilon$, ir 8 ff., Calypso uses $\dot{\alpha} \kappa \boldsymbol{\alpha} і \tau \eta$ s of mortal men beloved by goddesses, meaning Odysseus in her own case.

There remain in Homer two important passages: T, 298, and $\delta, 623$. The latter is almost certainly spurious. In the former, Patroclus is said by Briseis to have promised to make her the кoupiolm a dooos of Achilles. This has, of course, disturbed many. Yet we are dealing with the words of the kindliest of Homer's heroes, who is attempting to console a desolate woman. What wonder that he promises more than he can perform ? (Lang).

Many interesting passages could be adduced concerning similar extensions of meaning in the case of $\gamma \dot{\alpha} \mu \mathrm{os}$ or $\gamma \dot{\alpha} \mu o l$, of $\nu \nu \mu \phi l o s$, etc., of $\pi \delta \sigma \iota s$, of $\sigma \dot{v} \nu \in \nu \nu o s$, and so on ; but the Homeric instances adduced above suffice. Interesting, too, are many passages in drama, notably the portrayal of Tecmessa in the Ajax, and Teucer's proud defence of his mother - a princess, yet a captive and a slave.

The paper was discussed by Professor Clapp.
2. Athenian Politics in the Early Third Century before Christ, by Professor W. S. Ferguson, University of California.

The result of this investigation is that between 301 and 295, and again in $276 / 5 \mathrm{ff}$., an oligarchy friendly to Macedon had control of the Athenian government.

The chief evidence is as follows :-
$A$. During both of these periods and, with a few explicable exceptions, at no other time within the era under consideration, men who, either in person or through their relatives, were connected with earlier oligarchies, took part in public life.
B. In 301 and again in $276 / 5$ a government hostile to Macedon was superseded by one friendly to that country. This hostile government is proved by its personnel to have been democratic.
C. Constitutional changes took place in 301, 295/4, and 275. Their character is intimated by the following observations: -

1. In $295 / 4$ an important treasury ( $\epsilon \pi i \tau \hat{\eta} \delta i o t \kappa \hat{\eta} \sigma \epsilon t$ ), intrusted between 307/6 and 295/4 to a single officer, was placed in the hands of a college. It was restored to a single officer in $276 / 5$. The dates are, however, only approximate.
2. In 301 another treasury administered during the fourth century by the "treasurer of the people" ( $\tau$ a $\mu \mathrm{las}$ rov̂ $\delta \eta \dot{\eta} \mu v$ ) was abolished. Its funds were transferred to "an inspector and the trittyarchs" (ó $\bar{\xi} \epsilon \tau \dot{\sigma} \sigma \tau \eta s$ каi oi $\tau \rho \iota \tau \tau \dot{a} a \rho \chi 0 i$ ). There had earlier been a board of inspectors; now there was a single officer. Both the inspectors and the trittyarchs were earlier connected with military funds. The inspector was elected; the treasurer whom he superseded was chosen by lot. The inspector and the trittyarchs disappeared after 295/4, and their functions were taken over by the college then constituted, as described above in 1 .
3. A scrutiny ( $\delta o \kappa \kappa \mu a \sigma i a$ ) of the qualifications of applicants for the citizenship, instituted under the extreme oligarchy of $322 / 1-319 / 8$ and dispensed with subsequently, was revived in 30I. It was extended in $276 / 5$ (in at least one case) to citizens who had applied for civic honors.
D. We have direct evidence in an inscription of the year 271/o (PseudoPlutarch, Lives of the Ten Orators, 851 D) that between 303/2 and 271/o oligarchies controlled Athens on two different occasions. On the first occasion, Demochares, Demosthenes' nephew, was in exile, on the second, aloof from public life.
E. It is impossible to explain the continuance of Demochares' exile between 301 and 295 except on the assumption of oligarchic control during that interval.
F. In consequence of factional strife between the democrats and the oligarchs, a tyrant, Lachares by name, succeeded in making himself master of Athens in 295. Demetrius Poliorcetes restored a democracy in 294. Had that party thrown him over seven years earlier, he would not have trusted it again.

Printed in full in Beiträge zur alten Geschichte, V, I (1905).
Discussion by Professors Murray and Clapp.

## 3. Luigi Pulci, the First of the Courtly Cantastorie, by Professor

 C. Searles, Leland Stanford Jr. University.The paper began with the discussion of the different opinions in regard to

Pulci's literary position. A comparison of the Morgante Maggiore with its source the Orlando (Hülscher, Marburg, 1886) supports the view that the poet was chiefly concerned in changing materia da piazza into materia da camera (Morg. Mag. XXVIII, 142, 1.5). Pulci's work, then, serves to connect the works of his famous artist-successors, Ariosto and Tasso, with their predecessors the cantastorie and the jongleurs.

## Discussion by Professors Matzke and Johnston.

## 4. The Siamese Vocabulary: its Formal and Conceptual Features, by Professor Cornelius Beach Bradley, of the University of California.

The Siamese is not strictly a monosyllabic language, though it is constantly so characterized. In order to ascertain the actual proportion of monosyllabic in a representative section, as well as the origin and nature of the variants from the monosyllabic type, a vocabulary of one thousand separate words was compiled from a very simple piece of native writing. Only seven hundred and fifteen words were actually monosyllables, but fifteen more seemed to be mere extensions or perversions of monosyllabic furms, and were classed with them. Of the remaining two hundred and seventy, sixty-two were recognized as loan-words, chiefly from the Pali. One hundred and sixty-eight were derived from monosyllabic originals either reduplicates (which were discussed at some length), or compounds, or pre-fin-derivatives. Forty were undetermined. There are no suffixes or trace of inflection. The native core of the language is thus seen to be a mass of monosyllabic words, around which there is a scanty fringe of derivatives. All these words are invariable in form, and undiferenced in function, save only as content may determine, or rather limit, function. They are, that is, of no Part of Speech, but are symbols of concepts merely, unmixed with tokens of syntactic function. The sentence is thus of the nominal or notional sort exclusively, and generally without copula. Syntax is reduced to the simplest formulas of sequence, corresponding closely with those of sign-language, as set forth by Wundt. The paper further touched upon the important part played by the verbal predicate in developing the Parts of Speech and the intricate syntax of Indo-European languages.

Discussion by Professors Merrill, Clapp, Nutting, Murray, and Messrs. Allen and Linforth.

## 5. The Vowel $R$ and the Coronal Vowels in English, by Professor

 Samuel A. Chambers, of the University of California.Definitions. - A vowel is produced by a modified but unobstructed passage of the fundamental sound through the mouth; a consonant, by an obstruction of some kind, namely, occlusion, explusion, or friction. There is nothing absulute in these definitions, for there are sounds in which the obstruction is so slight that they are generally placed in a sub-class of consonants and called liquids. They are also called semi-vowels, and Sievers (Grundziige der Phonetik, p. 84) says: " Der Unterschied zwischen den Vocalen und Liquiden ist sehr gering; er beruht lediglich auf einer verschiedenen Articulationsform der Zunge." This shiftirg
and intermediate character of the liquids has been confirmed experimentally by Rousselot (Principes de Phonétique Experimentale, p. 404 fi.) and by Scripture (Elements of Experimental I'honetics, pp. 432-433).

The $i$ of $c a t$, the $j$ of $y$ out, and the $j$ of beyond, emphatic, represent the $i$-sound as vowel, liquid, and consonant. $U$ exists in its three stages in soon, zue, and we, emphatic. In the same way $r$ is vowel, liquid, and consonant in sir, run, and run, emphatic. In French there is a liquid, if not a consonant, form of the vowel $y$ in lui, puis. Scripture a lds, "Perhaps other vowels have liquid forms."

Vowels are produced from fricative consonants by opening the passage till the friction ceases. The consonant $r$ is a buzzing produced by the tongue-tip being held close to the front palate. If the tongue is lowered till the friction ceases, the pure vowel $r$ is produced. Cumpare the $r$ of red and of sir. Vowels may be formed in the same way from other fricatives, $w, j, z, z$, but $z$ and $v$ produce one of the already existing ubscure vowels.

The R'sound. - Sievers classes $r$ among the Sonoren or pure-voiced sounds, and says that it differs from a vowel only in tongue-articulation; that of the vowels being dorsal, that of $r$ being coronal. But later he discusses $r$ as a consonant, which leads Vietor (Elemente der Phonetik, p. 207) to accuse him of inconsistency. Vietor follows tradition and classes $r$ as a fricative consonant, but he adds that it differs in many respects from the other fricatives, especiatly in the fact that the narrowing may be very slight without the sound losing its characteristic resonance. It seems to me that neither Sievers nor Vietor liave reached "Das Wesen der Laute," the real nature of the $r$.

The essence of an $r$ is undoubtedly its coronal character - a sound made by the upturned tip of the tongue, as it keeps its peculiar resonance whether as vowel, liquid, or consonant, alone or with other sounds. The typical $r$ is probably the untrilled Engli.h fricative, as in red. The trilling is secondary, as a $b$ may be trilled as well. But from long association this secondary characteristic has been taken as primary, and fur the trilling of the tongue-tip that of the uvula has been substituted in probably more than half of France and Germany. The attempt to trill the back of the tongue leads to the guttural $r$. These are not $r$ 's at all, but substitutes for it. Trilling is a kind of intermittent friction, hence these $r$ 's are consonants.

The English R.-I. In North England $r$ in all positions in the word is trilled, and is, therefore, always a consonant.
II. In West England and America $r$ is a consonant when before a vowel.

It may have three positions: -
(a) Initial, as in red.
(b) Intervocalic, as in very.
(c) Between a consonant and a vowel, as in dry.

It is a voovel when,
(a) Before a cunsonant, as bird (brd), heard (hrd), argent (rgnt).
(b) Final, as sir (sr), poor (pur), butler (butr).
III. In South England, London especially, the vowel $r$ is weakened into some obscure vowel. Sweet calls it obscure e, and prints it as $a$ in his Primer of Spoken English. But Meyer (Englische Lautdauer, p. 8) doubts this, and says that in such expressions as the cutter, the 2 of er seemed to him a lower, deeper sound than the $z$ of the.

## 1xxxii Association of the Pacific Coast.

In liaison, vowel $r$ becomes a consonant. Compare He is here, Here he is. This liaison is made in London as well as in American English, which might indicate that Meyer's " lower, deeper sound" is caused by a sufficient upturning of the tip to depress the dursal part of the torgue - a reminiscence of the $r$.

The Vovel R. - In the production of the consonant $r$, both the tip and the dorsum are raised, which leads Vietor to class $r$ as a mixed sound - "das $r$ ist hiernach ein 'gemischter' Laut" (p. 208). To be consistent, he must call it a mixed consonant, which is a doubtful classification.

The mixed voovels are produced by the tongue-position of one vowel and the lip-position of another ; for instance, $y$ from $i$ and $u$. $R$ is not formed in this way.

In the pure vowels, such as $i$ or $a$, the oral passage is modified by the raising of the dorsum of the tongue. In the $r$-vowel the modification is made by the point, so that $r$ is as pure a vowel as $i$ or $a$.

The Coronal Vowels. - (a) If, when furming the vowels, we move back the velum so as to throw part of the voice through the nose, we get modifications of the original vowels, - mixed sounds which we call nasal zozvels.
(b) If, when forming $i, e, \epsilon, a$, we round the lips, we get modifications which we call rounded vowels.
(c) Likewise if, when forming the vowt ls, we turn up the tip of the tongue, we get modifications of the original vowels, - mixed sounds which we call coronal z'owels.

Thus, $\epsilon$ may be nasalized to $\tilde{e}$, rounded to $\propto$, coronalized to $\stackrel{r}{\epsilon}$.
The low vowels are coronalized with ease, as $a$ in far, $u$ in fur, $\epsilon$ or $a$ in fair, $o$ in for; the others with difficulty, since the tip of the tongue must be raised without deranging the dorsum.
$R$ in Liaison. - $I$ and $a$ in liaison add to themselves their corresponding consonant ; eg. He and $\mathrm{I}=$ hiyndai ; you and $\mathrm{I}=$ juwndai. Vowel $r$ also is followed by consonant $r$; eg. More and more $=$ Morrnmor.
$R$ in Diphthongs. - $K$ forms diphthongs readily with other vowels, as mere, maror, mare, mur, for, four, moor; these words all being monosyllables.
$R$ forms triphthongs with ai and au. Thus, air in fire, aur in flour, flower. In poctry flower may be made a dissyllable; thus, flautor.

In such words as fear, poor, and mayor, the union of the two vowels of the diphthongs seems loose, but there seems to be no doubt of the monosyllabic character of these words in ordinary speech. Compare $I$ and ay'e. It does not seem nccessary to consider that such words require glide vowsls. I should write fear $=$ fir, poor $=$ pur, mayor $=$ mer or mer.

Discussion by Professors Clapp, Matzke, and Richardson.
Adjourned at 5.15 P.M.
Second Session.
The members of the Association came together again at 8 p.m. to listen to the address of the President, Professor Merrill.

On the Problem of Literary Influence as illustrated by the Relations of Horace to Lucretius.

The first part of this address was published in The Latin Leafet, 1905 , Vol. V, Nos. 119 and 120 ; the principal part is to be found in the University of California Publications, Classical Philology Series, Vol. I.

## Third Session.

The Session was called to order on Wednesday, December 28, at 9.30 A.s., by the second Vice-President, Professor E. B. Clapp.

The reading and discussion of papers was continued.
6. Notes on the Conspiracy of Catiline, by Professor H. C. Nutting, of the University of California.

## 1. The Attempt to murder Cicero at his House.

The chronology of the events of the early part of November in the year 63 has provided a fertile theme for discussion. The aim of the earlier work ${ }^{1}$ was mainly to establish the date of the delivery of the first speech against Catiline. Unfortunately at this time there was a tendency to discredit or manipulate what we learn directly from Cicero in favor of what Asconius seems to say; and the results of the earlier investigations have therefore been generally rejected, so far as the date of in Cat. i is concerned. But during the discussion of this point much of value was brought to light with reference to our present theme. Yet the excellence of this part of the work has received little recognition in our text-books, and it has therefore seemed worth while to restate the facts already brought to light, applying them to the correct date of in Cat. i, and adding sume further suggestions.

From $p$. Sulla 18. $5^{2}$ we learn that it was on the night of the 6th of November that Catiline slipped away from the house of M. Marcellus, where he was in nominal confinement, to preside at a meeting of the conspirators at the home of M. Laeca. The business transacted that night included the making of an arrangement whereby two Roman knights should visit Cicero under pretext of an early morning call, and, when admitted in this way, kill him in his bed. With scarcely an exception the text-books in common use state that the attempt to carry out this plan was made immediately after the meeting broke up, i.e. in the early morning hours of the 7 th. Indeed, at first sight, this seems to be the meaning of in Cat. i, 4. 9: confirmasti te ipsum iam esse exiturum ; dixisti paulum tibi esse etiam nunc morae, quod ego viverem. Reperti sunt duo equites Romani qui te ista cura liberarent, et sese illa ipsa nocte paulo ante lucem me in meo lectulo interfecturos esse pollicerentur. ${ }^{2}$ The narrative then continues as though the original plan was carried out without change - Hacc ego omnia, vixdum ctiam coetu vestro dimisso, comperi ; domum meam maioribus praesidiis munivi atque firmavi; exclusi eos quos tu ad me salutatum miseras.

If this were all that Cicero had to say upon the subject, we should not perhaps think of questioning the correctness of the general assumption that it was on the morning of the 7th that the attempt was made. But in Cat. ii, 6.12 has a

[^69]
## 1xxxiv Association of the Pacific Coast.

different story to tell. There, speaking of the delivery of in Cat. i, Cicero says Quid ? ut hesterno die, Quirites, cum dumi meae paene interfectus essem, senatum in aedem Iovis Statoris convocavi, rem omnem ad patres conscriptos detuli. The plain and obvious sense of this passage is that the attempt on Cicero's life was made on the same day as that on which in Cat. i was delivered. But in Cat. i was not delivered on the 7 th - it could not have been earlier than the 8 th. For in it Cicero speaks several times of the night of the meeting at Laeca's house, using the terms nox illa, nox prior, illa nox superior - phrases which he could not have used until at least the second day after the meeting. We are therefore compelled to date in Cat. i as late as November 8, ${ }^{1}$ and this seems to carry forward the attempt on Cicero's life to that day.

Those who hold to the earlier date suggest that in ii, 6. 12 hesterno die belongs only with convocazi and detuli (actions which took place on the 8th), whereas the suburdinate clause cum domi meae paene interfectus essem refers to what happened a day earlier. This difficult interpretation is certainly a desperate expedient, and is apparently resorted to under the impression that $\mathrm{i}, 4.9$ definitely confirms the earlier date. But does it ?

Looking more carefully at the phrasing of that passage, it will be seen that it is not stated that the knights made the attempt on Cicero's life illa ipsa nocte, but that they promised to do so. It is therefore a mere assumption from the general tenor of the passage that puts the attempt on the morning of the 7 th. That the assumption is a mistaken one seems clear even from the internal evidence of this very passage. For when we come to assign a time for all the events narrated as preceding the arrival of the conspirators at Cicero's house, it seems incredible that the men should have arrived when day had scarcely broken (paulo ante lucem) on the 7 th.

For, in the first place, the meeting at Laeca's house must have convened at a late hour to avoid suspicion, and the session was doubtless a protracted one; for we learn from the passage in hand of the important final business that was transacted with a view to Catiline's speedy departure from the city : distribuisti partis Italiae ; statuisti quo quemque proficisci placeret; delegisti quos Romae relinqueres, quos tecum educeres; discripsisti urhis partis ad incendia, etc. It goes without saying that a meeting of this sort was not a short one - we should not be surprised if it were protracted until nearly dawn. If so, by hastening at once to Cicero's house, the conspirators would scarcely arrive in time to be among the very first of the morning visitors, when the opportunity to kill Cicero would be most favorable.

If we assume that they did thus come before daylight on the 7 th, where shall we find a place for the various things which happened before their arrival ? According to i, 4.9 it was not until the meeting broke up that the news of the plot against his life was carried to Cicero. How much time was consumed in transmitting the message we do not know. Cicero, with characteristic boastfulness, to show how well he has the situation in hand, says that he was informed when the meeting had hardly been dismissed. But if the news came through the usual channel (Curius and Fulvia), some considerable time must be allowed for the transmission. After the news arrived, we are told that additional guards

[^70]were called in to protect Cicero's house; and, most interesting of all, at the end of the passage we learn that Cicero had interviews with many prominent citizens, telling the names of the would-be murderers and predicting the time of their coming (cum illi ipsi venissent, quos ego iam multis ac summis viris ad me id temporis venturos esse praedixeram).

It really strains the probabilities of the case seriously to bring all these events within a compass that would allow of the conspirators arriving befure daylight on the morning of the 7 th, and since Cicero says only that the knights promised to kill him illa ipsa nocte, the whole case for the earlier date is very weak, especially in view of the fact that in order to maintain it we must violently force the meaning of ii, 6. 12. ${ }^{1}$ We therefure welcome the suggestion that the plan was made originally for the morning of the 7 th, but that, because of the length of the meeting, the execution of the plan was postponed until the following morning. This would allow an interval of twenty-four hours for the news to reach Cicero, for him to call in additional guards, and have interviews with prominent men regarding the plot. It would also fit perfectly with the statement in ii, 6. 12, which clearly indicates that the attempt was made on the day on which in Cat. i was delivered, i.e. on the Sth.

Further confirmation for this later date is afforded by in Cat. ii, 6. 13. Here Cicero is relating to the people what he had said on the 8th when delivering in Cat. i befure the senate : quaesivi a Catilina in nocturno conventu ad M. Laecam fuisset necne. Cum ille . . . reticuisset, patefeci cetera; quid ea nocte egisset, quid in proximam constituisset. Cicero is manifestly taking up that part of in Cat. i in which 4.9 falls. Referring back to that passage, it will be seen that after telling what business was transacted during the meeting at Laeca's house (quid ea nocte egisset), the very next thing mentioned is the plan made to murder Cicero. That this was the plan fur the following night (quid in proximam constituisset) would be a natural assumption from a comparison of the two passages; and this assumption grows to conviction when diligent search throughout the first oration against Catiline fails to bring to light a reference to any other plan for the night which followed that on which the meeting at Laeca's house took place.

There seems, therefore, to be no reasonable doubt that it was on the morning of the 8th that the actual attempt took place, but Cicero has not made it at all clear whether the original plan was for that morning or for that of the 7 th. Of course, at first sight, $\mathrm{i}, 4.9$ seems to decide that question definitely in favor of the earlier date, for Cicero says that the knights promised to kill him illa ipsa nocte, which would naturally mean in the early morning hours of the 7 th. But, as has already been noted, in this passage there is no hint of a postponement; the narrative runs along as though, in arriving on the morning of the 8th, the conspirators were carrying out their original plan. And the wording of ii, 6. 13 (quid in proximam constituisset) also looks clearly in this direction.

This point is of minor importance, but it presents greater difficulty than the larger question discussed above. We might be tempted to suppose that Cicero had made a slight slip, were it not for the fact that he was speaking of events so recent, and that these speeches were carefully revised by him. A second

[^71]alternative would be to suppose that Cicero has allowed himself to speak carelessly or awkwardly. Thus illa ipsa nocte might conceivably refer, not to the night of the meeting, but to the following night. For we might fancy that the meeting did not break up until dawn was streaking the east; if then, as the conspirators separated, the two emissaries should say "We will kill him this very night," they would mean the night following the day now breaking, i.e. the night between the 7 th and the 8 th. Quoting this speech indirectly, Cicero would say illa ipsa nocte. But such an interpretation is extremely hard, and is suggested only as a means of avoiding the last alternative, namely, that of supposing that we have to do with a corruption of the text of which the manuscripts give no hint.
2. Huic sceleri obstat, Sallust, B.C. LII, $\mathbf{3}^{2}$.

This phrase occurs in Cato's speech delivered on the Nones of December, when the fate of the conspirators was hanging in the balance. The sentence in which it stands is ironical, as is shown by videlicet. There are in general two lines of interpretation:
(a) "Doubtless their past lives secure them from suspicion of this crime," i.e. of having conspired against the state. See Harper's Lex. and Hoffmann, ad loi. This interpretation would fit better crimini huius sceleris than huic sceleri.
(b) "Doubtless their past lives counterbalance this crime." So Jacobs-Wirz and Stegmann. The meaning assigned to obstat is unusual, but supported by Livy i, 26. 5.

There is a third possible interpretation that would assign to obstat its usual meaning. The spirit of Cato's speech is very different from that of Caesar ; it fairly bristles with sarcasm, innuendo, and irony. In this passage he has cited the example of Torquatus, who ordered the execution of a son who persisted in fighting against the enemy when ordered to desist ; and then he adds " And that splendid youth by his death paid the penalty for his unbounded bravery; are you in doubt as to the action you should take with reference to most wicked traitors ?" He means, of course, that the death penalty should be passed on the prisoners; and I suggest that huic sceleri is an ironical reference to this proposed action. For Caesar, in his speech, had pointed out that to put to death a Roman citizen without a trial would be illegal ; and so Cato says with bitterest irony, "Doubtless their past lives - their past good record - stands in the way of this outrage ${ }^{1}$ (on our part)."

## Discussion by Messrs. Martin and Allen.

## 7. The Derivation and Meaning of Luscinia, by Mr. E. W. Martin, of the Leland Stanford Jr. University.

To the Romans was luscinia the "dawn-singer" or the "grief-singer"? Discussion based on Professor E. W. Fay's article, "Studies of Latin Words in -cinio, -cinia. I. Luscinia." - Classical Review, July, 1904.
${ }^{1}$ The choice of the term scelus in this connection is natural enough; cf. Cic. in Verr ii, 5, 66. 170 .

1. Derivation from *luces-, " dawn-singer." Weakness of the poetic citations. Improbability in view of reality and the records of the nightingale as a nightsinger in ancient poetry and folklore.
2. Derivation frum *luges-, "grief-singer," more probable in consideration of the word's semasiolugy. Evidence of (1) the myth ; (2) epithets; (3) ancient and modern bird-lore ; (4) nearly universal poetic feeling ; (5) parallels.

Discussion by Professors Fairclough, Emerson, Matzke, Rice, and Dr. O'Connor.

Professor Merrill then took the chair.
8. A Plan for the Republication in a Revised Form of the HebrewAramaic Equivalents in the Oxford Concordance to the Septuagint and the Other Greek Versions of the Old Testament, by Professor M. L. Margolis, of the University of California.

In giving the Hebrew-Aramaic equivalents, the editors, according to the explicit statement in the preface, have aimed at no final judgment in the sometimes very intricate questions of identification. Hence we very often find a mere quid pro quo, not to mention the obelized passages upon which the editors have refrained from all judgment. In the proposed revision it is intended to exclude erroneous identifications, to include new identifications, and to indicate, as well as to discuss, doubtful cases. There will be references to publications in which a certain identification has been proposed. The equivalents will be arranged in accordance with frequency. Under the simple verbs all the compounds will be given. The later translations will be dealt with each separately under each word. An index of Hebrew and Aramaic words will be found at the end. The proposed publication, which will give no quotations except in the case of words requiring discussion, will in nowise take the place of the larger work upon which it will be based, but rather supplement it, and pave the way for a new Lexicon of the Septuagint, which is a scientific desideratum.

Printed in full in Zeitschrift für alttestamentliche Wissenschaft, XXV (1905), 205-293.

Discussion by Professors Murray and Fairclough.
9. Aeschylus, Agamemnon, 817, and Secrecy in Voting in the Athenian Law Courts, Fifth Century b.c., by Professor J. T. Allen, of the University of California. Read by Professor Clapp in the author's absence.

The paper is published in the Classical Review, December, 1904, p. 456 sqq. (Vol. XVIII).

Discussion by Professors Emerson, Murray, Ferguson, Fairclough, and Clapp.
10. On Figures of Prosody in Latin, by Professor L. J. Richardson, of the University of California.
(1) The term figure of prosody defined and described. (2) Current classification of such figares. (3) A proposed classification. (4) Current terminulogy. (5) A proposed terminology.

Discussion by Professors Clapp, Fairclough, Murray, and Chambers. Adjourned at 12.50 P.M.

Fourth Session.
The Association convened again at 2.30 P.M.
The Committee on Nomination of Officers reported through the Chairman, Professor Murray, the following list of nominations:-

President, J. Guebel, Leland Stanford Jr. University.
Vice-Presidents, E. B. Clapp, University of California.
H. R. Fairclough, Leland Stanford Jr. University.

Secretary-Treasurer, L. J. Richardson, University of California.
Executive Committee, The above-named officers and
A. F. Lange, University of California.
J. E. Church, University of Nevada.
H. K. Schilling, University of California.
J. E. Matzke, Leland Stanford Jr. University.

The report was accepted, and on motion of Professor Chambers the Secretary was instructed to cast the ballot of the Association for the gentlemen as nominated.

On motion of Professor Senger the Association passed a vote of thanks to the retiring Secretary-Treasurer for his services.

The Committee on Time and Place of the next Meeting reported through the Chairman, Professor Chambers, as follows:-

Your Committee have considered the suggestion of holding a special meeting during the coming summer in Portland, Oregon. They deem the plan not feasible.

They recommend that the next regular meeting be held as usual at Mark Hopkins Institute of Art in San Francisco, on December 27, 28, 29, 1905.

The report was accepted.
The reading and discussion of papers was then continued.
11. English Notes, by Professor Frederick M. Padelford, of the University of Washington.
The author being alsent, the paper, through lack of time, was merely read by title. It is published in The Journal of English and Germanic Philology.
12. The Etymology of Mephistopheles, by Professor J. Goebel, Leland Stanford Jr. University.
This paper is published in the Transactions. Discussion by Professors Schilling, Emerson, Senger, Bradley, and Clapp.
13. The Master Playwright of Wakefield, by Professor C. M. Gayley, of the University of California.

The paper discussed those portions of the Towneley Cycle, whether complete miracles or insertions, which are written in the nine-line stanza peculiar to this cycle. It derived the stanza from its more unwieldy predecessors of York, and attempted to show that in all probability the contributions in that stanza are by one writer. It presented the characteristics of his thought and style, and suggested other portions of the cycle, not in the nine-line stanza, which may be attributed to him.
The exposition appears as a whole in an article entitled "The Later Miracle Plays of England" in the International Quarterly, April, 1905.
14. The Figurative Expressions in the Works of Heinrich von Kleist, by Professor J. H. Senger, of the University of California.

The paper gave an account of the method of investigation and classification with respect to the objects used as tropes in the complete range of pictures employed by a poet, a process which may offer a more reliable method than the present subjective treatment used by critics to determine an author's position not only within the limits of his own literature, but also to establish with great precision his affinity to an author of another nation.

By means of the complete material of an author's literary utterances it is possible to obtain a personal equation which, by comparison with that of other writers, leads to what may be called the personal equation of a nation as expressed in its literature.

For the purpose of attaining the greatest objectivity the great masters choose expressions which, like musical sounds, have over- and undertones connecting with the objects present in the picture words. The plastic effect of an expression by words depends upon the fact that it immediately conveys the idea of its object ; its poetic effect requires that the objectivity of the expression be accompanied by harmonious suggestions similar to the harmonics produced by aliquot parts of a vibrating string or column of air, of which we are rarely conscious, but which are essential to the beauty of the sound. Through these harmonious sug. gestions may ultimately be revealed the peculiar national quality of an author.

The forcible imagery of Heinrich von Kleist lends itself quite naturally to an analysis as proposed. Minde-Pouet in his treatise, Heinrich von K'leist. Seine Sprache und sein Stil. Weimar, 1897, treats Kleist's language and the style peculiar to him as regards grammar and the orthodox rhetoric. He deals but imperfectly with the author's imagery, although he tries to classify the images
employed. On little more than four octavo pages (pp. 167-171) he gives what might be called an index of word pictures, classified: animals, plants, metals, etc., merely stating the leading word and the corresponding passage. In this way he registers 205 passages, apparently merely those he has selected originally for grammatical and rhetorical reasons.

The 656 passages so far fuund contain 83 I objects for classification. Of these the poems in the first volume of Zolling's edition contain 18 passages, Familie Schroffenstein 80, Variations in Familie Ghonorez 5, Zerbrochener Krug 24, Robert Guiskard Fragment 22, Amphitryon 55, Penthesilea 106, Käthchen von Heilbronn 77, Hermannsschlacht 75, Prinz von Homburg 42, the prose pieces of the fourth volume $3^{65}$, the letters to Wilhelmine von Zenge 68, to his sister Ulrike 30 , other letters 18.

The author explained his classification of Kleist's tropes as employed in the forthcoming publication of his treatise.

## Discussion by Professor Bradley. <br> Professor Clapp took the chair.

15. Romance Etymologies, by Professor Carl C. Rice, of the Leland Stanford Jr. University.
16. French flichir, Old French fleschir, fleschicr, "to bend." Fleschier < *fexicäre<fexus<flectere," to bend." Phonetic development regular. The form in $-i r$ is due to a change of conjugation.
17. Spanish rosca, "screw," roscar, "to furrow." Rosca is a postverbal from *rōsicāre < rōsus < rōdere, "to gnaw." Phonetic develupment regular: cf. rascar, "to scratch" < * rāsicāre, "to scratch." For the postverbal formation, cf. Italian leia, "lever," from levare, "to raise." For the sense-development, cf. English bit, i.e., "a biting instrument."
18. French rucke, "hive," roucke, "hull of a ship on the stocks," Old French rusche, Provençal rusca, Piedmontese and Lombard rusca, "bark," Comascan ruscd, "to scale off.". Ruscd < *rüspicare < *rī̀spire," to scratch" (cf. Italian ruspare, "to scratch," and the rare Latin rusp.irì, "to explore"). Sensedevelopment: 1) "to scratch off," "to peel"; 2) "peel," " hark"; 3) "hive made of bark"; 4) "hive." The phonetic development assumed is certainly regular in French and Provençal territory, and appears to be regular everywherc.
19. Spanish sesgo, "oblique," sesgar,"to cut obliquely." Sesgar<*sēsecāre, "to cut apart." Phonetic development regular. The adjective is a postverbal.

## Discussion by Professors Noyes and Matze.

16. The Duration of English Vowels in Monosyllabic Words, by Dr. P. E. Goddard, of the University of California.

By employing monosyllahic words uttered separately, the complicating effects of accent and emphasis were avoided for the present. Rousselot tracings were made with the cylinder travelling at a speed of about 28 centimetres per second. The error in making and measuring these tracings need not exceed .or second.

The results first given are from recorls made and tabulated by a man about thirty years of age, who has lived all his life in the Rocky Mountain region. He held, at the time, the popular notions concerning vowel lengths.

First, words having the same initial and final consonants were compared. The differences in length were very small, indicating that English vowels and diphthongs have the same duration under the same phonetic conditions. The so-called long vowel or diphthong in mate is no longer than the vowels in mat or met.

Next, the same and other words were arranged so that their vowels and initial sounds were the same, but their final sounds varied as surds and sonants. The average length of the vowels preceding voiced consonants was .393 second, and of the same vowels preceding unvoiced consonants of the same kind .286 second, a difference of .107 second, o1 38 per cent.

A table made from the author's speech shows that vowels before unvoiced consonants, voiced consonants, and without consonant endings, have the ratios of $100: 140$, and $100: 175$.

|  | $A^{1}$ | $B$ |  | A | $B$ |  | A | B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| bay | . 544 | . 579 | bait. | . 333 | . 368 | bayed | . 398 | . 456 |
| bow | . 561 | .491 | hoat | . .333 | . 316 | bocie. | . 398 | . 439 |
| e. | . 526 | .491 | meat | . . 253 | . 351 | mead | . .398 | . 439 |
| he | .491 | .561 | heat | - .281 | . 298 | heed. | . .414 | . 421 |
| rye. | . 684 | . 649 | right | . . 368 | . 288 | ride . | . .564 | . 516 |
| fry | . 597 | . 597 | friglt | - . 368 | . 288 | fried. | - .558 | . 439 |
| pea | . 439 | . 421 | piece | - . 263 | . 193 | peas. | - 498 | . 376 |
| fay . | .491 | .491 | fate | - . 263 | . 263 | fade | . 414 | . 379 |
| sigh | . 632 | .561 | sight | - . 263 | . 263 | sighed | - 457 | . 439 |
| lay. | . 632 | . 527 | late | . 333 | . 355 | lade | -. 498 | . 368 |
| may | . 579 | . 527 | mate | - . 246 | . 256 | made | -. 515 | . 368 |
| rue. | . .561 | . 491 | root | . 351 | . 267 | rude . | . 457 | . 456 |
| ray. | . .56I | . 597 | rate | . 421 | . 404 | raid | - . 564 | .551 |
| lie | . 649 | . 579 | light | . . 368 | . 368 | lied | - . 531 | . 421 |
| her. | .474 | . 459 | hurt | . . 298 | . 281 | heard | - .464 | . 404 |
| spur | . 439 | . 368 | spurt | .281 | .281 | spurred | . 464 | . 333 |
| Average | .551 | . 524 |  | . 314 | . 310 |  | -469 | . 425 |
| Per cent | 175 | 169 |  | 100 | 100 |  | 147 | 137 |

Adjourned at 5.45 P.M.

## Fifth Session.

The Fifth Session was called to order by the first Vice-President, Professor Goebel, at 9.30 A.m., on Thursday, December 29. The Committee appointed to examine the Treasurer's Report

[^72]announced through the Chairman, Professor Margolis, that the books had been examined and found correct.

Report accepted.
17. The Correption of Diphthongs and Long Vowels in Hiatus, in Greek Hexameter Poetry, by Professor Edward B. Clapp, of the University of California. This paper will appear in full in the Publications in Classical Philology of the University of California.

This conspicuous feature in Greek hexameter poetry is difficult to explain. Two questions must be answered: first, why was the diphthong or long vow l treated as short? and, second, why was hiatus, under these circumstances, regarded as justifiable? The most satisfactory answer is that proposed by Hartel and by Grulich, which is based on the fact that in Homer more than 80 per cent of all cases of correption occur in diphthongs consisting of a short vowel folluwed by ، or $v$, which may be called the short diphthongs. Assuming that the practice originated in these short diphthong:, the explanation is easy. Before a word beginning with a vowel the final 1 or $v$ of the diphthong would easily change to the corresponding consonant, thus removing hiatus, and the first vowel of the diphthong, standing alune, would show its natural short quantity.

The present paper is based on a study of this practice through the whole range of hexameter poetry, from Homer to Tryphiodiorus, including about thirty poets. It was felt that if the correption should show a tendency to spread from the diphthongs mention d above to the long diphthongs and the simple long vowels, this fact would afford a strong confirmation of the truth of the views of Hartel and Grulich as to the origin of the practice.

But the result of the investigation points in the opposite direction. Far from showing a tendency to spread, and to affect all diphthongs and long vowels with approximate equality, correption in the later poets tends to confine itself more and more strictly to the short diphthongs, and especially to -at and -ot. These two diphthongs alone furnish 98 per cent of all cases of correption in Tryphiodorus, in contrast to 90 per cent in Oppian, 85 per cent in Callimachus, and 78 per cent in Homer.

This result leaves the main question still in doubt, the views of Hartel and Grulich receiving no additional confirmation from the investigation here reported.

## Discussion by Professors Richardson and Noyes.

18. Notes on Horace, Sat. 1. 6. 126, and Aristophanes, Peace, 990, by Professor J. Elmore, of the Leland Stanford Jr. University.

## 1. Hor. Sat. 1. 6. 126, fugio campum lusumque trigonem.

In lusumque trigonem - the much-discussed reading of Cruquius' Blandinius vetustissimus - we should recognize the characteristically Augustan usage of the participle in agreement with a substantive to express the abstract idea of action. The phrase thus means, not the "game of ball" (where lusume = ludum) nor "the ball game I have already played," but "the playing of the ball game,""I leave behind me the campus and the ball-playing."

This use of the participle is frequent in Horace. Among the examples are the following: Car. 1. 1. 4 ; 1. 3.29 ; 1. 5.6 ; 1. 8.12 ; 1. 36.9 ; 2. 4. 10; 2. 9.10 ; 2. 13. 31 ; 3.6.29; 3.15.10. Sat. 2.1.67; 2. 1. 84. F.p. 1. 16.42. Of these cases Car. 1. 5.6,2.9. 10, and 2. 13. 31 have the participle and its substantive in the accusative of the direct object, as in the present passage. Cf. Liv. 2. 36. 6 and Mart. 2. 75. 2. It is also proper to have this construction with the participle of ludere, which is often construed with an accusative of the so-called inuer object. (So by Horace in Sat. 2. 3. 248.)

This interpretation avoids the necessity of regarding lusum as a concrete substantive - a late and rare use, and involving here the harsh apposition of trigonem - or of taking it in the ordinary sense of th: participle. The latter places an undue emphasis on the completion of the action, as if it were only at the end of the game, and for this reason, that Horace took his departure. It is also unnecessary to assume, as both of these interpretations do, that Horace himself, in spite of his expressed distaste for it (Sat. 1.5.49), made ball-playing a part of his daily routine. The expression is a perfectly general one, not referring to any particular person or game. There were, doubtless, several of these games going on at the same time, and Horace may very well have been engaged in his favorite occupation of looking on.

This view of lusumque trigonem gives excellent sense, and the whole sentence with its combination of concrete and abstract in the same clause has a peculiarly i liomatic turn, reminding one of the similar combinations of metaque . . . Evitata rotis in Ciar. 1. 1. 4, and of fulem and Mutatosque deos in Car. 1. 5.6.

> 2. Aristoph. Peace, 989-990: où $\sigma$ ou $\tau \rho v \chi \delta \mu \in \theta^{\prime} \sharp \delta \eta \eta$ тріа каl $\delta \epsilon \epsilon \kappa^{\prime} \epsilon \not \tau \eta$.

Aristophanes (Achar. 266) accepts 431 as the beginning of the war with Sparta, and the Peace, according to the generally accepted statement of the first hypothesis, was brought out in 421 . Hence the chronological difficulty remarked ly the scholiast and insisted on by the editors. This difficulty has been met in three ways, - by assuming a second production of the play in 418, by supposing that Aristophanes is referring to the preliminary hostilities between Corcyra and Corinth, and by emending the text. It is possible that there was a second performance of the Peace in 418, but Thucydides (5.75) counts the whole period 421-416 as among the years of the war. As to the second explanation, the first battle between Corcyra and Corinth took place in 435 and the second in 432. The year required is 434 , but there is no apparent reason for dating the beginning of the war from this year. Reviewing the whole question, Van Herwerden is inclined to believe that the text is unsound, though in his opinion no convincing correction has been proposed.

Before giving up the text there is another possibility that may be considered, that Aristophanes is here using rpla кal $\delta \epsilon \in \alpha_{-}$as an indefinite number. There are three other passages where he unmistakably employs the number in this sense, - Plut. 194, 845, and 1083. In the second example we have the precise
 387, Bacchylides 10. 192, and Herodotus 1.119.6. To be noted also is the statement attributed to Chares by Gellius (5.2.2) that Alexander's steed was bought
for thirteen talents. Compare also the use of terdecies as an indefinite number in Juv. I4. 28.

In the passage in the Peace there is no apparent difficulty in seeing the same usage. Trygaeus is under no compulsion, artistic or otherwise, to speak with literal accuracy, while the use of popular expressions quite befits his character. In his address to Peace he merely desires to convey the idea that she has been absent a long time. The fact that thirteen is near the actual number (ten) which historical accuracy requires, is no objection, since, as König has pointed out, the approximation - real or imagined - to the definite number is usually a characteristic of the indefinite one.

## Discussion by Professors Clapp and Nutting.

19. A Study of the Forms of Interrogative Thought in Plato, by Professor H. R. Fairclough, of the Leland Stanford Jr. University.

This study, made for the new Plato Lexicon, aims at classifying the various interrogative idioms in Plato, summarizing their uses and showing their relative frequency, their variety of meaning, and their bearing upun the question of the authenticity of the doubtful dialogues.

The paper, when completed, will be published in full in the Lexicon referred to.
> 20. Sources of the Lay of Yonec, by Professor Oliver M. Johnston, of the Leland Stanford Jr. University.

A comparison of the lay of Yonec with the other stories containing similar motives shows that the lay represents a fusion of the legend of the Jealous Stepmother and of the well-known tale bearing the name Inclusa. The motive for combining these two stories doubtless lay in the desire of the minstrels, or the story-tellers from whom Marie de France heard the lay, to substitute a supernatural for a natural means of reaching the imprisoned lady. The first part of the story of the Inclusa, the theme, according to which a jealous old man has a young and beautiful wife whom he confines in a tower, was used in the lay. On the other hand, the second part of the Inclusa, where a handsome youth visits by means of an underground passage a lady imprisoned in a tower, is not contained in Marie's lay. However, the author of Marie's original substituted for the motive of the underground passage the theme of the Jealous Stepmother, where the lover assumes the form of a bird in order to reach the lady.
21. Direct Speech in Lucan as an Element of Epic Technic, by Dr. J. W. Basore, of the University of California.

An investigation of the speeches of the Pharsalia in point of (i) form, (a) monologue, (b) speech-scenes involving address and reply, (c) single speeches, and (2) their relation to the action and plot of the poem, to estimate by comparison with Vergil's usage of the speech as a naive form of expression (Heinze, Vergils Epische Technik, Leipzig, 1903, pp. 396 ff.), the independent character of Lucan's epic methods. By reason of a certain crude power and the originality
of a sententious though declamatory style, Lucan has been assigned freely in ancient estimate a place among older writers of established reputation (cf. Martial, vii, 22 ; i, $6 \mathbf{1}$; vii, 21; vii, 23; x, 64 ; Tac. Dial. 20; Quint. x, $\mathbf{1}$. 90 ; Stat. Sily. ii, 7 ; Chaucer, H. of Fame, iii, 40 ). It did not, however, remain for the more discriminating judgment of modern taste to discover that he had produced not an epic, but a history in verse (cf. e.g. Dryden, pref. Annus Mir. with Petr. 118; Serv. Aen. i, 382). But this verdict of his failure has been drawn rather from the character of his subject-matter and style than from analysis of his epic form in which, by even superficial conparison with others of the later schoul, he is seen to be the most unconventional. Direct speech figures conspicuously in the Aeneid as a part of Vergil's artful imitation of the realistic spirit of the Homeric epic, and, consciously or unconsciously, he must have been Lucan's model for what he conceived to be an epic manner. Technically a monologue may be either a speech uttered alone to an imaginary hearer, or a soliloquy, i.e. a self-address in a similar situation. The form is essentially dramatic, and not epic. The clearest dramatic type is that in which the conflict of opposing inclinations is depicted, with the final victory of one which serves to motivate action. This may be illustrated from Homer, $/ 1 /$. x, 99 ff., and Dido's soliloquy in Vergil, iv, 534 ff . Lucan shows it not at all. He has used more freely than Vergil (cf. Aen. i, 37 ff .) the form which gives a psychological characterization of the individual in a given situation (cf. e.g. ii, 522 ff ; iv, 702 ff ; viii, 622 ff .), and is most free in the use of the characteristic type of Vergil, involving an address to an imaginary hearer, animate or inanimate (cf. e.g. v, 521 ff.; vi, 241 f.). In introducing such he has avoided wholly the artless recurrence of stock phrase found in Homer and adopted by Vergil. Note the studied variants at $\mathrm{i}, 247$; ii, 52 I . ; iv, 70 I ; viii, 62 r ; often simple ait is used (cf. ii, 38 ; iii, 38 ) or dixit, inquit, fatur, etc. (e.s. v, 654 ; $\mathrm{v}, 52 \mathrm{I}$; iii, 90 ), or verb of saying is omitted (cf. ix, 989 ; ii, 493). Vergil has employed within much narrower lines than H (mer the device of introducing into a given scene speakers involved in a lengthy series of address and reply (Heinze, l.c. 397 ff.), and this tendency to restrict the elaboration of speech-scenes is more marked in Lucan. In only one instance does he group more than two speakers, and only twice exceeds the limits of simple address and reply (cf. iii, 123 ff ; ix, $\mathbf{1 2 3} \mathrm{ff}$; $\mathrm{v}, 130 \mathrm{ff}$ ). The other speeches of the poem represent groups involving mere dialogue situations or single addresses; and require no emphasis here as being in no way characteristic. In discussing the relation of the speeches to the plot of the poem, further detailed comparison with Vergil will not be possible. To treat epically a historical event of recent occurrence is an impossibility, for invention and imagination are confined within the limits of the literally true. In the attempt Lucan finds scope for imagination by devising for his characters in definite situations, set harangues which they might have delivered. His manner in these, therefore, is that of the pragmatic historian. Though characteristically the speeches of Lucan are not integral to the narrative and seem to serve as mere halting places for declamation, it is possible to discover in his usage some marks of epic treatment. It may be noted, as in the older epic, that they are introduced in emotional situations as the vehicle of anger, sorrow, fear, joy, and the like, and with an effort at epic realism are usually duly tagged as such (cf. i, 192; ii, 44, 493 ; iv, 70I, et saepe).

Aristotle (Poet. 34) has laid emphasis upon $\bar{\eta} \theta o s$ as an essential of epic narrative, and, though Lucan is often led astray by windy declamation, it is clear that many of his speeches are introduced fur purposes of characterization. To illustrate, the speech of Brutus to Cato (ii, 242 ff .) is pointed by $2 \mathbf{3 4}$ f., At non magnanimi percussit pectora Bruti $\mid$ terror, as an effort to portray his undaunted courage amidst the alarm of Caesar's approach. Cato, in ix, 256 ff ., is shown in calm dignity nerving his comrades to a struggle without hope; in 505 ff ., his words reveal his endurance in physical suffering ; in ii, $5 \mathbf{1 2}$ ff., the speech uf Domitius in captivity marks his haughty contempt and high-born courage. A second comprehensive group is more directly concerned with the narrative in motivating action (cf. e.g. i, 273 ff. ; ii, 483 ff . ; vii, 68 ff ); others amplify the situation by the introduction of vivid detail. I cite, e.g., viii, 172 ff., where the pilot discourses to Pumpey about the stars in the silence of the night upon the sea, so in ix, ${ }_{1} 76$ ff., Caesar, after feasting, seeks to prolong the night in familiar discourse to the priest of Isis. Finally may be shown a type which usualls, in the form of the cohortatio, is wholly extraneous to the narrative in subject-matter and purpose (cf. e.g. vii, 342 ff. ; ix, 379 ff., et saepe). As a result of the anal:sis thus outlined, it may be observed that in the forms of direct speech Lucan approximates Vergilian usage most nearly in the free employment of monol gue ; he observes the restristions set by Vergil in avoiding the introduction of elaborate speech-scenes, employing in fairly equal proportions monologue and groups involving dialogue situations, while single speeches are far more numerous. In subject-matter the speeches are characteristically non-essential to the development of the narrative, though serving somewhat to characterize, to motivate action, or to supply picturesque detail. Though Lucan's art is that of the historian, his spirit and style that of the orator, he has used the speech as the expression of emotion with some consciousness of its epic fitness, but in no case may be said to reproduce the Vergilian simplicity.
22. Examples of French as Spoken by Englishmen in Old French Literature, by Professor J. E. Matzke, of the Leland Stanford Jr. University.

The paper made a study of four instances in Old French literature intended to represent the speech of an Englishman using French: (1) Renart as an English jongleur (Roman de Renart, ed. Martin, I, 62 ff.); (2) The Fabliau de deux Anglor's et de l'anel (ed.' Montaiglon et Raynaud, II, 178 ff.); (3) The Duke of Glocester in Jehan et Blonde of Philippe de Beaumanoir (ed. Suchier) ; (4) Various characters in the Mystère de Saint-Louis (ed. Fr. Michel).

The following two papers were read by title:-
23. Old Problems in Horace and Vergil, by Professor J. E. Church, Jr., of the University of Nevada.
(a) Horace, Carm. i, 3. 1-8.

A reply to PAPA. xxxiv, xxii, based on Püsheler, Carm. Lat. Fpigr. 196, 197, 198, 215 ; Tibullus, i, 4. 1-3, etc.
(b) Vergil, Aeneid, i, 249 . . placida compostus pace quiescit.

The evidence of burial inscriptions favorable to the theory that this verse refers to the rest of Antenor in the tomb is weak, while the evidence of the Aeneid itself ( $\mathrm{i}, 24 \mathrm{I}$ f., iii, 393, 495 f .) and the use of placidaque . . . morte (not pace) quievit (ix, 445) strungly support the generally accepted belief that Vergil is here referring to the peaceful retirement of Antenor after a strenuous life.
(c) Vergil's Use of the Proper Names of the Winds in the Aeneid.

Vergil employed the proper names Aquilo, Eurus, etc., as he did the general, aura, turbo, etc., not to designate the direction of the air current, but the condition of the weather. In his use of proper names for rhetorical effect Vergil resembles Horace, but is less extreme. The theory that Vergil used the proper names of the winds interchangeably is not supported by the evidence.

## 24. The Name of the Slave in Plautus's Aulularia, by Professor H. W. Prescott, of the University of California.

The slave in Plautus's Aulularia is called Strobilus consistently in the text, and, with one exception, in the scene-headings. In the first part of the play the slave is the property of Megadorus; in the second part he is the slave of Lyconides, nephew of Megadorus, and perhaps a nember of Megadorus's household. Immediately following the scenes of the first part is a monologue apparently spoken by the same slave Strubilus who is active in the preceding scenes, but the scene-heading of this monologue in the Palatine Mss. gives his name as FITODICVS, itself corrupt, but perhaps standing for Pythodicus.

Various methods of reconciling the difficulties have been proposed: (1) The theory of retractatio is acceptable only as a last resort ; (2) Pythodicus may be substituted, without offence to the metre, for Strobilus, either in the first part of the play (Dziatzko, Leo), or in the second part (Le Breton). The former substitution destroys the effective alliteration in vs. 334 ; the latter is unlikely because the only evidence for Pythodicus occurs in the first part of the play.

A third solution has $m$ ost in its favor: the names in the scene-headings of the Palatine Mss. are thought to have no independent value, but to be derived in all cases from the text itself. The corrupt scene-heading FITODICVS, then, probably arose from a corruption in the text of the play, not necessarily of the name Strobilus, but of some phrase or word occurring in a speech addressed to Strobilus, as Stalicio in the Casina from stalitio (347) and sta ilico (955). The name Strobilus should be read throughout : parallel cases of one slave serving two masters in the same household have already been quoted by Dziatzko.

The Association adjourned at 12.15 P.M.
At the meeting of the Executive Committee the following two new
members were admitted :members were admitted : -

Mr. Monroe E. Deutsch, San Francisco, Cal.
Mr.C. F. Schmutzler, of the Leland Stanford Jr. University, Palo Alto, Cal.

## INDEX.

Arabic numerals indicate pages of the Transactions; Roman numerals indicate pages of the Proceedings.

Abbadia del Fiume, Etruscan necropolis: lviii ff.
Accent, Greek: 65, 66, 74.
Accent, Latin : 65 ff.; of adjectives: 4849 ; of conjunctions : $34-36$; of pronouns: 36-48.
Accent and ictus, in late Latin hexameters: x f. (cf. lxx).
Acute accent: 67 ff ., 70 ff .
Aeschylus, Agam. 817: lxxxvii.
Alchemy: 1xii.
à $\lambda \lambda o i \omega \sigma \tau s$, problem of, in pre-Socratics: xiv.
aloxos in Homer: lexy ff.
Alphabetic notation of variant sounds: xxii.

Amulets: 87, 89, 104-106, 108, 119, 120, 122.
Aristuphanes, Peace, 990 : xcii ff.
Art, influence of, on Vergil: lxix.
Atharva-Veda, criticism of: xxi; Çântikalpa of: 77 ff .
Athenian courts: lxxxvii.
Athenian politics (early third century в.C.) : lxxix.

Athens, economics of building: 12 ff .; transportation: 17.
Beneventum, arch of Trajan: xiv ff.
Çāntikalpa: 77-127.
Cassiodorus, and Livy: xvi.
Catiline, conspiracy of: lxxxiii ff.
Catullus, lxviii, 93, critical note on: vii ff.
Chinese drama: Iv ff.
Cicero, comitia and concilizm in: $\mathbf{2 2} \mathbf{f f}$.
Cicero, in Cat.: lxxxiii ff.
Cicero, on Latin accent : 66, 70.
Circumflex accent: 68-70.
comitia and conciliam, distinction between: 21-32; rule of Laelius Felix
unknown to Livy: 21; to republican period: 22-26; new generalizations: 26-29; their explanation: 29-32.
Conjunctions, occasional oxytonesis of, in Latin: 34-36.
Corneille, Horace, sources of: 1xix.
cretati pedes: lxxiv.
Crete, language of: xxix f.
Dictionary, Latin, suggestions for a new : xxxiv ff.
Direct speech in Lucan: xciv ff.
Donatus on Latin accent: 71-73, 75.
English, in America: ix.
English etymology (seventeenth century) : lxx.
Etruscan tombs (near Pitigliano): lviii ff. Etruscans: xxx.
Aechir, etymology of: xc.
French, as spoken by Englishmen in Old French literature: xcvi.
Goethe, Faust, Cabala and alchemy in : 1xii.
Grammatical myths : xxiv ff.
Grave accent: 67, 69, 71 .
Guilds, Rome: i8 f.
Hermes Trismegistos: 152.
Hexameters, accent and ictus in (late Latin): x f.
Hexameters, correption in (Greek): xcii.
Hiatus, Greek : xliii; xcii.
Hiatus in Greek Melic poetry : lxiii f.
Hittites: xxviii.
Homer, Hades and the dead in : xiii.
Homer, Mliad, i, 291, critical note on:
xlii f.; ix, 334-343: lxxv ff.
Horace, as a poet of nature: v ff.
Horace and Lucretius: lxxxii.
Horace, imitation of Ovid: Carm. iv. 1. 16 and $A m$. ii. 12. 28; Epist. i. 8. 3 and Am . i. 11. 13: 136-147.

Horace, Carm. i. 3. 1-8: xcvi.
Horace, Sat. i. 6. 126: xcii f.
House, ceremony for protection of : 88, 107, 121.
Iambic words, how far oxytone in Latin : 58-59.
Ictus: 73.
Illyrians: xxxif.
Indo-European languages, minor and problematic: xxvii ff.
Juvenal i, construction of: lxxiff.
Kleist, figurative expressions in : lxxxix f.
Laelius Felix on comitia and concilium: 21, 26, 3 I.
Latin, Gallic clerical, pronunciation of : lxiv f .
Lemnos, language of : xxx.
Ligurian : xxxiii f.
Livy, comitia and concilium in : 21, 28 f.
Livy, Oxyhynchus epitome: xvi.
Livy, third dec., Puteanus group of mss. : xliv.
Lucan, direct speech in: xciv ff.
Lucretius, influence on Vitruvius : xvi ff.
Lucretius and Horace: Ixxxii.
Lucretius and Memmius: lxii.
luscinia, derivation of: lxxxvi f.
Lycians: xxix.
Mahāçānti : 78-80, 83, 86-89, 101-109, 117-122.
Mephistopheles, etymology of : 148 ff .
Mephistophiel: 15 I.
Messapian : xxxii f.
Metaphor, lexical treatment of: xxxiv ff.
Metric, new, a quantitative difficulty in : xliii.

Metric, Latin, studies in : 43-48.
Mommsen on comitia and concilium: 22 f., 31, n. 1.
Motion in pre-Socratic cosmogonies : xiv.
Musical accent : 66 ff .
Nakșatrakalpa: 78-83.
Nakṣatrayāga: 81-83, 92-100, 109-116.
Nature, in Horace: v ff.
Nirrtikarman: 84-86, 101, 116-117.
Numeral systems, California languages: lxix f.
Obsequens, and Livy : xvi.
'Rфеौ $\boldsymbol{\eta} \mathrm{s}$ : 149.
Ophiel : 152.
Optative: iv f.
Ôschiros (l $\sigma \chi \cup \rho b s$ ): 156.

Ovid, imitated by Horace: Am. i. 11 . 13 and Epist. i. 8. $3: 140$; Am. ii. 12. 28 and Carm. iv. 1. 16: 136-147.
Ovid, allusive reminiscences of Horace: 143 f.
Ovid, Harvard manuscript of Heroides $\mathbf{x x i}$. 1-144: 128-1 36 ff .
Pariçistas of the Atharva-Veda : 79-81, 84-87.
Perfect active, Greek, rarity of forms of imperative, optative, and subjunctive : xxiv ff.
Pericles, his building policy: 5-20.
Philosophy, early Greek : xiv (bis).
Pitch, musical, in language : 66.
$\pi \lambda d \sigma \mu a$, use of, in poetical recitation : 58, $61 \mathrm{n} ., 64 \mathrm{n}$.
Plato, forms of interrogative thought in': xciv.
Plato, Rep. vii, simile of the cave: xxii. Plautus, concessive si-clauses in : liv.
Plautus, Aul., name of slave in: xcvii.
Pliny, Jr., date of governorship of Bithynia: xliii.
Plutarch, method in biography: 8 ff .
Plutarch, Pericles, 12: 5-20.
Poetry, ancient, song-like recitation of: 53-57; effect of this upon quantity and word-accent : 57-60.
$\pi \rho о \mu \alpha v \tau \epsilon$, meaning of: xi ff.
Pronouns, frequent oxytonesis of, in Latin: 36-48.
Prosody, figures of (Latin): lxxxviii.
Pulci, Luigi: lxxix f.
Quantity, affecting accent : 70.
Quintilian on Latin accent : 70, 72.
Quod-clauses, restrictive, subjunctive in : lv.
$R$, vowel, in English: lxxx ff.
Ritschl's theory of the influence of the accent upon Latin verse-forms: 62; merits and defects of this theory: 63-64.
Rome, building guilds at: 18 f .
rosca, etymology of: xc.
ruche, etymology of: xc.
Sallust, B.C., lii. 32 : lxxxvi.
Segolates, plural of: liii f.
Septuagint, Oxford Concordance to : lxxxvii.
sesgo, et ymology of: xc.
Si-clauses, concessive, in Plautus: liv.

Siamese vocabulary: lxxx.
Sophocles, Ajax, 186: iv ff.
Sophocles, Antigone, parodos of: lxv ff.
Subjunctive, Latin, second singular in-
definite, as mood of statement : xxvii.
Suppletivwesen, Latin : xxxvii ff.
Tabula smaragdina: 154 .
Thesaurus Linguae Latinae, proposed supplement: xxii ff.
Thraco-Phrygian: xxx f.
T6vos, 'musical mode,' 'melody': 53 n ., 56, 64 n .
Toth: 152.
Trajan, arch of, Beneventum: xiv ff.
Vari, cave at: xxii.
Venetian: xxxii.
Vergil, Aen. i. 249: xcvi f.

Vergil, influence of art on: lxix.
Vergil, wind-names in : xcvii.
Verse-ictus, problem of in ancient poetry: 50; ancient testimonies upon : 51-53; relation to word-accent in Latin: 60-64.
Vitruvius, and Lucretius: xvi ff.
Vowels, correption of (Greek) in hiatus: xcii.
Vowels, coronal, in English: lxxx ff.
Vowels, duration of English, in monosyllables: xc f.
Wakefield, master playwright of: lxxxix. Word-accent in Latin verse : x ff., lxx.
Yonec, sources of the lay of: xciv. Zabulon (diabolus): 156 .

# BIBLIOGRAPHICAL RECORD. 

July 1, 1903, to July $1,1904$.
The Bibliographical Record, which is at best a very incomplete summary of the work of the members, aims to include not only publications that are distinctly philological in character, but also those that deal with the educational aspects of the study of language and literature. The Record is intended to contain only such publications as have appeared within the above-mentioned year.

[^73]
## Frank Frost Abbott.

The Toledo manuscript of the Germania of Tacitus; University of Chicago Decennial Publications, first series, vol. vi., 215-259.

## Alfred Williams Anthony.

Recent literature on the New Testament ; AJT., viii. (April, 1904), 405-412.

## Sidney G. Ashmore.

A plea for the classics in our schools, with particular reference to Latin; Union University Quarterly, May, 1904, i., 30-46.

## Francis M. Austin.

Cacophony in Juvenal, Horace, and Persius; AJP., xxiv., 452-455.

## William W. Barer.

The Greek comic poets as literary critics; PAPA., xxxiv. (1903), p. xxxiv.

Quandō-quidem or quandŏ-quidem; $C R$, xvii., 313-316.

## Phillips Barry.

The ballad of Lord Randal in New England; Journal of American Folk-lore, xvi., 258-264.

## J. Edmund Barss.

Writing Latin (bk. ii., third and fourth year work), pp. 171; New York: University Publishing Co., 1903.

Iatin requirements for Harvard and for Yale; Latin Leafet, iv., No. 83.

The proper ratio between reading and writing in the study of Latin; Ib., No. 92.

## Samuel Eliot Bassett.

The cave at Vari : terra-cotta lamps; AJA., vii. (1903), 338-349.

## William N. Bates.

Iphigenia in Tauris, edited with an introduction, notes, and critical appendix (The American Book Co.) ; also text edition.
Scenes from the Aethiopis on a black-figured amphora; Trans-
actions of the Department of Archaeology, University of Pennsylvania, vol. i., 45 ff .

## Paul Baur.

Review of Gardner's Ancient Athens; $C R .$, Feb., 1904.

## Charles E. Bennett.

Cicero, selected orations; Boston, 1904.

## Maurice Bloomfield.

On some alleged Indo-European languages in cuneiform character; $A J P .$, xxv., $1-14$.
Cerberus, the dog of Hades; The Monist, xiv., 523-540.

## George Willis Botsford.

The story of Rome as Greeks and Romans tell it: an elementary source-book, pp. xii +328 ; New York: The Macmillan Co. [With Lillie Shaw Botsford.]

James W. Bright.
Concerning the unwritten history of the Modern Language Association of America; MLA., xviii., xlilxii.

Brief mention of books: March's Thesaurus dictionary of the English language ; MLN., xviii., 161162. -The international edition of Shakespeare, and T. S. Osmond's Study of metre ; MLA., xix., 63-64.

Rev. of R. Warwick's edition of The complete works of John Lyly; AJP., xxv., $201-206$.
Chaucer and Lollius; MLA., xix., xxii-xxiii.

## Carl Darling Buck.

A Latin grammar for schools and colleges, pp. xi +388 ; Ginn\& Co., 1903. [With W. G. Hale.]

A grammar of Oscan and Umbrian, pp. xvii $+35^{2}$; Ginn \& Co., 1904.

A sketch of the linguistic conditions of Chicago, p. 20 ; The Decennial Publications of the University of Chicago, 1903.

## Curtis C. Bushnell.

The attitude of Plato toward contemporary Greek thought concerning the future life; Butletin of Syracuse University, Series 4, No. 1 (1903), 3-1 3 .
Verse-translation of " $O$ luex beata"; Syracuse University Herald, xxxii., 3 (1903), 75.
Verse-translation of "Quid, tyranne, quid minaris?"; 1b., xxxii., 7 (1904), 215 .

Hymnus ad matutinum dominicae diei (original Latin poem) ; Ib, xxxii., 8 (1904), 244.

Latin selections (Martial and Juvenal), with notes, pp. 24; New Haven: J. T. Hathaway, 1904.

## Edward Capps.

The introduction of comedy into the city Dionysia at Athens; a chronological study in Greek literary history; University of Chicago Decennial Publications, first series, vol. vi., 261-288 (1903).
The 'Nemesis' of the Younger Cratinus ; $H S C P$., vol. xv. (1904), pp. 61-75.

## Mitchell Carroll.

Observations on the harbors and walls of ancient Athens; AJA., viii., 88-91 (1904).

Editor: The George Washingtont University Bulletin; published by the University, 1904.
J. E. Church, Jr.

Sepultura $=$ sepulcrum ; PAPA., xxxiv., lxxiii-lxxiv; Archiv, Bd. xiii., Hft. 3, S. 427-428.

Editor: Nevada State University . Tri-Decennial Celebration, Memorial Volume, Reno, Nevada, 1904, pp. 204.

## Edward Bull Clapp.

Hiatus in Pindar; PAPA., xxxiii., lxxx-lxxxii.
Hiatus in Greek melic poetry; University of California Publications, Classical Philology, i., 1-34.

## Arthur Stoddard Cooley.

The bronze Hermes from Antikythera; Records of the Past, July, 1903.

Greece in 1903; Boston Evening Transcript, Oct. 21, 1903.
In old Orchomenos; 1b., Jan. 1, 1904.

How the Greeks vote; Youth's Companion, Feb. 25, 1904.
The Macedonian tomb and battlefield at Chaironeia; Records of the Past, May, 1904.

## Walter Dennison.

The movements of the chorus chanting the Carmen Saeculare of Horace ; University of Michigan Studies, Humanistic Series, i., 4966.

## Benjamin L. D'Ooge.

New Latin grammar, with J. B. Greenough, G. L. Kittredge, and A. A. Howard, being a revision of Allen and Greenough's Latin grammar; Boston: Ginn \& Co., 1903, pp. $\mathrm{x}+490$.

## Mortimer Lamson Earle.

De Horatii Serm., I. I; Revue de Philologic, xxvii., 233-235.
The supplementary signs of the Greek alphabet; A/A., vii., 429444.

Observatiunculae ad locos quosdam poetarum romanorum; Revue de Philologie, xxvii., 269-272.
Rev. of Newman's edition of the Politics of Aristotle; Political Science Quarterly, xix., 157-160.
Notes [Horace, Carmm., I. 3. i-8; Plato, Rep., 423 B]; PAPA., xxxiv., xxii-xxiii.

De Sophoclis Antigonae vv. 45 et 46; R'evue de Philologie, xxviii., 122.

Ad Ciceronis Catonem Maiorem; Revue de Philologie, xxviii., 123 f.

## H. Edmiston.

The question of the coincidence of word-accent and verse-ictus in the Latin hexameter; $C R$., xvii., 458-460, and PAPA., xxxiv., xxvixxviii.

Diaeresis after the second foot of the hexameter in Lucretius; PAPA., ib., lx-lxi.

## Edgar Alfred Emens.

A Tanagra figurine of Eros; Syracuse University Bulletin, iv., No. I.

## Henry Rushton Fairclough.

Recent archaeological discoveries in Crete; The University of Toronto Monthly, December, 1903.
P. Terenti Afri Andria, pp. lxxxi + 181, second edition; Boston: Allyn \& Bacon, 1904.
Edwin W. Fay.
Further notes on the Mostellaria of Plautus; AJP., xxiv., 245-277.
Lateinisch cena, caesna (Festus) ,, fest "; Archiv, xiii., 436-437.
The word for nightingale in the romance languages; $M L N$., xviii., 195-196.
Some Greek cognates of the Sanskrit root twis- ; CR., xviii., 207-208.
Studies of Latin words in -cinio-, -cinia-, I. Luscinia; Ib., 303-307.
W. S. Ferguson.

The oligarchic revolution at Athens of the year $103 / 2$ в.c. ; Beiträge zur alten Geschichte, iv. (1904), 1-17.

## Charles Mills Gayley.

Poetry of the people, with a preface on the proper way of introducing the young to the study of poetry; Ginn \& Co., 1903, pp. 403.

The principies and progress of English poetry, pp. xc +600 (Principles by C. M. (i.; Progress in collaboration with C. C. Young) ; New York: The Macmillan Co., 1904.

## Pliny Earle Goddard.

Hupa texts; Univ. Calif. Tuhl., American Archaeology and Ethnology, vol. i., No. 2, pp. 290, 1904.

## Edwin L. Green.

tows as a possessive in Polybius, $P A P A$., xxxiv. (1903), iv-v.
The optative mood in Diodorus Siculus, $I b .$, lxii-lxiii.

## Alfred Gudeman.

Rev. of Bornecque's Sénèque le rhéteur, etc. ; $A J P$., xxiv., 337-3+0.
Theodor Mommsen; Lntin Leafet, Nov. 30 and Dec. 7, 1903.
Rev. of John E. Sandys's History of classical scholarship; $C R$., xvii1., 271-276, 316-321.

## Frederic Aldin Hall.

Homeric stories, pp. 200 ; American Book Co., 1903.

## Karl P. Harrington.

Studies in the metrical art of the Roman elegists; PAPA., xxxiv. (1903), xxviii-xxx.

The letters of Lipsius; Methodist Review, lxxxvi., 255-263.

## J. E. Harry.

On the omission of the copula in certain combinations in Greek; PAPA., xxxiv. (1903), viii-x.
The meaning of $\begin{array}{r}\mu \mu a \\ \tau \epsilon \tau \rho a \pi \tau a \iota \\ \text { in }\end{array}$ Euripides' Hippolytus, 246; 16., xli-xlii.
The same in full ; CR., Dec., 1903.
Zu Euripides' Hippolytos; Wochenschrift für klassische Philologie, June 22, 1904, pp. 699 f.
W. A. Heidel.

The logic of the pre-Socratic philosophy, in "Studies in logical theory," by John Dewey and others; Decennial Publications of the University of Chicago, second series, vol. xi.
Rev. of Carlo Pascal, Studii critici sul poema di Lucrezio, $A J P$., xxiv., 3, 330-335.
Rev. of Hermann Diels, Die Fragmente der Vorsokratiker griechisch und deutsch., Ib., 4, 456465.

## Otto Heller.

Die deutsche Schriftstellerin von gestern und heute; Paedagogische Monatshefte, iv., 8-9 (Oct., 1903), 251-264.
Vom germanischen Museum ; Mis-sissippi-Blaetter, Nov., 1903.
Rev. of Dillard, Deutsche Lyrik; MLN., Jan., 1904.
Rev. of Kloss, Lyra GermanicaLatina; Mississippi-Blaetter, 20 March, 1904.

## Arthur Winfred Hodgman.

Adverbial forms in Plautus; CR., xvii., 296-303 (July, 1903).

Carmen Harvardianum, Harvard Graduates' Magazine, xii., 47-48 (Sept., 1903).

## Charles Hoeing.

Vica Pota ; AJP., xxiv., 323-326.

## Milton IV. Humphreys.

Classification of the Barringer find of Alexandrian coius (about 300 in number), in Unizersity of Virginia Alumni Bulletin, iv., No. 2.
A. V. Williams Jackson.

Early Persian literature, Rev. of Browne's Literary history of Persia; Atlantic Monthly, xci., 275-278.
Bibliographie 'Iranisch'; IF., Anzeiger, xiii., 162-174.

By caravan and cavalcade; N. Y. Evening Post, Oct. 3, 1903.
Notes from India, second series, illustrated ; JAOS., xxiii., 307-317.
Benares, the sacred city of the Hindus, its temples, its holy river, and its burning ghats of the dead, illustrated; The Traveller, i., 22-26.
The great Behistun rock and some results of a reëxamination of the old Persian inscriptions on it; /AOS., xxiv., 77-95.
Die iranische religion (Schluss); Grundriss der iranischen Philologie, ii., $641-710$.
Bibliographie 'Iranisch'; IF., Anzeiger, xv., 48-57.
Contributor and editor of articles on Indo-Iranian subjects in The Nezo International Encyclopaedia; New York : Dodd, Mead \& Co., 1903.
On Sanskrit $l=$ Avestan $d ; J A O S$., xxv., 175 .

Notes of a journey to Persia, I., Ib., 176-184.

## Charles W. L. Johnson.

Must spelling reform necessarily be phonetic? ER., xxvi., 5 (Dec., 1903), 516-525.
W. H. Johnson.

Little Tullia, my darling; Evening Post, Saturday Supplement, May 7, 1904.
Rev. of Gudeman's sources of Plutarch's Life of Cicero ; Nat., lxxvii., 17.

Rev. of Lavisse's Education de la démocratie; Ib., lxxviii., 75.
Rev. of Henderson's Life and principate of Nero ; 1b., 174.
Rev. of Sandys's History of classical scholarship ; Ib., 394.
Rev. of Julian Hawthorne's Hawthorne and his circle; Dial, xxxv., 466.

## George Dwight Kellogg.

Report on Philologus lxi. (N. F. Bd. xv.), 1902, in AJP., xxv., 92-96.

The use of the floating-ship motive
in some ancient and renaissance fountains ; AJA., viii., 83-84.
Review of the Williams Literary Monthly in the Williams Weekly, xvii., 290-29I.

Roland G. Kent.
On Albinovanus Pedo, vv. 1-7, apud Sen. Suas. i., 15, in CR., xvii. (1903), 311-312.

A history of Thessaly from the earliest historical times to the accession of Philip V of Macedonia; printed in part; doctoral dissertation; New Era Printing Co., Lancaster, Pa., 1904, viii +27 pp .

## A. L. Kroeber.

The languages of the coast of Cali--fornia south of San Francisco; Univ. Calif. Publ., American Archaeology and Ethnology, ii., 318o. June, 1904.
Emory B. Lease.
Livy's use of -arunt,-erunt, and-cre; AJP., xxiv., 408-422.
Contracted forms of the perfect in Livy ; CR., xviii., 27-36.
Natal monstrosities in Italy before the age of Augustus; St. Louis Medical Review, Sept. 5, 1903.

## Herbert W. Magoun.

Is the present theory of Greek elision sound ? PAPA., xxxiv., xxiv.-xxv.
The dactylic, heroic, and ka $\tau^{\prime} \dot{\nu \delta}$ $\pi \lambda_{l o \nu}$ forms of the hexameter, and their relation to the elegiac pentameter and the prosodiac tetrameter ; $I b$., li.- lv .
Meter or rhythm, which ? $S R$., xii. (1904), 380-38I.

## J. Irving Manatt.

Bevan's The house of Seleucus; $A H R$., ix., $\mathrm{i} ., 1$ 126-1 30 .
Timotheos and the Persians; Atlantic Monthly, xciii., 234-24I.
The germ of Greek culture; Brown Alumni Monthly, April, 1904, 185188.

## Nelson G. McCrea.

The Latin papers of the college entrance examination board; Latin Leaflet, March 21 and 28, 1904, also ER., xxviii. (June, 1904), 2837.

Article on Lucretius; New International Encyclopaedia, xi., 554555.
C. L. Meader.

The value of general and comparative linguistics for the classical student; read at the classical conference of the Michigan schoolmasters' club on April 1; $S R$., xii., 39I-398.

Notes on the order of words in Latin; PAPA., xxxiv., xxxif.

## Truman Michelson.

On some verb-forms in the Rāmāyana; PAPA., xxxiv., xl-xli.
Linguistic archaisms of the Rāmāyana, JAOS., xxv. (first half), 89145.
C. W. E. Millér.

Hephaestion and the anapaest in the Aristophanic trimeter; TAPA., xxxiv. (1903), 49-59.

## Frank G. Moore.

M. Tulli Ciceronis Cato Maior de senectute (with introduction and notes), pp. 205; text edition, pp. 37 ; American Book Co., 1904 (Morris and Morgan's series).
Studies in Tacitean ellipsis: descriptive passages ; TAPA., xxxiv. (1903), 5-26.

## Lewis F. Motr.

Articles on Provençal literature, romance languages and troubadours in The New International Encyclopaedia; New York: Dodd, Mead \& Co., 1903-1904.
The position of the soliloquy, "To be or not to be," in Hamlet; MLA., xix., 26-32.

## H. C. Nutting.

The modes of conditional thought, AJP., xxiv., 278-303.
The Trinummus of Plautus, pp. vi + So ; B. H. Sanborn \& Co., Boston, 1903.

Some theories on subjunctive protasis with indicative apodosis, CK'., $^{\prime}$, xvii., 449-456.

## George N. Olcott.

Notes on Roman coins ; A. J. Num., xxxvii,
Thesaurus linguae Latinae epigraphicae, a dictionary of the Latin inscriptions; vol. i., fasc.i. (A-AB), Rome (Loescher), 1904.

## Edward T. Owen.

Interrogative thought and the means of its expression ; Wisconsin Academy of Sciences, Arts, and Letters, xiv., 355-470.

## Samuel Ball Platner.

The topography and monuments of ancient Rome, xiv +514 pp .; Boston : Allyn \& Bacon, 1904.
Henry W. Prescott.
Magister curiae in Plautus's Aulularia, 107; TAPA., xxxiv. (1903), 41-48.
John Dyneley Prince.
The vocabulary of Sumerian, JAOS., xxv., 49-67.

Le Bouc Émissaire; Journ. Asiatique, 1903, $133^{-1} 5^{6}$.
The Assyro-Babylonian scapegoat controversy ; AJSL., xx., 173-181.
The code of Hammurabi, AJT., 1904, 601-610.
Nisroch and Nusku; JBL., 1904, pt. i.
Dying American speech echoes from Connecticut ; Journ. Amer. Philos. Soc., 1904, 346-352.
Glossary of the Mohegan Pequot language; Amer. Anthropologist, vi., 18-45 (with F. G. Speck).

## Edward K. Putnam.

The Scalacronica version of Havelok; TAPA., xxxiv., xci-xcii.

## Robert S. Radford.

The Latin monosyllables in their relation to accent and quantity; TAPA., xxxiv. (1903), 60-103.
On the recession of the Latin accent in connection with monusyllabic words and the traditional wordorder, first paper; $A J P$., xxv., 147-162.
Rev. of West's Latin grammar for schools; CR., xviii., No. 7 (Oct., 1904).

## Edward Kennard Rand.

On the composition of Boethius's Consolatio philosophiae; HSCP., xv., 1-28.

## Carl Cosmo Rice.

The etymology of Italian greggio, grẹżżo; Modern Philology, i., No. 2 (October, 1903).
The etymology of the romance words for "to go"; MLA., xix., No. 2; new series, xii., 2 (June, 1904).

## Leon Joslah Richardson.

Rhythm as concerned in poetry; PAPA., xxxiv. (1903), lxxxviilxxxviii.

The 1904 University of California Summer Session ; Western Journal of Education, ix., 393-394.

## Erist Riess.

Studics in superstition: Pindar and Bacchylides; AJP., xxiv. (1904), 423-440.
An old worship in Cos; Latin Leafet, iv. (1904), Nos. 76, 77.

Rev. of Minckwitz's Cicero; Ib., No. 80.
Miscellae Vergilianae; 1b., No. 8ı.
The new treasures of the Metropoli$\tan$ Museum ; Ib., No. 87.
The Ajax of Sophocles (criticism of
the performance in Greek) ; Ib., No. 97.
Miscellanea Superstitiosa; Ib., Nos. 98, 99.

## John C. Rolfe.

Afterthoughts: on $a b$ before proper names beginning with a consonant; on de tenero ungui, Hor. Carm., iii. 6. 24; on the meaning of canicula; PAPA., xxxiv. (1903), lv-lx.
Articles in the New International Encyclopaedia and in the Encyclopaedia Americana.
As editor-in-chief of Allyn \& Bacon's College Latin Series; see under Platner and Westcott.

## Henry A. Sanders.

The myth about Tarpeia; University of Michigan Studies, i., 1-47.
The lost epitome of Livy; University of Michigan Studies, i., 149260.

Editor: The University of Michigan Studies; Humanistic Series, vol. i.
Roman historical sources and institutions; New York: The Macmillan Co., 1904.

## Hugo K. Schilling.

Schenken, translated and abridged from JGP., iv., 510-516 ("The semasiology of schenken, ‘skink'") by E. E. Meyer ; Zeitschrift für deutsche Wortforschuns, iv., 328330.

Two reminiscences of children's rhymes in Goethe's Faust I.; MLN., xix., ${ }^{153-155 .}$

## F. G. G. Schmidt.

Sudermann's dramatic development; PAPA., xxxiii., ciii-civ (1902).
Wildenbruch's Das edle Blut, with vocabulary ; D C. Heath \& Co., 1902.

Zur Elisabethen-Legende (Ms. fifteenth century) ; JGP., v., 2, 161179 (1903).

Christian Gottfried Boeckh's Altdeutsches Glossarium; Alemannia, v. (1904).

August Sperl u. seine Werke; $J G P$., v., 4 (1904).

Scribe's Le Verre d'Eau, edited, W. K. Jenkins; New York, 1904.

Grupp's Kulturgeschichte der römischen Kaiserzeit ; AHR., ix., 3, 542-543 (1904).
Dr. W. Kahl's Deutsche Mundartliche Dichtungen; JGP., v., 4 (1904).

John Adams Scott.
Vocative in Homer and Hesiod; $A J P$., xxiv., 192 ff .
Vocative in Aeschylus and Sophocles; $16 .$, xxv., 8i ff.
Homeric notes, first paper; CR., xvii., 238 f.; second paper ; $1 b$. ., xviii., 145 ff.

## J. Henry Senger.

Undine, by Friedrich Baron de la Motte Fouqué, with introduction, notes, and vocabulary; American Book Co.

## Frederick William Shipley.

Certain sources of corruption in Latin manuscripts; New York: The Macmillan Co., 1904, 100 pp . (Reprinted from AJA., vii., Nos. 1, 2, 4.)
Grant Showerman.
The American college course; $E R$., xxvi., 166-1 79 .

Cicero's appreciation of Greek art; PAPA., xxxiv., xxxv-xxxvii.
Rev. of Ernest Gardner's Ancient Athens; AJP., xxiv. (1903).

## E. G. Sihler.

Autumn leaves; Satura Senescentis, in the Violet (Year Book of New York University) for 1904.

## Edgar Howard Sturtevant.

Latin $s(s)$ from $r s(s)$; $C R$., xviii. (1903), 159.

## Charles William Super.

Aspects of Roman education ; Journal of Pedagogy, March, 1904.
Philosophers as failures, Westminster Reviezr, June, 1904.
Salt; Popular Science, July, 1904.

## Herbert Cushing Tolman.

Mycenaean Troy (with G. C. Scoggin), vol. v., Vanderbilt Oriental Series, edited by Herbert Cushing Tolman and James Henry Stevenson, 111 pp. ; American Book Co., 1904.

Danielsson's Assimilation mit nachträglicher Diektasis in Homer; PAPA., xxxiv., xx.

John C. Watson.
The relation of the scene-headings to the miniatures in manuscripts of Terence; HSCP., xiv. (1903), 55-172.
Raymond Weeks.
Texts most used in teaching of Old French, MLLA., vol. xviii., 526534.

The newly discovered Chancun de Willame (first article), Modern Philology, June, 1904, vol. ii., 1-16.

## Charles H. Weller.

The cave at Vari, description, account of excavation, and history ; AJA., vii., 263-288.
The pre-Periclean propylon of the Acropolis at Athens; Ib., viii., 35-70.

## J. H. Westcott.

Livy : books i., xxii., xxiii., with introduction and notes; revised edition, pp. xxxy +425 ; Boston : Allyn \& Bacon, 1904.

## Harry Langford Wilson.

Notice of H. Dessau, Inscriptiones Latinae Selectae, ii., 1; AJP., xxiv. (1903), 362.

Notice of Festschrift zu Otto Hirschfelds sechzigstem Geburtstage, Berlin, 1903; 1b., 485-486.
Notice of A. Carnoy, Le Latin d'Espagne d'après les inscriptions, Louvain, 1902-1903; 16. . xxv. (1904), 114.

The Codex Canonicianus Lat, xli. and the tradition of Juvenal; PAPA., xxxiv., xix.
Bericht über die Jahresversammlung des Archaeological Institute of

America, Dec., 1903; Deutsche .Lit.-Zeitung, xxv. (1904), Nr. 28, Sp. 1784 ; 1b., Nr. 29, Sp. 18451847.

Henry B. Wright.
The American college course ; $E R$., xxvii., 384-394.

The campaign of Plataea, pp. 148; New Haven : The Tuttle, Morehouse \& Taylor Co., 1904.

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Miss Amy L. Barbour, Smith College, Northampton, Mass. 1902.
Phillips Barry, 33 Ball Street, Roxbury Crossing, Boston, Mass. 1901.
J. Edmund Barss, Hotchkiss School, Lakeville, Conn. 1897.

[^74]George K. Bartholomew, Evanswood, Clifton, Cincinnati, O. 1893.
Dr. Samuel E. Bassett, Yale University, New Haven, Conu. (I 68 Sheffield Ave.). 1903.

Dr. F. O. Bates, Detroit Central High School, 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.
Prof. Paul V. C. Baur, Yale University, New Haven, Conn. ( 246 Church St.). 1902.
John W. Beach, Fort Worth University, Fort Worth, Tex. 1902.
Dr. Edward A. Bechtel, University of Chicago, Chicago, 1ll. 1900.
Prof. Isbon T. Beckwith, General Theological Seminary, Chelsea Square, New York, N. Y. 1884.
Charles H. Beeson, 6020 Ingleside Avenue, Chicago, Ill. 1897.
Prof. A. J. Bell, Victoria University, Toronto, Can. (17 Avenue Road). 1887.
Prof. Allen R. Benner, Phillips Academy, Andover, Mass. 1901.
Prof. Charles E. Bennett, Cornell University. 1882.
Prof. John I. Bennett, Union University, Schenectady, N. Y. 1897.
Prof. George R. Berry, Colgate University, Hamilton, N. Y. 1902.
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William F. Biddle, 4305 Spruce St., Philadelphia, Pa. 1894.
Prof. C. P. Bill, Adelbert College of Western Reserve University, Cleveland, O. (853 Logan Ave.). IS94.
Rev. Dr. Daniel Moschel Birmingham, Walden University, Nashville, Tenn. (addr.: Park Row Building, New York, N. Y.). 1898.
Prof. Charles Edward Bishop, College of William and Mary, Williamsburg, Va. 1890.

Prof. David H. Bishop, University of Mississippi, Oxford, Miss. 1905.
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. 1 Sgo.
Prof. C. W. E. Body, General Theological Seminary, New York, N. Y. (4 Chelsea Square). ISS7.
Dr. George M. Bolling, Catholic University if America, 1122 Vermont Ave., Washington, D. C. 1897.
Prof. D. Bonbright, Northwestern University, Evanston, Ill. 1892.
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Prof. Campbell Bonner, University of Nashville (Peabody College for Teachers), Nashville, Tenn. ( $1512 \frac{1}{2}$ Demonbreun St.). 1899.
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Prof. Benjamin Parsons Bourland, Adelbert College of Western Reserve University, Cleveland, O. 1900.
Prof. B. L. Bowen, Ohio State University, Columbus, O. 1895.
Prof. Edwin W. Bowen, Randolph-Macon College, Ashland, Va. 1905.
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.
Prof. Walter R. Bridgman, Lake Forest University, Lake Forest, Ill. 1890.

Prof. James W. Bright, Johns Hopkins University, Baltimore, Md. 18S7.
Prof. John A. van Broekhoven, Fairview Avenue, Hyde Park, Cincinnati, O. 1902.
Miss Caroline G. Brombacher, Erasmus Hall High School, Brouklyn, N. Y. (399 Clermont Ave.). 1897.
Dr. Carroll N. Brown, Asheville School, Asheville, N. C. 1899.
Prof. Demarchus C. Brown, Butler Cullege, Irvington, Ind. (125 Downey Ave., Indianapolis, Ind.). 1893.
Prof. F. W. Brown, Franklin College, Franklin, Ind. 1893.
Dr. Lester Dırman Brown, Drury College, Springfield, Mo. 1904.
Prof. Carletun L. Brownson, College of the City of New York, New York, N. Y. ( 17 Lexington Ave.). 1892.
Principal C. F. Brusie, Mount Pleasant Academy, Ossining. N. Y. 1894.
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Isaac B. Burgess, Morgan Park Academy, Morgan Park, Ill. 1892.
Dr. Theodore C. Burgess, Bradley Polytechnic Institute, Peoria, Ill. 1900.
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Prof. Sylvester Burnham, Colgate University, IIamilton, N. Y. 1885.
Dr. William S. Burrage, Middlebury, Vt. 1898.
Prof. Harry E. Burton, Dartmouth College, Hanover, N. H. 1899.
Prof. Henry F. Burton, University of Rochester, Rochester, N. Y. 1878.
Prof. Curtis C. Bushnell, Syracuse University, Syracuse, N. I. ( 201 Dell St.). 1900.
Pres. Henry A. Buttz, Drew Theological Seminary, Madison, N. J. 1869.
Miss Miriam A. Bytel, Gilman School, Cambridge, Mass. (10 Avon St.). 1901.
Prof. Edward Capps, University of Chicago, Chicago, Ill. 1889.
Prof. Mitchell Carroll, Columbian University, Washington, D. C. 1894.
Frank Carter, The College, Winchester, England. 1 S97.
Dr. Franklin Carter, 324 Prospect St., New Haven, Conn. 1871.
Prof. Jesse Benedict Carter, American Schoul of Classical Studies, Rome, Italy (Via Vicenza 5). 1898.
Prof. Mary Emily Case, Wells College, Aurora, N. V. 1895.
Prof. Clarence F. Castle, University of Chicago, Chicago, Ill. 1888.
William Van Allen Catron, West Side High School, Milwaukee, Wis. (1 306 Grand Ave.). 1896.
Prof. Julia II. Caverno, Smith College, Northampton, Mass. 1902.
Miss Eva Channing, Exeter Chambers, 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.
Miss Emma Kirkland Clark, 545 A Quincy St., Brooklyn, N. Y. 1896.
Dr. Frank Lowry Clark, Washburn College, Topeka, Kan. (1511 West St.). 1902.
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. $\mathrm{ISS}_{4}$.
Principal D. Y. Comstock, St. Johnsbury, Vt. I8SS.
Prof. Elisha Conover, Delaware College, Newark, Del. 1897.
Edmund C. Cook, Berkeley School, 72d St. and West End Ave., New York, N. Y. 1904.

Dr. Arthur Stoddard Cooley, $3^{8} 7$ Central St., Auburndale, Mass. 1896.
J. Randolph Coolidge, Jr., Chestnut Hill, Mass. 1884.

Prof. William L. Cowles, Amherst College, Amherst, Mass. 1888.
Prof. W. H. Crogman, Clark University, South Atlanta, Ga. I 898.
W. L. Cushing, Westminster School, Simsbury, Conn. 1888.

Prof. William K. Denison, Tufts Cullege, Cullege Hill, Mass. 1899.
Prof. Walter Dennison, University of Michigan, Ana Arbor, Mich. 1899.
Prof. Samuel C. Derby, Ohio State University, Columbus, O. 1895.
Sherwood Owen Dickerman. 1902.
Prof. Howarl Freeman Doane, 252 West 104th St., New York, N. Y. 1 S97.
Prof. Benjamin L. D'Ooge, State Normal College, 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. 1 S97.
Prof. Eli Dunkle, Ohio University, Athens, O. 1904.
Prof. Frederic Stanley Dunn, University of Oregon, Eugene, Ore. 1899.
Miss Emily Helen Dutton, Vassar College, Poughkeepsie, N. Y. is 9 S.
Prof. Mortimer Lamson Earle, Columbia University, New York, N. Y. ISgo.
Dr. Herman L. Ebeling, Hamilton College, Clinton, N. Y. IS92.
Prof. William S. Ebersole, Cornell College, Mt. Vernon, Ia. IS93.
Prof. W. A. Eckels, Miami University, Oxford, O. 1 S94.
Dr. Homer J. Edmiston, Via Vicenza 5, Rume, ltaly. 1894.
Prof. George V. Edwards, State Normal College, Ypsilanti, Mich. (i2I Normal st.). 1901.
Prof. Katharine M. Edwards, Wellesley Cullege, Wellesley, Mass. 1893.
Prof. James C. Egbert, Columbia University, New York, N. Y. 1889.
Prof. Wallace Stedman Elden, Ohio State University, Columbus, O. (1452 Neil Ave.). 1900.
Prof. A. Marshall Elliott, Johns Hopkins University, Baltimore, Md. $18 S_{4}$.
Prof. W. A. Elliott, Allegheny College, Meadville, Pa. 1 S97.
Prof. Herbert C. Elmer, Cornell University, Ithaca, N. Y. 1887.
Prof. L. H. Elwell, Amherst College, Amherst, Mass. 1883.
Miss E. Antoinette Ely, The Clifton School, Cincinnati, O. 1893.
Prof. Edgar A. Emens, Syracuse University, Syracuse, N. Y. 1 S95.
Prof. O. F. Emerson, Adelbert College of Western Reserve University, Cleve land, O. (50 Wilbur St.). 1903.
Prof. Annie Crosby Emery, Brown University, Providence, R. I. IS96.
Prof. George Taylor Ettinger, Muhlenberg College, Allentown, Pa. $\quad$ iS96.
Principal O. Faduma, Peabody Academy, Troy, N. C. 1900.
Prof. Arthur Fairbanks, State University of Iowa, Iowa City, Ia. 1886.
Prof. Charles E. Fay, Tufts College, College Hill, Mass. 1885.
Prof. Edwin W. Fay, University of Texas, Austin, Tex. 1889.
Pres. Thomas Fell, St. John's College, Annapolis, Md. 1888.

Principal F. J. Fessenden, Fessenden School, West Newton, Mass. 1 Sgo.
Prof. Mervin G. Filler, Dickinson College, Carlisle, Pa. 1905.
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, Charluttesville, Va. (Life member). 1902.
Prof. Roy C. Flickinger, Epworth University, Oklahoma City, Okl. 1905.
Miss Helen C. Flint, Mount Holyoke College, South Hadley, Mass. I S97.
Prof. Herbert B. Foster, Lehigh University, Bethlehem, Fa. 1900.
Prof. Frank H. Fowler, Lombard College, Galesburg, Ill. 1893.
Prof. Harold N. Fuwler, Western Reserve University (College for Women), Cleveland, O. $\quad$ I 885.
Miss Susan Fowlcr, Columbia University, New York, N. Y. 1904.
Dr. Wilmer Cave France, Radnor, Pa. 1900.
Dr. Susan B. Franklin, Ethical Culture School, 63d St. and Central Park West, New York, N. Y. 1890.
Dr. I. F. Frisbee, 187 W. Canton St., Boston, Mass. 1898.
Prof. Charles Kelsey Gaines, St. Lawrence University, Canton, N. J. ISgo.
Dr. William Gallagher, Thayer Academy, South Braintree, Mass. 1886.
Frank A. Gallup, 「acker Cullegiate Institute, Brooklyn, N. Y. (320 Clinton Ave.). 189 S .
Prof. Henry Gibhons, University of Pennsylvania, Philadelphia, Pa. (405 South 4 Ist St.). 1890.
Principal Seth K. Gifford, Moses Brown School, Providence, R. I. ISgi.
Prof. John W. Gilbert, Paine College, Augusta, Ga. (1620 Magnolia St.). 1897.
Prof. Basil L. Gildersleeve, Johns Hopkins University, Baltimore, Md. 1876.
Clarence Willard Gleason, Roxbury Latin School, Roxbury, Mass. (6 Copeland St.). 1901.

Prof. Thomas D. Goodell, Yale University, New Haven, Conn. (35 Elgehill Road). 1883.

Prof. Charles J. Goodwin, Lehigh University, So. Bethlehem, Pa. I89I.
Prof. William W. Goodwin, Harvard University, Cambridge, Mass. (5 Follen St.). 1870.

Prof. Roscoe Allan Grant, De Witt Clinton High School, New York, N. Y. ( 60 West $13^{\text {th St. }}$ ). 1902.
Prof. E. L. Green, South Carolina College, Columbia, S. C. 1898.
Prof. Herbert Eveleth Greene, Johns Hopkins University, Baltimore, Md. 1890.
Prof. John Greese, Colgate University, Hamilton, N. V. 1902.
Prof. Wilber J. Greer, Washburn College, Topeka, Kan. 1892.
Dr. Alfred Gudeman, Franz Josefstrasse 12, Munich, Germany. 1889.
Dr. Roscoe Guernsey, Columbia University, New York, N. Y. 1902.
Prof. Charles Burton Gulick, Harvard University, Cambridge, Mass. (I 8 Walker St.). 1894.
Prof. George D. Hadzsits, University of Cincinnati, Cincinnati, O. 1904.
Dr. Walter D. D. Hadzsits, Smith College, Northampton, Mass. 1904.
Miss Elizabeth Hazelton Haight, Vassar College, Poughkeepsie, N. I. 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.). 1896. Frank T. Hallett, Brown University, Providence, R. I. (283 George :t.). 1902. Prof. T. F. Hamblin, Bucknell University, Lewisburg, Pa. 1895.
Prof. Adelbert Hamilton, Elmira College, Elmira, N. Y. 1895.
Miss Clemence Hamilton, Vassar College, Puughkecpsie, N゙. Y. 1901.
Principal John Calvin Hanna, High School, Oak Park, 1ll. (209 Sunth East Ave.). I896.
Prof. Albert Harkness, Brown Ụniversity, Providence, R. I. 1869.
Prof. Albert Granger Harkness, Brown University, Providence, K. I. 1896.
Pres. William R. Harper, University of Chicago, Chicago, Ill. 1887.
Prof. Karl P. Harrington, University of Maine, Orono, Me. 1892.
Miss Mary B. Harris, 2252 Calumet Ave., Chicago, Ill. 1902.
Prof. W. A. Harris, Richmond College, Richmond, Va. (1606 West Grace St.). I895.
Prof. William Fenwick Harris, Harvard University, Cambridge, Mass. (8 Mercer Circle). 1901.
Prof. J. E. Harry, University of Cincinnati, Cincinnati, O. 1896.
Dr. Carl A. Harström, The Folly, Norwalk, Conn. 1900.
Prof. Samuel Hart, Berkeley Divinity School, Middletown, Conn. 1871.
Eugene W. Harter, Erasmus Hall High School, Brooklyn, N. Y. (I2I Marlborough Road). 1901.
Prof. Paul Haupt, Johns Hopkins University, Baltimore, Md. 1884.
Prof. Adeline Belle Hawes, Wellesley College, Wellesley, Mass. 1902.
Dr. Edward Southworth Hawes, Polytechnic Institute, Brooklyn, N. Y. 1888.
Rev. Dr. Henry H. Haynes, 6 Ellery St., Cambridge, Mass. 1900.
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, Colo. 1900.
Prof. Otto Heller, Washington University, St. Louis, Mo. ISg6.
Nathan Wilbur Helm, Phillips Exeter Academy, Exeter, N. H. 1900.
Prof. George Hempl, University of .Michigan, Ann Arbor, Mich. (IO27 East University Ave.). 1895.
Prof. Archer Wilmot Hendrick, Whitman College, Walla Walla, Wash. 1904.
Prof. G. L. Hendrickson, University of Chicago, Chicago, Ill. IS92.
Adam Fremont Hendrix, University of Kansas, Lawrence, Kan. 1904.
Prof. John H. Hewitt, Williams College, Williamstown, Mass. IS86.
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.
Dr. Gertrude Hirst, Barnard College, Columhia University, New York, N. Y. 1902.
Harwood Hoarley, 140 West 13th St., New York, N. Y. 1903.
Archibald L. Hodges, Wadleigh High School, II4th St., near 7th Ave., New York City. 1899.
Prof. Arthur W. Hodgman, Ohio State University, Columbus, O. (202 West Sth Ave.). 1896.

Dr. 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. (299 Lawrence St.). 1883.
Prof. Herbert Müller Hopkins, Trinity College, Hartford, Conn. ( $\&$ Trinity St.). 1898.

Prof. Joseph Clark Hoppin, American School of Classical Studies, Athens, Greece. 1900.

Prof. William A. Houghton, Bowdoin College, Brunswick, Me. 1892.
Prof. Albert A. Howard, Harvard University, Cambridge, Mass. (12 Walker St.). 1892.

Prof. George E. Howes, University of Vermont, Burlington, Vt. 1896.
Prof. Frank G. Hubbard, University of Wisconsin, Madison, Wis. 1896.
Prof. J. H. Huddilston, University of Maine, Orono, Me. 1898.
Prof. Walter Hul ihen, Grant University, Chattanooga, Tenn. 1904.
Prof. Milton IV. Humphreys, University of Virginia, Charlottesville, Va. 1871.
Stephen A. Hurlbut, Columbia University, New York, N. Y. 1903.
Dr. George B. Hussey, East Orange, N. J. 1887.
Frederick L. Hutson, 5727 Monroe Ave., Chicago, Ill. 1902.
Prof. J. W. D. Ingersoll, Yale University, New Haven, Conn. (3II Crown St.). 1897.

Andrew Ingraham, 4 Bryant St., Cambridge, Mass. 1888.
Prof. A. V. Williams Jackson, Columbia University, New York, N. Y. 1884.
Prof. George E. Jackson, Washington University, St. Louis, Mo. (4400 Murgan St.). 1890.
Prof. M. W. Jacobus, Hartford Theological Seminary, Hartford, Conn. (i4 Marshall St.). 1893.
Prof. Hans C. G. von Jagemann, Harvard University, Cambridge, Mass. (iI 3 Walker St.). 1882.
Dr. Samuel A. Jeffers, State Normal School, California, Pa. 1904.
Miss Anna S. Jenkins, 427 Nostrand Ave., Brooklyn, N. Y. 1899.
Dr. Charles W. L. Johnson, 32 East Preston St., Baltimore, Md. 1897.
Prof. William H. Johnson, Denison University, Granville, O. 1895.
Prof. Eva Johnston, University of the State of Missouri, Columbia, Mo. 1902.
Dr. George W. Johnston, University of Toronto, Toronto, Can. $1895 \cdot$
Augustine Jones, Providence, R. I. 1896.
Prof. J. C. Jones, University of the State of Missouri, Columbia, Mo. 1902.
Prof. George Dwight Kellogg, Williams College, Williamstown, Mass. 1897.
Prof. Francis W. Kelsey, University of Michigan, Ann Arbor, Mich. 1890.
Dr. Roland G. Kent, University of Penncylvania, Philadelphia, Pa. (3707 Woodland Ave.). 1903.
Prof. Charles R. Keyes, Cornell College, Mt. Vernon, Ja. Igor.
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.

Prof. J. C. Kirtland, Jr., Phillips Exeter Academy, Exeter, N. H. 1895.
Prof. George Lyman Kittredge, 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. A. G. Laird, University of Wisconsin, Madison, Wis. 1890.
Prof. William A. Lamberton, University of Pennsylvania, Philadelphia, Pa. 1888.
Prof. W. B. Langsdorf, 189 Kokutaijimura, Hiroshima, Japan. 1895.
Prof. Charles R. Lanman, Harvard University, Cambridge, Mass. (9 Farrar St.). 1877.

Lewis H. Lapham, 8 Bridge St., New York, N. Y. 1880.
Prof. William Cranston Lawton, Adelphi College, Brooklyn, N. Y. (224 Willoughby Ave.). 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, New York, N. Y. (I603 Amsterdam Ave.). 1895.
Dr. J. T. Lees, University of Nebraska, Lincoln, Neb. 1888.
Prof. Thomas B. Lindsay, Boston University, Boston, Mass. 1880.
Prof. Charles Edgar Little, University of Nashville, Nashville, Tenn. 1902.
Miss Dale Livingstone, State Normal School, California, Pa. 1902.
Prof. Gonzalez Lodge, Teachers College, Columbia University, New York, N. Y. IS8S.
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. Nelson G. McCrea, Columbia University, New York, N. Y. 1890.
Prof. Walton Brooks McDaniel, College Hall, University of Pennsylvania, Philadelphia, Pa. 1901.
Prof. J. H. McDaniels, Hobart College, Geneva, N. Y. 1871.
Prof. A. St. Clair Mackenzie, State College of Kentucky, Lexington, Ky. 1901.
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.
Pres. George E. MacLean, State University of Iowa, Iowa City, Ia. (603 College St.). 1891.
Prof. W. J. McMurtry, Yankton College, Yankton, S. D. 1893.
Prof. Grace H. Macurdy, Vassar College, Poughkeepsie, N. Y. I894.
David Magie, Jr., Princeton University, Princeton, N. J. (33 Prospect Ave.). 1901.
Prof. H. W. Magoun, 70 Kirkland St., Cambridge, Mass. 1891.
Prof. J. H. T. Main, Iowa College, Grinnell, Ia. 1891.
Prof. J. Irving Manatt, Brown University, Providence, R. I. (15 Keene St.). 1875.

Prof. John M. Manly, University of Chicago, Chicago, Ill. 1896.

Prof. W. G. Manly, University of the State of Missouri, Columbia, Mo. 1902. Prof. F. A. March, Lafayette College, Easton, Pa. 1869.
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., Cambridge, Mass. 1894.
Dr. Clarence Linton Meader, University of Michigan, Ann Arbor, Mich. 1902.
I'rof. Julan Moffatt Mecklin, Washington and Jefferson College, Washington, Pa. 1900.

Prof. Frank Ivan Merchant, 65 Irving Place, New York City. 1898.
Ernest Loren Meritt, 435 Elm St., New Haven, Conn. 1903.
Prof. Elmer T. Merrill, Wesleyan University, Middletown, Conn. 1883.
Dr. Truman Michelson, 69 Walker St., Cambridge, Mass. 1900.
Dr. Alfred W. Milden, Emory and Henry Cullege, Emory, Va. 1903.
Prof. C. W. E. Miller, Johns Hopkins University, Baltimure, Md. 1892.
Prof. Walter Miller, Tulane University, New Orleans, La. 1900.
Prof. Clara Millerd, Iowa College, Grinnell, Ia. 1902.
Dr. Richard A. v. Minckwitz, De Witt Clinton High Schoul, Manhattan, New York, N. Y. (Amsterdam Ave. and io2d St.). 1895.

Charles A. Mitchell, Asheville School, Asheville, N. C. 1893.
Prof. Clifford Herschel Moore, American School of Classical Studies, Rume, Italy (Via Vicenza 5). 1889.
Prof. Frank G. Moore, Dartmouth College, Hanover, N. H. 1888.
Prof. George F. Moore, Harvard University, Cambridge, Mass. (3 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. 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.

Prof. Lewis F. Mott, College of the City of New York, New York, N. Y. (17 Lexington Ave.). 1898.
Prof. George F. Mull, Franklin and Marshall College, Lancaster, I'a. 1896.
Prof. Wilfred P. Mustard, Haverford College, Haverford, Pa. 1892.
Prof. Francis Philip Nash, Hobart College, Geneva, N. Y. 1872.
Dr. K. P. R. Neville, University of Illinois, Champaign, Ill. (1002 Oregon St., Urbana, Ill.). 1902.
Dr. Charles B. Newcomer, Drury College, Springfield, Mo. 1900.
Prof. Barker Newhall, Kenyon College, Gambier, O. 1891.
Emily Norcruss Newton (Mrs. James H.), Holyoke, Mass. (159 Chestnut St.). 1902.

Prof. Frank W. Nicolson, Wesleyan University, Middletown, Conn. 1888.
Dr. William A. Nitze, Columbia University, New York, N. Y. 1902.
Prof. Richard Norton, American School of Classical Studies, Rome, Italy (Via Vicenza 5). 1897.

Prof. George N. Olcott, Columbia University, New York, N. Y. (43S W. ir6th St.). 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.
Miss Elisabeth H. Palmer, Vassar College, Poughkeepsie, N. Y. 1902.
Prof. Charles P. Parker, Harvard University, Cambridge, Mass. (ro75 Massachusetts Ave.). 1884.
Prof. James M. Paton, Wesleyan University, Middletown, Conn. 1887.
John Patterson, Louisville High Schoul, Louisville, Ky. (inif Fourth St.). 1900.

Dr. Charles Peabody, Phillips Academy, Andover, Mass. (197 Brattle Street, Cambridge, Mass.). 1894.
Prof. E. M. Pease, 1423 Chapin Street, Washington, D. C. 1887.
Prof. Tracy Peck, Yale University, New Haven, Conn. 1871.
Miss Frances Pellett, Kelly Hal!, 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.
Dr. Elizabeth Mary Perkins, 1355 Kenesaw St., Washington, D. C. 1904.
Prof. Emma M. Perkins, Western Reserve University (College for Women), Cleveland, O. 1892.
Prof. Bernadotte Perrin, Yale University, New Haven, Conn. (i36 Fa:nam Hall). 1879.

Prof. Edward D. Perry, Columbia University, New York, N. Y. (542 West 114th St.). 1882.
Prof. John Pickard, University of the State of Missouri, Columbia, Mo. IS93.
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 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. (I2 Nassau St.). 1895.

Prof. Ferris W. Price, Swarthmore Cullege, Swarthmore, Pa. 1895.
Prof. Benjamin F. Prince, Wittenberg College, Springfield, O, 1893.
Prof. John Dyneley Prince, Columbia University, New York, N. Y. 1899.
Prof. Robert S. Radford, Elmira College, Elmira, N. Y. (710 Park Place). 1900.
M. M. Ramsey, Johns Hopkins University, Baltimore, Mr. 1894.

Dr. Edward Kennard Rand, Harvard University, Cambridge, Mass. (104 Lake View Ave.). 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. (22I Church St.). 1884.

Dr. Rufus B. Richardson, The Independent, izo Fulton St., New York, N. Y. 1882.

Dr. Ernst Riess, D= Witt Clinton High School, Manhattan, N. Y. (Amsterdam Ave. and ro2d St.). 1895 .
Prof. Edmund Y. Robbins, Princeton University, Princeton, N. J. 1895.
Dr. Arthur IV. Roberts, Brookline High School, Brookline, Mass. 1884.
Prof. David M. Robinson, Johns Hopkins University, Baltimore, Md. 1905.
Dr. James J. Robiuson, Hotchkiss School, Lakeville, Conn. 1902.
Prof. W. A. Robinson, Lawrenceville School, Lawrenceville, N. J. 1888.
Prof. Joseph C. Rockwell, Buchtel College, Akron, O. 1896.
Prof. F. E. Rockwood, Bucknell University, Lewislurg, l'a. 1885.
Prof. Cornelia H. B. Rogers, Vassar College, Poughkeepsie, N. Y. igo3.
George B. Rogers, Phillips Exeter Academy, Exeter, N. H. 1902.
Pruf. John C. Rolfe, University of Pennsylvania, Philadelphia, Pa. (4400 Chestnut St.). 1890.
C. A. Rosegrant, Potsdam State Nurmal School, Potsdam, N. Y. 1902.

Prof. Clarence F. Ross, Allegheny College, Meadville, Pa. 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 fur Girls, 38 West Fifty-ninth St., New York, N. Y. 1875.

Benjamin H. Sanborn, Wellesley, Mass. 1890.
Prof. Henry A. Sanders, University of Michigan, Ann Arbor, Mich. (213 South Thayer St.). 1899.
Prof. Myron R. Sanford, Middlebury College, Middlebury, Vt. 1894.
Miss Catharine Saunders, Vassar College, Poughkeepsie, N. Y. 1900.
Joseph H. Sawyer, Williston Seminary, Easthampton, Mass. 1897.
Prof. W. S. Scarborough, Wilberforce University, Wilherfurce, O. 1882.
Prof. J. J. Schlicher, State Normal School, Terre Haute, Ind. 1901.
Prof. H. Schmidt-Wartenberg, University of Chicago, Chicago, Ill. 1894.
Edmund F. Schreiner, 486 N. Clark St., Chicago, Ill. 1900.
G. E. Scoggin, Cambridge, Mass. 1904.

Dr. Charles P. G. Scott, Yonkers, N. Y. (150 Woodworth Ave.). 1880.
Prof. John Adams Scott, Northwestern University, Evanston, 1ll. (2030 Orrington Ave:). 1898.
Miss Annie N. Scribner, 1823 Orringtun Ave., Evanston, Ill. 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, Brandon Hall, Brookline, 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'sCollege, Lynchburg, Va. (College Park P.O.). 1897.
Prof. J. A. Shaw, Highland Military Academy, Worcester, Mass. 1876.
Pres. Andrew Shedd, University of Florida, Lake City, Fla. 1904.

Prof. Edward S. Sheldon, Harvard University, Cambridge, Mass. (iI Francis Ave.). 1881.

Prof. F. W. Shipley, Washington University, St. Louis, Mo. 1900.
Prof. Paul Shorey, University of Chicago, Chicago, III. 1887.
Prof. 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.
Principal M. C. Smart, Littleton, N. H. 1900.
Prof, Charles Forster Smith, University of Wisconsin, Madisun, Wis. 1883.
Prof. Charles S. Smith, Columbian University, Washington, D. C. (2122 H St.). 1895.

Prof. Clement L. Smith, Harvard University, Cambridge, Mass. 1882.
Prof. Harry de Forest Smith, Amherst Cullege, Amherst, Mass. 1899.
Prof. Josiah R. Smith, Ohio State University, Columbus, O. (257 E. Broad St.). 1885.

Prof. Kirby F. Smith, Johns Hopkins University, Baltimore, Md. 1897.
Prof. Herbert Weir Smyth, Harvard University, Cambridge, Mass. (9I Walker St.). 1886.

Dr. George C. S. Southworth, Gambier, O. 1883.
Prof. Edward H. Spieker, Johns Hopkins University, Baltimore, Md. (915 Edmondson Ave.). 1884.
Dr. Sidney G. Stacey, Erasmus Hall High School, Brooklyn, N. Y. (119 Montague St.). 1901.
Prof. Jonathan Y. Stanton, Bates College, Lewiston, Me. 1888.
Eric Arthur Starbuck, Worcester, Mass. 1904.
Miss Josephine Stary, 3I West Sixty-first St., New York, N. Y. 1899.
Prof. R. B. Steele, Vanderbilt University, Nashville, Tenn. (240I 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, University of the State of Missouri, Columbia, Mo. 1901.
Dr. Charles W. Super, Ohio University, Athens, O. 188ı.
Prof. William F. Swahlen, De Pauw University, Greencastle, Ind. 1904.
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. Igoi.
Prof. Fitz Gerald Tisdall, College of the City of New York, New York, N. Y. (17 Lexington 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.
Dr. O. S. Tonks, Columbia University, New York, N. Y. 1903.
Prof. J. A. Tufts, Phillips Exeter Academy, Exeter, N. H. 1898.
Prof. Milton II. Turk, Hobart College, Geneva, N. Y. 1896.
Prof. Esther Van Deman, The Woman's College, Baltimore, Md. 1899.
Addison Van Name, Yale University, New Haven, Conn. ( 121 High St.). 1869.

Prof. N. P. Vlachos, Temple College, Philadelphia, Pa. 1903.
Prof. Frank Vogel, Massachusetts Institute of Technolugy, Boston, Mass. 1904.
Dr. W. II. Wait, University of Michigan, Ann Arbor, Mich. 1893.
Dr. John W. H. Walden, Harvard University, Cambridge, Mass. 1889.
Prof. Arthur T. Walker, University of Kansas, Lawrence, Kan. 1895.
Dr. Alice Waltun, 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.

Dr. Arletta Warren, State Normal School, Madison, S. D. 1904.
Prof. Minton Warren, Harvard University, Cambridge, Mass. (105 Irving St.). 1874.

Prof. William E. Waters, New York University, University IIeights, N. Y. (604 West IIfth St.). 1885.
Dr. John C. Watson, Cornell University, Ithaca, N. Y. 1902.
Dr. Helen L. Webster, Wilkesbarre lnstitute, Wilkesbarre, Pa. 1890.
Prof. Raymond Weeks, University of the State of Missouri, Columbia, Mo. 1902.
Dr. Charles Heald Weller, Yale University, New Haven, Conn. (392 Orange St.). 1903.

Dr. Mary C. Welles, Newington, Conn. 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, Cullege of William and Mary, Williamsburg, Va. 1888.
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. 1891.
Dr. Andrew C. White, Cornell University, Ithaca, N. Y. (424 Dryden Road). 1886.
Prof. John Williams White, Harvard University, Cambridge, Mass. (18 Concord Ave.). 1874.
Vice-Chancellor 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. ( 1005 N. Meridian St.). 1887.
Prof. George A. Williams, Kalamazoo College, Kalamazoo, Mich. (136 Thompson St.). 1891.
Prof. Mary G. Williams, Mt. Holyoke College, South Hadley, Mass. 1899.
Prof. Harry Langford Wilson, Johns Hopkins University, Baltimore, Md. 1898.
Miss Julia E. Winslow, 3I Sidney Place, Brooklyn, N. Y. 1903.
Dr. J. D. Wolcott, University of Chicago, Chicago, IIl. 1898.
cxxiv American Philological Association.
Prof. E. L. Wood, Manual Training High School, Providence, R. I. (271 Alabama Ave.). 1888.
Prof. Henry Wood, Johns Hopkins University, Baltimore, Md. 1884.
Dr. Willis Patten Woodman, 6 Greenough Ave., Jamaica Plain, Mass. 1901.
Prof. Frank E. Woodruff, Bowdoin College, Brunswick, Me. 1887.
C. C. Wright, University of Virginia, Charlottesville, Va. 1902.

Prof. Ellsworth D. Wright, Lawrence University, Appleton, Wis. 1898.
Dr. Henry B. Wright, Yale University, New Haven, Conn. (136 Farnam Hall). 1903.

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. (3I2 West 88th St.). 1890.

Prof. R. B. Youngman, Lafayette College, Easton, Pa. 1901.
[Number of Members, 505.]

## WESTERN BRANCH.

## MEMBERS OF THE PHILOLOGICAL ASSOCIATION OF THE PACIFIC COAST.

## (Established 1899.)

Menrbership 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.
Albert H. Allen, University of California, Berkeley, Cal. 1900.
Prof. James T. Allen, University of Califurnia, Berkeley, Cal. (2243 College Ave.). 1898.

Prof. Louis F. Anderson, Whitman College, Walla Walla, Wash. 1887.
Prof. M. B. Anderson, Leland Stanford Jr. University, Stanfurd University, Cal. 1901.

Prof. H. T. Archiball, Occidental College, Los Angeles, Cal. 1901.
Prof. William D. Armes, University of California, Berkeley, Cal. 1902.
Prof. William F. Badè, Pacific Theological Seminary, Berkeley, (al. 1903.
Dr. J. W. Basore, University of Califurnia, Berkeley, Cal. 1902.
Prof. C. B. Bradley, University of California, Berkeley, Cal. (2639 Durant Ave.). 1900.

Carlos Brans'y, University of California, Berkeley, Cal. 1903.
Rev. William A. Brewer, San Mateo, Cal. 1900.
Elvyn F. Burrill, 2536 Bancroft Way, Berkeley, Cal. 1900.
Prof. Luella Clay Carson, University of Oregon, Eugene, Ore. 1900.
B. H. Cerf, University of California, Berkeley, Cal. 1903.

Samuel Chambers, University of California, Berkeley, Cal. 1900.
Prof. J. E. Church, Jr., State University of Nevada, Reno, Nev. 1901.
Prof. Edward B. Clapp, University of California, Berkeley, Cal. (I Bushnell Place). 1886.
A. Huratio Cogswell, 2135 Santa Clara Ave., Alameda, Cal. 1900.

Prof. W. A. Cooper, Leland Stanford Jr. University, Stanford University, Cal. 1901.
Prof. L. IV. Cushman, Nevada State University, Reno, Nev. 1900.
J. Allen De Cou, Red Bluff, Cal. 1900.
L. J. Dem =ter, University of California, Berkeley, Cal. 1903.

Monroe E. Deutsch, San Francisco, Cal. 1904.
Henry B. Dewing, University of Califırnia, Berkeley, Cal. 1903.
Prof. J. Elmore, Leland Stanford Jr. University, Stanford University, Cal. 1900.
Prof. Alfred Emerson, Affiliated Colleges, San Francisco, Cal. 1903.
Prof. H. Rushton Fairclough, Leland Stanford Jr. University, Stanford University, Cal. 1887.
Dr. W. S. Ferguson, University of California, Bërkeley, Cal. 1899.
Prof. Ewald Flügel, Leland Stanford Jr. University, Stanford University, Cal. 1900.
Dr. B. O. Foster, Leland Stanford Jr. University, Stanford University, Cal. I899.
Prof. P. J. Frein, University of Washington, Seattle, Wash. 1900.
Prof. Juhn Fryer, University of California, Berkeley, Cal. 1900.

Dr. John Gamble, Haywards, Cal. 1902.
Prof. Charles Mills Gayley, University of California, Berkeley, Cal. 1895.
Charles Bertie Gleason, High School, San Jose, Cal. 1900.
Mr. Pliny E. Goddard, University of California, Berkeley, Cal. 1902.
Prof. Julius Goebel, Leland Stanford Jr. University, Stanford University, Cal. 1900.
Walter H. Graves, 1428 Seventh Ave., Oakland, Cal. 1900.
Miss Rebecca T. Greene, Palo Alto, Cal. 1900.
Prof. James O. Griffin, Leland Stanford Jr. University, Stanford University, Cal. 1896.

Prof. A. S. Haggett, University of Washington, Seattle, Wash. Igor.
Walter M. Hart, University of California, Berkeley, Cal. 1903.
Miss Hodgkinson, Lowell High School, San Francisco, Cal. 1903.
M. C. James, High School, Berkeley, Cal. 1900.

Prof. Oliver M. Johnston, Leland Stanford Jr. University, Stanford University, Cal. 19co.
W. L. Keep, Red Bluff, Cal. 1900.

Tracy R. Kelley, 2214 Jones St., San Francisco, Cal. 1900.
Dr. A. L Kroeher, University of California, Berkeley, Cal. 1902.
Prof. A. F. Lange, University of California, Berkeley, Cal. 1900.
Ivan M. Linforth, University of California, Berkeley, Cal. 1903.
Prof. Max L. Margolis, University of California, Berkeley, Cal. 1900.
E. W. Martin, Leland Stanford Jr. University, Stanford University, Cal. 1903.

Prof. John E. Matzke, Leland Stanford Jr. University, Stanford University, Cal. 1900.

Prof. William A. Merrill, University of Califurnia, 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.

Prof. A. G. Newcomer, Leland Stanford Jr. University, Palo Alto, Cal. 1902.
Rabbi Jacob Nieto, 1719 Bush St., San Francisco, Cal. 1900.
Prof. George R. Noyes, University of California, Berkeley, Cal. 1901.
Prof. H. C. Nutting, University of California, Berkeley, Cal. (P. O. Box 272). 1900.
Dr. Charles J. O'Connor, University of California, Berkeley, Cal. 1900.
Dr. Andrew Oliver, San Mateo, Cal. 1900.
Prof. F. M. Padelford, University of Washington, Seattle, Wash. 1901.
Clarence Paschall, University of California, Berkeley, Cal. 1903.
Prof. Henry W. Prescott, University of California, Berkeley, Cal. 1899.
Prof. Clifton Price, University of California, Berkeley, Cal. I 899.
E. K. Putnam, Leland Stanford Jr. University, Stanford University, Cal. 1901.

Prof. A. Putzker, University of California, Berkeley, Cal. 1900.
Miss Cecilia I. Raymond, 2407 S. Atherton St., Berkeley, Cal. I 1 goo.
Pruf. Karl G. Rendtorff, Leland Stanford Jr. University, Stanford University, Cal. 1900.

Prof. C. C. Rice, Leland Stanford Jr. University, Stanford University, Cal. 1902. Prof. Leon J. Richardson, University of California, Berkeley, Cal. 1895.
Trof. H. W. Rolfe, Leland Stanford Jr. University, Stanfurd University, Cal. 1 gor.

Prof. H. K. Schilling, University of California, Derkeley, Cal. 1901.
I'rof. F. G. G. Schmidt, University of Oregon, Eugene, Ore. 1900.
C. F. Schmutzler, Leland Stauford Jr. University, Stauford University, Cal. 1904.

Irof. Colbert Searles, Leland Stanford Jr. University, Stanford University, Cal. 1901.

Prof. Henry Senger, University of California, Berkeley, Cal. 1900.
S. S. Seward, Leland Stanford Jr. University, Stanford University, Cal. 1902.

Prof. David Thomson, University of Washington, Seattle, Wash. 1902.
Rabbi Jacob Voorsanger, 1249 Franklin St., San Francisco, Cal. 1901.
Prof. C. W. Wells, University of California, Berkeley, Cal. 1903.
I'resident Benjamin I. Wheeler, University of California, Berkeley, Cal. 1879.
[Number of Members, 84. Total, $505+84=589$ ]

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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 Cullege of Western Reserve University.
College Hill, Mass.: Tufts College Library.
Columbus, O.: Ohio State University Library.
Crawfordsville, Ind.: Wabash College Library.
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Hanover, N. H. : Dartmouth Cullege Library.
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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 Theolugical Seminary Library (700 Park Ave.).

Olivet, Mich. : Olivet College Library.<br>Philadelphia, Pa.: The Library Company of Philadelphia.<br>Philadelphia, Pa.: The Mercantile I.ibrary.<br>Philadelphia, Pa.: University of Pennsylvania Library. Pittsburg, Pa.: Carnegie Library.<br>Poughkeepsie, N. Y.: Vassar College Library. Providence, R. I.: Brown University Library. Rochester, N. Y.: Rochester University Library. Tokio, Japan: Library of Imperial University. Toronto, Can.: University of Torontu Library. University of Virginia, Va.: University Library. Vermilion, South Dakota: Library of University of South Dakota. Washington, D. C.: Library of the Catholic University of America.<br>Washington, D. C. : United States Bureau of Education.<br>Wellesley, Mass.: Wellesley College Library. Worcester, Mass.: Free Public Library.<br>[Number of subscribing institutions, 60.]

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American School of Classical Studies, Rome (Via Vicenza 5).
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Royal Asiatic Society, London.
Philulogical 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 Roval Asiatic Society.
North-China Branch of the Royal Asiatic Society, Shanghai.
Japan Asiatic Society, Iokohama.
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.

## cxxx American Philological Association.

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.
Classical Review, London.
Revue Critique, Paris.
Revue de Philologie (Adrien Krebs, ir Rue de Lille, Paris).
Mémoires de la 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).
Bolletino di Filologia Classica, Via Vittorio Amadeo ii, Turin.
Biblioteca delle Scuole Italiane (Dr. A. G. Amatucci, Maddalena Maggiore 43, Naples).
Zeitschrift für die österr. Gymnasien (Prof. J. Golling, Maximilians-Gymnasium, Vienna).
L'Université Catholique (Prof. A. Lepitre, 10 Avenue de Noailles, Lyons).

$$
[\text { Total }(589+60+43+1+17)=710 .]
$$

## CONSTITUTION

OF THE

## AMERICAN PHILOLOGICAL ASSOCIATION.

## Article I. - Name and Object.

I. 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 IIl. - Meetings.

I. 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.

## Article IV. - Members.

1. Any lover of philological studies may become a member of the Assuciation 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 memher 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.

# AMERICAN PHILOLOGICAL ASSOCIATION 

(Organized 1869).

|  |  | PRESIDENT. |
| :--- | :--- | :--- |
| $1869-1870$ | . | . |$. \quad . \quad$ William D. Whitney.

1900-1901
1901-1902 . . . . . . Samuel Ball Platner.

## TREASURER.

1869-1873 . . . . J. Hammond Trumbull.
1873-1875 . . . . Albert Harkness.
1875-1883 . . . . Charles J. Buckingham.
r883-1884 . . . . Edward S. Sheldon.
1884-1889 . . . . John Henry Wright.
1889-1904 . . . . Herbert Weir Smyth.
1904-1905 . . . . Frank Gardner Moore.
${ }^{1}$ The offices of Secretary and Treasurer were united in 1884; and in 18911892 the title Curator was allowed to lapse.

## 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.

For the contents of Volumes I-XXX inclusive, see Volume XXXIV, pp. cxliii ff.

The contents of the last five volumes are as follows:-

> 1900. - Volume XXXI.

Rolfe, J. C. : The formation of substantives from Latin geographical adjectives by ellipsis.
Bonner, Campbell: The Danaid-myth.
Fowler, H. N. : Pliny, Pausanias, and the Hermes of Praxiteles.
Showerman, Grant: Was Attis at Rome under the Republic?
Carter, J. B.: The cognomina of the goddess Fortuna.
Smith, C. F.: Traces of epic usage in Thucydides.
Seymour, T. D.: Notes on Homeric war.
Gudeman, A.: The sources of the Germania of Tacitus.
Capps, E. : Studies in Greek agonistic inscriptions.
Hale, W. G. : Is there still a Latin potential ?
Heidel, W. A. : On Plato's Euthyphro.
Hempl, G. : The Salian hymn to Janus.
Chase, G. D. : Sun myths in Lithuanian folksongs.
Wilson, H. L. : The use of the simple for the compound verb in Juvenal.
Bennett, C. E.: The stipulative subjunctive in Latin.
Proceedings of the thirty-second annual session, Madison, 1900.
1901. - Volume XXXII.

Wheeler, B. I.: The causes of uniformity in phonetic change.
Clapp, E. B.: Pindar's accusative constructions.

Merrill, E. T.: Some observations on the Arch of Trajan at Beneventum.
Harry, J. E.: A misunderstood passage in Aeschylus (Prom. ir9).
Franklin, S. B.: Public appropriations fur individual offerings and sacrifices in Greece.
Morgan, M. H. : Rain-gods and rain-charms.
Warren, M.: Some ancient and modern etymologies.
Adams, C. D.: The Harpalus case.
Steele, R. B.: Anaphora and chiasmus in Livy.
Hempl, G.: The variant runes on the Franks casket.
Bill, C. P.: Notes on the Greek $\theta \epsilon \omega \rho$ ós and $\Theta \epsilon \omega \rho / \alpha$.
Elmer, H. C.: On the subjunctive with Forsitan.
Proceedings of the special session, Philadelphia, 1900.
Proceedings of the Philological Association of the Pacific Coast, San Francisco, 1900.

Proceedings of the thirty-third annual session, Cambridge, 1901.

## 1902. - Volume XXZIII.

Earle, M. L. : Studies in Sophocles's Trachinians.
Morgan, M. H.: Remarks on the water supply of ancient Rome.
Richardson, L. J. : On certain sound properties of the Sapphic strophe as employed by Horace.
Shipley, F. W.: Numeral corruptions in a ninth century Ms. of Livy.
Steele, R. B. : Some forms of complemental sentences in Livy.
Prentice, W. K.: Fragments of an early Christian liturgy in Syrian inscriptions.
Allen, J. T.: On the so-called iterative optative in Greek.
Wheeler, B. I.: Herodotus's account of the battle of Salamis.
Perrin, P.: The Nikias of Pasiphon and Plutarch.
Hempl, G.: The Duenos inscription.
Proceedings of the thirty-fourth annual session, Schenectady, 1902.
Proceedings of the Philological Association of the Pacific Coast, San Francisco, 1901.

## 1903. - Volume XXXIV.

Moore, F. G.: Studies in Tacitean Ellipsis: descriptive passages.
Goodell, T. D.: Word-accent in Catullus's galliambics.
Brownson, C. L.: The succession of Spartan nauarchs in Hellenica I.
Prescott, H. W. : Magister curiae in Plautus's Aulularia 107.
Miller, C. W. E.: Hephaestion and the anapaest in the Aristophanic trimeter.
Radford, R. S.: The Latin monosyllables in their relation to accent and quantity. A study in the verse of Terence.
March, F. A. : Three new types.
Proceedings of the thirty-fifth annual meeting, New Haven, 1903.
Proceedings of the fourth annual meeting of the Philological Association of the Pacific Coast, San Francisco, 1902.

## 1904. - Volume XXXV.

Ferguson, W. S.: Historical value of the twelfth chapter of Plutarch's Life of Pericles.
Botsford, G. W. : On the distinction between Comitia and Concilaum.
Radfurd, R. S.: Studies in Latin accent and metric.
Juhnson, C. W. L.: The Accentus of the ancient Latin grammarians.
Bolling, G. M.: The Çāntikalpa of the Atharva-Veda.
Rand, E. K.: Notes on Ovid.
Goebel, J.: The etymology of Mephistopheles.
Proceedings of the thirty-sixth annual meeting, St. Louis, 1904.
Proceedings of the fifth and sixth annual meetings of the Philological Association of the Pacific Coast, San Francisco, 1903, 1904.

The Proceedings of the American Philological Association are distributed gratis upon application to the Secretary or to the Publishers until they are out of print.

Fifty separate copies of articles printed in the Transactions, ten of articles printed in the Proceedings, are given to the authors for distribution. Additional copies will be furnished at cost.

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The Transactions for 1869 and IS70 form Vul. I.
The Trans, for $18_{71}$ " " II.

| " | " | 1872 | " | " | IlI. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| " | " | 1873 | " | " | IV. |
| ، | " | 1874 | " | " | V. |
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| ، | " | 1877 | * | ، | VIII. |
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| " | * | 1879 | " | * | X. |
| " | " | 1880 | " | " | XI. |
| " | " | 1881 | " | " | XII. |
| " | " | 1882 | " | " | XIII. |
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| " | * | 1884 | " | " | XV. |
| " | " | 1885 | " | " | XVI. |
| " | " | 1886 | " | " | XVII. |

The Trans. for 1887 form Vol. XVIII.

| " | " | 1888 | " | " XIX. |
| :--- | :--- | :--- | :--- | :--- |
| " | " | 1889 | " | " XX. |
| " | " | 1890 | " | " XXI. |
| " | " | 1891 | " | " XXII. |
| " | " | 1892 | " | " XXIII. |
| " | " | 1894 | " | " XXIV. XXV. |
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| " | " | 1896 | " | " XXVII. |
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| " | " | 1902 | " | " XXXIII. |
| " | " | 1904 | " | " XXXIV. |

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[^0]:    ${ }^{1} \mathrm{Zu}$ diesen Worten verhält sich was sich daran anschliesst über die Verwirklichung dieses Gedankens des Perikles, wie die Erklärung zum Texte. Sauppe, H., Ausgewählte Schriften, p. 499.

[^1]:    ${ }^{1}$ Fahrbïcher fiur class. Philologie, 1868, p. 670 ff.
    ${ }^{2}$ Abhandlungen der berliner Akademie, I., 2, p. 99.
    ${ }^{8}$ Stadt Athen in Alterthum, I., p. 529, n. 2.
    ${ }^{4}$ See Griech. Gesch. III. 1, p. vii. 5 Ibid., p. 439, n. 1.
    ${ }^{6}$ Ibid., p. 350, notes. ${ }^{7}$ Forsch. zur alten Geschichte, II., pp. 22 f., 65 ff.
    ${ }^{8}$ Professor A. Gudemañ in a similar summary made as early as 1889 (Tr. A.P.A. XX., p. 139 ff .), showed that Plutarch used biographical literature, not Livy, Sallust, Asinius Pollio, Cicero, for the Lives of Romans.

[^2]:    ${ }^{1}$ Die griech.römische Biographic, p. 146 ff.
    ${ }^{2}$ Cf. Professor Meyer, o.c., p. $69 . \quad{ }^{8}$ o.c., p. 500 , note.
    4 Hermes, 27 (1892), p. 274.
    ${ }^{6}$ Griech. Lesebuch, Erlüugn. I., p. 38.

[^3]:    ${ }^{1}$ Anonymus Argentinensis, p. 32, n. 2.
    ${ }^{2}$ o.c., p. 444, n. 1.
    ${ }^{3}$ See also Professor Wachsmuth, Einleitung in das Studium der alten Geschichte, p. 222.

[^4]:    ${ }^{1}$ o.c., p. $150 . \quad 2$ See Professor Meyer, Gesch. d. Alter. IV. 409 A.
    ${ }^{3}$ See Ibid. 407 A. Professor Bruno Keil, who grants that the inaccuracy exists (o.c., p. 32 n.), writes at p. 158 : "Wenn die Oligarchen in Athen und von aussen die Bündner schrieen dass Perikles den Bundesschatz nicht für Bundeszwecke verwende und Athen mit fremdem Gelde wie eine Dirne putze: auf diese Massregeln [addition to the fleet, reorganization of the cavalry, etc.] liess sich hinweisen, auf sie hin behaupten, dass Athen gewappnet dastehe, jeder Zeit bereit das Schwert zu ziehen fïr die Bündner die nicht Schiff, nicht Mann, nicht Ross im Kampfe wagten."
    ${ }^{4}$ Gesch. d. Alter. III., § 303 A.

[^5]:    1 When capitalists imported slaves en masse for agricultural purposes they were strongly opposed ; see the story of Mnason in Timaeus, Fr. 67 (Athenaeus, VI. $264 \mathrm{c}=272 \mathrm{~b}$ ). Is it to be supposed that the industrial classes favored a policy which must have caused (in the premises) an extensive importation of slaves?
    ${ }^{2}$ L'industrie dans la grèce ancienne (Bibliothìque de la faculté de philosophie de l'université de Liége. Fasc. VII. et VIII., 1900, 1901) ; see also Dr. Friederich Cauer in Berl. Phil. Woch. XXIV. (1904), p. 78 f.

[^6]:    ${ }^{1}$ o.c. VII., p. 205 f.

[^7]:    ${ }^{1}$ See above, p. 3, n. I. ${ }^{4}$ Professor Busolt, Griech. Gesch. III. I, p. 266.
    ${ }^{2}$ § 24 . $\quad{ }^{6}$ Thucy. II. 40.
    ${ }^{3}$ Const. of Athens, § 27, 2. ${ }^{6}$ Plut. Pericles, 2.

[^8]:    ${ }^{1}$ Politics, VIII. II (Mr. Welldon's Trans.).

[^9]:    ${ }^{1}$ History of Greece, II., p. 637.
    ${ }^{2}$ C.I.A. II., Add. 834 c ; also 834 b and IV. 2, 834 b; see M. Francotte, o.c. VIII., p. 85 f.
    ${ }^{8}$ See the inscriptions (C.I.A. I. 282, 322 ; IV. 1, p. 1, p. 74; I. 321, 324 ; IV. I, p. 148, p. $\left.38,37^{17}, 33^{1}, 33^{\text {d }}\right)$ which deal with the Erechtheion.

[^10]:    ${ }^{1}$ See Professor Liebenam, Städteverwaltung im römischen Kaiserreiche, p. 382 ff .

[^11]:    ${ }^{1}$ Few guilds in fact existed in Greece proper ; see M. Francotte, o.c. VIII., p. 199 ff.

[^12]:    ${ }^{1}$ It is notorious that Athens welcomed metics; for the demand for foreign workmen, see M. Francotte, o.c. VII., p. 209 ff.

[^13]:    ${ }^{1}$ In classifying the functions of assemblies as elective, legislative, and judicial, I have followed Cicero, Div. ii. 35. 74: Ut comitiorum vel in iudiciis populi vel in iure legum vel in creandis magistratibus. In this paper, accordingly, "legislative " refers not merely to law-making in the narrower sense, but also to the passing of resolutions on all affairs, domestic and foreigu, including necessarily the lex de bello indicendo.

[^14]:    ${ }^{1}$ For early times it is true that the historians refer to occasional speaking in the electoral assembly on the merits of candidates (cf. Livy, x. 13.21), but in the age of Cicero such proceedings were no longer possible.

[^15]:    ${ }^{1}$ Mommsen imagined that foreign assemblies were usually so called because their resolutions were not binding on the Roman state. It would be strange, however, if in calling foreign institutions by Latin names (senatus, populus, plebs, etc.), Roman writers should attempt to show a connection between these institutions and Rome. Mommsen's proposed explanation of this use of concilium becomes actually absurd when it is extended to comitia; he certainly would not say that the resolutions of the Syracusan comitia, mentioned by Livy, were binding on Rome. It is only rational to conclude that the Romans gave to foreign institutions the names of corresponding institutions at home, with a view to representing these alien institutions in their real relation to the various states to which they belonged rather than in an imaginary relation, or lack of relation, to the Roman state.
    ${ }^{2}$ Cf. p. r. Notwithstanding all the confidence reposed by the moderns in this utterance of Laelius, debel suggests that he is proposing a distinction to be made in the future rather than stating an actual usage; while recognizing that the distinction did not exist in practice, he thought that it should be made.

[^16]:    ${ }^{1}$ A numeral placed in the line denotes a foot of trochaic verse; below the line, a foot of iambic verse.

[^17]:    ${ }^{1}$ Examples like quid-igitu4 (Mo. 91I; Tri. 333), with preceding monosyllable, are not included in the above. For the frequent accentuation of igitur, edepol, also aliter, aliă upon the ultima in proceleusmatici, v. Ahlberg, Procel. I, 33.
    ${ }^{2}$ Interesting also is the regular proclisis of the adverb in association with the adjective, e.g. And. 120 adeó-modésto, adeó-veńfisto, cf. the strict observance of Lachmann's law seen in lim-cild (A.J.P., No. 100); Ep. 380 áliquantó lubéntiús.
    ${ }^{3}$ A correct view was also taken by Conradt, De vers. Terent. struct., Berlin, 1870, p. 20.

[^18]:    ${ }^{1}$ I shall use henceforth the term 'first foot ' freely of the first foot of a colon, i.e. of either the first or the fifth foot.

[^19]:    ${ }^{1}$ I assume throughout that the first syllable of ecquid, quidquid, nequid, numquid, siquid, etc., is long; for precisely as the existence of nèmpe is aisproved by the non-occurrence of nĕmp(e) with elision, so the existence of ĕcquid is disproved by the non-occurrence of écqu(a), ěcqu(em), etc.

[^20]:    ${ }^{1}$ In connection with the last example, which is explained by the regular order of the pronouns (p. 41), I wish to deny emphatically that the preceding elision, as in atqu(e), justifies or explains the double iamb., in the irrational manner assumed by Klotz, Grundz., p. 245 f. In such assumed cases the double iamb. is justified only when a monosyllable, which forms part of a zuord-group, is really not eiided at all, even in thesis, as Hec. 495 quö-abis ? adés; Poe. 290 sě-amét potést. These cases are then quite similar to the well-known děhórtari (Poc.674), dě hórdeo (As. 706), cŭm ístac (Cas. 612), on which v. Klotz, Grundz., p. 139 f., and Skutsch, Berl. Phil. Woch., 1894, p. 139 f.; cf. also examples in Lucilius and the Augustan poets, as Hor. S. $1,9,38$ si mĕ̀-amás; $2,2,28$ nŭm adést, etc. (L. Müller, R. M. ${ }^{2} 37 \mathrm{If}$.). Other examples of the double iamb. in Klotz, l.l., as Poe. 447 quando amór iubét, are probably to be referred to some form of the traditional order (subject + verb). - The view which I have here defended against Klotz is, as I have since noted, also the view of Luchs himself, who writes of just such cases (Studem. Stud. I, 18): In his enim versibus pes paenultimus non continetur iambo, sed anapaesto, quod cum hiatu semper pronuntiandum est : së ămét, quì hăbél.

[^21]:    ${ }^{1}$ This accent is not, however, wholly invariable, eg. Eu. 819 istuc mihi, and in the first fout : Poe. 355; ib. 2; Ci. 561 unde tíbi; v. other examples in Kämpf, l.l., 29.
    ${ }^{2}$ This may possibly be the true explanation of the accents déinde, périnde, éxinde prescribed by the grammarians (Schöll, l.l., p. 192), i.e. dě́indé, etc.; so perhaps St. 545 dei ${ }^{1}$ ndĕ sęnéx, rather than deínde séněx.
    ${ }^{8}$ Hence I cannot accept the view of Ahlberg, Procel. I, 34, 110.

[^22]:    ${ }^{1}$ Ribb. ${ }^{8}$ accents quite needlessly quídquid pla ${ }^{3}$ cet, Caecil. fr. 148 ; recomposition is perhaps first attested for the Christian poetry, efs. Et quidquid micat sideris (Königsfeld, Lat. Hymn. I, 32).

[^23]:    ${ }^{1}$ In addition to the pronouns, the proclisis and oxytonesis of esse (cf. Skutsch, Forsch. 136, n. 1) and hercle have been established in certain word-orders; thus Ba. 83 vóles esse ${ }^{4}$ tibi; St. 716 vides esse $^{5}$ tibi, and, in Ter., cf. Hec. 398 esse $^{\mathbf{3}}$ : scio; $A u .40$ herclé tibi; hence the frequent shortening seen in these words after a Brevis Brevians. Also in the case of pred. adj. + copulative verb proclisis has perhaps been known, viz. Poe. 1194 pulcrá vidére; Ru. 218 servá forem, or servá forem (so B). Some of the other cases ${ }^{6}$ of oxytone trochees quoted by Klotz, ${ }^{2}$ Grundz., p. 239 ff., may also be genuine.
    ${ }^{2}$ The admissibility of the broken dactyl in general has been discussed especially by Müller, Pros. Nacher., p. 12 ff.; Leo, Forsch., p. 236 ff.; Ahlberg, Procel. I, 14 ff.; Maurenbrecher, Hiatus, p. 26 ff.

[^24]:    ${ }^{1}$ Against Luchs, Studem. Stud. I, 319 ff.

[^25]:    ${ }^{1}$ The proclisis of the demonstrative and relative pronouns in Latin, Umbrian, and Oscan is also indicated at times by the orthography of the Inscrr., viz. eamrim, eare, eaires, huncinerent (Corssen, II, 879), eafiveka (Lat. eas iuvencas), erernomneper (pro eius nomine), paeancensto (quae incensa), cf. Corssen, II, 919 ; v. Planta, I, 599. For the conjunctions also proclsis is indicated in Umbrian by writing ape ( = Lat. uoio, in meaning), and pune, I.at. -cunde, at times with the fullowing word, as afepesondro, cf. Corssen, ibid. Especially often is the proclisis of the pronouns indicated in connection with modus, e.g. huiusmodi, huiuscemodi, eiusmodi, etc.; for quodammodo, omnimodo, (mullomo.io,) v. the lexicons, and for ullomodo, v. Cod. Bern. 83, Keil, Suppl. ıSo, 9.

[^26]:    ${ }^{1}$ The same view is taken by Vendryes, L'intensité initiale, Paris, 1902, p. 65, and, according to V., by Meillet, who writes "par suite de la prononciation naturelle des mots"; cf. also Uppgren, Metrische Komposition d. Terenz, Lund, 1901, 107 ff .

[^27]:    ${ }^{1}$ Christ, Carakat, pp. 175, 222, cites still other passages as proof "für den Gebrauch des lateinischen cantare in sinne eines blos rhythmischen Vortrags, nicht vollständigen Gesanges"; he is quite mistaken, however, in wishing to limit the term 'sing' in this rhythmical sense to Roman usage.

    2 We find this statement of Arist. fully reproduced in Mart. Cap. IX, p. 353 Eyss. (quoted by Jahn, l.l., 42I) : continuum (genus vocis) est velut iuge conloquium, divisum quod in modulatione servamus. est et medium, quod in utroque permixtum ac neque alterius continuum modum servat nec alterius frequenti divisione praeciditur, quo pronuntiandi modo carmina cancta recitantur.

[^28]:    
    
    
    ${ }^{2}$ So also Joseph. Ant. II, 16, 4 ( $\left.\epsilon \nu \dot{\epsilon} \xi a \mu \epsilon \tau \rho \varphi \tau b \nu \psi\right)$; Themist. Or. 2, p. 27 c.
     Lex. explains towos in this use as "die Hebung im Verse u. das dadurch entstehende Versmass" ; thus the word appears to be used in the threefold sense of musical tone (Sext. Emp. 757, 29 Bekk.), word-tone, and verse-tone. In Latin also we should probably follow Bährens and the early editors in reading in Stat. Silv. V, 3, 99 : quis . . . dulce vel heroos gressu truncare tenores, 'to combine the curtailed pentameter with the accents of the hexameter'; the Ms. reading, truncare leones, which is retained by Vollmer (1898), appears to be corrupt and to yield no satisfactory meaning.

[^29]:    ${ }^{1}$ Ars, § 1, Uhlig, p. 5.
    ${ }^{2}$ For the comprehensive meaning of $\pi \rho 0 \sigma \psi \delta i \alpha$ in D., cf. Supplem. relust., Uhlig, p. 107, and also Jannaris, A.J.P. XXIII, 77.

[^30]:    ${ }^{1}$ Yet by no means always; for we find in the commentary ascribed to Probus (Verg. Ecl. p. 6): Aeneida quoniam plasmate legi volebat, aitt 'arma virumque cano.' This whole discussion of Probus upon the form of poetical delivery (pronuntiatio) is highly suggestive, in spite of the arbitrary dictum that the plasma or singing delivery (cantare) is to be employed in a poem (only) from the point where the words canere or carmen first occur. It is noteworthy that the general teaching of the commentary agrees perfectly with the well-known statement of Gellius (VI, 7, 4) that Valerius Probus and his pupils accented exdidersum in verse. For the meaning of $\pi \lambda \dot{\alpha} \sigma \mu a$, cf. Spalding on Quintil. 1, 8, 2, who quotes some ancient authorities, and also the excellent modern definition of Salmasius: " vocem mollem et eliquatam, quae per omnes sonos intentionesque varietur." For numerous references to the abuse of this singing delivery, see Jahn, l.l., 422, n. I and 2.
    ${ }^{2}$ At the same time the rhythmical tone falls upon the ultima. In a somewhat similar way Zieliński in his recent valual le work, Das Clauselgesetz in Ciceros Reden, Leipzig, 1904, reaches the conclusion that iambic words are oxytone in the oratorical rhythms, e.g. forént; cf. p. 239: "Immerhin ist zu betonen, dass für den rednerischen Accent die iambischen und anapästischen Wörter, im Gegensatz zur geläufigen Auffassung, Oxytona sind." This oxytonesis is of course not the

[^31]:    ${ }^{1}$ And still earlier in the dissertation, Quaest. metr. de accentus momento in zersu heroico. Lips. 1874. See also the able paper of H. A. J. Munro, Transactions of the Cambridge Philosophical Society, Vol. X (1864), pp. 374-402. Humphreys and Munro reach quite independently precisely the same conclusions respecting the influence of the accent upon Latin verse.

[^32]:    ${ }^{1}$ See the writer, "The Motion of the Voice," in Trans. Am. Phil. Assoc. XXX, p. 45, and "Accent and Accentual Arsis and Thesis," in Studies in Honor of B. L. Gildersleeve, p. 57.

[^33]:    ${ }^{1}$ Schöll, De accentu linguae latinae, Acta Soc. Philol. Lips. VI, p. 34.

[^34]:    ${ }^{1}$ Rhys-Davids, Buddhist India, p. 168, considers the term Vedānta (except in its literal sense) an imitation of the Buddhistic term Suttanta. A similar relationship might be assumed between Pañcakalpin and Pañcanekāyika, and if the number five is thus explained, no better selection of texts could have been made to make up that number.

[^35]:    ${ }^{1}$ The Ganamailia, AVPar. 32, contains thirty-two ganas; the first nineteen of these are those employed at the Maháçanti in the order in which they are there rubricated. With $19^{b}$ begins a change in form which suggests that the remainder of the text is a later addition.

[^36]:    ${ }^{1}$ See Sedlmayer, Prolegomena critica ad Heroides Ovidianas, 1878 , p. 86. On the defects of Sedlmayer's treatment, cf. Peters, Observationes ad P. Ovid. Nas. Heroid. Epist. 1882, p. 8, and Dilthey, Observationum in Epist. Heroid. Ovid. Part. I, i884, p. 10.
    ${ }^{2}$ See Sedlmayer, op. cit. p. 65; Peters, op. cit. p. 16.
    ${ }^{8}$ See the summary of this discussion in Schanz, Gesch. d. röm. Litt.§ 296.

[^37]:    ${ }^{1}$ Op. cit. p. 9.
    ${ }^{2}$ This possibility is admitted by Bürger, De Ovid. carminum amatoriorum inventione, 1901, p. 45, who, however, does not incline to it ; it is maintained vigorously by I. de Louter, De tribus Ovid. Heroid. codicibus Leidensibus, 1899, p. 24. The latter explains the irregularities in the double letters by the fact that Ovid had not put the finishing touches on these poems at the time of his banishment. Other recent advocates of their genuineness are Pieri, Quaest. ad $O v$. Epist. Heroid. . . . pertinentes, 1895, p. 71 ff., and Purser, who completed Palmer's edition of the Heroides, 1898, p. xxxii.

[^38]:    ${ }^{1}$ Most promising of the manuscripts hitherto examined seem to he Gudianus, 297, s. XV (see beluw, p. 134), and Parisinus, 7997, s. XV. Neither of these manuscripts has been adequately studied.
    ${ }^{2}$ See Peters, $c p$. cit. p. 40.
    ${ }^{8}$ Gött. Gelehrt. Anzerg, 1899, p. 897.

[^39]:    ${ }^{1}$ See Sabbadini in Rivista di Filologia, XXIX (1901), p. 262.
    ${ }^{2}$ See Voigt, Wiederbelebung des klass. Allerthums, 1893, II, pp. 45, 84.

[^40]:    ${ }^{1}$ Op, cit. pp. 12, $22 . \quad 2$ Ibid. p. 26.
    ${ }^{8}$ See the Tabulae Codicum of the Vienna Library, and Endlicher cviii.

[^41]:    ${ }^{1}$ In the Vindobonensis, as in H, Epist. xxi is immediately preceded by the de Arte Insitionis of Palladius. The texts in the two manuscripts are very closely related, though neither is copied from the other.
    ${ }^{2}$ No. 211, p. 59.
    ${ }^{8}$ Another we might expect, perhaps, to deduce from the Italian translations of the Heroides made in the fifteenth century, but these do not contain Epist. xxi. 13-248. See E. Bellorini, Note sulle tradizioni italiane delle "Eroidi" d'Ovidio anteriori al Rinascimento, 1900.
    ${ }^{4}$ Wiener Studien, 1881, p. $158 . \quad{ }^{6}$ Op. cit. p. 54.

[^42]:    ${ }^{1}$ In his editi $\mathrm{m}, \mathrm{I}$ 898, pp. xuxvi and 157.
    ${ }^{2}$ Jahresbericht iiber d. Fortsch. d. class. Altertumsw. CIX (1901), pp. 21 I, 290.
    ${ }^{8}$ Op. cit. p. $24 . \quad{ }^{4}$ Peters, op. cit. p. 54.
    ${ }^{5}$ Sedlmayer, op. cit. pp. 28-31. ${ }^{6}$ Kritischer Kommentar, p. 75 f.
    ${ }^{7}$ On them see Sedlmayer, Prolegomena, pp. 4, 16.
    ${ }^{8}$ Sedlmayer, Proleg. p. 30.

[^43]:    ${ }^{1}$ Gött. Gelehrt. Anzeig. 1882, p. 83 If .

[^44]:    ${ }^{1}$ See below, p. $142 . \quad 2$ Schanz, Gesch. der röm. Lit. § 260.

[^45]:    ${ }^{1}$ See below, p. 143, N. 1.
    ${ }^{2}$ O. Tüselmann, Quaest. chron. Horat. 1885, p. 6, states various opinions, himself declining to assign a date more positive than circa 15 B.c. Of very recent editors of Horace, L. Mueller, Oden u. Epoden, 1900, p. 259, argues that circa must imply before 15 в.c. C. H. Moore, 1902, sets the date at $14 / 13$.
    ${ }^{8}$ See Ehwald's reviews of J. Heuwes, De tempore quo Ovidii Ameres Heroides Ars Amatoria conscripta atque edita sint, 1883 (in Jahresbericht, XLIII, p. 125), and of P. Martinon : Les Amours d'Ovide, Paris, 1897 (ibid. i10, p. 168).
    ${ }^{4}$ Tr. iv. 10, 57 f. ${ }^{5}$ Schanz, op. cit. § 293.
    ${ }^{6}$ Némethy, De libris Amorum Ovidianis, 1898, p. 18, makes out a list of sixteen, but Ehwald in his review of this publication (Berl. Phil. Woch. 1899, 556) and in that of Martinon, op. cit. (Deutsche Litteraturztg., 1898, 629), shows how subjective any treatment becomes which would class with the Corinna cycle poems that do not refer to her by name. We may include at least the following

[^46]:    impassioned lover is expanded into a witty parndy, quite in Horace's manner ; the Muse plays the part of a go-between, a Nape. The whole gains point when we reflect that Celsus, like Paullus Fabius Maximus, was one of Ovid's intimates; see below, p. 146. Of course there are, in the Corinna poems, various imitations of Horace's earlier verse : cf. $A m$. ii. 8 , 9 ff. and C. ii. 4 ; $A m$. ii. 13 , 19, and C. iii. 22, 2 ; $A m$. i. 12, 13 , and Sat. i. 8, 1 .
    ${ }^{1}$ C. i. 19. I: Mater saeva Cupidinum.

[^47]:    ${ }^{1}$ Sat. vii. 95. An excellent account of Paullus Fabius Maximus is given by G. Graeber, Quaestionum Ovidianarum, Pars Prior, Elberfeld, i881, p. x ff. I cannot follow him, however, in his attempt to show that Fabius was not a patron of poetry (p. xi). Starting with Juvenal's statement that a Fabius - mentioned in the same breath with Ovid's friend Cotta - played this rôle, we may complete the picture with the lines which Ovid addresses to the present Fabius, Epist. ex Ponto, i. 2, 13I: Ille ego sum qui te colui, quem festa solebat | inter convivas mensa videre tuos:|ille ego qui duxi vestros Hymenaeon ad ignes | et cecini fausto carmina digna toro: | cuius te solitum memini laudare libellos ... | cui tua nonnunquam miranti scripta legebas: | ille ego de vestra cui data nupta domo est. Although so intimate with Fabius, and connected with him by marriage, his attitude to him, as Graeber (p. xii) and others have pointed out, is one of deference - like that of a poet to his patron.

[^48]:    ${ }^{1}$ Carm. iv. 2 is mainly a panegyric on the Emperor. Thus the opening of the second series of odes corresponds substantially to that of the first. In Carm. i. 1 Horace declares his allegiance to the Muse, in Carm. i. 2 he pays his homage to the Emperor. The difference between the two openings is that in the latter the initial ode is not a lldressed to Maecenas. This, as has often been remarked, is not an intentional slight; Horace's good sense prevents him from dedicating to Maecenas a work which the Emperor had asked him to compose. But the fact that a panegyric on Augustus is not plumped in at the start is no sign that Horace feels coolly towards his royal patron; he simply does not care to spoil by overemphasis the fine series of eulogies which form the backbone of the book (Odes 4, 5, 6, 14, 15). This consideration tends, I believe, to show that the first ode of this book was written last. If Horace had not to reckon with the five odes just mentioned, he might well have made the initial piece a dedication to the Emperor, even as Carm. i. i is addressed to Maecenas. But supposing them already completed, we can see why the first ode was given its present character. If, then, it followed the panegyrical odes, its date is 13 b.c. Another reason why the ode is not addressed to Augustus or any other mortal, is that Fahius Maximus and Ovid furnish personality enough.
    ${ }^{2}$ See above, p. 136 f., and for Ovid's reason for omitting mention of Horace where some critics would expect it, p. 137, N. 3 .
    ${ }^{8}$ M. Hertz, op. cit. ii, p. 7 : cum inter omnes poetas nemo fere tam constanter Horatium referat.

[^49]:    ${ }^{1}$ See Met. ed. Haupt-Ehwald ad loc.
    ${ }^{2}$ For excellent remarks on this matter, see Zingerle, op. cit. p. 35, who points to the same characteristic in Horace's reproductions. A marked change of situation, as he shows, may be employed for humorous effect, thus resulting in parody. An instance of this last we may now recognize, if I am right, in Horace's Epistles, i. 8; see above, p. 140, N. 2.
    ${ }^{8}$ Martinon, op. cit. p. xiv, imagines it a prologue to Book iv of the first edition.
    ${ }^{4}$ See above, p. 140, n. $2 . \quad{ }^{5}$ Op.cit. p. 14 f.

[^50]:    ${ }^{1}$ Cf. Lucretius, v. 95 : una dies dabit exitio multosque per annos \| sustentata ruit moles et machina mundi.
    ${ }^{2}$ Carm. iii. $30 . \quad{ }^{8}$ See above, p. 136, N. 3.

[^51]:    ${ }^{1}$ Op. cit. p. 17.
    ${ }^{2}$ i. 3, 8. Compare above, p. 140, N. 2.
    ${ }^{3}$ So Klebs, Prosop. Imp. Rom. 1897, I. 334. For the other view, see e.g. O. Hennig, op. cit. p. 14 f.; Pauly-Wissowa, VI. 1882.
    ${ }^{4}$ So Riese, and Graeber, op.cit. p. x f., against Merkel, Nipperdey, Teuffel. Klebs, loc. cit., leaves the question undecided; Celsus, he states, is amicus Ovidii et (Paulli Fabii?) Maximi. Cf. Dessau, ibid. II. 49; so Pauly-Wissowa, VI. I882.
    ${ }^{5}$ Carm. i. $1,6$.

[^52]:    ${ }^{1}$ In what I feel must be a later poem, Ovid applies the same line with a new effect: Epist. ii. 2, I, Nec nos Enceladi dementia castra secuti | in rerum dominos movimus arma deos. It seems more probable that he should first embody the line completely, and then change it in a second reproduction than vice versa. In this case a flavor of his first meaning still hangs about the present passage. However, if Wartenberg, Quaest. Ovid. Berlin, $1884, \mathrm{pp} .74,88$, is right in placing i. 9 among the the latest of the letters from Pontus, we may conceive that ii. 2 gives the ordinary sort of imitation, while in i. 9 the poet reverts to the same verse for a new significance. Epist. ii. 2 followed soon after 'Tiberius' triumph in A.D. 13: see Wartenberg, p. 77. For i. 9 Wartenberg's argument is that the letter shows Ovid to have been a resident at Tomi for some time. But supposing the date were 12, a year before ii. 2 was written, that would allow him four years of banishment ; and with Ovid one day was as a thousand, at Tomi.

[^53]:    ${ }^{1}$ In early astrological writings of the Arabians Hermes Trismegistos also appears as the spirit of Mercury. See Pietschmann, Hermes Trism., p. 46.

[^54]:    ${ }^{1}$ In a future paper I hope to show that certain chapters of the first part of Spies's Faustbook, the sources of which have not been ascertained, may be traced to the influence of Hermetic writings.

[^55]:    ${ }^{1} \mathrm{Cf}$. the references given by Edmiston, PAPA, xxxiv (1903), xxvif.

[^56]:    ${ }^{1} \mathrm{My}$ attention has been called to a discussinn of the meaning of $\pi \rho o \mu a v \tau e i a$ by Legrand, Rev. des Études Grecques, XIII, pp. 290 ff., which I have not yet seen.

[^57]:    ${ }^{1}$ An interesting account of the methods employed and the difficulties met in editing the Thesaurus is given by Vollmer, Neue Fahrbïcher, XIII, XIV, i, 1904.

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[^59]:    ${ }^{1}$ Recenly, Indogermanische Forschungen, Anzeiger, Vol. XIV, p. 47 ff .
    ${ }^{2}$ See Winckler, Der alte Orient, Erster Jahrgang, 1g00, p. 20.

[^60]:    ${ }^{1}$ Sayce. YR.4S. XIV, 377 ff.; A Primer of Assyriology, p 36; Winckler, ibid. p. 28 ; Hiibschmann, $\mathcal{F} F$. XVI, 200 ff.
    ${ }^{2}$ Kretschmer, Einleitung in die Geschichte der griechischen Sprache, p. 289 ff.
    ${ }^{3}$ Hatzidakis, $\mathcal{Y} F$. XI, $3^{12}$ ff ${ }^{4}$ Tsountas and Manatt, The Mycenean Age, chaps. i and xi.
    ${ }^{5}$ See R. S. Conway. "The Pre-Hellenic Inscriptions of Praisos," Annual of the British School at Athens, No. VIII (1gor-02), p. 125 ff.

[^61]:    ${ }^{1}$ See Bullctin de Correspondance Hellenique, Tenth Year, January, 1886, p. iff.
    ${ }^{2}$ Italische Forschutigen, II, 2, p. 225. ${ }^{3}$ Solmsen, KZ. XXXIV, 4I; Kretschmer, ibid., p. 408.

    - Fick, Spracheinheit der Indogermanen Europas, p. 417 ff.; Kretschmer, ibid., chap. vii.
    ${ }^{5}$ See Showerman, "The Great Mother of the Gods," Bulletin of the University of Wisconsin, No ${ }_{43}$, p. 230 ff .

[^62]:    ${ }^{1}$ IF. V, 193.
    ${ }^{2}$ Ramsay, FRR. 4 S , New Series, Vol. XV (1883), p. 120 ff ; BB. XIV, 309 ff.; Solmsen, $K Z$. XXXIV, $3^{6} \mathrm{f}$.
    ${ }^{3}$ Ramsay, KZ. XXVIII, 38 Iff ; Hogarth, Fournal of Hellenic Studies, XI, 158 ff.; Kretschmer, $W Z K: M$. XIII, 359 ff. ; Torp, BB XXVII, 280 ff.

    - Torp, ibid. 288 . ${ }^{\circ}$ Fick, BB. XIV, $50 . \quad{ }^{6}$ Kretschmer, i3id. 244 ff.

[^63]:    ${ }^{1}$ See Pauli. "Die Veneter," Altitalische Forschungen, Vol III.
    ${ }^{2}$ See Pedersen, KZ. XXXVI, $302 \mathrm{ff} \quad{ }^{3}$ Cf. Kretschmer, l.c, 269 ff .
    ${ }^{4}$ Mommsen, Die unteritalaschen Dialecte, p. 43 ff.; Bugge, BB. XVIII, 193 ff : Kretschmer, ibid. $2 \sigma_{3}$ ff., 272 ff.

[^64]:    ${ }^{1}$ Deecke, Rhein. Mus. XL, 133 ff. Here klohi,' hear,' is imperative sec. sing = Vali çrosi; $^{\text {; }}$ $z i s=\mathrm{Gr}$. тьs ; teiveinan = Lat. dat venum; and aran, accus. of ara, 'field' (cf Lat arare).
    ${ }^{2}$ Torp, IF. V, 195 ff . Here klohizis, 'hear thou,' is sec. sing. optative of a sigmatic aorist; pido 'made over' $=$ Skt api-dät, Gr. *e $\boldsymbol{\pi}$ - - $\delta \omega \mathrm{wr}:$ gastei, ' to the town,' is emended to vastei (F for $\Gamma$ ); and veinan,' suam,' is acc. sing. fem. from a stem veina, "sveina, formed like Goth. seina-, 'suus'
    ${ }^{3}$ Kretschmer, KZ. XXXVIII, 108 ff.

[^65]:    ${ }^{1}$ Gildersleeve-Lodge, Lat. Gram. p. 119, quotes futurum esse as the infin. of fio, which has not heretofore been proved ; also factum fore, which is still to be proved.

[^66]:    ${ }^{1}$ Cic. de Orat. ii, 113: Quid fiat, factum, futurumve sit; Caes. B.G. iv, 6, 2: ea, quae fore suspicatus erat, facta cognovit.
    ${ }^{2}$ On meanings of licet, see Emory B. Lease, "Zur Konstruktion von licet," Archiv f. lat. Lex. und Gran. XI (1898-1900), p. 9.

[^67]:    President, Professor Herbert Weir Smyth, Harvard University.
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[^68]:    ${ }^{1}$ We can scarcely avoid the conviction that $\delta v \sigma \chi e i \rho \omega \mu a(1.126)$ was coined to echo $\sigma \tau \epsilon \phi \dot{\nu} \omega \mu a$ (1. 122); through the din raised by the fighters on the towers the $\sigma \tau e \phi$ ávoma became the eagle's $\delta v \sigma \chi \in i \rho \omega \mu a$ ( $\sigma \tau \in \phi a \nu \bar{\omega}: \chi \in \iota \rho \bar{\omega})$ instead of its easy prey.

[^69]:    ${ }^{1}$ E.g. Madvig, Opusc. I, 194 ff.; Mommsen, Hermes, I, 43I ff.
    ${ }^{2}$ Cf. the less explicit statement $p$. Sulla, 88.52.

[^70]:    ${ }^{1}$ The argument against this date is weakened by the observation that Asconius reckons by both the English and the Roman methods, and that he is perhaps using the former (p. 6 Or.).

[^71]:    ${ }^{1}$ Sallust's account (chap. xxxviii) is not explicit on this point, and is, of course, of no critical value.

[^72]:    ${ }^{1}$ The results under $A$ were obtained by speaking the words according to their vertical position, and those under $B$ in their horizontal order.

[^73]:    Abbreviations: $A H R=$ American Historical Review: $A \mathcal{F A}=$ American Journal of Archacology; $A \mathcal{F P}=$ American Journal of Philology; $A \mathcal{F S L}=$ American Journal of Semitic Languages: $A \mathscr{F} T=$ American Journal of Theology; Archiv $=$ Archiv für latein. Lexicographie: Bookm. $=$ The Bookman; $C R=$ Classical Review; CSCP $=$ Cornell Studies in Classical PhiIology: $E R=$ Educational Review; $H S C P=$ Harvard Studies in Classical Philology; $H S P L=$ Harvard Studies and Notes in Philology and Literature; $I F=$ Indogermanische Forschungen; $\mathcal{F A O S}=$ Journal of the American Oriental Society; $\mathcal{f} B L=$ Journal of Biblical Literature; $\mathscr{F G P}=$ Journal of Germanic Philology; $\mathscr{F} H U C=$ Johns Hopkins University Circulars; $M L A=$ Publications of the Modern Language Association; $M L_{S} N=$ Modern Language Notes; Nat. $=$ The Nation; $N W=$ The New World; PAPA $=$ Proceedings of the American Philological Association: $S R=$ School Review; TAPA $=$ Transactions of the American Philological Association; UPB $=$ University of Pennsylvania Bulletin; WRUB $=$ Western Reserve University Bulletin.

[^74]:    ${ }^{1}$ This list has been corrected up to June 15, 1905 ; 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.

