## LYDIAN INSCRIPTIONS

## PART I

BY

## ENNO LITTMANN

Leipen - E. J. BRILL Ltd.

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## S A R D I S

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VOLUME VI

## LYDIAN INSCRIPTIONS

PART I

BY

## ENNO LITTMANN

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## INTRODUCTORY NOTE.

It was at first my intention to publish what follows as a preliminary article or essay, because the novelty of the subject and the fresh light which is sure to be thrown on it by other scholars will cause many of the views here expressed to need modifications and additions.

It has seemed best however to issue these chapters on the Lydian alphabet and on those Lydian inscriptions which I believe myself able to interpret with a certain degree of probability, together with this commentary in the series of monographs describing the results of the American Excavations at Sardis. The new texts can thus be presented in a form more worthy of their importance.

In future parts of this volume I hope not only to publish all Lydian inscriptions found at Sardis and elsewhere but also to embody the results of criticisms and discoveries contributed by other workers in this new and difficult field. Many problems in this connection are such that we can look forward to their being solved only by the joint labors of many different specialists.

I have already had the help of several scholars, to whom I wish to express my sincere indebtedness. Above all, it was my friend and colleague W. H. Buckler who with his untiring zeal not only assisted me in the material preparation of this Part but also contributed many a valuable note on the deciphering and interpretation; his name will be found quoted often on the following pages. Moreover I wish to express my gratitude to Professors J. Wackernagel, G. Herbig, A. Torp and J. Keil. A number of suggestions made by Professors Wackernagel and Herbig have been added to my commentary. Prof. Torp recognized the meaning of the negative particle $n i$-, although he differs from me in the interpretation of the formula viśsis nivisqc. Let us hope that his rich knowledge on all questions of Asia Minor and Etruscan Philology will soon be made available for Lydian Philology also. Prof. J. Keil very kindly sent me drawings and squeezes of two Lydian fragments discovered by him and von Premerstein in igii. These fragments are here cited as from "Arably Hadjili" and "Falanga"; they correspond with Nos. I6 and I 32 in the publication of
the results of the Third Journey made by Keil and von Premerstein; see below the List of Lydian Inscriptions heretofore published, No. H. Although these fragments are very short they have nevertheless thrown new light on several Lydian words and forms.

The inscriptions published here are those which can be interpreted and translated to some extent; they are almost all of them funerary inscriptions. Out of the 34 texts found by the American Excavations only 15 have here been edited. Of the remaining 19 texts a good many are small fragments or give only a few letters representing masons' marks or the like. But about half a dozen of rather long, well carved Lydian inscriptions, some of which are in perfect condition, have been reserved for the future publication since they cannot as yet be translated. The numbers given to these inscriptions at Sardis, i. e. L(ydian) I-34, have been kept in this Publication because the vocabulary of all Lydian words and the lists of endings and forms which I made at Sardis in 1913 were based on this numbering; it was therefore impossible to rearrange the inscriptions according to their ages or their contents and to change all the numerous quotations in my vocabulary and in my lists of forms and endings.

During the latter half of $\mathrm{I}_{191} 3$ I was entirely occupied by other work so that I could not devote any time to the Lydian inscriptions. The present Part was prepared and written during the months from May to August 1914. Its publication has been delayed till now by the War.

In the meantime Prof. Hrozny published his new theory on the Hittite language. It seems to me safer to postpone a definite judgment on his theory of the IndoGermanic origin of the cuneiform Hittite language until more of his material will have been made accessible. I hope all considerate and thoughtful scholars will approve of the way in which I have presented the "Comparisons" in Chapter VI of this Part.

It remains to acknowledge here the great care which the Publishing House of Late E. J. Brill have devoted to the making of the Lydian type, used for the first time in this Publication, and to the entire setting up and printing of this Part.

Göttingen, March igif.
E. Littmann.

## LIST OF LYDIAN INSCRIPTIONS HERETOFORE PUBLISHED.

(By W. H. Buckler, who by the kind permission of Mr. A. H. Smith and Mr. G. F. Hill was enabled to examine the originals of A and C.)
A. Fragment, in British Museum, of inscription on column-drum of Kroisean temple of Artemis at Ephesos. - Newton, Transact. Soc. of Biblical Archaeol. IV, 1876, p. 334.- See below, p. 66.
B. Bilingual inscription, in Berlin Museum, on column-drum from Pergamon. - Fränkel, Inschr. von Pergamon I, 1890, No. 1. - See below p. 39.
C. Electrum coin in British Museum, inscribed ! ! ! 1 A 1 , all letters uncertain, except second and third. - Head, Brit. Mus. Cat. Lydia 1892, No. 16, plate I, 7.
D. Inscription on rock near the Nile. - Sayce, Proc. Soc. of Biblical Archaeol. XVII, 1895, pp. 4I-43, No. V.
E. Three fragmentary inscriptions from Lydia, with commentary by Kretschmer. - Keilv. Premerstein, Denkschr. Wiener Akad. LIII, 1908, II, Nos. 9, it, 208.
F. One fragmentary inscription from Lydia, and republication of No. Ir (1908). - Keilv. Premerstein, ib., LIV, igir, II, No. i82.
G. One complete and one fragmentary text from Sardis. - Thumb, Amer. Fourn. Archaeol., XV, 19II, pp. 149 ff. - See below p. 42.
H. Three fragmentary inscriptions from Lydia. - Keil-v. Premerstein, Denkschr. Wiener Akad. 57, 1914, I, Nos. 16, 126, 132.

## LIST OF ABBREVIATIONS.

Bartholomae: Altiranisches Wöterbuch, von Christian Bartholomae, Strassburg, 1904.
Herbig: Kleinasiatisch-etruskische Namengleichuugen, von Gustav Herbig, in Sitzungsber. d. Kgl. Bayer. Akad. d. Wissenschaften, 1914, 2. Abhandlung.
Kirchhoff: Studien zur Geschichte des griechischen Alphabets, von Adolf Kirchhoff. Vierte umgearbeitete Auflage. Gütersloh 1887.
Kretschmer: Einleitung in die Geschichte der griechischen Sprache, von Paul Kretschmer, Göttingen, 1896.
Sundwall: Die einheimischen Namen der Lykier nebst einem Verzeichnisse kleinasiatischer Namenstämme, von Foh. Sundzvall, Leipzig, 1913 (= Klio, Elftes Beiheft).

## CHAPTER I.

## The Alphabet.

| Greek. | Lydian. | Value. | Greek. | Lydian. | Value. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | A | $a$ | $\bigcirc$ | - | 0 |
| B | g | $b$ | $\pi$ | - | - |
| $\Gamma$ | (1) | (g) | P | 9 | $r$ |
| $\triangle$ | 1 | $d$ | - | ғ | $s$ |
| E | * | $e$ | $\Sigma$ | 3 | $s$ |
| F | 1 | $v$ | T | T | $t$ |
| z | (F) | (s) | Y | $y$ | $u$ |
| H | - | - | Ф | 8 | $f$ |
| $\theta$ | - | -- | X | + | $h$ |
| 1 | 1 | 2 | $\psi$ | - | - |
| K | * | $k$ | - | M | $\tilde{a}$ |
| $\wedge$ | 1 | $l$ | - | $\psi$ | ก |
| M | 9 | m | - | $\Psi$ | ù |
| N | 4 | $n$ | - | ₹ | $\bar{\delta}$ (?) |
| - | 玉 | n | - | $\uparrow$ | $q$ (?) |
| 三 | - | - | - | 0 | $2(i$ or $e)$ |

Chapter I．The Alphabet．

A．

## The Values of the．Lydian Letters．

The bilingual inscription to be discussed below in Chapter II contains a number of proper names；these names represent the first starting point and the only safe foundation for the deciphering of the Lydian alphabet．They are in the Aramaic part as follows：

| ארתחּ | （1．I） | ${ }^{\circ}$ RTHSSS | Artaxerxes． |
| :---: | :---: | :---: | :---: |
| טפרד | （1．2） | $S_{P}^{F} R D$ | Sardis． |
| מני | （1．4） | MNY | Mane（Mani）． |
| במלי | （1．4） | KMLY |  |
| N（） | （1．4） | SRWK Y Y | of SRWK（？） |
| ארתמו | （1．7） | ${ }^{\circ}$ RTMW | Artemis． |
| בלו | （1．7） | KLW | Koloë． |
| אפש゙ׁ | （1．7） |  | pheso |

It was seen at once that the first two names，viz．Artaxerxes and Sardis，are not given in the Lydian part of the inscription．It is possible that they were never written there，and that the first Lydian line now lost contained a different date． Both of them however occur in other inscriptions as we shall see below where the single letters are discussed，under $\mp, 3,8$ ．But we find in corresponding places the following names：

1） 111 ปทAY $=M N Y$
2） 1111 My $=$ KMLY
3） $111 A x 11 \mid \mp=\operatorname{SRWK}(Y)^{2}$
4）（3）ฯฯIT9A $={ }^{3} R T M W$

6）$\ddagger$ ほクリ1リメ $=K L W$
These names enable us to determine with certainty the values of several Lydian letters．They are：
$\eta=m$ ，because it corresponds with $\sum(m)$ in $1,2,4$ ；
$\eta=n$ ，because it corresponds with $J(n)$ in I；
$\forall=k$ ，because it corresponds with $\mathcal{J}(k)$ in $2,3,6$ ；
$1=l$ ，because it corresponds with $\zeta(l)$ in 2 and 6 ；
$\mp=s$ ，because it corresponds with $\square(s)$ in 3 ；
$\mathfrak{\}}=\xi^{\xi}$（or $s$ ），because it corresponds with $\boldsymbol{ש}(\xi)$ in 5
$q=r$ ，because it corresponds with $\urcorner(r)$ in 4 ；
$\mathrm{T}=t$ ，because it corresponds with $\boldsymbol{\Omega}(t)$ in 4 ．

The short vowels are, of course, not written in Aramaic, but $\boldsymbol{\aleph}\left({ }^{( }\right)$stands in two cases at the beginning of a word, where the Lydian text has $A$ and I respectively. The letter,$(y)$ stands where the Lydian has $\$$ (No. I) and I (No. 2); in Aramaic it may indicate the vowels $\bar{e}, \bar{\imath}$, or the diphthong ay (ai). The letter $\upharpoonleft(w)$ stands in 3 , 4 , and 6 where the Lydian has $\boldsymbol{y}$; in Aramaic it may indicate the vowels $\bar{o}, \bar{u}$, or the diphthong azv (au). Now I think there is no doubt that $A, w^{\prime}, I, y$ must represent the vowels $a, e, i, u$. Since the letters $A, I$ and $y$ occur also where the Aramaic has no vowel sign, we must infer that long and short vowels were probably not distinguished in Lydian. Moreover $\&$ and $\mid$ occur where the Aramaic has $Y$, and $I$ stands in 4 and 5 where the corresponding Greek forms have $\varepsilon$; this leads us to the conclusion that the short $i$ in Lydian must have been an open vowel.

In 3 Lydian 1 is found where the Aramaic has $\urcorner(r)$. As the value of 1 is certainly $l$, we must infer that $l$ and $r$ sometimes interchange in Lydian.

In 5 Lydian 8 is found where the Aramaic has $\rrbracket$; this may be, of course, either $p$ or $p h$. Now $a$ is probably a $b$ as we shall see below from other examples. It seems therefore that the Lydians had no $p$ or $p h$ (i. e. tenuis and tenuis aspirata) and replaced it by their $b$.

The endings of the Lydian words, 111 - in $1-3$, 3 - in 4 , $\mp 1 \mp 9$ in 5 and 6 , will be spoken of in Chap. II, A.

These six names have yielded thirteen Lydian letters, i. e. about half of the whole alphabet: a good beginning! The letters are $\mathrm{A}=a, \mathrm{~g}=b$, $y=e, \mathrm{l}=i, \forall=k, 1=l$, $\mathfrak{Y}=m, \boldsymbol{Y}=n, \mathbf{q}=r, \boldsymbol{\mp}=s, \boldsymbol{3}=\bar{s}, \mathbf{T}=t, \boldsymbol{Y}=u$.

I shall now attempt to determine the values of the other letters found in the Lydian inscriptions and to give the material on which the table of the alphabet, above p. I, is based. At the same time I shall give a few more examples in the case of those letters whose values are already known from the proper names in the bilingual inscription. I follow the order of the Greek alphabet, placing the additional Lydian letters at the end.

$$
A=a
$$

This letter is of very frequent occurrence in the Lydian inscriptions. Several times $A A$ is found; this doubling may. perhaps indicate a long $a$. The $A$ occurs quite often in proper names; besides उYMIT9A (Artemis) and - YAM (Mane) it is found in
 Artaxerxes); -ATA (Ata, A $\tau \alpha$, A $\tau \tau \alpha \varsigma$, cf. Kretschmer, Einleitung, p. 349 f.); 3 A 4 Y A Y, which is rendered in a bilingual inscription published in Chap. II, B by NANNA $\Sigma$ (cf. Navas etc. in Kretschmer, l.c., p. 341 f.), and in several other names.

In a few Lydian lines written from left to right the $A$ has of course the small slanting line turned in the other direction.

$$
\mathrm{g}=\mathrm{b}
$$

The Greco－Lydian bilingual inscription from Sardis，below，Chap．II，B，has FI1AAIXA\＆corresponding with $\triangle I O N Y \Sigma I K \wedge E O Y \Sigma$ ．It is easy to see that the first part， $-\mid \geqslant A 8$ ，must be a rendering of stoveat；therefore－I才A\＆is nothing else but B $\alpha \times \% \circ s$ and $g$ is $b, \beta$ ，as in Oscan and in those lines of ancient Greek inscriptions that run from right to left．Another example is the name－A पMaAt9A（Inscr．9，1．5）which is ob－ viously the Persian name Artabanes．Above on p． 2 it was pointed out that－1381 must be the Lydian for Ephesos．And in the Greco－Lydian inscription from Pergamon，
 as the equivalent of ГAPTAPA乏．In our Lydian inscr．29，1．1 a word $1 A A g$ is found． I think it highly probable that this word is the same as the Semitic $B a^{c} a l$ ，although one cannot be sure of it，because the interpretation of the passage is unknown；it would seem not at all impossible that a Semitic god should have been worshipped at Sardis，for Lidzbarski has shown in his Ephemeris，III，p． 192 f．，that on the stele of Oerdek－ burnu，inscribed in an unknown language of Asia Minor，names of Semitic gods are found．

We should then have the Lydian $\&$ as an equivalent of $\beta, \pi$ ，and $\varphi$ or of $b, p$ ， and $p^{c}$ ．Another example of this fact might perhaps be recognized in one of the ＂Lydian glosses＂（Lagarde，Gesammelte Abhandlungen p．271，No．16；p．286，No．17）， in which Boizss and Фpúyss are identified．See however Kretschmer，p．229．The Lydians therefore had only one labial explosive sound．Whether it was voiced or voiceless I cannot say．For it is possible that all $b$－sounds had been changed to $p$ ， and that the 8 had been chosen for the labial explosive sound instead of a sign cor－ responding to Greek $\pi$ ．Modern West－Armenian，i．e．the Armenian spoken in Asia Minor，and the rendering of Turkish with Armenian characters might furnish certain parallels to this．However，I keep $b$ as a transliteration of Lydian 8.

In the single instance where this letter occurs in a line running from left to right （No．24）the form \＆has been written，not B．

## г．

A letter representing the $g$－sound has not been found so far，unless it be 1．This sign occurs only twice，viz．in inscr． 2 ，which contains only the letters 1 is as a mason＇s mark，and in the word r1019TA（No．12，1．4）．The latter may be compared with the word 1 キロяt（in No．12，1．8）．But this is very uncertain．Perhaps 1 is only a second form of 0 ，a sign which is discussed at the end of the alphabet．

If 1 be really $\gamma(g)$ ，its form may be compared with $\Lambda$ in Greek inscriptions from the Islands and from Athens，and above all with＞and C in Western Greek alphabets， forms which gave rise to the Latin C．Or，on the other hand，it may have been created in Lydia as a differentiation from $1(l)$ ．

$$
1=\mathrm{d}
$$

The name $3 A T F A 1|G T| M$, which occurs no less than seven times, in Nos. 7 and 30 - both of which, however, may refer to the same person - serves to determine the value of the sign 1 . For to my mind this name is to be read Mitridastas. At first I thought this to be a rendering of the name Mithridates, taking the $s t$ as an attempt to represent Persian $\mathcal{F}$; but the Persian has a $t$, not a $\mathcal{\vartheta}$ in dãta- "given". Prof. Andreas moreover is of the opinion that Mitridastas can only mean "hand of $\operatorname{Mit}(\mathrm{h}) \mathrm{ra}$ ". In Old-Iranian zusto- and dusto-= "hand" are used of men and of gods; cf. Bartholomae, Wörterbuch, col. 1685. The vowels $u$ and $o$ have been chosen according to Prof. Andreas. As a parallel to this name we may cite the Abyssinian names $B a^{3} e d a-M \bar{a} r y \bar{a} m$, "through (in) the hand of (the Virgin) Mary", and Yamāna-Krestōs, "right hand of Christ".

Again the identification of 19483 with $\left(S_{P}^{F} R D\right)$, i. e. Sardis, seems to me certain. On this see below p. 12, under the letter 8. And in all Lydian words in which 1 occurs nothing prevents us from reading it as a $d$.

Professor Herbig suggested to me that 1 might represent a dental sibilant, i. e. $d$ or even $z$; in that case the endings of the subjective case (see below Ch. V, C) would be $-s,-s$ and $-z$ instead of $-s,-s$ and $-d$, and such endings would perhaps stand in closer relation with each other. As a matter of fact, the name 3 ATFA $19 T 19$ might be read Mitrizastas; this would be the Old North-Iranian form which is missing elsewhere. But we cannot be sure of this. The reasons why I keep my rendering $1=d$ for the present are the following: 1) The name of Sardis certainly had a $d$, not a $z$. 2) Although the Iranian word for 'hand' is zust in the Avesta and should be the same in all other Iranian dialects except the Persian, i. e. Southwest-Iranian, yet the truly Persian form dust (däst) is found, according to Professor Andreas, in all other later Iranian dialects, and it must have spread there at a comparatively early date. 3) The Achaemenian, i. e. Southwest-Iranian, form should be expected in Asia Minor: this would be, it is true, *Missodusto, but Mipro, the name of the god, often kept its archaic form in proper names, and then we would have *Miprodusto, or since about 400 A. D., Miprécusto $=3$ ATFAł|qT1M. 4) In Lydian we find the corresponding forms
 likely that es-s vãna-s stands for *es-s vãna-s and es-t mru-d for *es-d mriv-d.

$$
\ddagger=\mathrm{e}
$$

In No. 8, ll. 1-2, the names fliłta fli|1Myy occur. The first is Kumli as we
 Kretschmer, l. c., p. 350. The name Ates is probably the second part of Aえvartns, being a short form or hypocoristicon of the longer name. The first part of it is found above on p. 3 in the name Alu-. Again in fl1s YA Y (Mane-), above p. 2, is $e$.

$$
1=\mathrm{v}
$$

The letter 9 occurs very frequently in Lydian. Of proper names that contain this letter $-A \mathcal{I}^{\circ} T A x$ and $-A 17 \mid T$ are the most striking. I do not hesitate to connect the former with Kadof- a very well known element of proper names in Asia Minor; see Buckler-Robinson in Amer. Fourn. Arch. 1912, XVI, pp. 33-35. There is, however, a difference between -10 TA才 with $t$ and Kador- with $\delta$. The Lycian form kadawãti also has a $d$; cf. Sundwall, p. 93. But the corresponding Italic names have a 9 or a $t$; see Herbig, p. 18.

In -A111T, a name occuring in four places, I recognize an element tiv which is perhaps the same as the Etruscan tiv "moon"; cf. Gött. Gel. Anz. 1914, p. 512, and below, Chap. III, F, (L. I3). The 1 may have represented a labio-dental or a bilabial sound. But I think the latter is the more likely, since 1 seems to interchange with 4 ; cf. this letter below.
Z.

It would be very natural to connect Lydian $\mp$ with Greek $Z$, since the oldest form of $Z$ is $I$ both in Greek and in Phoenician. But in Lydian $F$ is undoubtedly a voiceless $s$.

It is probable that $\mp$ was originally a voiced $z$, and became later a voiceless $s$, and that the letter $\mp$ should really have its place in the alphabet where $Z$ stands. For in an ancient Berber inscription the letter $\overline{\mathbb{X}}$ which is derived from Phoenician $\mathbf{x}$ is used as a sign for s; cf. Lidzbarski, Sitzungsber. d. Berl. Akad. d. Wiss. 1913, XV, p. 297. And Prof. Wackernagel called my attention to the fact that $I$ is a voiceless $s$ in Oscan and Umbrian. But on the other hand $\mp(s)$ may perhaps have been derived from $\mp(s)$ by omission of one of the horizontal bars, as e. g. \& was derived from $\exists$. I have placed $\mp$ below together with the other sibilant 3. The form $\pm$ occurs in Lydian in a very few cases.

## H.

I have found no sign for the long $\bar{e}$ in Lydian. The names Mavrg, A $\tau \tau \pi s$ have s where the Greek forms have $n$. It should be remembered also that Arss occurs as well as A Atrys; see Kretschmer, p. 350 . And in those ancient Greek inscriptions in which $H$ was used as the sign of the spiritus asper, $E$ was used not only for $\varepsilon$ and $\varepsilon$, but also for $n$.

The question arises whether the sign derived from the Phoenician hep might have been used in Lydia to render $h$. This would a priori not be very likely since the Lydians most probably received their script from the Ionians. No H or 日 has so far been found in the Lydian inscriptions.

Again the letter and sound $\theta$ seems to have been lost in Lydian. No sign resembling the Phoenician or Greek etc. occurs in our inscriptions. The name of the god Mithras is written with a $t(-19 T 1 M)$, but this is not an absolutely conclusive proof of the fact that the Lydians had no $\vartheta$; the North-Iranian form is Mipro-, and this form has found its way also into Greek literature, cf. Mispadorins, etc. But we should expect to find here in Lydia the Old Persian form; see above p. 5. I believe therefore that -19T1M was written because the Lydians had no 9 . It must also be said here that in Greek renderings of indigenous Asia Minor names $\mathcal{J}$ is extremely rare, ${ }^{1}$ that the foreign sound $p$ is generally written : in Greek, and that in Etruscan $\theta$ very often interchanges with $t$, especially in later inscriptions.

This identification scarcely needs proof. As an example the name उATFA 1 IGTIM may be cited.

$$
y=\mathrm{k} \text {. }
$$

Instances of $x=k$ are given above in the names $-A x y 11 F$ and -11 yyy. To these may be added here $-A \neq T A \geqslant$ and $\} \circ q A x$, Kapos. The latter occurs several times with different endings.

$$
1=1
$$

That 1 equals $l$ was shown above on p. 2 by the names -11 My* (Kumli) and $-y 1 y \geqslant$ (Koloü). It is possible that 1 became voiceless at the end of a word, especially after a voiceless consonant, as e.g. in $1 \not 1 \circ 9 \mathrm{TA}($ No. 12, 1. 8). But one cannot say which special kind of $l$ was expressed by 1 , whether it resembled more the German $l$ or the Slavic $l$, the Armenian $L$ or the Armenian $Z$.

In the lines that run from left to right this letter is turned in the other direction, viz. 1. In No. 23, 1. 3 a sign $\Lambda$ is found which I take to be intended for $l$. But this is uncertain, because the word in which it is read does not occur elsewhere. If it be $l$, it is only accidentally carved in this form, probably because the chisel slipped from the hand of the carver; for in other words of this inscription $l$ is represented by 1 .

$$
\mathrm{y}=\mathrm{m} .
$$

Again the names -IIMYオ, -寸 YAM, ЗATFA1IGTIM are sufficient proof for this reading. In a line running from left to right $m$ has the form $M$.

$$
\mathrm{y}=\mathrm{n}
$$

The names $3 A$ YYAY=NANNAE, and - YAY speak for themselves.

[^0]In the same way as the sign for $m$ ，the letter $\eta$ is also turned to the right in a line running from left to right，viz．$r$ ．

Perhaps the $n$ lost its voice when placed at the end of a word after a voiceless consonant；cf．e．g． $48^{\circ} \mathrm{TA才}$ in No．12，1．II．

$$
ま=\tilde{\mathrm{n}} .
$$

The letter $\mathbf{x}$ occurs not infrequently；but it seems to have been especially used in inscriptions written in a lofty style．In the ordinary funerary inscriptions it is very rare，but in No．4，which seems to be a votive stele，and in Nos．12，19，27，29， which are written in poetry，it is much more frequent．Perhaps it went gradually out of use and was later on employed in inscriptions that affected an archaic style．

In determining its value we may eliminate at the outset its Greek meaning，viz．$\xi$. For the sound $k s$ is rendered by $3 \rtimes$ in $3 A \mp \mp A B \geqslant A T 9 A$（Artaxerxes）and by $\mp x$ in TYイTYMFッITA which cannot be anything else than some rendering of Alexander．

Now in No．19．1．II we find Y｜ましヶ，but in No．27，1． 5 we read y｜y｜y．The
 it is written with $Y$ in $Y|\geqslant A F| q+A 1$ ．This points to the fact that there must be a certain relation between $m$ and $n$ ．

But the decisive words are 3A£YM1 in No．12，1．2，TキAまM1 in 12，1．II，and YAまAX in 13，1．2．For a discussion of these words we must take for granted what is said below on the letter $M$ ，namely that it means $\tilde{a}$ ，i．e．a nasalized $\alpha$ ．One of the most common words in our Lydian inscriptions is $3 A Y M A$ ，which I read vãnas and translate by＂（sepulchral）cavern，tomb＂．Almost always it is written 3 A YMA，but in
 TAYM\％．The conclusion is inevitable that m must be a nasalized $n$ ，i．e．the guttural nasal sound $(n)$ ．This should perhaps be transliterated rather by $n$ than by $\tilde{n}$ ；but since it has become customary to indicate the nasal vowels by $\tilde{a}, \tilde{e}, \tilde{u}$ ，the closely related
 the one hand，and $\Psi A Y M \neq Y A ま A \geqslant$ on the other，would be only orthographic variants． The former would be pronounced vãnaśs or vañas，the second kãnaũ or kañaũ．This method of spelling has a parallel in Lycian and in modern Albanian orthography．In the latter the nasal vowels are ordinarily written $\hat{a} \hat{\imath} \hat{\imath} \hat{b} \hat{u} \hat{y}$ ；but if a nasal conso－ nant（ $n, m$ ）follows in the same syllable，the sign of the nasal vowel，i．e．the circum－ flex accent，may be omitted；cf．Weigand，Albanesische Grammatik，§ 3，ann． 2. Another parallel is furnished by the spelling of the nasal sounds in Portuguese．

The variants $£ 1 x: \eta \mid x$ and $\eta|ま| \eta: \eta|\eta| \eta$ seem，however，to indicate more than a mere difference in orthography．Here I believe that the guttural $n$ became an ordinary dental $n$ either in a later period of the Sardian dialect or in the special dialect of the man who had the inscription written or of the mason who carved it．Such dialectic
variants are known to exist in Albanian；cf．Weigand，l．c．，3，ann．3．In modern European Turkish the guittural $\tilde{n}$ is usually pronounced like an ordinary $n$ ．In Asia Minor the Turkish $\tilde{n}$ is sometimes kept，sometimes pronounced as $n$ ；cf．Giese，Ma－ teralien zur Kenntnis des anatolischen Türkisch，p．8．In the Turkish dialect of Adherbeijan again $\tilde{n}$ has become $n$ ．

If then $\dot{x}$ has been shown to be $\tilde{\mu}$ ，one can easily understand why this sign occurs very frequently after a $*$ ．For $n$ after $k$ easily becomes guttural；the German word Knie，for instance，is often pronounced $k \tilde{n} \bar{\imath}$ or $k n \bar{\imath}$ by Germans as well as by foreigners．

I have given the m its place after the $\eta$ on account of their close phonetic rela－ tionship．It is not impossible that in the alphabets of Lycia and Lydia the Phoenician $\mathbf{I}(s)$ ，which comes directly after the $n$ ，was adopted without its meaning，only as a sign，and was used for an altogether different sound；this sound however was nearest to $n$ phonetically．

In a few cases the shaft of the letter projects beyond the lowest horizontal bar， and then the Lydian letter exactly resembles the Phoenician Samekh．

$$
\circ=0 .
$$

The names $-A A^{\circ} T A X$ and $\} \circ q A \ngtr$ may suffice to prove that the sign which means 0 in all Greek and Italic alphabets－except of course the Etruscan which had no O－ has the same value in Lydian also．Whether this 0 was long or short，open or closed， I cannot say．

$$
\pi .
$$

No sign corresponding to Greek $\pi$ has been found in Lydian．And Greek $\pi$ is rendered by 8，as we have seen above，p．4．Even in all cases where the small slanting line of $1(l)$ looks rather like a curve，so that thie sign resembles a Phoeni－ cian $p$ or ancient Greek $\pi$ ，the sign can be only $l$ ；this is proven by parallels．

$$
\mathrm{q}=\mathrm{r}
$$

This most natural value of the letter 9 is ascertained at once from 3yฯ1T9A，


$$
\mathrm{F}=\mathrm{s} ; \mathrm{\jmath}=\mathrm{s}
$$

The words on which my identification of these letters is based are chiefly the following：

$$
-A T F A 1 \mid 9 T 1 M=\text { Persian Mit (h)ridasta. }
$$

Sardis Expedition VI．

$$
\begin{aligned}
& \text {-ット1।f = -コาロ, SRWK. }
\end{aligned}
$$

The Greek Novias for 3 A Y Y A Y cannot decide the question, since in Greek both $s$ and $s$ would be rendered by the same sign. But I think that the above examples are sufficient to prove that $\mp$ is $s$ and $\}$ is $s$ (or $\xi$ ).

The name of Sardis however seems to furnish an argument against this proof. For in Lydian it is written 19483, in Aramaic $\left(S_{P}^{F} R D\right)$, a word which in the Old Testament, Obad. v. 20, is vocalized S叉faradt. This fact, to be sure, presents a difficulty. But I think it is not unsurmountable. For in Lydian itself $\mp$ and 3 interchange, as we see from the words $33 \pm$ and $T \neq y$ which are often found at the beginnings of inscriptions; see below, Chap. II, A. And such changes from $s$ to $s$ and vice versa are well know in Semitic languages and dialects. These changes are generally regulated by phonetic laws, but not always; to quote one case, in Arabic and Ethiopic $s$ and $s$ always correspond with each other, but Ethiopic šannāy "beautiful" is certainly the same as Arabic sanīy, and Ethiopic tafasssčha "he rejoiced" is the same as Arabic tafassaha. This may not bear directly on the case under discussion, but we must remember that one half of the 19A83- DDרד problem is Semitic.

Another proof that $\mp$ is a voiceless $s$, not a voiced $z$, is furnished by the word TFA. For it is very improbable that a $z$ should stand directly before a $t$ : either the $t$ must become a $d$, or the $z$ must become an $s$.

On p. 6 above, I said that $\mp$ may be derived either from Phoenician I $(z)$ or $\mp(s)$. I do not wish to give a definite answer to this question. But since I placed $\mp$ between 9 and 3 I wish to call attention to the fact that in the alphabet of Vaste, which Momysen published from the papers of Luigi Cepolla, a H is placed between $P$ and S; Kirchioff, p. ${ }^{157}$, eliminates this H , because he believes it does not belong there, and J. Schmidt, in Pauly-Wissowa's Real-Lexikon s.v. Alphabet, makes a $\Gamma$ of it and places it after the 0 .

In a very few cases the shaft of the $s$ does not project beyond the lower horizontal bar, and the letter looks like the Phoenician I (z); again in a very few cases the shaft projects at the top as well as at the bottom, and the letter then becomes $\neq$, a form which may be compared with $\neq$ in Carian, Etruscan, Oscan, and Faliscan.

The letter 3 has a curious form in two old Lydian inscriptions running from left to right, viz. §. Parallels are to be found in Old-Phrygian and in certain Greek alphabets; for Kirchhoff gives in his tables similar forms from Rhodes and Laconia. And curiously enough the same letter received a similar form in a distant country and at a much later period, after it had wandered from Phoenicia to Southern Arabia and then back through the deserts of Arabia northward to the Syrian desert. Phoenician $w(\xi)$ became $\leqslant$ or 3 in Sabaean, and then $\}$ or $\}$ in Safaitic, script.

$$
T=t
$$

A number of names contain a T , and this is certain to be a $t$; cf. उymITqA,

## A．The Values of the Lydian Letters．

 where the Greek forms have a $d$ ．Above on p． 6 it has been said that Katova－has its parallels in Italy．And though the names with－\％o－are so very common in Asia Minor，the second part of Greek names composed with－avopos has a $t$ in Lycian； cf．alakss［añ］tra（n？）Sundwall，p．4，and lusãntra－，ib．p． 16.

In an old Lydian inscription the upper crossbar of the $T$ in very short；see below，p． 57.

$$
y=u
$$

In 3yMIT9A，in－Ay11F and in－114y the letter y stands where the Semitic equi－ valents have a $\boldsymbol{\rho}(w)$ ；see above p．2．In -11 A it corresponds with a Greek v．And many words，as 3 M Myd，IV9M and the like，show that $y$ is a vowel．We are therefore justified in rendering $y$ by $u$ ．

In a line running from left to right it is turned towards the right：$r$ ．
It is possible that $\{$ is sometimes written where we should expect $y$ ．There is a grammatical ending $z y$－and another one $z \mathfrak{z}$ ，and the latter is found sometimes after consonants；cf．below Chap．V，H．This would correspond to a similar usage in certain Etruscan inscriptions．But I have found no case in which the same word had in the same place once a $y$ and another time a 1 ．

Prof．Herbig suggested to me that $y$ should be $\ddot{i}$ rather than $u$ ，comparing Boives and Фрúrses，＂Aprsurs and उyMIT9A．This is very possible，but I do not wish to decide this question as yet．

$$
8=\mathrm{f}
$$

The letter 8 occurs quite frequently in Lydian．The value here adopted for it is based on one word which is found in many different forms．This is 19A83，which I read Sfard－，and take to be the indigenous name of Sardis．I shall first give the forms in which this word appears．

$$
\begin{aligned}
& \text { 1АА9A83 12, 1. I; 16, 1. 19. TTY19A83 4, 1.2. } \\
& \text { ч9A83 4, 1. } 5 \text { and 1. 10. 玉Yч19A83 4, 1. I. } \\
& \text { \#A19A83 12, 1.9; 23, 1.3. श1TY19A83 4, 1. 13. } \\
& \text { *ATH19A83 4, 1. } 4 \text {. } \\
& \text { 2ATH19A83 4, 1. } 8 .
\end{aligned}
$$

I believe that the first two of these forms mean＂Sardis＂，and the last six＂Sardian＂ or＂Sardians＂．It is not the place here to discuss the meanings of the endings；that will be done in Chaps．II，III and V．But it is necessary to state why I derive the first two forms from the same root．1A19A83 occurs first in inscr．12，an inscription written in poetry in which the very common word 119M is given in the form 1AA才19M． We have then the parallels $-19483: 1419483$ and 1Y9M：1AA149M．In both cases the syllable $v a$ is added，perhaps as an infix；see below Chap．V，F，4．Concerning the
form $\Psi 9 A 83$ the following may be stated. Besides the word 1 19 9 we very often find


Now we know that in the Aramaic part of the bilingual inscription $\left(S_{P}^{F} R D\right)$ is the name of Sardis. We know moreover that in the Greek inscriptions of Sardis the names of the town and of its inhabitants are often mentioned. If then in -19483 we have determined the letters S.ard, I think the conclusion is inevitable that 8 must be either an $f$ or a $p$; for in Aramaic the may mean either. But we learned above that $p$ is rendered $\&$ in Lydian: so there remains only the $f$. It is unnecessary to give here a list of all words in which 8 occurs, but I made such a list and found that the value $f$ for 8 would be suitable in all cases. Among these words many begin with -83 .

The Biblical (Š̌färadt) in Obad. v. 20 has always been identified with some part of Asia Minor. Also Sparda (Saparda), a name which occurs in the Persian cuneiform inscriptions, has been located there by most scholars. And Sardis has many years ago been actually identified with Sparda. For Lassen said in 1845 (Zeitschr. f. d. Kunde d. Morgenlandes VI, p. 50, a passage to which my attention was called by Prof. Wellhausen): "Nehmen wir nämlich an, dass Sardis, Ex́pòls oder É́pó̀̇ıs in der einheimischen Sprache fvarda lautete, musste Persisch daraus Cparda werden, im Griechischen aber das $v$ verloren gehen. Es residierten in der alten Hauptstadt Lydiens auch die Persischen Satrapen, und es erklärt sich daher leicht der Name Sardische Provinz." Also Professor Andreas identified Sparda with Sardis; see Beiträge zur Alten Geschichte, III, 1903, p. 505. His note is of special importance.

LASSEN was right in his identification, for we now know the real name of the capital of King Kroisos in his own tongue, and we see that the Hebrew and the old Persian form of the name are even nearer to the original than LaSSEN was able to guess.

Lydian ŚSard-became Eapo- in the dialect of the Ionians through whom the other Greeks must have received the name of the Lydian capital. The Ionians probably chose this form because the foreign name had an unusual beginning. Even if they knew the name at a time when their own language still had the digamma, it could in time not become anything else but Eapo-. According to Thumb (in Indogerman. Forschungen IX, 1898, p. 334 sqq.) the Ionians had both a voiceless and a voiced digamma; the former would be the Lydian 8, the latter the Lydian 7. Both digammas disappeared in time; the voiceless one first, being changed to the rough breathing and then being dropped altogether.

Finally it may here be added that Johannes Lydus (III, 14) gives Euápor as another form of Eapoby. The $\Xi u$ - would be an attempt to render the unusual sounds -83 . But it is important to know that he gives a form without $\delta$ : this would be another proof for my assumption thar TqA 83 is a derived form of 19483 .

$$
+=\mathrm{h}
$$

I admit that I have found no strict proof that the sign + in Lydian really represents $h$ or $\%$. No proper names that could be identified with certainty have been found. My assumption that + equals $h$ is not based on Lydian words, but has been suggested by Lycian and by some of the Greek alphabets of Asia Minor.

Among the words containing + one seems to be the name of a deity, i.e. $34 \mathrm{M} 1 \mathrm{~T}+$. It occurs four times, in every case together with Artemis. In No. I B, 1. 4/5 we read
 cf. below Chap. II. In 7, 1. 1. T3. VAリTA1 TyMIT9A•YM1T+ must mean something like "is sacred to Hũdãnś and Artemis". In the same inscription 1. 3/4 3A3AAT 3YMAT+
 will punish"; and in 1. Io there is a shorter formula $11 \geqslant 019 A \mp T A \geqslant \geqslant y M 1 T 9 A \geqslant Y M 1 T+$, "Hũdãnś as well as Artemis will punish". I believe therefore that $3 M M+T+$ is the name of some divinity, but I have been unable to identify it. An identification of this name would probably make the value of + definite.
W. H. Buckler very ingeniously identified Hüdãns Tavśaśs with Zsìs 'ronvós. He kindly sent me the following note:
"Hyde was the ancient, or one of the ancient names, of Sardis (Strab. XIII, 4. 6), and as in the third century в. с. one could speak of the Carian god Komyros without
 so one could probably have mentioned Hüdãns without the additional name Tavśaś. The Old-Indian god Dyaus (Dyāu ${ }_{S}^{\prime}$ ) is the same as Zeus, and since $t$ in Lydian often takes the place of $d$, Tavsas might represent $D(y)$ avs $\alpha s^{\prime}$, and this would be very similar to Dyaus.

In the big stele (No. 7) sacred to Hüdans and Artemis, the god mentioned before Artemis must be an important one. We know that Zeus' temple shared the precinct of Artemis at Sardis, that Tmolos disputed with Crete the honor of Zeus' birthplace, that Zeus was very important in Lydia, being mentioned and depicted on coins of Sardis and many other towns, in short that next to Artemis he was by far the most important local deity."

He furthermore called my attention to the following facts: " I) The hypothesis Hũdãns' = 'Tònvós tends to support the identification of the letter $+\mathrm{as}=h .-2$ ) The termination of Hîdãns does not seem to be found in any other Lydian adjective denoting origin, but we cannot be sure that it is not a possible form, and it certainly suggests the Greek termination Lapolt-avós, or $^{2}$-nvós. Or perhaps Hũdañs is no adjective, but the original name of the Lydian Zeus."

It seems to me that Buckler's assumption is a very valuable contribution to the interpretation of our Lydian inscriptions. In Tavs-as the ending -(a)s would then be
the Lydian termination of the subjective case; see below $\mathrm{Ch} . \mathrm{V}, \mathrm{C}$. The $T$ in the beginning of the name would have its parallel in the Cretan forms T $\tilde{\sim} \nu \alpha, \mathrm{T} \tau \tilde{\sim} \nu \alpha$, Tä̃ $\nu$; cf. Brugmann, Grundriss d. vergl. Gramm. d. indogerm. Sprachen I (1897), p. 277. The ending -ãn-might very well be compared with the ending -ẽn-; for also in Lycian -añna- is found besides -ẽ̃ni; see below Chs. V, D and VI, B.

Professor Herbig compares also the Oscan Honde, Hunte (masc.) Hunte Fuvie (fem.) and the Umbrian Huntia (fem.?), which is the name of a deity. The OscanUmbrian deity would then be Etruscan; but in Etruscan it has not been found.

A discussion of the true relation between Hüdãns: 'Yònvés: Honde must be left to Classical and Indogermanic scholars.

The sign + does not occur very often, yet it is not rare. A very common word with + is $\mp 1+$. This word means, as we shall see below in Ch. II, A, "somebody". Other derivatives of the same root are $11+$ (perhaps "something"), $\tau+$ and perhaps A11t, $3 Y T+, 3 A T+$. Again a frequent root is $-A 91+$ which occurs in the forms $\mid A 91+$, $1 A A 91+$, TA91t, TAA91t. On its meaning cf. the commentary on 1.8 of the bilingual inscription, below p. 36. In the middle of words + is found several times before $\mathbf{q}$; this would be in keeping with its character as $h$. For the combination $h r$ seems to be a natural one in Greek ( $\rho$ ) as well as in other Indogermanic languages; cf. Armenian and Icelandic $h r$, and Celtic $r h$.

## Greek $\Psi$.

I have found no letter in Lydian that can be rendered by $p$ s like the Greek $Y$. There is a letter $\psi$ in Lydian, but this is, as we shall see below, a nasal vowel. On the other hand the combination 38 is found in Lydian.

$$
M=\tilde{a} .
$$

The value of this sign is certain. For-AYMgATqA in No. 9, 1. 5 can be nothing else but Artabanes. We see from this word that even vowels in foreign names were nasalized when they were followed by $n$. In the list of words which contain the letter $M$ there are great many that have $\mathcal{Y}$ or $Y$ after the $M$. A few examples may serve to illustrate this fact: $Y M, ~ З Y M, \downarrow A Y M, T Y M Y I, ~ Ұ Y M T, ~ Y M Y, ~ 1 A ま ケ A g M M Y$, etc.

$$
\psi=\tilde{\mathbf{e}} .
$$

There is no doubt that $\psi$ and $\psi$ are both nasalized vowels. For (I) they must be vowels because they often occur in words in which all other letters are consonants and none of them sonants; (2) they must be nasalized because they occur in the majority of cases before $n, t$ or $k$. The question now arises which of the two is $\tilde{e}$ and which is $\tilde{u}$ (or perhaps $\tilde{o}$ ). I believe however that there are certain facts which lead to the conclusion that $\psi$ is $\tilde{\varepsilon}$ and $\psi \tilde{u}$.

In No．13，1． 3 a word $1114 \uparrow+4$ occurs．We shall see below in Chap．II，A， that 111 is an ending often found with proper names．It is highly probable that $-(A) \Psi \psi M$ is a proper name．If this is transliterated Mẽù（a），one thinks at once of
 and compare many of the names that contain the element muwa；cf．SUNDWALL，p．I60－ 163．However there are also some good reasons why $\tau$ must be $\tilde{u}$ ；see next para－ graph．The letter $\psi$ has been found in no other names，except in endings，like
 most likely to be read $\tilde{e} n \tilde{n}$（and $\tilde{e} t$ ）we conclude from Lycian enni，Greek－خvos；cf． below Chap．VI，B．Words beginning with $\eta^{\psi}$ are among others the following：$\eta_{\psi}$



 these words indicate that $\psi$ is a nasal vowel；in many other words $\psi$ appears before $m$ or $n$ in the middle of the word．But it would be of no value to give here the list of all words containing $\psi$ ．

$$
\tau=\tilde{\mathrm{u}}
$$

Words like $r$ g，$r+3 Y T+$ etc．show that $\tau$ must be a vowel；words like TYTラAF， TYYYシA and $3 \Upsilon \Psi+$ point to the fact that it is a nasalized vowel．

The reason why I at once thought of identifying $r$ with $\tilde{u}$ was its occurence in
 ケリケMrAt（inscription from Falanga，1．2；（in Sardian inscrs．No．3，3：ryケ Mr－，and 11，2：ケサケMケA－are probably to be read．．．MケA
 （4，passim；II，10）， $3 Y M+\Psi+$（see above p．I3）and $T$ YqT MMFx｜TA $(26, I)$ ．The first of these is the name of a person；if we read it Sabũa，the names इapus（Sundwall，
 mis．Therefore - rAq才1F is probably the name of a place in Asia Minor；perhaps of Smyrna．

The identification of Sivraũ with Smyrna was proposed to me by W．H．Buckler． He justly suggests that $v, b$ and $m$ are consonants that might easily interchange．In fact，there are many examples of this change from Indogermanic as well as from Semitic languages．For the Lycian Buckler cites $\zeta_{e} b a[n]=$ Greek síurvac on coins，
 p． 100 and 102．Furthermore he recalls the account in Strabo（XIV，I．4），which points to Smyrna as being a native name．Finally he says that the Smyrna＂Mother of the Gods＂，i．e．Artemis，was quite worthy to rank with the goddesses of Ephesos
and Koloë．I think that this hypothesis of W．H．Buckler is very probable．We might then suppose an original form like＊Sibiran－which developed into＂Sibran－＞ ＊Sivran $>$ Sivraũ in Lydian，and into＊Simiran－a $>{ }^{*}$ Smiran－a $>{ }^{*}$ Smirn－a $>$ Eujpvé in Greek．

But TYqTyMFyITA seems to overthrow my whole theory concerning the value of $\Upsilon$ ．For with so many of the letters coinciding it would be most extraordinary if this word did not stand for＂Alexander＂．Inscr． 26 begins with the date IIII 2M198 zMA TYタTYMFットTA．To claim that $\Psi$ might be a mistake for 1 would be too easy a solution．And it seems to me almost impossible to make $\Psi$ a consonant，e．g．$l$ （i．e．Armenian Z）．Words like $\tau \Omega, \Psi+, 3 Y \Psi+, T Y \Psi Y \nexists A$ and many others would then have too strange a pronunciation．I believe therefore that we must look for some other way out of this difficulty，and I propose to consider Aüiksãntru－s as a Lydian form of Alexandros．It would be very precarious to give a definite explanation of a phonetic change in a language of which almost nothing is known．Still it may be worth while at least to suggest certain possibilities．（I）We may think of the change of $l>u$ in Umbrian and in many other Indo－Germanic languages and dialects，see von Planta，Grammatik der Osk．－umbr．Dialekte，p． 285 f ．The change of $l>u$ is also well known in Dutch，in English，and in Italian dialects．At Naples the article lo is pronounced uo．（2）In Armenian the Greek $\lambda$ is always rendered by $Z$ ，and this letter is commonly pronounced $\dot{g}(\bar{\xi})$ in all Armenian dialects．Again $\dot{g}(\bar{\xi})$ inter－ changes with $w$ in certain German dialects．A development Alek－＞Agek－＞Awek－ （or Aüik－）might not be impossible．（3）One might assume that Alek－had been changed to Anek－，since $l$ and $n$ are closely related and sometimes interchange，espe－ cially in Semitic languages．This $n$ might then have been changed to a nasal $\tilde{u}$ ，as probably in Armenian awj＂snake＂（＜ang）－and azwanel＂to anoint＂（cf．Lat．unguo）． In certain Turkish dialects of Northern Persia $\tilde{n}$ becomes $v$ in the neighbourhood of $u$ ； so Dr．H．Ritter tells me．

W．H．Buckler recognized the similarity between inscription L． 7 and L． 30 and saw that $\tau y 8$ in $7,1.11$ and $\tau 8$ in 30,1 ．I3 stand in parallel passages；this is a con－ firmation of the theory that $\tau$ is $\tilde{u}$ ．
$\tau$ is one of the most frequent endings in Lydian；cf．below Chaps．II，III and V．
The similarity between $\Psi$ and Cypriote $Y(=u)$ is probably accidental．

$$
z=\dot{c}(()) .
$$

It is hard to form a definite opinion on this curious letter which occurs very often in Lydian，mostly however in endings，and which has many different forms．

## 

No proper names containing it have been found except $2 A T \psi 19 A 83$＂the Sar－ dians＂，where $z$ is a case sign．Nor does comparison with the Phoenician and the

Greek alphabets help us．For 2 resembles a Phoenician yōd，it is true；but the yō is represented in Lydian by I，and the sign for this vowel cannot have been received by the Lydians twice at different periods，once from the Greeks and once from the Phoenicians．Of the signs occurring in Greek alphabets a certain kind of yōt would have some similarity with $\mathfrak{z}$ ，and so would a sign for B used at Corinth，Megara and in some Corinthian colonies．But here again we already have a beta in Lydian．We must therefore try to interpret this Lydian letter from the Lydian itself．In 19，1． 5 we read a word zMzTA，in 1． 8 zTAzA．It seems that we have here a case in which $z$ and $z^{T}$ have the same value．Furthermore a word which I translate＂these＂ （in the oblique case）is usually written $2 \mathrm{~A} \ddagger \neq$ ，but in $13,1.4^{z A 3}$ seems to be the same word．From these cases it would appear that $z$ has a certain relation to $t$ and to $s$ or $s$ ．Finally another argument may be advanced．The very frequent endings in $z$ represent the oblique case of the plural in Lydian，as will be seen below in Chaps．II，III and V．It will also there be shown that the nominative or subjective case of the plural very probably ends in $x$ ．．Now there is one very well known language that has the nom．plur．in $-k$ ，viz．the Armenian．I may add at once that this ending in Armenian is generally not considered to be of Indo－Germanic origin．In Armenian the genitive，dative，ablative of the plural have the ending $\boldsymbol{g}(t s)$ ， the accusative and the locative the ending $\boldsymbol{\boldsymbol { L }}(s)$ ，that is to say always certain sibilants． If then in the nominative Lydian and Armenian have the same ending，it is not un－ natural to assume that the endings of the oblique case are also similar in the two languages，especially since the Armenian $\boldsymbol{B}$ is also not Indo－Germanic．For these reasons I have assigned the value $\epsilon$ to the letter $\mathfrak{z}$ ，well aware of the fact that this is a mere hypothesis and that some one else may give a better solution of the pro－ blem．I cannot decide whether $z$ should be pronounced $t s$ or $t y$ or $t s$ ，although the last of these possibilities seems to me the most likely．${ }^{1}$

The endings with the letter $z$ are the following：$z A_{-}, z 4-, z M-, z \psi=, z \psi_{-}, z \mathcal{L}_{-}, z \mathcal{Z}_{-}$， $z_{1}-, z Y_{-}, z \neq-, z_{T}, z+-, z \uparrow$－．The ending $z_{A}$ occurs more than thirty times in these in－ scriptions．The endings $z 1-, z Y_{-}, z \mp, z T-, z+, z \uparrow$－may in reality represent only the ending $z$ ；the letters before it would then belong to the respective roots．Words in which $z^{2}$ occurs in the middle or at the beginning are the following：$\ddagger 191 z \uparrow A 8,1+z$ TTA
 キA\}z干Ag, T1ネMz. Some of these words, to which may be added 23MA3 (sansć) would with their many sibilants resemble Slavic words．

$$
\uparrow=\mathrm{q}(3) .
$$

My identification of this sign rests on a single word，viz．$\uparrow 11$ ปfy $\uparrow$ in inscr．I I，1．I．

[^1] These I translate "In the year I 5 of the great king Artaxerxes". I assume that quvellũ is the genitive of the word for "king". And I have chosen the value $q$ for $\uparrow$ in this word, because one of the Hesychian glosses (de Lagarde, Ges. Abhandl., p. 273, No. 26)
 but for the present I can offer no better explanation.

In almost all words in which $\uparrow$ occurs a consonantal value might plausibly be predicated for this sign. Words beginning with $\uparrow$ are the following: $\mathcal{B} \uparrow \uparrow A \uparrow, ~ Z M 19+\mp A \uparrow$,

 ソ ४ $\uparrow$, $\uparrow \wedge q+\psi \uparrow$.
 $z \uparrow 8 A A 1, z \uparrow \uparrow \circ 8 A \neq$. In two cases $\uparrow$ stands at the end, viz. $\uparrow \psi \nmid 9 A$ and $\uparrow \circ T 18$.

We have now to consider the words which contain $\uparrow$, but neither at the beginning


 A word like dqtdid seems to me impossible. And if my reading of the $\uparrow$ be correct, I am compelled to assume that there is a mistake in this word. Indeed I think that $\uparrow$ is a mistake for $\psi$, since $T \psi \nmid$ occurs half a dozen times in other inscriptions. In the word $2 \nmid 418 \uparrow \nmid$ the $\uparrow$ is not quite certain; this had therefore better be left out of the discussion, But $\uparrow Y \psi+A \& \uparrow 1$ is plainly written in inscr. $1,13,17$ and 26 . Its meaning must be "may he (she, they?) destroy (disperse)!" A reading vqbahẽnt seems to me somewhat unusual, but not impossible. For if we assume that this word is composed of two elements the first of which may be viq (cf. $2 \uparrow 17$, above 1. I2) and that the syllables before the stress sometimes lose their vowels as in Armenian, a word like *viqbahẽnt would have become vqbahẽnt. In Armenian we may compare vign, gen. vgni, or vstanal with all its derivatives. But in order to make such a word pronounceable, an $\partial$ is generally added: $v(\partial) g n i$, etc. Therefore the word in question may have been pronounced $v(\partial) q b a h e ̃ n t$.

I need scarcely say that in Lycian we are supposed to believe in pronunciations that look much more impossible than the one which I commend to my readers in this single case.

Nothing can be said on the phonetic side of the question. If $x$ was an unaspirated tenuis, $\uparrow$ might have been an aspirated one, but would then in some way interfere with the letter + and its value. Or finally $\uparrow$ might have been a $k$ with directly following glottal catch $\left(k^{j}\right)$, a sound which is not uncommon in Caucasian languages and which is the regular pronunciation of the Abyssinian $\boldsymbol{\phi .}^{1}$
${ }^{1}$ Prof. J. J. Hess called my attention to the fact that $c^{\prime}, k, q u^{\prime}$ etc. are known also in the Maya languages in Central America. These letters have been termed "cut letters", in Spanish letras heridas.

Inscription No． 21 which is a mason＇s mark contains only the letters M $\uparrow$ ；but these cannot bear on the question under discussion．

$$
a=2
$$

This letter occurs only in a few inscriptions as a variant of $1, i$ ．
In 7,1 ． 2 we read $\mp 0+$ ，but in all other instances this word is written $\mp 1+$ ，even in $7,11.9$ and 18 ．In $7,11.8$ and 14 we have $10+$ ，but commonly the word is spelt 11t．Other parallels are the following：

$$
\begin{aligned}
& \text { शサฯणT9A (I, B, 1. 5) : -y リाT9A (passim); } \\
& \text { rAq0 + (7, 1. II): rAqI+ (often); }
\end{aligned}
$$

$$
\begin{aligned}
& \text { ケ11019A (7, 1. II) and f111119A (7,1.13): T1!19A (30, 1. 13). }
\end{aligned}
$$

From all this I think it is sufficiently clear that 0 and I must be very closely related．Perhaps $a$ was pronounced like the Armenian $\subset$ ．This letter too sometimes takes the place of $i$ ．

## B．

The Lydian Alphabet in comparison with other Alphabets．
The Lydian alphabet is not directly derived from the Phoenician．The mere facts that the 8 occurs，that the letters $A \not \|^{\circ}$ are vowels，and that $y$ is added to the alphabet，are sufficient proof of this statement．For in none of all Semitic alphabets has the lower part of the Phoenician $f(b)$ ever been closed as in the Greek and the Italic alphabets．We must therefore assume either（1）that the Greek and the Lydian alphabets were derived from the Phoenician through an intermediate one which is now lost，or（2）that the Lydians received their script from the Greeks and modified it according to their own wants．The latter seems to me more probable；but I must at once add（ I ）that I cannot prove this theory definitely，and（2）that the Lydians must have received the Greek alphabet at a very early period，probably before $\phi, X$ ， $\psi(\rho, \chi, \psi)$ were invented and before $\equiv$ was used for $\xi$ ，and also before the Etruscans emigrated to Italy．

If then the Lydian alphabet is a daughter of the Greek，it must，I think，belong to the Eastern group of Greek alphabets．But since the characteristic additional let－ ters（East：$\phi, X, \psi=\varphi, \chi, \psi$ ，and $\mp(H)=\xi ;$ West：$X, \phi, \mathcal{W}=\xi, \varphi, \chi$ ）are not to be found in Lydian，at least not with values similar to those of the Greek alphabets，it is difficult to treat of this special question at all．

The letters which in Lydian and Greek have the same value and look more or
less alike are the following: $A(A), 8(B), 1(\Delta), y(E), \mathcal{A}(F), I(1), y(K), 1(\Lambda), Y(M)$, $\eta(N), \circ(O), 9(P), 3(\Sigma), T(T), Y(Y),+(X)$. The signs in parentheses are of course the ordinary Greek letters. The similarity would be much closer if the oldest forms, such as are used in lines running from right to left, were added above. Most of these values were inferred at once by comparing the letters heretofore found in Lydian inscriptions with those of the Greek alphabet. Thus Kretschmer (KeilPremerstein, Denkschr. Wiener Akad. 53; 2) recognized $A=a, 8=b$ (with certain restrictions), $\{=v, \quad\{=e$ (with certain restrictions), $\quad \mathrm{I}=i, \quad \forall=k, \mathcal{Y}=m, \boldsymbol{Y}=n$, $0=0, \mathrm{q}=r, \mathrm{~T}=t, \mathrm{Y}=u$. Some of the letters that he saw on the very badly weathered fragments at his disposal, are not confirmed by the inscriptions from Sardis. He stated himself that his $1(\gamma)$ and $\odot(\mathcal{F})$ were uncertain; the latter is probably $\circ$ with a flaw in the stone. His $\mathcal{L}$ may perhaps be ${ }^{2}$, his 9 may be in II, 1.8 a 9 , in II, 1. II a 3 . From his material he could not conclude that the round and the angular 1 are the same letter, viz. $v$. The letter which he took to be $\phi$ (in $11 y y \phi A$ ) is very indistinctly written, and I have found no corresponding word in the Sardian inscriptions; therefore I cannot say which letter should be read there. Kretschmer's very important discussion of the letter 8 will be referred to below.

Thumb in his article on the first Lydian inscriptions from Sardis adopted most of Kretschmer's identifications, correcting them in a few details, but he advanced several steps further in deciphering the Lydian script, especially with regard to those letters which are peculiar to the Lydian alphabet. He very acutely suggested that $M, \psi, \Psi$ might be nasal vowels (giving however different values from those assigned to them above), and after having discussed the question with myself, he concluded that $>$ and 3 might be sibilants. He could not know at that time that > in I a, 1. 3 (p. 43) is only a carelessly written 3.

A few of those Lydian letters that have equivalents in the Greek alphabet deserve special attention.

1 has a very unusual form; it looks like a minuscule $\Delta(\delta)$ of which the bottom has been opened $(\Delta>\Delta>1)$. I have not found a similar form in any Greek or Semitic alphabet. It seems that it must have been derived from $\Delta$ in some such way as that just indicated.
\& or \& with only two slanting lines is very rare. Kirchhoff has only one instance of a similar form; on p. 176 he quotes $\mathrm{F}=e$ from Eleutherna. In later Semitic alphabets however one of the three cross lines of $\exists$ is often omitted. In Phrygian and Lycian the three lines are preserved just as in Greek, Latin and Etruscan. Only in one case a Phrygian F is found, as Thumb has pointed out on p. 154 of his article.

The letter ${ }^{\circ}$ is always much smaller than the other letters. I think this is a sign of great age. The Semitic ${ }^{\circ}$ Ayin was originally smaller than the other letters, and it took some time before this letter was made the same size as the others for the sake
of symmetry. I know of course that a very small $\circ$ occurs also in late Greek inscriptions, but I do not believe that this has anything to do with the Lydian.

The letters $\mp$ and 3 have been discussed above on pp. 6, 9 f. I may here add that Kretschmer, p. 235 ann. 4 and pp. 313-314 was inclined to conclude that $\mathbf{Z}$ in Phrygian and $I$ in Lycian was a voiceless $s$. As to the origin of $\mp$ there is some doubt; it may be derived either from I (zayin) or $\overline{\text { F }}($ sämekh $)$. But I am sure that 3 is the Semitic $\check{S}_{i n}$. When the latter has the form $<$ as in a few old Lydian inscriptions it resembles the Phrygian $s$ and the $s$ of some Greek inscriptions from Laconia; see above p. io.

The ordinary T does not differ from the common Greek form of this letter, but the oldest $t$ has only a very short crossbar at the top. The latter form is again a connecting link between Lydian and Phrygian. For $t$ in the Phrygian inscriptions published in Chantre's Mission en Cappadoce, pp. 169 and ${ }_{17} 6$ has the same peculiarity.

The additional letters of the Lydian alphabet are $\mathbf{玉}(\tilde{n}), 8(f), M(\tilde{a}), \psi(\tilde{e}), \Psi(\tilde{u})$, $z(c), \uparrow(q$ ? $), \square(a)$ and perhaps $+(h)$. Two of these letters remind us at once of other alphabets, viz. $\mathbf{玉}$ of the Lycian $\tilde{n}$ and 8 of the Etruscan $f$. To my mind these similarities cannot be accidental. Whatsoever may be the ultimate origin of these signs, they prove that there are common features (I) between Lydian and Lycian, (2) between Lydian and Etruscan. At the present stage of our knowledge it is not safe to go further than a mere statement of these facts.

It is possible that $£(\tilde{n})$ was chosen because in the Phoenisian alphabet $\mp$ came after $n$; see above p. 9 . It has also been suggested that 8 is a modification of 1 . But I call attention to the fact that the oldest form of $f$ in Lydian seems to be $i$; cf. below, L. 24, at the end of Chap. III. Some scholars were of the opinion that 8 in Etruscan did not occur before the fourth century b. c.; cf. Pauly-Wissowa, Real-Encyclopädie, s. v. Alphabet. But Kretschmer has shown in his discussion of this letter (Denkschr. Wiener Akad., 53; 2, pp. 101 sq.) that this opinion is wrong. The facts which he states and the conclusions which he draws are of great importance.

Of the other letters + would again be the same as in Lycian, and perhaps the same as the $\chi$ of the Eastern Greek alphabets. The sign $a$ for a may be compared with Carian $\theta(e)$, but this is by no means certain.

How and when Lycians and Lydians derived their signs for the nasal vowels is impossible to say. It is not likely that the one people adopted them from the other, since there are remarkable divergences. However, a certain general resemblance cannot be denied; therefore it is possible that in both alphabets these signs were derived from the same source. As a mere suggestion I recall here the fact that the Copts when they adopted the Greek alphabet for their language added some signs that were taken from Egyptian hieroglyphic writing. Would it not be possible that the peoples of Asia Minor, when they wrote their native tongues with Greek letters, added some
letters derived from the old hieroglyphic writing of those countries, i. e. the Hittite?
My readings of $z(\mathcal{\varepsilon})$ and $\uparrow(q)$ are uncertain. With the latter may be compared a Phrygian $\uparrow$, which Kretschmer, p. 235 , ann. 1. thought to be perhaps a variant of the koppa, or perhaps Cypriote 1 which means ka. Again I am not sure whether 2 and $\uparrow$ might not have had their prototype in the Hittite. The ${ }^{z}$ agrees curiously with the Armenian 2 (é). This gives rise to the question whether the Armenians did not draw some of their letters from Asia Minor alphabets. But it would lead us too far here to enter into this problem. And Prof. Andreas is of opinion that the Armenian alphabet as a whole was derived from Sasanide Pehlevi.

In conclusion we may repeat that Lydian script is in the main derived from the Greek or from an intermediate source between Phoenician and Greek, and that certain Lydian letters point to a relationship with Lycian, Phrygian and Etruscan. But it is not possible yet to trace every one of these letters back to its origin. And even in the history of the Greek alphabets several problems still remain to be solved.

## CHAPTER II.

 The Bilingual Inscriptions.
## A.

The Lydo-Aramaic Bilingual Inscription from Sardis.

$$
(L . \quad I 7)
$$

Funerary Stele; dated 445 or 394 b. c. Marble. The stele was broken into two pieces; the break runs through the top lines of the Lydian part. The decorated top is 63 cm . high and 53 cm . wide. Adjoining the top there is a narrow uninscribed piece of the die preserved, $16 \frac{1}{2} \mathrm{~cm}$. high and $45 \frac{1}{2}$ wide. The lower, inscribed piece of the die is 82 cm . high and 46 (top) -47 (bottom) cm . wide. The decorated top is $16^{1 / 2} \mathrm{~cm}$. thick, the die $1 \mathrm{I}^{1} / 2 \mathrm{~cm}$. The Lydian letters are $3 / 4-1^{3} / 4 \mathrm{~cm}$. high, the additional letters in $1.3: 1 / 2-1 \mathrm{~cm}$. The Aramaic letters are $3 / 4-2^{3} / 4 \mathrm{~cm}$. high, the additional letters in 1. $4: 1 / 2-I^{1} / 4 \mathrm{~cm}$. The Aramaic letter $\boldsymbol{N}$ is $2-2^{1} / 2 \mathrm{~cm}$. wide. The stele was found on the northern slope of the Sardian necropolis. Between the two parts of the inscription there is a monogram, probably a mason's mark.

The Aramaic Text.

> IIIII .
> 2.
> 3.

$$
\begin{aligned}
& \text { • } 5 \text { מערתی א או לרך }
\end{aligned}
$$

$$
\begin{aligned}
& 8 \text { קצינה טין ומין ומנדעמתה יבדרונה וירתה }
\end{aligned}
$$

1. On the 5th of Marhešwān of the roth year of King Artaxerxes,
2. in the city of Sardis. This stele and the cavern [and] the funerary
3. couches (?) and the fore-court which is above Sardis (?), this its fore-court, [they are] the property
4. of MNY, son of KMLY, of SRWK. And if anybody against this stele or
5. the cavern or the funerary couches (?) opposite the fore-court of this cavern,
6. that is to say, if anybody destroys or breaks anything, then
7. may Artemis of KLW and of Ephesos with regard to his court, his house,
8. his property, soil and water, and everything that is his disperse him and his heir(s) (sic!).

There are still and will probably always remain a number of doubtful words and passages in this inscription. This is mainly due to lack of knowledge of the Aramaic language on the part of the man who translated the Lydian into Aramaic, and partly also to the use of some words not known in Aramaic literature. The translator of this inscription tried to be very literal, and seems even to have followed Lydian syntax mechanically, but he obscured the meaning of several passages. He even used אערח as a masculine (in l. 5-6) and used the masculine plural חa referring to two female deities. This indicates that the Lydians had no grammatical gender in their language. Moreover it seems that the mason also made some mistakes when he carved the Aramaic inscription. All this is not so very much to be wondered at if we take into consideration the probability that nobody spoke Aramaic at Sardis. The people spoke Lydian, the higher officials Persian, and Aramaic was only an artificial language in those western provinces of the Persian Empire where no Aramaeans or Jews lived. But it is much to be regretted that the one document on which the entire deciphering of Lydian rests is so obscure.

I wish to state at the very outset that the interpretation of $\begin{aligned} & \text { IM } \\ & \text { is due to }\end{aligned}$ Prof. Andreas, and that Prof. Lidzbarski has been of great help to me, for he recognized the curious usage of $\boldsymbol{\sim \pi} \boldsymbol{\pi}$, and above all found the true meaning of the
 importance for the interpretation of the last two lines of this inscription.
L. 1: The reading of every letter is certain. Only the first $\boldsymbol{\psi}$ in the name of the king is a little damaged. The question arises how the name שחחתח should be read. It is, as Prof. Andreas has shown, in Lidzbarski's, Ephemeris, II, p. 22 I, ann. 2, a rendering of the truly Persian form of this name, i. e. Urtahsas (s)a. In the Old Testament we find the forms Artaȟ̌asta, Artahsaśa and Artahzast. ${ }^{1}$ The Aramaic papyri of Elephantine have the same form as our inscription from Sardis. In this form Prof. Andreas thinks to be a rendering of the Persian sound $s s$ or $\xi \xi$ into which the Old-Iranian $p^{r}$ had developed at the time of the Achaemenids. This is possible: in that case we should have to read Artahsass, without any ending; for the ending a would undoubtedly have been expressed by ぶ. But שםשחภาs might also be transcribed Artahsassas, a form which would be very natural at Sardis; for there we find in Lydian $3 \Psi 4 \not \subset \mp A\} \nexists A T q A$. In the latter the Iranian $\rho^{r}$ is certainly rendered by $s s$, and the last 3 must be a Lydian ending.

[^2]L. 2: On the name aman abe above p. I2. I have translated the word בירתא by "city". This word generally means in Aramaic "palace, castle, fortress", and is sometimes also applied to small towns. Here it cannot mean "palace" or "fortress", since the palace was in the plain beyond the Paktolos, and the fortress, i. e. the Acropolis of Sardis, on the other side of the hills. It is therefore probable that בירתה was used for the whole of Sardis because it was a fortified city. The word is of Persian origin (stūna). We should expect $\Delta$ instead of $\Omega$, since in Syriac as well as in Arabic the $t$ of this Persian word is rendered by $t$. But in Greco-Phoenician words $\tau$ and $\Omega$ also correspond with each other, especially in the early centuries. The Persian word

means "column", and the same meaning has been kept in Syriac and in Arabic. But here must mean "stele", because "this פתונח on which the inscription is written.

After the $\boldsymbol{N}$, i. e. the first thing that a man reading the inscription would see, follows the מעֹרתא. This Aramaic word means "cave, cavern" etc. There is no doubt that the cave in the rock, the Lydian tomb, was meant. Drawings of such rock tombs by Prof. H. C. Butler are given in the illustrations on p. 25 and p. 27.

The last word in 1.2 is $\mathbb{N}$. The $\mathbb{N}$ at the end is smaller than the other letters, because the space for it was too narrow, and the mason did not wish to put Sardis Expedition VI.
it at the beginning of the next line．Before this word a 9 must be supplied as it
 are separated by $i \kappa$ ．In 1． 2 this curious word is combined with $א ภ า$＂places＂，in 1． 5 it stands by itself．Its meaning can only be guessed．As 7 and 7 are in this inscription absolutely alike，we do not know whether we should read אחּ so long as the word has not been identified．The Arabic word $\chi^{-0} 0$ ，is scarcely to be compared here．Nor do I believe that our term might be an Aramaicized Lydian word； the corresponding word in Lydian is $¥ A \mp \mid q+A 1$ ．Since in similar funerary inscriptions the different parts and belongings of the tomb are mentioned，I propose to translate this expression by＂funerary couches＂．For the most characteristic feature of these tombs is their couches（see plan on p．27），and it would have been very natural that the owner of a tomb should make special mention of the fact that all couches belonged to his
 might also mean＂tomb－niches＂，like Nחనג（NTH）in Nabataean and Palmyrene in－ scriptions．At all events it seems to me most probable that the term denotes the loculi where the dead were buried，of whatever kind these loculi may have been．

L．3：The plural NתרתN is unusual．We should espect Nית
 In writing פּ I follow a suggestion of Prof．Andreas．He took as a base for explaining this word the Armenian 弓пшщшןш4（hraparak），for which he postulates an old Persian＂fra－pädak．This Armenian word means＂place，court＂．Its derivation from the Persian is certain．For Persian fra－becomes in Armenian hra－；cf．the examples in Hübschmann，Armen．Gramm．pp．I8 s sqq．And Persian or Syriac dt often becomes $r$ in Armenian；cf．for instance $Z \sqcap E \boldsymbol{m}^{\prime}(h r e a y)=$ Karams（ $\left.\bar{\imath} h \bar{u} d \bar{a} y \bar{a}\right)$ ． The word＂frapadak is not found in Old Persian；but this is probably due only to an accident．The word＂p $\bar{a} \mathbb{d}_{a k} k$ must have existed；for Modern Persian the same word in a later stage．And for pãda－the meaning＂Standort，Heimstätte＂ is given by Bartholomae，col．887．This combined with fra－（Latin pro），is exactly the word required for our จコา．

Prof．G．Hoffmann called my attention to the Biblical 7 （parbār），which occurs in I．Chron．26，18，and which is supposed to be an annexed building on the west side of the temple at Jerusalem．Now Prof．Andreas suggests that a mistake for פั and that here also a sort of fore－court is meant．The word פרוֹ，


If $フ$ In our inscription is the Persian＊frapāda－，i．e．＂fore－court＂，it can here mean only the open space before the tomb．Most of the tombs at Sardis have such a small＂fore－court＂，corresponding to the dromos of Greco－Roman tombs．In this ＂fore－court＂our stele was standing，just as Nabataean and Greek stelae stood in the dromoi of the tombs of Umm idj－Djimal；cf．my Nabataean Inscriptions，Leiden 1914，
p. xII and p. 53. It might very well be that the man who owned the tomb inside the rock wished also to declare his claim on the area leading up to it, so that nobody. should trespass upon his rights.
 intelligible. Since I have not been able to find in Aramaic or Persian anything that would throw light on the word I think there must be some mistake. Seeing
 be considered to have been carved by mistake, the reading would be assured. These words would then be translated "the fore-court which is above Sardis". As a matter of fact the tombs near which the inscription was found are high up on the hill whence the town in the plain could be seen. A Greek inscription from $\mathrm{Si}^{\circ}$ in the
 ขะtiv ह́ттnxuia, because the statue of the goddess $\mathrm{Se}^{\text {aci }}$ stood in a place from which the


Groundplan of a tomb with two chambers and six couches.
Haurân country could be overlooked. But of course this parallel does not prove much, and my interpretation of the words (ד) זי על םפר still remains very doubtful.

Now with the words זנח פרבדח the anacoluthic constructions of our inscription begin. They can only mean "this its 7 ²", i. e. "this its fore-court", if our translation be correct. Why these words were repeated I do not know. Perhaps emphasis was laid upon them because the inscription stood in the fore-court, and the people who read it were within the 7 .

The last word in this line may be אחאח means "property". The translator may have thought of some derivative of the root דחוֹ, cf. the Syriac rawark "property"; for this root might very well be spelt with a 7 , although we read ${ }^{\circ} r$ instead of 17 , since the same is to be observed in the Aramaic papyri of Elephantine. But it seems to me almost certain that the writer chose this word which he probably pronounced ahad, (or perhaps akad, if the Lydians
had no $(2)$, because at the very same place in the Lydian part of our inscription $\backslash A \nmid A$ is the word used.
L. 4: The names of Mane and Kumli are recognized without difficulty. But the additional word is indistinctly written. The letters are almost certain, but the letter before the last has a very unusual form. Its top looks like that of a $7,7, \beth$ or $\mathcal{J}$, but at the bottom it has a small curve towards the right which is never found in any of these four letters. This curve brings the letter into near relation with, and $i$, and I believe therefore that it is nothing but an incomplete 9 . This would be well in keeping with the meaning that the added word seems to have. Greek inscriptions from Asia Minor, especially those from Lycia, Lydia and Phrygia, very often mention, besides the name of the person and his father, that also of the demos, the tribe or the place from which he came. At certain periods this seems to have been a very popular fashion. A noun derived from the name of a place would in Aramaic very properly have the ending - $\bar{a} y \bar{a}$. And $\begin{gathered}\text { D } \\ \text { would } \\ \text { then mean "a man from Sirūka" }\end{gathered}$ or "Siluka"; cf. the Lydian text. It is significant that the mason should have left out the gentilicium both in the Lydian and in the Aramaic text, so that a correction was considered necessary. The facts were probably these: the man who gave the Lydian copy to some Persian official for translation had omitted the word. The Persian naturally did not write it in the Aramaic text. Then the mason received both copies and carved them on the stone. Later on when the man who had ordered the inscription looked at the finished work and discovered his mistake he caused the correction to be made in both texts. This serves as a valuable hint to us modern interpreters; for hence we may infer that the two parts of the inscription must correspond with each other very closely.

After the gentilicium follows the second part of the inscription, containing the curse against him who should try to interfere with the monument: these curses are known from so many Oriental and Occidental inscriptions and manuscripts that it is not worth while to quote parallels. The syntax of our formula is not quite clear, but I can see no other way out of the difficulty than to assume that the construction is anacoluthic and that the first מן אן is taken up again by אחר מן זי. If this be so, the first relative clause would have no verb. Prof. Lidzbarski was of opinion that yל contains the verb, and he proposed a verb "yָ "to wrong", which the translator of the inscription would himself have created, thinking of 'auwel and 'auwal. Although I do not deny the possibility of this interpretation, in view also of the Ethiopic ond which is used in the ground-stem, I think that יחבל או יפרך are the real verbs that were intended to be connected with the first מן אן אח , and that the second was used partly because the verb would have been too far separated from its subject by the interposed objects, and partly also because in the Lydian original the corresponding words were used twice.
L. 5: The preposition לקבל זי means "in front of, opposite". The funerary couches opposite the fore-court would then be those in the first room of the cavern. For the tombs generally contained two rooms, one at the back, probably for the man and his wife and sometimes for his children, and one in the front destined for more distant relations or for other members of the household such as freedmen or the like (see p. 27). Persons of the latter class are sometimes included in the funerary inscriptions of Asia Minor.
L. 6: אחר is an Aramaic word, but the Aramaeans scarcely ever used it in the sense which it must have here. Prof. Lidzbarski called my attention to the use of Persian pasía(éeta) which he thinks was the prototype of this and to the fact that in Pehlevi $\mathrm{N}_{\mathrm{N}}$ and pas correspond. The Persian pasčaeta is often used to introduce the apodosis or even merely to connect sentences. Originally meaning "afterwards" it gradually came to be used for "then, furthermore, thus, and". I think Lidzbarski is undoubtedly right in this suggestion. The word meaning in Aramaic "to rub to pieces", would scarcely have been employed here by a man whose native tongue was Aramaic. Again we see that the translator had but a slight and superficial knowledge of that language.
L. 7: The words בתפשׁו certainly denote the lake of Koloë and the town of Ephesos, at each of which places there was a famous sanctuary of Artemis. But here we have again a linguistic difficulty. The words are perfectly
 since they were different deities. But the stone bears the letters to my mind mean only "and the Ephesian one". Now in correct Aramaic "the Ephesian one" referring to Artemis should be אפששׁית. Our "worthy translator, however, knew very little of the status emphaticus and the status absolutus, and certainly nothing of grammatical genders. I think he was perfectly capable of translating "the Ephesian Artemis" by "ארתמו אפששׁי.
L. 8. The word מנדעמתח would literally mean "his anythings". This is not good English; neither is it good Aramaic. The plural of the indefinite מנדעם together with a suffix is very conspicuous in Old Aramaic. The form מנדעמחא without the suffix occurs in the papyri from Elephantine, and the masculine plural is found in later dialects; cf. Nöldeke, Mandäische Grammátik, p. 186 and ann. 4. - That we should expect יבדרנה instead of has been said above on p. 24. The last word is which is the singular, whereas from parallels in other inscriptions we should expect the plural. Perhaps this is another mistake of the translator. The choice of the verb meaning "disperse" is also very strange. What the writer intended was probably "may the gods drive him away from his property", or "may the gods disperse his property". The translation given above is an attempt to imitate the curiously worded Aramaic phrase.

## The Lydian Text．

Unfortunately the beginning of the Lydian text was destroyed when the stone was broken．This lost part contained the date．The end of this date consists of the words T111才A\＆T1FI rAq－1．The words which then follow are also partly destroyed． But the missing letters can be restored with approximate certainty from a few other funerary inscriptions that will be discussed below in Chap．III．By comparing these inscriptions，especially No． 9 ，we find that we should here read the following words：
 end of 1.3 we should supply the word $\mp 1+M Y$ which generally follows $T I \not A A$（or a deri－ vative of the same root）and which is here found in 1． 6 after YIT＊A．In 1． 5 parts of an $\circ$ are to be seen over the 1 ，and as the word $1019 A T T 8$ is a very common one，almost always combined with $3 A Y M A$ or $T A Y M A$ ，there is no doubt that here too it must be read．Now taking these restorations for granted I shall try to present in parallel columns what appear to be the corresponding words of the two parts of the inscription．In the first column I give my English translation of the Aramaic，subject to all reservations pointed out in my commentary，in the second the Lydian text．
（1）This stele
（2）and the cavern
（3）［and］the funerary couches（？）
（4）and the fore－court which is above Sardis（？）－this its fore－court－
（5）［they are］the property of MNY son of KMLY of SLWK．
（6）And if anybody against this stele
（7）or the cavern
（8）or the funerary couches
（9）opposite the fore－court of this cavern－
（IO）that is to say，if anybody destroys or breaks anything，
 of Koloë 干1F M11ヶメ
（12）with regard to his court，his house， his property，soil and water，and all that is his disperse him and his heir（s）．
We cannot expect that absolutely every word in the two parts of a bilingual in－ scription of this kind has been literally translated．But comparing the columns we soon notice that the translation is as a whole accurate enough to allow us to identify most

[^3]of the Lydian words．Only in $\S \S 4,9$ and 12 wie cannot as yet be sure of the meaning of every word．I shall now give those Lydian words of which the meaning seems to be established with reasonable certainty．

119ฯ TF』 is in Aramic זנה Dתונָ＂this stele＂．In Lydian therefore est means ＂this＂and mrud＂stele＂．A number of other inscriptions begin 3A YM7 334（No．8，9， 11，13，15，26）；three（No．1 A，B，and 6）have 3 A YMA 3s．Now we know from § 7 on p． 30 that－AYMA is in Aramaic מערתא＂cavern＂，and we find another word for ＂this＂，viz．e＇s＇s or $e '$ ，employed when the word vãnas＇＂cavern＂follows．We conclude therefore that when a word ending in $-d$ is used，the demonstrative pronoun is est， but with＂a word ending in $-\xi$ it is ess．Furthermore in $\oint 6$ and 7 we have ryqM $r \neq y$ and TAYMA TFF．Judging from the context，$T$ is the sign of the oblique case，whereas 3 and + are the signs of the subjective case．Now all four words es $(s)$ ，est，mrud，and vãna＇s have the same sign in the oblique case：esĩ（derived both from es＇s and est）， mruũ，vãnaù．The stem of the demonstrative pronoun is therefore es－，but when $s$ ， the ending of certain substantives in the subjective case，is added，the $s$ is assimilated by the $s$, and we have es＇s or es．Our first results then are three Lydian stems：es－ ＂this＂，mru－＂stele＂and vãna－＂cavern＂．
 tive pronoun is omitted in the Aramaic．Nor is there any rule in Lydian with regard to the use of this pronoun；generally it is used with every word denoting a different part of the tomb，but sometimes it is omitted in Lydian also．Here however to the pronoun another letter is added，viz．$x$－；this corresponds with the Aramaic ；＂and＂． We know then that in Lydian＂and＂is expressed by the suffix $-k$ ．

In $\S 3$ ，I have placed only the word $\geqslant A \mp \mid 9+A 1$ ．It is very probable however that before this we should supply［犴y］．The word lahrisak is here rendered in Ara－
 p． 26 I inferred the meaning＂funeral couches＂for this term．The word is in the plural in Aramaic，and must be in the plural if my translation is correct；for there were always several couches in every tomb．But what is the sign of the subjective case in the plural？I think，but cannot be absolutely sure that it is the＊．For it ap－ pears that when the $x^{*}$＂and＂is added the case－ending is dropped；cf．esk mrud 5,1 ．I ＂and this stele＂（for＂est－k），and mruk II ，1． 2 ＂and the stele＂（for＊mrud－k）．If we read $\forall A \mp \mid 9+A 1$［ $\forall \mp \mathcal{F}]$ the $-k$ in esk might be the conjunction＂and＂，and the $-(a) k$ in lahrisak would be the subjective case of the plural．The oblique case of the plural which has the ending $2 A=$ is much better known．In § 8 we read $2 A \nmid 9+A 12 \neq 2 \neq A$ ， and in the other inscriptions there are over thirty instances of words with the ending $z A$－．Inscription 9 has in the first part the words $\forall \neq 19+A 1$ 仠 and in the second 2AF19＋A1 ZAZFs．In the form lahris－k an $a$ is perhaps omitted，so that lahrisak should be read．From the formula es－$k$ lahrisa－$k$ one might conclude that the demon－
strative pronoun was the same in the singular and in the plural, if used as an adjective, as for instance in modern Persian and Turkish. But the form esćać with lahrisać shows us that this is not the case. I believe therefore that the form es- $k$ meaning "and these" should really be *es-k-k, and that where two $-k$ came together at the end of the word only one was written. The paradigm of the demonstrative pronoun, so far as we now know it, would be:

> Subj. Case Obl. Case
Sing.:
es(s). est
esü

Plur.:
esk
esćać

In est́ác the $\bar{\varepsilon}$ has been reduplicated; for "esać or "esćc would be the form expected from the analogy of other plural forms.

In $\S 4$ there seems to be a divergence between the Lydian and the Aramaic. We must compare with one another § 4 and $\S 9$; the former reads helak kudkit ist esîu vã(naũ) bütarvod, the latter read bukit kud ist esĩ vãnaũ bütarvod. The translation of the former is very uncertain in the Aramaic ("and the fore-court which is above Sardis, - this its fore-court-"); the latter is reasonably certain ("opposite the fore-court of this cavern"). We know that esĩu is the oblique case of "this", that vãnaũ is that of vãna-s "cave". The word ist occurs twice in No. 4 together with Sfarũ; I am tempted to translate ist Sfariu "here in Sardis", ${ }^{1}$ since $\Psi 9 A 83$ is the oblique case of 19A83, as ry9y is of 119ฯ. ${ }^{2}$ Now the word "fore-court" occurs three times in the Aramaic, twice where the Lydian has vãnaũ bütarvod, and once where the Lydian has helak. The latter may stand for hela-d-k, and helad might then be the word for "fore-court", whereas vãnaũ bũtarvod might be a synonym, meaning "that which is before the cavern". But we cannot as yet reach a solution of these questions. The same is to be said about kudkit and bukitkud which in all probability are equivalent to the Aramaic לקבל זי "opposite". A definite opinion on the grammatical character of these words, their prefixes and suffixes, cannot be given. The only equivalent of Sardis in the Aramaic passage - if this be correctly read - would be TFI, "here".
§ 5 again is plain and acquaints us with several important facts as to Lydian grammar. It reads akad Mane-lid Kumli-lid Siluka-lid and is to be translated "(they are) the property of Mane the son of Kumli of (the town of) Siluka."

The words "they are" are not found in Aramaic; for in most Semitic languages the "verbum substantivum" or the "copula" or whatever it may be called is omitted. I presume that this is the case also in Lydian, for sentences like es vãnas Mane-lis Alu-lis, "this tomb (is) that of Mane, son of Alu", or "this (is) the tomb of Mane, son of Alu", occur several times in our inscriptions. The word $\backslash A \nmid A$ is in the same

[^4]place as the Aramaic ${ }^{7}$ א, which above has been translated "the property". I believe this meaning to be quite certain, and I cannot refrain from calling attention to the fact that Pauli in his Altitalische Forschungen, II, 2, pp. 99-100, suggested the meanings "property" for the Etruscan word acil and "he appropriated, dedicated" for acilune in the Lemnos inscription. ${ }^{1}$

The three words following have the ending -lid. The most natural supposition would be that this was the ending of the genitive in Lydian. But though genitives of the first and second names could easily be understood, that of the third name which indicates the place whence the man came, ${ }^{2}$ would be difficult to explain. It might however be claimed that the third name is that of the grandfather, or else a title. But even then -lid cannot be the genitive: for it is used only when the preceding word ends in $-d$, and when that word ends in $-s$ the ending $-l i s$ is used instead of -lid. This may be inferred from the following list:

$$
\begin{array}{ll}
\text { vãnas Mane-lis Alu-lis } & (\mathrm{I} \text { a, b) } \\
\text { mrud Alikuerid...... } & (5,1.1) \\
\text { vãnaśs Kumli-lis Ate-lis } & (8,1.1) \\
\text { akad Artabãna-lid } & (9,1.3-5) \\
\text { akad Karo-lid Sabüa-lid } & (1,1,1.3-4) \\
\text { vãnas Ata-lis Tivda-lis } & (13,1.1) \\
\text { vãnas Sivãmlis Armãvlis } & (15,1.1) \\
\text { mrud Atrasta-lid Timle-lid } & (26,1.2) .
\end{array}
$$

I believe therefore that $-l i s$ and -lid are the endings of adjectives denoting appurtenance or origin, and that akad Mane-lid Kumli-lid Siluka-lid are all three nominatives or subjective cases. The $-s$ of -lis corresponds with the ending $s$, the $-d$ of -lid with the ending -d. Expressions like Marcus Tullius, Teiquúivvos Aías, etc., are too well known to be here discussed at length. But it is a new feature that the adjective derived from the name of a place should also be added in the same form. It is of course not only possible but even highly probable that these adjectives of appurtenance are derived from the genitive and that $l$ was originally a termination of the genitive.
§ 6 begins $\mp 1+M Y$ TIXA, and these words are the equivalent of $\begin{aligned} & \text { Q } \\ & \text { which means }\end{aligned}$ either "whosoever" or "if anybody". In § $£$ אמחר "מן "that is to say, if anyboby". The ending YI- must here correspond with "that is to say, then". The beginning of the apodosis is again marked in the Aramaic by אחר "then", in the Lydian by T MネA8. There are three correlated words in Lydian:
 by Prof. Thumb, and he correctly concluded that -8 must be a kind of prefix. The common element in these words is $\forall A$. This occurs in Lydian with many different

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suffixes．Besides TIXA and YITシA we find $\geqslant A$ without addition；furthermore $Y I \geqslant A, T A \geqslant A$ ，
 what all these different endings mean．But it seems to me that the meanings of $T I-, Y I-, Y I T-$（probably for $Y I T I-$ ）and $\Psi \Upsilon$－can be guessed with some certainty．$\mp 1+M Y \geqslant A$ and $\mp 1+M Y$ TIXA evidently mean almost the same．They both occur in similar sen－ tences at the beginning of the second part of the funerary inscriptions．I take TI－ to be a sort of particle either connecting the two parts and leading over from one to the other，or having a generalizing idea well suited for a conditional clause；its meaning would be either like that of the English＂now＂，German＂nun＂（wenn nun ．．．），Greek $\delta s$ or $x:(\alpha i x \in!$ ），Ethiopic $-\hbar \bar{\imath}$ and the like，or of the English＂－soever＂，German＂nur immer＂．The Aramaic here gives 9 ＂and＂，a word that in Hebrew，Aramaic，Arabic， has to serve a great many purposes．The suffix 71 －must convey，judging from this inscription，rather a consecutive or conclusive idea，like the German＂also＂．r y－on the other hand seems to me to be a＂personal suffix＂，i．e．a suffix taking the place of a personal pronoun．I conclude this from such sentences a akmü－t his fẽnsüubid $f$－akmũ－t Hũdãns Artamu－k vqbahẽnt（No．1）．As we shall see below in § io and § 12 fënsüibid equals＂destroys＂and vqbahẽnt＂may they disperse＂．Now in the sen－ tence just quoted there is no object whatsoever unless it be $-m \tilde{u}$ ，or perhaps $-m \tilde{u}-t$ ． A fuller form of $-m \tilde{u}$ ，used when it stands by itself，not as a suffix or encliticon，seems to be $\tilde{e} m \tilde{u}$ ；cf．$\mu .06$ and $\dot{\varepsilon} \mu o o^{\prime}$ ．Thus when we take－mũ to be a＂personal suffix＂the phrase makes very good sense and is perfectly complete：＂if anybody destroys this， then may Hũdãnś and Artemis disperse（i．e．punish）him＂．If this be correct，mũ would mean＂him＂and＂it＂，like the personal suffixes in all Semitic languages and in modern Persian．And we have already seen that $\Psi$－is the sign for the oblique case．

Returning to our sentence we may translate akit nã－his＂if now anybody＂．Both his and $n \tilde{\alpha}$－his occur after akit，akin，akm etc．It appears that his is an indefinite pronoun with about the same meaning as $\tau<s$ ，quis，and that $n \tilde{\alpha}$－is a prefix which emphasizes the indefinite meaning：＂whosoever＂，quicumque，etc．Of the meaning of $a k$ we shall have to speak again in $\S I I$ ．－The words $\Psi ฯ q ฯ \Psi \mp v$ are the oblique case of オуवฯ T干y．
§ 7．The word $\$ 18$ is rendered in Aramaic by $1 \mathbb{N}$＂or＂．The meaning of buk is therefore established．The $-k$ at the end may be the same as the connecting post－ position－$k$ which in other cases means＂and＂．On $\Psi$ A पM才 TFy see above p． 3 I．
§ 8．The words buk esćać lahrisać＂or these funeral couches＂（oblique case）need no further discussion after what has been said above on P． 3 I and in § 7 ．
§ 9．I have no satisfactory interpretation to offer．In § 4 we read T干ITIXAYy f0ィ9ATケタ［TA Y］M才 TFま and in inscr．9，11． $2-3$ and Il．9－Io we have exactly the same reading，with the single difference that $T \mp I$ is omitted．But here the sentence begins fy＞t｜xys．If the correct formula is kudkit es $\tilde{u}$ vãna $u$ bũtarvod it is possible
that bukitkud has been erroneously carved by the mason who still had in mind the word buk which he had just written twice. But this is very problematic. See also above p. 32 , commentary on § 4 .
§ 10 is in Lydian aktin nä-his helük fênsüù(b)id. The original has $1181 \uparrow \mp 4 \uparrow 8$ but the second 8 is certainly a mistake for 8 , since the word $1181 \uparrow \mp 4 \nmid 8$ occurs over a dozen times with 8 in the last syllable. For the word aktin (for *ak-it-in) we have postulated the meaning "wenn nun also". The word helûk is the equivalent of Aramaic מנדעםם "something, anything". The stem of this word is probably hel-; for - $\mathfrak{u}$ is the sign of the oblique case. The $-k$ at the end cannot here mean "and", because there is no "and" in the Aramaic and because an "and" would not agree with the context. Nor can it be the sign of the plural, because there $-k$ is used only in the subjective case, and the objective case of the plural ends in -(a)c. I think therefore that $-k$ here has a generalizing meaning, like that of $-q u e$ in the Latin quidque. We might then, so far as the formation is concerned, compare his: nü-his with quis: ali-quis, ${ }^{1}$ and helũ: helü-k with quid: quidque. The first group has prefixes, the second has suffixes. The verb fennsüubid is rendered in Aramaic by two verbs "he destroys or breaks". In Lydian it probably had a more general meaning than the two special words in Aramaic. It is therefore best translated by "he damages". The word is probably composed of the prefix $f$-, another prefix (originally preposition?) $-\tilde{e} n$-, the stem -sü-, the sign of the mood -ib- and the sign of the person -id. But this is only guess-work.
§ II begins with fakmü. Here we have the apodosis. The conditional clauses are expressed in Lydian by $a k \ldots . \ldots f k$. .... It is not absolutely necessary that they should mean "if . . . .then". They may also mean "as . . . . so" (ut . . . ita). The suffix -mũ I believe to be a personal suffix "him". In Semitic it would be unusual to find a personal suffix with a conjunction, it is true; cases like ${ }^{\circ}$ innahu and the like are exceptional. But in Persian we should have a perfect analogy. The name of Artemis in Lydian is Artimus, in Aramaic ${ }^{\circ} \operatorname{Art}(e) m \bar{u}$. We have here again the ending ${ }^{-s}$ as a sign of the subjective case of a certain class of words. But this $s$ is very loosely connected with the stem of the word; for it is dropped not only when formative elements are added like the -lis of the adjectives of appurtenance (Artimulũ occurs in the inscription from Falanga), but also when the particle $-k$ is added (Artimu- $k=$ "and Artemis"). The words Ibsimsis and Kulumsis are adjectives derived from Ephesos and Koloë. The former was probably called in Lydian "Ibsis (<*Ibisis), the latter Kulu (or perhaps Kulus). But why has the ethnicon here the ending -msis, whereas above on p. 33 another ethnicon or gentilicium ending in -lis was discussed? I think that they have different meanings and that between the two there is a difference similar to that between Turkish izmir-li and izmir-de-ki. Both mean "Smyrniote", but the former means a man who comes from Smyrna or belongs there in general,

[^5]the latter denotes a man who is or lives at Smyrna. In Lydian then Ibsimsis would be the name of Artemis, because she dwelt there. This word seems to have a double adjectival ending: the sibilant was repeated as for instance in está , see above p. $3^{1}$. The ending -mis occurs also, e. g. in Sivraùmis, another epithet of Artemis. Perhaps *Ibsimis existed also in Lydian; this may have become *Tssimisis and then Ibsimsis, as akitin became aktin. The forms in -msis would then be a sort of hybrid. If adjectives ending in -lis were derived from a genitive ending in $-l$, those ending in -mis $(-m s i s)$ may have been derived from a locative ending in $\cdot m$.
§ 12 gives a number of nouns in the oblique case; some have the ending $x$-, some are without it. But there is much doubt with regard to the equivalents in Lydian and in Aramaic. In Lydian we have three pairs: (1) aaraù biraùk, (2) kùiddaũ kofuùk, (3) hiraù helùk; after these there is the word bilüu, which I take to be the missing word for "his". In Aramaic we have (1) his court, his house, (i. e. "Haus und Hof", "house and home") ; (2) his property ; (3) soil and water; (4) and everything that is his. It is safe to assume that the first two words are the same in Lydian and Aramaic, since they make a good pair, and since they occur together in Inscr. No. 30 . We should then have aaraũ biraũ⿸厃 "court and house". Which of the two means "court" and which means "house", may be doubtful. If we were to keep the same order in Lydian as in Aramaic, we ought to translate the Lydian "property and soil, water and all that is his". But such a combination does not commend itself. Moreover the word hiraũ would mean "water". Now this word is found in several other inscriptions, but never with the word kofuit which would mean "soil", if we keep the same order in both parts of the inscription. On the contrary, I think I can prove that hiraiu cannot mean water, but must be something else. Inscr. 13, 1. 5 ends fakmũ Artimus hiraù helük vqbahẽnt. It would be very strange to translate this curse "may Artemis destroy him and all the water", whereas a translation "may Artemis destroy him and all (his) property" would be very natural. I propose as a solution of the difficulty that the order of meanings in the Aramaic may in the Lydian be changed. It would be very plausible to read: ( 1 ) "house and home", (2) "soil and water", (3) "property and all that is his", or better (3) "and all property belonging to him". In that case küidaù kofuùk would be "soil and water". Again I shall not decide the question which of the two words is the equivalent of "soil" and which is that of "water". The third pair would be hiraù helük. Of these two we know helìk to mean "anything". But not in English only may "anything" also mean "everything". We have quisque in Latin and in all Semitic languages the root kull-, which means "all, everything, anybody, anything". We are, I think, entitled to assign here to helizk the meaning „all". And hira would be "property". It is moreover surely not accidental that the three pairs of words which we have just established are united by alliteration; for we have (1) aaraù bïraùk; (2) kùidaù kofuùk; (3) hiraũ helùk. These were
probably proverbial sayings like "rhyme or reason", "Kind und Kegel", "house and home",
The word bilĩ I take to mean "his". In the Aramaic part the suffix "his" is found with "court", "house", "property", "all". We cannot here dispense with a word for "his". Now bilü is the oblique case; its subjective case would be bilis. This is found in No. 7,1 . I3 3 where we have $\mp 1118 \geqslant 14 \mp 18 \geqslant 14$; and the oblique case of both these words is found in No. 30, 1. 13, viz. چヶ118 $\%$. It is very tempting to translate the first of these two passages "neither he nor anyone who is his", the second "him and anyone who is his". We should thus have the paradigm:
\[

$$
\begin{aligned}
& \text { Subj. case : bis "he" or "this, that" } \\
& \text { Obl. case: bilis "him" }
\end{aligned}
$$
\]

The "possessive pronoun" or "adjective denoting appurtenance" bilis would be derived from bi-s like Mane-lis from Mane-s. An inflected possessive pronoun of the third person or an adjective of appurtenance derived from a demonstrative pronoun might well have existed in Lydian. Although such forms are not common and their place is often take by the reflexive possessive pronoun, they grow up independently in different languages; cf. for instance Sanskrit tadīya-, Latin quojus ${ }^{1}$ (Spanish cuyo, cuya, etc., Portuguese cujo, cuja etc.). Like these last forms bilis is probably derived from a genitive.

The last word in the Lydian text is vqbahẽnt. This is no doubt the equivalent
 As I said before, we should expect "may they drive him away from his property" or "may they scatter his property". Since there is this uncertainty in the Aramaic, there is all the more in the Lydian. However we might take the $-m \tilde{u}$ in fakmũ as a sort of dative denoting "to somebody's advantage" or "to his disadvantage" (dativus ethicus), since personal suffixes may signify either the accusative or the dative, especially if it be true that there is only one oblique case in Lydian. Then a literal translation of the Lydian in 11. 6-8 would be: "now then, may to his disadvantage Artemis of Ephesos and Artemis of Koloë scatter his house and home, soil and water, all his property". ${ }^{2}$ If this is right, the $y_{-i n}$ inelük is not taken as a conjunction "and" but with the same meaning as in $\S 10$. What verb-form vqbahẽnt is I cannot say. It seems of course to be a plural form of the third person in some imperative or jussive mood; but in No. 13 it occurs with 3YM1T9A, a singular.

There is however in the word بוירתה "and his heir" one objection to my interpretation. In the Lydian I have discovered no similar expression, but it is not impossible that the Aramaic has an addition not contained in the Lydian; a similar case seems to occur in § 4, where the Aramaic has perhaps the name of Sardis, which

[^6]is not found in the Lydian. I repeat that my interpretation is only tentative, but it is the best that I can now offer.

For a restoration of the beginning of the Lydian text W. H. Buckler suggested to me the following:

## 1. [borlũ $X$ quvellû̀ Artakśassaũś] <br> 2. $[0]$ raũ islũ Bakillũ.

"Year Io of King Artaxerxes during (? or "in the course of") the Dionysiac month".
The restoration of 1. I is based on L. I1; see below Ch. III, E. However, I should rather propose to read [borlũ $X$ Artaksassaũs quvell̃ŭ o]rañ "In the year io of Artaxerxes, the great king"; for quvellũ (gen.) "king" and oraũ (gen.) "great" see the commentary on L. II.

Bakillũ undoubtedly means "Dionysiac", as Mr. Buckler suggests; he points for comparison to kave-k Bakillis in 4, 1. $9=$ "and priest of Dionysos". We learn from the Greco-Lydian bilingual inscription, p. 39, that -1才A\& equals $\Delta$ oovoro-. The "Dionysiac month" would then, of course, be the Lydian equivalent of "Marḥešwān". The latter corresponds to our October-November. That would be the time when the vintage is over and the first wine is drunk, a month very apt to be called "Dionysiac". The custom of calling certain months after the name of a god or a saint or of a festival is very widely spread. At the same time we would have here a new word for month, viz. isl-.

## B.

The Greco-Lydian Inscriptions.
(L. 25).


Greco-Lydian Bilingual from Sardis.
Small marble pedestal found at Sardis 1913 on the north side of the temple of Artemis. In the flat top of the pedestal are holes into which the base of a statue seems to have fitted.

Line 1 (Lydian) is $26^{3} / 4 \mathrm{~cm}$. long; 1. 2 (Greek) 33 cm .
The Lydian letters are $I^{3} / 4 \mathrm{~cm}$. high, the Greek $1-I^{1} / 2 \mathrm{~cm}$.

## Nannas Bakivalis Artimuũ.


"Nannaś, son of Bakivaś (Dionysikles) (dedicated this) to Artemis".

## 

NANNAEA IONYミIKAEOKAPTEMIUI

From this inscription we learn that Bakiva(s's) is the Lydian for $\Delta$ tovvotxirirs and that Artimuй is the equivalent of 'Aprípuò.

That the Ionic form $\Delta$ oovvouxiéos should be used is only natural at Sardis. But are we to conclude that *Bakis was the Lydian name for Dionysos and that Boxyos-Bacchus are derived from the Lydian? It is known that Dionysos was not only at home in Thrace, but also on the Tmolos ${ }^{1}$ mountains, the Boz Dagh, in Lydia. I leave this question to those who know Greek mythology and Greek etymology.

The second part of the name, -xiéos has its equivalent in -valis. We have seen that $-l i s$ is the ending of the adjective of appurtenance. The meaning of the root ${ }^{*} \lambda \lambda \varepsilon F$ must then be contained in Lydian va-. But this va-may be an abbreviated form of some longer word. It is not safe to draw conclusions with regard to etymology from proper names in an unknown language.

It is likely that Artimuũ has the meaning of a dative, because the Greek has 'Aptépuò. But perhaps the Lydian supplied a verb that takes the accusative. Above we saw that the ending - $\hat{u}$ seems to have the meaning of an accusative. We can therefore not do more than state that $-\tilde{u}$ is the ending of the oblique case in Lydian.

On the name Nazvas see Kretschmer, pp. 341 sqq., Sundwall, p. 273.
Pergamon. (Inschr. v. Pergamon No. i). My attention was called to this inscription by W. H. Buckler. It was published by Born in Altertiimer von Pergamon II, p. is f., by Fränkel, ib. VIII, i, p. i f. I endeavoured to get a squeeze of it, and when in Berlin in 1913 I enquired at the Museum, but it was impossible for me to have access to it. From the photograph of the squeeze published by Bohn I have made the following drawing.


Greco-Lydian Bilingual from Pergamon.

The Greek reads חaprapos 'A ${ }^{2}$ nvaint. Of the Lydian only the name Bartaraś can be read with certainty from the drawing. On Lydian $8=$ Greek $\Pi$ see above p. 4 .

My drawing of the Lydian text indicates what I see on the photograph of the squeeze. It may be read

$$
\begin{array}{ll}
\text { esĩ taaqũ Ata..l } & \text { This column (?) for Atana (?) } \\
\text { Bartaraśs oraćìt } & \text { Bartaraś erected. }
\end{array}
$$

[^7]
## Chapter II. The Bilingual Inscriptions.

The words esũ taaqü are distinctly read in the inscription from Arably Hadjili. The meaning "column" for taaqü is merely guessed. - I have been unable to read the last letters in 1 . I with certainty. The word seems to contain the name of Athena; its first three letters are probably $A t a$-. The last word I take to be a verb. The letters $T I . A q \circ$ are reasonably certain. If we consider - it to be the ending, orawould be the stem. This root may be connected with the word oraü for which I conclude the meaning "great"; see below Ch. III, p. 50. The verb might then mean "to make great", or "high", i. e. "to erect".

## CHAPTER III.

## Unilingual Inscriptions.

In this chapter I shall give a number of Lydian inscriptions of which I am able to offer tentative interpretations based on the bilingual inscription published in the fore-going chapter. I follow the order of the numbers given to these documents at Sardis according to the time at which they were found.


Stele of limestone found in the dromos of a tomb facing East, on the hillside West of the temple. In the interior of the tomb there was a single couch on the Sardis Expedition VI.
right, another on the left, and a double couch at the back. The top line contains black colouring matter in the letters, while those of Inscription b have red colouring matter. The stone measures $59 \times 7 \mathrm{I}^{1} / 2 \mathrm{~cm}$. (maximum measurements). Thickness: 19 cm . The face of the stone is smooth, the back very rough, the sides are fairly well finished. The letters are in $\mathrm{a}: \mathrm{r}-3^{3} / 4 \mathrm{~cm}$., in $\mathrm{b}: \mathrm{r}^{3} / 4-3 \mathrm{~cm}$. high. This inscription was published by Prof. Thumb, Amer. Fourn. of Archaeol., XV (igir), No. 2.


I take $\mathbf{b}$ first, since its interpretation presents no difficulty.

1. és vãnaśs Manelis
2. Alulis. akmiùt
3. his fênsũibid
4. fakmūt Hüdãns 5. Artamuk vqbahẽnt

## b.

This tomb (is) that of Manes,
the son of Alus. If it
anybody destroys,
then him may Hũdãnś
and Artemis punish.

The letters of this inscription are all certain, but not very well carved nor regularly written. The letter $\mp$ occurs twice without the projecting part of the shaft $(=\mathbf{I})$. In the $Y$ of ォyMatat (1.5) the upper part is a winding line without angles. The 1 in FIIJYAM has a curved top; this word is a proof of the fact that there is no difference between $\cap$ and 1 .

On i\& for 3 3isee above p. 3 I . - The word $a k m \tilde{u} t$ is composed of $\alpha k,-m \tilde{u}$ and it. The fuller form akmũit occurs also, e. g. 7, 1. 9. From the forms akmũt and aktin (above p. 34) we learn that the suffix -it does not bear the accent. I have tried above on p. 34 to interpret $-m \tilde{u}$ and $-i t$. On the 0 in शyMTqA see above p. 19. The deity Hüdãns has been mentioned above on p. I3.
a.

1. eś aãnaśs Manelis Alulis akmũt his fênsũibid
2. buk esćać anlolać buk
3. esũ karoṿ̃ fakmẽ Sãnñás
4. Kuoadk (?) Marivdak
5. ẽnsuib [id].
r. This tomb (is) that of Manes, son of Alus. If anybody destroys it
6. or these anlol- or
7. this karov- (daros-?), then may Sãnñaś
8. and Kuoad- and Marivda-
9. destroy him.

This inscription contains several unknown words and forms.
L. 1: The 3 is written >. This was of course very apt to lead astray the first interpreter. The second word 3 AMMA may be a mistake for 3 AYMA. The latter is given also in b, 1. I. Moreover I have not found 3 A 4 MA anywhere else, whereas उAYMA occurs more than twenty times. There is no proof yet that the digamma was dropped in. Lydian; unless it be the stem -A YM which occurs a few times and which perhaps may be derived from the same stem as $3 A$ MM .
L. 2: The meaning of anlolać is not known. In $15,1.3$ and 20, 1. 2 there is a word antolać which I firmly believe to be the same as this word. I think the $l$ here is a mistake for $t$, caused by the $l$ directly following. Now antolać cannot be a synonym of lahrisać, since they both occur together in No. 15. Perhaps antolać means "the bodies"; for the word occurs only in the second part of funerary inscriptions (-if anybody destroys the antolać - ), not in the first part ( - the antolak are the property of - ).
L. 3-4: The second word may be read karosũ, karovĩ, karolũ, darosũ, darovũ or darolũ. None of these words is found elsewhere except karolĩ; but this seems to be in all instances the oblique case of an adjective derived from a proper name, whereas here a common noun is needed.

The word fakmẽ corresponds with akmũt in 1. I. I have not found this form anywhere else; but fakmüu is not rare. I am inclined to believe that fakmẽ is a mistake for fakmĩ, especially because of the corresponding form in 1. i. The absence of the ending -(i)t in $f a k m(\tilde{u})$ shows that $-(i) t$ may be left out without making much difference in the meaning.

Śanñas, Kuoad- and Marivda- I take to be names of deities. The first, I think, is rather the Cilician god Sandon than another form of Sawazios (Sabazios). For Sanñas might easily stand for Sandas, and Sandas, Sandes etc. are variant forms of Sandon; cf. Ed. Meyer, Geschichte des Altertums, I, § 484. In Kuoad- we may recognize the elements kuova- and $-a d$ ( $-a t$ ? ), which occur frequently in names from

Asia Minor; cf. Kretschmer, p. 368 , Sundwall, pp. 127 ff. The name Marivda- may be the same as the second part of the Carian personal name Eov $\mu-\mu \alpha, 0 \% \delta_{0} \eta_{s}$, cf. Kretschmer, p. 366, and see similar names in Sundwall, pp. 142 ff.
L. 5: It it just possible that there is a 8 before $-8 \mid \uparrow \mp Y \uparrow$, but it is not very likely. The form ẽnsüibid without the $f$ - at the beginning occurs once more $(26,1.3)$. Perhaps the verb $\tilde{e} n s \tilde{u}(i b)$ - is used, when the deity "destroys" man, and $f \tilde{e} n s \tilde{u}(i b)$ - when man destroys a thing. In this inscription such a difference might very well be recognized.

## B.

## (L. 6)

Stele of limestone, found in situ before a tomb on the hillside West of the Paktolos, about $1 / 2 \mathrm{~km}$. from the river, opposite the South part of the South Village. The tomb had one double and two single couches. The stone is $96 \frac{1}{2} \mathrm{~cm}$. high, 33 cm . wide, 27 cm . thick. The letters are $\mathrm{I}^{1} / 4$ -
 $2^{1} / 4 \mathrm{~cm}$. high. There are traces of the stone cutter's guiding lines. Below the inscription there is a single letter which is probably a mason's mark.

1. es vãnas esk lahrisa(k)
2. esk helad bavafuni?...
3. akit nãhis esũ vãnaũ b[uk]
4. lahrisać buk helaũ
5. fênsǜ(i)bid fakać visis
6. nivisq́é varbtokid.
I. This tomb and these couches
7. and this fore-court (?) are sacrosanct (?).
8. If anybody destroys this tomb or
9. the couches or the fore-court,
10. then may a god take
11. vengeance upon the godless.

The letters of this inscription are somewhat indistinct; for the limestone has not preserved their outlines so well as the marble. In 1 . I at the end a $x$ - is probably obliterated. In 1.2 after bavafu- there may be $M(\widetilde{a})$ or $14(n i)$, but after this nothing is certain; my copy made from the stone indicates TAA as being very uncertain. At the end of 1.3 the letters $\ngtr y$ are easily restored. At the end of 1.4 I drew an uncertain $z$ in my copy, but I rather believe now for grammatical reasons that there never was another letter after TA1st.
L. 1: if stands again for 3 l .
L. 2: On 1411t see above, p. 32. The last word, howsoever it may be read, must mean something like "is sacrosanct", "is protected by the gods", or "is inviolable".

We have here one of the very few cases in which the owner of the tomb is not mentioned．The word 18A1Ag cannot be analyzed．In $7,1.15$ it occurs in the form TY8A才Ag，but there the meaning of the context is altogether uncertain．

L． 3 and 4：The words occurring here are known from the bilingual inscription．
L． 5 and 6：Here we have a new formula which must contain a curse or a menace．This formula occurs complete in three other cases．They are the following：

We see that $\ddagger 1317$ stands for $\mp 13317$ and that $2 \uparrow 31114$ again stands for z个3｜114．It seems to me that viśsis stands for vis－sis，and that we have here the same adjectival ending as above in Kulu－m－sis．The first $s$ was assimilated because it was directly preceded by $s$ ．The form viśs－qć was probably always pronounced vis－qć，because of the coming together of so many consonants；the spelling visiqi in No．i5 is probably only an etymological spelling．But vissis also became visis，since it seems that double consonants gradually came to be pronounced like single ones in Lydian．Thus viśsis would be historical，visis phonetic orthography．If varbtod in No． 16 is not a mistake， we learn also that varbtokid and varbtod are synonymous．Probably－ki－is the sign of the mood，like $-b i$－in fënsüibid．The $-d$ may be the ending of the third person singular．The stem of the verb may be varb－；for the syllabe－to．I believe to be the sign of a derived stem，like－lo－in katsarlokid，a verb which stands three times after the name of the deity and probably means＂may he（she）punish＂．

The meaning of fakać viśsis niviśq́é varbtokid can only be guessed．We know $f-a k$ to be the conjunction of the apodosis and $-a \hat{c}$ to be the ending of the oblique case of the plural．It is possible that the suffix $-a \dot{c}$ is an abbreviated form of $-m a c^{\prime},{ }^{1}$ and this I take to be the plural of $-m \tilde{u}$ ．Then $-a \hat{c}$ would mean＂them＂or＂to them， to their disadvantage＂；cf．above p．37．A plural in the apodosis would not be im－ probable；for the protasis，although grammatically in the singular，is 火arc̀ $\sigma \dot{v} v s \sigma \nu$ in the plural．In Syriac＂everybody that＂（ $\boldsymbol{\pi}$ ）often takes the plural．The two words following are undoubtedly derived from the same stem，vis．The prefix of the second word is ni－；cf．also nin：ni－nin；hesis：ni－hesik；haaslü：ni－hasllũ．Again ni－ occurs in the word ni－k；cf．nik bis nik biiis，above p． 37 ．It would be most natural to consider $n i$－a negative and to translate nik．．．nik by＂neither．．．nor＂．Now $v i s(s)$ is is in the subjective case of the singular，while nivisqq on account of its final $\bar{c}$ is in the oblique case of the plural．But I cannot explain the $q$ in ni－vis－q－c．How－ ever this may be，we shall not be far from the truth if we suggest as a translation of the formula something like the following：＂may a just one punish the unjust ones＂； or perhaps rather：＂may a divine one（a Deity）take vengeance upon the non－divine

[^8]Chapter III. Unilingual Inscriptions.
ones" (the mortals, or better "the godless"). If vis(s)is means divine, the stem visrecalls the Etruscan ais- $\alpha(r)$, " $\operatorname{god}(s)$ "; but this comparison is very doubtful.

## C.

## (L. 8)

Fragments of a funerary stele, which were found in different places built into a wall on the hillside near the tombs. These fragments have been stuck together and the whole now measures as follows: Height (maximum): $41^{1 / 2} \mathrm{~cm}$.; width, at the top: $32^{1} / 2 \mathrm{~cm}$.; at the bottom $28 \frac{1}{2} \mathrm{~cm}$. Thickness : 8 cm . Height of letters $2-4^{3} / 4 \mathrm{~cm}$.


1. es'śs vãnaśs Kumlil-
2. -is Atelis Sam-
3. [爵llis lahris-
4. ak. aki[t] nãhis
5. fẽnsü[ [ibid esũ]
6. vãnã̃ bu [k esćać]
7. lahrisa[́́ fakać]
8. $[v i s]$ is $n[i v i s q q c ́]$
9. [varbtokid]


Inscr. L. 8. - Scale 1 : io.

My restoration of this inscription I take to be reasonably certain. There are enough traces of words left at the end to indicate which formula must have been employed. Only the two letters in 1.3 cannot be restored, since this proper name occurs nowhere else. Neither can we be sure whether Sam-might be the beginning of a gentilicium derived from Samos. This was suggested to me by W. H. Buckler who recalled a passage of Herodotos (I, 51) in which are mentioned bronze caldrons made by Theodoros of Samos; these caldrons were given by Kroisos to the temple at Delphi. However, Mr. Buckler is now of opinion that the third names are not
C. (L. 8). - D. (L. 9).
names of places but of persons. He wishes therefore to withdraw his suggestion with regard to $\dot{\ddagger} \mid 11[\Psi]$ M A 3. - All other words of this inscription have already been discussed.

## D.

(L. 9)

Funerary Stele. This stele was found at the same place as L. 8. Above the inscription there is a decorated top; see the photograph. The two fragments fit perfectly; there can be only one line missing. The decorated top-piece has the following measurements. Height: 51 cm . Width: 39 cm . Thickness : $18^{1} / 2$ cm . The lower part (die) measures as follows. Height: 128 cm . Width: 32 cm . Thickness $17^{1 / 2} \mathrm{~cm}$. The inscription is 50 cm ., the letters are $3 / 4-2^{3} / 4 \mathrm{~cm}$. high.

1. ess vãnas esk mrud e[sk]
2. lahrisk kudkit esĩ
3. (vãn)aũ bûtarvod akad
4. . . . . . . . . . . . .
5. Artabãnalid Katoval-
6. -ik Atraśalid akit nãhis
7. fênsūibid esũ vãnaû
8. buk esũ mruũ buk esć-
9. ać lahrisać kudkit
10. esũ vãnaũ bûtarvod
11. faká́ viśsis nivisqú
12. varbtokid.
13. This tomb and this stele and these
14. couches opposite this
15. fore-court (?) (are) the property
16. of
17. son of Artabanes, and of Katovaś,
18. son of Atraśaś. If anybody
19. destroys this tomb
20. or this stele or these
21. couches opposite
22. this fore-court,
23. then may a god upon the godless

24. take vengeance.

There is some doubt about the arrangement of names, since we do not know how many of these were lost in 1. 4. The above translation supposes that only one long name was contained in 1. 4. Moreover I am not certain whether the *- "and" was added to the name of the second person or to that of his father.

Below the inscription there is again a mason's mark.

## E.

$$
(L . \quad I I)
$$

Funerary stele found at the same place as L. 8. Parts of the top and of the right hand side are broken off. The stone in its present size is 72 cm . high, $54^{\frac{1}{2}} \mathrm{~cm}$.

wide, 12 cm . thick. The inscription is 31 cm . high, the letters are $3 / 4-2^{1} / 2 \mathrm{~cm}$. high. The slab is smoothly finished on the face and the back.

1. [b]orlũ XV oraũ quvellũ Artakśassañs
2. $[h] a \tilde{u} т \tilde{u} u \tilde{u}$ dãć eśs vãnas mruk bũasokiñ
3. hid katać il lahrisakin hi(d) ẽtosrs akad

4．Karolid Sabūalid Istubeümlid aktin
5．nãhis fênsûibibid esáać mùvẽd（a）ć i（s）kon
6．hida tamć buk vãnaũ esùu b（u）k mruũu buk
7．－bũasoũ esũ buk lahrisać bukin aũêé
8．avûūā hisk d（ă）tdid ist esũu（v）ãnaũ Karolũu
9．Sabüalù Karolaśs sfêndač arvol akmî
10．Artimuć Ibsiméta á Kulumíak Sivraũmin（？）
11．－sänu aktin nähhis fensūibid fakatać ebad
12．．－ra bistaí tahaũaí sisirorś sfẽ̃ndavmũ̀in
I 3．$--(v)$ gbuhid．
About two thirds of the inscription can be translated either from internal evidence or on information derived from other inscriptions．

1．In the year 15 of the great king（？）Artaxerxes，
2．in the days of the month．．．（？）．This tomb and the stele and also the bùaso（d）which．．．．
3．and also the couches，which（are）inside（？），（are）the property
4．of Karoś，the son of Sabũaś，a man from Iśtubeũ－．If
5．anybody destroys these ．．．．．．．．．．
6．．．or this tomb or this stele or

8．avĩãc，and whosoever buries（？）here in this tomb of Karoś，
9．the son of Sabũaś，may the ．．．．．of Karoś，．．．．．
10．the＂Artemides＂of Ephesos and of Koloë and of Smyrna（？）
I I．．．．．．if anybody destroys ．．．．．．．．（13．）scattered．
First the corrections and restorations in this inscription are to be justified．
L．1：Of the first word only $-\boldsymbol{r l i}$ is entirely preserved；the $o$ is half destroyed． Before the 0 ．I restore a 8 because the fragment L． 3 has the word T 190 g and be－ cause the fragment from Falanga begins：．．AT9A III III $\neg$ T190 ．

L．2：The + at the beginning is again restored from the Falanga fragment where in line 2 we read 2 Md ryケMr゙At．

L．3：Instead of $11+$ I read 11t，a Lydian word that occurs quite frequently，which would here have its correlative in the $11+$ at the beginning of the line．From ⿻丷木 in 1.6 for $\boldsymbol{1} 18$ we know that in this inscription small lines are sometimes omitted．

L．5：mũvẽnd（a）c I read $A$ instead of $\Lambda$ ，（ 1 ）because the latter is not a Lydian letter and（2）because $-\alpha i$ is a most common ending．Here the slanting cross－bar was left out by the mason．The last word in this inscription would as it stands have to be read ihkon．But I read $i(s) k o n$（I）because the small cross－bar is not exactly in Sardis Expedition VI．
the middle as ought to be the case with $+(h)$, and (2) because $30 \geqslant \neq 1$ ( $12,1.2$ ), and $10 \nmid \mp 1$ ( 12 , 1. IO and 29, 1. 6) are Lydian words.
L. 6: The correction शy8 for $\geqslant 18$ is evident. ${ }^{1}$
L. 8: Instead of $11 \downarrow T \uparrow 1$ I read $11 \lambda T \psi 1$; see above p. 18. The correction $\uparrow$ A 1 M 1 for $\Upsilon A Y M 1$ is self-evident.
L. 10: In Ibsimí( $a$ )ć again a $\wedge$ has been carved in lieu of $A, c f$. . 5. I may add that in Greek and Latin inscriptions from Syria I have often noticed $\wedge$ for $A$.

On the interpretation and translation of this interesting document the following may be said.
L. 1: I think there is no doubt that borlut must mean "in the year". The oblique case seems to serve not only for the dative, but also like the Greek dative and the Latin ablative to indicate time and place. - If quvellũ, of which I have spoken above on p. I8, means "king", oraũ can scarcely mean anything else but "great". Both words are in the oblique case which here has the meaning of a genitive. The word Artaksassaũs in noticeable because of its ending. For the $s$, which usually indicates the subjective case, is here added after the sign of the oblique case. In other cases, like vãnaś-vãnã̃ etc., the $\tilde{u}$ takes the place of the $s$. There are two possible explanations for the form in question: (1) the $s$ is here not the sign of the subjective case, but indicates determination like $\boldsymbol{u}(s)$ in Armenian; (2) the sign of the oblique case was not "affixed" to the form Artakśassas, but "infixed" before the $s$ which was considered as a part of the name, not as the Lydian ending of the subjective case.
L. 2: (h) aйтйuй is an oblique case; it seems to me that it is a genitive here dependent upon the following noun. This is $d \tilde{a} \tilde{c}$, a short noun in the oblique case of the plural. It is of course not necessary that after the year the month should also be mentioned, but it is like!y to be the case, as above in the bilingual inscription. There is no figure giving the exact day; therefore $d \tilde{a} \tilde{c}$ would stand in the plural and mean "in the days of the month . . . " A certain similarity between däa and Etruscan tinsi "days" cannot be denied. For in Etruscan $d$ must needs become $t$; and if we take *din as the root, we might say that this became *dã- in Lydian by a similar development to that which turns Latin in- into $\tilde{a}(e n)$ in modern French; the intermediate stages in both languages would be $e n$ - $\tilde{e}$-, and we know that in Lydian the $i$ was an open vowel, since it corresponds with Greek $\varepsilon$. The name of the month if haйтйuй represents it - is unknown to me; the eight known names of Etruscan months furnish no point of comparison. - In büasokiñ we have $-k$ and $-i \tilde{n}$ added to the same word; we found a similar case in aktin above, p. 34. The noun may be bũasos or bũasod; but the latter is more likely, because hid follows. What the bũasod is I do not know. Since we have the words for tomb, stele, fore-court, couch, there

[^9]is not much choice left; of the parts of a Lydian tomb only the door, the front or rear chamber, the steps or the inscription are at our disposal.
L. 3: The word hid is probably a relative pronoun here. We know his as an indefinite proncun. I think hid stands in the same relation to his as Manelid to Manelis. Relative, interrogative and indefinite pronouns are closely related in many languages. The word katać is probably in the oblique case of the plural; il may be a postposition or a conjunction. For ẽtośr's I have suggested the meaning "inside", because the lahrisak are in the interior of the tomb.
L. 5: The word müvẽndać may be a general term for the whole tomb and may at the same time include the meaning "sacred".
L. 8: The word hisk is composed of the pronoun his and the conjunction $k$. I take his to be the relative pronoun. It seems to me very likely that the verb dẽtdid means "buries"; for "burying" in the tomb is often forbidden. Moreover the following words ist esiu (v)ãnaũ would be quite in keeping with that meaning, if ist means "here", as I suggested above on p. 32.

Ll. 9 ff .: Very little is clear in the sentences that contain the curse or menace or punishment of the infringer, because most of the words are unknown. In 1. Io Artimut is in the oblique case of the plural; for there are two or three "Artemides" but her name is given only once. Above in the bilingual inscription we had Artimus' Ibsimsis Artimuk Kulumsis in the singular because the name was repeated. From Ibsimćać Kulumáak (for *Kulumíać-k) we conclude that in the adjectives terminating in -sis the other endings are likewise doubled ( $-\sigma^{-}-a \dot{c}$ ). A parallel may be found in the Armenian where instead of ink'n "he himself" ink' $n$-in may also be said, or in the Turkish, where bir-i-si "some one" and baz-y-sy "some" etc. have a double suffix of the 3. person. - The last word of the inscription is -qbuthid. This may be restored as vqbuhid; for vqbahẽnt seems to be of the same stem.

## F.

$$
(L . I 3)
$$

Funerary stele found in the same place as L. 8 . The stone is 101 cm . high, $36^{1} / 2 \mathrm{~cm}$. wide, $9^{1 / 2} \mathrm{~cm}$. thick. The top is smoothly finished. The inscription is $131 / 2$ cm ., the letters are $1 / 2-2 \mathrm{~cm}$. high.

1. es's vãnaśs Atalis Tivdalis Tarvñallis
2. akin kudkañaùres ak Tesastid Sivãmlid
3. mîola Śrfastid Mễualid mũola ak nãhis
4. ẽmũ̀ (v)ãnaũ kileũ buk èminać eśać qitalad
5. fadint fakmũ Artimus hiraũ helûk vqbahẽnt

In 1. $4 \Psi A M M \forall$ is on the stone, but this may be a mistake for $\Psi A Y M \nmid$. However, the words near it are not certain, and in 1.2 we read kud-kaña-ñres,

The tomb is that of $\operatorname{Ata}(\xi)$, the son of Tivda( $s$, from Tarvnas (?) ${ }^{1}$. On the
 name $A \operatorname{ta}(s)$ see $\mathrm{K}_{\text {retschmer, }}$ p. 349 ff . In Tivda-s the first element may be tiv which in Etruscan means "moon, month". In Asia Minor the names Menodoros, Menodotos, Menogenes, Menophilos etc. are very common. ${ }^{2}$ They show that the moon-god (or goddess) was worshipped there. ${ }^{3}$ This Men is in my opinion to be distinguished from the Lydian Manes. Perhaps the goddess $\Theta u \alpha^{4}$ was the same as tiv. And the names Tutos, Tours and others may be derived from the name of this goddess.

In akin and $a k$ of 1.2 the conjunction $a k$ "if" cannot be recognized; the $a k$ must here have some other meaning. Perhaps it is an independent word for "and" used between the words that are to be connected; cf. Latin atque and -que.

The word kudkañaũres probably means relatives or persons in some way connected with the owner of the tomb. Perhaps this word is derived from the same root as kudkit "opposite".

Then follow two groups of three words

> tesastid sivãmlid mũola
> srfastid mẽũalid mũola

From 15, 1. I and 27, 1. I we know that Sivãm- is the name of a person. The word

1 W. H. Buckler refers to Tarra, a place name, and Tarabous, a personal name; Keil-Premerstein, Dritte Reise, p. 8 I, No. 113 .
${ }^{2}$ See Buckler-Robinson, Amer. Fourn. of Archacol. XVI, 1912, p. 37.
${ }^{3}$ Cf. Ed. Meyer, Gesch. d. Altertums, I, 2, 2nd ed. p. 639.
4 Buckler-Robisson, l.c., p. 40, and Sundwall, p. 223 f.
mẽũa has already been compared with Mị́çv; above p. 15. It seems then that teśas $(t)$ and srfas $(t)$ - are proper names too. The word mũola may signify some grade of relationship. But the meaning is very uncertain. There are besides in these words three problems which I cannot solve as yet: (1) why is the ending oid used here? (2) what does the $t$ in the ending tid mean? (3) what grammatical form is muola?

The last two lines contain again the curse, but most of the details escape my knowledge. In 1. 5 we have "may then to his disadvantage Artemis destroy all his property". Cf. above p. 37 . There is certainly a connection between $\tilde{e} m \tilde{u}$ and $\tilde{e} m i n a \check{c}$; they are likely to be personal pronouns of the 3 rd person or demonstrative pronouns. But then eśá́ could scarcely be the same as cscać.

## G.

(L. I4)

Funerary stele. This stele was found at the same place as L. 8. Height of stone 75 cm .; width $34^{3} /-35^{1} / \mathrm{cm}$.; thickness 15 cm . Height of inscribed place $6^{1} / 2 \mathrm{~cm}$.; of letters $3 / 4-2 \mathrm{~cm}$. The stone is broken at the top and at the bottom; the back is smooth.

1. es- vãnać hisredé nimit fêns(ûibid)
2. $|f a| k m s i n$ sof.


The inscription may be complete and may simply say "If anybody destroys any of these tombs, may punishment be upon him".

The only certain words are vãnać fênsûibid. The first word, eś- seems to stand for esć or esíać. The third word must on account of its ending refer to vãnać. The fourth word, nimit, has the same suffix as $a k$-it and his-it. It is not unlikely that nim is the substantive form of the relative pronoun, like the Arabic man, meaning "he, who" and "whosoever".

> H.

## (L. 15)

Funerary stele. This stele was found at the same place as L. 8. Height of stone: $72^{1 / 2} \mathrm{~cm}$. Width: 36 cm . Thickness: $9^{1 / 2} \mathrm{~cm}$. Height of inscription : 17 cm .; of letters: ${ }^{3 / 4}$
 $1^{3} / 4 \mathrm{~cm}$.

1. ess vã (n)as Sivãmlis Armã-
2. vlis, akit his esũ vãnaũ
3. buk esćać antolá́ buk esí-
4. ać lahrisać fẽnsũibid
5. fakać vissis niviş́qqé
6. varbtokid.

This tomb (is) that of Sivãm-, son of Armãv-.
If anybody this tomb
or these bodies(?) or these
couches destroys,
may a god upon the godless
take vengeance.

All words occurring in this inscription, except the two names, have been discussed already. The name Sivãm- is not known to me from other sources; the name Armã̃may be the same as Apoupoos; cf. Sundwall, p. 54.

$$
\begin{gathered}
\text { I. } \\
(L .2 \sigma)
\end{gathered}
$$

Funerary stele. This stele was found at the entrance to a tomb in the northern part of the necropolis of Sardis, on the hillside facing North. Height of stone 61 cm .;

width 56 cm .; thickness 12 cm ., at the top 16 cm . Below the inscription there is a relief of a man lying on a couch to the right, with a woman sitting to the left turning to the right and apparently conversing with him.

1. brvãć III II Aûiksãntruù dãć. es's vãnaś esk mrud
2. Atraśtalid Timlelid ardèq alarms fadol vśtaś
3. ak his hisred fakas silavad fat nid ẽnsüibid akmũ
4. levs sarẽtas hisit fẽnsūibid esũ vãnaũ
5. buk e[sî] mriũ fakmũ levs vqbahẽnt.

The first line undoubtedly contains a date, and it looks as if it ought to mean: "in the fifth year of Alexander". But there are considerable differences between this date and the date above on p. 50 in No. ir. There we have borlù for "in the year", and for dăác the meaning "in the days" was suggested. Now it is perfectly possible that in Lydian there were two words for "year". In Arabic for instance there are three words for "year", sanah, h.al and ' $\bar{a} m$, and in Arabic documents they alternate with each other. If then borl- and brva-both mean "year" the passage in this inscription could only be translated "Of the years 5 (i. e. the 5 th) in the days of Alexander", i. e. "in the days of the 5 th of the years of Alexander". Such an expression would seem very strange. Another strange fact would be the omission of the word "king".

After the date we read:
"This tomb and this stele (are) those of Atrasta(s's), the son of Timle(śs)".
Both names are probably Greek. Atrasta('s') seems to be "Adparmos; we even know of an Adrastos, the son of Gordios, who came to Kroisos. Timle('s) seems to be Tucoincos. The name Atrasta(śs) seems to indicate that in Lydian $d$ was tending to become $t$.

Of the second part of 1.2 I do not understand anything. These words may relate to the family of Atrasta(s); or in vs-tas we may recognize the stem vis- "god, divine".

Again in 1.3 there are several unknown words. It seems that the protasis reaches from $a k$ to $\tilde{n} s \tilde{u} i b i d$, and that the apodosis consists only of the words akmũ levs sarẽtaś. The word hisred would seem to be composed of his and red; hisredé occurs above p. 53 in L. 14. The ending -taś is also found in vstaś in 1. 2. I believe that levs is the name of a deity, since it stands where otherwise Artimus would stand. There is in Etruscan a nomen divinum which may be compared with this. On the bronze liver from Piacenza, lvsl is mentioned, and this has been identified with the Lynsa of Martianus Capella; cf. G. Körte, Die Bronzeleber von Piacensa, Mitt. d. K. D. Archaeol. Inst., Rom 1905, XX, p. 365. The general meaning of the words from ak to sarẽtaśs is probably "if anybody preserves these monuments and does not destroy them, to him (may) Levś (be) merciful". L1. 4 and 5 are intelligible. From the third word onward we read:
"whosoever destroys this tomb or this stele, may Levś punish him".

[^10]Chapter III. Unilingual Inscriptions.
K.
(L. 24)


From cast.


From original vase.

Canoe-shaped Vase. This boustrophedon text was not scratched or incised upon the vase after the baking, but was written with a blunt implement while the clay was still soft. The text is here given in order to show the oldest Lydian characters so far known. The vase will be published and discussed in the Section on Pottery. We are here interested in the inscription only.

This is probably to be transliterated:

## titisin èmétisarić fabil <br> Ataũ Kitvaũ

Several letters have special forms to which attention has been called in Chap. I under their respective headings. The dividing points are also of interest, since they are found in Semitic as well as in

L. 24, from drawing by W. H. Buckler. Old Greek and Phrygian inscriptions.

The meaning of this inscription is quite obscure. I think however that Atañ and Kitvaü are proper names in the oblique case. We may consider both to have the meaning of genitives and then $\operatorname{Ata}\left(s^{\prime}\right)$ might be the son of Kitva $(s)$. We are at once reminded of "A $u u_{s}$ the son of Kótus, in the pedigree of the ancestors of $\Lambda u 00 \delta_{s}$. But this may be accidental. Nor do we know whether $\operatorname{Ata}\left(\xi^{\xi}\right)$ and $\operatorname{Kitva}(\xi)$ were divine or human persons.

## CHAPTER IV.

## Lydian Poetry.

It is a remarkable fact that no less than five inscriptions written in poetry have been found at Sardis. However only one of them is absolutely complete, the others being more or less damaged. In order to give an idea of this poetry I publish here the one complete poem, although very little can be translated. It is on a funerary stele of very fine white marble, which unlike the ordinary Sardian marble contains no traces of blue. The stele has a cap 7 cm . high and 38 cm . wide. The lower part (die) is $102^{3} / 2 \mathrm{~cm}$. high; at the top $35^{1} / 2 \mathrm{~cm}$., at the bottom $38^{1} / 2 \mathrm{~cm}$. wide, and 14 cm . thick. The inscription is $32^{1} / 2 \mathrm{~cm}$., its letters are $1 / 2-1^{1} / 2 \mathrm{~cm}$. high. It reads, according to the alphabet established above, as follows:

$$
\text { L. } 12 \text {. }
$$

1. est mruvaad Saristrośù Śfarvad aśtrkoũ
2. vãnñaś viq's areũ \| kañaredkms' iskos
3. aćis hidad savé vratuũ arsiñãnsrś kasnod
4. ksbütaũks atrgolü || tafaaũ fabaûkol
5. avkać êtaméuvedmaś varedtaũ sfatos
6. Rotas qat hedkñad qfisad isaañal umíod
7. Saristrośũ Srkastus || Katovalis suños
8. datrosis haümũad || his labtãnal atrokl
9. Śfardak Artimuũ dã̄ $\|$ qahrlaũ astrkoũ
10. fakiñ est inal adalũ aksaakmũ iskod
11. vãnñakt esćać ifrol $\|$ his fakorfid katofn
12. buk mruvaaũ fakmûatać || visssis vaars nid kantrod.

The rhyme of this poem is 0 ; No. 19 has the rhyme $a$; Nos. 27 and 29 again have 0 ; No. 34, which is a very small fragment, has the rhyme $i$.

I have indicated in my transliteration of these verses (except in 11. I, 3, 5, 6, 10) that a caesura is assumed in the middle of each verse, or rather that I think each verse consists of two half-verses.

I do not pretend to be able at once to solve all metrical problems in Lydian.

In order to do this one ought to know a good many things some of which will probably never be known. Among other things one ought to know: (i) whether the Lydian accent was more a stress or a pitch; (2) whether the sonants, especially $r$ (cf. aśtrkoũ, 1. 1) were counted as a syllable or not; (3) whether other consonants which seem to constitute a syllable are counted as such or not (cf. ks- in kśbuitaũks, 1. 4); (4) whether double vowels represented one or two syllables (e. g. meru-va-ad, 1. I, or mru-vad); (5) whether short vowels in open syllables without the accents might be omitted or slurred over in prosody; (6) whether the nasal vowels always counted as a syllable or might sometimes with other vowels constitute a nasal diphthong, e. g. aũ ; (7) whether in prosody syllables that are not written might sometimes be added; (8) whether the caesura always had to come at the end of a word, or whether a part of a word of the first half-verse might be counted as belonging to the second halfverse.

I shall leave the discussion of Lydian metrics to those scholars who are more versed than I in Greek and Latin metrics. However I may venture to call attention to a few points.

From the rhyme syllable in 1. I it appears that the nasal
 vowel does not constitute a syllable by itself; for, as we see from the other rhyme syllables, the rhyme vowel must always be in the last syllable. Therefore oũ would be almost the same as oñ. This leads us to assume that perhaps in other cases also aũ is only one syllable (=auñ). If we take l. II as an example we may read vãnñákt | escáá | ifról || his fá|korfíd | katófn ||
This would be, quantities neglected, somewhat like an iambic trimeter, i.e. two half-verses, each of which had three feet consisting of an unaccented and an accented
syllable. This order - not the order: accented and unaccented - is given, because the last syllable, the rhyme syllable, certainly had the stress. Now into this scheme the whole poem might be pressed. If we do that we must assume: ( 1 ) that the caesura may sometimes come in the middle of a word; (2) that the sonants may sometimes be counted as a syllable, sometimes not; (3) that nasal vowels sometimes constituted a syllable, but generally not; (4) that double vowels are always counted as one syllable; (5) that quantity played no rôle whatsoever. The whole would then look like this:

1. est mru|vaad Sa|ristro||sũ Śfar|vad as|trokoũ
2. vãnñaś | viqś a reũ || kañalredkmśs| iskośs
3. aćís $\mid$ hidad $\mid$ savć vra $\mid$ tuũ arś $\mid$ ñãnsros $\mid$ kasnod
4. Rśbūtaũkś | atrolgolũu || tafaa|ü fabaükol
5. avkać | êtam $\mid$ '́uved $\mid$ mas' va redtaũu | sfatoś
6. kotaś | qat hed $\mid$ kñad qfi|sad i|saaũal |umiod
7. Saristrośũ | Srkastus || Katolvalis | suũos:
8. datro|sis haũ|mũad || his lab|tãnal | atrokl
9. Sfardak $\mid$ Arti| muũ dã̃́ $|\mid$ qahr lañ aś|trokoù
10. $f a k(\imath) \tilde{u}$ est | inal ada|l $\tilde{u}$ ak saakmũu | iskod
II. vãnñakt $\mid$ esíać $\mid$ ifrol $\mid$ his fa|korfid $\mid$ katofn.
11. buk mru|vaaũ fak|mũatać || viśsis |vaars nid |kantrod.

I admit that this is not very inviting or satisfactory. Although the only thing known about Lydian accent is the fact that suffixes had no stress (cf. fak-it-in $>$ faktin, above p. 36 ; vãnñak-it $>$ vãnñakt here, 1. 11), I think that it would be incredible to accentuate Śfardák $\mid$ Artí muи̃ (1. 9), unless Lydian had lost its stress altogether. Then this metre would be nothing but a counting of syllables as in the Awesta, ${ }^{1}$ in Syriac poetry and in the French blank verse It seems to me therefore at present more likely that the Lydian verse consisted of two half-verses, each of which had three arses, without regard to the theses. If that is so, this verse would have some similarity with the Latin Saturnian verse. ${ }^{2}$ This would enable us to discard 1) the caesura in the middle of words, which from the beginning seemed to me rather improbable; 2) the regular ictus, and especially the accent on syllables which in all probability never had the stress. Then in 1. I the caesura would come after Saristros̃̃ ; in 1. 3 after vratuũ; in 1. 5 after ẽtaméuvedmas, unless maśs is a word by itself and only erroneously written together with the preceding word; in 1. 6 after $q$ fisad; in 1. Io after adalũ.

And this metre would have its parallel not only in Old Latin, but also in Old Hebrew, and especially in modern Tigrē.

[^11]A word is to be said of the rhyme. We here have the earliest rhyme in the history of human literature. Of course, occasional assonances have been observed as an embellishment of poetry in Hebrew, in later Sanscrit artistic poetry, in Latin, perhaps even in Old Egyptian; but in Lydian the rhyme for the first time has been made the distinguishing feature of poetry, and for the first time it is found throughout the poem, as in Arabic and Abyssinian poetry and in the tirades of the Middle Ages. In Etruscan the rhyme was beginning to be used, as we see from verses in the long text from Agram: ${ }^{1}$

> 〈male〉 ceia hia etnam ciz vacl trin velञre male ceia hia etnam ciz vacl aisvale male ceia hia trins etnam ciz ale male ceia hia etnam ciz vacl vile vale.

But it did not become a fundamental principle of poetry as in Lydian.
The Lydian rhyme is no rhyme in our modern sense. We should call it but an assonance. It depends entirely upon the vowel; the consonants do not matter at all. The reason probably was that when the verses were sung the last vowel of each verse was lengthened and its note held, so that only the vowel was of real importance. Therefore we have rhymes here like -oũ, -os, -od, ool, ookl, ofn, and in No. 19: $-a d,-a s,-a \tilde{u} k,-a t \tilde{c},-a t$, etc. The rhymes in the older Surahs of the Koran are very similar; cf. Surah IOI: -ais, -aif, - $\bar{u}^{c}$, -auf; or Surah 113:-alaq, -aqab, -uqad,-asad. In Tigrē we find such rhymes as $-\bar{u} z,-\bar{u} q$, (see my Public. of the Princeton Exped. to Abyssinia III, No. 25 , v. 10, 11), or -ăgen, -āzen, -āder, -ātel, -āfel, etc. (ib. No. 67, I ff), or - $\bar{a} y i t,-\bar{a} y i z,-\bar{a} y i d,-\bar{a} y i{ }^{\prime}{ }^{\prime}(i b$. No. 338) and the like. We see that there is much similarity in the form of the rhyme between Lydians, Arabs and Abyssinians. The Abyssinians probably learned the rhyme from the Arabs, but the Arabs did not learn it from the Lydians. However, it is possible that the home of our European rhymed poetry is in Lydia. The Greeks would have learned it from the Lydians, the later Romans from the Greeks, and from Roman church poetry it was passed on to the modern languages. Whether in trying to trace European rhyme back to its origin we should take no account of Arabic rhyme, is a question which cannot here be answered.

The inscription was probably written for a certain Saristros, son of Katova(s), a citizen of Sardis. The first line may perhaps be translated "This stele (is) that of Saristros ( $i s$ ), a Sardian citizen". Lines $2-6$ probably contain an eulogy of this man. L. 7 gives his name more fully; ${ }^{2}$ if suũos means "son", it could scarcely be dissociated from the Indo-Germanic sunu etc. In 11. 8-12 the Sardian Artemis is invoked against infringers, and their punishment is described. It seems that there are two kinds of infringers, and that the former are to pay a certain sum of money (cf. ada-lũ

[^12]in 1. Io with the Lycian $a d a$ ), while the latter are to be destroyed by the deity (vissis in 1. 12). What the former and the latter are supposed to do to the tomb (vãnñas, 1. 2, vãnñakt, 1. 11) or to the stele (mruvaad, 1. 1; mruvaaũ, 1. 12) cannot be stated as yet. The forms mruvaad and Śfarvad (for mrud and Śfard) are undoubtedly poetic, archaic forms. A perfect parallel to Sfar-va-d would be the Lycian tlawa; cf. Sundwall, p. ${ }^{279}$. Perhaps Sfardak - if this means Sardian, which is very likely is also an archaic form; it would then remind us of Etruscan $\cdot \alpha \%$ in ruma "Roman". We saw above that in prose different forms of gentilicia are used.

## CHAPTER V.

## Notes on Lydian Grammar.

On the basis of what has been stated in the fore-going chapters it is possible to form an opinion upon certain grammatical features in Lydian. This chapter is bound to be very meagre. Let us hope that the longer inscriptions will soon be better understood and that our knowledge of Lydian grammar and of the Lydian lexicon will become more complete.

## A. Phonology.

§ 1. Consonants.
Lydian has three labial consonants: $b, f$ and $v$. In one case $f$ is written for $b$, above p. 35 ; but this is probably due to a mistake, not to a phonetic change. The sound $b$ takes the place of $\beta, \pi$ and $p$; see above p. 4 .

There are two dental consonants: $d$ and $t$. But it seems that in foreign names $d$ was changed; cf. Katova(s), Aüiksantru(s) and Atrasta(s), above pp. 6, II and 55, also est mrud. There is no 9 in Lydian, see above p. 7 .

There are two or perhaps more gutturals in Lydian: $k(x), q(\uparrow)$; perhaps $1(g$ ? $)$ and + (if this is the old Greek $\chi$, i. e. the aspirated voiceless guttural explosive). On 1 see above p. 4. If 1 is $g$, the $g$ interchanges with $k$.

There are three sibilants, $s(\mp), \xi(3)$ and $\dot{c}(\boldsymbol{z})$, if the last may be placed in this group. Lydian $s$ seems to be rendered by in Aramaic in the name of Sardis; cf. above p. Io. And Lydian $s$ becomes $s$ when $s$ and $s$ follow each other directly; cf. es-śsess, and vis-sis>vissis, above p. 31 and p. 45.

Finally there are the so-called "liquids" $l, m, n, r$, and the guttural $\tilde{n}$ ( $\mathbf{~}$ ). All of them seem to be able to form syllables. For $l$ compare atrokl ( $12,1.8$ ); for $m$ : akmss (in 4, several times); for $n$ : katofn (I2, 1. II), and the ending -mn in Sivraümn ( $11,1.10$ ) and alarmin ( $16,1.17$ ); for $r$ : astrokoü ( $12,1.1$ and in several other passages), srfastid ( $13,1.3$ ) ; brvãc $(26,1.1)$, srkastuś ( $\mathrm{I} 2,1.7$ ), srmlis $(30,1.3)$. It may , here be added that certain voiceless consonants may also form syllables; cf. ksbütaũks ( $12,1.4$ ), vstaś ( $26,1.2$ ), in which s takes the place of a vowel; in vqbahẽnt (passim) $q$ seems to take this place, but I think it should really be pronounced vaqbahẽnt.

The sounds $l$ and $r$ seem to interchange; compare $\mathcal{N}(\cdot)$ with $111 A \geqslant 111 \mp$ above, p. 2 and 28 ; furthermore $\mp 1111 \ddagger(16,1$. 3) with \#19\&f $(30,1.16)$. Also $n$ and $\tilde{n}$ interchange; but here we may have mere orthographic variants, of. the ending -i $\tilde{n}$ (11, 2; 22, 10) and -in (passim).

It is to be noted that no certain case of a word beginning with $r$ has been found in Lydian. This reminds us of Turkish; ${ }^{1}$ no genuine Turkish words begin with $r$, and I have heard in Asia Minor from Turks orum for Rûm "Greeks", orus for Rûs "Russians", orobalar "clothes" (from Italian roba).

## ANNOTATIONS.

1. On the change of voiced and voiceless consonants.

It was noted above that in a few cases $d$ is changed into $t$, i. e. that $d$ loses its voice. In other cases however the use of $d$ is very consistent, e. g. in the endings $-a d,-e d,-i d,-o d,-u d$, in which a change from $d$ to $t$ would be most naturally expected. In one case $-d$ seems to have become $-t$, viz. est "this"; cf. est mrud "this stele". It is therefore not very likely that in cases like atrokl and katofn where $l$ and $n$ follow at the end after a voiceless consonant, this $l$ and this $n$ should lose their voice. But both words are at the ends of verses in No. 12; since the rhyme is based on the vowel and since this vowel was probably emphasized in singing, it is possible that the consonants after this rhyme vowel were not strongly articulated and perhaps became voiceless. I have heard voiceless $l$ and $r$ in the Turkish of Asia Minor and of Northern Syria, in the Arabic dialect of Syria and especially in that of Egypt, finally in the traditional pronunciation of Ethiopic at Aksum.

## 2. On the doubling of consonants.

Double consonants are rather rare in Lydian. This is probably only a difference in writing. Either double consonants were pronounced but not always written; or long consonants were gradually shortened, as for instance in French, in most German dialects and in Jacobite Syriac. There are several words in which double and single consonants interchange; see eśs and es, above p. 31 ; vissis and visis, nivissq́̄ and nivisqé, above p. 45 ; dummûuit and dumüus, in No. 27 ; dummis, in 16, 1. 3 and dumis, in 29, 1. I. The last root occurs also in the word dumms (4, 1. 2); the original root then is dumm-: dumms is the subjective case, dumm $\tilde{u}$ and dumũ are objective cases, dummis and dumis are probably adjectives. Double $l$ occurs in sellis (in one case serlis, see above 1. 2); qitollad, in $7,1.9 ; 30,1.7$ (cf. however qitalad, 13 , 1. 4); Bakillis, in 4, 1. 9, Bakilliù, in 17,1 . I (cf. however Bakivalis in 18 and 25 , Bakivalũ in 16, 1. 22), quvellũ in 11,1 . 1 ; perhaps also fêllanin, in $16,1.6$, but this

[^13]may be a mistake for fönanin，cf．fënanil，in 34,1 1．2．Double $n$ is found in Nannas， 25 ；double $v$ in savvaś，30，1． 21 ，cf．savé in I2，1．3．A double $t$ has not been found， but the name A $\tau \tau \alpha \varsigma$ ，for which Kretschmer，p． 350 ，gives a great many references，is spelt－A TA in Lydian；cf．Atalid in 5，1．2；Atalis in 13，1．I；Ataũ in 24，1． 2.

3．Vowels．
Lydian has six simple vowels，$A, \mathcal{A}, 1, \circ, y, \square(a, e, i, o, u, \partial)$ ，and three nasal vowels $M, \psi, \tau(\tilde{a}, \tilde{e}, \tilde{u})$ ．The vowel 0 is seldom used and is usually replaced by $i$ ，see above p．Ig．

We have no means of determining whether these vowels were short or long．In a few cases a double $A$ is written，and this again interchanges with a single $A$ ，cf． haaslü in $27,1.2$ ，nihaaslad in 29，1．6；nihasllü in 27，1．9；mruvaad in 12，1．I； Sfarvad ib．；mruvaaũ in 12，1．12．In one case a double $i$ found；cf．iitũ in 4，ll． 5 and 10 ．The most natural conclusion from these facts seems to me that where double vowels were written，long vowels were intended，but that in Lydian long vowels were in course of time shortened in the same way as long consonants．

Sometimes a short vowel was probably pronounced but not written，as in Armenian； see above p．i 8.

The vowel $u$ seems to interchange with the consonant $v$ ；see above p．ir．－ This may indicate that there was the same relation between $u$ and $v$ in Lydian as in all Semitic languages．

The vowel $i$ must have been a very open vowel，see above p． 3 ．

## 4．Accent．

The only thing that can be said with regard to accent in Lydian is that the suffixes did not have the stress，and that the stress on one of the preceding syllables seems to have been strong enough to suppress the vowel of the suffix；cf．aktin for ＊ak－it－in，above p． 36 ；Ibsimsis for＊Ibsim－is－is，p． 36 ；akmüt and akmüit，p．42； vãnñakt probably for vãnñak－it（12，1．11）．If Tïmlelid in 26，1． 2 is derived from Tquóicoos，we should have in Lydian＊Timles for Greek Timolaos；this would indicate a strong stress on the first syllable in Lydian，strong enough to elide the 0 in the second syllable and to reduce the ao to e．Cf．also＂Ibsis for＊Ibisis（＂Epeoos）；Sivraũ－ for＊Sivirañ－（ $=$＊Simiran－a $\Sigma \mu \dot{\sim} p \nu a ?$ ）．But in words like vqbahẽnt and vśtas a short $i$ seems to have been elided at the beginning on account of the stress on the last syllable．

## 5．Abbreviations．

At the end of Inscr．I 6 there are two words which as they stand can hardly be pronounced and which I take to be abbreviations or sigla．There are two additional sentences written on the side or margin of No．I 6 ；they read

> 1Y8 1Y9Y ケ1A才1才Ag TYAYY

Sardis Expedition VI．

Chapter V. Notes on Lydian Grammar.
The word ẽnaũt cannot yet be translated. It may be a demonstrative pronoun or mean "the said". Bakivalü mrud seems to be a genitive construction, meaning "Bakivalis' stele". The letters $b n l$ may mean "is sacrosanct"; cf. bavafuni....., above p. 44.

In the second sentence I believe that 9 M certainly stands for mruũ. Then the whole would be "now ( $-i t$ ) this stele (esũ mruũ) if anybody (his, literally "he, who") destroys, may a god take vengeance upon the godless".
L. 22 reads 141 3ง1AX $\mp 1114 T \mathbb{C} \ldots$ and the fragment of an inscription from a column-drum of the Kroisean temple of Artemis at Ephesos, now in the British Museum, ${ }^{1}$ gives the letters $141 \mathrm{II} \ldots$ It seems that inl also is an abbreviation of some fuller word, probably a verb meaning "he dedicated". If the name of Kroisos had been on the column at Ephesos the inscription might be read

$$
\begin{aligned}
& 141 \text { II[1ATAY1A } 303109 x] \text { or } \\
& 141 \text { II[11, 1才1才 } 303109 \text { y]. }
\end{aligned}
$$

In L. 22 the name of the father of the donor is . . btel-; the word kaves probably means "priest"; see Buckler-Robinson in Am. Fourn. of Archacol., Vol. XVII (1913), pp. 362 sqq.

## B. Pronouns.

## 1. Personal Pronouns.

A personal pronoun of the first and second persons has not yet been discovered; nor is it very likely that such forms will be found in the funerary inscriptions from Sardis, unless it should be proved that in the poetical inscriptions the dead are addressed or speak themselves.

A personal pronoun of the third person seems to be the word bis; but this may originally be a demonstrative pronoun. It would not be impossible to assume several demonstrative pronouns; for in Armenian as well as in the Caucasian languages these exist in considerable variety. The exact meaning of the following forms cannot be determined. We should have

|  | I |  | II |
| :--- | :--- | :--- | :---: |
| Subj. case | bis | he | - |
| Obl. case | bü | him | (ẽmũ him?) |

Besides the independent forms there are as suffixes in Lydian
Sing.
$-m \tilde{u}$ Plur.
him, her, it
${ }^{1}$ This fragment was communicated to me by W. H. Buckler. It has been published by Newton in Trans. Soc. Bibl. Archacol. IV, 1876, p. 334. Kretschmer, in Denkscher. Wiener Akad. 54 ; 2, p. roo, follows Newton's incorrect text.

## 2. Possessive Pronoun.

According to p. 37 above, we should have
$\left.\begin{array}{ll}\text { Subj. case } & \text { bilis } \\ \text { Obl. case } & \text { bilûu }\end{array}\right\}$ his.
3. Demonstrative Pronoun.

Sing.


Plur. $\left.\begin{array}{l}\text { esk (?) } \\ \text { esćáć }\end{array}\right\}$ these.

## 4. Relative Pronoun.

Subj. case his hid
Obl. case he who, that which.
It seems that his etc. is originally an adjective form like $a i(y)$ - in the Semitic interrogative. The corresponding substantive form seems to be $n i m$, which would have the same use as Semitic man; cf. nim-it, above p. 53 .

But nim as well as his seem to be originally interrogative pronouns, used in relative sentences only with the meaning he who $=$ whosoever $=$ if anybody; such an use would have its parallels in Semitic, and perhaps in Middle High-German swër, etc.

## 5. Indefinite Pronouns.

Some of the forms mentioned in $\S 4$ are found by themselves; or with prefixes, or with suffixes, as indefinite pronouns. Such forms are

Subj. case his hid hisk his-it nã-his nã-hid nim-it
Obl. case hũ hûk - - - -
Besides these forms there is a word helîk which must have the meaning of an indefinite pronoun or perhaps mean "all"; cf. above p. 36. The subjective case of this word would probably be helisk (?) or helik (for helid-k).

## C. Substantives.

So far two cases have been found in Lydian with certainty. I have called these the subjective case and the oblique case; but this is of course only a makeshift. In the singular the subjective case has the ending $-s$ or $-d$, the oblique case has the ending $-\tilde{u}$. The endings $-s$ and $\cdot d$ disappear when $\tilde{u}$ is added; also when other endings such as $-k$ "and", -lis, -msis (adjective endings), $-l$ (probably an old genitive ending) are joined to the stem. We have then the paradigm

> Subj. case vãnaś"tomb" mrud "stele"

Obl. case vãnaũ mrũ̃
Whether $-s$ and $-d$ denote different genders cannot be decided yet. The demonstrative pronoun es- agrees with the following substantives: ess (for *ess) vãnas, est mrud.

These endings may just as well be signs of classes as signs of genders. Furthermore I do not wish as yet to say anything with regard to $-a-,-e-,-i-,-o$. and $-u$ - stems. All five vowels and even some of the nasal vowels occur before the endings $-s$ and $d$. The words ending in $-a s^{5}, e s, i s,--i s,-o s,-u s$ are probably all substantives or adjectives, those ending in $-a d,-e d,-i d,-o d,-u d$ may be either substantives, adjectives or verbs.

The ending $-l$, which seems to signify an old genitive, occurs after different consonants, after $a$, after $o$ and after $u$. Such forms occur several times, but I have not in a single case been able to determine the meaning of these words with absolute certainty. Many of them may be genitives, others verb forms. The conclusion that $-l$ is an old genitive ending is suggested by the adjectives of appurtenance, viz. -lis, -lid; cf. above p. 33.

The oblique case ending in $\tilde{u}$ evidently has many different functions. It seems to include the meanings 'of the genitive, dative, accusative, locative and of a temporal case. The words oraũ quvellũu Artaksassaũs in 11, 1. I and Aùiksantruũ in 26, 1. I are in all probability genitives. The meaning of a dative was suggested above p. 37 for the suffix -mĩ. The meaning of a dative or an accusative is implied in the words esũ vãnẫ̆ buk esũ mruũ which occur very frequently, followed or preceded by the verb fênsiuibid "he destroys". We do not know which case this verb takes; but it is likely that it takes either the dative or the accusative. Again in ist Sfariu and in ist esũ vãnaù the oblique case probably has the meaning of a locative; cf. above p. 32. In borlĩ, a word which in all likelihood means "in the year", it would have the function of a temporal case.

It is not unlikely that other case-endings will later on be discovered. However the existence of only two cases in Lydian would have its parallels in other languages, e. g. Persian and one of the newly discovered Indo-Germanic languages of Central Asia; for the latter see Meillet in Indogermanisches Fahrbuch, I, p. io-1 i.

In the plural the subjective case very probably has the ending $-k$, the oblique case certainly has the ending $-\hat{\varepsilon}(z)$; see above p. 3 I . In the demonstrative pronoun the oblique case of the plural has a double ending, viz. es-c-ać. The meanings of the oblique case of the singular seem to occur also in the plural. We have brvã́c "of the years", above p. 55 for the genitive, esćá́ lahrisać "(to) these funeral couches" for the dative or accusative, dã̃ "in the days", above p. 50 for the temporal case; all this, of course would only be true if my readings and translations of these words are correct.

## D. Adjectives.

Adjectives of appurtenance are formed by the ending -li. A paradigm would be

Sing.

$$
\begin{array}{lc}
\text { Subj. case } & \text { Manelis Manelid } \\
\text { Obl. case } & \text { Manelit }
\end{array}
$$

Plur.
Manelak(?)
Manelá́.

Another adjective ending is $-i s$, and reduplicated -sis (for *isis). The simple ending -is occurs quite frequently, but the words containing it cannot be translated. The ending -sis is found in vissis (for "vissis) to which I have tentatively assigned the meaning "divine, deity". Again in occurs in brafrsis (7, 1. 7) and mũvẽsis (27, 1. 3). The same ending -sis is probably contained in $m$ sis; for the $-m$ - is rather a remnant of a case ending. The word 16 śi $-m$-sis means "Ephesian"; cf. above p. 36 .

In 12, 1. 9 we read Sfardak Artimuũ. It seems that $-a k$ is an obsolete adjective ending denoting origin or appurtenance. The two words would then mean "to (or: of) the Sardian Artemis". But we cannot be sure of this since the word Sfardak occurs only once more, in the fragment 23 where the following word is lost.

Again from the same word Sfard several forms are derived which may have a meaning similar to the one just suggested. They are Śfardênñ̃, Śfardêtû̀, Śfardêtak, Śfardẽtik, Śfardẽtać. It seems that Śfardẽtak (subj. case) and S'Sardẽtać (obl. case) are plural forms meaning "the Sardians". Sfardẽtĩ would then be the oblique case of the singular. Śfardètiz may possibly stand for "Sfardẽntis $+k$. But I have found no parallel to Sfardeñ̃. Perhaps -ẽt- is composed of en- and -t-. Or $t$ is here really $d$, and $t$ after $n$ should be pronounced $d$ as in Lycian; in that case the $d$ might be a hybrid sound developed from $n \tilde{n}$. But this is all very uncertain. On the question of $-n t$ - and $n d$ - cf. Kretschmer, pp. 293 ff.

## E. Verbs.

Although there are undoubtedly quite a large number of verb forms in the Lydian inscriptions from Sardis, I have been able to recognize only a very few of them with some degree of probability.

The standard verb of these inscriptions is (f)ẽnsüibid which means "he destroys" or "he damages". There is scarcely any doubt that it is in the third person of the singular. So the $-d$ is probably the ending characteristic of this person under certain circumstances. Furthermore $f$ is a prefix, - $\tilde{n}$ - probably also a prefix, or a preposition; $-b i$ - or -ibi- may be a sign of the mood; then sũ or sũi would be the root.

Another common form is vqbahẽnt. In No. I it stands after "Hũdãnś and Artemis"; in No. 17 after "Artemis of Ephesos and Artemis of Koloë"; in 13 after Artimus, in 24 after Levs. We have therefore the same form in two cases where we expect a plural, and in two cases where we expect a singular, unless Artimus and Levs be also plural forms. If the latter be true, my notes on the plural of the substantives should be revised. Leaving this question aside for the present I venture to suggest that vqbahẽnt is really a form in the third person of the plural; then -nt, or -ont would be the sign characteristic of this form.

Other verbs are varbtokid and varbtod, katsarlokid, $d(\bar{e})$ tdid. It is possible that varbtod is only a mistake for varbtokid; for the former occurs only once, the latter
four times. The substantive to which this verb refers is always $v i s(s)$ is. Thus we have another instance of $-d$ as the sign of the third person sing. The verb $d(\hat{e}) t d i d$ occurs in $11,1.8$, after his-k; see above p. 49. This again is a singular. But katsarlokid is found in the three following passages:

## 7, 1. 3-4. Hüdãns Tavsa's Artimuk Ibssimsis katsarlokid <br> 7, 1. 10. Hũdãnk Artimuk katsarlokid <br> 30, 1. 12-13. Artimuśs Ibśimsis katsarlokid.

In the first two instances it refers to two deities; in the last to one only. Here again there is the same uncertainty as in the case of vqbahẽnt.

## F. Particles.

The Lydian particles so far recognized are
(1) independent words, (2) suffixes, (3) prefixes.
(1) The independent words are $a k, b u k, n i k$.
$\alpha k$ is the conditional particle; its place is always at the beginning of the protasis; it corresponds with $f a k$ at the beginning of the apodosis. Only in one case is the apodosis introduced by $a k$-; and there the protasis has no $a k$-, but a relative pronoun with conditional meaning, viz. esũit $m r(u \tilde{u})$ his fensüibid akać viśsis etc., 16, 1. 23 f . Generally however it is found with suffixes, mostly $-i t$, sometimes $-i t+-i n$; if the last two are added the word becomes aktin. Cf. above p. 34 and below the notes on Lydian Syntax. Evidently $a k$ has sometimes another function besides that of introducing conditional clauses. For it seems also to be an independent word for "and"; see above p. 52. Perhaps this is even the original meaning of our particle; cf. unde with conditional clauses in Middle High German.
buk means "or"; see above p. 34 .
$n i k$ seems to be composed of the negative $n i$ and the suffix $-k$; its meaning is probably "neither". See above p. 37 nik bis nik bilis.
(2) The suffixed particles are $-k,-i t,-i n$.
(a) $-k$ is the usual particle for "and"; see above p. 3 I. In such cases the endings of the subjective case $(-s,-s,-d)$ are dropped; cf. Artimuk for Artimus $+k$, hik for $h i s+k$, mruk for mrud $+k$. But the ending of the oblique case is retained; cf. Ar timuùk, hûk, mruùk. Sometimes $-k$ is repeated, in the same way as Latin que and Greek $\tau \varepsilon$; in L. 7,1 . Io Hũdãnk Artimulk must mean "Hũdãnś as well as Artemis". Another meaning of $-k$ is that of a generalizing particle; cf. above p. 36. In this case the ending of the subjective case seems to be kept; cf. hisk, hük, helük (above p. 67).
(b) -it is generally found at the beginning of conditional clauses; it is added to $a k$ as well as to other words taking its place, viz. his and nim, or even to any word of the protasis: hisit fênsüibid esĩ̆ vãnaũ etc. "whosoever (or: if anybody) destroys this tomb" etc., 26, 11. 4-5. The sentence in 14 es-vãnać hisredé nimit fên(süibid) is
not absolutely certain, but I believe that nim-it here has the same meaning as his-it, and that the object is here placed before the verb and before the conditional pronoun: "these tombs ... if anybody destroys". This order of words reminds us of Turkish, Abyssinian and Bavarian constructions. The same order is found in a case in which -it is joined to another word; cf. esüit $m r(u \hat{u})$ his fênsûibid $16,1.23$. When a personal suffix and this suffix -it come together, the former precedes the latter; cf. ak-mì-it and $a k-m \hat{u}-t$, above p. 42 .
(c) -in seems to have the function of a concluding particle; cf. above p. 34. It occurs almost always together with $-i t$ or $-k$, and follows them; we have then $-t$ in and -kin. Perhaps it was originally $-i \tilde{n}$, for in a few cases we read $£ 1 x$ - instead of $\eta \mid x-$.
(3) The prefixed particles are $f$ - and $n \tilde{a}$-.
(a) $f$ - occurs chiefly in the apodosis of conditional constructions; cf. above p .33 sq . In many words beginning with $f$ - it may also be a prefix or a preposition prefixed to a verb or a noun; but we are not able yet to analyze these words. Cf. fënsüibid and ẽnsũibid above p. 44 and fêtamóidé aks his ẽmé êtamé in $7,1.18-19$.
(b) $n \tilde{a}$ - is prefixed to the pronoun $h i s$ in order to make it an indefinite pronoun; nä-his anybody, cf. above p. 35 . It is also found at the beginning of several other words.
(c) It seems that $\tilde{e}$ - (or $\tilde{e} n$-) is also a prefix or a preposition used in compound nouns or verbs. But its meaning is unknown.
(4) Infixes.

A few words are to said with regard to infixes. It seems that a number of syllables are added to verbs or nouns between the stem and the ending. These syllables may be formative elements of declension or of conjugation or so-called "infixes" expressing different shades of meaning not connected with the inflexion. Above pp . II and 62 attention was called to the syllable -va- in-mruvaad and Sfarvad; on p. 45 to the syllable -to- in varbtokid; -lo-may also belong to this category, an inference suggested by the verb katsarlokid. And if we compare the words savé, savvas (sav-va-s) and savtarid we conclude that sav-is the stem, -va- is the same element as in mruvaad, and -ta-is another "infixed" element. Nothing can be said of the meanings of these syllables, except that $-v a$ - does not seem much to change the signification of the original. Cf. Sundwall, p. 279.

## G. Notes on Syntax.

It sounds almost audacious to speak of syntax with regard to such an unknown language. But I intend only to present a few remarks on the order of words in those sentences which are fairly intelligible.
(1) Position of the pronoun.

The pronoun es- "this" stands in our inscriptions always before the substantive.

Cf. es'(s) vãnaś" "this tomb", est mrud" "this stele"; in the oblique esũ vãnaũ, esũ mruũ; esćać lahrisać, esćać mũvẽdać, etc.
(2) Position of the adjective.

The adjective seems generally to follow the substantive; cf. akad Manelid Kumlilid, above p. 33, Artimuśs Ibśimsis, above p. 35 and elsewhere. But if Śfardak Artimùu in 12, 1. 9 means the Sardian Artemis we should there have the adjective before the substantive; it is to be noted however that this inscription is written in poetry, so that one might expect the usual order of words to be changed.
(3) Position of the "genitive".

The oblique case that seems to serve as a genitive may either follow or precede the word on which it depends; cf. borlü $X V$ oraũ quvellü "in the year 15 of the great king", but Aưiksantruи̃ dã̃ "in the days of Alexander" (if my interpretation be correct), and Bakivalũ mrud, above p. 66.
(4) Order of subject, object and predicate.

So far I have carefully avoided speaking of subject, object and predicate, because we do not know at all the internal structure of Lydian. I have spoken only of the subjective and the oblique cases and of verbs, and these are meant when I adopt here those grammatical categories known to us from Indo-Germanic and Semitic languages.

It seems that the usual order in Lydian is the following: subject - object predicate. A standard example would be

> akit nãhis esũ vãnaũ fẽnsũibid
> if anybody this tomb destroys
> fakać viśsis niviśq́c varbtokid
> then a deity upon the godless shall take vengeance.

The word $f$ - $\alpha k$ - $\alpha \dot{f}$ however indicates that we have not yet penetrated all the mysteries of this comparatively simple construction. I assume that $-a \dot{6}$ is a personal suffix of the third person plural: if it corresponds to the so-called dativus ethicus or dativus incommodi we should here have an "indirect object" besides a "direct object"; but if it has the meaning of a direct objective it may be used with a sort of prolepsis, and a literal translation would be: "then - upon them - a deity upon the godless shall take vengeance". In this case the object would be expressed twice, once before the subject by a suffix added to the particle, and once after the subject by a substantive in the oblique case.

The rule "subject - object - predicate" has however many exceptions, as may be seen from the following examples.
(a) Order: (1) subject (2) object (3) predicate.
akit (1) nãhis (2) esũ vãnaũ buk lahrisać buk helaû (3) fênsûu(2)bid fakać (1) vişis
(2) nivişǵ (3) varbtokid, in No. 6.
ak (1) nãhis (2) ẽmũ kãnaũ kileũ buk èminać esać (3) qitalad fadint fakmû (1) Artimus (2) hiraũ helưk (3) vqbahẽnt, 13, 1. 3 ff.
akit (1) his (2) esĩ vãnaũ buk esíać antolać buk esćać lahrisać (3) fênsūibioid fakaĉ (1) vişsis (2) niviśsqqé (3) varbtokid, $15,1.2 \mathrm{ff}$.
akit (1) nãhis (2) esũu mruũ........ aktin (1) nãhis (2) helük (3) fênsūibid fakmũu
(1) Artimus ..... (2) aaraũ biraûk..... (3) vqbahẽnt, 17,1. 3 ff......
(b) Order: (1) subject - (3) predicate - (2) object.
aki(t) (1) nãhis (3) fênsùibid (2) esũ vãnaũ, 8, 1. 5 ff.
akit (1) nãhis (3) fênsûibid (2) esũ vãnaũ buk esî mruî buk esćać lahrisać fakaĉ (1) vissis (2) nivisqé (3) varbtokid, 9, 1. 6 ff. - Here we have only in the protasis the order (b), whereas in the apodosis the order (a) is followed.
aktin (1) nãhis (3) fênsūibid (2) esíać mũvẽndać etc., $11,1.4 \mathrm{f}$.
(1) hisit (3) fênsüibid (2) esĩ vãnaũ buk esî̀ mruũ fak(2)mũ (1) Levś (3) vqbahẽnt 26, 1. 4-5. - In the apodosis we have here the order (c).
(c) Order: (2) object - (1) subject - (3) predicate.
ak(2)mût (1) his (3) fênsūibid fak(2)mũt (1) Hüdãns Artomuk (3) vqbahẽnt, I b.
a[kit (2) esũ sladmeũ buk esũ mruũ buk esćać mastãć (1) his (3) fèn $[$ süibid $] \ldots 5,1.3 \mathrm{f}$.
akit (2) esũ sirmaũu (1) has (3) fênsîibid 7, 1. 2.
(2) es-vãnać hisredé (1) nimit (3) fênsūibid 14, 1. 1.
(2) esũit $m r(u \bar{u})$ (1) his (3) fênsũubid akać (1) vişsis (2) nivisqúc (3) varbtod, 16, 1.23 f... Here the apodosis has the order (a).
akit (2) esiu taaqui (1) his (3) fênsùibid, Inscr. from Arably Hadjili, 1. 4.
(d) Order: (2) object - (I) subject - (3) predicate - (4) other objects.
ak(2)mût (1) his (3) fênsũibid (4) buk esćać an(t)olać buk etc. in I a.
All these examples have been taken from the inscriptions written in prose.

## H. List of Endings.

It is perhaps of some use to give here a complete list of Lydian endings so far as I have been able to recognize them in our inscriptions. In the fore-going pages many of them have been mentioned, and suggestions have been made as to their probable meanings. I shall now give an alphabetical list of them without any reference to their meanings. I have arranged them with regard to the characteristic consonant of the ending.

## Endings with $d$.

$-a d$ (very frequent); -ed (very rare); -id (frequent, cf. also -lid below); -ida (very rare, only in hida); -od (frequent); -ud (rare); -lad (?, very rare); -ñad (very rare); -kid (rare); -lid (frequent); -tid (very rare); -rd or -ard (only in one word, qivard).

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Endings with $-v$.
$-o v$ (very rare).
Endings with $k$.
$-k$ following a consonant is rather rare; but it is very likely that in most of the following endings the $-k$ is the real suffix whereas the vowels belong to the stems.
$-a k$ (frequent); $-c k$ and $-i k$ (very rare); -ok (rare); $-u k$ and $-i u k$ - (very rare); -ãk (rare); -kin and $-k i \tilde{n}$ (rare) $=-k+i n$, (see -in); -ks in $k s-b u ̈ t a \tilde{u}-k s, 12,1.4$; -kit ( $=-k+i t$, rare).

Endings with $-l$.
On $-l$ and $-l$ following a vowel the same is to be said as on $-k$. $-l$ (rare); $-a l$ (rare); -el (very rare);-il (frequent); ol (frequent); -ul (rare).
-la (only in Mĩola); -lad (very rare); -las (very rare); -lin(?) (very rare, probably $-l+-i n) ;-l \tilde{u}$ (very frequent).

Endings with $-m$.
$-m$ (after consonant); $-a m ;-i m ;-u m ;-\tilde{a} m$; all of them are very rare. $-m n$ (very rare, perhaps $=-m+i n) ;-m s$ is rather frequent, in most cases the words end in $-k m s$; $-m \tilde{u}$ (frequent); $-m \tilde{u} t$ and $-m \tilde{u} i t$ ( $=-m \tilde{u} t-t$; rare).

Endings with $n$.
$-n$ (after consonant, very rare); $-m u$ (rare); $-i n$ (frequent), sometimes written $-i \tilde{n}$, cf. $-k i \tilde{n}$; -on (very rare). - $\tilde{n} i n$ (rare, probably -in reduplicated); $\quad-\operatorname{tin}$ (rare, $=-i t+-i n$ ).

Ending with $\tilde{n}$.
Only the ending -ẽnñ in Śfardênñ; but cf. also the other forms Śfardêtak etc., above p. 69.

Endings with -s.
-s (after consonants), -as and $-\tilde{s} s$ (very rare); -is (frequent); -lis (very frequent); - mis (rare); -sis ( $=-$ is reduplicated, rare).

Endings with 5 .
$-s$ (after consonants, especially $-r$-, frequent); -as (very frequent); -es (very rare); $-i s$ (rare); -os (frequent); -us (only in Artimus); - $\widetilde{s},-\widetilde{s} s$, and $-\tilde{u} \bar{s}$ (very rare).

Endings with $-t$.
$-t$ (after consonants, rare; perhaps $=-i t$ with elision of the $-i$ ) ; -at (frequent); -it (very frequent); -int (very rare); -ot (rare); - $\tilde{a} t$ and $-\tilde{a} n t$ (very rare); -ẽt and -ẽnt (rare); $-\tilde{u} t$ and $-\tilde{u} n t$ (rare). -kit (see above under $-k$ ); -tũ (very rare).

Endings with $-u$.
It is not certain whether $-u$ is a separate ending in Lydian; above, under $-n$, an ending $-n u$ was mentioned. Here the words kantoru and amu (or amu-k) are to be mentioned, in which $-u$ seems to be an ending.

## Endings with $-\hat{u}$ ．

The ending－$-\boldsymbol{u}$ is unusually frequent；it occurs after consonants as well as after vowels；with vowels we should have $-a \tilde{u},-e \bar{u},-o u ̃,-u \tilde{u}$ ．

Endings with $-c$ ．
$-a \bar{c}$（very frequent）；－ú̆（rare）；－$\tilde{a} \bar{c}$（frequent）；－$\tilde{e} \hat{c}$（rare）；$\tilde{u} \bar{c} \tilde{c}$（very rare）．
$-d \hat{c}$（frequent）；$-v \hat{c}$（frequent）；$-l \bar{c}$（very rare）；－mé（very rare）；$-s \bar{c},-s \hat{c}$ ，and $-t \bar{c}$（very rare）；－qć（rare）．

Endings with q．
Only in bitoq and ardẽq．

## I．The Vocabulary．

There are not yet very many Lydian words the meanings of which are firmly established．But in order to give a short résumé of what seems to have been deter－ mined with more or less certainty I append here an alphabetical list of such words； all of them have been mentioned in the preceding chapters．

## A

TA9AA＂court＂（obl，case）．
＊A（1）＂if＂or a particle of com－ parison；also TIXA and HIT＊A etc．－（2）＂and＂．－ （3）suffix of appurten－ ance．
$1 A \geqslant A$＂property＂．
マA10TYA＂bodies＂（？，obl．case）．

## g

Fl11｜＊A\＆＂Dionysiac＂；obl．case r111＊A 8 ．
干1118＂his＂（？）— 干Ig＂he＂（？）．
rA918＂house＂（obl．case）．
$\Psi 1908$＂in the year＂．
2M才98＂of the years＂．Both words may have the same stem， viz．bor－；one would have been amplified by means of $-l$－，the other by $-v a$－
xy＂or＂．
1019АTケタ＂fore－court＂（？）．

1 ending of the subjective case of the singular．
aM1＂in the days＂（？）．
1ItTキ1＂he buries＂（？）．
$\downarrow$
（3）3ง，T干き etc．＂this＂．

## 1


FI（3）31才＂deity，divine＂．
3A पM才＂cavern，tomb＂．
TYY＋Agヤf＂may they（he？）disperse＂．

71－，壬1－suffix；see above p． 34.
T干I＂here＂（？）．
TI－suffix，see above p． 70.
FI－adjective ending．
ヶ171＂month＂（？，obl．case）．
$*$
＊－suffix（I）＂and＂－（2）＂so－ ever＂in $\ngtr \neq 1+$ etc．－ （3）sign of the plural．
3才才A才＂priest＂（？）．
 1
$\forall A \mp \mid q+A 1$ etc．＂funerary couches＂．
Y
ヶ Y－suffix，of．p． 34 ．
4
－II negative．
てヤる1ィ।り＂the godless＂（plur．obl． case）．
＊｜Y＂neither＂．
TIM14＂whosoever＂．
$\mp 1+M Y$ etc．＂anybody＂．
－
そАq०＂great＂（？，obl．case）．
f
$\mp$－ending of the subjective case of the singular．

3－ending of the subjective case of the singular．
T
TTAAT＂column＂（？，obl．case）．
8
118।ケキทษ8＂he destroys＂．
$+$
$141 \downarrow t$ etc．＂fore－court＂．
（x）$\uparrow$ ist＂all，every one＂（obl．case）．
rA9It＂property＂（？，obl．case）．
干It etc．＂anybody＂．
$\psi$
$393^{\circ}$ TY४＂interior＂（\％），above p． 5 I ．
r
$\tau$－sign of the obl．case of the singular．

マ
$z^{-}$sign of the obl．case of the plural．
$\uparrow$
そ11タフy $\uparrow$＂king＂（？，obl．case）．

## CHAPTER VI.

## Comparisons.

A. Lydian has very little in common with Semitic and Hamitic languages. The -l- suffix forming adjectives of appurtenance occurs with similar import in the Kushitic languages of Abyssinia. Lydian has personal suffixes like the Semitic languages, but in Semitic the suffixes denoting the object are always found with the verbs, whereas in Lydian they are added to the particles as e.g. in Persian. Another point of comparison might be the absence of the verbum substantivum. In Semitic languages the words for "is, are" very often are omitted or replaced by pronouns and the like. In our inscriptions a word for "is, are" has not been found; this is probably due to our imperfect knowledge of the language. But it seems to have been epigraphical style in ordinary funerary inscriptions not to use the so-called copula; this must of course have been in keeping with the rules and the spirit of the language. On the other hand we know that in Greek also ह̇ $\sigma$ tí in very often omitted, and, as Prof. Wackernagel tells me, the omission of the copula is also common in Proto-Indo-Germanic. I think we may safely say that Lydian is neither Hamitic nor Semitic.
B. The languages adjoining Lydian were Phrygian, Carian and Lycian. So far as I can see, Lydian and Phrygian have in common (1) a number of letters and, in the old Phrygian, the general aspect of the alphabet; (2) certain proper names; (3) the style and diction of the funerary inscriptions. This indicates that Lydians and Phrygians had intercourse with each other and both probably partook of the same civilization. This is most natural.

The Carian glosses and inscriptions furnish so little material for comparison that I prefer to leave them aside for the present. Kretschmer, p. 376 ff., thinks that Carian and Lycian had a very important suffix in common; but this suffix I have not found in Lydian.

The Lycian and the Lydian alphabets have certain striking similarities, e. $g . 玉=\tilde{n}$. But there are two important differences between the Lycian and the Lydian languages which are noticed at once when a Lycian inscription is compared with a Lydian: (1) Lycian as it were revels in double consonants, Lydian has them very seldom; (2) in Lycian almost all words end in. vowels, in Lydian almost all words end in
consonants with the exception of those ending in $-\bar{u}$ (which of course may be developed from $-u m$ or $-u n$ ). If the Lydian letter $\uparrow$ were $\tilde{e}$, the similarity between Lydian and Lycian endings would be somewhat greater, because many Lycian words terminate in $\tilde{e}$. However I have given above, p. 15 f., my reasons for thinking that $\uparrow$ must be $\tilde{u}$. An important feature in both Lycian and Lydian is the frequency of nasal.vowels; and this point undoubtedly has considerable weight. But these two languages are not the only ones possessing such vowels. Indian languages (especially Urdu), Albanian, French, Portuguese, Piedmontese, South German and Slavic dialects are full of them, and it has also been suggested that the Etruscan language had them.

Prof. Thumb concluded from "the points of agreement between Lydian and Lycian, as shown in their alphabets, their phonetic systems, and the forms of their words", "that we may well be permitted to consider the possibility of the two languages being related". I do not deny this possibility, and I believe even that it is almost a probability. But the word-forms on which he based this conclusion were at that time not correctly read. We may however add a few words which seem to be the same in Lycian and Lydian. The word ada cannot be taken into consideration, since it is probably a foreign word in Lycian and Lydian, cf. above p. 6If. But ni- is the negative both in Lydian and in Lycian. And the ending -ẽnñ in Śfardẽnñ, if this means "the Sardian", is probably the same as añna, eñni in Lycian; cf. Sundwall, p. 4I. It was alleged by Jacobsohn in the Berliner Philolog. Wochenschrift, 1914, No. 3I, col. 995 ff ., that the Greek suffix -nvos, $-\alpha_{\text {a }}$ os which Sundwall and Herbig think to be the same as the Lycian ending, is of Indo-European (Thraco-Phrygian) origin. It is not altogether impossible that the Lydians borrowed this suffix from the Phrygians; for it seems to me certain that there is a connexion between this Greek and the Lydo-Lycian suffix. If Lycian $I$ is read $s$, as in Lydian, the Lycian demotica ending in $a z i$, $e z i,{ }^{1}$ (i. e. asi, esi) might very well be compared with the Lydian adjectives ending in $-i s$, -sis; cf. above p. 35 f . The $-l$ - suffix is not so frequent in Lycian as it is in Lydian; but it occurs in a few cases, cf. the epichoric name of the Lydians trmmili. The -va-suffix is also known to exist in Lycian; cf. Sundwall, p. 279. On the other hand, such a characteristic element as $-k$ "and", is not found in Lycian. But we know that in Indo-Germanic languages also there is a great variety in the words meaning "and".
C. There are no doubt a number of resemblances between Lydian and the IndoGermanic languages. I must leave a fuller treatment of these questions to students of comparative philology. Only a few points may be mentioned here.

The postposition $-k$ "and" reminds us at once of $-q u e$, $\tau \varepsilon$, Sanskrit $-c a$.
The endings of the subjective case $-s,-s,-d$ seem to agree with similar IndoGermanic endings; es(s) and est "this" recall the Latin iste and istud.

[^14]The pronouns his and hid, which are probably interrogative, relative and indefinite pronouns, look somewhat like Latin quis, quid etc.

The fact that so far only a subjective and an oblique case have been discovered reminds us of the same phenomenon in the later Iranian and in Tokharian languages.

The ending of the oblique case is $-\tilde{u}$; this would most naturally be a later development of $-u m$ or $-u n$. Reading this, anyone would at once think of the endings of the accusative in Greek and Latin. Now this $\tilde{u}$ is also used as a locative. In Old-Armenian the locative in $-u m$ is rather rare, but later on it becomes more and more common; in Russian certain classes of nouns have a locative in $-u$; in Sanskrit $-m$, and in Lithuanian -iame, are respectively found as the ending of the locative with certain substantives.

The word for "if" is $\alpha k$; the Greek $\alpha i \neq s$ (in Homer) sounds somewhat like the Lydian word, but is undoubtedly of a different origin. Besides we know only that $a k$ (usually with suffixes) stands at the beginning of conditional clauses. Its original meaning is unknown to us; this may have been "as", or even "and". See above p. 70.

A Lydian word suи̃os, in I2, 1. 6, may mean "son"; Katovalis suû̀s would very well be translated by "son of Katovaś", see above p. 6i. It seems that if this meaning is correct the word must certainly be the same as the Indo-Germanic sunu-. But accidental coincidences are not uncommon: in a Guatemalan dialect ruká means "hand" just as рука does in Russian; in Coptic werme has exactly the same meaning as the German "Scheune"; in Telugu pampu means "to send"; in Tigrē sinsin means the same as the German "Zinsen" etc. Secondly even words for relationship are sometimes borrowed by one language from another, as we see from Etruscan nefts' (nepos) and prumars' (pronepos); German Onkel, Tante, Cousine, Papa, Mama; Lycian cbrata (for "tbrata) "daughter". ${ }^{1}$ But Indian, Gothic and Slavic, the languages in which sunuis used, are rather far away from Lydian. The word mrud means "stele"; but if it be translated "monument", the Indo-Germanic root *mer presents itself at once.

The only verb-forms recognized with certainty in Lydian end in $-a d,-i d,-o d$ and ẽnt. These of course will be at once compared by everybody with Indo-Germanic $\cdot t i$, $(-t$, in some languages $-d$ ) and with $-n t i$ (in several languages $-n t$ ). But as I have said above, p. 69 f., there is still some doubt which of the two is singular and which is plural; and perhaps Lydian had a verbal inflexion built on principles totally different from those of other languages.

There are certain parallels between Lydian and Armenian, which have been pointed out in the preceding chapters. Cf. $-k$ and $-\varepsilon$ as the endings of the plural, above p. 17 ; $\checkmark$ as the equivalent of Armenian $\_$and its omission, above p. 19; the probable change from $n>\tilde{u}$, above p. 16 ; the doubling of endings, above p. 5 I. But these peculiarities are explained with difficulty even in Armenian.

[^15]D. A language very widely spread in ancient Asia Minor was the Hittite. It is probable that more will soon be known of this language when the tablets from Boghaz-kyöi are published. From the description of the Hittite vocabulary published by Prof. Delirzsch in the Abhandl. d. Berl. Akad. 1914, No. 3 we learn that Hittite nouns have the nominative endings $-a \xi,-i \xi,-u s$ exactly as in Lydian. Prof. Winckler said in Mitteil. d. Deutschen Orient-Gesellschaft No. 35, p. 19, ann. *** that in Hittite the nominative ends in $-s$, the accusative in $-n$. If this statement be correct, the ending - $n$ may be compared with Lydian - $\tilde{u}$. Moreover in Hattusil and Mitrašsil we find an ending -sil which reminds us very strongly of Lydian -lis; see also Peiser in Orient. Lit. Zeitung 1915, col. 7. This is of great importance; but it is not decisive. Words common to both languages with the same meaning I have not found. Some of the words that might give us a clue are unfortunately written in Hittite with ideograms. The Hittite word biran, which reminds us of Lydian TA918 above p. 36, is not translated. A very uncertain parallel is Hittite $\xi^{\xi} /$ sarkus "the first": Lydian srkastus; for in 12, 1. 7 srkastus Katovalis suños might mean "the first-born son of Katovas".

Perhaps a few other Lydian words may be compared with Hittite forms; but this comparison is very doubtful. Delitzsch p. 20, 1. I reads in the Hittite column.... kuedani dannara, in the Babylonian i-da-a-an ra-ka-a-tim, The word kuedani recalls at once the Lydian küidaũ which means "soil" or "water"; see above p. 36. But unfortunately the meaning of the Babylonian expression is not certain, and the Hittite equivalent is incomplete. On the same page, 1. 2, Delitzsch gives the Hittite kutti biran as an equivalent of Babylonian sahâtum. The latter means "Seite, Umgebung". Now we have found above p. 32 that Lydian kud or kudkid means probably "before, opposite" and that biraũ (obl. case) means "house". Then sahâtum and kutti biran may possibly be interpreted "what is before, or around, the house". Dr. Ehelolf tells me that sahâtum is usually translated "arm-pit", but may have a more general meaning "side"; it seems however that sahatum is meant to be a part of the body at the passage just quoted. Prof. Jensen is of the same opinion and thinks that Lydian biraut has nothing to do with Hittite biran.
E. The most interesting question is that of the relationship between Lydian and Etruscan. In the course of our discussion several points of agreement between these two languages have been mentioned. These and others are to be presented here.

Etruscan has no double consonants: Lydian has them very seldom, and often a single consonant is written instead of a double one; cf. above p. 64. But of course the Lydian writing may be imperfect in this respect.

Etruscan has no medials and the aspirated tenues often interchange with the simple tenues, showing that their pronunciation was not different: Lydian has the medials $b$ and $d$, perhaps also $g$, but $d$ is sometimes changed into $t$, and $g$ seems to have become $k$ in all cases except one (as far as our inscriptions go); there are no aspirated tenues in Lydian.

Etruscan and Lydian have both the voiced and the voiceless labial spirant ( $v$ and $f$ ) and express them both by the same sign, $\mathcal{1}$ and 8. But $\mathcal{f}(v)$ may be $\psi$ in Lydian as well as in Etruscan.

Etruscan had nasal vowels; cf. Herbig, p. 34 f. On the Lydian nasal vowels see above pp. 8 f., 14 ff., 78 .

In Etruscan $u$ and $v$ interchange; for the Lydian see above p. in.
Etruscan had a very strong stress as near the beginning of the word as possible; this brought about a great many changes in the vocalization of the syllables following. The same seems to have been the case in Lydian. For even if Timles is not Tupinoos (cf. above p. 65), the omission of certain vowels in the suffixes shows that one of the preceding syllables had a strong stress; cf. ak-it-in>aktin; ak-mû-it>akmût.

In Etruscan there are two genitive endings: $s(\xi)$ and $l$, with varying vowels. In Lydian the adjectives of appurtenance which are most naturally to be derived from the genitive have $l$ and $s$ as their characteristic consonants. Moreover it seems that Lydian had originally a genitive ending in $-l$ which became obsolete and was used only in archaic style, and which was gradually replaced by the oblique case ending in $\tilde{u}$, when $l$ became more and more restricted to the adjectives. Although, as I said above, p. 77, the $l$ is used for similar derivatives in other languages, and although the Etruscan $l$-ending has often been compared with the Latin ending -lis, I think that there must be a nearer relation between Etruscan and Lydian in this matter.

It seems that neither Etruscan nor Lydian originally had a grammatical gender; for the Etruscan cf. Herbig, p. 23, for the Lydian above, p. 24.

Etruscan had a gentilicium ending in $-a \chi$; the same seems to have existed in Lydian. Cf. Etr. rumaұ "Romanus", Lydian Sfardak "Sardian" (?).

The patronymic is in Lydian almost always used as an adjective. In Latin the use of these adjectives has been considered to be of Etruscan origin, in Greek of "Pelasgian" origin, in Phrygian of pre-Phrygian origin. But according to Prof. Wackernagel these hypotheses are not justified; for the use of the patronymic adjective is Old-Indo-Germanic also.

The particle "and" is in Etruscan $-c$, in Lydian $-k$.
In Etruscan there seem to have been verb endings $\mathcal{\rho}$ and $n \vartheta$. Cf. Pauli, Altital. Forsch. II, p. 103 f. In Lydian we find the endings $d$ and $-n t$; cf. above p. 69.

Etruscan and Lydian seem to have several word-stems in common. Cf. tio "moon", above p. $5^{2}$; akad "property", above p. 33 ; vis-: ais- "deity"(?), above p. 46 ; dâć: tinsi "days" (?), above p. 50 ; perhaps even Etruscan ril "year" (?): bo-rlûu "in the year". The Lydian deity Levs has been compared above, p. 55, with the Etruscan Lvsl.

Of proper names Lydian Katova( $s$ ) may be mentioned here; on the stem 'cas see Herbig, p. 18 f.

Etruscan and Lydian poetry appear to have the same metrical system; cf. above p. 6i . Sardis Expedition VI.

It seems to me that the relationship between Etruscan and Lydian cannot be denied, unless we are misled and duped by accidental coincidences in the most extraordinary way. And it is also probable that Lydian and Lycian are related. Then Lydian might in time become the connecting link between Lycian and Etruscan.
F. The problem of the relations between Etruscan and Lydian on the one side, and the Caucasian languages on the other side, must be left to future investigation. There seem to be certain prominent features which belong to both groups, e.g. the role played by the $l$-suffix, or the "verbal infix" -bi- in Lydian and in Georgian. But I cannot treat of such difficult and intricate questions before I have acquired more knowledge of the Caucasian languages; and even then I am afraid the results will be very scanty, because the local and temporal distances between these groups are exceptionally wide.

## CHAPTER VII．

## Lydian Proper Names．

In this chapter a short list will be given of those Lydian words which I take to be proper names of deities，of persons and of places．I think it is safe to do this， even before all Lydian inscriptions are published．But I refrain from giving parallels from other Asia Minor languages，because I cannot reach completeness in this respect from the material at my disposal．The most obvious parallels can easily be found in Sundwall＇s book．What lies beyond this will be supplied by those scholars who have more material at their disposal than myself．Only some Etruscan parallels，which were pointed out to me by Professor Herbig，have been added here．All names will be given in exactly the form in which they occur in the inscriptions，without reference to their grammatical forms．Those names which occur in the third place after two other names I shall mark as nom．loci，although some of them may have another meaning．

## A


Fl1Y1A I $\mathrm{a}_{1}$ ，I $\mathrm{b}_{2}$ ，33．Etrusc．alu．
케 $14+4 A 51$ ．
＊А玉 М9（？（？） $4_{10}$ ．
Ғ11才ММ१А I51－2．
111А पМ8АТ9A 95.

langa，1． $\mathrm{I}-2$ ．

＂Artemis＂，passim．
TATA $24_{2}$ ；FllATA $5_{2}$, I $3_{2}$ ．－Etrusc．ata－． FllvTA $8_{2}$ ．－Etrusc．ate．
II1A3A9TA nom．loci 96 ．
小11АТЗАТА 26．－Etrusc．atresie．
…TAqTA $5_{1}$ ．
ケソ৭TリMF壮ゲA $26_{1}$ ．

8
1AA\＆nom．div．（？） 29.
 Fl111》A\＆ $4_{9} ;$ T11｜》AS I $7_{1}$ 。

1
3०TA9才 perhaps nom．propr．199， 11 ．
1
Ғ｜ҒM｜ろタ1＂Ephesian＂ $7_{4}, I 7_{7}, 3 \mathrm{O}_{12}$ ；
そАてクाアタ1 $1 I_{10}$ ．
 FIIMIMATFI（meaning uncertain） $19_{2}$ ．

$\star$
$3 \circ 9 A \geqslant I \sigma_{1} ; F 11 \circ 9 A \geqslant$ and other derivatives in 8 places．－Etrusc．carv．

YA才OTA才 I $6_{2}$ ；FI1A才०TA才 and other deriv－ atives in 5 places．
TA1TIX（？） $24_{2}$ ．
 Fl1｜1My× $8_{1} ; 111 \mid 1$ My $17_{3}$ ．－Etrusc．cuml－na． ＊ 1 A $\circ$ y＊nom．div．（？）I $\mathrm{a}_{4}$ ．

1
3才11 nom．div． $26_{4}$ ． 5 ．
7
FI1』 YAM I $a_{1}, 1 b_{1}, I 8,28_{2}, 28_{4}(?)$ ；小1けYAM $17_{3}$. －Etrusc．mane．
＊A1才19AM nom．div．（？）I $\mathrm{a}_{4}$ ．
1A⿱㇒士 $A 1 M$（meaning uncertain） $19_{4}$ ．
\A1｜M（meaning uncertain） 3 I ．
FI1ATA9TIM $7_{5}$ ．

$3 \mathrm{O}_{17}$ ；incomplete at the end $3 \mathrm{O}_{20} \cdot 22 \cdot 23$ ．
3A1Ғ9M（uncertain；cf．Múpolios？） $29_{7}$ ．
11АТ世M I $3_{3}$ ．
 $4_{8} ; \nVdash 1 \Downarrow 1 \uparrow \prod_{14}$ ．The word Müim．．． is perhaps to be derived from Maion．．． This might be the epichoric name for Lydians；for the name＊Lud has not been found．
$\eta$
ЗАYYAY 25.


F1MケAq才1F three times before リソMाTqA
 $29_{9} .=$＂of Smyrna＂（？）；see p．I 5.

d11A䐗11F nom．loci $\mathrm{I}_{3}$ ．
3
ҒIイTMA\} nom. loci $8_{2-3}$ ．
A3A3（uncertain） 32.
11T3A893 $13_{3}$ ．
-19483 ＂Sardis＂in different derivatives；see above p． 11.
ЗA⿱㇒士M nom．div．I $\mathrm{a}_{3}$ ．
T
3ABAAT $7_{3}$ attribute of $3 Y M \backslash T+$ ．
Fl11Aま孔9AT nom．loci $13_{1}$ ．W．H．Buckler compares the name of the Lydian town of Tarne．

FI1A1才1T $3_{1}, 5_{2},{ }_{1} 3_{1}, 28_{3}$ ．
小1』1MाT $26_{2}$ ．
413ITIT（meaning uncertain） $24_{1}$ ．

3 MM1T＋nom．div．I $b_{4}, 7_{1 \cdot 3} ; \forall 4 M 1 \uparrow+7_{10}$ ．

## ADDENDUM.

Dr. Ehelolf has very acutely suggested to me that the deities Sãnnas ... Marivdak, above p. 43, might be the Babylonian and Assyrian gods Samas and Marduk. He tells me also that these two gods are frequently invoked in imprecations against infringers of boundary lines and the like. The vowels of Marivdak he compared with those of the Biblical Merōdak, who is the same as Marduk. Inscription L. I would then in one part give the names of Lydian deities, in the other those of foreign deities. This would be by no means impossible. Our Lydian pantheon would contain, so far as it is known, the "Artemides" of Sardis, of Koloë, of Ephesos and of Smyrna, the Lydian Zeus (Tavsas), the Lydian Levs (Etruscan Lvsl), the Babylonian Samas and Marduk, perhaps the Semitic $B a^{c} a l$, and one unknown deity Kuoad. W. H. Buckler calls my attention to the fact that the existence in Asia Minor of a primitive deity *Koa.s, or *Kouas, has been suggested on philological grounds by Mr. Arkwright, Am. Fourn. Arch. XVII, 1913, p. 366.

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[^0]:    1 The same fact was also stated by Mr. Arkwright in his very important article "Notes on the Lycian Alphabet" see Fournal of Hellenic Studies, Vol. XXXV, Part I, 1915, p. 100.

[^1]:    1 W．H．Buckler compared the Lycian letter $X$ to which Mr．Arkwright recently has assigned the value $\zeta$ ；see Fourn．Hellen．Studies $\mathrm{xxxv}, \mathrm{p}, 100 \mathrm{f}$ ．It is quite possible that Lydian $Z$ is to be derived from $X$ ；for it is often written $\mathcal{C}$ ，i．e．the Lycian $\mathcal{X}$ without the lower part of the left half circle，

    Sardis Expedition VI．

[^2]:    ${ }^{1}$ This form (Ezr. 4, 7) has an $\mathfrak{N}$ at the end, which proves that the original had a vowel there; it may be due only to an artificial vocalization by a man who wanted to make a difference between Hebrew and Aramaic. The usual Syriac form is dexesefir (Artahtastot).

[^3]:    ${ }^{1}$ For a possible restoration see the end of the commentary on this inscription．

[^4]:    ${ }^{1}$ Cf. "here in Skado" in inscriptions from Aksum, my edition in Deutsche Aksum-Expedition, IV, No. 10, 24 and 11 , 44.
    2 As a parallel that may not prove anything, I cite Armenian ais "this", plur. aisk ${ }^{c}$, and ast "here".

[^5]:    ${ }^{1}$ Hungarian ki "who?" valiaki "somebody".

[^6]:    1 See Sommer, Handbuch der lat. Laut- und Formentehre, p. 472, ann. 2.
    ${ }_{2} \mathrm{Cf}$. in German "die Feinde zerstörten $i / \mathrm{m}$ sein Haus".

[^7]:     relation between this word and the name of the mountains?

[^8]:    1 The form fakmać occurs also．

[^9]:    ${ }^{1}$ It is barely possible that bik was a variant pronunciation for $b u k$. The sounds $u$ and $i$ sometimes interchange, e.g. in modern Persian and Arabic dialects.

[^10]:    1 Perhaps they are even both derived from the same root, viz. bor-, if $l$ and $v$ are additional letters.

[^11]:    ${ }^{1}$ Prof. Wackernagel called my attention to this fact.
    ${ }^{2}$ Cf. the latest discussion by C. Thulin, Italische sakrale Poesic und Prosa, pp. 21 ff .

[^12]:    ${ }^{1}$ Cf. Thulin, l.c., p. 5 and p. II.
    ${ }^{2}$ See below Chap. VI, D.

[^13]:    1 Prof. Wackernagel reminded me also of the fact that no genuine Greek words begin with $r$ and that the same
    true also of the Basque language. holds true also of the Basque language.

[^14]:    ${ }^{1}$ Sundwall, p. 40.

[^15]:    1 See Arkwright in Fourn. of Hellen. Studies, 1915, p. 104.

