CONTENTS OF VOLUME LIII

TRANSACTIONS

I. The Poems of the Appendix Vergiliana
   H. Rushton Fairclough
   5

II. Syllabification and Syllabic Quantity in Greek and Latin
   E. H. Sturtevant
   35

III. The Three Threads of the Plot of the Iliad
   Samuel E. Bassett
   52

IV. The Educated Roman and his Accent
   Roland G. Kent
   63

V. Catullus and the Ciris
   Alfred R. Bellinger
   73

VI. The Sanskrit Aorists: Their Classification and History
   Charles R. Lanman
   83

VII. Stampini and Pascal on the Catullus Manuscripts
    William Gardner Hale
   103

VIII. A Dialysis of the Fifth Century a.d. in the Princeton Collection of Papyri
     Henry B. Dewing
     113

IX. Some Literary Papyri in the University of Michigan Collection
    J. G. Winter
    128

X. A Papyrus of Dioscurides in the University of Michigan Collection
    Campbell Bonner
    142

XI. The Pronunciation of Greek and Latin Prose, or, Ictus, Accent, and Quantity in Greek and Latin Prose and Poetry
    C. W. E. Miller
    169
Contents

PROCEEDINGS

I. Programme of the Fifty-fourth Annual Meeting, New Haven, 1922 ........................................ i
II. Minutes ................................................................ v
III. Abstracts ................................................................. xvi
   1. The Colonization of Greek Poetry (Annual Address) ........................................... xvi
      Francis G. Allinson
   2. The Significant Name in Herondas ........................................................... xvi
      J. C. Austin
   3. On the Meaning of tollere and suscipere as Applied to Infants ........................................... xvii
      Harold Bennett
   4. The Grapheum of Tebtunis and Cercesuschon Oros ........................................ xviii
      A. E. R. Boak
   5. The Gratitude of the Gods ........................................................................ xix
      J. W. Hewitt
   6. The Subjunctive ἂν in the Papyri ............................................................... xx
      Robert C. Horn
   7. The Repeated Lines of Vergil ........................................................................ xx
      Nicholas Moseley

I. Programme of the Philological Association of the Pacific Coast ........................................ xxii
II. Minutes ................................................................ xxiv
III. Abstracts ................................................................. xxvii
   1. A Possible Origin of Duodecimal Counting ........................................... xxvii
      Clarence Paschall
   2. The Relation of Medieval Latin Literature to Classical Literature ......................... xxvii
      Max Radin
   3. The Relation of Medieval Latin Literature to Medieval Vernacular Literature .................... xxviii
      E. C. Hills
   4. The Relation of Medieval Latin Literature to Modern Literature .......................... xxix
      W. D. Briggs
   5. The Work and Plans of the Section on Medieval Latin of the Modern Language Association of America ................................. xxix
      J. S. P. Tatlock
Contents

Index to Articles and Abstracts . . . . . . . . . . . . . . . . . . . xxxi
Bibliographical Record for the Year 1922 . . . . . . . . . . . . . xxxiii
Officers of the Association . . . . . . . . . . . . . . . . . . . . . . . . xlix
Officers of the Association of the Pacific Coast . . . . . . . . . . . xlix
Members, List of . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
Constitution . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . lxxvii
Committees and Business Matters . . . . . . . . . . . . . . . . . . . lxxix
Publications of the Association . . . . . . . . . . . . . . . . . . . . . lxxxii

Plates

I. Princeton University Papyrus No. 55 . . . . facing p. 113
II. University of Michigan Papyrus No. 11 . . . . facing p. 133
III. University of Michigan Papyrus No. 3 . . . . facing p. 142
The whole question of the authenticity of the poems of the Appendix Vergiliana would provide material for an interesting chapter in the history of literary criticism. The poems were not included by Virgil's literary executors, L. Varius and Plotius Tucca, in their edition of the poet's work, and are not found in any of the major Virgilian codices. There is no allusion to them in the vita prefixed to the commentary of Valerius Probus of the first century, but in that which preceded the commentary of the fourth-century Donatus — generally supposed to be borrowed largely from the second-century Suetonius — we have an enumeration of the Catalepton, Priapea, Epigrammata, Dirae, Ciris, and Culex as early works of Virgil. The sentence containing this list is somewhat uncertain, for two fifteenth-century manuscripts omit the Catalepton and Ciris, and insert the Moretum. Nettleship therefore suspects that the original statement referred only to the Culex, of which the writer gives a brief account, though he has nothing to say about the other poems. He does add, however, "scripsit etiam de qua ambigitur Aetnam," thus showing that he knew of the existence of an Aetna, which some at least of his contemporaries must have attributed to Virgil.
The *Vita* given by the Virgilian commentator Servius, also of the fourth century, contains the important statement: "scripsit etiam septem sive octo libros hos: Cirin, Aetnam, Culicem, Priapea, Catalepton, Epigrammata, Copam, Diras," in which the *Copae* is added to the earlier list.

Poems corresponding to those enumerated in these two ancient lists have survived in a number of late manuscripts, none of which probably are earlier than the tenth century. In some of these the poems are included in a collection entitled *Virgillii iuvenalis ludi libellus*, and embracing the poems known as *Est et non*, *De viro bono*, *De rosis nascentibus*. These are thought to be of the fourth century. Two elegies on Maecenas, which also bear Virgil's name, are doubtless much earlier in origin.

In the light of nineteenth-century criticism all of these poems were pronounced non-Virgilian, and Gudeman voices the general verdict of the age when he says that "their spuriousness is established by incontrovertible proofs" (cited by Rand). With the twentieth century the pendulum has swung in the other direction. In 1901 Skutsch reopened a discussion of the problem, when in his *Aus Vergils Frühzeit* he argued that the *Ciris* belonged to Virgil's own age. Skutsch however did not claim for the poem Virgilian authorship. He was convinced that the *Ciris* was the work of Virgil's friend, Cornelius Gallus, from whom by way of compliment the greater poet later borrowed many verses. Even as late as 1911 Mackail could say of the *Ciris* together with the *Dirae* and *Lydia*: "No one in modern times has seriously argued that they are by Virgil himself" (*Lectures on Poetry*, p. 55).

Following in the footsteps of Skutsch, a goodly number of scholars have turned their attention to these Minor Poems, and many have expressed the conviction that one or some or all of those commonly included in the Appendix are actually Virgil's own work. Thus Drachmann, *Herm.* XLIII (1908), accepts the *Ciris* as Virgil's; Birt in his *Jugendverse und Heimatpoesie* (1910) advocates the Virgilian authorship of
most of the poems of the *Catalepton*, though he is also most emphatic in rejecting the *Culex*. The latter, however, has been accepted as genuine by a group of English scholars, e.g., Phillimore, *Class. Phil.* 1910, Miss Jackson, *Class. Quart.* 1911, Butcher, *ib.* 1914, and W. Warde Fowler, *Class. Rev.* 1914. Vollmer, in his revision of Baehrens' *Poetae Latini Minores* (1910), frankly states that he sees no good reason for rejecting any of the poems of the Appendix, and this conclusion has been accepted in America by Professor E. K. Rand, whose extremely able article on "Young Virgil's Poetry" appeared in *Harvard Studies in Classical Philology*, xxx (1919).

Rand accepts the *Culex* as a youthful effort of Virgil's, "written under the spell of Lucretius." The *Catalepton* "attests a vigorously Catullan period in Virgil's career." Birt's view that the *Priapea* were written not long before the *Bucolics* is accepted, while the "fourteen" pieces of *Epigrammata* are partly early and partly late. The early ones are very Catullan and some show the youthful Virgil among the poets of love. No. ix, however, in praise of Messalla, "a distinctly mediocre affair, such as great poets sometimes produce when writing from a sense of duty," was written either after Actium in 31 B.C. or in honor of Messalla's triumph over the Aquitanians in 27 B.C., that is to say, when Virgil was either just finishing the *Georgics* or beginning the *Aeneid*. If the poem is really by Virgil, this is undoubtedly the conclusion we must accept, however startling, and therefore it is not surprising to find that even Birt, wedded as he is to the Virgilian authorship of the *Catalepton* as a whole, flatly rejects the poem on Messalla, as also does Sommer (1910), who shows that there is a close connection between it and the *Panegyric on Messalla* included in the Tibullan Corpus (iv, 1).

Anyone who can accept No. ix as Virgilian will have little difficulty in recognizing Virgil as the author of even No. xiii, along with which may be grouped vi, x, and xii. These, says Rand, may have been "prompted by the *Epodes*," and indeed Némethy is so impressed by the Archilochian character of
that he assigns it definitely to Horace's authorship. Rand, however, would "credit Virgil with starting in Roman literature a form which Horace claimed as his creation" (p. 140). Birt, curiously enough, accepts xiii for Virgil and supposes that it preceded v, in which the invitation to the Camenae to return to the poet, sed pudenter et raro, involves a confession of shame at the composition of xiii. This would make v rather late in Virgil's career, though the usual view, as represented by Nettleship, would assign the poem to Virgil's sixteenth year, when he was first taking up the study of philosophy.

The vow made to Venus in xiv must also, if Virgilian, be late in the author's career, and Rand looks favorably upon Birt's view that its composition may be placed between Aen. i and Aen. v, at a time when it would have been very unusual for pentameters to close, as do three of these six, in polysyllables. No. viii, addressed to Siro's villa, must be contemporaneous with some of the Eclogues, being written after either the battle of Mutina in 43 B.C. or that of Philippi in 41 B.C. The elegiac epitaph, xiii a, in praise of some Roman scholar who rivalled the writers of Athens, is of course not by Virgil, though Vollmer thinks Virgil is the subject of eulogy. In like manner, the epilogue, No. xv, is evidently by the editor, who assures us that the collection of elementa, or first efforts, to which it is appended, is by the divine poet who was sweeter than Theocritus, greater than Hesiod, and not inferior to Homer. Birt thinks that this editor was L. Varius, and that, as the verses refer only to the Catalepton, they imply that Virgil's literary executors did not ascribe to him the other minor poems which others attributed to him. This of course is a dubious inference, but I see no reason for supposing with Rand that the collection to which the verses are appended should contain some epic element and therefore that poems like the Culex and the Ciris must have been included. The writer was probably some uncritical person, who did not realize that some poems of the Catalepton could not possibly be called
elementa, at least as far as Virgil was concerned. He must therefore have been somebody quite different from Varius or Tucca, and Sommer seeks to prove from the ἀπαξ λεγόμενον Homereus and the peculiar use of elementa that the epilogue is distinctly post-Augustan.

As to the vexed question of the date of the Ciris, the probability surely is that, if it is by Virgil, it is an early work, dedicated to the young Messalla. Who can believe with Vollmer that it was issued by Virgil as late as 27 B.C., the year of Messalla's victory over the Aquitanians, when Virgil was in his forty-fourth year? Yet hardly more credible is the view advocated by Rand, that the Ciris comes between the Bucolics and the Georgics, that is, when Virgil was at least thirty-four years old. If a study of the parallels leads to such a dating, then a second inference should be that the poem is not by Virgil, but by some poet strongly under Virgil's influence.

Inasmuch as even Donatus expressed doubt as to the Virgilian authorship of the Aetna, for he says "de qua ambigitur," it is indeed "a daring act of heresy" for Rand to claim this work for the greatest of Roman poets. For my part I fear that such a view is quite untenable, even though I am to show presently that so far as vocabulary is concerned, the Aetna does not depart from Virgilian usage appreciably more than the Culex. Rand indeed would place the Aetna between the death of Lucretius and the writing of the Bucolics. "Being a writer of individuality," he says, "Virgil uses expressions that he does not elsewhere use, just as in the second Georgic we find some rather striking cases not found in his other works or in Lucretius." Since most critics regard the Aetna as a product of Silver Latin, this is indeed a remarkably bold verdict.

The Copa too, we are assured, shows features that are "characteristic of Virgil," but as the Moretum is all realism, and moreover is "not in the ancient list," Rand does not claim it for our poet. The Dirae, however, is "altogether in Virgil's manner," and is practically contemporaneous with the Bucolics, but the Lydia is not by the same hand as the Dirae.
Rand's bold plea for a recognition of the Virgilian authorship of these Minor Poems has been followed in a still more audacious manner by Professor Tenney Frank, who in this very year, 1922, has brought out a new life of Virgil,¹ which is frankly based on the assumption that most of the poems we are discussing are Virgil's own product, composed in his formative years, and therefore "full of personal reminiscences. They reveal many important facts about his daily life, his occupations, his ambitions, and his ideals, and best of all they disclose the processes by which the poet during an apprenticeship of ten years developed the mature art of the Georgics and the Aeneid. They have made it possible for us to visualize him with a vividness that is granted us in the case of no other Latin poet" (Frank, p. vi). If we can learn all this from these poems, they become material of extraordinary importance, but before we can utilize them for such a purpose, we must convince ourselves, as Frank has convinced himself, that the poems are indeed the genuine work of Virgil.

Frank is just as ready as Rand to accept the Virgilian authorship of Catalepton, XIII, thus assigning to the poet, who was vita et ore et animo tam probus ut Neapolii Parthenias vulgo appellatus sit, the verses which, if Birt's exegesis is correct, are probably the foulest and filthiest effusion of the Latin Muse now extant. The eulogy on Messalla (ix), according to Frank, was written in 42 B.C., on receipt in Italy of news of the first battle of Philippi, when the camp of Octavius was captured. We are of course more ready to suppose that these insipid verses were written at an early, than at a late date in a writer's career, but even so Frank holds that some of the Eclogues antedate this poem.² However, the assumption that Virgil could ever have written laudatory verses on such an occasion will need more proof than is here produced before it can be accepted.

² Radford regards ix as "the earliest extant work of Ovid, written in his seventeenth year" ("The Juvenile Works of Ovid," T.A.P.A. 11, 159)
The Donatus vita states that the *Culex* was written by Virgil when only sixteen (xvi) years old, but Frank, assuming that there is an error in the numeral, assigns the poem to Virgil's twenty-first (xxi) year. The *Ciris* belongs, he thinks, to the same time, though the dedication was not written until several years later. The *Aetna* may be "the first fruit of Virgil's studies in evolutionary science at Naples" (p. 58), but Frank is not as sure as is Rand of the Virgilian authorship, being haunted by "that stray phrase de qua ambigitur" (p. 60). He admits the "hopelessly prosaic ugliness" of the theme, the "scholastic method" and "acerbity" of the author, and decides that "the poem is not a happy experiment." The credentials offered on behalf of Virgilian authorship are certainly not very satisfactory.

The poem known as the *Dirae* was written by Virgil, thinks Frank, at the same time as the first Eclogue, that is, in 41 B.C. It resembles that Eclogue in its "bitterness," but not in "its grace and tactful beginning." The *Lydia* is to be rejected as the effort of "a neurotic and sentimental pupil of Proper-tius" (p. 131, n. 18). The *Moretum* has no manuscript evidence to support its claim to Virgilian authorship, but Frank holds that it was composed in Virgil's day, and would not be disinclined to regard it as one of Virgil's experiments in a new style (p. 156, n. 4). The three *Priapea* and the *Copa* are recognized as genuine, and are assigned to a period between the *Eclogues* and the *Georgics*.

The question of the authenticity of these Minor Poems was brought home to me very intimately when I was engaged on the *Virgil* for the Loeb Classical Library. I had completed the *Eclogues*, *Georgics*, and *Aeneid* before taking up the lesser works, and naturally, while laboring over the Appendix, I was confronted at almost every step with the problem whether I was dealing with Virgilian or non-Virgilian matter. In the case of many writers, a difference in subject or style would be sufficient to settle the question of spuriousness or genuineness, but in the present case a change of subject or of *genre*
may account for a change of style, and the undoubtedly genuine works of Virgil exhibit a great variety of both subject and style. The Eclogues are classified as pastorals, but they embrace a variety of topics, and their style runs the gamut from the naïveté of colloquial speech to the sublimity of the epic. So with the Georgics. These are didactic poems on a technical subject, but they have a light as well as a weighty side, and deal with simple folk lore as well as advanced science. They reflect the tone of rustic Colin Clout and the skilled astronomer; of the plain man deos qui novit agrestis, and the learned philosopher qui potuit rerum cognoscere causas; of the lyrist and the satirist; of the writer of mock heroics and the serious singer on epic themes. As for the Aeneid, it is the most comprehensive poem in Latin literature, and embraces passages of graceful humor as well as of tragic earnestness. One book deals with the passion of love, and another with the immortality of the soul. In such a work we have a great variety of styles.

A more definitive test of authenticity is furnished by metrical technique. Several scholars have made elaborate analyses of the metrical characteristics of the Culex, Ciris, Aetna, and other poems and have arrived at interesting results. Thus Butcher’s study of “The Caesura in Virgil,” Class. Quart. viii (1914), leads him to the conclusion that the Culex and the Moretum are probably genuine, while the other hexameter poems are not (p. 128). In the Aetna trochaic caesura occurs in 15% of the lines, an increase on Virgil, which betokens a later date (p. 128). As to the Ciris, its characteristics are against its authenticity.

Nearly akin to metrical tests is one that Drachmann applied to some of the poems in question. In his article on the “Cirisfrage” in Herm. xliii, 405 ff. he notes the cases where the end of the verse and the end of a sentence or clause coincide, and he finds that in this respect there is a descending proportion, as you pass from the Aratea of Cicero through Catullus and Lucretius to the Aeneid of Virgil. The pro-
portion for Cicero (and Catullus and Lucretius are practically the same) is slightly over 50%, but for the *Georgics* it is 34.8, and for the *Aeneid* only 27.7. The *Ciris* has a higher percentage than Cicero, being 51.3, while the *Culex* has 41.3. Thus it is evident that in this respect "the *Ciris* is associated with the poetry of the Ciceronian age, while the *Culex* comes between that poetry and Virgil" (Hardie, "A Criticism of Criteria," *Class. Quart.* x [1916], 47). The *Moretum* falls between the *Ciris* and the *Culex* with a proportion of 47.2, but the *Panegyric on Messalla* is completely out of the reckoning, showing the extraordinary proportion of 68.4.

Other tests have been employed by Hardie, who has examined the poems under discussion according to the use of certain mannerisms, such as the employment of participles in the nominative singular, or the mode followed by some writers of "talking about their own literary efforts or purposes." On the basis of such tests Hardie is inclined to reject all these larger poems, even the *Culex*, and to deny them Virgilian authorship.

The most important criterion, and the one which, it seems to me, should be the most fundamental, has not yet been employed to any great extent in connection with this important question. [This is the criterion furnished by vocabulary.]

No writer of course confines himself absolutely to the same range of vocabulary from first to last in a long career, but on the other hand no writer, when dealing with similar subjects, is likely to use a vocabulary in his earlier work which he largely discards in his later. His range may expand considerably, but it will not also contract to any great extent. Indeed, we should not be surprised if at times an author adopts unusual words more freely in his later than in his earlier work, even if he is dealing with the same subject throughout. Even in the last book of the *Aeneid* Virgil uses 88 words found nowhere else in his writings.

The *Eclogues*, *Georgics*, and *Aeneid* embrace nearly 13,000 hexameters (12,914, to be exact). This makes a very large
body of genuine Virgilian verse with which we may compare the questionable poems, and it so happens that, for the most part, the debatable material is of the same metrical structure and belongs to the same literary types as the poems in the unquestioned Virgilian Corpus. Thus the Culex and the Ciris are epics and belong to the same genus as the Aeneid; the Aetna is a didactic poem, which belongs to the same class as the Georgics, and involves the descriptive handling of a scientific theme. The Dirae and Lydia are distinctly pastoral in character, and the Moretum may also be regarded as a bucolic idyll, though in its design and treatment it reminds one of certain passages in the Georgics rather than in the Eclogues. These six poems embrace 1905 hexameters. The Copa, Priapea, and Catalepton are more miscellaneous in character, include only 314 verses, and are in type farthest removed from the great Virgilian works.

It will thus appear that, so far as most of the doubtful poems are concerned, we should not expect to find them, if genuine, differing greatly in their vocabulary from the major poems. Certainly they should not exhibit a greater number of ἀπαξ λεγόμενα, especially if they are early works of Virgil. But if we discover that their proportion of unusual words is abnormally large, then we shall logically and inevitably decide against the Virgilian authorship.

Let us take the Aetna first. Here we have a very unpromising subject, which is treated in most unsuccessful fashion, the style being so stilted, prosaic, and artificial that, if a plebeiscite could be taken to determine the views of Latin scholars who had read the poem, I suppose that at least 95% of them would unhesitatingly express their conviction that the writer, whoever he was, was certainly not Virgil. For my part I agree with Munro that the style is more like Lucan than Virgil, but even so I should not care to contest Professor Rand’s view on merely subjective grounds alone. It is in vocabulary also that I find corroborative evidence that the Aetna is not by Virgil.
In making comparisons, I will as a rule exclude from discussion the proper names and adjectives used, though even here there may be good reason for admitting them occasionally into discussion. Thus among the 17 proper nouns and adjectives in the Aetna, we have un-Virgilian forms in Pierius (7), and Pergamon (18, 589), for Virgil uses only Pierides and Pergama. Virgil seems to avoid Gigantes, which occurs three times in the Aetna (cf. Geor. i, 280; Aen. vi, 582).

The writer of the Aetna uses, of course, a certain amount of technical vocabulary, like alumen (389), seminium (539), and siphon (326), but most of his strange words stand for quite familiar concepts. They are simply un-Virgilian, often prosaic rather than poetic, and sometimes characteristic either of comedy, which is early Latin, or of the Silver period, which is late.

In the 644 verses of the Aetna, there are 151 words not found in Virgil's authentic works. Of these 17 are proper names or adjectives, leaving a remainder of 134. This presents a non-Virgilian element of 20.8%, that is, 20.8 non-Virgilian words in 100 lines. Of these 134 the poet with whom the largest number can be associated is Ovid, for as many as 72 of them are found in Ovid's works. In other words the Aetna is more Ovidian than Virgilian in its vocabulary. I have used Ellis' index to the Aetna and Burman's index, appended to the fourth volume of his Amsterdam edition of Ovid (1727), which Radford quite rightly describes as "much neglected."  

3Ovid uses both Pierus and Pierides.

4Now that I have reached the constructive part of my argument, let me say that it had been practically completed before the Transactions of this Association for either 1920 or 1921 came into my hands. Had I even known that Professor Radford was working on the problem of the Appendix and had advanced as far as the conclusion which he reaches in his paper on "The Juvenile Works of Ovid and the Spondaic Period of His Metrical Art," T.A.P.A. li (1920), I should hardly have had the temerity to send the title of this contribution to our Secretary; and I should have been even less inclined to submit it, had I seen Radford's article on "The Priapea and the Vergilian Appendix" which has just appeared in the T.A.P.A. for 1921. As it is, however, I must frankly
The proportion of non-Virgilian words in the *Aetna* is not as high as one would expect in view of the un-Virgilian style, yet the vocabulary is remarkable for including a great many common words which Virgil altogether avoids, while other poets, such as Ovid and the Elegists, use them freely. It is remarkable, for instance, that a word like *libellus* should nowhere appear in Virgil, but should be found in Ovid 53 times, and that the form *materia*, which Virgil never uses, while *materies* occurs but once (*Aen. xi, 328*), should be found in the *Aetna* 5 times, and 44 times in Ovid. Other striking examples are furnished by *alimentum, arbitrium, lyra, minimus, minuo, moderor, and tabella*. Here is the complete list of non-Virgilian words:

*Aetna*

*adfinis* 252 (Plaut., Ter., Luc.)
adiuto 435, 489 (Plaut., Ter., Luc.)
*adsumo* 159 (Lucr., Hor., Prop.)
*adtineo* 348 (Lucr., Hor.)
agedum 550 (Lucr., Prop.)
*alimentum* 159, 385 (Prop.)
*alumen* 389 (reading of Hein-sius)
apluda 354 (Naev.)
*arbitrium* 195 (Lucr., Hor., Prop., Tib.)
brutus 409 (Lucr., Hor.)
calleo 263 (Lucr., Hor.)
*carbo* 411 (Lucr., Hor.),
cernulo 403 (conject. for cernu-lus, late Lat.)
*coacervatus* 50 (Cat.)

Admit that, so far as my observations go, they lend support to Radford's view that there is little, if any, material in the Appendix that should be regarded as Virgilian. I will not say, however, that I am prepared to follow Radford quite as far as the goal to which he would lead us, namely, that these poems are the work of the youthful Ovid. His articles, however, deserve very careful study, and I am delighted to find one American critic who refuses to listen to the voice of the charmer Vollmer, to whom too many of our Virgilian scholars have so readily succumbed. "Vollmer's method" says Radford (*T.A.P.A. LII [1921], 164) "appears to me wholly to lack the critical faculty, and his article, in its total rejection of internal evidence and its almost total neglect of the work of nearly all students of the Appendix, seems a most remarkable production to proceed from a learned scholar of the twentieth century."

In the following lists I have marked with an asterisk the words that are found in Ovid, while attention is commonly called in parenthesis to other poets who have used the words, and come nearest in date to Virgil.

* In Ovid 12 times.  
7 In Ovid 27 times in plural.  
8 In Ovid 25 times.
Vol. liii]

The Poems of the Appendix Vergiliana

commeo 100 (Plaut., Ter.)
commurmuro 299
*concordia 287 (Lucr., Hor., Prop.)
concremo 622 (Sen.)
confluvium 121, 326
*congeries 206, 374, 478
conservo 524 (Lucr., Prop.)
constringo 516 (Hor., Prop.)
*corrigo 9 182 (Hor.)
*crucio 10 268 (Hor., Prop.)
cunctanter 413
declinis 345 (Lucr., Stat.)
*decresco 471 (Lucr., Hor.)
dein 515 (Hor., Prop.)
demonstro 462 (Cat., Prop., Tib.)
dequeror 585 (Val. Fl., Stat.)
*disso 501 (Lucr., Hor.)
dolium 269 (Hor., Prop., Tib.)
durities 516 (Lucr., Cat.)
effumo 499
eheu 627 (Hor., Prop.)
elanguesco 427 (Val. Fl.)
emergo 118 (Cat., Lucr.)
emugio 294
*exagito 154, 209, 318 (Prop.)
exandescos 604
exillis 98 (Lucr., Hor., Prop.)
*existo 11 300
exundo 382 (Stat., Sil.)
faber 197 (Hor., Tib.)
*fabula 12 23, 42, 510, 602 (Hor., Prop., Tib.)

*faex 475 (Lucr., Hor.)
figulus 515 (Juv.)
*flebils 13 588 (Hor., Tib.)
*foramen 14 285, 565
fulguro 607 (Stat., Sil.)
*fusilis 532, 535
*inaequalis 491 (Hor., Mart., Juv.)
incopertus 142, 546
*incurs 56, 352 (Plaut.)
*index 15 245 (Hor., Prop., Tib.)
inertia 53 (Hor., Tib.)
inimus 104
*inifor 528 (Plaut., Mart., Juv.)
inopinatus 127
introitus 282 (Juv.)
introrsus 107, 176, 288 (Hor.)
intraspectus 340
lenties 542
levitas 349, 526 (Lucr., Prop.)
*libellus 16 536 (Prop.)
*licentia 74 (Plaut., Ter.)
*lyra 17 575 (Prop., Tib.)
magnificus 567 (Tib.)
materia 18 392, 425, 445, 455, 511
mendico 370 (Plaut., Juv.)
mendus 74
*mendo 232
*miito 217 (Prop., Hor.)
*minus 19 617 (Hor.)
*miuno 20 282 (Lucr., Hor., Prop.)

In Ovid 11 times.
In Ovid 17 times.
In Ovid 22 times.
In Ovid 44 times.
In Ovid 10 times.
In Ovid 23 times.
In Ovid 53 times.
In Ovid 31 times.
In Ovid 11 times.
In Ovid 46 times.
In Ovid 22 times.
*moderor 21 557
momen 304 (Lucr.)

*nubilus (sing.) 288, 312 (Prop., Tib.)
*numerosus, 38, 296 (Prop.)
*obrepo, 239 (Tib.)
*obsequor 337 (Juv.)
*occursus 376
*operosus 22 567 (Hor., Prop.)

parsurus (parco) 622, 623
patientia 409 (Tib.)
*perbibo 320 (Plaut.)
perhaurio 420 (Plaut.)
perpascor 491
*perquiro 254 (Plaut.)
persaepe 508 (Hor., Prop.)
pertabesco 474
*pessum 137 (Plaut., Ter., Lucr.)

*petulans 73 (Juv.)
pigre 413 (Luc.)
*ploro 586 (Hor., Prop., Tib.)
*paeclusus (Lucr., Prop.)
*professus 260
*promptus (subst.) 160, 218
(Plaut., Lucr.)
prope (adv.) 213 (Prop., Tib.)
proprietas 512
proruo 308 (Hor.)
*provoco 52, 53 (Tib.)
*pugnax 242 (Hor., Prop.)

*raro 436 (Hor., Prop.)
*refrigesco 439 (Lucr.)

*rotundus 433 (Lucr., Hor., Prop.)
scateo 431, 456 (Lucr., Hor.)
*scrutor 178, 257 (Lucr., Hor.)
seminium 539 (Lucr.)
*senesco 238 (Lucr.)
*sepono 642 (Hor., Prop., Tib.)
simans (conject.) 494
siphon 326 (Juv.)
*spatiosus 22 140 (Prop.)
*stolidus 24 365 (Lucr., Hor., Prop.)
*subsequor 221 (Tib.)
*subtilis 144 (Lucr., Hor.)
*subverto 543 (Lucr., Hor.)
succerno 495 (Plaut.)
*succurro 194 (Lucr., Plaut., Tib.)
sucusus 267, 533
suffoco 319 (Lucr.)

*tabella 25 592 (Hor., Prop., Tib.)
transfugio 348 (Plaut.)

utpote 491 (Plaut., Hor.)

vacuo (-are) 107 (Lucr.)
varie 184, 396 (Plaut.)
vegeo 120 (ante-class.)
*ventilo 350 (Prop.)
*verax 174 (Hor., Prop., Tib.)
vernaculus 386 (Plaut.)
vicien 508
vixdum 611 (Ter.)

21 In Ovid 19 times, besides moderate and moderatius.
22 In Ovid 11 times.
23 In Ovid 19 times.
24 In Ovid 9 times.
25 In Ovid 44 times.
Turning next to the *Culex*, which all critics are much more inclined to attribute to Virgil than the *Aetna*, it is surprising to find that this poem has a slightly larger proportion of alien vocabulary than the *Aetna*, for in its 414 verses we find 134 non-Virgilian words, 45 of which are proper names. The remaining 89 show a foreign element amounting to 21.25 in a hundred lines. Of these as many as 58 are found in Ovid, so that only 31 are non-Ovidian. It is to be observed that certain of the *Culex* adjectives foreign to Virgil are great favorites with Ovid. Thus *vagus* and *viduus* each occur 18 times in his works. *Senilis* 12 times, *squalidus* 11 times, *luridus* 8 times, *parilis* and *pudibundus* each 7 times, *excelsus* 5 times, *floridus* and *truculentus* each 4 times. Among nouns, *lyra* occurs 48 times, *iocus* 26 times, *baculum* 15 times, *charta* and *convicium* 14 times each, *nitor* 13 times, *notitia* and *utilitas* 12 times, *languor* 11 times, *perfidia* 6 times, and *historia* 5 times. Of verbs, *resideo* occurs 21 times, *aversor* 7 times, *polleo* and *remoror* 6 times, *propello* 5 times, and *refoveo* 4 times. Of other parts of speech, we find *quilibet* 22 times, *leniter* 7 times, and *eheu* 4 times. Of the proper nouns and adjectives found in the *Culex*, it may be worth while to observe that Virgil never employs *Pierius* (vs. 18), *Giganteus* (28), *Erichthonius* (adj., 30, 336, 344), *Hyperion* (101), *Nyctelius* (111), *Cadmeis* (111), *Cadmeus* (254), *Erebus* (202), *Hymen* (247), *Bistonius* (252), *Zanclaeus* (332), *Sparticus* (400), *Cilix* (401), *Cupidineus* (409). Of these words, *Giganteus* occurs in Ovid 5 times, *Hyperion* 6 times, *Bistonius* 8 times, and *Hymen* 9 times. Of the remainder, the majority

26 In dealing with the remaining poems of the Appendix, we have the great advantage of being able to use the excellent *Index Vergilianus* of Professor Wetmore's (Yale University Press, 1911).

27 Ovid's works embrace 32,285 verses, somewhat more than 2½ times as many as Virgil's.

28 Commenting on *Erichthonias arces* (336) Leo says: "bellam deprendimus doctrinae ostentationem; idem scilicet qui v. 30 *Erichthonias arces* Athenas nominavit, hic Troiam ab Erichthonio Dardani filio, quem ex Iliadis v. 319 omnes norunt, adiectivum praeter hunc nemo, ac statim repetit v. 344."
occur in Ovid, though less seldom, 27 of the non-Virgilian names appearing in his works.

The *Culex* sometimes shows inflectional forms unknown to Virgil. Thus *Panes* (94, 115) and *neces* (310); Virgil uses only the singular in each case. Also *labruscum* (55), as compared with *labrusca* (1st decl.) in Virgil; and *meo* (174), for which Virgil always gives the deponent *metor*. The *Culex*, like the *Aetna*, has *Pierius* (18); Virgil uses *Pierides*. The word *luxuria* is used twice in the *Georgics* (1, 112. 191) in the sense of 'richness of crop,' but in the *Culex* it means 'rich living.' The latter is the only sense in which it is used by Propertius, but both meanings are common in Ovid. The verb *formo* is found only twice in all Virgil, but four times in the *Culex* (2, 396, 397, 412), and twelve times in Ovid. Certain other words, fairly characteristic of the *Culex*, being used at least twice, are rare in Virgil. Thus:

*officium* (223, 231, 414), only in *Aen*. 1, 548. It is a *verbum amatorium* and occurs 6 times in Propertius, and 91 times in Ovid.
*evectus* (84, 107, 253), never in Virgil, though *evehit* occurs once.

The participle is found twice in Ovid.
*distans* (232, 259): Only *distant* in Virgil. The participle occurs 11 times in Ovid.
*feritas* (303, 311), only in *Aen*. xi, 568, but 13 times in Ovid.
*liquor* (14, 149, 307), only in *Geor*. iii, 488, but 6 times in Ovid.
*excelsus* (46, 155), only as a variant in *Aen*. v, 35, but 5 times in Ovid.
*adsideo* (301, 315), only in *Aen*. xi, 304, but 4 times in Ovid.
*corymbus* (144, 405), only in *Ecl*. iii, 39. Used by Ovid.
*rapax* (103, 331), only in *Geor*. iii, 142. Used by Propertius and Tibullus.

The following is a list of non-Virgilian words in this poem:

*Culex*

*aamaranthus* 406 (Tib.)
*araneolus* 2
*aureolus* 144 (Plaut., Cat.)
*aversor* 256

*baculum* 98 (Prop.)
bocchus 406
*charta* 24 (Tib.)

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<td>(post-Aug.)</td>
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<td>*perfidia</td>
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<td>*polleo</td>
<td>74</td>
<td>(Prop.)</td>
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<td>praepando</td>
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<td>(Lucr.)</td>
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<td>prosterno</td>
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<td>*pudibundus</td>
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<td>*pupula</td>
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<td>*quantumcunque</td>
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<tr>
<td>quaqua</td>
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<td>(post-class.)</td>
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<tr>
<td>*quilibet</td>
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<td>(Prop.)</td>
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<td>recino</td>
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<td>(Hor.)</td>
</tr>
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<td>*refoveo</td>
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<td>regemo</td>
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<td>*remoror</td>
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<td>*resideo</td>
<td>106, 159, 146, 358</td>
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<td>*respectus</td>
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<td>*revolubilis</td>
<td>169</td>
<td>(Prop.)</td>
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<td>rhododaphne</td>
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Most scholars have found it easier to come to a decision upon the authorship of the Ciris than upon that of the Culex. The external evidence is much weaker, and even Rand admits that "at the first reading the Ciris seems curiously unlike Virgil" (p. 146). He would assign the poem to Virgil's twenty-first year. Frank would place it two or three years later. Vollmer thinks that the introduction, which may be later than the body of the poem, was written in 27 B.C., after Messalla's victory over the Aquitanians.

In the 541 verses of the Ciris there are, I find, 131 words not to be met in Virgil. Of these, 51 are proper names, and it is significant that as many as 38 of the 51 appear in Ovid. Among them are Giganteus (30), and Pandionius, (101, 408), both of which we found in the Culex as well. The common words unknown to Virgil are present in the proportion of 14.8 to 100 verses. Many of these seem to be favorites with the writer, one of them, alumna, being used 11 times. Haliaeetos, ocellus, and sophia are used three times each, while the following occur twice each: charta, complures, despuo, frigidulus, libido, mirificus, nutricula, polleo, pote, remoror, tabesco, tribuo. Note the form pote (= potest), the archaic infinitive vexarier, and the curious use of terrarum milia for terrarum orbis (521).

Many of the non-Virgilian words in the Ciris are much in evidence in Ovid, as may be seen from the following instances. Thus ocellus, 20 times; relevo and tribuo, 19 times each; leviter, sedulus, supprimo, 16 times each; charta, 14 times; libido, 13 times; infamis and mendacium, 9 times each; marila,
tumulo, unicus, 8 times each; polleo and remoror, 6 times each; salutifer, 4 times; alumna, 3 times. Of proper names, Homerus occurs in Ovid 9 times, Athenae 7 times, and Atticus, Echidna and Giganteus, 5 times each.

The complete list, exclusive of proper names, is as follows:

Ciris

adsigno 304 (Tib.)
aegrotus 226 (Hor.)
aerumna 58 (Hor.)
*alumna 224, 246, 274, 289, 311, 324, 331, 338, 347, 381, 441
ancillaris 443
*animans 491
*antistita 166
argute (conject.) 186 (Plaut.)
*charta 39, 62 (Tib.); also in Cul.
*chorda 178 (Tib.)
circumvehor 271 (Plaut.)
coccina 169 (Mart.)
coccum 31 (Hor.)
complures 54, 391 (Hor.)
concrebresco 25
confingo 362 (Ter.)
conquiro 354 (Prop.)
consaepio (conject.) 85
crobylus (conject.) 128
crocota 252 (Plaut.)
*curialium 434
*denubo 330
despuo 372, 373 (Tib.)
*detondeo 186 (Prop.)
deturpo 284
exorno 148 (Prop., conject.)
*expallesco 81 (Hor.)
frigidulus 251, 348 (Cat.)

*haliaeetos 204, 528, 536.
hortulus 3 (Cat.)
impudentia 190 (Ter.)
*infamis 87 (Prop., Tib.)
*infestare 57
*internodium 491
interverto 84 (Plaut.)
*lascivio 142
*lectulus 440 (Prop.)
*leviter 11 (Prop.)
*libido 13 (Prop.)
livesco 450 (Lucr.)
*macero 244
*marceo (conject.) 347
*marita 443 (Prop.)
*mendacium 362 (Prop.)
*meretrix 86 (Prop.)
mirificus 12, 13 (Ter.)
nicto 218 (Lucr.)
notesco 90 (Prop.)
*novenus 371
nutricula 257, 277 (Hor.)

obnixe 301 (Ter.)
*oellus 132, 238, 345 (Cat.)
*pertimesco 82 (Tib.)
polleo 411, 483 (Prop.); also in Cul.
*populator 111
pote 227, 328 (Prop.)
In the above list of 80 words, half the number (39, to be exact) are found in Ovid, and though many of the words are used by other poets as well, none of these approach Ovid in respect to frequency of occurrence. The Ciris indeed, like the Aetna and the Culex, is distinctly more Ovidian in its vocabulary.

We have seen that while Rand rejects the Moretum for lack of external evidence, and Frank is inclined to accept it, Butcher thinks it is probably genuine, and Drachmann places it in time between the Ciris and the Culex. What is the evidence furnished by vocabulary? In the 124 hexameters of the Moretum, there are 69 non-Virgilian words, only two of which are proper names. The poem abounds, of course, in agricultural and botanical terms, but both the Eclogues and the Georgics offer a similar field for such language. Of the non-Virgilian words as many as 31 are found in Ovid, and 22 in Horace. We may note too that some of these words are remarkably common in Ovid, for tabella occurs 44 times, remaneo and spatius 19 times each, leviter and sedulus 16 times each, convicium 14 times, mensura 13 times, foramen 9 times, sincerus 7 times, providus and mica each 5 times. So far then as vocabulary goes, the Moretum is far more Ovidian than
Virgilian, though even so there remains a larger non-Ovidian element than in any of the poems previously considered. The complete list of non-Virgilian words is as follows:

**Moretum**

acetum 114 (Hor.)
*acumen 77 (Hor.)
beta 72 (Cat., Mart.)
*bulbus 96
*caepa 84 (Hor.)
calcaneum 36
carnarium 56 (Plaut., Mart.)
casula 61, 67 (Juv.)
*clavis 15 (Hor., Prop., Tib.)
*convicium 110 (Cul. 209)
coriandrum 91 (Plaut.)
*cribrum 40 (Pers.)
cucurbita 78 (Juv.)
*deperdo 104 (Hor., Prop., Tib.)
*dilato 48
emundo 43
eruca 86 (Hor.)
excubitor 2
*excurro 18
*exilis 35 (Hor., Prop.)
farina 40, 45 (Mart.)
*foramen 42 (Hor.)
grabatus 5 (Cat.)
grumus 47
inspergo 98 (Hor.)
instillo 113 (Hor.)
inula 73 (Hor.)
lactuca 76 (Mart.)
*leviter 88 (Cir. 11)
*lipo 42 (Hor.)
loratus 123
*lucerna 10 (Hor., Tib.)
macellum 83 (Hor.)
*malva 73 (Mart.)
*mensura 17 (Juv.)
*mica 98 (Hor.)
*moretum 118
mortarium 93, 116 (Plaut.)
mundo 50 (post-Aug.)
nasturtium 85
*nocuus 75
*nodosus 94
*octoni 18
panis 119 (Hor.)
pverrho 23
*pistillum 101, 112 (Plaut.)
porrum 74, 84 (Mart., Juv.)
*providus 60 (Hor., Tib.)
*purgamen 41 (Prud.)
redivivus 62 (Prud.)
refo 88 (Luc.)
regula (al. recula) 66 (Hor., Mart.)
*remone 8, 41 (Lucr., Hor.)
rume 73 (Plaut.)
*ruta 90
salebrosus 111 (Mart.)
*sedulus 119 (Cir. 354)
*sensim 5 (Plaut., Lucil.)
*sincerus 42 (Hor.)
siser 74
spartum 58
*spatiosus 35 (Luc.; adverb, Prop.)
*tabella 19 (Hor., Prop., Tib.)

transverso 46
*unicus 31 (Cir. 334)
venalis 81 (Hor., Prop.)
versatilis 39 (Lucr.)

As to the *Copa*, which is assigned to Virgil by Servius and Charisius (both fourth-century writers), but is not included in the Donatus list, both Rand and Frank unhesitatingly call it a Virgilian poem. I admit that it is not unworthy of Virgil, but when I find in its 38 verses (19 elegiac couplets) as many as 29 words foreign to Virgil as we know him, I become convinced that we must look elsewhere for the author. There are four proper nouns or adjectives in our list. Deduct these and the remainder is equivalent to the extraordinary proportion of 65.8 in one hundred verses. Only ten of the *Copa's* non-Virgilian words are found in Ovid. The residuum belongs mainly to prose, comedy, and satire. The following is the complete list:

*Copa*

*asinus 26
*autumnalis 18 (Prop.)

caseolus 17
*chorda 7 (Cir. 178)
copa 1
corolla 13 (Cat., Prop.)
crispus 2 (Juv.)
crotalum 2
crystallus 30 (Prop., Mart.)
*cyathus 7 (Hor., Prop., Juv.)
decumo 6 (Sen.)
*ebrius 3 (Hor., Prop., Tib.)
garrio 9 (Hor.)

*iuncus 17
kalybae 7
*lacerta 28 (Hor.)
mitella 1
pico 11 (Mart.)
strophium 32 (Cat., Prud.)
*taberna 3 (Hor., Prop.)
*talus 37 (Hor., Prop., Tib.)
topia 7
trichila 8
vappa 11 (Hor., Mart.)
*vitrum 29 (Hor., Prop., Mart.)
Much more Virgilian than any of the poems thus far considered, so far at least as vocabulary is concerned, are the *Dirae* and the *Lydia*, in whose 183 hexameters there are only 30 common words unknown to Virgil (16.3 to 100 verses). The question, therefore, of their authorship will be largely dependent on our verdict as to the rest of the poems. If they are by Virgil, so too must these be. Slightly more than one-half of the non-Virgilian words, 17 in all, are found in Ovid, one of whose favorites, *libellus*, occurs in his works 51 times; *ocellus* and *tribuo* are also characteristic of Ovid. The complete list follows:

**Dirae**

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</tr>
<tr>
<td><em>moechus</em></td>
<td>66</td>
</tr>
<tr>
<td><em>ocellus</em></td>
<td>5 (Cir. 132, 238, 348)</td>
</tr>
</tbody>
</table>

The three *Priapea* are regarded as Virgilian by Birt, who holds that they were written shortly before the *Bucolics*. In this he is followed by Rand. Frank, however, would assign them, as well as the *Copa*, to the period between the *Eclogues*
and the *Georgics*. If this were so, there should be little difference in diction between the *Priapea* and the *Eclogues*, since in tone and spirit, if not in metres, the two groups have so much in common. Yet in 46 verses we find as many as 20 words (a proportion of 43.5 in 100 verses) used nowhere in Virgil, besides certain forms which differ from Virgilian usage. Thus *expedit*, 30 2, 17, used impersonally, whereas the verb is always personal in Virgil; *proin*, 2, 16, for the Virgilian *proinde*; and *tuor*, 2, 5 and 3, 4, a Lucretian form 31 used instead of *tuor*, which Virgil employs 58 times. 32 The full list follows:

*Priapea*

<table>
<thead>
<tr>
<th>Word</th>
<th>Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>agellulus</td>
<td>2, 3</td>
</tr>
<tr>
<td>barbatus</td>
<td>3, 16 (Cat., Hor.)</td>
</tr>
<tr>
<td>corolla</td>
<td>2, 6; 3, 10 (Cop. 13)</td>
</tr>
<tr>
<td><em>crux</em></td>
<td>2, 18 (Hor., Prop.)</td>
</tr>
<tr>
<td>cucurbita</td>
<td>3, 13 (Mor. 78)</td>
</tr>
<tr>
<td><em>delicatus</em></td>
<td>2, 10 (Cat.)</td>
</tr>
<tr>
<td><em>formitatus</em></td>
<td>3, 3</td>
</tr>
<tr>
<td>gelata</td>
<td>(Birt) 2, 9 (Mart., Juv.)</td>
</tr>
<tr>
<td>hirculus</td>
<td>3, 16</td>
</tr>
<tr>
<td>hortulus</td>
<td>2, 4; 3, 18 (Cir. 3)</td>
</tr>
<tr>
<td><em>ligneus</em></td>
<td>1, 3 (Prop., Tib.)</td>
</tr>
<tr>
<td>mentula</td>
<td>2, 18, 21 (Cat.)</td>
</tr>
<tr>
<td>pol</td>
<td>(bis) 2, 19 (Hor.)</td>
</tr>
<tr>
<td>proind</td>
<td>2, 16 (Ter.)</td>
</tr>
<tr>
<td><em>spica</em></td>
<td>1, 2 (Dir. 73)</td>
</tr>
<tr>
<td>sursum</td>
<td>2, 17 (Lucr., Mart.)</td>
</tr>
<tr>
<td><em>tuor</em></td>
<td>2, 5; 3, 4 (Lucr., Cat.)</td>
</tr>
<tr>
<td>vaccola</td>
<td>(Lyd. 29)</td>
</tr>
<tr>
<td>vilicus</td>
<td>2, 19 (Hor.)</td>
</tr>
<tr>
<td>villula</td>
<td>2, 4; 3, 1</td>
</tr>
</tbody>
</table>

As regards the fifteen *Epigrammata* which make up the *Catalepton* collection, it would be easy to convince oneself that some at least of these are by Virgil. 33 The fifteenth is

---

30 Birt's comment is: "Das expedit ist gut rustikan und wird gern bei Cato und Columella, de re rustica, verwendet."

31 Sommer, *De P.V.M. Catalepton*, p. 107.

32 The form *tuor* is used once in the *Priapea*, 3, 18.

33 In his striking article on "The Priapea and the Vergilian Appendix" (*T.A.P.A.* LI, 162 ff.) Radford presents the theory that these little poems are Vergilian 'impersonations,' similar in character to the 'impersonations' of Tibullus (Tib. IV, 13; II, 3, 5). In both cases he supposes that Ovid was the actual author.
of course an editorial epilogue, but the fourteenth undoubtedly refers to the *Aeneid* as a poem begun and not yet completed. The seventh is addressed to Varius, presumably the well-known friend of Virgil's, and the eighth to Siro's villa, in which the poet and his father are finding refuge. The second is assigned to Virgil by Quintilian. Others are bright *jeux d'esprit*, which might well be the product of a brilliant versifier, but when we find that the two longest poems in the collection — the ninth, of 64 verses in elegiac couplets, and the thirteenth, of 20 iambic strophes, 40 verses in all, — are absolutely unworthy of a poet of lofty character, distinction, and nobility, we begin to suspect that the ancient editor, who regarded these poems as Virgilian *elementa*, was sadly lacking in critical judgment. The ninth, however, the *Panegyric on Messalla*, though condemned by its stilted and artificial style, as well as by the excessive coincidence of verse-close and sentence-close, which Drachmann observed, is not very un-Virgilian in diction, for aside from proper names, it contains only four words for which we look in vain in Virgil, namely, *deterreo* (11), *herois* (21), *cyaneus* (27), and *immoderatus* (45).

Yet here again, however Virgilian the language may be, it is even more strikingly Ovidian, for of the eleven words absent in Virgil, as many as nine occur in Ovid. These include the four words already cited, together with the five proper nouns, namely, *Pegasides* (1) (a synonym for *Musae*), and four names associated with myths often alluded to by Ovid — *Oenides* (6), *Cassiopea* (28), *Semele* (33), *Inachis* (33). Radford's theory that this poem is not only by Ovid, but, as belonging to 27 B.C., is the poet's earliest extant work, a product of his seventeenth year, is not unattractive, and is certainly much more plausible than the hypothesis that these feeble verses were composed by the greatest of Roman poets at a time when he had published the *Georgics* and was entering upon the *Aeneid*.

The thirteenth poem of the *Catalepton*, which we have al-
ready characterized in no uncertain terms, is absolutely un-Virgilian in diction, for in its 40 verses there occur as many as 24 common words which cannot be duplicated in Virgil. This is equivalent to the extraordinary proportion of 60 non-Virgilian words to 100 short lines. The vocabulary is scarcely more Ovidian than Virgilian, for only six of the alien words are found in Ovid, namely, *adscribo, improbo, incito, prostituo, stola,* and *turgidus.* Most of the peculiar language belongs to comedy, satire, and prose. Whether these abusive verses were written by Horace, as Némethy holds, or by Ovid, as Radford believes, or by some unknown writer, as I am inclined to think, they are certainly not by Virgil.

Taking the *Catalepton* poems as a whole, we find that in their 229 verses there are 81 non-Virgilian words, which yield a proportion of 35.3 in 100 verses. Omission of the proper names reduces this to a percentage of 28.8. The complete list follows:

*Catalepton*

*adscribo* 13, 34 (Hor.)
*amator* 2, 1 (Hor., Prop., Tib.)
*ampulla* 5, 1 (Hor.)

*bidens* 10, 9 (*Cir.* 213)

*callidus* 14 a
*charta* 5, 13 (*Cul.* 24; *Cir.* 39, 62)
*cinaedus* 13, 35 (Cat., Mart., Juv.)
* cisium* 10, 3
*comatus* 10, 10
*compitalia* 13, 27
*contubernium* 13, 7
*culina* 13, 27 (Hor., Juv.)
*cyathus* 11, 4 (Hor., Prop., Juv.)
*cycneus* 9, 27 (*Dir.* 1)

*dedico* 10, 25 (Hor., Tib.)
*deterreo* 9, 11 (Hor., Tib.)
*dispeream* 4, 3; 7, 2 (Hor., Prop.)

*eburneus* 10, 23
*elementum* 15, 3 (Hor., Juv.)
*fascinus* 13, 20 (Hor.)
*ferior* 13, 20 (Hor.)
*generinus* 13, 36 (Juv., Pers.)
*helluor* 13, 11
*hernia* 12, 8 (Plaut.)
*herniosus* 13, 39
*herois* 9, 21 (*Cul.* 261)
*historia* 11, 6 (*Cul.* 4)
*immoderatus* 9, 45 (Lucr.)
*improbo* 13, 9 (Hor.)
impudicus 13, 9 (Mart.)
*incito 13, 8 (Juv.)
inedia 13, 40 (Plaut.)
lutosus 10, 12
min 2, 4
*momentum 3, 10 (Hor.)
mula 10, 19
mulio 10, 2 (Juv.)
natio 5; 4 (Plaut.)
natis 13, 14 (Hor., Mart., Juv.)
orbitosus 10, 17
pentex 13, 31 (Mart.)
parsimonia 13, 11
patrimonium 13, 11
pertineo 6, 5
πῶθος 7, 2
*prostituo 13, 7
pudenter 5, 14 (Hor.)
putidus 6, 2; 12, 1 (Cat., Hor.)
*quatenus 2, 2 (Hor.)
raro 5, 14 (Hor.)
rhetor 2, 2; 5, 1
rhoso (?) 5, 2
salivosus 13, 29
*sarcina 10, 16
savium 13, 32
scholasticus 5, 4
semitalis 10, 20
sphin 2, 4
*stola 13, 21 (Hor., Mart.)
strigare 10, 19
*tabella 14, 5 (Mor. 19)
tau 2, 4
*turgidus 13, 40 (Hor.)
usquequaque 6, 5 (Mart.)

I am well aware that mere statistics often furnish an easy mark for criticism, and Rand very properly heaps ridicule on the figures adduced by W. Schmidt, who tries to prove from a statistical study of the use of verbs and adjectives in the Culex that that poem is un-Virgilian. For my part I am quite ready to concede that a certain number of novelties of expression may be expected in any literary product, and the mere fact that some words not used elsewhere in a writer's works do occur in the one suspected does not furnish conclusive proof that the work in question is spurious. Such a fact, however, may provide corroborative evidence, and in the case of these poems of the Appendix it is not merely the alien vocabulary that we should take into account, but also the questions of style, literary type, phraseology, turns of thought, personal mannerisms, and metrical technique, to say nothing of the external evidence involved. But even if we confine our at-
tention to the question of vocabulary, is it not true that, while we may assume for every writer that he will employ new words and expressions when occasion demands them, there must be some margin of inventiveness beyond which in a succession of his works he is not likely to advance? If the new element is abnormally large, surely we are justified in basing upon it a suspicion of alien authorship. Is it possible, then, to find out what this margin was in the case of Virgil?

I have examined the *Bucolics* from this point of view and I find some interesting facts. If we had reason to suspect the authenticity of these ten poems, and were to subject them to such a test as we have applied to the poems of the Appendix, we should learn that in the Eclogues, which embrace 829 verses, there are 102 common words not found elsewhere in Virgil's work. This is equivalent to a proportion of 12.3 in a hundred verses, a figure which would be reduced to about 9%, if we were to treat the Minor Poems as genuine, and were therefore to exclude from consideration all words found in them as well as in the Eclogues. If we were to subject the individual Eclogues to the same test, the proportion would run from only 5.5% (Ecl. viii) to 15% (Ecl. ii), to be reduced in the latter case to 8.2%, if we treated the Minor Poems as genuine. The other Eclogues would run thus: i, 12%; iii, 12.6%; iv, 11%; v, 7.7%; vi, 10.46%; vii, 8.5%; ix, 6%; x, 11.7%.

Let us compare these figures with those which we have already given for the several poems of the Virgilian Appendix. We have seen that in these the non-Virgilian element shows a percentage as follows: Aetna, 20.8; Culex, 21.25; Ciris, 14.8; Moretum, 54; Copa, 65.8; Dirae (and Lydia), 16.3; Priapea, 43.5; Catalepton, 28.8 (Cat. xiii, 60%). These figures show at once that there is a great difference between the Minor Poems and the Eclogues in their relation to general Virgilian vocabulary. The only poems which approach the norm of the *Bucolics* are the Ciris and the Dirae, next to which after a considerable interval come the Aetna and the Culex.
Even the books of the *Georgics*, which, notwithstanding their imaginative beauty and artistic finish, are nevertheless poems on special, practical, and even highly technical subjects, reveal on examination the truth that their vocabulary is much nearer to the Virgilian norm than is that of the poems of the Appendix. The words peculiar to the several books number respectively: I, 77; II, 79; III, 87; IV, 72, showing the following ratio to 100 verses: I, 15; II, 14.6; III, 15.3; IV, 12.7. Of all the Minor Poems only the *Ciris* can show as low a proportion of peculiarities of vocabulary.\(^{34}\)

The result of our examination of the vocabulary of the Minor Poems has been to confirm us in our conviction—a conviction based originally on purely stylistic considerations—that probably not a single one of these poems has been correctly assigned to Virgil. They stand condemned by internal evidence. If we turn to other fields of literature for parallels, we may say that we have no more right to call these poems Virgil’s than we have to claim the last twelve verses as part of the Gospel of St. Mark,\(^{35}\) or than we have to attribute the tragedy of *Titus Andronicus* to Shakespeare.\(^{36}\)

\(^{34}\) A similar test applied to the *Aeneid* results as follows: I, 48 = 6%; II, 54 = 6.7%; III, 57 = 7.9%; IV, 52 = 7.37%; V, 63 = 7.2%; VI, 91 = 10%; VII, 77 = 9.4%; VIII, 75 = 10.2%; IX, 55 = 6.7%; X, 77 = 8.48%; XI, 78 = 8.5%; XII, 88 = 9.2%.

\(^{35}\) Speaking of these verses, as well as of the shorter duplicate passage found in four uncial manuscripts of the New Testament, Plummer says, in his edition of the Gospel in the *Cambridge Greek Testament*, p. xliv: “That neither of these endings is part of the original Gospel is one of those sure results of modern criticism which ought no longer to need to be proved.” And yet (p. xlv) Plummer himself admits that the “external evidence to the genuineness of the twelve verses seems to be not only conclusive, but superabundant.” This external evidence, however, “is completely shattered by the internal evidence, which by itself would be decisive” (p. xlvii).

\(^{36}\) See John M. Robertson, *Did Shakespeare Write “Titus Andronicus”?* (London, 1905): “The whole mass of the internal evidence is overwhelmingly against the traditionist view” (p. 238). Robertson’s Epilogue might be studied by classical scholars with profit. He writes: “After a generation in which much was done to reach exactness of method and rationality of test, we seem to be in large part given over to the merest intuitionism.” In these days of ‘higher criticism’ he claims that “the criticism of some developments of secular literature has reverted to pre-scientific forms.”
The only reason left for claiming Virgil as the author of the Appendix rests upon external evidence, the testimony of Servius and Donatus. Yet how easy it was in ancient days for anonymous literary works to become attached to the names of famous authors! Thus the Cyclic epics and the Hymns were commonly assigned to Homer. Thus it was that numerous short but spurious poems, composed in the sententious style, fastened themselves upon Theognis. Thus pastoral poems, of unknown authorship, were readily assigned to Theocritus. Thus the Tibullan Corpus grew to its present dimensions. And thus too, I believe, in the early post-Augustan age, when Virgil’s renown was at its height, a body of verse, comprising mock-heroics, epyllias, idylls, and epigrams, which came to light without any name attached, were conjured to be the work of Virgil in his early years.

Apart from the Eclogues, Georgics, and Aeneid, I doubt whether a single line of genuine Virgilian work has survived. From what his biographers themselves say, we infer that Virgil must have taken the greatest pains to suppress his immature and imperfect productions. “Scripta sua sub ea condicione legavit ne quid ederent quod non a se editum esset.” Even the Aeneid would never have survived except through an imperial decree: “edidit autem auctore Augusto Varius.”
II. — Syllabification and Syllabic Quantity in Greek and Latin

BY DR. E. H. STURTEVANT

EDGEWATER, N. J.

I. HISTORICAL

Jespersen somewhere expresses ironic admiration for classical scholars who know precisely where Homer's syllables began and ended, whereas phonetically trained observers find difficulty in determining the corresponding facts about the modern languages. It is to the credit of classical scholarship that there has appeared some disagreement in regard to syllable division; but the proposers of new theories unfortunately undertake to fix the position of the syllable-ends as definitely as their predecessors did. The whole matter calls for re-examination in the light of phonetic science. But first we must note that the familiar theory of syllable division in Greek and Latin does not rest upon a unanimous ancient tradition, and that each of the two important ancient theories was inconsistent with itself.

The following passage from Dionysius of Halicarnassus (de Comp. 15, Vol. II, pp. 57–59 Usener-Radermacher) may be taken for the text of this discussion:

ἐκ δὴ τῶν γραμμάτων τοσούτων τε ὄντων καὶ δυνάμεως τοιαύτας ἔχόντων αἱ καλούμεναι γίνονται συλλαβαί. τούτων δὲ εἰσὶ μακρὰ ἢ ὡς συνεστήκασθι ἐκ τῶν φωνηέντων τῶν μακρῶν ἢ τῶν διχρόνων ὅταν μακρὸς ἐκφέρηται, καὶ ὡςι λήγουσιν εἰς μακρὸν ἢ μακρῶς λεγόμενον γράμμα ἢ εἰς τι τῶν ἡμιφώνων τε καὶ ἄφωνων. βραχεῖα δὲ ὡςι συνεστήκασθιν ἐκ βραχείος φωνηέντος ἢ βραχείως λαμβανομένου, καὶ ὡςι λήγουσιν εἰς ταῦτα. μὴν δὲ καὶ βραχύτητος συλλαβῶν οὐ μία φύσις, ἀλλὰ καὶ μακρότεραι τινὲς εἰς τῶν μακρῶν καὶ βραχύτεραι τῶν βραχειῶν. ἔσται δὲ τούτο φανερὸν ἐπὶ τῶν παραδειγμάτων.

ὁμολογεῖται δὴ βραχεία εἶναι συλλαβή, ἣν ποσὶν φωνηέν γράμμα βραχύ τὸ ὁ, ὡς λέγεται δὲδε. ταύτῃ προστεθήτω γράμμα ἐν τῶν ἡμιφώνων τοῦ ρ καὶ γενέσθω Ῥόδος· μένει μὲν ἔτι βραχεία ἢ συλλαβῆ, πλὴν οὐχ ὄροιος, ἀλλ’ ἔξει τινὰ παραλλαγὴν ἀκαρή παρὰ τὴν προτέραν. ἔτι προστεθήτω
taught then of grammators en to τι καὶ γενέσθω τρόπος... meiwn avth
tow protéron estai syllabon kai eti braxheia menei. τριτον eti grámma
thi avth syllabi prostebhtó to so kai ge nésthv strophos... trivn avth
prasotikous akoustais makritéra genhéstai ths braxhtátis me nousta eti
braxhia. odikoun téttarox avtíi braxheías syllabóis diaphorai thn allon
aisthsen exouso ths parallaghs métron. o aitóq lógos kai eti
ths makrás. ἢ γάρ ἐκ τοῦ ἡ γινομένη syllabhí makrá thn fúsin ósia
tettáron grammatón prasotikous paranuxthéseis triwn méven protatooménov,
enós de upotatooménov, kath' hín légetai styphn, meiwn àn ðítou légynto
éinai ths protéras ékeíntis ths monogrammatou... meiwméni gíoun aúthi kath'
en ékastou thn protesténtovn grammátov tás èpi toúllastov parallagás
aisthsas èn èkhoui. aítía de tis èsî toû mìte tás makrás ékbaíncws thn
autovn fúsin méχri grammátov pínnta mihyvoménavs mìte tás braxheías eis
èn aðd polllon grammatón svntelelomínas ekptétein ths braxhtytos,
àlla kakeieńas en diplotasígh lógw thwreúnav twn braxheión kai táuta en
hýmov thn makrón, oxì anagkaiown èn tv parónti skopéwv. ãrkei ýgar
òswen eis thn paróútan úptákeun ýrmotev èrísthav, òti diálhtitei kai
braxheia syllabhí braxheías kai makrá makrás kai ou thn autín ẽxi diva-
mw ouv' èn lógoi phalóis ouv' èn poúmasev òì méleov diá métron òì
roymwv katastekanaleómovns pásas braxheía kai pásas makrá.

Roberts translates as follows. In one place, near the begin-
ing of the passage, he alters Dionysius' meaning quite
needlessly by inserting three words which represent nothing
in the Greek. These three words I enclose in square
brackets.

Such is the number of the letters, and such are their
properties. From them are formed the so-called syllables. Of
these syllables, those are long which contain long vowels or va-
riable vowels when pronounced long, and those which end in a
long letter or a letter pronounced long, or in one of the semi-vowels
and [one of the] mutes. Those are short which contain a short
vowel or one taken as short, and those which end in such vowels.
There is more than one kind of length and shortness of syllables:
some are longer than the long and some shorter than the short.
And this will be made clear by consideration of the examples which
I am about to adduce.

It will be admitted that a syllable is short which is formed by
the short vowel ə, as, for example, in the word ὠδώς. To this let
the semi-vowel ρ be prefixed and ὑόδος be formed. The syllable still remains short; but not equally so, for it will show some slight difference when compared with the former. Further, let one of the mutes, τ, be prefixed and τρόφος be formed. This again will be longer than the former syllables; yet it still remains short. Let still a third letter, σ, be prefixed to the same syllable and στρόφος be formed. This will have become longer than the shortest syllable by three audible prefixes; and yet it still remains short. So, then, here are four grades of short syllables, with only our instinctive feeling for quantity as a measure of the difference. The same principle applies to the long syllable. The syllable formed from η, though long by nature, yet when augmented by the addition of four letters, three prefixed and one suffixed, as in the word στλήν, would surely be said to be ampler than that syllable, in its original form, that consisted of a single letter. At all events, if it were in turn deprived, one by one, of the added letters, it would show perceptible changes in the way of diminution. As to the reason why long syllables do not transcend their natural quality when lengthened to five letters, nor short syllables drop from their shortness when reduced from many letters to one, the former being still regarded as double the shorts, and the latter as half the longs,—this does not at present demand examination. It is sufficient to say what is really germane to the present subject, namely, that one short syllable may differ from another short, and one long from another long, and that every short and every long syllable has not the same quality either in prose, or in poems, or in songs, whether these be metrically or rhythmically constructed.

Since Dionysius limits long syllables to those consisting of or ending in long vowels and those ending in a semi-vowel or mute (in his classification these two categories include all the consonants), he must have held that the first syllable of such words as ἀσθένης, λεπτός, ὄγδοος, μέμνημαι, ὅψωμαι, and ἔξει ended in a consonant. In other words, he must have assumed syllable division within consonant groups except mute plus liquid. The more familiar ancient doctrine, for which Herodian is our earliest authority, held that consonant groups, as far as possible, went with the following vowel.
Dionysius, then, anticipated the theory of syllabic quantity which was propounded by Sievers and ably applied to Latin by Greenough, Hale, and Dennison. Since Dionysius was a much better scholar than Herodian, why not accept Dionysius' theory as valid for Greek and Latin both? The answer is that it has a fatal flaw, which Dionysius himself makes very evident in the passage cited above.

If length by position is due to the time it takes to pronounce consonants, a syllable beginning with a group of consonants must be longer than one beginning with a vowel, if both are otherwise identical; but since verse takes no account of such consonant groups, it follows that the time they add is less than enough to convert a short syllable into a long syllable. Dionysius thus holds, in effect, that the initial syllable of such a word as ὀντός is longer than the initial syllable of στρόφος, although the former contains only short vowel plus one consonant and the latter three consonants plus short vowel.

Still more serious is the self-contradiction of Herodian and his school. They hold that consonant groups, as far as possible, go with the following vowel; and yet syllabic quantity is affected, not by consonant groups preceding a vowel, but by those following. The first syllable of ἕστρεφε consists solely of a short vowel, and yet it is long; but the first syllable of στρόφος, consisting of three consonants and a short vowel, is short!

It is fairly clear that the ancients were, at any rate, no more expert than modern phoneticians in this matter. The observation of syllable division is extremely difficult, and, if we are wise, we shall take a skeptical attitude toward dogmatic statements on the subject in our authorities.


2 We shall see below that this must be true. In any case Dionysius obviously assumed that it was true.
II. THEORY OF SYLLABIFICATION

Syllabification is now known to be chiefly due to differences in the sonorousness of the several speech sounds. If one speaks with a given amount of energy, the vowels sound louder than any of the consonants, the more open vowels than the closer vowels, the voiced consonants than the voiceless consonants, etc. Consequently all speech is a series of waves of varying height which may be graphically represented as in Tables I and II.

**TABLE I**

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<tbody>
<tr>
<td>1</td>
<td>α</td>
<td>βαλον</td>
<td>βλάπτω</td>
<td>θαυμάζω</td>
</tr>
<tr>
<td>2</td>
<td>ε, η, ο, ω</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>ι, υ</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>(y, w)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>ρ, λ, μ, ν, γ</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6</td>
<td>ζ</td>
<td></td>
<td></td>
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<tr>
<td>7</td>
<td>β, δ, γ</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>π, τ, κ, ϕ, Θ, Χ, Σ</td>
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</tbody>
</table>

**TABLE II**

<p>| | | | | |</p>
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<tr>
<td>1</td>
<td>a, aw, æ</td>
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<td>2</td>
<td>e, o, ø, æ</td>
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<tr>
<td>3</td>
<td>i, u</td>
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<td>4</td>
<td>y, w</td>
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<td>5</td>
<td>r, l, m, n, ng</td>
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<td>6</td>
<td>v, z, zh, th</td>
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<td>7</td>
<td>b, d, g</td>
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<td>8</td>
<td>p, t, k, wh, f, th, s, sh, h</td>
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Since the crests of the syllabic waves are points of increased sound, the effect of a series of syllables is similar to that of piano music, which reaches the ear as a succession of sharp increments of sound with intervals of less intense sound be-

3 See especially Jespersen, *Lehrbuch der Phonetik*, 190–207. I had occasion to discuss the matter some months ago in a paper on "The Ictus of Classical Verse," which is to appear in the *American Journal of Philology*. I am repeating a part of what was said there for the convenience of the reader and also because I am not sure which paper will first see the light.
tween. This is particularly the case with languages like Greek and Latin which always have vowel sounds, that is, sounds of high sonorosity, at the syllabic crests. A modern example of such a language is French.

In English the staccato effect of the syllables is somewhat obscured by two peculiarities of the language. Many of our syllables have consonants (l, m, n, r) at their crests, while the troughs between the waves are often shallow. In Table II we have diagrams for the words fuel, following, usual, and little. The contrast between these diagrams and those of Greek words in Table I is striking. In the second place, the syllabic rhythm is obscured by the heavy English stress accent. The effect of a stress accent is to make certain syllabic waves higher, that is, more intense, than the others, and in English the stress is so strong that the accented syllables largely monopolize the attention.

In Greek and Latin, then, even more than in English, the syllabic crests were all points of sharply increased sensation, while the ends of the syllables fell in the intervals of lessened sound. Now most rhythms consist of sensations separated by regular intervals of lessened sensation or of no sensation. For example, we hear the ticks of a clock and note the length of time between the ticks. Just so one hears the syllables of a word or sentence or verse, but the syllable-ends, being merely negative, can scarcely attract attention or have any significance for the rhythm of prose or verse. That the syllable-ends were not easily perceptible in Greek and Latin is shown by the fact that our ancient authorities do not agree as to where certain syllables ended. That the syllabic crests were the important points, in verse at least, is shown by the very common practice of marking time by muscular movements coinciding with certain syllables of the line. For example, Quintilian, ix, 4, 51, says: Tempora etiam animo metiuntur et pedum et digitorum ictu intervalla signant. If the longer intervals of verse were bounded by time beats coinciding with certain syllabic crests, it is safe to assume that the shorter
rhythmic units also were bounded by syllabic crests rather than by syllabic troughs. In other words, syllabic quantity was measured from vowel to vowel rather than from syllable-end to syllable-end. The beginning of the louder sound inherent in the vowel must have attracted more attention than the continuance of that sound. Consequently the beginnings of the vowels are the points which stand in rhythmic relation, and the quantity of each vowel is reckoned to the following interval.

I have shown in the paper referred to above that the ictus syllables of Greek and Latin verse were stressed, and that stress amounts to a heightening of certain syllabic crests. We may therefore mark the scansion of verse by placing vertical lines over the vowels and longer lines over the ictus vowels, while indications of quantity may be placed between the vertical lines; thus:

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|_\ \ |\_\ |_\ | | | | |-|_\ | |\ |
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Arma virumque cano, Troiae qui primus ab oris

The most striking difference from the familiar system is that the last foot consists of a single interval. There is, in fact, little more reason for taking account of the indeterminate amount of sound that follows the last syllabic crest than for taking account of the sound that frequently precedes the first syllabic crest.

Even though the syllable-ends have no rhythmic importance, there must be low points in the syllabic troughs, and theoretic considerations help to determine where they must fall. A voiceless mute involves a moment of silence while the closure of the vocal passage is complete, and this moment must mark the low point of the syllabic trough; it is the syllable division. Hence any p, t, or k between vowels, whether accompanied by other consonants or not, contains the syllable division within itself. Since all the consonants have less sonorosity than any of the vowels, there is at least a tendency for the syllable division to fall somewhere within any single consonant or consonant group between vowels. No wonder it is
difficult to decide to which vowel an intervocalic consonant or cluster of consonants belongs, since it ordinarily belongs partly to each!

I hasten to meet the objection which is already on the lips of many readers. Our ancient authorities are quite unanimous in saying that in Greek and Latin a single consonant is to be joined with a following vowel. Since such a rule appears to fit the Romance languages and Modern Greek, whereas it distinctly does not fit English or North German, there seems to be here some feature common to the pronunciation of Ancient and Modern Greek, Latin, and the Romance languages. It is no doubt the phenomenon which Jespersen, *Handbuch der Phonetik*, 202 ff., describes as loose attachment of a consonant to the preceding vowel.

The consonant may break in upon the vowel while the latter is still at or near its maximum intensity, or the consonant may be delayed until the vowel sound has been decreased to some extent. The former is close attachment, the latter loose attachment. In English we have combinations of both kinds; close attachment is usual after an accented short vowel (*hit, better, summer*), and loose attachment after a long vowel or after a short vowel if the following vowel is accented (*father, decrease*). Now loose attachment involves a reduction of sonorouslyness before the consonantal sound begins, and, even if there is a further decrease within the consonant itself, the hearer who tries to decide to which vowel the consonant belongs is likely to conclude that it goes with the one that follows. The moment of least sound in English *decrease* undoubtedly comes when complete closure in the k-position shuts off all sound, and properly, therefore, the syllable division falls within the consonant group. Nevertheless nearly all speakers and hearers would say that *c* in *decrease* belongs to the second syllable rather than to the first.

We may, therefore, reasonably interpret the statements about syllable division in our ancient authorities as indicating that loose attachment of a single consonant was usual in Greek
and Latin, as it is in Modern Greek and the Romance languages. As to consonant groups the evidence is confusing. We have noted the disagreement among the ancients. The evidence supplied by the Romance languages is also contradictory. Loose attachment even of consonant groups is now the regular practice in those languages, but there is reason to believe that this was not always so. Latin short accented vowels yield Romance diphthongs (sometimes simplified in the course of time) if followed by single consonants, but simple vowels if followed by more than one consonant (e.g., Lat. pedica, O. It. piedica, Fr. piège; Lat. septem, It. sette, Fr. sept). Since loose attachment involves an alteration of the vowel sound before the consonant begins, such pronunciation favors the development of diphthongs. Close attachment, on the other hand, is due to an interruption of the vowel sound while it is still at its height, and this tends to keep it a simple vowel. We may therefore be inclined to think that Latin, or at least late Latin, had close attachment in case a consonant group followed a short accented vowel. The treatment of other vowels before consonant groups remains altogether obscure.

III. Syllaba Anceps

A strong point in favor of the theory of syllabification just stated is that it clears up several difficulties in Greek and Latin prosody and versification. It has always been a mystery why a syllable at the close of a verse may be either long or short without regard to the nature of the rhythm; and yet this is true not only of all types of Greek and Roman verse, but in Sanskrit as well. Some have held that syllaba anceps is due to the pause at the end of the verse, but there is no observable tendency to confine short syllables to verse-ends with pause, or long syllables to verse-ends without pause. For example, if we assume that the hexameter normally ended with a spondee, what are we to say of Od. 1, 8:

\[ \nu \acute{\iota} \iota \mathrm{ou}, \delta \; \kappa \acute{\alpha} \tau \alpha \beta \omega \mathrm{s} \; \Upsilon \pi \rho \acute{\iota} \acute{\omega} \mathrm{os} \; \Upsilon \acute{\epsilon} \rho \acute{\iota} \acute{\omicron} \omicron \mathrm{s} \; \Theta \epsilon \lambda \acute{\iota} \omicron \mathrm{os} \; \eta \acute{\sigma} \theta \omicron \omicron \.
\]
On the other hand, if we assume that the trochee formed the normal sixth foot, how shall we explain Od. 1, 5, which ends in the word *eratpov* at the close of a sentence? Pauses could explain syllaba ances only if Greek and Latin verse was recited mechanically, as it is sometimes scanned in school, with a stop at the end of every line, so that the final syllable might always count as long. If anyone needs proof that the ancients did not recite in that way, he can find it in the remarks of Dionysius of Halicarnassus on the arrangement of periods in verse (*de Comp.* 26). I have discussed the matter in *A.J.P.* XLII, 303–308.

If the rhythmic intervals begin and end with the syllabic crests, that is, with the vowel sounds, the rhythmic series ends with the final syllabic crest; therefore it does not matter whether much or little follows this, since it is virtually outside the verse. The syllaba ances does not appear at all in the scansion on p. 41. It is interesting to note that not only final consonant groups are neglected but also the quantity of a final long vowel, which must therefore be said to follow the syllabic crest. This does not prove that the first part of a long vowel was more intense than the remainder of the sound; it is the beginning of a sensation that chiefly attracts attention, and so the rhythmic intervals are bounded by the first full vibrations of the vowel tone, as we concluded above (p. 41).

**IV. Initial and Medial Consonant Groups**

No one has ever offered a satisfactory explanation of the lack of prosodic value of consonant groups at the beginning of a verse, as in Euripides, *Med.* 195 (anapaests):

στυγίους δὲ βροτῶν οἴδεις λύπας.

It is absurd to suppose that the consonants στ take less time when initial than when following a vowel; a difference in the other direction would be more probable. But if the rhythmic series does not begin until a syllabic crest is reached, it makes
no difference how many sounds precede that crest. Everything before the first vowel is virtually outside the verse. The quantity of the first vowel of the line is not neglected as is that of the final vowel, because, as we have just noted, it is reckoned to the following interval.

We have already noticed that medial consonant groups make difficulty for both the ancient theories of syllabification. Consonants are always reckoned with the preceding vowel in scansion, but some of them, at least, quite obviously belong to the same syllable as the following vowel. But if the first rhythmic unit of a sentence or of a verse runs from the first vowel to the second, the intervening consonants must belong to that interval whether they belong to the first syllable or to the second or partly to the first and partly to the second.4

V. MUTE AND LIQUID

A difficulty which has often been discussed is the variable quantity of a syllable with short vowel followed by mute and liquid. Those who hold that a syllable long by position is simply a close syllable (that is, a syllable ending in a consonant), have a ready solution: the first syllable of patris is long when the syllable division falls after the t, but short when it falls before the t. We have seen that the theory upon which this explanation is based (Dionysius’ theory, that is) leads to impossible conclusions. In the second place, it cannot be reconciled with our demonstration that ancient rhythm depended upon the intervals from vowel to vowel; for the time between vowels would not be affected by the position of the low point in the intervening syllabic trough.

Finally, the syllable division in a word like patris would fall at the moment of complete closure for t, unless it was placed before the t by a complete cessation of the vowel sound before the closure for t began. Such a pronunciation is so im-

4 Nevertheless we shall in this paper, for the sake of convenience, continue to speak of ‘the quantity of the syllable’ instead of ‘the quantity of the interval from syllabic crest to syllabic crest.’
probable as to be out of the question. When people speak of a syllable division before the t they usually refer to the pronunciation which we described above (p. 42) as loose attachment to the preceding vowel, and that may have been the pronunciation of patris, although we found reason (p. 43) to think that most Latin consonant groups were closely attached to a preceding short accented vowel. But if loose attachment was normal, a shift to close attachment (or syllable division after the t, as it has usually been called) would amount to a mispronunciation. Greenough and his successors have no basis for their assumption that such a mistake would be venial.

Before we can hope to find the true solution of this difficulty, we must consider the nature of 'length by position.' Quantity, whether of vowels or of syllables, is merely time, and time during speech must be occupied either by movement of the vocal organs or by the holding of an articulation of those organs. The quantity of a vowel depends upon the length of time during which the vowel sound continues, that is, during which the vowel articulation is held. The continuous consonants may be prolonged in the same way: l or n can last as long as a, all three being limited only by the capacity of the speaker's lungs. No doubt Greek ἀ and Latin ll bore about the same relation to λ and l as ā and ā bore to ā and ā.

The sound of a mute, at least if it is voiceless, cannot be prolonged; but the closure which forms the central point in a normal mute may be prolonged indefinitely, and doubtless we should thus interpret the time contributed to verse by Greek ττ, τθ, Latin tt, dd, etc.

Other consonant groups call for more movements of the vocal organs than are required by single consonants. For example, in English fatigue the passage from t to i involves the drawing apart of the corners of the mouth, the lowering of the tongue tip, and the beginning of vibration of the vocal chords, all of which may be simultaneous. In fatness, on the other hand, the passage from t through n to e (or rather,
to \( \acute{e} \) requires first the lowering of the uvula and the beginning of vibration of the vocal chords, and then the raising of the uvula, the drawing-apart of the corners of the mouth, and the lowering of the tongue tip. It is absurd to argue, as Greenough, *Harv. Stud.* v, 59, seems to do, that the two extra movements in the second case occupy no extra time, particularly since they are opposite movements of the same organ and therefore cannot be synchronous.

I do not mean to imply that all movements of the vocal organs are made at a given rate. Some movements may habitually be slow and others more rapid, and such habits vary to some extent from language to language and, within the same language, from time to time.

The laws of versification establish certain relative time values for Greek and Latin sounds and groups of sounds. The Greek rough breathing and Latin \( \ddot{h} \) probably occupied some time, but this was too slight to have any prosodic importance. Any single consonant occupied less time than a short vowel. As far as we can tell, Latin \( qu \) did not differ perceptibly in time from a single consonant. Most consonant groups, when added to a short vowel, made the equivalent of a long vowel; in other words, consonant groups were comparable, in respect to quantity, with short vowels. But consonant groups cannot all have occupied equal time, as can be seen by contrasting the first syllable of \( \epsilon ν\sigma\tau\rho\epsilon\phi\epsilon\tau\alpha\iota \) (*II.* v, 306) with the first of \( \mu\nu \kappa\alpha\lambda\epsilon\omicron\nu \omicron \iota \) at the close of the same line. Still more obvious is it that a long vowel alone was shorter than the same vowel followed by a consonant group. Dionysius was quite right in his opinion that some short syllables are shorter than others and some long syllables longer than others. The nearest we can come to a general statement of the ratios involved is to say that long syllables as a class were longer than short syllables as a class.

At or near the dividing line between the two classes stood, in Attic Greek, the syllables with short vowel followed by mute and liquid, and, in classical and later Latin, those with
short vowel followed by mute or $l$ plus $r$. We must return to the theory which regarded such syllables as common, or, as I should prefer to say, intermediate in quantity. This is not true, however, of Greek and Latin in general. The available evidence indicates that in Homeric Greek mute plus liquid occupied rather more time than was compatible with a short syllable, while in early Latin mute or $l$ plus $r$ were too brief to lengthen a syllable with short vowel.

VI. IAMBIG SHORTENING

Another difficulty of long standing is presented by the iambic shortening in early Latin of syllables long by position (ādēst, sēnēx, vōlāptātis, sīmīllumae, etc.). Sommer (Handbuch der lateinischen Laut- und Formenlehre ², 128, and Kritische Erläuterungen, 40) says that a syllable ending in a consonant cannot be short, and so he accepts a suggestion of Thurneysen's that iambic shortening was primarily a matter of syllabification; such a word as senex was pronounced under "one impulse of expiration," so that it became a single "stress-syllable." Sommer is led by the new explanation into a serious inconsistency. He accounts for the especial frequency of eo, tuo, etc., in the time of two morae by saying, quite correctly, that the combination of two syllables into one is particularly easy when two vowels are contiguous. But he explains the absence of such scansion as vidēō on the ground that the first two syllables of the word were pronounced under a single "impulse of expiration" and consequently the last two had to be separated. This time it was apparently easier to combine into a single syllable the vowels separated by a consonant than those which stood in immediate contact!

A more fundamental objection to Thurneysen's suggestion is that the conception of the stress syllable here implied is unsound. It is true that a lessening of stress in the midst of a vowel sound may divide one syllable into two and that a variation of stress can convert two syllables such as i-ā into one; but if two vowels have a consonant between them, no
manipulation of stress can reduce the number of syllables without the loss of a vowel (see Sievers, Grundzüge der Phonetik, 202). There are only two possible ways of pronouncing such a word as senex or adest (except at the end of the verse, where the consonant groups would be outside the rhythm) in the time of two morae: the second syllable must be shortened, or one vowel must be suppressed. It is safe to say that Thurneysen and Sommer would not have us return to the period of Plautine scholarship when it was in order to assume such forms as senx or adst. There is, then, no reasonable doubt about the reality of iambic shortening.

It is not necessary to go to the other extreme and assume all sorts of simplifications of the consonantal groups, as Greenough did (Harv. Stud. v, 63–69). We have here another example of varying speed in articulation. For a time in the history of the Latin language, a long syllable following a short accented syllable or following a short unaccented syllable if the accent rested on the next succeeding syllable tended to be articulated more rapidly than other syllables. The tendency died out within a century or so after the beginning of the literature. It left no traces as far as consonantal combinations are concerned, although some vowels were permanently shortened.

VII. FINAL SHORT VOWELS IN LATIN

We have still to explain the anomaly that in Latin verse a final short vowel is usually treated as short even before a consonant group at the beginning of the next word. A flagrant example is found in Horace, Serm. i, 3, 44:

Si quod sit vitium, non fastidire. Strabonem.

More frequent are such groups as sp in Plautus, Men. 527:

Iubeásque spínter nóvom réconcinnárier.

The most frequent case is that of mute or f plus l or r, as in Horace, Carm. iii, 6, 19:

Hoc fonte derivatā clades.
In Greek initial consonant groups regularly make position, as our theory requires that they should do. It is much more likely that the divergent practice of the Roman poets was due to a difference in language than that they intentionally departed from the metrical practice of their Greek models. If so we must conclude that Latin final short vowels were somewhat shorter than other short vowels. It is not necessary to suppose that they were reduced to the same extent as Italian final vowels, whose presence is sometimes not noticed by persons whose native speech is English. A relatively slight reduction might deprive the following consonant group of its normal prosodic effect.  

VIII. Syllable Division in Writing

The chief reason why so abstruse and essentially unimportant a subject as syllable division has received the attention of schoolmasters from ancient times until the present is that a writer (or typesetter) must frequently decide where to divide a word at the end of a line. The rules given by Herodian and his followers were, as Hale saw, directed toward this practical problem. Starting with the observation that a single consonant between vowels seemed to go more closely with the following vowel, they built up further rules to harmonize as nearly as possible with this. What Hale and Dennison failed to recognize was that the writers of Latin inscriptions, who as a rule divided consonant groups in the middle, may have had schoolmasters' authority behind them. The doctrine that the first consonant of a group went with the preceding vowel was, as we have seen, tacitly assumed by Dionysius of Halicarnassus. He would scarcely have taken such a system for granted if it had not been taught in the schools of his day.

This same practical problem still confronts us whenever we write or print Greek or Latin. Since the division in the

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5 We may note in passing that there is one more effect to be ascribed to the Latin stress accent. See *T. A. P. A. LII*, 5-15.
middle of a consonant group usually comes nearer to the low point in the syllabic trough than does the division before a consonant group, it seems preferable to join the first letter of most consonant groups with the preceding vowel and the rest of the group with the following vowel. If the first consonant of a group is a mute, the syllable division falls in the middle of that sound, and consequently it makes no difference, from the point of view of phonetics, whether we divide before or after the first letter of the group. A convenient rule is to place mute and liquid together with the following vowel, and to separate other groups.

This, of course, is the system advocated by Hale and Dennison, and it accords with the prevailing usage of carefully written inscriptions; but it is a matter of merely orthographic importance. Syllable division in pronunciation will regulate itself, and it is besides of interest only to students of phonetics. The important points in the syllabic waves are the crests, where vowels stand in Greek and Latin.\(^6\)

\(^6\) Eduard Hermann's *Silbenbildung im Griechischen und in den andern indogermanischen Sprachen* (Göttingen, 1923) did not reach me until the above was in type. Although Hermann has in several details reached the same conclusions as I, his discussion is largely based upon the assumptions which I have here attacked. If I had seen the book sooner several paragraphs might have been omitted or abbreviated, and several others would have taken a different form. I find no reason in it for changing my conclusions.
III. — *The Three Threads of the Plot of the Iliad*

**By Professor Samuel E. Bassett**

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Kinglake in describing his visit to the Trojan plain (*Eothen*, chap. iv) tells us that as a small boy he used to pore over Pope’s translation of Homer, “and all the while the strong vertical light of Homer’s poetry is blazing so full upon the people and the things of the *Iliad* that soon to the eyes of the child they grow as familiar as his mother’s shawl.” Who that has known one camel’s-hair shawl does not feel the happiness of this comparison? The shawl was a mere mass of gay figures until we came to know it well. Then its design was seen to have definiteness, clarity, and purpose: some principle of articulation was there, closely binding together and relating to each other the many gay arabesques. It is much the same with the *Iliad*. Aristotle more than once (*Metaph.* 1045 a 13; *An. Post.* 93b 36) makes the unity of the poem depend on its ‘bonding together.’ At the first reading of the *Iliad* we are likely to overlook this σύνδεσμος — which, like a conjunction, ἐν ποιεῖ τὰ πολλά (*Arist. Rhet.* 1413 b 33) — and to find rather a more or less inorganic mass of hero portraits, battle pictures, and episodic interludes. But if we pore over the poem until it becomes to us, as it did to Aristotle, εὐσύνοπτον, and if all the while we let Homer’s strong vertical light play upon it, we may discover a triple strand that runs through the countless episodes, appearing with sufficient clearness to unite them all and make each contribute to a single plot of surprising definiteness and power.

Everyone recognizes in the Wrath of Achilles the chief unifying element of the poem, and different readers, or the same reader in different moods, may distinguish important minor threads. Some of these, like the rôles of Nestor or of Ajax, run through the greater part of the narrative; others link together shorter continuous or intermittent parts, for example, Diomede or Sarpedon and Glaucus or the foreshadowed death
of Achilles, — and there are many others. But when the *Iliad* has become as familiar as a mother's shawl was to the child of a century ago, the two most important subordinate threads of the story will be found to be (1) the Plan of Zeus, by which the Wrath works out its destructiveness, and (2) the Instrument, Hector, which Zeus uses in carrying out his plan.

I

In the proem of the *Iliad* the poet tells his audience that in the woes which the Wrath brought upon the Achaeans, sending the souls of many to Hades and making their bodies a prey for dogs and birds, the βουλή of Zeus was fulfilled, Διὸς θεολείη βουλή. Ancient commentators offered three interpretations of Διὸς βουλή:

1. It was the result of the prayer of Earth to relieve her of overpopulation. Zeus on the advice of Momus answered her prayer not by means of his thunderbolts nor by flood, but by bringing about first the Theban, and then the Trojan, war (*Cypria*, frag. i Kinkel). Seeck and Robert accept this explanation. The arguments against it, if any are needed, have been given sufficiently by Wilamowitz (*Die Ilias und Homer*, 246).

2. The 'will of Zeus' is Fate. This is today the most commonly accepted interpretation. In its favor one may cite θ 82, Διὸς μεγάλου διὰ βουλᾶς, and likewise urge that if the proem was meant to introduce the story to an audience unfamiliar with the plot, the listeners could have no knowledge of any definite plan of Zeus. But there are several weighty objections to the interpretation. Jörgensen's study (*Herm. xxxix* [1904], 364 ff.) makes it extremely probable that in the *Iliad* (where the Olympians are represented so vividly as individuals), although a speaking character may mean fate or some vague divine power when he uses the name Zeus, the poet in narration when using the name of a divinity refers to that particular divinity. Yet it may be said against this that in the
proem the poet is not narrating; he is not yet the mouthpiece of the Muse, but speaks *in propria persona*. Hence, as in the similes, he may be taking the point of view of his listeners, who would naturally understand the will of the supreme divinity to be the equivalent of fate. A second objection to the proposed interpretation, however, makes this less probable. Nowhere in the proem is the Wrath, with its baneful issue, ascribed to fate by the poet. It is true that Agamemnon lays the blame on Zeus and fate (T 86 ff.), and Achilles courteously acquiesces (T 270 ff.); but this is only natural, and the poet is certainly speaking *ἐκ τοῦ προσώπου*. The other Achaeans blame Agamemnon alone, and from the poet's uniform attitude towards this hero in both *Iliad* and *Odyssey* (Lang, *Homer and his Age*, 70), it seems clear that he wishes us to share in this view. But the strongest reason for not accepting the interpretation under discussion is that there is another which is decidedly better.

3. *βουλή Διός* means the plan which Zeus forms and carries out at the request of Thetis; so Aristophanes and Aristarchus understood it (Schol. A on A 5–6). The fact that the poet withholds the name of his hero from the proem of the *Odyssey*, and in the *Iliad* first mentions Patroclus by his patronymic alone, indicates that he did not think it necessary to give full information at the beginning. At all events the only other references in the *Iliad* to a *βουλή Διός* unmistakably refer to his promise to Thetis; and the definite steps in the development of the Plan, the repeated verbal echoes and backward references to it, and the three or four predictions of its outcome and limits indicate how clear it was in the mind of the poet.

II

The function of the Plan in the structure of the *Iliad*, and likewise the use of Hector as Instrument, is most easily seen by a brief glance at the four days of battle. On the fourth day the Plan has been accomplished, and the Wrath of Achilles has
been transferred, with a ten-fold fierceness, from Agamemnon to Hector. The account of the first day's fighting the poet employs, like a skilled chess-player, in developing his pieces. We notice in passing that on this day the bodies of the slain Achaeans are not left for the dogs and birds, that is, the Plan is not yet being carried out. The second day of battle, described in Θ, focuses the attention more definitely upon the Instrument, and also brings definiteness into the Plan. It is the curtain-raiser for the third day's battle, the great centerpiece of the Iliad. On this third day the Plan is worked out to a thrilling conclusion at the end of O, and then after — if not because of — a moral weakness on the part of the Instrument, involves Hector in ruin, and leads to the tragic outcome of the tale. With the beginning of Π the Wrath takes the place of the Plan as a means of articulating the episodes.

In examining the evidence for the importance of the two minor threads of the plot let us first consider the orderly development of the βουλὴ Διὸς.

1. The Plan is very vague at first. In the interview between Zeus and Thetis there is not the slightest indication of the manner in which the request of the latter will be granted:

εἰμι δὲ γε ταῦτα μελήσεται, ὑφα τελέσω. (A 523)

Compare also the words of Zeus to Hera (A 564):

eἰ δὲ οὖν τοῦτ᾽ ἔστιν, εἰμι μέλλει φίλον ἠλια.

2. The first formulation of the Plan in the mind of Zeus, pondering in the watches of the night at the beginning of B, is likewise lacking in definiteness. The Dream is used by Zeus merely to bring the two armies together in battle, and by the poet to introduce action into the long-standing static condition of affairs before the walls of Ilios, for, so far as the poet makes clear, Trojans and Achaeans have not yet met in formal engagement. Compare two utterances of Hector:

ἡ οὖ πώ κεκόρρησθε ἑλμένοι ἔνδοθι πύργων; (Σ 287)

κακότητι γερόντων
οἷς ἠθέλοντα μάχεσθαι ἐπὶ πρύμνῃα νέεσαι
αὐτῶν τῷ ἰσχανάσχον ἐρημήσων τε λαόν. (O 721 ff.)
3. When the outcome of the single combat between Paris and Menelaus in \( \Gamma \) has made a truce seem probable, Zeus must find a new way of bringing the two armies face to face with each other. Again he achieves his purpose without revealing his Plan. As the scholiast remarks, he throws the responsibility from his own shoulders by making Hera the cause of the renewal of hostilities. *He* is for the time interested only in bringing about a general engagement; the *poet* wishes to make us more familiar with the Achaean champions, especially with Diomede, the dauntless and irresistible hero who at once wins our affection and, in the absence of Achilles, plays the leading rôle on the Achaean side until his wounding in \( \Lambda \). But in this preliminary and (to the reader who is not familiar with the poem) vague step in the development of the Plan, the poet seems to have had another most important and definite purpose. This is to put before us in several aspects the Instrument by which the Plan is to be carried out. In the action of the first five books Hector is kept somewhat in the background. As commander-in-chief he must of course appear at the marshaling of the Trojan forces, and he must also make arrangements for the combat between Paris and Menelaus. But we notice that he is kept out of the Pandarus episode. Athena tells Pandarus (\( \Delta 96 \)) that if he slays Menelaus he will be doing a favor to Paris, not to Hector; and it is Aeneas, not Hector, who pairs with Pandarus in \( \text{E} \). In the same book (\( \text{E} 494, 689 \)) Hector makes no reply to Sarpedon, although in the entire *Iliad* he speaks more often than any other character except Achilles. Finally, although he is one of the chief actors in the scene in which the greatest exploit of Diomede is described (\( \text{E} 793 \text{ff.} \)), it is Ares, not Hector, on whom our attention is focused: Ares 'rages' (\( \text{E} 717 \)), not Hector, as later in the *Iliad*. But early in the action of \( \text{Z} \) Hector comes forward to play the leading rôle. It is worth while to notice the way in

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1 A small point is to be noted in this connection: in both \( \text{E} \) and \( \text{O} \) a god fights in person for the Trojans, and close to Hector; but while in \( \text{E} \) (592) the poet tells us that the Trojans are led by Ares, in \( \text{O} \) it is Hector who leads, not Apollo (\( \text{O} 306 \)).
which the poet transfers our attention to his hero on the Trojan
side: Helenus addresses Aeneas and Hector, beginning with the
words *Alvela te kal Ἐκτόρ* (Z 75–77). But Aeneas neither
says nor does anything in response: he fades from the scene,
and from now on for many episodes Hector is the leading
character on the Trojan side. The reason apparently is that
Aeneas has been more prominent in the minds of the listener,
and a transition is needed. In Z we become acquainted with
Hector as son, brother, friend, husband, and father; in H,
as courteous and brave — but not too brave — single champion
in the ‘exhibition’ match with Aias, and in Θ, as bold charioteer.2 The Instrument is ready to be used.

4. The Plan has now become clear in the mind of Zeus. At
the beginning of Θ the battlefield has been cleared for its accom-
plishment. But its details are not announced3 until the close
of the day (Θ 470–476): “For mighty Hector shall not cease
from the fighting till Achilles rise up by the ships.”

5. There remains but one step in the development of the
Plan before its execution: the Instrument must be informed of
it, on the best of authority, and with its exact limits. This
is done early on the third day of battle: Iris, sent by Zeus, tells
Hector that Zeus gives him the might to slay “till he shall
reach the ships and night come on” (Λ 207 ff.).

6. The third day of battle sees the Plan consummated.
This is Hector’s brief day of glory; Hector himself calls it
ἄξιον ἡμαρ (O 719). In reality its events should occupy two
days (cf. Λ 84 with Π 777–779 and Π 384). But an intervening
night would ruin the nexus of the action. This has forced the
poet to put into one long day both the fulfilment of the Plan
and the transition from this thread of the narrative to that

2 Cf. Θ 88 f., and see Class. Phil. xv, 296 f. Θ is in fact the book of the horse.
The action begins with the harnessing of the bronze-hoofed steeds of Zeus (vs. 41),
and ends with a picture of the Trojan horses munching white barley beside their
chariots (564 f.). Nestor loses a horse, and Hector two charioteers. Cf. also

3 Θ ο, δόρα τάχιστα τελευτήσω τάδε έργα. Notice the demonstrative, used
for the third time to indicate the unrevealed βουλή.
of the Wrath. There is a structural weakness here, but it is one that the listener would not notice.

The story of the third day’s fighting has been the happy hunting ground of critics. It has seemed to be a maze of episodes. But if we take as a clue the double thread of Plan and Instrument, with an occasional, and at the end clearly visible and continuous, use of the strand of the Wrath, the account becomes sufficiently coherent. The part which is devoted to the execution of the Plan (A–O) is given a certain degree of rhythm by the insertion of episodes (the Errand of Patroclus, Λ 596–848; the Tricking of Zeus, Ξ 153–351), and by the clearly marked steps in the success of Hector. In Λ and Ν his achievements are general rather than specific, for the aristeia of Agamemnon and of Idomeneus, respectively, hold our attention; once (in Ξ) he meets with a severe reverse; and twice (at the end of Μ and of Ο) the tale of his prowess reaches a climax with a vivid account of how he attains an objective. “Zeus gave superior glory to Hector. . . . So Hector sprang in (through the broken gate — which Zeus had helped him to shatter, Μ 450), his countenance like swift night; he gleamed with the terrible bronze that he wore about his flesh, and two spears were in his hands. No one, other than a god, could have faced him and held him back when he leaped within the walls: his eyes were flashing fire” (Μ 437, 462 ff.). “He raged like unto Ares . . . foam gathered about his mouth, and his two eyes gleamed under his savage brows, and his helmet shook terribly about his cheeks as he fought . . . Zeus himself from the sky was his helper. . . . So Hector made for the dark-prowed ship, darting straight for it, and Zeus at his back drove him on with his own most mighty hand” (Ο 605–694). At the beginning of the account the poet, harking back to the proem, tells us that Zeus is about to send many mighty men to Hades (Λ 55); 4 at the end of Ο the Achaeans are at last in the plight that Achilles desired (Α 409 f.),

4 There are also at least two references back to the prayer of Thetis, Ν 347 ff., Ο 596 (cf. Μ 37 f.).
"huddled together and slaughtered at the sterns by the sea," and Patroclus is already speeding back to Achilles to take the step that is to lead to the honoring of Achilles (cf. A 505–510) by the return of Briseis and the payment of a large indemnity. In this part of the poem above all others both the poet and his characters, Olympians, Achaeans, and Hector himself, recognize that Zeus is willing the victory and giving glory to "the Trojans and to Hector"—or, simply, "to Hector." At the two climaxes (M 437, 450; O 610 f., 694 f.) Zeus in person helps his Instrument, and we are informed thrice of the limits which are to be set to the success of Hector (A 192 ff., O 59 ff., 596 ff.; cf. O 231, and Θ 473).

III

Professor Scott in one of his most brilliant hypotheses (Unity of Homer, 205–239; A.J.P. xxxv, 309 ff.) regards Hector not as a part of the legend, but as an invention of the poet. He argues inter alia (Unity, 233) that "Hector receives high praise in general terms, but the events of the Iliad give no warrant for assigning him a high place as a soldier." Yet surely the poet might easily at will have made a great fighter out of a character even of his own invention. Of course, since Homer was a Greek and was telling the story for Greeks, he must subordinate the Trojan champion to the greater Achaean heroes. But in doing this he makes prominent the close relation between Hector's success and the plan which Zeus conceived in fulfilment of his promise to Thetis. Hector is the only hero whom Zeus personally helps, making light the boulder which crushes the Achaean gate (M 450), and with his own

6 Specific recognition of Zeus's assistance to Hector: by the poet, Α 300, M 37 ff., 174, 255, 437, N 347, O 401, 694; by Poseidon, N 58; by Agamemnon, Ε 72; by Thoas, O 292; by Hector, Α 288 f., M 235, 241, N 154, O 493, 719. More general recognition of Hector's prowess: by the poet, M 10, N 1, 129, O 303, 349, 744; by Zeus, O 15, 42; by Poseidon, N 123, Ε 364, 375; by Idomeneus, N 316; by Patroclus, Α 820; by Ajax, N 80, O 504; by Agamemnon, Ε 44, 72; by Nestor, Ε 52; by Odysseus, Α 315.
hand urging Hector on (Ο 694 f.). It is Zeus who will not let Hector meet Agamemnon (Δ 163) or Ajax (Δ 543 f.) in battle. Furthermore, an instrument must be more or less passive, as Telemachus, for example, is in the Odyssey. How often Hector either is inert and needs to be aroused to action, for example, by Sarpedon (Ε 472) and by Glaucus (Π 537, Π 142), or else requires the advice and direction of others: of Helenus (Ζ 77, Η 47); Cebriones (Δ 521 ff.); Polydamas (Μ 60 ff., Ν 725 ff.)! Finally, an instrument must not gain too much glory for itself: in Δ, as Professor Scott has observed, the honor of putting hors de combat any one of the five Achaean heroes, Agamemnon, Diomedes, Odysseus, Machaon, or Euryptylus, does not fall to Hector. In fact the poet tells us that the Achaeans would not have fallen back if Παρίσ — not Hector — had not wounded Machaon (Δ 504 ff.). In Μ (290 ff.) we are told that the Trojans and valiant Hector would not have broken through the gates if Sarpedon had not swept the battlements clear of defenders — incidentally withdrawing the two Ajaxes to another part of the wall. There is likewise no glory for Hector, save in his own mind, in the slaying of Patroclus.

With the end of Ο the Plan, so far as it carries out the wish of Achilles (Δ 408–412), has been accomplished. But the honor of Achilles has not yet been restored, and he has not yet become reconciled with Agamemnon. To bring this about the poet designed the Patrocleia, which corresponds to the μετάβασις of Attic tragedy — an episode masterly in its conception, but somewhat faulty in some of the details of its execution. With the Patrocleia we are not concerned at present, for with the beginning of Π the poet needs to use no longer the subordinate threads of the Plan and the Instrument. The rest of the poem merely narrates the unlooked-for results of Wrath and Plan upon the Hero and the Instrument.

6 The Ασίος episode in Μ, to which so many critics take exception, has a legitimate function in the plot, namely, to illustrate what might have happened to Hector himself, but for the advice of Polydamas.
In following the development of the βουλή Διός and of the poet’s use of Hector, we have taken as an analogy the strands of a bond which holds the episodes together. We must now quit the figure — which perhaps we have stressed too much — and consider in a more general way the importance of the Plan of Zeus and of the character of Hector in the plot of the poem.

The dramatic quality of the Iliad, especially as contrasted with the narrative character of the Odyssey, was recognized by ancient critics. τῆς μὲν Ἱλιάδος . . . δόλων τὸ σωμάτων δραματικῶν ὑπεισήματο καὶ ἔναγώνιον, τῆς δὲ Ὀδυσσείας . . . τὸ πλέον διηγηματικῶν ([Longinus], On the Sublime, 9, 13). What the author meant by ἔναγώνιον he makes clear later (chap. 25; cf. 15, 9): ἄταν γε μὴν τὰ παρεληλυθότα τοῖς χρόνοις εἰσάγων ὡς γινόμενα καὶ παρόντα, οὐ διήγησιν ἐτὶ τὸν λόγον, ἀλλ’ ἕναγωνών πράγμα ποιήσεις.7 This representation of past events as present and as happening is the essence of tragedy.8 The Iliad in this respect very nearly satisfies Aristotle’s desideratum of the tragedy: δρώντων, καὶ οὐ δι’ ἀπαγγελίας (Poet. 1449 b 26). But the Iliad was regarded as dramatic in the best sense also because of its singleness of theme. When Aristotle (ib. 1459 b 2) says that out of either Homeric poem only one tragedy can be made — or at most two — he apparently means the qualification of his first statement to apply only to the Odyssey,9 the plot of which he elsewhere (1453 a 31) recognizes as being double.10 The tragic theme of the Iliad is of course the Wrath of Achilles. Yet this theme is insufficient during the first part of the poem for two

7 So in Argumentum ad a(Cod. Ambros. E) the Iliad is described as ἔναγώνιον.
8 As Butcher remarks (Aristotle’s Theory of Poetry [1895], 265 f.), “The epic is a story of the past, the drama a representation of the present.”
10 In the Odyssey we also find two minor threads of the plot in the Plan of Athena and the Instrument of her Plan, Telemachus. And we notice that her Plan is in fact two Plans, and that both are carefully formulated for the reader: α 84–95, and ν 397–415.
reasons. In the first place the *Iliad*, like Dickens' *Bleak House*, is a great gallery of portraits, and time is required to develop these. Once Achilles is fighting again the other heroes are over-shadowed. But besides this, the Wrath must have both sufficient time and the proper circumstances so that it can blaze to its full capacity and then burn out enough to make the return of Achilles seem probable. During this time the unity of the plot is preserved by means of a gradual development of the Plan of Zeus, and by the deliberate and methodical introduction of Hector in so many aspects, and then by the account of his progress to the climax of his achievements, in ever closer dependence on the help of Zeus.

If objection is made that the first two or three steps in the development of the Plan are hardly steps at all, the objector must remember the generally recognized fact that for the sake of the poet's audience the story of fighting must not begin with disaster to the Achaean arms, and also that Diomede is made so prominent in Δ–Δ because in the absence of Achilles it is necessary to give the Achaeans a champion of outstanding prowess.

We do not intend to imply that the poet must consciously have used the threads of Plan and Instrument, but rather that he conceived one great tragic climax involving as chief actors Achilles, Patroclus, and Hector. To make this climax the more effective Hector, though an enemy, is made dear to the audience, as he was to the poet and to Zeus. But the very fact that he is an enemy makes this impossible, if it were not for the Plan of Zeus, which itself is the outcome of the Wrath. This conception of the *Iliad* does not prevent us from enjoying the episodes of the poem as independent parts, but the unity of structure, to which the minor σύνδεσμοι of Plan and Instrument contribute largely, strengthens our belief that only one master mind could have conceived it.

11 ὥ δὲ ποιηθή εἰς καὶ δραματικῶς ἔγραφεν, ἀλλ' οὐκ ἐδραματοίργησε σκηνῶς, Eust. 5, 13.
IV. — The Educated Roman and his Accent

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FIFTEEN years ago, Professor Frank Frost Abbott, in an article entitled "The Accent in Vulgar and Formal Latin" (Class. Phil. II, 444-460), propounded the view that from about the second century before Christ to about the fourth century of the Christian era Latin was spoken with two different word-accent: one, an accent in which stress or energy was the main element, and the other an accent in which the accented syllable had as its chief distinguishing mark a higher pitch or musical note, as in Greek. The uneducated classes, says Professor Abbott, used the accent of energy, and the educated classes used the accent of pitch; the educated classes used the accent of pitch precisely because their schoolmasters were, in the main, Greeks, who used a pitch accent, and because the literary models of the Romans were the works of Greek literature. Now Dr. Sturtevant, in the T.A.P.A. XLII, 45-52, has shown that at the time in question, when Latin became split into two accentually different dialects, Greek was still spoken with a pitch accent, not having yet shifted to the accent of energy which characterizes modern Greek; if then it be granted that the educated Roman spoke with a pitch accent, while the uneducated Roman retained the stress accent, this development may fairly be attributed to the Greek.

In accepting Professor Abbott's view, to which I had come (so far as I am aware) independently, I felt that it was unnecessary to repeat his arguments, and therefore limited myself almost exclusively to its metrical applications (T.A.P.A. LI, 19-29; cf. A.J.P. XLII, 183). But with the appearance of Dr. Sturtevant's recent paper on "The Character of the Latin Accent" (T.A.P.A. LII, 5-15), it be-
comes evident that some aspects of the case have been left undisussed, or at least not satisfactorily interpreted.

In the first place, what is the dividing line between an educated Roman and an uneducated Roman? A twentieth-century American must rid himself of his natural feelings on the point: there was no democracy in education in the second century B.C., nor for many centuries after that. There were few indeed among the Romans who could qualify for the title of 'educated'; quite possibly the term should be limited to statesmen and public orators, and writers of good prose and verse (cf. Mackail, Latin Literature, 203). As for women, it can have been only the rare exception who spoke the Latin of the educated man: the comparative seclusion in which, for the most part, women remained at Rome in ancient times, hindered their acquiring the newer refinements of cultivated speech. This is why Cicero felt the speech of his mother-in-law Laelia to be that of Plautus or of Naevius (de Or. III, 12, 45); for parallel reasons, in Sanskrit drama, women, even queens, speak Prakrit, while kings and priests speak true Sanskrit; and in the Albanian villages of Greece, some twenty years ago, the women spoke only Albanian, while the men spoke Greek also. Let there be, therefore, no confusion through using 'educated' and 'uneducated' in different quantitative meanings; for in this sense the 'educated,' who spoke Latin with a pitch accent, were very few in number.

In the second place, is it likely that the educated few would have taken on the Greek accent, when the Greeks were looked upon with a certain kind of scorn, as an inferior race? We recall stories of Cato the Censor, and Juvenal's tirade against the Graeculus esuriens (III, 60-125, esp. 78); but there is much reason to think that Cato's Graecophobia has been magnified, and Juvenal's exaggerated satire is directed in large part against the Asiatic Oriental rather than against the Greek specifically. On the other hand, the sneer expressed in the term frog-eater does not extend to the language
of Racine and of Molière; the denomination *dago* does not lower our esteem for the works of Dante and of Petrarch; the modern Greek bootblacks and fruit-sellers in America do not drag Homer and Sophocles from their preëminent position; no anti-Semitic prejudice can do away with the importance of the Hebrew language and of its greatest monument, the Old Testament. No; a people may be, rightly or wrongly, regarded as an inferior race, but their language may at the same time be an object of admiration, even of reverent awe. Cicero's laudation of literature, of which Greek literature formed the major part, in his oration *pro Archia Poeta*, is a truer index of cultivated Roman feeling toward the Greek language, than Juvenal's bitter satire against them as men. In this connection, we should think of the influence of Greek upon Latin as exercised through Greek literature and Greek schoolmasters, not as exercised by Greek parasites and vaudeville performers.

Then, would an influence of Greek upon Latin, exercised in this way, be likely to take the form of altering the nature of the syllabic accent? Let us see how the Greek schoolmaster was to function: he had to use an acquired language, Latin, as a vehicle for teaching Latin, and he had also to teach his own language, Greek. In learning Latin, he found most of the sounds essentially identical with those of his own language (except *f*; Quint. 1, 4, 14), but he met a stress accent which must have baffled him much as the stress accent of English baffles the Frenchman. He would have the less incentive to acquire the stress accent of Latin, because his Roman students were eager to perfect themselves in his own language, Greek; and the lighter effect upon the ear, made by an accent of pitch, may very well have appealed to the Roman as an improvement on his own naturally vigorous and monotonous stress.

It is difficult for us to recreate, mentally, the psychological conditions in which the Roman found himself. Dr. Sturtevant here goes astray, when he says (p. 10): "We are asked
to believe that this absurd foreign pronunciation of Latin was adopted for use in serious literature! As well suppose that British or American enthusiasts over French literature would say 'zees peen' for 'this pin' or would use 'he' and 'she' in place of 'it!'. Of course no pronunciation can be adopted in any literature: pronunciation is used only in vocal utterance, and literature is written or printed; but his pertinent error is in thinking that he has adduced a parallel in 'zees peen' and the like.

We must use accent in one and the same meaning. When a man speaks with a foreign accent, we mean usually that he makes some of his sounds rather differently from the standard pronunciation, and that the sentence intonation is different. But in the present matter of Latin, we have to do with neither of these phenomena: we have to do merely with the nature of the syllabic accent, not even with its position, certainly not with the sentence intonation, except so far as that is affected by the different nature of the syllabic or word accent. No; this kind of accent has no concern with mispronunciation of sounds, as in 'zees peen.' It is a matter rather analogous to the musical intonation of the best Tuscan Italian and the harsher and more monotonous Italian of many other parts of Italy. It is not unlike the difference between normal American English, and the same words spoken with a British intonation, in which pitch plays a greater part.

Let us try to recreate, by a hypothetical parallel, the conditions which prevailed at Rome when the Greek influence gained its sway. Let us suppose that we speakers of English had very little formal instruction, and especially had none at all concerning our mother-tongue; that we had few written documents, and no works of literature; that we learned our language much as do the barbarians who have no system of writing — that is, by mere imitation of the sounds as heard. Let us further suppose that we came into contact with a highly gifted nation, which we shall call the French, who had a highly
developed language and system of instruction, based on the study of their own incomparable literature; that they became our teachers of language, both for French and for our own speech; that the nurses of the children of the foremost families were in many instances French; and that French had a word-accent lacking the heavy stress of English and characterized by a pleasing musical variation. Would it be astonishing if the children, so trained, should speak English with a French word-accent?¹ At least, this might easily be the case, with those who learned to speak French with the same facility as their native tongue; with those who passed some years in France studying philosophy or oratory; with those who made French works of literature their models in history or in drama or in oratorical composition or in philosophical treatises.

Now change English to Latin, and French to Greek, and we have the situation in Rome in the second century before our era (cf. A. S. Wilkins, Roman Education, 18–36).² Naturally the Greek pitch accent was not acquired by all who came into contact with it, nor in the same degree by all who did acquire it: to attempt a discrimination would be to delimit poverty and riches by the possession of one more or one less than a certain number of dollars. Yet we can recognize two general classes, one very large, including the general rabble, the slightly educated, those with whom education did not 'take,' those who were reluctant to accept culture; the second class, a small one, including the best orators, the poets, the statesmen, the cultured classes in general. The latter spoke Latin with a pitch accent, the former spoke Latin with a stress accent.

¹ Americans resident in England commonly acquire the British intonation to a greater or smaller degree, which is a distinctly similar phenomenon and a fair parallel to what we claim for the Latin word-accent.
² At an earlier date, Livius Andronicus (284–202), the first great Greek teacher in Rome, had to make an abridged Latin version of the Odyssey, as a textbook for the teaching of Latin; so lacking was Latin as yet in literary documents (Gell. xviii, 21, 42; xviii, 9, 5; Cic. Brut. 71; Hor. Epist. ii, 1, 69).
On this basis we can understand why the literary Latin language suffered virtually no change in syllabic values from about 100 B.C. until after 300 A.D.; for the literary language was not subject to the breaking-down which a stress accent inflicts. On the other hand, there are adequate remains of the colloquial or vulgar language, to show changes of precisely the nature which would be expected from a strong stress accent (cf. Abbott, *op. cit.* 453-454). But Dr. Sturtevant believes that "the *sermo cotidianus* of the upper classes had a stress accent," because Cicero's mother-in-law Laelia spoke like Plautus or Naevius, and because Quintilian, 1, 6, 21, says that some pedants said *calefacere* where he himself and others like him said *calfacere*, with syncope. The former point has already been disposed of. As for the second point, Quintilian was undoubtedly a cultured man, who spoke with the pitch accent if any educated Roman did. But that does not have the least connection with the matter of *calefacere* or *calfacere*. The speech of the cultivated and the speech of the uncultured may differ in any one or more or all of several phenomena: (1) in the use of words, as in *equus* and *caballus*; (2) in the use of simplex and derivative, as in *auris* and *auricula*; (3) in the pronunciation of certain sounds, as in *Claudius* and *Clodius*; (4) in syntax, as in the *quod*-clause instead of the accusative and infinitive in indirect discourse; (5) in the position of the word-accent, as in such English words as *research* and *discourse*; (6) in the nature of the word-accent, which has been the theme of this paper; and in other particulars.

It does not follow that a cultivated user of a language is equally superior in all these points; he may choose his words very carefully, and yet mispronounce them; he may pronounce them impeccably, and yet misuse them; he may in other respects speak perfectly, and yet say *I saw Mary and he yesterday*. There is no sharp dividing line between cultivated speech and uncultivated, even as there is no dividing point between the number of grains of sand which make a
heap and the number of those which do not suffice. Therefore, when Quintilian said *calfacere*, it did not mean that he spoke in an uncultured way, nor that *calfacere* was a cultured word; it meant merely that a word-form which had developed in popular speech had been accepted by cultured speech. If Quintilian’s use of *calfacere*, Octavian’s recommendation of *calidus* rather than *calidus*, and a few other similar examples (Sturtevant, *op. cit.*, 7) are to be taken as indicating that there was no difference between good colloquial speech and the best cultured speech, then Dr. Sturtevant’s employment of *ictus* and *ultima* in his article is evidence of the substantial identity of English and Latin, and his use of *phenomena* and *hypothesis* shows the impossibility of distinguishing between English and Greek. But in truth the distinctions can be made; and we are justified in drawing a line between cultured Latin and uncultured Latin, both on the extant evidence and on the analogy of every language which is both spoken and written. English, French, German, to go no further, show this divergence in marked degree.

We are drawing a distinction between the Latin of the most highly educated classes, or rather class, a small group, as we have said, and the Latin of the general public, of little or no education. It is an absurdity to inquire if “Vergil ordinarily spoke with a stress accent, but discarded it for pitch when he composed hexameters,” and whether Cicero used “a stress accent in dictating his letters and philosophical works, . . . but . . . a pitch accent when he addressed the people” (Sturtevant, *op. cit.* 7–8), for any difference in the language of the two great Romans in the two situations would be in the choice of words and in syntax; the Anglophile American will pronounce *baggage* with the same British intonation as in saying *luggage*—the difference is only in the word. The point needs no argument.

It is essential, however, for the thorough grounding of this view of the two accents, to trace the development and application in Latin. When the Umbrian Plautus (254–184 B.C.)
wrote his comedies, he was under the serious handicap of fitting a stress-accented language to a Greek metrical system which employed both quantity and stress; and he made certain departures from the Greek practices, adding thereto certain shortenings before or after the metrical accent, known as breves breviantes, and by careful selection secured a much closer agreement of prose accent and verse accent than could have been brought about by mere chance (Sturtevant, Class. Phil. xiv, 234–244). The same holds true of Terence and presumably of the other writers of that time, in the same field.

Ennius (239–169 B.C.), in the hexameter, had a different task before him, because of the different requirements of this meter and because of the less colloquial nature of the style. The breves breviantes do not appear, but other licenses are frequent. One of his chief difficulties was the conflict of word-accent and metrical ictus; apparently, he secured somewhat greater agreement of the two in the first four feet of the verse than Vergil did. At any rate, he was confronted by an insoluble problem: the two accents could not be entirely reconciled.

In the period between Ennius and Cicero (106–43 B.C.), the influence of the Greek language attained its maximum, though no notable decline is then to be observed until generations afterward. The division in the nature of the accent in Latin took place during these years, and it remains only to explain the effects upon Latin verse of the first century B.C. and later. Dr. Sturtevant shows that words of all types are, in the first four feet of the hexameter, used by preference in such a way that coincidence of word-accent and ictus will be less frequent than would be produced by mere chance, while in the last two feet the two accents agree in over ninety-seven per cent of the instances. No conclusions should be drawn from this, however, until certain automatic factors have been given proper consideration. At the end of the line, a word of one syllable is not common, even apart from pos-
sible rhythmical dislike, because such words are chiefly conjunctions, prepositions, and pronouns, most of which do not naturally stand just before even the slight break made by the end of the verse. If the line ends with a word of two or three syllables, the last two ictuses of the line necessarily coincide with the word-accents, unless the fifth foot contains a word of two short syllables or of one short syllable, respectively. Words of four syllables with the value \( \circ \circ \sim \) seem, at the end of the line, to be avoided; words of five syllables do not violate the word-accent, for one ictus coincides with the word-accent and another ictus falls on the initial long syllable. Thus the last two feet of the line have naturally drawn to themselves a high percentage of words which require harmony of accent and ictus, and have rejected those which require clash; and the corollary is, that words requiring harmony, having been appropriated for use in the last two feet, appear less frequently in the first four feet, and words requiring clash, having been rejected from the last two feet, appear in greater percentage in the first four feet. There is a further corollary that a word like mittunt, which may be employed either with harmony or with clash, must, in combination with words requiring clash, also normally be used with clash; in fact, it can be used with harmony in itself and clash in the preceding foot, only if it is preceded by a long monosyllable or a pyrrhic, and with harmony in itself and clash in the following foot, only if followed by a word of choriambic value.

By these facts, and by one other, I explain the results which Dr. Sturtevant has secured in his examination of the hexameter. The other fact is the greater regularity observable in all verse-structure in the Indo-European languages, at the end of the verse, and the general tendency to a uniform refrain or chorus at the close of song-units. The Latin hexameter — granted the view propounded by Professor Abbott — shows a regularity in the tune at the end of the line, where with but rare exceptions the musical beat comes on the higher
note, but secures variety by placing the musical beat on many of the lower notes in the earlier part of the line. The other differences which Dr. Sturtevant finds (op. cit., 14) between the Iliad and the Aeneid in the position of the word-ends and in the distribution of the sense pauses, seem to me to follow from the same factors, with the addition of the syncope of short syllables in early Latin, which greatly increased the percentage of long syllables in the language and made the Latin words much more difficult to use in the Greek meters.

But the demonstration that during several centuries the cultivated speaker of Latin used a pitch accent and the un-cultivated continued to use the stress accent of his ancestors, rests upon the evidence presented by Professor Abbott, a view which alone reconciles satisfactorily the conflicting evidence of the language and of the grammarians; all else is merely the explanation and the application of his view.
V. — Catullus and the Ciris

By Alfred R. Bellinger
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One of the most characteristic creations of the Alexandrian age was the epyllion. The passion for detail and the skill in its use had affected all forms of literary expression and had, to a certain extent, compensated for the loss of the larger style of an earlier day. The impulse for story-telling was not dead, but there was no longer time to listen to stories in twenty-four books, and, to tell the truth, there was nobody left who could produce them. So they created the epic in miniature. It was to have all the epic qualities except size, and it undoubtedly served the need of the generation better than artificial adherence to the old form could have done. What heights it reached at its best we cannot say, but we have two interesting specimens of its use by Latin poets whose natural medium it was not. These are the poem of Catullus, ostensibly on the marriage of Peleus and Thetis but largely devoted to the story of Theseus and Ariadne, and the Ciris, the poem of the Vergilian Appendix which tells how Scylla, the daughter of Nisus, betrayed her father and her father’s kingdom to Minos and was changed into a bird.

The authorship of the latter poem is not yet demonstrated beyond a reasonable doubt, but, for the present, let us assume that it was actually a work of Vergil’s youth from which he later borrowed the lines and phrases which reappear in his maturer works. A study of the two epyllia makes it quite clear that, whoever the author was, he knew his Catullus well and was indebted particularly to the poem on the marriage of Peleus and Thetis. There is a general similarity between the subject of the Ciris and that of Theseus and Ariadne, which takes up about half of Catullus’ poem. The central theme of each is the fate of a princess, who, enamored of a young foreigner, assists him against her father’s interests
and is ungratefully cast off by him. It is worth noting that Minos, the villain of one piece, is the distressed maiden’s father in the other. There are minor parallels, too, which are interesting if unimportant: the triumphant and faithless warrior sails home in each case; in each case prominence is given to the maiden’s lament of despair; and in each case the catastrophe is laid to the cruelty of the god of love. But there is obviously no attempt to make the one an echo of the other, and, as neither of them can lay claim to much originality of subject-matter, these similarities would have little weight were there not other connections between them. But, when we come to consider the actual language of the poem, the case is very different. The parallels in the Ciris with Catullus in general and the Marriage of Peleus and Thetis in particular cannot possibly be mere coincidence. They range all the way from unmistakable likenesses of situation and phrase to petty similarities of small individual significance. Many, of course, have been previously noted by the editors, especially Vollmer, to whose revision of the Poetae Latini Minores I am indebted for some of them. However, as others have not come to the editors’ attention, and as they are nowhere conveniently collected, I reproduce them that the reader may judge of their importance. In each case the passage from the Ciris is given first (cited by the line) and the parallel from Catullus directly underneath (cited by poem and line). The text of Vollmer (P.L.M. 12, 1910) has been followed for the Ciris, that of Ellis (1906) for Catullus.

Etsi me vario iactatum laudis amore (1)
Etsi me assiduo confectum cura dolore (65, 1)

Cecropius suavis expirans hortulus auras (3)
Florentis viridi sophiae complectitur umbra

Regia, quam suavis expirans castus odores (64, 87)
Lectulus in molli complexu matris alebat
Et leviter blandum liceat deponere morem (11)
Difficile est longum subito deponere amorem (76, 13)

Cum levis alterno zephyrus concrebuit euro (25)
Et prono gravidum provexit pondere currum
Ipsa levi fecit volitantem flamine currum (64, 9)

Haec tamen interea, quae possimus, in quibus aevi (44)
Prima rudimenta et iuvenes exegimus annos,
Accipe dona meo multum vigilata labore

Nunc tamen interea haec prisco quae more parentum (101, 7)
   Tradita sunt tristi munere ad inferias
   Accipe fraterno multum manantia fletu

Nam verum fateamur: amat Polymnia verum (55)
Iure igitur vincemur, amat victoria curam (62, 16)

Ipse pater timidam saeva complexus harena (72)
Tum Thetidi pater ipse iugandum Pelea sensit (64, 21)

Heu quotiens mirata novos expalluit artus (81)
Quanto saepe magis fulgore expalluit auri (64, 100)

Quarum non ulli fama concedere digna (104)
Aut nihil aut paulo cui tum concedere digna (68, 131)

Sed neque tunc cives neque tunc rex ipse veretur (116)
Sed neque tum mitrae neque tum fluitantis amictus (64, 68)
Et roseus medio surgebat vertice crinis (122)
At roseo niveae residebant vertice vittae (64, 309)

Concordes stabili firmarant numine Parcae (125)
Annuit invicto caelestum numine rector (64, 204)

Aurea iam gracili solvisset corpore pallam (151)
Omnia quae retinere gradum cursusque morari

Auratam optantes Colchis avertere pellem (64, 5)
Omnia quae toto delapsa e corpore passim (64, 66)

Etsi quis nocuisse tibi periuia credat (156)
Tum iam nulla viro iuranti femina credat (64, 143)

Quae simul ac venis hausit sitientibus ignem (163)
Et validum penitus concepit in ossa furorem

Non prius ex illo flagrantia declinavit (64, 91)
Lumina, quam cuncto concepit corpore flammam
Funditus atque imis exarsit tota medullis

Infelix virgo tota bacchatur in urbe, (167)
Non styrase Idaeo fragrantis picta capillos
Coccina non teneris pedibus Sicyonia servans
Non niveo retinens bacata monilia collo

Saxea ut effigies bacchantis, prospicit, eheu (64, 61)
Prospicit et magnis curarum fluctuat undis
Non flavo retinens subtilem vertice mitram

Ut patris, a demens, crinem de vertice serum (185)
Cum incurvo canos solvent a vertice crines (64, 350)
Namque haec condicio miserae proponitur una (187)
Quam quoniam poenam misero proponis amori (99, 15)

Iamque adeo dulci devinctus lumina somno (206)
Aut ut eam ** devincta lumina somno1 (64, 122)

Non accepta piis promittens munera divis (219)
Non ingrata tamen frustra munuscula divis (64, 103)
Promittens

Quod si alio quovis animi iactaris amore (241)
Quare agite optatos animi coniungite amores (64, 372)

Nam te iactari, non est amathusia nostri (242)
Multa satis lusi: non est dea nescia nostri (68, 17)

Nec tamen ante uillas patitur sibi reddere voces (255)
Nec missas audire queunt nec reddere voces (64, 166)

Intonsos multo deturpat pulvere crinis (284)
Canitiem terra atque infuso pulvere foedans (64, 224)

Praeceps aerii specula de montis abisses (302)
Qualis in aerei perlucens vertice montis (68, 57)
Rivus muscoso prosilit e lapide
Qui cum de prona praeceps est valle volutus

1 If we may rely on the analogy the line would be

Aut ut eam dulci devinctam lumina somno.
Numquam ego te summo volitantem vertice . . . (307)
Numquam ego te, vita frater amabilior (65, 10)
Tene etiam Fortuna mihi crudelis ademit (313)
Quandoquidem fortuna mihi tete abstulit ipsum (101, 5)
Ut, cum caesa pio cecidisset victima ferro (366)
Quae, velut ancipiti succumbens victima ferro (64, 369)
Tum coma Sidonio florens deciditur ostro (387)
Tum capitur Megara et divom responsa probantur
Tum suspensa novo ritu de navibus altis
Tum Thetidis Peleus incensus fertur amore (64, 19)
Tum Thetis humanos non despexit hymenaeos
Tum Thetidi pater ipse iugandum Pelea sensit
Complures illam nympheae mirantur in undis (391)
Aequoreae monstrum Nereides admirantes (64, 15)
Tyndaridae niveos mirantur virginis artus (399)
Excipiet niveos perculsae virginis artus (64, 364)
Dum queror et divos (quamquam nil testibus illis (405)
Profeci) extrema moriens tamen alloquor hora
Caelestumque fidem postrema comprecor hora (64, 191)
Certatim ex omni petiit quam Graecia regno (412)
Cum Delphi tota certatim ex urbe ruentes (64, 392)
. . . . e terris amplectitur Hellespontus (413)
Oceanusque, mari totum qui amplectitur orbem (64, 30)
Ilia ego sum, Minos, sacrato foedere coniunx 

Accipiat coniunx felici foedere divam 

Me non florentes aequali corpore nymphae 

Mortales oculi nudato corpore nymphas 

Pronuba nec castos accendet pinus honores 

Nec Libys Assyrio sternetur lectulus ostro 

Regia, quam suavis exspirans castus odores 

Lectulus in molli complexu matris alebat 

Magna queror: ne me illa quidem communis alumnum 

Omnibus iniecta tellus tumulabit harena 

Praeda, neque inacta tumulabor mortua terra 

Mene inter matres ancillarisque maritas 

Mene alias inter famularum munere fungi 

Coniugis atque tuae, quaecunque erit illa, beatae 

Non licuit gravidos penso devolvere fusos? 

At tamen in vestras potuisti ducere sedes 

Quae tibi iucundo famularer serva labore 

Candida permulcens liquidis vestigia lympsis 

Purpureave tuum consternens veste cubile. 

Iam fesso tandem fugiunt de corpore vires 

Nec prius a fesso secedent corpore sensus 

Aequoreae pristes, immania corpora ponti 

Aequoreae monstrum Nereides admirantes 

Non tulit ac miseris mutavit virginis artus 

Excipiet niveos perculsae virginis artus
Purpureas flavo retinentem vertice vittas (511)

Non flavo rētinens subtilem vertice mitram (64, 63)

Non thalamus Syrio fragrans accepit amomo (512)

Fragrantem ² Assyrio venit odore domum (68, 144)

Quae simul ut sese cano de gurgite velox (514)

Nutricum tenus extantēs e gurgite cano (64, 18)

Illi pro pietate sua (nam saepe nitentum (524)

O di, reddite mi hoc pro pietate mea ³ (76, 26)

This means that there is a reminiscence of Catullus on an average of one to every eleven lines of the *Ciris*, which is certainly too frequent to be an accident. Further than this, thirty-five of the forty-six passages cited above are from the *Marriage of Peleus and Thetis*. Indeed, the most significant thing about these parallels, next to their frequency, is the poems of Catullus which they represent. We are familiar with the influence of Catullus on Martial, to whom he was the prince of epigrammatists, but here we have a poet who has no connection with the epigrams, but who read Catullus for what we are accustomed to think of as his great poems.

As against this similarity it must be borne in mind that the *Ciris* is no parody of Catullus. Its vocabulary is not Catullan, nor is its meter. It is full of words which Catullus nowhere uses, it is less spondaic than his hexameters, and its rhythms are distinctly different. Nor is it like Catullus in literary treatment. It has its unevennesses and crudities: the hand of the novice may be known in that scene where the unhappy

² fragrantem *D*; fragrantem *Ellis*; flagrantem *codd. plerique.*

³ Vollmer cites also *Cir.* 104: Cat. 68, 131; and *Cir.* 195: Cat. 64, 23, where, however, the connection is so very doubtful that it does not seem worth while to reproduce the lines.
Scylla, thrown overboard from Minos' homeward-bound ship, is dragged from Megara to Seriphus before she expires. It seems a little odd, too, that the poet should take so long at the beginning to tell what he is not going to write about and should then dismiss the capture of the town in one line. But does not Catullus spend two hundred lines on a coverlet while he disposes of the Argo in the first twenty and summarizes the history of the world since the heroic age in the last ten? In a fair comparison of the poems as to their narrative quality alone, Catullus comes out second best. The episode of the nurse in the Ciris, for example, gives evidence of a true epic genius, undeveloped as yet, but showing promise of great things.

And now, to return for a moment to the question of authorship. Who but Vergil, the master-borrower, could use another poet so extensively without pawning his individuality? And who so likely as Vergil to borrow from Catullus? At least, we may dismiss the possibility of this being the work of an unknown plagiarist. Why should anyone quote direct from Vergil and only adapt Catullus? To choose theme and matter from the one, matter and style from the other, is surely over-complicated for a forger to undertake. And the poem does not read like the work of a hack writer. No one contends that it is great poetry, but it is precisely the kind of poetry that belongs in the juvenalia of many a great poet. Here is Vergil's dramatic power in embryo — the first foreshadowing of his pathos and his mastery of character-drawing. Scylla and her nurse are the sketches from which, in the fulness of time, Dido and Anna are to be painted. Perhaps even the colorless Minos is the forerunner of Aeneas sailing away from Carthage. It is surely possible to suppose that Vergil, his laurels still before him but conscious of the power within, having promised a poem to Messala, should have hit upon the fashionable epyllion to experiment with and should be attracted to it because of its use by the great Latin poet. Vergil chose his models wisely. Theocritus, Lucre-
tius, and Homer were guides of his maturity. To these names Catullus is a worthy addition. It is true that the epyllion is not his best poem. He needed a shorter and more intense medium as Vergil needed a larger. On this middle ground neither was quite at home. Yet the elder poet had given the younger a model he could follow with enthusiasm and admiration. It is not really an epic at all; it is a collection of pictures, but pictures of a vigor and freshness utterly beyond the powers of the careful and sophisticated Greeks of that time. As a translation from pictorial to poetic art Ariadne on the shore is a masterpiece; Homer himself might have been proud of the simile of the guests scattering like sunlit waves at morning. What Catullus in the steadier genius of middle age would have produced we cannot even guess, but it may be that in our debt to him must be included the first attraction to heroic song which culminated in the song of arms and a hero.
VI. — The Sanskrit Aorists: Their Classification and History

By Professor Charles R. Lanman
Harvard University

This paper is a by-product of the work of elaborating a Sanskrit Grammar for Beginners. Brevis esse laboro, obscurus fio. Between the Scylla and Charybdis of prolixity and inadequacy is hard steering. And so I was the more glad to accept the Executive Committee's kind invitation to print this essay in the Transactions, because I felt that, with it once printed, I could the more ruthlessly and easily trim it down to the Procrustean limits of the 'little grammar.' Lest any one deride me for including a table of paradigms in a 'paper,' I will add that I have put into the typography of the Table so much of painstaking ingenuity as may (I hope) justify me. Whoso doubts, — let him examine for instance the grammar of the admirable Kielhorn, where the aorist paradigms chase one another bewilderingly from page 127 to 137 and from page 145 to 147; or let him look at pages 181 to 187 of the grammar (1805) of the giant Colebrooke.

The facts concerning the aorists of the Vedic and classical Sanskrit are given in a masterly way by one of the founders of this Association, its first president (Transactions, L, 6), William Dwight Whitney, in his Sanskrit Grammar, and in the Supplement thereto, his Root-book. Had more of life and strength been granted to that stout-hearted old veteran for the study of these, his own, two works, we should probably have had a revision of the aorist-chapter which would have put this subject in a clearer light. Just this, and no more, is all that I try to do in this paper. It presents no new facts; but it endeavors to interpret long-known facts in a different way. These interpretations concern in the main the hybrid forms of the s-aorist and the abortive beginnings of the so-
called *siś*-aorist. If other matters are stated with more clearness than hitherto, — *tant mieux*.

The hybrid *s*-aorist forms in *-is* and *-it*. — It happens that the laws of Sanskrit sound-combination are such as to make the normal Vedic forms of the 2d and 3d singular active of the *s*-aorist (such as anāīs anāīs, for anāīs-s anāīs-t, from nī, lead) ambiguous and characterless. Whitney (at 880) says: "Before *s* and *t* of 2d and 3d sing. act. of the *s*-aorist is in the later language always inserted an *i*, making the endings *is* and *it*. This insertion is unknown in the earliest language."

But this *i* is no "insertion." In the later forms of the *s*-aorist, such as anāīs-īs anāīs-īt, we have in fact a taking-over, bodily, of the entire ending of the corresponding form of the *i*-aorist, such as abodh-īs abodh-īt (which ending already contains the tense-sign *i* and also the personal ending *s* or *l*), and an adding of it to the older forms of the *s*-aorist, such as anāīs anāīs (which forms already represent both the tense-sign *s* and the personal ending *s* or *l*). The forms anāīs-īs anāīs-īt are accordingly hybrid forms, that is to say, complete *s*-aorist forms to which normal endings of the *i*-aorist have been superadded.¹

The *siś*-aorist forms. — These are an abortive outgrowth from the hybrid forms of the *s*-aorist of roots in *a*. Beside the normal forms (such as ayās-am ayās-us) of the *s*-aorist of yā, we find also the hybrid form ayās-īt. But if the 1. s. to abodh-īt is abodh-īṣam, then a wholly analogous 1. s. to ayās-īt should be and is ayās-īṣam. This is the point of derailment of the *s*-series into the *siś*-series.

A grammar of classical Sanskrit cannot be blamed for giving, as a paradigm of the *s*-aorist, anāīs-ām anāīs-īs anāīs-īt etc., thus mingling new with old, and allowing the hybrid forms to displace the old and normal anāīs anāīs. But it is this mingling and displacing which confuses the genetic relations of the *s*-aorist series to the *siś*-aorist series. By all means, let the usual paradigm of the *s*-aorist stand, but let the grammars fail not to emphasize the secondary and later character of the hybrid forms.

¹ It is doubtless a very similar thing which has happened in the common classical forms of root as (be), namely ās-īs ās-īt, which replace the normal but ambiguous Vedic forms ās ās, standing for ās-s ās-t: cf. Doric ἵ (3d sing.). Perhaps the like holds also for the forms abrav-īs abrav-īt. — Similarly, to the complete Vedic word *i-ī* (pronominal root and case-ending) is added yet another case-ending *-am*, giving idam. And so, in modern English, to the nom.-acc. s. neuter *i-*l, is superadded a genitive ending *-s*, giving *īs*. 
The Aorists: Simple, Reduplicated, Sigmatic

The aorist is used in classical Sanskrit as a simple past tense, often in connection with a perfect or an imperfect, and without distinction therefrom. In the Veda it is used for what has just taken place. Nearly half the roots that occur in the Rig-Veda show aorist forms; but in much of the classical Sanskrit, the aorist is of infrequent occurrence. The s-aorist and the is-aorist are the most important. The reduplicated aorist serves as the aorist of causatives. Isolated Vedic forms survive in common phrases like mā bhāis (fear not) and mā gās (don’t go): see also p. 86 end.—Note that the same root often makes aorists of more than one formation. Thus gam (go) shows all three: root-aorist, agam-am; reduplicated, ajīgama-m; sigmatic, agaṁs-i.

Of each of the three formations (simple, reduplicated, sigmatic) there are two kinds, according as the stem does not end in a, or does end in a. Of the reduplicated aorist, however, the non-a-forms appear only in the Veda, and in meagre traces (gr, wake, ajīgar; dhṛ, hold, adīdhar; svap, sleep, asiśvap), and accordingly do not count as one of the accepted ‘seven’ aorists.

Furthermore, the aorist tense-sign s (like the future tense-sign svya) is added to some roots directly, but to others with the disjunctive i: so that, to the s-aorist, we must add a sub-variety, the is-aorist. But of this last, there are found only forms of the non-a-conjugation. The ‘sīś-aorist’ is merely an abortive outgrowth (see pp. 94–98) from the s-aorist, and (like the is-aorist) makes only forms of the non-a-conjugation.

Of the simple aorist, the forms from non-a-stems may be called root-aorists, and those from a-stems may be called a-aorists. Likewise, of the sigmatic aorists, the forms from stems in s may be called s-aorists; and those from stems in sa may be called sa-aorists. And since reduplication is the salient characteristic of the remaining variety, we may call this the reduplicated aorist. The numeration here used for
the 'seven' aorists is the traditional one; and it appears in the following table, which shows each formation, each with one example of a root and its aorist stem.

<table>
<thead>
<tr>
<th>Simple</th>
<th>Reduplicated</th>
<th>Sigmatic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-&lt;i&gt;a&lt;/i&gt;-&lt;i&gt;&lt;/i&gt;</td>
<td>root-aor.</td>
<td>(Vedic)</td>
</tr>
<tr>
<td>-conji.</td>
<td>dā, adā</td>
<td>gr, ajīgar</td>
</tr>
<tr>
<td>The a-&lt;i&gt;a&lt;/i&gt;-&lt;i&gt;&lt;/i&gt;</td>
<td>a-aorist</td>
<td>3. redupl. aor.</td>
</tr>
<tr>
<td>-conji.</td>
<td>sic, asica</td>
<td></td>
</tr>
</tbody>
</table>

The sequence of these seven classes of aorists is very clear from the Table. First, as to the precedence of the non-<i>a</i>-conjugation over the <i>a</i>-conjugation. In all these aorist forms, the most pervading difference is this, that some are made from non-<i>a</i>-stems and the rest from <i>a</i>-stems. Since the forms from non-<i>a</i>-stems (upon the whole) very greatly outnumber those from <i>a</i>-stems, the non-<i>a</i>-conjugation is put first.

Second, as to the sequence of the three formations, simple and reduplicated and sigmatic. It is obviously natural to put the simplest formation first, the reduplicated (which is without any extraneous element, other than the augment, which is common to all) next, and the formation with the extraneous element (<i>s</i>) last. — Each of these three formations constitutes a minor sequence by itself: and accordingly, the root-aorist comes first and the <i>a</i>-aorist comes second; and the sigmatic aorists (4, 5, 6) of the non-<i>a</i>-conjugation are followed by the <i>sa</i>-aorist as seventh.

Thirdly: within the sigmatic formation, the forms of the non-<i>a</i>-conjugation show three sub-varieties. Here again it is plain, without any showing, that the formation with simple <i>s</i> should come first, that with <i>iṣ</i> next, and that with <i>siṣ</i> last.

The augment belongs regularly in classical Sanskrit to all aorist formations. But in the Veda, augmentless forms are extremely common, and in sense are indicative or injunctive or precative. Prohibitive phrases with <i>mā</i> are frequent, and many of these survive in classical diction: <i>mā</i> bhūṣ . . .
(be not . . . ), mā rudas (don’t cry), mā vadhīs (don’t strike), mā glāsīs (tire not).

The endings are the secondary ones. Apart from a trifling exception (at p. 98 d), all the stems in a are inflected exactly like any imperfect of the a-conjugation.

The precative, as being an optative of the aorist, is treated with the other aorists, and at the end. — For a conspectus of paradigms of all the aorists, see the Table, p. 100—.

Description and discussion of the seven aorists and the precative may now follow in their order as just given.

Root-aorist. Active. — The augmented root is aorist-stem. This is made from roots in ā and from bhū. This aorist is closely analogous to the imperfect of the root-class (yā, go, ayā-m ayā-s ayā-t). In the 3. plural, the ending is us, and the radical ā disappears; but bhū has an. And the syllabic identity of the root is maintained before the vocalic endings by the transition-v: abhūv am abhūv an. Stems in classical use:

dā (give) adā dhā (put) adhā sthā (stand) asthā
gā (go) agā pā (drink) apā bhū (become) abhū

Root-aorist. Middle. — The augmented root in weak form is aorist-stem. Of middle forms a few are found. Thus, from roots in ā, with ā weakened to i: from dā (give), adi-thās, adi-ta; from dhā (put), adhi-thās, adhi-ta; from sthā (stand), asthi-thās, asthi-ta. So from kr (make), akr-i, akṛ-thās, akr-ata. And from roots in a sonant aspirate: arab-dhā, alab-dhā, abud-dhā, ayud-dhā, arud-dhā (for arabh-ta, etc.). The Hindus refer all these middle forms to the s-aorist, with loss of s; see p. 94 a.

Root-aorist. Passive. — An isolated 3d singular is made by adding i to the augmented, and usually strengthened, root.

2 When more precise reference is desired, the letters a, b, c, d, are used to designate the quarters of a page.
After radical अ, appears disjunctive य. Thus: tap (heat) अतप-ि; dhā (put) अधाय-ि. So:

vid (find) अवेड-ि  budh (wake) अवोध-ि  ṛ (see) अदार्य-ि
cri (lean) अचरय-ि  stu (praise) अस्तव-ि  bhr (bear) अभार-ि

The a-aorist. — The stem consists of augment, weak root (no गुण, no nasal), and stem-forming अ; and it is inflected like any imperfect of the a-conjugation. The middle is rare. The a-aorist is thus, as to mode of formation, the precise analogue of an imperfect of the accentuated-अ-class, of which also the root-vowel is weak. But note that the a-aorist of a given root differs markedly from the imperfect of the same root. Examples (first, the imperfect 3. s.; then, the a-aorist 3. s.; but of root चास, the i. s.):

ruh (climb) अरोह-ि aruha-t  sic (pour) असिंचा-ि asica-t
sad (sit) असाद-ि asada-t  khyā (see) अख्यात-ि akhya-t
gam (go) अगाच-ि agama-t  chid (cut) अच्छिनत-ि acchida-t
vṛt (turn) अवरत-ि avṛta-t  ṭ (be able) अचक्न-ि akanaka-t
naç (perish) अनास्य-ि anaca-t  cās (order) अचस-ि açīs-am
vid (find) अविंड-ि avida-t  But kṛ (do) अकर-ि akara-t!

Reduplicated aorist. — The stem consists of augment, reduplicated root, and stem-forming अ. Inflection like that of the imperfect of the a-conj. This aorist serves as aorist of causatives, and of dru (run) and cri (lean) as primary verbs. It is made from some forty roots in classical Sanskrit.

Consonant of the reduplication. — This follows the general rules: of two initial consonants, the first is repeated; for an aspirate, the non-aspirate is substituted; for ह or for a guttural, the palatal is substituted.

dru (run) अदुद्रव-ि adudruva-t  dhṛ (hold) अदिधर-ि adidhara-t  kṛ (do) अकिक-ि acikara-t
bhram (roam) अबि-ि abibhrama-t  han (slay) अजिघन-ि ajighana-t  grah (seize) अजिग्रह-ि ajigraha-t

Vowel of the reduplication. — For radical अ, अ, ई, ई, ऊ, ऊ, ए, ए, ओ, ओ, य, य, appears an ई-vowel; for उ or उ, appears an उ-vowel.

jan (beget) अजिण-ि ajijana-t  viç (enter) अविविच-ि aviviča-t  ṛ (grow) अविर्द-ि avīrṛda-t
sādh (succeed) असिध-ि asisadha-t  dip (shine) अदिदिप-ि adidipa-t  klp (be fit) अकल-ि aciklpa-t
duh (milk) अदुध-ि adūduha-t  yuj (join) अयुयु-ि ayuyuja-t  lup (break) अलुप-ि alulpa-t
Quantity. — The reduplicating syllable and the radical syllable regularly make a prosodial sequence of heavy and light (— ⊙). This is a most striking feature of the formation. Considering the number of roots beginning with two consonants (some 30 odd, first and last), a reduplicating vowel long by position must have been common, and the sequence was matter of course in such examples as dru and bhram and grah, just given; and so likewise in

\[\begin{array}{llll}
\text{tvar (hurry)} & \text{atitvara-t} & \text{kṣip (throw)} & \text{acikṣipa-t} \\
\text{cṛi (lean)} & \text{aṅgṛiya-t} & \text{cyu (fall)} & \text{acucyuva-t} \\
\text{hṛv (waver)} & \text{ajihvara-t} & \text{cru (hear)} & \text{aṅcruva-t} \\
\end{array}\]

But if the root begins with only one consonant, then (as if to establish the sequence), the reduplicating vowel is lengthened, as in the nine examples (jan, etc.) just given. — Exceptions are: mīl (wink) amimīla-t; dīp (shine) adīdīpa-t (Vedic; later, adīdīpa-t).

And (again for the sake of the sequence) a radical \(\ddot{a}\) or \(\dot{i}\) or \(\ddot{u}\) is even shortened, and a penultimate nasal is dropped.

\[\begin{array}{llll}
\text{rādh (thrive)} & \text{ariradha-t} & \text{bhū (become)} & \text{abūḥhuva-t} \\
\text{dīp (shine)} & \text{adīdīpa-t} & \text{sūd (finish)} & \text{asūṣuda-t} \\
\text{krand (cry)} & \text{acikrada-t} & \text{syand (flow)} & \text{asīṣyada-t} \\
\end{array}\]

The commonest forms of this aorist are the active 1. 2. 3. singular and 3. plural: thus, amūmucat, amūmucan. Note that all these make the prosodial sequence, \(\ddot{u} - \dot{x} - \ddot{x}\), and that this exactly fits the cadence of the Vedic iambic dimeter or trimeter or of the Epic half-cloka.

Roots in \(\ddot{a}\), with \(\ddot{p}\) in the causative, retain the \(\ddot{p}\) here: jñā (know) jñāpaya-ti, ajijñīpa-t; sthā (stand) sthāpaya-ti, atiṣṭhipa-t.

Root vac (speak) makes avoca-t (for a-vā-uca-t?). Forms from the stem voca are so frequent, that voc (like pracch or dad) is treated as a root.

The s-aorist and the is-aorist. — These are of course sigmatic aorists without or with the disjunctive \(i\); and they are related to each other as are the sigmatic future-stems, dā-sya and kar-isya. The s-aorist is made, earlier or later, from almost 150 roots; and, earlier or later, the is-aorist is made
from over 150 roots. Together, they are thus the most numerous of all the aorist formations. But of roots belonging to the earlier and later language or to the later language, only about 45 roots make an s-aorist, and about 35 make an is-aorist.

Choice between the formation with s and that with is. — As to this matter, a comprehensive rule can hardly be given. In a dozen cases and more, the same root shows stems of both formations: thus, tr (pass) atārś-am, atārīś-am; so the roots car, mad, krand, mṛj, rādḥ, stu, etc. But for the later language, two simple and natural generalizations (the second is not comprehensive) may be of use:

First. Vocalic roots make their sigmatic aorist with s (not is).

But in the Veda, these do indeed make aorists with is, altho very seldom: thus, gr (swallow) agārīś-am. And some such forms (as mayīś-ṭa, açayīś-ṭa) survive even in classical Sanskrit. But quotable forms are extremely rare.

Second. Of consonantal roots, those whose final (such as c, ç, j, h; d, dh, p) combines with s easily and often and so as to yield an unambiguous result, — those roots add the s directly.

But if the root ends in a sound or in sounds (such as s, kṣ, s, is, nd, l, v, rv, th) not easily or often or unambiguously combinable directly with s, — then the collision is avoided by the disjunctive i, and the stem is made with the formative is.

Thus from jīv (live) ajīviś-am; ujjh (forsake), āujjhiś-am: the combinations vs, jhś hardly occur in Sanskrit. From īkṣ (see), āikṣiś-i. From yāc (ask), ayāciś-am: not ayākś-am, which is aorist of yaj (offer). From vad (say), avādiś-am: not avāts-am, which is aorist of vas (dwell).

Table showing distribution of some later roots as between the two formations (s-aorist and is-aorist); also the several types of treatment of the root-vowel.
<table>
<thead>
<tr>
<th>S-aorist: roots with final vowel</th>
<th>Iṣ-aorist: roots with final vowel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root</td>
<td>Active</td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
</tr>
<tr>
<td>ci (pile)</td>
<td>acāś-ām</td>
</tr>
<tr>
<td>ji (win)</td>
<td>ajāś-ām</td>
</tr>
<tr>
<td>ni (lead)</td>
<td>anāś-ām</td>
</tr>
<tr>
<td>bhī (fear)</td>
<td>abhāś-ām</td>
</tr>
<tr>
<td>ġru (hear)</td>
<td>acrāś-ām</td>
</tr>
<tr>
<td>stu (laud)</td>
<td>astāś-ām</td>
</tr>
<tr>
<td>hu (pour)</td>
<td>ahāś-ām</td>
</tr>
<tr>
<td>jōā (know)</td>
<td>ajāś-ām</td>
</tr>
<tr>
<td>yā (go)</td>
<td>ayāś-ām</td>
</tr>
<tr>
<td>hā (quit)</td>
<td>ahāś-ām</td>
</tr>
<tr>
<td>kr (make)</td>
<td>akāś-ām</td>
</tr>
<tr>
<td>tr (pass)</td>
<td>atāś-ām</td>
</tr>
<tr>
<td>smṛ (mind)</td>
<td>asmāś-ām</td>
</tr>
<tr>
<td>hṛ (take)</td>
<td>ahāś-ām</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S-aorist: roots with medial vowel</th>
<th>Iṣ-aorist: roots with medial vowel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root</td>
<td>Active</td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
</tr>
<tr>
<td>chid (cut)</td>
<td>achāś-ām</td>
</tr>
<tr>
<td>ric (leave)</td>
<td>arāś-ām</td>
</tr>
<tr>
<td>muc (free)</td>
<td>amukṣ-ām</td>
</tr>
<tr>
<td>rudh (hinder)</td>
<td>aruts-ām</td>
</tr>
<tr>
<td>drĉ (see)</td>
<td>adrāś-ām</td>
</tr>
<tr>
<td>sprĉ (touch)</td>
<td>asprāś-ām</td>
</tr>
<tr>
<td>prĉ (ask)</td>
<td>aprāś-ām</td>
</tr>
<tr>
<td>srj (emit)</td>
<td>asrāś-ām</td>
</tr>
<tr>
<td>bhaj (deal)</td>
<td>abhāś-ām</td>
</tr>
<tr>
<td>tyaj (quit)</td>
<td>atyāś-ām</td>
</tr>
<tr>
<td>vas (dwell)</td>
<td>avāś-ām</td>
</tr>
<tr>
<td>dah (burn)</td>
<td>adhāś-ām</td>
</tr>
<tr>
<td>vyadh (pierce)</td>
<td>avāś-ām</td>
</tr>
<tr>
<td>yam (hold)</td>
<td>ayāṃś-ām</td>
</tr>
<tr>
<td>vap (strew)</td>
<td>avāṃś-ām</td>
</tr>
<tr>
<td>svap (sleep)</td>
<td>asvāṃś-ām</td>
</tr>
<tr>
<td>bhańj (break)</td>
<td>abhāṃś-ām</td>
</tr>
<tr>
<td>sańj (cling)</td>
<td>asāṃś-ām</td>
</tr>
</tbody>
</table>

Hence these rules for the behavior of the root-vowels:

**S-aorist active**

- Finals and Medials alike, all show vṛddhi

**Iṣ-aorist active**

- Finals take vṛddhi
- Medial i, u, r take guṇa; but for Medial a, we find ā or a

**S-aorist middle**

- Final ś and u take guṇa
- Final ā and r and Medials remain unaltered

**Iṣ-aorist middle**

- Finals and
- Medials alike, all show guṇa
But in the s-aorist middle, final ā weakens to i in the roots dā (give), dhā (put), sthā (stand). Thus: adīṣ-i, adīṣ-ata; adhiṣ-ī, adhiṣ-ata; asthiṣ-ī, asthiṣ-ata.

From the same roots and with the same weakening occur forms of the type adī-thās, adī-ta, classed above as true root-aorists middle. The Hindus class them as ‘s-aorists with loss of s’ (adī-ta for adīṣ-ṭa). Thus the traditional paradigm is: adīṣ-i, adī-thās, adī-ta; adīṣ-vahi, adīṣ-āthām, adīṣ-ātām; adīṣ-mahi, adī-ḍhvaṃ, adīṣ-ata. But it seems better to regard this as a patchwork of two sets of forms, each fragmentary, and each complementary to the other.

In the iṣ-aorist active, for medial a, we find ā in the roots vad (speak), mad (revel), car (move), vraj (go), jval (blaze); but medial a remains unaltered in dal (split), vadh (kill), vāc (will), grās (devour), kram (step), grah (grip). Thus: acāriṣ-am; but adalīṣ-am.

In the iṣ-aorist, moreover, consonantal roots that make a heavy syllable, remain of course unaltered. Thus: jīv (live) ajiviṣ-am; nind (revile) anindīṣ-am; hiṅs (hurt) ahiṅsiṣ-am. But dīv (play) adeviṣ-am!

The vrddhi in āciṣ-am (aç, eat), āiṣ-ām (iṣ, send), āujjhiṣ-am (ujjh, forsake), etc., is due to the augment.

Loss of tense-sign s in the s-aorist. — After the radical surd mute t or p, the tense-sign s is dropped before any of the active endings, tam, tām, ta (2. d., 3. d., 2. p.) or of the middle endings thās, ta (2. s., 3. s.): see the forms marked with a star in the paradigm (page 100), where anāut-tam, for anāut-s-tam, from nud (push), is quite in accord with the ordinary ut-thīta for ut-thīta, etc. Other examples (active second persons plural) are: achānt-ta, for achānt-s-ta, from chand (please); açāp-ta, for açāp-s-ta, from çap (curse).

Likewise after the radical surd mute k, — when it is the

By ‘radical surd mute t or p’ is meant either a root-final (very seldom: as in vṛt; tap, çap, sṛp), or else also the mute into which the root-final is changed before the tense-sign s (either t, as in chīd, nud, pad, bhīd, vid, krand, chand, skand, syand; budh, rādh, rudh, vyadh; or else p, as in labh, stambh).
product of a gutturalizing 4 root-final (c or j), — the tense-
sign is dropped without trace,5 before the t or th of the endings
just mentioned. Thus: *apāc-ta, apāk-ta. Other examples
below, left hand.

Likewise after a domalizing 4 root-final (č or j), the tense-
sign is dropped without trace,6 and the root-final becomes
domal ș before the said t or th: thus, *adrāč-ta, adrāš-ța;
* amārj-ta, amārș-ta. Other examples below, right hand.

<table>
<thead>
<tr>
<th>Gutturalizing finals + s + ending</th>
<th>Domalizing finals + s + ending</th>
</tr>
</thead>
<tbody>
<tr>
<td>pac (cook) apākș-ma; but apāk-ta, 2. p.</td>
<td>dṛč (see) adrāš-sa; but adrāś-ța, 2. p.</td>
</tr>
<tr>
<td>bhaj (deal) abhākș-ma; but abhāk-ta</td>
<td>sprč (touch) asprākș-sa; but asprāș-ța</td>
</tr>
<tr>
<td>bhañj (break) abhānș-ma; abhāń-ta</td>
<td>mrj (wipe) amārș-sa; but amārș-ta</td>
</tr>
<tr>
<td>muc (free) amūkș-i; but amuk-thās, 2. s.</td>
<td>srj (emit) asrēkș-i; but asrē-țhās, 2. s.</td>
</tr>
</tbody>
</table>

Not only in the s-aorist, but also in the iș-aorist, the tense-
sign s is dropped before dhvam (2. p. middle); and after the
domalizing vowels (i, e, o, r), the dh becomes domal.

bhaj (deal) abhākș-mahi; abhag-dhvam | nē (lead) anēș-mahi; but anē-țhavam |
| rā (give) arāș-mahi; but arā-țhavam | stu laud) astoș-mahi; but asto-țhavam |
| jan (beget) ajaniș-mahi; ajani-țhavam | vr (choose) avrș-ța, 3. p.; avr-țhavam |

Forms classed as s-aorists by the Hindus, and made from
roots in a sonant aspirate (rabh, take hold; labh, take; budh,

4 The root-final c, before t, reverts to the guttural k (vac, uk-ta), while the
root-final č before t becomes domal ș (dṛč, drș-ta). — The root-final j, before
t, shows a double behavior, now (like c) reverting to a guttural (yuij, yuk-ta),
and now (like č) becoming domal (mrj, mrș-ta). — And again, in like manner,
before t, the root-final k shows a double behavior, now (like c) yielding a guttural
(duh, dug-dha), and now (like č) yielding a domal (ruh, rūdha).

Accordingly, we may call the c, and also the j and the k that behave like
c, the gutturalizing root-finals. And in like manner, we may call the č, and
also the j and the k that behave like č, the domalizing root-finals.

This suggests distinctive names for the two kinds of j, namely, ‘gutturalizing
j’ and ‘domalizing j.’ So ‘gutturalizing h’ and ‘domalizing h.’ Such names
are much needed. Their meaning appears on their face (as is not the case with
‘ji, jḥ, hḥ,’ nor with ‘new’ and ‘old’).

5 If it left a trace, we should expect *apāś-ța (for *apāk-s-ța: since ks + t
normally yields š-t, as in *cakș-țe, caș-țe).

6 Here, even if we assumed an intervening tense-sign ș which left a trace,
the result would still be the same: for *adrāč-s-ța would yield *adrāk-ș-ta,
and this would yieldadrāș-ța. So *amārč-s-ța, *amārk-ș-ta, amārș-ta.
wake; yudh, fight; rudh, hinder), are found occurring in the middle voice: namely, the 3. s. forms arab-dha, alab-dha, abud-dha, ayud-dha, arud-dha. The Hindu view is that from these also an s has been lost, and that the combination is then made in the usual way (bh-t becoming b-dh, etc.), and as if no s had ever intervened to leave a trace! 'This is hard to believe: for alabh-s-ta ought to yield alap-s-ta; and this in turn, alap-ta. Accordingly, and in spite of the occurrence of forms with s (such as alap-s-ata, 3. p.), the forms of the type alab-dha may well be taken as standing for simple alabh-ta, that is, as root-aorists of the middle (p. 87 d).

For the s-aorist of roots in a sonant aspirate, two paradigms may be given — if only to show the complexities of the sandhi. The forms cut a much wider swath in the grammars than they do in the literature. The starred forms are either non-quotable or rare or referable in part (see just above) to the root-aorist. Thus, from rudh (hinder) and dah (burn):

Paradigms of s-aorist, showing loss of tense-sign

<table>
<thead>
<tr>
<th>Form</th>
<th>3s</th>
<th>1t</th>
<th>3m</th>
<th>1m</th>
</tr>
</thead>
<tbody>
<tr>
<td>aráuts</td>
<td>am</td>
<td>aruts i</td>
<td>adhákṣ am</td>
<td>adhákṣ i</td>
</tr>
<tr>
<td>aráuts</td>
<td>IS</td>
<td>arud dhās *</td>
<td>adhákṣ IS</td>
<td>ad ag dhās *</td>
</tr>
<tr>
<td>aráuts</td>
<td>it</td>
<td>arud dha *</td>
<td>adhákṣ it</td>
<td>ad ag dha *</td>
</tr>
<tr>
<td>aráuts</td>
<td>va</td>
<td>aruts vahi</td>
<td>adhákṣ va</td>
<td>adhákṣ vahi</td>
</tr>
<tr>
<td>aráud</td>
<td>dham*</td>
<td>aruts áthām</td>
<td>ad āg dhām*</td>
<td>adhákṣ áthām</td>
</tr>
<tr>
<td>aráud</td>
<td>dhām*</td>
<td>aruts átām</td>
<td>ad āg dhām*</td>
<td>adhákṣ átām</td>
</tr>
<tr>
<td>aráuts</td>
<td>ma</td>
<td>aruts mahi</td>
<td>adhákṣ ma</td>
<td>adhákṣ mahi</td>
</tr>
<tr>
<td>aráud</td>
<td>dha *</td>
<td>aruts dhvam*</td>
<td>ad āg dha *</td>
<td>adhag dhvam*</td>
</tr>
<tr>
<td>aráuts</td>
<td>us</td>
<td>aruts ata</td>
<td>adhákṣ us</td>
<td>adhákṣ ata</td>
</tr>
</tbody>
</table>

The 'siṣ-aorist' so-called. — The stem consists of augment and root and the element siṣ; and it is inflected precisely like that of the iṣ-aorist. "Active only. The corresponding middle forms belong to the s-aorist." Thus the grammarians. (See p. 97 b.) Unequivocal siṣ-forms are made from only about half a dozen roots, all ending in ā: see p. 98 b.

The genesis of the siṣ-aorist from the s-aorist is so closely connected with the history of the s-aorist, and with the history of the personal endings of the s-aorist and of the iṣ-aorist, that these matters must all be treated together.
In the *iṣ*-aorist active, 2. s. and 3. s., we should expect that apāviṣ-s, apāviṣ-t, from pū (cleanse), would yield apāvīs, apāvīs. But the tendency to establish the usual relation of *s* and *t* in the two persons, 2. s. and 3. s., is so strong that in the 3. s. the ending *t* is preserved at the expense of the tense-sign *s*; and thus, for the 2. s. and 3. s., we have the forms apāv-īs, apāv-īt. So, from vadh (slay), avadh-īs, avadh-īt. These forms in *īs* and *īt*, as endings (**nota bene!**) of the *iṣ*-aorist, are common from the earliest period of the language; but (**nota bene!**), as endings of the *s*-aorist, they are almost unknown to the oldest texts.

In the *s*-aorist active singular, the oldest Vedic inflection is quite regular. Thus:

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</thead>
<tbody>
<tr>
<td>prā (fill)</td>
<td>ji (win)</td>
<td>nī (lead)</td>
<td>dah (burn)</td>
<td>ric (leave)</td>
<td>muc (free)</td>
</tr>
<tr>
<td>1. aprās-am</td>
<td>ajāiṣ-am</td>
<td>anāiṣ-am</td>
<td>adhākṣ-am</td>
<td>arāiṣ-am</td>
<td>amāukṣ-am</td>
</tr>
<tr>
<td>2. aprāṣ</td>
<td>ajāiṣ</td>
<td>anāiṣ</td>
<td>adhāk</td>
<td>arāik</td>
<td>amāuk</td>
</tr>
<tr>
<td>3. aprāṣ</td>
<td>ajāiṣ</td>
<td>anāiṣ</td>
<td>adhāk</td>
<td>arāik</td>
<td>amāuk</td>
</tr>
</tbody>
</table>

But the tendency to differentiate the two identical and therefore ambiguous forms of the 2. s. and 3. s. shows itself here in the *s*-aorist also, and strikingly: for in the Veda, we find as third singular of prā, ji, nī, not only the old and regular forms aprās, ajāiṣ, anāiṣ, but also the tentative and abortive forms aprāṭ, ajāiṭ, anāiṭ.

The second step due to this tendency is the taking-over, for the ambiguous forms of the *s*-aorist, of the unambiguous endings of the *iṣ*-aorist, namely, of the endings *īs* and *īt*. These, added to the ambiguous forms ajāiṣ, anāiṣ (which al-

---

7 aprās for aprās-s, aprās-t
ajāiṣ for ajāiṣ-s, ajāiṣ-t
anāiṣ for anāiṣ-s, anāiṣ-t
adhāk for adhākṣ-s, adhākṣ-t

8 To wit, in a most interestingly modernized resolution of the ubiquitous aprāḍyāvaprāṭhīvīantarīkṣam. The manuscript combination aprāḍyāvā- may mean (Whitney, Grammar, 232 a) either aprā dyāvā- or aprāḍ dyāvā-. At R.V. 1, 115, 1c, the word-reading is aprāḥ dyāvā-, implying the old and correct aprās. But at A.V. xii, 2, 35, the author of the word-reading has, justifiably and ignorantly, the later and (for him) easier form aprāṭ.
ready contain the tense-sign s), yield the clearly distinguished forms ajāiś-is ajāiś-it, anāiś-is anāiś-it.

Of this type are the forms which become the prevailing ones in the later language, and which are therefore given in the paradigm (page 100). But it must be carefully noted that they are a later and secondary formation, and are hardly found in the oldest texts, the Rig-Veda, to which a form like anāiś-it is almost unknown.

Almost, but not entirely. — For in the Rig-Veda, from yā (go), we find, not only the old and normal forms of the s-aorist, ayās-am ayās-us, but also the later form ayās-īt. This last is also a true s-aorist; but it is nevertheless a younger hybrid form, and made, precisely like the later anāiś-īt, by adding to an s-aorist stem an iś-aorist ending; and it is perhaps the earliest quotable instance of such a hybrid formation.9

But in the iś-aorist, corresponding to apāv-īt apāv-īs, abodh-īt abodh-īs, akram-īt akram-īs, we have the first persons singular apāv-īsam, abodh-īsam, akram-īsam; and so, by the easiest possible 'false analogy,' and corresponding to ayās-īt, is formed the first singular, ayās-īsam.

The successive phases of the s-aorist inflection are clearly seen in the active singular of hā (quit): Phase 1. The oldest Vedic inflection; Phase 2. The inflection with tentative differentiation; Phase 3. The later hybrid inflection with īs, īt; Phase 4. The derailment into sīs-forms.—There is added the middle singular.

<table>
<thead>
<tr>
<th></th>
<th>ahās-am</th>
<th>ahās-am</th>
<th>ahās-am</th>
<th>ahās-īsam</th>
<th>ahās-i</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>ahās</td>
<td>ahās</td>
<td>ahās-īs</td>
<td>ahās-īs</td>
<td>ahās-thās</td>
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<tr>
<td>2.</td>
<td>ahāt</td>
<td>ahās-īt</td>
<td>ahās-īt</td>
<td>ahās-īt</td>
<td>ahās-ta</td>
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</tbody>
</table>

9 Despite the fact that it is sometimes classified as a sīs-aorist.
10 It occurs in the Soma-book of the Rig-Veda, ix,86,16,90,1,92,6,—places which do not show the marks of high antiquity. And it may itself be deemed a mark of modernity.
Forms of the type of the first singular, ayās-iṣam, in which the ś is felt rather as a part of the root than as a tense-sign, are the undoubted starting-point for the similar formations, few in number, which are covered by the designation ‘siṣ-aorist.’

The third and second persons singular, made with it and iṣ, are the only hybrid forms of the s-aorist, whether active or middle; and it is plain (see p. 101) that they are the only ones that would serve as points of departure for a ‘false formation’ like ayās-iṣam.

From this it is clear why (as the grammarians say: p. 94 d) the siṣ-formation is restricted to the active, and why (since the formation is an abortive outgrowth of the s-aorist) its ‘corresponding middle’ should be the middle of the s-aorist.

If the siṣ-forms are merely a false growth from the hybrid forms in it and iṣ of the s-aorist, then we ought not to expect to find siṣ-forms except from roots which show s-aorist forms. And this is in fact the rule. And since these hybrid forms are almost unknown to the oldest texts, the siṣ-forms should be of extreme rarity in such texts. This also is the case.

In the Rig-Veda, only the beginnings of the siṣ-aorist are found. Thus, from yā: ayāsiṣ-am, -ṭam, -ṭa, -us, beside the older and normal ayās-am, ayās-us, and the hybrid ayās-īt. So from gā (sing): agāsiṣ-us, beside the normal i. s. middle gāsi-ṃ. — As early as the Atharva-Veda, occur siṣ-forms from hā: thus, hāsiṣ-us, beside the older hāṣ-us of the older text, R.V. In many Vedic texts (see Whitney’s note to A.V. vii,81,5) occurs pyāsiṣ-imahi, beside which is found also apyās-am. — In the Brāhmaṇas occur siṣ-forms from jā: thus, ajñāsiṣ-am, beside ajñās-am. So from dhyā: adhyāsiṣ-am, beside dyās-us. — From jyā (overpower) we find ajyāsiṣ-am, etc.; and in Nirukta, from mnā (note), is found amnāsiṣ-us: but from neither of these roots are s-forms quotable (this

11 In like manner the tense-sign of arās-ma has come to be taken as part of the root rā (give), so that from the secondary root rās, present-stem rāsa-, are made rāsa-te, etc.
may be accidental?). — In all the Mahā-Bhārata, roots jñā and yā are the only ones that make siṣ-forms: ajñāsiṣ-am, -ma; ayās-īt. — Note that all these siṣ-forms just cited (except ayās-īt) are unequivocal siṣ-forms.

Equivocal forms from roots in ā occur as follows: adrās-īt (slept), adhmās-īt, apās-īt (kept), avās-īt, glās-īs, mlās-īs; and from nam, anaṁs-īt. By themselves, all these forms may be taken either as forms of the siṣ-aorist, or else as hybrid forms of the s-aorist. In default of unequivocal forms to support them as siṣ-forms, we assume that they are hybrid s-aorists. For this assumption, in the case of apās-īt, there is the support of the subjunctive pās-ati (R.V.), and, in the case of anaṁs-īt, the support of the Kāṭhaka form anān (for anāṁs-t).

Roots with unequivocal siṣ-forms
yā (go) pyā (swell) jyā (overpower)
gā (sing) jnā (know) mnā (note)
hā (quit) dhā (think)

Roots with equivocal forms in it or īs
drā (sleep) vā (blow) mlā (fade)
dhmā (blow) hvā (call) nam (bow)
pā (keep) glā (tire)

To sum up then: The siṣ-aorist, so-called, is merely a name covering a few forms from roots in ā and m, made by false analogy from forms of the singular of the s-aorist active.

In the Veda are seen the beginnings of a process of transfer of dā (give: δ-family) and dhā (put: τ-family) to the a-conjugation. In the precisely similar case of sthā (stand: τ-family) the process was not only begun, but also carried out. With dā and dhā it proved abortive, a case of 'arrested development.' Such also is the case of the siṣ-formation.

The sa-aorist. — This is made only from roots which end in h, c, s, or j. All these finals are sounds which, in combination with the s of the tense-sign, make ks. All these roots have i or u or r as medial vowel, and it remains unstrengthened. The stem consists of augment and root and the tense-sign sa. It is inflected precisely like an imperfect of the a-conjugation, — but with three exceptions (marked with a star in the paradigm, p. 100 d) as follows:
In the middle, the forms of the 1. s. and 2. and 3. dual must be made from a stem in s (that is, in \( k\_s \)) and have the endings of the non-a-conjugation. Thus the grammarians; but no such forms are quotable.

The roots making sa-aorists are less than a score. In the earlier language, this formation is hardly more than sporadic. In the Rig-Veda, it appears from only seven roots. And from the entire Mahā-Bhārata not an instance is reported. Including duh (milk: adhukṣa-t), guh (hide: aghukṣa-t), ruh (climb), mih (mingere), lih (lick), some 17 roots may be listed, — 7 in \( h \), 5 in \( \varsigma \), 3 in \( s \), 2 in \( j \):

\[
\begin{align*}
&\text{druh (harm)} & \text{adhukṣa-t} \\
&\text{vrh (tear)} & \text{avṛkṣa-t} \\
&\text{vṛj (wring)} & \text{avṛkṣa-t} \\
&\text{viç (enter)} & \text{avikṣa-t} \\
&\text{diç (point)} & \text{amṛkṣa-t} \\
&\text{kruç (yell)} & \text{amṛkṣa-t} \\
&\text{dviṣ (hate)} & \text{sprç (touch)} \\
&\text{kṛṣ (drag)} & \text{piṣ (pound)}
\end{align*}
\]

Precative or benedictive mode. — Precative forms are optatives (and accordingly, augmentless), made, in the active, with the mode-sign \( yā + s \), and, in the middle, with the mode-sign \( i + s \) or else with \( ī \), interposed between the radical part and the ending.

In the classical language, precative forms are extremely rare in the active, and in the middle they are virtually unknown. In the Vedic texts, however, a few score are found, and of these some examples may be given at this point, since they are made almost wholly from stems of the root-aorist and sigmatic aorists.

Of the root-aorist, only active forms are recognized by the Hindu grammar as part of the accepted precative. [In the Rig-Veda appear two middle forms (and no more), pad-\( iṣ\-tā \) and muc-\( iṣ\-tā \). — Of the sigmatic aorists, only middle forms are in use.

The paradigm is given at p. 101. From it, the questionable 2. and 3. dual (bhaviṣ-\( i\-yāsthām \), bhaviṣ-\( i\-yāstām \) and also the 2. p. (bhaviṣ-\( i\-dhvam \) are omitted, as non-quotable. They have never been found in actual use. It thus appears

[For the continuation of this sentence, see page 102.]
Paradigms of aorists: simple, reduplicated, sigmatic (s-aorist)

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<tbody>
<tr>
<td>da (give)</td>
<td>sic (pour)</td>
<td>jan (beget)</td>
<td>ni (lead)</td>
</tr>
<tr>
<td>bhū (be)</td>
<td>asica m</td>
<td></td>
<td>nud (push)</td>
</tr>
<tr>
<td>adā m abhū‘am</td>
<td>asica s</td>
<td></td>
<td>anāiš am</td>
</tr>
<tr>
<td>adā s abhū s</td>
<td>asica t</td>
<td></td>
<td>anāiš īs</td>
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<td>adā t abhū t</td>
<td>asica va</td>
<td></td>
<td>anāiš īt</td>
</tr>
<tr>
<td>adā va abhū va</td>
<td>asica tam</td>
<td></td>
<td>anāiš va</td>
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<tr>
<td>adā tam abhū tam</td>
<td>asica tām</td>
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<td>anāiš tam *</td>
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<tr>
<td>adā ma abhū ma</td>
<td>asica ma</td>
<td></td>
<td>anāiš ma</td>
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<tr>
<td>adā ta abhū ta</td>
<td>asica ta</td>
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<td>anāiš īa</td>
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<tr>
<td>ad us abhū‘an</td>
<td>asica n</td>
<td></td>
<td>anāiš us</td>
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</tbody>
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<table>
<thead>
<tr>
<th>The non-a-stems of non-a-conjugation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle</td>
</tr>
<tr>
<td>anēš ī i</td>
</tr>
<tr>
<td>anēš īhās anut īhās *</td>
</tr>
<tr>
<td>anēš īa anut īa *</td>
</tr>
<tr>
<td>anēš vahi anuts vahi</td>
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<tr>
<td>anēš ātām anuts ātām</td>
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<tr>
<td>anēš ātām anuts ātām</td>
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<tr>
<td>anēš mahi anuts mahi</td>
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<tr>
<td>anē dhvam anud dhvam *</td>
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<td>anē dhvam anud dhvam *</td>
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<td>anē dhvam anud dhvam *</td>
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<td>anē dhvam anud dhvam *</td>
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</table>

<table>
<thead>
<tr>
<th>The e-stems of the e-conjugation</th>
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</thead>
<tbody>
<tr>
<td>Active</td>
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<tr>
<td>ajījāna m</td>
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<tr>
<td>ajījāna s</td>
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<tr>
<td>ajījāna t</td>
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<td>ajījāna va</td>
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<td>ajījāna tām</td>
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<td>ajījan ī e</td>
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<td>ajījan īhās</td>
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<td>ajījan vahi</td>
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<td>ajījan ātām</td>
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<td>ajījan ātām</td>
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<td>ajījana mahi</td>
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<td>ajījana dhvam</td>
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<td>ajījana nta</td>
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| Active                              |
| ajījana m                           |
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| ajījan ī e                          |
| ajījan īhās                        |
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| ajījan vahi                        |
| ajījan ātām                        |
| ajījan ātām                        |
| ajījana mahi                       |
| ajījana dhvam                      |
| ajījana nta                       |
Paradigms, continued: (iṣ-aorist, siṣ-aorist, precative)

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</thead>
<tbody>
<tr>
<td>pū (cleanse)</td>
<td>budh (wake)</td>
<td>yā (go)</td>
<td>bhū (be)</td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td>bhūyāṣ a</td>
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<tr>
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<td>abodhiṣ tām</td>
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<td>apāviṣ tām</td>
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<tr>
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<td>bhūyāṣ ma</td>
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<td>apāviṣ ṭa</td>
<td>abodhiṣ ṭa</td>
<td>ayāsiṣ ṭa</td>
<td>bhūyāṣ ṭa</td>
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<td>abodhiṣ us</td>
<td>ayāsiṣ us</td>
<td>bhūyāṣ us</td>
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<td>abodhiṣ i</td>
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<td>bhaviṣṭa</td>
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<td>abodhiṣ ṭhās</td>
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<td>bhaviṣṭaḥās</td>
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<td>abodhiṣ vahi</td>
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<td>bhaviṣṭa vahi</td>
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<td>apāviṣ āthām</td>
<td>abodhiṣ āthām</td>
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<td>apāviṣ ātām</td>
<td>abodhiṣ ātām</td>
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<td>apāviṣ mahi</td>
<td>abodhiṣ mahi</td>
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<td>bhaviṣṭa mahi</td>
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<td>apavi ġhvam</td>
<td>abodhi ġhvam</td>
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<td>apaviṣ ata</td>
<td>abodhiṣ ata</td>
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<td>bhaviṣṭa ran</td>
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that, in the middle, the ‘inserted s’ is actually found only in the 2. s. and 3. s., before -\textit{tha}s and -\textit{ta}. Other than these five forms, accordingly, there remain in the middle only four forms (the three first persons and the 3. p.), and these are clear optatives made with \textit{i} from sigmatic aorist stems.

The ‘inserted s’ is highly problematic: is it a tense-sign, following the mode-sign? but the sigmatic precatives (for example, ma\textit{n}s-\textit{isth\text{\^a}s}, modi\textit{s}-\textit{isth\text{\^a}s}, y\textit{asi}-\textit{isth\text{\^a}s}) do in fact show a tense-sign \textit{before} the mode-sign.

Root-form. — In the active, the root is treated before \textit{y\text{\^a}} (= \textit{\textipa{iv\text{\^a}}}) as it is before the passive-sign \textit{y\text{\^a}} (\textit{\textipa{iv\text{\^a}}}): \textit{cr\text{\^u}} (hear) \textit{cr\text{\^u}-y\text{\^a}sam}; \textit{kr} (do) k\textit{r-y\text{\^a}ma}; \textit{k\text{\^r} (scatter) k\text{\^r}-y\text{\^a}t}; s\textit{inc-ati} (pours) \textit{sic-y\text{\^a}t}; \textit{vad} (say) ud-y\text{\^a}sam. And final \textit{\textipa{a}} with the \textit{i} of \textit{\textipa{iv\text{\^a}}} (= \textit{\textipa{y\text{\^a}}}) makes \textit{e}, as elsewhere: \textit{p\text{\^a} (drink) pey\text{\^a}s}, 3. s. — In the middle, the root shows the same form as in the corresponding indicative aorist: \textit{mr\text{\'k}s\text{\^i}-\textit{ta} (m\text{\'k}c), modi\textit{s}-\textit{\textipa{isth\text{\^a}s}}.

The personal endings are the secondary ones, with the optative \textit{us} in the 3. p. active, and with the optative \textit{a} and \textit{ran} in the 1. s. and 3. p. middle. — In the 2. s. and 3. s. active, the oldest texts have -\textit{y\text{\^a}s} -\textit{y\text{\^a}s} (for -\textit{y\text{\^a}s}-\textit{-y\text{\^a}s}-\textit{t}). The later texts evade the ambiguity (as elsewhere: p. 95 a), and have -\textit{y\text{\^a}s} -\textit{y\text{\^a}t}, at the expense of the ‘inserted \textit{s}’.

Examples of actually occurring precatives: made from —

<table>
<thead>
<tr>
<th>Root-aorist-stems:</th>
<th>Sigmatic aorist-stems:</th>
<th>Middle only</th>
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<tbody>
<tr>
<td>active only</td>
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<tr>
<td>1.s. bhū yās am RV.</td>
<td>1.s. mukš ī \textit{ra}</td>
<td>1.s. edhiś ī \textit{ra}</td>
</tr>
<tr>
<td>2.s. bhū yās RV.</td>
<td>1.s. lops ī \textit{ra} Upan.</td>
<td>1.s. janīś ī \textit{ra}</td>
</tr>
<tr>
<td>3.s. bhū yās t AV.</td>
<td>2.s. mānš īṣ \textit{t\text{^h\text{^a}s}}</td>
<td>2.s. modiś īṣ \textit{\textipa{th\text{^a}s}}</td>
</tr>
<tr>
<td>3.s. bhū yā s t AV.</td>
<td>3.s. mānš īṣ \textit{\textipa{ta}}</td>
<td>3.s. janīś īṣ \textit{\textipa{ta}}</td>
</tr>
<tr>
<td>1.p. bhū yās ma AV.</td>
<td>3.s. mākš īṣ \textit{\textipa{ta}}</td>
<td>3.s. vāniś īṣ \textit{\textipa{ta}}</td>
</tr>
<tr>
<td>2.p. bhū yās ta TS.*</td>
<td>1.p. māns ī mahī</td>
<td>1.p. edhiś ī mahī</td>
</tr>
<tr>
<td>2.p. brū yās taNala*</td>
<td>VS. 2,7 *Nala 17,36</td>
<td>Sīṣ-aorist</td>
</tr>
<tr>
<td>3.p. vadh yās us TS.*</td>
<td>TS. 3,2,5*; 2,6,6</td>
<td>2.s. yāsiś īṣ \textit{\textipa{th\text{^a}s}}</td>
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<td>1.p. pyāsiś ī mahī</td>
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VII. — Stampini and Pascal on the Catullus Manuscripts

By Professor Emeritus William Gardner Hale

University of Chicago

In spite of intended brevity, a short introduction is necessary.

It is agreed that there was in the fourteenth century a manuscript of Catullus in the Cathedral Library of Verona, and that it had probably been there from at least the tenth century. This is now lost.

Two existing manuscripts dating from the latter part of the fourteenth century (so far there is agreement) represent the "Lost Verona" with tolerable accuracy, though differing from each other at many points. These are G of the National Library in Paris, and O of the Bodleian Library in Oxford. O is undated, G bears the ostensible date of 1375.

Up to the nineteenth century, while editors repeatedly spoke of readings in manuscripts which they had used, there was no methodical exhibition of them. But about a hundred years ago, editors began to arrange and exhibit more adequately. For Catullus this improvement begins with Lachmann’s edition (1829). G and O were not yet generally known.¹ Lachmann as a rule cites two manuscripts, and two only, D and L, characterizing them as manuscripts "with the one or the other of which all the rest of the uninterpolated manuscripts everywhere agree." Such is the explanation given. But the real reason was undoubtedly the fact that D and L were right at hand for Lachmann in the Royal Library of Berlin; for his own occasional citations from Parisinus 7989 (P) and Laurentianus 33, 12 show them to be better manuscripts. Lachmann does not give the date of any manuscript cited. That of D is 1463, or only about seven years before the first printed edition.

¹ G was known to Sillig, who gathered readings from it and other Paris manuscripts in 1833; and Valpy’s edition, published seven years before Lachmann’s, called special attention to O. But Lachmann missed both.
Other manuscripts were presently brought into service. Schwabe cited six, including G. Robinson Ellis, after working in many libraries, set up a great apparatus, using twenty-one manuscripts, including O and B, the latter dated 1412. In neither edition does he cite P, dated 1423 (the famous manuscript of the Cena), except for a very few scattered references to it under its library number. This silence will always remain strange; for a collection of readings made by Sillig from five manuscripts in the National Library in Paris was published by Rossbach in 1859, and yielded nearly six large pages of readings from P. Besides, there was Schwabe’s second edition, which gave readings; and there was Paris close at hand.

But to proceed. Schwabe in his second edition used ten manuscripts. Schulze collated M (to which Ellis had drawn attention), and gave in his edition the readings of O, G, M, and D, on the theory that M and D best represented two masses of the secondary manuscripts which had come down from sources independent of O and G. This remained Schulze’s position, as appears in his summary (Jahresbericht, 1920) of publications upon Catullus since 1905. And let me say at this convenient point that, in substance, Schulze’s argument in this new summary is identical with Stampini’s argument, which we are going to examine, and that Stampini’s argument is in substance identical with that of a score of predecessors, including Ellis. The attempt is, in brief, to elevate a favorite manuscript, not exactly to equality with G and O, but to independence of them, so that any readings one likes to adopt from them may be regarded as having descended from the “Lost Verona Ms.”

We have reached Stampini. In 1915 he gave, before the Royal Academy of Sciences in Turin, two papers on Catullus, which were published the next year in a pamphlet. In this monograph, Stampini relies entirely upon Ellis’s apparatus, discussing and citing substantially the same manuscripts, and, like Ellis, having nothing to say about P.
His study was suggested to him by some added readings which Ellis in his small undated edition (1904) gave from a manuscript in Brescia. Let us call this manuscript the Brixianus.

Stampini’s argument of 48 pages may be condensed as follows:

1. Brix. has many wonderful agreements (mirabili concordanze) with h of the British Museum. They are clearly from one original. To be sure they do differ. But the explanation is simple. Where this happens, the reason lies in errors or ignorance, largely, though not wholly, due to paleographical grounds, especially misunderstandings of abbreviations.

2. There are places where they have a good and acceptable reading in common with another manuscript, or with a very few manuscripts, or with a few. But they also differ elsewhere from this same manuscript or these same manuscripts. The explanation is as before, in the copying of their exemplar from its exemplar, or of the exemplar of these other manuscripts from their exemplar.

3. They occasionally agree with O, while not passing into the field of G.

4. They have many good and acceptable readings, not due to interpolation, which are peculiar to them and are not in O.

Therefore we must believe that these manuscripts have come down, independently of O and G, from the “Lost Verona Ms.” And their readings become available for the restoration of the text.

Pascal, in his recent edition of Catullus (1916), substantially accepts Stampini’s reasoning. He also, because of their excellence, gives many readings from d and Cuiac., while holding his ultimate judgment in reserve.

Before we pass to a critical examination of Stampini’s reasoning, let me say that his phrase “wonderful agreements” should not be allowed to overawe us. There is nothing extraordinary in the close general agreement of two manuscripts. I can show the same general agreement in a group of three
manuscripts, or of six, or even of seven. Thus Stampini speaks of the Hamburg Ms., H, as having destinat in 21, 12, where O and G have desinat. But I can show five more manuscripts that agree with the Hamburg Ms., not only here, but pretty generally.

Now for the criticism proper:

1. In assuming paleographical blundering as the principal cause of variation in manuscripts, Stampini is certainly wrong. Thus in the place just referred to, where all editors have long read desine, the manuscripts give us desinat (O G), desinas, desine, destinat, destituat, desideat. These differences are obviously not due to paleographical confusion. Only one other explanation is possible: they are due, except the inherited original reading, to deliberate attempts to mend an obviously corrupt text. Put mathematically, we have here $83\frac{1}{3}$ per cent of emendation.

2. In saying that good and acceptable readings in the combination Brix. h are not due to interpolation, that is, attempted emendation, Stampini is begging the principal question, like Schulze after him and many a man before him. Schulze says (op. cit., p. 19): "The scribes were generally glad enough if they could merely make out Latin words, whether these yielded sense or not." But it is exactly here that proof is wanted. The odds are against the explanation of independent descent for these good readings; for it is a very suspicious circumstance that, toward the end of the manuscript period and the beginning of the period of print, the readings steadily improve. And it is precisely for these later manuscripts and readings that Stampini, Schulze, and others are most vigorously fighting!

3. There are other manuscripts which, from time to time, agree with O without agreeing with G, or with G without agreeing with O. That is the case with D, which, a number of times, agrees with G against O; it is the case with Ms. a, of the British Museum, which, in spite of resemblance to D, occasionally agrees with O against G. It is the case with L,
which, in additions by the first hand, has many agreements with O. It is strikingly the case with P, the manuscript with which Stampini seems to have no acquaintance. P has more agreements with O against G than Brix. and h have. If we proceed by Stampini's reasoning, we shall have the heavens studded with these independent luminaries!

4. Stampini's argument assumes that readings in common between O and Brix. h must have come down independently from a common ancestor. This is based on what has been, and still seems to be, the prevailing theory of descent in a straight line: A begets B, B begets C, C begets D, etc. But it has begun of late to be recognized that crossings of traditions take place, and in the case of a few authors stemmata have been published which connect one archetype with another. I early felt that I recognized that, in greater degree indeed than any one has yet suspected for any author, the manuscripts of Catullus were crossed and recrossed, and not archetypes alone, but individual manuscripts, so that scarcely one after the fourteenth century has come down unmixed. No stemma of the Catullus manuscripts from the earliest time down to Schulze's article, inclusive, hints at such a thing, and no programme or prolegomena propose it — in spite of the fact that, in a postscript in G, the scribe himself begs the reader's pardon for its inaccuracies, and excuses himself on the ground that he had no other manuscript by which to correct it!

5. Stampini suffers, without being clearly aware of it, from the same difficulty from which all the editors have suffered, a very limited knowledge of the manuscripts. I can easily illustrate by saying that another manuscript which he evidently does not know, the Brera Ms. in Milan, forms a third in the group to which his combination Brix. h belongs, and represents the family at a point one generation farther back. Most dramatic fact of all, Stampini's group owes much of its character to crossing from another manuscript of which, probably from following Ellis, he has no knowledge — I mean that
same P of the National Library in Paris. Even the highly individual titles in Stampini's group, of which he makes much, are evidently derived from the titles in P. To illustrate further: In Stampini's discussion, he gives many readings peculiar to Brix. h, or shared only by a very few (pochissimi) or a few (pochi) — "in general not to exceed four." Thus for *vetitabas* in place of *ventitabas*, 8, 4, he adds "with H." But I can give seven more manuscripts with this reading. For the inversion *puelle ferunt*, 2, 11, he gives no additional manuscript; but I can give twenty-two. For the corruption *nemo sinunt*, 12, 13, he gives no additional manuscript; but I can give twenty-four. Now if it is a good thing to know *something* more about the Catullus manuscripts (say about Brixianus) there would seem to be a hope of considerable advantage in a *complete* command of them. And here is one of the major points which mark my own studies in the Catullus tradition.

I should like now briefly to show, in contrast with the methods I have been criticising, how I came to be able to enlarge other people's citations, and how I am using my materials.

I early felt that the relations of the Catullus manuscripts had not been made out. But the published readings were so intermittent and scattering that there could be little hope of a solution through their aid alone. Even today, there are complete published collations of only two of the manuscripts, O and G, with an approach in the case of M, D, and L.

Still, I believed that I divined two things. One was that the great mass of the manuscripts outside of O and G had come down from a common third source, now lost. The other was, as I have already said, that the secondary manuscripts were heavily crossed: for there was no trouble in finding evidence for quite contradictory hypotheses.

Going to Rome as Director of the American School of Classical Studies, in its first year, 1895-1896, I seized my opportunity to look at the Catullus manuscripts in the Vatican
Library, in the hope of bridging over some of the existing chasms. A number of our students had taken an introductory course in paleography at the Vatican, and, in consequence, I was able (through the great kindness of Father, now Cardinal, Ehrle) to get the privileges of the manuscript working-room for four of them who wanted actual practice. They collated, under my direction, four manuscripts, selected by me out of the twelve entered in the three catalogues in which the name of Catullus appears. Heyse, in 1855, had said there were eleven. Eleven of the twelve duly came to me at my request; but, for the twelfth, a Greek author came instead. I was precisely where Heyse must have been, and probably many another scholar before his time and after it. I rang the changes on the figures of the catalogue number, but in vain. I was strongly tempted to give the matter up. It was late, in a year of great responsibility and hard work. The manuscript, if there really was one, was probably of little value in any case. But I could not bring myself to let go. After a long series of experiments, I got the manuscript, quite simply at the end. When it came to me, I at once thought it probable, and at my next sitting, after preparing special tests, felt morally sure, that I held in my hands that which I had believed had once existed, but had never guessed that I, or any other man, should see — the peer of O and G, and the original of the greater part, at any rate, of the whole mass of secondary manuscripts.

I christened the manuscript R, and collated it. On my return to America, I offered a seminar in the subject, and found the material insufficient. Then Mr. C. E. Dixon volunteered to return to Europe and make complete copies of manuscripts which I especially wanted, B, P, A, and V. A little later, Mr. O. M. Washburn contributed copies of Dresd. and Urbinas 641. I also had complete copies made of D and L, and had a photograph made of Ms. a in the British Museum. I could now control twenty manuscripts.

Ellis and Schwabe, in giving a reading, arrange in alpha-
batical order the symbols of the manuscripts having it. In contrast I made out hints of families, and had special paper for a collation printed and ruled, on which these tentative families appeared. I was not, in fact, far wrong. But after I had amassed a complete collation of my twenty manuscripts, I found it still insufficient. I then determined to get a complete collation of every existing manuscript of my author. I raised Heyse's guess of a total of seventy (he enumerates only forty-three) to an actuality of a hundred and fifteen or so, and published the list. Mr. B. L. Ullman, then fellow of my university, and a member of my Catullus seminar of that day, was allowed to come abroad to help me. With the assistance of Mr. Evan T. Sage, who happened to be at hand, and could give his time for a while, we dealt with every known Catullus manuscript.

The mechanical difficulties in collating so many manuscripts, especially of a text so corrupt, were great. Any manuscript would differ in multitudes of places from any modern printed text, and the number of entries one would have to make in collating under the ordinary system would be overwhelming.

A better way occurred to me. I had a book of a hundred and fifty copies privately printed, with the text which, on the basis of O G and R, I believed the "Lost Verona" to have had. The manuscripts would obviously differ much less from this than from a modern text. Armed with one of these copies, one of us would sit with pen and ink before a manuscript, and make the printed book conform to that manuscript. About a vast number of readings, nothing would need to be noted. Moreover, when I came to my work of comparison later, I should have for each manuscript the single book alone to deal with, instead of a modern text plus a notebook. My book would be for me the manuscript itself. And the fact that, all my books being of the same size and shape, they would pack, and handle, in smooth masses together, all open, if I wished, at the same page, and always exhibiting a given
passage at the same point in that page in every one, would facilitate comparing and recording. Yet I beg you not to think the labor slight.

There is no time in which to describe my processes. I can only speak of the provisional results, first for the text of Catullus, and second, for our general conception of the way in which fifteenth-century scribes and owners worked.

My large result for Catullus was divined as probable, and published as such, before I began to get the complete manuscript material before me. I am finding what I foresaw: all the manuscripts except O G R are derived from these three, and principally from R. This being so, we may and must cut off the whole web below the manuscripts O G R. In these three we possess the whole of the genuine tradition. Moreover, the work of G², that is, the first corrector of G, does not belong in this genuine tradition, for it was done from M, a copy of R, by a man who never set eyes on the original of G, and forty years, at the least, after G was written. The text of Catullus must accordingly be based entirely on O G R and R². R² was the owner of R, Coluccio Salutati (1330–1406), Latin Secretary of the Republic of Florence, a scholar, and a great collector of Latin manuscripts. We have throughout, of course, the delicate task of distinguishing between what he preserved to us, which is of incalculable value, and what he changed or added; for there is no question that methodical emendation is already present in his work (in the fourteenth century, please notice) not only in R, but in other manuscripts which may be identified as having been owned and worked over by him.

G and R are sister manuscripts, copied from a copy of the "Lost Verona MS.," made for Coluccio, pretty surely in 1375.

I have not yet published a collation of R, because it has proved to be difficult to persuade people of its character, though I have given strong demonstration. Ellis agreed with me, and Merrill does; but Friedrich and Schulze found
R of no value. I have waited until I could command the evidence of the whole mass of Catullus manuscripts. This obviously should come out with the collation, rather than after it.

The work is well advanced. I have my general stemma. I know, for example, where Stampini's group comes from (it is a composite from four sources), where D comes from, where the Hamburg Ms. and the C group come from, where other groups that have never been suggested come from. I know a good deal about the crossings, though not yet everything, and a good deal about the stemmata inside the groups, though not yet everything.

It is a good while since I began. But the task I set myself is not only perplexing in the highest degree, but enormous in extent. And there have been other things that claimed my time. The continuous attention which such a piece of work calls for by its very nature was impossible under the conditions of university teaching. But now, with good fortune for a few years, I hope to finish the undertaking. I can already vouch for three points with regard to fifteenth-century manuscripts of any Latin classic, if, as we have the right to do, we judge from the Catullus group:

1. Most of the manuscripts are highly sophisticated. There is no such thing as an uninterpolated manuscript.
2. As a whole the manuscripts are highly composite.
3. One needs, for the establishment of certainty about the interrelations and respective values of the manuscripts of any author, to be equipped with complete collations of all that have survived.
VIII. — A Dialysis of the Fifth Century A.D. in the Princeton Collection of Papyri

BY PROFESSOR HENRY B. DEWING

UNIVERSITY OF TEXAS

[Plate I]

DURING the year 1921 Princeton University was fortunate in obtaining a group of Greek papyrus documents, which are in every case ‘new’ material. The acquisition of these papyri was made possible by the generous and efficient assistance of Professor F. W. Kelsey, of the University of Michigan, who, in coöperation with the authorities of the British Museum, made arrangements for their purchase. They were first inspected and inventoried at the British Museum, and were received at Princeton in such shape that work could be begun on them at once.

There are sixty-seven items in the new Princeton catalogue, as prepared by Mr. H. I. Bell, of the British Museum, but five of these items represent detached fragments; the remaining sixty-two have all been inventoried, tentatively, with the exception of one demotic papyrus.

The pieces are all of the ‘non-literary’ class, and many of the familiar types are represented — personal papers and official documents; some informal, such as a letter of introduction to one Phoebammon, of Oxyrhynchus, who is besought to provide a little hay for the animals of a traveler (No. 58); and some formal, such as the dialysis discussed later (55), or the taxation register of Philadelphia (11). They range in date from the third century B.C. to the seventh century A.D.

The majority of the documents are mere slips of papyrus, size being of course no index to their intrinsic value, but three of the number were preserved as rolls, and are still in very good condition. There are thus three excellent examples of the papyrus roll: the taxation register (11), a roll of sitologi
(48), and the dialysis (55), each of them a very valuable piece.

**The Dialysis**

The dialysis is in effect a contract, being a record of an agreement or settlement between individuals, duly signed and witnessed. As a specimen of papyrus, it is truly remarkable, the body of the document being preserved with a fair degree of completeness, and the black writing standing out on the golden-brown ground as clearly as when first written. It is definitely dated 481 A.D., in the reign of Zeno, at the city of Lyconpolis. Apart from the signatures of the four contracting parties and of the four witnesses, it is written by a single hand in a bold well-rounded script. The writing is in long lines extending from side to side of the sheet. Supposing that no lines have been lost at the end, it may be computed with reasonable certainty that the entire document consisted of 94 lines of writing. Of these 77 are practically intact, and a few of the others may be approximately restored.

The sheet of papyrus on which the dialysis was written was originally \(44\frac{1}{2}\) inches long and \(11\frac{3}{4}\) inches wide. It was composed of seven pieces glued together, four of which are scarcely injured. There is a break affecting eleven lines of text (about five inches) where the first and second pieces were joined together, and the last piece has lost at the bottom about \(2\frac{1}{2}\) inches. How much writing may have been lost at the bottom cannot be estimated, unless, indeed, there existed some rule as to the number of witnesses required for such a document. The final break occurs in the midst of the signature of the fourth witness, and four would seem to be enough. In case the fourth witness was the last to sign, there was presumably a blank space of about two inches below his signature, which would then correspond to a larger blank at the top of the papyrus, where we find about three inches of blank space. The loss at the bottom was caused by breaking or cracking on the extreme inside of the roll; that near the top was caused by the exposure of one side of the roll during the period of its
temporary oblivion, so that a portion of the outermost layer fell apart into small fragments or entirely disintegrated.

Throughout the papyrus word-division is altogether lacking. Capitals are occasionally used, but not consistently even in proper names; there is no paragraphing. Accents are not written nor is iota subscript, but breathings (?) are regularly used in the body of the document over initial upsilon and iota ($\ddot{v} = \dot{v}, \ddot{i} = i, \dot{i} = i$). Abbreviation is indicated by the sign $\$ or by a diagonal stroke across the tail of iota, kappa, or rho, and by a dot over nu. The sign $/$ is used to set off numerals and once to mark a division in the itemized list (l. 38).

By a strange freak the final word of line 1 (Δυναύστου), as it now appears on the papyrus, is cut in two, the last five letters having been carried upward about three quarters of an inch above the rest of the line to which they belong; the word was originally written over a crease in the papyrus, and this, when ironed out in the British Museum, threw the latter half of the word about two lines out of alignment.

The term 'dialysis' is furnished by the document itself, and, in this case at least, means a settlement by arbitration, though the words 'arbiter' and 'arbitration' are not used. Other examples of a precisely similar character have been found previously and published (e.g. B.G.U. 1, 317), but the present example seems to be the only one approaching completeness.

TEXT

1 τοῖς μετὰ τὴν ὑπατείαν τοῦ δεσπότου ἦμῶν Φλ. Ζήνωνος τοῦ αἰώνιου Δυναύστου

tό γ', Φαρμούθι α', τετ[ά]ρτης ἱνδικτ.[,] ἐν Δύκων τόλει τῇ λαμπρᾷ

... ... ... ις τὴν κοινὴν [ὁμολογίαν τ]ῆς διαλύσεως ἐκ μὲν τοῦ ἐνο[ς]

[μέρος] ... ... ... ἐς θεοφιλέστατος [ἐπίσ]κοπος τῆς κ[οινῆς]

Δυκαπολιτῶν ἁγίας τοῦ θεοῦ
a ............................ ε]ύλαβοις .......... ἡ μὴ ............
b ........................... τ ἔαντ ... τοῦ θεοῦ ἐκκλη[σία] ............
c ............................. ρεῖν μικρὸ πρότερον ὁ πρὸς ἡμ[ᾶς] ...........................
12 ................................... Απόλλωνος
 .......................................................... a ὑπὸ
 .......................................................... τας μετὰ
15 .................................................................. [γεγρα]μένους

Κύρον τὸν θεοσεβ. [ἐπίσκοπον καὶ Δαυιὴλον καὶ Ἀρείωνα
ἐπὶ φανεροῖς κεφαλαῖοι τοῖς καὶ εὑ κειμέν[οις] τῇ ἀπὸ ...
η πάρ αὐτ[οῖς ἐ]ντεύξει,
καὶ διακελάδηται Κύρον μὲν τὸν θεοφιλέστατον ἐπίσκοπον καταλαμβάνοντα
τὸ μετὰ ἐκεῖνο δικαστ[ὴν τὰ] ὑπὸς προσούσας αὐτὸ εκθέσθαι
dικαιολογίας,
20 εἰ μὴ ἔλοις πρὸ δίκης ἐπιλύειν τὰ ἐ ... γόμενα Δαυιὴλον
de καὶ Ἀρείωνα τοὺς
εὐλαβ. αὐτοῦ ἀδελφοῖς ἐξ ἀντιρρήσεως πα[ρὰ] Ἐκκαρίῳ
τῷ [ἐλλο]γιμωτάτῳ συνηγόρῳ
tοῦ Θεοβᾶιῶν φόρον δικάσασθαι. καὶ τούτων[οῖτῶν ἔχοντων
ὁμολογία συντεθηται
μεταξ[ῆς] Θεοφίλου [τοῦ] ὑ προγεγραμμένο[ν διακόνου καὶ
Δ]αυιηλίου καὶ Ἀρείωνος
τῶν εὐλαβ. ἐν τῇ ἀ[γίᾳ τῶν Δυκαλίων ἐκκλησία
πρεσβυτέρων], καθ’ ἡν ὠμολόγησαν
25 ἀλλήλοις ἐίσω ρητῆς προθεσμ[ῆς ἀπαντῆ[σαι] πρὸς
το[ῦτων] τῶν ἐλλογιμώτατοι
Μακάριον καὶ τὰς προσούσας αὐτοῖς ἐκθέσθαι δικαιολογίας
ἡ γοῦν φανεροῦ

Lines a, b, c are written on a detached fragment which certainly belongs
between lines 5 and 14.
Διαλύσεις του Μεσαίωνα

τας υπομνήσεις Κύρος το θεοσμόστατος ἐπισκόπος ὑπομεμε-

υκάς παρὰ

Θεόφιλοο μὴ ἀναμείνας διαστικῆν διαγραμματίαν δεδυ-

σώτηρην ἔαντον

30 ἐκεῖνα ποιεῖν ἀπερ ἀν μέσοι τινες αὐτῶν γεγονόμενοι

δικαιώσωσιν· καὶ δὴ

Μακάριος καὶ Σαβίνος οἱ ἐπλογιμώτατοι παρ’ ἐκατέρον

μέρους ἐν τοῖς ἀγαφοῖς

στερχθέντες μέσοι αὐτῶν γεγονότες καὶ τὴς αὐτῶν ἀπάσης

ἀκρασάμενον δικαιο-

λογίας ἐδικαιώσαν Κύρον μὲν τὸν εὐλαβ. ἐπίσκοπον

καταθεῖναι ἐπὶ Θεόφιλον

χριστινοὺς δικαίωξις, γι. χρ. ν. τι, ὑπὲρ ἀπάλλαγης πάσης

δίκης καὶ δικαιολογίας

35 καὶ μέμψεως, Δανείλιον δὲ καὶ 'Ἀρέωνα καταβάλειν ὁμοίως

ἐπὶ Θεόφιλον

τὰ ἐξῆς ὑποτεταγμένα εἰδὴ οὕτως· κολοβοσμαφόροιν ἀνδρικῶν

ἐν, κοσμοῦλιν

Αἰγύπτιον ἐν, καρακάλλιον Αἰγύπτιον ἐν, στιχάριον λευκο-

ροδίου ἐν, προσκεφάλαια πολύμι.

δύο, στρώμα σκιώδιον ἐν, δελματίκιον μελισοχρων ἐν,

λωτίκιον παρακαὐτώδου ἐν,

οὐηλάρια μικρὰ χοντρά δύο, στιχαρομαφόρια ὀρθόπλουμα

πέντε, μαφόρια μολόχ.

40 ἐν, στιχάριον ἀνδρικῶν λιτῶν ἐν, λυσωμία ἀνδρικὰ δύο,

σιωδίναι καὶ σάβανα

32 ἀκρασάμενοι sic.

34 γί(νεται) χρ(ίναι) ν(ομισματία).

37 πολύμι i.e. πολύμιτα.

38 παρακαὐτώδου cf. παρακαυτώδωτα, 43, 44, and παρακαὐτώδου, 44.

39 μαφόρια error for μαφόριον. μολόχ(iνα).
απὸ Σκινεπώεως ἐπτὰ, τυλάριον ἀπὸ Σκινεπώεως ἐν, καμάσιον Δαμάσκινον ἐν,
ὅραρι[α] δέκα, ἱματιοφάρια δύο, μανδήλην ἀπὸ Σκινεπώεως μίαν, προμάξιμον
ἀπὸ Σκινεπώεως ἐν, χειρομάπτιον ἐν, ἱματιοφόριον γερδι-
ακὸν ἐν, λυνούμα παρα-
καύδωτα καινούργια τρία, μαλλωτὸν παρακαύτωδον ἐν, λυ-
νούμα ἄλλα μαλλωτὰ
45 δύο, πακιάλιον γυναίκιον πλούμαρκικὸν ἐν, καὶ ἐπὶ τούτοις τάσαν σβεσθήναι
dίκης ἀφορμὴν Θεοφίλον κατὰ τῶν προγεγραμμένων τριῶν ἀδελφῶν.
τούτων τούν ἔργῳ καὶ δυνάμει γεγενημένων δεξάμενον ὁ
προγεγραμμένοι
εὐλαβ. Θεόφιλος παρὰ μὲν τοῦ θεοφιλεστάτου ἐπισκόπου
toις προειρημένων
χρυσίνους δεκαεξ', γυ. χρ. ν. ἤς, π[α]ρ[α] Δανηλίον δὲ καὶ
 Ἀρείωνος τῶν εὐλαβ.
50 τὰ προειρημένα ἐσθήματα καὶ διάφορα εἴδη, ὀμολογεῖ
μηδένα λόγον τοῦ λοιποῦ
ἐχειν πρὸς αὐτοὺς μήτε τὴν τυχοῦσαν μέμψειν μήτε ἐκτὸς
dικαστηρίων
μήτε ἐν δικαστηρίῳ μικρῷ ἢ μεγάλῳ, ἐπιχωρίῳ ἢ ὕπερορίῳ,
μήτε πρὸς τοὺς τρεῖς
κοινῇ μήτε πρὸς ἕνα ἰδιαζόντως μήτε περὶ προστίμου διὰ τὸ
tοῦ προγεγραμμένον
θεοφιλεστάτου ἐπίσκοπον εὐσεβείας μόνης ἐνεκέν καὶ τῆς
προσούσης
55 αὐτῷ εὐλαβείας ἔτερα ἐπιγνώμαι χρήματα τοῖς ἐξ ἄρχῃς
tὰ Θεοφίλου ἐσθήματα
42 ἱματιοφάρια cf. ἱματιοφόριον, 43.
51 μέμψειν sic, but μέμψιν, 65.
Vol. liii] A Dialysis of the Fifth Century

κατεσχηκόσι καὶ ταῦτα ἐπιλύσασθαι. ὀμολογοῦσιν δὲ καὶ αὐτὸς ὁ αὐτὸς
θεοσεβ. ἐπίσκοπος καὶ Δαυιήλος καὶ Ἀρείων εὐλαβ. ἀδελφοὶ μηδένα λόγον
ἐξειν πρὸς αὐτὸν Θεόφιλον μὴτε ἐν δικαστήριοις μὴτε ἐκτὸς δικαστήρι[ω]ν
μὴτε μικρὸ μὴτε μεγάλῳ, ἐπιχωρίῳ ἢ ὑπερορίῳ, μὴτε λόγῳ
ἀναλομάτων

60 ἡ ξημιμωμάτων ὅσ ἄν εἱ γενομένων αὐτοίς παρὰ τὴν αὐτοῦ
αιτίαν. προσ-
ομολογοῦσιν δὲ ἀλλήλοις ἐξ ἐπερωτήσεως μὴτε περὶ τῶν
προειρημένων
κεφαλαίων μὴτε περὶ ἐτέρου οἰονὴπτοτε πράγματος εἴτε
ἀνίκοντος
ταύτη τῇ ὑποθέσει ἢ μὴ ἀνίκοντος εἴτε νοηθέντος εἴτε μὴ
νοηθέντος
εἴτε καταχθέντος εἰς δικαστήριον εἴτε μὴ καταχθέντος οἰον-
δήποτε

65 λόγον ἡ μέμψιν ἡ ἐνοχὴν ἐχειν πρὸς ἑαυτοῖς μέχρι τῆς
προγεγραμμ.

ἡμέρας ἢτις ἐστὶν Φαρμοῦθ οἰομηνία τῆς παρούσης τετάρτης
ινδικτ., ἀλλ' ἐσβέσθαι αὐτοῖς κατ' ἀλλήλων πάν σπέρμα
dίκης καὶ
ἀγωγῆς καὶ ἐνοχῆς εἴτε πρόσωπον εἰ<τ>ὲ πράγμα. καὶ ὦτι
ἐμμενοῦσιν
ταύτη τῇ ὀμολογίᾳ τῆς διαλύσεως καὶ οὐδαμοῦ ταύτην παρα-
σαλεύσουσιν

70 ἡ μέρος αὐτῆς. ὀμολογοῦσιν εἰ τολμῆσειν τις ἀπενάντιον
αὐτῆ[ς]
διαπράξασθαι διδόναι τῷ ἐμμένοντι μέρει λόγῳ προστίμου
χρυσοῦ

70 μέρος written μέρους with v crossed out.
νομισμάτια τριάκοντα ἔξ, γυ. χρ. ν. λέξις, υπὲρ μόνον τοῦ ἐγχειρήματος,
πρὸς τῷ οὖν ἄρραγη καὶ ἀσάλευτον εἶναι ταύτην τὴν
dιάλυσιν ἐφ’ αἷς περιέχει διαστολάς. καὶ ἐπὶ τούτων πᾶσι
ἐπερωτήσαντες
75 ἀλλήλους καὶ παρ’ ἀλλήλων ἐπερωτηθέντες ταῦθ’ οὖτος ἐχεῖν
στέργειν δώσειν φιλάττειν ὁμολόγησαν. ἘΠΙΣΚΟΠΟΣ οἱ προγεγραμμέ-
νοις ἐθέμην ταύτην τὴν διάλυσιν πειθόμενος πᾶσι τοῖς ἐγγε-
γεγραμμένοις
καὶ ἐμμενὼ διὰ παντὸς ταύτη καὶ οὐκ ἐνκαλῶ ὡς πρόκειται
καὶ ἐπερω-
τηθεῖς ὁμολόγησα καὶ ἀναγνώσα καὶ ὑπογράψας ἀπέλυσα.
80 ΔΑΝΙΗΛ Βῆσα πρεσβ. ὁ προγεγραμμένος ἐθέμην ταύτην τὴν
dιάλυσιν
ἐπὶ πᾶσι τοῖς ἐγγεγραμμένοις κεφαλαίοις καὶ στέργῳ διὰ
παντὸς καὶ πειθομαί
πᾶσι τοῖς συμφώνοις καὶ ἐπερωτηθεῖς ὁμολόγησα καὶ
ἀναγνώσα καὶ
ὑπογράφασα ἀπέλυσα. ἘΠΙΣΚΟΠΟΣ οἱ προγε-
γεγραμμένοις ἐθέμην
tαύτην τὴν διάλυσιν ἐπὶ τοῖς ἐγγεγραμμένοις κεφα-
λαίοις καὶ στέργῳ
85 διὰ παντὸς καὶ πειθομαί πᾶσι τοῖς συμφώνοις καὶ ἐπερωτηθεῖς
ὁμολόγησα
καὶ ἀναγνώσα καὶ ὑπογράφας ἀπελυσα. ΘΕΟΦΙΛΟΣ ἈΠΟΔΙ-
ΚΟΝΟΣ διάκονος
ὁ προγεγραμμένος ἐθέμην ταύτ[ὴν τὴν] διάλυσιν πειθόμενος
πᾶσι τοῖς ἐγγεγραμμένοις
καὶ ἐμμενὼ διὰ παντὸς ταύτη κ[αὶ ο]ὐκ ἐνκαλῶ ὡς πρόκ.
καὶ ἐπερωτηθεῖς ὁμολόγησα
77 ἐγγεγραμμένοι sic.
In the third year following the consulship of our sovereign Flavius Zeno, the immortal Augustus, on the first day of Pharmouth, in the fourth indiction, at Lyconpolis the splendid, this common [agreement] of settlement [was made by] the party of the first part, the most God-beloved Bishop Cyrus of the holy [church] general of God in Lyconpolis and Daniel [and Areion], his brothers.

(Theophilus took to task) the most righteous [Bishop] Cyrus and the pious presbyters [Daniel and Areion] on the basis of well-known topics, which in fact appear in the petition which is in their hands, and he talked of arresting Cyrus, the most God-beloved Bishop, and then setting forth the claims he had before a judge, unless he (Cyrus) should choose in place of court proceedings to discharge his obligation, while Daniel and Areion, his pious brothers, should state their case with a counterstatement before Macarius, the very honorable counsel of the Theban tax; and [in these circumstances] an understanding was reached between the above-mentioned [deacon] Theophilus and Daniel and Areion, the pious [presbyters in the holy church of Lyconpolis] by which they agreed within a specified time to come before this very honorable Macarius and to set forth such claims as they had, or else pay a definite forfeit as stipulated in the agreement.

89 Βουλ. Ἀυκ. ἴ. Ε. Βουλευτῆς Λυκοπολίτῶν.
94 Only the tips of a few letters remain.
Thereupon, however, Cyrus, the most righteous Bishop, after having been forced to endure the simple reminders administered by Theophilus, without awaiting the laborious process of accounting, humiliated himself (to such an extent as to consent) to do exactly what any persons acting as intermediaries should judge to be right. And finally the very honorable Macarius and Sabinus, being satisfied on either side with the oral statements, after intervening between them and listening to their whole case, gave judgment that Cyrus, on the one hand, should pay over to Theophilus sixteen (16) gold pieces in acquittal of every charge and claim and reproach, and that Daniel and Areion, on the other hand, should likewise hand over to Theophilus the goods hereinafter mentioned, to wit: one man's garment, one Egyptian cloak, one Egyptian cape, one rose-white tunic, two damask pillows, one dark-colored (?) mattress, one honey-colored garment, one . . . blanket, two small heavy curtains (?), five embroidered tunics, one mallow-colored garment, one plain tunic for a man, two men's "linens," seven napkins (?) and towels from Scinepoeus, one small cushion from Scinepoeus, one Damascus shirt, ten scarfs, two portmanteaux (?), one kerchief (or tablecloth) from Scinepoeus, one . . . from Scinepoeus, one napkin, one carpet bag (?), three new . . . "linens," one . . . "woolen," two other "linens" mixed (?) with wool, one woman's . . ., embroidered. And (they gave judgment) that after this every basis for legal action by Theophilus as against the three brothers above mentioned should be done away.

Consequently, when these things had been done in deed and in fact, the above-mentioned pious Theophilus, receiving from the most God-beloved Bishop the above-mentioned sixteen (16) gold pieces and from the pious Daniel and Areion the garments and various articles above mentioned, agrees that hereafter he has no claim against them, nor even the slightest reproach, either out of court or in a court, large or small, local or beyond the boundary, either against the three in common, or against one of them individually, nor yet as touching (the imposition of) a fine, since the above-mentioned most God-beloved Bishop, prompted only by the reverence and the piety that is in him, has awarded an additional sum to those who originally held the garments of Theophilus and has actually paid this sum. Also the pious Bishop himself
and Daniel and Areion, his pious brothers, agree that they have no claim against Theophilus himself, either in courts or outside courts, small or large, local or beyond the boundary, or based on expendi-
tures or penalties ostensibly incurred by them on his account. And they further agree with each other, upon being questioned, that neither as regards the above-mentioned topics or concerning any other matter, either related to this case or not related to it, either imagined or not imagined, or brought into court or not brought into court, have they any claim or reproach or liability affecting one another up to the above-mentioned date, which is the new moon of Pharmouth of the present fourth indiction, but that, on the contrary, every trace of claim or prosecution or liability, either personal or material, has been done away; and further that they will abide by this agreement of settlement and will in no way transgress it or a part of it. They agree that, if anyone should dare to act in opposition to it, he shall give as a fine to the party which abides by it thirty-six (36) coins of gold for the mere attempt, while this agreement shall remain no whit the less unbroken and undisturbed on the basis of the conditions which it contains. And finally, in addition to all this, after questioning each other and being questioned by each other, they acknowledged the truth of these statements and agreed to be satisfied with this settlement and to live up to it and defend it in all respects.

I, the Bishop Cyrus, above mentioned, entered into this agree-
ment assenting to all that is written therein, and I shall abide by it forever and shall not protest against it as it stands; and, upon being questioned, I acknowledged it, and, after reading and signing it, I released it.

I, Daniel, son of Besas, a presbyter, above mentioned, entered into this agreement on the basis of all the conditions specified therein, and I am permanently satisfied, and give my consent to all the terms agreed upon; and, upon being questioned, I acknowledged it, and, after reading it and signing it, I released it.

I, Areion, son of Besas, a presbyter, above mentioned, entered into this agreement on the basis of all the conditions specified therein, and I am permanently satisfied and give my consent to all the terms agreed upon; and, upon being questioned, I acknowledged it, and, after reading it and signing it, I released it.

I, Theophilus, son of Apollo, a deacon above mentioned, entered
into this agreement consenting to all that is written therein, and I shall abide by it forever, and shall not protest against it as it stands; and, upon being questioned, I acknowledged it and released it. I, Claudius Heraclides, son of Alexander, councillor of Lyconopolis, at his request, wrote for him in his presence and at his dictation, since he is illiterate.

I, Aurelius Colleuthos, son of Besas, from Diado, witness the agreement, having heard it from the contracting parties.

I, Aurelius, son of Dionysius . . . witness the agreement, having heard it from the contracting parties.

I, Aurelius, son of Dionysius (?) . . . witness the agreement, having heard it from the contracting parties.

I, Aurelius, . . .

**Commentary**

The general situation with which this document had to do is fairly clear. The case was evidently a double one, being a combination of one claim concerning a debt, and another having to do with personal property. Two independent proceedings were about to be instituted: the money claim was to be settled by the regular process of the law before a judge (δικαστής), while a different method was proposed for the settlement of the other claim. The two claims were later combined for a common settlement at the request of the Bishop, and this arrangement was doubtless accepted by the other parties to save the Bishop from the ignominy of appearing in court to defend a lost cause.

The method originally proposed for the settlement of the second claim provided that Daniel and Areion, "the pious brothers" of the Bishop, should appear before the "very honorable counsel of the Theban tax" and plead their case (δικάσασθαι) with a counterstatement (ἐκ ἀντίρρησεως). The language plainly suggests court procedure; ἀντίρρησις recalls the ἀντωμοσία of Athenian courts, though it is possible that the ἀντίρρησις was distinguished as an informal statement (perhaps oral) in contrast to the sworn affidavit. But why was the matter to be brought before a συνήγορος rather
than a δικαστής? I incline to the opinion that this proposed method of settlement would have been essentially an arbitration, and that the συνήγορος would not have been acting as a judge at a trial.

The case affecting the Bishop was more serious, and, in the mind of Theophilus at least, was one which would normally call for a court trial; had the Bishop chosen to fight the case (which he wisely did not do), the contest would have been before a regular judge. The fact that the Bishop was willing to compromise secured him the advantage of a more informal procedure and happily satisfied all parties. The informality of the procedure finally adopted is clearly attested by the fact that the decision is written and signed by the parties to the settlement and not by a court. But it was conducted not, as originally proposed, before the advocate Macarius alone, but before Macarius and Sabinus, the two being characterized together as “very honorable” (ἔλλογιμώτατοι). Probably a second advocate was added because of the dual nature of the case.

The basis of Theophilus’ claim cannot even be surmised from the document as we have it; the circumstances antecedent to the settlement may have been recorded in the lines which have been lost. The verbs καταθεῖναι and καταβαλεῖν, used of handing over the money and the dry goods respectively, give no clue. Nor does the list of surrendered goods, in itself, afford any clear evidence.

21–22. συνηγόρω τοῦ Ἐνθέαν φόρου. Similar titles occur in a few of the published papyri, but no satisfactory interpretation seems to have been made. In Pap. Brit. Mus. iii, 992 (p. 253), dated twenty-six years later than the Princeton dialysis, occurs the phrase σχολαστικὸς φόρου Ἐνθέαδος, and the only comment is that the title is “new.” Likewise in Pap. Strassb. 40, l. 6, dated 569 A.D., σχολαστικῷ καὶ σύν[ ] Ἐνθέαδος occurs, and the same comment is made. With these might be compared the συνήγορος τοῦ ἱερωτάτου ταμείου (Pap. Oxyr. i, 41), who is regarded as equivalent to the advocatus fisci. It would seem quite impos-
sible to connect the case recorded in our dialysis with any tax-office or any official of any tax-office. We seem driven to the conclusion that we are here confronted with an outworn title which no longer indicated the actual function of its holder. Might it not be that these officials were lawyers designated by the government of the Theban nome for the purpose of helping individuals to settle simple cases, thereby relieving the courts of a part of their routine work; that they were, in fact, public arbitrators like those at Athens in the Classical Period? Cf. Pap. Brit. Mus. l. c.: ἐδοξέων κοινῷ γνώμη ἀπαντήσαι εἰς διώταν πρὸς Καρδημέαν καὶ Ἑνότητος τοῦ ἔλλογμονταυσ σχολαστικοῖς φόρον Θηβαίδος καὶ στοιχεί[ν] καὶ πείθεσθαι . . ., ἀπαντῶν ἡμᾶς πρὸς τοὺς προειρημένους διαίτητάς καὶ διαιτάσθαι ἐπ' αὐτοῖς . . . . It may of course be objected that the advocate Macarius was to be called in simply as a private arbitrator, and that his official title was mentioned only as a matter of course. He would then not be acting in his capacity as "counsel of the Theban tax," but simply as a friend of the contending parties. This interpretation would be possible even though he is not called a διαιτήτης, as in the British Museum papyrus quoted above. The mere mention of one title suggests that he is to function in that capacity, unless a different function is plainly indicated. In the text itself there seems to be no such indication: in the first place, the two brothers were to "plead their case before Macarius, the very honorable counsel of the Theban tax"; later the Bishop proposed to accept any decision made by any persons "intervening between them" (μέσοι τινὲς αὐτῶν γιγνόμενοι); and finally the two advocates made their decision "after intervening between them" (μέσοι αὐτῶν γεγονότες). The phrase μέσοι γιγνόμενοι (γεγονότες) does not seem to indicate that they were doing anything apart from the regular duties of their office. Furthermore it would appear from the wording of the dialysis that the aggrieved Theophilus was able practically to require the two brothers of the Bishop Cyrus to appear before the advocate in question. It seems fairly certain then that Macarius, as "counsel of the Theban tax," had jurisdiction in a sense over such a case as that of Theophilus against the two brothers of the Bishop.

27. ψαλάς, in predicate position, seems to be an attributive adjective.

36. κολοβωμαφόρον: cf. Lat. colobium, a sleeveless tunic, Isid. Et. xix, 22, 24; μαφόρον, πέπλον, γυναικεῖον ιμάτιον (gloss); apparently an undergarment. κοσούλιον: cf. κασούλα, Procopius, Hist. iv, 26, 26; κούτζουλον, camasus (gloss); Isid. Et. xix, 24, 17.


38. δελματικόν: δαλματίκιον, κολόβιον (gloss); but the Lat. Dalmatica vestis was a garment with sleeves. λωτίκιον: Lat. lodix. παρακάτωδον: cf. (?) παραγαῖδῆς, vestis genus vel vestis ornamentum (gloss).


40. σάβανα: ‘towels’ or ‘napkins’ (gloss).

41. τυλάριον: ‘pillow’ or ‘mattress,’ Herw. καμάσιον: Lat. camisium (gloss).

42. ὀράμα: Lat. orarium, a decorative fringe or garment covering the head (gloss). ἵματιοφάρια: cf. ἵματιοφορίς. μανθήλην: mantile, χειρόμακτρον (gloss); cf. Isid. Et. xix, 26, 6.


44. καινούργια: καινούργιος, novus (gloss).

45. πλουμαρικῶν: πλουμαρίκος, plumario opere contextus (gloss); cf. ὀρθόπλουμα, 39.

53-56. διὰ — ἐπιλύσασθαί. Was it a case of handling stolen goods? We are not told who the persons were who had held the garments of Theophilus. This payment may have been in the nature of hush-money. Note the obvious effort to ‘save the face’ of the Bishop.
IX. — Some Literary Papyri in the University of Michigan Collection

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[Plate II]

Among the fragments of Homeric papyri now in the University of Michigan Collection, the longest and best preserved is that of the Iliad, Book Σ (18), comprising in a more or less complete form lines 439–617. This papyrus (Pap. Michigan 2) is surpassed in continuous length by only one of the eight papyri which represent this book,1 namely the well-known Harris Homer of the first century A.D., now in the British Museum.2 The subject is the famous description of the Shield of Achilles, beginning with the appeal made by Thetis to

1 The list (1–7) may be found in Schubart's Einführung in die Papyruskunde (Berlin, 1918), 479. I give it here, with more detail, to afford a means of comparison.

2. 1–617, 1st cent. A.D., the Harris Homer, Cat. of Anc. Mss. in the Brit. Mus. i, Pap. cvii. This consists of 1–171, the first letters of 172–218, and 311–617.
3. 76–135, 4th or 5th cent. A.D., Publicazione d. Società Italiana, i, 14. Only the beginnings of lines are preserved.
6. 574–617, 4th or 5th cent. A.D., Mélanges Nicole (Genève, 1905), 222.

2 The date assigned to it, i.e. 1st cent. B.C. (Cat. of Mss. i, p. 1) is probably too early. E. Maunde Thompson (article "Palaeography," in Ency. Brit., 11th ed., xx, 562) now believes it "should be rather assigned to the 1st century of the Christian era."
Hephaestus to provide new armor for her son. The text, which formed part of a fine roll, is written on the recto in a large, upright, well-formed and somewhat rounded uncial of the type called the calligraphic or book-hand, belonging to the close of the second century or the beginning of the third century A.D. The columns, four in number, are about 25 cm. high and 13 to 15 cm. wide. The average height of the letters is about 3 mm. The verso is blank.

The text is an excellent example of the vulgate texts in current use in Egypt during the Roman period. This means that it is eclectic like all the papyri texts, that it does not agree absolutely with any other papyrus or with any single manuscript known to us from the Middle Ages, and also that it is in substantial agreement with the mediaeval manuscripts. Its value lies in the fact that together with all such texts of this period, it affords cumulative evidence of the prevalence and merit of certain readings and omissions. With one exception, to be noted later, it contains no new readings; indeed, these were not to be expected, for the variants of the Ptolemaic texts had disappeared long before the time of the Roman Empire. We may, in fact, safely assert that any text of the Imperial period which contained wholly new material would not be a safe, or even characteristic, text. A case in point is afforded by the Berlin fragment of *Iliad* Σ, lines 596–608, of the first century A.D., which contains six lines taken with slight variation from the *Shield* ascribed to Hesiod.3 This addition proves nothing for the text of Homer, much for the errancy of some scribe or the lack of critical judgment of some editor.4

3 See *Berliner Klassikertexte*, v, i, pp. 18–20.
The Michigan papyrus is a palaeographical specimen of unusual beauty. Not only was the writer a better penman than the Harris scribe, but also, on the whole, a more accurate one, as the relatively few corrections attest. One of his failings was to write iota in certain words where epsilon iota was demanded. This is, however, a very common error in papyri of the period. From a careful study of the ink, pen strokes, and spacings, I am convinced that the circumflex accents, breathings, iota adscripts, marks of elision, and dots above the line indicating pauses, are the work of the scribe and not of a later corrector. These are not employed consistently throughout, and their presence, or absence, will not be noted in this account. The text of the fragment will be published in full, with photographs, in the *University of Michigan Studies, Humanistic Series*. In preparing the following commentary, Ludwich's text has been used for collation. Only the variations from his text will receive attention.

**Column 1**

439. This line begins the column. The usual pause, indicated by a dot above the line, closes 440, and 441 is omitted, in common with the Harris Homer, the Geneva Codex, and other Mss. Its omission therefore rests on a recognized tradition.

448. τορθελλισσοντο is the reading of the papyrus.

452. οπασσεν.

456. εδωκεν.

474. ατιρεα was first written; the correction was made by adding ε after τ above the line.

475. τιμητα was corrected to τιμητα.

Of the last line in the column only a few illegible traces appear. This must have been 483, since the second column begins with 484. The total number of lines in the column is 44.

**Column 2**

This column comprises ll. 484–530.

485. τειρεα corr. to τειρεα.

493. ορυμαγδος for vulg. ύμεναιος, the sole instance of a unique
reading in this text. So far as I know, no Homeric text gives this reading at this place. The phrase πολίς ὃς ὄρμαγδος ὄρφει is, however, Homeric (cf. B 810; Δ 449; Θ 59, 63; see also K 185; Π 633; P 424, 741, etc.). It occurs also in the Shield ascribed to Hesiod (line 401). διέλαθε is, of course, a better reading in 493 than ὄρμαγδος and the presence of the latter word here is doubtless nothing but a clear example of a reminiscent variant.

497. νίκος.

498. εὐκεφ. It is impossible to determine whether correction was made here, since the papyrus is perforated where the ε would naturally appear.

500. επιφρανοκών, with the Harris Homer.

501. ἵστορα corr. to ἵστορι. πειραρ corr. to πειραρ.

502. ἐπήτυνν, for ἐπήτυνν, is an error due to the presence of the former in the following line.

503. δ' ἀρα λαον is a correction from what seems to have been the scribe's δανάοντε or δαλλοτε. The original was blotted out so heavily that it is illegible.

504. εἰπτ, for ἵπτ'.

508. εὐνυτατα, for ἐβνυτατα.

513. πειθοντο corr. to πειθοντο.

515. ῥουτ' corr. to ῥουτ'.

517. ἥματα corr. to ἥματα. ἴσθην.

518. At the beginning of this line is the corrector's mark to indicate the omission of line 519, which, as the direction of the stroke indicates, was added in the lower margin.

521. βρότοις, in common with many Mss.

522 is omitted, and since the papyrus is broken at the beginning of the line, it is impossible to ascertain whether the corrector marked the omission. The last line in the column is 530, of which only faint traces appear. The total number of lines in the column is 45, exclusive of 519 and 522 which were doubtless supplied in the lower margin.

COLUMN 3

This column contains ll. 531–575.

531. τραῳν.

537. τεθνεωτα, also in Pap. cxxvii of Class. Texts from Pap. in B. M. (p. 99), and in 540 below.
539. ωμυλον corr. to ωμυλευ, by writing e over o, the latter not being stricken out.
542. τριολλον.
548. εωκοι corr. to εωκει.
550. βαβυληνπον, a recognized variant.
552. πιττεν, with the Harris Homer and other texts.
553 and 554. αμαλλοδοτηρες.
557. εατηκει.
560. εταιρουιν (apparently) corr. to ερεθουιν.
566. νισταντο corr. to νισσοντο.
570. μερον. Since the papyrus is perforated above the line, it is impossible to say whether or not the necessary correction to μερον was made.
571. The papyrus is broken at the end of this line, and it is impossible to tell whether or not the initial letter is preserved, and that in part, but it looks like ω.

There are faint traces of l. 575, the last in the column. This column, therefore, like the preceding one, contains 45 lines, with no omissions.

COLUMN 4

The fourth column comprises ll. 576–617.
576. ροδανον.
577 and 579. βοεσιν.
581. ειλκετο.
582. αναρηζαντε, for αναρηζαντε.
583. αμα λαφυσετον is a correction from something so heavily blotted that it is not clear; it looks like αματαλασετο.
591. Κνωσσωι.
594. εχουσαι corr. to εχοντες. αλληλαις corr. to αλληλων.

At the beginning of 595 is the corrector's mark to indicate the omission of 596 and 597 from their context. The lines are supplied in the upper margin. They are in a more cursive hand than that of the text and were probably added by the corrector. Before each of the two lines is the corrector's arrow, and following each is the letter κ, the abbreviation for κατω, to indicate that the lines were to be read below. At the end of 595 there further appears the word ανω to direct the reader to the upper margin.
596. ειχον, with other Mss., for ειωτ'.
PLATE II

UNIVERSITY OF MICHIGAN PAPYRUS, No. II.
599. ποδεσσων.
601. περησεται corr. to περησεται. θελησων (for θέλων), found also in the Harris Homer and elsewhere.

604 and 605, needless to say, do not confirm Wolf’s arrangement. The Harris Homer, the Berlin fragment, and the Pap. Mich. 2 are alike in their reading, which is precisely that of Ludwich’s edition.

616. η δ ειρω corr. to η δ ιρη.

617. This, the last line of the column, is badly broken; but enough remains to make it certain that the reading was τείχεα καλά φέρουσα παρ’ Ηφαιστευ άνακτος, in agreement with the Harris Homer and a number of other texts. The column has 41 lines. At the bottom of the last line, to the left, is a — to mark the end of the book. To the right of the column is a blank space, sufficient for a column, showing that this particular roll ended with Σ 617.

I turn next to an epic fragment of unknown authorship (Pap. Mich. 11). The subject concerns various individuals, apparently nymphs wedded to divinities, who have won immortal bliss. It is so reminiscent of Hesiod’s Theogony throughout in tone and epithet that I am inclined to believe it belongs to the Eoeae or Catalogus ascribed to Hesiod. If this attribution is correct, the fragment, small and mutilated as it is, possesses extraordinary value, because, like the Berlin fragments of the Catalogus, it is a wholly new addition to Hesiodic literature. The fragment consists of 18 lines. The left side of the column has been split off, causing the loss of the initial measures. The length of the column is 9 cm., with an upper margin of 3.5 cm. The width of the lines preserved varies from 9 to 10 cm. The average height of the letters is about 4 mm. The writing is a large, well-formed uncial, of beautiful appearance, and inclines slightly to the right (Plate II). Although smaller, and less upright, it somewhat resembles the specimen 19a shown in Schubart’s Papyri Graecae Berolinenses. Its date is probably the 2nd or 3rd century A.D. Like the specimen re-

6 On the relation of these, see Christ, Gesch. d. griech. Litt. (1912), Th. 1, p. 123.
6 Berliner Klassiker texte, v, 1, pp. 21–46.
ferred to, this fragment contains long slanting acute accents. The verso is blank. In the transcription of the text that follows, the original is reproduced except for the separation of words, the conventional usage of sigma, and the initial letters of proper names.

**Text**

1. a φυει χθων τηλεθαοντα
2. των ιερη δ' αποκιναται οδυη
3. οιο πολυττυχου ηγαθεου
4. νει εκατηβολου Απολλωνος
5. Ἀχελωώι ευνηθεισα
6. ρεης τε ντοτο τ' εν πειρασι γαιης
7. οιοι μινυθ ανει αγλαιον ηβην
8. τησι ντοτο και απο κρυος ελθη
9. κεκαλυμμεναι αψ δ' επι γαιαν
10. τι μητερε αιψα δ' επειτα
11. καλαι σελουσιν εβεϊρας
12. τα περι χροι νυμφαι εχον[ν]σαι
13. ντο παρ' Ἰπποθονην ιαυοφυν'
14. α και Ηρην χρυσοπεδειλον
15. ονοι εν ουρανω αστεροεντη
16. τει ακηδεα θυμον εχοντες
17. σεισηθονα ποιητομεδοντα
18. ἡπιον Αμφ[ε] τριτην

Before proceeding to translate the fragment I offer the following commentary upon it:

3. The adjective πολυττυχος is applied to Olympus and Mt. Ida. For the former, cf. Hes. Th. 113: πολυττυχον ευχον "Ολυμπον; II. Θ 411; Υ 5. For the latter, see Th. 1010; II. Φ 449; X 171. Since the word preceding the adjective ends in οω, there can be no doubt regarding Οιλυμπο. One might venture to restore:

[τηλοσ' ἀπ' Οιλυμπιου]οιο πολυττυχου ηγαθεου.
4. The phrase ἐκατηβόλον Ἀπόλλωνος can be found both in Homer and Hesiod: cf. II. A 370; E 444; Π 711; Ρ 333; Th. 94; Aspis, 58. The missing portion may, perhaps, be supplied in part by:

[... ἐν τεμέ]νει ἐκατηβόλον Ἀπόλλωνος.

6. The word in the second foot was doubtless [βο]ρές. Boreas and Notus are associated in Th. 379, 380, 870. The phrase ἐν πείρασι γαῖς occurs in Th. 622 (cf. 518).

7. [π]οισι? Some one accomplishes for them a glorious youth; perhaps:

[.. Μοῖρα δὲ ποισι μίνυνθ' ἀνεί ἀγλαον ἦβην.

αγλαον is a correction in the text from αυλαον. The v in the latter word was crossed out and γ written above it.

8. ἀπο is used in tmesis. We may have a reminiscence of Hes. Ὀρ. 543: ὄπον ἀν κρίνος ὄριον ἐλη.

10. πι is a correction from πε; the ε is stricken through. The scribe wrote μυρείᾳ αγναὶ επείτα. In the first word sigma does not appear although there is room for it. The plural seems implied by αγνα. In this word the letters αγν are crossed out and a correction made above them which is difficult to determine. It may be αψα. The i is crossed out and δ written above it. The result seems to be αψα δ' ἐπείτα, which is metrically correct.

11. Whether it is the “mothers” (10) or the “nymphs” (12) who “shake their beautiful tresses,” the state of the text leaves in doubt. Homer uses θειρά only in the singular to mean hair; in the plural it means mane or crest. The plural meaning hair is, however, common later, cf. Aesch. Pers. 1062; Cho. 175; Eur. Hel. 632.

12. εξο[ν]σιν is corrected to εξο[ν]σαί. The letters τα at the beginning of the line give a clue to a restoration which is, I believe, certain. The line would read:

[εἶματα σιγαλόεν]τα περι χροὶ νῦμφαι ἔχουσαι.

13. The Hippothoë mentioned, as the reference to Poseidon below shows, is probably the daughter of Mestor and Lysidice. According to Apollodorus (Π, 5, 2) and Hypothesis Δ of the Aspis, she was carried off by Poseidon to the Echinadae, where she bore him a son, Taphius. Her seizure by Poseidon is a favorite τόμος in the Church Fathers. Cf. Gruppe, Griech. Myth. 1, p. 478. Hippothoë, daughter of Nereus, is associated with Hipponoë in Th. 251.
The last word in the line is \( \varphi \alpha \varphi \rho \nu \nu \). The \( \phi \) is a correction upon a letter which seems to have been \( a \). The word is unknown and is doubtless an error. The most probable explanation, as Professor Campbell Bonner has suggested to me, is that the word in the text is a scribe's mistake for the \( \varsigma \nu \alpha \nu \phi \rho \nu \nu \) which appeared in the Ms. he was copying. \( \kappa \nu \alpha \nu \phi \rho \nu \nu \) is not found in Homer or Hesiod, but it occurs in Theocritus, 3, 18; 17, 53.

14. Hera, of the golden sandals, is one of the company. \( \chi \rho \upsilon \sigma \sigma \varphi \varphi \epsilon \delta \alpha \lambda \nu \) is, of course, for \( \chi \rho \upsilon \sigma \sigma \varphi \varphi \epsilon \delta \lambda \nu \). The adjective is applied to Hera: cf. Od. \( \lambda \) 604; Th. ii. 11, 12, 454, 952.

15. The phrase \( \delta \varphi \alpha \varsigma \nu \alpha \delta \sigma \tau \rho \rho \alpha \epsilon \nu \tau \) is found in Il. \( \Delta \) 44, and, with variation of case, in Th. 106, 127, 463, 479, 685, 737, 808, 891; Op. 548.

16. For \( \alpha \kappa \eta \delta \alpha \ \theta \mu \nu \alpha \nu \ \epsilon \kappa \alpha \alpha \nu \tau \epsilon \) see Th. 61; Op. 112, 170.

17. The earth-shaker, ruler of the deep, is Poseidon. \( \pi \sigma \nu \tau \omicron \epsilon \beta \omega \tau \alpha \) does not occur in Homer or Hesiod; cf. Pind. O. 6, 176; Aesch. Sept. 130; Eur. Hipp. 744, and Ar. Vesp. 1531.

18. The kindly Amphitrite emerges from the last line. The papyrus is torn through the middle of the line. On the basis of Th. 454, the line may, perhaps, be completed to read:

\[
[\text{[Istήνων, Δήμητρα καὶ] ἦσσων Ἄμφιτριτῆν.}
\]

**Translation**

(1) [For them] the Earth bears flourishing [trees or flowers] (2) whose divine odor is wafted abroad (3) from holy, many-ridged Olympus. (4) . . . in the precinct of the far-darting Apollo (5) . . . wedded to Acheloïs (6) . . . are Boreas and Notus at the ends of the earth (7) [where destiny] accomplishes for them for a brief time a glorious youth. (8) . . . Notus [ceases] and the cold comes. (9-10) . . . back to the earth [come] the veiled mothers (11-12) and straightway nymphs, clad in shining raiment, shake their beautiful tresses. (13) . . . [came] to the dark-browed Hippothoe (14) . . . and Hera, of the golden sandals. (15) . . . in the starry heaven (16) . . . with a heart free from care. (17) . . . the shaker of earth, the ruler of the deep (18) [Hestia, Demeter,] and kindly Amphitrite.

Another fragment (Pap. Michigan 6) of unknown authorship presents a bit entitled, on the verso, \( \pi ερί \ Μύθου \). The recto
shows a column from 7 to 8 cm. long and about 13 cm. wide. At the right of this is a portion of a column, from 4 to 5 cm. wide, whose writing begins at a point fully a line higher than that of the left column. The upper margin of the fragment varies from 2 to not quite 3 cm. On the verso the narrower column begins similarly at a higher level (of nearly two lines) than the wide column. The text on either side, therefore, consists of a wide column nearly complete in its upper lines, and a narrower column, incomplete, whose width is about one-third of the former. The title mentioned above is 1 cm. above the wide column of the verso. The writing is in a somewhat uncouth uncial about 3 mm. high, and probably belongs to the third century A.D. The contents of both recto and verso deal with the uses of the myth in rhetoric, a division of the subject known as προγυμνάσματα. Abundant examples can be found in the editions of the Greek rhetoricians by Spengel and by Walz.\(^7\) The best are afforded by Aelius Theon, a sophist of Alexandria. One of Theon’s statements is so closely echoed by a sentence in this papyrus, as I shall show later, that it seems at first sight a case of direct borrowing. The style of the fragment is so abrupt as to lead to the inference that we are dealing with a student’s or professor’s notes, or at any rate with an epitome of some sort. As a rule, the formal treatises on rhetoric under the Empire cannot be said to tantalize us by their brevity.

In the transcript that follows, I have introduced the separation of words, the conventional forms of sigma, the capital initials of proper names, and punctuation. Dots under letters indicate mutilated or illegible letters; dots inside the brackets give the approximate number of missing or illegible letters, and letters enclosed by brackets indicate conjectural restorations.

No attempt is made in this paper to deal with the narrower columns, due to their fragmentary condition.

\(^7\) Cf. Spengel, \(\pi\), pp. 1, 8, 21, 76, 92, 206; \(\text{III}\), 28, 333, 338, 452; Walz, \(\text{I}\), p. 172; \(\text{II}\), 8, 142, 144, 150, 158, 162, 164, 572; \(\text{III}\), 463, 570; \(\text{IV}\), 414; \(\text{IX}\), 316.
Verso


συντιθεμαί
μεθοδον [ε]κ τω[ν ζω]ντων ανθρωπ[ων ...] γαρ το μυθεο-
5 λεγειν παρὰ τοσ αρχαιος εστὶς τωνδε γ[ενών]. γενη
πολ[λ]α.

οι μεν γα[ρ αν]των Εσωτηριοι κα[λ]ονται τε και Κιλικιοι,
οι δὲ Εγγο-
πτη[ο]ι τε και Κυντριο[ι] τε και Διβ[νκοι .... τ]ε και
Συβαριτικοι.

Εσωτηριος μεν ουν [μνθ]ος επὶ [.................]

σω-

θεσιν επὶ τη[ν]ων αλογων ζωων λαμ [about 17 letters]

10 και Κιλ[ι]κιοι και οι προειρημενο[ι μθοι? about 8 more
letters wanting] Ε-

σωτηρ[ο]ν α[δ]ιαφορων [αδιαφορ] αλλ [about 16 letters]
[traces of about 7 letters] Του[τ]ουν [. . .] ασθ [about 22
letters]

[traces of a few letters, illegible]
[traces of a few letters, illegible]

For the title cf. Spengel, II, pp. i, 72.

1. Theon begins his discussion in a somewhat similar way: see
Spengel, II, p. 72: Μιθός ἐστι λόγος ψευδής εἰκονίζων ἀληθεῶν;
III, p. 453: Μιθός ἐστι λόγος ψευδής τῷ πιθανῷ συγκεκόσθαι εἰκονίζων
τὴν ἀλήθειαν; see also II, p. i, 59. Following την there is room for
about five letters: the papyrus is here abraded. After λαμβα[ν]ω
the line is broken; it could not have held more than three or four
additional letters. I have conjectured ἐπὶ because of the words
[σω]θεσιν επὶ των αλογων ζωων in l. 9 below.
2. ενετου is for αινετου.

3. The reading εφη[α] is uncertain; following ε the ι was added above the line. For the thought cf. Spengel, III, p. 454: εφηται δὲ μήδος ἀπὸ τοῦ μνεῖοσθαί.

4. τω[... ]ντωτων seems to have been written. Following the second ω there seems to be an erasure of the letters τω which, however, remain faintly legible. I have therefore assumed a correction and read τω[ν ζω]ντων ανθρωπων. Cf. Aeschines, peri της Παραπροσβείας, 31 (p. 110 Blass): νυν δὲ οἷς ἀνάγκη συντέμνειν τοὺς λόγους: ἢ δὲ ἢν τῶν σημείων οὐκ ἐν τοῖς ἀρχαιοῖς μύθοις, ἀλλ' ἐφ' ἡμῶν γεγενημένα, τούτων ἐπεμνήσθην.

5. The papyrus is crumpled and worn across ἀρχαιοῖς and it is uncertain whether that or ἀρχεῖοι was written; ε for αι is of frequent occurrence (cf. ενετου, l. 2).

6. ἐσωτείοι is for Αἰσωτείει; so Ἑγυπτιοί is for Αἰγυπτιοί. For the designation of μηθοὶ as Ἀἰσωτείει, etc., cf. Spengel, II, p. 1: ὀνομάζονται δὲ ἀπὸ τῶν εὑρόντων οἱ μὲν Κύπριοι, οἱ δὲ Διβυκοί, οἱ δὲ Συβαριτικοί, πάντες δὲ κοινῶς Ἀἰσωτείει λέγονται κ.τ.λ. See also Spengel, II, p. 21, and p. 73: καλούνται δὲ Ἀἰσωτείοι καὶ Διβυστικοὶ ἡ Συβαριτικοί τε καὶ Φρύγιοι καὶ Κιλίκιοι καὶ Καρικοὶ Ἀγυπτιοὶ καὶ Κύπριοι. Cf. also III, p. 452.

7. The scribe wrote Συβαριταῖοι; the correction is made by the first hand above the line.


9. Following [αδιαφορον] the scribe wrote αδιαφορ and then drew a stroke through the letters.

The text is in too unsatisfactory a condition to warrant a complete translation. It runs:

A myth is an untrue narrative having as the purpose of its composition the exhortation of one who is downcast in spirit to a praiseworthy life. It is commonly used by the ancients. The myth derives its name from the telling of untruths. I compose my treatment from living men... for the telling of myths among the ancients is of the following types. The types are many. For some
of the myths are called Aesopian, others Egyptian and Cyprian and Libyan . . . and Sybaritic. The Aesopian myth . . . synthesis from dumb animals. The . . . and Cilician myths and those mentioned above . . . Aesop . . . of different, etc.

The writing of the main column of the recto seems somewhat more cursive than that of the main column of the verso and may be by a different hand, although the right column of the recto and the left column of the verso, i.e., the narrower column on either side, are apparently by the same hand. In any case, the subject matter of both recto and verso is concerned with the myth in rhetoric.

**Recto**

1 . . . ] ou τοῦτο εκ κεφα[λ]ων τοσοῦτε εκ τον ασαφων, εκ του ελλιπων,

εκ του πλεοναζουντος, εκ του απιθανου, εκ του αδυνατου, εκ του

α[σ]υμφορου, ε[κ] τον εσχον. εαν δε και το μαχημον τη

πλασι π[ι]σ-

[του]μενου ευρ[ι]σκομεν επι του τελους, χρησωμεθα και

τη του

5 μαχημον κεφαλαιον κατασκευη. ανεσκ[ενα]ξομ[ε]ν δε

παραδιγ-

ματος ενεκ[α το]υ του κυνος μυθου. ου[κον?] μετα τα

προοιμεια λε-

[γ]οντε[ς] ασαφως ειρη[.]ναι [ειρηκεναι?] τον του

[.]συν [.] στα εκ


κ[υ]ον [.] ε[ν]

.π[. . .] ου [.] εν [.] ασ[. . .]

ιω[ς τυνος?] εξ οικιας

10 . . . ] κλετων [.] μεν αυτικα [.] τον μυ-

[θου? about 14 letters] ρουν φυ[. . . π.] μενου του

.μου
A few letters stand out in 12 and 13; of 14 and 15 there exist only faint traces.

1. This enumeration of the elements of the myth is strikingly similar to the statement of Theon (Spengel, π, p. 76): ἀκτήνοι δὲ τὰ ἐπιχειρήματα ἐκ τῶν τῶν, ἐκ τοῦ ἀσαφοῦς, ἐκ τοῦ ἄπιθανον, ἐκ τοῦ ἀπεποῦ, ἐκ τοῦ ἐλληπόν, ἐκ τοῦ πλεονάζοντος, ἐκ τοῦ ἀσυμφόρου, ἐκ τοῦ μαχαμένον, ἐκ τῆς τάξεως, ἐκ τοῦ ἀσυμφόρου, ἐκ τοῦ ἀνομίον, ἐκ τοῦ ψευδός. Cf. π, p. 104: ἀνασκευαστέον δὲ ἐτι τὰς χρειάς ἐκ τοῦ ἀσαφοῦς, ἐκ τοῦ πλεονάζοντος, ἐκ τοῦ ἐλληπότος, ἐκ τοῦ ἀνομίου, ἐκ τοῦ ψευδόν, ἐκ τοῦ ψευδόν, ἐκ τοῦ ἀσυμφόρου, ἐκ τοῦ ἀχρήστου, ἐκ τοῦ αἰσχροῦ. See also π, p. 354.

3. εὐσηροῦ is for αἰσχροῦ; cf. verso, l. 2.

5. For κεφαλαίων κατασκευή, cf. π, p. 380: περὶ τῆς τῶν κεφαλαίων κατασκευῆς. παραδείγματος is for παράδειγματος.

6. τοῦ κυνὸς μυθὸν is an allusion to the familiar fable of Aesop (Halm, 233) concerning a dog which started to swim a river while carrying a piece of meat. Seeing its own shadow in the water and supposing it to be another dog carrying a larger piece of meat, it let go its own and tried to snatch the other’s, losing, as men do, the substance for the shadow. Compare the reference to the dog and meat in l. 8 of the text. Theon also makes use of the fable (cf. Spengel, π, p. 75). προομέα is doubtless for προομία. Beginning with l. 9 the papyrus is so abraded and broken that it is impossible to decipher more than a few letters.

The expressions in the passage are the conventional ones of the rhetoricians. We may translate:

It consists of the following heads: of the obscure, of the defective, of the exaggerated, of the incredible, of the impossible, of the inexpedient, of the disgraceful. And if we find, for our purpose, that the hostile element lends credibility to the narrative, let us use also the constructive arrangement of the contentious topic. We prepared as an example the myth of the dog. According, therefore, to what has been said by way of introduction, speaking obscurely . . . the dog, seizing the meat, etc.

The presence of the word ἀσαφοῦς in l. 7 may imply that the writer intended to illustrate each of the various elements in the order enumerated, beginning with τοῦ ἀσαφοῦς.
X. — A Papyrus of Dioscurides in the University of Michigan Collection

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[Plate III]

PAPYRUS 3 of the University of Michigan Collection was identified some months ago as a part of the work de Materia Medica by Pedanius Dioscurides of Anazarba. It contains the greater part of Book II, chapter 76, in Wellmann’s edition (chapters 90–94 in Sprengel). As study of the piece went forward, it was seen that despite the uninteresting nature of the contents the papyrus was important for several reasons.

In the first place, papyri of Dioscurides are very rare. In 1885 C. Leemans published a papyrus codex dealing with chemistry which contains some excerpts from the fifth book.\(^1\) They are carelessly written by a scribe little versed in the Greek language, and are on the whole of slight value. There is also an insignificant scrap in the Aberdeen Museum.\(^2\) No others are known to me. In the second place, the Michigan papyrus gives us the oldest known text of Dioscurides, and one that differs interestingly from most of the manuscripts. Again, since the date of the writing can be fixed within narrow limits, the piece is of some value to the palaeographer.

The papyrus is a rather large fragment of a roll, 33 cm. high and 14 cm. wide. The columns of writing are 28.2 to 28.5 cm. by 7 cm. There are parts of three columns. Of the first only a few letters remain in a projection at the upper left-hand side. We have by far the greater part of the

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\(^1\) Papyri Graeci Musei Antiquarii Publici Lugduni-Batavi, ed. C. Leemans, II, 243 ff. The papyrus is known as Leid. X, and is of the third or fourth century.

second column, in spite of some bad cracks and the loss of several small pieces. A large part of the bottom of this column, at the right, has been split off, and the piece cannot now be replaced accurately because of the warping of the parts with which it was originally connected. Of the third column about one-half is left; the rest was lost by a longitudinal split.

The columns are of a length quite uncommon in literary texts; there are 89 lines in the second column, 87 in the third. The average number of letters in a line is from 27 to 29, but the scribe allows himself considerable freedom, sometimes writing as many as 34, especially where he encroaches upon the margin, sometimes as few as 24. This irregularity makes it harder to fill out the lost portions of the text, and consequently to determine its relationships.

The text has neither accents nor breathings. Numerals are usually represented by letters, which in most cases have the horizontal stroke above them; but sometimes the stroke is no longer perceptible, if it was there at all. μν, with a mark like a breve above it, stands for μνάς. In two instances the case endings of the perfect participle passive have been abbreviated: Col. 2, 78, κεκομμεν, with o above the last letter, for the genitive singular masculine; and Col. 2, 82, with a peculiar sign (ż) above, for the genitive singular feminine.

There are no punctuations except the indications of paragraphs, but these are of some interest. In Col. 3 there are nine cases of paragraphing. A pause is indicated by a space of three to five letters, and under the first one or two letters of the line in which the space occurs, a short horizontal stroke (paragraphus) was drawn, and is still to be seen except in one of the nine places. This is the normal method in the earlier papyri. In addition, the line under that in which the pause occurs is projected one letter-space into the left-hand margin. Thompson (Palaeography, p. 59) describes the latter device as coming into use later than the paragraphus and superseding it; but here the two are found to-
getter. Divisions were probably made by this method in Col. 2 also, at 51 and 63, and in 63 the space may be seen; but the loss of the left margin with a few letters has obscured the paragraph indication.

In Col. 2 at lines 17 and 20 we have what appear to be major divisions of the matter; the paragraphus is longer and has a wedge, or diplē, added to its head. In these two instances the division appears to give evidence of a textual relation between the papyrus and a mediaeval manuscript.

At the end of several lines of Col. 2 there is found a peculiar little check which may be designed to fill unoccupied space, but has no other discernible use (Thompson, op. cit., p. 63). It is a little angle or wedge, though in some of the examples one of its two strokes is longer than the other and passes beyond it. One may be seen at the end of line 1, but the clearest are near the end of the column, and do not appear on the plate.

The text is written in a good, small, sloping book-hand which was at first thought to be of the third century A.D., and without external evidence might be placed by different readers either in the third or the preceding century. All doubt has now been set at rest by the discovery, on the verso of the papyrus, of a faint but still legible cursive writing. Lacking experience in the reading of cursive, especially ill-preserved ones, I sought the expert assistance of Mr. H. I. Bell, of the British Museum, who has generously responded to my request. To him I owe the following reading except in one or two places where by using a photograph and the original together I was able to read more clearly than he could from the photograph alone.

\[ \text{L } \lambda \alpha \ \text{Ἀντοκράτορος Καίσαρος Λουκίου} \\
\text{Ἀλίου Αὐρηλίου Κομμόδου Εὐσεβὸ[ῦ]?} \\
\Pi\alpha\tilde{y}[v]\]  
\text{τοῦ κηπουρῳ μαί[}  
\text{ουρω} \ \text{τοῦ} \]
Here the date of Commodus is reckoned, as on the coins of Alexandria, in years of his father Aurelius; and his "year 31" would begin, according to the Egyptian style, August 29, 190 A.D. The letters at the beginning of the third line are very uncertain; perhaps they indicate the month Pauni (May-June), in which case this writing would fall within our year 191. Of the writing below the date little can be made. Perhaps we may gather that the roll was sent to a gardener, but that is all that can be ventured. The grammatical discord in the first two words stands as above in the papyrus. It may be worth while to mention the circumstance that a few other letters can be made out on quite another part of the verso, but no connected text is recoverable.

The papyrus, then, has the year 190 as a terminus ante quem, and since there may have been a considerable lapse of time between the writing of the text and the jotting on the verso, it may have been written as early as 150, which would bring it within seventy-five years, or less, of the author's lifetime. In view of the fairly narrow limits within which it can be dated, it is palaeographically of something more than ordinary importance (see Plate III). We see that the small sloping uncial hand must be pushed back to an earlier period than had been thought necessary; and the following details may be mentioned. Alpha is usually made in two parts, the 'loop' being a long sharp angle; but it is sometimes made with a rounded slightly open loop continued, without lifting the pen, into the down stroke. This is often seen in AU at the end of words. Eta is usually like a broad low capital H, but in one case is formed like the small h. The horizontal stroke of theta usually crosses the right-hand side of the ellipse. The stroke between the two uprights of mu is only very slightly dipped. Omicron is small. Omega is generally an unbroken curve like the lower part of a circle

or ellipse, and is sometimes so small and so nearly closed as to resemble omicron at first glance. But in several cases it is made in two parts—one stroke down and then to right, and another down and slightly leftward, meeting or passing beyond the first.

With about ten possible occurrences, iota adscript is entirely lacking in verb inflection. In the dative case it is found 13 times and omitted 16 times. Confusion among the vowels and diphthongs is relatively infrequent for so long a fragment, though cases do occur—ει for ι three times, ι for ει once (πρόσωμιξον), η for ει twice, αι for ε once. The ι is regularly written (five times) in σύνξεσον. Nu movable occurs once at the end of a sentence, once before a vowel, once before a consonant, and is omitted twice before vowels.

In presenting the text I have tried to give as faithful a picture of the actual state of the papyrus as is consistent with convenience in reading. The words are divided, and capitals are used for proper adjectives; but following the style of the Oxyrhynchus volumes for literary papyri, I have omitted breathings, accents, and punctuations; and I have refrained from expanding the few abbreviations that occur. Iota adscript and nu movable are shown only where they appear in the papyrus. Where words or parts of words are lost, I have supplied, as a rule, the text of Wellmann, even where there is reason to suspect that a different text may originally have stood in the papyrus. But I have departed from this practice when different readings are clearly indicated, either by neighboring words or by considerations of space. In such cases the footnotes will make the procedure clear. Further, I supply σύνξεσον, in place of omitting the ι, in view of the regular use of this form in uninjured parts of the text; and for the same reason write θεραπεύω and its derivatives with α in the first syllable of the stem.

The first object of the critical notes is to show clearly how the papyrus differs from the text of Wellmann, which is indicated by W. Therefore, in the absence of a note, the papyrus
will be understood to agree with Wellmann’s text except in the minutiae mentioned in the last paragraph, and in respect to the expansion of abbreviations. Where Wellmann reports no variants, but the papyrus has a different reading, the note will contain Wellmann’s text followed by the symbol W. Where Wellmann’s authorities differ among themselves, his report of their readings is reproduced (except for insignificant details) and the reading which he accepts has, in addition to the symbol of its manuscript, W in parenthesis. The symbols of the manuscripts are explained below (p. 159 ff.).

It will appear that I have reproduced the greater part of Wellmann’s critical apparatus. This has seemed only proper, in view of the need of exhibiting not only the text of the papyrus, but also the relations of the manuscript texts to it and to one another.

COLUMN 1

(p. 151, ll. 18-20 Wellmann)

8 esti δε καὶ ἄλλοις τρο
9 πος θεραπείας τοιούτος μετά το εξ
10 υμειοσθηναι το στεαι λέαινεται καὶ
11 εἰς λοιπάδα εμβληθεν τηκε]ται αλος

COLUMN 2

(p. 153, l. 15 — p. 155, l. 21 Wellmann)

1 πλυνον] πάλιν σφόδρως τρεῖβων τού 
2 μεν από] χεομενον υδατος τού δε επί 
3 χεομεν]ου αχρι αι παγη καλῶς και 
4 παλιν ε]ις χυπραν εμβαλων εφε με

COLUMN 1

8–9 θεραπείας τρόπος E. This cannot have been the order in the papyrus, since it would leave l. 9 too short. At the end of l. 12 there is an indistinct trace of a letter, and at the end of l. 14 an a, probably belonging to τὰ in the phrase εἰς τὰ Ἀκοπα (l. 22 W). The column must have ended with ταῖς χερεῖν ἐκ—.

COLUMN 2

1 πάλιν ἐκπλυνον W. ἐκπλυνον Orib. E (ἐκπλύνον Ε?), ἐκπλύνον F, ἐκτρίβων
2 Ἐ Di. τρίβων F Orib. (W), τρίβε E, πλύνον others.
3 ἀχρι Orib. Ἐ Di. πλύθῃ W, παγῇ E, παγηθῇ Orib. Cantab.
5 τ οῖνον ισ' ου ευώδους ως δ' αν ζεσθ δις

[1922] καὶ λευτεί


7 νυκτερεύσαι Di. δέ (an error) not in W. ενβάδε om. Orib.

8 τῷ δ' W. ἐὰν τι τῆς δυσωδίας W.

9 οὐπολείπηται W, διαλείπηται Q (not Orib. as reported by W), οὐπομένη

10 Κενήν Orib. Cantab.

11 προσεπίχεον W., προσεπίχεων H Orib. Cantab, προσεπιχέασ E. καὶ κατὰ

Q. τὰ αὐτὰ W.

12 πᾶσαν E.

14 χύδροις Di. τῶν ἄλων E. ἐν E.

16 τὸ om. E. οὗτον Orib. H Di.

17 After λευκῶν E begins a new chapter (πόδι). δέ καὶ W.

18 σκευαστεον sic. στέαρ παρδάλεων καὶ λευτίων, εὐθηρόν τε καὶ καμήλων καὶ ἵππιον καὶ τὰ δώμα ὑπάθως κατασκευαστέον E.

20 καὶ τὰ δώμα after ἵππιον W. E beings a new chapter (πόδι) with ἄρωμα-

τιστέον. δέ καὶ E.

22 τοῦτο τοῦ ἵππου W.
Vol. liii]  

A Papyrus of Dioscurides 149

tou tropou touton [e]ξυμ[ε]υσας > auton to mev euœdi[a]ξεσθ[α]ι kai ek 
πλυνας os peosier[τ]ai σ[υ]ξεσον oiων 
athalasaw te kai euœdei ei[ta a]νελο 
menos kai ennukterev[σ]ai aφ[εις] e 
non oion apo tou auton gen[ου]e 
πιξας [τω] πληθει τουστουν οσον ην 
epmprouth en dothei kai teξoun apo 
kouγχιας te epimeλοσ προς ομη > kouta kotulias tou steatos e[μ]βαλ[e 
σχοινου αραβικης ολκας e[πτα] eav 
de epwoesteron theis poi[σ]ai tou 
avthon olkas μ προσπαποδος [δ]e kai 
foinikos kalamos tais isas olkas 
aspalatho te kai xyloβαλσαμον α 
ova olkyn a panto de eπω olo 
scheresteron keκομμενα e[ιτ]α e

23 ξυναθισας η ξυνενισας E (corr. E')
24 auton to E, to W. μελλουν W, μεν is an error. ξυναθισα E, πλυνας W.
25 Space for two letters (an erasure?) after προτρηται. συνξεσον E (συξε-

30 Space for two letters (an erasure?) after προτρηται. συνξεσον E (συξε-

35 anbous olkas μ προσπαποδος [δ]e kai 
foineikos kalamos tais isas olkas 
aspalatho te kai xyloβαλσαμον α 
ova olkyn a panto de eπω olo 
scheresteron keκομμενα e[ιτ]α e

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25 Space for two letters (an erasure?) after προτρηται. συνξεσον E (συξε-

30 Space for two letters (an erasure?) after προτρηται. συνξεσον E (συξε-
40 ἐπίθεε Di. καὶ ὑπέρειδε Di.
41 πεπωμασμένον F (W), πεπωματισμένον others.
42 ἐέτα ᾱρας τε Ε (τε decl. by Ε²).
43 ἐνυκτερεύοις αὐτό W.
44 ἐχομένη ἡμέρα E. ἀπόχεε W, ἀποχέες E.
45 ἐπιδίδου F.
46 ὁμοιὸς ἐτὶ om. H. ἐόω τρίς Di, ἐπὶ τρεῖς E (corr. Ε²).
47 ἀπόχεε Q Di, ἀπόχεων E.
49 τὸ πρῶ τῷ πυθμέν Ψ, τῷ ἐν τῷ πυθμέν Η.
50 τῆς διωλίσας τε αὐτὸ (om. H E) ἀπόθονοι καὶ χρῶ W: the spacing of the scanty traces in the papyrus does not fit this text well, unless it had διωλίσας τε χρῶ καὶ ἀπόθονοι.
51 καὶ τῶ W: the space in the papyrus hardly admits τῶ. θεραπευμένον Q.
52 τοῦτον τῶν τρόπον H. δὲ καὶ E.
53 αὐτῶν W.
54 αἱρῆ E (W), ἠρεσκε Q, σωφλίῳ Di. ἀλλὰ error for ἄμα (W). ἐέτα before συνκαθεῖσ stricken out by Ε².
57 τε καὶ W.
A Papyrus of Dioscurides

ρεσ]τερου ετι δε συνκοπεντα τιν[ε]σ

εν του]των αρκονται οταν δε τριτον [α]ν
ελο]μενος ξεσ πραεως και δι οθονι
ου ν[λις]ας αρω[μ]ατιζε ως δεδηλωται
ετι δε και ουτως προστυφεται

τα στε]ατα κοψας ως οτι αν αυτων εθελη
προσ]φατον δε και αμυγες αιματος
τα τε]αλλα εχον α πολλαις ειρηται
εμβ]αλων εις λ[ο]παδα καινην επ[iχε
[ας τε οινων παλαιον λευκον ευωδη ως]
υπερ]εχειν δακτυλους η συνξεσον
ελαφ]ρωι χρωμενοι πυ[ρ]ι εως αν την
συμφυτον οσμην αποβαλη και μαλ
λον οι]νει ειτα καθελων το αγγει
ον κ]αι ψυξας ανελου του στεατος
μνα]ς β και εμβαλ[ω]ν εις λοπαδα

προσε]πιρους τ[ε] του αυτου οινων κο
τυλας] δ και λωτιων καρπου ου τα

58 κυπερον Mss, corrected by W to κυτερον.
59 ετι δε (repeated by error from 58) om. W. κοπεντα H Di. τινες δε W, E omits δε.
60 ενι must have been crowded. After αρκονται Di adds τη χρησει. το
τριτον W, εις τριτον H Di, E omits το.
61 Error for αναξετη ανελμενος (W). οθονι W, οθονιον E.
62 ουτω H Di. προστυφε W, προστυφεται E, alii sic conficiunt Di.
64 ως an error, om. W. θερης W.
67 Before εμβαλων Wellmann inserts και against the Mss. εμβαλων δε H, εμβαλον E, εμβαλλον Di. επιχεων E.
68 This line is so deeply abraded as to leave only a few indistinct traces.
70 ευς W, ευς ην E.
71 αποβαλη E. και μαλλον omitted and then added in margin by E.
73 του E (W), omitted from other Mss.
74 βαλον Q Di.
75 προστυφετος H. τε om. H.
76-77 τοις ευλοις οι αυλοποιοι χρωνται W, τα εξωλα οι αυλοποιοι παραλαμβα
νους και χρωνται (και χρωνται om. Di) E Di.
Campbell Bonner

ξυλα] οἱ ανλοποιοὶ παραλαμβανοῦ
σι κε] κομμεν ὃ ὁ ἐφε πυρι κον
φὼ κι.] γὼν διηνεκεῖς οταν δὲ τὴν
στεῖτω] δὴ αποφοραν αποβαλὴ τα
σαι δι] ύλισας αυτὸ ψυχὲ καὶ λιβανῶ
> του καὶ ασ] παλαθουν κεκομμεν' μ ἅ
αμαρακό] ν κεκομμενης μὲ ὃ οἰνω
παλαιω] φυρασον καὶ εασας μιαν νυ
κτα συ] μπεσεὶν τῇ δ ἐχομενη εἰς
χυτρα] ν κεραμεαν τριχουν καινη
καθες τ] α αυτα τε καὶ το στεαρ προσ
αποδος] δε καὶ οἰνου χοαν ἡμιου καὶ
συνζεσ] ον απαντα ομοι ως δ αν

COLUMN 3
(p. 155, l. 22 — p. 157, l. 23 Wellmann)
στυμματων την [τε δυναιν και
την οσμην ανα[λαβη το στεαρ καθ

79 διηνεκῶν κινῶν W, κινῶν διηνεκῶν E.
80 ἀποβαλὴ F.  
81 ύλισα E. αὐτὸν E. καὶ λαβῶν ἀσπαλάθου W.  
82 κεκομμένου W, κεκομμένης E.  
83 ἀμαρακόν δὲ ἄνθους W, ἀμαράκον δὲ ἄνθωντος E, et amarici Di. If ἀμα-
ράκον is rightly supplied in the papyrus, the gender of κεκομμένης (om. W) is
peculiar.
84 φυρασον παλαιῳ W, παλαιῷ φυρασον E. ἔσων W.  
85 πιεῖν F, συππεῖν E, ποιεῖν H Di, W emends to συμπεῖν.  
86 τριχουνιάλαν W, τριχουν E.  
87 ταῦτα W, αὐτὰ Di. W omits τε, τε καὶ E.  
88 προσαποδοῦς H. ξέωσ ἡμιον W, χοᾶs ἡμιου oίου Di, χοᾶs ἡμιου φι
ἡμιον E (corr. E'), χοᾶs ἡμιου (omitting oίου but leaving space) H.  
89 διὰν δὲ W, ὡς ἄν E, ἦς ἄν Di.

COLUMN 3
1-2 πάντων τῶν στυμμάτων την δύναμιν και τὴν ὁσμήν ἀπολάβη W, τῶν
στυμμάτων τὴν τε δύναμιν και τὴν ὁσμὴν ἀναλάβη E (the scribe of the papyrus,
with a similar text before him, probably omitted ὄν by an oversight in chang-
ing to a new column), τὴν δύναμιν καὶ τὴν ὁσμήν τῶν στυμμάτων ἀναλάβη Di.
tῶν στυμμάτων om. Q.
e)λων αυτο και διυλ[ιςας πηξον αποθον 
τε εαν δε ευωδε[στερον θελης ποι
5

νσαι μισγε αυτοι σ[μυρνης λυσαρω 
τατης ολκας ἦ οἰη[ω διειμενας πο 
λυτει το δε δ[ρυθειον και χη 
νειον στεαρ ουτωσ [αν ευωδιασθει λαβον οι 
σ]υνιος αυτων τε[θαρατευμενον κο 
5

τυλας δ καθεις εις [οστρακινην χυτραν 
προσμιξεις ερυσι[σκηπτρον και χυλοβαλ 
σαμον ετι δε φων[ικος ελατης και κα 
λ]αμον αδρομερωσ [κεκομμενου ανα δρα 
χι]ασ ιβ επιδους τε [οινον Δεσβιον πα 
10

λ[αι]νον κοτυλειν ἃ θε[ς επ ανθρακιας και 
συνξεσον δις εις [ανελομενος απο 
του πυρος το αγγειον [και εαςας ψυγη 
ναι τα εν αυτ[ω] ημ[εραι και 
νυκτα τη εχομεν[η τηξον αυτα και 
15

dia ρακους λινου και καθαρον υλισον εις 
αργυρουν αγγειου ο[ταν δε παγη αν 

3 E3 adds δε after καθελων. τηξον Mss, τηξον Laguna. και ἀπόθου Di.
4 ποιησαι θελης W, θελης ποιησαι E.
5 μισγε W, μισγε αυτῳ E. After σωμην W has της, not in E: the space in the papyrus would scarcely admit it.
6 δκτω δλκας W, δλκας ἦ E Di. διειμενης E.
7 πολυτελη και πολυτετι E (πολυτελη και del. E3).
8 Wellmann’s text, which I have supplied, could hardly have been crowded into the remainder of the line. Perhaps the papyrus had an erroneous form like ευωδιασθῇ (Q Di), or ουτιος.
9 ουντινοσουν H, οιντινος E (οινο del. E3).
10 και καθεις W. χυτραν ὀστρακινην E.
11 προσμειξον W.
12 και καλάμων om. H.
13 δισχερων W, ἀδρομερωτ E. κεκομμενου E Di.
14 ⤹< ⤹ E, ⤹< others (= δραχη). τε παλαιον οινον E.
15 κυδουν ένα W, κοτυλην ἦ E. εἰς ἀνθρακας E.
16 τρις W, τετράκις ἦ τρις E (τετράκις ἦ del. E3).
21 ἀργυρουν F E Di (W), καθαρον others.
ελομενος κογχω τ[ο προειρημενον
eis κεραμεον καιειν[ον αγγειον βα
λε πωμασας στεγν[οσ αποθευ εν
καταψυχρω τοπω χ[ειμωνος δε ταν
ta δρασ[τ]εον εν γαρ θερει ου
πησοται τινες δ[ε προς την σωστα
σιν αυτ[ο]ν και πηξι[ν βραχυ κηρου τυρ
ρημικου μισγουςιν τω δε αυτω τρωω
αροματ[ε]ιστεν και α[ρκειον και τα ομο
α σαμψουχιζεται [δε στειρο ντως λα
βων του μεν καλως "θαρα[πευμενον οσον
μναι α εστω δε μα[λ]ου ταυρειον
και σαμψουχου φριμ[ον τεθλασμε-
νου ραλσχερως μναιν αμισυ μειξον επι
μελως και μειξας α[νπλασον επι
ραϊων δαψιλεστερ[ον εινον ειτα
αποτιθεμενοι αυτα [εισ αγγειον και
σκεπασας εαυτον εν[νυκτερευσαι
προι δε εισ χυτρα[ν κεραμει αμ

23 κεραμεον W. καιεινη om. W, H Di have καιειναν after βαλλε. βαλλ
omitted then added in margin by E? , βάλλε F.
24 και πωμαςα W. στεγηνοι W. στεγηνος πωμασας E.
27 πηγνται W, πισσεται E.
28 την πηξιν W, E. omits την. κυρικου F.
30 και τδ ιειν και αρκειον και ια άμια W, τδ om. E, αρκειν τε (omitting
preceding και) Di. The space in the papyrus could not accommodate the
reading of W. The trace after και is probably α, and the α at the beginning of
31 is certain; hence I have supplied as above.
31 σαμψουχιζεται Mss, corr. W.
32 μεν om. W. τε above line inserted by first hand.
35 τεθλασμενον επιμελως W, τ. διοσχερως E. δεν μην H. μειξον, omitting
επιμελως W, μηξον επιμελως E.
36 μαγιδος (after και) W, μαλδας E, μιξας F. άναπλαςαν F.
37 έπιχειας Q (W), έπιραηνον E, έπιραηνων Di.
38 αποθεμενω W. αυτας W, αυτα Q E.
39 σκευασας E. νυκτερευσαι Q Di.
40 κοβρας Q Di.
Vol. liii]  A Papyrus of Dioscurides 155

βαλον καὶ ύδωρ [επιχειας εψε κοινfabs
οταν δε την idian [ομην αποβαλη
το στεαρ διυλισας αυτο και εασας αν
το μεναι ολην την [υυκτα πεπω
μασμενω καλως τη [επιουση αν
ελομενος τον [τ]ροξιο[κον και απο
ξυσας την προς του [πυθεμα ρυπαρι
αν μειξον παλην σαμψουχον κεκομ
μενου ως ειρηται [αλλην μιναν ἃ ημιου και ωσαυτως
αναστρεψων μαγιδαιων τε πωσι και
τα αλλα [τα π]ροιηρη[μενα επι πασι δε
εψησας και ν[λ]ιας α[φελω τε ει τις προς
tο πυθμεν[ι] ρυπαρα[ν] αποθουν
ev καταψυχη[ρ]ω τοτων []
ed δε
αθραπευτουν ο[τ]εαρ χην[ην ην ορυ
[θ]ην ην εχιδνουνθηλ[τις ασιττον
dιατηρησαι[αι ου]τως προι[ητεον αυτο
λαβων προι[σ]φατον τη[ι αν αιρη εκ
πλυνον επι[ι]μελως κα[ι διαψυχας ε
πι κοςκινο[υ] εν σκια μ[ετα το ξηραν

43  W. omits second αυτο.
44  ὄρη νηκτα μειναι E.
46  προσαποτησας W, for which reading there may have been room in the
papyrus, ἀποτησας E, προσαποτησας Di.
47  ἐν τῇ πυθμενί W, προς τὸν π. E.
49  The text of W which I have supplied(with ἄ for μιαν) is 8 or 10 letters
too long to fit into the remainder of the line; perhaps καὶ ῥωσάτως was omitted.
50  ἀναστρέφον E (W), ἀναστρέφων Q, and so probably the papyrus, ἀνα-
πλασε Di.  τε om. E Di.
51  ἄ ἰδιον προειρηται E, ἄ προειρητα Di.
52  διυλισας W, ὄλισας E.  την πρὸς τῷ πυθμενὶ δυταρλαν ὑπάρχουσαν E: a
similar reading would fit the gaps in the papyrus almost equally well.
55  ἀθραπευτουν W.  χήνεον W and similarly with the other adjectives.
56  μᾶσχεων W, ἐχίδνουν E, absingia gallinacia et anserina et uiperina Di.
θέλων W, θέλει Orib.  F Di, θελη E.
57  τοι H Di.  προι[ητεον] error for ποιητέον (W).
58  ὄψων W, δει E.  βοῦλου Di.
60  ἐν κοσκίνον Η, ἐν κοσκίνῳ F.
Campbell Bonner


63 ἐπιετα Οριβ. ἐν λινυ Ε. διετα W.
67 δι Η (W), others omit. ἐν μελιτι W. ἀποθεέντα W, ἀποτιθεμενぅ E. 68 ἀσηπτα μενει om. W: wrongly repeated from line above.
69 τα στεια παντα W. θεραπευτικήν E, θεραπευτική (written above) E². After θεραπευτικήν Ἡ Di add μαλακτικῆ, ἀρωματικῆ.
71 κα το β. κα το μ. W.
72 δε after λεοντειον W.
74-75 το δε ἐλεφάντειον και ἐλάφειον W, το δ’ἐλαφον και ἐλεφάντειον E. ἐλεφάντειον και formed no part of the original text: cf. DI ceruvino homo per unc-lus uestias (i.e. bestias) omnes expellet, and Diosc. perl Ἀπλῶν Φαρμάκων, π, 134 (p. 307 W). και before ἐρπετα om. W.
78 ἀλφιτῳ και ριο και τυρῳ καθεβομενον ἐγκλυβεται τε Ἡ Di. τυρῳ E, πυτήρῳ F Di (cf. Diosc. perl Ἀπλῶν Φαρμάκων, π, 51, p. 266 W). και ἐφομενον W, ἀπέμενον (for ἐψ.) F.
79 δινε is perhaps repeated by error from l. 77; but Di. has unde twice
Before proceeding to discuss the text of the papyrus, it is necessary to resume as briefly as possible what has been learned about the manuscripts of Dioscurides and the history of his text. This knowledge we owe chiefly to the thorough and painstaking researches of Max Wellmann; the edition of Sprengel (Leipzig, 1829) in Kühn's *Medicorum Graecorum Opera* was based upon inferior manuscripts, and is of little value today. The paragraphs that follow are dependent upon Wellmann's preface, for, unfortunately, the separate and fuller discussion of the manuscripts which he promised has never, to my knowledge, appeared. I have even ventured to reproduce Wellmann's stemma of the manuscripts, in order to shorten the discussion of their relations.

(unde et disintericis medetur, unde si cum pulenta et surfecte coctu clisteri adhibetur), where the second clause may represent ὅθεν σὺν ἄ. καὶ τ. ἐψῆμεν ἐγκλύστατι. ἐγκλύστατι Ψ. καὶ μετὰ Ε. μετὰ πτισάνης χυλοῦ Ψ, μετὰ χ. πτ. Ε.

81 ἐφηματε Ψ. καὶ ὁμ. by E, and perhaps by the papyrus: the line is a little long as compared with others in this part of the text.


85 κρῆκω καὶ Ψ, E omits καὶ.

86 καὶ τὸ προβάτευν δὲ ἀνάλογεὶ τοῦτῳ Ἡ.

87 Between τοῦτῳ and τὸ δὲ Ἡ has ὃν ὃν δὲ [ἀνάλογεὶ] τοῖς περὶ υπέραν καὶ ἐδραν καὶ πυρικαύθη άρμόζει. ἀνάλογεὶ, bracketed by W, is omitted by E. ὃ καὶ πυρικαύθη δ. Δ.

Wellmann holds that all existing manuscripts are derived from a recension made in the second century, probably less than a hundred years after the work was written. Upon some very slight evidence he attributes this recension to a certain Joannes, who appears to have edited other medical works. In the third century, according to Wellmann, the tradition divides into two branches. The texts derived from the left-hand branch, or first recension, contain the material

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Praef. p. vi (where the reference to Galen should be xii, 766). The combination is doubted with reason by Oder, in his review, Berl. phil. Woch. 1906, p. 521.
arranged in five books as Dioscurides wrote it. The right-hand branch is derived from an archetype the editor of which gave up the arrangement in five books, and rearranged the material alphabetically according to the substances described. This is the Dioscurides Alphabeticus, which Wellmann places between Galen, who appears not to have known it, and Oribasius, the physician of the Emperor Julian, who made excerpts from it for his great compilation *Iατρικάλ Συναγωγάλ* (Herm. xxxiii, 374 f.). Texts derived from the alphabetic recension differ not only in arrangement but also in readings from those of the first recension.

The first class of the first recension is headed by the excellent Parisinus 2179 (P), of the ninth century. O in the stemma designates its lost source. V (Marc. Ven. 273) is a copy of P. P and V are defective and do not contain the part of the text covered by the papyrus. F (Laurent. 74, 23) is complete, but much later (fourteenth century) and inferior. H (Palat. 77), of the fourteenth century, and A (Vindob. Med. Graec. xvi), of the fifteenth, are related to F, but contain some readings derived from the group known as Di (Dioscurides interpolatus), of which more presently. Readings of the group FHA are sometimes cited by the symbol of their archetype, Q.

Wellmann recognizes a second class of this left-hand or first recension, separating from the main stem in the fourth century. From it are derived, first, the Latin translation of Dioscurides, second, a peculiar manuscript of the Escorial library, and third, a few portions of Book III which exist in a palimpsest (Vindob. Lat. 16) of the sixth century. The last is not shown on the stemma, which is not free from faults (Oder, l. c. 522).

The Latin Dioscurides is known from Cod. Monacensis 357, of the eighth century, written in the Langobardic script. It has been published in instalments in *Romanische Forschungen*, Book i by Hofmann and Auracher, the remainder by Stadler. The text included in the papyrus corresponds to
Rom. Forsch. x, 200-202. The author of this version used a good manuscript of the second class of the first recension (so Wellmann, Praef. p. xxi); but he omitted not a little of his original and misunderstood even more. I have supplemented Wellmann's apparatus by adding from this source a few readings which appeared to be of importance.

E (Escorial. iii, R 3), of the eleventh century, is shown by Wellmann (Praef. xii, xxiii) to be closely related to Dl, though he does not believe it to have been copied from the same archetype. He describes E as full of errors and interpolations, and possessing further many readings in common with the second or alphabetic recension; hence the dotted line connecting E with the right-hand branch of the stemma. The scribe of E, in Wellmann's opinion, had before him a book descended by several removes from the archetype of Dl, in the margin of which variants of the second recension had been entered. These he sometimes took into the text; sometimes he placed both readings side by side. It will be seen later that the papyrus suggests a different view of this matter. Wellmann further calls attention to a passage in Photius (Bibl. 178), from which it appears that the patriarch read a manuscript of Dioscurides which in contents and arrangement resembled our E.

The third class of the first recension comprises a group of late manuscripts denoted by the symbol Di, with the matter arranged in five books, but containing many interpolations and peculiar readings derived from the alphabetic recension. For details reference must be made to Wellmann (Praef. xii–xiv).

No useful purpose can be served by dwelling at length upon the texts of the second recension, because, save the excerpts of Oribasius, none that is reported by Wellmann covers the chapter contained in our papyrus. The great illustrated herbal of Vienna (C) and its near relative N, constituting Wellmann's second class of the alphabetic recension, contain only so much of Dioscurides as is concerned with plants, and that combined with extraneous matter in a great compilation.
The group marked X on the stemma (the third class) is, according to Wellmann, the result of a contamination of a copy derived from the first recension with the readings of C, and he makes no use of these texts.

The first class of the second recension contained the whole of Dioscurides’ work arranged in alphabetical order. Of this group Oribasius is the most important witness, and his readings are reported by Wellmann. But except for a single passage he gives no readings of Dioscurides manuscripts of this class, on the ground that they are all late and represent a contamination of all three classes of the alphabetic recension.

Oribasius’ excerpts from Dioscurides form Books xi–xiii of his compilation. Bussemaker and Daremberg omitted them from their edition of Oribasius because they contained no original material; hence there is, unfortunately, no printed edition of the Greek text of these books. Wellmann notes their readings from Paris. Graec. 2189 (A of Oribasius), a sixteenth-century manuscript. The few lines which coincide in part with our papyrus were kindly recollated for me by my colleague, Mr. H. A. Sanders, who finds Wellmann’s report in error on one point (Col. 2, 9). Thinking it desirable to examine at least one other text of Oribasius, I obtained a photograph of the passage corresponding to the papyrus as it stands in Orib. C, a fifteenth-century manuscript belonging to the library of St. John’s College, Cambridge (No. A, 6). This I owe to the kind offices of Mr. E. E. Sikes, Fellow and Senior Tutor of St. John’s. To avoid possible confusion with the symbols of Dioscurides manuscripts, I refer to Orib. A as Orib. Paris. and to Orib. C as Orib. Cantab.

We may now consider the text of the papyrus, which will be sometimes cited as PMich. It was not a fortunate chance which presented us with this part of Dioscurides’ work rather than another. For one thing, all of our text is concerned with a single item of the pharmacopoeia, namely, the preparation and medicinal properties of fats. Hence, since the subject does not change within the limits of the papyrus, it is
not possible, strictly speaking, to determine whether the material of the roll was alphabetically arranged or not. Its date, however, is earlier than Wellmann placed the making of the alphabetic recension, and the differences which appear between the papyrus and Oribasius' excerpts argue against a close relation between them. Again, because the materials discussed in the papyrus are of animal origin, they do not appear in the Vienna manuscripts C and N, which are herbals. Consequently, among the sources quoted by Wellmann, only the excerpts of Oribasius enable us to compare our text with the alphabetic recension, and unfortunately they cover only a small part (Col. 2, 1-17; Col. 3, 54-68). Once more, the best manuscript of the first recension, P, and its copy, V, do not contain this part of Dioscurides; P does not begin until some six chapters farther on. Thus the field of comparison is limited to FHA (i.e. the Q group) Di, E, Dl, and Oribasius.

As is to be expected in a papyrus of this period, the text has many readings peculiar to itself. I have counted fifty-six cases, of which two are not beyond doubt. In one (Col. 2, 83) the not very safe witness of the Latin version may indicate an original agreeing with the papyrus; in the other (Col. 3, 8) it is not certain that the papyrus had a shorter text than W. There are a good many obvious blunders, due to inattention, and particularly to the wandering of the eye to a neighboring word or phrase, as Col. 2, 8-9, 24 (μεν for μελλον), 56 (ἀλλα for ἀμα), 59 (repetition), 61, 81 (probably); Col. 3, 57, 62 and 68 (repetition), 79. In several other places small words, especially conjunctions and articles, have been wrongly omitted or inserted; Col. 2, 7, 29, 36, 64, Col. 3, 1, 10, 24, 32. Unimportant variations in word-order occur in Col. 2, 1, 34, Col. 3, 71. The papyrus has preserved a better spelling than the manuscripts in Col. 3, 31 (see note). The reading συμπεσεῖν, Col. 2, 85, is interesting and possibly right, if it may be taken to mean 'settle'; but Wellmann's emendation συμπτεῖν, 'soak' is very plausible; cf. Theophr. H. P. v, 7, 4.
Certain omissions of the papyrus may reflect the original state of the text; so perhaps in Col. 2, 20, where all other authorities add καὶ τὰ ὀμοια, and especially 38, where the sentence not found in the papyrus reads like an interpolation—it was first omitted, then added in the margin by E. There were certainly readings shorter than those of the manuscripts in Col. 3, 30 and 49. In Col. 3, 75 the papyrus is certainly right in reading ἔλαφειον without ἔλεφάντειον, the latter being a variant caused by some uncertainty on a scribe's part as to the exact reading of an injured text; see the critical note. Here the papyrus seems to have the support of Di, and the immediate original of E may have agreed also. On the other hand, the omission of a sentence in Col. 3, 87 is an error.

More important than the cases where the papyrus stands alone are its numerous agreements with one of the manuscripts. This is the peculiar Escorial manuscript E. In forty-one certain cases the papyrus agrees with E against all other authorities. The case of Col. 2, 38 might be added (see the last paragraph); and in two other cases, Col. 3, 5 and 46, where the ends of the lines are lost, the measurement of the spaces to be filled suggests an original agreement between PMich. and E. Of the forty-one cases of agreement just mentioned, nine E-readings are adopted by Wellmann as clearly right—Col. 2, 25, 51, 56, 73, 74, Col. 3, 1, 39, 67, 78. Of the remainder, there are four unimportant order-variants and a larger number of miscellaneous minor variants touching the use of a simple or a compound verb (Col. 2, 24, Col. 3, 52), the omission or addition of small words, connectives, participles, and pronouns (Col. 2, 24, 59, 60, 70, 87, Col. 3, 5, 28, 85), and the choice of a participle or a finite verb in continuing a sentence (Col. 2, 11, 30, 44). This last uncertainty may be observed in other manuscripts also, and is natural in view of the author's rambling and inelegant style.

The papyrus and E have no serious blunders in common.
On the other hand, they have among the remainder of their common departures from the other manuscripts several readings which merit brief discussion. πρίχουν, Col. 2, 86, is better than πριχοννιαίαν (W), while πήσεται (πίσεται), Col. 3, 27, is a late and inferior form (πηγνυται W). ἀδρομέρως, Col. 3, 13, is as good as its synonym ὁλοσχερῶς (W). κοτύληρ, Col. 3, 15, seems to give a better proportion than κύαθον (W). ὀχοσχερῶς, Col. 3, 35, is as good or better than ἐπιμελῶς (W); and the fact that the other manuscripts have ἐπιμελῶς here, while omitting it in the next line, where PMich. and E have it, suggests that the others have misplaced the word.

Especially significant as to the close relation between the papyrus and E is the sentence in Col. 3, 83–85, where there are three common omissions — ὁν (haplography), φυραθὲν, and καὶ before ἐπιτιθέμενον — and a similarity in the division of the text near the beginning of the papyrus. The use of the paragraphus in several cases has been mentioned above, and attention was called to the fact that in two places, Col. 2, 17 and 20, a major division seemed to be indicated by the use of a wedge-headed line, a combination of diplē and paragraphus. Now in precisely these two places E indicates new chapters (see critical note), and nowhere else within the limits of the papyrus. Q Di have no chapter divisions in this part of the text.

The peculiar readings of the papyrus and E mentioned in the last paragraph are especially noteworthy because they cannot be due to casual errors of a copyist, but rather derive from a form of the text differing not a little from that of the Q family. That text must also have differed from Oribasius' text of Dioscurides. It is true that we find E, Oribasius, and (probably) PMich. agreeing in the reading ἐκπλυνων (Col. 2, 1), and in Col. 2, 3, the Cambridge Oribasius, with its reading παγηθῇ, points to παγῇ of PMich. and E. But Oribasius has individual variants in Col. 2, 2 and 7. In Col. 3, PMich. E Orib. agree in the form ὀθόνων (61); but
Oribasius does not read ὅτι with PMich. Ε in 58, nor has it the striking ἐξεδινεῖον for μῶσχεῖον of PMich. Dl Ε in 56. Oribasius has an individual variant in 63. The relation of the alphabetic recension to the text represented by our papyrus does not, therefore, seem to be particularly close.

The papyrus then presents a text which appears to stand apart from Wellmann's so-called Joannine recension. Since it is clearly discrepant from the Q group, upon which Wellmann's text of this part is principally based, and also from Oribasius, it remains to seek an explanation of its peculiar relation to Ε. It should be borne in mind that although Ε agrees significantly with PMich. in a number of places, there are as many (more than forty) in which it has readings entirely peculiar to itself. About three-fourths of these readings are unimportant—omissions or insertions of small words, changes in order, and minor blunders. There are a few 'wild' readings, like μαλάξας (Col. 3, 36), ἀ ἰδίως προείρηται (Col. 3, 51); for these the other texts offer no very good explanation. But in general the discrepancies of Ε from the papyrus are less significant than the group of good readings in which they agree.

Wellmann's views about the character of the text of Ε have been set forth above in connection with the description of the manuscript. He admits the excellence of some of Ε's readings, but, suspecting the influence of the alphabetic recension, adopts them, in general, only when supported by the Latin version or by the pseudo-Dioscuridean de Herbis Femininis.

It is not to be denied that in various parts of the work Ε stands in close relation to the text of Oribasius and the Vienna herbals, i.e., to the alphabetic recension. But that relation may be conceived in a manner different from Wellmann's view of it. Our papyrus gives evidence that readings found in Ε alone among manuscripts of the first recension go back to the middle of the second century, that is, to a time before the making of the alphabetic recension. To judge
from the part of the text which the papyrus covers, it seems more likely that the writer of \( \text{E} \) used, and perhaps based his text chiefly upon, a manuscript closely related to the Michigan papyrus, and derived from the same archetype with it, though doubtless with several intermediate stages. That manuscript was probably rubbed and otherwise injured. The archetype was also drawn upon to some extent by the editor of the alphabetic recension. The scribe of \( \text{E} \) evidently used also a text belonging to the first class of the first recension—the class represented in this chapter by the Q group—probably correcting his original by its aid, and modifying it so extensively as to give it the appearance of a “Joannine” text. This hypothesis may serve to explain several double readings of which the first is either like the text of the papyrus or else is a guess at an illegible word, while the second is the text of Q. So in Col. 2, 9, ὑπομένῃ ἡ διαλείπηται \( \text{E} \), ὑπολείπηται PMich. Orib., διαλείπηται Q; Col. 2, 77, τὰ ἄλα . . . παραλαμβάνουσι καὶ χρῶνται \( \text{E} \), παραλαμβάνουσι PMich. Di, τοῖς ἄλαι . . . χρῶνται Q. Even in Col. 3, 16, where \( \text{E} \) has τετράκις ἢ τρίς (see critical note), τετράκις may come from δις (PMich.) so rubbed that the δ alone was legible and was taken for a numeral. From the other cases it is safer to infer that \( \text{E} \)’s original was illegible than that it offered a peculiar reading; cf. Col. 2, 23, 88, Col. 3, 7, 83.

A few other points deserve separate comment. In Col. 3, 56, the Latin version (\( \text{Dl} \)) agrees with PMich. and \( \text{E} \) in reading uiperina (ἐχίδνειον) where the others (Q Orib. Di) have μόσχειον; and in Col. 2, 63 the version of \( \text{Dl} \) seems nearer to προστύφεται (PMich. \( \text{E} \)) than to πρόστυφε of the other texts. In Col. 3, 74–75 \( \text{Dl} \) takes account of ἔλαφειον only, with PMich.

Wellmann’s interpolated Dioscurides (Di) shares good readings with the papyrus or the papyrus and \( \text{E} \) in the following places: Col. 2, 77, παραλαμβάνουσι PMich. Di, παραλαμβάνουσι καὶ χρῶνται \( \text{E} \); Col. 3, 1, in reading τὸν στυμμάτων and omitting πάντων (though the word-order in
Di is different); Col. 3, 2, ἀναλάβη PMich. E; Col. 3, 23, καλόν with PMich., though in a different order; Col. 3, 37, ἐπιραίνων PMich. Cf. also Col. 2, 9, 28, 51.

In three noteworthy cases the papyrus is in agreement with the first class of the first recension against the other authorities; Col. 2, 41, πεπομασμένου PMich. F; Col. 3, 36, μελξάς (μιξάς) PMich. F; Col. 3, 50, ἀναστρέφου PMich. Q.

With Wellmann’s admirable edition at the service of scholars, it is not likely that anybody will soon undertake again to revise the text to which the German savant has devoted so much learning and self-sacrificing labor. None the less, the Michigan papyrus furnishes reasons for modifying the views of the text which Wellmann was naturally led to adopt. Since within the part covered by the papyrus characteristic readings of E are now proved to be as early as the second century, it seems permissible to infer that in other parts of the work also some of the readings of E may be equally ancient, and that intrinsically good readings of this manuscript should be followed oftener than Wellmann allowed himself to follow them.

To a smaller extent, and with something more of caution, the same observation may be applied to Oribasius, the Di group, and other texts of the alphabetic recension; and in fact, for further study of Dioscurides’ text, it would be desirable to examine other manuscripts of Oribasius and the alphabetic class, especially as regards their relation to E. For in spite of the corruptions incident to arbitrary rearrangement of the matter, it does not seem to me improbable that they may here and there preserve correct readings.

This is frankly to advocate an eclectic procedure in constituting the text; but such a method seems to be justified by the evidence of the papyrus. For since Wellmann traces his “Joannine” recension to the second century, and the papyrus shows that a different form of the text was current scarcely later than the middle of that century, it is clear that two good but different forms of the text were known within a
generation or two after the author’s death. This is not surprising in the case of a technical work where little value is set upon verbal style. Is it not possible that the differences may go back even to the author’s lifetime? If Dioscurides dictated from his notes to a group of scribes using shorthand, their copies would show very much the same sort of variety as is observed in the different forms of our text, and some of the copies might escape the author’s revision. Thus two or more texts might come into being under such circumstances that no one of them could claim exclusive authority.
XI. — The Pronunciation of Greek and Latin Prose, or Ictus, Accent, and Quantity in Greek and Latin Prose and Poetry

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When I began the study of Vergil and Homer, I was unable to read — rhythmically — an average verse of these authors. The same was true of my fellow-students. In those days, a more or less protracted study of elementary Greek and Latin followed by the reading of Xenophon and Caesar afforded no aid to the understanding of the structure of the hexameter. The quantities of the vowels were not marked in our textbooks, and it was difficult to navigate even when the course had been laid. Since that time, universities have multiplied in this country, scholars and teachers have been trained, knowledge of Greek and Latin rhythm and meter has increased, and pedagogical accessories have made their appearance. Nevertheless, so far as the ability to read without preparation simple Greek and Latin meter is concerned, the results of today are not much better than those of forty years ago. The reason is not far to seek. In spite of all the helps designed to facilitate the acquisition of a knowledge of Greek and Roman syllabic quantity, English rhythmic speech habits are adhered to in the ordinary pronunciation of Greek and Latin; yet Greek and Latin poetry cannot be read without the abandonment of these habits.

In 1869-1870, James Hadley published, in the first volume of these Transactions, a paper on the "Nature and Theory of the Greek Accent." The publication of this paper marked the dawn of a new era in the understanding of that most difficult subject. But new views penetrate slowly, and years elapse before the views are put into practice. So in this case. Most teachers continued to believe that English accent was identical with Greek and Latin accent, and Greek and Roman versifi-
cation was supposed to have been built on a system which caused the ordinary word-accent to be discarded when it conflicted with the rhythmical accent.

In 1880, the year in which I entered college, John Williams White published his translation of J. H. H. Schmidt’s *Leitfaden.*\(^1\) I bought a copy of the book, and in it I encountered the statement, “Greek verse can and must be pronounced throughout with the prose accents, and this can be done without any conflict arising between the prose accents and the quantity of the syllables and their ictuses in poetry.” This statement was followed by the first line of the *Odyssey* in musical notation, which was meant to exemplify the method to be pursued. The interval which was employed to designate the pitch was that of a single tone. I proceeded to execute on the piano the musical notation, and I repeated, in unison with the sounds of the piano, the words of the verse. The result was singing instead of speaking, but I continued to practice this and other lines. I attempted even to apply my method in the instruction of a younger brother, but brought down on myself the derision of the household for teaching the “singing of Latin.” Nothing daunted, I persevered, until one day, at a meeting of the Johns Hopkins University Philological Association, I heard a Frenchman read a paper on Chateaubriand. The name Chateaubriand was consistently pronounced in a manner different from that to which I had been accustomed. There were decided pitch accents on the syllables *Cha-* and *-bri-* and rhythmical accents on the syllables *-teau* and *-and*, whereas in English utterance the syllable *-teau-* dominates all the other syllables and receives the principal accent. The experience was a revelation to me. It presented me with a practical exemplification of the pronunciation of a Greek acute accent.

\(^1\) Professor B. L. Gildersleeve had many years before, in his *Latin Grammar*, published J. H. H. Schmidt’s schemes of the Horatian meters. To Professor Gildersleeve, therefore, belongs the honor of having been the first to direct the attention of the English-speaking world to a scholar whose works have been read with profit and delight by most students of Greek and Roman rhythmic and metric.
I was forced to see that there is a vast difference between the pitch effect of song and that of ordinary speech. Speech is usually more rapid than song, and "the loudness of the lowest of the constituent pitches (of the tone) is made greater in singing than in speaking." Furthermore, the speaking voice (λογικὴ φωνή) is continuously changing its pitch. Its motion (κίμωσις) is that which Aristoxenus (Harm. 1, § 28, p. 9 Meib.) calls συνεχής in contradistinction to the motion of music, which he calls διαστηματική (intervallar). Hence, it is more difficult to recognize by ear the pitch intervals of the peaks of ordinary speech, so small an interval as that of a single tone being hardly perceptible. In fact, a distinguished musician whom I consulted at the time denied that there were pitch intervals in the word-accents of ordinary conversation; and, very recently, another distinguished musician expressed the view that a fifth was too high an interval for the English accent.

Experience had shown me that a greater interval than a single tone must be assumed for the Greek acute. What was the magnitude to be? I reasoned it out as follows. Speech melody is, after all, regulated by the laws of music. Perfect harmony of sound characterizes the major chord. This is composed of the tonic, the third, the fifth, and the octave. Hence the acute accent ought to represent either the third, or the fifth, or the octave, etc. The third is rather a small interval; the fifth is distinctly audible and its utterance requires no unusual effort; the octave demands greater exertion; the tenth, still greater, etc. The fifth was evidently the normal interval, and the others might be used for varying

³ Compare C. W. L. Johnson, l. c. 47. See also E. W. Scripture, "The Study of English Speech by New Methods of Phonetic Investigation", Proceedings of the British Academy, xi, 24, 26: "It is of interest to notice that verse contains all the elements found in song. Perhaps the essential difference between the two may be found in the observation of Aristoxenos that in speech the voice slides up and down, while in song it proceeds by jumps." Page 25 comprises a long specimen of a melody plot. Compare also the melody plots on p. 12.
degrees of emphasis. The fifth, I found, was the interval that I was in the habit of employing for the ordinary English word-accent. My choice was shortly after confirmed by my reading of Dionysius of Halicarnassus, who says (de Com- positione, p. 58 R.) that the melody of speech is measured approximately by the interval of a fifth, and that the voice is neither raised nor lowered more than this interval. Scientific experiments have shown that an interval as great as a tenth is a common phenomenon in French, and Professor Scripture, l. c., p. 12, records English speech intervals of more than two octaves. Was Dionysius right in limiting the Greek interval to the fifth? Probably not. Strong emotion must have brought variation of pitch. Imagine Strepsiades, if you please, in his ὄ Ζεῦ βασιλεῦ at the opening of the Clouds, confining himself to the fifth! At any rate, when a Greek word that has an acute accent in conflict with the ictus, requires special emphasis, I am in the habit of employing a higher pitch than usual on the syllable bearing the accent. The problem of special emphasis presented itself early in my experiments, and was provisionally settled in the way described. It is conceivable that, for the sake of emphasis, a syllable other than the one bearing the written accent was at times made more prominent.

The pronunciation of the circumflex accent presents no difficulty. One has only to raise and lower the voice on the same syllable, somewhat after the fashion of the English oh! of admiration. If the acute represents an interval of a fifth, the circumflex indicates the rise of a fifth and a corresponding fall on the same syllable.

The grave accent presents real difficulty. It gave me a world of trouble. White-Schmidt, op. cit., calls for a lowering of the voice below the medium tone. This was difficult of execution and more difficult still of appreciation. I never felt certain of being able to pronounce it in such a way as to make it perceptible to the hearer. Study of the ancient

4 For a melody plot of this oh! see Scripture, l. c., p. 12.
testimony, scrutiny of modern views, consideration of the new
evidence brought to light by the discovery of the Delphic
hymns, and comparison of the operation of enclisis and bary-
tonesis in Modern Greek, have since convinced me that the
grave accent was not meant to designate a pitch below the
medial tone but a temporary suspension, either partial or total
according to the nature of the case, of the ordinary acute. In
the case of monosyllables, dissyllabic prepositions, and the
like, there can be no doubt that there was a total suspension
of the acute. In the case of other words, the proclisis of the
barytone will be sufficiently effected by the subordination of
its accent to that of a following orthotone (oxytone, paroxy-
tone, proparoxytone, perispomenon, properispomenon). The
I, i (Hannover, 1890), p. 315, may serve as a rough illustration
of partial suspension.5

While endeavoring to settle the problem of the written
accent in Greek verse, I was at the same time busying myself
with the problem of ictus and quantity. At that time, nobody,
so far as I know, questioned the presence of stress in Greek
verse. Indeed, there were many scholars who were still
laboring under the illusion that an ictus-bearing syllable was
pronounced like an English or German syllable bearing the
word-accent. This illusion inevitably led to the neglect of
the written accent in the reading of verse. But the consensus
of enlightened opinion entertained the idea of an ictus corre-
sponding to what in music is sometimes called the natural or
grammatical accent, which falls on the first note of a rhythm-
ical group and is fixed by counting, as opposed to the artificial
or oratorical accent, which is used for diversity of effect. In
recent years ictus has fallen from its high estate. It has
been styled "that Old Man of the Sea", and belief in it an

5 For a convenient résumé of the whole question of Greek accent, see J. Vendra-
dyes, Traité d'accentuation grecque, Paris, 1904. For the grave accent, see §35-43 of that treatise. E. H. Sturtevant, The Pronunciation of Greek and
Latin (Chicago, 1920), pp. 192-205, is briefer, but contains an excellent state-
ment of the middle accent.
"obsession" (White, *Verse of Greek Comedy*, p. xvi). I cannot join in this vituperation, though, long before *The Verse of Greek Comedy* was written, I had rebelled against the over-emphasis of stress in ancient metric. In a paper entitled "An Attempt to give a more Satisfactory Definition of Sound-Rhythm", which was read before the Johns Hopkins University Philological Association, and printed in *J.H.U. Circular*, June, 1895, pp. 81 f., I had shown, by an analysis of three of the most common drum-tap movements, that "1. An absolutely perfect rhythm may be produced without any variation in the quality or in the pitch of the sounds. 2. Physical stress, which is generally considered the *sine qua non* of rhythm, is not an indispensable factor of rhythm. What is commonly called the rhythmical 'accent' (ictus, stress) is in many cases simply the result of a mental process of grouping in accordance with certain psychological tendencies or with a clue furnished in one or more of various ways. 3. Rhythm is not necessarily dependent on the actual duration of the sounds themselves." Hence, when three years later Bennett published his articles on "What was Ictus in Latin Prosody?" (*A.J.P.* xix [1898], 361–383) and "Rhythmic Accent in Ancient Verse. A Reply" (*A.J.P.* xx [1899], 412–28), I confess that I felt the greatest sympathy with his insistence, for Greek and Latin, on the paramount importance of quantity, but Bennett had failed to heed my warning (§ 3) against quantitative zealousy, and it remained for Professor Hendrickson (*A.J.P.* xx [1899], 198–210 and especially 429–434) once more to take up the cudgels for saner views. The

6 "There is no evidence for an ictus in Greek poetry," says White, *l.c.*, p. xxii. And again (p. xxiii), "in Greek there is no evidence for any such phenomenon, no historic proof that the Greek poets distinguished the thesis from the arsis by variation of stress." Compare also pp. 9 f.: "But this assumption of an ictus in Greek poetry is unsupported by ancient evidence. Aristoxenus and Aristides recognize the division of the foot into arsis and thesis, accompanied respectively by up-beat and down-beat of hand or foot, but neither of them, nor any other ancient authority, even intimates that the thesis was stressed. . . . The inference seems inevitable, whatever our prepossessions may be, that in Greek verse the thesis was not distinguished from the arsis by variation of stress."
fact of the matter is that, in aesthetic rhythm, grouping and the perception of grouping are everything. To mark this grouping, or to bring it home to consciousness, it is sometimes necessary to resort to external means: designation of the time, bar, physical or mental stress, counting, beating, stepping, etc. If, as is conceded by both Bennett and White, "there is plenty of evidence that the Greeks (and Romans) beat time with hand or foot" (White, l. c., p. xxiv), I, for my part, am unwilling to believe that these people were so slow of wit as not to substitute at times for hand or foot the more convenient pitchless or mental stress. At any rate, I crave permission, when I am writing about Greek or Latin rhythm, to make use of the period under a syllable to indicate that I consider it the first syllable of a rhythmical group; and when I am speaking about rhythm, I beg to be allowed to retain the name 'ictus' as a convenient substitute for the lumbering, and perhaps ambiguous, term 'rhythmical beat' or 'rhythmical accent.' But, though I am unwilling to make a bogey of so innocent and useful a piece of philological outfit as the term 'ictus', I cannot too strongly insist that such processes as the mere application of a blow, or the bestowal of the modicum of quantity that usually accompanies an English, German, or Modern Greek stressed syllable, or the intrusion of the pitch that is characteristic of the average English, German, or Modern Greek stress, do not satisfy the demands of the Greek ictus-bearing but accentless long; and that the intrusion of the customary English or German quantity or pitch on an ictus-bearing but accentless short, results in gross distortion.

What, then, is Greek quantity? Everybody knows that, in Greek, a long syllable has normally the time of two short syllables, but few students of Greek observe this rule in their reading practice. The dactyl (\( \text{ḍṛṛṛ} \)) is generally pronounced as a tribrach (\( \text{ṝṝṝ} \)), or as a prancing dactyl (\( \text{ṝṛṝ} \)) — the so-called cyclic dactyl of Schmidt and others. For the real appreciation of Greek rhythm, it is necessary to be able to pronounce the long syllable twice as long as the short. The attainment of this ability is, of course, difficult, but the difficulty may be overcome by practice. Indeed, the problem of Greek quantity would be very simple if one had always to follow the rule that a long is the equivalent of two shorts. There are many pitfalls, however. Almost every tragic or comic trimeter shows the substitution of a spondee for an iambus in at least one of the odd feet. Many lines have spondees in all three odd feet, as, for example, the opening line of the Medea of Euripides:

\[ \text{eīθ' ὑφελ' Ἀργοὺς μὴ διαπτῶσθαι σκάφος.} \]

What is the relative duration of the syllables \( \text{eī-} \), \( \text{-γοῦς} \), and \( \text{-τάς-} \)? Various answers have been given to this question, and bitter controversies have been waged with reference to it. According to Hermann, not even Apollo himself could have reproduced the rhythm of the trochaic dipody \( \ominus \) in accordance with Boeckh’s measurement, 2. i. 1\( \text{¶} \). 1\( \text{¶} \), “ciui rite exsequandae ipse Apollo impar sit” (Hermann, Opusc. ii, p. 114). White (l. c., § 15), following Aristoxenus, calls the long that replaces the short of an iambus an irrational (\( \text{ἄλογος} \)) long, which “is not an exact multiple of the primary time, as is the normal long, but while greater than the \( \text{χρόνος πρῶτος} \) is less than the \( \text{χρόνος διανήμος} \).” I read iambic verse with anacrusis, and my solution of the quantitative difficulties

8 For some of these answers see White, l. c., § 16.
9 Unfortunately, the ancients seem to have known nothing about anacrusis though they must have read many of their verses with anacrusis. If White had not resolutely set his face against anacrusis (§ 29), his chapters on the iambic trimeter, excellent as they are, would have been even more valuable.
of the above verse is as follows: 1 1/2 | 2. 1. 1 1/2 | 2. 1. 1 1/2 | 2. 1. 1 1/2. The irrational long is found also in the iambic dimeter and tetrameter, in the trochaic dimeter and tetrameter, and in some other forms of verse. There are also “protracted theses, displaying a long syllable longer than the normal long, in trisemes and tetrasemes” (White, l.c., p. xxv). Short syllables, too, may be affected. By employing the solution proposed for Medea, the value of each short in κατεπάδων (Ar. Equ. 25) and ἄγαθον (85) is ascertained to be 1/2, and the values of the shorts of διαβόλαις (7) are computed as 1, 1/4, and 1/4 respectively. In παραθώ (52), Παφλαγῶν (54), κεκιρσται (54), etc., the two shorts take the place of the single short of the iambus, and, according to White, each has the value 1/2. For other details, the sections of White listed in the Index under the captions Irrationality and Protraction may be consulted.

The question now arises how the value of a syllable is to be determined when the word to which it belongs stands by itself, or is used in prose. Before trying to answer this question, I may be permitted once more briefly to discuss the relation of the language of every day to that of verse. As early as 1884 (J.H.U. Circular, July, 1884, p. 125), I laid down the postulate that the versification of a language must accord with the nature of that language. In 1902, in Studies in Honor of Basil Lanneau Gildersleeve, pp. 497-511, I enlarged upon this postulate. I called attention (pp. 497 f.) to the pernicious doctrine of Westphal — echoes of it are heard elsewhere too — that the placing of the rhythmical icus upon one syllable rather than upon another is, so far at least as Greek poetry is concerned, solely the act of the poet, who in this respect exercises full discretionary powers in the use of his linguistic material.10

10 Westphal, Griechische Metrik (1868), p. 2: “Die Setzung des rhythmischen Ictus auf die eine oder die andere Silbe ist wenigstens für die griechische Poesie lediglich die That des Dichters in seiner Eigenschaft als Rhythmopoios, der in dieser Beziehung gänzlich frei über das sprachliche Material gebietet.”
view, showed the probable origin of the opposite view, and discussed some current misapprehensions concerning the relation of quantity to stress. It may seem strange to harp on this theme when all students of Greek prose rhythm have tacitly assented to the postulate;\(^1\) when Bennett\(^2\) has accepted, and Lindsay\(^3\) virtually demonstrated, it for Latin, and Goodell\(^4\) and Wilamowitz-Moellendorff\(^5\) have adopted it for Greek; and when, even so long ago as 1871, Brücke\(^6\) claimed that the correctness of a verse increased as the necessity for deviation from the prose pronunciation diminished. But the postulate is of extreme importance, because, if it is valid, the rhythmical pronunciation of prose may be reconstructed.

\(^1\) I am glad to note that in a recent work on the subject of prose rhythm (A. W. De Groot, *Der antike Prosarhythmus*, Groningen, 1921), the author states (p. 11) that to appreciate the significance of the rhythm of prose a modern must bear in mind two things: (1) That metric, by which the author understands the arrangement of long and short syllables, is *terra incognita* to us moderns, whereas in ancient poetry and prose metrical laws are observed to the point of rigor. (2) That ancient literature, by virtue of its origin and nature, is "*acroatic."

\(^2\) A. J. P. xx (1899), 413: "The poet simply takes the choicer elements of familiar speech, uses them in their ordinary value and equivalence, and so arranges them that the rhythmical scheme to which they are intended to conform is immediately obvious to any one who can correctly pronounce the words as ordinarily uttered. At least, this is true of all languages of which I have ever heard, and poetry of any other nature is to me unthinkable."

\(^3\) Lindsay's *Early Latin Verse* (Oxford: Clarendon Press, 1922) is really a continuous demonstration of my postulate.

\(^4\) *Chapters on Greek Metric* (1901), pp. 19 f.

\(^5\) *Griechische Verskunst*, p. 25: "Metrik gibt es nicht ohne Verse, Verse nur in einer gegebenen Sprache, und diese bedingt das Schaffen des Dichters, der in ihr Verse macht. Schöpferisch wird derjenige werden, dem es gelingt Verse zu machen, die seiner Sprache so gemäss sind, dass andere sich an sein Vorbild halten, in allem was wir Stil nennen, nicht nur im Versmasse, denn alles wird zusammen geschaffen." P. 26: "Eine Metrik kann eigentlich nur so lange bestehen, wie die Sprache ihr dasselbe Material bietet. Sie besteht aber infolge des historischen Trägheitsgesetzes häufig länger, was zu manchen Kompromissen führt. Endlich kommt doch der Tag, wo ein neuer Schöpfer auftritt und den nun gegebenen Bedingungen der Sprache gemäss neue Versformen findet, einerlei wo er ankniipft, vielleicht eher an die Kunstprosa, die sich niemals ganz von der gesprochenen Rede entfernen kann." (The italics are not used in the original.)

\(^6\) *Physiologische Grundlagen der neuhochdeutschen Verskunst*, p. 1.
on the basis of our knowledge of the pronunciation of poetry. When I say *rhythmic*, I am not thinking of that perverted use of the term which is used to characterize the Greek and Roman prose of a later period when the classic laws of quantity broke down, accent became a dominant factor, and a certain amount of syllable-counting was indulged in. Nor am I thinking primarily of highly elaborate, artistic prose, but I have in mind prose as distinguished from poetry — prose in general. Every language has a principle of its own, which is revealed by the peculiar manner in which it rhythmizes its syllabic material. It is a mistake to suppose that the so-called long and short syllables of poetry received in prose only the natural amount of time it would take to utter the respective combinations of sounds. Such words as *donna* and *bella* have a noticeably longer sound in the Italian mouth than in the German or English. The suffix -ment is shorter in English than the corresponding suffixes in French and Italian. The syllables of words like *conversation* and *constitution* have varying relative values according as they are pronounced by the English, the French, or the Germans: \(1\frac{1}{2} \ 2 \ 1 \ \frac{1}{2}\) (Fr.); \(2 \ 1 \ \frac{1}{2} \ \frac{3}{2}\) (Eng.); \(1\frac{1}{2} \ 2 \ 1 \ 2\) (Ger.). There may be a difference of opinion as to these values, but there can be no doubt about the varying ictus: *conversation* (Eng.), *conversation* (Fr.), *Konversation* (Ger.). Compare French *réflexion*, English *reflection*; French *irrésistible*, English *irresistible*. Examples of similar variations in value of the same syllable as employed in different languages might be multiplied indefinitely, but the foregoing must suffice. It is plain that the Greek syllable had a quantity of its own, and that its prose values must be determined from its rhythmic use in poetry.

In a well-known passage of the *Poetics*, Aristotle tells us that of all the meters the iambic was best adapted to ordinary speech, and adds, by way of proof, that, though iambic measure was frequently employed in conversation, rare use was made of the hexameter and only when the conversational tone was
dropped.\textsuperscript{17} In the \textit{Rhetoric}, he expresses himself to the same effect: “The tragic poets gave up the tetrameter for the iambic trimeter because the latter is more like conversation than any other meter.”\textsuperscript{18} And again: “The heroic rhythm is dignified but lacks the tone of ordinary conversation, whereas the iamb is the very language of the people, and hence, in conversation, is used more frequently than any other meter.”\textsuperscript{19} Aristotle is a pretty safe guide, and if we wish to know how the masses spoke, we must study the iambic trimeter, particularly that of the comic poets. As a matter of fact, I wrote out the scansion of an entire play of Aristophanes, and carefully studied all the other plays of that author.\textsuperscript{20} But, in this paper, I shall have to limit myself to the analysis of a few verses and the citation of references to others in order to bring out the most important rhythmical principles that underlie the trimeter.

Aristophanes, \textit{Equites}, 1–9

\textbf{\textit{ΔΗΜ.}} Η\textit{απαταταιάξ τῶν κακῶν, ιαπαταῖ.}

\textbf{2} κακῶς Παφλαγόνα τῶν νεώντων κακῶν

\textbf{3} αὐταῖσι βουλαίας ἀπολέσειαι οἴ θεοί.

\textbf{4} ἐξ οὐ γὰρ εἰσήρθησαν εἰς τὴν οἰκίαν

\textbf{5} πληγάς ἀεὶ προστρίβεται τοῖς οἰκέταις.

\textbf{\textit{ΝΙΚ.}} κάκιστα δὴθ' οὕτως γε πρῶτος Παφλαγόνων

\textbf{7} αὐταίς διαβολαῖς. \textbf{\textit{ΔΗΜ.}} ὁ κακὸδαίμον, πῶς ἔχεις;

\textsuperscript{17} \textit{Poet.} IV. 14 (1449 a 24–28): μάλιστα γὰρ λεκτικὸν τῶν μέτρων τῷ λαμβεῖον ἐστὶν· σημεῖον δὲ τοῦτον· πλείστα γὰρ λαμβεῖα λέγομεν ἐν τῇ διαλέκτῳ τῇ πρὸς ἀλλήλους, ἔξαμενα δὲ διαλέγει καὶ ἐκβαίνοντες τῆς λεκτικῆς ἀρμονίας.

\textsuperscript{18} \textit{Rhet.} III. 1 (1404 a 30–32): ἐκ τῶν τετραμέτρων εἰς τὸ λαμβεῖον μετέβησαν διὰ τὸ τῷ λόγῳ τοῦτο τῶν μέτρων ὑμισθατόν εἶναι τῶν ἄλλων.

\textsuperscript{19} \textit{Rhet.} III. 8 (1408 b 32–35): τῶν δὲ ῥυθμῶν δὲ μὲν ἡρῴος σημεῖος ἀλλὰ λεκτικῆς ἀρμονίας δηλώμενος, δ’ ἦς λαμβανεῖ ἐστὶν ἡ λέξις ἡ τῶν πολλῶν· διὸ μάλιστα πάντως τῶν μέτρων λαμβεῖα φθέγγονται λέγοντες.

\textsuperscript{20} Compare my “Lyric and Non-Lyric in Aristophanes”, \textit{J.H.U. Circular}, August, 1883, p. 142.
NIK. κακῶς καθάπερ σύ. ΔΗΜ. δεύρω δὴ πρόσελθ᾽ ίνα
9 ευναυλιάν κλαύσωμεν Οὐλύμπου νόμον.

The article may have the iactus, as in lines 1, 2, and 3, or not, as in lines 4 and 5. Prepositions may have the iactus (εἰς, line 4), or not (ἐξ, line 4). Some words have more than one iactus: two words in 1, 4, 5, and 9; one word in 2, 3, 6. A spondaic word may have the iactus on the first syllable (3, 6), or on the second (5, 6, 7). By way of passing, it may be noted that every one of the above verses shows at least one divergence of iactus and accent; lines 3 and 4 show two; 6, 7, and 8, three; and in 9 all four words show divergence. It is important to notice that a syllable bearing the circumflex may be irrational (βουλαῖς, 3; οὖτίς ἑν, 5; διαβολαίς, 7), and that it may be subordinated even to two shorts, as in διαβολαίς just cited.21 The same word may have the iactus now on one syllable, now on another: βούλει, Νεβ. 636; βούλει, ἴβ. 1106; διαβολάς, Ἑκ. 491; διαβολαίς, ἴβ. 7; ἄποδος and ἄπόδος, Σωφ. Φῆ. 932 (cited by Vendryes, l. c.); ἵκετεύω, Θησ. 751; ἵκετεύω, ἴβ. 1002. A word with a short final syllable ending in a consonant will always present at least two rhythmical forms, because the final syllable is long when followed by a word beginning with a consonant. So χορίς is ὅο in Θησ. 13. but ὅο in Θησ. 11. δοῦλον presents three forms: ὅο Ἑκ. 44; ὅο, Ραν. 190; ὅο, Πλιτ. 2.

It is hardly necessary to dwell on the fact that the consideration of the logical relations of the elements of the sentence had little, if anything, to do with the determination of the rhythm, and, of course, did not affect the quantity of the syllables. It is, however, very important to note, in the case of the individual word, an instability of rhythm that is foreign to English and German. True, there is a certain amount of shifting even in these languages. English examples will occur to everyone, and there is an interesting and valuable

21 In iambic and trochaic verse, the latter condition can arise only in the combination ὅο ὅο ὅο (rarely ὅο ὅο). See also p. 184.
discussion by P. Fijn van Draat ("Rhythm in English Prose", Anglistische Forschungen, Heft 29, Heidelberg, 1910) on some of the less obvious phenomena. For German, Curme's Grammar of the German Language (New York. Macmillan, 1922), §§ 44–52, may conveniently be consulted. But it is to French that we are indebted for more copious parallels. This language is characterized by an extraordinary amount of mobile rhythm. To satisfy oneself of this, one has only to read a few pages of French poetry. In the first few scenes of Corneille's Le Cid, for example, one finds espoir (Act i, sc. 1, l. 9) and espoir (i, 1, 48; 2, 50; 77); discours (i, 4, 61), discours (i, 1, 10; 40); amour (i, 2, 15; 50; 59), amour (i, 1, 11; 2, 6; 23; 65); amant (i, 2, 24), amans (i, 1, 16; 3, 7); respect (i, 1, 21), respect (i, 2, 28); attend (i, 2, 2; cf. i, 3, 1), attend (i, 1, 20); diroit and diroit (i, 2, 31); souvenir (i, 2, 32), souvenir (i, 2, 33); aujourd'hui (i, 2, 49), aujourd'hui (i, 2, 2); avec (i, 2, 50), avec (i, 2, 48; 68); malgré (i, 2, 52), malgré (i, 2, 81); jamais (i, 4, 18), jamais (i, 2, 53); esprit (i, 2, 61), esprits (i, 2, 73); tourment (i, 2, 55), tourmens (i, 3, 8); faveur (i, 4, 12), faveur (i, 4, 1); honneur (i, 4, 15; 71), honneur (i, 4, 4; 73); lauriers and lauriers (i, 4, 52); etc. One hears similar variations in the ordinary prose utterance of the native Frenchman. Compare Michaelis-Passy, Dictionnaire phonétique de la langue française (Hannover and Berlin, 1914), p. xxiii: "Dans les phrases, l'accent normal est souvent déplacé. Il y a des déplacements emphatiques et rythmiques. . . . Le déplacement de l'accent est essentiel à une bonne prononciation du français." There is no occasion, then, to balk at the marvelous rhythmical elasticity of the Greek language. We must assume for prose the shifts of ictus and the readjustments of syllabic values that are found in poetry, and the rhythmical processes employed in the iambic trimeter must be our chief guide in the reconstruction of the rhythmical pronunciation of prose.

Firmly convinced of the soundness of this method of procedure, I started work on Thucydides. I marked page after
page of this author with periods under the syllables that were supposed to have the ictus. After covering a large portion of Thucydides in this way, I discovered the following laws of Greek rhythm:

1. A long syllable either preceding or following a single short syllable or two (not more) short syllables, must have the ictus.

2. An ictus-lacking long syllable either preceding or following an ictus-bearing long is irrational; and, conversely, —

3. A long syllable either preceding or following an irrational long has the ictus.

These laws may be summed up in the following general law:

A long syllable either preceding or following a single short, an irrational long, or two (not more) short syllables, must have the ictus.

With the exception of the third law, which is however comprised in the general law, these laws were incorporated in a paper which was read before the Johns Hopkins University Philological Association, and they were published in an abstract of that paper in the Johns Hopkins University Circular, July, 1884, pp. 125 ff. From that time to the present, these laws have been applied by me in practice, and their theoretical and practical importance has been pointed out to all my students.

The first of the foregoing laws is the fundamental law of Greek rhythm. It covers, in a single sentence, the normal forms of every kind of rhythm, and, with a knowledge of the principle of the irrational long and the replacement of a long by two shorts, will enable one to handle even the abnormal forms. It at once determines the pronunciation of the following types of words:

ἡδύ, χαίρε, βίζα (−∞); φίλοις, φιλεῖς, πατήρ (−∞); λείψανα, χαρία, ἀρχικά (−∞); θάλαττα, φιλούσα, ἰφάντα (voc.), ἀργά (−∞); λέγεται, μελέτη, μελέτω, ποταμοῦς (−∞−∞); ἄνθρωπε, ἄλλακτα (voc.), τιμώσα, οἰκοῦντα, τιμητά (−∞−∞);
kāthetai, políthēs, poliítai, ērasthēs, ērastou (Ὄ――); fainetai, 
ēmēra, eirēthēs, eirētou (―――); and of many quadrisyllabic 
and other words, e.g., xynanlían (――――), prōstrībetai 
(――――), ἑξάποισθε (――――), prōsβiβάζεισ (――――), ἐπαρθ-
ηκε (――――), ἐκδικάσασ (――――), κεχάριστα (――――), 
νέωντα (――――), αὐτομολόμεν (――――), Θεμιστοκλέους 
(――――), κοσκυλματίως (――――), μεμακκοακότα (――――), 
διαπράττουσι (――――), εὐδαιμονοῦσι (――――), 
βουλευματίων (――――), κακοδαίμονα (――――), etc.

Rule i seems to be violated by the occurrence in anapaest 
verse of the groups Ὄ―― and Ὄ―. The real ictus relations 
here are Ὄ―― and Ὄ―, so that, in spite of the fact that the 
first of the two shorts bears the ictus, the ictus of the long is not 
thereby impaired. The exception is, therefore, more apparent 
than real. In the next place, anapaestic rhythm is really a 
march rhythm, and does not belong to the language of 
conversation, and the rising dactyl (―――) and the descending 
anapaest (―――) are even more remote from the everyday 
sphere. Hence the comparative infrequency of dactylic 
words with inverted ictus (δηλατε, Equ. 1330) and the 
scarcity of anapaestic words like ὅτι (Equ. 780) in anapaest 
verse. In the 8835 trimeters of Aristophanes, only 44 
instances of dactylic words of the type Ὄ― (e.g. ξύλαβε, 
Equ. 1212) are found, and 33 of these occur in the first foot 
(White, op. cit., § 110). Anapaestic words of the type Ὄ―― 
are very frequent in the comic trimeter (e.g. παραθώ, Equ. 
52), but those of the type Ὄ― (e.g. ἀγαθοῦ, Equ. 85) are 
limited to the combination ᾼ――― and ᾼ― (rarely ᾼ――). 

Rule i, of course, is not applicable to groups or words of 
shifting rhythm, of which the following are types: τοῖχοι, τού-
tous, τιμῶ, τιμῆ (――); λειπονται, περιδίμαι, ἀνθρώπους, οἰκο-
νεῖν, πειρατῆς (―――); προσγίγονται, τιμωρεῖται, τιμω-
ρεῖσθω, συμφοιντοῦ, συμφοιντητῆς (―――); λέγε, βραχῦ 
(――); πέταλα, ἵκετα (voc.), ὄχυρα (――――); λεγόμενα, λευ-
μένα, διαβατά (――――); φαινόμενα, δημοβόρε, παμβεβλυρέ 
(――――); ἀνέχομαι, περιέχει, διαβαλῶ, διαβαλῶν (――――).
These and other words and syllable-groups comprising or containing successions of longs or shorts or both had a variable pronunciation in connected discourse, but, when pronounced by themselves, they may have had a preferential rhythm. A careful study of their linguistic and rhythmic history would serve to throw light on this phase of the problem. There can, of course, be no doubt that ꞏ v v ꞏ was much more common than ꞏ v ꞏ ꞏ. The great partiality of the tribrach word for the ictus on the first syllable would seem to indicate that there was a similar partiality in prose. In the case of molossic words, the preponderance of the grouping ꞏ r ꞏ ꞏ as compared with ꞏ r ꞏ ꞏ would seem to establish a presumption in favor of the pronunciation ꞏ r ꞏ ꞏ. The extensive use of the first paean, its apparent use as a substitute for the ditrochee (White, l. c., §§ 228 f.), the frequent use of the group ꞏ v ꞏ ꞏ ꞏ ꞏ ꞏ in the iambic trimeter, all show that, even in everyday life, a secondary ictus on the penult of words like δημοβόρε and παμβδελυφε gave no offence to the Greek ear.

22 In Latin it is a rule. See Lindsay, Early Latin Verse, II, §§ 8, 58.
23 In the trimeters of the Equites there are, according to my count, about 39 instances of words of the type ꞏ r ꞏ ꞏ, and only 13 of the type ꞏ r ꞏ ꞏ. Of the 13, three are trisyllables by elision — which makes a difference. According to White, l. c., § 101, there are only 229 tribrach words of the form ꞏ r ꞏ ꞏ in all the 8835 trimeters of Aristophanes. The 728 complete trimeters of the Calro papyrus, according to White, § 152, yield only 16 ꞏ r ꞏ ꞏ words for Menander, and eleven of these are found in the first foot. Lindsay, l. c., p. 106, ll. 4 f., requires modification.
24 A rapid count of the molossic words in the first book of the Iliad shows 75 examples of the form ꞏ r ꞏ ꞏ (exclusive of the patronymics) and only two of the form ꞏ r ꞏ ꞏ. At my suggestion, Dr. Lawrence H. Baker, three years ago, made a study of the rhythmical accent of the antibacchici, bacchici, molossic, paemonic, and spondaic words in Aristophanes. The results of this investigation were submitted in the form of a doctoral dissertation, which, unfortunately, has not yet been published. From the type-written copy in the Library of the Johns Hopkins University, I gather the following facts with reference to the molossic words in Aristophanes. In iambic and trochaic verse there are 524 molossic words, which, of course, are all of the type ꞏ r ꞏ ꞏ. The other form would not fit the verse. In anapaestic verse, however, there are 330 instances of the type ꞏ r ꞏ ꞏ and only 101 of the type ꞏ r ꞏ ꞏ.
25 Dr. L. H. Baker, l. c., states that in the iambic and trochaic verse of
ictus on the second syllable of spondaic words serves as an indication of what was the first choice of his Athenian audience. But in all these things one must proceed with great caution.

Attempts had been made by others, before the publication of my laws, to establish for Greek words an ictus apart from the written accent. Hilberg, *Princip der Silbenwagung* (Vienna, 1879), accepts the view of Hadley (l. c.) that the Greek written accent was meant to designate pitch, but he advances the theory that in addition to the pitch accent every polysyllabic word had also a stress accent and that the place of this stress accent was governed by the Latin rules for word-accent. The theory is based on false reasoning. It conflicts with the results that have been gained for words of the types ict., ict-ict., -ict-ict, -ict-ict, ict-ict-ict., etc.

In 1882, Hanssen (*Rh. Mus.* xxxvii, 252 ff.) stated that it was probable that the Greek word had a definite place for its center of gravity, i.e. ictus, and that this ictus of prose speech was analogous to the metrical ictuses of verse. He formulated the following rule (p. 253) for the place of the ictus: “If the ultima is long, it has the ictus; if the ultima is short, the penult has the ictus.” But, be it noted that, of the words with long ultima, only those whose ultima is preceded by one or two short syllables require an ictus on the ultima; and that polysyllables of spondaic ending with one or two shorts preceding the penult must have the ictus on the penult. Of the words that have a short ultima, tribrach words prefer the ictus on the antepenult; words of tribrach ending do not require

Aristophanes, 275 words are used as first paeons, of which 161 have the form ict., 114 the form ict-ict.

26 For spondaic words, Dr. Baker, l. c., gives the following statistics. In iambic and trochaic verse, there are 3861 instances of the type ict-, 2504 of the type ict-ict; in anapaestic verse, 1723 of the type ict-, 159 of the type ict-ict. 27 P. 252: “Und wirklich ist es von vorn herein wahrscheinlich, dass das griechische Wort an bestimmter Stelle seinen Schwerpunkt d. h. einen ictus gehabt habe, der in der prosaischen Rede ein Analogon bildete zu den metrischen Icten im Vers.”
the ictus on the penult; and dactylic words and words of
dactylic ending normally receive the ictus on the antepenult.
A few words may yet be allowed for a magnificent work that
was published long after my laws of Greek rhythm. In 1910,
Zander issued the first volume of his Eurythmia vel Compositio
rythmica prosae antiquae (Vol. i, Eurythmia Demosithenis,
Leipzig: Otto Harrassowitz). His aim was more ambitious
than mine. My humble endeavor was to facilitate the reading
and the appreciation of Greek verse by laying the foundation
for a more correct pronunciation of Greek prose. Zander's
aim was to rear a beautiful superstructure of the rhythm of
artistic prose. Like so many others before him, he built too
much in the air. He seems not to have known my laws, yet
follows the principle that the rhythm of prose is based on
that of poetry. But inadequacy of method together with
a strong bias for respondent rhythmical tags has caused
him in many places to admit abnormal scansions. A re-
markable specimen of such scansion is found on page 80
(cf. p. 441), where Zander would read πρότερον παρακρούομενος
μέγας ηὐξῆθη (Dem. 2, 5). He was probably led to scan
thus by his belief (p. 469) that, if a colon ends in a spondaic
or molossic word, or word with spondaic or molossic ending,
such word has the ictus on the penult. This view is partly
based on what he considered the proper scansion of choliambic
verse. But his argument on that score is inconclusive, and
he fails to bear in mind that in iambic and trochaic verse, the
falling anapaest occurs only in the combination ωυουουου
υυου(ουου); and that, in anapaestic verse, a colon like ἀλλ' ὀλολύξατε φαινομέναισιν (Ar. Equ. 1327), with its three falling
anapaests, is after all totally different from the above decapitated
phrase. Let the head be restored, and the dactylic rhythm at once becomes apparent: (ιδεῖν ὅτι πάντα διεξελή-
λυθεν) οἷς πρότερον παρακρούομενος μέγας ηὐξῆθη.
It yet remains to present the analyses of several passages of
connected prose to serve as illustrations of the application
of our laws of rhythm. Let us start with a specimen of Thu-
cydidean narrative; for A. W. De Groot, Handbook of Antique Prose-Rhythm, 1 (Groningen: J. B. Wolters, 1918), p. 24, claims to have shown that the non-rhetorical portions of Thucydides furnish "an example of artless and natural ordinary prose, i.e. not with regard to his style, his sentence construction, his syntax, but with regard to his metre, i.e. the arrangement of long and short syllables." Thuc. ii, 2, 2 has been selected wholly at random:

\[\text{έπηγάγοντο \ δὲ καὶ \ ἀνέφεραν \ τὰς \ πύλας \ Πλαταιῶν \ ἀνδρεῖς,} \]

\[\text{Ναυκλείδης \ τε \ καὶ \ οἱ \ μετ' \ αὐτοῦ, \ βουλόμενοι \ ἴδιας \ ἕνεκα \ δυνά-} \]

\[\text{μεως \ ἀνδρας \ τε \ τῶν \ πολιτῶν \ τοὺς \ σφίσιν \ ὑπεναντίους \ διαφθείραι} \]

\[\text{kai \ τὴν \ πόλιν \ Ἑθαίως \ προσποιήσαι.} \]

The numbers 1, 2, and 3 have been placed under the long syllables to indicate, in each case, which law is operative. A zero has been placed under a syllable to indicate that none of the laws is directly applicable. For example, in the case of Πλαταιῶν ἀνδρεῖς (\(\nu\nu\nu\nu\)), -\(\tau\)\(\alpha\)\(\iota\)\(\iota\) has the iactus by Rule 1; -\(\delta\)\(\nu\) is irrational by Rule 2; -\(\dot{\alpha}n\) receives the iactus by Rule 3; -\(\delta\)\(\rho\)\(\epsilon\)\(\epsilon\) is irrational by Rule 2. There are two cases of accumulation of shorts: ἕνεκα δυνάμε- and σφίσιν ὑπε-. In the latter case, the iambic movement that precedes has established the swing, and the grouping chosen is inevitable. In the former case, five arrangements are possible: (1) ἕνεκα δυνάμε-, (2) ἕνεκα δυνάμε-, (3) ἕνεκα δυνάμε-, (4) ἕνεκα δυνάμε-, (5) ἕνεκα δυνάμε-. The natural pronunciation of ἕνεκα is \(\nu\nu\nu\nu\) (see above, p. 185); that of δυνάμεως is \(\nu\nu\nu\).28 No. 1 yields good rhythm, but produces clash of iactus with ἴδιας. Clash of iactus is common enough, but there is no other example in this passage. It would be intolerable with No. 2. Nos. 3

28 Dr. Baker, l. c., reports that, in the iambic and trochaic verse of Aristophanes, 452 words of the type \(\nu\nu\nu\nu\) are found as compared with 142 of the type \(\nu\nu\nu\nu\).
and 4 are objectionable on account of the ictus on the penult of ἔνεκα. No. 5 with βουλόμενοι ἔδας would constitute a sort of resolved dactylic rhythm, but I am suspicious of it. Upon the whole, then, No. 1 seems preferable. From the point of view of the kind of rhythm, it may be interesting to note that ἐπιγέγοντο ... πύλας is a rude form of iambic trimeter. ἀνδρας ... διαφθείραι is headed by an iambic spondee, ἀνδρας, which is followed by the iambic trimeter τε ... ὑπεναντίοις, to which in turn is appended a choliambic metron, διαφθείραι (to be read "--", not "xxx"). The trimeter is, of course, hidden by the phrasing: ἀνδρας τε τῶν πολιτῶν | τοὺς σφάσιν ὑπεναντίοις | διαφθείραι. Iambic rhythm is chosen again for what follows, καὶ τὴν πολὺν Θη-, and then there is a heavy close of six longs. In the reading of the whole passage, the quantitative relations of the syllables must be brought out in accordance with the directions given above, pp. 9 ff., and the written accent must be scrupulously observed by making the proper variations in the pitch of the voice, as described on pp. 176 ff.

The first section of the funeral speech of Pericles (Thuc. ii, 35) runs as follows (Stahl’s text):

{oil μὲν πολλοῖ τῶν ἐνθάδε εἰρήκατον ἦδη ἐπαινοῦσι τὸν προσ-
θέων Τῶν νόμῳ τῶν λόγων τόνδε, ὡς καλῶν ἐπὶ τοῖς ἐκ τῶν πολέ-
μων θαπτομένων ἀγορεύομεν αὕτων. ἔμοι δὲ ἄρκον ἂν ἑδοκει
εἶναι ἀνδρῶν ἀγαθῶν ἔργῳ γενομένων ἔργῳ καὶ δηλοῦσαι τὸς
tιμᾶς, οἷα καὶ νῦν περὶ τῶν τάφων τόνδε δημοσίᾳ παρασκευα-
σθέων ὀράτε, καὶ μὴ ἐν ἐνὶ ἀνδρὶ πολλῶν ἀρετὰς κυνδυνεύσεσθαι
ἐν τε καὶ χείρον εἰσόντι πιστευθῆναι.
The reading requires little comment. The speech opens with six longs. Since the favorite place for the ictus, in the case of spondaic words, is the second syllable (see above, p. 185 f.), and since Greek is an iambic language, οἰ μὲν πολλοὶ is the natural grouping. ὡς καλὸν ἐπὶ τοῖς carries on the swing of the iamb-o-trochaic rhythm that precedes. Thucydides may have pronounced ἀγορεύεσθαι αὐτὸν (ω-ο-ο-ο), since he had the privilege of shortening -αυ before the αυ- of αὐτόν. In ἄρκον ἂν ἐδόκει, -κοῦν ἂν ἐδό- forms a first paeon, which naturally has a secondary ictus on the syllable ἐ- (cf. above, p. 185), and -κεῖ, which follows the paeon, of course receives the next ictus. The same reasoning holds for ἐργῷ γενομένων, though γενομένων is the more common rhythm, and is possible here. Η ἀνδρῶν . . . γενομένων were followed by a cretic group instead of the molossic ἐργῷ καὶ, there would be a trimeter, and γενομένων would be pronounced ω-ο-ο-. ἐν ἐνὶ, coming between a trochaic spondee and a trochee, has the value of a trochee, and receives the ictus on the first syllable.

The following is a brief selection from Plato (Legg. 898 A). The figures below the scansion may now be dispensed with.

τοῦτων δὴ τοῖν κινήσεων τὴν ἐν ἐνὶ φερομένην ἂεὶ περὶ γέ τι
μέσον ἀνάγκη κινείσθαι, τῶν ἐντόρνων οὐσαν μίμημά τι κύκλων,
ἐναὶ τε αὐτὴν τῇ τοῦ νοῦ περιόδῳ πάντως ὡς δύνατον οἰκειοτάτην
tε καὶ ὁμοίαν.

The opening longs are rhythmized as in the previous selection. The six shorts following the ictus-less long readily fall into two trochaic tribrachs. Of the seven shorts that follow ἂει, the first, following an ictus, is naturally without an ictus; the second receives an ictus, which carries two other shorts with it; the first, again, of the three remaining shorts receives the ictus, and the long that follows is ready for the next ictus. The first paeon, of which there are three examples, has been met before and requires no comment. When three shorts
follow an ictus-lacking long, the first of the shorts properly takes the ictus, as in δυνατών. If there is elision in τε αὐτήν, the rhythm must be altered to εἰναι τ' αὐτήν τῇ τοῦ νοῦ περιόδῳ. At the close, the scansion given of τε καὶ ὄμοιαν (ό̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣̣...
The scansion requires but a few words of comment. The opening words, πρῶτον μὲν, ὡς ἄνδρες Ἀθηναῖοι, are the half of an anapaestic tetrameter. For a longer anapaestic beginning, see the Aristocratea (Dem. 23), and compare Dion. Hal. de Comp., 198 f. R.). Hence, we must read Ἀθηναῖοι, not Ἀθηναῖον, as Norden (Antike Kunstprosa, p. 915) and Zander (Eurythmia, i, p. 310) would have it. As for the cola,—the following remarks apply to the other selections as well—it is not always possible to determine their precise length. Hence, to keep from distracting attention from the more important things, the scansion has been given without reference to such pauses. In general, it may be said that if a long pause is made, the continuity of the rhythm may be broken, and, in that case, a slight rearrangement of the ictus may be necessary, but such a contingency would, in general, affect only two or three syllables, and the general flow of the rhythm would not be seriously altered by the one scansion or the other. For instance, if Demosthenes really made a long pause after πᾶσι καὶ πᾶσαις, as Dionysius would have us believe, he may have resorted to protraction of the syllable πά-, in which case πά-太过, too, would have received the ictus. I object to this scansion because it would yield a complete verse of poetry. Again, if διατελῶ ended the colon, -λῶ would have the main ictus, and the ictus which is now on the syllable -ά- would become a secondary ictus. Furthermore, if παρ’ ὕμων forms a real close, εἰς must have no ictus; etc. As for the beauty and the majesty of the rhythm, the words of Demosthenes speak for themselves. They require praise from neither ancient nor modern critic. ἰχθομένου δ’ ἐργον πρόσωπον χρή θέμεν τηλαγῆς. In the de Corona, if anywhere, the poet’s advice has been heeded.

There exists in Latin a problem similar to that which in the preceding pages has been discussed for Greek. There is in Latin poetry a large amount of divergence of ictus and word-accent, and the ordinary pronunciation of Latin prose is an impediment to the reading of Latin verse. If one agrees with
Professor Roland G. Kent (T.A.P.A. LI, 19–29) and with the French scholars Havet, Meillet, etc., that the Latin word-accent is a pitch accent, or, at any rate, that there is a large element of pitch in it, 29 it is easy to distinguish between the word-accent and the ictus in the reading of Latin poetry. In fact, ever since (in 1883) I learned how to pronounce the Greek acute accent (see above, pp. 170 ff.), I have been following a plan similar to that set forth by Professor Kent (l. c.), and I have been directing my students along the same path. 30

But, if Latin accent was largely a pitch accent, why is one constantly confronted with positive assurances that the Latin word-accent is an expiratory, or stress, accent? 31 Our authorities do not stop to tell us precisely what they mean by a stress accent. Do they mean that such an accent is devoid of pitch? The English, German, and Modern Greek word-accents are usually cited as examples of stress accent, but everyone who knows these languages and has an ear for pitch, is aware of the fact that the word-accent of these languages has a decided admixture of pitch. If the Latin accent were identical with the accent of any of the languages specified, Latin verse, according to the postulate that the rhythm of a language is based upon the nature of that language, would be con-

29 Sturtevant, Pronunciation of Greek and Latin, p. 216: “We must conclude that Latin accent was a pitch accent as well as a stress accent.” In T.A.P.A. LI, 6, the same author argues in favor of an accent in Latin which “combined a considerable variation of pitch with a considerable variation of stress.”

30 In the Proceedings of the American Philological Association, for July, 1895, pp. xxvi–xxx, was published the abstract of a paper entitled “Did Verse-Ictus Destroy Word-Accent in Latin Poetry?” It appears that, in actual practice, the author, Professor William G. Hale, employed a method similar to that of Professor Kent and myself, but Professor Hale erred in regarding his word-accent as solely a stress accent.

31 So Lindsay, l. c., II, § 13: “Our own view is that there is a regard for Accent in all Latin Verse, a result of the Latin accent being a stress-accent, and that this is most in evidence in Dramatic verse, where the tones of conversation are echoed. We do not forget that so eminent Frenchmen as Havet, Meillet, and others deny that the Latin accent was a stress-accent. . . .” Compare § 19: “This shortening (maile, bené, etc.), due to the Latin stress-accent (pace our French friends), is produced only when a short syllable precedes.”
structed in such a manner as to do justice to the properties of the English, German, or Modern Greek accent. But Latin poetry notoriously does not satisfy the conditions of any of these accents. A large portion of Latin verse simply cannot be read according to English, German, or Modern Greek accent. What is the obstacle?

There are in Latin certain so-called long syllables which, under certain circumstances, attract to themselves the rhythmical accent, whether the word-accent falls on these syllables or not. Is this a native characteristic — as I have always believed it to be — or is it exotic? A long chain of facts seems to establish the former view, and for the slight amount of seemingly refractory evidence other explanations must be sought. It is reassuring to note the unequivocal statement of Dr. Sturtevant (T.A.P.A. lii, 8) that "popular Latin preserved clear-cut distinctions of quantity after the introduction of the historic accent on penult and antepenult." If, then, it is agreed that clear-cut distinctions of quantity were really indigenous to Latin, and that the Roman quantitative system was neither a Greek importation nor a gratuitous invention of the Roman poets, it follows, from the very nature of the Latin accentual laws, which are regulated by quantity, that there was a certain amount of divergence of ictus and accent. This divergence was inevitable in the case of iambic words; the Brevis Brevians Law merely reduces the amount of the divergence, but is itself an evidence of the existence of the divergence. In the case of the spondee and the molossus, — to limit ourselves to the most evident types of words

32 Compare also Sturtevant, Pronunciation, p. 216: "Certainly the stress (sc. of the Latin accent) was weaker than in modern English; for otherwise it would have obscured the quantitative distinctions of the unaccented vowels."

33 See J.H.U.C. 1884, p. 126.

34 So, for example, the Plautine accent on the first syllable of quadrisyllabic words like facilius, mulierem, and the like (Sturtevant, l. c., p. 209; Lindsay, l. c. ii, § 18), is perfectly consistent with Cicero’s statement (Or. 58) and with my theory of the existence of a pitch accent apart from the ictus or rhythmical accent: -mu- has the ictus, -li- has the word-accent in the shape of a pitch accent, and -rem has a second rhythmical accent
— so long as a spondee remained a spondee and a molossus a molossus, a certain amount of divergence of ictus and accent was almost inevitable; and, what is more, this divergence had a tendency to maintain the quantity of the non-penultimate syllables. And now, what is the evidence from poetry? There is in Plautus a considerable divergence of ictus and word-accent in the case of iambic, spondaic, and molossic words, not to mention others (see Lindsay, l. c. ii, §§ 6 ff.); the dactylic poets constructed the first four feet of the hexameter “so as to avoid harmony of accent and ictus on spondaic words” (Sturtevant, T.A.P.A. LII, 14); and, in general, “the clash of accent and ictus in the first four feet . . . (of the Latin dactylic hexameter) was not accidental, but was sought after by the poets” (ib 13.). In the light of this evidence, one cannot resist the conclusion that, under certain circumstances, the conflict of ictus and accent must have been entirely unobjectionable to the Romans, and that, instead of there being a conflict of ictus and accent, there was rather an agreeable contrast — a contrast similar to that in which the Greeks fairly reveled, and to that in which the French delight to this day.

But it remains to be shown that in this contrast of word-accent and rhythmical accent pitch played a leading part. Any given syllable is characterized not only by the peculiar sound or sounds of which it is composed, but also by pitch, stress, and duration. What, then, is it in the case of an iambic word that the word-accent imparts to the penult that the ultima has not? By the very terms of the case, it cannot be duration, for, even under the influence of the Brevis Brevians Law, the penult of an iamb remains short. It cannot be stress alone, for the Latin word-accent is admitted to have had a large amount of pitch (see above). It cannot easily have been stress combined with pitch, for the ultima of the iambus has both the rhythmical and the metrical stress, and, hence, either the ultima would take away whatever natural stress might be involved in the word-accent of the penult, or else the employment of specially heavy stress on the penult would
impart an illogical emphasis to the iambic word as compared with the other words of the sentence. It is reasonable, therefore, to conclude that pitch was the predominant element in the word-accent of iambic words. A similar conclusion results, in the case of the rhythmically mobile words, from a study of their transition from one rhythmical form to another: aūro, aūro; commūtānt, commūtānt; fāciant, fāciant; fortunātī, fortunātī; etc. In the case of the divergent forms, what does the word-accent give to the penult that the other syllable or syllables have not? According to the terms of agreement, it must be either pitch alone or pitch and stress combined. In the latter case, a moderate stress would be absorbed by the metrical and rhythmical accent of the other syllable or syllables, whereas a sforzando stress would give an illogical accent to the word as compared with the other words of the sentence; but even so moderate a pitch interval as that of a fifth would clearly differentiate the penult from the other syllable or syllables.

Of course, when, as in the case of the tribrach, the pitch of the word-accent combines with the rhythmical accent, or, as in the case of the trochee, cretic, and dactyl, it combines with both the rhythmical and metrical accents, — under these conditions, the accented syllable may be said to have a stress accent. But, so long as the Latin accent did not entirely usurp the function of the rhythmical accent, it may not be said to have been a stress accent in the sense of the English or the German accent.

To be sure, there is the beginning of such a usurpation. There is, for instance, the promiscuous admission of the spondee to iambic and trochaic verse, which shows the absence of so fine a discrimination in the matter of quantity as was exercised in Greek. There is the constant admission of words and syllable-groups of the form ꞌ>, under conditions that would be prohibitive in Greek. There is “the Roman avoidance of an ictus like facēre, reficēre, conficēre” and the absence from Plautus of a tribrach word or word-ending as an iambic
foot (Lindsay, l. c. II, § 8). There is phrase rhythm and a
tendency to give logical stress a play in rhythm (Lindsay, l. c.,
§§ 8 and 12 D). There is the Brevis Brevians Law, which
shows that the quantity of a syllable may be dominated by
accentual or rhythmical considerations. All these and other
things show the breaking-down of the dominance of fixed laws
of quantity as regulators of rhythm. This brings us to the
second part of our problem, that of the determination of the
place of the ictus in Latin prose.

Even in Greek, with its comparatively rigorous observance
of quantity, there is something more to be done, as we have
seen, than simply to pronounce every long syllable twice as
long as a short; there is a certain tendency to rhythmical
grouping with its resultant process of adjustment of values
that has to be taken into account. In a similar way, Latin
has its own rhythmical tendencies, and the attempt would be
hazardous to pronounce all long and short syllables in exactly
the ratio of two to one. It is the business of him who would
arrive at the proper pronunciation of Roman prose to know
when a so-called long is a long and how these longs and shorts
are to be adjusted in rhythmic sequence. Much of this has
long been known, but about much there has been uncertainty
and ignorance. Thanks to the marvelous exertions of men
like Lindsay, whose latest book is a perfect mine of information
on our subject, scholars are now in a position to begin the
work of reconstructing the rhythmical pronunciation of Roman
prose. I had hoped to illustrate the process of reconstruction
by submitting the analysis of a few specimens of prose, but
space will not permit. I believe, however, that the preceding
pages have made abundantly clear the nature and the im-
portance of the task. When the task is completed, it will no
longer be necessary for our students of Latin, after two or three
years of hard work on grammar and vocabulary, to flounder
about in the attempt to master the elements of versification,
but they will be prepared to enter at once the portals of Roman
poetry and enjoy the rich heritage that there awaits them.
PROCEEDINGS

OF THE

FIFTY-FOURTH ANNUAL MEETING

OF THE

AMERICAN PHILOLOGICAL ASSOCIATION

HELD AT NEW HAVEN, CONN., DECEMBER, 1922

ALSO OF THE TWENTY-FOURTH ANNUAL MEETING

OF THE

Philological Association of the Pacific Coast

HELD AT SAN FRANCISCO, CAL., DECEMBER, 1922

VOLUME LIII

PUBLISHED BY THE ASSOCIATION THROUGH ITS SECRETARY

ADELBERT COLLEGE, CLEVELAND, OHIO
AMERICAN PHILOLOGICAL ASSOCIATION

I. PROGRAMME

WEDNESDAY, DECEMBER 27

FIRST SESSION, 2.30 o’CLOCK P.M.

L. R. SHERO
The Cena in Roman Satire

ALLAN C. JOHNSON
The Edict of Caracalla

J. G. WINTER
Some Fragments of Literary Papyri in the Collection of the University of Michigan (p. 128)

CHARLES R. LANMAN
Sanskrit Aorist Formations, their History and Classification (p. 83)

NICHOLAS MOSELEY
The Repeated Lines of Vergil (p. xx)

J. W. HEWITT
The Gratitude of the Gods (p. xix)

H. W. PRESCOTT
The Distribution of Rôles in Roman Comedy

SAMUEL E. BASSETT
The Prologues of the Iliad and the Odyssey (read by title)

W. W. HYDE
Malevolent Demonology among the Modern Greeks (read by title)

1 Published in Classical Philology, xviii, 126–143.
2 Embodied in a book to be published shortly.
3 Published in Classical Philology, xviii, 23–34.
4 To be published in the American Journal of Philology.
5 To be embodied in a book entitled Greek Religion and its Survivals in the series “Our Debt to Greece and Rome.”
American Philological Association

JOINT SESSION WITH THE ARCHAEOLOGICAL INSTITUTE OF AMERICA
8 o'clock p.m.

Francis Greenleaf Allinson
The Colonization of Greek Poetry: Annual Address of the President of the Association (p. xvi)

Thursday, December 28

Second Session, 9:30 o'clock a.m.

Harold Bennett
On the Meaning of Tollere and Suscipere as Applied to Infants (p. xvii)

Cornelia C. Coulter
The Genealogy of the Gods

Alfred R. Bellinger
Catullus and the Ciris (p. 73)

H. R. Fairclough
The Poems of the Appendix Vergiliana (p. 5)

E. G. Sihler
Strabo of Amaseia, his Personality and his Work

J. Curtiss Austin
The Significant Name in Herondas (p. xvi)

W. G. Hale
Stampini and Pascal upon the Manuscripts of Catullus (p. 103)

R. B. English
Lucretius Foiled by Vergil (read by title)

Gertrude Hirst
Notes on Juvenal, Satires 1. 3. 6. 10 (read by title)

Robert C. Horn
The Subjunctive ἢν in the Papyri (p. xx)

1 Published in the Vassar Medieval Studies, 1923.
THIRD SESSION, 2.30 o'clock P.M.

ALICE F. BRAUNLICH
Against Curtailing Catullus' Passer

EUGENE S. McCARTNEY
Magic and the Weather

LA RUE VAN HOOK
Menander Rhetor and the Art of Rhetorical Perversion

W. A. HEIDEL
Hector and the Iliad

JOHN A. SCOTT
Homer and the Cycle

SAMUEL E. BASSETT
The Three Threads of the Plot of the Iliad (p. 52)

W. A. MERRILL
Some Statistics of the Lucretian Hexameter (read by title)

SECOND JOINT SESSION WITH THE INSTITUTE

8 o'clock P.M.

E. K. RAND
An Evangelary of Tours in the Pierpont Morgan Library

FRIDAY, DECEMBER 29

FOURTH SESSION, 9.30 A.M.

DEAN P. LOCKWOOD
Is the Querolus an Atellana?

C. W. E. MILLER
The Pronunciation of Greek and Latin: a study in
Comparative Rhythm (p. 169)

E. H. STURTEVANT
Syllabification and Syllabic Quantity in Greek and Latin (p. 35)

1 To be published in the American Journal of Philology.
2 To be published in Miscellanea Francesco Ehrle.
R. G. Kent
The Educated Roman and his Accent (p. 63)

Charles Upson Clark
The Roumanian Language and Literature (read by title)

Benjamin Dean Meritt
Inscriptional and Topographical Evidence for the Site of Spartolus and the Southern Boundary of Bottice 1 (read by title)

Evan T. Sage
Hannibal's Route through the Alps (read by title)

R. B. Steele
The Style of Apuleius (read by title)

E. H. Sturtevant
The Etruscan Problem 2 (read by title)

Joint Session with the Institute and the American Historical Association

2.30 o'clock p.m.

General Subject: Papyri

A. G. Laird
The Wisconsin Papyri

Campbell Bonner
A Papyrus Fragment of Dioscurides in the Michigan Collection (p. 142)

A. E. R. Boak
The Record Office of Tebtunis and Cercesuchon Oros (p. xviii)

John R. Knipfing
The Libelli of the Decian Persecution Reexamined

Henry B. Dewing
A Recent Addition to the Princeton Collection, and Notes on a Dialysis of the Fifth Century A.D. (p. 113)

1 To be published in the American Journal of Archaeology.
2 To be published in the Classical Weekly.
II. MINUTES

NEW HAVEN, CONN.

FIRST SESSION

Wednesday afternoon, December 27, 1922.

The Fifty-fourth Annual Meeting was called to order by the President of the Association, Professor Francis Greenleaf Allinson of Brown University, in Osborn Hall, Room A2, Yale University. The session was attended by about 135 people.

The Secretary, Professor Clarence P. Bill of Western Reserve University, reported as follows:

The publication of Volume 52 of the Transactions and Proceedings was delayed until the end of November, partly because some of the material was late in reaching the Secretary, and partly through unusual slowness at the bindery, which was being moved. The volume contains 249 pages, about 80 pages less than the average number in the half-dozen years before the war.

The financial condition of the Association has improved during the year, and its membership has continued to grow substantially. The financial improvement is due not only to the increase in membership, but largely to the contributions of members and to income from the Endowment Fund, now available for the first time. But the resources of the Association, though strengthened, are not yet such as to insure the permanent publication of a volume of satisfactory size. Enlargement and improvement of the volume are still to be provided for, and it is hoped that provision for them can be made through substantial additions to the Endowment Fund and through continued increase in membership.

The condition of the Endowment Fund, which now totals somewhat more than $10,000, will be made clear by the reports of the Endowment Committee and its Treasurer (pp. xv. f.).

The number of members has grown in the last three years from 599 to 867, an increase of 45%. A further increase to 1000 members should be an aim of the immediate future.

The Association has 867 members, distributed as follows:

Regular annual members ........................................... 693
From the Philological Association of the Pacific Coast ...... 59
Life members .......................................................... 93
Relieved from payment of dues because of age and length of membership .................................................. 22

867
The membership record for the past year is as follows:

New members ........................................... 93
Reinstated ................................................ 1
Transferred from the Philological Association of the Pacific Coast . 3
Total gain ................................................ 97

Members lost
   By death ............................................ 4
   By resignation .................................... 10
   Dropped for failure in payment of dues .... 17
   Loss in members from the Philological Association of the Pacific Coast . 5
Total loss .............................................. 36
Total net gain .......................................... 61

The new members elected by the Executive Committee during the year are as follows:

Dr. Charles J. Adamec, Alfred College.
Walter R. Agard, Amherst College.
Prof. A. William Ahl, Thiel College.
Miss Miriam C. Akers, Denison University.
Maurice W. Avery, Harvard University.
Prof. Harold L. Axtell, University of Idaho.
John B. Baldwin, Princeton University.
Hon. Simeon E. Baldwin, New Haven, Conn.
George H. Beal, New York City.
George H. Blake, New Hampshire State College.
Warren E. Blake, Harvard University.
J. P. Blickensderfer, Washington University.
Miss Helen V. Broe, Wellesley College.
Christopher G. Brouzas, Broadax College.
Charles B. Brown, Washington University.
Miss Nita L. Butler, Ann Arbor, Mich.
Miss Mary E. Campbell, Vassar College.
Prof. Charles B. Cannaday, University of West Virginia.
Frederick M. Carey, Harvard University.
Dr. Frank L. Cloud, Philadelphia, Pa.
John K. Colby, Milton Academy, Milton, Mass.
Prof. Ernest E. Dale, University College, Toronto, Can.
Prof. George I. Dale, Washington University.
Milton C. Davis, Harvard University.
Prof. William H. Davis, Louisville, Ky.
Prof. Henry S. Dawson, D'Youville College.
Prof. Walter J. Dech, Albright College.
Prof. Thomas S. Duncan, Washington University.
Alfred P. Dorjahn, Evanston, Ill.
Proceedings for 1922

Charles W. Everett, Washington University.
Prof. John T. Ewing, Alma College.
Prof. William E. Farrar, Macon University.
Maynard D. Follin, Detroit, Mich.
Norman Freudenberger, Southwest Missouri State Teachers College.
Russell M. Geer, Harvard University.
Prof. C. H. Grandgent, Harvard University.
Dr. Clayton M. Hall, Smith College.
F. Russell Hamblin, University of Chicago.
Prof. K. Louise Hartt, Hunter College.
Dr. Alice C. Hunter, Nebraska Wesleyan University.
Vladimir Jelinek, Washington University.
Thornton Jenkins, Malden, Mass.
Dr. Richard Jente, Washington University.
Prof. R. F. Jones, Washington University.
Franklin P. Johnson, American School of Classical Studies, Athens.
M. V. Kern, Princeton University.
Prof. John R. Knipfing, Ohio State University.
Prof. Casper J. Kraemer, Jr., Cornell University.
Franklin B. Krauss, University of Pennsylvania.
Dr. Oswald R. Kuehne, University of Pennsylvania.
Prof. Henry A. Lappin, D'Youville College.
Dr. Robert J. Law, Schuylkill Seminary.
Harry J. Leon, University of Pittsburgh.
Prof. Janet M. MacDonald, Franklin College.
Prof. Donald McFayden, Washington University.
Prof. W. R. Mackenzie, Washington University.
Benjamin D. Meritt, Princeton University.
Miss Elizabeth F. Nammack, Far Rockaway, N. Y.
Prof. Eva M. Newman, Rockford College.
Merle M. Ogders, University of Pennsylvania.
Dr. John R. Oliver, Johns Hopkins University.
Dr. Louis Ottof, Chicago, Ill.
Samuel M. Reed, Brevard, N. C.
Miss Irene C. Ringwood, Vassar College.
C. A. Robinson, Jr., Princeton University.
Miss Myra Rogers, Sophie Newcomb College.
Prof. H. Osborne Ryder, Hamline University.
Prof. Frederick W. Sanford, University of Nebraska.
Alfred C. Schlesinger, Princeton University.
Miss Mary E. Shaneman, Birdsboro, Pa.
Miss Caroline Sheldon, Grinnell College.
Prof. William R. Shepard, Hamilton College.
Miss Elizabeth F. Smiley, Marshall, Mo.
D. D. Smith, Princeton University.
Dr. Gertrude E. Smith, University of Chicago.
William F. Smith, Harvard University.
The following report of the Treasurer was then read:

**RECEIPTS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, December 15, 1921</td>
<td>$2900.94</td>
</tr>
<tr>
<td>Sales of Transactions and reprints</td>
<td>$358.96</td>
</tr>
<tr>
<td>Membership dues, annual</td>
<td>1959.00</td>
</tr>
<tr>
<td>Membership dues, life</td>
<td>50.00</td>
</tr>
<tr>
<td>Initiation fees</td>
<td>413.10</td>
</tr>
<tr>
<td>Contributions</td>
<td>499.58</td>
</tr>
<tr>
<td>Income from Endowment Fund</td>
<td>211.08</td>
</tr>
<tr>
<td>Interest</td>
<td>100.52</td>
</tr>
<tr>
<td>Dividends</td>
<td>6.00</td>
</tr>
<tr>
<td>Philological Association of the Pacific Coast: memberships fees</td>
<td>155.00</td>
</tr>
<tr>
<td>Subscription to the Proceedings of the Classical Association of England and Wales</td>
<td>1.50</td>
</tr>
<tr>
<td>Postage advanced to forward above Proceedings</td>
<td>.44</td>
</tr>
<tr>
<td><strong>Total receipts to December 15, 1922</strong></td>
<td>$3756.08</td>
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**EXPENDITURES**

<table>
<thead>
<tr>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Transactions and Proceedings, (Vol. LII)</td>
<td>$2149.07</td>
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<tr>
<td>Do., Vol. LIII</td>
<td>2196.21</td>
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<tr>
<td>Salary of Secretary and Treasurer</td>
<td>350.00</td>
</tr>
<tr>
<td>Printing and stationery</td>
<td>199.87</td>
</tr>
<tr>
<td>Postage</td>
<td>99.72</td>
</tr>
<tr>
<td>Express</td>
<td>11.32</td>
</tr>
<tr>
<td>Telegrams</td>
<td>5.63</td>
</tr>
</tbody>
</table>
Expenses of Delegate to Conference on Latin as the
International Auxiliary Language ................ $6.48
Do. to meeting of American Classical League .... 13.00
Clerical help ........................................... 195.41
Proceedings of Classical Association of England and
Wales ..................................................... 13.50
Miscellaneous (twine, notary fee) ................. .80

Total expenditures to December 15, 1922 ........ $5,211.01
Balance, December 15, 1922 ....................... 1,446.01
$6,657.02

The reports of the Secretary and Treasurer were duly accepted
and placed on file.

The Chair announced the appointment of the usual committees,
as follows:

To Audit the Treasurer's Accounts: Professors W. P. Woodman
and J. S. Galbraith.

On the Place of the Next Meeting: Professors C. P. Bill,
E. K. Rand, and D. R. Stuart.

On Resolutions: Professors W. A. Heidel, Emily H. Dutton,
H. L. Crosby.

On motion of Professor E. G. Sihler it was

Voted, That the Secretary send a message of felicitation and esteem, on behalf
of the Association, to Professor B. L. Gildersleeve.

The remainder of the session was devoted to the reading of
papers.

JOINT SESSION WITH THE ARCHAEOLOGICAL
INSTITUTE OF AMERICA

Wednesday evening, December 27.

The societies met at 8 P.M. in Osborn Hall, Professor R. V. D.
Magoffin, President of the Institute, presiding. About 230 people
were present.

President James R. Angell of Yale University welcomed the
societies, and Professor Edward Capps of Princeton University
responded.

The President of the Association, Professor Francis Greenleaf
Allinson, delivered the annual address, on the subject The Coloni-
zation of Greek Poetry.
SECOND SESSION

Thursday morning, December 28.

The Association was called to order by Professor E. K. Rand, Vice-President, at 9.30 o’clock in Osborn Hall. The session was entirely devoted to the reading of papers, and was attended by about 125 people.

THIRD SESSION

Thursday afternoon, December 28.

The President called the Association to order at 2.30 P.M. in Osborn Hall. The session was entirely devoted to the reading of papers. About 120 people were present.

SECOND JOINT SESSION WITH THE INSTITUTE

Thursday evening, December 28.

The societies met at 8 P.M. in Osborn Hall, the President of the Association presiding. The session was devoted to the reading of papers. About 275 people were present.

FOURTH SESSION

Friday morning, December 29.

The business meeting of the Association was called to order by the President at 9.30 o’clock in Osborn Hall. About 100 members attended.

The Committee to Audit the Treasurer’s Accounts reported as follows:

We have examined these accounts of the Treasurer for 1921, including the vouchers for bills paid and the statement of account in depository bank, and we find the same correct.

December 29, 1922. (Signed) W. P. Woodman John S. Galbraith Auditors

The report of the Committee was adopted and placed on file.

The Committee on the Place of the Next Meeting, through its Chairman, Professor Bill, recommended that the Association accept the invitation of Princeton University to hold the next meeting on the campus of that institution in conjunction with the Archaeological Institute. The recommendation was adopted.
Proceedings for 1921

The following resolutions, reported by the Committee on Resolutions through Professor Crosby, were then adopted:

Resolved, That we, the members of the American Philological Association, assembled at New Haven for the Fifty-fourth Annual Meeting, express to the President and Corporation of Yale University our most cordial appreciation of their generous welcome to the Association. We acknowledge also a debt of gratitude to Professor C. W. Mendell and to the other members of the Classical Faculty of the University and to their wives for the care and courtesy they have shown in providing for our comfort and pleasure. Nowhere could the Association feel more at home than in the University to which it owes in a considerable measure its origin.

Resolved, That we tender the thanks of the Association to the Graduates Club for the privilege of using its house for the smoker.

Resolved, That we express our appreciation of the kindness of the Faculty Club in opening its house for the social meeting of the women of the Association.

Resolved, That we give our thanks to the Elizabethan Club for its hospitality at the tea and for the opportunity it afforded to inspect its unique collection of books.

Resolved, That we record the Association’s appreciation of the thought and care taken in our behalf by the authorities of the University Library in arranging the interesting exhibition of early printed classical books.

Resolved, That we thank the officers of the American Historical Association for their help in making the arrangements for this meeting.

Resolved, That we express the Association’s appreciation of the devotion of its Secretary, Professor Clarence P. Bill, shown in his constant attention to his exacting duties, in his successful raising of a fund for the Association, and not least in attending this meeting in circumstances which more than justified his remaining at home.

The Association’s Representatives on the Joint Committee on Grammatical Nomenclature, through their Chairman, Professor John C. Kirtland, reported that it has still been impossible completely to finish the work of the Committee. Further explanation was made by Professor W. G. Hale, Chairman of the Committee. The report was adopted and the representation continued.

The Endowment Committee, through its Secretary, Professor C. P. Bill, presented the following report:

Your Committee begs leave to report that the total amount paid into the Endowment Fund is $103,253.85. The Committee greatly regrets that the conditions under which it had to work, particularly the general depression of business in the last two years, have prevented greater progress toward its goal of $25,000. It hopes, however, for further substantial additions to the Fund.

Ten thousand dollars of the Fund has been invested by the Treasurer in first mortgage bonds on real estate in New York City.
The Committee recommends that the following resolution, setting forth the purpose and control of the Fund, be adopted and entered on the records of the Association:

The income of the Fund shall be used to meet the cost of the publications of the Association.

Upon the retirement of the Treasurer of the Endowment Committee, who is ex officio Treasurer of the Fund, the choice of a Treasurer shall be in the hands of the Executive Committee of the Association. The investment of the Fund shall be made by the Treasurer, with the approval of the Executive Committee.

In order to safeguard the future of the Fund, it is hereby provided that in case the Association should dissolve, the management of the Fund shall reside in a Committee of Five, of which one member shall be appointed by the Classical Departments of Harvard, Yale, Columbia, Johns Hopkins, and Chicago Universities respectively; and this Committee shall devote the proceeds of the Fund to a purpose as closely allied to the original one as possible.

On motion duly made and seconded the report was adopted. The following statement, showing the condition of the Endowment Fund, and submitted by Geo. A. Plimpton, Treasurer of the Fund, was presented, in the Treasurer’s absence, by the Secretary:

December 18, 1922.

**Credits**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total amount of the Fund</td>
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</tr>
<tr>
<td>Interest on bank balances, June 29, 1921 to October 1, 1922</td>
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</tr>
<tr>
<td>Interest (June 1) on investment of $8000, six months at 6% less 6% commission</td>
<td>234.00</td>
</tr>
<tr>
<td>Interest (December 1) on $8000, six months at 6% less $4.80 commission</td>
<td>235.20</td>
</tr>
<tr>
<td>Total credits</td>
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</tr>
</tbody>
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**Debits**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange (New York Trust Co.) on deposits, March, 1921 to December 18, 1922</td>
<td>$2.82</td>
</tr>
<tr>
<td>Investment of $8000 by the New York Trust Co. in participation-bond and mortgage, George J. Bascom, 6% (April 25, 1922)</td>
<td>$8000.00</td>
</tr>
<tr>
<td>Accrued interest on this investment, December 1, 1921, to April 25, 1922</td>
<td>192.00</td>
</tr>
<tr>
<td>Check sent C. P. Bill on cost of Vol. 52, Transactions and Proceedings</td>
<td>211.98</td>
</tr>
<tr>
<td>Investment by New York Trust Co. in participation-bond and mortgage, Manida Construction Co. (September 30, 1921) $2000 and accrued interest, $21</td>
<td>2021.00</td>
</tr>
<tr>
<td>Total debits</td>
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<tr>
<td>Balance in the New York Trust Co., December 18, 1922</td>
<td>551.22</td>
</tr>
<tr>
<td></td>
<td>$10979.02</td>
</tr>
</tbody>
</table>
The report was accepted and ordered spread upon the minutes; and it was

*Voted,* That the Secretary be instructed to convey the thanks of the Association to Mr. Plimpton for his service in connection with the Fund.

The Nominating Committee, through its Chairman, Professor Scott, reported as follows:

*President,* Professor Edward Kennard Rand, Harvard University.
*Vice-Presidents,* Professor Samuel Eliot Bassett, University of Vermont.

Professor Gordon Jennings Laing, McGill University.
*Secretary and Treasurer,* Professor Clarence P. Bill, Western Reserve University.
*Executive Committee,* The above-named officers, and
Professor Frank Cole Babbitt, Trinity College.
Dean Roy C. Flickinger, Northwestern University.
Professor Tenney Frank, Johns Hopkins University.
Professor Duane Reed Stuart, Princeton University.
Professor Berthold L. Ullman, State University of Iowa.

*Delegate to the Council of the American Classical League,* Professor Walton Brooks McDaniel, University of Pennsylvania.

The Secretary was instructed to cast the ballot of the Association for the election of these officers.

The President announced the appointment of Professor Walton Brooks McDaniel as a member of the Nominating Committee.

On recommendation of the Executive Committee the following resolutions were adopted:

*Voted,* That the amendment to the Constitution providing for an increase in dues, which was proposed at the last meeting, be laid on the table for another year.

*Voted,* To endorse the protest of the American Library Association against Section 6 of the bill now pending in Congress to amend the copyright law (H. R. 11476).

The President presented an invitation sent by the Classical Association of England and Wales to members of the American Philological Association to attend the coming general meeting of the former association.

Professor H. R. Fairclough, delegate of the Philological Association of the Pacific Coast, presented the following message from that Association:
At the Twenty-fourth Annual Meeting of the Philological Association of the Pacific Coast, recently held in San Francisco, a motion was carried unanimously whereby the speaker was deputed to convey to this, the parent Association, the filial and respectful greetings of her offspring in the far West. We rejoice in your continued activity and in your notable achievements, which are our inspiration and our model, and we trust that the pleasant and harmonious relations now existing between us may always prevail. We salute the American Philological Association with assurance of our genuine esteem and devotion.

It was thereupon

Resolved, That this Association express its thanks for the friendly message sent through Professor Fairclough by the Philological Association of the Pacific Coast; and that it request Professor Fairclough to convey the cordial greetings of his Association to the affiliated organization.

On motion of Professor E. K. Rand it was

Voted, That the President of the Association appoint a Committee on Medieval Latin, with power to enlarge or change its membership.

That at the next meeting of the Association a round table session be held on Medieval Latin subjects provided this session does not interfere with the general programme of the meeting.

The President then appointed the following members of the Committee: Professors B. L. Ullman (Chairman), C. H. Beeson, Cornelia C. Coulter, H. R. Fairclough, K. P. Harrington, G. D. Kellogg, D. P. Lockwood, E. T. Sage.

The following resolutions were introduced by Professor W. A. Oldfather:

Resolved, That the American Philological Association would profoundly regret the suspension of the Thesaurus Linguae Latinae, an enterprise of incomparable value for all phases of classical scholarship, and earnestly hopes that means may be secured in some quarter to insure its completion within the next decade or two.

Resolved, That in case it should be found necessary and feasible for American scholars to cooperate in or to direct further work upon the Thesaurus, the American Philological Association stands ready to assume its share in such cooperation or direction through the appointment of scholars to represent it upon such a cooperating or directing board or committee.

Resolved, That in case a condition such as contemplated should arise, the President of the Association be authorized to make the necessary appointments.

The first of the above resolutions was adopted and the others were referred to the Executive Committee with power.1

1They were later adopted by vote of the Committee, on the understanding that the Association was not thereby committed to any financial obligation.
On motion of Professor John A. Scott the following resolution was adopted:

Resolved, That the American Philological Association felicitate Professor E. G. Sihler on the completion of seventy years, so many of which have been devoted with singular fidelity to the highest ideals of scholarship; and join with its congratulations the hope that he may still live many happy years and that he may often be present in future meetings of our Association to encourage and to inspire our members.

The remainder of the session was devoted to the reading of papers.

JOINT SESSION WITH THE INSTITUTE AND THE AMERICAN HISTORICAL ASSOCIATION

The societies met at 2.30 P. M. in the Lampson Lyceum, the President of the Institute presiding. The entire session was devoted to the reading of papers. About 150 people attended.

The total number of members present at the meeting was 190.
III. ABSTRACTS

1. The Colonization of Greek Poetry (annual address of the President of the Association), by Professor Francis G. Allinson, Brown University.

Greek poetry from Hesiod to Aeschylus was examined to justify the usual generalization that it is full of the salt sea; to indicate the progressive local expansion of its domain; and to hint at its legacy to other times. Specific details were drawn from the recurrence of sea-epithets; from simile and metaphor; from actual descriptions of the sea and sea-business; from the peopling of the sea by myth; and, finally, from the actual numbers of places, islands, and sea-board sites — expanding from the Aegean to the furthest reaches of the Midland Sea. Oceanus, from Homer to Pindar, belongs to the realm of fancy outside the Gates. The mise en scène is set in the Aegean and the Mediterranean.

In the poetry examined personal equations differ. Hesiod and Sappho, for example, are landlubbers; the Homeric Hymns, Archilochus, Alcaeus, Pindar, Aeschylus, etc., are redolent of the sea.

Oceanus intrudes upon the Aegean finally in the Clouds of Aristophanes, who transmits to Shelley the divine ichor.

2. The Significant Name in Herondas, by Professor J. C. Austin, Colgate University.

An investigation of the nomenclature of Herondas the mimographer has yielded the conclusion that, in general, the technical requirement of the significant name (redender Name) is observed. Many names are so employed as to be etymologically appropriate to the individual characters, such as: Gyllis, bawd (<γύλως, 'glutton' or 'traveller,' by-name of Herakles); Battaros, pander (<βατταρίζω; cf. βάταλος: κίναιδος); Lampriskos, schoolmaster (<λαμπρός, suggesting vigorous action with reference to the flogging scene); Kottalos, truant schoolboy (<Αεολ. κόπτω or κοττός, 'die'); Kydilla, maid-servant (<κύδος or κύδος); Gastron, a pot-bellied, gluttonous, lecherous slave; Kerdon, cobbler (<κέρδος as fixed by word-plays, 7, 34, 37, 74); Drimyllos and Pistos, slaves and salesmen (<δριμύς, πιστός); Psylla, Megallis, and Anna, maid-
servants (<ψύλλα, μεγάλη; cf. Hebrew Hannah, Carthaginian Hanno).

Others were chosen for traditional, literary, ethnological, or theological associations, such as: Bitinna, jealous of her paramour (hetaira-name, perhaps <βύα); Pyrrhies ('red-head,' a Northern slave, big, clumsy, stupid); Threissa, maid-servant (ethnicon); Thales, Persian turned Greek; Kynno (<κόνω); Koritto, Myrtale (hetaira-names); Metrice, Metrotimc, Metro (< the magna mater); Kokkale (<κόκκαλος, poma Cybelae).

Many characters other than the dramatis personae bear appropriate names, derived either from the etymological meaning, such as Matakine (Persian name, or possibly <μάρη); Gryilos (<γρυλλίξεων); Mennes, champion boxer (<μένος); Euthies, Kokkalos, and Phillos, teacher's pets ('Frank,' 'Sweet,' and 'Dear'); Batale, daughter of Myttes ('Lisper,' daughter of 'Dumb'); Antidoros, pistor (Headlam: 'Mr. Tit-for-tat'); Euboule who betrays a secret (significant per antiphrasin for the ironical effect); or from literary, proverbial, or theological associations, such as Mandris (<Μανδρος, a god of Asia Minor); Pataikios and Pataikiskos (typical thievish parasite); Myllos or Myellos; Philainion, Myrtale, and Sime (hetaira-names); Daos, clever slave; Batyllis (with bad connotations, as Batale and Battaros); Nossis and Erinna (Crusius: "eine litterarische Bosheit"); Mikion, humble tradesman (<μικρός).

3. On the Meaning of 'tollere' and 'suscipere' as Applied to Infants, by Professor Harold Bennett, Lebanon Valley College.

It is frequently stated that tollere and suscipere, when applied by Latin authors to infants, refer to a Roman practice of laying a newly-born infant on the ground, in order that the father might 'raise' it, and thus signify his acknowledgment of parenthood and his desire to have the child reared. If one seeks ancient authority for this alleged custom, he will find convincing evidence that the Roman child was placed on the ground soon after birth (Ovid, Trist. iv, 3, 46; Plin. N. H. vii, 2; Suet. Aug. 5, Nero, 6), but nowhere any direct assertion that the father was expected to take it up, or any clear information regarding the significance of the
practice. The explanation cited above seems to be a Renaissance conjecture, for it can be traced back to notes by Gronovius on Plautus, *Mil.* 294, and Lambinus on Plautus, *Amph.* 501.

A reexamination of the evidence, however, leads one to doubt the accuracy of this interpretation. Not only can one find passages in which it is the mother who is to 'raise' the child (Plaut. *Truc.* 308; Ter. *Heaut.* 571), but in some cases the action evidently takes place without the father's knowledge or consent (Ter. *Heaut.* 626–627, *Hec.* 576). In no case do we find any such phrase as *tollere ab humo*, nor is there anywhere an instance of *tollere* or *suscipere* in juxtaposition with a reference to the custom of placing the child on the ground. The only passage in which both 'putting down' and 'taking up' are mentioned is in Augustine (Civ. *Dei*, iv, 11), and there the verb is not *tollere* or *suscipere*, but *levare*.

It is suggested, therefore, that the idiom under discussion does not mean 'to lift,' but is to be connected with another common connotation of *tollere* and *suscipere*, namely, 'to undertake,' and that the explanation of the custom of placing a newly-born infant on the ground must be sought in an entirely different direction.


Papyrus No. 622 of the Michigan Collection is a roll which contains on the verso the ἀναγραφὴ γραφείου Τεβτονικοῦ καὶ Κερκεσιοὺς of the last four months of the second year of Tiberius, *i.e.* April 28 to August 28, 42 A.D. The ἀναγραφὴ is an ἀναγραφὴ συμβόλαιον, or register of contracts. This register contains 247 entries made according to a fixed formula with a notation in the left-hand margin of the month and day upon which they were drawn up. The following types of contracts are registered: (1) 136 ὁμολογίαι, agreements; (2) 50 μισθώσεις, leases; (3) 27 δάνεια, loans; (4) 17 συγγραφαὶ τροφίτες, alimentary contracts; (5) 14 πράτεις, sales; (6) 3 συγγραφαὶ διδασκαλικαί, contracts of apprenticeship. The general formula for the entries was: ὁμολογία (or μισθώσις, etc.) δεῖν (καὶ ἄλλου or ἄλλων) πρὸς δεῖνα (καὶ ἄλλου or ἄλλων) διαμετέχεις (or whatever the subject of the contract might be). The συγγραφαὶ διδασκαλικαί alone are not entered according to this formula but as the following example
illustrates: ἢξιδέτο Τασωύκιος πρὸ(ς) Ὠρον διδασκαλικῆ(ς). It is suggested that ἢξιδέτο is here a stereotyped verbal form used as a noun upon which the genitive form Τασωύκιος depends.

The recto of the same roll contains lengthy abstracts of the first fifty of the contracts entered on the verso. This shows that the Grapheum maintained two types of registers: (1) a register of the titles of contracts, and (2) a register of abstracts. The former type has not hitherto been known; the latter has some fragmentary parallels.


Not only must man be grateful to God, but God owes gratitude to man. This is expressed with some clearness in Herodotus, 1, 87 and 90, Bacchylides, 3, 37, Hippocrates, περὶ Ἀἴρων, 22, Aristophanes, Thesm. 1228, and Plato, Laws, 931 A. In addition there are discussed numerous passages, which, while not specifically demanding gratitude from the gods, do request or demand some favor, in consideration of worship rendered. The first instance is Iliad, viii, 39.

Why does man thus expect return from his gods? The deity may be conceived of (1) as constrained by an act of sacrifice; or (2) bound by a promise, (a) explicit or (b) implicit, due to his having accepted a vow or a propitiatory offering. Or the return may be considered (3) an act of justice or (4) an act of enlightened self-interest. Or, finally (5), the god may desire to make return to his worshiper. These motives continually overlap, but a dash of the element of desire is necessary before there can be any question of gratitude on the part of the gods.

The development of the notion that God owes return to man is sketched from the stage where man sets aside the fetish, if it does not do for him what is expected of it, through ancestor-worship to such higher acts as the vow. Man is always convinced that he should receive return. He will not serve God for naught. But as he comes to recognize his own duty to be grateful, he thinks of what is due him from God in terms of his own moral advance. This assumes an affinity between God and man that was foreign to the Hebraic element in the Christian religion, which at this
point prevailed over the Greek elements and reckoned man at his best an unprofitable servant and incapable of doing God any favor or earning his gratitude.

6. The Subjunctive ἵν in the Papyri, by Professor Robert C. Horn, Muhlenberg College.

In several passages in the New Testament, certain uncial manuscripts read ἵν for ἃ in the third person singular of the present subjunctive (e.g. A in I Cor. 16, 4). While these may be simple errors, due to the tendency to add movable, the form is found in papyri also; in certain phrases ἵν seems to be the natural form with the common people. The private letters and official documents of the published papyri have been examined. The results have been checked against Moulton’s, who called attention to many instances (Class. Rev. xv, 38 and 436, and xviii, 108; Grammar of N. T. Greek, 1 [Proleg.] 168; ii, § 86). A characteristic example is Pap. Oxyr. 744 (1 B.C.): έαν ἵν ἀσκον ἄφες, έαν ἵν θῆλη έκβάλη.

The papyri in which ἵν occurs date from the first century B.C. to the fourth A.D. It occurs much more frequently in private letters than in official documents. Most letters in which it occurs are written by ignorant or uneducated people, as the spelling and syntax show. It occurs mainly in conditional and relative clauses, where the phrase probably became fixed (έαν ἵν, έαν ἵν ἵν, έαν ἵν ἵν); even in relative clauses έαν ἵν is prominent. Fifteen papyri have ἵν in conditional clauses; there are three examples of relative clauses; four of purpose, introduced by έαν; and three temporal.

Other peculiar subjunctive forms are ἵππον (Pap. Oxyr. 1157, Pap. Tebt. 333) and ἵππον (Pap. Hib. 78, third century B.C.).

There was great confusion in later Greek between the imperfect indicative of εἰμί and its present subjunctive, because of the similarity of form and sound. There was also a strong tendency to add a parasitic ν (Mayser, Gram. d. gr. Pap. 191-194, 197-199). ἵν seems to be established as a subjunctive in popular speech, due to ignorance and confusion.

7. The Repeated Lines of Vergil, by Nicholas Moseley, Yale University.

The paper endeavors to show that Vergil repeats lines not as a Homeric imitator, but with a definite artistic purpose. A study
of ninety-five repetitions of three feet or more indicates that the repetitions in the *Aeneid* are conscious and that they recur under similar circumstances. Nine classes are outlined: (1) lines describing people repeated to describe the same people; (2) lines repeated to describe different people; (3) lines repeated to describe like actions or reactions of characters; (4) lines repeated to describe the same or similar objects or situations; (5) lines repeated to describe the same natural phenomena; (6) lines repeated to describe the opening and close of speeches; (7) repeated prophecies; (8) bona fide descriptions repeated as similes; (9) phrases repeated for special effects.

The repeated lines are generally exceptionally fine ones and they gain force from the repetition. When there are two similar descriptions and a line is repeated from the first one, Vergil is inclined to omit specific details in the second instance, trusting to the reader's being reminded of these details by the repeated line. Furthermore the repeated lines, especially those describing the same characters, help very greatly, together with the prophecies, to preserve the unity of the poem.

The study of the repeated lines may in one or two specific instances give important evidence of incompleteness or lack of polish. Moreover such a study furnishes the best criterion for judging the authenticity of the challenged lines among the iterata. It also indicates the relation of certain manuscripts of Vergil and may give valuable assistance in determining the authenticity of some of the poems in the Appendix. These questions are to be dealt with in a later paper.
I. PROGRAMME

FRIDAY, DECEMBER 1

FIRST SESSION, 10 O’CLOCK A.M.

ARTHUR G. BRODEUR
The Ballad of Ebbe Skammelsön and the English King Horn

H. R. FAIRCLOUGH
The Poems of the Appendix Vergiliana (p. 5)

HAROLD BRUCE
William Blake and Gilchrist’s Remarkable Coterie of Advanced Thinkers

ROBERT W. GORDON
Some Recent Criticisms of the Communal Theory of Ballad Origins

SECOND SESSION, 2 O’CLOCK P.M.

MONROE E. DEUTSCH
Caesar’s Triumphs:
Annual Address of the President of the Association

Conference on Medieval Latin Literature and its Relations:
To Medieval Culture in General, by L. J. Paetow
To Classical Latin Literature, by Max Radin (p. xxvii)
To Medieval Vernacular Literature, by E. C. Hills (p. xxviii)
To Modern Literature, by W. D. Briggs (p. xxix)
Saturday, December 2

Third Session, 10 o'clock A.M.

Howard J. Hall
An Early American Poet

Clarence Paschall
A Possible Origin of Duodecimal Counting (p. xxvii)

Mathurin Dondo
Marionettes in the Time of Shakespeare

John D. Cooke
Medieval Interest in the Origin of Idolatry and Classical Paganism

Alwin Thaler
D'Avenant and Thomas Heywood: A New Source for the Siege of Rhodes

Fourth Session, 1 o'clock P.M.

Thomas K. Whipple
Hamlet and the Anti-Elizabethan Reaction

Willard H. Durham
The Infant Alexander

Max Radin
The Attic Libel Law and Freedom of Speech

Guy Montgomery
Swift in the Twentieth Century

Papers Read by Title

Edward A. Wicher
Two Brief Papers on the New Testament

Edward G. Cox
Classical Traditions in Medieval Irish Literature
II. MINUTES

The Twenty-fourth Annual Meeting of the Philological Association of the Pacific Coast was held at the Hotel Bellevue, San Francisco, December 1 and 2, 1922, President Monroe E. Deutsch presiding at all sessions. The following business was transacted:

The minutes of the last annual meeting were approved as printed in the Publications of the Modern Language Association and to be printed in the Transactions of the American Philological Association.

The Treasurer made the following report for the year 1921-1922:

RECEIPTS

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On motion the report was accepted and referred to the Auditing Committee.

The appointment of the following committees was announced by the President:

Nominating, Professors Schilling, Nutting, Johnston.

Auditing, Professors Elmore, Bruce.

Social, Professors Hart, Richardson, Tatlock.

The Secretary’s report consisted chiefly of statistics of membership for the past year, and notice of the election of 36 new members.

It was moved and seconded that the Nominating Committee be made permanent, one member to be elected each year. By vote of the members present further consideration of the motion was deferred until Saturday morning.
Proceedings for 1922

The report of the Nominating Committee was read and accepted, and by vote the following officers were elected for the ensuing year:

President, C. G. Allen.
Vice-Presidents, A. P. McKinlay, B. O. Foster.
Secretary, A. G. Kennedy.
Treasurer, W. L. Schwartz.
Executive Committee, the above-named officers and R. M. Alden, R. Schevill, E. A. Wicher, C. Paschall.

The Auditing Committee reported that the accounts and vouchers of the Treasurer were correct and in order. On motion the report was accepted and approved.

The Association then voted that the Nominating Committee shall consist henceforth of three members, shall be appointed by the President, and each member shall hold office for three years, the respective terms of office to expire in successive years. In case of the absence of any member of the committee from the annual meeting, the President shall fill the vacancy with a temporary appointment. To initiate this system, the incoming President shall select two members from the Nominating Committee of the present session and add a third, indicating the terms of office of these members as of one, two, and three years.

On motion a vote of thanks was extended to the University Club for hospitality and the Treasurer was authorized to pay $10 to the “Christmas Box” for the waiters of the Club.

It was also voted that the President be authorized to appoint each year certain members whose duty it should be to carry to the American Philological Association and the Modern Language Association of America the greetings of the Philological Association of the Pacific Coast, the choice to be made from those members likely to be in attendance at the annual meetings of the Eastern associations.

By motion the President was authorized to appoint a committee of three to represent the Association and assist it in keeping in touch with the movement started at the last annual meeting of the Modern Language Association of America for the promotion of the study of Medieval Latin literature. It was further voted that the Philological Association of the Pacific Coast recommend the appointment of Professor E. K. Rand as the American represent-
ative on the committee having in charge the publication of a new Medieval Latin dictionary.

Professor R. M. Alden called the attention of the members to the desirability of cooperating with and supporting the Modern Humanities Research Association.

The attendance at the four sessions numbered 50, 50, 40, and 38 respectively.
III. ABSTRACTS

1. *A Possible Origin of Duodecimal Counting*, by Professor Clarence Paschall, University of California.

Besides the decimal system, based on ten and preceded probably by the beginnings of a system based on five, we have in the Indo-European languages, as well as elsewhere, surviving traces of a method of counting in which twelve and six play rôles corresponding to those played by ten and five.

The six-twelve system, which seems to be older than the five-ten system, must also have originated in some form of digital counting. How could primitive man have counted six fingers? It is generally assumed that man began to reckon with collective units before he had gone far in counting by ones. He thought of a hand of objects — *i.e.*, as many objects as he had fingers on one hand — before he realized how many fingers he actually had. Then in counting he might easily make six if he returned to the little finger from which he started and counted it twice. That it is natural to make this mistake in counting in a series in which one returns to the starting point is shown by the familiar fact that in French and German the week is thought of as containing eight days. The French count a fortnight in the same way as fifteen days. The Roman method of counting the days in the divisions of the month reveals the same principle. With the development of a more rational notion of number, the error in counting the fingers of the hand was no longer made, and the six-twelve system gave way to the five-ten system, to which, from a mathematical standpoint, it was not inferior.

The following abstracts are those of papers presented at the Conference on Medieval Latin Literature and its Relations (see Programme, page xxii).

2. *The Relation of Medieval Latin Literature to Classical Literature*, by Professor Max Radin, University of California.

Medieval Latin Literature is no more a debased and corrupt copy of classical Latin Literature than medieval Latin is of the language of Cicero and Caesar. The literature of the Middle Ages is a natural development, a means of satisfying the needs of a society fundamentally different from that of the Roman Em-
pire. The classics were known and valued, but, except for form, they were copied only when rhetorical practice was intended. The ideas of medieval society were ideas of religion, philosophy, history, and law, and in these fields, medieval Latin produced worthy and adequate works. In belles-lettres, poetry and fiction grew up, having for their subjects whatever evoked a strong emotional appeal. For poetry, that was chiefly — but by no means exclusively — mystic religiosity. This new poetry, further, developed a new form, the rhyming verse.

The value of this literature as compared with Greek or Latin or any given modern literature will be variously estimated. The important thing in connection with it is that it was independent and specially adapted to the society whose life it illustrated.

3. The Relation of Medieval Latin Literature to Medieval Vernacular Literature, by Professor E. C. Hills, University of California.

Till about the eleventh century, the literature of Western Europe was almost exclusively in Latin. In the immediately following centuries an outpouring of literary works in the vernacular speeches — epics, lyrics, didactic poems, fabliaux, romances, farces, etc. — stimulated Latin and made it more productive. The medieval Latin literature and that of the vernacular speeches traveled together and each influenced the other so that neither can be understood without a knowledge of the other. Poets who wrote in a vernacular speech would take their material from medieval Latin works, and if a poem in the vernacular was excellent, it was often put into Latin, so that all might read it, for Latin was still the universal language of Western Europe.

The same or similar metrical forms were developed in Latin and in the vernacular speeches (see the Carmina Burana and the Cambridge Songs), and farces were given by clerics sometimes in the one language and sometimes in another. The medieval Latin chronicles were used as material for epic poems in the vernacular (see Bédier, Légendes épiques), and the medieval Latin tales found in the collections of exempla were used in French fabliaux and in Italian novelle (see Crane's Jacques de Vitry).

Without a reading knowledge of Latin and some acquaintance
with the medieval Latin literature, no one can do thorough work in linguistics, in prosody, in the modern literatures, in history, or in philosophy.


The importance of a first-hand knowledge of medieval Latin literature to the student of modern literature may be most readily understood through observing the fact that various important kinds of intellectual activity of the Middle Ages were directly continued into the sixteenth and seventeenth centuries and thence into later times. English writers of those centuries, whatever subject they dealt with, were constantly making use of medieval Latin writers in theology, history, science, law, etc., and it may be said with truth that a knowledge of a considerable amount of this medieval Latin writing was widespread among men of learning. From another point of view, it can be said that neither the thought nor the art of a writer like Spenser can be well understood without some knowledge of medieval life and thought, in obtaining which a direct, even if not extensive, acquaintance with medieval Latin authors is indispensable. For instance, Holiness and Chastity in the Faerie Queene illustrate the intrusion of Christian and medieval ethical ideals into the Aristotelian scheme of the virtues. In the same way, 'romantic love' in modern fiction can only be comprehended in its relation to both life and literature by studying the medieval conditions out of which it sprang. From a third point of view, the important influence upon poetry, drama, and other forms of literature of a medieval writer like Geoffrey of Monmouth can only be appreciated after obtaining a speaking acquaintance with him.


At the meeting of the Modern Language Association in 1921 there was successfully organized a permanent group of those interested in medieval Latin and its relations with ancient, medieval, and modern literature and with medieval culture in general. The
group has been working since with Dr. George R. Coffman, professor of English in Grinnell College, Iowa, as its executive secretary; the honorary general chairman is Professor E. K. Rand, of Harvard University, and the chairmen for the East, Central Division, and West are respectively Professors G. H. Gerould (Princeton), G. R. Coffman, and J. S. P. Tatlock (Stanford), who also form the executive committee of the group. The organization is likely soon to be expanded. Among the tasks undertaken are a list of those in America who are working on these subjects, in secular and church institutions and elsewhere; a survey of what the universities are doing for the study of medieval Latin culture in the widest sense; a consideration of what can be done to advance such studies; cooperation with other learned societies. One result of the activities of the group already is the editing of an anthology of medieval Latin by Professor C. H. Beeson, of Chicago.

The study of medieval Latin has suffered in America through being nobody’s business in particular. There is still a widespread feeling that the language and literature are so inferior as to be negligible, and a surprising inattention to the fact that till the fourteenth century Latin was almost the only literary language of the best-trained minds, and till much later conducted the main current of intellectual progress. Many have retained the sentimental and distorted idea of the medieval mind which began in the eighteenth century; and the important middle division of man’s intellectual history is still obscured by paradox and misunderstanding as well as by ignorance.
INDEX

TO ARTICLES AND ABSTRACTS

Arabic numerals refer to pages of the Transactions, Roman to the Proceedings.

Accent of the educated Roman: 63 ff.; a pitch accent: ib.; influence of Greek schoolmasters: 65; differences between cultivated and uncultured speech: 68 f.; relation of verse accent to prose accent at different periods of Latin literature: 69 ff.; increase in regularity toward end of verse: 71 f.; v. Pronunciation.

Aetna: v. Appendix Vergiliana.

ἀναγραφή συμβολαών: xviii f.

Aorist: s. Sanskrit.


Catalepton: v. Appendix Vergiliana.


Cercesuchon Oros: v. Grapheum.

Ciris, parallels it shows with the works of Catullus, esp. the Marriage of Peleus and Thetis: 73 ff.; Vergilian authorship: 81 f.; v. Appendix Vergiliana.

Contracts: v. Dialysis, Grapheum.

Copa: v. Appendix Vergiliana.

Counting: v. Duodecimal.

Culix: v. Appendix Vergiliana.

Dialysis, a, of the fifth century A.D., in the Princeton Collection of Papyri (Plate I): 113 ff.; a record of settlement by arbitration: 114 ff., 124 f.; text, translation, and commentary: 115 ff.


Dioscurides, a papyrus of, in the University of Michigan Collection (Plate III): 142 ff.; text and commentary: 147 ff.; relation to other Mss.: 161 ff.; modifications of Wellmann’s views of the text: 167 f.

Dirae: v. Appendix Vergiliana.

Duodecimal counting, possible origin of: xxvii.

ἐπί as a subjunctive form: xx.

Grapheum, the, of Thebunis and Cercesuchon Oros, its ἀναγραφή συμβολαών: xviii f.; register of abstracts of contracts: xix.

Gratitude of the gods toward men: xix f.; origin and development of the notion: ib.

Greek poetry, the colonization of: xvi; the sea in: ib.


Herondas, significant names in: xvi f.

Hesiod, Eoeae: 133.

Homer, IIiad, the three threads of the plot: 52 ff.; the βοώλη Διός and its interpretation: 53 ff.; its orderly development: 55 ff.; the story of the third day’s fighting made coherent: xxxi
Quantity of syllables in Greek and Latin: v. Pronunciation, Syllabification.

Repeated lines in Vergil: xx f.; critical results of a study of them: xxi.

Rhetorical treatise περὶ Μόδων, papyrus fragment of: 136 ff.

Rhythm in Greek and Latin poetry and prose: v. Pronunciation.


Subjunctive ἵνα in the papyri: xx; apparently used in popular speech: ib.

συμβάλλω: xviii f.

suscipere; v. tollere.


Tebtunis: v. Graphemum.

tollere and suscipere, their meaning as applied to infants: xvii f.; not 'to lift', but 'to undertake': xviii.

Vergil, repeated lines in: xx f.; v. Appendix Vergiliana.

Vocabulary, evidence of, in determining authorship: 13, 31 f., 33.
Proceedings for 1922

BIBLIOGRAPHICAL RECORD

FOR THE CALENDAR YEAR 1922

PRINCIPAL ABBREVIATIONS

A.A. — Art and Archaeology.
A.H.R. — American Historical Review.
A.J.A. — American Journal of Archaeology.
Am. — American.
B. — Bulletin.
Cal. Chr. — University of California Chronicle.
C.P. — Classical Philology.
C.Q. — Classical Quarterly.
C.R. — Classical Review.
C.W. — Classical Weekly.
E.R. — Educational Review.
J. — Journal.
L.C.L. — Loeb Classical Library.
M. — Magazine.
M.L.N. — Modern Language Notes.
M.P. — Modern Philology.
Nat. — Nation.
N.I.Y.B. — New International Year Book.
P.Q. — Philological Quarterly.
Pr. — Press.
Qu. — Quarterly.
Rev. — Review.
Rom.R. — Romanoic Review.
S.P. — Studies in Philology.
S.S. — School and Society.
U. — University.

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FRANK COLE BABBITT.

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LEROY C. BARRET.

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1 An incomplete list of publications of the members during the calendar year 1922, as far as reported by them to the editor. Where the number of a volume has not been given, that for 1922 is meant.
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The worship of Augustus in Italy during his lifetime; T.A.P.A. li, 116-133.
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EXECUTIVE COMMITTEE

The above-named officers, and —
RAYMOND M. ALDEN
RUDOLPH SCHEVILL
EDWARD A. WICHER
CLARENCE PASCHALL
MEMBERS OF THE
AMERICAN PHILOLOGICAL ASSOCIATION

1922–1923

Dr. Elizabeth F. Abbe, Melrose High School, Melrose, Mass. 1919.
Prof. Frank Frost Abbott, Princeton University, Princeton, N. J. 1886.
Dr. Charles J. Adamec, Alfred College, Alfred, N. Y. 1922.
Prof. Arthur Adams, Trinity College, Hartford, Conn. 1908.
* Prof. Charles Darwin Adams, Dartmouth College, Hanover, N. H. 1892.
Miss Edith Adams, 24 Howe St., Wellesley, Mass. 1921.
* Walter R. Agard, Amherst College, Amherst, Mass. 1922.
Prof. A. William Ahl, Thiel College, Greenville, Pa. 1922.
* Miss Miriam C. Akers, Denison University, Granville, O. 1922.
Dean Francis Asbury Alabaster, Nebraska Wesleyan University, University Place, Nebr. 1921.
Prof. Raymond M. Alden, Leland Stanford Jr. University, Stanford University, Cal. 1914.
* Bernard M. Allen, Cheshire, Conn. 1921.
Prof. James T. Allen, University of California, Berkeley, Cal. (37 Mosswood Rd.). 1898.
Prof. Katharine Allen, University of Wisconsin, Madison, Wis. (228 Langdon St.). 1899.
Prof. May Alice Allen, Sophie Newcomb Memorial College, Tulane University, New Orleans, La. 1920.
Dr. Anne C. E. Allinson, 163 George St., Providence, R. I. (Life member). 1920.
* Prof. Francis G. Allinson, Brown University, Providence, R. I. (163 George St.). Life member. 1893.

1 This list has been corrected up to June 30, 1923. The Secretary begs to be kept informed of all changes of address. Names marked with an asterisk are those of members who attended the Fifty-fourth Annual Meeting, held in New Haven, Conn., in December, 1922.
Proceedings for 1922

Prof. Andrew Runni Anderson, University of Utah, Salt Lake City, Utah. 1905.

Dr. Florence Mary Bennett Anderson (Mrs. L. F.), 364 Boyer Ave., Walla Walla, Wash. (Life member). 1910.


Prof. Mary E. Armstrong, Olivet College, Olivet, Mich. 1921.

Prof. William G. Aurelio, Boston University, Boston, Mass. (102 Charles St.). 1903.

* Prof. James Curtiss Austin, Colgate University, Hamilton, N. Y. 1921.


Prof. Harold L. Axtell, University of Idaho, Moscow, Ida. 1922.

Pres. Frank Aydelotte, Swarthmore College, Swarthmore, Pa. 1921.

Prof. C. C. Ayer, University of Colorado, Boulder, Colo. 1902.

* Prof. Frank Cole Babbitt, Trinity College, Hartford, Conn. (65 Vernon St.). 1897.

Prof. Earle Brownell Babcock, New York University, University Heights, New York, N. Y. 1913.

Dean William Frederic Badé, Pacific School of Religion, Berkeley, Cal. (2616 College Ave.). 1903.


Dr. Lawrence Henry Baker, Johns Hopkins University, Baltimore, Md. 1920.

John B. Baldwin, Nassau Inn, Princeton, N. J. 1922.

Hon. Simeon D. Baldwin, New Haven, Conn. (Life member). 1922.

* Prof. Allan P. Ball, College of the City of New York, New York, N. Y. 1905.

Dr. Francis K. Ball, 15 Ashburton Pl., Boston, Mass. (Life member). 1894.

* Prof. Floyd G. Ballentine, Bucknell University, Lewisburg, Pa. 1903.

* Dr. Susan H. Ballou, Bryn Mawr College, Bryn Mawr, Pa. 1912.

Cecil K. Bancroft, Phillips Academy, Andover, Mass. 1898.

Miss Edith Bancroft, 25 Sanborn St., Reading, Mass. 1921.


Louis Barnier, University of California, Berkeley, Cal. (1589 LeRoy Ave.). 1921.

* Prof. LeRoy C. Barret, Trinity College, Hartford, Conn. 1906.

J. Edmund Barss, Loomis Institute, Windsor, Conn. 1897.

Prof. George Lloyd Barton, Jr., Virginia Military Institute, Lexington, Va. (Drawer 925). 1919.

Prof. Herbert J. Barton, University of Illinois, Urbana, Ill. 1907.

Prof. John W. Basore, Princeton University, Princeton, N. J. 1902.

Prof. Henry Jewell Bassett, Evansville College, Evansville, Ind. 1919.

* Prof. Samuel Eliot Bassett, University of Vermont, Burlington, Vt. 1903.


Prof. William J. Battle, University of Texas, Austin, Tex. (Life member). 1893.
American Philological Association

* Prof. Paul V. C. Baur, Yale University, New Haven, Conn. (166 Edgehill Rd.). 1902.
  John W. Beach, 149 Calumet Ave., Aurora, Ill. 1902.
  George H. Beal, 138 West 55th St., New York, N. Y. 1922.
  Prof. Edward A. Bechtel, Tulane University of Louisiana, New Orleans, La. 1900.
  Edith A. Beck, 16 Newcomb St., Haverill, Mass, 1923.
  Dr. Frederick E. Beckman, University of California, Southern Branch, Los Angeles, Cal. (526 N. Kenmore Ave.). 1920.
  Prof. Isbon T. Beckwith, Hartford, Conn. 1884.
  Prof. Charles H. Beeson, University of Chicago, Chicago, Ill. (1009 E. 60th St.). 1897.
  * Prof. Gertrude H. Beggs, Westhampton College, Richmond, Va. 1912.
  * Alfred Raymond Bellinger, Yale University, New Haven, Conn. (406 Yale Station). 1920.
  * Prof. Harold H. Bender, Princeton University, Princeton, N. J. 1912.
  * Prof. Harold Bennett, Lebanon Valley College, Annville, Pa. 1921.
  Capt. Paul Benrimo, Marion Institute, Marion, Ala. 1921.
  Miss M. Julia Bentley, Hughes High School, Cincinnati, O. (3517 Middleton Ave.). 1920.
  Prof. George O. Berg, St. Olaf College, Northfield, Minn. 1909.
  Pierre Arnold Bernard, Nyack, N. Y. 1913.
  Prof. Lillian G. berry, University of Indiana, Bloomington, Ind. 1916.
  Prof. Louis Bevier, Rutgers College, New Brunswick, N. J. 1884.
  Dr. John Dean Bevier, Culver Military Academy, Culver, Ind. 1920.
  * Prof. Clarence P. Bill, Adelbert College of Western Reserve University, Cleve-
    land, O. 1894.
  Prof. Albert Billheimer, Pennsylvania College, Gettysburg, Pa. 1912.
  Prof. Arthur Vaughan Bishop, Hollins College, Hollins, Va. 1917.
  Prof. Charles Edward Bishop, West Virginia University, Morgantown, W. Va. 1890.
  Prof. Elizabeth L. Bishop, Western College for Women, Oxford, O. 1919.
  Mrs. Mary Leal Harkness Black, Panora, la. 1921.
  George Horace Blake, New Hampshire State College, Durham, N. H. 1922.
  Mr. Warren E. Blake, 38 Carleton St., Newton, Mass. 1922.
  Dr. Carl W. Blegen, American School of Classical Studies, Athens, Greece.
    (Life member). 1920.
  J. P. Blickensderfer, Washington University, St. Louis, Mo. 1922.
  Prof. Leonard Bloomfield, 2061 Fairfax Rd., Upper Arlington, Columbus, O. 1914.
  Prof. Maurice Bloomfield, Johns Hopkins University, Baltimore, Md. 1882.
  Dr. G. Alder Blumer, 106 Blackstone Boul., Providence, R. I. 1921.
Prof. Willis H. Bocock, University of Georgia, Athens, Ga. 1890.
Sister Mary Paschal Boillot, Dominican College, San Rafael, Cal. 1921.
Prof. George M. Bolling, Ohio State University, Columbus, O. 1897.
Prof. Alexander L. Bondurant, University of Mississippi, University, Miss. 1892.
Prof. Arthur Bonner, College of the Pacific, San José, Cal. 1923.
* Prof. Campbell Bonner, University of Michigan, Ann Arbor, Mich. (1025
    Martin Pl.). Life member. 1899.
Prof. Robert J. Bonner, University of Chicago, Chicago, Ill. 1911.
Prof. Benjamin Parsons Bourland, Adelbert College of Western Reserve Uni-
    versity, Cleveland, O. 1900.
Prof. Ella Bourne, Mills College, Cal. 1916.
M. J. Boyer, 603 N. 6th St., Allentown, Pa. 1921.
Miss Florence C. Brachman, 8439 Germantown Ave., Chestnut Hill, Phila-
    delphia, Pa. 1921.
Prof. J. Everett Brady, Smith College, Northampton, Mass. (5 Crescent St.).
    1891.
* Miss Mary Victoria Braginton, 315 York St., New Haven, Conn. 1922.
Dr. Joseph Granger Brandt, University of Kansas, Lawrence, Kans. 1916.
* Dr. Alice F. Bräunlich, Goucher College, Baltimore, Md. (2819 Guilford Ave.).
    1916.
Charles Henry Breed, Lawrenceville School, Lawrenceville, N. J. (Woodhull
Prof. George Sidney Brett, University of Toronto, Toronto, Can. 1920.
Prof. Ethel Hampson Brewster, Swarthmore College, Swarthmore, Pa. (Life
    member). 1914.
Dr. Josiah Bridge, Simsbury, Conn. 1921.
Prof. Anna Brinton (Mrs. Howard H.), Earlham College, Richmond, Ind. 1912.
Louis F. D. Briosis, University of California, Berkeley, Cal. 1923.
Miss Cornelia P. Brossard, Soldan High School, St. Louis, Mo. 1923.
Christopher George Brouzas, Broadus College, Philippi, W. Va. 1922.
* Dr. Carroll N. Brown, College of the City of New York, New York, N. Y.
* Charles Barrett Brown, Washington University, St. Louis, Mo. 1922.
George Brown, Amherst College, Amherst, Mass. 1919.
Dr. Lester Dorman Brown, Hotchkiss School, Lakeville, Conn. 1904.
Prof. Ruth W. Brown, University of Southern California, Los Angeles, Cal. 1912.
Mrs. Timothy Brown, 116 E. Gorham St., Madison, Wis. 1920.
Dr. William Norman Brown, Johns Hopkins University, Baltimore, Md. 1921.
Prof. Carleton L. Brownson, College of the City of New York, New York, N. Y.
    1892.
American Philological Association

* Dr. W. R. Bryan, Columbia University, New York, N. Y. 1921.
Dr. Arthur Alexis Bryant, De Witt Clinton High School, New York, N. Y. 1921.
Prof. Carl D. Buck, University of Chicago, Chicago, Ill. 1890.
* Miss Mary H. Buckingham, 96 Chestnut St., Boston, 9, Mass. 1897.
Dr. Theodore A. Buenger, 635 Garland Ave., Winnetka, Ill. 1915.
Frank S. Bunnell, 251 Washington St., Norwich, Conn. 1921.
Paul H. Burg, 3831 Cleveland Ave., St. Louis, Mo. 1923.
Prof. Edmund Burke, College of the City of New York, New York, N. Y. 1921.
Prof. William S. Burrage, Middlebury College, Middlebury, Vt. 1898.
* Prof. Harry E. Burton, Dartmouth College, Hanover, N. H. 1899.
Miss Nita L. Butler, 516 E. Madison St., Ann Arbor, Mich. 1922.
Prof. Orma Fitch Butler, University of Michigan, Ann Arbor, Mich. (1109 Forest Ave.) Life member. 1907.
Miss Hilda Buttenwieser, University of Cincinnati, Cincinnati, O. (Life member). 1921.
Miss Alice Hill Byrne, Western College, Oxford, O. 1921.
Sister Marie José Byrne, College of St. Elizabeth, Convent, N. J. 1921.
Prof. Alva J. Calderwood, Grove City College, Grove City, Pa. 1917.
Prof. George M. Calhoun, University of California, Berkeley, Cal. (581 Euclid Ave.). 1911.
Prof. T. Callander, Queen's University, Kingston, Ont., Can. 1919.
* Prof. Donald Cameron, Boston University, Boston, Mass. 1905.
Dr. James Marshall Campbell, Sulpician Seminary, Brookland, D. C. 1923.
Miss Mary E. Campbell, Vassar College, Poughkeepsie, N. Y. 1922.
Miss Helen Campion, 800 Logan St., Denver, Colo. (Life member). 1921.
Prof. Charles B. Cannaday, West Virginia University, Morgantown, W. Va. 1922.
Prof. Howard Vernon Canter, University of Illinois, Urbana, Ill. (Champaign, Ill.). 1921.
Seth Bunker Capp, Box 2054, Philadelphia, Pa. (Life member). 1914.
* Prof. Edward Capps, Princeton University, Princeton, N. J. 1889.
* Frederick M. Carey, 44 Jacques St., Winter Hill, Mass. 1922.
Prof. Rhys Carpenter, Bryn Mawr College, Bryn Mawr, Pa. 1913.
James A. Carr, Boatmen's Bank Building, St. Louis, Mo. 1923.
Prof. W. L. Carr, Oberlin College, Oberlin, O. (73 S. Cedar Ave.). 1920.
Prof. Adam Carruthers, University College, Toronto, Can. 1909.
Proceedings for 1922

Dr. Earnest Cary, Dartmouth College, Hanover, N. H. 1905.
William Van Allen Catron, Lexington, Mo. 1896.
Miss Emma Cauthorn, University of Missouri, Columbia, Mo. (401 Price Ave.). 1916.
Arnold B. Chace, 90 Power St., Providence, R. I. 1920.
Prof. Angie Clara Chapin, 50 Saratoga Ave., Yonkers, N. Y. 1888.
* Prof. Cleveland King Chase, Hamilton College, Clinton, N. Y. 1911.
* Prof. George Davis Chase, University of Maine, Orono, Me. 1900.
Dr. W. H. Chenery, Boston Public Library, Boston, Mass. 1916.
Arthur S. Chenoweth, Somers Point, N. J. 1921.
Miss Helen M. Chesnutt, 9719 Lamont Ave., Cleveland, O. 1920.
Dr. Edward C. Chickering, Jamaica High School, New York, N. Y. 1920.
Prof. Gilbert Chinard, Johns Hopkins University, Baltimore, Md. 1912.
Miss A. D. Choate, 3739 Windsor Pl., St. Louis, Mo. 1923.
Prof. J. E. Church, Jr., University of Nevada, Reno, Nev. 1922.
* Dr. Edith Frances Claflin, Rosemary Hall, Greenwich, Conn. 1919.
* Prof. Charles Upson Clark, Yale Club, New York, N. Y. 1905.
Prof. Frank Lowry Clark, Miami University, Oxford, O. 1919.
Prof. Frederick William Clark, University of Manitoba, Winnipeg, Manit., Can. 1920.
Prof. Herman A. Clark, University of Oregon, Eugene, Ore. 1920.
Prof. Sereno Burton Clark, University of Washington, Seattle, Wash. 1907.
Prof. Harold Loomis Cleasby, 805 Comstock Ave., Syracuse, N. Y. 1905.
Dr. Frank L. Cloud, 4600 W. 12th St., Philadelphia, Pa. 1922.
Miss Katharine M. Cochran, Ferry Hall, Lake Forest, Ill. 1914.
Ernest A. Coffin, High School, Hartford, Conn. 1914.
Dr. Harrison Cadwallader Coffin, Union College, Schenectady, N. Y. 1920.
Dr. George H. Cohen, 120 Capitol Ave., Hartford, Conn. 1914.
Dr. James Wilfred Cohoon, Mt. Allison University, Sackville, N. B., Can. 1914.
Prof. Guy Blandin Colburn, State College, Fresno, Cal. (Life member). 1911.
John Kingsbury Colby, Milton Academy, Milton, Mass. 1922.
Prof. Charles Nelson Cole, Oberlin College, Oberlin, O. 1902.
Prof. Hermann Collitz, Johns Hopkins University, Baltimore, Md. (1027 N. Calvert St.). 1887.
Miss Ruth Congdon, New Bedford, Mass. 1921.
* Willard Connelly, 7 Craigie Circle, Cambridge, Mass. 1922.
Prof. Elisha Conover, Delaware College, Newark, Del. 1921.
Prof. John D. Cooke, University of Southern California, Los Angeles, Cal. (705 W. 50th St.) 1923.
Prof. Raymond Huntington Coon, William Jewell College, Liberty, Mo. 1923.
* Prof. Lane Cooper, Cornell University, Ithaca, N. Y. 1917.
Prof. William A. Cooper, Leland Stanford Jr. University, Stanford University, Cal. 1901.
Dr. Mario E. Cosenza, College of the City of New York, New York, N. Y. (577 Isham St.). 1908.
* Dr. Cornelia C. Coulter, Vassar College, Poughkeepsie, N. Y. 1912.
* Prof. Frank H. Cowles, Wabash College, Crawfordsville, Ind. 1916.
* Prof. William L. Cowles, Amherst College, Amherst, Mass. 1888.
Prof. Edward G. Cox, University of Washington, Seattle, Wash. 1923.
Mrs. F. G. Cressey, Denison University, Granville, O. 1922.
Prof. Edmund D. Cressman, University of Denver, Denver, Colo. (2076 S. St. Paul St.). 1914.
Prof. Albert R. Crittenden, University of Michigan, Ann Arbor, Mich. (220 Twelfth St.). 1920.
Prof. W. H. Crogman, Clark University, South Atlanta, Ga. 1898.
Miss Nellie Cunningham, 5712 Cabanne St., St. Louis, Mo. 1923.
Prof. George I. Dale, Washington University, St. Louis, Mo. 1922.
* Prof. Ernest A. Dale, University College, Toronto, Can. 1922.
Leslie Dana, 1 Brentmoor Park, St. Louis, Mo. 1923.
Dr. Fritz Sage Darrow, 218 East Ave., Rochester, N. Y. 1921.
* Prof. Irville F. Davidson, St. Stephens College, Annandale, N. Y. 1922.
Prof. Edmund Wayne Davis, Maryville College, Maryville, Tenn. 1921.
Prof. M. E. Davis, Howard Payne College, Brownwood, Tex. 1920.
Prof. Martelle Elliot Davis (Mrs.), Ohio Northern University, Ada, O. (118 W. Montford Ave.). 1918.
Milton C. Davis, Miller Place, Long Island, N. Y. 1922.
Prof. William Hersey Davis, Norton Hall, Louisville, Ky. 1922.
* Prof. Henry S. Dawson, D’Youville College, Buffalo, N. Y. (364 West Ave.). 1922.
* Prof. Lindley Richard Dean, Denison University, Granville, O. 1912.
Miss Mildred Dean, 2404 Wisconsin Ave., Washington, D. C. 1920.
Prof. Walter Joseph Dech, Albright College, Myersburg, Pa. 1922.
Dr. Alice A. Deckman, 5236 Chestnut St., Philadelphia, Pa. 1921.
Dr. Roy J. Deferrari, Catholic University, Washington, D. C. 1915.
Dr. E. B. De Saúzé, Board of Education, Cleveland, O. 1920.
Prof. Monroe E. Deutsch, University of California, Berkeley, Cal. (2805 Parker St.). 1904.
* Prof. Henry B. Dewing, University of Texas, Austin, Tex. (3111 Grandview St.). 1909.
* Prof. Thomas Wyatt Dickson, Syracuse University, Syracuse, N. Y. 1915.
* Dr. George E. Dimock, Jr., 21 Phillips St., Andover, Mass. 1913.
* William Bell Dinsmore, Columbia University, New York, N. Y. 1921.
* Miss Dorothy Dixon, 381 Massachusetts Ave., Lexington, Mass. 1922.
Miss Ellen MacKenzie Dodson, Mills College, Cal. (Box 25). 1921.
Prof. James C. Dolley, McKendree College, Lebanon, Ill. 1919.
Miss Helen M. Donnelly, 5046 Vernon Ave., St. Louis, Mo. 1923.
Alfred C. Dorjahn, 1211 Michigan Ave., Evanston, Ill. 1922.
Prof. James Walker Downer, Baylor University, Waco, Tex. 1915.
Miss Juanita M. Downes, Cheltenham High School, Elkins Park, Pa. 1921.
* Prof. William Prentiss Drew, Knox College, Galesburg, Ill. 1907.
Dr. Eleanor Shipley Duckett, Smith College, Northampton, Mass. (53 Crescent St.). 1914.
Prof. Thomas S. Duncan, Washington University, St. Louis, Mo. 1922.
Prof. James E. Dunlap, Indiana University, Bloomington, Ind. (601 E. University St.). 1921.
Prof. Charles L. Durham, Cornell University, Ithaca, N. Y. 1906.
Prof. Donald Blythe Durham, Hamilton College, Clinton, N. Y. 1912.
* Prof. Emily Helen Dutton, Tennessee College, Murfreesboro, Tenn. 1898.
Prof. William S. Ebersole, Cornell College, Mt. Vernon, Ia. 1893.
Mother M. Edith, Loretto College, Webster Groves, Mo. 1923.
Dr. George V. Edwards, College of the City of New York, New York, N. Y. (1705 Montgomery Ave.). 1921.
Prof. James C. Egbert, Columbia University, New York, N. Y. 1889.
Prof. Wallace Stedman Elden, Ohio State University, Columbus, O. (1734 Summit St.). 1900.
Prof. G. W. Elderkin, Princeton University, Princeton, N. J. 1916.

Prof. W. A. Elliott, Allegheny College, Meadville, Pa. 1897.
Willis A. Ellis, Lombard, Ill. 1921.

Prof. Herbert C. Elmer, Cornell University, Ithaca, N. Y. 1887.

Mrs. Ellinor T. B. Endicott, 404 W. 115th St., New York, N. Y. 1921.


Prof. George Taylor Ettinger, Muhlenberg College, Allentown, Pa. 1896.

Miss Catherine A. Everett, 46 Shepard St., Cambridge, Mass. 1921.

Charles W. Everett, Washington University, St. Louis, Mo. 1922.


Dr. Arthur Fairbanks, Museum of Fine Arts, Boston, Mass. 1886.

* Prof. Henry Rushton Fairclough, Leland Stanford Jr. University, Stanford University, Cal. 1887.

Prof. Fred L. Farley, College of the Pacific, San José, Cal. 1919.

William W. Farnam, 335 Prospect St., New Haven, Conn. (Life member). 1921.

Dean William Edmund Farrar, Mercer University, Macon, Ga. 1922.

Miss Elizabeth Faulkner, Faulkner School, 4746 Dorchester Ave., Chicago, Ill. (Life member). 1920.

Frederick P. Fish, 84 State St., Boston, Mass. (Life member). 1921.

Prof. W. S. Ferguson, Harvard University, Cambridge, Mass. 1899.

Prof. Mervin G. Filler, Dickinson College, Carlisle, Pa. 1905.

Prof. George Converse Fiske, University of Wisconsin, Madison, Wis. (University Club). 1900.

* Prof. Edward Fitch, Hamilton College, Clinton, N. Y. 1890.

Prof. Thomas FitzHugh, University of Virginia, Charlottesville, Va. (Life member). 1902.


* Prof. Roy C. Flickinger, Northwestern University, Evanston, Ill. (1629 Hinman Ave.). Life member. 1905.

Herbert P. Flower, High School, Reedley, Cal. (Box 324). 1921.

* Dr. Francis H. Fobes, Amherst College, Amherst, Mass. (Life member). 1908.

Maynard D. Follin, Box 1118, Detroit, Mich. (Life member). 1922.


Prof. Benjamin O. Foster, Leland Stanford Jr. University, Stanford University, Cal. 1899.

Dr. Emily Foulkrod, 1534 Harrison St., Frankford, Philadelphia, Pa. 1921.

Prof. Frank Hamilton Fowler, University of Arizona, University Station, Tucson, Ariz. 1893.

* Prof. Harold North Fowler, College for Women of Western Reserve University, Cleveland, O. (2033 Cornell Rd.). Life member. 1885.

Miss Susan Fowler, Brearley School, New York, N. Y. (60 E. 61st St.). 1904.

Prof. William Sherwood Fox, Western University, London, Ont., Can. 1911.
Prof. James Everett Frame, Union Theological Seminary, New York, N. Y. 1921.

Prof. Tenney Frank, Johns Hopkins University, Baltimore, Md. (Life member). 1906.

* Miss A. Mildred Franklin, Wilson College, Chambersburg, Pa. 1921.

Miss Ernestine P. Franklin, 800 N. Chesnut Drive, Williams Bridge, N. Y. 1921.

Prof. A. D. Fraser, Jamesstown College, Jamestown, N. D. 1923.

Dr. Walter H. Freeman, Worcester Academy, Worcester, Mass. 1908.

Norman Freudenberger, Southwest Missouri State Teachers College, Springfield, Mo. 1922.


Prof. Charles Kelsey Gaines, St. Lawrence University, Canton, N. Y. 1890.


Prof. Robert Max Garrett, University of Washington, Seattle, Wash. 1914.

* Russell M. Geer, 1655 Boulevard, W. Hartford, Conn. 1922.


Prof. A. F. Geyser, Campion College, Prairie du Chien, Wis. 1920.

Miss Flora S. Gifford, 531 W. Ormsby Ave., Louisville, Ky. 1891.

Prin. Seth K. Gifford, Moses Brown School, Providence, R. I. 1891.

Prof. Basil L. Gildersleeve, Johns Hopkins University, Baltimore, Md. 1876.

Dr. Walter H. Gillespie, Phillips Academy, Exeter, N. H. 1908.


Prof. Meta Glass, 622 W. 113th St., New York, N. Y. 1916.

Charles Bértie Gleason, High School, San José, Cal. (456 S. 2d St.). 1900.

* Clarence Willard Gleason, Roxbury Latin School, Boston, Mass. 1901.


* Prof. A. E. Gobble, Albright College, Myerstown, Pa. 1921.

Prof. Julius Goebel, University of Illinois, Urbana, Ill. 1900.

Prof. Grace G. Goodrich, Ripon College, Ripon, Wis. 1921.

Prof. Charles J. Goodwin, Lehigh University, Bethlehem, Pa. (18 E. Church St.). 1801.


Malbone Watson Graham, University of California, Berkeley, Cal. (Box 30, Wheeler Hall) 1923.

Prof. C. H. Grandgent, Harvard University, Cambridge, Mass. (107 Walker St.). 1922.

Dr. Mary A. Grant, University of Kansas, Lawrence, Kans. (1433 Tennessee St.). 1921.

Prof. Roscoe Allan Grant, Jamaica High School, Jamaica, L. I., N. Y. 1902.

American Philological Association

Miss T. Jennie Green, State Teachers College, Kirksville, Mo. 1923.
Theodore Francis Green, 1138 Hospital Trust Building, Providence, R. I. (Life member). 1920.
* Dr. William C. Greene, Harvard University, Cambridge, Mass. (44 Shepard St.). 1915.
Prof. Alfred Gudeman, Franz Josefstrasse 12, Munich, Germany. 1889.
* Prof. Elizabeth Hazelton Haight, Vassar College, Poughkeepsie, N. Y. 1902.
* Prof. William Gardner Hale, Shippin Point, Stamford, Conn. 1882.
Dr. Clayton Morris Hall, Smith College, Northampton, Mass. (20 Franklin St.). 1922.
Chancellor Frederic A. Hall, Washington University, St. Louis, Mo. (5846 Julian Ave.). 1896.
F. Russell Hamblin, University of Chicago, Chicago, Ill. 1922.
* Prof. H. A. Hamilton, Elmira College, Elmira, N. Y. 1895.
Miss Alice B. Hammond, 130 Wall St., New Haven, Conn. 1921.
John Calvin Hanna, Department of Public Instruction, Springfield, Ill. 1896.
Ralph W. Harbison, 1317 Farmers Bank Building, Pittsburgh, Pa. (Life member). 1921.
Prof. Caleb R. Harding, Davidson College, Davidson, N. C. 1919.
† Prof. Albert Granger Harkness, Brown University, Providence, R. I. 1896.
* Dr. James Penrose Harland, University of North Carolina, Chapel Hill, N. C. (Life member). 1921.
* Prof. Austin Morris Harmon, Yale University, New Haven, Conn. (244 Lawrence St.). 1907.
Prof. Gustave Adolphus Harrer, University of North Carolina, Chapel Hill, N. C. 1914.
Dr. Raymond D. Harriman, University of Utah, Salt Lake City, Utah. 1916.
* Prof. Karl P. Harrington, Wesleyan University, Middletown, Conn. 1892.
Prof. W. A. Harris, University of Richmond, Richmond, Va. 1895.
† Died, January, 1923.
Proceedings for 1922

Dr. Carl A. Harström, Harström School, Norwalk, Conn. 1900.
Maynard M. Hart, McKinley High School, St. Louis, Mo. 1909.
Prof. Walter Morris Hart, University of California, Berkeley, Cal. (2255 Piedmont Ave.). 1903.
Prof. K. Louise Hartz, Hunter College, New York, N. Y. 1922.
Dr. Floyd Clayton Harwood, Yale University, New Haven, Conn. (492 Yale Station). 1919.
Prof. Harold Ripley Hastings, 146 W. Lanvale St., Baltimore, Md. 1905.
Dr. Edward Southworth Hawes, 155 Willow St., Brooklyn, N. Y. 1888.
Dr. H. M. Hays, Fenger High School, Chicago, Ill. 1920.
Edwin Humphrey Hazen, 373 Crown St., New Haven, Conn. 1923.
Prof. Charles Baker Hedrick, Berkeley Divinity School, Middletown, Conn. 1913.
*Prof. William A. Heidel, Wesleyan University, Middletown, Conn. 1900.
Sister Helen, College of Saint Teresa, Winona, Minn. 1923.
Prof. F. B. R. Hellems, University of Colorado, Boulder, Colo. 1900.
Prof. Otto Heller, Washington University, St. Louis, Mo. 1896.
*Prof. George Lincoln Hendrickson, Yale University, New Haven, Conn. 1892.
Miss Hilda Hiemenz, 3520 Magnolia Ave., St. Louis, Mo. 1923.
Director Bert Hodge Hill, American School of Classical Studies, Athens, Greece (Life member). 1911.
Miss Helen Fairbanks Hill, 10 Astor St., Lowell, Mass. 1921.
Prof. Victor D. Hill, Ohio University, Athens, O. 1920.
*Prof. Gertrude M. Hirst, Barnard College, Columbia University, New York, N. Y. 1902.
Prof. Helen Elisabeth Hoag, Mount Holyoke College, South Hadley, Mass. 1907.
Archibald L. Hodges, Wadleigh High School, 114th St., near 7th Ave., New York, N. Y. 1899.
Prof. Arthur Winfred Hodgman, Ohio State University, Columbus, O. (206 W. 10th Ave.). 1896.
Prof. Charles Hoeing, University of Rochester, Rochester, N. Y. 1899.
Dean Horace A. Hoffman, Yorktown Heights, N. Y. 1893.
Prof. Richard T. Holbrook, University of California, Berkeley, Cal. (Faculty Club). 1923.
Prof. John Emory Hollingsworth, Washburn College, Topeka, Kans. (1258 Lane St.). 1921.
Urban T. Holmes, Jr., 10 Rue de Vaugirard, Paris, France. 1923.
Benjamin Clark Holtzclaw, Jr., Cornell University, Ithaca, N. Y. (306 Eddy St.). 1921.
Prof. W. D. Hooper, University of Georgia, Athens, Ga. 1894.
Prof. E. Washburn Hopkins, Yale University, New Haven, Conn. (299 Lawrence St.). 1883.
* Prof. Robert C. Horn, Muhlenberg College, Allentown, Pa. 1909.
Dr. H. M. Houston, Emory and Henry College, Emory, Va. 1923.
Prof. Albert A. Howard, Harvard University, Cambridge, Mass. (12 Walker St.). Life member. 1892.
Prof. Joseph Henry Howard, University of South Dakota, Vermillion, S. Dak. (216 Pine St.). 1921.
* Prof. George Howe, University of North Carolina, Chapel Hill, N. C. 1914.
* Prof. Harry M. Hubbell, Yale University, New Haven, Conn. (268 Willow St.). 1911.
Prof. Merritt Y. Hughes, University of California, Southern Branch, Los Angeles, Cal. (4111 Roseward Ave.) 1923.
Prof. Milton W. Humphreys, University, Va. 1871.
Dr. Alice Cushman Hunter, Nebraska Wesleyan University, University Place, Nebr. 1922.
Prof. Richard Wellington Husband, Dartmouth College, Hanover, N. H. 1907.
Dr. George B. Hussey, Chilhowee St., Maryville, Tenn. 1887.
Miss M. Agnes Hutchinson, Kensington High School, Philadelphia, Pa. (238 S. 38th St.). 1921.
Prof. Mark E. Hutchinson, Emory and Henry College, Emory, Va. 1921.
Prin. Maurice Hutton, University College, Toronto, Can. 1908.
Dr. Leo V. Jacks, York, Nebr. 1923.
Prof. A. V. Williams Jackson, Columbia University, New York, N. Y. 1884.
Prof. M. W. Jacobus, Hartford Theological Seminary, Hartford, Conn. 1893.
Vladimir Jelinek, Washington University, St. Louis, Mo. 1922.
Prof. Thomas Atkinson Jenkins, University of Chicago, Chicago, Ill. 1921.
Thornton Jenkins, High School, Malden, Mass. 1922.
Dr. Richard Jente, Washington University, St. Louis, Mo. 1922.
* Prof. Allan Chester Johnson, Princeton University, Princeton, N. J. 1912.
Dr. Edwin Lee Johnson, Vanderbilt University, Nashville, Tenn. (3615 Westbrook Ave.). 1911.
Franklin Plotinus Johnson, Thomas M. Johnson Library, Osceola, Mo. 1922.
Prof. Harriet Dale Johnson, Denison University, Granville, O. 1920.
William H. Johnson, 710 Franklin Ave., Columbus, O. 1895.
Prof. Eva Johnston, University of Missouri, Columbia, Mo. 1902.
Prof. Richard O. Jolliffe, Queen’s University, Kingston, Ont., Can. 1920.
Prof. Horace L. Jones, Cornell University, Ithaca, N. Y. 1908.
Prof. Richard Foster Jones, Washington University, St. Louis, Mo. 1922.
Prof. Clinton K. Judy, California Institute of Technology, Pasadena, Cal.
1915.
Prof. F. A. Jurkat, Cedarville College, Cedarville, O. 1923.
Charles E. Kany, University of California, Berkeley, Cal. (2304 Telegraph Ave.).
1923.
Miss Rosalie Kaufmann, 5200—a Waterman Ave., St. Louis, Mo. 1923.
Prof. Arthur Leslie Keith, University of South Dakota, Vermillion, S. Dak.
1914.
Miss Ruth E. Keller, 568 S. Champion Ave., Columbus, O. 1921.
* Prof. George Dwight Kellogg, Union College, Schenectady, N. Y. 1897.
Prof. Robert James Kellogg, Oklahoma Baptist University, Shawnee, Okla.
1912.
Prof. Francis W. Kelsey, University of Michigan, Ann Arbor, Mich. (Life member). 1890.
Prof. John B. Kelso, College of Wooster, Wooster, O. 1923.
* Prof. Roland G. Kent, University of Pennsylvania, Philadelphia, Pa. (College Hall). Life member. 1903.
M. V. Kern, Pleasanton, Kans. 1922.
Prof. David Martin Key, Millsaps College, Jackson, Miss. 1917.
* Dr. Clinton Walker Keyes, Columbia University, New York, N. Y. (404 W. 115th St.). 1914.
Prof. David R. Keys, University College, Toronto, Can. 1908.
Prof. William E. Kirk, Willamette University, Salem, Ore. (1450 State St.). 1920.
Prof. William Hamilton Kirk, Rutgers College, New Brunswick, N. J. 1898.
Prof. Robert Christian Kissling, Southeast Missouri State Teachers College, Cape Girardeau, Mo. 1920.
Prof. George Lyman Kittredge, Harvard University, Cambridge, Mass. (8 Hilliard St.). 1884.
Prof. James A. Kleist, St. Ignatius College, Cleveland, O. 1920.
* Prof. Charles Knapp, Barnard College, Columbia University, New York, N. Y. (1737 Sedgwick Ave.). 1892.
Prof. Fred A. Knapp, Bates College, Lewiston, Me. 1920.
Hugo A. Kochler, 320 N. Union Ave., St. Louis, Mo. 1923.
* Prof. John R. Knipfing, Ohio State University, Columbus, O. 1922.
* Casper J. Kraemer, Jr., Cornell University, Ithaca, N. Y. (618 E. State St.). 1922.
Dr. Paul E. Kretzmann, 3705 Texas Ave., St. Louis, Mo. 1923.
Dr. Oswald Robert Kuehne, 3250 Locust St., W. Philadelphia, Pa. 1922.
Prof. Gordon J. Laing, University of Chicago, Chicago, Ill. 1907.
Prof. A. G. Laird, University of Wisconsin, Madison, Wis. (130 Prospect Ave.). Life member. 1890.
Dr. George A. Land, Merchantville, N. J. 1914.
Prof. Henry A. Lappin, D’Youville College, Buffalo, N. Y. (671 Delavan Ave.). 1922.
* Prof. Helen Hull Law, Meredith College, Raleigh, N. C. 1920.
Dr. Robert J. Law, Schuylkill Seminary, Reading, Pa. 1922.
Miss Lillian B. Lawler, State University of Iowa, Iowa City, Ia. (13 N. Madison Ave.). 1921.
* Prof. Emory B. Lease, College of the City of New York, New York, N. Y. (889 St. Nicholas Ave.). 1895.
Prof. David Russell Lee, University of Tennessee, Knoxville, Tenn. (505 Main Ave., W.). 1907.
Miss Sylvia Lee, The Ludlow, Copley Square, Boston, Mass. 1921.
Harry Joshua Leon, University of Pittsburgh, Pittsburgh, Pa. 1922.
Dr. Earnest Linwood Lehman, University of Virginia, University, Va. 1919.
Miss Evelyn Starr Lesslie, 1352 Fairfax Ave., Los Angeles, Cal. 1923.
Prof. Winfred G. Leutner, Adelbert College of Western Reserve University, Cleveland, O. 1905.
Prof. Mark Harvey Liddell, Purdue University, West Lafayette, Ind. (224 Waldron St.). 1923.
Miss Lotta B. Liebmann, 1618 Ridgefield Rd., Cleveland Heights, O. 1920.
Prof. Ivan M. Linforth, University of California, Berkeley, Cal. (2233 Eunice St.). 1903.
Dr. Henry Wheatland Litchfield, Pembroke, Mass. 1912.
Prof. Charles Edgar Little, Peabody College, Nashville, Tenn. 1902.
* Prof. Dean P. Lockwood, Haverford College, Haverford, Pa. 1909.
Prof. Gonzalez Lodge, Teachers College, Columbia University, New York, N. Y. 1888.
Prof. John Oscar Lofberg, Queen’s University, Kingston, Ont., Can. 1919.
* Prof. O. F. Long, Northwestern University, Evanston, Ill. (Life member). 1900.
Proceedings for 1922

Prof. Christopher Longest, University of Mississippi, University, Miss. 1913.
Prof. George D. Lord, Dartmouth College, Hanover, N. H. 1887.
* Prof. Louis E. Lord, Oberlin College, Oberlin, O. 1910.
Miss Dora Aileen Lougee, University of Illinois, Urbana, Ill. 1923.
Dr. D. O. S. Lowell, South Hanson, Mass. 1894.
* Miss Katherine Lummis, Sweet Briar College, Sweet Briar, Va. 1920.
Dr. F. B. Lund, 257 Beacon St., Boston, Mass. (Life member). 1921.
Dr. Elizabeth Perkins Lyders (Mrs.), 2429 Green St., San Francisco, Cal. 1904.
Miss Caroline Vinia Lynch, 217 Norfolk St., Dorchester Centre, Boston, Mass. 1914.
* Dr. Eugene Stock McCartney, University of Michigan Library, Room 6, Ann Arbor, Mich. 1920.
Prof. Chester C. McCown, Pacific School of Religion, Berkeley, Cal. (Box 59). 1920.
Prof. J. H. McDaniels, Hobart College, Geneva, N. Y. 1871.
Prof. Janet M. Macdonald, Franklin College, Franklin, Ind. (253 S. Forsythe St.). 1922.
Miss Cecelia Baldwin McElroy, 668 Irving Park Boul., Chicago, Ill. (Life member). 1914.
Dr. Charles W. Macfarlane, Longacre, 1428 Walnut St., Philadelphia, Pa. 1914.
Prof. Ida Kruse McFarlane, University of Denver, Denver, Colo. (Life member). 1921.
Prof. Donald McFayden, Washington University, St. Louis, Mo. 1922.
Rev. Thomas J. McGourty, Catholic University, Brookland, D. C. 1923.
Mrs. Isabella T. Machan, 854 W. Williams St., Decatur, Ill. 1921.
Prof. W. R. Mackenzie, Washington University, St. Louis, Mo. 1922.
Prof. Arthur P. McKinlay, University of California, Southern Branch, Los Angeles, Cal. 1913.
Miss Harriett E. McKinstry, Lake Erie College, Painesville, O. 1881.
Dr. Charlotte F. McLean, Mrs. Dow's School, Briarcliff Manor, N. Y. 1906.
Prof. James Sugars McLemore, University of Virginia, Charlottesville, Va. 1912.
Dr. Robert Cecil MacMahon, 78 W. 55th St., New York, N. Y. 1921.
Prof. James A. McMillen, Librarian, Washington University, St. Louis, Mo. 1923.
Prof. Grace Harriet Macurdy, Vassar College, Poughkeepsie, N. Y. 1894.
American Philological Association

Dr. Anna Pearl MacVay, Wadleigh High School, New York, N. Y. 1918.
Robert L. McWhorter, University of Georgia, Athens, Ga. 1906.
Prof. Joseph S. Magnuson, State University of Iowa, Iowa City, Ia. 1920.
* Prof. Ralph Van Deman Magoffin, Johns Hopkins University, Baltimore, Md. 1908.
Dr. Herbert W. Magoun, Hillcrest Rd., Belmont, Mass. 1891.
Prof. John M. Manly, University of Chicago, Chicago, Ill. 1896.
Dr. Clarence Augustus Manning, Columbia University, New York, N. Y. 1915.
Prof. Richard Clarke Manning, Kenyon College, Gambier, O. 1905.
Prof. Allan Marquand, Princeton University, Princeton, N. J. 1891.
Miss Ellen F. Mason, Rhode Island Ave., Newport, R. I. 1885.
Dr. Maurice W. Mather, 41 Dana St., Cambridge, Mass. 1894.
* Prof. Thomas Means, Bowdoin College, Brunswick, Me. (267 Maine St.). 1921.
Prof. Bruno Meinecke, Carleton College, Northfield, Minn. 1921.
* Prof. Clarence W. Mendell, Yale University, New Haven, Conn. 1908.
Prof. Frank Ivan Merchant, Iowa State Teachers' College, Cedar Falls, Ia. (1927 College St.). Life member. 1898.
Benjamin Dean Meritt, Graduate College, Princeton, N. J. 1922.
Prof. Elmer Truesdell Merrill, University of Chicago, Chicago, Ill. 1883.
* Prof. William A. Merrill, University of California, Berkeley, Cal. (2609 College Ave.). 1886.
* Prof. William Stuart Messer, Dartmouth College, Hanover, N. H. 1915.
Dr. Truman Michelson, Smithsonian Institution, Washington, D. C. 1900.
Prof. Alfred William Milden, University of Mississippi, University, Miss. 1903.
Dr. A. Bertha Miller, Wellesley College, Wellesley, Mass. 1915.
* Prof. C. W. E. Miller, Johns Hopkins University, Baltimore, Md. 1892.
Prof. Frank Justus Miller, University of Chicago, Chicago, Ill. 1920.
Prof. Walter Miller, University of Missouri, Columbia, Mo. 1900.
Knower Mills, Loomis Institute, Windsor, Conn. 1919.
Samuel L. Mohler, University of Pennsylvania, Philadelphia, Pa. (Life mem-
ber). 1921.
* Prof. Clifford Herschel Moore, Harvard University, Cambridge, Mass. (112
Brattle St.). Life member. 1889.
* Prof. Frank Gardner Moore, Columbia University, New York, N. Y. 1888.
* Prof. J. Leverett Moore, Vassar College, Poughkeepsie, N. Y. 1887.
Prof. Edward P. Morris, Yale University, New Haven, Conn. (53 Edgehill Rd.).
1886.
* Nicholas Moseley, Yale Station, New Haven, Conn. 1921.
Prof. Lewis F. Mott, College of the City of New York, New York, N. Y. 1898.
Prof. Omer Hillman Mott, Belmont Abbey, Belmont, N. C. 1921.
Prof. Clyde Murley, Northwestern University, Evanston, Ill. (Fisk Hall, 2). 1920.
Paul Murphy, College of Idaho, Caldwell, Idaho (1815 Filmore St.). 1923.
Prof. E. W. Murray, 17 S. William St., New York, N. Y. 1907.
Prof. John Scott Murray, Furman University, Greenville, S. C. (428 University
Prof. Wilfred P. Mustard, Johns Hopkins University, Baltimore, Md. 1892.
Walter N. Myers, Sellersville, Pa. 1921.
Miss Elizabeth Frances Nammack, 1 Dorian Ct., Jarvis Lane, Far Rockaway,
N. Y. 1922.
Dr. Royal C. Nemiah, Dartmouth College, Hanover, N. H. 1919.
Prof. K. P. R. Neville, Western University, London, Can. 1902.
Prof. Charles B. Newcomer, 1083 27th St., Des Moines, Ia. (Life member). 1900.
Prof. Barker Newhall, Kenyon College, Gambier, O. 1891.
Dr. Samuel Hart Newhall, Haverford School, Haverford, Pa. 1913.
Prof. Eva May Newman, Rockford College, Rockford, Ill. (Box 25). 1922.
Dr. Edward Willber Nichols, Dalhousie University, Halifax, N. S., Can. 1915.
* Dean Paul Nixon, Bowdoin College, Brunswick, Me. 1907.
Prof. Jonas O. Notestein, College of Wooster, Wooster, O. 1919.
Prof. H. C. Nutting, University of California, Berkeley, Cal. (Box 172). 1900.
Prof. Irene Nye, Connecticut College for Women, New London, Conn. 1911.
Prof. Caroline H. Ober, University of Washington, Seattle, Wash. 1914.
Dr. Ainsworth O'Brien-Moore, Brown University, Providence, R. I. (144
Benefit St.). 1923.
Dr. Margaret Brown O'Connor, 3702-a Page Ave., St. Louis, Mo. (Life
member). 1916.
Prof. John Price Odell, Occidental College, Pasadena, Cal. (1279 N. Los Robles
Ave.). 1915.
1922.
Dr. Charles J. Ogden, 628 W. 114th St., New York, N. Y. 1909.
* Prof. C. H. Oldfather, Wabash College, Crawfordsville, Ind. 1919.
* Prof. William Abbott Oldfather, University of Illinois, Urbana, Ill. (804 W.
Green St.). 1908.
Prof. Samuel Grant Oliphant, Grove City College, Grove City, Pa. 1907.
American Philological Association

* Dr. John R. Oliver, Latrobe Apartments, Baltimore, Md. 1922.
Dr. Louis Ottoy, 121 E. 18th St. Chicago, Ill. 1922.
Prof. W. H. Oxtoby, San Francisco Theological Seminary, San Anselmo, Cal. 1914.
Prof. Walter Hobart Palmer, Branford, Conn. 1914.
Prof. Clarence Paschall, University of California, Berkeley, Cal. (2800 Derby St.). 1903.
Prof. James M. Paton, care of Morgan, Harjes & Co., 14 Place Vendôme, Paris, France. 1887.
Thomas Patterson, 1712 Oliver Building, Pittsburgh, Pa. (Life member). 1921.
Dr. Adolf Frederick Pauli, Dartmouth College, Hanover, N. H. 1921.
Harry F. Payer, 538 East Ohio Gas Building, Cleveland, O. (Life member). 1921.
Dr. Charles Peabody, Harvard University, Cambridge, Mass. (197 Brattle St.). 1894.
Dr. Mary Bradford Peaks, 165 Broadway, New York, N. Y. (Life member). 1905.
Dr. Joseph Pearl, College of the City of New York, New York, N. Y. 1921.
Prof. Arthur Stanley Pease, University of Illinois, Urbana, Ill. 1906.
Dr. William T. Peck, 48 Princeton Ave., Providence, R. I. 1920.
* Prof. Daniel A. Penick, University of Texas, Austin, Tex. 1902.
Prof. Charles W. Peppler, Trinity College, Durham, N. C. 1899.
Prof. Emma M. Perkins, College for Women of Western Reserve University, Cleveland, O. 1892.
* Dr. Ben Edwin Perry, Adelbert College of Western Reserve University, Cleveland, O.
Prin. Lewis Perry, Phillips Academy, Exeter, N. H. 1914.
* Prof. Walter Petersen, Westminster College, New Wilmington, Pa. 1913.
Prof. Torsten Petersson, University of California, Berkeley, Cal. (2215 Marin Ave.). 1905.
* Prof. Clyde Pharr, Southwestern Presbyterian University, Clarksville, Tenn. 1912.
Dr. Aristides E. Phoutrides, Harvard University, Cambridge, Mass. 1915.
Miss Elizabeth D. Pierce, Vassar College, Poughkeepsie, N. Y. 1916.
Prof. Annie M. Pitman, 414 N. Henry St., Madison, Wis. 1921.
Prof. Perley Oakland Place, Syracuse University, Syracuse, N. Y. 1906.
Mrs. Mary B. Pollard, 24 Kingsbury Pl., St. Louis, Mo. 1923.
Proceedings for 1922

Alfred E. Porter, 674 Winthrop Ave., New Haven, Conn. 1921.
Prof. Edwin Post, De Pauw University, Greencastle, Ind. 1886.
L. Arnold Post, Haverford College, Haverford, Pa. 1921.
Prof. Hubert McNeil Poteat, Wake Forest College, Wake Forest, N. C. 1911.
Prof. Franklin H. Potter, State University of Iowa, Iowa City, Ia. 1898.
Henry Preble, 154 E. 91st St., New York, N. Y. 1882.
Prof. Henry W. Prescott, University of Chicago, Chicago, Ill. 1899.
Dr. Keith Preston, Northwestern University, Evanston, Ill. 1914.
Dr. Helen Price, Hood College, Frederick, Md. 1921.
* Dr. Leslie M. Prindle, University of Vermont, Burlington, Vt. (Life member). 1921.
Dr. G. Payn Quackenbos, College of the City of New York, New York, N. Y. 1921.
Mrs. Eliza G. Radeke, 92 Prospect St., Providence, R. I. (Life member). 1921.
Prof. Robert S. Radford, University of Tennessee, Knoxville, Tenn. (521 Walnut St.). 1900.
Prof. Edwin Moore Rankin, University of California, Southern Branch, Los Angeles, Cal. (143 N. Van Ness Ave.). 1905.
Miss Ruth E. Razee, 137 Alden Ave., New Haven, Conn. 1921.
Prof. John W. Redd, Centre College, Danville, Ky. 1885.
Samuel Macon Reed, Brevard, N. C. 1922.
Prof. Katharine C. Reiley, Columbia University, New York, N. Y. 1912.
Prof. Horatio M. Reynolds, Yale University, New Haven, Conn. (85 Trumbull St.). 1884.
Prof. Alexander H. Rice, Boston University, Boston, Mass. 1900.
Prof. Leon J. Richardson, University of California, Berkeley, Cal. (2415 College Ave.). 1895.
Prof. Ernest H. Riedel, Tulane University of Louisiana, New Orleans, La. 1908.
Dr. Ernst Riess, Boys' High School, Brooklyn, N. Y. (221 W. 113th St., New York). 1895.
Joaquin Palomo Rincon, Ava, Uruguay 45, Mexico, D. F., Mexico. 1912.
Miss Irene C. Ringwood, Vassar College, Poughkeepsie, N. Y. (301 Mill St.). 1922.
Miss Dorothy M. Robathan, Walnut Hill School, Natick, Mass. 1921.
Dr. Frank Egleston Robbins, University of Michigan, Ann Arbor, Mich. (Life member). 1912.
Harley F. Roberts, Taft School, Watertown, Conn. 1921.
Prof. John Cunningham Robertson, West Springfield, N. H. 1909.
Miss Ruth E. Robertson, Deputy, Ind. 1913.
Charles Alexander Robinson, Jr., Graduate College, Princeton, N. J. 1922.
* Prof. David M. Robinson, Johns Hopkins University, Baltimore, Md. (Life member). 1905.
* Prof. Dwight Nelson Robinson, Ohio Wesleyan University, Delaware, O. 1911.
Dr. James J. Robinson, Hotchkiss School, Lakeville, Conn. 1902.
Dr. Rodney Potter Robinson, University of Cincinnati, Cincinnati, O. 1920.
Prof. Joseph C. Rockwell, Municipal University of Akron, Akron, O. 1890.
Miss Dorothy M. Roehm, 3319 Hogarth Ave., Detroit, Mich. 1921.
Miss Myra Rogers, Sophia Newcomb Memorial College, Tulane University, New Orleans, La. 1922.
Dean Florence K. Root, College of Wooster, Wooster, O. 1919.
Miss Mabel V. Root, Catskill, N. Y. 1920.
Ruskin R. Rosborough, Box 834, De Land, Fla. 1920.
S. L. Millard Rosenberg, University of California, Southern Branch, Los Angeles, Cal. 1923.
Prof. Clarence F. Ross, Allegheny College, Meadville, Pa. 1902.
Prof. A. M. Rovelstad, Luther College, Decorah, Ia. (206 Ohio St.). 1921.
Prof. William T. Rowland, Amherst College, Amherst, Mass. 1919.
Prof. August Rupp, College of the City of New York, New York, N. Y. 1902.
* William Sener Rusk, Wells College, Aurora, N. Y. 1921.
Prof. H. Osborne Ryder, Hamline University, St. Paul, Minn. 1922.
Prof. Frances E. Sabin, University of Wisconsin, Madison, Wis. 1920.
Prof. Julius Sachs, Teachers College, Columbia University, New York, N. Y. (The Belmont, 86th St. and Broadway). 1875.
* Prof. Evan T. Sage, University of Pittsburgh, Pittsburgh, Pa. (247 Lothrop St.). Life member. 1912.
Prof. Henry A. Sanders, University of Michigan, Ann Arbor, Mich. (521 Thompson St.). 1899.
Prof. Frederick W. Sanford, University of Nebraska, Lincoln, Nebr. 1922.
Prof. Myron R. Sanford, Middlebury College, Middlebury, Vt. 1894.
Henry B. Sargent, 247 Church St., New Haven, Conn. (Life member). 1921.
Miss Rachel Louisa Sargent, University of Illinois, Urbana, Ill. 1923.
Prof. Catharine Saunders, Vassar College, Poughkeepsie, N. Y. (Life member). 1900.
* John Alexander Sawhill, Graduate College, Princeton, N. J. 1921.
* Alfred Cary Schlesinger, Graduate College, Princeton, N. J. 1922.
Prof. Nathaniel Schmidt, Cornell University, Ithaca, N. Y. 1914.
Prof. D. T. Schoonover, Marietta College, Marietta, O. 1912.
Prof. Robert Maxwell Scoon, Princeton University, Princeton, N. J. 1914.
Dr. Charles P. G. Scott, 49 Arthur St., Yonkers, N. Y. 1880.
Prof. Harry Fletcher Scott, Ohio University, Athens, O. 1921.
Kennéth Scott, University Club, Madison, Wis. 1923.
Oreon E. Scott, 5211 Westminster Place, St. Louis, Mo. 1923.
Prof. Henry S. Scribner, University of Pittsburgh, Pittsburgh, Pa. (1045 Murray Hill Ave.). Life member. 1889.
Dr. Lewis L. Sell, Columbia University, New York, N. Y. (240 W. 122d St.). 1916.
* Prof. William Tunstall Semple, University of Cincinnati, Cincinnati, O. (315 Pike St.). Life member. 1910.
Prof. Joachim Henry Senger, University of California, Berkeley, Cal. (1321 Bay View Pl.). 1900.
Miss Mary E. Shaneman, Birdsboro, Berks Co., Pa. 1922.
F. C. Shaw, Westport High School, Kansas City, Mo. (3711 Mercier St.). 1923.
* Dr. T. Leslie Shear, Princeton University, Princeton, N. J. (Battle Road). Life member. 1906.
Prof. Caroline Sheldon, Grinnell College, Grinnell, Ia. 1922.
Prof. Edward S. Sheldon, Harvard University, Cambridge, Mass. (39 Kirkland St.). 1881.
Dr. Henry V. Shelley, Lafayette College, Easton, Pa. (126 Porter St.). 1919.
Prof. William P. Shepard, Hamilton College, Clinton, N. Y. 1922.
Charles L. Sherman, 12 Francis St., Newport, R. I. 1921.
American Philological Association

* Prof. L. R. Shero, St. Stephen's College, Annandale, N. Y. 1921.
Prof. F. W. Shipley, Washington University, St. Louis, Mo. 1900.
Prof. Paul Shorey, University of Chicago, Chicago, Ill. 1887.
Prof. Grant Showerman, University of Wisconsin, Madison, Wis. (410 N. Butler St.). 1900.
Prof. Thomas K. Sidey, University of Washington, Seattle, Wash. 1914.
* Prof. E. G. Sihler, New York University, University Heights, New York, N. Y. 1876.
Pres. Kenneth C. M. Sills, Bowdoin College, Brunswick, Me. 1906.
Miss Adelaide Douglas Simpson, University of Virginia, University, Va. 1919.
Prof. S. B. Slack, McGill University, Montreal, Can. 1920.
Prof. Moses Stephen Slaughter, 633 Francis St., Madison, Wis. (Life member). 1887.
Prof. Charles N. Smiley, Grinnell College, Grinnell, Ia. 1907.
Miss Elizabeth F. Smiley, 519 E. Summitt St., Marshall, Mo. 1922.
Prof. Charles Forster Smith, University of Wisconsin, Madison, Wis. (1715 Kendall Ave.). 1883.
Charles H. Smith, Morristown School, Morristown, N. J. 1919.
Prof. Charles S. Smith, George Washington University, Washington, D. C. 1895.
* Daniel Du Pré Smith, Graduate College, Princeton, N. J. 1922.
Dr. Gertrude E. Smith, University of Chicago, Chicago, Ill. 1922.
* Prof. Harry de Forest Smith, Amherst College, Amherst, Mass. 1899.
* Prof. Kendall Kerfoot Smith, Brown University, Providence, R. I. 1910.
Prof. Lillian S. Smith, Agnes Scott College, Decatur, Ga. 1919.
Prof. Reuben Valentine Smith, 409 Parkview Ave., Columbus, O. 1923.
Dr. Stanley Barney Smith, Ohio State University, Columbus, O. (1474 Belmont Ave.). 1921.
William F. Smith, 10 Trowbridge St., Cambridge, Mass. 1922.
Prof. Thomas Henry Sonnedecker, Heidelberg University, Tiffin, O. 1919.
Floyd A. Spencer, 822 East 58th St., Chicago, Ill. 1922.
Miss Evelyn Spring, Baldwin School, Bryn Mawr, Pa. 1917.
Dr. Sidney G. Stacey, Erasmus Hall High School, Brooklyn, N. Y. (177 Woodruff Ave.). 1901.
Proceedings for 1922

Prof. Wallace N. Stearns, Illinois Woman's College, Jacksonville, Ill. 1907.
Prof. R. B. Steele, Vanderbilt University, Nashville, Tenn. (101 24th Ave. S.).
  Life member. 1893.
Prof. Charles P. Steinmetz, Union College, Schenectady, N. Y. (Life member).
  1921.
Prof. Guido Stempel, Indiana University, Bloomington, Ind. (723 S. Park Ave.).
  1921.
Prof. Rufus T. Stephenson, De Pauw University, Greencastle, Ind. 1910.
* Prof. James Sterenberg, Knox College, Galesburg, Ill. 1910.
Prof. Manson A. Stewart, Yankton College, Yankton, S. Dak. 1909.
Prof. Francis H. Stoddard, 22 West 68th St., New York, N. Y. 1890.
Charles W. Stone, 488 Beacon St., Boston, Mass. 1921.
Prof. Alvin H. M. Stonecipher, Indiana Central College, Indianapolis, Ind.
  1914.
Prof. S. E. Stout, Indiana University, Bloomington, Ind. 1915.
Prof. Frederick Eugene Stratton, Fargo College, Fargo, N. Dak. 1919.
Dr. Robert P. Strickler, Swarthmore College, Swarthmore, Pa. 1911.
Prof. Donald Clive Stuart, Princeton University, Princeton, N. J. 1916.
* Prof. Duane Reed Stuart, Princeton University, Princeton, N. J. 1901.
Mrs. Anne B. B. Sturgis, 214 Oak St., Oberlin, O. 1920.
S. Warren Sturgis, Groton, Mass. 1921.
Albert Morey Sturtevant, University of Kansas, Lawrence, Kans. (924 La. St.). 1922.
* Dr. Edgar Howard Sturtevant, 28 Myrtle Ave., Edgewater, N. J. 1901.
* Dr. Mary Hamilton Swindler, Bryn Mawr College, Bryn Mawr, Pa. 1912.
Prof. Rollin Harvelle Tanner, Denison University, Granville, O. (Box 485).
  Life member. 1911.
  1923.
* Prof. Helen H. Tanzer, Hunter College, New York, N. Y. (Life member).
  1910.
  1915.
* Prof. Eugene Tavenner, Washington University, St. Louis, Mo. (McMillan Hall). 1912.
Prof. Archer Taylor, Washington University, St. Louis, Mo. 1920.
Gilbert H. Taylor, Palmer College, Albany, Mo. 1922.
Dr. John W. Taylor, 85 Bedford Ave., Buffalo, N. Y. 1910.
* Prof. Lily Ross Taylor, Vassar College, Poughkeepsie, N. Y. 1912.
Prof. Susan D. Tew, Sophie Newcomb Memorial College, Tulane University,
* Prof. Ida Carleton Thallon, Vassar College, Poughkeepsie, N. Y. 1915.
Miss M. Carey Thomas, The Deanery, Bryn Bawr, Pa. 1921.
Prof. Clara Louise Thompson, Shorter College, Rome, Ga. 1920.
American Philological Association

R. H. B. Thompson, St. Louis Country Day School, St. Louis, Mo. 1923.
Russell I. Thompson, Dickinson Seminary, Williamsport, Pa. 1922.
Dean David Thomson, University of Washington, Seattle, Wash. 1902.
Prof. George R. Throop, Washington University, St. Louis, Mo. 1907.
John B. Titchener, University of Illinois, Urbana, Ill. 1923.
Prof. Otis Johnson Todd, University of British Columbia, Vancouver, Can. 1923.
Prof. Herbert Cushing Tolman, Vanderbilt University, Nashville, Tenn. 1889.
Miss Lena B. Tomson, Milwaukee-Downer College, Milwaukee, Wis. 1921.
Prof. Catherine Torrance, Agnes Scott College, Decatur, Ga. 1920.
Miss Mary Luella Trowbridge, Lawrence College, Appleton, Wis. (Ormsby Hall). 1922.
Prof. J. A. Tufts, Phillips Academy, Exeter, N. H. 1898.
* Prof. B. L. Ullman, State University of Iowa, Iowa City, Ia. (Life member). 1910.
Mrs. Mary Pence Underhill, University of California, Berkeley, Cal. (2731 Dwight Way). 1923.
Prof. Justin Loomis Van Gundy, Monmouth College, Monmouth, Ill. 1920.
* Prof. La Rue Van Hook, Barnard College, Columbia University, New York, N. Y. 1905.
† Addison Van Name, Yale University, New Haven, Conn. (121 High St.). 1869.
* Prof. Agnes Carr Vaughan, Wells College, Aurora, N. Y. 1917.
Prof. N. P. Vlachos, Temple University, Philadelphia, Pa. 1903.
Prof. Frank Vogel, Massachusetts Institute of Technology, Cambridge, Mass. 1904.
J. Homer Wade, 3903 Euclid Ave., Cleveland, O. (Life member). 1921.
* Miss Emily L. Wadsworth, Arden School, Lakewood, N. J. 1922.
Dr. Anthony Pelzer Wagener, Roanoke College, Salem, Va. 1911.
Prof. W. H. Wait, University of Michigan, Ann Arbor, Mich. 1893.
Miss Mary Violet Waite, 402 Eddy St., Ithaca, N. Y. 1908.
† * Prof. Margaret C. Waites, Mount Holyoke College, South Hadley, Mass. 1910.
Dr. John W. H. Walden, 7 Irving Terrace, Cambridge, Mass. 1889.
G. Byron Waldrop, Blair Academy, Blairstown, N. J. 1921.
Prof. Arthur Tappan Walker, University of Kansas, Lawrence, Kans. 1895.
† Died Sept. 29, 1922. † Died March 15, 1923.
Proceedings for 1922

Miss Anne R. Waney, Soldan High School, St. Louis, Mo. 1923.
Prof. William D. Ward, Occidental College, Los Angeles, Cal. 1912.
James R. Ware, 1709 Fillmore St., Camden, N. J. (Life member). 1921.
Miss Florence Waterman, Winsor School, Boston, Mass. 1921.
* Prof. William E. Waters, New York University, University Heights, N. Y. 1885.
Prof. John C. Watson, 6216 Wayne Ave., Edgewater Station, Chicago, Ill. 1902.
Prof. Robert Henning Webb, University of Virginia, University, Va. 1909.
Prof. Hermann J. Weber, Berkeley, Cal. (1811 La Loma Ave.). 1913.
Dr. Helen L. Webster, National Cathedral School, Washington, D. C. 1890.
Prof. Raymond Weeks, Columbia University, New York, N. Y. 1902.
Dr. Herbert T. Weiskotten, Wagner College, Staten Island, N. Y. 1919.
Prof. Charles Heald Weller, State University of Iowa, Iowa City, Ia. 1903.
Louis C. West, 706 Citizens Building, Cleveland, O. (Life member). 1921.
Prof. John R. Westbrook, Fulton, Mo. 1923.
Prof. J. H. Westcott, Princeton University, Princeton, N. J. 1891.
Prof. Arthur Harold Weston, Lawrence College, Appleton, Wis. (520 John St.). 1915.
President-Emeritus Benjamin Ide Wheeler, University of California, Berkeley, Cal. (2425 Ridge Rd.). 1879.
Benjamin Webb Wheeler, University of California, Berkeley, Cal. (2425 Ridge Rd.). 1920.
* Prof. George Meason Whicher, Hunter College, New York, N. Y. 1891.
Dr. Andrew C. White, Cornell University, Ithaca, N. Y. (424 Dryden Rd.). 1886.
Howell North White, Hotchkiss School, Lakeville, Conn. 1921.
Prof. John B. White, St. John's College, Annapolis, Md. 1920.
John G. White, Williamson Building, Cleveland, Ohio. 1922.
Prof. Raymond H. White, Middlebury College, Middlebury, Vt. 1911.
* Dr. Philip B. Whitehead, Yale University, New Haven, Conn. 1920.
Miss Mabel K. Whiteside, Randolph-Macon Woman's College, Lynchburg, Va. 1906.
Prof. Edward A. Wicher, San Francisco Theological Seminary, San Anselmo, Cal. 1906.
Dr. Carol VanBuren Wight, Johns Hopkins University, Baltimore, Md. 1923.
Dr. Alfred Reynolds Wightman, Phillips Academy, Exeter, N. H. (81 Front St.). 1920.
Prof. Eliza G. Wilkins, University of Colorado, Boulder, Colo. 1917.
American Philological Association

Mrs. Caroline Ransom Williams, Chesbrough Dwellings, Toledo, O. 1922.
Prof. Edward Thomas Williams, University of California, Berkeley, Cal. (1410 Scenic Ave.). 1919.
Prof. Mary G. Williams, Mount Holyoke College, South Hadley, Mass. 1899.
Mrs. Arleigh Boyd Williamson, 431 W. 121st St., New York, N. Y. 1917.
Dr. Gwendolen B. Willis, Bryn Mawr School, Baltimore, Md. 1906.
Harold R. Willoughby, 130 South Divinity Hall, Chicago, Ill. 1915.
Miss Lillian M. Wilson, 5464 Woodlawn Ave., Chicago, Ill. 1922.
Prof. Margaret B. Wilson, Hunter College, New York, N. Y. (Life member). 1921.
Dr. Pearl Cleveland Wilson, Miss Chandor's School, New York, N. Y. (65 Morningside Ave.). 1919.
Prof. William Jerome Wilson, State Normal School, Cheney, Wash. 1918.
* Prof. Herbert Wing, Jr., Dickinson College, Carlisle, Pa. (429 W. South St.). 1915.
Charles J. Winter, Johnstown Ledger, Johnstown, Pa. 1922.
Miss Ruth Witherstine, 120 S. 34th St., Philadelphia, Pa. 1922.
Prof. William Dudley Woodhead, University of Toronto, Toronto, Can. 1920.
* Prof. Willis Patten Woodman, Hobart College, Geneva, N. Y. (808 Main St.). 1901.
† Prof. Frank E. Woodruff, Bowdoin College, Brunswick, Me. 1887.
Dr. Horace Wetherill Wright, Lehigh University, Bethlehem. Pa. 1918.
J. M. Wulffing, 3448 Longfellow Boul., St. Louis, Mo. 1923.
Dr. William Frank Wyatt, 120 Packard Ave., Tufts College, 57, Mass. 1915.
Mrs. Helen D. Yetter, Perrenoud Apartments, Denver, Colo. (Life member). 1921.
* Prof. Clarence H. Young, Columbia University, New York, N. Y. (312 W. 88th St.). 1890.
Dr. Charles Hamline Zimmerman, 155 Elm St., New Haven, Conn. 1920.

Members in the above list, 935
Members not in the above list (from the Philological Association of the Pacific Coast), 5
Total, 940

† Died
CONSTITUTION

OF THE

AMERICAN PHILOLOGICAL ASSOCIATION

ARTICLE I.—NAME AND OBJECT

1. This Society shall be known as "The American Philological Association."
2. Its object shall be the advancement and diffusion of philological knowledge.

ARTICLE II.—OFFICERS

1. The officers shall be a President, two Vice-Presidents, a Secretary and Curator, and a Treasurer.
2. There shall be an Executive Committee of ten, composed of the above officers and five other members of the Association.
3. All the above officers shall be elected at the last session of each annual meeting.
4. An Assistant Secretary, and an Assistant Treasurer, may be elected at the first session of each annual meeting, on the nomination of the Secretary and the Treasurer respectively.

ARTICLE III.—MEETINGS

1. There shall be an annual meeting of the Association in the city of New York, or at such other place as at a preceding annual meeting shall be determined upon.
2. At the annual meeting, the Executive Committee shall present an annual report of the progress of the Association.
3. The general arrangements of the proceedings of the annual meeting shall be directed by the Executive Committee.
4. Special meetings may be held at the call of the Executive Committee, when and where they may decide.

ARTICLE IV.—MEMBERS

1. Any lover of philological studies may become a member of the Association by a vote of the Executive Committee and the payment of five dollars as initiation fee, which initiation fee shall be considered the first regular annual fee.

1 As amended December 28, 1907.
American Philological Association

2. There shall be an annual fee of three dollars from each member, failure in payment of which for two years shall ipso facto cause the membership to cease.

3. Any person may become a life member of the Association by the payment of fifty dollars to its treasury, and by vote of the Executive Committee.

ARTICLE V. — SUNDRIES

1. All papers intended to be read before the Association must be submitted to the Executive Committee before reading, and their decision regarding such papers shall be final.

2. Publications of the Association, of whatever kind, shall be made only under the authorization of the Executive Committee.

ARTICLE VI. — AMENDMENTS

Amendments to this Constitution may be made by a vote of two-thirds of those present at any regular meeting subsequent to that in which they have been proposed.
COMMITTEES AND BUSINESS MATTERS

1. NOMINATING COMMITTEE, established July 8, 1903 (xxxiv, xix, xlvi). One member retires each year after five years of service, and is replaced by a successor named by the President of the Association. The present membership of the Committee is as follows:

   - Professor Carl D. Buck.
   - Professor Frank G. Moore.
   - Professor Frank Frost Abbott.
   - Professor Clifford H. Moore.
   - Professor Walton Brooks McDaniel.

2. COMMITTEE ON GRAMMATICAL NOMENCLATURE (representing the Association on the Joint Committee), appointed in 1911 (XLII, xii), and continued at the subsequent meetings:

   - Professor John C. Kirtland.
   - Professor Benjamin L. Bowen.
   - Professor Hermann Collitz.
   - Professor Walter Miller.
   - Dr. Sidney G. Stacey.

3. PHILOLOGICAL ASSOCIATION OF THE PACIFIC COAST. The present terms of affiliation between this Association and the American Philological Association are defined in the Articles of Agreement adopted by the two Associations in December, 1916 (XLVII, xi f.), and November, 1917 (XLVIII, xiv), respectively.

4. SALARY OF THE SECRETARY AND TREASURER. In December, 1921, the Association voted to authorize the Executive Committee to give the Secretary and Treasurer an allowance for clerical help, of such amount as it deems proper, in addition to his salary of $350 (LI, xv). For the year 1923 the Committee allowed for this purpose an amount not to exceed $250.

5. PUBLICATION. By vote of the Association (December, 1919), the publication of the annual volume was put in charge of the Secretary (I, xi).

6. VETERAN MEMBERS. On December 29, 1911, the Executive Committee voted that it be the practice of the Committee to relieve from the payment of further dues members of thirty-five years standing, who have reached the age of sixty-five.

7. LIFE MEMBERSHIPS. On December 31, 1914, it was voted by the Association that the Treasurer be instructed to fund all sums received for life memberships (XLV, xiv).

† Died.

Ixxix
American Philological Association

8. **Lapse of Membership.** On December 29, 1917, by vote of the Association, Art. iv, Sec. 3 of the Constitution, long neglected, was again put in force. Membership therefore ceases automatically after failure in the payment of the annual fee for two years (XLVIII, x).

9. By vote of the Association (December 28, 1918), no member is entitled to receive the annual volume unless he has paid the dues for the year for which the volume is issued (XLIX, vii).

10. The Association elects annually a delegate to the Council of the American Classical League (XLIX, viii). The delegate for 1923 is Professor W. B. McDaniel.

11. **American Council of Learned Societies.** On December 31, 1919, the Association declared its adherence to the American Council of Learned Societies, which represents North America as a member of the Union Académique Internationale (1, ix-x). The delegates of the Association to the Council are Professors Frank G. Moore and William K. Prentice. The following scholarly projects of special interest to the Association have been approved by the Council for consideration by the Union: a corpus of ancient vases; a new edition of the *Glossarium of Du Cange*; a catalogue of alchemical manuscripts (Greek, Latin, and Oriental); continuation of the *Corpus Inscriptionum Graecarum* and the *Corpus Inscriptionum Latinarum*; a reportory of collections and catalogues of Greek manuscripts; a collection of Greek Christian inscriptions; adoption of a uniform method of publishing Greek and Latin papyri; adoption of an international auxiliary language. Of these projects the first three have been adopted by the Union. The organization and constitution of the Council, the statutes of the Union, the proceedings of the Council and its Executive Committee, and brief accounts of the meetings of the Union are found in the *Bulletin of the Council*, published by the Institute of International Education, 419 West 117th St., New York City (No. I, Oct., 1920; II, Dec., 1922). The officers of the Council are: Chairman, Professor C. H. Haskins; Vice-Chairman, Professor A. A. Young; Secretary-Treasurer, Professor John Erskine. The Executive Committee: the officers and Professors A. T. Clay and W. K. Prentice. Committee on Ways and Means: Professors Hiram Bingham, J. P. Chamberlain, J. F. Jameson, J. D. Prince, J. E. Woodbridge.

12. **Endowment Committee,** established December 31, 1919 (1, xi):

- Fairfax Harrison, Chairman.
- G. A. Plimpton, Treasurer.
- Professor Clarence P. Bill, Secretary.
- † Professor Charles E. Bennett.
- Dr. Arthur Fairbanks.
- Professor B. L. Gildersleeve.
- Professor G. L. Hendrickson.
- Principal Maurice Hutton.
- Professor John M. Manly.
- Professor Clifford H. Moore.
- Professor Frank G. Moore.
- Dr. Paul Elmer More.
- Professor John C. Rolfe.
- Professor Paul Shorey.

† Died May 2, 1921.
Abstracts published in the Proceedings are limited by vote of the Association (December 31, 1919) to 300 words in length (L, xi).

Committee on an International Auxiliary Language, appointed December 30, 1920 (L, xii):

- Professor W. A. Oldfather.
- Professor Carl D. Buck.
- Professor Roland G. Kent.
- Professor Dean P. Lockwood.
- Professor Clarence W. Mendell.
- Professor H. P. Nutting.
- Professor L. J. Paetow.

Committee on Medieval Latin, appointed December 29, 1922 (LIII, xiv):

- Professor B. L. Ullman.
- Professor C. H. Beeson.
- Professor Cornelia C. Coulter.
- Professor H. R. Fairclough.
- Professor K. P. Harrington.
- Professor G. D. Kellogg.
- Professor D. P. Lockwood.
- Professor E. T. Sage.
PUBLICATIONS OF THE ASSOCIATION

The annually published Proceedings of the American Philological Association contain, in their present form, the programme and minutes of the annual meeting, brief abstracts of papers read, a record of the publications of members 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.

For the contents of Volumes I−XXXIV inclusive, see Volume XXXIV, pp. cxliii ff.; for XXXV−XLVII, Volume XLVII, pp. lxxxviii ff. The contents of Volumes XLVIII−LII are as follows:

1917—Volume XLVIII
Stuart, D. R.: Petrarch's indebtedness to the libellus of Catullus.
Moore, C. H.: The decay of nationalism under the Roman Empire.
Sturtevant, E. H.: Tenuis and media.
Carnoy, A. J.: The predicking sentence.
Bassett, S. E.: The hephthemimeral caesura in Greek hexameter poetry.
Ullman, B. L.: Horace on the nature of satire.
Proceedings of the fortieth annual meeting, Philadelphia, Pa., 1917.
Proceedings of the nineteenth annual meeting of the Philological Association of the Pacific Coast, San Francisco, Cal., 1917.

1918—Volume XLIX
Flickinger, R. C.: The accusative of exclamation: Lucretius to Ovid.
Bassett, S. E.: The suitors of Penelope.
Bourne, Ella: Augustus as a letter-writer.
Tavenner, Eugene: The Roman farmer and the moon.
Steele, R. B.: The similes in Latin epic poetry.
Carnoy, A. J.: The real nature of dissimilation.
Lockwood, D. P.: Two thousand years of Latin translation from the Greek.
lxxxii
Proceedings for 1922

Hadzsits, G. D.: Lucretius as a student of Roman religion.
Proceedings of the fiftieth annual meeting, New York, N. Y., 1918.
Proceedings of the twentieth annual meeting of the Philological Association of the Pacific Coast, San Francisco, Cal., 1918.

1919 — Volume L (Semi-Centennial)

Shorey, Paul: Fifty years of classical studies in America.
Bloomfield, Maurice: Fifty years of comparative studies in America.
Elmore, Jefferson: The Philological Association of the Pacific Coast.
Merrill, E. T.: The Church in the fourth century.
Moore, C. H.: The pagan reaction in the late fourth century.
Rolfe, J. C.: Claudian.
Pease, A. S.: The attitude of Jerome toward pagan literature.
Sage, E. T.: The publication of Martial's poems.
Proceedings of the fifty-first annual meeting, Pittsburgh, Pa., 1919.
Proceedings of the twenty-first annual meeting of the Philological Association of the Pacific Coast, San Francisco, Cal., 1919.
Indices to Volumes XLI-L.

1920 — Volume LI

Kent, R. G.: The alleged conflict of the accents in Latin verse.
Schmidt, Nathaniel: Bellerophon's tablet and the Homeric question in the light of Oriental research.
Taylor, J. W.: Gemistus Pletho as a moral philosopher.
McCarty, N. E.: Spontaneous generation and kindred notions in antiquity.
Taylor, L. R.: The worship of Augustus in Italy during his lifetime.
Van Hook, La Rue: The exposure of infants at Athens.
Radford, R. S.: The juvenile works of Ovid and the spondaic period of his metrical art.
Tanner, R. H.: The 'Αρχαλογος of Cratinus and Callias δ δακτυλωτος.
Proceedings of the twenty-second annual meeting of the Philological Association of the Pacific Coast, San Francisco, Cal., 1920.

1921 — Volume LIi

Petersen, Walter: The speaker and the hearer.
Oldfather, W. A.: Richard Bentley's critical notes on Arrian's Discourses of Epictetus.
Mendell, C. W.: Literary reminiscences in the Agricola.
Allinson, F. G.: On a fragment of comedy attributed to Menander.
Boak, A. E. R.: Two contracts for division of property from Graeco-Roman Egypt.
Ballou, S. H.: The carrière of the higher Roman officials in Egypt in the second century.
Bonner, Campbell: A papyrus describing magical powers.
Miller, Walter: Theracles, potter, in the light of the Greek drama.
Bassett, S. E.: The function of the Homeric simile.
Radford, R. S.: The Priapea and the Vergilian Appendix.
Proceedings of the fifty-fourth annual meeting, New Haven, Conn., 1922.
Proceedings of the twenty-fourth annual meeting of the Philological Association of the Pacific Coast, San Francisco, Cal., 1919.

The Proceedings of the American Philological Association are distributed gratis upon application to the Secretary until they are out of print.
Fifty reprints of articles in the Transactions, and twenty reprints of abstracts in the Proceedings, are given to the authors for distribution. Additional copies are furnished at cost.
The “Transactions for” any given year are not always published in that year. To avoid mistakes in ordering back volumes, please state — not the year of publication, but rather — the year for which the Transactions are desired, adding also the volume-number, according to the following table:

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The price of these volumes, bound in paper, is $2.00 apiece, except Volumes XV, XX, XXIII, XXXII, XXXVI, XL, XLI, and XLIII–XLIX, for which $2.50 is charged, and Volumes L–LIII, the price of which is $3.00. Where the cloth binding is ordered, fifty cents per volume must be added to the above prices. The first two volumes will not be sold separately. Volumes V, VI, and VII are out of print. A charge of fifty cents per copy is made for reprints of the indices to Volumes XXXI–XL; and seventy-five cents for the indices to Volumes XLI–L.

Odd volumes will be bound by F. J. Barnard & Co., 386 Congress Street, Boston, at a price to be quoted upon application.

Orders for the publications of the Association should be sent to the Secretary, Professor Clarence P. Bill, Adelbert College, Cleveland, Ohio. For prices, see above (p. lxxxv).