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## TRANSACTIONS

OF THE

## AMERICAN $1 / 1$ <br> PHILOLOGICAL ASSOCIATION.

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## TRANSACTIONS

OF THE

## AMERICAN PHILOLOGICAL ASSOCIATION.

1889.

I. - The Vorvel System of the Ionic Dialect.

By HERBERT WEIR SMYTH, BRYN MAWR COLLEGE.

Of that Greek dialect which appeals to the sympathies of the student of Greek literature only less instantly than does Attic, we may use the words of Thukydides in reference to one of the momentous periods of the history of his country:
 form a part of the pioneer undertaking of Ahrens; and at the present day, despite a few scattered German dissertations, the history of Ionic is still an unwritten history. Various causes have contributed to the delay in taking possession of so precious a legacy of opportunity bequeathed to his successors by the author of the De Graecae linguae dialectis. Of these causes doubtless one has been more potent than all others, - that there did not exist a collection of inscriptions so complete and so perfectly disposed that the scholar might with confidence compare the "testimony of the rocks" with the evidence of literature.

But now that we are equipped with a collection of Ionic inscriptions it becomes the more imperative that those who have at heart the history of Hellenic speech should attempt to cover that wide field from Homer to the Sophistic Renais-
sance, in order that at least a comprehensive outlook may be gained over the development of a dialect containing so generous a wealth of linguistic phenomena and standing in such intimate relations with the history of Hellenic thought.

Upon the present occasion I desire to portray, in somewhat detailed outline, the Ionic vowel system from the eighth century b.c. to the second century A.D., though part of my material reaches over into the following centuries.

As to the field surveyed by my paper, so far as the inscriptions are concerned, I have endeavored to utilize every form pertinent to a knowledge of Ionic phonology. Whenever it was necessary to compare the date of any phonetic change in Ionic with the date of a similar change in Attic, I have drawn the latter dialect into the range of vision. Of the lyric poets, especial attention has been devoted to those of Ionic birth (Archilochos, Simonides Amorginus, Hipponax, Ananios, Kallinos, Mimnermos, Xenophanes, and Phokylides); and I have treated in detail the dialect of Tyrtaios, Solon, and Theognis: Tyrtaios, a Lakonian by adoption, but a representative of the early Ionic elegy; Solon, in order to test the question how far his Muse is Ionic, how far Old-Attic ; and Theognis, that we may obtain a complete survey of the language of the elegy down to the end of the sixth century. Herodotos I have examined with special reference to the interrelation of the Mss., and trust that but few points have been overlooked, though I am but too well aware how difficult it is to reach completeness in so wide a field. For the language of the philosophers, Anaxagoras of Klazomenai, Diogenes of Apollonia, Melissos of Samos, Herakleitos of Ephesos, have been investigated ; and for the older medical dialect, those writings of Hippokrates which are least open to the suspicion of spuriousness. Of the pseudo-Ionists, Aretaios' Aitial, Arrian's 'I $\nu \delta \iota \kappa \eta$ ', and Lukian's Syrian Goddess and Astronomy are easily our chief sources; but I have placed under contribution the fragments of Abydenos' Assyrian History, Eusebios, and Eusebios Myndios, that we may realize the more vividly how persistent has been the influence exercised upon later prose by the Ionic dialect.

In this introduction I propose to touch only upon one or two matters which deal with the wider positions assumed in the course of the investigation.

From the point of view of the dialectologist, the history of Hellenic speech falls into four divisions:-

Period of primitive Greek.
Period of the life of single dialects.
Period of the contest of the Attic кoı $\eta^{\prime}$ with the Doric коьขŋ́.
Period of the existence of a universal кoı ŋो.
Within the confines of the second period, Ionic is, broadly speaking, the dialect of the literary world from the eighth century until it was driven from its commanding position by Attic. Through it every creative effort of Greek thought, save the Doric choral ode and the Aiolic love song, found expression. Taken as a whole Ionic presents in its structure a uniformity far more consistent than that possessed by Doric. It is upon the evidence of the inscriptions alone that we are enabled to assert the existence of sub-divisions, which mark the course of Ionic emigration from the mainland of Greece. These sub-dialects are: I. Ionic of Euboia and colonies. II. Ionic of the Kyklades. III. Ionic of Asia Minor and of the adjacent islands and their colonies.
I. Western Ionic is the dialect of Euboia and colonies (Chalkis, Kyme, Olynthos, Amphipolis, Eretria, Oropos, Styra). It still possesses the rough breathing; names derived from $\kappa \lambda$ éos terminate in $-\kappa \lambda$ é $\eta \varsigma$, not in $-\kappa \lambda \hat{\eta} \varsigma$; the genitive of proper names whose second component part is an $-\iota$ stem, ends in -८סos, not in -七os. These peculiarities and certain others ( $\epsilon \iota<\eta \iota$, o $<\omega \iota$, and cases of $\tau \tau$ for $\sigma \sigma$ ) testify to what an extent the political supremacy of Athens has succeeded in coloring the speech of the rear-guard of Ionism. When Western Ionic differs from the Ionic of the other divisions, it differs by its preference for Attic forms, save in its possession of rhotacism, found nowhere else upon Ionic territory, and whose ultimate provenance is still a matter of dispute. Another point of isolation is that Western Ionic alone produced no literature. Whatever artistic capacity the Euboians
possessed tended in the direction of the manufacture of vases.
II. Island Ionic has - $\kappa \lambda \hat{\eta} s$, not $-\kappa \lambda$ é $\eta$; - -os, not - $\delta \delta o s$. Retaining the rough breathing, which is well attested in the case of the Parian Archilochos, Island Ionic thus forms a bridge between Western and Eastern Ionic. Up to the present time, no mint-marks of local difference can be observed in the speech of the various islands, and the sole ground for a separation into two sections, (1) Naxos, Keos; (2) Delos, Paros, Siphnos, is a difference in the writing of $\eta=$ I.E. $\bar{e}$ and $\eta=$ I.E. $\bar{a}$. But at best this palaeograpic distinction, which seems to betoken a difference in pronunciation, does not hold good for all time, having been retained a century longer by the first group than by the second.
III. The chief characteristic of Eastern Ionic is the displacement of the rough breathing at a very early period.. The inscriptions speak with no uncertain voice against the existence of the spiritus asper save in compounds, and literature confirms this testimony to a considerable extent. Asiatic Ionic, like that of the Kyklades, has - $\kappa \lambda \eta \bar{\rho}$ and $-\iota o s$.

Now it is a modern discovery that far more satisfactory tests of dialect coloring are yielded by phonology and by schemes of inflection than by vocabulary and style. As far back as we trace the history of the dialects we find that, even when recourse is had to epic formulae, these formulae assume the color of the dialect in question. The Korkyraian of the seventh century says $\bar{\epsilon} \pi$ ' 'A $\rho a ́ \theta \theta o \iota o ~ \dot{\rho} o f a i ̂ \sigma \iota$, and not $\dot{\rho} \circ f \eta \hat{\imath} \sigma \iota$, because his dialect is an $\hat{\Lambda}$, not an $H$, dialect. Now if we apply this criterion of phonology and inflection to the Ionic of Asia Minor in the endeavor to test the accuracy of Herodotos' famous quadrilateral division, we find that the following forms have been held by various scholars to be mint-marks of the four sub-dialects:-

1. Milctos: iєрє́ต <iєрйo, gen. to iєpク́s, also the ArkadoKypr. form of iє $\rho \epsilon$ ús.
$\lambda a^{\psi} \epsilon \tau a \iota$ in Mil. кате $a^{\prime} \phi \theta \eta$ in Zeleia, from $\lambda a \mu \beta a ́ \nu \omega$.
2. Epliesos: dat. in $-\epsilon \iota$, not in $-i$, from $-\iota$ stems.
3. Chios-Erythrai:

## $\Delta \epsilon o ́ v u \sigma o s$ for $\Delta$ íopugos.

$\Pi \epsilon \epsilon \theta \epsilon \hat{v}$ and other gen. in $-\epsilon v$ in the $\hat{A}$ decl.
' $A \sigma \boldsymbol{i} \omega$ and other gen. in $-\omega$ in the $\hat{A}$ decl.
$\grave{\epsilon} \sigma \lambda \hat{\eta} s$, not $\epsilon \in \sigma \lambda \eta \eta_{\rho}$.
$\pi \rho \hat{\eta} \chi \mu a$ for $\pi \rho \hat{\eta} \gamma \mu a$.

$\pi o ́ \lambda \epsilon \omega \varsigma$ for $\pi o ́ \lambda l o s . ~$
The subjunctive in $-\epsilon$, as $\pi o \neq \eta \sigma \epsilon \iota$.
4. Samos: $\delta \eta \mu \iota o \rho \gamma o ́ s ~ f o r ~ \delta \eta \mu \iota o v \rho \gamma o ́ s . ~$

But of all these forms, only those from Samos and Miletos can stand the test of a closer examination ; and the Milesian and Samian forms quoted are, upon any sober view, but indifferent data for the support of a quadrilateral division on the score of phonology and inflection. Now the question arises: May not Herodotos have regarded vocabulary as the criterion of his four sub-dialects ? That such a point of view could be assumed by the ancients is evident from the remark of Hermogenes, that the dialect of Hekataios was pure Ionic (äкратоя), but that of Herodotos was mixed (кєкранє́vŋ). While I have no hesitation in referring this remark of the rhetorician to differences in vocabulary and in style (especially since it assists in lifting much of the obscurity in which the Herodotean dialect is enveloped), nevertheless I find myself unable to support any view which holds that there is evidence cogent enough to warrant the belief that the intermingling of Ionians with Lydians and Karians gave birth to à Lydian-Ionic or a Karian-Ionic, which Herodotos might have regarded as sub-dialects of Ionic ; and even if such evidence existed, it would not fail of being impeached at the bar of modern conceptions of dialectology, where the presence of sporadic loan-forms from contiguous languages is not recognized as essentially determinative of the character of any dialect.

All Ionic monuments that contain an admixture of nonHellenic words inflect these words as if they were of Hellenic stock. The Lygdamos stelè from Halikarnassos treats the gentlemen of Karia as if they were full-blooded Ionians, and the billingsgate of Hipponax, drawn from the slums of Ephesos, is inflected after the most orthodox Ionic fashion.

There did doubtless exist sub-dialects of Asiatic Ionic, but the accuracy of the Herodotean division is not yet attested by the monuments under our control. From the point of view of literature there are indications that there existed a Milesian dialect which claimed preëminence over all others. At Miletos were born Thales, Anaximander, Anaximenes, Kadmos, Dionysios, and Hekataios, and it is not the baseless fabric of a vision to conjecture that Herodotos himself may have used a dialect not greatly dissimilar to the speech of a.city that was the eye of Ionia as Athens of Greece.

This leads us to the delicate question of the interrelation of the sources of our knowledge of Ionic. On the one hand we have the inscriptional, on the other the literary, sources, which may be divided into: (1) the elegiac and iambic poets; (2) Herodotos, Hippokrates, their contemporaries, immediate predecessors, and immediate successors ; (3) the pseudo-Ionists of the Ionic Renaissance.

The language of the inscriptions alone is not an absolute criterion of the genuineness of an Ionic form unless the inscription is older than 400 B.C. and contains no trace of what is specifically Attic. When the language of the inscriptions, with this limitation, agrees with that of the poets, we have the surest criterion of the Ionic character of the form in question that is possible under the circumstances; and against this evidence the fluctuating orthography of Herodotean and Hippokratean Mss. can make no stand.

As in the domain of thought, so in that of language, the elegy occupies a different field from iambic poetry. Upon the dividing line of the frequency of adoption of Homeric forms, we may separate Theognis from the earlier elegists. In its possession of legacies from the earliest Ionic period, and in its use of Homeric Aiolisms, the dialect of the Megarian poct stands in closer touch with the language of the epic period than does the idiom of any of his predecessors of the elegiac guild. That the early elegists used Aiolisms seems to me an incontrovertible fact which has withstood all the assaults of the recent investigations of Fick.

Now there is a wide chasm between the Aiolism of the earlier elegy and the adventitious Aiolisms of Chios. The latter are distinctively prose forms, the former are only such as had been consecrated to use by the epos. Here we must clearly grasp two facts: (I) that an elegiac poet could adopt only Homeric Aiolisms, and (2) that no elegiac poet, not of Ionic birth, could borrow from a genuine Ionian, forms that are specifically Ionic. Solon has his Atticisms, Tyrtaios and Theognis their Dorisms, but they may not use forms that are specifically Ionic. Our inscriptions show that what is not Homeric in the elegy is drawn from the soil whence the elegy sprang; and that the forms taken from the living speech of the poet's time are few in comparison to those found in iambic poetry.

If the language of the iambographers has but little love for archaic Ionisms, it has still less for Aiolisms. The language of Archilochos, Simonides of Amorgos, and Hipponax, is, with due allowance for the perverse influence of copyists who had the Attic norm in their mind's eye, practically the same as that of the inscriptions. In regarding the Ionisms of Attic tragedy as a reflection of the Ionic period of the cultivation of the iambus just as its Dorisms proclaim the birthplace of the choral ode, I regret to be obliged to differ from so eminent a scholar as Rutherford, who holds that to the similarity between Old-Attic and Ionic is due the Ionic ingredient of tragedy.

In great part the language of Herodotos is supported by that of the inscriptions, and much of what is genuine Ionic in Herodotos is also Attic. Many forms which occur nowhere else outside of Herodotos find an easy explanation in the laws of Greek morphology. Of the remaining forms, aside from the out-and-out barbarisms, one part was obsolescent, another, and the larger part, obsolete, at the time the genius of the Ionic race created literary prose.

In the course of the following investigation my primary purpose has been to let the facts themselves show how great is the difference existing between what is certainly Ionic of the fifth century and what is ordinarily proclaimed as Ionic
of the fifth century upon the authority of Herodotean Mss. While I do not deny that Herodotos may have adopted forms that are specifically Homeric in passages that are strongly tinged with an epic tone, nevertheless my survey of the evidence has led me to the conclusion that the original text of Herodotos was written in the dialect of his time, while the bulk of the variations from that dialect is due to a $\mu \epsilon \tau a \chi a$ ракт $\eta \rho \iota \sigma \mu$ 's, which I would place about the first century of our era.

In the history of Greek literature $\mu є \tau а \chi a \rho a \kappa \tau \eta \rho \iota \sigma \mu o$ s proceeded on two lines: ejther in the direction of Atticizing the dialect texts, a fact vouched for by Galen as usual in his time, or in the direction of the substitution of dialect forms in the light of contemporaneous dialectological theories. The text of Alkman, of Korinna, and, to a lesser extent, that of Pindar, bear witness to the activity of the $\mu \epsilon \tau a \gamma \rho a \psi a ́ \mu \epsilon \nu o \iota ~ i n ~$ the latter direction.

The writers of the Hadrianic age who imitated Herodotos and Hippokrates have received the full shock of this wave of speculation as regards Ionic. But from the point of view of higher criticism, the "pseudo-Ionisms" of Lukian and Aretaios are on a different footing from the same forms in Stein's or Holder's text of Herodotos. In the one case they are the result of genuine imitation ; in the other, these forms never existed in Herodotos. A further estrangement from genuinc Ionic was produced by the occasional insertion of such hyper-Ionic formations into the texts of these Ionists, as are not found except in some Mss. of Herodotos.

One of the causes of this $\mu \epsilon \tau а \chi а \rho a \kappa \tau \eta \rho \iota \sigma \mu$ ós was the inability of the dialectologists to distinguish between the Ionic of the Homeric period and the Ionic of the fifth century. It was all Ionic Greek to these sciolists. The cardinal error of the $\mu \epsilon \tau a \gamma \rho a \psi \dot{\mu} \mu \epsilon \nu o \iota$ was the foisting of uncontracted forms upon Herodotos. This was caused by inability to distinguish between those vocalic combinations that normally remained uncontracted and those which by the fifth century had suffered contraction, and by their failing to recognize that $\epsilon o$ and $\epsilon \omega$, even if written in the uncontracted form, had fre-
quently become diphthongal as early as the seventh century. My paper will adduce evidence that this $\mu \epsilon \tau а \chi a \rho a \kappa \tau \eta \rho \iota \sigma \mu{ }^{\prime}$ 's has not affected alike all the early writers in Ionic, and that upon the authority of good Mss. the original form may very often be reinstated.

All references to my own treatment of those portions of Ionic not discussed in the following pages, will be found in a work on the Greek dialects to be published by the Clarendon Press. Under the appropriate sections I have generally attempted to explain the character of the phonetic processes at work, excluding any elaborate defence of the positions assumed. I have therefore adduced the names of others who have brought forward explanations either agreeing with, or differing from, my treatment of the forms under discussion. In a few instances the desire to institute comparisons with other dialects, chiefly Attic, has caused me to include in an examination of Ionic phonology, certain forms which do not strictly belong in such an examination (e.g. § 62).

## The Short Vowels.

## A.

1. First we may treat that $\breve{a}$ derived from $\epsilon$, which is chiefly seen in conjunction with $\rho$. The Ionic dialect here presents no features sharp enough to separate it from allied dialects.

крáтоs $=$ Aiolic крє́тоя. крáтоs, Hdt. VIII, 2 , with ка́ртоs in $A B d$; cf. картєр $\eta$, VIII, $\mathbf{1 2}$, with $\kappa \rho a \tau \epsilon \rho \eta$ in other Mss. ${ }^{1}$ Archil. 26 has картєpós, a form that comes to light upon inscriptions: Halik. картєоov́s $238_{29}$, and so in Attic and Kretan (Gortyna) ; крáтьттos appears in K $\rho a \tau \iota \sigma \tau o ́ \lambda \epsilon \omega$, Thasos (Louvre) 12 B, but was not used by Hdt.; Epic кápтıбтos. The Ionic dialect alone possesses the strong form of the adjective ( $\kappa \rho \dot{\rho} \epsilon \sigma \sigma \omega \nu$ ). In the inscriptions names in $\kappa a \rho \tau$ - and
 $\tau \eta \mathrm{s}, 19360$; $\Lambda v \sigma \iota-$, $19_{27}$; $\Lambda \epsilon \omega \kappa \rho a t i o ̂ \eta s$ Styra, $19{ }_{24}$; Kрátıos Keos, 44 A 8.
$\theta$ ápros, Hdt. VII, $9 \gamma\left(\theta_{\rho}\right.$ á $\sigma o s$ in $R$ ) ; Homeric and Attic $\theta$ ápros and $\theta \rho$ áros. The only trace of the strong form $\theta$ époos (cf. Aiolic) appears
upon an Erythraian inscription (No. 200). The fact that the inscription is in metre renders it doubtful whether names in $-\theta \epsilon \rho \sigma \eta s$ should be regarded as Ionic, though they occur elsewhere in dialects that show no predilection in favor of the $\epsilon \rho$ forms. See Pape's Lexicon. Doubtless the Homeric names in $-\theta \epsilon \rho \sigma$ - did much to popularize this form in such dialects.

The prefix dot- see:ns to be Ionic as contrasted with Aiolic $\dot{\epsilon}^{\boldsymbol{\epsilon}} \mathrm{f}$ (Hinrich's de Hom. cloc. vest. Aeol., p. 64). 'A ${ }^{\prime} \mu \nu \eta \sigma \tau o s ~ o c c u r s ~$ upon a Kean inscription, No. 44, B 1 r.
 Arkad. ऍ' $\rho \in \theta \rho o v$.

тapotá, Sim. Amorg. 39, from Et. Mag. 76425 ; cf. Hesychios
 $\tau \rho a \sigma \iota \hat{\eta} s$; cf. $\tau \epsilon \rho \sigma \hat{\eta} v a \iota$ in Homer. $\tau \epsilon \rho \sigma \iota \alpha$ is a very late formation (Julian). $\tau \rho \alpha \sigma$ - is morphologically older than $\tau \alpha \rho \sigma-$. A variation between $\alpha \rho$ and $\rho \alpha$ in order to lighten consonantal weight is seen in


The Ionic dialect was less elastic than Doric as regards its preference for the weak $a$ before or after $\rho$ in verbal forms (from original $\epsilon \rho$ ). Thus, Herodotos adopts $\tau \rho \epsilon_{\chi}{ }^{\omega}$ (VII, 57) $\tau \rho \epsilon ́ \psi \omega, \sigma \tau \rho \epsilon ́ \psi \omega$, following in the wake of Homer, while he accepts $\tau \rho \dot{\alpha} \pi \omega\left(\mathrm{I}, 6_{3}\right)$ in the present, despite Attic-epic $\tau \rho \epsilon \in \pi \omega$. In the future and first aorist the $\epsilon$-forms hold their ground in Ionic, whereas in Kretan we have $\dot{\epsilon} \pi \iota \tau \rho a \psi \hat{\omega}$. On the variation between $\tau \rho \epsilon \in \pi \omega$ and $\tau \rho \alpha ́ \pi \omega$, cf. Bredow, p. 145. In employing $\tau \rho \epsilon \in \pi \omega$, not $\tau \rho \dot{\alpha} \pi \omega$, Lukian follows in the wake of Hdt. (d. d.S. 7, 39, Astr. 3). Aretaios has but one sure example of $\tau \rho \alpha \dot{\alpha} \pi \omega$, while Hippokrates inclines in favor of the other form.

When other dialects, notably Aiolic or those allied to Aiolic, have $\rho o$ or $\rho \rho$, Ionic almost invariably adopts $\rho \alpha$ or $\alpha \rho$. See below on $\beta \rho o ́-$ тахоя, торбако́s § 18 . Hdt. III, 86, has $\dot{\alpha} \sigma \tau \rho a \pi \eta$, with which may be compared Homeric $\sigma \tau \epsilon \rho о \pi \dot{\eta}$ and $\dot{\alpha} \sigma \tau \epsilon \rho o \pi \dot{\eta}$. Kyprian has $\sigma \tau \rho o \pi \alpha ́$ (Hesychios $\sigma \tau \sigma \rho \pi \alpha$ ). In verbal inflection whenever op occurs it is the ablaut of $\epsilon \rho$, not the Aiolic form of $a \rho$.

карסín, Hdt. III, 35, a form not unknown in Homer (B452, $\Lambda$ 12), though the poet generally adopts крaסin. Ionic, Attic and Aiolic are here on a plane. The Kyprian has ко́р $\zeta \alpha$.

In the variation between $\alpha \rho$ and $\rho a$ we can discover no dialect affinities in the wider sense.
2. Other forms with $\mathbf{A}$ parallel to $\mathbf{E}$ are :
$\tau \alpha ́ \mu \nu \omega$ occurs in Hdt., though not without variation in favor of $\tau \epsilon ́ \mu \nu \omega$, and is a present formed from the aorist of $\tau \epsilon \prime \mu \omega$ (Iliad, $\mathrm{N}_{707}{ }^{\prime}$ ) ( $\tau \alpha \mu \omega ́ \nu<\tau \neq{ }_{o} \mu-o \nu \tau-$ ). Whether $\tau \alpha ́ \mu \nu \omega$, which occurs as early as Homer ( $\Gamma$ 105) and Hesiod, and is found in Pindar, Kretan, and the Heraklean tablets, is more ancient than $\tau \epsilon ́ \mu \nu \omega$, which is derived from $\tau \epsilon ́ \mu \omega$ by the infixing of $\nu,{ }^{1}$ is not certain. $\tau \epsilon \in \nu \omega$ is in fact no stranger to Homer ( $\gamma 175$ ), and is the regular form in Attic. The inscriptions indicate the preference of Ionic and Attic most clearly. In the
 ${ }^{\epsilon} \tau \epsilon \mu \rho \nu$ without exception. The $\epsilon$ of ${ }_{\epsilon}^{\epsilon} \tau \epsilon \mu \nu \nu$ is due to that of $\tau \epsilon \mu \nu \omega$.

Hippokrates and the pseudo-Ionist Aretaios use $\tau \alpha ́ \mu \nu \omega$; Lukian has $\tau \epsilon ́ \mu \nu \omega, S$ 15, тá $\mu \nu \omega, S_{51,} 60$; Demokr., frag. mor. 194, has $\tau \alpha ́ \mu \nu \omega \nu$.
$a$ for Attic $\epsilon$ occurs in the Ionic $\dot{v} \pi \sigma^{\prime} \gamma a \iota o s^{\circ}$ (also late Attic), $\mu \epsilon \sigma o{ }^{\prime} \gamma a \iota o s$,
 is quoted from Hippokrates, though not from a treatise that is colored with Ionisms). There is here no direct interrelation of $a$ and $\epsilon,-\gamma a t o s$ and $-\gamma \epsilon \iota o s$ having been each derived from different ground-forms. See the declension of $\gamma \hat{\eta}$ in Ionic.
 -oıă, see below under H, § 45, 46.

廿aкás, Hdt. III, ro, according to Stein, though $\psi \in \kappa \alpha ́ s ~ i s ~ s u p p o r t e d ~$ by Mss. authority and by Eustathios. Moiris, 419, held that $\psi \in \kappa \alpha{ }_{s}$ was Attic, but not so acceptable a form. Cf. $\psi \hat{\omega} \chi o s<\psi \bar{\alpha} \kappa$.
'A $\gamma \beta$ árava is the form used by Hdt., Ktesias (and Aischylos) for ${ }^{\text {' }} \mathbf{E}_{\kappa} \beta$ átava. The Mss. of Hdt. show constant fluctuation between these two forms, though Steph. Byz. distinctly states that 'A $\gamma \beta$ ázava is Herodotean.

$$
\text { 3. Ionic } \mathbf{A}=\text { Attic } \mathbf{H}
$$

$\mu \in \sigma \alpha \mu \beta \rho i ́ \eta$, Hdt. and Arrian, 3, 25, 39 (elsewhere the Attic form). Cf. Eustathios on the Odyss. $1714=478$, Greg. Corinth. p. 444, 654, Schmidt, Voc. I, 119.
$\dot{\alpha} \mu \phi \iota \sigma a \tau \epsilon \epsilon \omega$, Zeleia 1 I 3,18 , and in Hdt. IV, $14{ }^{2}$; IX, 74. This form is apparently not confined to Ionic unless Rhodian $\dot{\alpha} \mu \phi \iota \sigma \beta a \sigma i a s$,

[^0]$\dot{a} \mu \phi \varepsilon \sigma \beta a ́ \tau \epsilon \iota$ ，C．I．G．2905，Aiolic ${ }^{\alpha} \mu \phi \iota \sigma \beta a \tau \eta \mu \epsilon ́ v \omega \nu$, C．D．I． 21425 ， can be shown to have $\bar{\alpha}=$ Ionic $\eta$ ．

If these non－Ionic forms can be shown to have $\bar{\alpha}$ ，weight must be attached to Brugmann＇s suggestion that an Ionic $\dot{\alpha} \mu \phi \iota \sigma \beta \ddot{\mu} \tau \epsilon \in \omega$ is due to the ignorance of scribes who connected the latter part with $\beta a i v \omega$ ， Bárts，Barós；Morph．Unter．I，22．But there is no proof that the $\alpha$ of the Aiolic and of the Rhodian forms is not short ；and further－ more the inscriptional form from Zeleia proves conclusively that the Herodotean $\dot{\alpha} \mu \phi \sigma \beta \breve{a} \tau \epsilon \epsilon$ is not due to blundering ignorance．Per－ haps the forms in $\eta$ stood in an ablaut relation to those in $\breve{\alpha}$ ．
$\lambda \alpha_{s}^{\prime} \epsilon \sigma \theta a \iota$, Hdt．VII，I44，$\lambda \alpha_{s}^{\prime} \iota_{\iota v}$, IV， 2 I，have their $\breve{a}$ from the pres－ ent stem as $\lambda \dot{\alpha} \psi \epsilon \tau \alpha$, ，Miletos， $10 \boldsymbol{H}_{4}$ ．The converse procedure appears in the New Test．$\lambda \dot{\eta} \mu \psi o \mu a \iota$, a form found on Lykian inscript．C．I．G． 42446， $4^{24720,425315}$ ，and in the Papyr．du Louvre，14，1 7．${ }^{1}$ It is due to a confusion between $\lambda \eta{ }_{\eta}^{\psi} \boldsymbol{\sigma} \mu a \iota$ and $\lambda \alpha ́ \mu \psi о \mu a \iota$.

The form without nasal comes to light upon Attic vases（ $\Lambda \alpha^{\prime}(\mu) \pi \omega \nu$ ， $\Lambda \alpha{ }^{\prime}(\mu) \pi o s$ in Kretschmer＇s collection，K．Z．XXIX，p．436），though here the comparison of $\lambda \alpha \dot{\alpha} \notin \tau \alpha \iota$ is not so pertinent as Kretschmer supposes．I would prefer to class $\Lambda_{a}^{\prime}(\mu) \pi \omega v$ ，etc．，with $\mathrm{N}^{\prime}(\mu) \phi \eta$ rather than regard $\lambda \alpha^{\prime} \psi \epsilon \tau \alpha \iota$ as derived from $\lambda \alpha^{\prime}(\mu) \psi \epsilon \tau \alpha \iota$ despite the Herodotean $\lambda \alpha ́ \mu \psi о \mu a \iota, ~ \in ̇ \lambda \alpha ́ \mu \phi \theta \eta \nu, \lambda a \mu \pi \tau \epsilon ́ \sigma s . ~ W e ~ h a v e ~ к а \tau є \lambda a ́ \phi \theta \eta$ ， Zeleia， $113_{i}$ ，and $\lambda \epsilon \lambda \dot{\alpha} \beta \eta \kappa \alpha$ ，каталє $\lambda \alpha \beta \eta^{\prime} \kappa \epsilon \iota$ in Hdt．（IV， 79 ；III，42）， $\lambda e ́ \lambda a \mu \mu a \iota ~ i n ~ H d t . ~ a n d ~ H i p p o k r ., ~ \dot{a} v a \lambda \epsilon \lambda \alpha^{\prime} \phi \theta a \iota ~ i n ~ H i p p o k r . ~ I I I, ~ 308, ~$ according to Littré，with ample Mss．support．${ }^{2}$ I cannot follow Bech－ tel in branding as spurious the Herodotean $\lambda \alpha ́ \mu \psi є a \iota, ~ I, ~ ェ 99, ~ \lambda a ́ \mu \psi є \sigma \theta a \iota, ~$ IX， $108, \lambda a \mu \phi \theta \epsilon i \sigma \alpha \iota$, VI， 92 ，merely on the ground that $\lambda \alpha^{\prime} \psi \epsilon \tau \alpha \iota$ is a well attested Milesian form，and that Herodotos probably made use of the Milesian dialect，as is claimed by Wilamowitz，Zeitschr．für Gymn．－wes．XXXI，645．If $\lambda \eta \dot{\psi}$ o $\mu a \iota$ ，and $\lambda \eta \dot{\eta} \psi о \mu a \iota$ could be formed， why not $\lambda \alpha^{\prime} \mu \psi о \mu a \iota$ ？$\lambda \alpha ́ \mu \psi \epsilon \sigma \theta a \iota ~ i n ~ f a c t ~ o c c u r s ~ u p o n ~ t h e ~ g r e a t ~ i n-~$ scription from Andania，Ditt．Syll． $388_{67}$ ，though the genuine Doric was גa ${ }^{\prime}$ ồmat，Epicharmos，18，Theokr．I，4．Cf．also the late aorist ¿＇$\xi^{\prime} \lambda a \mu \psi a$ ，Diog．Laert．I，85．入á $\mu \psi o \mu a \iota$ is now generally banished from Hdt．＇s text，and $\pi \alpha \rho u \lambda \eta ́ \psi \eta \tau a \iota$ in Hipp．rests upon shadowy evidence．

Proper names in＇ $\mathrm{A} \boldsymbol{\gamma} \epsilon$－or＇ $\mathrm{A} \boldsymbol{\gamma} \epsilon$－，which run parallel to those in ${ }^{ } \mathbf{~} \mathrm{H} \gamma \epsilon$－， are from ä $\gamma \omega$ ，the asper being borrowed from $\dot{\eta} \gamma^{\prime} \neq \mu \alpha \iota$（ $>$ sāg）．Cf．

[^1]Lokrian ä $\boldsymbol{\epsilon} \epsilon \ell$. The Doric 'A $\gamma \eta \sigma$ ídaos (Perinthos, 234, B 5) has the lenis from ä ${ }^{\circ} \boldsymbol{\gamma} \omega$.

Ionic does not differ from the other dialects in offering $-\breve{\mu}$ in the nominative parallel to $-\eta$; e.g. тó $\lambda \mu$ ă, Hdt. VII, I 35 , and Eurip. Ion. $1264=\tau$ ó̀ $\mu \bar{a}$, Pind. Ol. XIII, II. In many cases this $\breve{a}$ after $\rho$ represents the pre-Hellenic suffix -ıă, iota having been transferred to the previous syllable, e.g. $\mu$ oîpa (cf. Bechtel, 265, Adesp.). The tendency to hyperionize Herodotos has led to the form $\mu$ oip $\eta$ in a few Mss. (e.g. $\mu_{i \eta} \mu^{\prime} i\left(\eta \eta\right.$, IV, $\mathbf{1 2 0}$ ). ${ }^{1}$ That the grammarians held $\eta$ to be the unvarying mark of the Ionic dialect appears from Greg. Corinth.,

 $\dot{\omega}_{\rho} \eta$, $\sigma \pi \epsilon \hat{i} \rho a \quad \sigma \pi \epsilon i \rho \eta$, where dialectal forms are confused with panHellenic formations ( $\sigma \phi x \hat{\imath} \rho a, \sigma \pi \epsilon \hat{\imath} \rho a) .{ }^{2}$ Many proper names ending in $-\breve{\alpha}$ have suffered hyperionization in the Mss. of Hdt. ; e.g. ${ }^{*}$ O $\sigma \sigma \eta$, aiy'ivq, Taváyp $\begin{aligned} & \text {. The index to Holder's or Stein's edition of Hdt. }\end{aligned}$

At the present day the explanation of many words in $-\breve{a}$ is still uncertain. Many belong to the class of which $\mu o i \hat{\rho} a$ is an example
 The cause of the $\breve{a}$ in other words is. obscure ; e.g. रápadpa, Hdt. IX, 102, while Stein reads Xapád $\rho a$, VIII, 33, name of a Phokian town. Dissimilation may be here at work, unless we admit with Stein and Holder the Attic $\chi$ a $\rho a \delta \rho a$.

Note. - The reverse process to $\breve{\alpha}$ for $\eta$ is found in the Ionic $\Sigma \mu \dot{\mu} \rho \nu \eta$ and $\pi \rho \dot{u} \mu \nu \eta$. Hdt. I, 15; 149, has $\sum \mu \dot{\nu} \rho \nu \eta$ (cf. also III, 107); Lukian $\phi \omega \nu . \kappa \rho \iota \sigma$.
 376, 657). $\pi \rho \nu \mu \nu \grave{\prime}$ may be an adjective to $\pi \rho \cdot \mu \nu \delta \delta_{s}$. See Brugmann, Saxon Soc. Reports, 1883, 191. $\pi \rho \dot{v} \mu \nu \alpha ̆$ is then an analogue of $\pi \rho \hat{\hat{\omega} \rho \alpha}$.
In the feminine forms of adjectives from $v$ stems, where Herodotos regularly has $\breve{a}$, the pseudo-Ionists not infrequently have $\eta$. Lukian
 (cf. 32 ) ; $\beta a \theta^{\prime} \eta{ }^{\prime} 7$; Eusebios § $5 i \theta \epsilon i \eta$, Euseb. Mynd. 63 , єv̉ $\rho \dot{\epsilon} \eta$.

## 4. Interchange of A and O .

In a few instances $a$ and $o$ seem to be interchangeable sounds, though the law governing this interrelation has not been formulated

[^2]in all cases (cf. below on o). So far as Ionic is concerned we have the following forms where Ionic $a=o$ of other dialects. áap $\rho \boldsymbol{\rho} \dot{\epsilon} \omega$, Hdt. I, 9,111 , 156 , III, 119 , etc., áppwín, IV, 140 , etc., and attested
 $\rho \omega \delta \kappa \omega s$, etc., and Lukian, too, the Attic form. Hippokrates, $618_{42}$, and Aretaios, Caus. M. Ac., 2, 2, have the o form. Probably assimilation of $\alpha$ to $o$ has here been caused by the influence of the $\omega$ of the following syllable (Schmidt, K. Z. XXV, ini). Etymologists are generally silent as to the derivation of this word. Horrere is probably фоírow, and cannot be connected. The Ionic form deserves special note, since it is only very rarely that Ionic differs from Attic in its use of $\alpha$ and $o$.

The question as to the interrelation of $a$ and $o$ assumes a different form in the case of proper names. In the Mss. of Hdt. there is a constant fluctuation between the readings ' $\mathrm{A} \rho \tau a \xi \xi \rho \xi \xi_{\eta}$ s and ${ }^{\prime} \mathrm{A} \rho \tau 0 \xi \in \rho \xi \eta \mathrm{~s}$, the latter obtaining in Ktesias and Plutarch, though Plutarch, in the de malig. Herod., ascribes the form in a to the historian. Cf. also Steph. Byz. s. v. 'A 1 from Mylasa, $248, \mathrm{ABC}$, and would seem to be a closer reproduction
 106, $1_{151} 1_{152}$, though the form in $a$ is not unsupported. In other

 Mag. $299_{16}$, testifies to the form in 'A 1 ra-. Nor is Stein consistent, since we find 'Артáßavos, IV, 83 , VII, іо, і1, 17,47 ; 'Арта́ßa̧оя, VII, 66, etc. ; 'Aртаßát


In any event no Ionic change of $a$ to o may be deduced from the uncertainty attendant upon the Mss. fluctuation. The Persian names
 instances of the final effort of a phonetic movement which began with 'A $\rho \tau \alpha-$ and reached 'A $\boldsymbol{\rho} \tau v$ - through 'A $\boldsymbol{\rho} \tau \boldsymbol{\sigma}$-, as has been held to have been the case with катú, кaтó, and кати́. The forms in 'Apтo- are due, not to an interchange of $\alpha$ and $o$ (§ $\$ 8$ ), but to the fondness for $o$-stems in composition.
5. A in relation to $Y$.
éкадıvó́єто, Hdt. III, 52, compared with кидívঠєтаı, Sim. Amorg. VII, 4, кuтuкv
${ }^{1} \mathrm{Cf}$. his note on this passage in his annotated edition, and Fick, Spracheinheit, p. 406.
of the interchange of $a$ and $v$, and much less as a proof of the greater age of $\kappa a \lambda \iota \nu \delta \delta_{i}^{\omega} \omega$ (Curtius, Etym. ${ }^{5}$, p. 715 ). An original qel sound $=$ Greek $\kappa \lambda$, becomes in Greek $\kappa \nu \lambda$ in weak case forms, cf. кúкдоs < qéklos. With кичé̀ $\eta$, ка́ $\mu \psi a$, capsula, and кú入̀ц̧, calix, are to be classed кадıv $\delta \epsilon \omega$, кvдıvঠ́ $\epsilon$, Germ. quellen.

The non-Ionic (Arkadian) form кavv́ does not invalidate the above explanation, since it is derived from *катó (катóтє Halikarn. $238_{43}$ is from $\boldsymbol{o} \pi \epsilon \rho$ ), which in turn is an analogue of $\dot{\boldsymbol{v} \pi o ́ ; ~ * к а \tau o ́ ~ b e c o m e s ~}$ $\kappa a \tau \dot{v}$, as $\dot{v} \pi o ́$ becomes $\dot{\boldsymbol{v}} \boldsymbol{v} \dot{v}$ (Kyme, 3 A ). This is better than to assume that the forms in $\alpha$ and $v$ are proethnic ; cf. Lettic-Lith. sa and Lith. $s u$, Lith. $g a, g u$.

## E.

## 6. Ionic $\epsilon \rho$ for $\alpha \rho$ of other dialects.

The Ionic dialect in a few cases has made use of the strong forms in $\epsilon \rho$, though not to the same extent as Aiolic.
 I, 193. The Mss., notably $R$, have the Attic form, which must have been Ionic also, since it comes to light upon the very old Thasian inscription (Bechtel, vs. 68, ä $\rho \sigma \epsilon \nu$ ). Homer has $\ddot{\alpha}^{2} \rho \sigma \eta \nu \Theta 7$, which is doubtless Ionic, since ${ }_{\epsilon}^{6} \rho \sigma \boldsymbol{\sigma} \nu$ is Aiolic (C. D. I. 2936). That both the strong and the weak form should co-exist in one and the same dialect need not surprise us. Thessalian and Boeotian (perhaps even Ionic, see on $\theta_{\rho} a^{\sigma} \sigma s$, above § i) have both $\theta_{\epsilon \rho \sigma-}$ and $\theta_{a \rho \sigma}-$, two forms living together as mother and daughter. The only other dialect which has ${ }_{\epsilon}{ }^{\prime} \rho \sigma \eta$ s is, I believe, Kretan: Gortyna Tables, X, ${ }^{2}$ 2,
 ă $\rho \rho[\epsilon]$ vos C. I. A. II, 678 , B $55-378$ в.c., Elean fáp $\rho \in v o \rho=$ ä $\rho \rho \epsilon$ vos,
 Fick, G. G: A. 1883, p. 117 ; Schmidt, K. Z. XXV, 23, 43. Hippokrates, Lukian, and Arrian have the $\alpha$ form.

 of the Attic forms (see Bredow, p. 136). Upon inscriptions we meet with $\boldsymbol{\tau} \boldsymbol{\epsilon} \sigma \sigma \epsilon \rho a s, \mathrm{r}_{4} 8_{91}$, a comparatively late document from Ephesos, $\tau \epsilon \sigma \sigma \epsilon \rho \omega \nu$, 104, B 66, Thasos, middle of the fourth century, with $\tau \epsilon \sigma-$ $\sigma \alpha ́ \rho \omega v$ on the same inscription, lines 62 and 63 ; $\tau \epsilon \sigma \sigma a ́ \rho \omega v$ occurs also in No. 114, F (Zeleia), which dates shortly after the battle of Granikos. $\boldsymbol{\tau} \dot{\epsilon} \sigma \sigma \epsilon \rho a$, Teos, ${ }^{15718}$ (the stone has TEZEPA) ; $\tau \dot{\epsilon} \sigma(\sigma) a \rho \epsilon \varsigma$,


Thasos, $11_{11}$, Kyzikos ; ${ }^{1} \tau \epsilon \sigma \sigma[\epsilon \rho \alpha] \kappa[o ́] v \tau \omega \nu$, $1_{74}, \mathrm{C}$ 16, Chios, and $\tau \epsilon \sigma(\sigma) \epsilon \rho а к и \epsilon \epsilon \beta \delta$ о $[\mu \eta]$ роитои́т $\eta s, 5 S$, Paros. Arkadian and Ionic alone have $\epsilon \rho$. Arkad. тєббєра́когта, loucart, 352 n . (late).
'A $\boldsymbol{A} \tau \alpha \phi \rho \in \mathscr{\prime} \eta$ s is adopted as the genuine reading by Stein in every instance, though the Mss. of Hdt. constantly vary between the form in -фрє́r $\eta$ s and that in - $\phi_{s}^{\rho} p v \eta ;(V, 25,30,31,32,35,73$, etc.). Aeschylos, Persae, 21, 776, has 'A $\quad$ тaфpév $\overline{2}$. In like manner Stein
 C. I. A. I, 64, B 14 ( $410-405$ b.c.), we find Tto $] \sigma \alpha \phi \rho \in ́ v \eta v$, which
 and stamps that in - $\phi^{\prime} \rho r^{\prime} \eta s$, so popular in later Greek, as a folk's etymology in the direction of $\phi^{\prime} \equiv \rho \omega$. G. Meyer, Gr. Gr. § 175 , note 1. The above-quoted Attic inscription is important evidence that the form used in the treaty, Thukydides, VIII, 27, is incorrect. See Kirchhoff in Sitzungsherichte d. Berliner Akad., 1884.

On $\theta^{\prime} \rho \sigma \sigma s$ in $=\theta^{\prime} \rho \sigma \eta ;$ upon a metrical inscription from Erythrai, see above $\S$ i, under $\theta_{\rho}$ рáoos.

On к $\rho \stackrel{\prime}{\sigma} \sigma \sigma \omega \nu$, cf. below $\$ 13$.
In suffixes : $\chi^{\lambda \iota \epsilon \rho o ́ s ~ i s ~ s a i d ~ t o ~ b e ~ I o n i c ~ f o r ~} \chi^{\lambda \iota a \rho o ́ s, ~ i n ~ L i d d e l l ~ a n d ~}$ Scott, but in Hdt. IV, i81, we find only the latter form. Hippokrates, 890 A, has $\chi^{\lambda \iota a} \rho \hat{\omega}$ s. ${ }^{2}$
iapós does not occur in Ionic. On íspós and ipós see § 167 .
 Klein, Vasen, 124), though Attic has generally ${ }^{\text {ëtços. }}{ }^{3}$ In Aiolic we have conflicting testimony; є̈ $\tau \epsilon \rho$, Sappho, ro6, and C. D. I. 2799 ,
 phologically considered, the later form, its initial $\epsilon$ being due to the influence of the $\epsilon$ of the following syllable. Schmidt (K. Z. XXV, $9^{2}$, note, and 25,43 ), a reference suggested by Dr. Collitz, explains in like manner $\dot{\delta} \rho \rho \omega \delta^{\delta} \omega$, and even $\epsilon \bar{\epsilon} \rho \sigma \eta \nu$ and $\tau \epsilon \epsilon \sigma \sigma \epsilon \epsilon \epsilon$. Cf. also $\dot{\alpha} \tau \tau \epsilon ́ \lambda \epsilon-$

 pp. 196, 200, 374. The inscription cannot be Elean, as Wilamowitz thinks,
${ }^{1}$ rícospa held its ground till late. Upon an Egyptian papyrus (i89 A.D.) we find it still preserved. Cf. Trans. Berlin Acad. 1883, pp. 916, 919.
${ }^{2}$ In one instance we have - $\epsilon \lambda$ os for Attic -a $\lambda o s, \boldsymbol{i} \in \lambda o s$, Hdt. III, $24 . \quad \boldsymbol{v} \in \lambda o s$ was regarded by the grammarians as the Hellenic form. Bredow, p. 136, suggested that it was sanctioned by the authority of Theophrastos, who adopted it from Ionic.
${ }^{3}$ Attic inscriptions have always ítepos. Attic $\theta \dot{\partial} \tau \in \rho o \nu$, sic, and not $\theta \dot{x} \tau \epsilon \rho \supset \nu$. It is impossible that to érepov should become $\theta \dot{\alpha}$ тepov, as is commonly stated.
since that dialect loves $\bar{\alpha}$ in preference to $\eta$. Does not the absence of the asper indicate an Asiatic-Ionic origin? We find $\tau \boldsymbol{\eta} \tau \bar{\epsilon} \rho \eta$ in Phoinix in Athen. 495 E.
7. Other examples of Ionic $\mathbf{E}=\mathbf{A}$ of other dialects.

ӧтє, $\pi о ́ \tau \epsilon, ~ a ̈ \lambda \lambda о т \epsilon$, Ionic-Attic $=$ Dor. ӧкх, $\pi о ́ к \alpha, ~ a ̈ \lambda \lambda о к х, ~=~ A i o l i c ~$
 an I.E. palatal sound becoming tau before $\epsilon$, kappa before $a$. The Aiolic forms are contaminations.

On $\epsilon_{i \nu \epsilon \kappa \epsilon \nu, ~ \epsilon i \tau \epsilon \nu, ~}^{\ell * \pi \epsilon \iota \tau \varepsilon \nu, ~ s e e ~ u n d e r ~ A d v e r b s . ~}-9 \epsilon \nu,-\theta \varepsilon$ are the Ionic forms. $\quad \gamma^{\prime}$ Ionic-Attic $=$ Doric $\gamma{ }^{\prime}$, Epeirot. $\gamma^{\prime} v .{ }^{1}$
$\gamma^{\prime} \mu \mu \alpha$ was the Ionic form used especially by Demokritos according to the unsupported testimony of Eustathios, $370_{15}$. For other variations between $\epsilon$ and $\alpha, \alpha$ and $\epsilon$, occurring in various dialects, and for which no satisfactory explanation has as yet been reached, compare G. Meyer, Gramm. § 24.
 Cf. Greg. Corinth. $d . d . I$. § 59. Attic $\mu \epsilon \in \notin \theta o s$, the variation between $a$ and $\epsilon$ being due perhaps to the influence of $\epsilon$ in the initial syllable. The statement that the Doric dialect possessed the form $\mu^{\prime} \gamma^{\prime} \theta 0$ os is not beyond suspicion, since Philoxenos, who has the form with $\alpha$ in II, 19, either contradicts himself, V, 2 I , where he uses $\dot{v} \pi \epsilon \rho \mu \epsilon \boldsymbol{\epsilon} \boldsymbol{\epsilon} \boldsymbol{\jmath} \epsilon \mathrm{~s}$, or at least shows that both forms were known to Doric. Lukian has $\mu^{\prime} \gamma^{\prime} \alpha \theta$ os, $S 27,30$, according to Jacobitz, though $A$ has the $\epsilon$ form everywhere. In Arrian, $\mu \epsilon \epsilon \epsilon \epsilon$ os is the only reading in seven out of eleven cases, and this is the form used by Abydenos 5. Hippokrates and Aretaios both adopt the common form.
$\epsilon$ apparently takes the place of $\alpha$ in certain verbs in - $\epsilon \omega$ ( $\delta \rho \rho^{\prime} \omega$, $\tau 0 \lambda \mu \epsilon ́ \omega$, oi $\delta \delta \varepsilon \omega$, etc.) and before $o, \omega$, ov in inflection. A full list, with an attempted explanation of the interrelation of the forms, is given in the $\S \S$ treating of the verb.

Before the termination - $(\sigma) a \iota$, a becomes $\epsilon$ in Ionic by dissimila-


## 8. Ionic $\mathbf{E}=\mathbf{O}$ of other dialects.

A singular substitution of $\epsilon$ for $o$ is found in $\Delta \iota \epsilon \nu v^{\prime} \sigma \omega(\imath)$, Bechtel No. 31, from Amorgos, an inscription of the fifth century; whereas,

[^3]the other Ionic inscriptions have either $\Delta t o v v^{\prime} \boldsymbol{t o s}$ or $\Delta$ tovús. See below on E and I. G. Meyer, Gramm. § 26, is inclined to regard this $\epsilon$ as parallel to that of ' $\mathrm{I} \pi \pi \epsilon \delta \dot{\alpha} \mu \sigma v$ (Rhodes) or of $\dot{\alpha} \nu \delta \rho \epsilon \phi o{ }^{v} \nu o s$, called Doric by Herodian, -forms of common speech with an $\epsilon$ comparable to the toneless $e$ of Modern Greek. Bechtel's suggestion is preferable: Díéveros : Dióvvaos = aiédovpos : aiódos, or as
 Nom. in - $\omega$ s. Cf. G. G. A. i 88 i. 1447, Baunack's Stud. I, 71, and K. Z. XXVI, 354. Solmsen, K. Z. XXIX, 89, offers no proof of his suggestion that $\Delta \iota \epsilon v v^{\prime} \sigma \omega t$ is an error.

Of the various names taking their rise from the two chief ablaut forms of Apollo ('A $\pi o ́ \lambda \lambda \omega \%$ 'A $\pi \epsilon \in \lambda \lambda \omega \nu$ ), there are a few examples upon Ionic soil of the latter, so common among Doric peoples. 'A $A \pi \lambda$ $\lambda_{i}^{\prime} \omega r o s,{ }_{153}$, Smyrna (names in 'A $\pi o \lambda \lambda$-, lines $3,15,24,37,40,41$ ), 'A $\pi$ ] $\lambda \lambda \hat{\eta} s, 177$ Chios, and in Erythraian inscriptions: 'A $\pi \epsilon \lambda \lambda i o v, 206$
 line, 'А $\pi о \lambda \lambda \omega ́ v[\iota o s])$, 'А $\pi \epsilon \lambda \lambda \iota \kappa \hat{\omega} v$, Bull. de Corr. Hel. III, 388 . Also in Naukratis (Gardner's Naukr. I, pl. XXXII, ro4), 'A $\pi \boldsymbol{\sigma} \boldsymbol{\lambda}$ - names are very frequent. In no case does the god bear the name 'A $\pi \epsilon \lambda \lambda \omega \nu$ among Ionic peoples, though it is a form of as great antiquity as the usual Attic-Ionic one. See my paper 'Trans. Am. Philol. Assoc. XVIII, 97, and, above all, Prellwitz, B. B., IX, 327 , ff. Baunack in the Studia Nicolaitana, p. 54, in his Studien, p. 155, and Meister G. D. II, 90 may also be consulted.

In $\dot{\epsilon} \xi \alpha \pi \epsilon^{\delta} \delta o v$, Hdt. (II, 149) has preserved the older form of the
 -modov. In Attic (Thuk. and Xen.) the stem mod- has supplanted its rival $\pi \epsilon \delta$.

Tєра́vaov, Terone 7 (before 420 ), cf. Topevaioı on Attic tribute-lists in the first volume of C. I. A., and Topevaios on an Attic mortuary stele, Mitth., X, $3^{6} 7 \mathrm{ff}$.

The Mss. of Hdt. have $\epsilon$ for o in -кóvтєроs, etc. Examples : $\pi \epsilon \nu \tau \eta-$
 but in each case Stein has adopted the -коvтєроs form. The Ionic form contains the simple form of the root $\hat{\epsilon}^{\rho} \rho$ ( $\dot{\epsilon} \rho \dot{\epsilon} \boldsymbol{\epsilon} \sigma \sigma \omega$ $\boldsymbol{\epsilon} \rho \dot{\epsilon} \tau \eta s$ ), whereas the Attic пєvтұкóvтороs, трєакóvтороs have the ablant ó $\rho$-. Both forms, трико́vтороs and треакóvтєроs, occur in Attic inscr., and in the fourth century only; but the former is the more frequent. The ablaut form is the one to be expected from the composition of the word.

## 9. E in Ionic $=\mathrm{I}$ of other dialects.

Names derived from, or connected with, $\Delta$ oóvvoos exhibit a greater elasticity of vowel relations in Ionic than elsewhere.

We have above, § 8, met with the sui generis $\Delta i^{\prime}$ v́voos ; besides this form we have $\Delta \epsilon \boldsymbol{\nu} v \hat{s}, ~ 196$, Maroneia, and $\Delta \epsilon \boldsymbol{v} \hat{v} \delta o s$, No. 198, Erythrai. The $\epsilon$ vowel wè have also in $\Delta \epsilon$ ovvos ${ }^{1}$ upon a coin of Imhoof-Blumer's collection (Bechtel, p. 114), in $\Delta$ ev́voros, Anakreon, $2_{11}$, II, (but $\Delta$ córvace $^{2} 54,55$ ), and in the abbreviated $\Delta \mathrm{EO}$ on coin legends of Abdera, Bechtel, No. $166_{1}$.

In sharp opposition to this $\epsilon$ are the forms with $\iota$, which are very common. Examples are: Dióvvoos, Iasos, 104 ${ }_{16}$, Eryth., 206 B 24, and often elsewhere ; Diovv́soos, Smyrna 153 $_{3,5,}$, Thasos (L) $1_{5}$ C 4, Kyzik. II $_{5}$, Olbia $\mathbf{I}_{3} \mathrm{I}_{14}$, 26 I (unc. locality), Halik. 24I, Thasos
 Thrace 66 nos. $62,68,85$, and in almost. every other Ionic quarter. Ionic is also $\Delta \iota \dot{\omega} v \sigma^{\prime} \sigma o s$. On the probable connection with $\mathrm{Z} \epsilon \dot{\text { ús }}$ by folk's etymology, see Baunack (Gortyn. p. 67, note r), and Solmsẹn, K. Z., XXIX 89. Cf. also Frogs, 2 15, Apoll., Argon., II 905, IV II 32.

The corruption of antevocalic $\epsilon$ to $i$, so frequent in Thessalian, Boiotian, Duric, Kyprian, etc., is rare in Ionic, if indeed it can be shown to exist at all. Kad入cpévos 36 (Amorgos) is doubtless a mere slip on the part of the engraver. The nearest approach to $\iota$ is the pronunciation of $\epsilon$ as a semi-vowel in the synezesis $\epsilon$. This semivocalic $\epsilon$ may disappear in contract verbs, as in Arkad. $\in \lambda \lambda a \nu]$ o $\delta$ -


 Mitth., VIII, 189, 190. Fritsch's paper in Curt. Stud. VI (cf. esp. pp. ${ }^{125-132}$ ), is scarcely trustworthy in all its dealings with Ionic.
 haps from $\Theta$ ev́ó $\omega \rho o s$.

## 10. E for H .

$\mu^{\prime} \dot{\epsilon} \nu$ for $\mu \dot{\eta} \nu$ in the formulae ${ }^{\eta} \mu^{\prime} \hat{\prime} \nu, \mathrm{I}, \mathrm{r} 96$; $\mu \grave{\eta} \mu^{\prime} \hat{\prime}, \mathrm{I}, 68$, III, 66,
 VII, 1оз; каi- $\mu$ ย́v, IV, 45, VI, 98 . Cf. Greg. Corinth., 47 I. Hdt. here adopts a usage common to Homer, and not unknown in Attic. Cobet, Mis. Crit., 365 , is an advocate of the view that Homer has
only $\dot{\eta} \mu^{\prime} v, \mu \grave{\eta} \mu^{\prime} v$, not $\dot{\eta} \mu_{\eta}^{\prime} r, \mu \grave{\eta} \mu \dot{\eta} \nu$. Cf. Monro, Hom. Gram., $\S 345$, and note, p. 322 . With $\mu^{\prime} v$ I would connect the Thessalian, Homeric and Attic $\mu \alpha^{\prime}$ as $\kappa \epsilon \quad \nu$ is connected with к $\alpha$.
$\ddot{a} \pi \lambda \epsilon \tau \sigma$ is said by Bredow, p. 143 , to be used by Hdt. for $\ddot{\alpha} \pi \lambda \eta \pi o s=$
 Hymn to Demeter ; $\ddot{\alpha} \pi \lambda \epsilon \tau \sigma$ is, however, to be classed with $\pi \lambda \epsilon \epsilon \omega$, and not with any derivative of $\pi \epsilon \lambda \alpha^{\prime} \omega$. Cf. Siegismund in Curtius, Stud., V, 201, 202.
$\dot{\text { éroov́pat in Hdt., cf. Attic } \mathfrak{\eta} \tau \tau \alpha ́ o \mu a \iota, ~ o u t ~ o f ~ w h i c h ~} \dot{\eta} \tau \tau \alpha$ was formed, Wackernagel, K. Z., XXX, 299. Hdt. has é $\sigma \sigma o \hat{v} \nu \tau 0, \mathrm{I}, 67$; - $\mu \in v o s, \mathrm{I}, 82$; $\dot{\boldsymbol{\epsilon}} \sigma \sigma \omega \theta \epsilon i ́ s$, I, 207 ; 白 $\sigma \sigma o v \hat{v} \theta \theta a t$, III, 22, etc. Brugmann conjectures (Berichte d. süchs. Gesell. d. Wiss. 1883, p. 193, cf. Osthoff Perfect., 449) that $\dot{\epsilon} \sigma \sigma o v \mu a t$ is from ${ }_{\epsilon}^{\epsilon} \sigma \sigma \omega v$, whose $\epsilon$ represents a mechanical change of $\eta$ (cf. $\dot{\eta} \kappa \alpha$, Attic $\stackrel{\eta}{\eta} \tau \tau \omega \nu$ ) to $\epsilon$, in order to bring the comparative into line with крє́ $\sigma \sigma \omega \nu$, Ionic for крєí $\sigma \sigma \omega \nu$. Stein, however, has no qualms of conscience in writing $\dot{\eta} \sigma \sigma \omega \nu$ (cf. $\hat{\eta} \sigma \sigma o v$, I, 98 ; $\ddot{\eta} \sigma \sigma o v \epsilon \varsigma, V, 86$, VIII, $113 ; \dot{\eta} \sigma \sigma o ́ v \omega v$, VII, 18 ; $\dot{\eta} \sigma \sigma o \sigma \iota$, VIII, 83) since he is supported in part by the unanimous voice of the Mss. Krüger holds to "̈ँ $\sigma \omega \boldsymbol{v}$, Formenlehre, $\S 23,4,3$.

Өарүєлєós for $\Theta a \rho \gamma \eta-$, Chios, 174 С 18.
il $\lambda$ cos appears to be the Herodotean form, IV, 94, VI, 9r. The interrelation of this form, which is also Kretan, with $i \lambda \eta f o s$ and $i \lambda \lambda \alpha o s$ is a much-vexed question. iौcos represents that form which had $\eta$, the forms with $\alpha$ an old ablaut form ină-. Archilochos, $75_{2}$, has ildaos (-v-) according to Bergk, for which Fick proposed without jus-
 ever, Ionic as well as Attic (which has also ìdāos). See Pischel, B. B. VII, 332 and Solmsen, K. Z., XXIX, 35 I. The Hesychian $\epsilon i \lambda \hat{\eta} s$ $\epsilon \boldsymbol{i} \cdot i \lambda \epsilon \omega s \epsilon i$, has been read $\epsilon \ddot{i} \lambda \eta s \in \boldsymbol{i}$, and explained as an Asiatic-Ionic perfect.

This word belongs also under the following section :
11. Ionic $\mathbf{E}=\hat{\mathbf{A}}$ of other dialects.

1. In this category falls first Ionic $-\epsilon \omega v,--\bar{\alpha} \omega \nu<-\alpha \iota \omega \nu$ or $-\alpha{ }_{\sigma} \omega \nu$.

 $\delta \hat{\omega} v$, Arch. Ep., 114 , for which we may read IIoveє $\delta^{\prime} \epsilon \boldsymbol{\omega} v$.

Notr. - חogeiodiw in the Ionic elegy is due to the pressure exercised upon
 given by Bergk, is not supported by Ms. evidence, though corresponding to
$\Pi o \sigma \epsilon \iota \delta \alpha{ }^{\prime} \omega \nu \alpha \not{ }^{2} \nu \alpha \kappa \tau \alpha$, Iliad, XV, 8. The objection that if Archil. may adopt -oto from Homer, he has an equal right to - $\dot{\alpha} w \nu o s$ is not cogent, since -oto is an ancient Ionic termination, while $-\bar{\alpha} \omega \nu$ cannot be shown to be the property of any period of the Ionic dialect. Fick's correction, Hov $\omega \iota \delta \eta \omega \nu o s$, is based upon
 peculiar position of $\pi \alpha \iota \eta \omega \nu$ in Homer, see Fick, Odyssee, p. 17), and $\dot{\alpha} \lambda \lambda \dot{\eta} \omega \nu$, Naxos, 23, where $\eta \omega$ seems to be an intermediate stage between $-\dot{\alpha} \omega \nu$ and $-\omega \nu$. Cf. § 29.
'А $\lambda \kappa \mu \tilde{a} \omega \nu$, Hom. $=$ Hdt. and Thuk. 'А $\lambda \kappa \mu \epsilon ́ \omega \nu$. With $\Phi_{\iota} \lambda \epsilon$ ' $\omega \nu$ in $\Phi \iota \lambda \epsilon \omega \nu{ }^{\prime} \delta[\epsilon]$ os, Thasos, 73, cf. Hdt., VIII, ri, $\Phi \iota \lambda \alpha^{\prime} \omega v$, which is, however, the name of a Kyprian. Max ${ }^{\prime} \omega \nu$, Thas. (Louvre) $1 o_{11}=$ Hom. Maxá $\omega v$. Cf. Zacher, Nomina in -awos, p. i12, Merzdorf, Curtius' Stud., IX, 238.
2. Ionic genitives in $-\epsilon \omega=\bar{\alpha}(\imath)$, ' 'A $\tau \rho \epsilon i \delta \epsilon \omega$, etc., see Declension.
3. Genitive pl. in $-\epsilon \omega \nu=-\bar{\alpha} \omega \nu$ (Boiot., Thessal. (-aovv), Hom.). Homer's gen. in $-\epsilon \omega \nu$ ( $\mathrm{H}_{\mathrm{I}}, \phi$ 191) and $-\epsilon \omega \nu,-\hat{\omega} \nu$ are Ionic. Menrad, p. 41, calls for the restoration of $-\epsilon \omega \nu$ and $-\epsilon \omega$ wherever possible in the text of Homer.

 Miletos, 93, not long after 600 b.c. So in $\lambda \epsilon \omega \phi$ ó $\rho o v$, Chios, 175 , $\Lambda \epsilon \omega \kappa \rho \alpha ́ \tau \eta s, \Lambda \epsilon \omega \mu \epsilon \dot{\delta} \omega \nu$, and many other forms on inscriptions. The Mss. of Hdt. are, of course, not consistent (cf. II, i24, V, 42). Even in the case of Doric names he occasionally uses the Ionic forms ;
 is clearly a contamination of an original $\Lambda a o \delta i \kappa \bar{a}$ and an Ionic $\Lambda \epsilon \omega-$ סiк $\eta$. Variation in the proper names must be expected even upon inscriptions : thus we have, Chios, i $77, \Lambda \epsilon \omega \sigma \epsilon \in \beta \epsilon$ [s], l. 3, but -тóдaos, 1. 14. In the lyric poets the epic form prevails to some extent: גoós, Kall. I, 18, Xenoph., II, 15, whereas Hipponax (88) has preserved the only example of $\lambda$ خós, a form which shows that words with an $\bar{u}$, represented in Ionic by $\epsilon$, must have gone through a transitional period with $\eta$, though the examples are exceedingly few. Cf. Eng. Journal of Philol., vols. IX, X, for a discussion as to the periods of Ionic.

With these compounds of $\lambda \epsilon \omega^{\prime} s$ and ' $A \mu \phi \iota \alpha \rho \epsilon \omega{ }^{2}{ }^{2}$ in Hdt., cf. the


${ }^{1}$ Greg. Corinth, pp. 42, 686.
${ }^{2}$ Cf. Greg. Corinth, p. 42. 'A $\mu \phi$ iá $\rho a . o v$, Oropos, 18 , a non-Ionic form.
${ }^{3}$ Bredow, p. 50.
(gen. of vaîs), $\gamma \epsilon \omega \pi \epsilon \delta i o v$, etc., $\delta_{i}^{\prime} \mu \nu \epsilon \omega s=\delta<\mu \nu a i o v s($ Attic $\delta i \mu \nu \omega \mathrm{~s})$, and
 $\tau \in \theta v e ́ o ́ s$, I, 112 , etc.

In almost every instance when primitive $\bar{\alpha}$ was followed by a vowel, Ionic attests the presence of $\epsilon$ in place of $\bar{a}$. The instances where this is not the case deserve to be brought out into clear light. $\lambda$ चós, in Hipponax, has already been referred to. In Hdt. we do not find
 well attested in literature and in inscriptions. ${ }^{1}$ Herodotos' conservation of v$\eta{ }^{\circ}$ s is artificial and not in consonance with the genius of the Ionic dialect, which would call for $v \epsilon \omega$, a form which in fact appears
 form, and as such is not foreign to Aiolic monuments; but it may be safely claimed as genuine Ionic, even though the Samian inscription is not old.
Whether the Ionic form of the adjective is $i \lambda \epsilon \omega s$, or $\bar{i} \lambda \epsilon \boldsymbol{\sigma}$, is still a matter of contention, since the ground form of the word has not been cleared up by the Lakonian EI^FFO (Roehl, 75, = Rob., I No. 261); and it is even a matter of uncertainty what is the genuine Homeric form, since Nauck has demanded $i \lambda \eta o s$ and $i \lambda \epsilon \sigma$ s in place of $\bar{i} \bar{\lambda} \bar{a} o s$ and $i \lambda$ ăos. Stein's claim that $i \lambda \epsilon o s$ is the Herodotean form is supported by the arguments of Wackernagel, K. Z., XXVII, p. 264. See \& io.

On 'А $\lambda \kappa \mu \epsilon{ }^{\prime} \omega \nu$, $\delta i \mu \nu \varepsilon \omega \varsigma$, see below under $\mathbf{E}=\mathrm{AI}$.
12. Ionic $\mathbf{E}=\mathrm{AI}$ of other dialects.

Ionic $\gamma^{\prime} \eta=$ epic $\gamma$ 人aic may be regarded as forms phonetically interdependent, though the parallelism of 'A $\theta$ quaia, adduced by Bechtel (Ionisclie Inschr., No. 62), is faulty, since there is no *'A $\theta_{\eta} v^{\prime} \epsilon_{\eta}$ We have, however, here to do with strong and weak case forms, as is shown on $\gamma \hat{\eta}$, under Declension.
 though in Homer, v 16, Hesiod, O. D. 333, and Archilochos, 25 , the original at cannot be impeached; nor does an *ajéomat win the support of our sympathies when $\dot{\alpha} \gamma \dot{\sigma} \sigma \sigma \epsilon \sigma \theta a l$, etc., are compared. Fritsch (V. H. D, p. 39) is inclined to the view that äyєópevot can

[^4]have originated only in a period when at was written $\epsilon$ ( 150 A.D. according to Meisterhans,' p. 27). Cf. $\pi \alpha \rho a \kappa$ '́є $\tau \alpha$, II, izo (C. P. d.) for таракаієта.

If recourse to this means of accounting for the form $\dot{\alpha} \gamma \epsilon-$ be deemed too bold, we may be compelled to dissociate $\dot{\alpha} \boldsymbol{\gamma} \boldsymbol{\epsilon} \boldsymbol{\prime} \mu a \iota$ from

 the realm of probability any suggestion that $\dot{\alpha} \gamma a i o \mu a t$ was the ground form which, through $\iota$ passing into the glide and by an Ionic weakening of $a$ to $\epsilon$, became $\dot{\alpha} \gamma \boldsymbol{\epsilon} \neq \mu a l$. Curtius, Verbum, I, 176, does not mention à $\gamma$ ќopal.
' $\mathrm{A} \lambda \kappa \mu \mu^{\prime} \omega \nu$, $\delta \dot{\prime} \mu \nu \epsilon \omega \mathrm{s}$, are not to be derived from ' $\mathrm{A} \lambda \kappa \mu \mathrm{a} \omega \omega \nu$, etc. (Wackernagel, K. Z., XXVII, 267), but from 'A $\lambda_{\kappa} \mu \alpha^{\prime} \omega \nu$, etc. (Kretschmer, K. Z., XXIX, 416 ; Johansson, B. B., XV, 183).

## 13. Ionic $\mathbf{E}=\mathbf{E I}$ of other dialects.

$\mu{ }_{\epsilon}^{\prime} \zeta \omega \nu$ in Hdt. $<\mu \epsilon \gamma_{L} \omega \nu$, a more original form than $\left.\mu \epsilon_{i}^{\prime} \zeta \omega \nu . \quad \mu \epsilon \epsilon^{\prime}\right\} \omega \nu$ is the poetical form (Theog., 338, $5^{17}$ ), though $\mu \epsilon ́ \xi \omega v$ appears upon a metrical inscription from Attika, B. C. H., VIII, 470. ${ }^{1}$ The form with $\epsilon \iota$ has not been cleared up despite the efforts of Brugmann (Ber. d. sächs. Gesell. d. Wiss. 1883, p. 193, Grundriss, I § 639) and of Osthoff (Jena Litteraturzeit. 1878, Art. 476, Zur Gesch. des Perf., 449) to refer it to the analogy of $\chi \epsilon i \rho \omega \nu$, à $\mu \epsilon i v \omega v$. Brugmann adopts the same explanation for $\kappa \rho \epsilon \dot{\epsilon} \sigma \sigma \omega \omega$ for $\kappa \rho \dot{\epsilon} \sigma \sigma \omega v$. Cf. also K. Z., XXIX, 140. $\mu_{\epsilon \in \zeta}{ }^{\prime} \omega \nu$ has been imitated by Lukian, Syr., 12, 19, 22, though $\mu \epsilon i \hat{\zeta} \% v$ ro in all Mss.; in the Astr., 5, 6, the $\epsilon$ form. In Arrian, $\mu \epsilon \zeta$ - is well attested, but it is absent from the text of Euseb. Mynd. Eusebios, 3, has $\mu$ é $\xi_{o v}$. Hippokrates and Aretaios adopt the Ionic form in a large majority of instances.
$\kappa \rho \epsilon \in \sigma \sigma \omega$, formed from the strong base $\kappa \rho \epsilon \tau$-, which does not elsewhere appear in Ionic, though well attested in the case of ArkadoKyprian, and perhaps not foreign to Aiolic. к $\kappa \dot{\epsilon} \dot{\epsilon} \sigma \sigma \omega v$ occurs in Hdt., in Hipponax, 79 , Anan., ${ }_{3}$, Phokyl., $5_{2}$, though in these poets the reading $\kappa \rho \epsilon \epsilon \sigma \sigma \omega \nu$ is disputed by some Mss. Theognis, 218, 618, 63 I , 996 , has $\kappa \rho \in ́ \sigma \sigma \omega \nu$; which is sufficient authority to justify Renner's displacement of $\kappa \boldsymbol{\rho} \boldsymbol{\epsilon} \dot{\prime} \boldsymbol{\sigma} \sigma \omega \nu$, 1о74, 1173 . I hold fast to my assertion (Diphthong EI, p. 58) despite the objections urged against it, A.J.P., VIII, 98, that it is impossible for yod with tau to have become

[^5]$\sigma \sigma$, and at the same time to have changed $\epsilon$ to $\epsilon \iota$ in the preceding syllable. Hippokrates and Aretaios have к $\kappa \epsilon \sigma \sigma \omega \nu$, a form which recurs in Euseb. Mynd., 10, 62, though the Mss. of the Neo-Platonist has $\mu \epsilon i \zeta \omega v$. In the letters of Hippokrates the Ionic form has been carefully imitated ( ${ }_{7} 729,5 ; 27$ it $)$.
cis, ${ }^{\prime} s<\notin v s$, see under Prepositions. The genuine Ionic form appears to be 's, though eis is not unknown. cis in Ionic contains a spurious, in Aiolic a genuine, diphthong.
$\kappa \dot{\tau} \pi \epsilon \rho o s$, an aromatic plant used by the Skythians for embalming, Hdt., IV, 7r. Whether this is connected with the marsh plant, ки́лєєроv, Il., XXI, 35 r , is doubtful.

 $\mu \epsilon \nu o t, 3 \mathrm{I})$ is to be separated from $\delta \in i \kappa \nu v \mu t$, and compared with doceo. ${ }^{1}$
 Theog., 500). G. Meyer's suggestion (Gramm. § 115, note) that $\delta_{\varepsilon \iota} \delta_{\chi} \chi a \tau a \iota$ is connected with doceo and $\delta^{\prime} \dot{\xi} \dot{\xi}$, etc., is scarcely to be accepted.
$\ddot{\epsilon} \rho \gamma \omega=\epsilon i \rho \gamma \omega$ (the distinction between $\epsilon \ddot{\ell} \rho \gamma \omega$ and $\epsilon i \rho \gamma \omega$ is late and
 Bredow, p. 153), and not $\epsilon i \rho \gamma \omega^{2}$ or $\epsilon_{\epsilon}^{\epsilon} \rho \gamma \omega$. $\mathfrak{\epsilon} \xi \in \epsilon \hat{\imath} \rho \gamma o v, \mathrm{~V}, 22$, is due apparently to the variable augment of ${ }^{\epsilon} \rho \gamma \omega$, and need therefore not be classed with катє $\rho \gamma \hat{v} \hat{\sigma} \iota$, IV, 69, ánє'िpovoa, IX, 68, where the Mss. unite in demanding a form stamped as un-Herodotean by all other passages. In Homer both $\epsilon \ddot{\epsilon} \rho \gamma \omega$ and $\boldsymbol{\epsilon} \epsilon \rho \rho \omega$ are well estab-
 advisable.
Note. - I have tentatively explained the interrelation of $\epsilon \iota_{\rho} \rho \gamma \omega$ and $\boldsymbol{\epsilon} \dot{f} \rho \gamma \omega$ as
follows: eip $\omega$ contains a prosthetic vowel that appears upon the weakening
of the base $\boldsymbol{F} f \rho \gamma$ to $f i \rho y$ through influence of the accent. $\dot{\epsilon} \in \rho \gamma \omega$ is perhaps a
contaminated form, with the prosthetic vowel that is in place originally in the
weak form above. Schulze, $K^{*}$. Z. XXIX, 235 protests against this explanation.

## 14. Varia.

The $\epsilon$ in $\boldsymbol{\epsilon} \xi a \iota \theta \rho a \pi \epsilon$ vovios, Mylasa, $248_{2}$, is a prefix to help out $\xi$ as representative of the Old Persian $\chi^{\xi}$. Wiese, B. B., V, 90, sug-

[^6]gests that $\epsilon \mathfrak{c} \xi-$ is due to a popular etymology which connected the word with the preposition. Cf. é $\dot{\xi} \sigma a \tau \rho \alpha \pi \epsilon$ vovoros, C. I. G., 2919, Tralles; є̇धбarрámŋs, Theopompos, Lobeck, Ell., I, 144. A parallel example
 I, 243 .

The vowel I (short $\iota$ ).

## 15. Ionic $\mathrm{I}=\mathbf{E}$ of other dialects.

$\mathbf{E}+\sigma+$ consonant $+\iota$ becomes $\iota^{1}$ in $i \sigma \tau i \eta$ in the Ionic of Homer and of Hdt., as in other dialects. Cf. fıテтiav, Arkad., ${ }^{\text {I }} \boldsymbol{I} \sigma \sigma \tau \iota a i \epsilon[\iota]$ os, Thessal., ' ${ }^{\text {I }} \boldsymbol{\sigma} \sigma \tau \iota a i ̂ \delta a s, ~ B o i o t . ~ a n d ~ D o r i c ~(L o k r i a n, ~ K r e t a n, ~ S y r a k u s a n, ~$ Heraklean), Aiolic and Attic alone having preserved the $\epsilon$ vowel here.

 $\dot{\varepsilon} \sigma \tau i \eta$ of $L$. Greg. Corinth., p. 500, quotes $\dot{\epsilon} \pi i \sigma \tau \iota o s$. The editors of Hdt. have now removed all cases of $\epsilon \sigma \tau$ - from the text, even ' $I \sigma \tau \iota a \iota \epsilon$ ', having been substituted for ${ }^{〔} E \sigma \tau-$, though attested by Plutarch. Cf. the variation between Homeric 'I $\sigma$ tiaıav and Apollodoros' 'Ertıaíav.

In $\sigma v \nu \epsilon \sigma \tau i ́ \eta, ~ V I, ~ 128$, the Mss. have -єбт-. For various conjectures, see Stein, ad loc. Bechtel Thas. (L), i8 B io) writes $\left.{ }^{\prime} E\right] \sigma \tau \iota \alpha i ́ o v$.
$\boldsymbol{\epsilon}$ before $\sigma+$ cons., when the latter is not followed by $\iota$, does not become $\imath$; e.g. $\epsilon \dot{v} \epsilon \sigma \tau \alpha \hat{\imath}, \mathrm{Hdt}$., I, 85, à $\pi \epsilon \sigma \tau o \hat{\imath}$, IX, 85.

Note. - A nominative ip $\rho$ s = $\boldsymbol{\epsilon} \rho \rho^{\prime} s$ (Thessal.) is assumed by Baunack, K.Z., XXVII, 565 ; and for $i \rho \in ́ v \in s, i \rho \epsilon \in \epsilon s$ is substituted by the same scholar in Hdt. IX, 85 .
16. Ionic $\breve{\mathrm{I}}=\mathrm{EI}$ of other dialects.

See under $\overline{\mathrm{I}}, \S 65$, for cases of itacism in Ionic. Sections 44, 46, will discuss the interrelation of $-\iota \eta$ and $-\kappa \iota \eta$. No cogent instance can be adduced of an itacistic change of $-\varepsilon \iota \eta$ to $-\iota \eta$ in any older period in the history of Ionic.
$\ddot{\imath}_{\kappa \kappa є \lambda o s}^{*}$ varies with $\epsilon \ell \kappa \in \lambda o s$ in the Mss. of Hdt. as in those of Homer.
 not descended from the $\epsilon \iota$ of $\epsilon i \kappa \epsilon \lambda$ os by the merging of $\epsilon+\iota$ to $\bar{\iota}$, and


${ }^{1}$ Cf. Collitz, A. J. P., VIII, 216, who suggests that the change is late. It is certainly confined to certain dialects.
 $\epsilon i ̋ \epsilon \lambda о s$ is the correct form, though ǐкєдos often occurs; and that in composition the form with $\iota$ is alone admissible. This testimony is not authoritative for the fifth century. In Homer fíкє times, while frinє Lukian we cannot learn what form the satirist used. Hippokrates, Aretaios, and Uranios prefer the $\iota$ form, which is doubtless to be adopted in the Dea Syria, 33, 40.

The existence of parallel forms in $\epsilon \iota$ and $\iota$ in the name of Poseidon, and in names derived therefrom, does not substantiate the presence of itacism in this word. Hdt., VII, 115, has Mootoniov, III, 91,



 ep. 114.

As regards the inscriptions, which speak with greatest authority in cases similar to this, their testimony is as follows : -


Hootiótios, Thasos (Louvre), $1 \mathrm{IO}_{10}$.

Hoociồvos, 206 B 31 , Eryth.

Пoбєєठ'л $\pi \sigma o v$, Thasos (Louvre) $2_{11}$.

Пoo兀ठ́́ov, $\mathrm{I}_{53}{ }_{32}$, Smyrna.
" 1771 ¹, Chios.
Moctóiov, Jahrb. für Phil. Suppl.
Vol. V, 487, No. 47, and Vol. X, 29, No. 21.
Mocíðєוos, 234 B 34, Perinthos.
Moot $\delta$ íov, ${ }^{196} 6_{5}$, Maroneia. Cf. the form in Hdt.
IIoo兀ঠsิิvos, 206 A 46, Erythrai.

The Attic month Moctiסswv appears thus in the Ionic form, Moot$\delta s \omega ́ v$ (Clodius, Fasti Ionici).

As regards the age of the inscriptions, the only inscription with $\iota$, dating certainly before 400 , is that from Maroneia, $196_{5}$, the others with $\iota$ being later; while those with $\epsilon \iota$ are not older than the bulk of those with $\iota$. Chronological considerations do not therefore make in favor of the origin of the forms with 1 from those with cl. Despite the obscurity which attends this word (cf. Prellwitz, B. B., IX, 331 ), it is evident that the variation between $\epsilon \iota$ and $\iota$, which is confined to no single dialect, must depend upon stem-gradation. On
this view the $\epsilon \iota$ and $\iota$ stand in no immediate personal relation to each other.

The $\imath$ of $\Pi$ ıoíviparos, Samos, 225 , does not necessitate the assumption of itacism, though its quantity is not certain. Cf. Hıoiteos in Delphic, $\Pi \iota \sigma i ́ a s, ~ \Pi \iota \sigma \iota \delta \omega \dot{\rho} \rho$, etc.

## 17. Varia.

I. Iota and alpha are not phonetically related ; hence, $\Sigma(\llcorner\nu \omega ́ \pi \eta$ and इага́тๆ (Schol. Ap. Rh., II, 946) are not connected.
2. The form $\dot{v} \gamma \boldsymbol{\gamma} \epsilon \mathrm{a}$ for $\boldsymbol{i} \gamma^{\prime} \dot{\epsilon} \epsilon a$ is found, Olbia, $129_{14}$ (imperial period). I do not discover any occurrence of $\hat{v} \gamma \hat{u} \ll \hat{i} \gamma i \epsilon \epsilon a$, or of $\hat{i} \gamma i \epsilon(\imath) a$. ivicia is the regular Attic form upon inscriptions. See 45 A .

## THE VOWEL O.

18. Ionic $\mathrm{O}=\mathrm{A}$ of other dialects.

On $a=o$ in forms in 'A $\rho \tau \sigma$-, $\dot{a}_{\rho} \rho \rho \omega \delta^{\prime} \omega$, etc., see above § 4, on そó $\omega$ § 69 .
 kapaion and Ephesos (Wood's Discoveries, App. 2, No. 2). Hippo-
 is further supported by the Hesychian gloss (s.v.) and by the Et. Mag. $214_{4}$, where the form is quoted from Xenophanes ${ }^{1}$ and Aristophanes. The dialects of Lesbos, Boiotia, and Thessaly are generally held to evince a strong predilection in favor of the weak op, $\rho 0$, but Brugmann (Grundriss, I § 292) makes mention only of Lesbic and Boiot. forms. I have, however, shown A. P. A., XVIII, 104, 159 , that it is inadvisable, if not futile, to attempt to set up such a restriction. Bpóraxos was the name of a Gortynian worthy of an epigram from the great Simonides (127), though the substitution of $\rho o$ for $\rho a$ is not elsewhere attested as a peculiarity of Kretan speech. At best $\beta \rho \rho^{\prime}-$ raxos can have been but partially adopted by Ionic. According to the express testimony of the scholiast on Iliad, $\dot{\Delta}{ }_{243}$, Eustath. II., $468_{: 2}$, and Greg. Corinthius, 414 , the Herodotean form was $\beta \dot{a} \theta_{p a к o s,}$ a form not adopted by Stein (IV, $131,13_{2}$ ). Cf. Roscher in Curtius' Studien, IV, 189, whose etymological combinations are somewhat out of date, German kröte being the phonetic equivalent.

[^7] has，however，тарбхкós．

The form Kad入iotporo［s］has been adduced from one ōf the Sty－ raian lead tablets as proof of the influence of Boiotian vocalization upon the dialect of Styra．In Bechtel，No． $19{ }_{21}$ ，we read $-\sigma \tau \rho A \tau$ clearly enough，Vischer＇s $-\sigma \tau \rho \mathrm{O}$ being incorrect．All other examples of the supposed interdependence of Boiotian and Styraian have in like manner been deprived of their validity upon more careful exam－ ination of the evidence．In Styra we have $\Sigma \tau \rho a ́ \tau \omega \nu{ }^{19}{ }_{416}$ ．

The inscriptions offer several instances of a preference for the o sound ：－
＂Oбтакоя，Delos， $55 \mathrm{I}_{-}$，has been identified by Bechtel with á $\sigma \tau \alpha \kappa o ́ s$, lobster．The form ó⿱宀такós comes to light in Aristomenes，Гoŋт．，2， and is quoted by Hesychios．It occurs also in Athenaios．Cf．Sturz， de dialecto Mac．et Alexandr．，p．7o，who held that óvтaкós was Alexandrian．

With Ko］ $\boldsymbol{\mu o \sigma \alpha \rho}{ }^{\prime} \eta$ ，Phanagoreia， 167 cf ．Ka $\mu a \sigma \alpha \rho^{\eta} \eta$ ，a queen of Bithynia，C．I．G．，2855．See Dittenberger，Syll．го4 1.
${ }^{\prime} \mathrm{E} \rho \mu \dot{\omega} \boldsymbol{\prime} \boldsymbol{\sigma} \boldsymbol{\tau} \sigma a$ ，Chios， $174 \mathrm{~A}_{2,4}$ ，a locality in Chios．With this com－ pare ${ }^{\text {}} \mathrm{E} \rho \mu \dot{\omega} \boldsymbol{\nu} \alpha \sigma \sigma a$ ，name of a woman and also of several cities．

19．Varia．
$\hat{\epsilon}_{\boldsymbol{\epsilon} o v \tau \hat{\omega} \nu}$ ，Panionion， 144 （ $=$ C．I．G．，2909），an inscription but in－ differently written．
 $\dot{\epsilon} v \theta a \hat{v} \tau \alpha$ ．This and the preceding example present no slight difficul－ ties，since in no Greek dialect is there a well－attested instance of an interchange of $a v$ and $o v$ ．These forms may be rescued on the view that it shows the influence of other pronominal forms（ovizos，evv тои́т＠）．See § 124.

Note．－$\lambda$ variation between $\bar{a}$ and $o$ exists in the case of $\chi \alpha \mu \hat{u} \theta \epsilon \nu$, Hdt．，II， 125，where $d z$ have $\chi \alpha \mu \dot{\prime} \theta \epsilon \nu$ ，a form attacked by Cobet（Varia．Lect．，89） and expelled by him from Kratinos，Xen．（Hellen．，VII，2，7），and Aristotle．

20． O in Ionic $=\mathrm{E}$ in other dialects．
Kvavo廿t $\omega$ v，name of the month in Samos，Kyzikos（Reinach，Traité， p．489），also Attic（Berichte der Berl．Akad．，1859，p．739）．Cf． IIvavét＇ө́v．See Schmidt＇s Chronologic，p．458，Brugmann＇s Gr．Gr． p． 32 note．

 $\lambda \epsilon \gamma o v \sigma \iota v$. The same form of the name has come to light in Athens, Bull. dell. instit. di Corr. Arch. 1874, 107. Cf. őp ${ }^{\circ}$ avov, and later,

21. O in Ionic $=\mathrm{OY}$ of other dialects.

The Samian inscription, No. 220, has the new forms ${ }^{\boldsymbol{i} \lambda o \rho \gamma o v s, ~ l . ~} 23$,


 A. P. A., XVIII, 159. Cf. $\S \S 162$, 179, on the contraction of $\mathrm{O}+\mathrm{E}$.

On the Ionic oṽvo $\alpha, \mu o v ̂ \nu o s, ~ O v ̈ \lambda v \mu \pi o s, ~ s e e ~ u n d e r ~ O Y . ~$
22. O in $\mathrm{Ionic}=\mathrm{OI}$ of other dialects.

From Roehl, 501, = Roberts, 148 (Kyzikos), $\delta \epsilon \sigma \pi o ́ v \eta \sigma \iota \nu=$ Attic סsoroivals according to the commentators, we might conclude that Ionic o was here $=$ Attic $o$. No such interrelation of $o$ and $o \boldsymbol{o}$ is known. It is possible that the o is due to $\delta \epsilon \sigma \pi \sigma$ ó $\eta \boldsymbol{\rho}$, etc. ; but Osthoff's attempt to connect - $\pi o \iota \nu a$ and $\pi o ́ \tau \nu l a ~(* p o t n i i a, ~ *-\pi o \tau \nu ı a, ~$ *- $\quad$ ovvia, ${ }^{*}$ - $\pi 0 \nu t a$ ), which still awaits confirmation, does not provide us with the "fitting key" to explain the appearance of $o$ in a $\delta=\sigma \pi o ́ v \eta$.

On anaptyctic ८ in Tpoı५そ́vıos, see under OI, § 97.

## 23. Varia.

The assumption of hyphaeresis of o in Hdt. $\beta o \eta \theta$ ós is rendered easier if we recall the Homeric oै óoov, $\xi 287$. With $\beta$ o $\theta$ Oós, cf. סopvそ́ós, Пєı $\boldsymbol{\text { Oós }}$, etc. No dialectal dividing line can here be established. See G. Meyer, Gramm., § 152.

On the change of o to $v$ in Euboian Ionic, see under $\Upsilon$. On the substitution of $o$ for the $v$ of $a v, \epsilon v$, see under these diphthongs.

## Short Y .

24. Ionic $\mathbf{Y}=\mathbf{O}$ of other dialects.

The change of $\mathbf{O}$ to $\mathbf{Y}$ is attested to a limited extent in Ionic :Upon a Kymaian inscription (Bechtel, 3 A = Roberts, 177 A) we find HYMY ( $\left.\dot{v} \pi v v^{\prime}\right)$ twice ; from which it is clear that of the Ionians,
the Chalkidians ${ }^{1}$ had not adopted the later $i u$. Other instances from Euboian Ionic of a similar retention of the I.E. phonetic value of $v$ as $u$ do not stand on so sure a footing, though Wilamowitz, Hom. Untersuch., p. 288, claims that the modern names Kuma and Stura are living witnesses to a pronunciation which held ground throughout the Ionic period of the epos, and in fact to the rise of Attic supremacy in Greece proper ; while in Asia Minor $v$ had become $i i$ before the year 500. The Styraian Métviкos, 19 тo, may stand for Métooкos; but it is at best a doubtful form which has illegitimately been used to show the connection between Boiotian and Euboian Ionic. ${ }^{2}$ No interrelation of O and Y need be assumed on the score of Кєфа入ótクs,

 Delos, C. I. G. 2310 . "Oגou 0 os, occurring in C. I. G. 8412 , an apparently Ionic inscription, is of doubtful validity.

As regards the Ionic of the mainland, we have but slender support for the assumption that the old $v$ was retained. $\dot{\rho} v \phi \epsilon i v$, in Hipponax, $\mathbf{1 3 2}^{2}$, and $\mathfrak{v \pi} \boldsymbol{e}^{\prime} \boldsymbol{a} \tau \iota$, Hdt., IV, 7 o , are the only examples from literature of the change of $o$ to $v$. In Phokaia $v$ was pronounced as $u$, if we may judge from ' ${ }^{\prime} \epsilon \lambda \eta \tau \omega \nu \quad 172_{2}$, about 350 b.c. Hyele $=$ Velia, the Oscan name being spelled with V, which the colonists reproduced by their $\mathbf{Y}$ (Hdt., I, $\mathrm{r}^{67}$ ).

That o became $v$ in aiov $\begin{gathered}\text { vír } \eta \text { s, Teos, } \mathrm{I}_{5} 6 \mathrm{~B} 4 \text {, is not proven. }\end{gathered}$ Cf. Chalkedon. ai $\boldsymbol{\tau \mu \nu \omega ิ \tau \tau \varsigma , ~ C . ~ I . ~ G . , ~ 3 7 9 4 , ~ w i t h ~} \iota$ perhaps from $v$ as in 'Avтíazos, R. M., XXXV, 358. Cases of $\iota$ arising from an $v$, which is itself from $o$, are far to seek.

 $\Pi v \theta^{\omega} v \sim \mu o s$, Thas. (L.) $\mathrm{ro}_{12} \mathrm{~B} . v$ occurs in this word and its congeners in Aiolic, Boiot., Thessal., Phokian, Delphic, Aitolic, in Aigina and Selinus, and is pan-Hellenic in aُvóvonos and cívivopos (Eph. 145). The extensive geographical reach of the forms with $v$, and the undeviating writing ${ }^{\dot{\alpha} \nu} \boldsymbol{v}^{\prime} v \mu o s$, render the assumption not improbable that the forms in $v$ are original, those in o later. If the o forms are original, there can be no doubt that the vowel interposed between the nasals was in a pre-historic period closed, the first o remaining open.

On the substitution of ofor the $v$ of $a v, \varepsilon v$, see under the head of these diphthongs.

[^8]
## 25. Ionic $\mathrm{Y}=\mathrm{I}$ of other dialects.

Zuкєєิิvıv, on the stelè of Sigeion Bechtel, $\mathrm{ro}_{3}=$ Roberts, 42 A го. In the Attic part of the inscription we find $\Sigma<\gamma \varepsilon v \varepsilon i \sigma \tau$. The $v$ is doubtless older since it is found on the epichoric document. The two forms are then interrelated as $\beta v \beta \lambda i o v ~ \beta \iota, \beta \lambda i o v, ~ T v v \delta a \rho \iota \delta \bar{\nu} \nu T \imath v \delta \alpha \rho \iota-$
 Iota does not pass into $v$ in any Greek word.

Hdt. has $\beta \dot{v} \beta \lambda o s, \beta \dot{v} \beta \lambda \iota v o s, \beta v \beta \lambda i o v$. A complete mustering of the occurrences of these words in Stein's edition shows that the chief support of the forms with $c$ is derived from Mss. $P . R$., while in oneseventh of all passages there is no variant. I conclude, therefore, that Bredow's distinction between $\beta \iota \beta \lambda i o v, \beta i \beta \lambda$ os (notione charta scriptoriae, libelli) and $\beta \dot{v} \beta$ дos (notione libri conticis papyri) must fall to the ground, and that the Ionic of the fifth century preferred, if it did not recognize exclusively, the forms with $v$. The variants in favor of $\iota$ are due to the scribes rather than to the influence of such actual forms in $\iota$ as we find as early as 400 b.c. in Attic (C. I. A., II, Add., I B 25 ; Mitth., VII, 368, concerning the Attic cleruchs in Samos, 346 в.c.). The forms in $\iota$ continue in Attic inscriptions until the second century b.c., after which $\beta v \beta \lambda$ iov is the normal form. See Birt's Buchwesen, p. 12.
 that does not find any support in the Attic $\mu o \lambda v \beta[\delta \hat{\omega} \nu]$, C. I. A., II, $476_{43}$, or in any other inscriptional form. That the $\iota$ form elsewhere forced an entrance at an early period should not mislead us as regards Ionic.

In a Halikarnassian inscription (Bechtel, No. 241) we read HMYミK, which Bechtel transcribes $\eta^{\prime} \mu(\imath) \sigma(v)$. This is possible, though the occurrence of $\boldsymbol{\eta} \mu v \sigma v$ upon Attic inscriptions (C. I. A., II, ${ }^{1} 7_{45}$ ) and elsewhere, e.g. Delos (B. C. H., II, 580 ), renders the attempt to rescue this form for Ionic not overbold. Cf. Meisterhans, p. 22, Blass, Aussprache, ${ }^{3}$ p. 40 . $\eta \mu \epsilon \sigma v$ occurs on a late inscription from Thasos, $7^{2}{ }_{16}$, upon one from Teos, $\mathbf{I}_{5} 8_{24}$, and in Sterrett, Wolfe Expedition, III, 335. The forms in iota are the more primitive, those in upsilon being due to an assimilation which could take place in Greece only at a period when the inherited tendency to avoid a succession of $v$ 's was no longer felt. ${ }^{1}$

[^9]

 Megarian orthography (Selinus, Chalkedon, Selymbria). Bechtel, C. D. I., 3 oi 6 , conjectures that the change between the weak vowels $v$ and $\iota$ ensues when $f$ originally proceeded the strong vowel ( ${ }_{\alpha}{ }_{f} \epsilon \tau \mu a$, $\dot{\alpha} \dot{i} \tau \mu \mu \dot{\eta}, \dot{a} \hat{\imath} \sigma \theta \omega)$.

On a supposed change of $a$ to $v$, see above $\S 5$.

## The Long Vowels.

26. Â.

The three subdivisions of Ionic uniformly present $\hat{\mathbf{A}}$ in place of that $H$ which is specifically Attic. An Ionic $\tilde{a}$ in Homer, though supported by Brugmann, Gr. Gram., § io, must be held to be indefensible. Nor on the other hand does the constitution of the Homeric poems permit us to assume that $\kappa \bar{a} \lambda o$ ós is Doric (King-Cookson, p. 184). See Bechtel, Phil. Anzeiger, 1886, 20 ff.
27. The dialect of Styra it has been alleged, offers instances of an original Hellenic $\hat{A}$, due to the influence of the speech of Boiotia. Names of Ionians may assume, it is true, a form inconsistent with the laws of Ionic, but this happens solely when a special reason exists. Compare for example the names of the children of Kimon, where political preferences have dictated a nomenclature alien to Attic. In all other cases it must be denied that Ionic can admit a thoroughgoing contamination of its phonetics from the influence of a neighboring speech centre. The examples from the lead tablets are worthy of registration. Cf. Bechtel, Ion. Insch., p. 36.


$\Lambda v \sigma a \gamma o ́ p u s 1_{144}$, an uncertain reading.
 infrequently confused in the tablets.

Aoxā yós $19_{126}$ is based upon the Lakonian $\lambda o \chi \bar{a} \gamma^{\prime}{ }^{\prime}$, , which is in Attic, too, a loan form. Hdt. uses $\lambda o \chi \eta \gamma^{\prime} \omega(\sqrt{\bar{u} \gamma})$.
'Ervéas $19{ }_{19}$ is no name at all, which may be said of Lenormant's Eivéas. In Roberts, i89 F, upon a vase from a colony of Chalkis,
we read Aivé $\bar{s}$, and upon a Thasian inscription in the Louvre ( $3_{5}$ ),

$\Delta \bar{a} \mu \alpha \alpha_{\rho} \epsilon \tau o s$, cited by Karsten, p. 18, is in reality $\Delta \eta \mu \dot{a}, \eta \eta \pi o s$, and is so read by Bechtel, 19180.
 $\rho \epsilon \tau \boldsymbol{s}$ are due to Lenormant.
28. The retention of $\hat{a}$ in Hdt. occurs in the names of non-Ionic personages, which are of Doric stock. As Gramm. Meerm. states
 ("I $\omega v \epsilon \varsigma$ ), a statement which must not be twisted so as to give life to a Doric $\kappa \bar{\alpha} \lambda$ ós $^{\prime}$ in Homer. The following are instances of proper names with $\bar{a}$ in Hdt. : -
'A $\mathbf{y}$ ss, VI, 65 , the Spartan. It is noticeable that Hdt. uses the

'Á́ротоя, VIII, 137, an Argive, VIII, 139, a Makedonian ; but 'Hépoтоя, IX, 26, a Tegean.
'Aкарváv, I, 62 ; 'Акарvаиі́, II, го.
'A $\pi \iota \delta a v o ́ s$, the Thessalian river, VII, 129 ; but 'H $\mathrm{H} \star \delta a v o{ }^{\prime}$, VII, 196.
'A $\rho \dot{\prime} \sigma \beta a, \mathrm{I},{ }_{15} 1$, a city in the Troad $=$ 'A $\rho \dot{\prime} \sigma \beta \eta$, B 836 . The proper form may, however, be "A $\rho \tau \sigma \beta a$; so Strabo, XIV, 635. Eustathios distinguishes between two cities, 'A $\boldsymbol{i} \dot{\prime} \sigma \beta \eta$ and 'A $\rho i \sigma \beta a$.
'Apıotéas, VII, 137, a Korinthian. Cf. 'Apıvтéๆs, IV, I3, from Prokonnesos.

「uyáoas $\chi$ pvoós, I, I4. This apparently irregular form ( $\Gamma$ úqns elsewhere) is explained by the statement of the historian : $\dot{v} \pi \grave{o} ~ \Delta \epsilon \lambda \phi \hat{\omega} \nu$

$\Delta v \mu a v a ̂ r a \iota, ~ V, ~ 68, ~ a ~ D o r i c ~ t r i b e . ~$
$\mathrm{K}_{\mathrm{e} \hat{a}} \mathrm{\theta}_{\mathrm{\imath}} \mathrm{~s}, \mathrm{I}, \mathrm{I} 45$, a river in Achaia and also a river near Sybaris, V, 45 .


 VII, i34, and Nıкólas, VII, i37, though a Spartan is referred to.
 an Arkadian, VI, 127 ; $\Lambda a \delta_{1}^{\prime} \kappa \eta$, a woman of Kyrene, II, 18 r.

Cf. the forms of גaós § i 1,30 . A perfect dichotomy of the dialects as regards names in $-\lambda a \geqslant s$ is clearly impossible, in view of the fact that even Attic citizens before the year 500 b.c. bear names formed from this form of the word, the right to use $\Lambda \epsilon \epsilon^{\prime}$ s having been confined to the tribe Leontis. That - $\lambda$ aos was also in use among the Ionians is
clear from its occurrence upon a Chian inscription, $177_{14}$, -тódaos, 1.14

'Opvєâtaı, VII, 73.
Паршрєа̂тає, IV, 148, but VIII, 73, Паршрє $\eta \tau \alpha \iota$.
Прovaì, I, 92. Cf. also Прovqír.
Tı $\theta$ op $\varepsilon_{a}$, VIII, 32, a peak of Parnassos.
'Yâtaı, V, 68, from Sikyon.
$\Phi \iota \lambda \alpha_{o} \alpha$, VIII, II, despite $-\alpha \omega \nu$ generally becomes $-\epsilon \omega \nu$ in Hdt. Cf. Maұá $\omega$; in Homer $=\mathrm{M} \alpha \chi^{\epsilon} \boldsymbol{\epsilon} \omega$, Thasos (Louvre), 1 о $_{11}$. Cf. Фı入є $\omega$ $v^{\prime} \delta[\epsilon]$ os, 'Thasos, 73. Hdt. has ómá $\omega v$, V, ini.

Xapád $\rho a$, in Phokis, VIII, 33. So Stein, Bredow Xapád $\rho \eta \nu$. So


Xoıpєâtal, V, 68, from Sikyon.
Besides these names we have several which show - $\bar{s}$ in the nomi-
 which are inflected $-\alpha,-a,-\alpha \nu$. Proper names in $-\epsilon \eta s$ and $-\iota \eta s$ are the rule, with but few exceptions ('Apıotéas, VII, in7).

Herodotos' treatment of the names of non-Ionic persons and places is tolerably elective. In a considerable number of instances where we might expect a thoroughgoing Dorization he surprises us by such Ionisms as:-
$\Lambda \epsilon \omega v i ́ \delta \eta s, \Lambda \epsilon \omega \beta \dot{\alpha} \tau \eta s, \Lambda \epsilon v \tau v \chi i o \partial \eta s$ (a form that occurs in 'Timo-
 By a reverse process we have 'A $\rho \iota \sigma \tau 0 \lambda a i \delta s \omega$, I, 59, an Athenian.

Again, the island is called © ${ }_{\eta}^{\prime} \rho \eta$, its founder, © $\eta^{\prime} \rho a s$. The leader of
 127, is the inhabitant of the Arkadian 'A ${ }^{\prime} \alpha \nu i \alpha$; ' ${ }^{\prime} \nu \imath \hat{\eta} \nu \varepsilon \varsigma, ~ V I I, ~ 132, ~ e t c ., ~$

29. Retention of $\bar{u}$ in proper names occurring outside of Herodotos. In poetry, see on חor $\epsilon \delta \dot{\delta} \omega \nu$, under the vowel E, § ir.

 Syll., $6_{3_{\varepsilon s}}$, time of the second maritime league ; $\Delta \eta \mu a \iota v \epsilon ́ \tau \eta s, ~ A m o r g ., ~$ 29, but Evidídapos, Klazom. Le Bas, Voy. Archéol., III, i, No. 186.
 vases. See K. Z., XXIX, 390.

Note. - The usage of Attic prose inscriptions may here be noted. In the fifth century we find both the epichoric and the Attic names of tributary states (Hermes, V, 52). In the fourth century the tendency to permit the adoption of the epichoric name seems to be stronger.

## $\lambda a ̄ o ́ s<{ }^{*} \lambda \bar{a}$ fos．

Homer has $\lambda \bar{a} o ́ s, ~ \lambda a ̀ o \sigma \sigma o ́ o s, ~ a n d ~ i n ~ p r o p e r ~ n a m e s ~ \Lambda a ̄ o \delta a ́ a ́ ~ e t a, ~ e t c . ; ~ ; ~$ $\lambda \epsilon \omega^{\prime}$ in＇A $\gamma \epsilon{ }^{\prime} \lambda \epsilon \omega$ s and $\Pi \eta \nu \epsilon ́ \lambda \epsilon \omega{ }^{1}{ }^{1}$ ；and $\lambda \eta o ́ s$ ，incorrectly transcribed in
 these，the first form has found an echo in Ionic poetry：Archil．， Xapí入aє， 79 （paroemiacus and ithyphallicus，Flach，Gr．Lyrik，p．228）． The reading is not perfectly certain，Aelian having Xapíסav．Cf． Xapı $\delta \alpha \nu \tau i o ́ \eta s$ ，a Thasian name，Bechtel＇s Thas．Inschr．，p．8．＇Iódaos 1193（a hymn of uncertain metrical reconstruction）；${ }^{2}$ Kallinos，$\lambda \alpha \hat{\omega}$
 776，גaoф Oópov 781．These forms are not Ionic．${ }^{3}$ Genuine Ionic is $\lambda$ そós，the oldest Ionic form of the word known to us，preserved in

 K．Z．，VII，324．With $\lambda$ そós，cf．vךós in Hdt．and $\pi a \iota \eta \dot{o v a, ~ A r c h i l ., ~} 76$.

This $\lambda$ ךós became $\lambda \epsilon \omega$ śs in later Ionic ；in Miletos，at least，shortly after the year 600 b．c．（＇Ava $\xi_{i}^{\prime} \lambda \epsilon \omega \varsigma$ ，Becht．，No．93）．$\lambda \epsilon \omega^{\prime}$ s is the form in Hdt．，though we find $\lambda$ クoos，V，42，$\lambda a o{ }^{2}$ ，IV，148，which Stein refuses to accept．$\lambda a o \phi o ́ \rho \omega \nu, \mathrm{I}, 187$ ，exists parallel to $\lambda \epsilon \omega \sigma \phi$＇́ $\tau \epsilon \rho \frac{1}{}$ ，IX，33， though the testimony is so greatly on the side of $\lambda \epsilon \omega$ s that a fair view will not regard harshly the attempt to make Herodotos uniform in his adoption of this form．

When $f$ disappeared after $\breve{a}$ ，its disappearance was not signalized by the lengthening of the vowel（ácívăos，Hdt．，I，93， 145 ；Attic $\nu \stackrel{\Delta}{\omega} \omega=$ Aiolic $\nu a v ́ \omega)$ ．Hence，when in Ionic $\bar{a}$ appears，it is clear that we must distinguish between such poetical forms as $\dot{\alpha} \epsilon_{i}^{\prime} \sigma \omega$ ，Theog．， 4 ， cf．Od．，17， $5^{19}$ ，and such prose forms as＇Aío $\eta$ s．In Ionic poetry the short $a$ appears in＇Atioao，Theog．，244，42 7，906，＇Aíds $\omega$ 703，726，
 Theog．，914，has $\bar{a}$ ．

In but two iambic passages（Simon．Amorg．$I_{14}, 7_{117}$ ）do we find traces of＇A $\bar{i} \dot{\delta} \eta s$ ．In both passages the $\bar{a}$ falls under the ictus，a fact which seems to suggest the Homeric usage，which is as follows ：＂${ }^{\text {A }}$ Ïos

[^10](Iliad nine times, Od. four times), elsewhere ă (so 'Aî̀òs, V 395, IX 158 , etc.).

Hesiod always has $\breve{u}$, and the Homeric Hymns, except in one passage, IV, 348 , where ${ }^{" A}{ }^{\mathrm{A}} \delta \delta \eta$ is read by Gemoll. Hdt. has 'Atio $\bar{\eta} \overline{\mathrm{s}}$. In Aiolic and Doric the $a$ is invariably short. So, too, in words derived from the same base. See § it2.

It has been widely held that 'Aío $\partial \bar{s}$ is derived from $a+\kappa \iota \delta$-, and that the passages in Homer where the $a$ is long, represent $a v, f$ having been vocalized. There is no objection to this explanation, so far as
 have arisen either from $\breve{a}_{f} \iota \delta$ or $\bar{\alpha}_{f} \iota \delta$ - Since the Attic and Homeric forms cannot be dissociated, it is best to regard each as descended from $\alpha i f \iota \delta-\left(c f . \kappa \alpha ́ \omega,{ }^{\alpha} \in \epsilon ́\right)$. This of course necessitates the abandonment of the old-time etymology whereby 'Aíò $\overline{\text { s }}$ is the unseen god. $a \iota f i \delta$ may be connected with aití or with aia. See Wackernagel, K. Z., XXVII, 276 . On this view " $\bar{A} i \bar{\delta} o s$ is the older, "Aï $\delta o s$ the younger, form ; and the apparently isolated cases in Simonides Amorg., are brought into line.

## 31. $\widehat{A}<a ̆ \nu s$.

$\pi \hat{a} \sigma a<{ }^{*} \pi \dot{a} \nu \tau \iota x$ may serve to illustrate the existence of that $\bar{a}$ in Ionic-Attic which did not suffer the change to $\eta$ at the time when * $\pi a ́ v \tau \iota a$ became $\pi a ̂ \sigma a$. When there arose the tendency to substitute a lighter form for the disyllabic ${ }^{*} \pi a ́ v \tau \grave{a} a$, or to expel $v$ before sigma (whether proethnic or from $\tau_{\iota}$ ), the law according to which $\bar{\alpha}$ has become $\eta$ in Ionic had ceased to exist, having extended its operations throughout the length and breadth of the dialect. A $\pi \hat{\eta} \sigma a$ or $\tau \hat{\eta} s$ for $\tau$ ấvs was thus rendered impossible. So, too, with names in - $\delta \alpha \dot{\mu} \mu \bar{s} s$.

In this connection it is noteworthy that Kallinos, $\mathrm{I}_{16}$, has ${ }_{\epsilon}^{\boldsymbol{\epsilon}} \mu \pi \bar{\alpha} \bar{\rho}$, whereas Homer has $\mu \mu \pi \eta$; forms not to be derived immediately
 does not occur outside of the epic. Brugmann, Gr. Gr., p. 225, connects $-\pi \bar{\alpha}-$ with $\kappa v \epsilon \epsilon \omega$ through $\kappa \nu-\bar{\alpha}-$, and thus regards ${ }_{c} \mu \pi \bar{\alpha} \bar{s}$ either as a genitive or as a petrified instrumental with the sigma of ablative adverbs. This $-\pi \bar{\alpha}-$ does not seem to be associated with Kyprian mal. I know of no other case where sigma has attached itself to an instrumental. ${ }_{\epsilon} \mu \pi \eta$ s in Homer should be reflected by $\ddot{\epsilon} \mu \pi \eta$ s in Kallinos, as I am aware of no reason for expelling the Homeric form in favor of the Aiolo-Doric (or Attic) $\ddot{\epsilon} \mu \pi \bar{s}$.

$$
\text { 32. } \hat{\mathrm{A}}<a v_{f} \text {. }
$$

Io $\phi \theta^{\wedge} \nu \omega=$ Attic $\phi \theta^{2} \nu \nu \omega$.

## 33. $\widehat{\mathrm{A}}$ in the forms of the Comparative degree.

$\mu \hat{a} \lambda \lambda o v$, for which one might expect ${ }^{*} \mu \hat{\eta} \lambda \lambda o v$, if the form with $\lambda \lambda$ was formed before or during the period in which proethnic $\widehat{\mathbf{A}}$ became H in Ionic-Attic. The force of analogy has, however, substituted for the old comparative ${ }^{*} \mu \dot{\epsilon} \lambda \lambda$ dov (melius) the form $\mu \hat{a} \lambda \lambda o \nu$, which arose at a period when $\bar{a}$ no longer became $\eta$ in Ionic-Attic. The
 given us first $\mu \bar{a} \lambda \lambda o v$, then $\mu \hat{a} \lambda \lambda o v$ for $\mu \mu_{\circ} o v$. The difficulty, which is not recognized by King-Cookson, p. 364, ${ }^{1}$ is that $\theta \dot{\alpha} \sigma \sigma \sigma \omega$ and $\bar{\epsilon} \lambda \hat{a} \sigma \sigma \sigma \omega v$ are themselves associative forms, whose priority to $\mu \hat{a} \lambda \lambda o v$ is not made out on other grounds than the desirability of using them to account for $\mu \hat{a} \lambda \lambda o v . ~ \mu a ̆ ̀ \lambda \iota o v, ~ T y r t ., ~ 12 ~ i n ~, ~ i s ~ h y s t e r o g e n o u s, ~ d u e ~ t o ~ t h e ~ p a r a l l e l-~$
 where for $\mu$ ádıov, Harder, De alpha vocali apud Homerum producta, p. 104, would read $\mu$ ád $\lambda o v$ (sic). ${ }^{2}$
$\theta \dot{a} \sigma \sigma \sigma v$, Attic $\theta \dot{a}$ á $\tau \omega \omega$, with $\bar{a}$ according to Herodian, I, $5^{23}$, II,

 tory lengthening.
 XXV, 156 .
 period when I.E. $\widehat{\text { A }}$ was changed to Ionic $\eta$. Their displacement by the $\bar{\alpha}$ forms was therefore subsequent to the production of Ionic $\eta$.

## 34. $\widehat{\mathrm{A}}$ in other words.

$\kappa \bar{\alpha} \lambda$ оs : ${ }^{*} \kappa а \lambda \iota o s=$ Skt. kalya- would become кӑ $\lambda \lambda$ ós in Greek, which by reduction of the geminated liquid should appear as ${ }^{*}{ }_{\kappa} \eta \lambda o^{\prime}$ in Ionic, as $\kappa \bar{\lambda} \lambda_{o ́ s ~ i n ~ D o r i c . ~ N o w ~ i n ~ H o m e r ~ w e ~ f i n d ~ к а ̄ \lambda o ̣ ́ s ~ w i t h o u t ~ e x-~}^{\text {in }}$ ception, a form that cannot, however, be regarded as Doric. In Hesiod кäдós prevails : in Theog., 585 , W. D., 63 , кa入ós. In the lyric poets we find $\kappa \bar{\alpha} \lambda$ ós in the following passages: Kallinos, $2_{2}$;

[^11]Tyrtaios， 4 ：$, \mathrm{IO}_{1}, \mathrm{IO}_{30}$＊；Mimnermos， $5{ }_{3}, \mathrm{II}_{4}$ ；Archilochos， $2 \mathrm{I}_{3}, 29_{2}$ ， $77_{1}$ ；Simon．Amorg．， $7_{51}$ ， $7_{\text {i }}$ ；Theognis，16，242，257＊，609，683， 1019，1047， $1106,1216,1251,1329,1336$ ， $135^{*}$ ， $1369^{*}$ bis， 1377 ； ＇Solon， $\mathrm{I}_{324}, \mathrm{I}_{340}{ }^{*}$ ；Phokyl．， $\mathrm{I}_{32}$ ；Anakreon，22，＇ $6_{310}$ 71 ；Oracle in Hdt．，I，66＊；cf．also Sim．Keos，147．On the other hand кă入ós appears as follows：Mimn．， $\mathbf{I}_{6}$ ；Solon， $\mathbf{1}_{312}$ ；Theog．， $1_{7}$ bis，282， 652，696，960，994，1259，1280， 1282 ；Ananios， $5_{2}$ ；Sim．Am． 767 （？）； Anakr． 71 （？）；Sim．Keos，147， $156_{1}$ ．Passages marked with a＊have the $a$ in the arsis．

If we question the other dialects outside of Attic，we learn that $\kappa \check{a} \lambda o o_{s}$ is the prevailing form：Terpander， $6_{2}$ ；Alkman， 35 ；Sappho， $1_{9}, 3,11_{2}, 1_{1}, 19:, 28,58$ ， $101_{1.2}$ ， 104 ；Praxilla， $5_{1}$ ．Alkman has
 Bergk＇s conjecture be admitted．In the＂universal melic＂of Simonides of Keos we have кă入ós $5: 37_{12}, 40_{2}, 70$ ，in Bacchylides， $\mathbf{1}_{1}, 25$ ．In the Attic drama we find both forms，$\kappa \bar{\alpha} \lambda o o_{s}$ being the rarer form．The lyric poets have кă $\lambda$ ós：Ion， $\mathrm{I}_{15} ;$ Kritias， $\mathrm{I}_{14}, 2_{13}$ ；and in the Skolia，${ }^{1}{ }_{1,2}, 20_{1,2}$ ．Plato（？）has кӓдós 8 ；Aischrio， 1,42 ， the same form．кădós occurs upon an epigram from Delcs， 53 ．

If，as is held，the reduction of the geminated liquid affords an op－ portunity for a compensatory lengthening of the vowel preceding $\lambda \lambda$
 this reduction would produce ${ }^{*} \kappa \eta \lambda$ ós in Ionic．Those who demur to the form к $\bar{u} \lambda o o_{s}$ in Homer have recourse to the easy expedient of regarding this form as an incorrect transcription of KAMOE，which they would read kad入ós．But have we the right to assume with G． Meyer（Gramm．${ }^{2}$ § $6_{5}$ ）that wherever $\kappa \bar{\alpha} \lambda{ }^{2}$ ós is found in the Ionic iambic and elegiac poets this form is incorrect？Cf．Schmidt，Neutr． p． 47.

фâpos in Herodotos as in Homer，if фápos is not to be read with Nauck．So，too，in Xenophanes， 3 ．See Harder，de alpha vocali， p． 92 ff．

$\dot{\epsilon} \dot{a} \sigma \omega$ in Hdt．$=$ Skt．sāvayati，Lat．desivare． $\mathfrak{\epsilon} \grave{a} \omega$ is originally an aorist formation，pres． $\operatorname{sé} \tau \bar{\sigma}$ ，aor． $\operatorname{sev} \check{\bar{a}-}(\sigma \epsilon \digamma \breve{a}-\stackrel{\iota}{\Lambda} \omega)$ ．
 384）．Rutherford，Plirynichus，p．15，classes the $i \theta a \gamma{ }^{\prime}{ }^{2} \eta$ s of Aischy－ los among the old Ionisms of the Attic dialect．See on $\ddot{\eta}_{\nu}$ and èáv under Comjunctions．

 to verbal influence．$\eta$ is here not original．Even the perfect indic． and the participle have this loan $\eta$ ．
 $\pi a i \delta^{\gamma}{ }^{\text {＂}} \boldsymbol{\rho} \rho \epsilon \omega$ ，Archil．， $48,{ }^{1}$ probably with $\bar{a}$ ；cf．also Tyrt．， $1_{1}{ }_{7}$ ．The regular Ionic $\eta$ would have disfigured these words．The lyric poets have $\check{a}$ ，except Bacchyl．， $36_{2}$ ．Another poetical form is ：－
 where $\breve{a}$ ．No form in $\eta$（cf． $\bar{\eta} v o \rho \in \neq \eta$ ）is found．
$\lambda \bar{a} \rho \iota v o \hat{v}$, Xenophanes， $5{ }_{2}$ ，as $\lambda \bar{a}$ pós in Homer from＊$\lambda a \sigma \epsilon \rho o ́ s .{ }^{.}$
$\kappa \iota \chi$ áv $\epsilon$ ，Archil．， 543 （troch．tetr．），as in Homer，from ${ }^{*} \kappa \check{\chi} \alpha{ }_{\nu}{ }^{\prime} \omega=$ Attic $\kappa \iota \chi a ́ v \omega$ ．
 фа́р $\mu$ ӑкоь）．The Ionic word is not accented differently from the
 $\chi^{\alpha \mu} \hat{\mu} \theta \varepsilon \nu$ is rejected by Blass，Aussprache，${ }^{3}$ p．1r6，in favor of $\chi^{a \mu \alpha \hat{i}-}$ $\theta \epsilon \nu$ or $\chi^{x} \mu \hat{a} \theta \epsilon \nu$ ．Cf．Osthoff，Perfect．，p．597．The Mss．do not have $\chi^{\alpha} \mu \hat{a} \theta \varepsilon \nu$, II，${ }_{125}$ ，where $\chi \alpha \mu \dot{a} \theta \epsilon \nu$ is found beside $\chi a \mu \dot{\partial} \theta \epsilon \nu$ ；and in IV， 172，we have no authority for Stein＇s $\chi a \mu \hat{a} \theta \epsilon \nu$ ．
The Mss．often mix Ionic $\eta$ with Attic $\bar{\alpha}$ after a fashion that gives a false conception of the original dialect preferences of the poets； e．g．，Archil．，$\gamma \rho a \hat{v} s$ ，Ananios，àv $\begin{aligned} & \text { ías．}\end{aligned}$

Note．－Names in－âs（Const．Decl．）are not contracted from－$\epsilon a s$ ，but represent，originally at least，the lengthening of the short final $\alpha$ of the first member of a compound name，e．g．＇Алка̂s from＇Алканє́ $\nu \eta$ s；or from the length－ ening of the initial $\breve{\alpha}$ of the second member，e．g．Mo八aâs（Mo八лâdos， $163_{10}$ ， Abdera）from Mo $\boldsymbol{\lambda} \pi-\alpha{ }_{\alpha} \gamma$ ofos．Later on these forms were created ad libitum． See Bechtel on No．76，p．60．Ionic and Attic are here parallel：cf．＇A ${ }^{\prime} \kappa \hat{c} \alpha$, C．I．A．，I，433，which cannot have originated from＇Алкє́as；Ionic Mo入तâs，


35．H．Preliminary Remarks．
Pronunciation of $\eta$ ．In the alphabet of Keos，Naxos，and prob－ ably Amorgos，Ionic－Attic $\eta=\bar{a}$ of Aiolic，Thessalian，Boiotian， North－Greek，Arcado－Kyprian，Doric，or $=\epsilon+a$ ，is represented by日 or $\mathbf{H}$（later）；pan－Hellenic $\eta$ by E．From this it is clear that the difference in graphical representation reflects a qualitative differ－ ence in pronunciation，$\eta=\bar{\alpha}$ or $\epsilon+a$ ，being the open $\bar{e}, \eta=$ I．E． $\bar{e}$ ， the closed long vowel．

[^12]Examples are：
Keos．
$\theta v \mathrm{H}, \mathrm{Rob} ., 32 \mathrm{~A}$.
Amorgos．
$\mu \nu \mathrm{H} \mu a$, Rob．，${ }_{5} 58$ D．
Naxos．
$\Delta \epsilon \iota v o \delta i к$ 目o，Roberts， 25 ．
ふ̀ $\lambda$ 日ov，Roberts， 25.
Nıка́v $\delta \rho$ 日，Roberts， 25.
є́к日ßól $\omega \iota$ ，Roberts， 25 and 26 A ；
cf．also Delos， 24 A ．
This accurate distinction is，however，not carried throughout the entire history of the dialect ；and in fact，before the adoption of the Ionic alphabet at Athens we find instances of a confusion between the two $\mathbf{E}$ sounds．Thus in Naxos $\boldsymbol{\epsilon} \pi o^{\prime} \mathbf{H} \boldsymbol{H} \mathbf{E} v$ ，Rob．，28，in Keos，Rob．， $32 \mathrm{~A}, 1.17$ ，we have $\delta_{\cos \alpha} \alpha \theta \mathrm{H}, 1.23, \theta_{\alpha \nu} \mathrm{H} \iota$ ，where we should expect the closed $\overline{\mathrm{e}}$ sound to be represented by E，not H．Cf．Dittenberger， Hermes，XV，229，Blass，Aussprache，p． 24 ff．，Roberts，§ 33，and on 32 A，the authorities there quoted，and Karsten，p．23．

A knowledge of the character of the $\eta$ sound in Ionic is important， since Merzdorf，in Curtius＇Studien，IX， 202 ff ，has endeavored to establish the principle that open $\overline{\mathrm{e}}<\bar{\alpha}+o$ becomes $\epsilon \omega$（ $\lambda \eta{ }^{\prime}{ }^{\prime}$ ，$\lambda \epsilon \omega$＇ ），
 Opposed to this doctrine is the Chian $\pi o ́ \lambda \epsilon \omega s$（Becht． $174 \mathrm{~A}, 13$ ）， a form that must be held to be genuine Ionic．See declension of Iota stems，where the other occurrences of this form are registered． Furthermore，＂A $\rho \epsilon \omega$ ，Archil．， 48 ，is as cogent an objection to the law of Merzdorf as is $\pi o ́ \lambda \epsilon \omega s$ ．And $\eta f o$ from pro－Hellenic āvo does not become $\epsilon \omega$ in later Ionic with consistency ；as witness Ionic $\pi \lambda$ 白os， $\chi \rho$ óos and Hdt．v ${ }^{\prime}$ ós beside $\lambda \epsilon \omega ́ s$ ．Cf．Brugmann，Gr．§ 19.

36．Pan－Hellenic $\eta$ appears invariably as $\eta$ in Ionic．The form $\chi \rho \hat{\sigma} \sigma \theta a i$ in Herodotos，and even in Attic（Mitth．，IX，289，1．24），is no exception to this law．＇That the root of this verb is $\chi \rho \eta-\left({ }^{*} \chi \rho \eta \iota o-\right.$ $\mu a \iota$ ）is elevated beyond a doubt by the forms of the Kretan，Aitolian， Lokrian and Megarian dialects．A weaker form of $\chi \rho \eta$－is $\chi \rho \breve{\alpha}$－（cf． $\kappa \tau \eta-, \kappa \tau \dot{\alpha}$－оцal），and it is this that appears in the Herodotean $\chi \rho \hat{a} \sigma \theta a \iota$ ， and perhaps in Attic $\chi \rho \omega \hat{\omega} \mu \iota, \chi \rho \omega \dot{\mu} \boldsymbol{\nu o s}$ ，and Messenian $\chi \rho \omega \hat{\omega} \tau \alpha \iota, \chi \rho \omega \mu \epsilon$＇ vov．${ }^{*}$＊xolo is $\chi \rho \epsilon$－，found in $\chi \rho$ ќорає（Hdt．，Heraklea，Rhodes，Krete，Delphi，
etc.). A fourth form is र $\quad \eta$ 白о $\mu \alpha$, in Boiot. र $\rho \epsilon \epsilon \epsilon \hat{\epsilon} \sigma \eta \eta$, Megarian (Chalkik.) $\chi \rho \eta \epsilon i \sigma \theta \omega$, and Elean $\chi \rho \eta \eta$ 立 $\sigma \alpha \iota$. Cf. Ahrens, II, $\mathrm{I}_{31}$; Meister, I, 70, 226, 297 ; Brugmann, M. U., I, 64 ; Merzdorf, C. S., VIII, 203, 209 ff., IX, 230, 236 ; Johansson, D.V.C., 155 ff . See § $\mathrm{r}_{3} \mathrm{I}$.

Attention may here be called to that $\eta$, which is produced by the lengthening of $\epsilon$, the initial vowel of a word which stands second in a compound. This initial vowel may or may not be lengthened in the same dialect upon composition taking place. Cf. Chios, 174 C

 8578, ı88, 109 (Archil., é $\rho \in \epsilon \omega, 25,68$ ). But see Wackernagel's Dehnungsgesetz, p. 41.
37. Relation of $\eta$ to $\epsilon$. The non-diphthongal EI is generally expressed by E upon Ionic inscriptions (see below under EI). Ionic $\eta=(1)$ pan-Hellenic $\eta$ and (2) $\bar{\alpha}$ of other dialects, stands in no relation to this non-diphthongal $\epsilon t$ in Ionic ; nor is any change of $\eta$ to
 asserted by me (Diphthong EI, p. 8o) to be an impossible form. The same is held to be the case by Bechtel, ad loc. ${ }^{1} 19{ }_{194}$ was read by Vischer $\Theta \epsilon i \sigma \omega v$, and held to be the "Boioto-Aiolic" form for $\Theta \dot{\eta} \sigma \omega \nu$. This is incorrect as regards the presence of a Boiotian form upon the Styraian leaden tablets. Nor can it be justified on other grounds. Bechtel suggests 'A $\lambda] \theta \dot{\eta} \sigma \omega \nu$; cf. 'A $\lambda \theta \eta \mu$ év $\overline{\text { n }}$, a Thasiotic name.
38. Ionic $\mathbf{H}=\widehat{\mathrm{A}}$ of other dialects. I.E. $\bar{a}$ is represented in Ionic regularly by $\eta$.
$\pi a \mu \pi \dot{\eta} \delta \eta \nu$, Theog., 615 , with which cf. Solon's $\pi \epsilon \pi \hat{a} \sigma \theta a l\left({ }_{137}\right)$. This verb is, however, not in use in Ionic, which has accepted кто́ouau.


On Подvá́ $\mu \omega v$ in Homer, cf. Fick, Odyss., p. 17; Wilamowitz, Hom. Unters., 70 ; G. Meyer, Gramm., § 65 ; Johansson, D. V. C., p. ryo. A Thessalian has the name $\Pi a \mu \epsilon[\nu]$ ós, from * $\pi \hat{a} \mu a L$.
$\ddot{\eta}^{\prime} \kappa \eta$, Archil. tri.', 43, the only instance in Greek of the $\bar{a}$ of this root. Cf. Skt. āçus, Lat. ācer. Weak form in áкóv ${ }^{\text {áa }} \boldsymbol{\alpha} \kappa \omega \nu$, etc.
 Hipp. ПА 6, 10, 22, 26, Aretaios, 260 ; $\eta^{\prime} \rho \rho$ os in Lukian, Hippokr.

[^13] Luk., the Astr., 23. The Homeric $\vec{u} \eta \dot{\eta} \rho$ has been regarded as equiv-
 has been cited as offering a parallel case of the vocalization of $\alpha_{F}$, must be classed elsewhere on account of the Attic ${ }^{\circ} \bar{A} \iota \delta \eta_{s}$; see $\S 30$; so, too, ひ́ $\dot{\sigma} \sigma \omega$ cannot be explained as $=\alpha u ̛ ́ \sigma \sigma \sigma \omega$ (Fick), since an $\ddot{u}_{f} i \sigma \sigma \omega$ would have become ail $\tau \tau \omega .^{1}{ }^{2} \dot{a} \dot{\eta} \rho$ in Attic is not a form in accordance with the genius of that dialect. Were the $\bar{\alpha}$ genuine we should have to seek for a root aif. Wackernagel, K. Z., XXVII, 276, ventures the assertion that it is an importation of the philosophers and the poets. While this still awaits confirmation, it is clear that $\breve{a}_{F}=$ Aiolic av cannot be reflected by Attic $\bar{\alpha}$; in other words, that $f$ upon its disappearance lengthens a preceding vowel, must be abandoned as an inveterate superstition. Scholars have only just learned that the loss of the palatal spirant yod does not lengthen a preceding vowel. The momentary appearance of $\breve{a}_{f}$ as $\breve{a} v$ under the ictus in Homer cannot cause $\breve{a}$ to be regarded as long elsewhere. Homeric verse does not make Greek words for the dialects which live their own life. We must always distinguish between words that have been adopted into literature from Homer in the Homeric form and the phonetics of the dialects which are free from such external influence.
$\vec{\eta} \varepsilon_{\rho} \rho s$ in Herodotos is a mere reproduction of the Homeric form, which is due to the Ionic transcribers who inconsequentially left án $\dot{\boldsymbol{a}}$, but used the Ionic $\eta$ in the genitive. Consistency had required them to go that step farther which seems to have been taken by the Hippokratean $\boldsymbol{\eta} \eta{ }^{\eta} \rho$.
 words must be separated from $\dot{\alpha} \neq \rho$, etc. Cf. Collitz, B. B. X. 62, Brugmann in Curt. Stud. IX. 392, and Grundr. II. § 122.
39. H $\hat{\mathrm{A}}$ of Doric, E of Attic, and of later Ionic by metathesis quantitatis.

In the Hipponaktian $\lambda \eta{ }^{\prime}{ }^{\prime}$ s we have the oldest Ionic stage of pre-
 found in a Ms. of Hdt., V, 42. Were it not for $\lambda \epsilon \omega^{\prime} \mathrm{I}$ I, 22, II, 129 , VIII, $\mathrm{I}_{3} 6, \lambda \eta{ }^{\prime}{ }^{s}$ might claim admission to the text of the historian with the same justice as v $\boldsymbol{\eta}$ ós. See $\S 30$.

[^14] retention of $\eta$, whereas, according to Merzdorf's "law" the form should not have $\eta$. The Doric genitive is väós. Theognis has vavs 84, 856, 136 I , in $970 A$ has $v \eta v s$, though Bergk reads vav̂s ; vâvv $680 .{ }^{1}$
 (Mimn. $9_{z}$ ). The forms in $\eta$ deserve comment in this connection, because of the superstition that vqvoi and vavai are identical as regards quantity. 'The a of vxvoi' is short. Cf. Baбı $\lambda \epsilon$ ús $<-\eta v s$, Z $\epsilon v^{\prime} s<Z \eta v^{\prime} s$, etc. In Ionic $v \eta \hat{v} s$ the $\eta$ is due to $v \eta \eta^{\prime} s ; \nu \eta^{\prime \prime}$ instead of $\nu \hat{\eta}$ is due likewise to the influence of the genitive.

## 40. Ionic $\mathbf{H}=\widehat{\mathrm{A}}$ of other dialects (including Attic $\widehat{\mathrm{A}}$ after $\mathrm{E}, \mathrm{I}, \mathrm{Y}, \mathrm{P})$.

r. In the endings of the Vowel Declension, and in adverbs representing petrified cases of this declension.
2. In verbal forms of the $-x \omega$ inflection, and in forms derived therefrom.
3. In radical and thematic syllables (excluding such as may be classed under 1 and 2 ).
4. In syllables of derivation.

Note. - $\epsilon \boldsymbol{\eta}=$ Attic $\epsilon \bar{\alpha}$ is derived from $\epsilon(\imath) \eta=\epsilon(\imath) \bar{\alpha}$. Cf. Attic $\delta \omega \rho \epsilon \bar{\alpha}<\delta \omega \rho \epsilon \epsilon \frac{u}{u}$, which prevails till 268 в.c.

References for the study of the interrelation of Ionic $\eta$ and Attic $\bar{\alpha}:-$

Strabo, VIII, 1, 2. Ahrens, Göttinger Philol. Versammlung, 1852. Cauer, Curt. Stud. VIII, 244, 435, and Wochenschrift fiur kl. Phil., 1887, No. 51, Curtius, in his Studien, I, 248, Brugmann, Gr. Gr. § ıо, Grundr. I. § ıо4, Bechtel, Phil. Anzeiger, 1886, p. 20.
41. Preliminary Remarks. - The question at issue is whether Attic $\bar{a}$ is here original, or whether the Ionic $\eta$ was also Attic at some period of the Attic dialect, and later became $\bar{\alpha}$. Certain scholars have ventured to compare the instances of Elean $\bar{\alpha}=$ pan-Hellenic $\eta$, despite the fact that the cases are not perfectly parallel, and that the actual appearance of a "hyper-Doric $\bar{\alpha}$ " in one dialect is not proof that an Iono-Attic $\eta$ became $\bar{\alpha}$ in Attic. The dichotomy of the Greek language into $\widehat{\mathbf{A}}$ and $\mathbf{H}$ dialects rests upon the assumption that at an extremely early period $\bar{\alpha}$ had become $\eta$ in Ionic. It may be doubted whether this shifting of pronunciation was in all quarters of the Ionic world so old as is generally assumed to be the case. We have learned

[^15]to distinguish in the alphabets of Naxos, Keos, and perhaps Amorgos, between the sign for pan-Hellenic $\eta$ and that for $\eta=\bar{a}$. Now the coloring of the latter $\eta$, recalling that of $\bar{a}$, makes it probable that the substitution of $\eta$ for $\bar{a}$ was gradual in Ionic, and did not happen "at the stroke of twelve." Even though a sign was adopted different from the old A , the newer sign may have been pronounced more like the Attic $\overline{\bar{\alpha}}$, which is an heirloom from the oldest period. Herein then is Attic more ancient than Ionic, and its $\bar{\alpha}$ in the earliest inscriptions speaks in favor of the retention of the original sound.

> Note. - If Attic $\dot{\alpha}$ arose from $\eta$ we might expect that an older $\eta$ should be sporadically attested, or that Attic $\bar{\alpha}$ might be substituted here and there for pan-Hellenic $\eta$. In neither case is there any support for the view that I. E. $\bar{a}$ became $\eta$ in Ionic and Attic, and afterwards became $\bar{\alpha}$ in Attic.

In literature the adoption of the Ionic $\eta$ in Ionic writers dates from a period considerably anterior to that of the inscriptions of Keos and Naxos. Whether or not the Ionic pronunciation of $\bar{a}$ came into existence at the time of the Ionian migration eastward is impossible to state with certainty, though probability speaks in favor of the change having taken place after the Ionians had settled in Asia Minor. ${ }^{1}$ Cf. Ionic M $\hat{\eta} \delta o \iota$, Kypr. Mâठoı, Old Pers. Māda. The Ionisms of the Homeric poems represent in a majority of instances the earliest form of Ionic and have, so far as the characteristic Ionic use of $\eta$ is concerned, not been retouched by the Ionic Homerids of the ninth or later centuries. This view excludes the possibility of any $\bar{a}^{-1}$ s in Homer being Ionic.

Gustav Meyer has made the statement (Gr. Gramm., XXXIII) that the farther back we follow the history of the Attic dialect, so much nearer does it approach to Ionic. As regards the interrelation of $\bar{a}$ and $\eta$ at least, whatever may be said of other points in question (see on $\eta \nu v, \epsilon a ́ v$ in Ionic under Conjunctions, Rutherford's Phrynichus, and Verall's remarks in J. H. S., I, 260, II, r79) it cannot be affirmed that Meyer is correct. The Attic dactylic poetry of the seventh and sixth centuries rigorously excluded forms of Ionic vocalization. Thus in C. I. A., I, 471, which dates close upon the time of Solon, we find $\dot{a} v^{\circ}\left[\rho \rho^{\prime}\right] a v, \dot{\eta} \lambda \iota \kappa i ́ a s . ~ S o, ~ t o o, ~ i n ~ C . ~ I . ~ A ., ~ I, ~ 463, ~ v e a \rho a ́ v, ~$
 Cf. Kirchhoff, Hermes, V, 54, Cauer in Stud., VIII, 244-849, Kirchhoff's remarks on C. I. A., IV, B 492, 12, and Meisterhans, ${ }^{2}$ p. 13.

[^16]42. Ending of the Vowel Declension (stems in $\bar{a}$ ).
A. Masculines in $-\epsilon \eta \mathrm{s},-t \eta \mathrm{~s}$, are retained upon all early Ionic inscriptions. 'E $\sigma v$ éas and $\Lambda v \sigma a \gamma o ́ \rho a s$, forms assumed to exist upon the lead tablets of Styra ( $\mathrm{I}_{1919 \mathrm{and} 24}$ ) have been shown, $\S 27$, to lack foundation. Cf. $19{ }_{5 c}, 19{ }_{1 \pi z}$ in Bechtel, Aivé $\eta$ s in Rob., 189 F, 'Av $\tau i \eta s$, Rob., 190, no. I, E. $\Pi$ vearópas, Samos, $215=$ Roberts, ${ }_{156}$, in an artist's signature to an Ionic epigram. Since the giver of the $\epsilon i \kappa \omega_{\nu}$ was an Epizephyrian Lokrian, Pythagorês may have adopted for his name a form in harmony with the dialect of the dedicator Euthymos. ${ }^{1}$ Cf. the mixture of dialect at Rhegion. Whatever be the true explanation of this form, it deserves notice that this is the earliest example of -aरópas upon an Ionic inscription. In Rob., 157, we read $[\Pi v] \theta$ ayó $\rho[a]$ s, restored on the lines of 156 . A coin of Samos ( $400-35^{\circ}$ ) gives the genuine Ionic form $\Pi v \theta a \gamma o ́ p \eta s$, Bechtel, 226, I. On Iuvarópŋs, from Selybria, see Bechtel on No. 261.
-tas appears in Thasos at the end of the third century (Kpıtias
 document perhaps of the fifth century ; 'A $\rho \iota \sigma \tau a \gamma o ́ p a s$, Thasos, 82 A 5 (225-200).
B. In feminine nouns the termination $-\iota \eta$ appears sporadically till after Christ in the inscriptional monuments of the Ionic dialect (cf. below, § 43). The ingression of the Attic forms in the $\bar{A}$ declension dates from the middle of the fourth century b.c. Thus, for example, we have K $\lambda \epsilon v \pi a ̆ ́ \tau \rho a$, Delos, 55 , III, 34 (cf. VII, 27) of the third cen-
 $129_{1}$, all inscriptions of late date. Upon an archaic vase (Roberts, 190) we find X $\mathbf{X} \rho \boldsymbol{\rho}$, , whose $\bar{a}$ perhaps makes for Attic provenance (see Kretschmer, K. Z., XXIX, 398).
$\Delta \omega \rho o \phi^{\prime} \alpha$, Roberts, 29 , upon a stone in Naxos, is certainly not an Ionian woman, not only on account of the $\bar{a}$, but also on account of the $\phi$ for $\theta$, which is not a substitution known elsewhere as Ionic ( $\phi=\theta$ in Aiolic, Boiotian, and Thessalian).
${ }^{7} \mathrm{H}$ pas, Samos, $22 \mathrm{O}_{34}$, and $22 \mathrm{I}_{37}$ (about 350), whereas in 226 we find ${ }^{*}$ Hp ${ }^{2}$. Cf. Greg. Corinth., 390, Gram. Meerm., 650. The $\eta$ form is retained upon inscriptions till a late period, though doubtless no longer spoken. The conservative style of the inscriptions has retained $\Pi v \theta a y o ́ \rho \eta s$ on coins of the empire (P. Gardner, Num. Chron., 1882, 280).
${ }^{1}$ Dedicators generally have the dedicatory inscription engraved in their native alphabet; but cf. Roberts, 230, bis, for an exception.

On $-\bar{\alpha}$ in the poets, see below, $\S 54 \mathrm{ff}$. The occurrences of $\bar{\alpha}$ in proper names in Hdt., where $\eta$ might have been expected, have been enumerated above under $\widehat{A}(\$ 28)$.
43. Note on the chronology of $\eta$ after vowels and $\rho$ in Ionic inscriptions.

It is to be noted that upon inscriptions as late as the third century after Christ, Ionic $\eta$ held its ground sporadically ; e.g. Keos, 52, 'Iov $\lambda \iota \eta \bar{\omega} \nu$ (in Attic even in the fourth century b.c.) ; Paros, 66,
 II $\iota \eta \nu \dot{\epsilon} \omega v$, on a coin, Imhoof-Blumer, Monnaies Grecques, 296, No. 127 (time of Hadrian). Coins of Olbia retain - $\dagger \eta$ till the period of Caracalla and Alexander Severus. ${ }^{1}$
The inscriptions before $35^{\circ}$ b.c. generally have the Ionic $\eta$.
This retention of $\eta$, the inflection of adjectives of material in -6os, etc., and the inflection of the Iota declension (gen. -tos), are the last heirlooms of the Ionic dialect that were displaced by the Attic кovv'.
44. In the following paragraphs we will attempt to discover to what extent the Ionic dialect has preserved the long vowel of the suffix $-\frac{1}{2} \bar{\alpha}$, which in Attic and occasionally in Ionic has been displaced by -lă. An immediate connection, temporal or local, between Ionic and Attic cannot be shown on the ground of this tendency, which obtains in both dialects. Thus, the usual Attic form is $\dot{a} \lambda \dot{\eta} \theta \dot{\theta} a$, a form younger than the "Old-Attic" $\dot{\alpha} \lambda \eta \theta \epsilon i a ́ a$ and the Ionic (Homeric) $\dot{\alpha} \lambda \eta \theta \epsilon i \eta$, since it is the result of a transferring of an abstract noun with the suffix $-\frac{\iota}{\alpha} \bar{u}$ into the category of the adjectival flexion, which had $-\iota \breve{\mu}$ as original feminine ending. Cf. also $-\eta$ í and $-\epsilon \omega$ from - $\eta v$ stems, $-\iota \eta$ being the substantival, $-\iota \breve{a}$ the adjectival, ending. ${ }^{2}$
The question of the interrelation of $-\epsilon \ell \eta,-\eta \ddot{\eta} \eta,-\iota \eta$ will be touched on, $\S \S 66$, ioi ff. On Attic - $\epsilon l a$ and $-t a$, see Schanz, Plato, II, 2, p. vii., ff., Moiris, $199{ }_{15}$.

## 45 A. Abstract feminines in $-\epsilon \eta$ in Ionic.

Unless especially noted, no case of - $\epsilon \check{a}$ occurs. See Choirob., Bekk. Anecd., IV, 1314 ; Hdn., II, 45420 ; Fritsch, Zum Vokalismus, etc., p. 19, etc., Bredow, 127 , 188. Figures without authors refer to Hdt.

[^17]Unless specially noted the forms may be referred to a nom. in $-\iota \eta$.

$\dot{\alpha} \delta \rho a v \varepsilon ́ \eta$, Aret., 150, 26 r .
$\dot{a} \in \kappa \varepsilon \dot{\eta} \eta, \mathrm{I}, 73$, etc., as in Homer.
äкрı $\beta \varepsilon$ í , Hippokr., ep. 17 .
$\dot{a} \lambda \eta \theta \varepsilon \dot{i} \eta$, not $\dot{\alpha} \lambda \eta \theta_{\eta} \eta^{i} \eta$, in Hdt. ; $\mathfrak{a} \lambda \eta \theta \varepsilon \dot{\varepsilon} \eta$ occurs in Euseb. Mynd., 19 , 21, Luk., Astr., I, Hipp., ep. 10 $_{6},{ }^{12}{ }_{4},{ }_{1} 7_{29}$, Mimnermos 8, Iliad, $\Psi 36 \mathrm{r}, \Omega_{407}$, and often in the Odyssee.
 291, 648 ( $O$ - í $^{\eta}$ ) ; Hipp., ep. $7_{42}$.
$\dot{\alpha} \sigma \varepsilon \lambda \gamma \varepsilon \dot{\eta} \eta$, Hipp., ер. $1730,4 \cdot$
$\dot{a} v \theta \varepsilon v \varepsilon \dot{\eta} \eta$, IV, ${ }^{25}$, etc., Hipp., ПА 29.
$\dot{\alpha} \sigma \phi a \lambda \epsilon \dot{\prime} \eta$, III, 7, etc.
 form has been attributed by Karsten, p. 18, to that species of Ionic which he calls Karian. ${ }^{1}$ No other example of $\dot{a} \tau \epsilon \lambda \epsilon$ í occurs upon Ionic inscriptions, though it is the regular Ionic form which has been supplanted upon other inscriptions by the Attic äré̀eca, Eryth. 1996 ( 394 в.c. one of the earliest cases of the ingression of Atticisms ${ }^{2}$ ), 2029 (350 b.c.) ; Zeleia, 114 (334 в.c.) ; Ephesos, 14713 (300 в.c.) ; Iasos, ro $_{9}$ (end of fourth century).
$\dot{a} \tau \rho \epsilon \kappa є \dot{\eta} \eta$, IV, 152 , Нipp., ер. $1_{8}, 1756$,

 Stein and Holder read - $\epsilon \eta \nu$.
$\dot{\epsilon} \pi \iota \mu \epsilon \lambda \epsilon \dot{\prime} \eta$, Hippokr., ep. $1_{57}{ }_{50}$.
$\dot{\epsilon} \pi \iota \pi \epsilon \theta \theta_{i ́ \eta}$, Sim. Amorg., $\mathrm{I}_{6}$.
 editors.
$\boldsymbol{\epsilon} \boldsymbol{v} \lambda \alpha \beta \in \dot{i} \eta$, Hippokr., ep. $122_{4}, 16_{10}$.


$\epsilon \dot{v} \mu \epsilon v^{\prime} \eta$, II, 45, is written by Holder against the authority of the Mss., which have $-\epsilon \iota \alpha$ or $-\epsilon a$. In II, 55, both Stein and H. write Поолє́vєıa, the name of a Dodonaian priestess. In the case of proper names, Hdt.'s elective affinities may permit him to choose

[^18]neither the Ionic nor the epichoric name. The name may have come to him from Attic sources.

є ่งтєтєї, V, 20.
єủтє入єiŋ, II, 92, etc.
$\mu \epsilon \gamma \mathrm{\lambda} \boldsymbol{\lambda} \boldsymbol{\pi} \rho \epsilon \pi \epsilon$ 'í , I, 1 39, III, 125.
$\nu \omega \theta \epsilon i \eta$, Aret., 208.
$\xi v \gamma \gamma \epsilon v \varepsilon i \eta$, Hippokr., ep. $17{ }_{72}$.
$\pi о \lambda v \tau \epsilon \lambda \epsilon i ́ \eta$, II, 87.
$\pi o \lambda v \pi \lambda \eta \theta \epsilon i \eta$, Hippokr., ПА 22.
$\pi \rho \epsilon \sigma \beta v \gamma \epsilon \tau \epsilon i \eta, V I, 5$ I.
$\pi \rho o \mu \eta \theta$ кi $\eta$ is correctly handed down in Xenoph., $\mathbf{1}_{24}$. Hdt. has $\pi \rho о \mu \eta \theta_{i \eta}$, I, 88, III, 36 (CPd, -cí ). A schol., quoted by Bredow,

$\pi \rho \sigma \sigma \eta \nu \epsilon i \eta$, Aret., 250, Hippokr., П $\Delta$ O, 2 I.
бוтodeín, I, 22, 94.
$\sigma v \mu \pi a \theta \in i \eta$. Aret., 145, 152, $\xi v \mu-, 153$.
 íyítu, see Blass, Aussprache, ${ }^{3}$ p. 60, who compares late Boiotian
 Meisterhans, ${ }^{2}$ p. ir8. Aret., 12, Euseb. Mynd., 26 have ívıєí , and so in Hippokr. ep. $17 \%$ 26, EI, 11, ПА 2, 9. ívєín, Aret., 95, 120.

$\phi \rho \epsilon v o \beta \lambda a \beta \epsilon i \eta$, Luk., Syr., i 8.
$\dot{\omega} \phi \epsilon \lambda \epsilon$ ín might be expected in view of $\dot{\alpha} \nu \omega \phi \epsilon \lambda \eta$ 's in Aischylos; and

 however, find no support from inscriptions (Attic $\dot{\omega} \phi \in \lambda i a$ in all inscriptions). Herodotos, V, 98, and Hippokr., EI, $7, \Pi \Delta \mathrm{O}, 5 \mathrm{I}$, ep. $\mathrm{I}_{7 \text { 48, } 25 \text {, }}$ seems to have used $\dot{\omega} \phi \epsilon \lambda_{i} \eta$. Aretaios, 238, and Eusebios, § 4, adopt the same form.

45 B. Other forms in $-\epsilon \iota \eta(-\epsilon \iota \check{\alpha})<-\epsilon \sigma \iota a$.
' $\theta \epsilon \rho \epsilon i ́ \eta$, I, ı89. Bekk., Anecd., $\theta \epsilon \rho \epsilon i a$.
$\pi \epsilon \rho \iota \phi$ ávєıa, Holder's reading, Hdt., IV, 24, though supported by all the Mss., should yield to Stein's - $\epsilon i \eta$.
ím $\omega \rho \epsilon a$, Hdt., IV, 23 , ${ }^{1}$ for $-\epsilon(\imath) \alpha$ from ö $\rho o s$, a word of doubtful etymology. Hipponax, 35 s, ó ócias, Hdt., ópєєvós.
$\pi \alpha \nu \dot{\omega} \lambda \epsilon \alpha$ and $\boldsymbol{\epsilon} \dot{\xi} \dot{\omega} \lambda \epsilon a$, Bechtel, 263, found in Lykia, belong to the

[^19]same class as $\dot{\dot{v}} \pi \omega \boldsymbol{\rho} \boldsymbol{\rho}(\imath) a$, but it is not certain that these forms are not Attic.
 Holder. 'Hрáкдєоs appears frequently in Hdt. Upon inscriptions,
 Eryth., 206 A 12 (third century) ; 'Poסóклє $\quad$, Samos, 225 (late).

- $\epsilon a ̆-$ occurs only in the following cases without any variant in $-\epsilon\rceil$ :



46. Feminines in $-\epsilon \dot{\epsilon} \eta$ or $-\epsilon \check{a}$ derived from - $\eta v$ - stems.
i $\rho \in \epsilon$ i , in Hdt., V, 72 ; II, 53, ABC, ié $\rho \epsilon \epsilon u$, II, 55 , id., the reading adopted by Holder. In II, 55, occurs Пооне́vєєa, on which see $\S 45 \mathrm{~A}$. íf $\rho \in \epsilon a$ is the Homeric ( Z 300 ) and original form. Upon Ionic inscriptions we have this form, Keos, 48 , of the fourth century. Contracted form $i \epsilon \rho \hat{\eta}<i \in \rho \epsilon_{\eta},{ }^{1}$ Pantikap., ${ }^{123}{ }_{3}$, Ephesos, 150 (late). If $i \in \rho \in a$ is correct, we have in Hdt. the older and the younger form co-existing. iefeia is attested by grammarians as Attic, though i $\epsilon \rho \epsilon(\iota)$ ă, too, is Attic (Meisterhans, ${ }^{2}$ p. 32).
$\beta_{\text {aci }}$ cia appears in numerous passages in Hdt. without a variant, and is the Homeric and original form. The v.l. $\beta a \sigma \iota \lambda$ クins, $\mathrm{I}, 21 \mathrm{II}$, in $R$ iṣ an hyper-Ionism.

Bredow has collected the cases of - $\epsilon \grave{a},-o \iota a ̆,-a a ̆ a$, and $-\epsilon \iota \eta$, -oıך, -aıך, in proper names in Hdt. The explanation of the forms in $-\breve{a}$ is often a matter of extreme difficulty.
47. Ionic $-\iota \eta=$ Attic $-\iota \breve{a}$ appears, furthermore, in ' $\Omega \rho \epsilon \theta \theta v i \neq$, Hdt.,
 ó $\rho \gamma v \imath \eta^{\prime}(-\iota a ̂)$.

Note. - Hippokrates and Aretaios have $\mu^{i} \eta$, ò̀ $\delta \epsilon \mu_{i}^{\prime} \eta$, etc., whereas Hdt. always uses $\mu \mathfrak{i}$ ă, ò̀ $\delta \epsilon \mu \mathfrak{i a ̆}$, etc. $\mu \mathrm{ta}[s]$, Olynthos, 8 B 13, but Ionic $\mu \iota \hat{\eta} s$, Sim., Amorg., 2 ; $\mu \hat{\imath}$, Theognis, 664, in A. O. Lukian, Syr., 19, Astr., 27, 29, has où $\delta \epsilon \mu$ í $\eta \nu$.

On the nom. $\check{a}=\eta$, see sub A, § 3 .
48. Adverbs representing petrified case-forms of the $\widehat{A}$ declension have throughout the Ionic $\eta$, e.g. $\lambda_{i} \eta \nu$ (cf. Greg. Corinth. § 58) $\lambda \alpha ́ \theta \rho \eta, \pi \dot{\epsilon} \rho \eta \nu($ Arrian, 3$) \pi \dot{\epsilon} \rho \eta \theta \epsilon$.

[^20]49. II. In verbal forms of the - $\alpha \omega$ inflection, and in derived forms.
 Tyrt., 128 , in Hdt. and on a vase, Roberts, 194. "Aסpactos, Smyrna, ${ }^{153_{17}}$, an inscription of Attic inclinations. Cf. also $\boldsymbol{\eta} \gamma o ́ \rho a \sigma \epsilon v$, Eryth.,
 Thasos, $72_{3}$, but "Aparos, Eryth., 206 B 44.
50. III. Words containing $\mathrm{H}=\mathrm{I}$. E. $\widehat{\mathrm{A}}$ in the radical and thematic syllables. A few examples of each class will suffice.
$\eta=$ extra-Ionic $\bar{a}$, after $\rho$.
$\gamma \rho \eta \hat{v}_{s}$; for which Bergk reads $\gamma \rho \alpha \hat{v}$, Archil., 31, though Schneidewin long ago corrected the Ms. to $\gamma \rho \eta \hat{v} s$. There is no warrant for supposing that the inflection of $\gamma \rho \eta \hat{v} s$ differed from that of $\nu \eta \hat{s}$ in the nom. ; and in Archil., 168, Bergk reads $\gamma \rho \eta \dot{u} v$. $\gamma \rho \eta \dot{u} s$ should not be derived from $\gamma \rho a \hat{\imath} \iota s$ (Curtius, Et. ${ }^{5}$, 176 , cf. Schmidt, K. Z. XXVII, 375), but is probably an immovable feminine adjective like $\theta \hat{\eta} \lambda v s$ in
 movable feminine forms. $\quad \gamma \rho \alpha \hat{\imath} \alpha$ appears to be a solitary example of a $v$-stem which has not taken on the - $\epsilon \iota a$ inflexion. $\gamma \rho a \hat{v} \iota s$ is of
 as Brugmann, M. U., III, 25, suggests.
$\kappa є \kappa \rho \eta \mu \epsilon$ ย́vs, Hdt., III, 106, against the authority of all the Mss., cf. Hippokr., кє́кк $\rho \mu \alpha \iota$. The base кєра has the form ко $\bar{\alpha}=$ Ionic кр $\eta$. а́крәтоло́т $\boldsymbol{\varsigma},-\pi о \sigma i ́ \eta, \mathrm{Hdt}$.
$\pi \iota \pi \rho \eta \eta^{\prime} \kappa \omega$ (cf. Kallimachos, 85), $\left.\pi \rho\right] \eta \theta^{\prime} \epsilon \tau \tau \omega \nu$, Eryth., 204 ${ }_{6}$; Hdt. $\pi \rho \eta \theta \hat{\eta} \nu a \iota . \quad$ Solon, however, has $\pi \rho a \theta \epsilon ́ v \tau \epsilon \varsigma, 4{ }_{25}$ eleg., $3^{6}$; trim.
$\pi \rho \eta \dot{\eta} \sigma \omega: ~ \Pi \rho \eta \xi^{\prime} \sigma \sigma \pi \eta s, \Pi \rho \eta \xi_{i}^{\prime} \lambda \epsilon \omega \varsigma, \Pi \rho \eta \xi_{i v o s}$ in Hdt. $\Pi \rho \eta \xi_{i} \pi \mathrm{\pi} \lambda \iota s$,
 B 8, cf. Thasos, 75 A 7. П $\boldsymbol{\eta} \xi \hat{\alpha} \hat{s}$, Eryth., 206 A ir. $\Pi \rho \eta \dot{\xi} \alpha \gamma o ́ \rho \eta s$,

 20 ; $\pi \rho \hat{\eta} \chi \mu a$, Chios, 174 B 18, 174 C 7 (also Attic, C. I. A., III, $3^{82} 2_{2}$ ). In Hdt. the Attic forms have crept into some Mss. Cf. I, 8, V, 12, VII, 147. Theognis has $\eta$ forms, $70,80,73,1026,1027$, 553, 661, 953, 461, 1031, 1075, but the $\bar{\alpha}$ forms in $A$ or in other Mss., 204, 659, 256, 644, 642, 105 I . Ionic inscriptions, too, have admitted the Attic forms, Mylasa, 248 A ro (367-6 b.c.), 248 C io (355-4), Ephesos, $147_{18}$, about 300 b.c.
$\pi \rho \eta \dot{\prime}, \pi \rho \eta \dot{v} v \epsilon \sigma \theta a \iota$ in Hdt., Прךú̀os, name of a Thasiote, $\Pi \rho \eta \hat{v} \chi o s$ of a Styraian, $19_{347}(\mathrm{cf} . \Pi \rho \epsilon-\alpha \dot{\alpha} \theta \eta \mathrm{s}$, Keos, 50, IV, 65 ). $\pi \rho \eta$ ย́a, Luk., Astr., 29.

 446 ff., explains $\frac{\rho}{\rho} \frac{2}{2} \omega \nu=\dot{\rho} \hat{a} \sigma i \omega \nu=$ Lat. rārior (*vrāsos).
$\dot{\rho} \eta \chi^{i} \eta$, flood-tide, in Hdt., can have nothing to do with $\dot{\rho} \eta \boldsymbol{\eta} \gamma v \mathrm{u} \mu \mathrm{a}$ as L. S. state, since the latter has pan-Hellenic $\eta .{ }^{1}$ Connect rather คáaus, spine, Hdt., III, 54. For the use of names of parts of the body to express natural objects, cf. arm of the sea, shoulder of the mountain, Gk. $\pi \mathrm{o} \mathrm{\lambda v} \mathrm{\delta} \epsilon \rho \rho a ́ s " O \lambda v \mu \pi o s, ~ e t c . ~$
$\tau \rho \eta \chi^{\underline{v}}$. The relation of $\tau \rho \bar{a}$ to $\tau \alpha \rho a$ in $\tau \alpha \rho a \chi \eta \dot{\eta}, \tau \alpha ́ \rho a \xi \bar{\xi} \iota s$ is not perfectly clear, though it is probable that there is a correspondence of types, $\kappa \epsilon \rho a: \kappa \rho \bar{a}:: \tau \alpha \rho a: \tau \rho \bar{a} . \quad \tau \rho \eta \chi^{\epsilon} \alpha$ in Hdt., VII, 33 , is due to Abicht, the Mss. having the Attic form which comes to light in Solon, 435 . The genuine Ionic form is found in Tyrtaios, $\mathrm{I}_{22}$, Hipponax, 47 .

The pseudo-Ionists generally adopt the Ionic forms.
51. N九ки́vooos, Thasos (L), 12 C ir, may serve as an example of $\eta=\bar{a}$ lengthened from $\breve{\alpha}$ upon formation of a compound word. See § 36. On $\Lambda$ oxā $\begin{gathered}\text { ós in Styra, see above, § } 27 .\end{gathered}$

$$
\text { 52. Ionic } \eta=\text { extra-Ionic } \dot{\bar{a}} \text {, after vowels. }
$$



$\nu є \eta v i \eta s$ Hdt., cf. N $\epsilon \bar{\eta} \pi \sigma \lambda \iota s$, Bechtel, 4 . The stem $\nu \in \bar{\alpha}-$ varies with
 from $\phi a \iota o-$, as $\mathrm{K} \dot{\delta} \delta \rho \eta \lambda o s$ from $\kappa v \delta \rho o-. ~ C f . ~ ' Е \rho \mu a ́ \phi \iota \lambda o s, ~ T h . ~(L),$. ${ }_{20}$ C 8, and 'Ериóфıдоs.
$\pi a \imath \eta^{\prime} \omega v$, the Homeric form, is still preserved in Archilochos 76. Hdt. has $\pi a \iota \omega v i ́ \zeta \omega$.

Прıпү $\boldsymbol{\epsilon}^{\prime} \omega \nu$, Imhoof-Blumer, Monn. Grecq., No. 127, period of Hadrian ; MPIH, Bechtel, No. 143.
$\tau \iota \eta \eta_{\rho} \eta$, Hdt., VIII, $\mathbf{1 2 0}$, but $\tau$ tápa, I, I32, III, 12, retained by Stein and Holder.
$\tau \rho \iota \eta_{\kappa o v \tau a}$ and other forms of $\tau \rho \iota \eta$ - in composition. $\tau \rho \iota \dot{\eta} \kappa о \nu \tau a$, Eryth., $202_{\text {li, }}$, cf. Mylasa, 248 A i, Keos, $43_{20}$, Chios, $\mathrm{I}_{74}$ B 23, D I $_{5}$, Thasos (L.), 96 , has an $\eta=\bar{a}$ that is probably not original, despite the $\bar{a}$ of the I. E. neuter pl. triā took its $\bar{a}$ from the $o$ decl. when the plural of the $o$ stems ended in $\bar{a}$. See Schmidt's Noutra, p. 39.

[^21]$\delta_{\iota \eta-\text { in }} \delta_{\ell \eta \kappa \sigma \sigma i \omega \nu}$, Zeleia, 114 D 5, Chios 174 D 18 . The long vowel is due to the influence of that of $\tau \rho \iota \eta \kappa o ́ \sigma \iota o$. See Spitzer, Lautlehre des Arkad., p. 19.

## 53. IV. Syllables of Derivation containing H.


 in Attic, if the latter, as Dittenberger thinks, is not the younger form), Bapүv入ıๆтิ̂v, Bechtel, 252 . In 'Opvєâral, Hdt., VIII, 73, Stein has the epichoric form, though in the same chapter $\Pi$ apopeq̂rat. On other names in -ârat in Hdt., see above, § 28. Arrian, 5 , has Tı $\uparrow \hat{\eta} v o s$.

 form (in III, ro7, one Ms. has $\sigma \tau v ́ \rho \eta \kappa a$ ).
 to Побєьえ́àva ävaкта, Iliad, XV, 8. Cf. § i 1 .
54. The verdict of Attic metrical inscriptions (§41) in favor of the adoption of the Attic vocalization of forms which might, on the view that the influence of the epic dialect was paramount, have been Ionic, invites an investigation of Ionic poetry as to how far it has preserved $\eta$ after $\epsilon, \iota, v$, and $\rho$ in the four categories enumerated in § 40. Ionic was the dialect of the Greek literary world prior to the advent of Attic, as Attic was the medium of literary expression until the advent of the кoov $\dot{\eta}$. The question at issue here is: How far does the dialect of poets born in Ionia differ, if it differs at all, from the dialect of poets whose birthplace or place of residence was in a canton whose speech had never admitted $\eta$ after $\epsilon, \iota, v$, and $\rho$ ? In other words, are the ${ }^{-}$'s of Tyrtaios due to his Spartan home, and are the $\bar{a}$ 's of Solon the result of his Athenian citizenship? Furthermore, we can here but call attention to the fact that the Mss. of the Ionic poetry may have suffered, either from the hands of ignorant scribes who knew only the common dialect of their time, or from preconceived notions as to the character of early iambic, trochaic and elegiac poetry.
55. Tyrtaios: In the elegies, where, on any view, we should expect to find fewer cases of $\bar{a}$ than in the embateria, we notice airopâs

 words represent the response of the Delphic oracle to Lykurgos,
while $\sum$ ádópras in 4 (accord. to Plutarch) might be excused for a reason not very dissimilar, though the $\Sigma \pi \alpha \dot{\alpha} \rho \tau \eta s$ of Diod. Sic. seems more probable.

 is more probable that the later copyists should have inserted an Attic $\bar{a}$ in place of $\eta$ than that they should have changed a Doric $\bar{\alpha}$ to $\eta$ in
 as foreign to the original dialect of Tyrtaios.

In the case of the embateria, we shall, I think, have to accept as certain an admixture of Lakonian forms. Thus we find $\Sigma \pi \alpha \dot{\alpha} \rho$ тas $\mathrm{I}_{5}$,


 Doric and Ionic, such as the Spartan youth would scarce have listened to. кivartv is a "hyper-Dorism," unattested for the period of the early Messenian wars; and кov̂po七 should be $\kappa \hat{\omega} \rho o \iota$, if Doric. Hephaistion has кiv $\eta \sigma t \nu$ correctly enough.
56. In the case of poets of Ionic birth, whose art is Ionic, the restoration of the genuine Ionic forms in $\eta$ offers but little difficulty. Thus we have an Attic $\dot{\alpha} \nu \theta i a s$ in Ananios, 5 ( $\theta \epsilon i \eta \nu \mathbf{I}_{2}$ ), and 'Ava $\xi_{\alpha-}$ rópas in Anakreon, 105.
57. The temptation to Atticize Solon was still greater. Though it is not advisable to go so far as Fick in rejecting all traces of Solon's dependence upon his elegiac predecessors, some evidence in favor of the retention of Attic $\bar{\alpha}$ is found, not only in the fact that contemporary Attic dactylic poetry used the native $\bar{\alpha}$, but also in the numerous instances of the occurrence of $\bar{\alpha}$ in the Mss.

In his trimeters we find $\dot{\epsilon} \lambda \epsilon v \theta \dot{\epsilon} \rho a \quad 3 \sigma_{5}$, $\beta$ iàv $36_{14}$ (Plut., $\beta$ í $\nu$ ), $\pi \rho a-$ $\theta$ évтas $36_{7}$. $\eta$ in àvaүкаíns $36_{8}$, סov入íqv $36_{11}$.
 Bins 32.

In the elegies, where the greatest dependence upon epic forms





If it is possible to distinguish between the dialectal preferences of the Solonian metres, $\eta$ may be defended even in the trimeters and
tetrameters on the view that the background, especially of the iambic trimeter, is Ionic. If $\bar{a}$ be genuine here, $\eta$ must have been introduced by scribes prepossessed by the belief that Solon was entirely dependent upon the Ionic dialect in matters of vocalization.

In the elegiac poems there is no positive proof that Solon adopted Attic forms where they differed from Ionic, nor, on the other hand, have we criteria sufficient to establish the uniform appearance of the Ionic forms. While we may assume that Solon did not mix dialects, nevertheless the solution of the question which form he preferred must be left open until this point is discussed more fully from the vantage ground of literary history.
58. The Theognidean collection offers so much that is adventitious that the question as to whether or not Theognis colored his Ionic elegies with slight masses of local matter is rendered well-nigh insurmountable. The cases of $\bar{a}$ in the chief Mss. are as follows :-
$\pi \rho a ̂ \gamma \mu \mu$ 256, 642, 644, 105 I ; pą̣́óov and connected words, 120 , 429, 1220 ; $\mu \iota \kappa \rho a ́ 607$; Tıцаүópa 1059 (by conj.) ; đ̇ $\chi \theta \rho a ́ 270$ (in

 $-\eta$, as frequently where the Mss. divide on this question) ; vavs 84 , 856, 970 , 1361 ; vav̂v 680 . Renner wishes to read $v \eta \hat{v}_{s} 84,856$, and $97^{\circ}(A v \eta v s)$. The genitive sing. and dat. plur. are $v \eta \sigma^{\prime} 5^{1} 3$ and $\nu \eta \nu \sigma i{ }^{1} 2$.

Xenophanes preserves the Ionic $\eta$ everywhere except in $\kappa \rho a \tau \eta \rho_{1} 1_{4}$; on ${ }_{\epsilon}^{\mu} \mu \pi \bar{u} s$, see above, $\S 3$ r.

## 59. Ionic $\mathrm{H}=$ Attic A .

$\delta \iota \pi \lambda \dot{\eta} \sigma \omega o s, \pi \epsilon \tau \tau a-, \hat{\epsilon} \xi a \pi \lambda \dot{\eta} \sigma \omega o v, \pi o \lambda \lambda a \pi \lambda \dot{\eta} \sigma \omega a$, Hdt. The latter form, III, 135, where $A B R$ have the Attic form ; which comes to light in $\delta_{\iota \pi \lambda \dot{\sigma} \sigma o v, ~ T e o s, ~}{ }^{5} 8_{z 2}$, an almost completely Atticized inscription. Cf. Gothic ain-falls.

The genuine Herodotean form $\pi \epsilon \nu \tau a \kappa o ́ \sigma o o$ is amply attested (III, 90, IX, 29), and in the Chian inscription, 174 D 7 ( $\pi[\epsilon]$ vтакобi $\omega v$ ). $\pi \epsilon \nu \tau \breve{\alpha} \kappa о \sigma \iota o t$ has its $\pi \epsilon \nu \tau \check{\alpha}-$ on the lines of $\tau \epsilon \tau \rho \ddot{a}-, \dot{\varepsilon} \pi \tau \tau \check{a}-$. The form $\pi \epsilon \nu \tau \eta$ - in certain Mss. of Hdt. (III, 13, VII, 186) is doubtless to be explained on the view that the scribe had in his mind's eye the Homeric $\pi \epsilon \nu \tau \eta \kappa$ óroot $(\gamma 7)$, whose $\eta$ is due at once to the influence of $\pi \epsilon v \tau \dot{\eta} \kappa o v \tau a$ and at the same time to the ictus.

Instances of $-\eta=\breve{a}$ in suffix syllables have been adduced, $\S 3$.

Such forms as $\mu$ oí $\eta, \sigma \pi \epsilon i \rho \eta$ (Greg. Corinth. d. d. Ion., p. 390), $\gamma \epsilon \phi \dot{\rho} \eta \eta$, occasionally in the Mss. of Hdt., are hyper-Ionisms.

Ionic $v \eta \hat{v} s, v \eta v \sigma i=v a ̆ \hat{v} s, \nu \breve{a} \hat{v} \sigma \iota$, is due to case levelling, the $\eta$ forms being strictly in place only in such cases as the genitive singular where the case termination begins with a vowel.

Kallinos' 'Hotovîas (5) has been regarded by Fick, Odyssee, p. 24, as an instance of ictus lengthening, Steph. Byzant. connecting 'Hoovia with A $\boldsymbol{\sigma}$ ía. $\ddot{\eta}^{\prime} \kappa \eta \nu$, cited as a parallel instance from Archilochos by Fick, has been differently explained, $\S 38$; and ${ }^{'} \mathrm{H}$ o七ov $\mathfrak{\eta}$ as may rest ultimately upon similar ablaut gradations. At least it is premature to assume lengthening per ictum in so hazy a word.

Note. - Prof. Fick's contention that $\eta_{\mu} \mu \rho o s$ is a living Ionic form for $a^{\alpha} \mu \mu \rho \rho o s$, still awaits proof. Evidence in favor of his view may be found
 would then be another indication of the close interrelation between the dialect of the Ionians and that of the Attic tragedy. ä $\mu \mu o \rho o s$ is a strange form in Hipponax (2), a poet whose intellectual constitution and whose use of language is alien to the retention of such Homeric forms as are Aiolic in coloring.

$$
\text { 6o. } \mathrm{H}=\mathrm{E} \text {. }
$$

 relation of $\epsilon \iota$ and $\eta \iota$, see $\S 100-107$.

$$
\text { 6I. Ionic } \mathrm{H}=\mathrm{I} \text {. }
$$

No interchange of $\eta$ and $\iota$ can be maintained on the score of the name $\Sigma_{\eta \mu o v i o ̀ n s, ~ a t t e s t e d ~ a s ~ t h a t ~ o f ~ t h e ~ i a m b o g r a p h i c ~ p o e t ~ b y ~ E t . ~ M a g ., ~}^{\text {, }}$ and adopted by Christ in his History of Greek Literature. Elsewhere no trace of this form of the name appears; while $\Sigma \iota \mu \omega v i \delta \partial s$ is genuine Ionic from the evidence of a lead tablet from Styra ( $\mathrm{I}_{1}{ }_{13}$ ), and it is under this name that the author of the Mirror of Women is usually cited by ancient authorities.

## 62. Ionic $\mathrm{H}=\Omega$.

Maı̂̀rıs, often in Hdt. with different suffix than in Matêrıs, the later name. Cf. Maı̂̄rat $=$ Maı̂̂тat, Hdt. IV, 123 . Hdt. generally used


 occurs VIII, 47.


63．Ionic $\mathrm{H}=\mathrm{AI}$ ．
$\mu \imath \eta \phi o ́ v o v$, Archilochos， $48=$ Homeric $\mu$ ái申ove（E 31）．A similar balance of $\eta$ and aı forms appears in＇A $\lambda \theta_{\eta \mu \epsilon ́ v \epsilon o s, ~ B e c h t e l, ~ T h a s . ~(L .), ~}^{\text {（L）}}$ 4 В 3，and＇ $\mathrm{A} \lambda \theta a \iota \mu \epsilon ́ v \eta s$.

64．Long Iota．
1．Ionic with other Hellenic dialects has retained a few cases of $\bar{\imath}$ which may be assumed to be proethnic．

2．$i$ on Hellenic soil from $\nu_{F}\left(\tau^{\prime} \nu \omega\right)$ ，etc．，$\iota \iota$, оіктiр $\omega$ ， $\bar{i} \lambda \epsilon o s$ ，and ${ }_{i}^{i} \lambda \alpha o s<\sigma \iota \sigma \lambda \eta-$ ．On $\bar{i}$ from contraction of $\imath+\epsilon$ in ipós，ipeí, etc．，in Herodotos，see under Contraction of Vowels．

Ionic is on a plane with the non－assimilating dialects（i．e．all ex－ cept Aiolic and Thessalian）in lengthening short iota $+\sigma \mu$ to $i \mu$
 the accepted form of the fifth century，though we lack the evidence of old inscriptions．Oropos， $18_{1 i}$ ，about 400 b．c．，has $\gamma \iota \nu \epsilon \epsilon \theta \theta \omega v, \mathrm{My}$－ lasa， 248 A ${ }_{15}$（ $367-6$ в．c．），$\gamma_{i v \epsilon \sigma \theta a l, ~ T e o s, ~}^{158}{ }_{5}{ }_{56}$（first century）， $\gamma \iota \nu o ́ \mu \epsilon \nu o l$ ．If we may trust the Mss．of the iambographic poets， $\gamma^{i} \gamma$ vouat is the better attested form for their period．The substitu－ tion of $\gamma^{\prime}$ vopal for $\gamma^{\prime} \gamma v o \mu a \iota ~ a p p e a r s ~ t o ~ h a v e ~ t a k e n ~ p l a c e ~ e a r l i e r ~ i n ~$ Ionic than in Attic，in the inscriptions of which latter dialect $\gamma \iota \nu$－ does not come to light until 292 b．c．The Herodotean $\gamma \bar{\imath} \nu \omega \sigma \kappa \omega$ is not met with upon Attic inscriptions until the period of Roman supremacy．Hdt．uses $\mu i \sigma \gamma \omega$ ，not $\mu i \gamma v v \mu$ ，on which see A．J．P．，VI， 449.
$\bar{\imath}$ under influence of the ictus in ка́кїov，Archil． $13 ; \sigma v v^{\prime} \epsilon \tau \epsilon$ ，Archil． 5०，光 $\sigma \theta^{\prime} \epsilon \iota \nu$ ，Anan． 5 ．

65．Itacism．It is extremely doubtful whether there is any instance of itacism in inscriptional Ionic of the fifth or previous centuries．In the third edition of his Aussprache（p．58）Blass has withdrawn all the examples he had collected（ed．2，p． 5 1）from the inscriptions in proof of an early appearance of $\iota$ for $\epsilon$ ．In the case of Map由ııt＇$\omega \nu$ ， $196_{4}$ ，not noticed by Blass，we have a form by the side of which exist Map $\omega \boldsymbol{v} \epsilon \tau \epsilon \in \omega v, 196_{\approx}$ ，and Brit．Mus．Catal．125，No．15，and Mapovqit＇$\epsilon \nu, 196_{2}$ ，all three forms occurring upon coins before 400. The coin，Brit．Mus．Catal．125，15，has Mapovetré $\omega v$ on the front

[^22]and Map $\omega \nu \iota \tau \hat{\omega} \nu$ on the reverse ; Map $\omega \nu \iota \tau \epsilon \in \omega \nu$ occurring after 400 in Bechtel, $196_{6}$. In such forms as show both $\eta \iota$ and $\epsilon \iota$, the former is the older form, as in Attic 'A $\rho \iota \sigma \tau \eta i \delta \eta s$ and 'A $\rho \iota \sigma \tau \epsilon i \delta \eta s$; but no instance of a parallel form in $\bar{\imath}$ can be adduced: An 'A $\rho \iota \sigma \tau о к \lambda$ ' $\delta \eta$ s, Styra, ${ }_{1}{ }_{163}$, is derived from 'А ${ }^{\prime}$ '́ттоклоs, an 'А from 'Apıбток $\lambda \hat{\eta} s$. Greg. Corinth. d. d. Ion., p. 379, attests the existence of diaeresis in $\Pi \eta \lambda \epsilon^{\prime} \dot{\delta} \eta s$ and $\Pi \eta \lambda \eta \dot{i} \delta \eta s$, thereby confusing Homeric and Herodotean Ionic. On the latter form and on other Herodotean patronymics, see Bredow, p. ı90.

There are several forms in the Ionic of literature which point to the later confusion between the $\epsilon \iota$ and $i$ sounds, such as I have shown, A. J. P., VI, $4^{19-450}$, to exist in the text of Homer. Cf. e.g., Подvvєiкәs, Hdt. IV, 147, etc., with the spelling of $\Sigma \tau \rho a \tau o v \epsilon i к о v, ~ P a r o s, ~$ 67 , and of $N \epsilon i \kappa \eta v$, Olbia, $129_{11}$, both of the period of the empire. For the older forms in $\bar{\imath}$, see Roehl, 79, 515. Hoגv́vıкоs occurs on inscriptions from Attika and elsewhere (C. I. G. Samos, 2248, etc. See Baunack, Gortyn. p. 58). The early $\epsilon \iota$ forms may be rescued by the proportion $\nu \epsilon i \kappa \eta: \nu i \kappa \eta:: \tau \epsilon i \mu \eta: \tau \iota \mu \eta$. See $\S 83$.
 $\mathbf{T} \epsilon \iota \mu$ - is, however, attested in T $\mathbf{\epsilon} \epsilon \mu a \gamma o ́ \rho a$, Cauer, $195_{24}$ (Rhodes). This form is due to the influence of $\tau \epsilon \dot{\epsilon} \sigma \omega$, ${ }^{\prime} \tau \epsilon \iota \sigma \alpha$, $\mathrm{T} \epsilon \iota \sigma \iota \kappa \rho \alpha ́ \tau \eta s$, etc.
 $2184,-\epsilon \hat{\imath} 6418$ ), may be derived from є" $\delta о \mu \alpha \iota$. 'O $\lambda \beta \iota \pi \pi \lambda \epsilon \iota \tau \epsilon \epsilon \omega \nu$, Olbia,
 $\mathbf{1 3 O}_{2}$. 'A $\phi \rho 0 \delta \epsilon i ́ \tau \eta$, Eryth. 206, c. 48, with later $\epsilon$.

The Homeric Modvídos I have treated, A. J. P., VI, 440. 'The form Modútoos occurs upon a metrical inscription from Amorgos (No. 35) of the fourth or third century, unknown to Schulze, K. Z., XXIX, 236, who assumes -iסos, and in a document from Halikar-
 Thessal. $345 \mathrm{si}_{4}$. The form $\Pi$ odveio $\eta \mathrm{s}$, if it existed in earlier Ionic, must have ceased to exist in Ionia by the fourth century. The forms in $\bar{i}$ seem well attested.

 II, 465, we find єip ${ }^{\prime} \nu$, so also Plut. Lyk. 17 ; whereas Hesychios
 mann, Curt. Stud. IV, in6, and J. Schmidt, Vocal. II, 330, to be derived from ${ }^{\epsilon} \rho \sigma \eta \nu$, through ** $\rho \rho \rho \eta \nu$ and ${ }^{\iota} \rho \rho \eta \nu$. ${ }^{\imath} \rho \eta \nu$ is like $i \rho \eta$ 's and $\dot{\epsilon} \rho \eta^{\prime} s$, an independent nominative, whereas $\epsilon \boldsymbol{\epsilon} \rho \eta^{\prime} \nu$ is itacistic (Baunack, K. Z., XXVII, 566).
iré $\eta$, in Hdt. I, $19+$ is proved by the $\epsilon i \tau^{\prime} \dot{\prime} \alpha$ of Attic inscriptions to be itacistic.
66. To the forms terminating in -ct from - $\epsilon \mathrm{s}$ stems, quoted above, §44, there exist in the Mss. of Herodotos sporadic variants in -i $\eta$, none of which forms deserve recognition as genuine Ionisms; and much less may they be brought in evidence for the reduction of $\epsilon \iota$ to $\iota$. There is, however, a small list of forms with no trace of $-\epsilon \ell \eta$, where Hdt. has -ı $\boldsymbol{\eta}$, Attic -七a. These are: -

Comparable to these forms are the Attic substantives in -ía, which, like the Ionic termination $-\iota \eta$, is to be held to represent a transference of the $-\iota \eta(-\iota a)$ which is in place in O stems. Forms in -ta are claimed as the property of the $\nu \epsilon \omega \tau \epsilon \in \rho a$ 'Iás by a scholiast quoted by Bredow, p. 189, but without foundation. Where the Attic poets have -ia (aikiu, etc.), this termination should be classed with the Homeric words in -i $\eta$ (II in thesi, 3 in arsi), the explanation of which is still involved in obscurity, despite recent attempts to clear up the nature of the $i$. Cf. Johansson, K. Z., XXX, 401, B. B., XV, 176 , Brugmann, Grundriss, II, 1, p. 313. The most probable explanation is that we have to deal with a set of doubles, due to a contamination of nom. $-\bar{i}$, gen. $-\check{\imath} \bar{a}$ s, by which the $\bar{\imath}$ was transferred to the oblique cases. So Danielsson (Gramm. Anm. I, 40).

Thus: nom. aviкī-

This explanation grapples at closer reach with the phenomena in question than that preferred by Jebb on Electra, 486 (small edition).

## 67. Relation of î to EY.

The statement that $\epsilon v$ becomes $\bar{i}$ in $i \theta \dot{v} s, i \theta i v \omega$, is incorrect. Hdt.
 VII, 70. On the stones we notice a similar juxtaposition of forms:
 B. P. W., 1889 , p. 1195 . See Bezzenberger in his Beiträge, IV, 345. Wackernagel, K. Z., XXIX, 15 1, suggests that $i \theta v$ - became $\epsilon i \theta v$ - in post-Homeric times through influence of $\epsilon^{i} \theta v$ - (I. E. ūdhú).
${ }^{1} \mathbf{E}(\dot{i}) \theta \dot{v} \mu a \chi o s{ }^{19}{ }_{39}, \operatorname{not}^{\prime} E(f) \theta \dot{v} \mu a \chi o s, G$. Meyer, Gramm., § 121 note.

## 68. $\mathfrak{Y}$.

I. I.E. $v$ is retained.
2. $\bar{v}$ developed on Greek soil as in other dialects, e.g. $\bar{v}$ from $v \sigma v$. $\beta_{\imath} v{ }^{2} \omega$, Hdt. II, 96.

$\bar{v}$ is not interchangeable with $\omega$; ки́ $\mu \eta$ has nothing in common with

 Homeric adjectives. Hinrichs (H. E. V. A., p. 8I) asserts the Aiolic character of $\dot{\alpha} \mu \dot{v} \mu \omega \nu$, though it is not clear why the Aiolians should have possessed a monopoly of this word.

## $\Omega$.

69. $\Omega$ for $A$.
$\zeta \hat{\omega} \omega=\zeta^{\prime} \omega$ is not restricted to Ionic, since we have in Boiotian $\zeta{ }^{\omega} \omega$ and in Kretan $\delta \omega \omega \omega$. $\zeta \omega \omega \omega$ seems to have been formed from an aorist * ${ }^{\prime} \zeta \omega \nu$, present * $\zeta \hat{\omega} \mu \iota$. Whether we have to deal with a reduction of $\omega$ to o in ऍó $\omega$ that is specifically Greek, and whether the $\omega$ forms are proHellenic, is not certain. In Ionic both the $\omega$ and o forms exist, e.g. ऍósıv, Sim. Amorg. $\mathrm{I}_{17}$; cf. ऍóєs • ऍ $\hat{\eta}$, which Brugmann, M. U., III, 6, classes with his injunctives. Parallelism of $\omega$ and o is not unusual, as
 Kallim., $\lambda o \varepsilon$ 白 $\omega$, etc. Homeric $\zeta \omega o{ }^{\prime}$ s is a later formation for older $\zeta^{\prime} \omega$ s, Brugmann, Grundr. I, p. 458, そó $\eta<\zeta \omega \eta$ ', as ${ }^{~} v \epsilon \omega \hat{\nu}<\nu \eta \eta^{\omega} \hat{\nu} v$, ibid., p. 463 .

## 70. Ionic $\Omega$ where Attic has E.

$\pi \lambda \omega \omega$ in Homer and Hdt. for $\pi \lambda \epsilon \epsilon \omega$, though the latter is more frequent (Bredow, 171). $\quad \pi \lambda \omega \omega$ has been held to contain an $\omega$ which is the ablaut of $\eta$, and which does not originally belong in the present; M. U., I, 45• $\quad \pi \lambda \omega$, on this view, seems to be treated like $\gamma \nu \omega$ or $\delta \omega$. King-Cookson record a different explanation, p. 84, which is less satisfactory than that of Johansson, D. V. C., p. 159, who shows that $\pi \lambda \omega$ has a proethnic $\overline{\mathbf{o}}$ (Germ. fiôdus). Saussure regards $\pi \lambda \omega \omega$ as a comparatively late formation (Mém. 67).

## 71. Ionic $\Omega=$ Attic $\widehat{\mathrm{A}}$.

$\theta \hat{\omega} \kappa \alpha$ and $\theta \omega \kappa \dot{\epsilon} \omega$ in Hdt. with the ablaut in $\omega$, cf. Attic $\theta \dot{\alpha} \sigma \sigma \omega, \theta \bar{\alpha} \kappa \dot{\kappa} \epsilon$. $\operatorname{Hdt}$. has $\pi \alpha \iota \omega \nu i \zeta \omega$, which is also the Attic prose form except in Xeno-



$$
\text { 72. Ionic } \Omega=\text { Attic } \mathbf{H} \text {. }
$$

For Attic $\pi \tau \dot{\eta} \sigma \sigma \omega$ we have the Homeric $\pi \tau \omega \sigma \sigma \sigma \omega$ in Hdt. IX, 48 ; cf. Iliad, IV, 372, $\pi \tau \omega \sigma \kappa \alpha ́ \zeta \omega$. Ionic $\pi \tau \omega \dot{\sigma \sigma \omega}$ (Eustath. ad locum) is either a denominative or a present formed from the base of the perfect.

On the suffix $-\eta \tau \tau s,-\omega \tau \tau s$, see under $\mathrm{H}, \S 62$.

$$
\text { 73. } \Omega=\mathrm{Î} .
$$

$\grave{a} \mu \pi \omega \tau \tau \varsigma$, Hdt. Cf. Aiolic $\pi \dot{\omega} \nu \omega$ and $\pi \hat{\omega}$ from perf. ${ }^{*} \pi \dot{\epsilon} \pi \omega a$. See Schulze, K. Z. XXVII, 420.

$$
\text { 74. Ionic } \Omega=\mathrm{A} Y \text {. }
$$

In a few Ionic words the $a$ of $a v$ seems, through influence of $v$, to have taken upon itself an $o$ coloring, and this $o+v$ to have been pro-


We have thus $\dot{\alpha} \phi \dot{\omega} \sigma \kappa \omega$, Hdt. III, 86, but -av- probably IX, 13, and ímóфavass, VII, 36 . ф'́धкк may still be heard at Anchialos on the Black Sea. So also $\omega$ for $\alpha v$ in $\tau \rho \omega \hat{\mu}$, $\tau \rho \omega \mu a \tau i \eta s, \tau \rho \omega \mu a \tau i \xi \epsilon \iota v$, калатє$\tau \rho \omega \mu a \tau i \sigma \theta a t$ in Hdt., with similar forms in Hippokrates, Aretaios, and Arrian, Ind. 19. In Hdt. IV, i80, the Mss. have $\tau \rho \omega v \mu a ́ \tau \omega v$, which Stein corrects to $\tau \rho \omega-. \quad \tau \rho \omega \hat{v} \mu a$ is found in Lukian, $d . d . S$., 20 , in all Mss. except $E$. $\theta \hat{\omega} \mu a$ occurs in Mss. of Hdt. with such frequency that we may well question whether Dindorf's $\theta \hat{\omega} \mu \alpha$ and $\tau \rho \hat{\omega} \mu a$ are not preferable to Bredow's and Stein's $\theta \omega \hat{v} \mu \alpha$ and $\tau \rho \omega \hat{v} \mu a$. The pseudoIonists, however, offer slender support to $\theta \hat{\omega} \mu a$ (Arrian, Ind. 34, 40, $\theta a \hat{\imath} \mu \alpha$ 15, Eusebios, § 3, $\theta \omega \dot{\omega} \mu a \tau \iota$ ) ; and Lukian testifies in every passage to $\theta \omega \bar{\nu} \mu \mathrm{a}$. See § 126 .

## 75. Ionic $\Omega=$ Attic OY.

$\omega^{\omega}$ is the form of the adverb in the Aiolic, Boiotian, Doric, and Ionic dialects. Thessalian oiv is only apparently equivalent to Attic oiv, which seems to have been engrafted upon Homer upon the authority of Aristarchos, who regarded the poet as an Athenian; unless it may be held that ov became $\omega$ as did $a v$ in $\tau \rho \omega \hat{\mu}$. Hdt.
 in the direction of the Attic forms, as is the case in the Mss. of

Lukian and Arrian. The letter of Pherekyd. has ${ }_{\omega}{ }^{*} v$; the Mss. of Hippokrates, of the letters, and of Euseb. Mynd., have ov̂v. Aretaios has oviv in the first four books, ${ }^{\boldsymbol{\omega} \nu}$ in the latter books. See § 120 , note 1 .
©s, ear, Delos, B. C. H., II, 322 (before 167 b.c.), is formed like
 has oṽa

$$
\text { 76. Ionic } \Omega=\mathrm{OH}
$$

The Homeric and Herodotean $\boldsymbol{o} \gamma \delta \boldsymbol{\omega} \boldsymbol{\omega} \boldsymbol{\sigma} \boldsymbol{\tau} \boldsymbol{\tau}$ a is either a contraction

 $\mathfrak{o} \gamma \delta \omega$ - nor o $\boldsymbol{o} \gamma \delta о \eta$ коога has as yet turned up upon Ionic inscriptions. The Chian óктакобíшу 174 C 23 does not assume the $\omega$ of Aiolic óктшко́б九о (C. D. I. 281 A 30, Lesbos). Though the Aiolic form records the influence of $\boldsymbol{o} \kappa \tau \boldsymbol{\omega}$, yet since that dialect has $\boldsymbol{o} \gamma \delta о \boldsymbol{\eta} \kappa о \nu \tau a$, nothing is thereby proved as to the Ionic form. It should be borne in mind that, if the Homeric form is a contraction of $\dot{0} \gamma \delta o \eta-$, forms that arise under stress of the verse in Homer are not criteria for the common extra-Herodotean prose use.

 Rhod. IV, 1409 ; also ${ }_{\epsilon} \beta \beta \omega \sigma a, ~ \dot{\epsilon} \beta \dot{\omega} \sigma \theta \eta \nu, \beta \epsilon \beta \omega \mu \epsilon ́ v o s$, as in Homer, $\beta \omega \dot{\omega} \alpha \nu \tau \iota$, é $\pi \iota \beta \omega ́ \sigma o \mu \alpha \iota$. Stein still holds (Pref. to school edition, liI) to the view that we have to go back to a stem formation in o (vo-,
 Aiolic $\beta \bar{a} \theta o ́ \epsilon \nu \tau \iota, \bar{\epsilon} \beta \bar{a} \theta o ́ \eta)$ are now expelled from the text of Hdt. Cf.


The Diphthongs in Ionic.
77. AI.

We have first to investigate how often the diphthong. AI loses its final mora before a vowel. See below on EI and OI, and cf. Fritsch, V. H. D., 37 ff., Allen, Versification, 72. The inscriptions attest the change in the following instances.

West Ionic. T $\epsilon \rho \omega{ }^{\prime}$ $3^{6} 7$ ff. ; $\dot{\alpha} \epsilon \iota \phi v \gamma i \eta v$, Amphipolis, IO $_{5,25}$ (357 в.c.) ; $\dot{\alpha}: \iota \nu \alpha \hat{v} \tau[a \iota]$, Rob. 172, Chalkis, and according to Plut. 2, 298 C , found in Miletos; 'А $\downarrow \kappa \alpha ́ o s, ~ C . ~ I . ~ G . ~ 7375 ~ ; ~ ` А к т а ́ \omega \nu ~ 8431 ~(v a s e ~ i n c r). ~ ; ~ M i v \delta a o v, ~ M e n d e, ~$


19133; Típaos 19313. About the same number of forms with AI are found in West Ionic, e.g. 'A $\theta \eta$ raí, Volci, Rob. I, 191.

Island Ionic. 'A $\theta \eta v a ́ \eta s, ~ D e l o s, ~ 54 ~(f i f t h ~ c e n t),. ~ ' ~ N ı к ̄ a ̂ v, ~ T h a s o s, ~$ $72_{8}\left(300-25^{\circ}\right),=$ Nıка́ $\nu$; cf. $i \epsilon \rho \hat{\eta}<i \in \rho \epsilon i \eta$. In 1. ro of the same inscription we have 'A $\theta \eta v a i \eta s$. Fritsch, V. H. D., p. 37, suggests that Nıкâs is not certainly an Ionian, being merely proxenos. 'A $\theta \eta v a i \not \eta$ occurs frequently in the Ionic of the islands: Keos 4 I (epigram), ${ }_{51}$, Paros 64, Thasos $72_{10}$; cf. also Roberts, I, p. 64, and No. 165, where an inscription of uncertain provenance has 'A $\theta \eta v a i o s ~ t w i c e . ~$ Roberts (I, No. 26) reads 'A $\theta \eta^{\prime} \nu \eta \iota$, a rare form in an old inscription, but not isolated, as we have 'A $\theta \eta v \hat{a}$, C. I. A., IV, B 3736 (sixth cent.), IV, 373, w (about 400).

Asiatic Ionic. $\dot{a} \in i$, Iasos, $105_{10}$ (end of fourth cent., hence not
 tain), which recalls the Attic inscriptional forms $\Phi \omega \kappa$ аї's, Фшкаїко́s; 'A $\theta \eta \nu a ̂ s$, Erythrai, 206 A 27, 29, B 20 (in the last example we have
 middle of fourth cent.). 'A $\theta \eta v \hat{s}$ is not certainly Ionic, since this document may contain an admixture of Attic. ${ }^{2}$ The above list, so long as it is not augmented by more certain proofs of the appearance of $\mathrm{A}(\mathrm{I})$, makes for the conclusion that in Asiatic Ionic intervocalic a from $a_{l}$ is not frequent. 'A $\theta \eta v a i \eta$ is attested in Halik. 240 A 3, 241, Chios, 173 ; metrical inscr. 265 (unc. loc.) ; Erythrai, 200, 20432 , Priene, 142 ; aicí in Halik. 240 A 6, and so all editors except Ruehl,
 older than ioo b.c.).

In the poets, whose authority stands second only to that of the inscriptions, we do not find any evidence beyond that presented by
 frag. 17), is called in question by Bergk, though the at is found in all Mss. aisí appears Tyrt. $5_{5}$, Mimn. $\mathbf{I}_{i}$, Sol. $\mathbf{I}_{3}{ }_{4}$, Theognis more than 20 times; Sim. Amorg. $\mathrm{I}_{4}, 7 \epsilon$; the poetical aícv, Xenoph. $\mathrm{I}_{24}$, Theog. 631 , etc. $;^{3}$ aîwhos, Anakr. $112_{4}$; каiєєо́s, Archil. $86_{2}$ (epod.). ' $\Lambda$ Xuins should be expected, and doubtless is the correct form, Sim. Amorg. 23, for 'A $\chi^{-\quad t}{ }^{t} \eta s$ (Fick, B. B., XI, 269), which is due to an Attic scribe. Cf. 'АХаїк['́ ], C. I. A., II, 723 .

[^23]In Herodotos the chief difficulty as regards settling the question of the occurrence of $a$ for $a \iota$ is presented by aicí. Proper names in -aıés preserve the ı except in Фшкаєús, in seven passages, according to Stein, though the same editor adopts Фшкaєє́s in thirteen cases. Фшкаєі̂s, Bechtel, No. 170, Фшкаиє́'s, 207, are of doubtful authority, ${ }^{1}$ the latter at least being very late.

Nouns and adjectives in -aul $\eta$, -aukós, -auís, fall into line. © $\Theta_{\eta} \beta a t{ }^{\prime}$, II, 28, etc., appears to be correct, since a @ $\eta \beta a l \epsilon$ és is defensible solely on the ground of analogy.
aici is Stein's reading, though the Mss. are shaky in the extreme. Stein's eclecticism dictates aicíl, but áévaos. áeí may be West Ionic, but scarcely Asiatic Ionic. aiধधós is certainly the genuine reading in Hdt. ; and al does not become $a$ in this word in the Attic inscriptions of the fifth and fourth centuries. $\quad \dot{\epsilon} \lambda a i \eta$ and congeners, $\kappa \lambda a i \omega$ Theog. 93I, 1041, 1132, Archil. I3, 20, and кai $\omega$ do not admit the a form (Theog. ir45). From the stem каf we have $\lambda v x$ voкaï,$\pi v \rho к а i ̈ \eta$. On the interrelation of каí $\omega$ and кќa $\omega$, see Wackernagel, K. Z., XXV, 268 ; Brugmann, Gr. Gr., § $18,54$.

## 78. Ionic $\mathrm{AI}=\mathrm{A}$ of other dialects.

éraîpos is the Ionic form. Cf. éralıグios, é eatp has éraîpos, so too Theog. 643. Éтapos is epic alone, though claimed as Ionic, without any chronological distinction, by Greg. Corinth., p. 457. See Hinrichs, H. E. V. A., p. 90.

тараı $\beta$ ár $\eta$ s, an Ionic form, $\Psi$ 132. An Attic inscription, C. I. A.,
 by Ionisms to a limited extent.
aïda $\alpha \mu \circ$ s, Chios, 183 A 30 , B 30 , is an unexplained form for $\ddot{\partial} \delta a \sigma \mu o s$.
Note. - iearevís is the Herodotean form, not $i \theta a r$,., as $P$. $R$. II, it.

$$
\text { 79. } \mathrm{AI}=\mathrm{A}(\imath)
$$

Фatévvov, Thasos (Th. L. 18 C 5), Пa ${ }^{2} \neq a i ́ \eta s, ~ T h . ~ L . ~ 19 ~ A ~ 6, ~$ Davaí, Miletos, 99 , from $\Delta$ avá ${ }^{\boldsymbol{Z}} 319$ in a passage held by some to be an Ionic insertion. The myth of Danaë is referred to nowhere else in the Iliad. Hekataios, 358 , has $\Delta a v a ̂<\Delta a v a ́ \eta$. Another instance of $\alpha$ for $\alpha$ is suggested by Bechtel, Thas. Insch., p. 28: ८222,
 other forms, sub EI, § 90 .

[^24]
## 80. Varia.

## Note on $\mathrm{AI}=\mathrm{H}$.

I. There is no interrelation between $\eta$ and at in 'A $\lambda \theta \eta \mu$ év $\nu \bar{\prime}$, Thasos (L), $4_{3} \mathrm{~B}$, compared with 'A $\lambda \theta a \mu \mathrm{c} v \eta \mathrm{~s}$, similar to that existing be-
 is that of $\dot{\alpha} \lambda \theta \dot{\eta} \sigma \kappa \omega, \dot{\alpha} \lambda \theta \dot{\eta} \sigma \sigma \mu a t$; see Bechtel, ad loc.

 $\tau \rho \dot{\pi} \eta \eta$ s to Old Pers. khšath「apāvā (Lagarde, p. 68, Le Bas, Voy. Arch. III no. 388).
3. Archil. $3, \delta \alpha^{\prime} \mu \omega \nu=\delta a \eta \mu \omega \nu$. The latter is derived from $\delta a \_\eta{ }_{n} \mu \omega v$.

> 81. EI.

The diphthong EI will here be treated under the divisions -
I. Genuine $\mathbf{E I}=$ pan-Hellenic and proethnic EI.
II. Spurious EI (monophthongic) = Attic $\epsilon$, Doric $\eta$.

Doubtful cases will be considered at the close.
82. Note on the orthography of Ionic inscriptions. Confusion between E and EI as representatives of the two EI's is of not infrequent occurrence upon Ionic inscriptions antedating the year 400 . After that period monophthongic EI was gradually diphthongized.
I. Genuine EI represented by (a) EI.
$\delta_{v v a ́ \mu}^{\mu}$ EI, Teos, $1_{5} 6$ B 3 i.
Eİós, Teos, 156 B 22, 25.
EI, Halik. $238_{31}$.
IIEIOoûs, Thasos, 70 .
$(\beta)$ by E rarely.
$\pi o \not \eta_{\sigma} \mathrm{Eav}$, Teos, $156 \mathrm{~B}, 30$ (but here $\iota$ has been dropped).
E $\pi \epsilon \nu$, Didyma, Roberts, I, I 39. Cf. Meisterh. ${ }^{2}$ p. 135 .


2. Spurious EI represented (a) by E.
$\pi \rho \sigma \sigma \epsilon \in \delta \mathrm{E} \nu$, Thasos, 68.
$\phi \in \check{\gamma} \boldsymbol{Z} \mathbf{E}$, Halik. ${ }_{2} 3_{37}{ }_{37}$.
$\dot{\epsilon} \pi \iota \kappa а \lambda \mathrm{Ev}$, Halik. ${ }_{2}{ }^{2} 8_{45}$.
$\dot{\delta} \phi \epsilon_{i} \lambda \mathrm{Ev}$, Thasos, $7_{11}$ (fourth century).
In Attic the last examples of E for spurious EI date from 350-300.
$(\beta)$ by EI rarely.
$\mathrm{EI}_{\chi}$ ov, Halik. ${ }_{2} 8_{30}$.

Instances of the writing of $\epsilon i \mu i$, etc., will be given § 93. The diphthongization of the $\epsilon \iota$ of ci $\boldsymbol{c}_{i}$ may be traced back as far as the sixth century in Attic.

## 83. I. Genuine EI.

 Rob. I, 174 ; Mєíowv, Styra, ${ }_{9}{ }_{68}$; Tєєұıov́ббךs, Miletos, 98, etc.

The following words call for special attention :


 Halik. $240_{11}$. Similar forms occur in other dialects (Diphthong EI, p. I 7, A. J. P., VI, 443). Names in Tī $\sigma$ - are itacistic, but not so those in $\mathrm{T}_{\bar{i} \mu} \mu$-. It is better to assume a root $q \bar{a} i$, whose weak form is $q \bar{\imath}$ in $\tau \iota \mu \dot{\eta}$, rather than to hold that case-levelling has produced $T^{\imath} \bar{\imath} \mu$ : Nom. $\tau \epsilon i \mu \bar{a}$; Gen. $\tau \iota \mu \hat{\iota} s$, whence $\tau \bar{\iota} \mu \eta_{\eta}^{\prime}$, through remembrance of the long penult of the nominative and not with nebentoniges $i$ (K. C., p. 234). See § 65 and Schmidt's Neutra, p. 396.
2. The $\epsilon \iota$ of $\dot{o} \phi \epsilon_{\imath}^{\prime} \lambda \omega$ is genuine, despite the pair $\dot{o} \phi \hat{\phi} \lambda \lambda \omega$ : $\dot{o} \phi \epsilon \epsilon^{\prime} \lambda \omega$ (with different significations) ; $\dot{o} \phi$ EI $\lambda \epsilon \boldsymbol{\epsilon} \tau \omega$, Chios, Rob. I, 149 A 14, $\dot{\boldsymbol{o} \phi \mathrm{EI} \lambda o ́ v \tau \omega \nu, ~ i b i d ., ~ l . ~ 17, ~ s o ~} \dot{0} \phi \mathrm{EI} \lambda \mathrm{E} \nu$, Thasos, $7 \mathrm{I}_{9-11}$. EI is also attested, C. I. A., $40_{14}, \mathrm{I}, 58,324$ A $5^{2}$, whereas we have E , C. I. A., I, 32 A $3_{8}, \mathrm{~B}_{22}, 4 \mathrm{I}_{3}$. See Johansson, D. V. C., p. 212.
 $\kappa \alpha ́ \nu \tau \omega \nu$, Chios, 174 B 4. The $\epsilon \iota$ formation occurs in Homer, Hesiod, Pindar, Theokritos, Kretan, Boiotian, Aiolic. See Baunack, Gortyn, pp. 56 ff. Other theories are registered by Meyer, Gramm., p. 287 ; to which add Fick, G. G. A., 1883, p. 590, Meisterhans, ${ }^{2}$ p. 146. See § 91 .
84. Genuine EI in other syllables.

On $\tau o v \tau \mathrm{EI}, \nu \eta \pi o \iota \nu \mathrm{EI}, \dot{a} \sigma \pi \sigma \nu \delta \mathrm{EI}$, etc., cf. section on $A d v e r b s$, etc.
The $\epsilon \iota$ of $\Delta \iota \epsilon \iota \tau \rho \epsilon ́ \phi \eta s$, Keos, 44 B 12 , is from a stem $\delta \iota_{f}{ }^{\circ}$. Cf. $\Delta \iota \epsilon \tau \rho \epsilon ́ \phi \eta$, C. I. A., I, $402{ }_{2}, 447$ III, 53 ; Kypr. $\Delta \iota_{\digamma} \epsilon i \theta \epsilon \mu \iota s, 60_{21}$. In
 (perhaps), Styra, 19181 .

On $\epsilon \iota$ in suffixes $>\epsilon \sigma \iota$ and $\epsilon f \iota$, see § 45, 46, and under Declension ( $-\epsilon \mathrm{s}$ and $-\eta v$ stems).

[^25]
## 85. Genuine EI from $\epsilon+$ anaptyctic $\boldsymbol{\imath}$.

Ionic examples of this phenomenon are eivхŋка, Smyrna, Berl.

 scriptions.

## 86. Genuine EI from EF-.

I must not be taken to be the direct representative of $f$. In some cases it may be a minimum vocalic sound, found in a weak syllable, as survivor of a tonic vowel. Many of the words to be classed here are not of transparent structure, $c . g_{\text {. }}$.

єipos (Hdt., Hippok., Hom.) is either *è-fípos, with fépoov as strong

 expect $\bar{\eta} \rho \eta{ }^{\prime} v a$ in Doric, é $\rho \rho \eta \eta_{v a}$ in Aiolic, which never occur. Spitzer, Arkadischer Dialekt, p. 20, attempts unsuccessfully to explain the dialectal interrelation of $\bar{a}$ and $\eta$ after $\rho$ in this word. I cannot adopt Meister's conclusions (G. D. II, 93).

## 87. Genuine EI from HI.

$\pi \lambda \epsilon \bar{\epsilon} \sigma \tau o s$ from I.E. plēisto- < plēis- by proethnic contraction of $\bar{c}$ and $i$. The Ionic dialect offers no trace of $\pi \lambda \hat{\eta} \sigma \tau o s$, on which see Meister, G. D. II, 95, and Schmidt, Neutra, p. 413. On $\pi \lambda \epsilon i ̂ o v, ~ e t c ., ~$ see § 88 .

Note. - $\eta \iota$ does not become $\epsilon \iota$ in the subj. in the forms àmoкри́ $\psi \epsilon \iota$, Ephesos,
 B 39. The forms in $-\epsilon t$ are genuine and original subj. See Schulze, Hermes, XX, 491 ff. On $\epsilon \iota<\eta \iota$ in subjunctives, see under HI, § 107.

## 88. E from EI before vowels.

Genuine EI suffers the loss of its second element, as does AI (above, § 77), though not frequently.

West Ionic: Chalkidian vases in Roberts, $189 \mathrm{~F}, \mathrm{~A} i v e ́ \eta s ; \mathrm{K} \lambda \epsilon \omega$, C. I. G. 8369 ; ©á̀єa 8412 ; $\mathbf{\Sigma} \pi \epsilon \omega \dot{\omega} 854$.

Other examples, as Fritsch (V. H. D., p. 41) states, are not free from the suspicion of not being pure Ionic. Hoovíev, Chios, ${ }^{17717}$ (about 300 b.c.), Smyrna, $\mathrm{I}_{53} 32$ (this name with $\epsilon$, Perinth. $2_{34}$ B

 metrical inscription. Meisterhans, ${ }^{2}$ p. 34, quotes 'Нраклєє́́тov from C. I. A., I, $65_{1}$, before 403 в.c. ; 'Н $\mathrm{H} \alpha \kappa \lambda \epsilon \omega ́ \tau \eta \nu$, II, $6{ }^{1}{ }_{315}{ }_{15}(298$ в.c.),
 14715 ( 300 b.c.) ; iєpatéal, Eryth. ${ }^{206}$ C $1_{3}$, 一the only instance of this form, while there are ten of iєp $\tau \epsilon \epsilon \hat{i} u$. i $i \in \hat{\eta}$, Pantikap. 123 (third cent.), Ephesos, 150 (late), from $i \epsilon \rho \epsilon(i) \eta$; cf. Hdt. $i \rho \epsilon i \eta, \mathrm{I}, \mathrm{r}_{75}$, V, 72. $\dot{\epsilon} \xi \omega \hat{\prime} \lambda \epsilon a, \pi a \nu \dot{\omega} \lambda \epsilon a$, Bechtel, 263 (Lykian), may be Ionic or Attic.

Nouns in $-\epsilon \iota=\eta t o$ and nouns and adj. from sigmatic and $\eta v$ stems generally retain $\epsilon t$ in all branches of Ionic.

The form $\delta a \sigma$ éav in Miletos $\mathrm{IOO}_{2}$ an inscription, dating, according to Rayet, from the fifth century, is apparently as complete a parallel to $\delta a \sigma \sigma^{\prime} \alpha$ in Hdt. as might be desired ; and the more interesting, on account of the fact that Hdt.'s dialect is in some measure similar to
 $\kappa \alpha \grave{i}$ éni $\pi \dot{\alpha} \sigma \eta \mathrm{s} \pi \tau \omega \sigma \epsilon \omega \mathrm{s}$ тov̂тo $\pi o \iota o v \sigma \iota v$, quoting Hdt. for $\theta_{\eta} \lambda \epsilon \in \omega \nu$ and $\theta_{\eta} \lambda \epsilon \bar{\eta} \eta$. Following are the forms adduced from Hdt., with the evidence from other quarters of Ionic. Other examples of the $-\epsilon$ - forms from the pseudo-Ionists are given, sub Declension.
Table A.

| msS. of herodotos. | homer. | lyric poets. | OTHER IONIC PROSE WRITERS | inscriptions. |
| :---: | :---: | :---: | :---: | :---: |
| Batéa | - $\epsilon \alpha$ only O 606, п $766, \Phi 213$ cf. Fick Ilias $\mathrm{S}_{4}, 86,380$ | Ba日єià Sim. Am. $7_{66}$ cf. Sim. Keos 379 | Batéa ${ }^{\text {a }}$ Arrian 27, 33 |  |
| Bapéa | Bapeía | Sim. Keos 117 |  |  |
| foxxia |  | ${ }^{\text {Bpa }}$ ¢ $\epsilon$ ia Sim. Am. 7 \% |  |  |
| סaб'̇z | סafeia | סaбєîa Hipp. $19{ }_{2}$ $\delta \alpha \sigma \epsilon$ i! $\sigma \iota \nu 19_{3}$ | Bрахє́ $\dagger$ Aret. 28 Bpađєía Demokr. | $\delta a \sigma \epsilon ́ a \nu$ Milct. $100_{2}$, סaбєins Zeleia 114 E |
| ¢ ¢ $\mathrm{p}^{\prime}$ 'a | ${ }_{\text {¢ }}$ ¢̇¢ $¢ \hat{i} \alpha$ |  | ${ }^{\epsilon} \dot{\nu} \rho \dot{\rho} \notin \eta$ Euseb. Mynd. 63 <br>  |  |
| $\dot{\eta} \mu \boldsymbol{i} \sigma \in \alpha$ |  |  |  |  |
| $\theta_{\text {¢ }} \boldsymbol{\lambda} \boldsymbol{\lambda} \boldsymbol{\alpha}$ | $\theta \eta \dot{\eta} \lambda \epsilon \iota a, \theta \dot{\eta} \lambda \epsilon \alpha s$ |  | $\theta_{\eta \lambda \epsilon \in ́ \eta \nu}$ Luk. Syr. 15, 51 $\theta$ भ́л $\lambda a s 54$ ( $\theta \eta \lambda \epsilon$ 'ins 27 Mss.) Arrian 14 |  |
| ${ }^{\text {i }}$ '́́a | $i \theta$ ¢îa |  | i $\theta$ éf $\boldsymbol{y}$ Demokr. |  |
| $\dot{\partial \zeta \xi \dot{\epsilon} \alpha}$ |  probable. |  | ${ }_{\partial} \xi^{\prime} \epsilon^{\prime} \omega \nu$ Hippokr. $\mathrm{I} \Delta \mathrm{O}_{2}$ |  |
| $\pi \lambda a \tau \epsilon \in \alpha$ |  | $\pi \lambda \alpha \tau \epsilon \hat{\imath}$ Bacchyl. 37 | $\pi{ }^{\boldsymbol{\pi}} \boldsymbol{\lambda} \boldsymbol{a} \boldsymbol{\tau}$ áas Ktesias $\pi \lambda a \tau \epsilon i \not \eta \nu$ Arrian 16 (Mss.) |  |
| тах¢́a | тахєîa | тахє $\omega$ \% Theog. 715 |  |  |
| $\tau \rho \eta \chi \chi^{\prime \prime} \alpha$ | $\tau \rho \eta \chi$ єía | T $\rho \eta \chi$ є $\boldsymbol{i} \eta \mathrm{s}$ Hipp. $47_{2}$ <br> т $\boldsymbol{\alpha} \boldsymbol{\chi}$ єíà Sim. Keos 163 | $\tau \rho \eta \chi$ є́a Arr. 21; $\tau \rho a \chi \epsilon i ̄ \alpha$ Herch. тpaxeins Vita Homeri 18 | $\begin{aligned} & {[\tau \rho \eta \hat{\eta} a \nu \text { Kaib. } 237} \\ & \text { Smyrna II. or I. cent. B.c.] } \end{aligned}$ |
| $\delta \rho \iota \mu$ '́a | $\delta \rho \mu \mu \epsilon \cdot a$ |  | סpı$\mu$ '́a Aret. 204 |  |

A probable support is given to the Herodotean adj. in - $\epsilon a$ by the Homeric 'P'́a, $\beta a \theta^{\prime} \dot{\epsilon}$, $\boldsymbol{\omega} \kappa \dot{\epsilon} \alpha$, and by an occurrence of this formation in the lyric poets ( $\left.\tau \alpha \chi{ }^{\epsilon} \omega \nu\right)$. It is therefore inadvisable to refer this adj. form to the influence of the later Attic writing $\epsilon a$ (for the first time in an -v-adj., 345 b.c.). Since the vowel following upon the last $\iota$ was a palatal, we may assume that the genitive -cins was the source of the expulsion, and the new form then extended its territory, creating an - $\epsilon$ a. Cf. Johansson, B. B., XV, i84 ; but also K. Z., XXX, 405, where recourse is had to the assumption that these feminines are from $-\epsilon_{f} \breve{a}$, not from $-\epsilon_{f} t \breve{a}$.

I class together $\pi \lambda \epsilon^{\prime}{ }^{\circ} \nu$ and related forms.
 (and $\pi \lambda \epsilon \hat{v} v, \pi \lambda \epsilon \hat{v} v o s, \pi \lambda \epsilon \hat{v} v a, \pi \lambda \epsilon \hat{v} v \epsilon s, \pi \lambda \epsilon \dot{v} v \omega v, \pi \lambda \epsilon \hat{v} v a s)$, in Hdt.,


 Oropos, $18_{4}$, Keos, 439 ; $\pi \lambda \epsilon$ '́ovos, Keos, 435 ; $\pi \lambda \epsilon ́ \omega$, Miletos, $10{ }_{2}$. $\pi \lambda$ '́ov, Syr. dea 46 .

Forms with $\imath: \pi \lambda \epsilon \overline{i o v}$, Sim. Amorg. $2_{2}$, and Theog. 606 ; $\pi \lambda \epsilon$ ciovs, Hdt. I, 167 (?), and in Theog. $\pi \lambda \epsilon^{\prime}$ ova $702, \pi \lambda \epsilon$ 'í, 907.

Hippokrates and Aretaios have both $\pi \lambda \epsilon \bar{i} \nu \nu$ and $\pi \lambda \epsilon$ év.
$\pi \lambda \epsilon i o v$ lost its iota before any other form, according to Wackernagel, K. Z., XXIX, r44, because the $\epsilon$ bore the accent, while in other forms $\iota$ was tonic ( $\pi \lambda \epsilon \epsilon \omega \nu$ ).
'A $\mu \alpha \lambda \theta^{\prime} \eta \mathrm{s}$, Anakr. 8 (for Bergk's 'A $\mu a \lambda \theta^{\prime} \eta \mathrm{s}$ ), seems warranted in
 tvisháti, and not to be written $\sigma$ '́ovia (Fick) $=$ tvéshati. Alkaios has $\sigma \epsilon^{\prime} \omega \nu 22$ (with $\epsilon \iota$ reinstated from the aorist), and $\sigma \sigma^{\prime} \omega \nu 26$.

In the case of $-\epsilon \sigma$ - stems, we have $-\epsilon o s=-\epsilon o s$ in the following cases in Hdt. : -
 $\tau \epsilon \lambda \epsilon$ íos (about 354 в.c.), and in Homer and Demokritos $\tau \epsilon \lambda \epsilon \omega$ 'тãos ; cf. Kret. $\dot{\alpha} \tau \bar{\tau} \lambda \in a$, Cauer, $1{ }^{1} 9{ }_{22}{ }^{1}$
$\dot{\epsilon} \pi \tau \tau \eta \dot{\eta} \delta \sigma$, Greg. Corinth. p. 473. Fritsch, V. H. D., 43, prefers to derive the adj. from $\dot{\epsilon} \pi \iota \tau \eta \delta \epsilon \dot{v} \omega$, but denies in any case the correctness of the ending -cos, which is the reading of the Mss. in almost all instances.

 tury b.c.
$\dot{\epsilon} \pi \boldsymbol{\epsilon}$ '́ctos is now written by Stein.
áфveós, Ther :. i 88 , 559.
 12 (after 278 в.с.). 'H ${ }^{\prime}$ а́клєєоos is the best attested form in Hdt., appearing also Erythrai, 201 ${ }_{17}$ (before 350 b.c.).

цоvvoүєข'́ $\eta v$, Arrian, Ind. S.
-cos in adjectives from other stems.

 be rejected with Fritsch, V. H. D., 44 (Fick, Ilias, 55 Iff .). á $\delta \varepsilon \lambda \phi \in \boldsymbol{c}_{\boldsymbol{s}}$ in Hdt., Lokrian, I. G. A. 321 A 7, B 4, 22, and in the letters of Hippokr. $1^{729}, 2720,34,35$.

 $\epsilon(\iota)$ regularly. $\Delta \epsilon ́ \epsilon \lambda \kappa о$, Thasos, 83 , seems to have lost iota. Cf. $\Delta \epsilon i ́ a \lambda \kappa o s$, Thasos, 8i B 14.

Expulsion of I from EIH.
 (above, § 45). єv̉ $\mu \alpha \rho \in \neq$ seems to be supported, Hdt. II, 35, by all the Mss., by Greg. Corinth. d. d. Ion. § 119, and by Suidas, є $\boldsymbol{v} \mu a \rho \in ́ \eta$ à $\pi о ́ \pi \pi \tau о s ~ \pi \alpha \rho \grave{\alpha}{ }^{\text {' }} \mathrm{H} \rho о \delta o ́ \tau \varphi$, , but cannot make stand against the overwhelming mass of counter-testimony.
$\Delta \epsilon \kappa \epsilon \lambda \epsilon \dot{\eta}$, Hdt., as $\Delta \epsilon \kappa \epsilon \lambda \epsilon \epsilon \epsilon \omega$, C. I. A., II, 733, B 6, from $\Delta \epsilon \kappa \epsilon \lambda \epsilon \epsilon \epsilon v{ }^{\prime}$, II, 66o, 4. See Bekk. Anecd. II, p. 6oi, Steph. Byz., s.v. $\Delta \epsilon \kappa \epsilon \lambda \epsilon t-$


Upon the expulsion of $\iota$, contraction resulted in $i \epsilon \rho \hat{\eta}$, Pantikap, 123 , Ephesos, 150 ; cf. Ionic ipcí in Hdt. ; í́ $\rho \epsilon \iota$, Keos, 48 (fourth cent.), as $Z 300$. Tre intermediate step between $i \in \rho \epsilon i \eta$ and $i \epsilon \rho \hat{\eta}$ is represented by K. !imachos' 'Iepé $\eta$, epigr. 40. In Attic we may have $i \notin \rho \epsilon \iota a$ and $i \in \rho i a$ (Orestes, 26i) by suffix exchange. The explanation of the form 'Epr̂̀s is as yet too uncertain for it to be classed here.

 Chios, 180 , where $-\iota \epsilon \omega$ seems an analogical formation.
89. EI from $\mathrm{E}+$ glide I (before a vowel) occurs before $\boldsymbol{o}, \boldsymbol{\omega}, \boldsymbol{o v}$, $\boldsymbol{a}$; as yet no examples before $\boldsymbol{\epsilon}$ and $\eta$ in Ionic.
$\delta \epsilon \iota o ́ \mu \epsilon \nu o v$, Oropos, $18_{36}$ (about 400 в.c.) ; cf. $\delta \epsilon i \omega[\nu] \tau \alpha \iota$, C. I. A., II, ${ }^{11914}$, about 340 в.C.; $\pi \rho \sigma \sigma \delta \epsilon i \eta \tau a l$, C. I. A., II, 167, 43, 48, 334-
${ }^{1}$ Homeric $\alpha{ }^{2} \gamma \epsilon i o s$, except a 196.
${ }^{2} \mathrm{Cf} . ~ \Lambda ~ 659, \kappa є ́ a \tau \alpha$, , and катакеі́aтаı, $\Omega 527$.

325 b.c. ${ }^{1}$ Attic inscriptions of the fifth century have $\epsilon$; and so else-

 B. B., XI, 253, in favor of an assumed $\bar{\epsilon} \pi \iota \delta \epsilon \epsilon \epsilon \tau a \iota$. $\delta \varepsilon v i \omega$ is an Aiolic
 classed with other Aiolisms preserved by Ionic elegists. Traces of this form appear even in Mss. of Hdt. IV, I 30 ( $\boldsymbol{\epsilon} \pi \kappa \delta \epsilon v \epsilon \in \epsilon$, where è $\pi \downarrow \delta \in \epsilon \in \epsilon$ is correct).

Évvéa, Zeleia, $\mathrm{II}_{3}{ }_{30}$, shortly after Granikos.
ciáv, Zeleia, $113_{20,39}$; cf. C. I. A., add. nov. 14, B 11 ( 387 в.c.) ; add. 115 B 30,47 (after 350 b.c.) ; add. 573 В 13, 18 (after 350 b.c.), ${ }^{2}$ and in Epeirotic.
$\boldsymbol{\pi}$ ó̀ $\epsilon(\omega)$ s, Zeleia, $\mathrm{II}_{1}{ }_{19}$.

 $\theta \epsilon$ óv, Priene, 14 I , an inscription in Ionic orthography, but not Ionic in dialect. $\theta \epsilon \epsilon \omega \iota$, 167, Phanagoreia.
$-\epsilon \hat{i} \mathrm{~s}$, genitive of $-\eta v$ - stems, called Ionic (and Lesbic) by Herodian, II, 6744 ('A $\left.\chi^{\prime} \lambda \lambda \epsilon \hat{i o s}, ~ \beta a \sigma i \lambda \epsilon i o s\right)$. No examples occur in Ionic literature or inscriptions. Hdt. $\beta a \sigma i \lambda$ éos, and so 'A $\chi$ c $\lambda \lambda$ éos, Olbia, C. I. G. 2076 (late).
-кגєíovs, genitive. See list sub E乏 stems in § on Declension. See Meisterhans, ${ }^{2}$ p. 36, and Dittenberger, Syll. p. 780 , for other forms.
90. An $\epsilon \tau$ that is never represented by $\eta$ in other dialects, and which is nevertheless not strictly a genuine diphthong, appears to exist in крєias by a probable conjecture of Hermann, Ananios, 53 . кр́éas, Hippon. 77, Sim. Amorg. 24. ${ }^{3}$ As in $\lambda \epsilon \epsilon a i v \omega$, Solon, 4 2ヶ, $\chi \rho \epsilon \hat{\circ} \varsigma$,
 graphical representation of $\epsilon v<\epsilon_{f}$, and appeared originally only when a long syllable was necessary, a fact not comprehended by later tran-
 where $\delta \epsilon \delta=\delta \epsilon \delta_{F}$.

In єiapıvós, Theog. 1276, Lukian, S. 49 є"̈apos ('Eapívns, Styra, 19184 ;
${ }^{1}$ Cf. also $\epsilon \delta \epsilon \epsilon \grave{r} \theta \eta$, Lokris 'A $\theta \eta \nu$, I, 489.
${ }^{2}$ The oldest certain example of $\epsilon(\underline{\imath})$ is Attic N $\eta \lambda \epsilon \epsilon^{\prime} \omega{ }^{\prime}{ }^{\prime} E \phi$. à $\rho \chi$. 1884, 161 (418 b.c.).
${ }^{3}$ The $\imath$ of this крєias must not be confused with that of Hom. крєiov, which is that of the suffix (Skt. kravya). $\kappa \rho \epsilon \epsilon \omega \bar{\nu}=\kappa \rho \epsilon \neq \alpha{ }^{\omega} \omega \nu$ has the $\imath$ of $\kappa \rho \epsilon i a s$.
${ }^{4}$ Unless this be from ${ }^{*} \chi \rho \eta$-t-os.
 the development of the glide iota, the ground form being * ${ }^{*}$ apıós, cf. vēr from vēzr, old Norse vār. ĵpos seems to be from éapos, rather
 B 3) is purely metrical.

In the cases where this intervocalic ioti appears, we must, I think, distinguish two distinct classes.
I. Cases of $\epsilon \iota$ in poetry, where the $\epsilon \iota$ is a mere graphical expression, not made use of by the earlier poets at least, to represent $\epsilon v=$ $\epsilon_{f}$; e.g. Hom. 入єíovaı.
2. Cases of the pure glide iota, as in ciáv, évveía, where $f$ has nothing whatever to do with the appearance of the $\iota$, though in some of the words in question $f$, as a matter of fact, did once exist; but at the period from which the forms date, cannot have left any trace of its former appearance.

At the present stage of our knowledge, I hold it best to keep the two classes apart, though thereby not wishing to deny that in certain special instances one class may overlap into the other.
91. $\eta_{\eta} \nu \epsilon \kappa \alpha, \epsilon_{\nu \epsilon \hat{\kappa}} \boldsymbol{\kappa} \alpha \iota$, in Hdt. with an $\epsilon \iota \kappa$, whose relation to $\epsilon \gamma \kappa$ is not perfectly clear as yet. Lukian follows well in the wake of Hdt., but Hippokrates and Aretaios have throughout the Attic forms. See $\S 83,3$, and under Conjugation.
92. Itacism.

See above, under $\check{I}, \hat{\mathbf{I}}$, for instances of $\epsilon \iota$ for $\bar{i}$ (Tєípap

## 93. II. Monophthongal EI.

A few sample, and some of the most important, forms under each head will illustrate this characteristic feature of Ionic. On 4-1 3 , see Solmsen and Wackernagel, K. Z., XXIX.
I. Spurious EI from $\boldsymbol{\epsilon} \boldsymbol{\nu}$.





[^26]Eustathios, quoting Hdt., uses the form $\pi \rho^{\prime} \dot{\xi}_{\xi} \in v o s$. In the poets we have $\epsilon$ forms, Sim. Amorg. $7_{19,29,107}$; Archil. eleg. $7,19_{2}$; Theog. $5^{21}$, etc. Lukian has $\xi \in \hat{i v o s}$, though cases̉ of $\xi \in \dot{\varepsilon} v o s$ occur. Arrian, 26 , 28, has $\xi_{\epsilon}^{\prime} \nu-$; and so, too, Aretaios and the Vita Homeri. In other pseudo-Ionic sources, though there is great fluctuation, the weight that Herodotos' unimpeachable $\xi \in i v o s$ carries, may pardon the adoption of this form.
 tos, $\mathrm{IOO}_{6}$; Eryth. 1994; later documents, Thasos, $7_{2}{ }_{3}$; Eryth. 206 B 12 ; Ephesos, $147_{19}$; Phanag. 165 . In Solon, $\xi_{\epsilon ́ v o s, ~}^{23} 2$, Theog., $\xi \in v i n s 518$, are to be classed together as epic reminiscences. Gévos in Attic must be derived directly from $\xi \in \xi^{\prime}$ fos, not through $\bar{\xi}$ évos.
$\kappa \epsilon \iota v o ́ s=$ Attic кєvós (кєvórєроя), Wackernagel, K. Z., XXV, 260 ; G. Meyer, Gramm., § 76 .
 $\sigma \tau \epsilon$ ós an equal number. Aretaios seems to have the vulgar form; cf. Hippokrates, ПTK $9, \sigma \tau \epsilon \nu \dot{\omega} \tau \epsilon \rho a l$.

єiveкєv perhaps $={ }^{\boldsymbol{\epsilon}} \mu+\boldsymbol{\epsilon}^{\epsilon \kappa \alpha}$ (Osthoff, Perfect, 334; Brugmann, Gramm., § 13) in Hdt. (cf. on Prepositions). єivєка: Sim. Amorg. 718 ; Theogn. 46, 730 , etc. oṽ $\ell \in \kappa$, Theogn. 488,854 ; Xenoph. $2_{10}$; Solon, tr. 37. See Wackernagel, K. Z., XXVIII, rog ff. Vila Homeri has ̈̈veка, द̆́évos, etc.

єı้vatos, єivaкóotoo, Wackernagel, K. Z., XXVIII, 132 ; G. Meyer, Gramm., p. 379.
2. Spurious EI from $\epsilon \rho$ f.
$\delta \epsilon \iota p \dot{\eta}$, Hdt. and Theog. 266.
$\pi \epsilon i \rho a \tau a$, Arch. tetr. 55 ; Solon, eleg. 16 ; Theog. 140, 1о78, 1172. Skt. párvan.

єïpopau, ask (Greg. Corinth. d. d. Ion. § 73), appears to be a present formed from the aorist stem with prosthetic vowel ( $\left(\dot{\epsilon}-\rho \vee{ }^{\circ} \mathcal{f}^{\prime} \epsilon \theta a l\right)$. ${ }^{1}$

 $\sigma a l$, Attic ( $300-250$ b.c.) ; cf. C. I. A., II, $6^{01}{ }_{7}$. Attic inscr. have also è $\pi \epsilon \rho \dot{\rho} \epsilon \theta$ Oal.

єipúóal, Hdt. See Leaf on A 216 ( $\epsilon i p v i ́ w, ~ d r a v e, ~ \sqrt{f \epsilon \rho v}$; єipúopat, protect, $\sqrt{\sigma \epsilon \rho F}$. Schulze, K. Z., XXIX, 235 , holds to the view that

${ }^{1}$ So my Diphthong EI, p. 64, and also G. Meyer, Gramm. ${ }^{2}$, p. 425. Or єїpomat

 K. Z., XXIX, 64.
3. Spurious EI from $\epsilon \lambda_{F}$.

4. Spurious EI from $-\epsilon \nu \sigma^{\circ}$ or $-\epsilon \nu s$.

The sigma may represent either I.E. $s$ in a final syllable, or secondary (dialectal) $\sigma=\tau \iota$.

On cis, єi $\sigma \omega$, and the orthography in inscriptions, see under Prepo-
 Teos, Rob. 142 B ir. $\mu$ eis, Hdt. II, 82, gen. $\mu \eta \nu o ́ s, ~ H a l i k . ~ 2384 . ~$
 4 A. $\pi \epsilon$ 'íто $\alpha \iota \iota$ from ${ }^{*} \pi \epsilon ́ v \theta \sigma o \mu \alpha \iota$.
5. Spurious EI from $\epsilon \rho s$.

кєі́раs, Paros, 67.
6. Spurious EI from $\epsilon \lambda$.

ả $\gamma \gamma \epsilon i ̂ \lambda \alpha \iota, \dot{a} \pi \sigma о \sigma \tau \epsilon \hat{\lambda} \lambda a \ell$.
7. Spurious EI from $\epsilon \mu$.

є́vєíparo, etc.
8. Spurious EI from $\epsilon \sigma \mu$.

єipa[ $\tau] i o[\iota s]$, Keos, $43_{2}$, with the $\epsilon \iota$ of $\epsilon i \mu a$. Cf. Andania, Cauer, ${ }^{2}$
 II, 223 (cf. IV, I33), separates íá́tıov from cípa so far as to imply that itacism does not exist. That G. Meyer, Gramm., § 115 , Solmsen, K. Z., XXIX, 73, are incorrect in maintaining this view, is clear from Attic ipátıov, C. I. A., II, 755, 8, 9 (349-344 в.c.), etc. We have double forms in cípátıov and iцátıov.

Medial $\epsilon \sigma \mu$ is preserved by analogy in Ionic as in other dialects.
The orthography of cipi shows a fluctuation found in no other form in $\epsilon$. All inscriptions, not otherwise dated, are earlier than 400 B.c.

With E.
Kyme, 3, = Rob. 177.
Kyme, Rob. $173,185$.
Naxos, 25, = Rob. 27.
Arkesine (Amorg.), $29=$ Rob. 158 D.
Prokon. $103_{2}$, $=$ Rob. 42.
Samos, 214, $^{2}=$ Rob. 155 .
Naukr. Rob. 132 A, E, G.
Chalkidian, Rob. 175, 186.
Asiatic Ionic, Naukr. Bechtel, 259.

With EI.
Miletos, 98 , Rob. 138 .
Theodos. 125 , written IEMI (after 400).

Olbia, Rob. 163 A.
Kameiros, 256, Rob. 164.
Naukr. Rob. ${ }^{132}$ C.

For a similar fluctuation in other dialects, cf. my Diphthong EI, p. 60. EI $\mu i$ in Attic is as old as 570 b.c. (Cauer, 487), this proving that $\epsilon \iota=\eta$ in this and a few other words had a tendency toward diphthongization at an early period.
9. Spurious EI from $\epsilon \sigma v$.

The orthography of eival in Ionic inscriptions shows the fluctuation in the representation of the closed $\bar{e}$ sound.

With E.
Halik. $238_{22,24,42}$ (fifth cent.).
Erythrai, 199 $_{5,10,11}$ (after 394). Thasos, $7 \mathrm{I}_{5,6}$ (fourth cent.) 729

Keos, $43_{4}$, $\mathfrak{\xi} \xi \in \hat{\epsilon} v a l$ (fifth cent.).

$$
(300-250) .
$$

Oropos, 18 32 (about 400).

## With EI.

Halik. $2372 \pi, 29,36$.

Amphip. 10 $_{12}$ (about 350 ).
Eretr. $1_{14}$ (fifth cent.).
Eiv, Olynth. 8 A 3, B 5, 7 (betw.
389 and 383).
$\epsilon \xi \epsilon \hat{\nu}$, Orop. $188_{31}$.
 a direct descendant of $\epsilon_{\varepsilon \nu v \mu}$, but derived from a later ${ }^{*!} \notin v v \mu$,

 near Erythai is perhaps due to the Aiolic element in the neighboring
 Aiolic word, Hinrichs (H. E. V. A., p. 56). Other traces of Aiolism are $\Pi \epsilon \lambda \iota v v a i o v$, name of a mountain in the north of Chios, and Фatévvov, Thasos (L.) 8 C 5.
io. Spurious EI from $\epsilon \sigma \lambda$.
$\chi^{\epsilon}{ }^{\prime}{ }^{\lambda} \iota o \iota=$ Aiol. $\chi^{\prime}{ }^{\prime} \lambda \lambda \iota o$, Lak. $\chi \eta \lambda^{\prime}$ ioo.

II. Spurious EI from $\boldsymbol{\epsilon} \boldsymbol{\nu}$.

According to Brugmann, Gr., §54, Homeric $\epsilon i v$ is $=\dot{\epsilon} v \underset{\sim}{l}+$ vowel. ċvádıos we find in Archil. 748 (tetr.), civádıos in Theogn. 576.

Note. - Brugmann, Grundr., I. § 639 (cf. Johansson, D. V. C., p. 212), has no hesitation in referring the $\epsilon \iota$ of $\dot{\alpha} \mu \epsilon i \nu \omega \nu$ to compensatory lengthening (i.e., $\epsilon \iota$ is a spurious diphthong); and to make this $\epsilon \iota$ of $\dot{\alpha} \mu \epsilon i \nu \omega \nu$ a point of departure for that of $\kappa \rho \epsilon i ́ \tau \tau \omega \nu, \mu \epsilon i \zeta \omega \nu$ where $\epsilon$ would have been in place. ${ }^{1} \dot{a} \mu \epsilon \iota \nu \delta$ -

[^27] Amorgos.
12. Spurious EI from $\epsilon \rho$.
 $\theta \eta \nu$, Attic $\dot{\epsilon} \rho \rho \eta^{\prime} \theta \eta \nu<\frac{\epsilon}{\epsilon}-\digamma \rho \eta \dot{\eta}-\theta \eta \nu$.

 with $\dot{v} \pi \epsilon i \rho$, as in Hom., $<\dot{i} \pi \epsilon \rho \frac{\iota}{\rho}$ before an initial vocalic syllable. $\dot{v} \pi \epsilon \epsilon \rho \rho_{\chi}{ }^{\prime}{ }^{2}$ (Hdt. V, $92 \eta$ ), adopted by Stein, is alien to the form usually accepted by the historian, and can be defended solely on the assumption of покı八ía in the Herodotean dialect.

## 94. EI of doubtful origin.

इ $\epsilon \lambda \lambda_{\eta} \dot{\eta}$, Paros, 66, a late inscription with $\epsilon \in$ not in accord with the common Attic-Ionic form (Sappho, $\sigma \in \lambda a ́ v \nu a ; ~ D o r i c, ~ \sigma \epsilon \lambda a ̂ ́ v a ; ~$ Archim. $\left.\sigma \in \lambda \eta \eta_{\nu \alpha}\right)$.

Eidetiv́єt, Delos, 56 $5_{50}$, Paros, 66 (Eidctivínı). See Baunack, Studien, I, 69.

Eïúrахоя, Styra, 19 з9. See § 67.

$\kappa \in \mathfrak{i v o s}$, written $\kappa$ Evos, Teos, 156 A 4, 5, if, 13, 156 B 28, 39, but with EI, 156 B 7 ; ${ }^{\text {énEI }} \mathbf{y o s}$, Mylasa, 248 A 16 B 15, C 19. Prellwitz
 proposed etymology, B. B., XV, 155.

## 95. OI.

This seems to have been pronounced as a genuine diphthong. Bechtel, Ion. Inschr., p. 37, has refuted the view that in Styra of was pronounced as ü, and that the dialect of Styra was herein influenced by the Boiotian change of ot to $v$, i.e. ii. Métvikos, $1_{70}{ }_{70}$, may or may not be correct ; but in the fifth century, the period of this leaden tablet, Boiotian ot had not abandoned the old diphthongal pronunciation of ot. Cf. Blass, Aussprache, ${ }^{3}$ p. 57.
96. Antevocalic $\mathrm{OI}=\mathrm{O}$.

See above for $\mathrm{A}(\mathrm{I}), \mathrm{E}(\mathrm{I})$ in Ionic.
A. In inscriptions.

West Ionic.

| Evußocús, Styra, 1938 | V | є̇тоі́єь, Eretria 14 <br> є̇ $\pi{ }^{\prime} \dot{\prime} \eta \sigma \epsilon$, Adesp. 21 <br> є̇ $\pi o \neq \eta \sigma a ́ \tau \eta \nu, 265$ (Euboia or Island Ionic) | $\begin{gathered} \text { V } \\ \text { VI } \\ \text { V } \end{gathered}$ |
| :---: | :---: | :---: | :---: |

Island Ionic.

є̇по́єє́, Delos, 57
$\boldsymbol{\pi o \epsilon}(\hat{\imath})$, Thasos, $7^{2}$

| $\begin{gathered} \text { II } \\ 300- \\ 250 \end{gathered}$ | $\boldsymbol{\epsilon} \pi[\mathrm{o}] i \nmid \eta \sigma \epsilon \nu$, Naxos 26 <br> [ $\pi$ ]o七єiv, Keos, $43{ }_{21}$ <br> Еúкоїэs, Keos, 44 B $9^{1}$ <br> Пoцa $\sigma \sigma \sigma^{i} \omega \nu$, Keos, 472 <br> Hoıâ $\sigma \sigma \alpha \nu$, Keos, $47{ }_{10}$ <br> Өavцатотоо́s, Delos, 55, 3 <br> Єं $\chi \sigma \epsilon \pi \sigma$ ó $\eta \sigma \epsilon \nu$, Paros, 58 <br> $\pi$ оí $\mu \boldsymbol{\mu}$, Paros, 60 (metr.) <br> єv̉voías, Thasos, $7{ }^{2}{ }_{6}$ | 500 <br> end <br> of V <br> IV ? <br> IV <br> IV <br> 270 <br> VI <br> V <br> III |
| :---: | :---: | :---: |

${ }^{1}$ Cf. коıâtal, G. G. A., 1883, p. 119.

Asiatic Ionic.





| V | A. Before $\eta, \boldsymbol{\epsilon}$. є̇ $\boldsymbol{\pi}$ ó́ $\boldsymbol{\sigma} \boldsymbol{\sigma}$, Miletos, 94 | VI |
| :---: | :---: | :---: |
| 394 | '̇̇оо'єєv, Miletos, 95 | VI |
| pre- | í¢ $\rho$ опoı̂̀, Miletos, $\mathrm{IOO}_{6}$ | 400 |
| Rom. | $\pi<\epsilon \hat{i}[\nu]$, Didyma Rob. 139 <br> $[\pi] \epsilon \pi о \iota \eta$ какаль, Iasos, IO5 4 | $\begin{gathered} \text { V? } \\ \text { end IV } \end{gathered}$ |
|  | $\pi o \cup \eta \sigma \epsilon \alpha \nu,{ }^{1}$ Teos, 156 В 30 | 470 |
|  |  | 470 |

## Asiatic Ionic - continued.


$\pi o t \epsilon \omega$ is the word most frequently affected by the change.
 $\sigma \theta a \iota$, Aiolic, 281 A 19. B 24; $\pi o ́ \eta=\pi o \iota \hat{\eta}, 238_{6} ; \pi o \eta \sigma \omega$, 281 B 54 ;
 Gramm., § 155.
B. Lyric Poets.
 52 ).
C. Herodotos. Cf. Fritsch, V. H. D., p. 45 ff.

Eủßoєús, VII, 156, VIII, 4, 19, 20 ; Eủßoî́s, III, 89.
Ev̉ßoïкós, III, 89, etc. In fact, Ev̉ßotcús is found in no Attic prosaist, and Eủßotís only in poetry : Trach. 237, 401 ; Eủßoî́s Trach. 74, Eurip., Herakl. 83.

єv่voí $\eta$ and $\pi \rho o v o i ́ \eta$.
 as Sappho, $54{ }_{3}$.
 Doric).
$\sigma \tau o \eta$, according to Stein, III, 52 ( $R$ has $\sigma \tau o \neq \eta$ ) ; $\sigma \tau o \alpha^{\prime}$ is poetic in Attic, $\sigma$ roá alone is found in inscriptions, $\sigma \tau o \not \alpha \alpha^{\prime}$ is Doric ( $D . S$., $3^{6} 9_{25}$ ). ${ }^{1}$ Why Hdt. should use $\pi \sigma^{\circ} \eta$ and $\rho o{ }^{\prime} \eta$, but $\sigma \tau o \eta$, is not clear.
$\phi \lambda o \iota o ́ s$, IV, 67, also Homer and Attic.
 $\delta_{\eta}$, , Hippokr.
óroхpoiin has Mss. authority, I, 74, where Stein prefers -oí
$\pi \boldsymbol{\tau}^{\prime} \epsilon$ in Hdt. throughout.
$\phi \theta^{\prime} \eta$ is a medical expression adopted by Plato, perhaps from Hippokrates. Wackernagel's (K. Z., XXX, 268) objection to the hiatus is removed if we compare Skt. kshayá and apply Fick's law as to the interrelation of $\iota$ and yod: when the accent falls originally, as here, upon the final syllable, $\iota$ is expelled, i.e. becomes yod. Cf. Bechtel, Gött. Nachrichten, 1885 , No. 6.

## 97. Varia.

1. There appears to be no certain instance in Ionic of oct for obefore a vowel (as in ó $\gamma \delta \delta_{i ́ \eta s, ~ e t c .) . ~ к o t i ̀ ~}^{\lambda} \eta$, Mimn. $12_{6}$ (Alkaios, $15_{5}$ ), is a conjecture. It has not been shown that a кoíìos arose in the

 represented graphically by коí̀лоs.


[^28]ment of G．Meyer，Gramm．，§ 112 ，that this form（with anaptyctic $\iota$ before $\zeta$ ）does not appear before the imperial period．Cf．Tpo弓ávos， Roehl， $7 \mathrm{o}_{13}$ ，Schneider，Dial．Megarica，39，Müllensiefen，Dial． Lacon． 88.

3．$\delta_{\epsilon \sigma \pi o ́ v \eta \sigma \iota v, ~ K y z i k o s, ~ R o b . ~}^{\text {r }} 48=\delta_{\epsilon \sigma \pi o i v a l s, ~ i f ~ c o r r e c t, ~ i s ~ a ~ u n i q u e ~}^{\text {en }}$ form．The converse appears in Фidodé⿱㇒日木ाoutos，Wolfe Expedition to Asia Minor（Papers of the American School，III，No．218）．

4．ot appears for $\epsilon o$ in the Herodotean oíkas，oikós，with absence of reduplication，as in oiкодó $\eta \tau а \iota$, I，181，Heraklea，I， 137.

98．YI．
The second mora of the diphthong YI may disappear before a following vowel．
vós，Paros， 67 （late），Hvús，266，of uncertain provenance．Cf．viós， $\Delta_{473}, \lambda 270$ ；$\delta \dot{v} \eta, v 286$ ．ádúv，often used by the comic poets，may be an Ionic loan－form（G．Meyer，Gramm．，p．36）．
viós is found，Amorg． 35 epigr．，Priene， 141 （in Ionic alphabet），
 On viós in metrical inscriptions，cf．Allen，Versification，p． 7 II f．，on $\dot{v}(\iota)$ ós in in Attic，Meist．，$^{2}$ p． 47.

## Diphthongs кã’ èmıкрátєlav．

99．ÂI．
$\bar{a} \iota=$ pre－Hellenic $\bar{a} \bar{i}$ ，gave way to $\eta \iota$ at the earliest period of Ionic that can be reconstructed by us．

## 100．HI．

Whether HI is really a $\delta i \phi \theta o \gamma \gamma o s$ кат＇étıкрá $\tau \epsilon a v$ in such forms as ßaot $\lambda \dot{\eta}$ ıos is not perfectly certain（Blass，Ausspr．${ }^{3}$ 22，Johansson， B．B．，XV，182）．Schulze，K．Z．，XXIX，252，writes $\beta$ aacin̂os， and holds that $\eta$ became $\eta$ between the time of Hipponax and Herodotos．${ }^{1}$ See below，§ 152.

## 101．Medial HI．

I．Retained before vowels．
In this category fall chiefly the derivatives in－ $\boldsymbol{\eta} \iota v,-\eta i \eta=$ Attic －$\epsilon$ iov，－$\epsilon i \eta$ ，from stems in－$\eta r$ ．In dealing with the vexatious problem

[^29]of the interrelation of these terminations it must be borne in mind that originally an $-\eta v$ - stem yielded $-\eta \iota \eta$ or $-\eta \iota o$-, except in the case of such feminines as had adjectival motion (§46) ; while sigmatic stems produced - $\epsilon \eta$ and $-\epsilon \iota-$. This original mark of distinction has been obliterated to a great extent in all the dialects, and especially is this the case in Ionic. In the following $\S$ wherever $\eta \iota$ is written, this is regarded as $\eta i$. The forms of the $\eta v$ stems have been col-

 103 . (V cent.) ; $\sigma \tau \rho a \tau \eta i ́ \eta, \tau \alpha \rho \iota \chi \eta i \eta, \chi^{\alpha \lambda \kappa \eta} \iota o v$, etc. Also from $-\eta \psi$-stems nouns and adjectives in $-\eta \iota o s,-\eta \iota o v,-\eta \imath \eta$, $=$ Attic $-\epsilon \iota o s,-\epsilon \iota \nu,-\epsilon \omega a$.
 $\mathrm{N} \eta \lambda \eta \dot{\eta}{ }^{\circ} \mathrm{v}$.

In other Ionic prosaists we find that the $-\eta \iota$-forms are not so prevalent as in Hdt. : $\theta \epsilon \rho a \pi \epsilon$ í , Lukian, Syr. 31, Aretaios often, Hippokr.
 Hippokr. ${ }_{15}{ }_{7}, 16_{7}, 17_{20,23}$. $-\eta$ l- forms occur as follows: $\mu a v \tau \eta \iota-$, Luk. Syr. 36, Astr. 8, 23, 24 ; $\pi$ одıi $\eta i ́ \eta$, Hipp. ep. 17 з2 ; $\beta \alpha \sigma \iota \lambda \eta \iota-$, Luk. Syr. 18, 25, Astr. 12, Arr. Ind. 3, 8, 39, Hipp. ep. 17 $_{84,41}$;
 Luk. Syr. 42, 58, 57, Arr. Ind. 18. The following have no variant
 épuqveín. $\sigma \tau \rho a \tau \eta i \eta$ is the only example in the vita Homeri.

Fritsch's thoroughgoing examination shows that here and there the Attic forms have forced themselves into the Mss. of Hdt. In the inscriptions we meet with the following forms in $\epsilon \iota$ where $\eta \iota$ would be Ionic : -
$\dot{\text { ápxєiov, }}$ Iasos, 105 (end of third cent.).
$\pi$ odıctia, Zeleia, 114 ABC (late), Samos, 22127 (322 b.c.).
$\pi \rho v \tau a v \epsilon$ îov, Kyzikos, 108 B (first cent.).
$\kappa а \pi \eta \lambda \epsilon i o v$, Iasos, $\mathrm{IO}_{4}{ }_{4}$.
$\pi ⿰ \rho \rho \epsilon i a$, Samos, 22121 ( 322 b.c.).
All these forms are due to Attic influence.
Furthermore, $-\eta \omega$ - occurs (Attic - $\epsilon \hat{i}^{-}$-) where there is no - $\eta v$ - stem
 रvvauкєias, Phokyl. ${ }_{2}$, , бvvaiкєí $\omega v$ (cf. Fick, B. B., XI, 272), Archil.


${ }^{1}$ Cf. Anakr. 114.

Stems in A or O yield－$\eta$ ıo in the later Ionists ：－
oírílos，Luk．Syr．20，22，53，54，57，Arrian，Ind． 20 （elsewhere $-\epsilon \iota-)$ ；áv $\theta \rho \omega \pi$ inıos，Luk．Astr．27．From consonantal stems we have àvopíos，Luk．Syr．15，26，27，Euseb．Mynd． 56 （Hippokrates has －єl－always）；रovaıкjıos，Luk．Syr．15，27， 5 I，Arrian，Ind．8，Aret． 60，61，62， 285 （Hippokrates－$\epsilon$－，and also Euseb．Mynd．54）； ब $\eta \mu \eta \eta_{\imath}$ v，Luk．Syr．15，17，49，Astr．4，7；Arrian，Ind．28．Here Hippokrates and Aretaios follow the Attic rather than the Ionic standard．We have here a line of distinction drawn with tolerable distinctness between the medical writers and Herodotos，Lukian，and Arrian．Arrian，Ind．io，has furthermore $\mu \nu \eta \mu \dot{\eta}_{i}$ ，io，but $\theta \dot{\eta} \rho \epsilon \epsilon a$, I 7 ， 24，and Aitionєi $\varphi, 6$.

And again，$-\eta \iota-=$ Attic－$-\iota \sigma$ ．


 Ionic verb．

Upon inscriptions $\epsilon \iota$ for $\eta \iota$ in ${ }^{-}$
＇Avסеєíwv，Eryth．206，B 48， 56 （278 b．c．）．
oiкєєótทtos，Ephesos， 1474 （ 300 b．c．）．
oiкєiou，Lykia， $26_{3}$（perhaps an Attic form）．
Eủфpovitiol，©a入ciolo，Eryth． 206 B 46.
$\Lambda v \kappa \epsilon i o v$, Eryth． 206 A 20 （Steph．Byz．$\Lambda v \kappa \eta \eta_{\imath}$ ）．
 iєратє́al， $\mathrm{C}_{13}$ ；Priene， 144 ，iєратєíns．

б́ $\rho \kappa v \nu \epsilon i o v, ~ H a l i k . ~_{240}{ }_{44}$（fifth cent．）．

 $\sigma \pi o v \delta \eta_{i} \nu$, Paros， 62 ；इapanjica，Naxos， 28.
－$\eta$ o－in Ionic has by analogy extended its sphere beyond that of
 any justification for the adoption of $-\eta \iota$－even in such $-\epsilon$－stems as yield abstract nouns，c．g．$\dot{a} \lambda \eta \theta \eta \dot{\eta} \eta$ ，which has been foisted upon Herod－ otos by the Aldine edition．The few instances of $\eta \iota=\epsilon \iota$ ，are of late date．＇A $\rho \gamma \dot{\eta} \neq 5$ ，Ditt．Syll． $42 \mathrm{I}_{5}(400-350$ ），is，however，certainly on the stone，though it may be an error，as it dates from a period when there was a fluctuation in the orthography．

Note．－If it can be shown that there are stems in $\cdot \eta \sigma \iota 0$ ，which is still a moot point，such apparent anomalies as Aiolic кuтрoré⿱亠䒑ŋa，and Boiot．names in

$\kappa \rho a \tau \dot{n} \iota a$ ，Eryth．208，is a hyper－Ionic form，and not to be regarded as an ex－ ample of $-\eta \sigma \iota a$ ．That yod should lengthen a preceding vowel，as G．Meyer， Gramm．，${ }^{2} \S 79$ ，states，is of course out of the question．

ヨєvoкрат ${ }^{\prime} \iota a$ is not to be classed with Delphic Ka入入ıкра́тךа，etc．， where the $\eta$ is a late graphical expression for $\epsilon$ ．It is scarcely prob－ able that a stem in $-\eta \sigma \omega$－should manifest itself so late as the first century b．c．when it is not beyond peradventure proved in the case of older forms．

Note 1．－à $\gamma \gamma \dot{n} \imath o \nu$ without variant，Hdt．II， $121 \beta, \delta$, IV，2，Lukian，Syr．20， 48．This is the sole support for this supposed Ionic form．Keos， $43_{10}$ ，with $\dot{\alpha}] \gamma \gamma \in i \alpha$, is not free from the suspicion of being Attic，though this form is un－ doubtedly Ionic too．Cf．$\alpha \boldsymbol{\gamma} \gamma \epsilon i o \nu$ and $\kappa \in \nu \epsilon a \gamma \gamma \epsilon i ́ \eta$ in Hippokr．and Aretaios．

Note 2．－Feminines derived from masculines in－$\epsilon$ Us have $\epsilon$ ，not $\eta$ ı．In Keos，48，íf $\rho \epsilon 1 \alpha$ ；Pantikapaion， $123_{3}, i \epsilon \rho \hat{\eta} ;$ Ephesos， 150 ，$i \epsilon \rho \hat{\eta}$ ．In Herodotos， the Mss．have generally $i \rho \varepsilon i \eta$ ，but occasionally the shibboleth of the Ionic $\eta \iota$ is disclosed（II，53，54，55）．Cf．also，$\beta a \sigma i \lambda \epsilon i a$ ，not $-\eta i \eta$ ．

102．Medial $\eta \iota$ retained before consonants．
I．Masculine patronymics．
 Chios，1799，the same form on a Chian coin，Denkmäler der Wiener Akad．，IX， 322 （400－350）．If $\Sigma_{\epsilon} \epsilon \lambda \eta \dot{i} \delta \epsilon \omega$ in Archil． 104 is correct，it is the only instance in the lyric poets，and $\Sigma_{\kappa \eta} \beta \eta_{i} \delta \eta s$, Teos，C．I．G．， $3064_{28}$（late），the only instance in the inscriptions．In all other cases $-\epsilon \delta \eta \mathrm{s}$ ，on which see below．$\Pi_{\eta \lambda \eta i \delta \eta s, ~ a t t e s t e d ~ b y ~ G r e g . ~ C o r-~}^{\text {l }}$ inth．d．d．Ion．，p． $377 . \quad$ M $\eta^{\prime} \omega v$, Hdt．I， 7.

2．Feminine patronymics．
 to be written $\eta i$ ，a poetical form introduced by the grammarians． Doubtless $-\eta \iota \delta \eta s$ and $-\eta \prime \iota$（ $-\eta$＇s）are correct．

3．Dat．Plur．of $\widehat{\mathbf{A}}(\eta)$ stems．
$-\eta \iota \sigma \iota$ was the regular Ionic form in the fifth century in Hdt．and in the inscriptions．The last Ionic $\eta \iota \sigma \iota$ of which we have any knowl－ edge dates from 394 b．c．（Erythrai，1996）．After this，als is the normal use．See under Declension．

4．In compound names（two stems）．
$\Delta \eta i \delta a \mu a \nu \tau$－，Aigiale， 28 A.
$\Delta \eta \ddot{\lambda} \epsilon \epsilon \omega$ ，Smyrna， 153 18．Cf．Bechtel，ad loc．
$\Delta \eta i \lambda \lambda \epsilon \sigma$ оs，Thas．（L）7，B 9.

$\Delta \eta i ̈ \rho a ́ \sigma \eta s$, Th. (L) 3 A 8.
$\Delta \eta і ̈ \pi \epsilon ́ \tau \eta s$, Styra ${ }_{1}{ }_{181}$, perhaps.
'Appitovs, Th. (L) 14 B 2 ; 16 7.
'A $\quad$ ï申íגov, Anakr. 106.
5. Greg. Corinth. d. d. Ion., p. 377, quotes $\kappa \lambda \eta \ddot{\sigma} \sigma \theta \epsilon \in \tau \tau \epsilon s$ as Ionic. Map $\omega \nu \eta \iota \tau \epsilon \epsilon \nu$, Maroneia, $19 \sigma_{2}$, though from the same period (before 400) we have Mapఉvєıт' $\omega \nu$, $196_{3 .}{ }^{1} \quad \eta \iota$, as augment, is preserved; e.g., ท̂̀ $\rho \eta \mu$ évovs, Samos, 22 I 3 .

## ro3. II. Medial HI becomes H.

íp $\eta_{0}$, Oropos, $18_{33,36}$, about 400 b.c. Greg. Corinth. d. d. Ion., p. 379, mentions icpúiov as Ionic. Also Aiolic and Delphic.

A remarkable form is $\lambda \eta \tau \pi v \rho \gamma \epsilon i v$, on a Tean document, Ditt. Syll. $126_{\text {i2 }}$ (306-301).
104. III. Medial HI passes into EI.
(a) before vowels.

Here belong the forms mentioned under § ior, from inscriptions, from the lyric poets $\gamma$ vvaiкєiov, Archil. and Phokyl., unless Fick's defence of the form as it stands (= $=\gamma^{\prime} v a \iota o v$ ) holds good. $[\dot{\alpha}] \gamma \gamma \epsilon i a$, Keos, $43{ }_{10}$, while Hdt. has ${ }^{3} \gamma \gamma \eta^{\prime} \iota a$, IV, 2 ; Homer, $\iota 222$, ${ }_{a} \gamma \gamma \epsilon a$. Fritsch holds that $\dot{\alpha} \gamma \gamma \epsilon \hat{i} o \nu$ alone is correct, which is probable (cf. $\left.{ }_{a}{ }^{2} \gamma \gamma \boldsymbol{\sigma}\right)$.
( $\beta$ ) before consonants.
In all masculine patronymics, except those mentioned § ro2, Hdt., as Attic writers, uses -єı $\delta \boldsymbol{\eta}$ with but a single exception: Ai $\gamma \epsilon i \delta a \iota$, IV, 149 ; 'A $\rho \iota \sigma \tau \epsilon i \delta \eta \rho, ~ V I I I, ~ 79-82 ; ~ ' A \tau \rho \epsilon i ̂ \alpha \iota, ~ V I I, ~ 20 ; ~ N \eta \lambda \epsilon i ̂ o u l, ~ V, ~ 65 ; ~$

 'A $\rho \iota](\sigma) \tau \epsilon i \delta \eta s$, Thasos, 77 A 9, 'A $\rho \ell \sigma \tau \epsilon i \delta \epsilon v s, \mathrm{~B}$ 14, are all too late to be of moment, though they apparently support the general conduct of the patronymic in Ionic prose. Baбı $\lambda \eta_{i} \delta \epsilon \omega$ may well be correct despite the numerical weight of evidence against $-\eta \iota \delta \eta$ s in Hdt. As Attic inscriptions of the fourth century have $-\eta \underline{\iota} \delta \eta s$, the older form existing parallel to the younger - $\boldsymbol{\epsilon} \delta \boldsymbol{\delta} \boldsymbol{s}$ (to say nothing of the fifth century with its EIDEE), so in Ionic we may assume the contemporaneous existence of both forms, though $\eta^{\prime}$ may have been weakened to $\epsilon \iota$ in the majority of instances. The Ionic dialect is tenacious of $\eta^{\prime}$ ( $\nu \eta^{\prime}, ~ \Pi \rho \imath \eta \nu \eta i$, etc.). See § 102, and below, § 106, 107, 152.
${ }^{1} \mathrm{Cf}$. Hdt. Bopvaधєขeïє' $\omega \nu$, TV, 17.

## 105. IV. Medial $\mathrm{HI}=$ EÎ.

This metathesis quantitutis was first proposed by Fick (B. B. XI, 267 ) on the score of Anakreon's four syllable $\Theta \rho \eta i \kappa i \eta$ (96) by the

 for Ionic and Attic that, wherever $\epsilon \iota$ appears for $\eta \iota, \eta \iota$ passed through the stage $\epsilon \bar{i}$. On any view $\epsilon \ll \eta \iota$ is found chiefly in Eretrian Ionic, since in Asiatic Ionic $\eta \iota$ lost its iota and did not become $\epsilon \iota$. From prose inscriptions we can scarcely expect proof, and even if we accept $\Theta \rho \epsilon \ddot{\epsilon} \kappa i \omega \nu$, we are not compelled to extend this metathesis quantitatis over all the territory claimed by Bechtel. The parallelism of later $\lambda \epsilon \tau \tau v \rho \gamma \epsilon \hat{\imath}$ and $\tau \epsilon \hat{\imath}$ does not disprove the vocalis ante vocalem corripitur rule, or necessitate the hypothesis that in Ionic-Attic there was a middle stage, $\epsilon \bar{\epsilon}$.
106. I. Final HI is retained.
(a) In the dative singular.
$\nu \eta i$, perhaps from $\nu \hat{\eta}$ from the analogy of $\nu \eta{ }^{\prime} s$, etc. (Alkman has $v \hat{a}$ according to Blass, Hermes, XIII, 25). On $\Pi_{\rho \iota \eta}(\nu] \hat{\eta} \imath$ see under Declension.
( $\beta$ ) In the subjunctive (Island and Asiatic Ionic, but not generally in West Ionic). See under Conjugation.
 ${ }^{15} 8_{15,50}$, (second cent.). Cf. the similar form on an old papyrus, Blass, Ausspr. ${ }^{3}$ 48, and the confusion between $\epsilon_{i \eta}^{\prime \prime}$ and $\epsilon \ddot{\eta} \eta$, H 340 , $\Sigma 88$. $\epsilon \bar{\prime} \eta \iota$ occurs on the papyrus that has $\theta$ eí $\downarrow$.

## 107. II. Final $\mathrm{HI}=\mathrm{EI}$.

(a) In the dative singular of $\widehat{\mathbf{A}}(\eta)$ and $-\eta v$-stems.

For the forms from Euboian Ionic, see under Declension. The Herodotean $\beta a \sigma \iota \lambda \epsilon$ él, or $\beta a \sigma \iota \lambda \epsilon \hat{\imath}$, is due to the analogy of other cases.
 will readily yield to "A $\rho \in$ ï, or "A $\rho \eta$ ( $\Phi$ i12, 431, B 479). Smyth, Diphthong EI, pp. 36, 42.
( $\beta$ ) In the subjunctive. Here we have to distinguish between (I) $\epsilon$, an original form with short modal vowel (Schulze, Hermes, XX, 49 ff.).

Cf. таранєi $\psi \epsilon \tau \alpha \iota$, Mimn. 3, and also in Kretan (Baunack, Studien, I, 3 ; Bechtel, Gött. Nachr., ı888, p. 402).
(2) $\epsilon \iota<\eta \iota$ in later inscriptions.
$\dot{a} v a \psi \eta \phi: \sigma \in \iota$, Amph. $\mathrm{ro}_{19}$ (middle of the fourth century).
$\pi a \rho \in ́ \lambda \theta \epsilon \iota$, Orop. 18 $8_{3}$,
ảठıкєî, Orop. 189 ,
є̇ктіvєє, Orop. $18_{12}$,
ả $\delta \iota \kappa \eta \theta \epsilon i ̂$, Orop. $18_{14}$,
$\sigma v \nu \chi \omega \rho \epsilon i$, Orop. $188_{20}$,
between 41 1-402 or 387-377.
$\pi a \rho \epsilon \hat{\imath}$, Orop. $18_{26},=\pi a \rho \hat{\eta} \iota<\pi a \rho \epsilon ́ \eta \iota$;
cf. $\epsilon i, 18_{34}=\eta$,
${ }_{\epsilon}^{\epsilon} \mu \beta \dot{\alpha} \lambda \lambda \epsilon \iota$, Orop. $18{ }_{40}$,
This $\epsilon \iota<\eta \iota$ is restricted in Ionic to the division of the West, ${ }^{1}$ and in so far presents a proof of the progression of West Ionic and Attic along the same phonetic lines. There are no examples of this later $\epsilon \iota$ from other portions of Ionic territory, and even in West Ionic the change has not been thoroughgoing (Olynthos, 8 A 6, B 17 , ${ }^{\imath} \eta \iota$; B 14 , бок $\hat{\eta} \iota)$. In the Kyklades and in Asiatic Ionic we have $-\eta \iota$ in the verb and nouns, except where $\iota$ has fallen off. The change of $-\eta \iota$ to $-\epsilon \iota$ precedes in Amphipolis that of $-\omega \iota$ to -ot. In Olynthos, 8 A 6, Bechtel reads $\pi$ ]odє́ $\mu$ o七 whereas we have $-\omega \iota$ in 8 B 4 (as well as $-\eta \iota$ ).

## 108. Final H from HI.

Rarely, and then not in West Ionic, in the dative : Mávŋ, Kyzikos, 108 (sixth century) ; $\tau \hat{\eta} \beta o v \lambda \hat{\eta}$, Eryth. 1991 (394 B.c.) ; Madvєín, Eryth. 2011 (fourth century) ; $\tau \hat{\eta}$, Zeleia, II $_{15}$ (after 334) ; $\delta \eta \mu o \sigma i \eta$, Mylasa, 248 C 15 (355/4).
109. $\Omega$ I.

Final $\Omega \mathrm{I}$ becomes OI only in Western Ionic. See under Declension for examples.

[^30]110. AY.

I find the following examples of $\alpha o=a v(a+u)$ in Ionic inscriptions. See below for $\epsilon \boldsymbol{\sigma}=\boldsymbol{\epsilon}$.
aótoí, Priene, 144 g.
aỏtós, Chios, 184.
aỏtóv, Samos, 22 I ${ }_{14}$.
$\alpha o ̉[\tau \hat{\omega}]$, Eryth. $202{ }_{11},{ }^{1} 263$ (unc. loc.).

aỏioov́s, Samos, $22 \mathrm{I}_{29}$, Leros, $107{ }_{7} \cdot$
$\tau \alpha \hat{o} \tau \alpha$, Leros, $10{ }_{12}$, Chios, 184, Eryth. $202{ }_{10,18}$, Samos, $22 \mathrm{I}_{14}$, Halik. $240_{7}$ (the only example of the change in the dialect of Halikarnassos).
$\dot{\epsilon} \alpha o \tau \hat{\omega} \nu$, Samos, 22 I $_{20}, 263$ (Asiatic).
Глао̂коя, Eryth. 2091.
Taopéas, Eryth. $209{ }_{2}$.
 p. 1195 ; cf. Eryth. 206 A 19.

Naóлoxov, Priene, 141, an inscription not in Ionic dialect but in Ionic orthography. Naôклоs, Paus. VII, 3, 6, may be compared. Styra, $19{ }_{26 \epsilon}$, has Navбтєi $\rho \eta s$; Olynth. 8 B ,2, vavi $\eta \gamma \eta \sigma^{\prime} \mu \omega \nu$.

The graphical substitution of ofor $v$ is practically confined to Ionic
 offers the only example from extra-Ionic territory. So far no evidence for this ao has been found in any portion of Ionic except that of the Asiatic mainland and adjacent islands.

This method of writing, however, does not of itself necessitate the conclusion that Ionic av was of different color from Attic av. Perhaps the Naxian AFYTO represents nothing more than an attempt at showing the pronunciation of $a u$ in a clearer manner than by AY, though we must not entirely exclude the suggestion that AFTO was meant, and AFYTO was a correction of the engraver ( $\dot{\alpha} f v \tau o \hat{v}$ ). See B'ass, Aussprache, ${ }^{3} \mathrm{pp} .74 \mathrm{ff}$. This $\alpha_{f}$ for $a v$ before a consonant is chiefly the property of Kretan, and sporadically of Lokrian and Korinthian.

$$
\text { III. } A Y=\Omega \text {. }
$$

See § 74, $\mathbf{1 2 6}$, for $\tau \rho \hat{\omega} \mu a$, $\delta \iota \phi \omega \sigma \kappa \omega$, etc. The substitution of $o$ for $v$ is more frequent in Ionic than that of $v$ for $o$. At present but one example of the latter orthography is known to us in Ionic: Mú-

[^31]$\lambda a v \rho o s$, Styra， $19{ }_{133}=\mu v \lambda \omega \rho o ́ s<-\alpha o \rho o s . ~ C f . ~ \pi v \lambda a v \rho o ́ s=\pi v \lambda \omega \rho o ́ s$ in Hesychios and the other examples quoted，G．Meyer，Gramm．，§ 120. Hdt．III，72，has $\pi v \lambda o v \rho o s^{\prime}$ with the $v . l . \pi v \lambda \omega \rho o{ }^{\prime}$ ．The grammarians went so far as to hold that $a v$ became $\omega v$ in a suppositious form $\omega v ่ \tau o ́ s$. Greg．Corinth．p． 419.

On OY from AY，see under OY，§ 19， 124.

## 112．A from AY．

${ }^{\prime}$ In late inscriptions $v$ is sometimes not written before a consonant．
 near Sardis， $\mathfrak{\varepsilon} \alpha \tau 0 i ̂ s ~ 340$, valley of the Makestos，á $\boldsymbol{\tau} \hat{\eta} s$ ，Sterrett，III， 235.

II3．EY．
EO for original EY is not specifically Ionic，though this orthography was more extensively adopted by the Ionians than by any other Greek people．

1．Inscriptions of the fifth century．
及acı入єós，Chios， 174 C 1 о．
Kєфалєós，Adesp． 266 ；see Bechtel ad loc．
2．Inscriptions of the fourth century．
$\phi \epsilon \sigma ́ \gamma \epsilon \nu$, Amphip． $10_{3}{ }_{3}$.
$\phi \epsilon о \boldsymbol{\epsilon} \tau \omega$ ，Amphip． 10 $_{24}$ ．
$\phi \epsilon o ́ \gamma o[v \sigma \iota \nu]$ ，Chios，${ }^{18} 5_{15}$.
котрєо́ши，Chios，B．P．W．，ェ889，р．ェ195．
Eỏvouió $\begin{aligned} \text { s，Miletos，102，} 1 .\end{aligned}$
Eóé $\lambda \theta \omega \nu$ ，Ephesos， $15 I_{3}$ ．
Eóma日ió $(\mathrm{s})$ ，Ephesos， $15 I_{4}$ ．

€övotav，Samos， 221 ．

Eỏ⿴囗́óx $\mu$ os，Klazom．，Le Bas，Voy．Arch．Inscr．III，i，No． 86.
пєокаїоs，Klazom．169 ${ }_{3}$ ．Cf．入єокоїs，Priene，141，Ionic orthogra－ phy as in Naódoxov．
＠́́oтtıs，Chios，Zeitschr．f．Numism．XIV，${ }^{\text {153，No．3．Cf．}}$ $\Theta \epsilon \hat{\imath} \tau \tau[\iota s]$, l．l．No． 4 ＝Becht． 194 （both fourth century）．

3．Inscriptions of third century．
Eỏaүóp $\eta$ s，Thasos， $83_{3}$ ；cf． $83_{4}$ ．
${ }^{1}$ Bechtel＇s［є̇oj $\left.\gamma\right] \epsilon ́ \tau \eta \nu$ ，Eryth． $199{ }_{3}$ ，is doubtful on account of à̀ $\hat{\omega} \iota, 1.5,12$.
4. Of uncertain date.

Eópúda ( $\mu \mathrm{Os}$ ), Eryth. $209{ }_{3}$.
$\Sigma \iota \nu \omega \pi \epsilon$ ós, Sinope, ir6.
Note. - Eỏnáuovos (Bechtel, Ion. Inschr., p. IO4), held by Boeckh (C. I. G. 2121) to be Phanagorean, cannot well be Ionic on account of $-\pi \alpha \mu \omega \nu=\kappa \tau \eta \mu \omega \nu$,
 Mss. ${ }^{1}$ That $\epsilon=\epsilon \omega$ is not confined to Ionic is clear from the following list:
 C. I. G. 7049; $\Sigma_{\epsilon} \epsilon \hat{\eta} \rho \rho \nu$, C. I. G. 3423 , etc. See Hausoullier, B. C. H., II, 47 ff. Bechtel proposes to refer Eò $\boldsymbol{\pi}$ á $\mu$ ovos to Knidos.

This $\epsilon \circ$ is sporadic merely, and does not indicate that the pronunciation of $\epsilon v$ (i.e., $e+u$ ) was any different in the localities where these forms were at home from that prevalent among all Ionic speaking Greeks. The following list shows the retention of $\epsilon v$ in words that in the above list had $\epsilon$.
$\phi$ éćyov[ro]s $1_{3}{ }_{6}$, Chalkis (?), found at Olympia.

$\phi \in \dot{\prime} \gamma \epsilon \tau$, Iasos, $104{ }_{5}$.
Evà ${ }^{\prime}$ óp $\eta$, Thasos, $83_{4}$.
Eú $(\pi)$ opía, Pantik. 121 .
 $\Lambda \in e ́ \kappa \omega v o s$, Phanag. 164.

Eủкрátov, Teos, I59 $_{3}$.
On $\epsilon v$ for original $\epsilon$, see also under Contraction.
114. $\epsilon v$ represents the diphthong $\epsilon v$ in Hír $\theta$ evos, Ephesos, Num. Chron. 1881, 16. $\epsilon \boldsymbol{\sigma}$ stands for $\epsilon=\epsilon v$ in $\Delta \epsilon \vartheta v v i ̂ s$, Maroneia, on a coin in Imhoof-Blumer's coll., referred to by Bechtel on No. 196.
 217. Analogous is aov in Пaov入入íva, C. I. G. 6665, G. Meyer, § 120. Cf. Baunack, Studien, I, 72 ; B. B., II, 269.
115. $\beta$ takes the place of $v$ in the late катєбк $\dot{\beta} \beta \sigma \sigma v$, Kyzikos, C. I. G. 3693. Cf. the same form C. I. G. 2015 (Gallipoli), and such forms as Boiot. eviסouov 49 r $_{17}$, eíסoцéккovta, C. I. G. 1845 (Korkyra).

[^32]
## 116. Loss of Y in EY .

Before vowels $v$ is expelled as is $\iota$. Scanty evidence of this phenomenon is furnished by the Ionic poets, Hipponax using $\epsilon v$ as a short syllable in $\epsilon ⺌ \omega v o \nu 22 \mathrm{~B}$ (cf. 'E $\omega v v \mu \epsilon \hat{\prime}$, Kuman. ' $\mathrm{E} \pi \iota \gamma \rho$. 'A $\tau \tau$.


Inscriptions offer us but doubtful evidence : -

 $\delta \epsilon \omega$, Th. (L.) 3 A iо.
$\pi \rho v \tau a v \varepsilon^{\prime}(o)$ vтos, Priene, 14410 , Ross' conjecture for $-\epsilon \omega \nu \tau o s$ of the transcribers. Johansson, D. V. C., p. 6i, retains - $\epsilon \omega v \tau o s$, which he explains as $=-\eta o v \tau o s$, comparing Lesbian $\dot{\delta} \delta \iota \kappa \dot{\eta} \omega$. This is, however, entirely unwarranted and has in fact been partially withdrawn by the same scholar, B. B., XV, 17 r.
 cion, since Ionic verbs in -ev retain the $v^{1}$; e.g. $\beta a \sigma \iota \lambda \epsilon$ íovios, Pant.


 here between $-\epsilon v \omega$ and $-\epsilon \omega$ verbs such as is discussed by Bredow, p. 81.

## 117. EY for AY.

$\pi \dot{\epsilon} \tau \tau v \rho o v$, Oropos, $18_{42}$, deserves notice as the Ionic form, found also Theokr. XIII, 13.

OY.
118. I. Genuine OY.

The diphthongal ov is generally represented upon inscriptions by
 OY in TOYTO, Halik. ${ }^{2} 8_{21} 8_{21}, 23,32,3$, TOYTOE, Amphipolis, $10_{20}$. TOTO $=$ тoùto $175=$ Roberts, 150 (Chios), as occasionally in pre-
 is a vexatious spelling, though it is certain from Kyprian a $\cdot \mathrm{ro} \cdot \mathrm{u} \cdot \mathrm{ra}$. that the diphthong is genuine.

[^33]Genuine ov (i.e. $o+u$ ) is retained in Ionic as in other dialects. It occurs in ablaut forms, such as $\sigma \pi$ ovó and where $v$ has been joined to $o$ as in $\tau 0-v-\tau o$ (particle $v$ ).
119. II. Śpurious OY.

The monophthongal ov is generally written O ; e.g. : -

TO $\quad$ риокоа́тєоs, Prokon. тоз ${ }_{2}$.
ВОлє́́o, Teos, 156 B 24.
T $/ \mu$ O $\chi$ є́єогєєs, Teos, 156 B 29.
T $\epsilon \chi \chi^{\prime} O \sigma \eta$, Miletos, 98 .
Sporadically or appears :-
TOY, Amphipolis, $\mathrm{IO}_{13}$, only case of this writing of tov.
$\beta a \rho \beta a \rho \mathrm{OY} \Sigma$, Teos, 156 B 26 ; in every other case of the accus. pl. OZ.
120. Spurious ov before nasals.

 52. Attic forms in Solon, 243, 93. $\mu$ ov̂vos survives in late inscriptional poetry ; e.g. Arch. Instit. of America, III, 341 ${ }_{6}$ (Pisidia). Lukian, Abydenos, Aretaios, and other later Ionic writers have ov. Arrian varies between $\mu \circ \hat{v} v o s$ and $\mu$ óvos, but the prevalence of the former in Aretaios and Hippokrates is so striking that there can be no question but that $\mu 0$ ivos was accepted by all the pseudo-Ionists, except the author of the Vita Homeri.
rov́vard $<\gamma_{0}$ F $^{-}$, Hdt., Theog. 978, Tyrt. $10_{19}$; Archil. tetr. 75,
 and Aretaios have the ov form.

Note 1. -The etymology of o $\hat{u}_{v}$ is uncertain. It is found Hipponax, 61, though there probably an Atticism. Sim. Amorg. $7_{45}$ has the genuine Ionic form. Wackernagel (K. Z., XXIX, 127) suggests that $\bar{\omega} \nu$ is extracted from $\mu \hat{\omega} \nu$. But $\mu \hat{\omega} \nu$ is not Ionic. See § 75 .

Note 2. - The principle that the exigencies of the Homeric verse cannot force any Greek form upon the ordinary dialect life of the people is fatal to a genuine Ionic oüvoua, despite the fact that Lukian, etc., read it in their copies of Hdt. Stein writes oüvoua, although the Mss. are in a constant flux, and $\dot{\partial} \nu о \mu \alpha i \nu \omega, \dot{\partial} \nu o \mu a \dot{\zeta} \omega$. óvoua is the genuine Ionic prose form, found Oropos, $18_{39}$,
 Theog. 246, Tyrt. $12_{31}$; övo ${ }^{2}$.

of the folk－dialect（misread from KON？）．In Hippokrates，Lukian，d．d．S．，de Astr．，Arrian，Aretaios，oüvoua prevails over üvoua，in the Vita Homeri，üvoua
 varies with oùvouarti．

121．Spurious OY before liquids．
1．－opf－．
ov̉pos，mountain，Sim．Amorg．141，Theogn．881；oư $\rho \in \boldsymbol{\prime}$ ，etc．； Hekat． 172 ov̋ $\rho \epsilon a$ ， 173 ouv $\rho \epsilon \sigma \iota v$ ．In Hdt．and Homer we find both ovjos and őpos．The latter is the sole reading of the Mss．in about nineteen passages in Hdt．In other places where the word occurs， ABR have őpos，CPd ov̊pos；whence Stein concludes，in opposi－ tion to Dindorf and Bredow，that ő ${ }^{1}$ os is the genuine reading in Herodotos．Of the pseudo－Ionists，Lukian has ovjpos，d．d．S．8， 28 ； Arrian has ov́pos but once（ $\$$ II），oboos fourteen times．Hippokr．， Aretaios have the o form，as the Vita Homeri；öpos，Hekat．44，227， 344，Tyrt． 57 ，Archil．tetr． 749 ，ep．115，Theog． 1292 ；Hipponax，35，
 met with favor．＇The form ö $\rho \in \iota \circ$ is certain，Arrian＇I $\nu \delta$ ．17．＇Opo－ $\left.\beta \iota \eta \eta^{[\tau \eta s}\right]$ or＇ $\mathrm{O} \rho o \beta \iota \epsilon[v ́ s]$ ，Chalkis，Roberts， 172 ，an inscription not adopted by Bechtel．Oúpádıos is an uncertain conjećture of Roehl， No． 394 ＝Bechtel，No． 42.
ov̉pos í，boundary，Chios， 174 A 6，8， 10 ；oủpoфú入aкєs 174 A 15， ${ }_{19} 9$ ；ö $\mu$ ovoos，Halik． $240_{\text {61 }}$ ；ov̉pos，not ö $\rho o s$, Samos， 216 ；and if Roehl 406 is Ionic，then HOPO乏 must be read Hov̂pos．In Herodotos，ov̉pos，
 ovjos 40，Euseb．Mynd．13，ovjov．Solon，trim． $36_{4}$ ，has the Attic form．

Sovp－is not found in Mss．of Hdt．in the oblique case forms，though Tyrt． I $_{20,37}$ ，Archil．eleg． 35 have the ov form，which alone is genuine Ionic．Cf．$\Delta$ oupíns，Adesp． 21 （Western Ionic）of the sixth century． ＇The epic $\delta o \rho-$ ，Archil：eleg． 31,2 ．

кov̂pos，amply attested on Ionic inscriptions and by Greg．Corinth． d．d．Ion．，p． 387 ；cf．p． 48 g．
＇Епíкovos［s］Styra， 19 з；Samos， 2212.
Ooúp, Naxos， 23 ；but Kóp $\iota$, Paros， 65 （late）；Kó $\eta \eta_{\rho}$ ，Eryth． 206 B 22 （almost an Attic inscription）．
$\Delta \iota o \sigma \kappa o v \rho i ́ \partial \eta s$, Halik． $24 \mathrm{O}_{32}$ ．

[^34]$\Delta$ ]ıобкои́ $\rho$ [८] $\sigma \iota 257$ (unc. loc.) ; but $\Delta \iota \sigma \sigma \kappa о ́ \rho \omega \nu$, Eryth. 206 A 7 (Attic).
$\Delta \iota o \sigma \kappa o v p i ́ \delta \epsilon v s$, Thasos (L.), i i C ir.
$\Delta \iota o \sigma \kappa o v \rho i ́ \delta o v, ~ T h a s o s ~(L) ~ 2 о ~ В ~ 3 .$.
In the poets we find кovo-, Tyrt. $\mathrm{IO}_{6} ; \mathrm{I}_{5}{ }_{2}, \mathrm{I} 6$ (Doric!).
siórкovpos, Hipponax, 120 , and so in Hdt., who has also кovpídos.

кópos, Attic, Hdt. only IV, 33, 34. Aret. 18 has кov́рךбє; Archil.

122. Other Ionic forms with ov.

Oúpavínı, Phanag. 164, 168 ; Oípavíך, on an old amphora, C. I. G. 8412. Wackernagel derives from fooz-, rain, with accent on the syllable after the radical syllable (K. Z., XXIX. 129). In that case we may connect $f^{\epsilon} \rho \sigma \boldsymbol{\eta}$ and fov $\rho \dot{\epsilon} \omega$. The older attempts at derivation assume $\rho_{f}$ (rvon-).

ởp $\eta^{\prime}$, tail, illustrates Wackernagel's accent theory, K. Z., XXIX, 127.
2. ovd.
(a) $0 \lambda_{f}$.
oùdaí, Hdt. < fodfo- ?
Hom. ov̉入os, entire, $<\delta \lambda_{f}{ }^{-}$is not represented by the same form in later Ionic. The absence of any form except ödos shows that the parallelism between Hom. Ionic ov by compensatory lengthening $=$ Doric $\omega=$ Attic o is not complete. Attic, Doric, and Ionic here agree in having ö̉ $\lambda o s$.

Proper names in חovdv- have come to light in Megarian and Thessalian as well as Ionic. Hdt. has $\pi$ od入ós (cf. $\pi$ od ${ }^{2}$ śs, Abdera, 162, metrical) ; but that aov ${ }^{2}$ v́s may have been Ionic is probable from $\pi o v \lambda u ́ \pi o v s$ in Attic (Athenaios, VII, 316), which looks like a loan from $\pi$ ovdús. Theog. 509 need not be Megarian, but is to be classed with such Ionisms as $\pi о v \lambda$ v́тoסos, $\epsilon 432$, Hym. Apoll. 77.

Movdvóá $\mu a s$, Samos, 1537 , Eretria, 16 B 5.

- $\chi$ á $\rho o v$, Eretria, B. C. H. II, 277.

חovגv́шvo[s], Chios, 187.
חovдvává, Thasos (L.), 8 B г.
Mov́dvos, Thasos, 78 B in.
Пoll $\lambda v \rho$ '́' $\eta \mathrm{s}$, Styra, $19{ }_{286}$.
There are no names in $\Pi o v \lambda v$ - in Hdt.
Cf. also in other dialects : -
Hov $\boldsymbol{\lambda} \boldsymbol{\tau} \boldsymbol{\tau}^{\prime} \omega \nu$ in the Hermokopidai process (Thuk.).
 Le Bas, Explications, No. 346.

Пovдvסá $\mu a s$, Thessal. 345 79-80.
There are no names in $\Pi$ o $\lambda \lambda \frac{1}{}$-, but those in $\Pi$ o $\lambda v$ - are abundant.
Подváркәs 19287, and perhaps 19 406.

$\Pi[0] \lambda v \xi \epsilon \iota v[i] \delta \eta s$ 19407.

Modút $\rho$ ovs, Thasos, 75 B i1, Teos, $158_{27}$.
חoдváp $\quad$ ros, Abdera, $163_{12}$, Maroneia, $196_{15}$, Thasos, $72_{3}$.

Modvaivetos, Thasos, 8ı B ir, Thas. (L.) $3_{i}$, 6 A 9, 15 C ıо.
Moגи́октоs, Eretria, 16 B 37, 49 ; also Thessal. 34575.
Поди́хар $о$ оя, Smyrna, 15311 .
Hódvos, Smyrna, 15322.
ПодvaєiӨךs, Erythrai, 206 A 28.
Подúíos, Halik. $24 \mathrm{O}_{46}$.
Подv́фаитos, Thasos (L.), 6 C 9.
Пoдva入 $\theta$ є́os, Thasos (L.), 1 о $_{11}$.

Mo $\lambda v-$, Thasos (L.), 16 A 17, B 3.
Пó $\lambda v[\beta]$ os, Volci, Roberts, 188 H.
Bechtel holds that the names in Mov $\nu v$-, in whatever dialect found, are due to the influence of the epos. This, if true, does not render nugatory our contention that the Homeric verse does not create genuine forms in the dialects, since proper names have their own history. It is better to regard $\pi o v \lambda v$ - as a genuine prose form, from contamination of $\pi o \lambda v$ - and $\pi o v \lambda$-, $\pi o v \lambda$ - originating in the oblique cases ( $\pi 0 \lambda \boldsymbol{\lambda}$-ós).
$\pi o v \lambda$ ús is but sparingly attested in the late Ionists. Lukian and Arrian follow Hdt., while the medical writers use now $\pi$ ov $\lambda v$-, now $\pi o \lambda v-\pi o v \lambda v ́$ occurs in the letters of Hippokrates (XVII, 16 in $c$ ); elsewhere $\pi$ odús and $\pi$ odv́ should probably be read (Lindemann, p. 12 ff.).

It is no contradiction of the laws of phonetic development that $\pi o v \lambda-$ and $\pi o \lambda$ - should be coexistent at one and the same time in a single dialect. As in Ionic, so too in Megarian (Baunack, Stud. I, 229) are both forms permissible. A $\pi \omega \lambda$ - is, however, foreign to Ionic, despite $\pi \omega^{\prime} \lambda v \pi \sigma \nu$, Sim. Amorg. 29. Perhaps Sim. of Keos is the Simonides referred to by Athenaios, VII, 318 F.
( $\beta$ ) oud from od $v$.
ovidos, crisp, < fodvo- ?
ойло́ $\mu \in v o s$, Tyrt. 72 , Theog. 156, 1062.
$\beta$ oúdoual, probably from $\beta$ odvo-, from $\beta \omega \lambda v$-? Forms with O :-

©єоßoùdov, Naxos, 28 and Boùo日éplos, Naxos, 28 with OY (late)
Note. - The ov of Oü $\lambda \nu \mu \pi$ os appears to be due to the metre alone in Homer and Theog. il36. In Herodotos 'Oג- is to be written, a form attested by Xenoph. $\mathbf{2}_{3}$, Theog. 1347, Solon, tr. $3_{6}{ }_{2}$, Sim. Amorg. $7_{21}$, Arch. tetr. $74_{2}$,
 Smyrna, ${ }^{53}{ }_{27}$ (before 350 b.c.).
123. Other cases of ov.

Editors of Hdt. reject oủ $\delta \hat{\omega} v$, ways, I, 123 (cf. Od. 17, 196), but accept ouvóv, threshold, I, 90 . So long as this ov is to be regarded as metrical merely, it cannot belong to common Ionic speech. Samos, $220_{30,30}$, has ơoovo ( $346 / 5$ B.c.).
vov̂cos, Hdt. Mimn. 6, Solon, 2410 , Theog. 274, etc., is not from ${ }^{*}{ }^{\nu}$ oүкцоs $={ }^{*}$ vovaros, as Curtius held in his Studien, X, 328, but from $\sigma_{\text {oroftios, }}=$ Old Norse snauðr, stripped, poor, bereft, sneyðiligr, destitute (Germ. schnöde). vov̂ros occurs in late poetry, B. C. H., VIII, $5^{02}$, No. XI, from Phrygia ; Am. Arch. Instit. III, 34 I . Lukian adopts the form seven times in the Syria dea, Arrian has it chap. 15 ; Herakleitos, epist. V, VI ; Pherekyd. and Hippokr. epist. ; and so too in Aretaios. Hdt. always uses voo' $\epsilon$, if Mss. authority means anything, and Hippokrates, Lukian, and Aretaios agree in adopting this form. The Mss. of these authors fluctuate constantly between vó$\sigma \eta \mu a$ and $v o v i \sigma \eta \mu a$, to the former of which preference must be given. Sim. Amorg. iamb. $\mathrm{r}_{12}$ has vórol, corrected by Ahrens and Renner (see especially the latter in Curtius' Stud. I, 178). The author of the Vita Homeri used the o form alone.
 That the latter is not a fictitious form is evident from its occurrence in C. D. I. 1200, incorrectly supposed to be Arkadian, and in inscriptions from Agrigentum, Cauer, ${ }^{2}$ 1999, 13 , etc. -кovaa is from -когтца, -коба from -котıа, instead of -катца, by influence of the former termination.
124. Ionic $\mathrm{OY}=\mathrm{AY}$ of other dialects.


 I, $226_{13}$. $a$ seems to have become $o$ through influence of the following $v$. This change is unique, recalling only indirectly $\omega$ for $a v$. See § 19, III.

## 125. HY.

In the dialect life of Greece wherever $\eta v$ appears before a consonant it is not an original diphthong. ${ }^{1}$ So Ionic $\gamma \rho \eta \hat{v} s, \nu \eta v \hat{s}$ with $\eta$ from the oblique cases ( $\nu \eta_{F}$-ós $\gamma \rho \eta_{F}$-ós) ; so too in $\pi \rho \eta u$ ús, whence $\Pi \rho \eta u ́ \lambda o s$, a Thasian name (and $\Pi \rho \epsilon a ́ v \theta \eta s$, Keos, 50, IV, 65 ), from root prāi. $\eta v$ in the augment (e.g. $\eta \dot{v} \xi_{\eta} \boldsymbol{\eta} \sigma a \tau \epsilon$, Solon, $\mathrm{II}_{3}$ ) is not proethnic $\bar{e} u$ or $\bar{a} u$. In Attica $\eta v$ as augment of $\epsilon v$ - verbs held its ground until the second half of the fourth century. Hipponax, $63_{2}$, has кат $\quad$ vío $\theta \eta \nu$, but Hdt. often avoids $\eta^{v}$-.

## 126. $\Omega \mathrm{Y}$.

Like $\eta v, \Omega \Upsilon$ is not an original diphthong in the dialects. $\omega v$ originates in Ionic chiefly by crasis, as in $\tau \omega v \boldsymbol{\jmath} o{ }^{\prime}, \dot{\epsilon} \mu \epsilon \omega v \tau o \hat{v}, \sigma \epsilon \omega v \tau o \hat{v}$, $\dot{\epsilon} \omega v \tau o \hat{v}<\tilde{\epsilon} 0+a \dot{v} \tau o \hat{v}$. All these forms are based on the genitive.
 $\kappa o v ̉$ (e.g. к $\mathrm{OY}_{\kappa}$, on a papyrus, cited Blass, Aussprache, ${ }^{3} 43$ ) is for $\kappa \omega \boldsymbol{v}$, as in Sappho's $\kappa \omega \boldsymbol{v} \kappa \mathbf{I}_{24}, \kappa \omega \boldsymbol{v} \delta_{\epsilon} v$, Epicharmos, 19 , may well be doubted. 'The same Ionic papyrus has KEN, i.e. $\kappa$ ' $+\boldsymbol{\epsilon} \nu$, and Sappho's $\delta a v ̋ \tau \epsilon$ by the side of $\delta \eta \boldsymbol{v} \tau \epsilon$ shows the possibility of elision, $\kappa^{\prime}(\alpha \iota)+o v^{\prime}$. Nor would I agree to Blass' explanation of $\mathfrak{\varepsilon}$ ovr $\hat{\omega} \nu$, Priene, $144=$ C. I. G. 2908 (Mykale), from $\dot{\epsilon} \omega v \tau \hat{\omega} \nu$. A form $\dot{\epsilon} \omega v \tau \hat{\omega} \nu$ is utterly unknown on Ionic inscriptions. Its $a$ of $\dot{\epsilon} o v \tau \hat{\omega} \nu$ became o either through assimilation to $v$ as $\epsilon$ became $o$ in Kretan $\psi o v \delta_{i} a$, or it is due to the influence of oviros, etc.

To a limited extent outside of crasis, $\omega v$ appears in Ionic. Hdt. $\theta \omega \hat{v} \mu a, \theta \omega v \mu \alpha ́ \zeta \omega, \tau \rho \omega \hat{v} \mu a$, IV, 180, in one Ms. ; Luk. Astr. 3, Syr. 7, 8, 10, 30 , has $\theta \omega \hat{\imath} \mu a, \theta \omega v \mu a ́ \zeta \omega$ 13, 32, 36, and the Vita Homeri, $\theta \omega v-$. Arrian, Ind. $\theta_{\text {av }}^{\mu \alpha}$ 15, but $\theta \hat{\omega} \mu a$ 40, as Euseb. § 3. The epistles of Hippokr. have generally the Attic form ; $\tau \rho \omega \hat{v} \mu a$ is found in the majority of the Mss. Syr. 20, while Arrian, Ind. ig has $\tau \rho \hat{\omega} \mu a$. Lindemann (de dialecto Ionica recentiore, p. 30) holds that the $\omega v$ of $\theta \omega \hat{v} \mu a$ is due to the influence of $\dot{\epsilon} \omega v \tau o \hat{v}$, etc. A partial support for this suggestion is to be sought in the fact that Greg. Corinth. p. 419, by

[^35]quoting $\omega u$ úrós, seems to regard $\omega v$ and $a v$ as interchangeable. Aretaios, in fact, abounds in forms which indicate that the grammarians were ignorant of the true interrelation of $\omega v$ and $\alpha v$. See § 74 , ini.

Note. - Perhaps $\theta \omega \hat{v} \mu \alpha$ may be explained from $\theta \bar{\alpha} F \epsilon \in \rho \alpha \iota$; and was thus the incentive to the formation of a $\tau \rho \omega \hat{\nu} \mu \alpha$.

## 127. Vowel Contact.

I. Contact of like vowels.
II. Contact of unlike vowels.
III. Contact of vowels and diphthongs, diphthongs and diphthongs.

Under these heads will be treated actual contraction, poetical synezesis, diaeresis, and crasis.

Both medial combination of vowels and diphthongs and sentence Sandhi are thus included.

Under the head of a short or long vowel $+\eta$, $\omega$, are included $\eta \iota$, $\omega \iota$. Examples of the crasis of $\iota$ and $v$ diphthongs are placed under the head of $\alpha, \epsilon, o+$ the vowel in question (e.g. o七 $+\epsilon$ under $\mathbf{O}+\mathrm{E}$ ). In citing inscriptions I have generally selected only those of considerable antiquity.

## I. Contact of Like Vowels.

$$
\text { 128. } A+A .
$$

1. $\breve{a}_{\boldsymbol{\alpha}} \breve{\alpha}=\bar{\alpha}$ in $\stackrel{\ddot{\alpha}}{\tau} \eta$ (except Archil. 73), ${ }^{\bar{a}} \tau \eta \rho o ́ s$, Theog. 433, 634,

2. $\breve{\alpha} \sigma \breve{a}=\bar{\alpha}: \kappa \rho \epsilon \bar{\alpha}$, Sim. Amorg. 24, and Hdt. ; otherwise $-a s$ stems have - $\epsilon a$ in Hdt.
3. Hdt. $\tau \hat{d} \lambda \lambda \alpha, \tau \dot{a} \gamma a ́ \lambda \mu a \tau \alpha$, etc. (Bredow, 201). $\tau \hat{a} \lambda \lambda \alpha$ we find in an almost Attic inscription, Teos, 158 $_{13}$; $\tau \grave{a} a ̈ \alpha \lambda a$, Eryth. $204_{18}$; and тà ả $\gamma^{\prime}{ }^{\prime} \lambda \mu a \tau a$, Miletos, 93.

Crasis of $\mathrm{AI}+\alpha=$ Ionic $\bar{\alpha}: \kappa \dot{a} \pi о \theta \nu \mu i \eta$, Sim. Amorg. 73 ; кảvapi $\theta$ -
 Chios, 174 A 15 ; ка̉ло́д $\lambda \omega \nu \iota$, Thas. 68 ( $\kappa \dot{\omega} \pi о \lambda \lambda \omega \iota \iota$, Hipp. tr. $31=$ каì $\delta$ 'А $\boldsymbol{\pi}$-). Crasis with каi is almost always omitted in inscriptions :
 Miletos, 93.

1. $\epsilon^{\epsilon} \epsilon$.
2. $\mathrm{E}+\mathrm{E}$.
 sic).
 scriptions in the forms of the $-\eta v$ declension. See under H+E.


( $\beta$ ) contracted in K $\lambda$ eitos, Th. (L.), 20 C 9 , etc., in later inscrip-

3. $\epsilon \sigma \epsilon$ was contracted to $\epsilon$, e.g. in $\epsilon i \chi \epsilon v$. In the $\epsilon s$ declension the inscriptions have $-\epsilon \epsilon$, the prosaists $-\epsilon \epsilon$; in the future of verbs, Hdt.
 no metathesis quantitatis took place.
4. $\epsilon \epsilon$ becomes $\epsilon t$ in Ionic generally. Examples of $-\epsilon \epsilon$ - in the imperative and imperfect act., present, imperf. mid. and inf. from prosaists alone are to be found under the section on the verb. ${ }^{3}$ All these forms are probably figments of grammatical doctrine. In nouns, pronouns, and adj. $\epsilon_{\kappa} \epsilon$ yields $\epsilon \iota$ ìnvariably : $\pi o ́ \lambda \epsilon \epsilon \varsigma, \dot{\eta} \mu \epsilon i ̂ s$.

Note.-Whether the infinitive ending is ${ }_{F} \epsilon \nu, \sigma \in \nu$, or ${ }_{〔}(\nu)$, the result of the combination of this ending with the final $\epsilon$ of the stem is always - $\epsilon \boldsymbol{\nu}$ (eg.


$$
\text { 130. E }+ \text { H (see Fritsch V. H. D. p. } 3 \text { r ff.). }
$$

1. $\epsilon_{f \eta}$.
(a) contracted in $\nu \dot{\eta} \nu \ll \varepsilon \notin \nu v$, Anakr. 14. Hippon. tr. 49 B 4, has $\kappa \lambda \eta \delta \omega \nu$, a form found also in Hdt. IX, 91, ror, without the iota.
On $-\kappa \lambda \hat{\eta} s$ and $-\kappa \lambda \epsilon$ '́ $s$, see under Declension. Western Ionic has the open, Island, and Asiatic Ionic, the closed forms.
 parallel form to $\mathrm{N} \epsilon \mathrm{c}_{-}$.
 nia, Hdn. $\pi . \mu . \lambda .7,8)$.
$\epsilon \eta<\eta f \eta<\bar{a} v a \bar{a}$ remains open in $\theta_{\epsilon ́ \eta}, \theta_{\epsilon} \eta \mu a$, Sim. Amorg. $7_{6 \bar{i}}, \theta \epsilon \eta \eta^{-}$ $\sigma \epsilon \sigma \theta a i$ (but $\theta_{\eta} \sigma a ́ \mu \epsilon v o s$, Abdera, 162).

2. $\epsilon \sigma \eta$.
 jugation.
${ }^{1} \mathrm{Cf}$. -' $\epsilon \in s$ for $\hat{\eta} \mathrm{s}$ in Attic 'A入al'є́ s , etc.
${ }^{2}$ Fick, B. B. XI, 266, 271, writes $\epsilon \eta<\eta \epsilon$ in all these cases. This metathesis quantitatis is, however, not a necessary, only a possible, change in Ionic. Forms

 ries, and do not represent any actual dialect.

3．$\epsilon_{l} \eta$ ．
（a）In substantives．
In the nouns in $-\epsilon \boldsymbol{\epsilon} \boldsymbol{\rho}$ ，$-\hat{\eta} \mathrm{s}$ ，we find that the poets use the contracted forms：${ }^{\text {E }} \mathrm{E} \rho \mu \hat{\eta} \mathrm{s}$ ，Hipponax， $3^{22}, 55 \mathrm{~B}$ ，Anakr． $\mathrm{III}_{3}$（voc．${ }^{〔} \mathrm{E} \rho \mu \hat{\eta}$ ，Hipp． 1，16， 21,89 ）．＇E $\rho \mu \hat{\eta}_{\iota}$ Abdera， 162 （metr．），Lampsakos， 171 ； ＇A $\boldsymbol{\pi} \epsilon \lambda \lambda \hat{\eta} \mathrm{s}$ ，Iasos， $\mathrm{IO}_{15,42}$（and so probably Anakr． $72_{2 \mathrm{~B}}$ ，where Bergk writes $-\epsilon \geqslant \rho$ ；cf．M $\epsilon \gamma \iota \sigma \tau \hat{\eta} \mathrm{s} 4 \mathrm{I}$ ）；$\Lambda \epsilon \omega \imath \hat{\eta} \mathrm{s}$ ，Keos， 44 A 5 ；$\Delta \eta \mu \hat{\eta} s$ ，Thasos， ${ }_{7} 8$ C 14，Thas．（L．） 13 A 10 ；© $\alpha \lambda \hat{\eta} s$ ，Miletos， 93 （sixth century）． Hdt．has also © $\Theta \lambda \hat{\eta} s$ ，I，74．With such authoritative testimony in favor of the contracted form，we cannot but conclude that Bo $\hat{\eta} \boldsymbol{\eta}$ is the genuine Ionic form，despite the fact that the Mss．of Herodotos prefer－$\epsilon \eta$ s，though in VII， 189 there are two occurrences where the Mss．with but one dissenting voice speak in favor of $-\hat{\eta} s$ ．The same conclusion will hold good in the case of $\beta$ op $\overline{\mathrm{y}}$ ，＇A $\mu \iota \tau \hat{\eta} s, \Pi v \theta \hat{\eta} s$ ．
$\gamma \hat{\eta}$ is from $\gamma^{\prime} \alpha<{ }^{*} \gamma \hat{\eta} a$ from $\gamma \bar{\alpha} \iota a$（but see Merzdorf，Stud．IX，225， Wackernagel，$K . Z$. XXVII，269）．$\dot{\alpha} \delta \epsilon \lambda \phi \hat{\eta} \iota$ ，Roberts， 158 B（Amorgos－ Arkesine），is not in itself an obstacle to the validity of the Herodo－ tean $\dot{\alpha} \delta \epsilon \lambda \phi \epsilon \eta^{\prime}$ ，though we have $\dot{\alpha} \delta \in \lambda \phi \eta^{\prime}$（sic），Mykonos， 9222 （Attic？）， and Halik． 240 D 34，parallel to the masc．d́de入ोós．If we admit a by－form in $-\epsilon \eta$ as Ionic，the open $-\epsilon \eta$ cannot be said to be in har－ mony with the usual treatment of $\epsilon+\eta$ ．When $\iota$ was retained in Hdt．（ipeín）but disappeared in a later period，contraction ensued （ $i \in \rho \hat{\eta}$, Pantikap．123，Ephesos， 150 ）．
$\gamma \epsilon \omega \epsilon \eta^{\prime}$ is open in Solon， $27_{10} ; \epsilon+\eta=\eta$ in $\rho 0 \delta \hat{\eta} s$, Arch． $29_{2} ; \gamma \alpha \lambda \hat{\eta} s$ ，

 $\mathrm{IoO}_{3}$ ，Xenoph． 5 ；$\sigma v \kappa \in \neq \eta$ s，Anan． 52.

Avoidance of contraction will have to be accepted in a few proper names：Aivє $\eta \tau \hat{\omega} \nu$ ，Ainea， 12 （ 550 b．c．），later，Aiv $\eta \tau \hat{\omega} \nu$（end of fourth century）；N $\epsilon \mu \epsilon ́ \eta \iota$ ，Thasos， 69 （fifth century）；K $\rho \epsilon \not \eta^{\prime} \tau \eta$ ，Archil． $175=$

（b）In adjectives（masc．－ $\boldsymbol{\epsilon o s}$ ；fem．$-\epsilon \eta,-\eta$ ）．
The forms will be quoted under the $\widehat{\mathbf{A}}$ Declension．The inscrip－ tions prove that when $\eta$ follows $\epsilon$ ，contraction ensues，when o or $a$ follows $\epsilon$ ，the forms are kept open till the latest period of declining Ionism．In the poets $-\hat{\eta}$ almost without exception（－a入＇́ $\eta$ and $\kappa v \nu \epsilon \in \eta v$


[^36] § 155. In Herodotos we find $-\hat{\eta}$ generally, but not without exceptions ; e.g. $\delta<\pi \lambda \epsilon \bar{\eta}$, III, 42.

As regards the forms of -E $\Omega$ verbs, Merzdorf's "law" that after consonants $\epsilon \eta$ remains open, but is contracted after vowels, has been accepted in many quarters; but incorrectly, as is clear from the fact that his contention is based upon a mere numerical count of Mss. For the establishing of the dialect of Herodotos, we cannot assume that a given form is genuine Ionic merely because a varying per cent of Hdt.'s Mss. speaks in favor of its adoption. The inscriptions proclaim that the Ionians in their decrees adopted the contraction without exception; and the poets unite with the inscriptions in their opposition to the Merzdorfian law. All the MI verbs too contract $\epsilon \eta$. On $\dot{\epsilon} \theta \epsilon \hat{\eta}$ ro in Hippokr. see under Conjugation.

$$
\text { I. } \eta \boldsymbol{F}^{\varepsilon} . \quad \text { I3I. } \mathrm{H}+\mathrm{E} .
$$

From ēve, remains uncontracted in a few forms of the $-\eta v$ - declension, as in фov̂̀єs, Archil. 59. See under E + E.
āve in $\dot{\eta}^{\prime} \dot{\lambda} \lambda o s$ ( $\sigma \bar{a} f \in \lambda \lambda o s$ ): the elegiac poets adopt this form alone
 etc.). The iambographers contract : $\eta^{\prime} \iota o s$, Archil. tetr. 744, Hipp. tr. $\mathbf{I}_{5}$, Sim. Amorg. $\mathrm{I}_{19}$, and in Anak. 27 ; and upon an inscription Arkesine, 33 , Z $\epsilon$ ̀ेs $\mathrm{H} \dot{\eta} \lambda[\iota o]_{\mathrm{s}}$ (fifth century), Herodotos, II, 92, $\boldsymbol{\eta}^{\lambda} \lambda \iota o \mathrm{~s}$ (Bredow, 45), as Arrian, 1 ; Lukian using $\eta^{\prime} \in \lambda ı o s$, Astr. 3, 5 , etc., $d$. $S .29,34$. Both forms form a part of the poet's material in Aiolic (Sappho, 69, 79).
$\eta \epsilon$ also in adjectival forms (nom. - $\eta^{\prime} \epsilon \iota$ ), Kall. $\mathrm{I}_{6}, \tau \tau \mu \hat{\eta} \epsilon \nu$; Mimn.
 Archil. $74{ }_{8}$, Sim. Amorg. $7 \pi$, Mimn. 9 j , see § 129 . $\eta \epsilon$ in these forms often in Hdt., $\eta \in$ in the poets and in prose writers is found only when $f$ followed $\eta$. Forms with $\eta \epsilon$ seem to be obsolescent in the seventh century.

 Ananios, 51 .

Note. - On Fick's Xapai\} \lambda _ { \eta \epsilon , ~ A r c h i l . ~ 7 9 , ~ s e e ~ § ~ } ^ { 3 0 } .

## 2. $\eta$ ! $\epsilon$.

$[\chi] \rho \hat{\eta} \sigma \theta[a \iota]$, Keos, $43_{12}$, is not necessarily for $\chi \rho \eta_{\iota} \epsilon \sigma \theta a l$, since it may be formed directly from $\chi \rho \eta+\sigma \theta a \mathrm{a}$ (Johansson, D. V.C. p. 155).
 assume that $\eta \iota \epsilon$ in Ionic becomes $€ \eta$. $\begin{gathered} \\ \delta \\ \imath\end{gathered} \psi \eta$, Hippokr. III, 36,42 , $\delta u \eta \hat{\eta} \nu$, Hdt. II, 24 , i.e. $-\eta+-\digamma \epsilon v$ or $-\sigma \epsilon \nu$.
4. Crasis and aphaeresis:

 Chios, 174 A 2, compare $\dot{a} \rho \epsilon \tau \eta \eta^{\prime} \sigma \tau \nu \nu$, Theog. 147 and Phokyl. ${ }^{7} 7$, oldest example of aphaeresis in the case of $\epsilon \mu \dot{\prime}, \hat{\eta}^{\prime}$ ' $\kappa$, Theog. 577 (in



## 132. $\mathrm{H}+\mathrm{H}$.

Is contracted almost universally. On $\eta \eta^{\eta} \rho$ in Hippokrates ( $\bar{\alpha} \neq \eta \eta_{\rho}$ ), see § 38. Ionic of the post-Homeric period does not possess such
 see under Conjugation. $\eta \in$ held ground longer than $\eta \eta$.

$$
\text { 133. } 0+0 .
$$

So far back as we can follow the history of Ionic, $o+o$ became ou. In view of this fact the position assumed by many scholars that in Ionic $o+o$ became $\omega$, which afterwards became ov, is without foundation. The Doric dialects, which at different stages of their existence had $\omega$ and $\boldsymbol{o v}$, offer but a specious parallel to an Ionic $o v<\omega$. oro in Homer never becomes $\omega$ as $\epsilon \sigma \epsilon$ never $=\eta$.
I. ofo.

In a few nouns and adjectives of the $\mathbf{O}$ declension oo is apparently kept open to a limited extent: Hdt. vóos, єivvoos, $\pi \lambda$ óos, $\delta \iota \pi \lambda$ óos (but
 fashioned orthography dictated voos in the Mss. Sim. Amorg. I, 3, where voûs, or vóos, must be read. ${ }^{2}$ vóov in the same poet ( $7_{1}$ ) must be an archaism, if the authority of the inscriptions is invoked. $\pi[\rho]$ óxovv occcurs upon a vase from Naukratis, Roberts, 132 bis. Perhaps contraction resulted during the seventh century, since Archil. 89 epod. and Mimn. $5_{8}$ have vóov. Homer preserves vóos, but the beginnings of the later forms appear $\Omega 354, \kappa 240$ (Menrad, p. 46). Later inscriptions have 'Aorúvovs, Eryth. 206 C 9 ; Kad入ívovs,

[^37]

The pseudo-Ionists have $\pi$ doos generally in the uncontracted form, though the compounds more frequently avoid the open forms. vóos, $\hat{\rho o ́ o s, ~} \pi \nu$ óos, - $\chi$ poos, $\dot{a} \theta$ oóos, generally are found in the resolved forms. $\delta \iota \pi \lambda$ óos prefers the closed forms.

In composition : 'A $\theta \eta$ vaínı Пoдıoóx $[\omega t$, Eryth. 200 (epigr.), and so Roberts, p. 64, and Hdt. I, 160 ; Подıóvov, Paros, $6_{46}$; T $1 \mu$ ov̂ $\chi$ ol, Teos, ${ }^{15} 8_{26}$ ( $\tau \hat{\mu} \mu \mathrm{os}$ in Aischylos) ; 'A $\operatorname{lot\sigma \tau ov} \chi o v$, Ross, 148.
2. ola.

इanфóos, $\Lambda_{\eta}$ róos, called Ionic by Herodian II, $\mathbf{2}_{3} 8_{15}, 755_{21}$, are supported by no such formation in the existing monuments of the dialect. Hdt. has $\Lambda \eta \tau o v ิ s, ~ \Lambda \eta \tau o \hat{v} v$, etc., and $\phi \lambda o \hat{v} v$. On the retention of -oto $<\boldsymbol{o}(\sigma)_{\grave{\prime}}$, , see under O declension.

In verbs in $-o \omega, o v$, and never $\epsilon v$, arises from $o+o$. The examples of $\epsilon v$ collected by Merzdorf, Curtius' Studien, VIII, 215, show the confusion as to the character of the Herodotean dialect in the minds of the diasceuasts.
I. ${ }^{\circ}{ }^{\omega} \omega$.
134. $O+\Omega$.
$\chi^{\hat{\omega} \nu}$, Keos, 43 ., fifth century ; cf. $\pi[\rho]$ óxovv, Naukratis, 139 A. Hdt. keeps $\sigma o ́ \omega \nu$ open, so vów, $\sigma v \mu \pi \lambda o ́ \omega \nu$.
2. oб $\omega$.

Always contracted, e.g. in gen. plural, $\mathbf{O}$ declension.
3. ${ }^{2} \omega$.

Contracts in verbal forms ( $\delta \iota \kappa a \omega \hat{\omega}$ ). $\zeta \hat{\omega} \mu \epsilon \nu$, Sim. Amorg. ${ }_{3}$, from

 uses $\lambda a \gamma^{\prime} \mathbf{o}^{\prime}$ ), if we extend the limits of metathesis quantitatis beyond those ordinarily set up for Ionic.
I. $\omega_{F}$ o.

$$
135 . \Omega+0
$$

$\ddot{\eta} \rho \omega o s$, Hdt. ; $\zeta \omega \omega^{\prime} s$, Tyrt. $10_{30}$, with $\omega$ preserved before a short vowel by the interposition of $f$. Goov is the correction of Porson for the traditional reading $\zeta \omega \omega \hat{v}$, Archil. $6_{3}$. $\Sigma$ îwos, Styra, 1923,30 .
2. ${ }^{2}$ to.
 The latter appear to be regular, yet the uncontracted participial forms may be defended. See B. B. XV, 170, 175, and M. U. I, 8.

$$
\text { 136. } \Omega+\Omega \text {. }
$$

$\omega_{\grave{\prime}}^{\omega}$.
$\omega \omega$ preserved in $\zeta \dot{\omega} \omega \omega$ ，Hdt．$\zeta{ }^{\boldsymbol{\omega}} \omega \nu$ ，Kallinos， $\mathrm{I}_{19}$ ．Anan． $5_{5} \lambda \alpha \gamma \hat{\omega} \nu$ is either from Hom．入aүшós or Hdt．入ayós．

$$
\text { 137. I }+\mathrm{I} .
$$

1．七fı．
The Ionic dialect permits，but does not require，contraction ：$\Delta \iota$ i， Paros 65 ，a late inscription，Mylasa 248 C 6 （fourth century），both examples probably Attic ；$\Delta i^{*}$ ，Eretria 14 （fifth century），Samos（？） in Roberts ${ }^{5} 57$ ，Asiatic－Ionic，Bechtel No．260．Hdt．has $\Delta i$ i．I do not find either form in the poets．

2．On $\bar{\imath}$ in the dat．sing．of iota stems，see under Declension．In the optative of roots ending in iota，contraction of $\iota+\iota$ is pan－Hellenic．

138．Note．－Before passing to the concurrence of unlike vowels， we may here treat of $v+\iota$ ，strictly not a diphthong，but a phonetic combination，the $v$ of which was probably $i u$ ．On the treatment of the $v t$ of viós，see $\S 98$ ．In the forms from which $\iota$ is absent，Cauer held（Curtius＇Studien，VIII，275）that $v$ and $\iota$ had been fused as in
 the dat．of－$\epsilon \mathrm{s}$－stems．

## II．Contact of Unlike Vowels（horizontal and vertical vozvels）．

1．$\breve{a}_{f} \epsilon$ ．
139. A + E.
（a）Uncontracted in $\mathfrak{d} \epsilon \in \kappa \omega v$ ，Theog．371，467，471，1379，áєкои́vos， Theog． 1 343，both forms in Hdt．and in Lukian．Hipp．ПTK io has
 Homer．In Attic the form is open in the law of Drakon（C．I．A．I， $\mathbf{6 I}_{\mathrm{I}_{4}}$ ），but contracted before the middle of the fifth century in वккои＇－ $\sigma_{\iota}[a]$ ，C．I．A．I，B，I．
$a ̈ \approx \in \theta \lambda o v$, Archil．ep．104，Tyrt．${ }_{12}{ }_{13}$, Mimn． II $_{3} ; \pi \epsilon \nu \tau \alpha \epsilon \theta \lambda \epsilon \dot{\prime} \omega$ ，
 $\dot{a} \theta \lambda a$ ，Theog．971，994，io14，Hippokr．ПА 6；$\pi \epsilon \nu \tau a \theta \lambda \epsilon i v$, Xenoph．



 Hipp．tr．28，Hdt．III， 78 ； $\mathfrak{d} \dot{\xi} \xi \omega$ ，Sim．Amorg． 78 ，Sol． 275 ，Theog．


aiédovoos, not $\dot{a} \in \lambda-$, is the Herodotean form.
( $\beta$ ) Contracted $\dot{a} \rho \theta \epsilon i ́ \mathbf{s}$, preferred by Mss. of Hdt. to $\dot{a} \epsilon \rho \theta \epsilon i \mathbf{i}$ (Bredow 193, Merzdorf, Curtius' Stud. VIII, r86). Anakreon, 19, ảp $\theta$ cís. See on áєíp $\omega$, sub A + EI, § і 7 I .

Note I. - Contraction of àfe, both in a privative and other forms seems to have been possible at least as early as the sixth century. In the ordinary speech of the people many forms were doubtless contracted which were kept open by the artifices of literary expression.

Note 2. - In the inf. active $\alpha+f \in \nu$ (or $-\sigma \epsilon \nu$ ), e.g. $\begin{gathered} \\ \sigma o \rho \\ \alpha \\ \nu\end{gathered}$; see § 171. On $\tau \epsilon \theta \nu \dot{a} \nu \alpha \iota$, Amphip. $10_{9}{ }_{9}$, and Mimn. $\mathbf{2}_{10}$, as the Mss. read, or $\tau \epsilon \theta \nu \hat{a} \nu a \iota<\tau \epsilon \theta \nu a+$

2. ${ }^{\text {ăte. }}$
 Hdt. $\chi \rho \hat{a} \sigma \theta a \iota$ from $\left.\chi \rho \check{\alpha}+\epsilon \sigma \theta a \iota, \operatorname{Keos} 42_{12}, \chi\right] \rho \hat{\eta} \sigma \theta[a \iota]$ from $\chi \rho \eta+\epsilon \sigma \theta a \iota$, or from ${ }^{*} \chi \rho \eta i o \mu a \iota ~(M e r z d o r f, ~ l . l . ~ p . ~ 210, ~ G . ~ M e y e r, ~ G r a m m . ~ § ~ 51, ~$ Johansson, D. $\left.V . C . \mathrm{p} . \mathrm{I}_{55}\right) . \quad$ See § 36, i31, 155.

Crasis of $a+\epsilon$ in $\tau \dot{\alpha} v$, Chios 174 C $19=\tau \dot{a} \gamma 174$ C 22 ; $\tau \dot{\alpha} \mu a ́$, Theog. 346, Archil. tr. 50 , but often kept apart : $\tau \grave{\alpha} \notin \mu a ́, ~ H d t . ~ V I I I, ~$
 $\kappa \dot{\alpha} \boldsymbol{\alpha} \theta \lambda o \hat{\imath} \sigma \iota \nu$, Theog. 355 ; каُкфє́ $\eta$, Hippon. 29 ; каُ $\boldsymbol{\gamma}^{\prime}$, Amorg. Rob.
 Chios 174 B 22 ; к $\boldsymbol{\alpha} \pi i \epsilon \lambda \pi \tau \alpha$, Archil. $74{ }_{5}$.

$$
\text { 140. } \mathrm{A}+\mathrm{H} .
$$

$a \stackrel{l}{\eta} \eta$.
In verbal forms : $\tau \iota \mu \hat{a}, \tau \iota \mu \hat{a} \tau \epsilon$ (Doric $\eta$ ).
$a_{f} \eta$ contracts in $\Delta a v \hat{a}$, Hekat. $35^{8} \mathrm{M}$.; on the other hand in $\Delta a v a i ́ \eta$, Miletos 99, a glide iota has been generated between $a$ and $\eta$,
 $72{ }_{8}<$ N $\iota \kappa a ́ \eta ; ~ c f . ~ i \epsilon \rho \hat{\eta}<i \epsilon \rho \epsilon i \not \eta . ~ \mu \nu a ̂ s, ~ H i p p o n . ~ 20<\mu \nu a ̆ \eta ̂ s$, Attic $\mu \nu a ̂ s$

 283, 491, 599, ПА 15, etc. ; к $\lambda \epsilon \iota 申 о ́ \mu \eta \nu$, Sim. Amorg. 16; $\chi \dot{\eta} \mu \epsilon ́ \rho \eta$, 'Theog. 160 , к $\boldsymbol{\eta} \mu \epsilon ́ \rho \eta s$, Anan. 510 . Where crasis might take place in the inscriptions it is omitted : каì 'H $\gamma \boldsymbol{\eta} \sigma \alpha \nu \delta \rho o s, ~ M i l e t o s ~ 93$; каi ' ${ }^{\prime} \mathrm{H} \rho \alpha-$


## 1. $\breve{a}_{f}$

$$
\text { 141. } \mathrm{A}+\mathrm{I} .
$$

$=\alpha i ̈$ and $\alpha \iota . \quad \pi \alpha ́ i s$ occurs in but one passage in older Ionic poetry (Archil. tetr. 70, $\pi \alpha ́ i ̈)$. Renner (Curtius' Stud. I, 189 ) seeks to find
an excuse for the se judice irregularity of the Archilochian $\pi a \dot{i}$ by assuming a "poetic diaeresis." No such license can be admitted; and these forms find their explanation, in comparison with Hipponax', $\pi a i ̂ \partial a$ 1, $\pi a i \hat{\delta} a s$ 14, and $\bar{a}$ in Solon, in the fact that the dissyllabic ai in nominative and vocative, and the monosyllabic $a t$ in oblique cases are an inheritance from Homeric times. $\pi$ áis is, however, not an archaism whose observance was enforced. Sim. Amorg. $\mathrm{I}_{1}$ has $\pi \alpha \hat{\imath}$, Hipponax, $38, \pi \alpha i ̂ s$. Anakreon has $\pi a \hat{a}, \mathrm{r}_{2}, 4_{1}, 62,6_{3} ; \pi \alpha{ }_{1}$ s, $2 \mathrm{I}_{13}$; $\pi \alpha i ̂ s, 22_{2}$. Oblique forms, $\pi \alpha i ̂ \delta a$, Hipp. 1, $\pi \alpha \iota \delta i ́$, Anakr. 173 $_{3}$ (aï possible) ; $\pi \alpha i ̂ \delta \iota s$, Anakr. 45 ; $\pi a i \delta \omega \nu$, Mimn. $2_{13}$ (aï possible) ; $\pi \alpha \iota \sigma i v$,




 $\mathbf{1}_{24}$, from $\grave{\alpha}_{f} \iota \kappa$ - rather than $\dot{\alpha}_{f} \epsilon \kappa$-. So too in the case of aik $\hat{\epsilon}_{\lambda}$ os, Theog. 1344 .
 Arch. el. 6 ; -aïкos in Hdt.
$\bar{\alpha} \bar{f}$.
142. $\widehat{A}+\mathrm{I}$.

Пoдvaaíins, Theog. 25, 57, 6I, 54 I , from $\pi \bar{\alpha}, \S 38$, or due to the ictus and $=\pi a v$; 'Apıテтoגaïך̀s, Hdt. I, 59.

 Solon 248 , Anakr. 435 ; with no instance of a necessary $\bar{a}$. 'Aíō $\bar{s}$ probably does not revert to an original 'Afì̀ns, but to ${ }^{*} A i_{f} i{ }_{i} \eta \bar{\eta}$,

 K. Z. XXVII, 276 , and above, § 30 .
 length of the $a$ in ${ }^{2} \dot{i} \delta i o s$ is attested but rarely, e.g. Hymn. 29 ${ }_{3}$, where it may be due to the ictus.
'A xait, Sim. Amorg. 231, where alï might be expected. Since the reduction of aut to ai in Attic ensued as early as the fifth century ( $\Phi \omega \kappa \alpha i \hat{\delta} \in[\mathrm{~s}], \mathrm{C}$. I. A. I, $_{1997}^{7}$ ), the traditional reading may be correct. See § 77 , on $a$ from antevocalic at.

$$
\text { 143. } \widehat{\mathrm{A}}+\mathrm{H} .
$$

Original $\bar{\alpha}+\eta$ did not remain in Ionic ; see $\mathbf{H}+\bar{H}$.

1. ăfo.
2. $\mathrm{A}+\mathrm{O}$.
$\sigma \alpha o ́ \phi \rho \omega v$, Phok. 9, as in Homer : $\sigma \omega \phi \rho o v \epsilon i v$, Sim. Amorg. $7{ }_{108}, \sigma \omega \omega^{-}$
 contraction. These forms are placed here tentatively, as it has not been shown that $f$ intervened between $a$ and $o$ in $\sigma$ áos. Certainly Roehl's reading, 532, $\sigma a f o \hat{\text {, }}$, is too much a matter of dubitation to be admitted in proof. Perhaps $\sigma$ áos stands for **aбos. See Ruehl in Philol. Anzeiger, 1886, 14, note 8, and § 16ı.
$\theta v \rho \omega \rho o ́ s<\theta v \rho a ̆+$ ғор- (Fick : $\theta v \rho є \omega \rho o ́ s<\theta v \rho \eta$ - $о \rho o ́ s) ; ~ c f . ~ \tau \iota \mu \omega-$ рós $<\tau \iota \mu a ̆-$.
á $\gamma \lambda$ aós :
(1) Not contracted: $\dot{\alpha} \gamma \lambda \alpha o ́ v, ~ K a l l . ~ I, ~ 6, ~ e l e g y ~ ; ~ ' A ~ \gamma \lambda \alpha o к u ́ d ~ \eta s, ~ T h a s o s ~$ (Louv.) 20 A 8 (about 175 b.c.) ; 'A $\gamma \lambda a(o ́) v \iota \kappa o s$, Styra ${ }^{19433 \text { (fifth }}$ century). The preponderance of names in ' $\mathrm{A} \boldsymbol{\gamma} \boldsymbol{\lambda} \omega$ - has made Bechtel question whether we should not read 'A $\gamma \lambda \omega$ 'өıкоs. 'A $\lambda \lambda$ докv́ঠ́ $\eta$ s shows that Bechtel's statement (that 'A $\gamma \lambda \omega$ - is the invariable rule in Ionic inscriptions) is not accurate. It must, however, be confessed that this form of the name is, if Ionic, an obsolete form for its period. ${ }^{\prime} \mathrm{A} \gamma \lambda \alpha[0] \phi \hat{\omega} \nu$, Kyzikos C. I. G. 1780 is late.
(2) Contracted: 'A $\gamma \lambda{ }^{\prime}{ }^{\prime} \chi$ apos, Amorgos 227 (sixth century); 'A $(\gamma) \lambda \omega \theta$ '́ $\sigma \tau \eta$ s, Amorgos 37 (unc. date) ; 'A $\gamma \boldsymbol{\lambda} \omega{ }^{\prime} \nu \iota \kappa o s$, Keos 50 II, in (fourth century) ; 'A $\gamma] \lambda \omega \phi \hat{\omega} \nu \tau o s$, Thasos 78 A 2 (beginning of third century) ; 'A $[\gamma] \lambda \omega \phi \hat{\omega} \nu \tau o s$, Thasos (Louv.) 6 B 14 (third century) ; 'A $\gamma \lambda \omega \gamma \epsilon \epsilon \nu \eta$, Delos 55 I 7 (282 b.c.) ; cf. also 'A $\gamma \lambda \omega \nu$, Thasos (Louv.) $2_{14}$.

We find in other dialects: 'A $\boldsymbol{\gamma} \boldsymbol{\lambda} \omega \phi$ ávŋs, Thera, C. I. G. 2460 ;

$\phi$ áos, Archil. tetr. $74{ }_{3}$, Sim. Amorg. ${ }_{19}$, Theog. $5^{69}$, II43; on the oblique cases of names in $-\phi \hat{\omega} \nu$, see Spitzer, Lautl. p. 4 I, Johansson, D. V.C. p. 16 .
2. $\breve{a} \sigma o$.

Archil. if 6, Mimn. $2_{6}, \gamma \eta^{\prime} \rho a o s$, also in Hdt. III, 14 , in the phrase $\dot{\epsilon} \pi i \quad \gamma \dot{\eta} \rho a o s$ ov $\dot{v} \delta \hat{\omega}$, with the unusual form on account of the stereotyped nature of the expression. Hdt. generally has -cos in -as nouns. -aro, or more strictly, $-\alpha \sigma_{F} o$, in the second pers. sing. of imperfect and


3. ăı

On the relation of $-\breve{\alpha} \omega$ to $-\bar{\alpha} \omega(-\eta \omega)$ verbs in $\tilde{\omega} \rho \epsilon \sigma \nu=\tilde{\omega} \rho \alpha o \nu$, etc., see Johansson, $D . V . C$. p. I5I, etc. ano becomes $\omega$ in the

Ionic verb despite fluctuations in Mss. of Hdt. See under Conjugation.

On ao, written for $-a v$, see under AY, § iro.
Varia. ' $\Omega \sigma \pi \rho a o ́ v \nu \omega \iota$, Halik. $24{ }_{43}{ }^{\text {3 }}$, Máơos, Roberts I, 193 D, are of uncertain derivation.

1. $\breve{a}_{F} \omega$. 145. $\mathrm{A}+\Omega$.
 év $\sigma \epsilon \omega$ 's, but from -af́́s, as $\pi v \lambda \omega \rho o ́ s<\pi v \lambda a ̆ \omega \rho o ́ s . ~ A l s o ~ i n ~ p r o p e r ~$ names in - $\phi \hat{\omega} \nu$, § ro6, and in 'A $\gamma \lambda \omega \hat{\nu}$, Th. (L.) $2_{14}$, § 144.
2. ${ }_{2}$

For the treatment of $-\breve{a}_{\omega}$ verbs, see under Conjugation. The contracted forms alone seem genuine Ionic.

Crasis of $a \iota+\omega$ in $\chi \omega \dot{s}$, Sim. Amorg. 24 (but $\kappa \alpha i \begin{gathered}\omega \\ s\end{gathered}$, Halik. $238_{44}$ ); $\kappa \omega \dot{\pi}{ }^{\prime} \lambda \lambda \omega \nu$, Hippon. tr. 3 I , according to Bergk's reading, which is open to grave doubts (see Renner, p. 199):

1. $\bar{\alpha}_{f} \omega$. 146. $\widehat{A}+\Omega$.
 the Mss. having $\omega$. Is - $\eta \omega \nu$ os correct? See § ir. If Attic $\Pi$ по $\epsilon \delta \bar{\omega} \nu$ is from $-\boldsymbol{\epsilon} \omega \nu$, this instance deserves note as being a rare case of con-

 $-\bar{\alpha} o \nu-$, not through $-\epsilon \omega \nu$ (Bechtel, B. B. X, 283).

On the treatment of pre-Hellenic $\alpha_{\imath}^{2} o$, see under $\mathrm{E}+\mathrm{O}$ and $\mathrm{E}+\Omega$.

$$
\text { 147. } \mathrm{E}+\mathrm{A} .
$$

Note. - $\epsilon$ before a vowel does not become $\iota$ in Ionic.
I. $\epsilon_{f}$ ă.

Remains open in adj. in feminines of -vs ( da $^{2}$ éav, Miletos $1 \mathrm{oo}_{2}$,





 Maua $\epsilon \hat{v}$, Hipp. $16_{1}$ ), from $\epsilon a$ (or $\epsilon \bar{\alpha}$ ?).

दं $\gamma \chi$ '́as, Xenoph. 42 ; Anakr. $66_{3}$, with synizesis. No instance of actual contraction occurs. ф́éáos, Hdt. VI, 119.
2. $\epsilon \sigma \breve{\text { u }}$.


 though $\mathfrak{\eta}$ pos immediately before, $160,164, \mathrm{E}$ III, 213,221 , etc. In old Attic inscriptions ${ }^{\boldsymbol{\epsilon}} \boldsymbol{a} \alpha \rho$ (Klein, Vasen, $\mathbf{1} 33$ ). See § 90.
 Orop. $1 \mathrm{IO}_{2}$; áфалє́a, Chios 174 A 12 ; áфavéas, Teos 156 B 38 , and the other forms quoted under Declension. $\theta$ ón, Keos $43_{17}$ ( $\delta \lambda o \sigma \chi \epsilon \rho[\epsilon ́ a]$ on the same inscr., end of V C.). Both forms as attested by inscriptions find their parallels in lyric poetry: Solon, ${ }^{\boldsymbol{\epsilon}} \boldsymbol{\epsilon} \eta \eta^{27} 7_{4}, \stackrel{y}{\eta} \theta \eta{ }^{2} 6_{12}$,


 Solon, $19{ }_{4} \dot{\alpha} \sigma \kappa \eta \theta \hat{\eta}$, ${ }^{2}{ }_{62} \dot{v} \gamma \iota \hat{\eta}$; 'Theog. in $80 \dot{a} \sigma \epsilon \beta \hat{\eta}$. 'The open forms

 $\dot{a} \nu \omega \phi \epsilon \lambda \epsilon ́ a s$. For a full list of forms, see under Declension.
3. є tăa.
 Bechtel 263.
ȯ $\sigma \tau \epsilon ́ \alpha$, Arrian 30, Aret. 42, 88, Hippokr. 188, 237 ; ỏ $\sigma \tau \hat{a}$, Arrian 29 ; ö $\sigma \tau \rho \epsilon a$, Arrian 21, 29, 39 ; кєvєа́, Luk. vit. auct. 13. v̇лє́є $\boldsymbol{\tau} \iota$, Hdt. IV, 7 .


 $622_{2}, \pi \in \pi \lambda$ éaral, Sim. Amorg. 31 A , seems to represent a difference in writing merely. Whether or not the passage from original $\eta \alpha$ to $\eta$ was made in Ionic through $\epsilon \bar{a}$ or $\epsilon \check{c}$ in the verbal forms is not as yet clear, though analogy would seem to incline in favor of $\epsilon \bar{a}$. Here no sound has been lost between $\epsilon$ and $a<\eta+a$.
$\eta_{\nu} \nu$ ćáv, see Bredow 38, Merzdorf, Curtius' Studien VIII, 143, and under Conjunctions, etc. In Theog. 682, we find ${ }_{\boldsymbol{a}}^{\boldsymbol{\nu}} \boldsymbol{\nu}$ where Schnei-
 Corinth. p. 465 ), but $\eta \nu v$.
4. Elision is frequently avoided in the inscriptions: $\mu \epsilon \dot{\alpha} v^{\prime} \theta \eta \kappa \epsilon$, Naukr. 139 B.

$$
\text { 148. } \mathrm{E}+\hat{\mathrm{A}} .
$$



## $\epsilon_{n}{ }_{n} \bar{\alpha}$.

In the inflection of nouns in $\epsilon \eta$ the accus. plural remains open:

ápүvpє́á, Wood, Disc. at Ephesus, App. 6, No. 1, with Attic $\bar{\alpha}$, but with the absence of contraction in adjectives of material, which is the rule in Ionic till the imperial period.

 Hesychios.

Note. - In proper names in $-\bar{\alpha} s$ it has been commonly held that $-\bar{\alpha} s$ is from -єas. Bechtel on No. 76 (Norбıкâs) remarks with appropriateness that this is impossible, since Attic names in - $\epsilon a s$ could not be contracted to -âs. On Attic
 and the name of a son of Aristagores in Miletos, Hdt. V, 30 , and on Mıка́s, Thasos (Louv.), ${ }_{14}$ i, see § 34. $\epsilon \bar{\alpha} s$ occurs in two names, 'H $\boldsymbol{\gamma}^{\prime} \bar{\alpha} s$, Keos 44 B 4; .' $\mathrm{E} \lambda \pi \epsilon \in \bar{\epsilon} s, 44$ В 16.

$$
\text { 149. } \mathrm{H}+\mathrm{A} .
$$

$\eta$ before the $\breve{a}$ of substantival and verbal inflections is regularly shortened to $\epsilon$. It is a matter of indifference whether this $\eta=$ I.E. $\bar{e}$
 shortening are sporadic in Homer : Tvó́ă Z 222, Kaıvéă A 264, ढ̈araı

 $\beta a \sigma \iota \lambda \hat{\eta} a s$, Tyrt. $43 . \quad \eta$ is retained before $a$ only when $f$ intervened (except Hom. $\pi o ́ \lambda \eta \in \varsigma$ ). In Ionic these $\eta a s$ forms are obsolescent even at a very early period.

By crasis, $̇ \pi \epsilon \epsilon \delta \alpha ́ v, ~ H d t . ~ V I I I, ~ 144 ; ~ b y ~ s y n e z e s i s, ~ \mu \grave{\eta}{ }^{\alpha} \pi о \pi \epsilon ́ \mu \psi \eta s$, Hippon. 43.

$$
\text { 150. } \mathrm{E}+\mathrm{I} .
$$

1. $\epsilon_{f}$.
$\epsilon i$ in the dative-locative singular of $-v$ - stems, see under Declension.

## 2. $\epsilon \sigma \iota$

Becomes $\bar{\epsilon}$ in the dat.-loc. sing. of $-\epsilon s-$ stems: Archil. 113 є́var $\epsilon \hat{\imath}$,

 $-\epsilon i$ in Hdt. does not represent the stage to which Ionic had advanced in the fifth century. See under Declension.
 ỏбтéivos, iтéivos, краขヒ̂ïvos.

$$
\text { 151. } \mathrm{E}+\hat{\mathrm{I}} .
$$

$\epsilon i$ by metathesis quantitatis has been assumed by Fick, B. B. XI, 267, Bechtel, Ion. Insch. p. 14, in $\Theta \rho \epsilon$ ếкıos, Hipponax 42, єï standing

 75 , should be read $\Theta \rho \overline{\epsilon t}-$. As held above, $\S$ ro5, this assumption
 M. U. IV, 209 .

## 152. $\mathrm{H}+\mathrm{I}$.

$\eta \bar{i}$ is very common in Ionic, both from $\eta \iota=$ I.E. $\bar{c} i$ and I.E. $\bar{a} i .^{1}$

1. $\eta F^{\circ}<\bar{e} v i$.

 Ionic II $\eta \lambda \eta^{i} i \partial \eta s$, but by Ionic he doubtless means Homeric. With the exception of the instances quoted, $-\eta \iota \delta \eta s$ has become - $\epsilon \delta \eta$ s everywhere in Ionic. See under HI, § ro4. With N $\eta \rho \eta i \delta \omega \omega$, N $\eta \rho \eta_{i}^{i} \sigma c$ in
 $\lambda E I \delta \eta ; 19{ }_{2 \tau}, \mathrm{M} \epsilon \rho \rho \lambda \mathrm{EI} \delta \eta(\mathrm{s}) 19_{283}$, are transcribed with $\epsilon t$ on account of the extreme rarity of $-\eta i \delta \eta s$, despite the fact that $\eta f \iota<\bar{e} v i$ generally $=\eta \iota$ in Ionic. By the fifth century $\overline{\eta^{\prime}}$ in closed syllables could become $\epsilon$.
$-\eta \iota o v,-\eta \iota \eta$, in suffixes from stems in $-\eta v-$ and from $-\eta$ - stems, e.g. $\beta a \sigma t \lambda \hat{\eta} i o s$ Theog. 1191, Hdt.; $\beta a \sigma \tau \lambda \eta^{i} \eta, \theta \epsilon \rho a \pi \eta^{i} \eta$, $\sigma \tau \rho a \tau \eta_{i}^{i} \eta$ Hdt.;
 stem). By analogy - $\eta$ oos is transferred to other stems. For these and those in $-\epsilon \iota 0,-\epsilon \epsilon$, where $\eta \iota 0,-\eta \imath \eta$, are to be expected, see above, § ror.

Note. - Either Kєios, or Kйios, is Ionic from Kéos. Hdt. VIII, $\mathbf{r}, 46$, Kєîol,
 Kク̆̈a, and Keíw 'Iovגıท̂tal, C. I.A. II, 17 B 22. See Wackernagel, K. Z. XXVII, 265, who regards Keios as certainly Ionic whatever may be said of Kй̈os (*K $\eta_{\mathrm{F}}$ ıos,
 $\beta \alpha \sigma \iota \lambda$ jios, etc., amply prove that I.E. $\bar{e} \bar{i} i$ is represented in Ionic by $\eta \bar{i}$. On $\Pi \rho \imath \eta \nu \hat{\eta}$, on a Samian inscription, No. 212, see under Declension.

[^38]
## $\eta F^{\prime}<\bar{a} v i$

Appears in Ionic as $\eta i$ without exception. Attic differs from Ionic in its treatment of pre-Hellenic $\bar{e} v i$ and $\bar{a} v i$ in that the former is generally represented by $\epsilon \iota$ (except in patronymics, as Aiरqn's, N $\eta \rho \eta \eta^{\prime} s$ ), the
 form common to the fourth century). Ionic represents both by $\eta i$, though $-\eta i ̈ \delta \eta$ s from $-\eta v$ - stems has been generally supplanted by - $\epsilon \delta \eta s$.


 96, Hipp. 42, 120 (see above on E + I ). . Homer has $\Theta \rho \eta \kappa \kappa \hat{\nu},-\kappa \epsilon \sigma \sigma \iota$,


 has the Attic $\eta$.

Furthermore, in v$\eta^{t}$; $\dot{\epsilon} \pi i v \epsilon i o v ~ H d t . ~ V I, ~ i n 6, ~ m u s t ~ b e ~ i n c o r r e c t ~(c f . ~$ $\Pi \rho o v \eta i \eta$ and Attic $\pi \rho o v \eta \hat{\eta} \nu)$; $\kappa \lambda \eta \eta^{i} \omega$ is genuine Ionic, not $\kappa \lambda \epsilon \epsilon(\omega$, Bredow, p. 176, Greg. Corinth. d. d. Ion. § 3 ; so too $\kappa \lambda \eta$ îठєs, ${ }^{2}$ pqïíi ss Hdt. IX, 2 , in Mss., but $\rho \eta \sigma \tau \omega \nu \eta$, III, 136 . Theognis, 239, 524, 592, 1027 ,

 either Tyiot, or Tîiol, according to Meisterhans, ${ }^{2} 5 \mathrm{I}$, with $\eta \ddot{i}$, which is an Ionic loan. $\gamma \gamma_{i \prime i v o s,}$ Sim. Amorg. $7_{21}$, is not from $\gamma \dot{\eta} f l v o s$, but a neologism from $\gamma \hat{\eta}$, which never contained $f$. So too $-\gamma \epsilon \iota-$ is a new formation. It will be noticed that of the forms that have preserved $\eta$ before $\iota$, most once had $F$ before $\iota$ ( $\pi$ ó $\lambda \eta i, \quad \eta_{\eta}^{\prime} a,-\eta \iota o s$ from non $-\eta v$ stems, are the exception).
$\chi \rho \eta i \zeta \omega$ (Greg. Corinth. p. 44r) in Hdt. and restored in the only



$\ddot{\eta} \nLeftarrow$, Sim. Amorg. 32, from $\sqrt{v e s}$, eat, Baunack, K. Z. XXVII, 56 I , found in Alkaios 91, ë́crav.
$\pi \sigma^{\prime} \lambda \eta i$, Tyrt. $\mathbf{1 2}^{15}$, is a double locative, and not a raised form of $\pi o ́ \lambda \epsilon-\epsilon$.


${ }^{2}$ Tyrt. $12_{24}$, $\epsilon \dot{\omega} \kappa \lambda \epsilon \epsilon / \sigma a s$ is not Ionic.
 pâò 429.
${ }^{4}$ Wackernagel, K. Z. XXVII, 264, Danielsson, Grammat. und etymol. Studien, 52, and Gramm. Anm. I, 17.

## 153. $\mathrm{E}+\mathrm{O}$.

The earliest testimony to an Ionic contraction of $\epsilon$ is the existence in Homer of $\epsilon$ and of a few cases of $\epsilon v$. In the older periods of the Greek dialects whenever the contraction of $\epsilon \boldsymbol{t o} \epsilon v$ appears, it is to be regarded as Ionic. $\epsilon v$ is but sparingly attested from earlier Aiolic, but more frequently from later Doric sources (Ahrens, II, 213 ff .).

As regards the genesis of $\epsilon \frac{\text { from } \eta o \text {, it should be stated that Merz- }}{}$ dorf's ${ }^{1}$ distinction between pre-Hellenic $\bar{a} o=$ Ionic $\eta o=$ Ionic $\epsilon \omega$, and pan-Hellenic $\bar{e} 0=$ Ionic $\eta \boldsymbol{\eta}=$ Ionic $\epsilon 0$, a distinction accepted for many years by many distinguished scholars, can no longer be upheld. Cf. - $\epsilon v$ from masculines of $\widehat{\mathbf{A}}$ decl. and iєpé $\omega<{ }^{*} i \epsilon \rho \eta o$. The occurrence of $\epsilon \boldsymbol{\epsilon}(\epsilon v)$ makes it appear that the combination $\eta o$ is treated in three different ways in Ionic. (1) $\eta o$ may be retained as an archaism, see below on $\mathrm{H}+\mathrm{O}$, (2) $\eta \circ$ becomes $\epsilon \omega$, and (3) becomes $\boldsymbol{\epsilon}$. In Ionic no difference can be detected in the treatment of long vowel + short vowel whether $f$, yod, or sigma intervened, though the dialect bears traces of the fact that the labial spirant disappeared later than either of the others. In Attic metathesis quantitatis seems to have occurred even when sigma or yod were expelled, though the cases are rare.

To a large extent the question whether $\epsilon$ or $\epsilon v$ should be written, is an orthographical question merely, at one and the same time the same word being written $\epsilon$ or $\epsilon v$ in the same portion of Ionic terri-
 quently than it was written. ${ }^{2}$ Cf. $\epsilon \frac{\text { for original } \epsilon v \text { and } \alpha o \text { for } a v . ~ \epsilon o v ~}{\boldsymbol{a}}$
${ }^{1}$ Merzdorf in Curtius' Stud. VIII, 163 ff., IX, 226 ff.; Wackernagel, K. Z. XXVII, 262; Schmidt, K. Z. XXVII, 297; Osthoff, Philol. Runaischau, I, 933; Erman, Stud. V, 294; Brugmann, Gramm. § 19; Bechtel, B. B. X, 280, Ion. Insch. p. 69, 107, 109; Johansson, D. V. C. 153, B. B. XV, 167; Fick, B. B. XI, 259 ff.; Karsten, 19-22; Blass, Aussprache, ${ }^{3} 72$.
${ }^{2}$ In the pseudo-Ionists $\boldsymbol{\epsilon}$ was carefully preserved. From Lindmann, de dial. Tonica recentiore, p. 53, I construct the following table : -

|  | ¢о | $\epsilon v$ |  | ¢о | $\epsilon v$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dea Syria, | 112 | $\bigcirc$ | Eusebios, | 4 | - |
| Vit. auct. | 6 | $\bigcirc$ | Euseb. Mynd. | 55 | 4 |
| Astrol. | 49 | - | Ep. Thales, | 1 | - |
| Arrian, | 118 | 2 | Aretaios, I, II, | 39 | 13 |
| Abydenos, | 4 | $\bigcirc$ |  |  |  |

is occasionally found（＇Epva日éveovs Samos 217 ，＇Apıбток入є́ovs Thasos $7^{2}{ }_{1}$ ）．See § 114．The writing $\epsilon$ shows that $\epsilon v$ was not pronounced eii．$\epsilon$ especially in the $-\epsilon$ stems becomes $\epsilon v$ from about 350 b．c． Whenever in Ionic poetry $\epsilon$ must be read $\cup \checkmark$ ，it is an archaism． In the early inscriptions of the same date $\epsilon \boldsymbol{\sigma}$ occurs，both $=\epsilon v$ and
 a diphthong．

1．$\epsilon_{F} O$
 as first parts of a compound name show both forms．
 $19{ }_{266}$ ；－$\mu$ そ́vıos，Olbia，Jahrb．für Philol．suppl．vol．X，26，No．8， Maroneia $196_{14}$ ；Halik． 240 B 29，D 38 ；－$\mu a v \delta \rho o s$ ，Thasos（L．） 172. Cf．véovs，Arch． 55 ；véó，Kall． $\mathrm{I}_{2}$ ；vé $\omega v$ ，Anakr． $\mathbf{1 0 0}_{3}$ ；Hdt．véos，etc．；


N $\epsilon v-$ ，in $-\pi 0 \lambda i ́ \tau \eta s 4_{3}$ ，Neapolis（ $350-300$ ）；－$\pi 0 \lambda \iota \tau \hat{\omega} \nu{ }_{4}$ ，Neapolis


 104 22， 48 （about 350 B．c．），and upon Olbian coins，is Attic．

K $\lambda \epsilon$－in－$\mu$ ахоя，Styra 19119 ；$-\mu \beta$ ртоs 44 B ıо，Keos，Thasos 77 B

 $-\mu \epsilon ́ \delta \omega v$ ，Th．（L．） $3_{10}, 6$ C 6 ；－［ $\left.\lambda_{0}\right] \chi^{\circ}{ }^{\circ}$ ，Th．（L．） 6 C 15 ；－ $\boldsymbol{\alpha}^{\alpha} \nu[\eta s]$ ，Th．
 Chios 17710 ．

K $\lambda \epsilon v$－in $K \lambda \epsilon \rho \mu \alpha ́ v \delta \rho o v$, Arkesine 34 （fourth century），epigram．K $\lambda \epsilon \epsilon^{\prime}-$ ßov入os，Anakr． $2_{9}, 3_{1,2,3}$ ，by synezesis（Mss．$\epsilon v$ ）．$\kappa \lambda \epsilon v$－in prose is writ－ ten in－$\pi \dot{\alpha} \tau \rho \alpha$ ，Delos 55，III，34；－ $\boldsymbol{\nu}^{\prime} \kappa \eta$ ，Pharos 87 ；－крíт $\eta$ ，Siphnos 89 ；
 $K \lambda \epsilon v$－in later Kretan and Rhodian documents．
 774．These genitives are never written－$\epsilon v s$ ，as those of the sigmatic declension may be．－ $\boldsymbol{\sigma}$ s from $\eta v$－stems in $\beta a \sigma \iota \lambda$ éos，etc．（on $\eta o s$, see
 Гє $\lambda \epsilon \hat{v} \tau \epsilon \varsigma$ ，Perinthos 234 В 13 ；$\Lambda \epsilon$ о́vтьбкоя，ibid． 234 A 4．ĩ $\lambda \epsilon о \varsigma$ ，prob－ ably Herodotean（cf．IV，94，VI，91），from ī $\lambda \eta \mathrm{F}_{\mathrm{o}}$ ．Cf．Kretan inéos （accus．pl．）．ìdoos is also Ionic，Archil． $752 . \quad$ See § io， 1 I．
 which obtain from 454 to 356 в．c．
$\epsilon v$ from $\epsilon \sigma=\epsilon \omega$ :
 $\theta \epsilon o \rho-$ from $\theta \epsilon \omega \rho-$ Cf. B. B. X, 282 ; cf. $\Lambda \epsilon v \tau v x i i_{\eta}, ~ H d t .{ }^{1}$ and


Note. - Greg. Corinth. p. 447, Gramm. Meerm. 654, August. 669, say that the Ionic form is $\delta \rho \tau \eta$, which appears in Hdt. ${ }^{2}$ That this statement is only partially true is evident from $\dot{\varepsilon} \circ \rho \tau \boldsymbol{n}$, Oropos $18_{34}$. That a prosthetic vowel should have the asper is irregular (cf. 'Eópros in Attic, Roberts, 52), hence Bury's attempt at etymologizing éopty has at least the vantage ground of ex-
 on the other hand is = vratid. Cf. B. B. XI, 333.

## 2. $\epsilon \sigma O$




 Kaibel 773. Cf. the Attic Maı $\iota \sigma a ́ \delta o v s, ~ B e c h t e l ~ N o . ~ 119, ~ 120 ; ~ M a \imath \rho \iota-~$
 though no reason may be adduced why in Sim. Amorg. єo should be written, but $\epsilon v$ in Hipponax. Tradition is worth but little in such cases, as $\epsilon v$ did not come into vogue at "the stroke of twelve." The open forms still hold their ground in the Ionic poets : $\pi \mathrm{o} \lambda \mathrm{vav}^{2}$ $\theta$ ө́os, Mimn. $2_{1}$; ä้ $\theta$ єos, Xenoph. $\mathbf{1}_{6}$. For a complete chronological list of $-\epsilon \sigma s,-\epsilon v s$, in the genitive of $\kappa \lambda \epsilon \epsilon \epsilon \sigma-$ stems, see under Declension.

In derivatives from $\theta \epsilon o s,{ }^{4}$ © $\Theta \circ-$, in $\Theta \epsilon о \phi \hat{\omega} \nu$, Thạsos $83_{5}$; - $[\kappa \lambda] i \delta \eta \rho$, Keos 44 B 6 ; -кv́ó $\eta$ s, Keos 46 ; - $\delta \omega \rho$ os, Thasos 77 B 8, Olbia 131,3 ,
 166, Theodosia 127 (Stephani's Compte Rendu, 1866, p. 128); $-\gamma \epsilon i \tau \omega \nu$, 'Teos 1591. $_{1}$ Cf. Jahrb. für Philol., Suppl. vol. V, 487 , No. 47,

 have $\Theta \epsilon v-$ ) ; - $\phi \rho \omega v$, Eryth. 206 C 1 I (cf. $\Theta \epsilon[\iota] o{ }^{\circ} \phi \rho \omega \nu$, Eryth. 206 C


[^39]Note 1.- In Attic we often find $\Theta \epsilon 0$ - in proper names in sixth, fifth, and fourth century inscriptions parallel to the same names in ©ov-. See K. Z. XXIX, 138 .

 reverse direction o is omitted in $\Theta \epsilon \kappa \lambda \lambda \delta \eta \delta^{19} 9_{209}$. See Baunack's Studien, I, 229.
$\Theta \epsilon v$ -
$-\mu \alpha \rho[\eta s] 16$ B 25 , Eretria ( $340-278$ ) ; - $\beta o v \lambda o s$, Naxos 28 ; - $\delta \omega \rho o s$, Delos 55, 3 30, Keos $169{ }_{5}$, Eryth. 206 B 42, Eryth. 207, Olbia 131 17, 21 , Teos 16r (also @єv- in Jahrb. für Phil. Suppl. IV, 478, No. 16; IV,
 Smyrna $153{ }_{28}$; - $\delta 0 \sigma$ í , Pantik. 119, 120, 122, Phanag. 165, 167, 168 ;

 Eryth. 206 A 26, an almost Attic inscription; -крıros, Eryth. 206 A
 Amorg. $7_{1}, \theta \epsilon o \hat{v} 7_{104}$, and elsewhere $\theta$ cós in poetry. Even in Attic: @єvסórıos, С. I. A. II, 445 C 16 (16o в.с.).
3. єino.
$\epsilon о<\epsilon \iota ⿱$ in verbal forms is generally contracted in old Ionic poetry, the contraction being written $\epsilon$. Mss. of the lyric poets vary between $\epsilon \boldsymbol{\sigma}$ and $\epsilon v$, the Attic ov sometimes having been brought in by the copyists. See under Conjugation for the parallelism of $\epsilon \boldsymbol{a}$ and $\epsilon v$ forms. All instances of $o v$ in Ionic documents must be regarded as foreign to the character of the dialect. $\epsilon \boldsymbol{\sigma}$ from $\bar{a} \iota \omega$ or $\eta \iota \omega$ verbs is a diphthong, as is $\epsilon \omega$, at least in the period of Ionic represented by the iambographers.
 verb $=$ Doric $\chi \rho$ ќo $\mu$ a is at least open to doubt.

In adjectival forms: -cos.
Hdt. र $\rho$ v́бєos; $\chi \rho v ́ \sigma \epsilon o v ~ I I 4 ~ E ~ 8, ~ Z e l e i a ; ~ W o o d, ~ D i s c o v . ~ a t ~ E p h e s u s, ~$ App. 6, No. 1; Aphrodisias 254, of the imperial period ; Olbia 129, 12 ; Latyschev, Inscr. antiq. orae septentr. Ponti Euxini, I, Nos. 50, 54, 57, 59, 61, 63, 64, 70 (after Christ).

This $\epsilon$ of late Roman times is a diphthong; in adj. of material the orthographically old form is preserved till the latest times ; cf. under $\mathrm{E}+\Omega$, $\mathrm{E}+\mathrm{OI}$.
$\chi^{\alpha} \lambda_{\kappa \epsilon о \nu}$, Samos 224, an inscription otherwise Hellenistic.
 $22 \mathrm{O}_{25}$ (despite $\chi \rho v \sigma^{\sigma} \sigma o v, 1.18$ ). The same inscription, dating from the
middle of the fourth century, has ádopoôs, 1. 23, -ov̂v, 1. 22, 30 (cf. Plato, Timaios, 68 C).
áфvєós, Theog. 188, 559, $\pi \lambda$ éos in Hdt. with some of the oblique case forms in $\pi \lambda \epsilon v$ (see $§ 88$, and Bredow, p. 154), $\boldsymbol{\epsilon} \pi \iota \tau \dot{q} \delta \epsilon o s, \dot{\epsilon} \pi \epsilon \in \tau \epsilon o s$,
 177.
 not beyond peradventure for ${ }^{*} \chi \rho \eta \neq o s$. If we assume $\chi \rho \eta$-七os, we have the ablaut $\chi \rho \alpha-$ in $\chi \rho a \tau \sigma \mu \epsilon \omega$.

Pronouns: $\epsilon \in \epsilon \hat{v}$, Mimn. 14 „, Archil. 92 ; $\mu \epsilon v$, Hipp. 62, Anakr. 76, 8ı; $\tau \epsilon v$, Archil. 11 о.
$\sigma o v$, found Hippon. 76, $\mu \boldsymbol{~}$ 83, $_{3}, \boldsymbol{\epsilon} \mu \boldsymbol{v}$, Arch. 111 , are Atticisms to be removed in favor of the forms in $\epsilon v$ or $\epsilon$. ov in Solon is correct.

$$
\text { 154. } \mathrm{H}+\mathrm{O} .
$$

$\eta o$ is sometimes preserved in Ionic when $f$ originally separated the two vowels. It is indifferent whether $\eta=$ I.E. $\bar{a}$ or $\bar{e}$. Such forms as do not show metathesis quantitatis are to be regarded as archaisms : $\lambda \eta{ }^{\prime} v$,
 (Hdt. and Attic $\mu \epsilon \tau \epsilon ́ \omega \rho o s)$; "A $\rho \eta o s$, Tyrt. I $_{7}$ ("A $\rho \eta o$, Arch. 48, according to Fick, for Bergk's $\left.{ }^{*} \mathrm{~A} \rho \epsilon \omega\right) .{ }^{2}$ On Fick's restoration 'Ióд $\quad$ os, etc., see § 30 . Elsewhere $\eta 0$, whether =I.E. $\bar{e} v o$ or $\bar{a} v o$, suffers change to $\epsilon \omega$ or $\epsilon$ ( $\epsilon v$ ) : Arch. $58_{4}, \pi \lambda \epsilon \epsilon \omega\left(\right.$ ?) ; Anakr. 94, $\pi \lambda \lambda^{\prime} \omega$; Hdt. $\pi \lambda \epsilon^{\prime} \rho^{\prime}\left(\pi \lambda \epsilon \sigma^{-}\right)$. It is not true that $\eta o<\bar{\alpha} o$ became only $\epsilon \omega$ in Ionic, and $\eta o=$ pan-Hellenic $\eta \boldsymbol{}$, only $\epsilon$.

$$
{ }^{5} 55 . \mathrm{E}+\Omega .
$$

The $\omega$ of the diphthong $\epsilon \omega$ from $\eta o$ probably did not contain two moras, as the $\epsilon$ on the other hand may have had greater weight than a simple vowel of a single mora. $\epsilon \omega$ in Ionic and Attic, when originating from $\eta o$, must be regarded as a diphthong with three moras, which in Ionic could become a diphthong with two moras ( $\epsilon$, $\epsilon v$ ) or finally a monophthong ( $\omega$ ). $\quad \epsilon \omega$ generally remains a diphthong in Ionic except when a vowel precedes. When a consonant stood originally before $\epsilon \omega$, the diphthong is only in rare cases contracted. In lyric poetry open $\epsilon \omega$ (and $\epsilon$ ) is an archaism.

[^40]$\epsilon \omega$ in Ionic comes into existence from $\eta o=$ I．E． $\bar{e} 0$ ，and from $\eta o=$ Aiolic and Doric $\bar{a} o$ ．As both $\eta o{ }^{\prime}$＇s become $\epsilon$ ，so may both appear under the form of $\epsilon \omega$ ．Cf．the remarks on $\mathbf{E}+\mathbf{O}$ ．On the retention in Ionic poetry of $\eta o$ where the later dialect adopts $\epsilon \omega$ or $\epsilon$ ，see under $\mathrm{H}+\mathrm{O}$ ．

I．$\epsilon \omega$ from $\eta_{f}$ ．
 in Hipponax is a survival．The change of $\bar{a}$ to $\eta$ precedes in time the metathesis quantitatis．$\pi \lambda \epsilon \epsilon \omega$ ，Anakr．94，and perhaps Arch．
 while Mimn． $12^{3}$ ，has the obsolescent＇ H ＇́s．
i $\epsilon \rho \rho^{\prime} \omega$ ，Olbia $128_{20,23,59}$ ，to which a new nominat．i $\epsilon \rho \epsilon \rho^{\prime} \omega \varsigma$ ，Miletos， $\mathrm{IOO}_{4}$ ，has been formed．$i \in \rho \epsilon \epsilon$ is the genitive of $i \in \rho \eta^{\prime} s$（Ark－Kypr．）． On the connection of stems in $-\eta$ and $-\eta v$ ，see Bechtel，G̈̈tt．Nachr． 1886， 378 ，Smyth，A．P．A． 18 ，p．79．A similar form is＂${ }^{*} \rho \rho \omega$ ，Archil．48， though there $\epsilon \omega$ represents the stage intermediate between $\epsilon \omega$ and $\omega$ ．

пódє $\omega$ s（occurrences under Declension），a genuine Ionic form， from $\pi$ ód $\eta o s$ ．Johansson，B．B．XV， 169 ，proposes to explain the $\epsilon \omega$ of $\pi$ ó入 $\lambda \omega$ s on the theory that if the accent fell upon a syllable pre－ ceding or following $\eta$ ，$\epsilon \omega$ and not $\omega$ ，is the result．Cf．Attic $\gamma \epsilon \omega-<$ $\gamma \eta(\iota) o$－in $\lambda \epsilon \pi \tau o ́ \gamma \epsilon \omega \varsigma, \gamma \epsilon \omega \mu \epsilon \tau \rho i ́ a$ ，Hdt．$\gamma \epsilon \omega \pi \epsilon i v \eta s, \gamma \epsilon \omega \rho v \chi \epsilon \omega, \gamma \epsilon \omega \pi \epsilon \delta o \nu$ （ $\gamma \eta \circ \chi$ ќ $\omega$ ，VII，190）．
$\epsilon \omega$ originates from $\epsilon \neq \omega$ ，not from $\eta_{f} 0, \eta_{F} \omega$ ，in $K \lambda \epsilon \omega v v \mu o s$ ，Smyrna
 A 38，Halik． 241 （§ 88）；Паvтa入́ $\omega v$ ，Iasos $104{ }_{50}$ ；К 183 A 7，etc．；ăv $\downarrow \boldsymbol{\nu} \epsilon \dot{\sigma} \sigma a \tau o$ ，Ephesos $147{ }_{7}$ ．
 $\theta \epsilon \omega \rho o ́ s$ ，Theog． 805 ，Samoth．236，from $\theta_{\eta \omega \rho o ́ s ~}^{<} \theta_{\eta}$ Fafopós．
$\epsilon \omega$ from $\eta_{\digamma} o$ ：$\eta_{f} \omega$ in
 Hippon． $43{ }_{4}<{ }^{*} \kappa v \kappa \hat{\eta} о \nu ; ~ \tau \epsilon \theta \nu \epsilon$ 白s，Theog． 1192.
$\omega$ from original $\eta_{F} \omega$ in
 is found Archil．114，to which Побє $\delta \delta^{\xi} \omega \nu$ is to be preferred（Herod． $\pi . \mu . \lambda .11,5$ ，Renner 190）．The long form，Archil．io ；Побıঠŋḯv，


2．$\epsilon \omega$ from $\eta(\sigma) \iota$ ．
The Ionic genitive in $-\epsilon \omega=$ Homeric $-\bar{\alpha} 0$ ，is represented on the Naxian inscription，No．23，by $\eta \mathrm{\eta}$（ $\Delta \epsilon \varepsilon \nu 0 \delta i \kappa \mathrm{HO}$ ），where HO is a diph－ thong，whose $\eta$ is not equivalent phonetically to Homeric $\bar{\alpha}$ ．
$-\epsilon \omega$ in the Ionic elegiac and iambic poets in a monosyllable: in Hdt. we have $\beta$ op' $\epsilon$ for $\beta$ op $\epsilon \epsilon \omega$, on which see under Declension.
$-\omega$ from $\epsilon \omega<\eta(\sigma) \iota 0$.
 ibid. $\mathrm{D}_{1}{ }_{7}$, are the result of the contraction of $\epsilon+\omega$ reduced from $\epsilon \epsilon \omega$. With 'A $\boldsymbol{i} i \omega$, cf. Havoaví $\omega$, Abdera $163_{16}$. 'These genitives, as Bechtel has shown (Ion. Insch. ıo9, B. B. X, 280 ff., cf. Declension), do not represent a different period of the dialect from those in $-\epsilon \omega$. Those in $-\epsilon \epsilon \omega$ are probably grammatical figments. Since upon the same inscription (e.g. 240) the forms in $-\epsilon \omega$ and $-\hat{\omega}$ occur, since $-\epsilon \omega$ is a diphthong, and finally, since the $\epsilon$ of the genitive had not disappeared from the Ionic genitive in the third century b.c., $-\epsilon \omega$ and $-\hat{\omega}$ must be mere graphical variations of one and the same ending. ${ }^{\prime} \mathrm{E}_{\rho \mu \boldsymbol{\prime}} \boldsymbol{i}^{\prime} \omega$, Chios 180, and 'A ${ }^{\prime} \boldsymbol{i} \epsilon \omega$, Olbia 131, i1, seem to owe their existence to the workings of analogy. Even Hdt. has 'E $\rho \mu{ }^{\prime} \epsilon \omega$ with his usual $-\epsilon \omega$.

 6 D 22 , we have the contraction. The genitives in $-\epsilon v$ from $-\epsilon \circ<-\epsilon \omega$ probably came first into existence when $-\epsilon \omega$ constituted the final syllable ; and $\epsilon v$ gradually forced its way into medial syllables ( $\theta \epsilon v \rho o i$, $\pi v \lambda \epsilon v \rho o ́ s)$. But see Brugmann, Gr.Gr. § 19.
$\epsilon \omega$ from $\eta \sigma \omega$.
$\epsilon \omega$ is diphthongal in the gen. pl. $\hat{A}$ declension. The occurrences of $-\epsilon \omega \nu,-\hat{\omega} \nu,-\epsilon \omega \nu$, are given under Decl. $\dot{\alpha} \lambda$ 日ON, Naxos 23 , I regard not as $=\eta o v$, as Fick takes it, B. B. XI, 268, but as $=\epsilon \omega \nu$, the H expressing the open quality of the $e$ sound (cf. Dittenberger, Hermes, XV, 229 ; Blass, Aussprache, ${ }^{3} 24$ ff.). There appears to be no warrant for deriving $-\epsilon \omega \nu$ from $-\eta o \nu$, attested at best in this single instance.

Note. - Attic - $\omega$ arises from - $\epsilon \omega$ (either from pan-Hellenic $\eta o$ or Attic-Ionic $\eta o$ ) when either $\epsilon$ or $\omega$ was tonic. Ionic resisted the operation of this law until
 have produced $\epsilon \boldsymbol{o}$ is entirely doubtful.
$\epsilon \omega$, $\epsilon \omega$, from $\epsilon \sigma \omega$.
$\epsilon^{\epsilon} \omega \dot{\omega}$, Amorg. 35, epigram, Mimn. 3 ; ${ }^{\epsilon} \epsilon^{\omega} v$, Xenoph. $2_{11}$. Adverbs
 963 ; $\nu \eta \lambda \epsilon \omega \hat{\omega}$, Anakr. $75_{2}$ ( $<\nu \eta \lambda \epsilon \epsilon \in \omega \varsigma$ ) ; ả $\sigma \phi a \lambda \epsilon \epsilon_{\omega}$ s, Archil. $58_{4}, 66_{4}$;


$\epsilon \omega, \underline{\epsilon} \omega$, from $\epsilon \sigma \omega$ in other forms.
$\theta \epsilon \hat{\omega} v$, Arch. tr. ${ }_{25}$, Mimn. ${ }_{4}, 9_{6}$, Xenoph. $\mathrm{I}_{24}$, Solon ${ }_{42}, \mathrm{I}_{33}$, but $\theta \epsilon \hat{\omega} v 13_{30}$, and Archil. $84_{2}$, Hipponax 30 A, Anakr. $6_{5_{4}}$. In the genitive plural of nouns of the sigmatic declension both $-\epsilon \omega v$ and

 $\dot{\sigma} \rho \underline{\epsilon} \boldsymbol{\epsilon} v$, Anakr. $2_{5}$.

## 3. $\epsilon \omega$ from $\eta_{\substack{\circ}}$.

$\delta \psi^{\prime} \epsilon \in \nu$ (———), Archil. 68, $\delta \psi^{\prime} \psi^{\prime} \omega v \tau a$, Anakr. 57, according to Fick (B. B. $\left.\mathrm{X},{ }^{265}\right)$, for $\delta \iota \psi \hat{\omega} \nu \tau \alpha$.
$\chi \rho^{\epsilon} \omega \mu a \iota$, the genuine Ionic form (whatever be made of Hdt.'s $\chi \rho^{\prime} \epsilon^{\prime}-$

 $\chi \rho \bar{\eta} \nu$, pronounce, $\chi \rho \hat{\eta} \sigma \theta a l$, interrogate an oracle, we have in Hdt.
 From $\sigma \mu \hat{\eta} \nu, \delta \alpha^{\prime} \sigma \mu \epsilon \epsilon \omega \tau \tau \epsilon$, II, 37 (Stein, Kallenberg, $-\sigma \mu \omega \hat{\nu \tau \epsilon \varsigma) \text {; hence }}$ ${ }^{\boldsymbol{\epsilon}} \xi^{\xi} \epsilon \sigma \mu \epsilon \omega v$, III, r48. If $\nu \hat{\eta} \nu$ is the Herodotean form, we would expect

$\epsilon \omega$ from $\epsilon_{\lambda} \omega$ in verbs: under the head of Contract Verbs are given the forms in $\epsilon \omega, \epsilon \omega, \omega$. Here too are to be classed participial nouns:



Adjectives denoting a material retain the uncontracted form until
 1479; रpvó' $\omega$, Latyschev, Inscr. antiq. orae septentr. Ponti Eux. I, No. 67, Wood, Discov. at Ephesus, App. 6, No. 1. But रpvó⿶凵, Mimn. $\mathrm{II}_{6}$, and one case of $-\hat{\omega}$, Latyschev, l.l. No. 57 . Adjectives in $-\lambda \epsilon \sigma$ with but a few exceptions fail to contract any form : à $\rho \gamma a \lambda \lambda^{\prime} \varphi$, Tyrt. $\mathbf{1 2}_{28}$. See § $130 b$. In the pronominal declension we find $\dot{\eta} \mu \epsilon^{\prime} \omega \nu, \dot{v} \mu \mu^{\prime} \omega v$; see Brugmann, Gr. Gr. § 96 .

Suffix - $\epsilon \omega \nu$ in $\alpha \nu \delta \rho \epsilon \epsilon \dot{\omega} \nu, \pi o \delta \epsilon \dot{\omega} \nu, \phi a \rho \epsilon \tau \rho \epsilon \omega \dot{\nu}$, etc., in Hdt.
$\epsilon \omega$ where no consonant intervened:
${ }^{\alpha} \phi \dot{\phi} \omega$, Hipponax 75 , from ${ }^{*} \dot{a} \phi \eta^{\prime} \omega$; cióé $\omega \sigma \tau v$, Halik. ${ }^{23} 8_{21}$, Demokr. 87 , whose $\epsilon \omega$ is diphthongal despite the absence of contraction, and is $=\epsilon i \delta \hat{\omega} \sigma \iota \nu$, Ephesos $147_{17}$ ( 300 b.c.). Cf. $\epsilon$ in $\gamma \epsilon \gamma \omega \nu \dot{\epsilon} \epsilon \nu \tau \epsilon \varsigma$, Chios ${ }_{174}$ B 12 . Original $\epsilon \omega$ becomes $\epsilon \omega$, e.g. in the subj. : $\delta o \kappa \epsilon \omega \sigma \iota v$, Sim.
 $220{ }_{22}$.
156. $\mathrm{H}+\mathrm{O}$.

The Ionic developed a pronounced objection to $\eta$ with following vowel. See above, on $\epsilon, \epsilon \omega$.

## 157. $\mathrm{H}+\Omega$.

$\eta \omega$ is preserved as an archaic form ; e.g. in ' ${ }^{\prime}{ }^{\prime} \omega$ 's, Mimn. $12_{3,10}$, and in Hdt. through the protection offered by $F$ ( ${ }^{\eta} \omega \dot{s}$ from *àvows, K. Z. XXX, 422, No. 2). On Archil. $83 \tilde{\epsilon} \omega \theta \epsilon \nu$, see Bartholomae, K. Z. XXIX, 522. Elsewhere $\mathrm{H}+(f, \iota, \sigma)+\Omega$ becomes $\epsilon \omega$, whether $\eta=$ $\bar{a}$ or pan-Hellenic $\eta$.

$$
\text { 158. } E+Y
$$

The elegy still preserves $\begin{gathered}\epsilon \\ \tilde{v} \\ \text {, if }\end{gathered}$ the possibility of reading $\cup \checkmark$ may
 $\mathrm{I}_{4}$; є́votє申ávov, Theog. 1339 ; cf. 548,574 ), while $\overline{\epsilon v}$ iṣ permitted (Archil. 19, Theog. 639, 845, etc.). Iambic poetry records $\overline{\boldsymbol{\epsilon v}}$ in $\epsilon v ̈ \phi \rho \omega v$, Sim. Amorg. $7{ }_{99}$, єv่ $\tau v \chi \epsilon \hat{\imath} 78$.

> 1. of

$$
\text { 159. } \mathrm{O}+\mathrm{A} .
$$

 vактоs, Нipp. 13 ; 'A $\rho \iota \sigma \tau \omega ́ v a \kappa т о s, ~ C h i o s ~ 17710 ; ~ ' Е \rho \mu \omega ิ \nu \alpha \xi, ~ I a s o s ~ 104 ~ 14, ~$
 81 B4; T $\mu \mu \omega \nu a \xi$, Thasos 75 B 4 . It seems not incredible that in most of these compound proper names the termination - $\omega \nu \alpha \xi$ is due to the influence of such names as $\Pi v \theta \hat{\omega} \nu \alpha \xi$ (which rests upon $\Pi \dot{v} \theta \omega v$ ); and that there seemed to be an echo of the vocative ${ }_{\omega}{ }^{\boldsymbol{\omega}} \alpha \boldsymbol{\xi} \xi$ in the names of the Ionian democrats. See Wackernagel, K. Z. XXIX, 143.
$\pi \rho \hat{\omega} \tau o s$ (perhaps from $\left.{ }^{*} \pi \rho \omega_{F} \alpha \tau o s\right)$, Keos $43{ }_{16}$, Styra $19{ }_{47}$; $\omega \sigma i$, Anakr. $\mathbf{2 1}_{4}$, ${ }^{*}$ ỏa $\tau \sigma \iota<$ Hom. ov̉aг-, ov̉ $\sigma \alpha \tau$-. See Schmidt's Neutra, P. 407.
 be a compound.
2. $\sigma \sigma \breve{a}$
$=\omega$ in какі́ $\omega$, Archil. $6_{4}$; крє́ $\sigma \sigma \omega$, Anan. $3{ }_{3}$; $\dot{\alpha} \mu \epsilon i v \omega$, Theog. 409
 etc., as well as the $\nu$ forms. Hdt. ai $\delta \hat{\omega}, \mathrm{I}, 8$ (Greg. Corinth. $\S 35$, says aiooov̂v is Ionic) ; $\vec{\eta} \hat{\omega}$, Hdt. $\mathrm{II}_{8}$.
3. Crasis (cf. Greg. Corinth. § 29) : $\tau \dot{\omega} \rho \chi \alpha \hat{\iota} o v$, $\omega_{\nu} \eta \rho, \tau \ddot{\omega} \gamma a \lambda \mu \alpha$, etc., in Hdt. render $\dot{a} \mu$, Thasos 68 A , very noticeable, if Fick ( $G . G . A$. 1883, 126) is correct in regarding it as $=\stackrel{\circ}{0} \ddot{a} \mu . \quad o+\alpha$ results in $\alpha$ in Elean, Argolic, Korinthian, and in other Doric dialects. In Attic we find $\alpha$ in 'A $\theta \eta \nu a i o s, ~ \tau \alpha ̈ \gamma \alpha \lambda \mu a$, Mitth. III, p. 230, 5 (before 343 в.c.),
 by Kirchhoff, $\left.\tau \hat{v}(\dot{a}) \gamma^{-}\right)$. The parallelism of Attic and Ionic makes
 Abu-Simbel (Roberts I30) cannot be introduced in evidence, since the name is not that of an Ionian. Absence of crasis is frequent


 Amphip. ${ }_{10}{ }_{13}$, Eretria ${ }_{15}{ }_{15}$, Milet. 98, тov̂ 'Aфváócos, Halik. ${ }_{23} 8_{4}$. With $\tau \dot{\alpha} \pi \dot{\sigma} \dot{\partial} \lambda \lambda \omega \nu[o s]$, Naukratis, Roberts $\mathrm{I}_{2} \mathrm{G}$; cf. $\ddot{\alpha} \mu$ above.

$$
\text { 160. } \mathrm{O}+\widehat{\mathrm{A}} .
$$

In accus. pl. of $\widehat{\mathbf{A}}$ stems $o+\bar{a}<a v$ remains uncontracted.

$$
\text { 161. } \Omega+\mathrm{A} .
$$

$\Sigma \bar{\omega} v \delta \rho o s$, Amorg. 32 rather from $<\sigma \omega v=\sigma \omega$ before vowels (Spitzer,
 $\eta^{\eta} \rho \omega a$. ' $\Omega \rho i \omega v$, Miletos 93 (Pindar ' $\Omega a \rho i \omega v a$ ) and in Homer, though Nauck proposes to substitute ' $\Omega a \rho i \omega \nu$ - for ' $\Omega \rho \bar{\rho} \omega \nu$-. Cf. Menrad, p. I3.
 Miletos 96, 97, Naukratis 139 B $=$ Roberts 132 ter.; $\tau \omega ้ \tau \tau \kappa v \eta \dot{\mu} \mu \nu \nu$, Hippon. $49{ }_{6}$; $\tau \hat{\omega} \iota$ 'A $\pi o \lambda \lambda[\omega \nu i ́] \omega$, Mil. 93 and Halik. $238_{45}$, an inscription that refuses to follow the crasis laws.

$$
\text { 162. } \mathrm{O}+\mathrm{E} .
$$





 contraction in forms of -ots, i.e. o+ spurious $\epsilon t$; see § 179.

In the compound $\tau \epsilon(\sigma) \sigma \epsilon \rho a к a \iota \epsilon \delta \circ[\mu \eta]$ ooovтoúr $\eta s$, Paros 58 , of ${ }_{\sigma}$ is contracted, and in the adjectival and participial formations: Teixi-





[^41]The concurrence of a stem in $\epsilon / \%$ and of - $\epsilon \rho \gamma 0$ or $-f \epsilon \tau \tau-$, as the latter member of a compound, is dealt with in the dialects in different ways. The original ablaut form, -foopós, gave way at an early
 Studien, VIII, 213 , § 20, 2 i, A. P. A. XVIII, 95, 158, Meister, II, 4I, Bennett 28 ff .
I. The vowels are uncontracted.
 76 ; $\mathrm{\Sigma}] \in \lambda \iota \nu^{\prime} \in \nu \tau[1]$, Megara C. D. I. 3045 A B $_{9}$; 'O $\pi o ́ \epsilon \nu \tau \iota$, Lokris C. D. I. 1478 B 33 .
II. The vowels are contracted.
(A) $o+\epsilon$ becomes ov.

 rins, Luk. Syr. 34 ; $\mu$ ovaovprins, Astr. ıо, vit. auct. 3 ; $\lambda$ etrovproí,

 the Delian Apollo (B. C. H. VI, $29=$ Ditt. Syll. 367), are too late ( $185-180$ в.c.) to be placed in evidence. So too in North Greek, סapoovpós, Phokis (Ditt. Syll. 294 ${ }^{39}$ ), of the second century and Argolic, l.l. $3^{889} 96$ Kameiros in Rhodes, Revue Arch. XIV, 333, No. 59 ; Lokris, 'Oтov́vtoo C. D. I. 1503, 1504 A B, 1505, 1509 B,
 (so Bechtel edits, but in his note suggests $\Sigma_{\epsilon \lambda \iota v o v \tau-) . ~ T h e ~ M e g a r i a n ~}^{\text {I }}$ dialect contracted $o+\epsilon$ to $o v$ even in an early period (the inscription is written $\beta$ ova $\tau \rho \circ \neq \eta \delta o ́ v)$.
(B) $o+\epsilon$ becomes $\omega$ according to some scholars (Roehl, G. Meyer, Blass) where syllabic hyphaeresis is preferable. $\omega$ is however certain in : $\mathfrak{\alpha} \mu \pi \epsilon \lambda \omega \rho \gamma \iota \kappa \alpha ́$, Herakl. Tables II, 43; T $\epsilon \lambda \phi \hat{\omega} \sigma \sigma a$, a spring in Boiotia, Ahrens I, 173.

Note. - Contraction to $\epsilon \nu$ has been assumed on the strength of Kapıкєирү́є́о, Anakr. 91, as written by Bergk for Strabo's Kapıкоєpr-. This contraction belongs in the same class as $\bar{\epsilon} \boldsymbol{\delta} \boldsymbol{\kappa} \alpha \boldsymbol{i} \epsilon \nu \nu$ with hyper-Ionic $\epsilon v$.
III. One of the vowels is lost either by syllabic hyphaeresis, or by the lightening of $-f \omega \rho \gamma-$ to $-f o \rho \gamma-\bar{o} \nu \tau$ to -ovi (never to $-\epsilon \nu \tau)$.
(A) $\epsilon$ is expelled in $\dot{\alpha} \lambda o \rho \gamma \dot{\eta} v$, Samos $220_{15,16,19}, \dot{\alpha} \lambda o \rho \gamma \alpha \dot{\alpha}^{2} 20_{36}, \dot{a} \lambda o \rho-$
 $220_{22}$ (cf. Rhein. Mus. XXII, 313) ; ipopyíat, the reading of $A B C$ in Hdt. V, 83. In the other dialects we find $\delta a \mu$ opyós, Andania,

Cauer 47 nit, first century ; Megara Mitth. VIII, i9r, No. 5 ; Aigosthenai, Cauer $\mathrm{IO}_{19}$ (III, C) ; Knidos, Cauer $166_{7}$ (I, C) ; Kameiros, Cauer 1871 (conj.) ; ${ }^{1}$ Astypalaia, B. C. H. VIII, 26 B 7, 8 ; Telos, Cauer 1692 ; Argos, Cauer 48 (conj.) (V, C) ; Arkadia, C. D. I. 11819 (III, C), B. C. H. VII, 488, Mitth. VI, 3043,9; Achaia (Ditt. Syll. 182 ${ }_{13}$ (II, C), $242_{21}$ (II, C), B. C. H. II, 97 l. 16; Lokrian, C. D. I. $1476_{2.3}$; Oianthea, C. D. I. 1479 B 15 (V, C), r 48 o (V, C), Pamphylia, C. D. I. 1260 (late), 1261 (late). Also in 'O ${ }^{\text {óvertoo }}$ in Krete, C. I. G. ${ }^{25543}$, 'O] $\pi o v \tau i \omega v$, C. D. I. 1478 A ri, cf. 14 (V, C)
 vóvios, as Bechtel proposes to read C. D. I. 3044, Megara, instead of -ovvtıos.
(B) $o$ is expelled.

סamı $\rho \gamma$ ós, Nisyros, Ditt. Syll. No. 195 (about 200 b.c.) ; $\lambda \iota v \epsilon \rho \gamma \eta^{\prime} s$, Lykophr. 716. Both are doubtless, due to the influence of ${ }^{\epsilon} \rho \gamma o v$. Cf. § 20.

In infinitives of $-o \omega$ verbs $o+f^{\epsilon \nu}$ (or $\sigma \epsilon \nu$ ) or o+ spurious $\epsilon \ell$, has invariably yielded ov. ópкôv, Halik. ${ }_{2} 8_{20} ; \beta \varepsilon \beta a \iota o ̂ v \nu 240_{4,5}$; also $o+f^{\epsilon \nu}=o v$ as in $\delta o \hat{v}(\nu) \dot{\alpha} \iota$, Priene $144{ }_{8}$; $\delta \iota \delta o v ̂ v$, Oropos $18{ }_{21,33}$, Tha-
 after Plato. We should expect $\hat{\rho} \not \subset \hat{\omega} \nu$ in Hdt.
2. $\sigma \sigma \epsilon$

Becomes ov regularly ; e.g. $\mu$ éovs, Xenoph. ${ }_{34}$; ả áivovs V, 78 , $\pi \lambda$ 'िovs II, $^{\prime} 8,120$, are the only contracted forms in Hdt. of the nom. pl. of these comparatives.

## 3. one.

In verbs in -ow, oce invariably becomes ov. See under Conjugation.
4. Crasis: oc suffers contraction when no spirant intervenes. In lyric poetry : $\pi \rho$ оєк $\pi o v \hat{\eta}$, Sim. Amorg. $22_{1} ; \pi \rho o v ̈ \theta \eta \kappa \epsilon$, Arch. tr. 38 ; $\pi \rho o v ̃ \pi \tau \nu \epsilon v$, Hippon. tr. 393 , $\pi \rho$ оv̈ $\delta \omega \kappa \alpha$, Theog. 529 ; not contracted in the Ionic of Hdt. Lukian Syr. 24, Hippokr. ep. 17 ${ }_{34}$, have $\pi \rho o v^{-}$; but Arrian Ind. 19, 22, 34, Euseb. Mynd. 21, 41, Epist. Hipp. 2719 ,



 $\tau \epsilon \circ \varsigma$, Prokon. 103 ; oั้vєк', Sol. tr. 37 s, Theog. 854, $\mathrm{r}_{349}$; тойvєка, Theog. 488 ; тoṽvєкєv, Xenoph. ${ }_{19}$; тойvєка, Luk. Syr. 33, 39, 54. This ov is not a diphthong. Aphaeresis in $\pi о \tau a \mu o \hat{v}$ ' $\pi a v v^{\prime} \rho \chi о \mu a l$, Anakr. 23.
${ }^{1}$ For $\delta a \mu \mathrm{O}$ ОГ $\check{n} \sigma a s$.

1. of $\eta$.

$$
163 . O+H
$$

 когта (Eustath. Il. $288=218$ ), through influence of óкт $\dot{\omega}$. See § 76.
 the Mss. Homer has $\beta \dot{\omega} \dot{\sigma} \alpha \nu \tau \iota$, Anakr. 60 , $\dot{\epsilon} \pi i \not \beta \omega \tau o v$. That the contraction is not thoroughgoing is evident from Anakr. $\mathbf{1 0 0}_{2}, \dot{\epsilon} \beta \dot{\beta} \eta \sigma \epsilon$.
 218 ) ; $\nu \omega \sigma \alpha ́ \mu \epsilon \nu о \varsigma$, Theog. 1298 ; $\nu \epsilon \nu \omega \mu \in ́ v o s$, Anakr. ıо ; $\nu \omega \sigma \sigma \nu \tau \alpha \iota$, Sim. Amorg. $\mathrm{I}_{17}$ (conj.). This contraction is sporadic ( $\pi \rho o v o \eta \sigma \sigma a s$, Sol. $\mathbf{1}_{66}$, vo $\hat{\sigma} \sigma \alpha 1_{16}$, and often in Hdt.). of $\eta$ is retained in $\dot{\alpha} \theta \rho o ́ \eta v$, Arch. 35 , etc.

There seems to be no ground for the contention that $\beta \hat{\omega} \sigma a l$ and $\dot{\epsilon} \nu \nu \omega ́ \sigma a s$ do not stand for $\beta o \hat{\eta} \sigma a \iota$, etc., but are comparable to Homeric and Herodotean $\zeta \dot{\omega} \omega$ and have themes ending in $\omega$.

Note. - $\beta$ o $\eta^{\prime} \theta^{\prime} \omega$ (or -ó $\omega$ ?), in Aiolic $\bar{\epsilon} \beta \bar{\alpha} \theta o ́ \eta$, is not paralleled by an Ionic $\beta \omega \theta$. Hdt. has $\beta o \eta \theta^{\prime} \epsilon$, and so $\beta o \eta \theta \dot{\eta} \sigma \omega$ in Eryth. $204_{15}$.

## 2. $o \underset{n}{ } \eta$.

Contracted in $\dot{\alpha} \lambda \lambda \lambda^{\prime} \gamma^{\prime} \dot{\omega} \sigma a s$, Hdt. I, 85, perhaps through influence of $\dot{a} \gamma \nu \dot{\omega} \mu \omega \nu, \stackrel{a}{\alpha} \gamma \nu \omega \mu \sigma \sigma v v^{2} \eta . \quad \mu \iota \sigma \theta \hat{\omega} \tau o \nu<\mu \iota \sigma \theta o ́ \eta \tau \sigma \nu ; ~ \mu \iota \sigma \theta o ́ \eta \iota=\mu \iota \sigma \theta o \hat{\imath}$. Hdt. uses neither $\delta \iota \pi \lambda o ́ \eta$ nor $\delta \iota \pi \lambda \hat{\eta}$, but Hippokrates has $\delta \iota \pi \lambda o ́ \eta$ as a substantive.
$\omega_{F} \epsilon$. 164. $\Omega+\mathrm{E}$.
 though many Mss. omit the iota) ; Hesychios quotes $\omega^{\omega} \beta \epsilon o \nu$ as Argolic.

Aphaeresis in $\omega^{\prime}$ ' $\alpha a \hat{\imath} \rho \epsilon$, Arch. tetr. 85.

$$
165 . \mathrm{O}+\mathrm{I}
$$

1. oft
 65 ; and so we generally read in Ionic prosaists. oc in oiцvpóv, Sim. Amorg. 750 ; $\tau \rho \iota \sigma o \iota \zeta$ úp $\nu$, Archil. 129 ; i.e. about 700 oï could become $\bar{\sigma}$.
oíl vós, not ót $\omega \nu$ ós, Theog. 545, Solon 13, 56, Hdt. ốt $\omega<$ ỏf $_{\iota}^{\iota} \omega$, from öfıs, bird, which lies at the base of oi $\omega v o{ }^{\prime} s$ (Hintner, $K . Z$. XXVII, 607), is not found in Ionic outside of Homer.
ois : monosyllabic nouns that contain a diphthong, separated originally by $f$, are in Homer generally dissyllabic in the nominative and accusative cases, but refuse to admit the diaeresis in the oblique
cases. This holds good in Ionic poetry as late as the sixth century, at least, in the case of $\pi$ aîs. ö́s oolcs, ôl $\boldsymbol{v}$ ôcs, are the rule in Homer; but in the other cases both oï and $\bar{o}$ occur. For the later Ionic it is difficult to say which form should have the preference, on account of the paucity of poetical forms. ôios is a conjecture, Anan. 5 6, for oios; otherwise we have no evidence. Stein (Preface, liii) maintains that ôis, oleos, are the correct Herodotean forms, while Bredow (p. 173)
 form of the fifth century, it is difficult to see why Bechtel's oiv, Thasos 68 A , is not correct.
öïrós is written in Hdt. by Bredow and Stein ; $\Lambda \eta$ qooì̀ $\eta$ s, Theog. II20; ä $\theta \rho 0$ oíSoual, Archil. 60, 104.
2. ote.
 (Makedonian period). Ionic $\pi \rho o t \xi$, Et. Mag. $495{ }_{32}$, a form found in the spurious Hipponaktian fragment, 72. ${ }^{1}$

## 3. oбt.

ai̊ó $\eta \nu$, Epigr. adesp. 264 ; aiooôos, Archil. 631 .

$$
\text { 166. } \Omega+\mathrm{I} \text {. }
$$

Except in suffix syllables ( $-\omega$ öos-), $\omega$ before $\iota$ is preserved as an archaism in the earlier phases of Ionic poetry by the echo of the lost $f$, as in
$\lambda \omega i ̂ \omega \nu$, Sim. Amorg. 730 ; $\lambda \omega$ íiov, Theog. 424, 690, as in Homer ;


 stance of the open form (cf. $\ddot{\omega} \epsilon o v$ in Sim.), elsewhere $\zeta \hat{\varphi} o v$, as in Hdt.
 Renner 186, Hipponax 59 ; Bergk, $\phi \hat{\omega} \delta a s . ~ P e r h a p s ~ w e ~ s h o u l d ~$
 inscriptions.

Adjectives in -шïos: $\pi a \tau \rho \omega ́ i ̈ o s$, Greg. Corinth. p. 441, Theog. $5^{21}$,
 so often in Mss. of Hdt. though wï appears to be genuine Ionic


 (Germ. ed.), Fick, B. B. VIII, 330.
as $\pi \rho \omega i$, IX, roi. From the Mss. of Hdt. it is impossible to determine beyond any doubt whether -wïos or -wos was the actual form. Most editors write the forms as given above, while for $\underset{\underset{\omega}{\omega}}{ }$ a preference may be made out in the case of $\dot{\eta} \hat{\omega} o s(=\dot{\eta} 0 i o s)$, a poetical word used
 థờv.

$$
167 . I+E
$$

 the Mss. of Hdt. have $\tau \epsilon$ in the majority of instances, but $\bar{i}$ in some cases without any variant. Hekataios, 284, has ipós. The latter derives a weak support from Greg. Corinth. (§66), who states that $\iota \epsilon=\bar{\iota}$ in Ionic, but quotes $i \in \rho \epsilon \in x$ in $\S 67$. The text of Herodotos, in reproducing the occurrence of both Homeric forms, cannot per se be held to guide us to the genuine Ionic form in use in the fifth century. The testimony of the poets is without great weight: Sim. Amorg. $7_{56}$, ipá with v. l. iєpá; 242 i $\rho \omega \sigma \tau i ́$ (conj.) ; Anan. $\mathbf{I}_{3} i \in \rho \omega \bar{\nu}$; (a very obstinate passage), Archil. i $\epsilon \rho-18$, Solon $4_{12}$, Theog. $545 \cdot$ In the inscriptions we find but few cases of ipo-, but these occur in the three geographical divisions of Ionic: ' ${ }^{\prime} \rho \rho \mu \nu \eta \eta^{\prime} \mu \omega \nu$, Abdera 1637 ,
 a sure proof that $i_{\rho \rho}$ is Ionic ; IHPON $=i \rho o v^{\prime}$, Thasos 70 , ípóv $7 \mathrm{I}_{9}$,


500-400 b.c.: Eretr. 1514,19 , Oropos 18 ( 18 times), Miletos $\mathrm{IOO}_{4,6,7}$, Amorgos 230, Halik. $2_{3} 8_{3,36}$.

400-300 b.c.: Keos 48 ; Thasos $7 \mathrm{I}_{7}$ (also ípo-) ; Miletos 102, 2 ;
 Ephesos $1_{47}{ }_{14}$; Eryth. 201 ${ }_{5,24}, 204{ }_{23,32,33}$; Samos $221_{37}$; Mylasa 248 B 8, C 4, 8, Chios, B. P. W. 1889, p. 1195, l. 20.

300-200 b.c.: Thasos $7^{2}$ 10, 11, 14 ; Olbia 128 ; Eryth. 206 very many forms. In still later times: Ephesos 150 (Hadrian), Teos $\mathrm{I}_{5} 8_{15,16,22 \cdot}$

From this evidence we cannot but conclude that both forms existed contemporaneously in Ionic, and that it is in vain that we attempt to draw a sharp line between them. As long as the only form that we have from Chalkidian has $i$, and as long as the genuineness of the Thasian and the Abderite $i$ is unassailed, it is beyond the lines of sound argument to hold with Fritsch that ipós in Herodotos is borrowed from

[^42]the epic, and that ipós in Homer is Aiolic. If evidence of inscriptions and Mss. is to be taken for anything, Hdt. used both forms as he used кєivos and èккєivos.

The pseudo-Ionists fluctuate to such a degree that their testimony can scarcely be brought into court. There appears to be a slight predominance of the open form, which is the sole form in the Vita Hom.
Whether ${ }^{\imath} \rho \eta \eta$ is contracted from ${ }^{i} \epsilon \in a \xi$, or whether ${ }^{\imath} \rho \eta \xi$ is the older form, is still uncertain.

Note. - The explanation of ipós from *icoós is shattered by the Aiolic ípos; ívoós would have become, and remained, in that dialect, íppos.
168. I + H.
$\pi o \lambda i ́ \tau \eta s$ is of course not contracted from $\pi 0 \lambda \iota \eta \eta_{\eta} \eta s$, as was formerly held ; a view as incorrect as that of the pleonasm of the $\eta$ (Bekker, Anecd. II, 524). ${ }^{\iota} \boldsymbol{f} \eta$ in $\mu \in \lambda \iota \eta^{\delta} \eta \eta s$, etc.

$$
\text { 169. } \mathrm{Y}+\mathrm{I} .
$$

$v i \bar{i}$ in the dative of $v$ stems, occasionally $v \hat{\imath}$ (invî, Theog. 961 ), as Homeric ơo乡vi. vi also in $\pi 0 \lambda v v \delta \rho \epsilon \epsilon_{i}^{\prime} \eta \tau v$, Theog. 703 , etc.
III. Combination of Vowels and Diphthongs, and Diphthongs and Diphthongs (crasis).

The combinations of vowels and diphthongs will be treated in the following order:-

| $a+a l$, | $a+\epsilon l$ | $a+o l$, | $a+a v$, | $a+\epsilon v$, | $a+o v$. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\epsilon+a l$, | $\epsilon+\epsilon$, | etc. | etc. | etc. | etc. |
| $o+a l$, | $o+\epsilon$, |  |  |  |  |
| $\eta+a l$, | $\eta+\epsilon$, |  |  |  |  |
| $\omega+\alpha l$, | $\omega+\epsilon$, |  |  |  |  |

Combinations of $a \iota+\alpha \iota$, $a \iota+\alpha v$, etc., are placed under the head of $a+a \boldsymbol{l}$, etc. $\eta \iota, \omega \iota$, have been classed under the head of $\eta, \omega$, above § 127.
170. A + AI.
$a \iota+a \iota=a \iota$ in каïєтós, Arch. ep. 86 (v. l. кaì aiєєós).

$$
17 \mathrm{I} . \mathrm{A}+\mathrm{EI} .
$$

1. $\alpha_{f} \epsilon \iota$. A. Genuine $\epsilon \iota$.

 come $\breve{a}+\breve{\imath}$; but that $\breve{a}+\breve{\iota}$ ( $\dot{\alpha}_{f} \iota \kappa \eta$ j) may remain open or be contracted, as in aiкı乡оi $\mu \in \theta a$, Sim. Amorg. $\mathrm{I}_{24}$, which cannot be derived from $\dot{\alpha} \epsilon \epsilon$-. The presence of this shorter form and the composition
 'Theog. i344, may be a parallel form to áєєкє́ $\lambda \iota o s$ (cf. Smyth, A. J. P.

$\dot{\alpha} \in i ́ \delta \omega$, Hdt., Arch. tetr. 57 , Anakr. $65_{3}$, Sol. $20_{3}$, Theog. 533, 939 (Schneid., Mss. $\underset{\sim}{u} \delta-$ ), ro65, etc. $a+$ genuine $\epsilon \iota$ when contracted can yield only $\bar{a}$, never $\bar{\alpha}$ : Archil. $123(\underset{a}{a} \delta \omega \nu)$, Anakr. $452 \underset{\alpha}{a} \delta \omega \omega$, Theog.
 is as old in Ionic as that of $\alpha+$ spurious $\epsilon \iota(\bar{a})$. $\dot{\alpha} \epsilon^{\prime} \delta \omega$ in Hdt. is perhaps due to the $\mu \epsilon \tau \alpha \chi \alpha \rho a \kappa \tau \eta \rho \iota \sigma \mu o$ s, which affected archaic forms. Lukian has the open form in every case. So too $\epsilon \in \pi \alpha \ddot{i} \omega$ in Hdt. (III, 29) should give place to $\dot{\epsilon} \pi \underset{\substack{\alpha}}{ } \omega$. Herakl. 73 has still the older form according to Bywater. See Schulze, K. Z. XXIX, 253 ff.
B. $a+$ spurious $\epsilon \iota$ either remains open or is contracted in Ionic to $\bar{\alpha}$. Ignorance of this fact has led to great confusion in the minds of dialectologists and editors of Herodotos as to the propriety of admitting ail $\rho \omega$ into the text of the lyric poets and of Herodotos. Homer has both $\dot{\alpha} \epsilon i \rho \omega$ and $\alpha \ddot{\imath} \rho \omega$, and both forms must be accepted as genuine Ionic. That the Mss. of Hdt. prefer $\dot{\alpha} \epsilon i \rho \omega$ to $\alpha \ddot{\imath} \rho \omega$, and that $\dot{\alpha} \epsilon \dot{\epsilon} \hat{\delta} \omega$ and $\dot{\alpha} \epsilon \iota \kappa \eta \dot{\eta}$ are always read in the text of the historian, have led Dindorf and Stein to adopt $\dot{\alpha} \epsilon i \rho \omega$, though its $\epsilon \iota$ has nothing in common with that of $\dot{\alpha} \varepsilon \dot{\imath} \delta \omega$ or $\dot{\alpha} \epsilon \iota \kappa \eta \dot{\eta}$. $\dot{\alpha} \epsilon i \rho \omega$ is attested as follows: Archil. 94, $\pi \alpha \rho \eta$ 白є $\rho$; Luk. d. d. S. § 36, 52, Astr. 1 1, Abydenos 5, Euseb. Mynd. 9, 33, have aєt, and so Aretaios, 216, 224, 132, 265

 found in Hippokrates $\Pi \mathrm{K}, 165,413$, EI, 178 ; є่ $\boldsymbol{\pi} \hat{\eta} \rho \tau \alpha \iota, ~ \Pi К, ~ 294 ; ~$

$\dot{\alpha} \in i \rho \omega$ and ail $\rho \omega$ are to be separated, so far as their genesis is con-

[^43]cerned, the former representing $\dot{\alpha}-f \epsilon \rho-\stackrel{\iota}{2} \omega$, the latter $f_{0}^{r-\iota \omega}$ (Brugmann, K.Z. XXVII 197 ; Solmsen, K. Z. XXIX 355). In Attic aip $\rho$ got the upper hand. Though the desire to rescue open forms for Herodotean Ionic, and to exclude contract forms, has led to the exclusion of ail $\rho \omega$, the genuine interrelation of the forms offers no obstacle to its acceptation. Whether or not it has been inserted by copyists on the strength of the Homeric form, is another question. It is, however, probable that both forms have a claim to existence in the Ionic dialect of the fifth century.
$a+\epsilon \iota$ uncontracted in סacís, Solon, $\mathrm{I}_{3}{ }_{50}$, and Ká $\epsilon \rho \rho a, \Delta 142$ and Hdt., the masculine form of which is derived from Кӑ ${ }^{\prime} \rho$ К $К \check{\epsilon} \rho o ́ s, ~ e t c . ~$ (Lugebil, B. B. X, 303). $a+$ spurious $\epsilon \iota=\bar{a}$ in Attic $\phi$ avós (Lukian фativoual, Syr. 32), in Hom. Att. סavós, and perhaps in infinitives in $-\alpha ̂ \nu$; see § 179.
2. alıct ( $\epsilon$ genuine) $=\bar{\alpha}$ in $\tau \iota \mu \hat{a}$ (Doric $\tau \iota \hat{\eta})$.
$$
\text { 172. } \mathrm{A}+\mathrm{OI} .
$$
 Hdt., Theog. 25I, 791 ; áoíк $\eta$ тos, Hdt.

Contraction ensues in $\dot{\psi} \dot{\phi} \dot{\eta}$, Sol. $\mathrm{I}_{2}$, Hippokr. AAL, ${ }^{2} 3$, EI, 186, as Hymn V, 495 ; $\dot{\rho} a \psi \omega \delta$ ós, Bechtel 260, found at Dodona, but ultimate provenance unknown. Crasis of $a+o$ omitted, e.g. $\tau \grave{\alpha}$ oik $[i] a$, Halik. $238_{25}$.
$\mathrm{AI}+\mathrm{OI}$ in ко $[i] \nu o \pi i \delta \eta s$, Chios, 174 C 22, Blass, others, $\kappa^{\prime} \mathrm{O}[i] \nu 0-$ $\pi i \grave{\partial} \eta \mathrm{~s}$; каì оікішv, Halik. 23829 .

$$
\text { 173. } \mathrm{A}+\mathrm{AY} .
$$

Crasis in rà̉vá, Eryth. $2004^{23}$, and in Hdt., but many cases of $\tau \grave{\alpha}$ av̉rá in Hdt., e.g. IV, i14. So Miletos $10{ }_{4}$; Zeleia 11327 .
 Sim. Amorg. $\mathrm{I}_{19}$; кav̉rós, Teos ${ }_{15} 8_{15}$; but several cases of кai aủrós in Teos 156 A and B and Amphipolis io.

$$
\text { 174. } \mathrm{A}+\mathrm{OY} .
$$

$\tau \iota \mu \hat{\omega} \sigma \iota$, Ionic-Attic (ov spurious).
AI + OY: койк, Theog. 1342 ; Sol. 1360 ; Hippon. tetr. 83 ; коі̛voнáкдитov, Sim. Amorg. 787 ; see § 120, note 2.

## 175. $\mathrm{E}+\mathrm{AI}$.

$\epsilon(f) a \iota$ in K $\lambda$ єaivєтos, Naukratis 139 C ; $[\sigma v \gamma] \chi^{\epsilon} \alpha \iota$, Halik. $238_{33}$.
$\epsilon(\sigma) a \iota$ in Hdt. is not contracted in verbs in $-\epsilon \omega$. Theog. $25^{2}$ has є̈ $\sigma \sigma \eta$. $\epsilon a \iota$ for $\epsilon \epsilon \alpha \iota$ in Hdt. (Studien VI, 128 ), $\delta \iota \nu \epsilon ́ \alpha \iota$, Anakr. 12 B, from $\delta \iota \nu \epsilon \in \epsilon a l$. Is $\delta \iota \nu \epsilon \in \eta \iota$ correct here? I have not observed an instance of 2 pers. sing. pres. mid. (Attic $\beta$ ov́ $\lambda \epsilon \iota$ after 378 b.c.).
$\epsilon \iota a \iota$ in adj., even those denoting a material, $=a \iota: ~ \lambda \iota \nu \alpha \hat{\imath}$, Samos $\mathbf{2 2 O}_{21}$; ảp $\gamma v \rho \hat{a} \iota$, Latyschev, Inscr. orae septentr. Ponti Euxini, I, No.


$$
{ }^{176 .} \mathrm{E}+\mathrm{EI} .
$$

1. $\epsilon_{f} \epsilon \iota$ remains open in $\rho \in \epsilon \epsilon \iota$, Mimn. $5_{1}, \pi \lambda \epsilon \epsilon \epsilon \iota \pi \lambda \epsilon \epsilon \iota \nu$, Hdt. ; is contracted in $\delta \in i$, Hippon. 6, Anakr. 98, Teos, $158{ }_{8}$. Hdt. has єїкобє and not the epic $\epsilon$ єíкобь, as Xenoph. 7. $\quad \epsilon+$ spurious $\epsilon \iota=\epsilon \iota$ in K $\boldsymbol{\lambda} \mathbf{E}$ -
 98 ; K $\lambda \epsilon$ civavóos, Thas. (L.), $16_{5}$; к $\lambda \epsilon \iota \nu o ́ s$ in Solon, $19{ }_{3}$.
2. $\epsilon_{\ell} \epsilon \iota$ is found in the open forms in Herodotos, e.g. סокє́єє, סокє́єєข, in direct opposition to the language of the inscription (see - $\epsilon \omega$ verbs). The only examples in poetry are кєртонє́єєข, Arch. 64 ; $\phi \iota \lambda$ éєєv 8o, Sim. Amorg. סокє́єє $I_{9}$, where the metre in each case calls for $-\epsilon \hat{\imath}$ or $-\epsilon \in \epsilon$.


$$
177 . \mathrm{E}+\mathrm{OI}
$$


2. єбou in $\theta$ єoí (§ 153,2 ), Hipponax 93, Theog. 142, elsewhere $\theta \epsilon o i ́$, Archil. eleg. 95 , Solon $\mathrm{I}_{39,55}$; $\theta \epsilon$ oîs, Archil. tetr. 56 ; $\theta$ єoî $\sigma \iota 55$; Tyrt. $5_{1}$, Solon II $_{2}, 35$.
3. $\epsilon \circ$ in in $-\epsilon \omega$ verbs is contracted in lyric poetry and in inscriptions, except in $\dot{a} \nu \omega \theta \epsilon o i ́ \eta$, Teos $156 \mathrm{~A}_{11}$, with obsolete orthography. Hdt.
 latter representing the ordinary Ionic of the fifth century. See under - $\epsilon \omega$ verbs.

In adjectives of material, $\epsilon o \iota$ is kept open, even in the imperial
 б́́oıs, Latyschev, Inscr. Ponti Euxini, I, No. 22, C. I. G. 2059. Ad-
 Anakr. $432_{2}$ See § 153 .
178. $\mathrm{E}+\mathrm{OY}$ (spurious).
I. $\epsilon$ fov.
 kos 17 I , with $o v$ from $o+\epsilon$.
2. єfov.

є̇oúr $\eta$ s, Mylasa 248 C 5, etc., as $\mu \epsilon \delta \dot{\sigma}$ óv $\eta \iota$, Phanag. 164, Samos 216.
$\theta_{\epsilon \in \hat{v}}$, Sim. Amorg. 7104 .
3. єlov.
$\boldsymbol{\epsilon} \boldsymbol{\sigma}<\boldsymbol{\varepsilon}<\boldsymbol{\sigma} \boldsymbol{\tau}$ - is not contracted in the verb.
179. O + EI.
 Hdt., Theog. 7 ; ix $\theta$ voción's, Hdt. VII, 6I, is a different formation from
 o + spurious $\epsilon \iota$ in -oєts in इo入ócts, etc.; also in ä̀opyov̂s, Samos $220_{23}$, § 162.
2. out becomes ot in verbal forms : $\delta \iota \delta o ̂ ̂$, Sim. Amorg. $7_{54}$; Mimn. $2_{16} ; \mu \iota \sigma \theta o i ̂ s$, etc., $<0+$ spurious $\epsilon \iota$ perhaps in $\mu \iota \sigma \theta o v ̂ v$; see § 162, 1 and 2.
180. o + oi.
 Chios 174 D 18, in Bechtel ; cf. Attic $\tau \hat{\omega} \kappa$ í̊ov, Clouds, 92.

$$
\text { 181. } O+A Y
$$

 Hippokr., and their imitators. oc+av in ©ivooí, II, 168 ; but oi av̉roí, I, 182, VII, 168 ; sometimes even $\hat{\epsilon}^{\boldsymbol{\epsilon}} \omega v \tau 0$ ! ${ }^{2}$ appears. $o v+a v$ in $\tau \boldsymbol{\omega} v-$ тồ, Hdt. (Greg. Corinth. d. d. I. § 46), upon a single occasion, $\cdot$ III, 72. Elsewhere $\frac{\tau}{}$ ov̀ aưvồ, V, $5^{2}$, IX, ioI. ov, it will be remembered, is not diphthongal here.

$$
\text { 182. } \mathrm{O}+\mathrm{OY} \text { (spurious). }
$$

 63 ; vóov, Theog. 223 ; Arch. tetr. $56_{5}$; $\pi \in \rho \iota \rho \rho o ́ o v, ~ H d t . ~ I, ~ 174 ; ~ a ̉ v \tau \iota-~$ Góous, VII, 150 ; but evvov, VI, 105 in Mss.

[^44]2. o o七ov< oıovt- $=$ ov in $\mu \iota \sigma \theta o \hat{v} \sigma \iota$, etc.
$o+o v=o v$ by crasis in $\tau o u ̛ v o \mu a, ~ H d t . ~ o c+o v$ in oủpoфúdaкєs, Roberts 149 A 15, 19.
$$
\text { 183. } \mathrm{H}+\mathrm{AI} .
$$
$\eta \sigma \alpha \iota=\eta$ in $\beta$ oúd $\eta$, Ionic-Attic.
$$
\text { 184. } \mathrm{H}+\mathrm{EI}
$$
in $\eta f \epsilon \iota$, $\eta_{\epsilon} \iota \rho a \nu$, Hdt. IX, 59, VI, 99 (conj. Mss. - $\eta \rho \alpha \nu$ ) ; $\pi \alpha \rho \eta \eta^{\epsilon} \rho \epsilon$, Arch. 94.
$$
185 . \mathrm{H}+\mathrm{AY} .
$$
$\delta \eta v ̂ \tau \epsilon$, Archil. 6o, Hippon. 78 ; $\dot{\eta}$ av̉ $\tau \dot{\eta}, \mathrm{Hdt}$. IV, 38 , as $\tau \hat{\eta}$ aủ $\mathfrak{\eta} \hat{\eta}$,
 and even $\dot{\eta} \dot{\omega} v \tau \dot{\eta}$ 158, and often.
$$
\text { 186. } \Omega(\mathrm{I})+\mathrm{AY}
$$
in $\tau \omega v ่ \tau \varphi ิ, H d t .$, etc.

## ABBREVIATIONS.

A. J. P. $=$ American Journal of Philology.
A. P. A. $=$ Transactions of the Amer. Philol. Assoc.

Allen, Versification $=$ Papers of the American School of Classical Studies at Athens, vol. IV.
Astr. $=$ Lukian $\pi \epsilon \rho l \tau \hat{\eta}{ }^{\text {' }} \mathrm{A} \sigma \tau \rho o \nu \rho \mu i \eta s$.

Bechtel $=$ Die Inschriften des ionischen Dialekts.
Bennett $=$ On the Sounds and Inflections of the Cyprian Dialect.
B. B. $=$ Bezzenberger's Beiträge.
B. C. H. = Bulletin de Correspondance Hellénique.
B. P. W. $=$ Berliner Philologische Wochenschrift.

Bredow $=$ De dialecto Herodotea .
C. D. I. = Collitz' Sammlung der griechischen Dialekt-Inschriften.
C. I. A. $=$ Corpus inscriptionum Atticarum.
C. I. G. $=$ Corpus inscriptionum Graecarum.
$\left.\begin{array}{l}\text { C. S. } \\ \text { Curt. Stud. }\end{array}\right\}=$ Curtius' Studien.

$\left.\begin{array}{l}\text { d. S. } \\ \text { d. d. S. }\end{array}\right\}=$ Lukian $\pi \epsilon \rho l \tau \hat{\eta} s$ ミupins $\theta \in o \hat{v}$.
D. S. = Dittenberger's Sylloge.
D. V. C. $=$ Johansson's De derivatis verbis contractis linguae Graecae.

Erman $=$ De titulorum ionicorum dialecto in Curt. Stud. vol. V.
Et. Mag. = Etymologicum Magnum, ed. Sylburg.
Forsch. = Osthoff's Forschungen.
G. G. A. = Göttingische Gelehrte Anzeigen.

Gött. Nachr. = Göttingen Nachrichten.

H. E. V. A. = Hinrichs' De Homericae elocutionis vestigiis Aeolicis.
I. G. A. = Corpus inscriptionum Graecarum antiquissimarum.
J. H. S. = Journal of Hellenic Studies.
K. C. $=$ King and Cookson's Principles of Sound and Inflexion.

Klein Vasen = Die griechischen Vasen mit Meistersignaturen (2d ed.).
K. Z. = Kuhn's Zeitschrift.
L. = The united testimony of the Mss. of Herodotos.
L. S. $=$ Liddell \& Scott's Lexicon.

Lindemann $=$ Lindemann De dialecto Ionica recentiore.
$\left.\begin{array}{l}\text { Meist. } \\ \text { Meisterhans }\end{array}\right\}=$ Grammatik der attischen Inschriften, 2nd ed.
$\left.\begin{array}{l}\text { Meister } \\ \text { G. D. }\end{array}\right\}=$ Meister's Griechische Dialekte, vols. I and II.
Mém. = Saussure's Mémoire sur le systéme primitif des voyelles dans les langues indo-européennes.
Menrad $=$ De contractionis et synizeseos usu Homerico.
Mitth. $=$ Mittheilungen des deutschen Archaeologischen Instituts zu Athen.
Movg. каl $\beta_{\iota} \beta \lambda$. = Movбєiov каl $\beta \iota \beta \lambda \iota о \theta \dot{\eta} \kappa \eta \tau \hat{\eta} s \epsilon \dot{\nu} \alpha \gamma \gamma \epsilon \lambda \iota \kappa \hat{\eta} s \sigma \chi o \lambda \hat{\eta} s$ of Smyrna.
M. U. = Morphologische Untersuchungen.

Num. Chron. = Numismatic Chronicle.
Renner $=$ De dialecto antiquioris Graecorum poesis elegiacae et iambicae in Curt. Stud. vol. I.
Roehl = I. G. A.
$\left.\begin{array}{l}\text { Rob. } \\ \text { Roberts }\end{array}\right\}=$ Introduction to Greek Epigraphy; Part I.
R. M. = Rheinisches Museum.

Sterrett $=$ Papers of the Am. School of Classical Studies at Athens, vols. II and III.
Stud. = Curtius' Studien.
$\left.\begin{array}{l}\text { Th. (L.) } \\ \text { Thas. (L.) }\end{array}\right\}=$ Bechtel's Thasische Inschriften ionischen Dialekts im Louvre.
unc. loc. $=$ uncertain locality.
V. H. D. = Fritsch's Zum Vokalismus des herodotischen Dialekts.
W. F. = Wescher-Foucart : Inscriptions recueillies à Delphes.

Arrian is quoted from the text of Hercher-Eberhard.
Eusebius is quoted from the text of Müller's Frag. Hist. Graec.
Eusebius Myndius is quoted from the text of Mullach.
Lukian is quoted from the text of Jacobitz.
Aretaios is quoted from the text of Kühn.
Hippokrates is quoted from the paragraphs of Ermerins. Littre's text has been compared.

```
    \(\mathbf{E I}=\pi \epsilon \rho l \bar{\epsilon} \pi i \delta \eta \mu \omega \hat{\omega} \nu \tau \delta \pi \rho \hat{\omega} \tau o \nu\).
```



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    \(\Pi=\Pi \rho о \gamma \nu \omega \sigma \tau \iota \kappa \delta \partial\).
```




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\(\Pi T K=\pi \epsilon \rho l \tau \hat{\omega} \nu \quad \dot{\epsilon} \nu \kappa \in \phi \alpha \lambda \hat{\eta} \tau \rho a \nu \mu a ́ \tau \omega \nu\).
\(\Pi \mathrm{K}=\pi \rho о \gamma \nu \omega ̈ \sigma \epsilon \iota s\) Кшакаí.
The pseudo-Ionic letters are cited from Hercher-Boissonade.
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For the study of later Ionism Lukian's Astronomy has been regarded as equally genuine with the Syrian Goddess (see Allinson A. J. P. VII, 203 ff.).

All Ionic inscriptions are quoted from the numbers of Bechtel's collection; all other dialect inscriptions are cited by the numbering of C. D. I., except when another source is specially stated. The date of an inscription is frequently indicated by a Roman numeral followed by the letter C, e.g. $(\mathrm{V} C)=$ fifth century.

Wackernagel's Dehnungsgesetz and Johannes Schmidt's Pluralbildungen der indogermanischen Neutra were not received until the printing of the above article had so far advanced that it was impossible to take cognizance of the views advocated therein. A few references have, however, been inserted. The second edition of Brugmann's Griechische Grammatik reached me too late to permit any but a sporadic notice of modifications of views maintained in the first edition and referred to in the course of this paper.

I desire to express my thanks to my colleague, Professor Collitz, for his courtesy in looking over the proof-sheets of this paper.

# II. - A New Source in Plutarch's Life of Cicero. 

By Dr. A. GUDEMAN,
NEW YORK.
Two modes of philological investigations have of recent years risen into high favor. The one, which may be termed the statistical method, consists in carefully and minutely examining the style of some Greek or Roman author, usually with a view to determine the chronology of his works or to settle questions regarding their authenticity. Dealing only with documentary evidence, this method proceeds on perfectly safe lines, the only danger which it constantly incurs being a kind of irresistible tendency to sweeping inferences, based upon coincidences often, indeed, remarkable. ${ }^{1}$ The other method, that of "Source Researches," rests on no such firm foundation, the loss of the original sources being, in fact, the conditio sine qua non of its existence. The question with which this paper is concerned belongs to this latter category of philological inquiry and is more immediately confined to Plutarch's Life of Cicero.

I need hardly expatiate upon the great difficulties necessarily involved in researches of this nature, a fact made emphatically apparent by the utter lack of unanimity so frequently displayed by scholars, in the conclusions at which they have arrived. The intrinsic difficulty of the subject and an ever-present element of uncertainty, are, however, I conceive, not the only reasons for this deplorable state of affairs. It is also due, in no small measure, to the undeniable fact that philologists too often enter upon their task with preconceived opinions and without having previously ascertained their author's method and style of work by a diligent perusal of his writings, a demand perhaps never so frequently disregarded as in the case of Plutarch.

He was a most voracious reader, with a keen, absorbing interest

[^45]in every branch of human knowledge ; and it was his habit to take notes of what he read or heard, either with a view to the composition of some particular treatise, or perhaps merely for the sake of future reference and use. His erudition is encyclopaedic, and in his works he would draw freely upon this vast thesaurus of fact and anecdote, marshalling them into literary phalanxes, as would best suit his purpose.

But, while the characteristics and typical traits in Plutarch's biographical writings are the direct result of his literary skill and his historical method, ${ }^{2}$ influenced though they were by the limitations imposed upon him by nature, we can properly estimate the value of his biographies only by the authenticity of the sources consulted. Where these were few, he naturally followed the one that appeared to him the more copious and best adapted to his purpose. If, however, the material at his disposal was as superabundant as was unquestionably the case in the Life of Cicero, he had to exercise his faculty of criticism and discrimination to no small extent if he desired, as he professedly did, ${ }^{3}$ to give an impartial and truthful picture of his hero. To ascertain how near Plutarch came to realizing this cherished aim, unbiassed investigations into the sources whence he drew his information are absolutely necessary. The mere assumption of some one particular source, because of real or alleged coincidences between it and Plutarch's narrative, is quite gratuitous and unwarranted as long as the probability of some intermediate source remains, for Plutarch did not at all times have access to the original sources for the information which he imparts. He may well have taken, and in innumerable instances demonstrably did take, his facts at second hand, which does not, however, necessarily render the testimony given either worthless or even less in value, unless demonstrated to be so on other grounds. A quotation, therefore, from some author now lost, or a striking coincidence with some work still extant, does not necessarily imply that the writer had the original, from which the words are taken, before his eyes.

To determine this, we must, in the first place, carefully inquire in each and every instance, whether other passages in Plutarch will warrant us in ascribing to him a personal knowledge of the particular

[^46]work under discussion. If so, the further question arises, whether the two apparently similar accounts do not harbor discrepancies and differences of a nature that would make it impossible for us to believe that a writer, possessing the unquestioned ability of a Plutarch, can possibly have made use of certain portions of his "Quelle" and then suddenly have had recourse to some other authority, while completely overlooking or purposely ignoring an entirely different, though perhaps equally truthful version in the author just abandoned by him. I may explain my meaning by an example. In Plut. Cic. VI. 15 sq. ' $S$. we read the following :
 $\theta \epsilon \hat{\imath} \nu \quad \phi \eta \sigma \iota$. $\sum$




 $\pi \in \pi о і$ ккє к.т.入.

As this anecdote is not found elsewhere, except in Cicero's speech pro Plancio ( $26,63 \mathrm{sqq}$.), this oration has always been looked upon as the source of Plutarch. This assumption is, however, altogether erroneous, as will be readily admitted on comparing the passage just quoted with the original:
"Vere me hercule hoc dicam : sic tum existimabam nihil homines aliud Romae nisi de quaestura mea loqui; excogitati quidam erant a Siculis honores in me inauditi, itaque hac spe decedebam ut mihi populum Romanum ultro omnia delaturum putarem. At ego cum casu diebus iis itineris faciendi causa decedens e provincia Puteolos forte venissem, concidi paene, iudices, cum ex me quidam quaesisset quo die Romae exissem et num quidnam novi. Cui cum respondissem me e provincia decedere, 'Etiam, me hercule,' inquit, 'ut opinor ex Africa.' Huic ego iam stomachans fastidiose 'Immo ex Sicilia' inquam. Tum quidam quasi qui omnia sciret, 'Quid? tu nescis hunc quaestorem Syracusis (!) fuisse.'"

Now Plutarch was, as is well known, a passionate lover of anecdote, nor could any one tell a good story more delightfully than he ; and yet we are asked to believe that this clumsy and pointless account, differing also in essential details from the original, is the direct reproduction of the exquisitely well-told story just quoted from Cicero! But if Plutarch can never have read this anecdote in Cicero himself, it certainly is no rash inference to maintain that he in all likelihood never read a line of this speech, let the alleged coincidences between
it and certain parts of the Greek narrative be what they will. The same may be predicated of the orations against Catiline which are generally supposed to have been known to Plutarch. Such similarity, however, as apparently exists between the two accounts, is in no sense surprising, rather perfectly natural, as it almost necessarily arises from both authors treating one and the same well-known historical occurrence. By a similar process of reasoning which seems never to have been resorted to before, we are enabled to eliminate a number of other writings of Cicero commonly supposed to have been known to the Greek biographer.

In the discussion of Plutarch's Roman Lives still another problem presents itself, which must at least be touched upon before we can enter upon the more immediate object of this paper. The question is simply this: Are we justified in attributing to Plutarch a sufficient knowledge of Latin that would have enabled him to read the innumerable authors whom he expressly quotes? ${ }^{4}$
${ }^{4}$ C. Acilius, Rom. 21; M. Porcius Cato, Cato Maior (17 times), Comp. Arist. et Cat. 5, Quaest. Rom. 49; L. Capurnius Piso, Numa 21; C. Fannius, Tib. Gracch. 4; Scmpronius Tuditanus, T. Flam. 14; Scipio Nasica, Aem. 15. 21; C. Gracchus, Tib. Gracch. 8; Rutilius Rufus, Mar. 28, Pomp. 37; Q. Lutatius
 Valerias Antias, Rom. 14, Numa 22, Flam. 18, de fort. Rom. 10; Sallustius, Lucull. 11.33; comp. Lys.et Suliae 3. Cicero-Letters: Pomp. 62 ( $=$ ad Att. I. i2, 3, cf. also ad fam. V. 2.6); Cic. 24 (de Dem. ad Herodem et ad filium, de Gorgia ad filium et altera ad Pelopem Byzantium, cf. ad fam. XII. 16. 2; XVI. 21.6); Cic. 35 (ad Caelium, cf. ad Att. XIV. 5. 1; ad fam. II. ir) ; c. 36 ( $=$ ad Att. VIII. 7. 2), c. 40, Praecept. ger. rep. 27 ( $=$ ad fam. IV. 13) ; Cic. c. 37 (sed cf. ad Att. VII. 17.3). Orations: Crass. 13; Caes. 4; Cic. 24 (Philippics, cf. also c. 48, Ant. 6. 9) ; c. 35 (pro Murena, cf. also Cato 21 ; comp. Dem. et Cic. 1); comp. Dem. et Cic. I (pro Caelio); Cic. 37 (pro Ligario), cf. c. $10-23$ orations against Catilina. Other works: Aem. c. 10 ( $=$ de divin. I. 46, 103; II. 40, 83); Cato Maior 17; Flam. 18 (= de senect. 12, 42); Lucull. 42 (Academica); Crass. 13 ( $\pi \in \rho$ ) ínateías); Cacs. 3, 54; Cic. 39 (laudatio Catonis); Cic. c. 40 (philosophical works). Cf. also Phoc. 3; C. Gracch. I (= de div. I. 56); Cato Min. c. 50; Cic. 2; comp. Dem. et Cic. 2 (cedant arma togae, etc.). Tiro, Cic. 41, 49. Nepos, comp. Pel. et Marc. 1 ; Marc. 12, 30; Tib. Gracch. 21 ; Luc. 43. Brutus, Cic. 44, 45; Brut. (13 times). Caesar, comp. Pel. et Marc. 1; Pomp. 63; Caes. 2, 3, 22, 54; Cato Min. 46, 52, 54; Cic. 39. Asinius Pollio, Caes. 46; Pomp. 72. Sulpicius Galba, Rom. 17. Tanusius Geminus, Caes. 22. Calpurnius Bibulus, Brut. 2, 13, 23. Volumnius, Brut. 48, 51. Munatius Rufus, Cato Min. 25, 36, 37. Livius, Cam. 5 (cf. Livy V. 21); Marc. 11, 30 (lib. XXVII. 27); comp. Marc. I (lib. XXVII. 2, 12); Flamin. 18; Cato Maior 17 (lib. XXXIX. 42); Flamin. 19 (lib. XXXIX. 51); Sulla 6 (ex lib. LXXVII. deperdito); Lucull. 28, 31 (ex lib. LXXXXVIII. dep.) ; Caes. 47 (ex lib. CXI. dep.), 63 (ex lib. CXVI. dep.); Q. R.

On the strength of a famous chapter in the life of Demosthenes (c. 2), it has been answered in various ways. We are there told that he did not begin the study of Latin till late in life, and that he acquired a knowledge of the language by a method most unique and quite incredible, for "it was not so much by the knowledge of words that I came to the understanding of things, but by my experience of things, I was enabled to follow the meaning of words . . . and so in this fifth book of my Parallel Lives, in giving an account of Dem. and Cicero, my comparisons of their natural dispositions and their characters will be formed upon their actions and lives as statesmen, and I shall not pretend to criticise their orations one against the other, to show which of the two was the more charming or the more powerful speaker. . . ."

If I rightly interpret this interesting passage, Plutarch does not wish to be understood as saying that he was unable to read Latin intelligently, for he distinctly implies the contrary ; but he simply tells us in his modest way that he did not sufficiently master the language of the Romans to constitute him a competent critic of the respective merits of Dem. and Cicero as orators, and I am persuaded that every reader will rise from the perusal of his works with the very strong impression that Plutarch certainly possessed a very fair acquaintance with Latin prose writings. But while this must be admitted, it will be seen that the real problem is not whether Plutarch could read Latin authors, for such sources as he did consult in his Roman biographies were in any case written in that lansuage, ${ }^{5}$ but whether the information which he imparts was taken directly from the writers whom he expressly cites as his authorities, or if not quoted by name, as is but too often the case, may be reasonably supposed to point to some one particular work possibly accessible to him. The case of Plutarch's alleged indebtedness to Livy is a good instance. His name occurs some fourteen times in Plutarch, the quotations extending from book $V$. to book CXVI., not counting a number of

[^47]coincidences with this history, where Livy is not especially cited. I do not see how the apparently exhaustive knowledge of Livy here displayed can be accounted for except on the supposition that Plutarch actually read, to use the words of Martial (XIV. 190), "Livius ingens, quem mea non totum bibliotheca capit"! But as this is an intrinsic improbability, and in as much as there is no evidence of an epitome of Livy existing in Plutarch's time, to which all his quotations might in that case be easily referred, we are forced to the conclusion that Livy was solely known to the Greek historian through the medium of other works which he consulted. ${ }^{6}$ But if this is the conclusion which an unprejudiced inquiry must lead to, on the face of Livian passages yet extant, the temerity of the attempt so constantly made to establish without the aid of strong collateral evidence, an interdependence between Plutarch and such of Livy's books as are now unfortunately lost, will be plainly apparent.

Again, to take the case of Cicero, we contend, that there is scarcely a passage quoted by Plutarch from this writer of a nature to necessitate the assumption of direct indebtedness, for nearly all of these references are either too vague or too general, if not actually contradictory, or the discrepancies too far counterbalance apparent coincidences, to be compatible with a personal acquaintance on Plutarch's part with the works apparently referred to. And then, does it not stand to reason that the biographer, when he had determined to write up the great orator's life, would not, like a modern Drumann, have gone through the voluminous works of Cicero for his materials, even though every single work of his, thanks to the egregious vanity of the man, ${ }^{7}$ fairly teems with autobiographical detail.

Of the orator's writings which were professedly autobiographical,
 (ad Att. I. 19, 10 ; I. 20,6 ; II. i, 1 ; Plut. Caes. 8 ; Crass. 13 ; Cassius Dio 46, 21), the same in Latin prose (ad Att. l.c.; cf. also Schol. Bob. p. 270, Or. ; "epistula ad Pompeium non mediocris ad instar voluminis scripta"), a pocm de consulatu, in three books

[^48](Urania, Minerva, Calliope), ${ }^{8}$ a poem de temporibus suis (ad Quintum fratrem III. $\mathbf{I}, 24$; III. 9), and finally a work usually designated as De consiliis suis (cf. Asc. Ped. p. 831 Or.; Cassius Dio 39, ıо

 Charisius G. L. I. i46; Boeth. de inst. mus. I. I. Identical with the 'A ${ }^{\prime}$ 'к $\delta o \tau a$ so frequently mentioned in Cic. letters to Atticus II. 6,2 ; XIV. 14, 5 , etc.).

The four last were unquestionably not consulted by Plutarch ; the first has, however, been generally regarded as the principal source of the narrative of Catiline's conspiracy (ch. 10-23). It is not the object of this paper to enter upon a discussion of this question, about which quite a literature has already clustered, ${ }^{9}$ nor am I disposed to deny that the Greek account may be based upon Cicero's $\dot{\boldsymbol{\tau} \pi o ́ \mu \nu \eta \mu a, ~}$ but this concession does not necessarily involve the further admission of Plutarch's direct indebtedness, for the identical chapters of the ímóд $\nu \eta \mu a$ may well have been reproduced in Tiro's ${ }^{10}$ exhaustive biography of his patron and friend, a work generally conceded to have constituted one of Plutarch's principal authorities; and yet we are expected to believe that the moment he had reached this part of his narrative, he suddenly abandoned his author, taking recourse to the identical fountain whence Tiro himself drew all his information !

[^49]These introductory remarks concerning the methodical lines, upon which source inquiries must proceed, if the results attained are to possess any validity at all, were deemed necessary (a fact which may possibly excuse their prolixity) for our present purpose. The tendency to rash inferences is the ever-present danger which can only be avoided by our approaching the subject "sine ira et studio," and by not allowing the " wish to be father to the thought." Our conclusions must be the outcome of cogent argumentation; and if the fragmentary state of our knowledge should at any point not yield any satisfactory results, if we can only, in the words of Cicero, " rivulos sectari fontes rerum non videre," then let us frankly say so, and not cover the weakness of our position (to wit, a recent paper on Plutarch's Cicero) by apodictic assertions and a profuse display of rhetorical pyrotechnics.

We have observed that Plutarch's acquaintance with Cicero's writings was probably not so extensive as some scholars would have us believe. But even if this were not so, it would still be perfectly selfevident, from the vita before us, that the great orator's works did not constitute Plutarch's only source of information. I do not propose to enter upon the treatment of these sources here, ${ }^{11}$ but shall confine myself, for purposes of brevity no less than for the sake of clearness, to those portions of the Greek biography which deal with the personal and literary side of Cicero, as distinct from the political. I shall, therefore, not discuss Plutarch's alleged indebtedness to Livy, Sallust, or Asinius Pollio ; for these writers, from the very nature of their histories, confined themselves to a more or less exhaustive narrative of Cicero's political activity, purely biographical detail being wholly beside the object they had in view. Nor, again, shall I inquire into the sources of Plutarch's account of the death of Cicero. For this tragic episode, appealing as it did so strongly to the minds of men, was very frequently depicted by historians and often chosen as a theme of discussion by rhetoricians. ${ }^{12}$ The accounts possibly accessible to Plutarch were, consequently, so numerous that any attempt to determine his fons primarius, at least in the present fragmentary state of our knowledge, will necessarily be doomed to failure at the very outset.

Of the monographical literature on Cicero, so far as known to us,

[^50]which carefully recorded all purely biographical details, while in no way neglecting his political history, scholars have been well-nigh unanimous in assuming Tiro's Life of Cicero ${ }^{13}$ as constituting one of the chief sources of Plutarch. This biography was unquestionably of the very greatest authenticity, for not only was this life-long friend of the orator and the editor of his priceless correspondence in possession of absolutely all available material (cf. Gellius VI. (VII.) 3, 8), but he was also enabled to record many incidents derived from their original fountain, the living lips of Cicero himself, as is again attested by a passage in Gellius IV. ro, 5 ; cf. also XV. 6, 2.

There existed yet another biography of Cicero by a contemporary writer, which, strange to say, has never even been suggested as a possible source of Plutarch. I refer to the vita Ciceronis by Cornelius Nepos, a work which, if extant, cannot but have proved of the very greatest interest and value, for as the friend of Cicero and Pomponius Atticus, and himself possessed of a very profound knowledge of Roman history, he must have enjoyed most exceptional advantages and facilities for this task. For the solitary mention of this book, we are indebted to the following passage in Gellius $N . A$. XV. 28, r , which must be quoted in full, as it will engage our attention again :

[^51]lost commentary to that oration) animadvertit quod eum scripserit sexto vicesimo aetatis anno pro Sextio Roscio dixisse. Longior autem Nepotis quam Fenestellae error est nisi quis vult in animum inducere Nepotem studio amoris et amicitiae adductum amplificandae admirationis gratia quadriennium suppressisse ut M. Cicero orationem florentissimam dixisse pro Roscio admodum adulescens videretur."

This accusation of partiality was probably occasioned by the apologetic and eulogistic character of Nepos' narrative, a supposition confirmed by a fragment preserved in the so-called codex Gudianus 278 (Peter, Fragm. hist. Rom., p. 223). ${ }^{15}$

It will have been observed that all the authors that have hitherto been thought of as possible sources of Plutarch's Life of Cicero were either contemporary with the orator or very nearly so. It seems not to have occurred to any one that there are passages in this very Life that clearly and unmistakably point to a later origin, passages that can never have emanated from Tiro or Nepos or any other contemporary writer possibly accessible to the Greek biographer; or, in other words, it can be shown that Plutarch also consulted some one or more post-Augustan authorities. Having shown this to be true, beyond possible refutation, we shall proceed to prove that one of these sources, if, indeed, there were more, was no other than Suetonius Tranquillus in his vita Ciceronis, which formed, as is well known, a part of his famous work, De viris illustribus.

In order, then, to prove the first proposition, that among the sources of Plutarch's Cicero there was also a post-Augustan writer, we take the closing paragraph of ch. 2, which reads as follows :





 $\beta \eta \kappa є \nu$."
${ }^{15}$ "Cornelius Nepos in libro de historicis Latinis de laude Ciceronis: non ignorare debes, unum hoc genus Latinarum litterarum adhuc non modo non respondere Graeciae sed omnino rude atque inchoatum morte Ciceronis relictum. Ille enim fuit unus, qui potuerit et etiam debuerit historiam digna voce pronuntiare, quippe qui oratoriam eloquentiam rudem a maioribus acceptam perpoliverit, philosophiam ante eum incomptam Latinam sua conformavit oratione (cf. Plut. Cic. 40). ex quo dubito interitu eius utrum res publica an historia magis doleat." " Locuples ac divina natura quo maiorem sui pareret admirationem ponderatiora-

That this piece of literary criticism is not the intellectual property of the biographer, as far as its essential details are concerned, will not, I am persuaded, be seriously denied by any student of Plutarch. He was at best but an indifferent judge, even of Greek verse, and of Roman poetry he does not seem to have even the slightest acquaintance, no mention being made by him of any Latin poet, throughout all the voluminous writings that have come down to us. ${ }^{16}$

But if this criticism is not Plutarch's own, it can only be attributed to some other post-Augustan author for the following reasons: In the first
 $\zeta_{\epsilon \tau a l}$, which clearly indicate some contemporary source consulted by the biographer. In the second place, the very contents of the passage under notice bear strong internal evidence of its post-Augustan origin, for the highly unfavorable verdict which is here passed upon the poetry of Cicero did not begin to be accepted till the second
que sua essent beneficia, neque uni omnia dare nec rursus cuiquam omnia voluit negare."
${ }^{16}$ This may seem a rash statement to make in the face of the well-known mention of Horace in Lucull. ch. 39. This passage, however, is a most palpable interpolation; so palpable, in fact, that I am astounded at its never having been taken for such before. A juxtaposition of both passages will make this clear:
 $\mu$ оицє́vov $\pi \in \rho i ́ ~ \theta \in ́ a s ~ к а l ~ \chi \delta \rho \varphi ~$ $\tau$ เข $\iota$ кó $\sigma \mu \circ \nu$ aitıov $\mu \in ́ \nu o v ~ \pi о \rho ф v \rho \hat{\alpha} s \chi \lambda a-$





 $\mu \grave{\eta} \tau \grave{\alpha} \pi \alpha \rho о \rho \omega ́ \mu \in \nu \alpha$ каl $\lambda \alpha \nu \theta \alpha ́ \nu о \nu \tau a \pi \lambda \epsilon i ́-$


Hor. Epist. I. 6, 40 sqq.
chlamydas, Lucullus, ut aiunt
si posset centum scaenae praebere rogatus
'qui possum tot?' ait, tamen et quaero et quot habebo,
mittam? post paulo scribit sibi milia quinque.
esse domi chlamydum, partem vel tolleret omnis.
exilis domus est ubi non et multa supersunt
et dominum fallunt et prosunt furibus.

The two versions are widely different, that of Plutarch containing a number of details that could not possibly have been suggested by the passage in Horace, and the " $\epsilon \pi เ \phi \omega \nu \nu \eta a$ " can only be made to correspond with the moral which the Latin poet gives to the story by the most liberal kind of interpretation. It is, moreover, very awkwardly and quite unexpectedly joined to the preceding. The anecdote is complete without it, as it is not given by Plutarch with any didactive purpose, as in the case of Horace. The words " $\epsilon$ is . . . $\bar{\epsilon} \sigma \tau \ell$ " simply represent the marginal gloss of some ancient reader, which subsequently crept into the text.
half of the first century of our era, as will be seen from the following passages:

Seneca enc. controv. 3, praef. 8: Ciceronem eloquentia sua in carminibus destituit. Seneca de ira III. 37, 5 : et Cicero si derideres carmina eius inimicus esset. Cf. also Gell. N. A. XII. 2 (Seneca frag. ini, H.). Tacitus Dial. 21 : fecerunt enim et carmina et in bibliothecas retulerunt non melius quam Cicero sed felicius quia illos fecisse pauciores sciunt. Quintil. XI. 1, 24: in carminibus utinam pepercisset quae non desierunt carpere maligni. Martial II. 89, 3: Carmina quod scribis Musiś et Apolline nullo | Laudari debes. Hoc Ciceronis habes. Iuvenal X. 124: ridenda poemata. Cf. also vs. 122. Schol. Bob., p. 306 Or. ${ }^{17}$ : Manifestum est amatorem poeticae rei Tullium fuisse quamvis ad oratoriam qua maxime praestitit non videatur in versibus par suif fuisse.

Now all these authors are not only post-Augustan, but practically contemporary. There is no instance of an earlier writer who spoke thus disparagingly of Cicero's poetical productions. This fact cannot be accidental. Again, we may safely assert that neither Nepos, nor Tiro, nor Varro would have handed down to posterity any such verdict, even if convinced of its truth. The only other author to whom we might be disposed to attribute a similar criticism is the impartial Fenestella ( $\dagger 19$ A.d.) ; but unfortunately, even if this were not a mere supposition, there is not the slightest evidence or probability of any kind that Plutarch ever read any of his works, although he quotes him three times (cf. note 2).

Plutarch's indebtedness to some post-Augustan author having been thus demonstrated, we may now, resting on this firm foundation, proceed to show that Suetonius' vita Ciceronis constituted one of these sources.

To accomplish this object, we must briefly discuss the sources of Hieronymus and Sextus Aurelius Victor.
The former of these need not occupy us very long, for if there is one thing recognized by scholars as an irrefutable fact, it is, that the items concerning Roman literature, found in Hieronymus' ${ }^{18}$ additions to the Chronicon of Eusebius, are, up to a certain date, all taken from Suetonius. Tranquillus, De viris illustribus.

[^52]Under the name of Sextus Aurelius Victor (an historian living in the time of Theodosius about the middle of the fourth century) there have come down to us, among other writings, two works entitled Caesares and De viris illustribus. ${ }^{19}$ Without attaching too much importance to the singular coincidence in the titles of these works with those of Suetonius, which is in itself suggestive of interdependence, it may be sufficient to draw attention to the fact that the author of the Caesares demonstrably did draw very freely upon the Caesares of his great predecessor. The presumption, therefore, is that the De viris illustribus of Suetonius was also well known to Victor. But whatever may have been the sources of the De viris illustribus, a question which could not be discussed in this place without far transgressing the limits imposed upon this paper, I contend, that, at least, as far as the life of Cicero is concerned (which constitutes chap. 8i of his work), he is resting upon the shoulders of Suetonius' vita Ciceronis. For not only is there a remarkable family likeness between chap. $8 \mathrm{I}^{20}$ and the lives of some of the Roman poets that have been justly attributed to Suetonius, however diluted they may have been by subsequent accretions, but also because of certain parallelisms between Victor and SuetoniusHieronymus.

1. Hieron. Olymp. 168, 3 (2).

Cicero Arpini nascitur matre Helvia, patre equestris ordinis ex regis Volscorum genere.

## Sext. Aurel. Vict. de vir. ill. 81.

M. Tullius genere Arpinas patre equite Romano natus, genus a Tullo rege duxit ; cf. also Sil. Ital. VIII. 404 sqq.

[^53]2. Hieron. Olymp. 175, 1.

Roscio contra Chrysogonum defenso Cicero Athenas secessit et inde post triennium Romam regreditur.

Sext. Aurel. Vict. de vir. ill. 81.
Adolescens Rosciano iudicio eloquentiam et libertatem suam adversus Sullanos ostendit ex quo veritus invidiam Athenas studiorum gratia petivit.

Hieron. Olymp. 184, $2^{21}=$ Aurel. Vict. 81 (Formiis).
To these passages may also be added : Sueton. p. 318, 4 R. (= Sext. Aurel. Vict. de vir. ill. 2) ; id. p. 319, 2 ( $=$ id. 3, 2) ; id. p. 320, 5 ( $=$ id. 5, 1, 7) .

We see, therefore, that the notices concerning Cicero to be found in Hieronymus are certainly based upon Suetonius' De viris illustribus, while those in Victor's vita may, without temerity, be attributed to the same source.

Keeping these facts constantly in mind, we may now turn to the discussion of the third chapter in Plutarch's biography, a narrative, by the way, so perfectly uniform in color and so .perfectly coherent, that we must needs attribute the entire passage under notice to one and the same source.














This passage contains two errors. The first consists in the statement that the oration pro Roscio Amerino was the earliest speech of Cicero, whereas this distinction belongs to the oratio pro Quinctio. ${ }^{21 a}$ Now it so happens, that the single and solitary reference to Nepos

[^54]and Fenestella, as authorities on the life, or rather writings, of Cicero (in the passage of Gellius quoted above) was called forth by the existence of this very error. What then, it might be argued, could be more plausible than that Nepos (for Fenestella is out of the question) and not Suetonius, as we contend, was the source of Plutarch's information on this point. But this view, however plausible it may appear at first sight, must be altogether abandoned, because of the second error alluded to. "Fearing the anger of Sulla, he left for Greece, giving out that the poor state of his health made his departure necessary."

This statement flatly contradicts the facts of history, for so far from leaving Rome out of any dread of Sulla, Cicero actually remained in the city almost a year and a half before taking his trip to Greece, delivering in the mean time at least two speeches, one for L. Varenus (cf. Drumann, V. p. 245) and another in behalf of a woman of Arretium (cf. pro Caecina 33, 97; and ad Att. I. 19, 4).

It must be perfectly evident that no such account can possibly have been found in Nepos; but if so, Plutarch's source for this chapter which, as I was careful to point out, is of a perfectly homoge-- neous character, must be sought elsewhere. Nor would Tiro or Varro or Fenestella, or any other writer of the time have been guilty of what is both an insult and a deliberate falsehood, even supposing all their writings to have been accessible to Plutarch, which they unquestionably were not. This calumny, in other words, and with it the entire passage, can only have proceeded from some post-Augustan writer, when a legendary halo had already formed about the historical individual, and many incidents in the great orator's life had become obscured by the lapse of time. This writer I contend was Suetonius. ${ }^{22}$ For singularly enough both of the errors just discussed reappear in but two other authors besides Plutarch, and in only two, and these are Hieronymus and Sextus Aurelius Victor. But inasmuch as the fountain, whence these writers drew this rare piece of

[^55]erroneous information was Suetonius, it "follows as the night the day" that he constituted the common source of all three. This conclusion, although irresistible, as it appears to me at least, receives additional emphatic confirmation from the fact that the statements under notice, apart from the circumstance that they are found but three times in all extant literature, are also demonstrably erroneous, it being well known how much safer a clue to the detection of literary interdependence is frequently afforded by errors found in common than by coincidences in matters of fact, the treatment of the same subject often leading to a similarity in its presentation.

In ch. I we seem to detect another instance, almost equally certain, of Plutarch's indebtedness to Suetonius:






The source of this passage cannot have been Nepos or Tiro, to the latter of whom it has been customary, by a sort of general consent, to relegate these purely biographical portions of Plutarch's vita. This is not only impossible on the face of its very contents, but is sufficiently indicated by the oi $\mu \grave{\epsilon} \nu$. . oi $\delta \grave{\epsilon}$. On the other hand, the passage under notice possesses the true color Suetonianus. ${ }^{23}$

But even allowing this inference to be of too subjective a nature to compel conviction, all doubt as to its truth is again dispelled by two passages in Hieronymus and Sextus Aurelius Victor. I must quote them again for the purpose of comparison with the Greek cited above.
22. This same reproach is made by Calenus, an inveterate enemy of Cicero's. (cf. ad Att. XI. 8, 2, etc.), in a scurrilous speech put into his mouth by Dio 46, 4. The genuine oration, to which we may add the invectives of Antony as in all probability containing similar imputations, were undoubtedly known to Suetonius, whereas Plutarch unquestionably read neither.
${ }^{23}$ H. T. Peck, Suetonius, Lives of the Caesars, Holt \& Co., New York, 1889, p. X.: " He can only accumulate with patient industry a vast number of details, and set them before us in a mass, leaving us to arrange and weigh and discriminate and judge as best we may. He is a gatherer of facts. . . . Nothing is too unpleasant, nothing too personal, to be left unrecorded. He pins a scandal and adds it to his collection, as a naturalist would a butterfly ; but at the same time he does not dwell upon these matters."

Hieron. (i.e. Suetonius) Olym. 168, 3: Cicero Arpius nascitur matre Helvia, ${ }^{24}$ patre equestris ordinis ex rege Volscorum genere.

Victor de vir. ill. 81 - M. Tullius genere Arpinas patre equite Romano natus genus a Tullo ${ }^{25}$ rege duxit.
Plutarch's indebtedness to Suetonius' Life of Cicero having thus been demonstrated by the aid of Hieronymus and Sextus Aurelius Victor, we are now at liberty to look for additional evidence, corroborative of this indebtedness, and fortunately such passages are by no means lacking.

At the end of ch. 4 we are told that Apollonius on hearing Cicero, his pupil, declaim in Greek, cried out in despair that now eloquence too, the only glory that still remained to Greece, would be transferred by him to Rome. ${ }^{26}$ The story is intrinsically improbable. It is nowhere alluded to by Cicero, certainly a very suspicious circumstance in his case, for he of all men would have been the least likely to have omitted to speak of it had it been true. Neither Valerius Maximus nor Gellius nor Macrobius nor any other writer of that stamp, in whose works we might reasonably expect to find so memorable an incident recorded, has any knowledge of it. There is, as a matter of fact, but one other author besides Plutarch who mentions it, and singularly enough his name is Sextus Aurelius Victor, in the vita Ciceronis so often quoted by me: "Molonem Graecum rhetorem tum disertissimum habuit qui flesse dicitur quod per hunc Graecia eloquentiae laude privaretur." ${ }^{27}$ Relying on the strength of the evidence already presented, we will not, I am confident, hesitate about designating Suetonius as the common source of Plutarch and Victor in this passage.

I have previously taken occasion to prove that in ch. 2, 22 sq., in which the poetry of Cicero is unfavorably criticised, Plutarch had
${ }^{24}$ The name of Cicero's mother is given only here and in Plut. She is never alluded to by Cicero, the solitary other reference being Q. Cicero Ep. ad Tironem (ad fam. XVI. 26, 2) "et matrem nostram sic olim facere memini."
${ }^{25}$ Cicero speaks of the antiquity of his family some three times: de leg. II. I, 3; Brut. 16, 32; Tusc. I. 16, 38 (Servius Tullius).



${ }^{27}$ It might be mentioned in passing that a very similar anecdote is related of Fohn Reuchlin and Argyropolus, whose lectures on Thucydides the German scholar took occasion to attend while an embassador to the court of Pope Alex. VI.; cf. Raumer, Gesch. der Paedagogik, I. p. 95.
recourse to some post-Augustan source. The same is true of ch. 40, 4-24, in which he treats of Cicero's great merits in enriching the Latin language by the coinage of new words, and then again reverts to his poetical efforts. I do not, however, contend for source-identity because of any belief that the later chapter bears any internal evidence of a post-Augustan origin, for it does not, but simply because there can be no possible doubt that ch. 40 , on the very face of its contents, is derived from the same fountain as ch. 2 ; and as this is necessarily post-Augustan and non-Tironian, ${ }^{28}$ it follows that ch. $40,4-24$, is so too. But of all post-Augustan writers possibly accessible to Plutarch, there is not one to whom passages of this literary character can with more justice be attributed than to Suetonius Tranquillus, whose predilection on this point is well attested by innumerable examples. Adding to this the positive evidence already presented of Plutarch's indebtedness to Suetonius, the inference just made as to the source of ch. 2, 22 and ch. 40, 4-24, will be well-nigh irresistible.

I have purposely reserved for the last the discussion of one other passage which is calculated to give additional confirmation, if such, indeed, be needed, to the argument which I have been advocating in this paper. In ch. 44 the biographer narrates a dream of Cicero's which is practically and substantially identical with Cicero's dream concerning Augustus, as recorded by Suetonius (Aug. c. 94). Neither writer mentions his authority, the commentators on Suetonius are silent in regard to it, and the scholars who have written on the sources of the Greek vita attribute such passages to 'Tiro, in want of anything better, a proceeding, by the way, as easy as it is gratuitous. And yet the original source of this anecdote can be determined with singular accuracy from a passage of Tertullian de anima, c. 46: "M. Tullius Cicero Augustum civilium turbinum cultorem de somnio narrat quod in vite illius commentariis conditum est." There is every probability that this dream was also related in Suetonius' Life of Cicero, which, if true, might well account for the succinct narrative of it in his Life of Augustus. But if so, the question at once suggests itself, whether the $i \pi \sigma \mu v \eta \mu a \tau \alpha$ of Augustus constituted the common source of both Plutarch and Suetonius, or whether the latter author is again to be looked upon as the source of the former. Though not disposed categorically to assert what can never be fully substantiated by proof,

[^56]I am nevertheless very much inclined to favor the second view ; for, although Plutarch quotes these Memoirs five times in all (see the list above), there is but a very remote probability of his having ever read a single line of them, except at second hand, while Suetonius, on the contrary, is known to have made an extensive use of the emperor's autobiography. ${ }^{29}$

With this I close my paper, which I am only sorry to say is not nearly so carefully elaborated as I would like to have made it, if more time and space had been allotted to me. But be this as it may, its object will be more than accomplished if the philological jury, into whose hands the case is now given, should decide that the arguments adduced to prove that Suetonius' vita Ciceronis constituted one of the sources of Plutarch's life of the great Roman orator are at least formidable enough to merit attention, if not absolutely convincing. ${ }^{30}$

29 Among other passages possibly taken from Suetonius might be mentioned c. 5, 29, $12 \mathrm{sq} . ; 41$, 1 , especially c. 24, and particularly some highly unfavorable criticisms of Cicero that are met with in Plutarch's life (omitting similar expressions in the narrative of the orator's political history, the sources of which were not discussed in this paper), for most of these are of so unfriendly a nature as to exclude Nepos, or Tiro as possible sources, their biographies being entirely eulogistic or apologetic.
${ }^{30}$ A possible chronological objection, which, if valid, would strike at the very root of my arguments, may be briefly discussed in a note, it being easily disposed of. Plutarch's Life of Cicero was written at a later date than his Life of Sulla (cf. Michaelis de ordine vitarum parall. Plutarchi, Berlin, 1875, Weber, p. 1-39). Now, the latter happily furnishes us with a "terminus post quem," for in ch. 2I Plutarch, describing the battle of Orchomenus, fought in 85 B.c., adds that many relics of the dead were found in the neighboring marshes, $\sigma \chi \in \epsilon^{\prime} \delta o \nu \dot{\epsilon} \tau \bar{\omega} \nu \delta \iota \alpha \kappa \sigma \sigma^{\prime} \omega \nu$
 (cf. Holden, Plutarch's Sulla, p. xxiv.). The vita Ciceronis was consequently composed later than this date.

Suetonius Tranquillus is generally supposed to have been born about 75 A.d.; he was appointed magister epistolarum to Hadrian, probably in 119. He was, therefore, at the time of the composition of Plutarch's Cicero, some forty years old. There is consequently nothing to prevent us from supposing that his work, De viris illustribus, or parts of it, had at that time long been published, there being a.bsolutely no evidence to the contrary. Pliny the Younger, in a letter (V. io) probably written in 105 A.D., begs S. to publish his volumina. The Caesares are undoubtedly his latest, as they are his maturest, work.

## APPENDIX.

## Sexti Aurélii Victoris vitae Ciceronis [epitome] (de Viris

 Illustribus, c. 81).Marcus Tullius Cicero genere Arpinas, patre equite Romano natus genus a Tito Tatio rege duxit. ${ }^{1}$ Adolescens Rosciano iudicio eloquentiam et libertatem suam adversus Sullanos ostendit ex quo veritus invidiam Athenas studiorum gratia petivit ${ }^{2}$ ubi Antiochum Academicum philosophum studiose audivit. ${ }^{3}$ Inde eloquentiae gratia Asiam post Rhodum petiit ${ }^{4}$ ubi Molonem Graecum rhetorem tum disertissimum magistrum habuit qui flesse dicitur quod per hunc Graecia eloquentiae laude privaretur. ${ }^{5}$ Quaestor Siciliam habuit. ${ }^{6}$ Praetor Ciliciam latrociniis liberavit. ${ }^{7}$ Consul coniuratos capites punivit. ${ }^{8}$ Mox invidia P. Clodii ${ }^{9}$ instinctuque Caesaris ${ }^{10}$ et Pompeii quos dominationis suspectos eadem qua quondam Sullanos libertate perstrinxerat, sollicitatis Pisone eṭ Gabinio css. qui Macedoniam Syriamque provincias ${ }^{11}$ in stipendium operae huius acceperant in exsilium ${ }^{12}$ actus mox ipso referente Pompeio ${ }^{13}$ rediit eumque civili bello secutus est. ${ }^{14}$ Quo victo veniam a Caesare ultro accepit ${ }^{15}$ quo interfecto Augustum fovit. ${ }^{16}$ Antonium hostem indicavit. ${ }^{17}$ Et cum Triumviros se fecissent Caesar, Lepidus Antoniusque ${ }^{18}$ concordia non aliter visa est inter eos iungi posse nisi Tullius necaretur ${ }^{19}$ qui immissis ab Antonio percussoribus ${ }^{20}$ cum forte Formiis. quiesceret imminens exitium corvi ${ }^{21}$ auspicio didicit et fugiens ${ }^{22}$ occisus est. Caput ad Antonium relatum. ${ }^{22}$
${ }^{1}$ Cf. Plut. Cic. c. I S. Hieron. l.c.
2 Plut. Cic. c. 3 Hieron. l.c.
${ }^{8}$ Cic. c. 4, init.
${ }^{4}$ Cic. c. 4, 24.
${ }^{5}$ Cic. c. 4, 26.
${ }^{6}$ Cic. c. 6.
${ }^{7}$ Cic. c. 36, 14.
${ }^{8}$ Cic. c. $10-23$.
${ }^{9}$ Cic. c. 28 sq.
${ }^{10}$ Cic. c. $30,30$.
${ }^{11}$ Cic. c. 30, 25.
12 Cic. c. 31 sq.

13 Cic. c. 33.
${ }^{1+}$ Cic. c. 37 .
15 Cic. c. 39.
16 Cic. c. 40, 24.
17 Cic. c. 45, 30.
18 Cic. c. 46, 22.
19 Cic. c. 46, 26.
${ }^{2)}$ Cic. c. $47,48$.
${ }^{21}$ Cic. c. 47, etiam Val. Max. 19, 15
[" cum enim in villa Caietana esset corvus in conspectu eius hororum mansit."] 22 Cic. c. 48, 49.

## III. - Sex-denoting Nouns in American Languages.

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The most cursory consideration of the things in nature teaches us the fact, that there are living and lifeless objects in the world around us, that is, beings which spontaneously show signs of inward life, and objects deprived of the signs of life or appearing to be so. To reach such a degree of mental apperception our race had to pass through a long period of training and experience, and among rude and primitive nations the human mind has not reached this stage of logical perfection; much less can this be said of the intelligence of the primordial man of many thousand years ago. The primordial man easily confounded action, motion, variation, and change with life, this being a natural consequence of the animism which then pervaded all human understanding. Man at that remote period also confounded cause and effect with sequence in time, and both errors were the fruitful agencies which produced that wonderful maze of religious ideas, myths, and superstitions which are now being published in the literature of folk-lore. Objects like the wind, lightning, dew, or fog could then be regarded as animate as well as pearls, precious stones, and flowers, although we would now laugh at the idea that there is life in them. But primeval ideas like these still survive in the gender of some languages, part of which are spoken by the most cultured nations.

But besides the above another distinction was received into the noun and other parts of speech. Man and the higher animals, as quadrupeds and birds, were known to be divided in two sexes, and an intimation of these was expressed in the grammatic forms of some languages. In the Aryan languages the majority of the lower animals and plants were also given a grammatic sex, but most other objects of nature were relegated into what is now called the neuter gender. In other languages, mainly of the agglutinative type, these were relegated into a large class of "inanimates." The large majority of all languages which are distinguishing gender in the noun, know of two genders only, and a number of tongues in all parts of the world know
nothing of any gender- or sex-distinction whatever, ${ }^{1}$ some of these, as Neopersian, Lettish and English, having lost them in course of time.

The personal pronoun is that part of speech in which the masculine sex is at first distinguished from the feminine by separate words or grammatic signs. From the personal pronoun this distinction gradually invades the possessive, reflective, demonstrative, interrogative and relative pronoun. Sex may be made distinct in the pronoun of one, but not of another dialect of the same linguistic family, a fact which I have observed in the Kalapuya family of Northwestern Oregon. Sex-distinction also exists in the third persons of the pronouns in some Iroquois dialects, but not in the Cherokee language, which is related to them. In Iroquois dialects the distinction between he and she extends to persons only, not to any of the animals. In the Timucua, once spoken in the Floridian peninsula, o, oqe is he, ya she; but sex does not appear to be marked in any other manner in this language, which is so extremely rich in pronominal and verbal forms.

From the personal and possessive pronoun sex-distinction passes into the verb, which in agglutinative languages is nothing but a modified noun. In the verb sex-distinction is less frequent than in the pronoun. Of American languages some Iroquois dialects have it in the third persons of the singular, dual and plural of the pronoun only ; in the eastern hemisphere the languages which present this feature most conspicuously are those of the Semitic stock.

## Distinction of sex in the noun.

The noun proper or substantive and the adjective are the parts of speech in which sex-denoting affixes are most unfrequently met with. The majority of all tongues will resort to separate terms to indicate sex in human beings and animals, and place them in apposition to the noun either before or after it. In Maya dialects these sex-apposites have been ground down so as to represent mere prefixes; ahdesignates the male, but in fact means proprietor, possessor; ish-, shrepresents the female sex, and originally referred to the reproduction of the species. Thus in the Maya of Yucatan mehen is son, ishmehen daughter; Ah-Pech man called Pech, Ish-Pech woman called Pech. To designate the sex of animals, this language uses other

[^57]terms: shibil-coh male puma, shibil signifying male. The Quiché language, closely related to Maya, furnishes such examples as : Tziquin, nom. pr. masc. "Bird"-Sh-Tziquin, name of his wife ; zu flute, ah-zu musician; achih-mun male slave, ishok-mun female slave, achih meaning male and ishok zooman.

But this is agglutination only ; affixes like these are not real, inseparable grammatic marks to designate sex, but only terms used in forming compound nouns, just as we say she-fox for vixen. However, we find in several not sex-denoting American languages instances of metaphoric appellations of inanimate things referring to sexual distinction. They show how deeply engrafted in the human mind is the tendency towards animism. Thus the Caddo name for Mississippi river is Báhat sássin Mother of rivers, for sássin means mother as well as wife, and the name shows that that river is here symbolized as the "receiver of many rivers." In the Maskoki languages thumb is "mother of fingers" ; in Creek ingi Itchki; in Chikasa flbak-ishke, in Hitchití 1 lb -iki, the literal rendering of all these terms being "of one's fingers their mother."

## Sex-denoting affixes.

What seems to be a genuine sex-denoting affix to the noun appears in one of the South-American linguistic families of the northern part of that continent. This stock is commonly designated as Carib, but since this name has been used in an exceedingly vague and indistinct manner, it is preferable to call the dialects in which sex-denoting affixes have been studied, by their special names.

Copying from Fr. Müller, Grundriss der Sprachwissenschaft, II, p. 324, the dialects in which this feature is observed are the Arowak and the Goajira, sex being indicated in adjectives and participles as well as in substantives. In Arowak we have :
boy basabanti ; girl basabantu.
little boy basabanti-kan ; little girl basabantu-kan.
a good man üsati ; a good woman üsatu.
loving (man) kansiti ; loving (woman) kansitu.
dying (man) ahuduti ; dying (woman) ahudutu.
child (male) elonti ; child (female) elontu.
In the Goajira language, spoken north of the Gulf of Maracaibo, the -i of the masculine answers to a feminine in -e, as follows :
merchant oikari ; fem. oikare.
fisherman apüshaxori; fem. apüshaxore.
good anashi ; fem. anase.
dead autushi ; fem. autuse.
little morsashi ; fem. morsase.
sorry, trist, maxuaintshi ; fem. maxuainre.
The language of the Kalinago or Caribs of the West Indies or Antillian islands is surviving upon a few islands only; it is related to both dialects above mentioned, and shows the same sex-denoting suffixes as observed in Arowak (Müller, ibid. p. 339) :
a beautiful man iropo"ti ; a beautiful woman irupatu.
beloved (man) ki"shi"ti; beloved (woman) kinshi"tu.
murderer aparuti ; murderess aparutu.
I do not have the works of Father Breton before me, who is the chief authority upon this insular language ; but from the extracts in L. Adam, Examen Grammatical, p. 7 (1878), it appears that the personal and the possessive pronouns also differed according to the sex of the one speaking in the third person: l-iem he does, t-iem she does; 1-aku his eye, t-aku her eye. Moreover, the females among themselves spoke another language than the men, and though both languages were called Caribbean, Fr. Müller regards them as radically distinct from each other. ${ }^{1}$

The Taensa people, the existence of which is recorded in the annals from 1680 to 1812 , lived between Vicksburg and Natchez City on the west side of the Mississippi river, near the Tonikas, and about ${ }_{1} 714$ removed to Mobile Bay. The grammar, vocabulary and poetic collection of the Taensa language, which was published in Paris in 1882, has been attacked in regard to its authenticity, and since the arguments brought forward against it have not convinced many scientists, ${ }^{2}$ I shall make mention of the curious system of sexdistinction which the grammar contains. This distinction occurs in the pronouns and in the substantive. The pronouns with sex-forms are thou wi, fem. wiâ ; he su, she suâ ; ye wig, fem. wiâg ; they sug, fem. suâg. The interrogative pronoun wekmâr, fem. wekmârâ who? the emphatic and expletive forms of the personal pronoun all bear the marks of sex-distinction. When a masculine form corresponds to a feminine substantive, the ending of the latter is $-\hat{a}$; and this in some instances passes over into the adjective when this is used attributively.

[^58]The terminals -ao, -a-u indicate inanimate things, but nouns in -ao, $-a-u$ are regarded as of the feminine sex.

## Tonika.

The only sex-denoting language which I have had the opportunity to study on the spot is the Tonika or Túnixka of Eastern Louisiana, discovered by me in the autumn of 1886 . It proved to be a language heretofore unknown to science, and by its strange peculiarities deserves to be carefully studied and compared with other languages, especially with those spoken in its nearest vicinity: the Na'htchi, Shetimasha, Atákapa and the sundry dialects of the wide-stretching Maskóki family.

In the pronoun, verb and noun this southern tongue distinguishes two sexes, the masculine and feminine; inanimate things belong either to one or the other of the two, and abstract nouns are chiefly or exclusively of the feminine class. If an inanimate order ever existed, it has been merged into the above two, as in the modern Romance languages the neuter has merged into the masculine.

In the noun the male sex is made distinct in the singular by the prefix uk- ( $u-$ ), or by the suffix $-\mathrm{ku}\left(-\mathrm{k}^{\mathrm{u}},-\chi^{\mathrm{ku}},-\chi^{\mathrm{k}},-\mathrm{k}\right)$; in the plural by the prefix sik-, sig-, or by the suffixed pronoun sä ${ }^{\prime n}$, sä'ma, hé säma. The female sex has a distinguishing mark in the prefix tik-(ti'h-, tig-, ti-, t-) or in the suffix -ktchi ( $-\chi$ tchi, $-\chi$ tch, $-\mathrm{ktch},-\mathrm{kts}$, -'htchi, -tch, -ts) in the singular number, while in the plural it has $\sin , \mathrm{si}^{\mathrm{n}}$, si, hé $\sin$, hé sinma, placed either before or after the noun to which they belong.

All these affixes are either pronouns or of pronominal origin. They are frequently omitted where we expect to find them, and the masculine affixes much more so than those of the opposite sex.

## A partial list of Pronouns is as follows:

héku, hék ${ }^{u}$ this one, this; fem. héktchi, hé’htch ; pl. hé sän ; hé sin. héku and héktchi may also refer to inanimate things.

## Personal pronoun :

[^59]I pl. ínima we; emphatic ínimata ${ }^{n}$ ourselves.
2 pl. wínima ye (masc.), hínima (fem.); emphatic winimatan, hínimata ${ }^{\mathrm{n}}$.

3 pl. sä'n ${ }^{\prime n}$, sä ${ }^{\prime n}$ they (masc.), sinima, $\mathrm{sin}^{\mathrm{n}}$ (fem.); emphatic sä $^{\prime n}$ mata $^{\mathrm{n}}$, fem. sinimata ${ }^{\mathrm{n}}$.

## Possessive pronoun:

lúk tongue, ta lúk the tongue, a tongue, tongue.
i sg. íluk my tongue.
2 sg. wiluk thy tongue, fem. hiluk.
3 sg. úluk his tongue, fem. tiluk her tongue.
i pl. ínluk our tongues.
2 pl. wînluk your tongues, fem. hînluk.
3 pl. siluk their tongues, fem. sînluk.
The word ri house, provided with possessive prefixes, runs as follows :

1 sg. ígri my house; 2 sg. wigri, f. higri ; 3 sg. úgri, f. tígri.
1 pl. ̂́hĕri our house; 2 pl . wîhĕri, f. híhĕri ; 3 pl. sígri, f. si'hri.
When ri house, which is of the feminine gender, stands in the plural, it becomes ri-sin houses, lit. "house-these" or "house-they," and the "conjugation " proceeds as follows:

I sg. Igrisin or ta ri'htinsin my houses.
2 sg. wígrisin thy houses, fem. higrisin.
3 sg. úgrisin his houses, tígrisin her houses.
a pl. ihĕrisin our houses.
2 pl. wi'hrisin your houses, fem. hi'hĕrisin.
3 pl . sígrisin their houses, fem. si'hrisin; or tá n'tchi sín si'hri, lit. " the-women-their-houses."

In following up a portion of the personal inflection of the verb, similar pronominal elements are found to occur.

## Present tense of ságu to eat, declarative form :

1 sg. ságukani $I$ am eating.
2 sg. ságuki ; fem. ságuka.
3 sg . sagukúna, ságuku ; fem. sagúkati.
indef. sagúkiti somebody' is eating.
1 du. saginán we two are eating.
2 du. saguwina ${ }^{n}$; fem. saguhina ${ }^{n}$.
3 du. sagu-úna ${ }^{n}$; fem. sagusína ${ }^{n}$.

I pl. ságitin ${ }^{\text {n }}$ and ságiti we are eating.
2 pl. sagúwiti ; fem. sagúhiti.
3 pl. sagúkiti ; fem. sagúsiti.
Although there is a dual in the verb, I have been unable to obtain a dual for the pronoun and substantive differing from the plural.

Now let us see how these different signs of sex are applied in the Tonika sentence: Let us consider them separately, beginning with the :

## Masculine.

kuá tú $\mathrm{k}^{\mathrm{u}}$ óshka tádshara the clawes of a little bird; kuá being masc., tú $\mathrm{knu}^{\text {or tú }} \mathrm{k}^{\mathrm{u}}$, tú $\mathrm{\chi}^{\mathrm{k}}$ little, is of the same sex.
héku ná $\mathrm{x}_{\mathrm{k}}$ like this man, or like this thing.
ikontéku lúpui wéran a-áxkinta my father-he (ikonté-ku) died, while I was hunting.
kán hari'a ta ríxku (or táxku, abbr.) ? how tall is this tree ?
táyani-shi-ku ríxti míshti tá sá-tek ${ }^{\text {u }}$ ukpéri the buffalo is stronger than the horse; lit. "cattle-male-he strong more the horse-he him surpasses ": uk- is the masc. object-particle of the singular, referring here to the horse.
tóni sik'háyi hihá-ixta lúp hót' onta The old people in this village are all dead; lit. "people those-old in-there dead all are"; sikbeing an instance of the masculine plural.

## Feminine.

óka núxtchi tú little girl; lit. " child-woman-small "; tú little need not take the fem. ending (tú'htchi) here, for the sex is already pointed at by núxtchi.
táxkuri héktch iméhtini this fence is mine (tá ${ }^{\text {kuri fence). }}$
tá yúnka'htch (or tá yúnka) titik ma-itóru ${ }^{\text {anra }}$ a rope is crossing the creek; lit. "the rope creek across is lying"; if yúnka was masc., the verb would be ū'ra.
rá-axkini î'gatchik lúpiti'htch I greze up when my mother was dead.
igatchiktch ti'htch, Béluksi núxtchi, iknaxshä'ki my mother, a Beluxi woman, brought me (here). In these two examples ti'htch is added reverentially to the term my mother (ì'gatchi).
ta tíraktch irúkati húriwi the cloth (or sheet) floats in the wind; lit. "the-she-cloth-she floats-she wind-in," ira cloth being preceded and followed by feminine affixes.
ta rixkéku (or tąrkeku, táxkuk) hárīa tári'tch atápära the tree is as tall as the house; lit. " the tree tall the house-she equals."
tá $\mathrm{x}^{2} \mathrm{k}$ hária, tigri kä'ha the tree is lower than the house; lit. " the tree tall, she-house is-not."
táxtchiksh ti'hkorak(i) full moon; lit. "luminary she-round."
lá-u tá $x$ tchiksh rikĕhä, á $\chi$ shukun tá $x$ tchiksh tikamishti the moon is smaller than the sun; lit. "night-luminary great-not, day-luminary her surpasses."
tá-ushi rómana mishtik, ta mákak tikpéri water is heavier than oil; lit. " water (for ta wi'hshi) heavy more, the oil her surpasses."
ta wíshäna máxkina míshti hótu si"péri this lake is deeper than all others; lit. "the lake deep more all them (fem.) surpasses."
yakanikáxtcha ki, láho ${ }^{n}$ tuk yakanikáxtcha if I come, I come early. Láho" tuk " small morning" gives no indication of the feminine gender of láhon, láhoni.
ta héri'htchi tchúima he seizes the canoe.
táru hésin ra (or rata) these nuts are hard.
ta niriwä'ka sin the cemeteries.
hé sin hótu tíksa tchóhaki she led all these dogs; tíksa female dog, hé sin these (fem. pl.), hótu all.

The demonstrative particle ta preceding many of the nouns can best be understood when we regard it as an article corresponding in most cases to our definite article the, and indicative of the singular and plural number of both sexes.

These examples plainly show that there is a real sex-distinction in this language for animate beings as well as for inanimate things; that the pronoun $\mathrm{ku}, \mathrm{k}^{\mathrm{u}}$ is always placed after its noun, adjective, or pronoun to designate the masculine gender; that the more frequent ti'h-, ti-, t - is placed before it to designate the feminine, but when it appears in the shape of ti'htch, -'htch, -ksh, -'tch is suffixed to it; that in many instances the signs of either class are omitted altogether.

The point which we have to examine next is, what objects or categories of objects are assigned to the one or the other sex. For we find that the attribution of some sex to inanimate things must have started from the same mental activity which has assigned to the sun a male sex in the classic and a female in the Germanic languages, and to the moon just the reverse, although there is nothing male or female to be perceived in either of the two celestial bodies. It was the same energy of the mind which caused primitive men to produce myths by personifying the inanimate objects of nature observed
around them. The Tonika language is the more remarkable on this account, because it is the only language heretofore discovered in America which divides all objects of creation into two great sexcategories.

Of the adjectives the large majority appear to have a simple form, from which the masculine is derived by suffixing $-k u,-\chi^{k u},-k^{u}$, the feminine by appending one of the aforementioned affixes. The adjective ni'hsara young forms neither of the two, as the sex is expressed by the noun accompanying this adjective or implied in it : óne ni'hsara boy, nú $\chi$ tchi ni’hsara girl; ; lit. " man young," " woman young:"

We have the following instances:

| tä'g great, large | masc. tä'ku, tä'gu | fem. tä'htchi |
| :---: | :---: | :---: |
| tú small, little | túxku, tú $\chi^{\text {k }}$ | túx kush |
| kora ${ }^{\text {n }}$ round | koraku | kóraktch |
| méli black | méliku | méliktchi |
| mili red | miliku | miliktchi |
| rowa white | rowaku | rówaktchi |
| táakir smutty, dirty | táxkirku | táxkiri'htch |
| máka ${ }^{\text {f }}$ fat | makáxku | aká'htchi |
| rix'sa spotted, dotted | rix'saku | rix'satch |

The sex of the substantive is not by any means always expressed in the adjective accompanying it, and this appears to be dictated either by the run of the sentence or be a matter of pure convenience. Thus we have tashkaráxponi (fem.) rówa white stocking, though t . is. feminine ; tíxshuma máka ${ }^{\mathrm{n}}$ or t . makáhtchi fat meat; tíxshuma sépi lean meat, instead of sépi'htch. Especially the sign of the masculine is frequently omitted.

Of the Terms of relationship, which correspond to each other in both sexes, many appear in this language with the sexual affixes appended, and are always connected with their possessive prefixes $m y$, his, her, just like the parts of the human and animal body:
e'hkutuhuk my son, éhkutuhuktch (i) my daughter.
é $\chi$ kutu wálik my step-son, é $\chi$ kutu wáliktch my step-daughter.
ixtchaku my grandfather, íxtchaktch my grandmother.
étuku mashiku my father-in-lawe, étuku mashi'htchi my mother-inlaw. Thus in the formation of the degrees of relationship we perceive a close analogy with the sex-distinction in adjectives.

Terms designating male persons, their occupations, employments, generally show no affix designating sex, or if they do, it is $-\mathrm{ku},-\mathrm{k}{ }^{\mathrm{u}}$. Terms descriptive of women, their occupations, etc., have either no affix, or t'h $h$-, -'htchi or some other of the above-mentioned feminine affixes.

Quadrupeds and birds (kúa) are of the masculine gender, unless the female sex is pointed out by a noun standing appositively. There is no word in the language corresponding exactly to our term animal, unless it should be contained in sán, which now means $d o g$; sá tä'n horse would then be "large animal." Examples: yánish cattle, yánish káxshi buffalo, pä'ha sán wolf, tchúla fox, yá, i-a deer, yátän elk, lit. " large deer," núxki beaver, rushtán rabbit, rushtán tä'n sheep, lit. " large rabbit," iyushäla opossum and woodrat, kiwa weasel, fyutä hog, mínu cat, híxku mouse; kúa tú bird (lit. "small bird"), kúa tú and túxku humming-bird, kúa míli cardinal, ela, älla buzzard, yé'hta tä̈n turkey, shími pigeon; but ä'xka crow is represented to be a feminine.

The lower animals, as amphibians, reptiles, fish, insects and mollusks, appear to be considered as of the masculine gender: kó ${ }^{k u}$ turtle, ko'hsuki crab, ná-aran snake, nā'ran tà ${ }^{\prime n}$ rattlesnake, viz. " snake large," níni fish, ä'ya fly, í-unari salmon, ómaxka alligator, sutáx ${ }^{\text {shu }}$ grasshopper, shírixka ant, lúpiran chamaeleon, námi louse, shíla pä'xka bedbug, lit. "fat beast," kē bee, kē mírka, míx'ka zeasp, kē wísta honey, takírka mollusk, úxshik shell. The generic term for all the smaller animals is shíla or shila tú, which the French Creoles call "le petit bétail," and is of the male sex. The term for frog, udshéxka, is said to be feminine.

Plants, trees, bushes and weeds are of the masculine sex also, and ríxku tree and zeood is masc. as well. The term for plant, tápa and tápaktch, is fem. and means "what grows" or "is planted"; tapákani $I$ plant. Examples of plants, all masculine, are as follows: ríx ku sánu pacan-tree, and sánu pacan-nut, úhshpa white oak, ríxku kíru peach-tree, ráyi mulberry-tree, yúgmoxku herb, grass, weed; erá, rá tobacco, yítä batate, sweet potato, shúlik ótaka melon, shúxka pumpkin.

Of rocks, stones and minerals the following are masculine: shí $\mathbf{k a}$ stone, rock, flint-stone; háxtchu salt, láxspi, lá'spi metal, iron, náxta bluff on a river, etc.

The celestial bodies and the divisions of time are considered feminine by these Indians, as is also háliktch, abbrev. háli, hál earth, and
its derivatives, perhaps because the personified Earth is regarded as the mother of all beings.
We mention the following instances: tá $\neq t c h i k s h, ~ a b b r . ~ t a ́ \chi t c h i ~$ "luminary" and sun; áxshukun t. sun, lit. "day-luminary"; lá-u t. moon, lit. "night-luminary"; táxtchi tipulá star; láhoni morning, te'hkalugéki noon, tohónagi afternoon, lá-aki, là'ki evening, tíhika summer and year; thika tú spring, lit. "little summer"; táxsaba winter, táxsaba tú autumn, lit. "little winter"; rúina heat, yúpaxta the cold, alutápa ${ }^{\mathrm{n}}$ harvest also belong to the feminine order. Among the derivatives and compounds of háli earth we have: halúpish mud, háli-sáman brick, lit. "earth baked"; halư'hta sole. But the term hal-ukini village, district, lit. "placed upon the earth," is masculine.

The points of the compass are derivatives of verbs or nouns, and all of the feminine sex: táxsapash north, lit. "cold"; táxtchi píkatish east, tíhikash south, lékatish west, lit. "loss (of the sun)."

Some other objects of nature are of the feminine order also: wi'hshi water, liquid becomes tà-ush (i) when the article ta is placed before it: tá-ush míli river, lit. "red water" ; háxpushi ashes, ontétish milk, tóra ice, toratíni hoarfrost, yáxku vegetable poison, shíxtika venom, télia and telia'htch shadoze and soul, also reflection on the water. The term yí pain, invisible sickness is feminine, and hence all names of diseases are of the same gender: ini yi toothache, e'htiníyu yí heart disease, táshki- rúpa diarrhaa. Yúri visible sickness is of the same sex.

Abstract nouns are all considered as of the female sex, for they are feminine adjectives made into substantives: káxshi true and truth, . reality; ríxki'htch force, strength, from ríxki strong; taxkirítchi filth, from tá ${ }^{\text {kir }}$ dirty; náka war, battle is masculine and appears to be considered as a concrete, not as an abstract noun.
The names for the parts of the human and animal body and of plants are about equally divided between the two sexes.

Of masculine nouns we have: íni my tooth, éruk my neck, i'hstuksuk my eye, ir''hshi my nose, inishi my breast, e'htuka my shoulder, i'hkení my hand, i. lábu my right hand, lit. "good hand," eyumä'ra my wrist, hanîmu fist, úyu ${ }^{\mathrm{n}}$ bowels, ilákashi my hair, táxki bone, íshki my posteriors, éhshka my foot, and o'hshka stalk and root of plant, yúxtar feather, plumage, oxsa tail of animal, axkatini pimple.

Of feminine nouns there are : I'hkin tírwash my finger-nail, e'htiniyu my heart, e'hsini my head, itá ${ }^{\text {kishi }}$ my skin (and bark of plants),
oli'hka and olika'htch my liver, tá-idsha flesh, meat, éyu and éyu'htch my arm, ópushka lung, tchára toe, túxsu grain, seed, rú nut.
Natural objects classed into the masculine order of inanimates are as follows : éshku rain, éshku rahini thunder, tóa snow, hóxka hole, áyi, á-i fire, húri zeind, ta húri ku the wind blowes, apáru sky and clear sky; hi'hshuka dew appears to be of both sexes.

Manufactured objects are thought to belong to both sexes, but the number of those belonging to the feminine possibly prevails over that of the opposite sex.

Masculines are : hässán saze, pólu'hki bottle, takáxti key, tíra táruhi clothes-brush, tanáha" back (of chair), kún kúrini drum, lit. "noise to assemble," tchúhi cushion, pillow, áyi wotchúra chimney, héyutana bed, ta póxku bed-cover, kóti lodgement, wúxku hat, ríáwähan doorway.

Feminines are: wishkatáhi bow, lit. "bow with cord"; róhina book, paper, newwspaper, etc., from rówa white; íra cloth, clothing, garment, úshik spoon, skálaxk shilling, from Span. escalino; láxspi ta éyu beads, hi'hturak tára ${ }^{\mathrm{n}}$ spider-web, yúnka and yúnka'htch rope, rí house, lodge, rí káhi floor, rí pókuni roof, thatch.

Readers perusing this long list of nouns will obviously notice that some of these terms have lost such endings as -i or -u , and that others have a long and an abbreviated form used simultaneously. There are whole categories of nouns which distinctly belong to one grammatic sex only, like the names fur the points of the compass, all of which are feminine exclusively, and moreover end in -sh throughout. But outside of the terminals of sex, -ku and -ktchi, with their phonologic alterations, no suffix can be found which gives an indication of sex by itself, as we observe it, e.g. with Latin -tas and German -heit.

The problem now confronts us: do we have in the Tonika language ${ }^{\circ}$ a division of nouns into an animate or vitalistic and an inanimate or non-vitalistic class, or a real sex-division into male and female nouns? To this I reply:

Had the originators of the gender-system embodied in Tonika started from the purpose of separating the objects showing life from those of the inanimate world, they would not have placed animals, plants, minerals, many objects of nature and the body's organs into the same class. Neither would they have done this, if they desired to distinguish the noble from the ignoble (whatsoever this distinction may amount to in an Indian's mind), the active from the non-active, or the organic from the inorganic, a conception which could hardly
originate in minds untrained in natural science. That the feminine sex contains, or originally embraced, only such terms which describe objects hidden within others, or not on the surface, or enclosing other objects, and abstract ideas, is a theory agreeing with many terms of the list, but not with all the facts on hand, and has therefore to be discarded.

The best we can do in our present state of knowledge is to assume that the early Tonikas started from the two sexes observed among men and animals, and found in all the other objects of nature, and in abstract ideas, some fancied analogy to males and females, and thus classified their nouns.

# IV. - Metrical Obscrvations on a Northumbrianized Version of the Old English $\mathcal{F}$ udith. ${ }^{1}$ 

By ALBERT S. COOK, professor in yale university.

The attempt to restore a poem to the dialect in which it was originally written, and from which it is supposed to have been afterwards transcribed, is not wholly unprecedented. R. Payne Knight undertook this for Homer in his Carmina Homerica, Ilias et Odyssea, 1820, and has been followed in our day by Fick (Die homerische Odyssee, 1883 ; Die homerische Ilias, r886). A similar endeavor to reconstruct the original strophic form of Béowulf was made a few years ago by Möller (Das Altenglische Volksepos in der ursprünglichen strophischen Form, 1883). It is needless to specify the services which such a version, if properly made, is capable of rendering to scholarship. For our purpose it will be preferable to measure the results which, in the subjoined text, have been obtained on the basis of phonology and inflexion alone, by subjecting them to the independent test of prosody. The metrical laws of Old English have at length been made out with sufficient accuracy. (Sievers, Zur Rhythmik des Germanischen Alliterationsverses, in Paul und Braune's Beiträge, Bd. X), and have been applied to our poem by Karl Luick (Paul und Braune's Beiträge, XI 470-492 ; cf. my new edition of Judith, pp. lv-lxxi). Assuming that these are well known, I will at once proceed to record the metrical observations on the Northumbrianized version of Judith, which may be easily verified by any student for himself.
I. In the vast majority of hemistichs the metre remains entirely unchanged.
2. The metrical necessity for the syncope of middle vowels in the cases established by Sievers (PB. X 459 ff.) is fully confirmed by many instances in our version. Thus, éadgo, $35^{\mathrm{a}}$; módga, $52^{\mathrm{b}}$;

[^60] hálga, $203^{\text {b }}$.
3. In other instances the metre is rendered more regular by the substitution of vowels long by position for the short vowels of the manuscript ; in other words, a proper iambic, trochaic, dactylic, or other rhythm, with a long vowel to bear the ictus, takes the place of a kind of logaœdic rhythm, in which two short vowels stand, by resolution, in the place of the single long one. Thus, for example, snotra (snottra ?), $55^{\text {a }}$, becomes a trochee ; beadw-, $175^{\text {b }}$, becomes, instead of beadu-, the end of a foot anapæstic in its general character; niol-, $1 \mathrm{I}^{\text {a }}$, becomes the long syllable of an anapæst; salwig-; $21 \mathrm{r}^{\mathrm{a}}$, becomes a trochee ; beadwe, $213^{\mathrm{a}}$, cwicra, $235^{\mathrm{a}}, 324^{\mathrm{n}}$, -fretwad, $329^{\mathrm{b}},-$ fedra, $210^{\mathrm{b}}$, are all trochees. The loss of the final $e$ in the first element of certain compounds has a similar effect: thus hyg-, $13 \mathrm{r}^{\mathrm{a}}$, becomes a monosyllabic foot, and sig-, $295^{2}$, the long syllable of an anapæst. In like manner, the first syllable of herpad, $303^{\text {b }}$, in the ordinary version, must be considered as long by Sweet, who otherwise would naturally have emended it to hęre-, as phonological law has required in the Northumbrian version. Another example of hyg- is found in $303^{a}$, where it forms the first syllable of a foot having the form $ニ ン \times$. Hypesæx, $3^{28^{a}}$, is doubtful ; perhaps hup- should remain.
4. The dropping of final $e$ in the pronouns hir and ðǽr has a similar effect upon the metre. Feet are shortened, with advantage to the regularity of the metre, in $99^{b}, 123^{b}, 124^{b}, 130^{\circ}, 149^{a}, 149^{\circ}$, $167^{\mathrm{a}}, 175^{\mathrm{b}}, 286^{\mathrm{b}}, 33^{2} 7^{\mathrm{a}}, 335^{\mathrm{b}}, 341^{\mathrm{l}}$; in the anacrusis, $5^{\mathrm{b}}$. Hir appears to be sometimes long, and sometimes short ; it is long in $5^{\mathrm{b}}, 99^{\mathrm{b}}$, $335^{\text {b }}$, short in $123^{\text {b }}, 130^{\text {b }}, 149^{\text {a }}, 175^{\text {a }}$.
5. The change in the form of a verb converts a trochee to a cyclic dactyl in $9^{\mathrm{a}}, \mathrm{I} \mathrm{r}^{\mathrm{a}}$, a first pæon to a dactyl in $278^{\mathrm{a}}$, and increases the number of unstressed syllables by one in the first foot of $117^{\text {b }}$ : ne ðorfeð hé hopiga nó, like Beów. 392 (PB. X 239), ðæt hé éower æðelu can, and Beów. 1213 , héo fore ðææm werede spræc.
6. In $324^{\mathrm{b}}$ and $325^{\mathrm{b}}$, an anapæst followed by à iambus becomes anapæst + anapæst, which is a common form (PB. X 240).
7. The substitution of plur. fiondas for fýnd does not seem to cause a transgression of metrical law. Thus, in $320^{\mathrm{b}}$, fiondas oferwunnen resembles the cases under 11 in PB. X 230 , and stands or falls with them; fiondas sindon fuera, $195^{\text {b }}$, would be admissible on the same terms, were it not that fuera is a trisyllable; but perhaps we should be justified in reading fura.

8．In one instance，double trochee changes to the type $-\times 1$ ノニ $\times$ ： bord and brád swordas， $318^{\mathrm{a}}$ ．Whether scírméled swordas， $230^{\mathrm{b}}$ ，of the form $ニ ン \times 1 \Perp \times$ ，can be allowed to stand，I leave for others to determine ；it is found exceptionally in the first hemistich（PB． $\mathrm{X}_{3}$ IO），but apparently not in the second．

9．The rime is often unaffected by the phonetic changes under－ gone by both riming words．Thus hiorde ：gestiorde is as good a rime as hyrde ：gestýrde， 60 ；so néasa ：forléasa， 63 ．In other cases the rime is actually improved，as in－ræste ：－hlæste， 36 ；flég－：fég－， 47 ；swíra：swima，ro6．In line 2 the conversion of funde to fand destroys the rime，bụt of this we shall speak under a subsequent head．
ro．Hiatus is more frequent，through the loss of final $n$ ，though this is a matter of no importance in Old English prosody．Examples occur in $15^{\mathrm{b}}, 18^{\mathrm{b}}, 42^{\mathrm{b}}, 64^{\mathrm{a}}, 114^{\mathrm{b}}, 120^{\mathrm{b}}, 154^{\mathrm{a}}, 243^{\mathrm{a}}, 348^{\mathrm{a}}$ ．
ri．Alliteration is destroyed by the substitution of geéad for gegán in lines 140 and 219．Could Northumbrian poetry have had its peculiar form，differing from that of prose？

12．Metre is apparently destroyed in three cases， $132^{\text {b }}, 135^{\text {b }}$ ，and $272^{2}$ ．A stressed short syllable is inadmissible in $\delta$ Qna and hęre of the final foot，and similarly the first syllable of סolende should be long．We may conceive of the latter as possible by means of secondary lengthening，but ð̨̨na and hęre can only be emended for metrical purposes in the manner actually adopted by the manuscript text．Hęrige could easily be restored in the Northumbrian version on the analogy of other forms（cf．l．294），but סanonne（ðanone， dqnane）must have been coined for prosodical reasons．One is inclined to assume a similar coinage or adaptation in the case of funde（ 9 ，above）．True，it is common in West Saxon prose（Cosijn， Altwestschsische Grammatik，II § 84），yet its adoption may have been determined or influenced by poetic considerations in the first place．As it stands，this line is hopelessly unmetrical，and could not be restored except by replacing funde．

## V. - Notes on the Vocalism of Late West Saxon.

By ALBERT S. COOK, PROFESSOR IN YALE UNIVERSITY.

The phonological study of Ælfric's Homilies, recently made by my friend and pupil, Mr. Frank Fischer, has rendered it somewhat easier to survey the vocalism of the most important of Late West Saxon authors. As this paper has not been fully published at the date of the present writing (it is included in No. 2, Vol. IV of the Publications of the Modern Language Association), a synopsis of the chief results of the investigation may be welcome. This synopsis will accordingly be presented in the most summary form, with references, whenever necessary, to the Sievers-Cook Old English Grammar, second edition.
I. Where EWS. sometimes has $a$ before $l+$ cons., Ælfric always has the breaking ea.
2. Where EWS. fluctuates between $a$ and $o$ before nasals (Gr. 65), Ælfric always has $a$.
3. The umlaut variation in the past participle of certain strong verbs (Gr. 50. 2) is not found in Ælfric. In these cases the vowel is always $a$.
4. Ecthlipsis of $g$, with lengthening of the preceding vowel, takes place wherever possible before $d, \delta$, and $n$ (Gr. 214.3 and Note 3).
5. Palatal $g$ shows a similar tendency toward vocalization and disappearance in such forms as dæig-, læig, mæig, mæigð, céig, mǽig-, mǽið, x́ig, weig, seigð.
6. In Ælfric there are no $i e, i e, i o, i o, c, \alpha$,
7. In 25 words of the Homilies, Vol. $\mathrm{I}, i$ occurs for $y$, the $i$-umlaut of $u$, chiefly before palatals and nasal combinations. In 9 stems $i$ occurs for $\dot{y}$, the $i$-umlaut of $\dot{u}$.
8. EWS. ie (from various sources) is represented in Ælfric now by $i$, now by $y$, with a decided preponderance in favor of $y$. Exceptional are cwelm- 72. II, eltsta 24. 7, gerela 296. 4, gest- 30 . 14, -welm 382. 13 .
9. EWS. $i e$ is similarly represented by $i$ and $\dot{y}$, with a like preponderance in favor of $\dot{y}$. Exceptions are few in favor of $\dot{e}, 6$ in all.
10. Palatal umlaut is common, but that by a preceding palatal has been noted only in the word scép, for scéap.
11. The influence of $w$ upon following $e 0$, io is noticeable, producing $u, y$.
12. $U$-umlaut fails to occur in metod, werod.
13. Secondary lengthening of all the vowels is frequent, if Thorpe's edition is to be trusted.
14. Peculiar or exceptional forms are: næcednysse 392. 8; líchomlice 142. 7 , dæghwomlice 408. 6, ungesome 478. 25 , womm 236. 31 ; ardlice 78. 19; galdrum 474. 21; gewarnast 6. 28 ; ymesene 418.22 ; embe 36 . 10, ymbrene (for -ryne) 102. 27 ; fir 132. 25 ; hréaw 380. 34 ; sinu (sina) 236.21 ; cynnestran 352.27 , understynt 158. 35 ; bewýpð 84. 29; wælhréaw 606. 1; always hrade, never hræðe. Besides, there is a large number of more or less completely Anglicized Latin words, of which aspide 486. 35, Chaldeisc 570. 10, manna 76. 16, cherubim 10. 14, Ebreisç 24. 11, Persicisc 518. 17, Medas 454. 12, Judeisc 48. 19, cyrographum 300. 5 are not found in the index to Pogatscher's Lautlehre der Griechischen, Lateinischen und Romanischen Lehnworte im Altenglischen (Strassburg and London, i888).

Many other interesting particulars, together with the full proof of the statements here made, may be found in the monograph itself, which is therefore heartily recommended to professional students of Old English.

## APPENDIX.

I. Proceedings of Twenty-First Annual Session, Easton, Pa., 1889.
II. Treasurer's Report (p. iv).
III. List of Officers and Members (p. xlix).
IV. Constitution of the Association (p. lxi).
V. Publications of the Assoclation (p. lxiii).
VI. Indices to Vols. I-XX.

## MEMBERS IN ATTENDANCE AT THE TWENTY-FIRST ANNUAL SESSION (EASTON).

Herbert L. Baker, Detroit, Mich.
Isbon T. Beckwith, Trinity College, Hartford, Conn.
P. M. Biklé, Pennsylvania College, Gettysburg, Pa.

Edward B. Clapp, Illinois College, Jacksonville, IIl.
Manuel J. Drennan, Vassar College, Poughkeepsie, N. Y.
L. H. Elwell, Amherst College, Amherst, Mass.
A. Gudeman, New York, N. Y.

Isaac H. Hall, Metropolitan Museum, New York, N. Y.
Samuel Hart, Trinity College, Hartford, Conn.
Edward W. Hopkins, Bryn Mawr College, Bryn Mawr, Pa.
Theodore W. Hunt, College of New Jersey, Princeton, N. J.
George B. Hussey, College of New Jersey, Princeton, N. J.
Edmund Morris Hyde, Lehigh University, So. Bethlehem, Pa.
John B. Kieffer, Lancaster, Pa.
Charles S. Knox, St. Paul's School, Concord, N. H.
Francis A. March, Lafayette College, Easton, Pa.
Francis A. March, Jr., Lafayette College, Easton, Pa.
Samuel A. Martin, Lincoln University, Pa.
W. B. Owen, Lafayette College, Easton, Pa.

James M. Paton, Middlebury College, Middlebury, Vt.
Tracy Peck, Yale University, New Haven, Conn.
Edward E. Phillips, Marietta College, Marietta, O.
Thomas R. Price, Columbia College, New York, N. Y. Sylvester Primer, Friends' School, Providence; R. I. Julius Sachs, New York, N. Y.
W. S. Scarborough, Wilberforce University, Wilberforce, O.
C. P. G. Scott, New York, N. Y.

Thomas D. Seymour, Yale University, New Haven, Conn.
William D. Shipman, Buchtel College, Akron, O.
M. S. Slaughter, Iowa College, Grinnell, Iowa.

Clement Lawrence Smith, Harvard University, Cambridge, Mass
Herbert Weir Smyth, Bryn Mawr College, Bryn Mawr, Pa.
Edward Snyder, University of Illinois, Champaign, Ill.
J. R. S. Sterrett, University of Texas, Austin, Tex.

Edward F. Stewart, Easton, Pa.
Morris H. Stratton, Salem, N. J.
Andrew F. West, College of New Jersey, Princeton, N. J.
John Henry Wright, Harvard University, Cambridge, Mass.
[Total, 38.]

## AMERICAN PHILOLOGICAL ASSOCIATION.

Easton, Pa., Tuesday, July 9, 1889.
The Twenty-First Annual Session was called to order at 4 P.m., in Room 5, Pardee Hall, Lafayette College, by Professor Thomas D. Seymour, of Yale University, New Haven, Conn., President of the Association.

The Secretary, Professor John H. Wright, presented the following report of the Executive Committee :-
a. The Committee had elected as members of the Association: ${ }^{1}$ -

Charles W. Bain, Portsmouth, Va.
Herbert L. Baker, Detroit, Mich.
Charles W. Ballard, New York, N. Y.
P. M. Biklé, Professor in Pennsylvania College, Gettysburg, Pa. Edward Capps, Yale University, New Haven, Conn.
James C. Egbert, Instructor in Columbia College, New York, N. Y.
Edwin W. Fay, Fellow of Johns Hopkins University, Baltimore, Md.
Abraham L. Fuller, Instructor in Adelbert College, Cleveland, O.
George P. Garrison, Professor of English, Austin, Tex.
A. Gudeman, Ph. D., New York, N. Y.
J. Leslie Hall, Professor of English, William and Mary College, Williamsburg, Va.

Benjamin F. Harding, Belmont School, Cambridge, Mass.
Lawrence C. Hull, Lawrenceville School, Lawrenceville, N. J.
John B. Kieffer, Professor in Franklin and Marshall College, Lancaster, Pa.
Charles Sigourney Knox, St. Paul's School, Concord, N. H.
Clifford H. Moore, Oakland, Cal.
Charles A. Moore, Yale University, New Haven, Conn.
Ransom Norton, Houlton, Me.
Rev. Endicott Peabody, Groton School, Groton, Mass.
Edwin M. Pickop, High School, Hartford, Conn.
George Rodeman, Ph. D., Cambridge, Mass.
T. F. Sanford, Yale University, New Haven, Conn.

Henry A. Scribner, Plainfield, N. J.
Albert H. Smyth, Philadelphia, Pa.

[^61]F. C. Sumichrast, Assistant Professor of French, Harvard University, Cambridge, Mass.
Fitz Gerald Tisdall, Professor of Greek, College of the City of New York, N. Y.
H. C. Tolman, Yale University, New Haven, Conn.
J. W. H. Walden, Harvard University, Cambridge, Mass.

Hamilton Wallace, Principal Public High School, Tulare, Cal.
Sarah E. Wright, Augusta Seminary, Staunton, Va.
A. C. Zenos, Professor in Hartford Theological Seminary, Hartford, Conn.
b. The Proceedings of the Twentieth Annual Session (Amherst) were to be issued in the course of the meeting ; the Transactions for the same year (Vol. XIX.) would be issued in a few weeks.
c. The Committee had voted to give copies of the Transactions of the Association to the Smithsonian Institution and to the American School of Athens, as well as to the institutions named on pp. i, li., of the Proceedings for 1888.

Professor Wright presented also his report as Treasurer of the Association for the year ending July 6,1889 . The summary of accounts for $1888-89$ is as follows : -

## RECEIPTS.

Balance on hand, July 7, 1888 .
$\$ 487.19$
Fees, assessments, and arrears paid in . . . . . . . . \$918.25
Sales of Transactions and of Reprints . . . . . . . . 216.59
Total receipts for the year . . . . . . . . . . . . . 1134.84

EXPENDITURES.
For Transactions (Vol. XVIII.) and Proceedings for 1887:
composition, printing, distribution . . . . . . . . $\$ 760.4 \mathrm{I}$
For postages, stationary, job printing, clerk hire . . . . 75.00
Interest on borrowed money (\$200) with partial payment $(\$ 12.20+\$ 50)$
62.20

Total expenditures for the year . . . . . . . . . . . $\$ 897.6 \mathbf{1}$
Balance on hand, July 6, 1889 . . . . . . . . . . . . $\mathbf{7 2 4 . 4 2}^{\mathbf{7 2 4}}$
$\$ 1622.03$
The Association owes the Treasurer $\$ 200$, the debt of $\$ 250$ of July 7,1889 , having been reduced by the payment of $\$ 50$, Nov. $1,1888$.

The Chair appointed as Committee to audit the Treasurer's report, Messrs. Isaac H. Hall and H. W. Smyth.

At 4.20 p.m. the reading of papers was begun. At this time there were about thirty persons present ; at the subsequent meetings the number averaged forty-five.

1. Notes on Andocides, by Professor W. S. Scarborough, of Wilberforce University, Wilberforce, O.

The Mss. and editions of Andocides now extant are the same as those of the orator Antiphon with the omission of the Oxford (N) which makes no mention of this orator. Or as Blass ${ }^{1}$ puts it : -
"Andocidis codices eosdem fere atque Antiphontis habemus praeterquam quod Oxoniensis N ope in hoc oratore destituti sumus."

Both of these orators have come down to us together, and the defects and corruptions which they have in common indicate that they are derived from a common archetype. The bibliographical observations made in respect to the one are almost equally applicable to the other.

It is generally conceded that the Crippsianus (A) is the most accurate, and therefore the best Ms. that we have of Andocides. Bekker used this as the basis of his text. He also collated the Laurentian (B), the Marcian (L), and a Breslau copy. Then he further examined the Ambrosian (P) and the Burneian (M). As to the Ambrosian $(Q)$ and in respect to its bearing upon the Andocidean orations, vide Blass, etc. (Teubner). Baiter, Bekker, Blass, and Sauppe have, perhaps, given us the best texts; while Meier, Hirschigg, Kirchoff, Vater, Stephen, Reiske, Dobson, Sluiter, Dobree, Valckenaer, Bergk, Klotz, Maetzner, and others have thrown much light upon various points in the text:

Immanuel Bekker has done especial service to scholars by his remarkably clear and complete recension of the Andocidean orations. Aldus gave us the first complete edition, though full of errors. Bekker, Dobree, and Schiller followed with others in emending and correcting the Aldine edition. The Zurich edition was represented by Baiter and Sauppe who were not less vigilant than others of their contemporaries in their efforts to furnish a faultless text. I regard the edition of Blass the most available text that we have. It is certainly one of the best recensions of that orator to be found in the libraries of Europe, aside perhaps from a few orthographical forms observed here and there, which are probably foreign to the age of Andocides. Blass uses $\sigma \omega^{\prime} \zeta \omega$ with s subscript and defends it with the remark: "Scribere dum esse in vulgus notum est contra $\epsilon \sigma \dot{\sigma} \theta \eta \nu$ $\sigma \omega \tau \eta p i a . "$ Curtius, in his Das Verbum der Grieschischen Sprache seinem Baue nach dargestellt, discusses with numerous examples the two forms $\sigma \omega j \omega, \sigma \omega \omega^{\prime} \omega$, and seems to favor the latter. In the Etymologicum Magnum I observe the


 say that $\sigma \dot{\omega} \zeta \omega$ has the $\imath$ subscript when derived from $\sigma \hat{\omega} o s$ and that $\sigma \omega t \zeta \omega$ becomes by synæresis ( $\sigma v \nu a i \rho \epsilon \sigma \iota s) \sigma \psi^{\prime} \zeta \omega$, just as $\left.\lambda \epsilon \pi i\right\} \omega$ is from $\lambda \epsilon$ '́mos; further, that $\sigma a \delta \delta \omega$ is derived from $\sigma$ dos and does not take the iota, but becomes by crasis ( $\kappa \rho \dot{\alpha} \sigma / s) \sigma \omega \dot{\omega} \omega \omega$. Neither this nor the explanation of Buttman ${ }^{2}$ is conclusive, though the appearance of the $\imath$ subscript form is fully established by Attic inscriptions of an early date - and yet I am of the opinion that $\sigma \dot{\omega} \delta \omega$ is more classic than $\sigma \omega \zeta \omega$. Dr. Smyth, however, calls my attention to the fact that $\sigma \omega \zeta \omega$ does not appear upon Attic inscriptions till after 100 b.c.

[^62]The style of Andocides is peculiar. Aside from the frequent repetition of the same thought there is a loose connection of sentences; the tendency to change abruptly his construction, by the introduction of new clauses and then to resume his narrative with $\delta \dot{\epsilon}$ oîtos, or ō̂tos $\delta \grave{\epsilon}$ (vide Myst. 1, $2,27,56,57,58,59,70-73$, So-8i, 137-1 39, 140-145, etc., etc.; De Red. 3, etc.; De Pace 5, 34, etc., etc.)
 the tragic poets, nor in the best Attic prose, though it occurs in Plato, also in Demosthenes, and in the Antiphontic Tetral., B, $\beta$, io. Wecklein and Weil admit the form in their editions of Eschylus, vide Wackernagel, K. Z. XXVIII, rog ff. It is not allowable in the tragic poets, nor is it admissible in the best Attic prose. Between $\mu \grave{\eta} \theta^{\prime} \dot{\prime} \lambda o \nu \tau a s$ and $\mu \grave{\eta}$ ' $\theta^{\prime} \lambda^{\prime} \lambda \frac{\nu}{2}$ as, Greek usage compels us to adopt the shorter form, though Baiter and Sauppe write the longer. "e $\theta^{\prime} \dot{\epsilon} \lambda \omega$ is found upon all Attic inscriptions till the year 300 b.c. ; after 200 b.c. $\theta^{\prime} \dot{\prime} \lambda \omega$ comes to light." - Blass has bracketed the dative after $\kappa \in \lambda \epsilon \dot{v} \omega$ (vide Myst. iI). A similar construction appears in $\S 40$ (Myst.). The dative is never thus used in the best Attic prose. - Again I note the use of an enclitic form of the pronoun after the preposition, as in the phrase $\pi \rho \sigma_{s} \mu \epsilon$ ( $\lambda \epsilon$ ' $\gamma \epsilon \iota \pi \rho \sigma$ s $\left.\mu \epsilon \mathrm{X} a \rho \mu i \delta \eta s\right)$. This is certainly contrary to the general rule as the following examples will show: $\bar{\epsilon} \pi^{\prime} \dot{\epsilon} \mu o l$, Xen. Oecon. VII. 14; $\kappa \alpha \tau^{\prime} \epsilon \mu \epsilon ́$, Id.

 we have an unusual example of a personal object after $\pi \rho o \sigma \iota$ éval. Cf. Xen. Mem. I. 2,47 .

Another queer construction is found in the use of $\tau 0 \dot{\prime} \tau \omega \tau \hat{\varphi} \tau \rho \sigma \pi \omega$ for $\tau o \hat{v}-$ $\tau 0 \nu \tau \dot{\partial} \tau \rho \dot{\prime} \pi o \nu$ - the dative for the modal acc.; vide Aristoph., Plato, etc. There are many other debatable forms found in some of the editions of the Andocidean orations - some interpolations, others a part of the original narrative. Andocides was largely inclined to the use of circumlocutions and ambiguities, and there is need of caution on the part of critics in their attempt to separate the genuine from the spurious. As to the $\mathrm{Kar}^{\prime}{ }^{\prime} \mathrm{A} \lambda \kappa \iota \beta \iota \dot{\alpha} \delta o v$, whether Andocides was the author or not, there is much discussion. Yet the similarity of style, the numerous periods ending in anacolutha, etc., etc., aside from the historical inaccuracies, would indicate that he was the author of the oration against Alcibiades.

Remarks were made by Messrs. E. W. Hopkins, T. D. Seymour, J. H. Wright, and H. W. Smyth.
> 2. Maximus Planudes: his Life and Works, by Dr. A. Gudeman, of New York, N.Y.

The all but universally accepted verdict of condemnation which has been passed upon Byzantine scholarship, however just it may be found to have been in numerous instances, has undoubtedly been the chief cause of blinding the eyes of philologists to the distinguished merits of at least one of the scholars of that time, the monk Maximus Planudes. This verdict reached, as it demonstrably was, upon altogether insufficient evidence and upon sweeping generalizations, due in a great measure, to a lack of historical perspective, naturally not only precluded any accurate criticism, but decidedly discouraged renewed impartial investigations.

The ambitious aim of this paper, of which the following is but a very short abstract, ${ }^{1}$ is to replace traditional prejudices and errors by facts; to give an accurate and detailed account of Planudes' life, and by a complete critical survey of his writings, to pave the way for a juster appreciation of this monk's services to classical philology.

Right at the very outset of our inquiry, we must enter upon a detailed discussion of the traditional data in Planudes' life which, though singularly erroneous, have nevertheless been accepted, without question, as true, for the last three hundred years; his $\grave{\alpha} \kappa \mu \eta$ being generally assigned to the year 1353 (I know not on what grounds), and the date of his diplomatic mission to Venice to the year 1327. The original source of this piece of chronological information seems to have been Raphael Maffeus Volaterra's (1451-1521) Commentarii Urbani, lib. XVII. ${ }^{2}$ The data just given subsequently passed into Lambecius' Catalogue of the library of Vienna and into Fabricius' famous Bibliotheca Graeca, and from this time on were never called into question, until in 1877 Maximilian Treu conclusively proved them wrong. ${ }^{3}$ But Treu's discovery remaining practically unknown, whether we ascribe this fact to the strange vitality so characteristic of error, or to the inaccessibility of his little pamphlet, the author of this paper thought himself justified in again taking up Treu's convincing arguments in his thesis, ${ }^{4}$ adding such corroborative evidence as the then still unpublished letters of Planudes happily supplied him with. ${ }^{5}$

This short abstract will, of course, not admit of more than the very briefest review of the arguments, by which the traditional chronology has been shown to be altogether untenable.

There is an epigram extant (p. 65, of my dissertation) composed by one Gregorius. ${ }^{6}$. It consists of twenty-two rather uncouth hexameter and pentameter .verses, and deeply deplores the death of Maximus Planudes, as an irretrievable loss to his country. His works, some of which the writer enumerates, are pronounced to be of so great a value, as to entitle their lamented author to a glorious immortality. The "poem" does not add anything to our previous knowledge of Planudes, with the very important exception of the seventh line, which reads as follows: -

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We are here told, on the unimpeachable testimony of an intimate friend, that Planudes did not much exceed the age of fifty. With this fact we combine another.
${ }^{1}$ The entire paper will be published in the American Journal of Philology.
${ }^{2}$ It is true, Volaterra asks his readers to consult Bessarion for the data given by him. I have, however, been unable to find the slightest trace of the statement referred to in the published works of the famous cardinal, although he speaks of Planudes repeatedly.
${ }^{3}$ Cf. M. Treu Gymnasial Prog. Waldenburg, i/Schl. 1877 (" Zu Plutarch's Moralia ").
${ }^{4}$ A. Gudeman De Heroidum Ovidii codice Planudeo, Berolini, s888, Calvary \& Co. (p. 67 sqq.).
${ }^{5}$ The letters, one hundred and twenty-two in number, have now been published by Treu in successive programmes of the Friedrichs Gymnasium of Breslau; cf. especially the programme of $1889, \mathrm{p} .183$ sqq.
${ }^{6}$ Perhaps identical with the friend addressed in Planudes' 25,26 , and 27 letters.

There is preserved in the library of Venice a manuscript in Planudes' own handwriting, containing the Gospel of St. John, from the subscription of which we learn of its being completed in September, 1302. Now assuming the traditional chronology which assigns his floruit to the year I 353 to be correct, Planudes must have been about two years old at the time, when he finished the copy of the Gospel of St. John, an example of precocity, surely as unprecedented as it is absurd!

Nor does the year 1327, given as the date of the embassy, fare any better, for it can be conclusively proven from a passage in Pachymeres and from Planudes' own correspondence (cf. p. 69 sqq. of my dissertation) that he left for Venice in the company of Leon Orphanotrophos in the winter of 1296 , being then, to use
 facts, we arrive at the following chronological data: Planudes was born about 1250-1260, and was sent as an embassador to the Venetian Republic in 1296. He copied the Gospel of St. John in September, 1302, and having not much exceeded the age of fifty, he cannot well have died later than 1310, though possibly earlier.

Planudes was born in Nicomedia, as he tells us himself in the prooemium to his "Encomium in sanctum megalomartyrem Diomedem." ${ }^{1}$ He left his native town at an early age for Constantinople, for in Ep. 112, 40, he describes a triumphal procession, ${ }^{2}$ commemorating a great victory over the Persians which occurred in 1282. On taking orders, he discarded his baptismal name Manuel for that of Maximus. ${ }^{3}$ He soon became involved in the ecclesiastical controversies between the Greek and Latin churches, concerning the momentous question of the emanation of the Holy Ghost, and it was in support of the shrewd ecclesiastical policy of Michael Palaeologus that he probably translated St. Augustin's De trinitate, but on the accession to the throne of Andronicus II., who completely reversed his father's policy, Planudes returned to the orthodox Greek faith, whether on compulsion or not is not clear, by writing four syllogisms (still extant), "de processione Spiriti Sancti contra Latinos." His correspondence shows him to have been on intimate terms with the emperor himself as well as with most of the highest officials of the empire. Omitting minor biographical details, I proceed to enumerate some of the more important of Planudes' works, ${ }^{4}$ having to content myself in this place with a mere skeleton outline of the subjects treated of.

## 1. Anthologia Planudea.

Its critical value. To be judged solely by the standard of scholarship of the period.
2. Ms. copy of the works of Plutarch. Cf. Ep. 106.


${ }^{1}$ Cf. Boissonade ad Ovidii Metam., pag. XII. and Treu l.c. (1889), p. 191.
 This letter, together with about twenty-six others, is addressed to the famous General Philanthropenus.

3 On this custom, cf. Treu, 1.c. p. 189. The forty-seven verses composed by him "In laudem Ptolomaei" must therefore have been written prior to this time, for the


4 Planudes' theological works were not discussed in this paper.
3. Life of Aesop attributed to Planudes. Cf. Bentley Dissert. on Epist. of Phalaris, etc., p. $57{ }^{8} \mathrm{~W}$.
Proof of its spuriousness, from its matter and its style.
4. Rhetorical and grammatical treatises.

Especially the Prolegomena to Hermogenes (Rhet. Gr. vol. 5. W.). Their value. Compared to other works of a similar nature.
5. Ifis mathemati:al treatises.

The $\Psi \eta \phi \circ \phi o \rho i ́ a \kappa \alpha \tau^{\prime}{ }^{\prime} I \nu \delta o u s$, etc. Planudes’ services to mathematics hitherto overlooked. An attempt to do him justice. Cf. Ep. 35, 46, 67, 100 sqq. et saepius.
6. His correspondence ( 122 Epistles - not edited by himself. Earliest, written about 1282; latest, 1299 ( 1300 ?). His personal character.
7. Translations of Latin into Greek.

A review of Greek translations from Latin authors before Planudes (Zenobius' Sallust [cf. Suidas], Capito's and Paeanius' Eutropius). Reasons why the Greeks so seldom translated Latin authors into their own tongue. Planudes, the first to do this to any extent, thus opening a new field in Greek literature. The originality and importance of this step hitherto not recognized.
a. Boethii De consolatione philosophiae.

Planudes' masterpiece. Proof that it was written before 1295.
b. Caesaris de Bello Gallico, VII books.

Next in order of merit. Its value for purposes of text criticism. Formerly attributed to Theodorus Gaza, together with the Somnium Scipionis. A conjecture concerning the possible cause of these works being attributed to Gaza.
c. Ciceronis Somnium Scipionis.

The Saturnalia of Macrobius not translated by Planudes. Error of Bentley, Fabricius, etc.
d. Rhetorica ad Herennium, lib. III. (de memoria).
c. Disticha Catonis.

Probably his earliest effort as a translator. Compared with.Scaliger's Greek version of the same.
f. Metamorphoses of Ovid.

A work of no critical value, but one involving much time and labor.
h. Heroides of Ovid.

Its great critical value. Cf. A. Gudeman, De Heroidum Ovidii codice Planudeo, 1888, Calvary \& Co., Berlin ( 90 pp.).
i. Translations falsely attributed to Planudes.

Boethii De dialectis, Boethii Commentaria in Topica Ciceronis, Augustinus De civitate dei, etc.
8. Works known to have been woritten by Planudes, thougg no longer extant, ח€ Cl $\mu о v \sigma \iota \kappa \hat{\eta} s$ (cf. Ep. 64, 25) and others.
9. Excerpta Dionis, Comparatio hiemis et veris, Medical treatises, etc.

Scientific character of Planudes. Great learning, indefatigable industry, astounding versatility, and an undying devotion to classical studies. Not an original thinker. His scholarship compared with that of his contemporaries of a superior kind.

The paper closes with a plea for the reversal of the unfavorable judgment which scholars have so long and so unanimously passed upon the life-work of this diligent and learned Byzantine monk.

The Chair appointed as Committee to Nominate Officers for 188990, Messrs. I. T. Beckwith, L. H. Elwell, and E. W. Hopkins.

The Committee to propose Time and Place for the next meeting was also appointed : Messrs. T. Peck, J. Sachs, and J. M. Paton.

At 6 p.m. the Association adjourned to meet at 8 o'clock.

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\text { Easton, Pa., July 9, } 1889 .
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## Evening Session.

The Association with many residents of Easton assembled in the Auditorium of Pardee Hall at 8 p.m.

The programme of papers for the remainder of the session, as arranged by the Executive Committee, was then read by the Secretary.

Rev. James H. Mason Knox, President of Lafayette College, welcomed the Association to Easton in an appropriate address.

The audience then listened to the annual address of the President of the Association.
3. Philological Study in America, by Professor Thomas D. Seymour, of Yale University, New Haven, Conn.

After congratulating the Association on the auspicious opening of its twentyfirst annual meeting, and mentioning briefly the names and services of the prominent philologists who have died during the past year, the speaker gave a survey of the work of the Association and of the course and development of philological study in this country.

This Association has amply justified its existence. The value of its work is not to be measured by its volumes of Transactions and Proceedings, nor by the formal discussions at its meetings. Not a few new and true philological principles have been enunciated and explained before this body. Excellent philological work has been stimulated by the audience which this Association offers. But, after all, the main service of the society is that which the name Association implies. Few have departed from these gatherings without the impulse to broader and deeper research. No other science is so far removed as philology from the work and thought of the ordinary man. No other men of science have so much need as ourselves of association and union.

This Association was founded on a comprehensive plan, and some of its difficulties and dangers have arisen from its comprehensiveness. Its founders hoped that it could be divided into sections, and seven different departments were named, but the numbers actually present at its meetings have not justified such a division.

The true Alexandrine idea of philology was adopted at the first, - embracing literary criticism and archaeological illustration, as well as linguistic science. The Association includes also paedagogy in the broadest sense, though not in technicalities. The condition of philological study in this country requires that most of us should direct our efforts to the presentation of philological facts and principles to our classes quite as much as to the discovery of new philological truths. The first duty of most is to teach well, - i.e. to know their subject, and to set it forth in an accurate, intelligible, attractive, and impressive form, avoiding unnecessary matter and insoluble problems. But the second commandment, which is like unto the first, is to pursue philological study for its own sake. It is a blessing to our science in America that the few who are most conspicuous for their attainments and discoveries, are also conspicuous for their paedagogical skill, and are brilliant examples to the rest of us.

The course of philology in America has changed greatly during these last twenty years. When this Association was founded, Professor Whitney was almost alone in delving in the mine of Sanscrit, Professor March and Professor Child had few companions in their work in English philology, the security from control of our leader in the study of the Indian languages was almost a common jest, the very idea of a comparative Semitic Philology was hardly formed, while the Teutonic and Romance Philologies were seeking for recognition.

Twenty years ago, the tendency of philology in America was distinctly towards linguistics. The pendulum swung too far, perhaps, in that direction. The present tendency seems possibly too far away from linguistics, and toward art and archaeology. The same change is seen in the classical instruction of our country. Less attention is paid to the analysis of words, and their relation as cognate or derived. Far more is taught of ancient life and culture. The results of recent archaeological study are presented to our classes. Some of us, indeed, seem in imminent danger of making Greek philology a branch of political science. Etymology and linguistics at one time threatened to claim the sole right to the name of philology, but now a large proportion of classical philologists are turning to the study of inscriptions, vases, and sculpture, as illustrative of ancient life and literature. A multitude of hidden facts will be drawn from the literature itself. This is all well. The study of classical philology must be made as interesting and animated as possible, and the connection of our own life and civilization with that of the ancient Greeks and Romans is so close as to make the acquaintance with this at first hand of high value to every educated man. But classical philology must not become classical archaeology.

If any one desires comfort for the present, and encouragement for the future, of philological study in this country, let him survey the progress of this science in America during the past century. Philology is not an old science here. Our forefathers were too busy in founding a free nation to give much room to literature and art, whether of their own or ancient times. For the first century and more of her existence, Harvard College required ${ }^{\text {for }}$ admission no knowledge of Greek beyond the inflexion of nouns and verbs, and in 1800 only about as much Greek was read in college as is now read in the best "fitting-schools." No Greek but the New Testament seems to have been studied in the regular course at Yale College until after the beginning of the nineteenth century. Latin studies were in a somewhat better plight than Greek, since Latin was the scholastic language. The text-books
used in the study of the classics were weak and barren, affording little help to the beginner and none to the more advanced student. The best college libraries had no decent collection of even the classical texts. The Yale library had long possessed a copy of Stephens's Greek Thesaurus (as the gift of Sir Isaac Newton), and copies of the works of Plato and the Platonists (as the gift of Bishop Berkeley), but in 1800 had no copy of Aeschylus and no Greek orators but Demosthenes and Aeschines. Very few even of the old "variorum" editions seem to have found their way to this country in the eighteenth century. The first great change in the teaching of languages at Yale College was due to the election in 1805 of James Luce Kingsley to the chair of Hebrew, Greek, and Latin. (As if the duties of this office were insufficient, Professor Kingsley gave instruction also in Church History.) Mr. Kingsley was not a great scholar according to modern standards, but he was an elegant latinist with a strong and keen linguistic sense, and soon broadened the classical course.

Just before $\mathbf{1 8 2 0}$, three young Americans whose names are very familiar in other connections, studied philology in Germany, - Edward Everett, George Ticknor, and George Bancroft. Of these, two were drawn aside into political and historical studies, while Ticknor devoted himself to Spanish literature. Everett gave little instruction and seems to have had slight influence on Greek study, except what was due to his translation of Buttmann's smaller grammar, and his edition of Jacobs' Greek Reader. Bancroft translated Heeren's Researches on Ancient Greece.

Only three or four years after the return of Everett, Ticknor, and Bancroft, Theodore Dwight Woolsey went to Europe and spent three years in the study of Greek. On his return, he was elected to the chair of Greek in Yale College, and entered upon the duties of his professorship in 1831. For twenty years (including the first five of his presidency of the college) he devoted the powers of his great mind to the service of philology. He soon broadened and deepened the course of Greek instruction at Yale and exerted a strong influence on classical teaching elsewhere. His influence has been fitly compared to that of Erasmus at Rotterdam. The editions of Greek works which he prepared and modestly designated as " for the use of American colleges," were admirable when compared with similar English, French, or German editions of that time, and opened a new field for American scholarship.

Certainly, during the first half of this century, no one else was so clearly the leader of philological study in this country as Woolsey, whose mortal remains were laid to rest only four days ago. He secured the best classical library in America, and was thoroughly possessed of the best English and German methods of his time. His mind was thoroughly scientific by nature, besides being acute and virile. If he too had not been drawn away from philology in the strength of his manhood, we may be sure that the world would know Woolsey as a philologist, as it now knows him as an administrator and publicist.

During the lifetime of this Association, the growing importance of the younger departments of our science has secured for them an honored place where they existed before only by sufferance or as ornamental studies. The advance of the old natural sciences, on the other hand, and the development of others of which nothing was known a few years ago, have crowded hard upon the traditional studies of our colleges. But in our larger institutions, many studies are now made optional
or elective, and a student who desires to pursue philological courses can give more time to this pursuit, and can make considerable attainments while still an undergraduate. This has led philological teachers to offer more advanced courses and a larger variety. Dozens do now what only a remarkable individual here and there attempted thirty years ago.

Simply to register the most important philological books of the last twenty years would be a considerable task. The student of to-day would feel helpless without the works of these last years.

In our own land, besides the yearly volume of Transactions of this Association, our sister association publishes Modern Language Notes, the American Journal of Philology has reached its tenth volume, and the American Journal of Archaeology its fifth volume; Hebraica represents with credit and energy Semitic Studies; the Classical Review has been introduced into the midst of us; the Universities of Cornell, Nebraska, and Texas (the oldest of which is hardly older than this Association) have published valuable Philological Studies; the American Institute of Archaeology has published accounts of its explorations in Mexico and its excavations in Asia Minor; while the American School of Classical Studies at Athens (may we call it the flia pulchrior of the Institute of Archaeology?) has published four volumes of Papers.

No one here would think or allow that any branch of philology is effete; that its growth is checked and its powers exhausted; that only a scanty gleaning of facts and principles remains for us and our successors. We all feel that the fresh strength of any department of our science is sure to bring new vigor to all the rest. The tie which binds us is stronger than it seems. We have much in common, and we all may profit by union. Let us trust that the growth of the future will be as rapid and as sound as that of the past, and that we may always find a rallying point for learning and for free discussion in the meetings of this Association.

At the close of the address, the Association adjourned to 9 A.m. Wednesday.

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\text { Easton, Pa., July ıо, } 1889 .
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The Association was called to order at 9.15 A.m. by Professor T. D. Seymour, the President.

The Association was invited, on behalf of the Committee on Entertainment, to make at 3.30 P.M. an excursion to Paxinosa Inn, where dinner would be served and a reception held in the evening.

The invitation was accepted, and it was determined to adjourn at 12 m . and to hold a second session from I .30 P.m. to 3.30 P.m.

The reading of communications was then resumed.
4. The Meter of Milton's Paradise Lost, by Professor Francis A. March, of Lafayette College, Easton, Pa.

The first book of Paradise Lost is perhaps the most perfect production of metrical art. A complete digest of its meter wil giv a good idea of Milton's blank verse.

Each verse is made up of five feet of equal times. It is also made up of two or more great divisions or sections. Milton himself lays stress, as a part of musical delight, upon having "the sense variously drawn out from one verse into another," i.e. on the management of the verse caesura.

He has seven familiar places for the caesura : after each foot but the last, and in the midl of the second, third, and fourth. Two often occur in the same verse. In the whole book their number is as follows:-


It is by tracing the movement of the caesura from verse to verse that its musical effect is obtaind. The curv is a veritabl line of beuty; the point of division sways with the movement of the thought like the index on the power gage of the dynamo as the cars move up and down the slopes of an electric road.
I. The prevailing foot is an mambus, two syllabls with rising accent, the first syllabl being unaccented, the second syllabl having more stress and length than the first. In the first book of Paradise Lost ther ar 798 lines, 3990 feet. Of these, 2586 ar pure iambics.

The distribution by hundreds is as follows: -


Only sixty-six lines ar holey pure iambics. Five pairs of like lines ar found: 452-3, 496-7, 538-9, 555-6, 61 7-8. A duzen other pairs differ only in the caesuras. Sumwhat more than one-third of the feet ar variations for harmony. See Proceedings, XIV, xi.
II. Of these many ar falling feet, the most common being the trochee, - two syllabls, of which the first is accented and longer, the second unaccented.

The feet of this kind, arranged in their order by hundred lines, ar as follows : -
Lines. First foot. Second foot. Third foot. Fourth foot. Fifth foot. Sum.


The reason for so large a proportion being in the first place is twofold, metrical and historical; first, that after the voice has enterd upon the regular series of iambic, rising cadences, it is not easy to change to a falling cadence; second, that the erly English, Anglo-Saxon poetry prevailingly begins its verses with trochees, because the accent is prevailingly on the first syllabl of every word.

In blank verse the falling first foot is useful to mark the beginning of verses, or sections.

The other place in which feet of this kind ar found is after the caesura, at the beginning of the second section. All the exampls in this book ar in these places.

It may be noticed that the metrical reason wil allow a trochee to follow another trochee. And sections having repeated trochees of this kind ar found in other parts of Milton and in Shakespeare.
III. Another peculiar variation is the pYrrhic, or two unaccented syllabls, the time of the foot being eked out by a rest.

The most frequent and characteristic is divided by the verse caesura, but a pyrrhic may begin or end either section.

It is a slightly rising foot, except when beginning a section.
4. With loss of $\mathrm{Ed} \mid$ en $|\mid$ till | one greater man
5. Restore | us || and | regain the blissful seat.

The first syllabl of the pyrrhic seems like a redundant close of the first section, the second syllabl like an anacrusis of the second section; the caesura fills out the time of the foot; as if this pentameter was a development of the old tetrameter.

Another pyrrhic occurs when two unaccented syllabls ar found in a polysyllabl with a rest of conformation.
100. And to the fierce contention brought along

10I. Innumerable force of spirits armed.
The pyrrhics, arranged by the hundred lines, ar in number as follows: -


The third foot has the most caesuras, and therefore the most pyrrhics.
IV. The most common variation is the spondee or quasi-spondee, a foot of two syllabls, both having stress, and dividing the time nearly equally.

This usually is a rising foot, having slightly more stress on the second syllabl, making the simplest variation of the pure iambus. The following table shows the places and the times of its occurrence: -


The first foot is the one of easy variation.
The third foot contains the most frequent caesura, and therefore the least frequent spondee, since the two long syllabls fil the time. The spondee is frequently and naturally used as a foot of transition from the trochee to the iambus. As ther ar almost no trochees in the second place, ther ar no transition spondees in the third.
V. Another common variation is the ANAPEST, or two unaccented syllabls followd by an accented. The unaccented ar mostly syllabic consonants or glides.
6. Sing, heavenly Muse.
11. And Siloa's brook.
15. Above the Ao|nian Mount.
366. Through God's high suffrance, for the trial of man.

VI. Feet of three unaccented syllabls mostly rising ar found with the rests.

1. Of man's first disobedience $\|$ and the fruit.
2. Since through experience | of this great event.

Of these ther ar in the book 22 feet.

| First foot. | Second foot. | Third foot. | Fourth foot. Fifth foot. |  |
| :---: | :---: | :---: | :---: | :---: |
| 0 | 8 | 10 | 5 | 2 |

156. Fallen cherub, to be weak is miserable.
VII. Ther ar a few falling spondaic feet, 21 in all.
$\begin{array}{ccccc}\text { First foot. } & \text { Second foot. } & \text { Third foot. } & \text { Fourth foot. } & \text { Fifth foot. } \\ 16 & 0 & 2 & 3 & 0\end{array}$

They ar found in the same places as trochees, in the first foot of a section.
21. Dove-like sat'st brooding.
VIII. Ther ar also 12 dactyls.
87. Myriads, though bright.
280. Groveling and prostrate.
312. Abject and lost lay these, covering the floor.

They also as falling feet ar found at the beginning of sections.
IX. For falling pyrrhics, see III, above.
X. Twelv feet hav an unaccented close.
38. Of rebel angels ; by whose aid aspiring.

There ar no unmetrical lines.
Passages wer analyzed to point out their harmony and expressivness.
Remarks were made by Messrs. T. D. Seymour and T. W. Hunt.
5. The Text of Richard de Bury's Philobiblon, by Professor Andrew F. West, of Princeton College, Princeton, N. J.

## The Text of the Philobiblon of Richard de Bury. Finished Jan. 24, 1345.

I. The Received Text of the Printed Editions.

Cologne, 1473.
Spires, 1483.
Paris, 1500.
Oxford, 1599.
Frankfort, 1610.
Frankfort, 1614.
Leipsic, 1674.
Helmstadt, 1703.
London, 1832.
Paris, 1856.
Albany, $\mathbf{1 8 6 1 .}$
London, 1888 (Morley's reprint).
Of these the Cologne, 1473, Spires, 1483 and Oxford, 1599, go back to manuscript sources.
II. The True Text as found in the Manuscripts.

1. Number of known extant Mss. is thirty-five. Apparently eight more lost or at present untraceable. Probably a number more of inferior Mss. in German libraries.
2. Classification of Mss. into two main kinds;-the standard English tradition and the later German variants.
3. The standard English tradition in over two-thirds of the Mss., including every Ms. known or suspected to be earlier than 1450, and none after 1460.

They may be classified according to the following general division.
Complete Text $\left\{\begin{array}{l}\text { Prologue with collected list of chapter titles following and twenty } \\ \text { chapters, each headed with a title separately, - colophon also? }\end{array}\right.$
(1) A B C D with sixteen others.
$\mathrm{A}=\mathrm{Ms}$. R. $8, f . \mathrm{Fiv}^{2}$. in British Museum, date 1380 .
$\mathrm{B}=$ Ms. Digby 147, Bodleian Library, date 1370.
C $=$ Ms. 15168 in National Library, Paris, date 1440.
D = Ms. 3352 c in National Library, Paris, date 1430.
Incomplete Text - in three manuscripts.
Magdalen Ms. (VI. 164), Oxford, date about 1400, -lacks prologue and end of XIXth chapter.
St. John's Ms. (CLXXII), Oxford, date about 1400 , - lacks last half of chapter IX, all c.f chapter X, and opening of chapter XI.
Brussels 11465 , date early XVth century, - lacks collected chapter titles at end of prologue and separate titles at head of each chapter.
The headings, chapter titles, colophon and body of the text in the English tradition. Full form of the colophon (an integral part of the original text) is

Explicit Philobiblon domini Ricardi de Aungervile, cognominati de Bury, quondam Episcopi Dunelmensis.
Completus est autem tractatus iste in manerio nostro de Aukelande xxiiij die Januarii
anno Domini millesimo trecentesimo quadragesimo quarto, aetatis nostrae quinquagesimo octavo praecise completo, pontificatus vero nostri anno undecimo finiente, ad laudem Dei feliciter et Amen.
4. The later German variants are at least seven in number. None earlier than 1450-60, and running on to 1492 .

Copied in Germany.
The main variations are twofold.
(I) The chapter titles mainly or wholly changed. Due to what?
(2) The body of the text altered at pleasure, wherever unintelligible to scribe. Perhaps 1500 variations from the early English Ms., out of, say, 9000 words in the treatise.

The effect of this is of course to alter and obscure the meaning of the author, to debase his style.
5. From the German variants comes the received text of the Philobiblon, as seen in editio princeps Cologne 1473 and all the editions derived from it. From an arbitrarily altered poor English Ms. comes the Spires Ed. of 1483. From an uncritical examination of six English Mss. comes the Oxford Ed. of 1599. The English Mss. contain the true text. Two only certainly of XIVth century (A and B).
6. Mr. Thomas's Edition (London, 1888). The Grolier Club's Edition (1889, New York).

## Appendix to Abstract.

## General View of the Manuscripts of the Philobiblon.

I. The English Tradition
preserves the true text in twenty-three Mss.
ranging in date from 1370 to 1450 or later.

III. Unclassified Mss., five in number-

Two at Munich, one each at Venice, Bamberg, and Brussels (No. 3725).
IV. Lost or Untraceable Mss. -

Apparently eight in number.

## 6. Open Questions in English Philology, by Professor Theodore

 W. Hunt, of the College of New Jersey, Princeton, N. J.After calling attention to the origin and history of the scientific study of English, and to the relation of settled to unsettled questions in philology, Professor Hunt invited the Association to consider some of the most important open questions in English philology. A brief abstract of the points stated and discussed is as follows:-

1. The question of English philological Nomenclature, with special reference to the use of the terms Saxon, Anglo-Saxon, Anglo-Norman, Semi-Saxon. It was held that we should adopt the one term English as applicable to all the different periods of the language.
2. The question of English philological Method among the possible methods open to the student, such as the comparative, etymological, and literary. Here it was urged that some one of these should be prominent, while emphasis was laid upon the literary side of linguistics as being more important than that conceded to it by general criticism.
3. The question of the relation of British English to American English. It was the object of the discussion, in this connection, to show the points of difference and of resemblance between these two branches or forms of English, and especially to press the principle of their substantial unity and co-operative growth. The true relation of English dialects to what are called provincialisms was here shown, while it was argued that the term dialect meant in England much more than it means in this country.
4. The question of the native English element in our Modern English vocabulary. The extreme and untenable theories on this subject were briefly stated, and

English scholars were warned against the tendency unduly to eliminate the native element in favor of foreign influence. Special notice was taken of the attempt to estimate far too highly the Celtic and Scandinavian influence in English.
5. The question of English Lexicography was then discussed, with primary reference to its rightful province. The encyclopedic tendency was noticed as the prevailing tendency in modern lexical work. Against this, ground was taken on the principle that it was far exceeding its rightful limits.

In conclusion, the paper made reference to the new and scholarly interest evinced in all departments of English philology, particularly, in its older periods and forms, and urged the importance of magnifying the intellectual and ethical elements in language above the merely verbal.

Remarks were made by Messrs. J. Sachs, F. A. March, and A. F. West.

## 7. Differentiation of the Uses of shall and will, by Professor George

 P. Garrison, of the University of Texas.I take it that shall originally expressed a present necessity or obligation, and will a present volition or desire. It was very natural, however, to associate with these ideas of necessity and volition that of a subsequent result; and, as the use of shall and will as auxiliaries grew, they became auxiliaries for the future in so far as they carried this associated idea and kept less of their original meaning. Thus it came about that shall go, for example, signified: (I) a present necessity or obligation to go, and (2) a future result in the act of going. Similarly, zuill go signified: (1) a present desire or volition to go, and (2) a future result in the act of going.

But these ideas were not allowed to develop evenly. The Anglo-Saxon and his English descendant has always been domineering, inclined to magnify the importance of his own will and to regard lightly that of others. Under the influence of this quality, when he used shall with the first person he obscured the idea of necessity, because it was unpalatable to him, and dwelling upon the result made a pure future. But in the second and third persons he was willing enough for shall to imply necessity, especially if he were the agent that imposed it. He so used it, and in these two persons shall remained present. In using will, the same characteristic led him to make prominent the idea of volition in the first person and to obscure it in the second and third. Thus will has become mostly present in the first person, and future in the second and third.

Remarks were made by Messrs. F. A. March and T. D. Seymour.
At 12 m. the Association adjourned to meet at i. 30 P. m.
Easton, Pa., July io, 1889.

## Afternoon Session.

The Association was called to order at 1.30 P. m. by the President.
8. On the Interpretation of Aristoph. Ach. 849, by Frank W. Nicolson, Esq., Instructor in Harvard University, Cambridge, Mass.

The words $\mu l \hat{a} \mu a \chi a i \rho x$ in this line are commonly understood to refer to the razor. The aim of this paper is to show that a form of shears is meant, and that the reference is to clipping and not shaving.

Another name for the $\mu i ́ a \mu \alpha^{\prime} \chi a \varsigma \rho a$ was $\psi a \lambda i ́ s ~(c f . ~ P o l l u x ~ X . ~ I 40 ~ a n d ~ P h o t i u s ' ~$ definition ; cf. also Pollux II. 32, where the correct reading is not $\delta \iota \pi \lambda \hat{\eta}$, but $\mu(\hat{a}$, as given by Mss. C. and V.). The words $\mu$ í $\chi$ aı $\rho a$ and $\mu a \chi \alpha \iota \rho$ is do not, as generally supposed, relate to the razor, but to various forms of shears. (Cf. Arist. Frag. II. Thesm. and Lucian, Adv. Ind. 29, where these are mentioned respectively as distinct from the $\xi \nu \rho \sigma \nu$. .) This is proved also by the order of the words in the two lists of barbers' implements given by Pollux (X. 140 and II. 32).

The shears used by the Greek barber were of two forms. The $\delta i \pi \lambda \hat{\eta} \mu \alpha \alpha^{\prime} \alpha \iota \rho a$ resembled the form most common in modern days, consisting of two pieces of metal fastened together by a rivet in the middle. A representation is to be found in a terra-cotta from Tanagra (vide Arch. Ztg. XXXII. taf. 14). The $\mu^{\prime} a^{\mu} \alpha^{2} \chi a \iota \rho a$ or $\psi a \lambda i ́ s$, on the other hand, was formed from a single piece of elastic metal bent in the middle and having the two edges sharpened. It is represented in a Pompeian wall-painting (vide Abh. der Sächs. Gesell. der Wiss. V. plate VI. 5). The word $\psi a \lambda$ is means a vault or arch, and as applied to this form of shears no doubt refers to the curved or rounded end made by bending the metal on itself.

The $\mu^{\prime} \alpha \mu^{\prime} \chi \alpha \iota \rho a$ seems to have resembled in shape the old-fashioned sheepshears still used in some parts of this country. There is evidence that it was employed by the ancients in sheep-shearing (cf. Hesychius' definition of $\mu \alpha^{\alpha} \alpha^{\prime} \rho \alpha \mathrm{l}$ : oîs $\grave{\alpha} \pi о к \epsilon i \rho \epsilon \tau \alpha \iota ~ \tau \grave{\alpha} \pi \rho \delta \beta a \tau \alpha$; cf. also Galen, quoted by Steph. in his Thesaurus,

 траүокоирьк $\hat{\eta} \mu а \chi \alpha i \rho a$. These goat-shears were probably the same in form as the $\psi a \lambda i s$, or sheep-shears, and a similar punishment to that proposed by Lucian may be here alluded to by Aristophanes.

That shears ( $\mu \alpha^{\prime} \chi a \iota \rho a \iota$ кovói $\delta \epsilon s$ ) served the double purpose of shearing sheep and clipping men's hair appears from a fragment of Cratinus, Dion. II. The $\psi a \lambda$ i's was particularly fitted for shearing sheep, since it could be operated by one hand, leaving the other free to manage the animal being sheared. Finally, the words of Phrynicus, 319, seem to favor this interpretation: $\tau \grave{\partial} \mu \grave{\epsilon} \nu \gamma \dot{\alpha} \rho$ (i.e. кap $\hat{\eta} \nu a l$, as


## 9. The Dramatic Features of Winter's Tale, by Professor Thomas

 R. Price, of Columbia College, New York, N. Y.This play, which belongs to the last stage of Shakspere's dramatic method, is not, as commonly conceived, a violation of the laws of dramatic construction, but an ingenious experiment in the application of those laws. It is constructed on the plan of the diptych, a form of art in which two compositions, each in itself complete, are merged into a composition of a higher kind, which comprehends them both. For this purpose, the drama divides itself into two (2) distinct parts, a tragedy of (28) twenty-eight scenes, ending at III. 3, 58, and a comedy of (22) twenty-two sceies, stretching from that point to the end. To carry on these two movements, the characters are divided into (3) three groups, one group of (9) nine characters that belong altogether to the tragedy, one group of (12) twelve
characters that belong altogether to the comedy, and one group of (7) seven characters that belong in common to the tragedy and to the comedy.

Of these two parts, each, according to the law of construction, is complete in itself. The tragedy has a protasis of 8 stages, an epitasis of 5 stages, a well-marked climax in II. 3, a catabasis of 5 stages, and a catastrophe of 3 stages. The comedy has a short protasis of only 3 stages, because many of the comedy-characters are known to us already from the tragedy. It has an epitasis of 5 stages, a wellmarked climax in IV. 4, a catabasis of io stages, and a catastrophe of 2 stages. The only irregularity is the immense length of the comic catabasis: and this double length, io stages instead of 5 , comes from the necessity of merging at this point the two movements into one catastrophe.

Thus Shakspere, at the end of his career, worked out in the Winter's Tale, as a bold experiment in dramatic construction, the fusion of two distinct passions and of two distinct actions into a new form of romantic drama.

## Remarks were made by Professor F. A. March.

## 10. Roman Elements in English Law, by Herbert L. Baker, Esq., of Detroit, Mich.

It is now a well-recognized fact that English law contains a very considerable Roman element.

The presence of this element presents a difficult problem in English legal history for the reasons that (I) Roman law was never recognized by the common law courts as having any authority in England, and (2) it has long been the accepted theory that the English common law is indigenous customary law deriving its sanction from immemorial usage - a theory which necessarily excludes foreign elements. The subject seems to have been hitherto discussed from a legal standpoint only and by means of comparisons instituted between rules existing in English and Roman law respectively. Such method of treatment assumes that the Roman element came in in the form of positive rules, and it is adapted to reaching only such part of it as came in thus, which part, there is reason to think, is but a small fraction of the whole. It is proposed here to view the subject from a philological standpoint. The fact that Roman 'aw as such was excluded by English national policy and prejudice affords a hint that much the greater part of the Roman element must have effected its entrance in some form more subtle than that of positive rules. While Roman law as such was excluded, Roman legal thought, which may be regarded as Roman law held in solution, might and did enter into English thought unhindered and on practically an equal footing with other branches of ancient learning. If we can trace the Roman element as it exists in legal thought, it is evident that we shall thus arrive at a juster estimate of its character and extent than by a comparison of positive rules. A means of thus tracing the Roman element is afforded by the composite character of our language. English law has borrowed freely from Roman legal terminology; the words thus borrowed are capable of identification; wherever one of these words expresses thought which has never been expressed by a native word, it may justly be inferred that the thought also was borrowed, at least to the extent of the meaning attached to the word when it was adopted into English speech. The words belonging to our
legal terminology, as given in a standard law dictionary, number 1738 . Of these 1363 are of Latial origin, and 375 are of other origin, mostly Anglo-Saxon. Very few, if any, of these Latin words have complete equivalents in words of native origin. It follows, therefore, that more than four-fifths of our elementary legal thought has been borrowed from the Romans. This general deduction must, like all such, be taken cum grano salis. Some allowance should doubtless be made for lost words and meanings of words, and for an affectation of Latinity on the part of lawyers and others. With suich allowances, the conclusion is in the main justifiable, because none of the ideas represented by those words were ever communicated by one English-speaking person to another until it was done through the medium of the foreign word; and in order to render the idea thus communicable, both speaker and hearer must have learned the word and its meaning from the Romans.

For a complete acquaintance with the Roman element and its nature, a study in detail of individual words and their history is requisite. Some general idea may, however, be gained by a grouping of words according to subjects, and a comparison of the native and Roman elements as thus exhibited. The proportion of native and Roman words pertaining to some of the principal branches of the law are as follows: (1) Public Law: Organic, International, etc., native words, 20; Roman, 135. (2) Public Lawe: Criminal, native words, 10; Roman, 54. (3) The Law of Procedure, native words, 7; Roman, 123. (4) The Law of Property, native words, 49; Roman, 171. (5) The Law of Contract, native words, 14; Roman, 112. Of the remaining 1043 words not embraced in either of the foregoing groups, 889 of the more important give 229 words of native and 660 of Roman origin. An examination of these groups discloses the fact that the Roman words, as compared with the native, are almost invariably expressive of ideas belonging to a more advanced and settled political society and shows in a striking manner in how great a degree the English state and its laws were developed upon intellectual lines marked out by the Romans. Thus in the first group (Organic Law) the native element gives us " baron," " barrister," " earl," " gerefa," " king," "queen," "lord," "sheriff," " thane," " borough," " hundred," "woodmote," " folkgemote," "shiregemote," " witanagemote," while the Roman clement gives us "constable," "coroner," " surrogate," " attorney," " solicitor," " magistrate," " judge," "chancellor," "court," "county," "district," " municipality," "statute," " legislation," "Congress," "Parliament," "exchequer," "revenue," " sovereignty," "constitution," " government," " state," " nation," "society."
2. In the second group (Criminal Law) the words descriptive of "offences against property are, (I) native, "blackmail," and "theft," (2) Roman, "arson," " burglary," " champerty," " embezzlement," " embracery," "f forgery," " larceny," "maintenance," " piracy," " robbery." And the words pertaining to the administration of criminal law are almost wholly Roman, the native words being only "guilt" and "outlaw," as against twenty-eight Roman words, such as "arrest," "capital," " conviction," "crime," "defence," "indictment," " innocent,"' " penalty," "perjury," " prosecution," " punishment," "reward," " sentence."
3. The legal ideas contained in the law of procedure are expressed almost wholly in Roman words. The seven native words are "forswear," "oath," "setoff," " speaking," " wager," " battel." In contrast with these there are 123 Roman words with well-defined technical meanings, most of which are now in constant use.
4. In the law of property the native words are in greater proportion, but are of the same relative character. They are usually designative of material things; e.g., " building," " dwelling," " farm," " homestead," " house," " land," " thing," while the Roman words usually designate more abstract conceptions, such as are involved in apprehending and defining the relations subsisting between persons in reference to material things; e.g., "adverse," "common," "descent," " dower," " entail," " estate," " heir," " hereditament," " lease," " mortgage," " real," " rent," " seisin," "tenure," " title."
5. In the law of contract the same relative characteristics are exhibited, with a much larger proportion of Roman words. The native words are "bearer," "bond," " borrow," " bottomry," " breach," " drawer," " holder," " loan," " maker," " sale," "seller," "settlement," " sight," "warehouse." In contrast with these are 112 Roman words, such, for example, as "agreement," "bailment," "charter," " condition," " consent," " consideration," " contract," " covenant," " damages," " debt," "default," " due," " interest," " note," " obligation," " partner," " pledge," " principal," " promise," " special," " surety," " warranty," etc.
6. Of the unclassified words the following are examples of the more important : native, " free," " gift," " law," " mistake," " owner"; Roman, " custom," "duty," "general," "injury," "judicial," "juridical," " jurisprudence," " jury," "justice," "moral," " principal."

The position taken in this paper must not be understood too broadly. It is not asserted that prior to the adoption of any given Roman word the Anglo-Saxons had nothing of what afterwards came to be designated by that word. On the contrary, they had the rudiments, actually or potentially, of all that they afterwards acquired both with and without the aid of Roman ideas. The position here is that, by a kind of educational process, they gradually grew into and possessed themselves of these portions of the intellectual world which the Romans had created, and that the Roman words which they at the same time adopted, constitute an important record of the process by which Roman thought was thus taken up and assimilated. Thus, for example, as to the word "judge": some of the functions of judgeship were of course exercised among them before the borrowing of the word " judex" (such functions in more or less rudimentary form being exercised in all stages of organized society); but those functions were as yet but rudely conceived, and were bound up with, and were undifferentiated in thought from, legislative and executive functions. The introduction of the word "judex" to designate an officer charged only with judicial functions marks the beginning of that process of dividing up and distributing sovereign power which has led to the present well-established and familiar threefold division of sovereign power into Legislative, Executive, and Judicial.

So also the words "state," " nation," and "government" indicate, not that the Anglo-Saxons had nothing of what afterwards came to be designated by these words, but that they had not yet reached the stage of political development which would enable them to evolve the distinct and separate conception of a "state," a " nation," or an impersonal "government," and to produce the institutions properly corresponding to such conceptions.

Viewed thus as a part of our intellectual inheritance derived from ancient learning, the Roman element is seen to be very large, and at the same time it ceases to present an insoluble enigma. Its presence in English law can from this
standpoint be accounted for, but not without some modification of the theory above adverted to. For this reason amongst others a thorough study of this subject promises to be productive of important practical results, by leading to a critical examination of that theory de novo and thereby to a truer understanding of the essential nature of our law.

## ri. An Unstable Idiom in English, by Dr. C. P. G. Scott, of New

 York, N. Y.At 3.30 p. m. the members of the Association and their friends, escorted by thirty gentlemen of Easton, of the Committee on Entertainment, proceeded in carriages to Paxinosa Inn, where a large part of the afternoon and evening was pleasantly spent in the grounds and on the piazzas of the hotel. Before dinner an address was made by William Hackett, Jr., Esq., Chairman of the Committee on Entertainment, to which President Seymour responded, and grace was said by President Knox.

At 7.45 P. m. the Association was called to order in the parlors of the Inn, and listened to communications from two of the members.
12. The Pronunciation near Fredericksburg, Va., by Professor Sylvester Primer, of the College of Charleston, Charleston, S. C.

Prof. Edward A. Freeman, writing or speaking to a friend in regard to a young American who was going to the University of Jena in order to study Anglo-Saxon, remarked: "Why does he not go to Orange County, Va., instead of to Jena? They speak very good West Saxon in Orange County." This statement may serve as an introduction to my remarks on the pronunciation of Fredericksburg, Va. For Stafford, Spottsylvania, and Orange counties have about the same pronunciation, and have preserved to a remarkable degree the older English sounds brought over in the 17 th century by the early settlers of this region.

This section of the country was the earliest settled. Stafford first appears as a county in 1666. Among the early names of the county are Scott, Moncure, Houseman, Mercer, Donithan, Tyler, Montjoy, Strother, Fitzhugh, Deyton, Daniel, Traverse, Cooke. Their descendants still live in various parts of the country. Spottsylvania was founded in 1720 . Some of the prominent names are Taliafero, Thornton, Lewis, Carter, Washington, Herndon, Ficklin. Orange County was formed later, dating from 1734. The principal families of Orange in colonial times are the Barbours, Bells, Burtons, Campbells, Caves, Chews, Conways, Daniels, Madisons, Moores, Ruckers, Shepherds, Taylors, Taliaferos, Whites, Thomases, and Waughs, whose descendants are still living.

As early as 1675 there was a fort on the present site of Fredericksburg, but it was not incorporated till $\mathbf{1 7 2 7}^{7}$. Among the prominent names we find Robinson, Willis, Smith, Taliaferro, Beverly, Waller, Clowder, Mercer, Weedon, Lewis, Washington, Littleplace, Forsyth, Conway, Fitzhugh, Moncure, Carter, Lee, many of which are still prominent in and about Fredericksburg. In Fredericksburg
itself descendants of Carter Braxton, one of the signers of the Declaration of Independence, are still living. A comparison of the earlier names with those of the present inhabitants shows that the present families represent almost exclusively the earlier families. Intermixture from without has not been great, foreigners have rarely sought homes here, and immigration from other states has been limited.

The early settlers were men of education. They studied at Cambridge, Oxford, Dublin, and Edinburgh, and at Temple Bar. Professional men were all educated in England. For the poor almost no provision was made. Sir William Berkeley in his day rejoiced that there was not a free school or printing-press in Virginia, and hoped it might be so for a hundred years to come. The rich had private tutors at their own houses, the poor remained ignorant. There were no libraries of any account. The sons of the rich were sent to England for their education up to the time of the Revolution. "The College of William and Mary, from the year 1700 and onward, did something toward educating a small portion of the youth of Virginia, and that was all until Hampden Sidney, at a much later period, was established." However poor the school system of the colony and young state was, the education of the superior class has ever been a matter of pride. Virginia has produced more great men than any other state, and the intellectual life has ranked high. She has won for herself the proud title of the " Mother of Presidents."

The English of the 17 th century, with proper regard to that of the 16 th and 18th centuries, forms the basis of the comparison of Fredericksburg's present pronunciation. Three extracts from early documents of Virginia with the approximate pronunciation of that day are given, and the pronunciation of the present traced back to that. The first is taken from The First Assembly of Virginia, held July 30, 1619. The second is from A Briefe Declaration of the Plantation of Virginia. The third is from Captain Smith's True Relation.

The tabular view of the Virginia Sounds at this period will be best understood in connection with the extracts in the full article; it would be impossible to give either here in this brief extract. A few of the more prominent peculiarities of the Fredericksburg pronunciation are given to show the tenor of the article.

The sound (i). The word "tester" is here pronounced (tiister) as in Charleston, S. C. In Latin words like simultaneous, etc., the $i$ is generally pronounced ( a , sai-mel-tee-ni-os), rarely ( $i$ ). In words like Palestine the sound fluctuates between (oi) and (ii), but inclines mostly to the latter. Ef for if is sometimes heard. For mill, hill, I heard in two instances (mil, Hil) quite distinctly, but am not sure that it was not an individual rather than general pronunciation. The word ear is here pronounced (yiir) by the vulgar.

The long and short $e$ differ but slightly from the accepted pronunciation elsewhere. The shades between this and the next sound (x) show a diversity of sounds in words that generally have the sound (x) and in Charleston, S. C., have (ee). Words like here, pare, pair, tare, bear, etc., which in Charleston generally have the sound ( $x$ ) or (xa), are divided in Fredericksburg between (ii), (x) and (FE). The sound (EE) is somewhat common in many of these words, but not so common as the Charleston (ee). In some the sound is short (E). There is the same fluctuation between (agen) and (ageen), (agenst) and (ageenst) as is found everywhere. The Latin prefix pre- has the two sounds (ii) and (e) in
words like predicessor (prii-di-sesx, or pred-i-sesr). The word here sometimes has a peculiar pronunciation. It is often pronounced ('jiir). The sound $e$ and $a$ exchange in yes and well (pr. yas, wal); e also exchanges with $i$ in yesterday, yes, yet, get, kettle, etc. (pr. yis, yit, etc.).

The long sound of (ææ) is heard in calm, psalm, balm, etc. (pr. kææm, sææm, bææm, etc.). But the ordinary pronunciation is also heard (kaam, saam, baam). The words ask, demand, are also divided between the sound (ææ) and (aa) (ææsk or aask). Compare also (pææs or paas), and we even hear (paas or pas). Passable and Possible are said to be indistinguishable in their pronunciation by many. Words in aut, like gaunt, daunt, etc., have three grades, (ææ), (aa), and (AA). These different pronunciations here mentioned are all found among the cultured, and is said to be traditional in families. As they all go back to the 17th century, they were probably brought over here and handed down from father to son.

There are one or two peculiarities under the $a$-sound. Among the vulgar the words there, where, are pronounced (dhar, whar). The genuine $a$-sound is heard in various words that have in other localities the (æ) or (e) sound. Mayor sounded to me as spoken by one person (maa-r). Stairs are often called (staars) by the illiterate, bears (baars), etc.

The a-sound is heard in $d g_{S}$ and God (dag, Gad, and even daAg, GaAd). But the $\rho$-sound may also be heard in these words (dog, God, and doog, Good). The words not, God, gaud, form a rising scale. Not is short, God is longer, and gaud is longest ( $\mathrm{O}, \mathrm{A}, \mathrm{AA}$ ), and we generally find $\operatorname{dog}$ and God running through the whole scale in the same locality. In Fredericksburg I have heard (dog, God, dag, Gad, daAg, GaAd). The word pond varies in its pronunciation in different sections of the country. All three sounds can be found in Charleston, S. C. (pond, pand, paAnd). The careless often pronounce it just like the word pazoned; the elegant pronunciation is the middle sound of our series (pand); many pronounce it (pond). In Fredericksburg the first and second (pond, pand) are heard, never the third. The word $\operatorname{hog}$ (generally $\mathrm{H} \partial g$, or $\mathrm{H} \partial \mathrm{g}$ ) is often pronounced (Hag or Haag) in Fredericksburg.
The $o$-sound has one or two peculiarities. The word poor almost always has the long sound of $o$ and drops its $r$ (poo). For the dropping of the $r$ see under $r$ in the consonants. The two pronunciations of progress, process, (projgres, proogres, prosses, prooses) prevail here. The preposition to often has the older pronunciation of (too), as in the time of Chaucer and Shakespeare, now becoming obsolete.

The long $u$ appears to have more of the i -Vorschlag in certain words than ordinarily, making it almost a distinct syllable. I am almost inclined to think that it is rather a (y)-Vorschlag. Thus due (dew), do, too, etc., sound to me (dü-u, tü-u, or dy-u, ty-u), with the accent on the (ü or y). Some, however, regularly pronounce these words $\left(\mathrm{diu}^{2}, \mathrm{tiu}^{2}\right)$ where the ${ }^{2}$ denotes a prolonged vanish. The word put (also in a less degree could, would, should) shows the same peculiarity as in Charleston, S. C. It is frequently pronounced (pət, rarely kəd, wad, shad). More probably the peculiar sound of could, zoould, should is the same as that heard in prove, move, and cthers. The sound here is to me a diphthong beginning with an (y) and ending with ( $u$ ), thus (pry- $u \mathrm{v}$, my- $u \mathrm{v}$; perhaps $\mathrm{ky}-\boldsymbol{u} \mathrm{d}$, etc.). The two sounds follow each other very rapidly, and it is difficult to
detect the two shades of sound of the first and second components of the diph. thong. The word spoon has the same sound (spy- $u \mathrm{n}$ ), but see under diphthongs. The $u$-sound in fruit appears to me to be quite peculiar. As near as I can make out it sounds nearly like the double French $u$, thus (fry-yt); the word appears to be dissyllabic, though the last syllable may be only the prolonged vanish. I have also noticed this same sound in people from the middle and upper part of the state of South Carolina. It has puzzled me very much. This sound may be the (yy), or the (yyw), or the (yy) with a labial modification. I hardly consider it the (iu). All these shades of sound have been handed down from the 17 th century.

The diphthongs show quite a number of peculiarities. Jones (1701) says that $a i$ has the sound of $a$ in some words. Ellis thinks the two sounds indicated by Jones were (ee) and (ee), and though ai was sounded $a$ by some people, it was not considered best. Jones gives quite a long list, among which we notice the word stair (pronounced staar by some), already mentioned. Here belongs also bear, an animal, pronounced (baar) by some. We have noticed the pronunciation of $d u e, d o$, etc. This leads us to consider the diphthong $e u$, which Ellis says the Americans pronounce (iu) rather than (iu), and even (eu) remains here in some parts. I believe it possible to hear all three in America. In Fredericksburg I am inclined to think (iu) or even (iuu) is the prevailing pronunciation. Some prolong it so that I heard (nieu), (dieu), etc. The (au) becomes (æu) in house (Hæus), where it is short. In town it is long (tææun). In out it is very short (æut). Thus we have very short in (out, about, south, etc), short (in house, etc.), and long (in town, cozv, etc.). The (ou) is heard in Fredericksburg, but not in house. There it is more often heard in boat, and similar words. As near as I could make out, I heard the sound (bout) in the pronunciation of boat almost always. Frequently I thought I detected the sound (baut), but the (A) was very short. The pronunciation of spoon, could, point, shook, grood (almost gyŭd), has been mentioned.

There is little to be said of the consonants. The ( $k$ ) often suffixes a ( j ) and becomes a breathing, as ('jeer) for here (Hür). The exchange of $z v$ for $v$, as prowok, wocation, for provoke, vocation, is no oftener heard here than elsewhere. In the combination wh both letters are sounded. The $r$ is at all events an evanescent sound and difficult to detect. In Fredericksburg it disappears in words like more, door, floor, war. And yet its influence is felt. Professor March told me that he explained this peculiar pronunciation of the final $r$ after vowels as an attempt to pronounce the $r$ by assuming the $r$ position after the enunciation of the vowel and then stopping just before the real enunciation of the $r$. This appears to me to be the truc explanation. Indicating the preparation for the $r$ by (') this peculiar pronunciation may be expressed (moo', doo', floo', wa').

The usual dropping of the $g_{g}$ in ing is heard here as elsewhere. The consonants $g$ and $k$ insert the ( j ) after them. Thus cart, garden, girl, etc., are pronounced (kjart, gjardn, etc.). Even school seems to fall under this rubric and becomes sometimes (skjuul).

The accent of the word idea has changed here to the antepenult (idea).
The above is only a beginning of studies of the pronunciation of Fredericksburg, and I hope hereafter to continue them. Any suggestions, corrections, or information will be gladly received.

Remarks were made by Messrs. A. F. West, T. R. Price, and F. A. March.
13. Some Syriac Legends, by Professor Isaac H. Hall, of the Metropolitan Museum, Central Park, New York, N. Y.

This was intended as an informal communication rather than a regular paper, and in fact was a mere talk. The legends spoken of were (i) The Legend of Romulus and Remus and the founding of Rome, and (2) a collection of legends in a manuscript recently received from Urmî in Persia, which are extant in a few manuscripts in Karshûn, but not heretofore found in Syriac. These were: A Colloquy of Moses with the Lord on Mount Sinai ; The Letter of Holy Sunday that fell from Heaven upon the Hands of Athanasius Patriarch of Rome, being the Third Letter [of its sort]; and The Narrative of Arsenius King of Egypt, and how our Lord raised him to life (containing an account of man's experiences at and after death, with a description of Gehenna).

Since the legends in the Urmi manuscript need the Syriac text for proper appreciation, they will be published elsewhere ; and no abstract of them is fairly called for here. The legend of Romulus and Remus seems to be of interest to the Association, however, and a translation of it is therefore given here. The original is to be found in a Nitrian manuscript written A.D. 837 (Brit. Mus. Addit. 12152, fol. 194 ff .). The text is printed in Paul de Lagarde's Analecta Syriaca (pp. 201-205), a work of which 115 copies were issued. A partial translation is to be found in B. Ifarris Cowper's Syriac Miscellanies, a work now quite scarce. It is a fragment from the Roman History of Diocles, and bears probable marks of translation from the Greek.

As the legend is quite closely connected with the preceding one of the settlement of Syria, Cilicia, and Phœnicia, it seems best to give the whole together. A distorted form of that portion which treats of Hercules and the Tyrian purple occurs also in a much later composition called the "Cave of Treasures," of which at least one manuscript exists in New York, and which Bezold has published in German and Syriac under the title of Die Schatzhöhle (Leipzig, 1883, 1888). In the "Cave of Treasures," however, Hiram King of Tyre replaces Punicus, and Hercules is suppressed - perhaps as a character not altogether in place in a strictly religious composition.

The following is the translation : -

## The Writing of Diocles the Wise.

Now after the division of tongues in the days of Peleg there was [born] a certain man of the sons of Japhet, who was called $\mathrm{Ag}^{\prime}$ ûr (or, $\mathrm{Ig}^{\prime}$ ûr). This one went up from the east and came and dwelt on the sea-shore, and built a city and called its name Ge 0 r, which in the Syriac tongue is called Tyre (Ṣ̂r). And there were [born] to him three sons, Syrus (Sûrôs) his first born, and Cilicus (Qûlîqôs) his second, and Punicus (Pûnîqôs) his third. And Ag ûr their father was king in Tyre 13 years. And when he died he divided the land to his sons; to Punicus he gave Phœnicia (Pûniqâ, or Pûniqî), and to Cilicus he gave Cilicia (Qiliqyâ, or Qîlìqîyâ), and to Syrus he gave Syria (Sûrîyâ).

And in the time of Punicus was [born] Hercules (Heraqlîs, or Harqlis), a man
wise and mighty in valor. For when this hero was commanding ${ }^{1}$ upon the seashore of Tyre, he saw a certain shepherd's dog capture a shell-fish of the sea, that is called conchylium, and eat of it, so that the dog's mouth was stained with the blood of the shell-fish. And Hercules called to him the shepherd of the flock, and told him about the dog; and forthwith the shepherd brought wool, and with it wiped out the mouth of the dog, and of the wool the shepherd made himself a crown and put it upon his head. Then when the sun shone upon it, Hercules saw the crown of wool, that it was very splendid, and he was astonished at its beauty; and he took the crown from the shepherd. But the next day Hercules took the shepherd and the dog, and went out to the sea-shore. And the dog, as he was walking along, saw a shell-fish, and the dog ran and caught it ; but Hercules snatched the shell-fish from his mouth, and let the shepherd go to his flock. And Hercules walked every day upon the sea-shore, and as soon as one of those shell-fish came out from the sea, he ran quickly and caught it. So he gathered 30 of them, and he boiled them over a fire, and dyed white wool with their blood. And he gave it to a certain woman, and she made of it for him a garment, and he took that clothing and brought it in to Punicus the king of Tyre, who, when he saw it, wondered at its beauty, and commanded that no one except himself should wear it, but the king (or, the one acting as king) only. And moreover, he gave to Hercules authority to be commander in his place, and wrote that he was the father of the kingdom [i.e. prime minister]. And it was this Hercules that showed the dyeing of all manner of beautiful colors; and how, moreover, pearls go up from the sea he showed and taught to men.

In those days there was [born] a man in the country of the west, whose name was Rômiyâ (or Rômyâ or Rômayâ, = 'P $\omega \mu$ aios) ; and the man was a mighty hero. Now in his days there was in the island of Cilicia a certain virgin beautiful in appearance, who had been made priestess in the temple ( $\nu a . \partial s$ ) of the god Aris ('A A $\eta$ s). And when Rômfyâ saw [her], he lusted after her, and he went in unto her, and she conceived from him. And when she perceived that she had conceived from him, she was in great fear, and kept herself close, in order that the priests of the god Aris should not detect it and kill her. And when she had borne two twins [sic-idiomatic], their father took them and gave them to a certain woman, who reared them. And when the boys were grown up and become men, their father gave them names; to the one Romulus (Rômullôs, Rômillôs, or Rômellôs), and to the other Remus (Rômôs). And they built the city Rome (Rômâ or Rômt) and . . . ${ }^{2}$ it, and all their subjects ${ }^{3}$ they called Romans (Rômayê $=$ ' $\mathrm{P} \boldsymbol{\omega} \mu \mathrm{aio}$ ) after the name of their father; and for this reason the sons of Rome are called Romans. And, moreover, they built the capitol (qâpitôlôn), which interpreted is, the Head of the city; and it is one of the wonders of the whole earth [lit. one out of the wonders that are in the whole earth]. And they brought a great image that had been in Helûdûs (or Helôdôs, possibly 'E入入áסos, genitive), ${ }^{4}$

[^63]and raised and set it above the top of the capitol, and it was a great wonder, whose like has not been on the earth. And they built the great dimôstôn ( $\delta \eta \mu \dot{o}^{-}$ $\sigma$ ov ) that is in Athens (Athînis, $=$ Athēnis, 'A ${ }^{\prime} \dot{\eta} \nu a, s$ ), and the philosophers called it the dìmôsî̀n of wisdom (sôphiâ).

Now then there arose a quarrel between the two brothers, and Romulus (Armillôs, Armellôs, or Armullôs, $=\delta$ ' $\mathrm{P} \omega \boldsymbol{\mu} \boldsymbol{\mu} \lambda o s$ ) rose up and slew his brother Remus. And straightway the city began to quake; and when the sons of Rome saw that their city was quaking, they feared with great fear, and all its inhabitants sought to flee out of it. And when Romulus saw that the sons of Rome were in commotion at the temple ( a òs) of the goddess Pâthinayâ (or Pûthinîâ, or $^{\text {a }}$ Pâthinyâ - or perhaps better, of the Pythian goddess), he asked of her that she would reveal to him for what cause the city was quaking. And she answered him, "Because you have slain your brother the city is quaking and mourning; because he built it with you. And there will be no cessation from the earthquake until it [i.e. the city] sees your brother sitting with you upon the throne of the kingdom, and commanding and writing and proclaiming with you as formerly."

Now when this saying was heard throughout the city, they assembled to stone Romulus with stones, because he had slain his brother. But he fled from them and went up to Athens. And when the philosopher Punitus (Pûnitôs, Pônitôs) heard of him, he went and listened to the words of Romulus, and promised him that if he would write for him Athens as a free city [lit. daughter of freemen, or of nobles], so that no king of the Romans should have authority over her, he would go to Rome and restore tranquillity to the sons of the city and to his powers. And he made a covenant with him that he would do that for him. And Punitus went to Rome and spoke with them, and said to them, "If ye will receive your king in peace, this earthquake will cease forthwith from your city, so that it shall not again quake. But if ye do not receive him your whole city will perish." And forthwith all the sons of Rome assembled and went up after their king to Athens. And when they had arrived [there], and had come [back] and reached Rome (Rômt), the whole city went out to receive him; and they answered and said to him, "If it be that you know that by your entrance into the city the quaking will cease from it, come, enter in glory and honor, and sit on the throne of your kingdom. But if the earthquake will not cease from us, do not enter." But he promised them, "This earthquake will cease from the city."

And the same philosopher made an image of gold after the likeness of his brother, and seated it with him upon the throne of his kingdom. And he commanded them that whatever was done or written should be as if from the mouth of the two. And they did so, and forthwith the earthquake ceased from the city. Thus by the wisdom of this man that earthquake ceased, and the inhabitants with their king were tranquillized. And thenceforward the Romans fixed that it should be the custom to write and command, saying [i.e. in the form], "We command." And Athens received freedom from that time on, that no king should have authority over her to do in her anything by force. And this same Armellus (Romulus) instituted an equestrian display (ippîqton, a corruption of im $i \kappa \delta \partial \nu$ ) for [the] amusement [of the people], and he instituted the martius, and he was the first to institute the veneti ${ }^{1}$ and the prasini ${ }^{1}$; for because he was afraid of the sons . . . ${ }^{2}$

[^64]would kill him as he had kiiled his brother, he established before him two men that hated each other, one from the veneti and one from the prasini; for, said he, "If it be that the veneti plot against me, the prasini will make it known to me ; and if the prasini plot against me, the veneti will make it known to me" . . . ${ }^{1}$ two men before . . . ${ }^{1}$ of the city as if for amusement. And he clothed the one of the veneti in clothing of the sea, and the other in clothing of the prasini, which was like the grass of the earth. And he said, "If indeed this one conquers that is clothed like the veneti, the sea will be quieted, and the barbarians will not invade and obtain authority in the islands of the sea; as regards them that dwell in the sea, these will take the victory, and those that dwell on the dry [land] will be conquered. But if, again, he that is clothed like the prasini conquers, they that dwell on the dry [land] will conquer, and subdue those that dwell in the seas." And forthwith as these two men advanced to contend one with the other, those that dwelt in the sea prayed that the [one of the] veneti might win, but those that dwelt on the dry [land], that the [one of the] prasini might win. And from that time even until now there have been these two divisions of the kingdom of the Romans, of the veneti and the prasini. And Armellus (Romulus) instituted the brumalia, because he was a man that loved instruction, and that loved amusement, and that loved the youth; and he commanded that in the days of winter men should be calling one upon another, and that many should assemble, assembling with one, and should eat and drink and enjoy themselves. And he commanded that the letters of the alphabet should be coming in one after another, and every one of them should be called in its day. And they called them [i.e. those days] brumalia, which is, interpreted in the Greek language, "Let us eat and drink off others," that is gratis. And there was . . . ${ }^{2}$ a grade of nobility at Rome, and he gave to the nobles the great honor of a throne and authority, that they should command and be obeyed. And he ordained that there should be qûblarê (cubi[cu]larii?) in the kingdom of the Romans, that is, that they should be servants in the kingdom. And he sent to Athens and brought thence the philosophers GLSOS (or GLSUS, Gelasus, Glesus, or -sys?) and LThROS (or -US, Lathrus, Lathyrus, Lathrys, etc.?), and made them an organ, that they might be delighted with beautiful sounds. And Armellus (Romulus) instituted the katâdromôn, and commanded that when the sons of Rome were assembled at the capitol the boys should go down by a rope from the top of the capitol to the bottom, sitting on a wheel and offering a crown to the kingdom, just as if a heroic crown were going down to [the place] of Nimrod, and that the kings should be givers of gifts to those little boys when they returned to come up again. And again he ordained that the Romans should take turns, that in order that they might be supported all the winter, so in the summer they should be going forth to war against their enemies. And he ordained and established veredi (i.e. postcouriers or post-horses), to serve as relays and bring news to the kings from the armies. And the day in which the Romans went out to war and called it martius, ${ }^{3}$ also interpreted victory . . ${ }^{4}$ and . . . ${ }^{4}$ great marvels and various deeds and excellent laws and upright commands he executed and established in Rome

1 Words defaced.
2 A word or more defaced.
${ }^{3}$ Perhaps the month of March (Martius) is meant.
${ }^{4}$ Some words defaced.
(Rômi). Among all the Romans there was no man like him excelling in all knowledge and wisdom, nor so honored by those that have understanding. And in his intellect he was so rich that whosoever saw him and spoke with him was discovered, the bad from the good and the false from the true . . .

At 9 P. M. the Association adjourned to meet at 8.30 A. m., Thursday.

Easton, Pa., Thursday, July ir, 1889.
Morning Session.
Professor Seymour, the President, called the Association to order at 8.30 A . M.

The report of the Committee to nominate Officers was presented by L. H. Elwell, Esq., and adopted. In accordance with the recommendations of the Committee, the following gentlemen were elected officers of the Association for 1889-90 : -
President, Professor Charles R. Lanman, Harvard University, Cambridge, Mass.
Vice-Presidents, Dr. Julius Sachs, New York, N. Y., and Professor Johñ H. Wright, Harvard University, Cambridge, Mass.
Secretary' and Curator, Dr. Herbert Weir Smyth, Bryn Mawr College, Bryn Mawr, Pa.
Treasurer, Dr. Herbert Weir Smyth.
Additional members of the Executive Committee, -
Professor Martin L. D'Ooge, University of Michigan, Ann Arbor, Mich. Professor Basil L. Gildersleeve, Johns Hopkins University, Baltimore, Md.
Professor Francis A. March, Lafayette College, Easton, Pa.
Professor Bernadotte Perrin, Adelbert College, Cleveland, O.
Professor William D. Whitney, Yale University, New Haven, Conn.
The Committee appointed to propose Time and Place for the next meeting reported, through Professor Peck, that invitations had been received to hold the meeting in 1890 at Norwich, Conn., Northampton, Mass., and Princeton, N. J. The Committee recommended that the Twenty-Second Annual Meeting be held on the second Tuesday in July, 1890, at Norwich, Conn.

The report was accepted and adopted.
On motion, the matter of effecting a union of meetings between the Modern Language Association and the Association was referred to the Executive Committee to report at the Norwich meeting.

The report of the Committee to audit the Treasurer's Accounts was presented by Dr. H. W. Smyth, to the effect that the accounts, with the accompanying vouchers, had been examined and found correct.
14. John Reuchlin and the Epistolae obscurorum virorum, by Morris H. Stratton, Esq., of Salem, N. J.

The object of this paper was to call attention again to the fact that the great contest between the monks of Cologne and John Reuchlin was really an attempt to smother classical literature in its cradle.

The facts and dates given were taken from the printed "Case" of the trial at Rome, of the appeal of Hoogstraten, the Inquisitor at Cologne, from the judgment of the Bishop of Spires - which appeal was decided in favor of Reuchlin in 1516-and from the letters of Pirkheimer, Erasmus, and others, printed in Van der Hardt's Historia Litteraria Reformationis. Luther's letters to Reuchlin, also printed by Van der Hardt, fully and frankly acknowledge how much the Reformer owed to the Scholar who had preceded him.

The Epistolae obscurorum virorum were quoted to show that the first attack of the mendicant monks - in which they were fatally worsted and the back of the Inquisition was broken - was against the revival of classical literature as such. These letters are, of course, a satire, but the well-known facts as to the reception of them - even by their unconscious victims - prove that they were thoroughly verisimilar if not true.

Reuchlin and Erasmus opened the doors to the study of the Testaments in the original tongues, but that they were opposed as scholars and not as disseminators of a wider knowledge of the Bible was illustrated, inter alia, by the fact that among the hundreds of editions of the Bible in modern tongues issued in the Fifteenth Century, a very fine folio Bible, in the local German, with illustrations, was published in Cologne, between 1470 and 1475, without objection from Hoogstraten, and that Koburger published a superb illustrated Bible at Nuremburg, known as the ninth German Bible, in 1483 - the year in which Luther was born.

Reference was made to the great services of Ulrich von Hutten, one of the editors of the Epistolae, and the author of the "Triumphus Capnionis." Sir Wm. Hamilton defends Hutten's authorship of the Triumphus - and from this the fact that he was one of the three editors of the Epistolae - with great learning and ability in an article on the Epistolae and their authorship, in the Edinburg Review of March, 1831; and Van der Hardt assumes it as unquestioned that Hutten wrote the Triumphus. This savage satire is referred to, however, by Henry Charles Lea, in his IIistory of the Inquisition - Vol. II. pp. 424-25 as written by Eleutherius Bizenus, Hutten's nom de plume.

The inaccurate and misleading account of Reuchlin and of his contest with the monks, in the work referred to, was given as one of the reasons for writing this paper.

Professor Francis A. March, as Chairman of the Committee on the Reform of English Spelling, reported that no action had been taken during the last year. The manual dictionary with amended spellings has not yet been made.

A report was made April 8, 1889, by the Commission on Amended Orthography authorized by the Legislature of Pennsylvania. The Commission askt aid from the American Philosophical Society, Super-
intendents of Education, and others, and the printed report contains, as appendixes', elaborate arguments in favor of reform by a committee of the American Philosophical Society, and by Hon. W. T. Harris, U. S. Commissioner of Education, with various statistics.

The practical recommendation of the Commission is as follows:-
The Commission would call attention to the fact that many words are spelt in two ways in our dictionaries, and that it is therefore necessary for a choice to be made between the different spellings. We find "honor" and "honour," "traveller" and " traveler," " comptroller" and "controller," and hundreds of such pairs. In these words one way of spelling is better than the other on grounds of reason, simpler, more economical, more truthful to sound etymology and scientific law.

The Commission respectfully submits that the regulation of the orthography of the public documents is of sufficient importance to call for legislative action, and recommends that the public printer be instructed, whenever variant spellings of a word are found in the current dictionaries, to use in the public documents the simpler form which accords with the amended spelling recommended by the joint action of the American Philological Association and the English Philological Society.

Francis A. March, Thomas Chase, H. L. Wayland, Arthur Biddle, Jas. W. Walk, Samuel A. Boyle.

Professor W. D. Whitney, in the preface to the Century Dictionary, May Ist, 1889, takes similar ground: "The language is struggling toward a more consistent and phonetic spelling, and it is proper, in disputed and doubtful cases, to cast the influence of the dictionary in favor of this movement, both by its own usage in the body of the text, and at the head of articles by the order of forms, or the selection of the form under which the word shall be treated."

The report was accepted, and the Committee appointed in 1875 was continued for another year. It now consists of Messrs. March (Chairman), Child, Lounsbury, Price, Trumbull, and Whitney.
15. A Northumbrianized Judith Text, with Commentary, by Professor Albert S. Cook, of Yale University, New Haven, Conn. ; read by Professor F. A. March.
16. Stressed Vowels in Ælfric's Homilies (late West Saxon), by Professor Albert S. Cook, of Yale University, New Haven, Conn.; read by Professor F. A. March.

On motion of Professor A. F. West, a resolution was adopted as follows : -

The American Philological Association desires to place on record, before finally adjourning, the hearty expression of its thanks to the President and Faculty of Lafayette College for the use of the various college buildings, to the Local Committee of Arrangements and its Chairman, Professor Owen (of Lafayette), to the Committee of the gentlemen of Easton for the very pleasant excursion taken under their guidance to Paxinosa, and to the newspapers of Easton for their full and accurate reports of the proceedings of the Association.
17. The Study of English in Preparation for College, by Professor Francis A. March, of Lafayette College, Easton, Pa.

Accurate knowledge of the mother tung is fundamental to all valuabl thinking. It is to be obtaind by studying classic English authors substantially in the same way that Greek is studied in good schools : that is to say, by studying each word etymologically and in its connection so as to comprehend its meaning, and by studying each clause and sentence in its connection so as to repeat the train of thought of the author. This study should be recognized as different from reading literature for plesure or for esthetic or bibliografic culture. The paper discust the desirablness of a general agreement among the colleges upon some two or three English books of moderate size for the entrance examinations, to be put on the same footing as the Anabasis and Iliad in Greek. Franklin's Autobiography and two books of Paradise Lost wer suggested. If they wer generally adopted, editions would be prepared for study of the right sort by the most accomplisht professors, and a tradition of good teaching of them would soon be establisht in the fitting schools.

Remarks were made by Messrs. W. D. Shipman, 'T. Peck, J. Sachs, 'I. R. Price, and F. A. March.
18. The Relation of the Greek Optative to the Subjunctive and the other Moods, by Professor William W. Goodwin, of Harvard University, Cambridge, Mass. ; read by Professor J. H. Wright.

This paper has appeared in the new (1890) edition, of Professor Goodwin's Greek Moods and Tenses, Appendix I.
19. A New Source in Plutarch's Life of Cicero, by Dr. A. Gudeman, of New York, N. Y.

After some introductory remarks on the method to be followed in investigations of this nature, on the inherent difficulties to be encountered, on Plutarch's mode of work and on the degree of proficiency in Latin which we may safely assume him to have attained, the lecturer briefly reviews the authors usually regarded as the chief sources of the Greek life. The investigations hitherto made have, however, been almost entirely confined to ascertaining the sources of Plutarch's narrative of Cicero's political history, and, in consequence, but slight attention was paid to the "Quellen" of those portions of the vita which deal more particularly with the personal and literary side of the great orator. Tiro's voluminous life of his patron was generally supposed to have furnished Plutarch with the bulk of his purely biographical material, while Cicero's autobiographical
writings, as well as Augustus' memoirs, were considered as secondary sources. ${ }^{1}$ All the writers, however, that have been suggested as the original sources of Plutarch's narrative were either contemporary with Cicero or nearly so. That the Greek historian may also have consulted much later authorities has not, as far as I am aware, ever been hinted at. It is the object of this paper to show: I. That Plutarch actually made use of one, or, if you will, several post-Augustan writers. 2. That one of these post-Augustan sources is no other than Suetonius Tranquillus' Life of Cicero, which formed a part of his famous work De viris illustribus.

The first of these propositions is conclusively demonstrated by ch. 2 of the Life, containing a criticism of Cicero's poetical abilities. ${ }^{2}$ The beginning of ch. 40 , and a few other passages, also point to a post-Augustan source.

The proof for the second thesis is furnished by ch. III, II sqq. This passage contains two misstatements of such a nature as to exclude Tiro, Nepos, Fenestella, etc., as their possible authors. We can only attribute them to a writer remote enough in point of time to render the error excusable. Who can this be? The identical error is fortunately found in two other authors, and in only two, besides Plutarch, and their names are Hieronymus and Sextus Aurelius Victor. Now, one of the sources of Hieronymus (as has never been denied) and of Victor's De viris illustribus (as can be shown) is Suetonius' work of the same name. The erroneous statements in question, therefore, not being met with elsewhere, and remembering how much safer a clue to inter-dependence of authors is afforded by coincidences of palpable errors than by concurrences in well-known facts, it follows that Suetonius is the common source of Plutarch, Aurelius Victor, and Hieronymus.

This new source having once been discovered, we are at liberty to look for other statements whose origin we had been hitherto unable to determine with any degree of probability. A number of such passages having a genuine color Suetonianus, ch. 2, quoted above, being among these, is accordingly pointed out as being very probably derived from Suetonius' vita; and taken altogether, they certainly possess all the argumentative validity of strong cumulative evidence.

The paper concludes by the author's disposing of a possible chronological objection to Suetonius as a source of Plutarch, by showing that the vita Ciceronis was written later than 115 A.D., this year being the terminus post quem of the composition of the Life of Sulla (cf. ch. 21), which in its turn preceded Plutarch's vitae of Demosthenes and Cicero, as Michaelis has convincingly proven. Suetonius' work must have been in the hands of the public long before this time, the author being then past the age of forty.

## 20. On the Use of Verbs of Saying in the Platonic Dialogues, by Dr. George B. Hussey, of the College of New Jersey, Princeton, N. J. ${ }^{3}$

This paper points out the various forms of verbs of saying used by Plato, and passes on to show that some of them belong exclusively to the later periods of his literary activity. The fact that almost all Plato's writings are in the form of dialogues suffices of itself to explain his frequent use of verbs of saying. Thus the Protagoras has 565 instances of them, and the Phaedrus over 320. Some of these

[^65]verbs may depend for their use entirely on the external features of the dialogue. In the indirect dialogues - those where the argument is related to persons not
 the verbs of saying.

If such verbs as belong to the narrative of the indirect dialogues are set aside, the remaining instances exhibit much more variety of form. They serve chiefly to introduce quotations of all sorts. So proverbs are usually introduced by $\tau \delta \lambda \epsilon \gamma \delta-$ $\mu \epsilon \nu 0 \nu$, myths and traditions by $\lambda \epsilon \in \mathcal{\epsilon} \tau \alpha$, , and opinions of poets and philosophers by $\lambda \epsilon \gamma \epsilon!, \phi \eta \sigma^{\prime}$, or some other form in the active third person. Another use of these verbs of saying (and the one to which attention is especially called) occurs where one of the speakers quotes an earlier part of the dialogue he is engaged in, or even a preceding dialogue. When the statement referred to is near at hand or is quite prominent, a present tense, as $\lambda \epsilon \in \gamma \in \epsilon s, \phi n^{\prime} s$, may be used in citing it, but when more distant a past tense $\epsilon_{\epsilon}^{\ell} \lambda \epsilon \gamma \sigma \nu,{ }_{\epsilon} \rho \rho \rho^{\prime} \theta \eta, \tau \grave{\alpha} \lambda \epsilon \chi \theta^{\prime} \dot{\epsilon} \nu \tau \alpha$ is more frequent. It is among citations consisting of past passive forms that the gradual extension of use can be best observed. Some of them seem to be known only to Plato's later style, and by means of them the dialogues can be arranged in the following series, which probably corresponds somewhat closely with the order in which they were composed: -.

|  | I. | 2. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Apology . . | 7 | . | . | $\cdots$ | . | . | . |
| Crito . . . . . . . | 11 | $\cdots$ | . |  | . | . |  |
| Euthyphro. . . . | 10 | . | . | . | - | - | - |
| Protagoras. . | 26 | . | $\cdots$ | . | $\ldots$ | . |  |
| Euthydemus . . . | 29 | - | $\cdots$ | -• | - | - | - |
| Laches . . | 17 | $\ldots$ | $\ldots$ | - | -. | . | . |
| Charmides. | 18 | . | $\ldots$ | 1 | . | $\ldots$ | . |
| Meno | 16 | $\cdots$ | - | 1 | . | . | . |
| Lysis . . . . . . . | 13 | - | - | 1 | $\cdots$ | -• | . |
| Parmenides | 16 | $\cdots$ | . | 1 | $\cdots$ | . | . |
| Cratylus . | 34 | . | - | 1 | 1 | - | . |
| Hippias II | 13 | - | - | 2 | 2 | - | $\ldots$ |
| Republic (bks. I-V) | 109 | 1.8 | 2 | 2 | 3 | . | . |
| Gorgias . . . . . | 76 | 2.6 | 2 | 0 | 0 | -. | -. |
| Phaedo. . | 40 | 5.0 | 2 | 1 | 4 | . | . |
| Symposium . | 29 | 6.9 | 2 | 1 | 1 | -. | -. |
| Phaedrus . $\cdot$ : | 39 | 10.2 | 4 | 4 | 0 | - | - |
| Republic (bks. VI-X) | 80 | 8.7 | 7 | 3 | 9 | . | . . |
| Theaetetus | 47 | 10.6 | 5 | 1 | 0 |  |  |
| Sophist . . | 65 | 9.2 | 6 | 7 | 1 | 1 | . |
| Philebus | 93 | 10.7 | 10 | 9 | 4 | 2 | . |
| Timaeus | 39 | 20.4 | 8 | 6 | 1 | 1 | 2 |
| Politicus | 88 | 26.1 | 23 | 11 | 2 | 5 | 1 |
| Laws . . . . | 324 | 11.1 | 36 | 26 | 5 | 10 | 3 |

I. $\begin{cases}\text { Dittenberger. } & \multicolumn{1}{c}{\text { Schanz. }} \\ \text { Crito. } & \begin{array}{l}\text { Apology. } \\ \text { Euthyphro. } \\ \text { Protagoras. }\end{array} \\ \text { Charmides. } & \text { Gorgiashro. } \\ \text { Laches. } & \text { Laches. } \\ \text { Hippias II. } & \text { Lysis. } \\ \text { Euthydemus. } & \text { Protagoras. } \\ \text { Meno. } & \text { Symposium. } \\ \text { Gorgias. } & \text { Phaedo. } \\ \text { Cratylus. } & \text { Phaedrus. } \\ \text { Phaedo. } & \text { Cratylus. } \\ \text { Symposium. } & \text { Euthydemus. } \\ \text { Lysis. } & \text { Theaetetus. } \\ \text { Phaedrus. } & \text { epublic. } \\ \text { Republic. } & \text { Sophist. } \\ \text { Theaetetus. } & \text { Philebus. } \\ \text { Parmenides. } & \text { Politicus. } \\ \text { Philebus. } & \text { Timaeus. } \\ \text { Sophist. } & \text { Laws. } \\ \text { Politicus. } & \\ \text { Laws. } & \end{cases}$

In determining the frequency of any form of citation in such different dialogues as the Gorgias and Timaeus the total number of references is a much fairer measure than the number of pages covered by each dialogue. These totals are shown in the first column of the table. They are made up solely of references to statements of persons engaged in the discussion, and are, besides, limited to past tenses of the indicative and to past participles of the verbs $\lambda \epsilon \epsilon \gamma \omega, \epsilon \in \hat{\omega}, \epsilon \bar{i} \pi o \nu$, and $\phi \eta \mu i^{\prime}$. The tenses of the infinitive and imperative are omitted, as when used in a past tense they are not always references to a preceding passage. The second column shows what percentage of these citations is formed by $\epsilon^{\prime} \rho \rho \eta^{\prime} \theta \eta$ and its participle $\rho \eta \theta \epsilon i$ s, and the third gives the absolute number of these special forms. The fourth column shows the cases of $\bar{\epsilon} \lambda^{\prime} \chi \theta \eta$ and $\lambda \epsilon \chi \theta \epsilon i$ is when used as citations; and the next does the same for $\pi \rho о є \rho \rho \eta \dot{\theta} \eta \eta$, $\pi \rho o \in i \rho \eta \tau \alpha \iota$, and their participles. A peculiar and harsh construction of $\lambda \in \chi \theta \in$ 's, as an adjective qualifying a noun of masculine or feminine gender, is shown in the sixth column. Cases of the rare perfect passive of $\lambda \epsilon \boldsymbol{\epsilon} \boldsymbol{\gamma}$ are given in the last column. Some of these, however, are imperatives, and it should be remarked that the last two columns are not restricted to citations, but include all instances of the forms mentioned.

It will be seen that the first six dialogues do not show any of the forms given in the table. They can, therefore, only be put into a group by themselves; while their relations to one another within it have to be left undetermined. The next few dialogues in the series owe their position to the fact that they begin to show instances of $\bar{\epsilon} \lambda \epsilon \chi \chi \theta \eta$. Then, when $\dot{\epsilon} \rho \rho \dot{\xi} ; \theta \eta$ begins, it is chosen as a criterion; and finally the $\lambda \epsilon \chi \theta \epsilon$ ' $s$-construction, shown in the sixth column, becomes the test-word. Thus the early stages of each usage are considered to be most important, as it is then that the employment of the special word is most a matter of conscious effort. The columns containing $\pi \rho o \epsilon \rho \rho \dot{\eta} \theta \eta$ and $\lambda \epsilon^{\prime} \lambda \epsilon \kappa \tau \alpha \iota$ have, in general, a tendency to confirm the evidence of the others ; but, except for this, are not of so much importance in fixing the order of the dialogues. The most natural explanation of these new forms of citation that appear in the later dialogues, but do not exclude
earlier words used for the same purpose, is that they were introduced for the sake of variety.

Dittenberger in Hermes, XVI, 321, and Schanz in the same periodical, XXI, 439, have already used a similar method of arranging the dialogues by means of changes in the use of words. Certain phrases containing $\mu i \boldsymbol{\nu}$ were used for this purpose by Dittenberger, and, except for the position of the Lysis and Parmenides, the present list agrees very closely with his results. According to his investigations the Lysis ought to be placed near the Phaedrus and the Parmenides near the Philebus. Their fluctuating position would thus seem to be another proof that they are not genuine Platonic dialogues.
21. The Quality of Sanskrit $a-k \bar{a} r a$, by Professor Edward W. Hopkins, of Bryn Mawr College, Bryn Mawr, Pa. ; read by L. H. Elwell, Esq.

It seems to me time to put the formal question: Do we mean what we write when we transcribe the Sanskrit vowel usually rendered $a$ by this symbol? As we know that there was a period in which the language had short $\breve{o}$ and $\breve{c}$ (of whatever source), and find neither of these represented in the alphabet; as we know also that there was a period when a single vowel sound represented all that was left of $\breve{a}, \check{c}, \breve{o}$, we may for convenience' sake divide the growth of the whole language into two periods, Early and Late, approximately the time of the Rig Veda and of Pāṇini respectively.

For the early period we have (see Bloomfield in the third volume of the Am. Journ.), already given, the fact that short $\check{e}$ and $\check{o}$ existed. To the late period no such vowels were known. It is important to bear in mind that the alphabet arises between the two periods here designated.

One of the short vowels of the earlier period is $\breve{o}$, said to be developed from ' $a$ 's. As this $\check{b}$, however, corresponds to the short $o$ of related languages in os, it is evident that its apparent derivation from as assumes (what is in this case not yet proved) that we have here (' $a$ 's) a real $a$, and not a letter subsequently to develop into ' $a$ '. The assumption of Oldenberg, that we have here $a s=\bar{o}=a u$, with a vanishing semivowel after the vowel, is based on examples that prove only the felt want of some sign to express the lost consonant which can have been nothing but $s$. The peculiar examples of ' $a$ 's $=a y$ given Hymnen s. 457 show only a halfremembered consonant expressed, by analogy, by the semivowel; for there can be absolutely no historical sense in apay isya, abhibhūyamānay iva, etc. In Indrō 'bravīt from indrös + vowel ' $a$ ' we have a result to be compared with Indrō nāma; the $s$ lost before sonant and the following vowel absorbed in one case (compare the accent); in the other the $s$ dropped before sonant, but the consciousness of the two consonants producing length of the preceding vowel. For until we know that in this example of ' $a$ '-kāra we are dealing with a pure ' $a$ ' it is right to assume the vowel sound indicated, even were it probable that ' $a$ 's $d / h i$ would remain contracted as $\bar{e} d h i$, while ' $a$ 'sti is asti (ésdhi becomes $\bar{e} d h i$, hence for asti read ésti). Because the later alphabet gives us $s^{\prime} a^{\prime} d$ we assume sad and take sēd to be contracted from sasad rather than sëséd, though this alphabet on which we rest our belief does not really give us sad, as I shall now show, but $s+$ doubtful vozvel $+d$ (I am aware that the primitive origin of $s \bar{e} d$, etc., is called in question by Bar-
tholomae, but the example will serve as an illustration of our present transcription). Were it not for a future alphabet which writes $\breve{e}, \stackrel{b}{c}, \breve{a}$, in their further development with one sign (this which we write $a$ and which I will call akar), we should not think of assuming that the $\check{e}, \check{o}, \breve{a}$, of the Veda were all one sound as they actually become later. For if we prove $\breve{o}$ from ' $a$ 's and see no alphabetical distinction between $\check{o}$ and $\bar{o}$, we may conclude that the alphabet is responsible for slurring other sounds also. It is then of the highest importance to know what akar is in the Sanskrit alphabet of the late period. Moreover, we are entitled to look to the neighboring dialects and see whether our alphabet is not later than the forms they give. In Pali our akar is represented by both $\breve{e}$ and $\breve{o}$, and it is no explanation to say that this is the result of a later closed pronunciation of $a$ (see Ind. Stud. iv. 119). Our ending of the plural verb $m^{‘} a^{\prime} s$ is represented by $m \breve{u}$; the instrumental rāj‘a'bhis by $\breve{u} b h i$, or $\check{e b h i}$; dharm'a's, by dhammŏ; pitrā , by $p i t a r \bar{a}$ or $p i t u n \bar{a} ; j^{\prime} a^{\prime} y^{\prime} a^{\prime} t i$ by $j e t i$, etc. If we turn to Zend we find also, near as it stands to Sanskrit compared with other tongues, Sanskrit akar represented by $\check{e}$ as well as by $\breve{a}$; the nominatives, as in Pali, aspo, mano; possibly the diphthong $o i$ for $a i(t o i)$. It would be extraordinary to have Zend and Pali agree rather with Greek than with Sanskrit in giving $o$ as the nom. sg. in aspo, etc. We write $a$ for $a k a r$ because the later alphabet demands - not $a$-but one vowel in all cases. What then is this vowel of the later period? Different vowels passed into one sound as in Greece. Three reasons show that in the second or late period this vowel was not an $a$. First, the oral tradition, that tradition which made the early Sanskrit scholars write not Manu but Menu, etc.; second, this traditional pronunciation is upheld by Pānini, at whose time we may loosely set the uniform stage, who says distinctly that the sound which he treats as open $a$ is in reality a closed $a$. Now a closed $a$ cannot be transcribed by $a$, but rather by $\breve{o}$ or $\breve{u}$ if we would render its quality correctly, and not violate truth by adherence to Pānini's self-confessed inaccuracy. Third, the Greek inscriptions show clearly that tradition and Pānini's confession bear witness to truth, for here we find that akar, far from being transcribed as a pure $a$, is rendered by Greek $o$, by $\epsilon$, or even by $\iota$ and $v$, as well as by $\alpha$ (see Weber's collection Ind. Ant. ii. 143 ff .). Now if we find the norm of a pure $a$ earlier than Pānini (Vāj. Pr.), we may assume a chronological better than geographical difference, especially as the close $a(\breve{b}, \breve{u})$ seems to be found in various districts.

In this second period (to the beginning of which the alphabet must be referred) we find but one sign for the earlier $\breve{a}, \breve{e}, \breve{o}$, and this sign is not really an $a$, but an $\check{b}$ or $\check{u}$. What right have we, therefore, to insist on a pure $a$ being the universal representative of this akar for the earlier period? Undoubtedly akar often represents a pure $a$ because its later function embraces a pure $a$ in a plurality of cases (as in words whose vowels $=a, a j$, etc.); but on the other hand, it often does not, as far as we can see; nor is there any reason to think so except given by this same alphabet. The separate existence of $\breve{a}, \breve{e}, \breve{b}$, ceased before this alphabet began, becoming the "mid-back narrow $a$," i.e. $o$ in come, $u$ in but. In transcribing $a k a r$ by $a$ we therefore fail to give rightly the sound of the second period, and ignore the fact that in the early period it would have been divided (had an alphabet existed) into $\breve{e}, \check{o}$, $\breve{a}$, which three vowels occur, but could of course leave no trace except by inference. Our norm for the early period must necessarily be doubtful in cases where no light is given from without. But where
a comparison of Zend, Pali, and Greek show o against an assumed Sanskrit ' $a$ 's, we ought certainly to make a distinction that is based on comparative forms and upheld by native texts; writing instead of as, ŏs: and we should probably not be wrong if we extended this distinct pronunciation into other cases where obs or ess can be predicated from native dialects in conjunction with Zend, itself nothing but an Aryan dialect a little further removed. But to keep on writing Sanskrit $a=a, \epsilon, o$, is certainly incorrect both for the early and the late period. In one case ' $a$ ' does not fill the requirements; in the other it contradicts a pronunciation that is proved to have been different. We might as well write $\epsilon_{\iota}=\mathrm{i}$ in Greek because it came to be pronounced so in the course of centuries.
22. The Phonology of the Ionic Dialect, by Dr. Herbert Weir Smyth, of Bryn Mawr College, Bryn Mawr, Pa.

Though the Ionic dialect contains so generous a wealth of linguistic phenomena and stands in such intimate relations with the history of Hellenic thought, investigators have not yet taken possession of that precious legacy of opportunity bequeathed by Ahrens to his successors. A few scattered treatises dealing with Ionic is the total output of the half-century following upon the publication of the De Graecae linguae dialectis.

This paper gave a brief abstract of the results of a somewhat detailed examination of the vowel and the consonantal system of Ionic from the advent of the elegy to the period of the Sophistic Renaissance.

As to the field surveyed, so far as the inscriptions are concerned, I have endeavored to utilize every form pertinent to a knowledge of Ionic phonology. Whenever it was necessary to compare the date of any phonetic change in Ionic with the date of a similar change in Attic, I have drawn the latter dialect into the range of vision. Of the lyric poets, especial attention has been devoted to those of Ionic birth (Archilochos, Simonides Amorginus, Hipponax, Ananios, Kallinos, Mimnermos, Xenophanes, and Phokylides); and I have treated in detail the dialect of Tyrtaios, Solon, and Theognis: Tyrtaios, a Lakonian by adoption, but a representative of the early Ionic elegy; Solon, in order to test the question how far his Muse is Ionic, how far Old-Attic; and Theognis, that we may obtain a complete survey of the language of the elegy down to the end of the sixth century. Herodotos I have examined with special reference to the interrelation of the Mss., and trust that but few points have been overlooked, though I am but too well aware how difficult it is to reach completeness in so wide a field. For the language of the philosophers, Anaxagoras of Klazomenai, Diogenes of Apollonia, Melissos of Samos, Herakleitos of Ephesos, have been investigated; and for the older medical dialect, those writings of Hippokrates which are least open to the suspicion of spuriousness. Of the pseudo-Ionists, Aretaios' Aitial, Arrian's 'I $\nu \delta \iota \kappa \grave{\eta}$, and Lukian's Syrian Goddess and Astronomy ${ }^{1}$ are easily our chief sources; but I have placed under contribution the fragments of Abydenos' Assyrian History, Eusebios, and Eusebios Myndios, that we may realize the more vividly how persistent has been the influence exercised upon later prose by the Ionic dialect. The testimony of Gregory of Corinth has been adduced throughout.

[^66]From the point of view of the dialectologist, the history of Hellenic speech falls into four divisions:-

Period of primitive Greek.
Period of the life of single dialects.
Period of the contest of the Attic кoıv with the Doric кoıv
Period of the existence of a universal коьй.
Within the confines of the second period, Ionic is, broadly speaking, the dialect of the literary world from the eighth century until it was driven from its commanding position by Attic. Taken as a whole, Ionic presents in its structure a uniformity far more consistent than that possessed by Doric. It is upon the evidence of the inscriptions alone that we are enabled to assert the existence of subdivisions, which mark the course of Ionic emigration from the mainland of Greece. These sub-dialects are: I. Ionic of Euboia and colonies. II. Ionic of the Kyklades. III. Ionic of Asia Minor and of the adjacent islands and their colonies.
I. Western Ionic is the dialect of Euboia and colonies (Chalkis, Kyme, Olynthos, Amphipolis, Eretria, Oropos, Styra). It still possesses the rough breathing; names derived from $\kappa \lambda \epsilon \in \neq s$ terminate in $-\kappa \lambda \epsilon \in \eta s$, not in $-\kappa \lambda \hat{\eta} s$; the genitive of proper names whose second component part is an $\iota \iota$ stem, ends in - $\iota \delta o s$, not in -七os. These peculiarities and certain others ( $\epsilon \iota<\eta \iota$, o七 $<\omega \iota$, and cases of $\tau \tau$ for $\sigma \sigma$ ) testify to what an extent the political supremacy of Athens has succeeded in coloring the speech of the rear-guard of Ionism. When Western Ionic differs from the Ionic of the other divisions, it differs by its preference for Attic forms, save in its possession of rhotacism, found nowhere else upon Ionic territory, and whose ultimate provenance is still a matter of dispute. Another point of isolation is that Western Ionic alone produced no literature. Whatever artistic capacity the Euboians possessed tended in the direction of the manufacture of vases.
II. Island Ionic has $-\kappa \lambda \hat{\eta} s$, not $-\kappa \lambda \epsilon \in \eta s ;-\iota o s$, not $-i \delta o s$. Retaining the rough breathing, which is well attested in the case of the Parian Archilochos, Island Ionic thus forms a bridge between Western and Eastern Ionic. Up to the present time, no mint-marks of local difference can be observed in the speech of the various islands, and the sole ground for a separation into two sections, (I) Naxos, Keos; (2) Delos, Paros, Siphnos, is a difference in the writing of $\eta=$ I.E. $\bar{e}$ and $\eta=$ I.E. $\bar{a}$. But at best this palaeographic distinction, which seems to betoken a difference in pronunciation, does not hold good for all time, having been retained a century longer by the first group than by the second.
III. The chief characteristic of Eastern Ionic is the displacement of the rough breathing at a very early period. The inscriptions speak with no uncertain voice against the existence of the spiritus asper save in compounds; and literature confirms this testimony to a considerable extent. Asiatic Ionic, like that of the Kyklades, has - $\kappa \lambda \hat{\eta} s$ and -tos.

There doubtless existed sub-dialects of Eastern Ionic, but the accuracy of the Herodotean division is not yet attested by the monuments under our control.

The language of the inscriptions alone is not an absolute criterion of the genuineness of an Ionic form unless the inscription is older than 400 b.C. and contains no trace of what is specifically Attic. When the language of the inscriptions, with this limitation, agrees with that of the poets, we have the surest criterion of the

Ionic character of the form in question that is possible under the circumstances; and against this evidence the fluctuating orthography of Herodotean and Hippokratean Mss. can make no stand.

As in the domain of thought, so in that of language, the elegy occupies a different field from iambic poetry. Upon the dividing line of the frequency of adoption of Homeric forms, we may separate Theognis from the earlier elegists. In its possession of legacies from the earliest Ionic period, and in its use of Homeric Aiolisms, the dialect of the Megarian poet stands in closer touch with the language of the epic period than does the idiom of any of his predecessors of the elegiac guild.

Now there is a wide chasm between the Aiolisms of the earlier elegy and the adventitious Aiolisms of Chios. The latter are distinctively prose forms, the former are only such as had been consecrated to use by the epos. Here we must clearly grasp two facts: (I) that an elegiac poet could adopt only Homeric Aiolisms, and (2) that no elegiac poet, not of Ionic birth, could borrow from a genuine Ionian, forms that are specifically Ionic. Solon has his Atticisms, Tyrtaios and Theognis their Dorisms, but they may not use forms that are specifically Ionic. Our inscriptions show that what is not Homeric in the elegy is drawn from the soil whence the elegy sprang; and that the forms taken from the living speech of the poet's time are few in comparison to those found in iambic poetry.

If the language of the iambographers has but little love for archaic Ionisms, it has still less for Aiolisms. The language of Archilochos, Simonides of Amorgos, and Hipponax, is, with due allowance for the perverse influence of copyists who had the Attic norm in their mind's eye, practically the same as that of the inscriptions.

In great part the language of Herodotos is supported by that of the inscriptions, and much of what is genuine Ionic in Herodotos is also Attic. Many forms which occur nowhere else outside of Herodotos find an easy explanation in the laws of Greek morphology. Of the remaining forms, aside from the out-and-out barbarisms, one part was obsolescent, another, and the larger part, obsolete, at the time the genius of the Ionic race created literary prose.

In the course of the following investigation my primary purpose has been to let the facts themselves show how great is the difference existing between what is certainly Ionic of the fifth century and what is ordinarily proclaimed as Ionic of the fifth century upon the authority of Herodotean Mss. While I do not deny that Herodotos may have adopted forms that are specifically Homeric in passages that are strongly tinged with an epic tone, nevertheless my survey of the evidence has led me to the conclusion that the original text of Herodotos was written in the dialect of his time, while the bulk of the variations from that dialect is due to a $\mu \epsilon \tau \alpha \chi a p a \kappa \tau \eta \rho \iota \sigma \mu$ 's, which I would place about the first century of our era.

In the history of Greek literature $\mu \in \tau а \chi a \rho a \kappa \tau \eta \rho เ \sigma \mu \delta$ 's proceeded on two lines: either in the direction of Atticizing the dialect texts, a fact vouched for by Galen as usual in his time, or in the direction of the substitution of dialect forms in the light of contemporaneous dialectological theories. The text of Alkman, of Korinna, and, to a lesser extent, that of Pindar, bear witness to the activity of the $\mu \epsilon \tau а \gamma \rho a \psi \alpha ́ \mu є \nu o 九$ in the latter direction.

The writers of the Hadrianic age who imitated Herodotos and Hippokrates have received the full shock of this wave of speculation as regards Ionic. But
from the point of view of higher criticism, the "pseudo-Ionisms" of Lukian and Aretaios are on a different footing from the same forms in Stein's or Holder's text of Herodotos. In the one case they are the result of genuine imitation; in the other, these forms never existed in Herodotos.

A further estrangement from genuine Ionic was produced by the occasional insertion of such hyper-Ionic formation into the texts of these Ionists as are not found save in some Mss. of Herodotos.

One of the causes of this $\mu \epsilon \tau \alpha \chi \alpha \rho \not \kappa \tau \eta \rho \iota \sigma \mu{ }^{\prime} s$ was the inability of the dialectologists to distinguish between the Ionic of the Homeric period and the Ionic of the fifth century. It was all Ionic Greek to these sciolists. The cardinal error of the $\mu \in \tau a \gamma \rho a \psi \alpha{ }_{\alpha} \mu \in \nu 0<$ was the foisting of uncontracted forms upon Herodotos. This was caused by inability to distinguish between those vocalic combinations that normally remained uncontracted and those which by the fifth century had suffered contraction, and by their failing to recognize that $\epsilon 0$ and $\epsilon \omega$, even if written in the uncontracted form, had frequently become diphthongal as early as the seventh century. Evidence is adduced that this $\mu \in \tau \alpha \chi a \rho a \kappa \tau \eta \rho ı \sigma \mu o ́ s$ has not affected alike all the early writers in Ionic, and that upon the authority of good Mss. the original form may very often be reinstated.
23. The Enchantment of "Grammar," by Dr. C. P. G. Scott, of New York, N. Y.

In the absence of the author, the following paper was read by title : -
24. Sex-Denoting Nouns in American Languages, by Albert S. Gatschet, Esq., of the United States Bureau of Ethnology, Washington, D. C.

When primitive populations attempt to form grammatic distinctions of the objects which they see around themselves, they usually classify them into objects of the animate and objects of the inanimate order. Whether this distinction is made by adding a syllable or retrenching one, there is probably no language on the face of the earth that does not show some trace of this obvious and antique classification. It appears to have manifested itself at first in the pronominal parts of speech and from there spread into the verb and the noun. The various phases and aspects of this classifying process are also known to students of American languages as rational and irrational, noble and ignoble, arrhenic and metarrhenic, etc., as far as the noun is concerned, and are of great psychologic interest; the Algonkin dialects of the United States and Canada exhibit this distinction in a very obvious manner.

But besides the above, a distinction of sex was made in some languages, which either embraced all the objects of the animal creation or only the more important ones, viz.: persons, quadrupeds, and birds, the other animates being not distinguished for sex and relegated to the inanimate class. Abstract nouns adopted either the feminine or the inanimate gender.

The personal pronoun, especially the third person, is that part of speech where sex is first marked by separate grammatic signs, and from there it works its way
into the other pronouns. Sex may be denoted in one dialect of a linguistic family and not be distinguished in the others, as I have observed in the Kalapuya of Oregon. It exists in the pronoun of the third person in some Iroquois dialects, but not in the Cherokee, which is a cognate language. Even in Iroquois dialects it extends to persons only, not to animals. A beginning of sex-distinction is found in the pronoun of the Selish and Chinook dialects, in Yuchi and in Timucua, where o , oqe is $h e$, ya: she. The large majority of American languages knows nothing of any such pronominal distinction; we do not find it in the Shoshonian, Algonkin, Maskoki, Kechua, and Tupi languages.

Sex-distinction is scarcer still in the verb of American languages than in the pronoun, though it could have easily made its way into this part of speech, wherever there is a real personal inflection or incorporation of the object into the verb. Something of the sort is observed in the verb of Chinook, at least in Klakamas, which is an Upper Chinook dialect I had the opportunity to study.

The substantive has resisted more than other parts of speech the adoption of formative affixes designating sex, and in most American languages such are wanting. In Maya dialects the appositions "male" and "female" have been ground down so as to represent mere prefixes, ah- for the male, ish-, sh-, for the female. A beginning of personification of inanimate objects in regard to sex is found in a few Indian terms. Thus, Mississippi river is called in Caddo: Báhat-sássin, the "Mother of rivers"; and thumb is in all the Maskoki dialects " of one's fingers their mother "; in Chicasa, ilbak íshke.

In the eastern hemisphere two stocks serve as examples of a well-developed system of sex-distinction: the Aryan and the Semito-Hamitic. In the former we find a large variety of modifications in this line, one of these being the total extinction of the neuter gender, which formerly represented the inanimate class, by the masculine and feminine in some of the modern dialects. In America sex-distinction in the noun has been found to occur only in two families, the Carib and the Tunica; but when a more profound study of all the American tongues will have been achieved, it may turn up in other languages also.

In the Carib family, the real seat of which is in South America, sex-denoting affixes have been studied in the Arowak, the Goajiro, and the Kalinago of the West Indies or Antillian islands. From Fr. Müller, Grundriss (vol. II), I quote the following instances of sex-inflection:

| Arowak: | basabanti boy, | basabantu, girl. |
| :---: | :---: | :---: |
|  | kansiti loving (man), elonti male child, | kansitu loving (woman). elontu female child. |
| Goajiro: | anashi good, oikari merchant, maxuaintchi sorry, | fem. anase. fem. okare. fem. maxuainre. |
| Kalinago: | aparuti murderer, kinshinti beloved, | fem. aparutu. fem. $k i^{n}{ }^{\text {shin }}{ }^{n} t u$. |

These examples prove that the sex-suffixes extend over the adjective and participle, as well as over the substantive.

Sex-suffixes appear also in the Tacnsa language of Louisiana; but since this language is subject to some doubts of genuineness in the form as we have it now,
we have to remit the discussion over its sex-character to some future day. It is at all events a curious fact, that sex-suffixes appear here in such close vicinity to the Tunica, another language of Eastern Louisiana, both showing them in the second as well as in the third persons of the personal and possessive pronoun.

The Tunica or Tunizka, discovered by me in the autumn of 1886, proved to represent a family heretofore unknown to science, and on account of its strange peculiarities deserves to be carefully studied and compared with other languages, especially with those once spoken in its immediate neighborhood, as Nāhtchi, Maskóki, Atákapa, and Shetimásha.

The masculine and feminine are the only genders existing in Tunica, for all inanimate objects belong to one of these two, and abstract nouns are of the feminine gender.

In nouns the masculine is marked in the singular by a prefix uk-, $u$-, or by a suffix $-k u,-\chi k u$; the feminine by a prefix tik-, ti'h-, ti-, $t$-, or by a suffix $-\chi$ tchi, -ktchi, -'htchi, -'htch, -tch, -ts. In the plural, the masculine nouns are made distinct by a prefix sik-, sig-, the feminine by $\sin -$, sin$^{\mathrm{n}}$-, si-; these plural affixes appear also, but in rare instances only, as suffixes. These affixes are often dropped, but the feminine less frequently than the masculine affixes.

That these affixes are of a pronominal character and that some appear also as independent personal pronouns, may be gathered from the following table of pronouns:

```
ima I, imata" myself.
ma thout (masc.), hä'ma (fem.).
dwi he, t''htchi she; emphatie: úwita nimself, etc.
ínima we, inimata ourselves.
winima ye (masc.), hínima (fem.).
sänma, sa'n they (masc.), sinima, sin they (fem.).
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The possessive pronouns are prefixed to the noun, and most of them are abbreviations from the above through retrenchment of -ma.

In the verb, the subject-pronoun is incorporated into its stem as a suffix of one or two syllables, which largely differs from the personal pronoun as quoted above.

In the sentence these suffixes appear as follows:-
kuá túxku óshka tádshara the clawes of a little bird. Kuá bird being masculine, tú $\chi$ ku or tú $\chi$ k, from tú small, assumes the suffix of that gender.
tóni sik'háyi old people, lit. " people - those - old."
tá rixkéku hárīa tá ri’tch atapä'ra the tree is as tall as the house, lit. " the tree he tall the house - her equals." Tá is the article the, which is unchangeable as in English; rixku means tree, ri house.
tá $\chi$ tchiksh ti'hkorak full moon, lit. "luminary she - round"; kóra meaning round.
As instances of the changes which adjectives are undergoing when subjected to the sex-denoting process and accompanied by their substantives, we offer the following: -

> tä'n great, large, masc. tä’ku, tä'gu, méli black, rówa white, mákan ${ }^{\text {n }}$, táxkir smutty, méliku, mélixku, rówaku, maká ${ }^{\text {ku }}$, tá ${ }^{k}$ kirku,
> fem. tä'htchi.
> méliktchi.
> rówaktch(i). maká'htchi.
> tá ${ }^{\text {kirir'htch. }}$

Substantives standing alone or accompanied by adjectives, numerals, participles, etc., do not always assume the prefix or suffix of their particular gender; there are special laws or rules presiding over this.

Masculines are all the nouns designating male persons, male relationships, male occupations; all animals, the higher and the lower, unless they are specially pointed out as of the female sex ; all plants, trees, bushes, and weeds. Thus we have : óni man, kátuhuk son, í $\chi$ tchaku my grandfather, kíwa weasel, híxku mouse, shími pigeon, ná-aran ${ }^{\mathrm{n}}$ snake, nini fish, takírka mollusk, ríxku tree, ráyi mulberry tree, tápa plant.

Feminines are all the nouns designating female persons, occupations, and relationships, the celestial bodies, seasons and natural phenomena, the earth and its parts, the parts of the compass, the names of diseases and the abstract nouns. Examples: nú $\chi$ tchi woman, é $\chi$ kutu wáliktch my stepdaughter, tá $\chi$ tchi sun, tá $\chi$ saba winter, tíhikash south, íni yi toothache, ká $\chi$ shi truth.

About equally divided between both genders are the substantives which designate the parts and limbs of the human and animal body and of plants, and the objects of manufacture ; it is difficult to decide which is the principle assigning these nouns to the one or the other category. Thus hässán sazw, tcháhi pillow, wáxku hat, éruk my neck, úyun bowels, are masculines, while to the opposite gender belong nouns like: rí house, lodge, róhina book, paper, yánka rope, ópushka lung, tá ${ }^{\text {kishi skin }}$ and bark of plants.

I conclude this article with the remark that no language has ever been discovered upon the western continent which thus individualizes all the animate beings and inanimate objects as to sex, and does it with such a poetic, creative power, as Tunica.

The Association adjourned at $\mathbf{1 2 . 3 0}$ P. M.
The Secretary desires to state that all contributions of new words, of which a list was published in Vol. XIX. pp. 8o-82, should be arranged upon the lines laid down by the sub-committee which edits the material furnished, viz. : all new words should be accompanied by the names of their authors so far as known, the place of their occurrence (page, etc.), the date of the issue of the book or journal in which they are contained, and the context of the sentence so far as is necessary to elucidate the meaning of the word. Communications may be addressed to the Secretary.

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## CONSTITUTION

## OF THE

## AMERICAN PHILOLOGICAL ASSOCIATION.

## Article I. - Name and Object.

1. This Society shall be known as "The American Philological Associa tion."
2. Its object shall be the advancement and diffusion of philological knowledge.

## Article II. - Officers.

1. The officers shall be a President, two Vice-Presidents, a Secretary and Curator, and a Treasurer.
2. There shall be an Executive Committee of ten, composed of the above officers and five other members of the Association.
3. All the above officers shall be elected at the last session of each annual meeting.

## Article III. - Meetings.

1. There shall be an annual meeting of the Association in the city of New York, or at such other place as at a preceding annual meeting shall be determined upon.
2. At the annual meeting, the Executive Committee shall present an annual report of the progress of the Association.
3. The general arrangements of the proceedings of the annual meeting shall be directed by the Executive Committee.
4. Special meetings may be held at the call of the Executive Committee, when and where they may decide.

## Article IV. - Members.

1. Any lover of philological studies may become a member of the Association by a vote of the Executive Committee and the payment of five dollars as initiation fee, which initiation fee shall be considered the first regular annual fee.
2. There shall be an annual fee of three dollars from each member, failure in payment of which for two years shall ipso facto cause the membership to cease.
3. Any person may become a life member of the Association by the payment of fifty dollars to its treasury, and by vote of the Executive Committee.

## Article V.-Sundries.

1. All papers intended to be read before the Association must be submitted to the Executive Committee before reading, and their decision regarding such papers shall be final.
2. Publications of the Association, of whatever kind, shall be made only under the authorization of the Executive Committee.

## Article VI.-Amendments.

Amendments to this Constitution may be made by a vote of two-thirds of those present at any regular meeting subsequent to that in which they have been proposed.

## PUBLICATIONS OF THE ASSOCIATION.

The annually published "Proceedings" of the American Philological Association contain an account of the doings at the annual meeting, brief abstracts of the papers read, reports upon the progress of the Association, and lists of its officers and members.

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Tibeto-Burman group of languages; J. Avery, 1617.



[^0]:    ${ }^{1}$ Unless $\tau \alpha \dot{\mu} \mu \omega$ be derived directly from $\tau \underset{o}{m \nu \omega}$, in which case we have $a \mu=m_{0}^{m}$ in a syllable originally atonic.
    ${ }^{2}$ The manuscripts here agree in $\dot{\alpha} \mu \phi \iota \sigma \beta a \sigma i a s$ (cf. VIII, 81), but have $\dot{\alpha} \mu \phi \iota \sigma-$ ßクтє́єเข.

[^1]:    ${ }^{1} \lambda h \mu \psi \eta$ is a probable conjecture in Sterrett＇s Epigr．Fourney，Papers of the Am．School，II，56，V＇I；cf．58，XIX．
    ${ }^{2}$ Veitch，however，supports àva入є入á $\mu \phi \theta$ ．Cf．Schmidt，Voc．I， 118.

[^2]:    ${ }^{1}$ Hyperionic $\mu$ oíp $\eta$, Lukian, Astr. 10; Euseb. § 9.
    ${ }^{2}$ See Misteli, K. Z. XVII, 177; XIX, 119; Osthoff, Forsch. II, 25; Brugmann, M. U. II, 20I; Grundriss, I § 639; Johansson, K. Z. XXX, 4 II.

[^3]:    ${ }^{1} \gamma^{\prime} \boldsymbol{\prime} \nu$ would seem to be the original form, but it is, perhaps, $\gamma \epsilon+\nu(\epsilon)$. Cf. Thessal. $\nu \epsilon$. $\gamma^{\prime}$ may be the Old Slav. $\dot{z} e$, Old Lith. $g e ; \gamma \dot{\alpha}=$ Skt. $h i$, Lith. Pruss. $g i$, ga (Skt. gha).

[^4]:     ing to form the declension. (Cf, the intermixture of strong and weak stems in the
    

[^5]:    ${ }^{1} \mu \epsilon \in \xi^{\prime} \nu \nu$ appears upon a Tegean inscription, B. C. H. XIII, 28I.

[^6]:    ${ }^{1}$ So far as I am aware no scholar has accepted the conclusions of Möller in regard to $\delta$ eiкиvц, K. Z., XXIV, 462.
    ${ }^{2}$ Anan. 3, has кateipgal, a doubtful form. Theognis, 686, 710, 1180 , has elp $\omega \omega$, which I would not change with Renner.

[^7]:    

[^8]:    
    ${ }^{2}$ Kyprian Etaбiuıos Meister (G. D. II. p. 19) is not above suspicion.

[^9]:    ${ }^{1}$ In Attic the iota held its ground in those forms which show no $v$ in the endings.

[^10]:    ${ }^{1}$ See K．Z．，XXVII， 266.
     （Klein，Vasen，${ }^{2}$ 206，1），which shows mixed dialect（＇Ióגaos Mavía by the side of M $\epsilon \gamma \dot{\alpha} \rho \eta$＇А $\lambda^{\prime} \mu \mu \dot{\eta} \nu \eta$ ）．Cf．K．Z．，XXIX， 400.
     It is noteworthy that $\lambda a \sigma^{\prime}$ does not occur in the iambics of Archilochos．
    ${ }^{4}$ Et．Mag． $5^{62} \mathbf{5 3}^{5}$ ．

[^11]:    ${ }^{1}$ Following Osthoff, Perfectum, 450.
    ${ }^{2}$ The schol. II., VIII, 353, brings forward a $\mu$ ád $\lambda \iota o \nu$, which Eustathios calls Doric.

[^12]:    

[^13]:    
     $483=\mathrm{K} \tau \eta \sigma$ iov.

[^14]:     Skt. devár-, and in $\dot{\dot{a}} \in i=a i_{f} \in \mathfrak{i}$.

[^15]:    ${ }^{1}$ Renner regards this form as a Dorism, but wishes to substitute $\nu \eta u{ }^{\prime} s$ for $\nu \alpha \bar{v} s$.

[^16]:    ${ }^{1}$ From this it will be clear that I do not adopt Curtius' theory of the Ionis migration.

[^17]:    ${ }^{1}$ Ionic forms occasionally appear in the Mss. of the New Testament. Cf. Acts $\mathrm{x}, \mathrm{I}$; xxi, $3 \mathbf{1}$; xxvii, I .
    ${ }^{2}$ Ionic and Attic Ébßoıa is older than Eùßoiá, Hesiod, W.D., 65 I . Cf. eî̀viav.

[^18]:    ${ }^{1} \beta \eta \sigma_{\iota} \lambda^{\prime} \omega \boldsymbol{\omega}$ is Karsten's other example of "Karian" Ionic. This form is quoted from Rayet, Rev. Arch., XXVIII, ıog, as if existing upon a Milesian inscription. It is not found in Bechtel's collection, and vitiated by $\beta a \sigma \iota \lambda \epsilon u$ s, Miletos, $100_{5}$.
    $2 \pi \rho o \in \delta \rho i \eta \nu$ in the same inscription.

[^19]:    ${ }^{1} \dot{v} \pi$ upein is to be expected. This form is found, II, $158(R)$.

[^20]:    ${ }^{1}$ Kallim., Epigr., 40, has 'I $\epsilon \rho \in \neq \eta$.

[^21]:    ${ }^{1} \nu a v \eta \gamma^{i} \eta$, shipwreck = Attic $\nu a v a ̄ \gamma i \eta$ contains, of course, the lengthened form of $f a ̆ \gamma$, ablaut of $f^{\alpha} \gamma$ (катє $\eta \gamma \dot{\sigma} \tau \alpha$ in Hdt. and Hippokr.).

[^22]:    ${ }^{1}$ Hoffmann（D．M．G．，p．23）denies that rivoual arose from rifvoual and
     from yopre．

[^23]:    ${ }^{1}$ 'A $\begin{aligned} & \text { nváa in Attic inscriptions of the sixth and fourth centuries; cf. Alkaios, } 9 \text {, }, ~(1)\end{aligned}$ Theokr. $28{ }_{1}$.

    2 'A $\theta \eta \nu \bar{u} s$ in Attic prevails after 362 b.c. in inscriptions.
    ${ }^{3}$ àév ${ }^{2}$ asos, Hdt. I, 145, as v.l.

[^24]:    ${ }^{1}$ Sappho 44, has $\Phi \omega \kappa$ das.

[^25]:    ${ }^{1}$ Arkad. $\tau \epsilon i \omega$ is a neologism. Brugmann, Grundr. I, § 314, doubtfully suggests that ${ }^{\ell} \tau \epsilon \iota \sigma \alpha$ is from ${ }^{*} \notin \tau \eta \iota \sigma \alpha$.

[^26]:    1 गfot in Hdt. must be corrected. The form in Lukian cannot stand, unless it can be proved that he here imitates an epic, not a Herodotean, form. Hippokr. and Aretaios have no trace of ciaf, their Mss. fluctuating between $\overline{\mathcal{Y}}, \rho$ and $\epsilon a \rho$.

[^27]:    ${ }^{1}$ The only way to reconcile Brugmann's view with the fact that EI is written on old Attic inscriptions, is to assume that genuine EI was monophthongized, which is directly opposed to Meisterhans' view (p. 16). Brugmann himself believes in such a monophthongization (Gr., § 15).

[^28]:    ${ }^{1}$ Also C. I. G., $2483_{22}$, Astyp.

[^29]:    ${ }^{1}$ In Hdt．the correct form is $\boldsymbol{\eta} \boldsymbol{f} \epsilon$ ，not $\tilde{\eta}_{\iota} \epsilon$ ．

[^30]:    

[^31]:    ${ }^{1}$ About 350 b.c. No. 199, Eryth. (394 b.c.) has aùrêc twice.

[^32]:    ${ }^{1}$ On חoגuпnuovíסao, $\omega$ 305, see Wilamowitz, Hom. Untersuch. 70, note.

[^33]:     is late. Cf. similar examples from Kyme (C. D. I. $311_{42}$ ), Korkyra (C. I. G. 1838
    

[^34]:    ${ }^{1}$ Oúpєєos，où $\rho \in \sigma \iota \beta \omega ́ \tau \eta s$ in the tragedians make for an Ionic où $\rho$－．Solmsen，K．Z．， XXIX， $35^{8}$ ，goes so far as to hold that in む̄pos（Dor．）and úpos，$\omega$ and $o$ are ablaut vowels．

[^35]:    ${ }^{1}$ In a pre-dialectal period $\bar{e} u, \bar{o} u, \bar{u} u$, having become $\check{c} u$, etc., before consonants, their history is the same as that of I.E., ču, etc.

[^36]:    ${ }^{1}$ Renner，in Curtius＇Studien，I， 217 ，claims that the open forms alone are ad－
     pon． 99.

[^37]:    ${ }^{1}$ TETEPEI $=\boldsymbol{\tau} \boldsymbol{\eta} \tau \epsilon$ '́p $\quad$ ı, Rob. 167 , of uncertain dialect. Bechtel suggests AsiaticIonic. See Roberts, I, p. 374, Cauer, ${ }^{2} 557$, and § 6, note.
    ${ }^{2} \nu$ voùs, Theog. 1185; $\nu 0 \hat{\nu} \nu$, Theog. 350, 898, Sol. $27{ }_{13}$, مoû̀ 41.

[^38]:    ${ }^{1}$ It is not easy to determine chronologically how long - $\eta$ ios was regarded by the Ionists as a trisyllable. The cases of $\eta$ in Ionic poetry though rare, as in Homer, show that $\eta \mu$ was not far removed from a diphthong. On the accent of $\beta a \sigma \iota \lambda \dot{\eta} ı o s$, see Fritsch, V. II. D. 30, and Johansson, B. B. XV, 182. It is not clear that $\eta \iota$ in
     supports an Ionic $\mu \nu$ ضïov.

[^39]:    ${ }^{1} \Lambda \in \cup \kappa[\alpha]$ doos, Styra $19_{124}$, regarded by Merzdorf and Wackernagel as containing $\Lambda \epsilon \nu=\Lambda \epsilon \omega$-, is an hypocoristic name for * $\Lambda \epsilon \boldsymbol{v \kappa \delta \kappa а \rho o s . ~}$
    ${ }^{2}$ єортй, Luk. Syr. ıо, v.l., with $\delta \rho \tau \boldsymbol{\eta}$ in the better Mss.
    ${ }^{3}$ ov in Mss.
    ${ }^{4}$ Brugmann, Berichte d. königl. sächs. Gesell. d. Wissen. 1889, p. 41, compares Skt. ghōrds. In this paper Brugmann mentions all the old etymologies of the much-disputed word $\theta \epsilon \delta \delta s$, except the one which I have here provisionally adopted ( $\theta \epsilon \epsilon_{s}={ }^{*} \theta_{\mathrm{F}} \in \sigma o s,=$ Lith. dvesti).

[^40]:    ${ }^{1}$ Solon, Пatŵvos $13{ }_{37} . \quad$ Elsewhere $\pi \alpha \iota \omega$, see § 146.
    ${ }^{2} F$ is here in each case the intervening consonant. $\pi \delta \delta \eta o s$ alone lies outside of this category. On this form, see under Declension. In $\dot{\alpha} \lambda \lambda H O \nu$, Naxos 23 $H=$ open $\boldsymbol{\epsilon}$.

[^41]:    ${ }^{1}$ Unless $\pi \rho \omega \bar{\omega}$ os is for ${ }^{*} \pi \rho \omega_{\mathrm{F}}$ atos.
    ${ }^{2}$ Cf. Et. Mag. $82 \mathrm{II}_{39}$.

[^42]:    ${ }^{1}$ Perinthos 234 B 23, and a Samian coin in Brit. Mus. Num. Chron. 1882, 255, have ' $A \chi \in \lambda$ ம́sos.
    ${ }^{2}$ This disproves Erman's statement, Stud. V, p. 297.

[^43]:    ${ }^{1}$ I see no reason for following Fritsch (V. II.D. p. 20) in his refusal to accept deıкeín as Herodotean.
    ${ }^{2} \mathrm{Cf}$. $\boldsymbol{a}$ in Attic from at $\iota$, § 38.
    ${ }^{3} \mathrm{Hdt}$. Mss. have $\alpha \rho \theta \epsilon$ 's more frequently than à $\in \rho \theta \epsilon$ ís. The latter, Luk. Astr. 15.

[^44]:    ${ }^{1}$ Cf. $\omega u$ ùzós, E 396. Greg. Corinth. p. 419, had the absurd notion that wùzús stood for aủvós. Analogy went so far as to coin $\dot{\eta} \dot{\omega} u \tau \dot{\eta}$ (sic), $\dot{\eta} \dot{\omega} u \tau \dot{\eta}, \tau \dot{\alpha} \dot{\omega} v \tau \alpha$,
    
    ${ }^{2}{ }_{\epsilon} \mu \alpha u \tau \delta \delta$ in Pherekrates is a poor support to such a form.

[^45]:    ${ }^{1}$ Cf. e.g. Dittenberger (Hermes, XVI. p. 321 sqq.), Schanz (Hermes, XXI. 439 sqq.), Ritter, Untersuchungen über Plato, Stuttgart, Kohlmann, 1888; Hussey, On the Verbs of Saying in Plato, Proceed. of Am. Ph. Ass. 1889; Roquette De Xenophontis vita, Diss. Regimont, 1884. See also Zeller's criticisms, Arch. f. Gesch. d. Philos. II. p. 665, 676 sqq.

[^46]:     Timol. c. 1; Cato Mai. c. 7; Galba 2; Fab. Max. 16; Pomp. 8; Artaxerxes c. 8; Nicias $1 ;$ Arat. $1 ;$ Demet. $\mathbf{I}$.
    ${ }^{3}$ Thes. 1; Cimon. 2; Cat. Min. 37; de Herod. malig. c. 5; de gloria Athen. c. 3 .

[^47]:    25; de fort. Rom. $1_{3}$ (Livy V. 37 sqq.). Varro, Q. R. 2, 4, 5, 14, 27, 90, 101, 105; Romul. 16. C. Oppius, Pomp. 10; Caes. 17. @. Dellius, Ant. 59. Corvinus, Brut. 40, 42, 45. C. Drusus, Tib. Gracch. 2. Fenestella, Q. R. 41; Crass. 4; Sylla 28 [P. Törasea Pactus ex Munatic, Cato 25, 36]. Cluzius Rufus, Q. R. 107; Otho 3. Iul Secundus, Otho 9. Augrustus, comp. Dem. et Cic. 3; Cic. 45; Brut. 27, 41; Ant. 22,68. Valerius Maximus, Marc. 12 (=V. 6); Brut. 53 (=IV. 6. 5 K .) ; [raĩos tis $\pi$ eifoav, àvìp íттopıkds] Mar. 35. Empulus, Brut. 2.
    ${ }^{5}$ Barring a few exceptions, such as the memoirs of Lucullus and of Sulla, and Cicero's $\nu_{\pi} \delta \mu \nu \eta \mu a$ rท̂s $\nu_{\pi a \tau \varepsilon}$ las, which were all written in Greek.

[^48]:    ${ }^{6}$ This inference is confirmed by a comparison of the passages themselves. Thus, Plut. Cam. 5 sq. cannot well have been taken directly from Livy, notwith-
     Cf. also Plut. Marc. 30 with Livy XXVII. 28 ( $\Lambda$ íBios) and many others.

    7 What the poet Horace, in a famous passage (Sat. II. 1, 35), said of Lucilius applies with equal force to Cicero: "qui velut fidis arcana sodalibus olim credebat libris . . . quo fit ut omnis votiva pateat veluti descripta tabella vita senis."

[^49]:    ${ }^{8}$ A few fragments still remain; cf. de div. I. x 7-22. Two verses in this poem have gained considerable notoriety, owing to the frequent altacks made against them. Cedant arma togae, etc. (Quint. IX. 4, 4I; Plut. Comp. Cic. 2; also quoted by Cic. de off. I. 22, 77, in Pis. 30, and o fortunatam natam me consule Roman, cf. Iuv. X. 124).
    ${ }^{9}$ Heeren, de fontibus, etc., Plutarchi, 1840, p. 133 sqq. I. G. Lagus, Plutarchus vitae Ciceronis scriptor, II. p. 7 I sqq., Helsingfors, 1846. Sibinga, De Plut. in vita Cic. fontibus, etc., Diss. Leyden, 1863 (pp. 47-143). Weizsäcker, Iahrb. f. Phil. III, p. 417 sqq. Besser, De coniurationes Catilin, Diss. Leipzig, 1880. E. Schmidt, De Cic. commentaris . . . a Plut. in vita Cic. expresso Lübeck (Diss. Iena) 1884. Thouret, De Cicerone, Asinio Pollione, etc., Diss. Leipzig, 1878 (= Leipz. Stud. I. 313 sqq.). K. Buresch, Comment. philol. in honorem Ribbeckii, Teubner, 1888, p. 219 sqq.
    ${ }^{1)}$ A phrase in Plut. Cic. c. 14, ro s. seems, indeed, to point to a Latin source, for we there read ' $\pi \rho a \gamma \mu \alpha ' \tau \omega \nu \kappa \alpha \iota \nu \omega ิ \nu$ '̇фıє $\epsilon$ '́vous.' But this is an evident translation of the well-known Latin idiom, 'rebus novis studere.' There is no parallel
     Her. Lys. Thucyd. Isocr. is in no way analogous, though perhaps identical in thought, for the invariable use of the comparative constitutes the very essential difference between the two expressions. That the $\dot{v} \pi \delta \mu \nu \eta \mu \alpha$ of Cicero is not responsible for this Latinism is shown by Ep. ad Att. I. 19, 10.

[^50]:    ${ }^{11}$ The author of this paper will shortly publish a critical edition of the Lives of Dem. and Cic., with a complete 'source commentary.'
    ${ }^{12} \mathrm{Cf}$. the famous VII. Suasoria of the elder Seneca.

[^51]:    "Cornelius Nepos et rerum memoriae non indiligens et M. Ciceronis ut qui maxime amicus familiaris fuit. Atque is tamen in librorum primo quos de vita illius composuit errasse videtur cum eum scripsit tres et viginti annos natum primum causam iudicii publici egisse Sextumque Roscium parricidii reum defendisse. In qua re etiam Fenestellam ${ }^{14}$ erasse Pedianus Asconius (no doubt in his
    ${ }^{13}$ This work is mentioned twice by Plutarch himself (ch. 4I, 49), also by Tacitus, Dial. 17, and Gellius IV. io. 5; and from Asconius Pedianus in Milon, p. 49, Or., we glean the additional information that in his fourth book Tyro had not yet advanced beyond the Clodian episode! This same writer was also the reputed author of a book, de iocis Ciceronis, to which Plutarch was possibly indebted for the numerous 'bon-mots' of the orator found in the vita (cf. Quint. VI. 3, 5, " utinam Tiro libertus eius aut aliquis quisquis fuit qui tres hac de re libros edidit, parcius dictorum numero indulsisset." Again, Quint. VIII. 6, 73, Ciceronis est in quodam ioculari libello). Also quoted, but as a genuine work, by Macrob. Saturn. II. 1, 12, and Schol. Bob. in Sest. p. 309, Or. Another collection of Cicero's " facete dicta" was made by C. Trebonius, cf. Cic. ad fam. 15, 2I, 1 sqq.
    ${ }^{14}$ We know next to nothing of the works of this accurate writer (according to Hieronymus, he died 19 A.D., a septuagenarian. Cf. Teuffel, R. L. § 259). From the passages from Asconius, however, quoted by Gellius, and from four others still extant (in Pis. p. I, in Mil. p. 32, in tog. cand. p. 85, 86), I should infer that F. had given a complete chronological table of Cicero's writings (in the "Annales "?), perhaps with short exegetical notes; cf. Asconius in Pis. p. 5, Or.

[^52]:    ${ }^{17}$ This scholiast, although a Christian of the fifth century, is here quoted, because he very largely Asconii "fontibus hortulos suos irrigavit." Cf. Madzuig, De Q. Asconio Pediano, etc. Kopenhagen, 1828, p. 142.
    ${ }^{18}$ Cf. his own preface, p. 3 Sch., and Mommsen, Quellen der Chronik des H. Abh. der sachs Ges. d. W. 1850 (I. p. 669 sqq.). For his historical notices, H. is chiefly indebted to Eutropius, whose principal source was Livy.

[^53]:    19 I am perfectly well aware that the De viris illustribus has been assumed by many as having been falsely ascribed to this author, owing to its difference in style and treatment as compared with the Caesares. I do not, however, think that Opitz (Quaest. de S. A. V., Acta soc. phil. Lips. II. 2, p. 197-280) or Wölffin (Bursian, Jahresber., 1874, p. 790 sqq., also Rh. Mus. 29) or Haupt (De auct. de vir. ill. libr. quaest. histor. Diss. Wurzb. 1876) have proven their case, except to their own satisfaction, for not only does the De viris illustribus bear unmistakable traces of having been thoroughly epitomized, but we are not even certain but that the Caesares have been similarly dealt with, which, if true, would satisfactorily explain the difference in style and treatment detected by Wölfflin and others. H. Hildesheimer De libro qui inscribitur de viris ill. etc. Berlin Diss., 1880, has not been accessible to me.
    ${ }^{2)}$ In its abundant use of participial constructions this chapter has perhaps retained a reflex of its original source, such constructions being very characteristic of Suetonius.

[^54]:    ${ }^{21}$ Hieron. Olym. 184, 4, "Cicero ut quibusdam placet interficitur in Caietis" is an interpolation; cf. Mommsen, Hermes XXIV. p. 399.

    21* Cf., however, pro Quint. I. 4, "quod mihi consuevit in ceteris causis esse adiumento."

[^55]:    ${ }^{22}$ That we are doing no injustice to Suetonius in ascribing to him the passage under discussion is clearly shown by a most remarkable parallelism found in Suet. Caes. 4: "Ceterum composita seditioni civili Cornelium Dolabellam consularem et triumphalem repetundarum postulavit; absolutoque Rhodum secedere statuit et ad declinandam invidiam et ut per otium et requiem Apollonio Moloni clarissimo tunc dicendi magistro operam daret." All the circumstances here afford a perfectly exact parallel to the narrative of Plutarch, and the motive given for the departure is as sımular to the above as it is singularly false.

[^56]:    28 That ch. 40 is not dependent upon Tiro's work, as has been almost unanimously assumed by scholars, is plainly indicated by the $\boldsymbol{\omega} s$ фaбıv (line 12) and the $\lambda \epsilon \in \gamma \in \tau a$ ( line 18 Sint).

[^57]:    ${ }^{1}$ To avoid misapprehension, I call henceforth gender the categories of the animate and inanimate, sex those of the masculine and feminine.

[^58]:    ${ }^{1}$ Cf. also Ober, Fred. A., Camps in the Caribbees. Boston, 1880, pp. 100-103.
    ${ }^{2}$ Dr. D. G. Brinton, in American Antiquarian, 1885, pp. 108-113; 275, 276; A. S. Gatschet, in Revue de Linguistique of Paris, 1888, pp. 199-208, and several articles written by Lucien Adam and Julien Vinson.

[^59]:    i sg. íma $I$; emphatic î'mata ${ }^{\text {n }}$ myself.
    2 sg. ma thou (masc.) hä'ma (fem.) ; emphatic mátan ${ }^{\mathrm{n}}$, hä'mata ${ }^{\mathrm{n}}$.
    3 sg. úwi he, ti'htchi she; emphatic úwita ${ }^{\mathrm{n}}$, ti'htchita ${ }^{\mathrm{n}}$.

[^60]:    ${ }^{1}$ The text of the Northumbrian version accompanied this paper, but, to save space, is omitted here. It may be readily found by referring to the second revised and enlarged edition of the Judith, published by D. C. Heath \& Co., Boston.

[^61]:    ${ }^{1}$ In this list are included the names of all persons elected to membership at the Twenty-First Annual Session of the Association. The addresses given are, as far as can be, those of the autumn of 1889.

[^62]:    1 Preface to his Ed. (Teubner), p. iii.
    2 Ausführliche Griechische Sprachlehre, II. 295.

[^63]:    ${ }^{1}$ A rather difficult word; probably the imported $\pi a \rho a \gamma \gamma \dot{\epsilon} \lambda \lambda \omega$, in a peculiar reflexive participial form. "On a tour of inspection and improvement" is perhaps the meaning.

    2 Part of word obliterated. Probably "ruled as kings in " is to be supplied.
    ${ }^{3}$ This is the right rendering if I guess rightly how to supply the obliterated place preceding. Otherwise, "workmen" or "cultivators."
    ${ }^{4}$ If this conjecture is correct, then the rendering of the clause is "that had been in [the land] of Hellas."

[^64]:    ${ }^{1}$ An anachronistic reference to colors worn in the hippodrome.
    ${ }^{2}$ A word or more defaced. Perhaps " of Rome, that they " is to be supplied.

[^65]:    ${ }^{1}$ Strange to say, it has never occurred to any one that Plutarch might possibly be indebted to Nepos' Life of Cicero (mentioned by Gellius XV, 28, r) for some details. But cf. Transactions, Vol. XX. $\quad 2$ For the proof itself I refer to Transac. Vol. XX.
    ${ }^{3}$ Published in full in Am. Journ. Philol. Vol. X.

[^66]:    ${ }^{1}$ Even if the Astronomy should not prove to be the genuine work of Lukian, it is still invaluable as a testimony to the character of the pscudo-Ionism of the age of Hadrian.

[^67]:    ${ }^{1}$ This list has been corrected up to Feb. 1, 1890; permanent addresses are given, as far as may be. Names where the residence is left blank are either of members who are in Europe, or of those whose addresses are not known to the Secretary.

