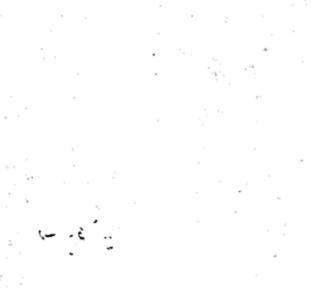
GOVERNMENT OF INDIA

DEPARTMENT OF ARCHAEOLOGY

CENTRAL ARCHAEOLOGICAL LIBRARY

AC. Class	2505	*-
CALL No 410	EU	

D.G.A. 79.



ASIATIC AFFINITIES

OF

THE OLD ITALIANS.

BY

ROBERT ELLIS, B.D.,

FELLOW OF ST. JOHN'S COLLEGE, CAMERIDGE, AND AUTHOR OF "ANCIENT ROUTES BETWEEN ITALY AND GAUL."

" Tuscos Asia sibi vindicat."

2805

410 Ell

LONDON:

TRUBNER AND Co., 60, PATERNOSTER ROW.

1870. 46 11-3-40 Cl-111 T. RICHARDS, PRINTER, 37, GREAT QUEEN STREET.

CENTRAL ARCHAEOLOGIGAL LIBRARY, NEW DELHI.

A⇔.	No	2505		
Bote.	28	, <u>a</u> ,	55.	
Call	No	410/	ELL.	

CONTENTS.

CHAPTER I.

1	AGE
Migrations of the Aryans from their original home in Mount Imaus—Route of the Thracians into Europe—Western and Northern limits of the Thracian area in Europe— With what nations the Thracians came into collision— Primitive population of the South of Europe, and of Asia Minor and Armenia	
CHAPTER II.	
Etruscan sepulchral inscriptions	26
CHAPTER III.	
Etruscan votive inscriptions	78
CHAPTER IV.	
The Inscription of Cervetri	95
CHAPTER V.	
Conjugations and Numerals	114
Index of Etruscan words with their meaning	153

ERRATA.

In p. 15, l. 17; p. 16, l. 1; and p. 18, l. 24; for Mæsia read Mossia.
In p. 94, l. 4; for sulthn read salthn.
In p. 102, l. 27; for mataram read mataram.

PREFACE.

THE publication of the great work of Fabretti, the Corpus Inscriptionum Italicarum, has rendered available a rich store of materials for investigating the affinities of the ancient languages of Italy. The additional Etruscan epitaphs, in particular, are of the highest importance, and have induced me to return once more to the subject of the Etruscan language; for it does not appear, at least to my knowledge, that all the results to which the new inscriptions lead have hitherto been deduced from them. What the significance of those results is may be estimated from the facts, that we are now in possession of the written forms of several Etruscan numerals, that we are enabled to recognise the Etruscan equivalents for the Latin -ginta and -genti, and that, in addition to the previously known ril, "year," we may likewise elicit the Etruscan words for "month" and "day."

The objects which I have chiefly had in view in the following pages are: to demonstrate the Armenian character of the Etruscan language in as complete and brief a manner as possible, and to present such a vocabulary of Etruscan words as may be sufficient for the interpretation of the common forms of expression on the monuments of Etruria. It would increase the interest with which those relics of an ancient nation

ii PREFACE.

are regarded, if the meaning of the inscriptions which they bear could be understood, and we were thus qualified to know what the Etruscans engraved upon their offerings to the gods, and on the tombs of their dead. At the same time, these votive and sepulchral forms, when combined with the Inscription of Cervetri, and with such other points of evidence as may conveniently be introduced in connexion with these three bodies of proof, seem quite sufficient to disclose the nature of the language of the Etruscans, and thus to determine who that enigmatical people really were.

But the origin of the Etruscans is a question that does not stand alone, and that cannot be treated without touching on several others which relate to ancient and prehistoric times. To one of these in particular I have endeavoured to direct inquiry. As the Armenians, the last representatives of the old Thracian race at the present day, have been neglected or overlooked in all investigations relating to the affinities of the Etruscans; so too a similar extension, in remote ages, of the race of nations now confined to the Caucasian regions, is a probability that has not been sufficiently allowed for in constructing the population of Europe before the Aryans entered it. There seems, as far as I can judge, to be no necessity for inferring the extinction of either of the two ancient stocks mentioned eighteen years ago by Dr. Latham in the following passage, which sets forth very clearly and forcibly the two principal questions whose solution I have attempted :-

"The displacements effected by the different Euro-

pean populations, one with another, have been enormous. See how the Saxons overran England, the Romans Spain and Gaul. How do we know that . some small stock was not annihilated here? History, it may be said, tells us the contrary. From history we learn that all the ancient Spaniards were allied to the ancestors of the Basques, all Gaul to those of the Bretons, all England to those of the Welsh. Granted. But what does history tell us about Bavaria, Styria, the Valley of the Po, or ancient Thrace? In all these parts the present population is known to be recent, and the older known next to not at all. The reconstruction of the original populations of such areas as these is one of the highest problems in ethnology. To what did they belong, an existing stock more widely extended than now, or a fresh stock altogether?"

"My own belief is, that the number of European stocks for which there is an amount of evidence sufficient to make their extinction a reasonable doctrine is two—two and no more; and even with these the doctrine of their extinction is only reasonable."

- "a. The old Etruscans are the first of these";
- "b. The Pelasgi the second."

If the Etruscans were of the same race as the Armenians, and the Pelasgi of the same race as the Caucasians, both these stocks would still survive. The Caucasian tribes include the Georgians (with the Lazians and Mingrelians), who are connected through the Suanians with the Circassians and Abkhasians; the Ossetes, who are frequently supposed to be Aryans; the Kisti, who are connected through the Tuschi and

Pschawi with the Georgians; and the Lesgi in the ancient Albania. The languages of these tribes differ very considerably, but something common is found to run through them all.

The following equivalents will be employed for the Armenian alphabet; and the Greek letters which correspond to the Armenian in place, though not always in sound, are prefixed to them:—

```
a. a.
                                       \mu. m.
β. b.
                                           y.
                                       \nu. n.
\gamma. g.

 έ. έ (English sh).

 d.

e. e (e or ye).

\( \text{$\epsilon} \) (t\( \text{$\epsilon} : \text{English $ch$} \)).

\zeta. z (English z).
n. ê.
    ë (e mute).
                                          \mathring{g} (d\acute{s}: as sch in mensch).
\theta. th (Hebrew teth).
                                       ρ. r (strong r).
    z (French j).
                                       σ. ε.
                                          w (strong v).
                                       τ. t.
    kh (guttural).

\( \bar{z} \) (tz: Hebrew tzaddi).

    z (ds).
ĸ. k.
                                       v. v.
                                       φ. ph (like p'h).
    h.
    ż (ts).

 ch (Hebrew koph).

\lambda. t (Welsh ll: Polish t).
                                      ω. ô (broad o, or au).
                                         f (used in foreign words).
    \acute{q} (d\acute{z}: English j).
                     Armenian Diphthongs.
```

```
av, the older form of ô.
ev, like English yew.
iv, vowel y, French u.

ov, vowel u, English oo.
ow, long o.
ea, like French è.
```

The Armenian alphabet was invented about 1500 years ago.

THE ASIATIC AFFINITIES OF THE OLD ITALIANS.

CHAPTER I.

Migrations of the Aryans from their original home in Mount Imaus.—Route of the Thracians into Europe.—Western and Northern limits of the Thracian area in Europe.—With what nations the Thracian race came into collision.—Primitive population of the South of Europe, and of Asia Minor and Armenia.

As the Asiatic element in Italy was mainly Etruscan, and the Aryan character of the Etruscan language will be apparent as soon as its examination is commenced, such an examination may be appropriately preceded by a sketch of the probable course of the Etruscans from the original home of the Aryan family of nations, and by an endeavour to determine what were the elements which composed the early population of the South of Europe.

A remarkable light has been thrown on the first movements of the Aryans by the researches of German scholars, the result of which is readily accessible in the third volume of Bunsen's Egypt's Place in Universal History. But the map which is there given as illustrating the "track of the Aryans from the Primeval Country to India," might perhaps receive with more

justice the title of "a map to illustrate the tracks of the Southern Aryans from the Primeval Country to India and Armenia." The "Primeval Country" was the mountainous region which contains the sources of the Oxus and the Jaxartes: and the map exhibits clearly how the Aryans, starting from this country, settled successively in Sogdiana, Margiana, Bactria, Parthia, Aria, and other tracts, until the list of the districts which they occupied in the earliest times concludes at last with these three countries:—

- Varena, now Ghilan, S.W. of the Caspian.
- 15. Hapta-Hindu, now the Punjab.
- 16. "The sixteenth country has no specific name. Its inhabitants are the dwellers near the sea-coast, who do not require any ramparts. Their curses are winter and earthquakes. As the Caspian was the sea nearest to the Old Iranians, we must understand the shores of that sea."

It seems a highly probable inference that this last country was Armenia, which formerly touched Ghilan and the Caspian Sea,* is protected by the natural ramparts of its mountains, has a long and severe winter on account of its elevated position, and is notoriously subject to earthquakes.† But, even with-

^{*} See the map in Whiston's Moses Choronensis.

^{+ &}quot;In the summer of 1840 Armenia was visited by a violent earthquake, which shook Ararat to its foundation. The immense quantities of loose stones, snow, ice, and mud, then precipitated from the great chasm, immediately overwhelmed and destroyed the monastery of St. James and the village of Arghuri, and spread destruction far and wide in the plain of the Araxes. Although

out this inference, the mention of Ghilan immediately before the Punjab, and the positions of the other thirteen regions previously named, would lead up to the following conclusion:—

The Southern Aryans, proceeding from the banks of the Oxus, and expanding as they advanced, reached Armenia on the west about the same time as they occupied the Punjab on the east, and before they entered Southern Media, Persia, Carmania, Gedrosia, and India beyond the Sutlej.

Whatever may be the historical value of these results thus deduced from the Vêndidâd, they fall in at any rate singularly well with the theory which I desire to support, and which may be stated in this manner:—

The Southern Aryans were ultimately divided into three principal stocks: the Thracian on the west, the Medo-Persian in the centre, and the Indian on the east. The Thracian race, as a distinct member of the South Aryan family, had its origin in Armenia, about the same time, and in the same manner, as the Indian race had its origin in the Punjab. Finally, while the Medo-Persians were gaining possession of the southern half of Iran, upon the Indian Ocean and the Persian

Ararat is formed of volcanic rocks, yet no allusion to its volcanic activity at any period, no mention of an eruption, is made by any of the native historians, who record, nevertheless, several earthquakes more or less calamitous." Appendix to Cooley's translation of Parrot's Journey to Ararat, p. 371. The earthquake of 1840 was felt as far as Tiffis, 150 miles N. of Ararat, and as Tauris or Tabreez, 150 miles S.E. of Ararat, near Ghilan.

Gulf, and while the Indians were carrying the Sanskrit language with them from the Indus to the Bay of Bengal, the Thracians were extending themselves from the Caspian to the Alps and the Tyrrhenian Sea, and carrying an Armenian dialect into Etruria and Rhætia.

That there were Thracians over all this extent of country is, however, not merely a probable or possible conjecture: it is a matter of ancient history, or at least of ancient tradition. What the earliest Zoroastrian record seems to exhibit in the germ, the authors of Greece and Rome present in its completion. Twentytwo such authors, as Mr. Dennis has noticed, derive the Etruscans from the Lydians; a presumption of affinity not to be hastily set aside, although the voyage of the Lydians to Etruria under the conduct of Tyrrhenus may be no more historical than the voyage of Æneas, and Tyrrhenus himself a personage like Hellen and Romulus, or Delphinus and Sabaudus, the sons of Allobrox. That some Alpine nations, and especially the Rhætians, were akin to the Etruscans, is a fact attested by Livy: and that the Lydians and Carians were allied in blood and language to the Mysians, who were a branch of the Thracian race, is affirmed by other writers. There were too, as we learn from Strabo, Thracians mixed with the Celtic inhabitants of Noricum and Pannonia, the countries which intervene between Rhætia and Dacia. The rest of the historical argument for the extension of the Thracians from Armenia to Italy may be summed up in the words of Dr. Latham, although he has rejected the result which

I not only accept, but extend to Etruria: * "The old Thracian affinities are difficult, but not beyond investigation. A series of statements on the part of good classical authors tell us, that the Daci were what the Getæ were, and the Thracians what the Getæ; also, that the Phrygians spoke the same language as the Thracians, and the Armenians as the Phrygians. If so, either the ancient language of Hungary must have been spoken as far as the Caspian, or the ancient Armenian as far as the Theiss." Write here the Alpine Rhine and the Tiber for the Theiss, and I believe that no more than the truth would be said, and perhaps not quite as much as the whole truth. For I imagine that the Bebryces, whom several authors mention in the Eastern Pyrenees, were Thracian settlers who came thither by sea, probably from Italy, before the Carthaginians and Greeks formed settlements upon that line of coast. My reasons for this conjecture may be thus briefly expressed, as a part of the cumulative proof of the western extension of the Thracian race:-

Armenian ... $\begin{cases} sarn, \text{"ice:" root } sar, \text{"freeze."} \\ patel, \text{"to enclose" (th. } pat). \\ patovar, \text{"wall, rampart."} \end{cases}$

Bithynia...... Patavium, a town of the Thracian Bebryces.

Pannonia Patavium, a town, now Pettau.

^{*} Ethnology of Europe, p. 229 (1852). Dr. Latham considers that two languages were spoken in Phrygia; one allied to that of the Armenians, and the other to that of the Thracians, whom he regards as Slavonic.

Venetia Patavium, the chief town, now Padua.*
E. Pyrenees ... Bebryces.†

Pyrenees sern-eille, "glacier." For the termination, compare ab-eille, sor-ella, and or-illa. The rest is Armenian.

Observe, too, that Iberians bordered on these Bebryces, and on the Armenians.

Patavium, the chief town of Venetia, seems to have a Thracian and Armenian name. Of the Venetian language I know only one word, which is given by Pliny (H. N., xxvi, 6): "Halus autem, quam Galli sic vocant, Veneti cotoneam." Cotonea "comfrey, σύμφυτον, wallwurz," may be explained, like the Dacian κοτίατα, "ἄγρωστις, gramen," from the Armenian khot, "herb, forage," an Armenian word which nearly replaces the English wort and the German wurz in names of herbs. The Armenian khotan, "low, humilis," shews a connexion in sense between khot and humus. Ptolemy mentions an Armenian town called Κόταινα. The Cot-ensii were a Dacian tribe.

The Bebryces in Roussillon, with the word serneille, "glacier," would mark the extreme western extension of the Thracians. On the north-west their limit would have been Rhætia, where their presence is indicated by several Rhæto-Romance words used in the Swiss Canton of the Grisons. The following group

These three Patavia, and no others, are mentioned by Ptolemy.

[†] See Bouquet, Historiens de la France, vol. i, pp. 94, 114, 531, 677.

of five kindred terms may mark how the Southern Aryans once reached from the Ganges to the sources of the Rhine, while the existence in Lydian of the termination of the Armenian present participle, -avt, ôt, or ot, is one sign that the Lydians had a more intimate degree of affinity with the Armenians than with the Indians. The Etruscan language, when we come to examine it, will exhibit exactly the same degrees of affinity to the Armenian and the Sanskrit that the ancient Lydian and Rhætian appear to have possessed. These are the five words:—

Sanskrit...... kantha, "the throat, the throttle."

Armenian..... khetdavt, "throttling, choking."

Lydian..... κανδαύλ-ης, "σκυλλοπνίκτης, the

quinsy."*

Albanian kyendis, "I choke." †

Rhæto-Romance. . candarials, "a choking disease." t

The following Rhæto-Romance names of animals exhibit also Armenian affinities:—

Guis, "marten." Armenian kovz, "pole-cat;" kznachis, "marten," = Polish and Bohemian kuna, Russian kuniza, Lithuanian kiaune.

Asöl, asoula, "kid." Armenian ayz, "goat" (= Sanskrit aģā, Greek aἴξ); ovl, "kid."

Tarna, "moth." Armenian thithern, Fafarinna, "butterfly."

Bötticher's Arica, p. 44.
 † Habn's Albanesische Studien.
 † "Eine Art Drüsenübel, das das Athmen sehr erschwert."
 Carisch's Rhäto-Romanisches Wörterbuch.

Salipp, "locust." Sanskrit çalabha, "locust:" root çal, "to run." Armenian satap, "quick, gliding."

There are thus signs of the Armenian language having once stretched as far as the Pyrenees and the Alps: and the same may be said of the Carpathians, for the relics of the Dacian language exhibit some striking instances of Armenian affinity. These relics consist of more than thirty names of plants used in medicine; * names that are very likely to contain the Dacian equivalents for the German kraut and wurz, and the English grass, wort, or weed, which are the terms that most commonly enter into the composition of German and English names of plants. The corresponding terms in Armenian are: khot, "herb, verdure, hay," and det, "herb, medicine, poison." Thus "tobacco" is zkhakhot, "smoke-herb," and "rhubarb" is khaśndet, "flock-wort," in Armenian. Are there any indications of kindred words in Dacian?

Now ἄγρωστις, gramen, was called in Dacian κοτ-ίατα or κοτ-ήατα, in which we may fairly recognise the Armenian khot, "herb, hay;" while it is very probable that a word similar to the Armenian det, "herb, medicine, poison," existed in the Dacian διέλ-εια or διέλ-λεινα, "henbane;" τευ-διλά or τευ-δειλά, "calamint;" δονω-δηλά, "origan;" πρια-δήλα or πρια-διλά, "black briony;" κοικο-διλά (or possibly κυκο-λίδα), "nightshade;" and perhaps προπε-δουλά or προπε-διλά "cinquefoil." In addition to khot, the Armenian has

Grimm, Geschichte der Deutschen Sprache, cc. 9, 30.

another word for "grass," sêz, apparently = Sanskrit caka, "herba." This word, combined perhaps with the Armenian anyag, "unlucky, detrimental," may be found in the Dacian ἀνιασσεξέ, "onobrychis:" Pliny (xxiv, 113) speaks of a plant called impia herba. There is too in Armenian the word ost, "ramus, germen, palmites, frondes" (cf. Basque ost, "leaf," and German ast), which, when combined with the Armenian zow, "θάλασσα," gives a good explanation of the Dacian ζουόστη, "artemisia," of which Dioscorides says that it grows for the most part ἐν παραθαλασσίοις τόποις. There is a fifth Armenian word of the same class as khot, det, sez, and ost, which are all apparently found in Dacian. This word is phthith, "the blowing of a flower," which gives the verb phthëth-il, "to blow, to bud, to sprout," with the present participle phthëth-ot, the preterite participle phthëth-eal, and the future participle phthëth-eli. We meet likewise with phthith, when combined with zatik, "flower," mist, "always," and loys, "light," in the following compounds :-

zatk-a-phthith, "flowering, blooming." mëst-a-phthith, "ever-blooming."

lovs-a-phthith, "luminous, light-shedding."

To these add one of the previous Armenian *l* terminations, or such a one as in *ovś-et*, "sensible," from *ovś*, "sense," and then compare the Dacian—

φιθ-ο-φθεθελά, "άδίαντον, maidenhair."*

Φ:θ- is perhaps to be found in the Armenian phet-ovr, "feather,"

It has been pointed out by Grimm that one Dacian word, κρουστάνη, "χελιδόνιον μέγα," is the Lithuanian kregźdyne, and that another, δύν, "urtica, κνίδη," is the Welsh dan-ad. The existence of such words in Dacian may, however, be accounted for by contiguity of position; an expedient which cannot be admitted as an explanation of the Armenian affinities of the Dacian, which are, besides, more numerous and intimate than any other. There were Celts in Pannonia, and there may have been Lithuanians in Galicia; but Armenia is far away from Hungary and Wallachia.

Having now ascertained, by the combined aid of history and language, the probable limits of the Thracian area in Europe, we must proceed to consider another subject before entering upon the examination of the Etruscan language. What nations possessed the area in question when the Thracians first intruded upon it?

I spoke of Bunsen's map (ante, p. 2) as illustrating the tracks of the Southern Aryans to India and Armenia; for it is hardly probable that all the Aryans entered Europe through Armenia and Asia Minor. If the "Primeval Country" of the Aryans was the region where the Oxus and the Jaxartes have their sources, then another branch of that race, who may be called the Northern Aryans, would most likely take their way into the West along the north of the great barrier of sea and mountain, a thousand miles in

and phet-tel, "to pluck." Φιθοφθεθελά would then be "feathersprouting, plumy," just as the Armenian lovsaphthith is "lightsprouting, luminous."

length, which is formed by the Caspian, the Caucasus, and the Euxine. The leaders of this division seem to have been the nations of the Classical stock, such as the Umbrians, the Oscans, and the Hellenes; which last I think, with Dr. Latham, to have been maritime settlers from Italy, as the Pelasgians and the Leleges may have come from Asia. I should find the explanation of Pelasgi, who are described as veteres, as αὐτόχθονες, as ἀρχαιότατοι, and as ἀρχαῖον τι φῦλον, in the Armenian words, wat azg, "ἀρχαίον φῦλον;" where azg is "race, nation," and wat is "ancient, old," = Greek $\pi a \lambda - a i \delta \varsigma$, = Epirot $\pi \epsilon \lambda - i \delta \varsigma$. Pelasgi would be a Thracian term corresponding to the Greek Autochthones and the Latin Aborigines. Armenian words similar to Pelasgus in formation are: lavazqi, "noble," = good-race; watazqi, "plebeian," = bad-race; azatazgi, "citizen," = free-race; aylazgi, "foreigner," = other-race; and some more. Leleges, "again," is readily explained as "sailors," from the Armenian let, lot, lovt, "swim," lotak or lovtak, "swimmer;" navalovtak, "navigating."* The Classical nations would probably, as might be expected from the level nature

^{* &}quot;The headlands of Southern Greece, and some other parts of the coast, were occupied in the earliest times by the Leleges and other tribes, which spread themselves from the opposite shores of Asia Minor over the islands of the Egean Sea. But, with these exceptions, the whole continent, from the borders of Thrace and Macedonia to the extreme point of Peloponnesus, was peopled by the great Pelasgian nation" (Malden). If the Leleges came by sea into Greece, and the Bebryces by sea into Roussillon, the Tyrrhenians might have come by sea into Etruria.

of their supposed route from the Oxus to the Danube, reach Italy before the Thracians, while the reverse may have been the case in Greece; and they would have been followed or accompanied into Europe by their kindred the Celts, till the Alps, or perhaps the Carpathians, severed the stream into a northern and a southern arm. The Celts, in their turn, would have been followed by the Germans, and the Germans finally by the Slavonians and Lithuanians; although it is possible that these two ramifications of the Sarmatian branch of the Aryan stock, whose languages have several Armenian affinities, may have preceded the Thracians through Asia Minor. I do not, however, think so myself. If the Thracians entered Europe from Asia Minor, and the Celts through the South of Russia, it might be anticipated that the two races would clash and mingle on the Lower Danube; and this would account, not only for what Celtic may appear in Dacian, but also for such Celtic words as the Etruscan has taken up.

But other tongues, besides the Celtic or any other Aryan language, may have affected the original Thracian as it was carried from Armenia to Etruria. Europe would have been peopled by some other nations before the Aryans entered it. Now, if we eliminate from Europe, together with that part of Asia which lies between the Caspian and Ægean Seas, all Aryan, Semitic, and Turkish inhabitants, we shall be left with only three races, or groups of nations: the Basques in the west, the Fins in the north, and the

nations of the Caucasus in the east. The first approximation therefore that we should make towards reconstructing the primitive population of Europe (with Armenia and Asia Minor) would be, by extending the Basques, the Fins, and the Caucasians, till they met somewhere in the centre of Europe. I do not, however, find any linguistic signs of a Basque population there, though the Taurine asia, "rye," has been compared with the Basque acià, "seed;" and the name of the Taurine Iria, now Voghera, is like the Basque iria or uria, "city." But I must notice three Alpine words which deserve attention as possible indications of an extension of Fins and Caucasians into those mountains. The Ossetes and Tuschi, it has been mentioned in the preface, are two Caucasian tribes; and the Tuschi would apparently be a remnant of those Tusci whom Ptolemy speaks of in Asiatic Sarmatia on the north slope of the Caucasus. might be an extension of the same race that brought the Tuscan name into Europe, where we meet with it in Etruria. The three Alpine words are :-

- 1. Käss, kees, käse, "glacier" (Noric Alps).* Lapponic kaisse, "mons altior, plerumque nive tectus." Esthonian kahho, "frost; kasse jäa (jäa, "ice"), "ice formed by frost upon snow." Georgian qiswa, "frost."+
- Laui, lauwi, lawine, "avalanche."; Tuschi law, "snow" (Schiefner's Thusch-Sprache).

^{*} The Noric Alps lie to the north of the great valley of the Drave, the Carnic Alps to the south.

[†] Compare the Peruvian cassa, "hail." Helps' Life of Fizarro.

[‡] In Rheto-Romance, lavinna.

3. Tüssel, "boy, knabe" (Splügen district). Carian τουσσύλοι, "Πυγμαῖοι." Ossetic tyüsül, "little," = Armenian doyzn. Armenian thzovk, "a pygmy;" root thiz, "a span." Κάτ-τουζα, πόλις Θράκης, ἐν ἢ κατόκουν οἱ Πυγμαῖοι.*

The last of these three words may possibly be Aryan, and have been carried into Rhætia by the Thracians; but of the other two, one seems Caucasian, and the other both Finnish and Caucasian. would be two explanations of the presence in the Alps of Turanian words for "ice" and "snow," if it may be allowable to apply the title "Turanian" to the Fins and Caucasians. Such words may have been taken up in Asia by the Thracians, and have been brought by them to Rhætia; or they may be due to an original Turanian population extending from the Ural or the Caucasus to the Alps. If we adopt, as I should be inclined to do, the second of these alternatives, we might be led to inquire if there were any European nations in historic times who belonged to this primitive Turanian population. That the Basques or Iberians formed a part of it is no improbable supposition; and I suspect that both they, and all the original inhabitants of the South of Europe, as well as of Asia Minor and Armenia, were allied in blood and language to the Caucasian nations, while the North of Europe, beyond the Alps and the Carpathians, would have been Finnish.† The identity of names is remarkable. Not

^{*} Bötticher's Arica, p. 5.

^{+ &}quot;The population of the first period," says Mr. Troyon, in his

merely were there Iberians and Tuscans in the Caucasus as well as in Spain and Italy; but the name of the nation which intervened in Europe between the Iberians and Tuscans, namely, the Liques or Liquians, is found likewise in or near the Caucasus, as we know from Herodotus and Zonaras. There were, too, Liqurii in Thrace, and the Taurisci of Noricum bore the additional name of Ligyrisci. The Ligurians of Italy were almost extirpated in their long war with the Romans (Niebuhr). and both in Italy and Gaul they would have been much Celticised, as we know that the Salves were: while the Tuscans of Italy, if originally Caucasian, would have been conquered by the Thracian Rasenæ, and have lost their national existence, while they communicated, like the Britons, their name to their conquerors. The same lot probably befell the primitive population of Dacia and Mæsia; for, though the Dacian language was Thracian in the time of Dioscorides, as may be inferred from its Armenian affinities, and as Strabo had declared at a rather earlier period, yet the Dacian town-name dava, of which a few

work on the Swiss Lake-dwellers, "are a primitive people, perhaps belonging to a Finnish or Iberian race which came out of Asia several thousand (hundred) years before our era, and following the course of the Rhone or the Rhine wandered into the valleys of the Alps." Keller's Lake Dwellings (Eng. trans.), p. 395. I imagine that law-ine and kees are relics of the language of this Finnish or Iberian race, using Iberian in the double sense of Georgian (or Caucasian) and Basque; like as the ancient presence of the Thracian Bebryces in Roussillon would be indicated by the word sern-cille, "glacier," in the Pyrenees.

instances are found in Mæsia besides, with one in Dalmatia, and one in Dardania, seems best explained from the Georgian daba, "village, town," though probably allied at the same time to the Sanskrit deça and the Armenian deh, "pagus." A parallel might be made with Cornwall, where Celtic place-names exist among a people now speaking English. The Daci or Davi were probably "the villagers," as Gesenius has interpreted the name of the Caspian Dahæ or Dai.*

"Quam vetus mos Græciæ Vocitavit Accion." (AVIENUS)

Guadix in Andalusia was anciently called Acci. In Georgian, vake is "plain, fields," like the Spanish vega. In Lapponic, wagge is "valley:" "imprimis vallis inter montes latior," which would well describe the position of the Ligurian Vagienni. The Genoese lalla, "aunt," seems Finnish too, as lel is "uncle" in Esthonian. We find in Avienus the inhabitants of the Alpine valley of the Rhone called Tylangii, Daliterni, Chabilci, and Temenici, instead of Viberi, Seduni, Veragri, and Nantuates; just as the Acitavones were also Centrones, and as the Medulli were also Garoceli. Each one of the six tribes between the Furca and the Mont Cenis had two names, and so likewise had the Lacus Lemanus. The Alps were perhaps not much Celticised before the movement which brought the Gauls into Italy. The Chabilci seem to have left their name to Chable and the Chablais, which once included the Lower Vallais. There was a town called Chabala in the Caucasian Albania Temnus was a mountain in Mysia.

^{*} The Georgian data might also explain the name of the Galatian Tavium, and the last part of Pa(t)-tavium (ante, p. 5), while Pat-was referred to the Armenian pat-el, "to enclose." There was a Dacian town called Patav-issa. Two more Dacian towns were called Acidava, which bears a resemblance to Acidavones, the second name of the Centrones in Savoy. We know that there were the pile-towns of an early race on the Leman Lake—

A part of the Albanians, the probable representatives of the ancient Illyrians, are still called Toscans; and both are Caucasian names, though the Albanian language is Aryan, as Bopp has shewn in his essay on that subject. Among many remarkable Albanian words, two may be selected on account of their significance. One of them, diel or dil, "sun," resembles the Georgian dili or dila, "morning," but would also be allied in root to the Albanian di(të), "day," = Latin dies, = Sanskrit di(na), = Welsh dyw, = Armenian tiv. The Armenian plural form, tich, "age," i. e. "days," would imply ti in the singular as another form of tiv. The Sanskrit diva, "heaven," is likewise a kindred term; and the root is the Sanskrit div, "to shine." By taking this root into the Armenian, dropping the v as in the Sanskrit dina = divana, and adding one of the Armenian l terminations (ante, p. 9), the Albanian diel or dîl, "sun," comes to mean "shining, bright." Yet l terminations are as characteristic of Georgian as they are of Armenian and Etruscan; and dili or dila, "morning," is a true Georgian derivative from the root, di(v), "to shine." In Tuschi, too, "God" is Dal, which might be deduced from a similar root.

For from the root div the Sanskrit derives also deva, "God," = Armenian dev, "demon;" which words, when combined with the Armenian werin, "high" (shortened into wern in wern-akan, "celestial"), lead us at once to the Albanian perndi or perëndi, "God." The root of werin is the Armenian wer, "on high" (= Sanskrit para, "altus"), which gives in the

comparative weragoyn, "superior," and enables us to explain the Phrygian βερεκύνδαι, "δαίμονες," i. e. "the supreme spirits;" or else as "the most high," if δ is not radical. Berecynthus was also a mountain.*

The Armenian for "God" is astovaz, = Zend actvat, "existentia (actu) præditus.";

The Etruscan words for "Deity" are Aryan, like the Armenian and Albanian. They are, according to Classic reporters, æsar, "deus," and alooi, "θεοί." Aes- or ais- is the Old Norse as, "deus," the Armenian ays, "spirit, demon," and probably also the Gaelic aos, "fire, the sun," from which by the addition of fear, "bonus, vir," = Sanskrit vara, Armenian ayr, are derived the Gaelic Aosar, and the Irish Aosar, Aesar, "God," which Bopp compares with the Sanskrit icvara, "dominus," and ic, "dominari." The connexion between "dominus" and "sol" is shewn in the Sanskrit ina, "dominus," = Irish ion, "sol." Yet we should expect the Sanskrit ic to become ic (= ik) in Gaelic. The Etruscan for "heaven," falandum, would be allied to the Persian buland, "high, heaven," and the Sanskrit oland, "in altum tollere."

Whatever the population may have been originally in Illyria, Dacia, and Mæsia, yet it seems eventually to have been either Aryan or Aryanised, as it would certainly have been in Thrace and Greece: but among the mountains in the heart of the peninsula a remnant of the original Turanian inhabitants may have been

^{*} Other languages present signs of affinity here. See Diefenbach, Lex. Comp. s.v. fairguni, "berg."

[†] Bötticher's Arica, p. 63.

left in the Pæonians, with the dwellers on piles whom Herodotus describes on Lake Prasias; the kindred, perhaps, of the Swiss lake-dwellers who have of late excited general interest, and whom "Realmah" has made so popularly known. The Pæonians represented themselves, according to Herodotus, as a colony of the Teucrians from Troy, and their remains were certainly called Gergithes (v. 22), and probably dwelt at Gergis, Gergithium, or Gergithus, in the territory of Lampsacus (Strabo, p. 589). Gergeti is an Ossetic town in the centre of the Caucasus. The pile-dwellers on Lake Prasias cut their timber in Mount Orbelus, and the Orbelians were a princely family in Georgia.*

If there were people of Caucasian origin in Europe, it is not likely that Asia Minor would be without them. The most eminent nation here that I should be inclined to consider as Turanian and Caucasian would be the Lycians, whose language, which is neither Aryan nor Semitic in character, appears to me to present signs of such an affinity. I have discussed the question at some length in my Armenian Origin of the Etruscans, and shall only select a very few points for notice here. The Lycian term for "wife," lade, deserves consideration in the first place, and may be thus derived from the Caucasian by the aid of the Circassian and Lesgi languages:—

Circassian ...
$$\begin{cases} lay \\ l'lay \end{cases}$$
 "flesh."
$$lay \\ lay \\ l'hlay \end{cases}$$
 "blood."
$$lay,$$
 "husband."

St. Martin, Mémoires sur l'Arménie.

Lesgitly'adi } "wife."

Three other Lycian words are :---

tedê-eme, "son." κάδρ-εμα, "σίτου φρυγμός." ὕλ-αμος, "καρπός."

the last pair being two of the five Lycian words derived from Greek reporters. The terminations of these three words may be found in the termination of the Esthonian infinitive -ma, which resembles the Turkish infinitive terminations, -mak, -mek; or in the Tuschi noun-termination -om, which is, however, not common; or in the Lapponic noun-termination -em, which is exceedingly frequent: as, e. g.—passat-et, "lavare," passat-em, "lotio;"—passot-et, "colere," passot-em, "cultus;" pass-et, "assare," pass-em, "veru." But Aryan languages have similar terminations, as in αν-εμος.

For υλ-aμος we have—

Turkish él-ma Hungarian al-ma } "apple."

and for űλ- --

Esthonian willi } "fruit."

Georgian { khili, "apple." th-khili, "nut."

for κάδρ- —

Tuschi kotor, "cake, bread."

and for tede- -

Esthonian toid-Armenian taz- $\}$ "nourish." Greek $\tau \dot{\eta} \theta \eta$, "nurse." I subjoin one Lycian epitaph to shew the language, and because it will enable me to explain a word better than I did on a former occasion:—

êwuinu gorû mute prinafatû êsêdêplume urppe this tomb here made Esedeplume for lade êuwe sê tedêsaeme êuweyê womêleyê. wife his and children his all.

For the last word compare:—

Lycian ...wom-éle-yé, "all."

On a gold collar about six inches in diameter, which is now in the Museum of Vienna, and was found in Wallachia, a part of ancient Dacia, in the year 1838 (Micali, Mon. Ined., tav. LIII), there is an inscription written from left to right, which may be read by the aid of the Lycian characters, alufiithdi iifipfa, "the iifipfa of Alufiithâs," a name partially like Alyattes.* Here the short a is X, which is Lycian; and the u, I surmounted by X, which is also Lycian. If the X be made a χ or ch instead of a short a, the inscription would become chlufiithâi iifipfch, which seems a less likely reading. The remaining letters in the inscription have nothing particularly distinctive about them. If the collar were a votive offering, or even a gift to an individual, iifipfa might

Pausanias (x, 16) says, that of all the offerings of the Lydian kings nothing remained at Delphi but the iron pedestal or base of the bowl of Alyattes.

be explained from the Tuschi iphob = Georgian iephoba, "generosity, munificence, freigebigkeit;" which consists of the Tuschi iaph, = Georgian iephi, "munificent," combined with the Tuschi termination -ob = Georgian -oba. Votive offerings are said to be given liberter and libera munere. Such a Georgian form as saso-eba, "hope," comes still nearer to iifipfa, though -ipfa should likewise be compared with the Sanskrit cal-abha, = Armenian sat-ap, = Rhæto-Romance sal-ipp (ante, p. 8).* We have seen from the Dacian -dava, = Georgian daba, "village, town," that the language of Dacia was probably at first Caucasian, and from the Dacian names of plants that it became afterwards Thracian; as the language of Gaul became Latin while the Celtic town-names were retained in the country. Yet it does not follow, because the gold collar was found in Dacia, either that its original destination was Dacia, or that the inscription on it is Dacian. It might have been carried off, and brought to Dacia. For the declension of Alufiithai, compare the Tuschi Markai, the genitive of Mark, "Marcus;" and maśai, the genitive of maśa, "lux," = Sanskrit mds, "luna," = Georgian mze, " sol."

Micali thinks the characters on the Wallachian collar to be like the Euganean letters. The Euganeans may very well have been a remnant of the early Turanians of Italy. They were neither Gauls nor Venetians.

Compare apfel, hüpfen, kopf, and apple, hop, cop.

Malden writes, in his unfinished, and hardly commenced, History of Rome: "The mountainous country northward from the lake (of Garda) remained in possession of the Euganei. Of this ancient and once powerful people Cato was still able to enumerate thirtyfour towns (Plin. H. N. iii, 24); and they were reported by tradition to have inhabited all the country between the Alps and the Adriatic Sea, till they were driven into the mountains by the Veneti (Liv. i, 1). Their chief tribe was the Stoni or Stoni (Plin. H. N. iii, 24), and the Stoni are expressly named Ligurians in a fragment of the Triumphal Fasti, and by the geographer Stephanus." I think it probable that the Euganeans are rightly connected with the Ligurians, as well as the Orobii, whose origin Cato could not ascertain (Plin. H. N. iii, 23). The same mystery hangs over the origin of the Euganeans. Micali says (vol. ii, p. 25): "Vanamente però vorremmo rintracciare l'origine degli Euganei." No doubt it is difficult to do so. Indeed, until Caucasians or Fins be brought in, there is always one race at least, in Italy, in the Turkish peninsula, and in Asia Minor, which cannot be accounted for. The name of the Orobii, who occupied the mountains of Como, and possessed Berg-omum (which is like Perg-amus, and may contain a termination like the Tuschi -om and that of the Lycian $(\lambda - a\mu o_5)$; of the river Orobis, now the Orb in Languedoc; of the river Orba in the Ligurian Apennines; of the Pæonian Mount Orbelus; and of the Georgian Orbelian family; -all these names may be compared with three given

by Ptolemy: Orbanassa in Pisidia, and Orbisene and Orbalissene in Armenia Minor, where -sene would be the Armenian termination sen, found in mezasen, "great," and sikasen, "red." Cf. Tyr-senus and Porsena. It signifies also "town," and is Georgian as well as Armenian. Orbi means "eagle" in Georgian, and -ali and -eli, which may appear in Orb-elus and Orb-alissene, are common Georgian terminations: e. g. dab-ali, "humilis," from dab-a, "pagus;" Guri-eli, "belonging to the country of Guria." Mount Orbelus would probably = Adlersberg, but the rivers Orba and Orobis would rather mean "swift," like as the Etruscan aracus, "hawk," is the Armenian arag, "swift." Cf. Araxes. There is an Arbel-horn in the Bernese Alps.

The Tuschi call their own country Baza (Schiefner, s. v.); a name resembling the Hispanian Basti, now Baza, which Humboldt compares with the Basque baso(a), "forest." The Bessi were a Thracian tribe.

There was an ancient people in Paphlagonia or Bithynia called *Caucones*, who were extinct in Strabo's time. Some thought them to be Scythians, others Macedonians, and others Pelasgians. A people of the same name were once found in Messenia and Elis. The *Cauco-ensii* were a Dacian tribe. Cf. *Caucasus*.

In addition to the Lycians, I should be inclined to consider as Caucasian the Pisidians and Lycaonians, neither of whom are mentioned as Thracians, though the Phrygians and Milyans, who bordered on them, are expressly said to be so. Lycaon was a son of Pelasgus. When the Thracians advanced from the

Caspian into Armenia and Asia Minor, I think that they left the relics of the primitive Caucasian population, on their right in Armenia, and on their left in Asia Minor. Upon the whole, I may define the position which I imagine the Caucasians held with respect to the Thracians, both in Asia and Europe, by comparing it to that which the Dravidas now hold with respect to the Sanskrit nations in India. The Cappadocians or White Syrians, who divided the Armenians from their kindred, the Phrygians, would have been Semitic invaders from the south at a later period, whom an infusion of Thracian and Caucasian blood may have rendered fairer in complexion than the rest of the Aramæans. As the Thracians proceeded from Asia towards the west, their language, previously liable to be affected with Caucasian and Semitic elements, would probably have taken up some Celtic, and perhaps some Finnish words, especially in Italy and the Eastern Alps. But its substance and its structure would remain Armenian; and such, I believe, the Etruscan language will prove on examination.

CHAPTER II.

ETRUSCAN SEPULCERAL INSCRIPTIONS.

It has been shewn in the preceding chapter, from the accounts of the ancients, how they made a series of Thracian nations to extend from the Caspian Sea as far as the Carpathians and the sources of the Rhine; and several linguistic coincidences have been brought forward in confirmation of the truth of these accounts, which there does not seem to be any reason for impugning. There is then, as Etruria is included in the Thracian area, a certain antecedent probability that the Etruscan language would be found to belong to the same Aryan family as the Armenian: and we have, besides this, the evidence of Livy, a native of Padua, that the Rhætian language, which appears from its relics to have been like the Armenian, was Etruscan with a corrupt pronunciation. It will accordingly be the object of this and the two following chapters to shew that the Etruscan language was Aryan of the Armenian type; and the argument will be opened by an examination of the Etruscan epitaphs that contain the often cited avil and ril, words both characterised by one of those l terminations to which I have already called attention.

There are three words, ætas, annus, and vixit, which continually occur in Latin epitaphs, accompanied by the name and age of the deceased. The case is the same in Etruscan, where the corresponding words are avil, ril, and leine, with line elsewhere. To illustrate the use of these Etruscan words, it will be sufficient to select the following seven of Lanzi's epitaphs, in each of which the proper name is omitted, and its place supplied, for convenience of reference, by the number of the epitaph:—

453. avil xxxIII.

454. avil ril LXV.

avils xxix.

455. ril lill leine.

10. ril xxI.

456. ril leine LV.

87. line.

There are almost enough materials here to determine the family of languages to which the Etruscan belonged, for the respective meanings of avil, ril, and leine, are scarcely to be mistaken. I will, however, as so much is to be learned from these three words alone, proceed to prove what a careful observer might very likely perceive on inspection: and this demonstration seems to be the more requisite, as it was said long ago, and has not yet entirely ceased to be repeated, that all we know of the Etruscan language is, that avil ril means "vixit annos," though it cannot be said which is the noun, and which the verb.* Even

^{* &}quot;Of their language, chiefly preserved to us in their sepulchral inscriptions, we know absolutely nothing. The only expression that has been satisfactorily made out is the very common one of RIL AVIL, 'vixit annos.'" Murray's Central Italy, p. 256 (ed. 1807).

Niebuhr was at fault here. "Al dire di lui," writes Micali, in his Antichi Popoli Italiani (vol. ii, p. 351), "la scienza dell' Etrusco sarebbe ristretta all' interpetrazione certa di due sole parole: AVIL RIL, vixit annos."

Yet all that can be pronounced certain, or almost certain, is, not that avil ril means "vixit annos," but that of the two expressions, avil ril and ril leine, one signifies "vixit annos," and the other "anno ætatis." Ril therefore, which occurs in both expressions, stands for both anno and annos, and would consequently be the Etruscan word for "year" used without declension, or else contracted to its crude form like ann. and ætat. in Latin. Again, as avil and avils cannot both be rendered "vixit," to say nothing of other obvious reasons, it is plain that avil is ætas or ætat., and that avils is ætatis; so that avil would be declined like an Arvan noun. So far then from its being certain that avil ril means "vixit annos," it is easy to see that avil ril cannot mean "vixit annos." Finally, as ril is "year," and avil is "age," no sense but "lived" is left for the remaining word leine, which, when accompanied by the number of years of life, is always joined with ril, "years," as vixit is with annos.* When it stands alone, as line

^{* &}quot;Occurrit (leine) in titulis sepulcralibus (ex Volaterris), conjunctum cum voce ril, quod exponitur annos vel annorum." Fabretti, p. 1042. Should it not therefore have been inferred that leine corresponded to "vixit," especially when avils, "ætatis," had been rightly interpreted, as it has for some time been in Italy? Of the explanations that have been given for leine, the Latin lene, i. e. leniter, and the Greek λάνου, are selected as the most probable in Fabretti's vocabulary. But even if lene be taken

does twice in Lanzi, the Roman euphemism, "she lived," would be employed for "she is dead."

The Etruscan words, leine or line, "he lived," ril, "year," and avil, "age," may be thus explained:—

Sanskrit.

Root lî, "adhere, dwell, live."

laya, "house, dwelling."*

lināti, "he dwells."

alināt, "he was dwelling."

ARMENIAN.

Root li, "become, be, live" (implied in li-eal, "been").

lavray or lôray, "dwelling, home."

Lôrê or Lori, name of two towns, "Ham."

lini, "he is."

linêr, "he was" (imperfect: there is no aorist).

ETRUSCAN.

Lori-um, name of a town.+ leine or line, "he lived."

as a valediction equivalent to "sit tibi terra levis," and \(\lambda\text{dires}\) as meaning "tumulus," how can the resulting explanations of ril leine LV or ril LHH leine be more probable than "annos vixit..."? There is no reason to infer at starting that the Etruscan, Greek, and Latin languages belonged to one family, but rather, as Niebuhr and Micali affirmed, strong grounds for separating the Etruscan from the other two: for the Greek and Latin, after being put to the torture for a century, have given no explanation of the commonest Etruscan forms. Proximity need not imply affinity; and the languages of Etruria and Latium may have been no more nearly allied than are those of England and Wales.

Cf. Thracian λέβα, "πόλις." Bötticher's Arica, p. 51.

[†] Loro and Lari are two modern towns in Tuscany.

GAELIC.

Root rà, "go."

rà-idh, "a quarter of a year."

SANSKRIT.

Root ri, "go."

ri-tu, "a season (of two months)."

ARMENIAN.

Root rah, "go" (implied in rah-el, "to go"). kath-il, "to drop, a drop" (root kath).

ETRUSCAN.

r-il, "a year." Compare n-il = nih-il.

SANSKRIT.

Root av, "grow, move."

ARMENIAN.

lin-il or lin-el, "to be" (root li, base lin).
lin-eli, "that is to be" (future participle).
av-eli, "exceeding, redundant, more."
yav-êt, "more, rather."
yav-itean, "an age."
av-ag, "more aged, elder."
tes-il, "aspect" (root tes).

ETRUSCAN.

av-il, "age."

The Armenian av-r, "day, time, age," and av-t, "ring," i. e. "circle, circuit, orbit," might also be akin to avil and the Sanskrit av: and the following words may be cited to illustrate the connexion between "going" and "year," and "season" and "year;" as well as to exhibit still further the relationship of the

Indians to the Armenians, and of both, in their proper degree, to the reputed ancestors of the Etruscans:—

Sanskrit.

Root hi, "go, increase, amplify."
hayana, "year."

nava, "new."

çarad, "autumn, year;" whence çarada, "new."

Armenian.

Nava-sard, "ancient name of first month:"
zardi, "new."

LYDIAN.

Νέος σάρδις, "New-year."*
Ος Επίσ.

särd, "summer."

Something may likewise be said about the forms of the Armenian words adduced to explain leine, avil, and ril. The Armenian imperfect is formed like the imperfect of the Latin possum, so that lin-ér, "he was living," corresponds to pot-erat: for the Sanskrit dsit, "he was," = Zend ds, = Armenian dr, = Latin dr But, in the imperfect, it is only in the third person singular, and there, it may be, in order to distinguish dr, "he was," from dr, "he is," that the Armenian retains the s of the Sanskrit root, converted into r as in Latin. In the Armenian dr, "I was," = Sanskrit dsam, and dr, "thou wast," = Sanskrit

^{*} Bötticher's Arica, p. 49. The city Sardis might derive its name from the Armenian zardi, "new." Cf. Ebrard on Rev. iii, I. † The augment is, however, wanting in erat.

asis, that letter is omitted; so that we should rather expect in the third person, instead of liner, a form like the Etruscan leine or line, "he lived," which may, too, be the Sanskrit (a) lin (t), "he was living," when the augment is dropped, as in Latin, Zend, and Armenian, and the final t, as in Armenian, Greek, and Italian. But perhaps, as we shall see eventually, leine is an historic present, = Armenian lini, while line is the imperfect. With respect to av-il and r-il, it should be noticed, that -il is the usual termination of the passive or neuter infinitive in Armenian, as in lin-il (or lin-el), "to be." The Etruscan ril, "year," i. e. "course (of the sun)," would thus signify originally "das Gehen," = Armenian rahel, just as the Armenian kathil signifies "a drop," as well as "to drop:" and avil, "age," would in like manner signify "das Wachsen." The German leben is another example of an infinitive that is also a noun: and it is remarkable that a single Armenian word lin-il, "leben," should contain the meaning of leine or line, and the form of av-il and r-il. In the Etruscan lein-, too, there is a double affinity to the Sanskrit and Armenian; for the conjugational n is there, as well as the root li or li.

In the Armenian lavray or lôray, "a home," which explains the signification of the Armenian Lori and the Etruscan Lori-um (ante, p. 29), the root of dwelling, li or li, seems combined with the Sanskrit vri, "tegere," which occurs, with the termination -an added, in the Armenian wran, "tent, booth." Compare Verona, the Noric Virunum, and the village Vrin in the Grisons.

Avil or avils, "ætatis," accompanied by the number of years of life, is found in conjunction with two other words besides ril. One of these words appears in two forms, lupu and lupuke, the last being one of those -ke forms which are so common in Etruscan, as in tur-ke or turu-ke, "he gives." In Lanzi we find:—

465. lupu.

463. lupu avil xxIII.

464. lupu avils xvII.

and in Fabretti :-

2100. avils xxxvi lupu. 2058. avils Lx lupuke.

If avil ril corresponds to anno ætatis, and ril leine to vixit annos, the Latin form to which lupu avils corresponds would most likely be obiit ætatis. Lupu would then mean "he dies," and be a verb belonging to a u conjugation, like the Armenian lizov, "he licks." The root of lup-u is supplied by the Sanskrit lup, "destroy;" lûp, "kill, rob;" or by the Polish tup, "booty;" tup-ić, "to plunder;" tup-ać, "to split;" or by the Gaelic lobh, "putrefy," and the Irish lubha, "corpse." All these words are allied to the Sanskrit lu, = Greek λύ-ω, and to the Armenian lovz-el, "to loose." We shall meet in another epitaph with lupum, which means "corpse" in the accusative.*

I said it was only almost certain that avil ril and ril leine meant "anno ætatis" and "vixit annos," because it would be possible a priori that lupu avils meant

The Greek and Latin explanations of lupu are λοπάς and locus.

"vixit annos," and ril leine, "ætatis obiit." The forms might be sufficient to assure us that, in these four words, ril and avil are the two nouns, and lupu and leine the two verbs. If, therefore, we can deduce, from the Armenian and Sanskrit, avil, "age," ril, "year," leine, "he lives," and lupu, "he dies," we should have the right meanings for the four words collectively, and might fairly conclude that each one of them was correctly interpreted. Nor would this conclusion be much, if at all, shaken, because avil with a number is found connected with one more word, as in the following epitaph, where the proper name is omitted as before (Giorn. Arcad., vol. cxix, p. 325):—

zilachnke avil S.I. (qu. avils . .)

Orioli renders these words conjecturally, "obiit, depositus est, sepultus est ('o simile') ætatis --- ;" and it is not easy to see how a different meaning can be given to them. As, therefore, the sense "obit" (= "obiit") is in all probability anticipated by lupu, zilachnke ought apparently to mean "sepelitur, infoditur": and, as the Aryan character of the Etruscan is sufficiently apparent in the forms already interpreted, a root found in many Aryan languages would be an appropriate root for zilachnke. Such a root appears in the Greek λάκος, in the Gaelic lag, "cavum, specus," in the Italian lacca, "fossa, caverna," in the Armenian etag, "fossa," and in the Phrygian lachit, which probably means "fodit." Assuming, then, lach as the Etruscan for "grave," and "is buried" as the meaning of zilachnke, we might make the following comparisons between Etruscan and Armenian forms :-

ETRUSCAN.				
lach, "a grave."				
zi—lach —nk — e, "he is buried."				
ARMENIAN.				
akn, "an eye."				
z—akan———ê, "he eyes."				
ett, "a place."				
z-etet é, "he places."				
getin, "ground, terre."				
z—getn — é, "il terrasse."				
phokh, "a response."				
phokh é, "he exchanges."				
phokh-anak, "change, lieutenant, vicar."				
phokh-anak-é, "he exchanges, he succeeds."				
yatth, "great."				
yatth — é, "he conquers."				
yatth—anak, "victory."				
vatth—anak—é, "he triumphs."				

The only discrepancy here is, that the Etruscan zilachnke is passive, while the Armenian verbs cited are active; though yatthanaké, "he triumphs," and phokhanaké, "he succeeds," i.e. "he puts himself in the place of another," may be considered as reflective. In Armenian, n implies "self," and k is causative.

Z is prefixed to nouns and pronouns, as well as to verbs, in Armenian. It distinguishes the objective from the nominative: e.g. sirel zAstovaz, "to love God, amar á Díos." It also marks other cases: as—erthal zoskvoy, "to go for gold" (oski);—arkanel znowav, "to put upon him." On the whole, whether

prefixed to verbs, where it is augmentative or determinative, or to pronouns and nouns, where it is the latter, its force seems nearly the same as that of $\epsilon\pi\ell$.*

In addition to zilachnke avil . . , lupu avils xvII, and avils IX lupuke, we find in Fabretti (2059), zilachnuke lupuke, "infoditur, moritur,"—"he is dead and buried." This shews that zilachnke is not synonymous with lupu and lupuke, and can, therefore, hardly mean anything else than "he is buried" or "interred." If so, and the root be lach, — Armenian etag, "fossa," the manner in which the Armenian enables us to build up zilachnke is very remarkable. As the Armenian phokh gives phokhé and phokhanaké, "he exchanges," we should first get etaganaké, "fodit(ur);" and, as ett gives zetelé, "he places," we should next get zetaganaké, "infodit(ur)," = zilachnuke or zilachnuke.

I now come to nine epitaphs of the greatest value, as they contain Etruscan numerals, not in figures, but in words. I shall, therefore, give them at length, with their numbers in Fabretti:—

2104. Larthi Keisi Keises Velus Velisnas Ravnthus sech avils sas Amke Uples.†

^{*} The Armenian word si, = Zend si, = Sanskrit hi, signifies "for, nam, denn, γάρ."

[†] Amke Uples was probably the person who provided the tomb, or undertook the burial. See 2070 and 2340, where Amke seems the nominative to kepen tenu and kisum tame.., "offers the grave," and "buries the corpse." Kepen may be the accusative of a noun corresponding to the Armenian govb, gen. geb-oy, "a ditch, a cistern;" and tenu would be equivalent to the Armenian tani, "tenet, tendit." Kisum, as will be shewn subsequently, may be the accusative of kis-, "a corpse," and tame...... "buries," appears

- 2119. Vipinanas Vel Kla nte Ultnas La(r)thal klan anils tivrs sas
- 2033 bis. Vel Leinies Larthial Ruka Arnthialum klan Velusum prumaths avils sesphs lupuke
- 2071. Larth Churchles Arnthal Churchles Thanchvilus(k) Krakial

klan avils kiemzathrms lupu

2070. Arnth Churkles Larthal klan Ramthas Pevtnial vilk Parchis Amke

Marunuch Spurana kepen tenu avils machs semphalchls lupu

- 2340. Ramthn Matulnei sech Markvs Matulm...
 puiam Amke Sethres Keis(in)ies kisum tame...u
 Laf.nask Matulnask klalum* ke.s kiklena R.m.
 a.. avenke lupum avils (m)achs mealchlsk
 Eitvapia me...
- 2335a. Larth Arnthal Precus klan Ramth(a)s Apatrual eslz zilachnthas† avils thunesi muvalchls lupu
- 2335d. A. . ikne . . eltna turefnesithvas avils kis muvalchl
- 2108. Vipinans Sethre Velthur. . Meklasial Thanchvilu avils kis kealch(l)s

akin to the Armenian damban, "a sepulchre." Ravnthus (2104) should probably be Ramthas, as 2070 and 2340 seem to shew: but I shall not correct the proper names.

^{*} Klalum, "mœrorem, funera." Greek κλαίω. Armenian lal, "mourning, lamentation."

⁺ Qu. zilachnuke, "sepelitur."

In 2340, we meet with .. avenke lupum instead of lupu. This form must be explained before proceeding to analyse the numerals. The root of .. avenke, one of the Etruscan -ke forms, like lupuke, turuke, turke, and erske, would probably be the Sanskrit av, "servare," which is found in the Armenian ap-avén, "refuge;" ap-being equivalent to the Sanskrit apa, ap-, and the Greek $a\pi \delta$, $a\pi$ -. Apavini means in Armenian, "he takes refuge, he consigns himself;" so that the active apaviné would mean "he consigns," and the Etruscan .. avenke lupum would be rendered "deponit corpus."

But .. avenke might, perhaps, be better explained, still keeping to the same root av, "servare," from the Armenian:—

avan(d), * "deposit, consignment." avand-el, "to deposit, to give up."

avandê zhogin, "he gives up the ghost (hogi), he dies;" a singular parallel to the Etruscan .. avenke lupum, "he gives up the body, he dies."

I will notice at a later period the terms of parentage or descent in these epitaphs, klan, sech, and puiam, the accusative of puia, "filia." Their explanation is not necessary, as that of . avenke lupum was, to prepare the way for the consideration of the numerals, to which we will now proceed. From the first three of the epitaphs we get:—

avils sas avils tivrs sas

^{*} Compare relew and tendo; also Armenian spand, "slaughter," from span, "kill;" and avan, "village" (= Sanskrit avani, "terra"), and sar-avand, "headland" (sar, "head").

avils sesphs lupuke

I need scarcely cite such forms as avils XXXVI lupu and avils IX lupuke, to prove that sesphs, in avils sesphs lupuke, is a numeral: but I must defer its consideration for the present, as Fabretti gives the reading as sesphs in the inscriptions, but as semphs in the vocabulary; and semph, as will be seen later, appears to be the Etruscan for "seven." In avils sas, and avils tivrs sas, sas would be "six," = Sanskrit śaś, = Persian śaś, = Lithuanian szeszi, = Latin sex, = Greek έξ, = Armenian weż, = Afghan śbaż, = Zend khsvas, = Ossetic achsäz: and tivr-s would be "thirty," = Welsh trideg, = Latin tri-ginta, = Lithuanian trys-deszimtis, = Sanskrit trim-çat, = Zend thri-çata, = Armenian eresovn, = Afghan dêr-ś. This last form is very like the Etruscan, which should, perhaps, be tier-s, as E and V (F) are easily confounded.

We now pass to the fourth epitaph, which gives:

avils kiemzathrms lupu

"ætatisobit."

This epitaph belongs, as is seen from the effigy, to an old man (uomo vecchio), and would, therefore, involve "fifty," "sixty," "seventy," or even "eighty." If kiemz- be put by the side of tivrs or tiers, "thirty," it will be apparent that kiem may mean "five," and the following table will shew how it ranges with other Aryan forms for that numeral:—

Sanskrit...pańćan Persian...panģ Lithuanian...penki Armenian $\begin{cases} hing \\ yi \end{cases}$ Latin $\begin{cases} quinque \\ quin \end{cases}$ Gaelic...cuig

Etruscan...kiem

Swedish...fem

Gothic...fimf

Welsh...pump

Greek $\begin{cases} \pi \acute{\epsilon} \mu \pi e \\ \pi \acute{\epsilon} \nu \tau e \end{cases}$ Afghan...pinža

Kiemz-thus means "fifty," = Sanskrit pańćacat, = Persian pangah, = Afghan panzūs, = Armeman yisovn, = Swedish femtio, = Gaelic caogad, = Latin quinquaginta, = Bohemian padesat. The termination of kiemzathrms would seemingly involve thr., "three," = Sanskrit tri, = Zend thri, = Armenian er and ere(ch), = Afghan diré: and -m-in-thrms might be the sign of the ordinal, as in the Latin pri-mus and the Lithuanian pir-mas, "fir-st," which Bopp compares with the Sanskrit para-ma, "eximius, summus." The final s in kiemzathrms would then mark the genitive, and the whole word would signify "(anni) quinquagesimi tertii." If so, there are five Aryan characteristics in kiem-za-thr-m-s.

The sibilants in -s and -z, "-ginta, -κοντα," would indicate that the Etruscan language did not belong to the same Aryan family as the Greek and Latin, and that it was not Celtic or Teutonic. In the Etruscan

-s or -z, the n of the Armenian -sovn or -san, "-ginta," is dropped, as it is in the Afghan -s or -s. There is the same omission in the Ossetic däs, the Hindustani des, the Persian dah, and the Welsh deg, "ten," which are all = Sanskrit daçan, Armenian tasn or tasan, Latin decem, Gothic taihun. This n is wanting also in the Sanskrit -cat and the Zend -cata, "-ginta;" but an additional t suffix is introduced, as in Latin and Greek, of which the Etruscan and Armenian know nothing. The Old Slavonic has not only this t, but retains besides, like the Teutonic languages, the da of daça(n) in the Sanskrit - (da) çat, "-ginta." Thus the Slavonic for "thirty" and "fifty" are tri-desjatj and pjatj-desjatj, which are very unlike the Etruscan tier-s and kiem-z. The Lithuanian has trys-deszimtis and penkios-deszimtis for "thirty" and "fifty." The Etruscan problem seems thus nearly reduced to a choice between the Sanskrit and the Armenian; and if the Sanskrit could be got rid of, the Armenian would then be left alone. Another letter-change, which will be noticed later, may be able to do this.

The last five epitaphs exhibit these forms:—
avils kis muvalchl(s).
avils kis kealch(l)s.

..avenke lupum avils (m)achs mealchls.*
avils machs semphalchls† lupu.

^{*} In accordance with the other forms, I drop the final k here, which would probably belong to the following word. Such mistakes are not uncommon.

[†] Thus written in Fabretti's inscriptions, which the other forms shew to be right: in his vocabulary, semphachls.

avils thunesi muvalchls lupu.
"etatis.....obit."

The age of the deceased is obviously given by the words in italics. What then is the meaning of -alchls or lchls, which is found in all five of these numerals? Or rather, what is the meaning of -lchl, for s may be the sign of the genitive or plural? In all probability, -lchlis"-decim," or "-ginta," or "-genti." But it is not likely to be "-ginta," for tier-s and kiem-z are "triginta" and "quinqua-ginta." Nor would it be "-decim," for machs semphalchls is shewn by the effigy on the tomb to be the age of an "old man," who was certainly out of his teens, unless they were teens of lustres. Lchl would thus appear to be "-genti," == centum. Now the Latin centum and the Sanskrit cata are each 10 x 10, and = decem-decem-tum and dacandacan-ta. Lchl is probably a similar form, as may be intimated by the repetition of the l, and = lch-lch, 10 x 10. We have therefore to trace lch, "ten."

It is found first in the Lapponic lokke, "ten," where we have also the form lokkad lokke, "quod dicit decimum decem, hoc est centum" (Ihre). The Lapponic lokket, "numerare, legere," shews that the fundamental idea in lokke, "ten," is the same as in δέκα, which is connected with δείκω, = dico, "λέγω." In fact, lokke is "digit, number," and is allied to the Lapponic suffix lokk, "omnis, unusquisque," from which we may pass to the Armenian lok, "solus, simplex," and to the Tuschi -loghe or -lghe, which forms ordinals out of cardinals, as in yethchloghe, "sixth," from yethch, "six," and qhalghe, "third," from qho, "three."

Lch, "ten," may also be explained from the Lithuanian -lika, "-leven, -teen," i. e. "ten," which would = the Polish lik, "number." It cannot thus be said that the Etruscan -lchl, "-genti," is necessarily of Turanian origin; though, if it were so, it would not be surprising, as the Alpine lawine, "avalanche," and käss, "glacier," appear to be Turanian words, and the latter = Lapponic kaisse, "mons altior, plerumque nive tectus." Yet I think lchl is most likely Turanian; for there were, as will be found, Turanian numerals in Etruscan, and the Aryan for "hundred" in Etruscan seems to be tesnsteis, a reduplication of tesne, "ten," = Armenian tasn.

All now comes out easily. Me-a-lchls and muv-alchls both signify "one-hundred" or "one-hundredth;" the Etruscan me- and muv-, "one," corresponding to the two Armenian forms, mi and mov, "one," with mein me-tasan, "eleven." The connecting vowel a, in me-a-lchls and muv-a-lchls, and in the other similar Etruscan forms, is the same as in Armenian, where we find mi-a-pet, "μόν-αρχος;" mi-a-kin, "having only one wife;" char-a-chayl, "quadruped;" char-a-kerp, "quadriform." Ke-a-lchls is "five-hundred" or "fivehundredth;" for it will soon be seen that "five" is ki, as well as kiem, in Etruscan. We have, too, the Armenian yi-sovn, "fifty," as well as hing, "five;" and we know that m is elided in Latin between two vowels, as in co-arguo, = cum-arguo. Finally, semph-a-lchls, if semph be right, is "seven-hundred," or "sevenhundredth ;" semph-, " seven," being = Latin septem,

Sanskrit saptan, Slavonic sedmj, Russian sem, Zend haptan, Armenian evthn, eôthn, Greek ἐπτά. The Armenian evthn, "seven," would explain the Albanian yavë and the Rhæto-Romance evna, "week," just as the Kurdish ahft, "seven," explains the Kurdish ahftie, "week." The present Albanian word for "seven" is έta(të), from which yavë could not be derived. The Armenian for "week" is eôthneak or eavthneak.

The Etruscan "-genti" forms may throw some light on another question. The Aryans use three distinct words for "thousand." The Slavonian and Lithuanian terms are like the German tausend, as the Armenian hazar is like the Sanskrit sahasra, and the Celtic mile and mil are like the Latin mille. The Etruscan mealchl, "one-hundred," might lead us to explain mille as "one-thousand," as if $= mi - lch \times lch \times lch$ contracted; and it is possible that $\chi l\lambda - \iota o\iota$ might be "thousand," $= (\lambda)\chi \times \lambda(\chi \times \lambda\chi)$, as centum is (decende) centum. The forms of mil and $\chi \iota \lambda$ - are like the Tuschi met, "quot," which appears derived from me, "qui," by the addition of t, "number," = Lapponic lokke, = Etruscan lch, = Polish lik. "How many there are" = "what a number there are."

Nothing remains for explanation but machs, thunesi, and kis. Now machs semphalchls, as is known by the effigy, is the age of an "old man," who might have lived nearly sixty years, or about "seven-hundred months." Machs would thus be the genitive or plural of mach, "a month," = Sanskrit mas, "moon," =

Persian $m\hat{a}h$, = Armenian mah-ik (a diminutive in ik), "the crescent moon." The letter-change in the Etruscan mach, from the Sanskrit sibilant to the Aric aspirate, should not be overlooked; but in the Armenian amis, "month," it is not observed. Finally, as ril is "year," and mach is "month," thunesi (p. 42) would be "days," or "day's," and is explained by the Armenian tovnijean, which is used as the genitive of tiv, "a day," and might be the proper genitive of tovnig, as teslean is of tesil. Lars (2335 a) would be an infant who only reached the age of a hundred days, while Ramtha (2340), who is described as puiam, "filiam," would be a girl of a hundred months old, or in her ninth year when she died. I have not distinguished the two Etruscan characters for s, one of which, that in thunesi, is supposed to correspond to the English sh, which is nearly the Armenian \(\tilde{g} \).

The Etruscan thuncs(i) and the Armenian tovnig appear to be composed of the Armenian tov(oy), the genitive of tiv, "a day,"—a word which may be allied to thiv, gen. thovoy, "number, year, epoch,"—and of the Armenian nis, gen. nsi, i.e. nösi, "sign, mark," = Hebrew nes. The Armenian combines nis with the pronouns, ays, ayn, "this, that," in the expressions, ays nis, ayn nis, "such a one, o delva;" both being forms similar to the Etruscan thu-nesi, "diei," and to what would be a genuine Armenian word, tov-nösi, with the same signification. And let it be remembered that it is not from the resemblance of the Etruscan thu-nesi to the Armenian tov-nösi that it is interpreted

"diei." It is from independent argument, not from similarity of sound, that leine, lupu, avil, ril, mach, and thunes, are concluded to mean respectively, "lives," "dies," "age," "year," "month," and "day," the six terms which we find in Latin epitaphs where the age of the deceased is given.

Niebuhr noticed that on two occasions the Etruscans made truce with the Romans, once for twenty, and the other time for forty years; but yet were again at war with them, and apparently without breaking truce, at the end of eighteen and thirty-six years respectively. Niebuhr explains this by saying that the Etruscan year would have contained only ten months. No doubt the explanation is correct, and the truces would have been made for two-hundred and four-hundred months. This shews how the Etruscans were in the habit of reckoning by periods of one-hundred months, each of which periods would have been a kind of double lustre, just as the Latin has bilustris for a period of ten years. Of course such periods could only have been used in epitaphs when the age of the deceased happened to be nearly bilustral; and this may explain why, in the case of two members of one family (ante, p. 37, epit. 2070, 2071), the age of one of them is defined by the words, avils kiemzathrms lupu, and that of the other by the words, avils machs semphalchls lupu. Larth Churchles lived fifty-three years, ril being understood; and Arnth Churkles seven-hundred months, or about fifty-eight years. But perhaps one-hundred months = eight years.*

^{*} An Etruscan week was eight days (Niebuhr).

Kis may be explained in two different manners. When kis muvalchls and kis kealchls are compared with machs mealchls and machs semphalchls (ante, p. 41), it might be inferred that kis = machs, and therefore that ki means "month." If so, we have another Turanian word: for "moon, month," is ku in Esthonian, and kuu in Fin; while in Georgian "moon, month," is thve, and in Tuschi "white" is kui: all terms probably akin ultimately to the Sanskrit cve(ta), "whi(te)." * Otherwise, as there is no equivalent for lupu, "dies," or avenke lupum, "leaves a corpse," in the two epitaphs which contain kis (p. 41), that word might be explained from the Armenian qes, gen. qisi, "a corpse;" and machs, "months," would be understood, like ril, "years," elsewhere. At any rate, kisum would be rendered "νεκρόν" in 2340 (ante, p. 37), where it is in apposition to Ramthn. The beginning of that epitaph would mean: Ramtham Matulnæ prolem, Marci Matulnæ filiam, Amycus a Sethre Cosennia νεκρον sepelit. So, too, in the first line of another epitaph (Fabretti 2339) we read :-

Larth Keisinis Velus klan kizi zilachnke—
where kizi zilachnke would be rendered "dies (and) is
buried," or "(being) dead is buried," or "is buried
with the dead;" according as we make kizi an Armenian verb like lini (ante, p. 29), or a noun like ovti,
"a way," or a noun like gés, "a corpse." Very probably, kis and kisum are unconnected in sense.

Mouna Kea in Hawaii is the "White Mountain." It is the Mont Blanc of the Sandwich Islands.

I now turn to notice the doubtful inscription, avils sesphs lupuke, where the sesphs of the inscription is given as semphs in Fabretti's vocabulary, and there interpreted "seventy," after the analogy of semph, "seven," in that form which he gives as semph-alchls in his inscriptions, and as semph-achls in his vocabulary. There are thus, in Fabretti, three to one in favour of semph, "seven," as against sesph, which would have to be referred to the Basque zazpi, "seven." Now, as tiers would be "thirty," semphs or sesphs would rightly be "seventy," if semph or sesph be "seven." But there is one objection to the interpretation. The epitaph, avils sesphs lupuke or avils semphs lupuke, is annexed to the figure of a young man (giovane), which would seem from the description of the tomb to represent the deceased, though it may not do so. If it does, as the Etruscan ph and th nearly resemble each other, the true reading might possibly be sesths or semths (for semphths), "sixteen" or "seventeen." In this case, -ths would = Welsh -theg, Sanskrit -daçan, Armenian -tasan; the final -an being dropped in -ths, just as in the change from the Armenian -sovn or -san, "-ginta," to the Etruscan . -s. On the whole, I should think Fabretti's vocabulary and interpretation most likely to be right as to this doubtful word, and that we ought to read semphs, "seventy," rather than anything else. But it is not a word that can be much relied on.*

^{*} The Etruscan m and s (sh) are liable to be confounded. In the same epitaph, Arnthialum should probably be Arnthialus.

The Perugian Inscription, which appears to be a conveyance of land for a burying-ground, may help us to arrive at some other Etruscan numerals. We find there, in two different parts:—

and also—slelethkaru

tezanfusleri tesnsteis
rasnes.

As chiem seems probably = kiem, "five," karutezan *may be a number; and if so, would apparently be "fourteen," = Sanskrit ćaturdaçan, = Armenian ćorechtasan: but in chara-sovn, "forty," the Armenian approaches more nearly to the first part of karu-tezan. The second extract above concludes with—

tesusteis

rasnes

and we have besides—tesne eka velthinathurasth aurahelutesnerasnekei tesnsteis rasneschimthsp

Here rasne would not improbably be the Persian rasan, Armenian arasan, "a cord," Sanskrit rasand, "a girdle," and might mean "fathom." Cf. σχοῦνος; also German klafter, "cord, fathom," faden, "thread, fathom." Fusle may have been some larger measure than rasne. As we may possibly have sesths, "sixteen," elsewhere, chimths might be "fifteen;" though this seems inconsistent with karutezan, "fourteen," and is open to other objections. But there would be less reason for doubting that tesne is "ten," = Armenian tasn, = Sanskrit and Zend daçan; and if it be, then

tesnsteis would probably be "ten tens," or "a hundred;" a formation like lchl, excepting that tesns-, "tens," has the sign of the plural. The Armenian tasn is declined, the genitive being tasin, and the instrumental tasamb. The Sanskrit cata, "hundred," would be formed from daca(n)-daca(n)-ta by a process very different from that employed in the formation of tesnsteis. The Armenian for "a hundred" is harivr, which is an entirely different word.

Kiem, sas, semph, and tesne, have been interpreted "five," "six," "seven," and "ten," by others before myself, as may be seen in Fabretti's index. I now come to something more remarkable than the existence of Aryan numerals in Etruscan; a fact which would have been expected in a language that is plainly Arvan. There are numerals in Etruscan which are not Aryan, as lchls has perhaps intimated already. This important discovery connects itself with what I said in my first chapter. I there noticed that there were in ancient times Iberians, Liques, and Tuscans, not only along the Mediterranean from Gibraltar to the Tiber, but likewise all three in the Caucasian regions: also that there are now Toscans in Albania, and Tuschi in the Caucasus; and that the Tuschi word law, "snow," explains the lawine of the Alps. It appears too from Livy (x. 4) that there was a difference between the town and country speech in Etruria. Now on a pair of Etruscan dice (Fabretti, 2552) the first six numbers are given in words: and by comparing the relative positions of these words with the relative positions, on

a quantity of other ancient dice, of the same numbers expressed by points, Campanari has determined their value to be as follows:—

I II III IV V VI.
mach thu zal huth ki sa.*

Here mach is Aryan, and may be compared with the Armenian miak, "unique, one." Thu and sa are Aryan, though not exclusively, as they are like the Circassian tu and the Basque sei. The Irish for "six" is sé. Zal, "three," is not Aryan. Huth is not Aryan,

I do not know whether any exceptions will be taken to my interpretations of machs, kis, and thunesi (ante, p. 41), because mach, ki, and thu are here found to be Etruscan numerals. But, if machs and kis be there interpreted as "first" and "fifth," we should then have to understand ril, "year," and therefore to interpret mealchls and muvalchls as "tenth," kealchls as "fiftieth," and semphalchls as "seventieth." This seems to me improbable: and even if it were allowable to interpret muvalchls as "tenth," what are we to make of thunesi in avils thunesi muvalchls lupu, "ætatis (anni for anno) (et) decimi obit ?" Thunesi ought to be the genitive of a number, as well as machs and kis, and would therefore have to signify "eight" or "nine," as all the other numeral places are occupied. Now thu is "two" in Etruscan, and there are languages, of which the Hungarian is one, where "eight" = 4 x 2; so that thu-nesi or thu-nes might be "eight," if nesi or nes were "four": and "four" is negy in Hungarian, and net in Ostiak, two Finnish dialects. Indeed, "eight" in Ostiak is nida, which would = net-da, 4×2 . It is thus possible for thu-nesi to be "eight." But, if muva-lchl-s be "ten," the second l would be non-radical, as lch, according to analogy, would mean "ten" by itself. Yet this might not be impossible, as the t termination in the Classical, Zend, and Sanskrit "-ginta" and "-genti" forms is non-radical too, and the t termination of the Sanskrit participle becomes, as will appear later, an I termination in Armenian and Etruscan. Or lch-l might be "ten-th," as qha-lghe is "thir-d" in Tuschi (ante, p. 42).

and both huth and ki seem Caucasian. This may appear by comparing these six Etruscan numerals with the same numerals in Circassian, Tuschi, Georgian, and Lazic:—

1	II	III	IV	v	VI.
Circassian . se	tu	$\dot{s}i$	ptl'e	t'chu	chi.
Tuschi $\hat{z}ha$	śi	qho	dhew	phchi	yethch.
Georgian $erthi$	ori	sami	othkhi	khuthi	ekhvsi.
Lazicar	zur	$\acute{g}um$	otkh	khut	aś.
Etruscanmach	thu	zal	huth	ki	sa.

In th-khu-meti, "fifteen," the Georgian khuthi, "five," is contracted to khu.* The Etruscan ki, "five," might be obtained from the Georgian kh(uth)i, or the Tuschi (ph)chi; or nearly from the Circassian (t')chu; or from the Lesgi chewa and yku, which mean "five" in two different dialects; or from the Abkhasian chu(ba), "five," where ba is a suffix for all numerals from two to ten, so that chu would be the number "five." The Etruscan huth, "four," would probably not be the oth of the Georgian othkhi, "four," but would be related to the Georgian khuthi, "five," and the Lazic khut, nearly as the Georgian o-thkhi, "four," and the Tuschi ye-thch, "six," are to the Circassian t'chu, "five." For the Georgian -thkhi in o-thkhi, and the Tuschi -thch in ye-thch, are both apparently = Circassian t'chu, "five," while the Tuschi ye in ye-thch, and the Georgian o in o-thkhi, may both be explained from the Ossetic yu, yeu, or yeue, "one." That is to

Th- is "ten," and -meti is like the Ostiak ordinal sign -met.

say, the Georgian o-thkhi, "four," is "one from five," IV; and the Tuschi ye-thch, "six," is "one to five," vi. So, in the Georgian ekh-vsi, "six," -vsi would probably = Fin wiisi, "five," while ekh- is "one," = Sanskrit eka, = Persian yak, = Abkhasian aka, = Hungarian egy, = Fin yk, which becomes yh- in yh-deksa, "nine," i. e. "one from ten," IX. If now the ekh-, "one," of the Georgian ekh-vsi, "six," be prefixed to the Georgian khuthi, "five," we could obtain for "one from five," IV, the form ekh-khuthi, which might be changed, by incorporation and contraction, into the Etruscan huth, "four," in which a x, implying "one," is lost at the beginning of the word, as it would really be also in the Etruscan sa, "six," as well as in the Sanskrit śaś. The following tabular view may present the argument more clearly :-

Etruscan (χ) — sa ,	vi (= one + five).
Abkhasian śva,	x = fives).
Osseticach — säz,	vi (= one + five*).
Zendkh svas,	VI.
Sanskrit $\begin{cases} (\chi) \hat{s}a\hat{s}, \\ eka, & \dots \end{cases}$	VI. . I.
Abkhasianaka,	. I.
Ossetic $\begin{cases} yu, \dots, \\ yeu, \dots \end{cases}$. I. . I.
Circassian t'chu,	v.
Tuschiye —— thch,	VI.

^{*} That saz, etc., probably = "five," will be shewn in the last chapter. The true value is seen in the Bas in zazyi, "seven," where -pi = bi, "two."

Georgian {	thkhi, khuthi,	v.
Lazic { °	tkh, khut,	v.
Etruscan $\{ (\chi)$	-huth, ki,	v.
Lesgi	chewa,	v.
Circassian(χ)	-chi,	VI.
Tuschi	phchi,*	v.
Abkhasian (χ)		
Circassian	pśe,	x = fives).

It will be perceived from the forms at the head of this table how a guttural aspirate is lost before s. But such an aspirate would be still more likely to be lost when it preceded another aspirate, as in that case the fusion of the two aspirates into one would be almost sure to take place. And so, by the loss of the prefixed aspirate implying 1, the Etruscan huth, IV, may = the Georgian khuthi and the Lazic khut, v, nearly as the Abkhasian phśi, IV, = Tuschi phchi, V, and as the Circassian chi, vi, = Etruscan ki, v. As Octavius is written Uhtave in Etruscan, the Etruscan h would be guttural, like the Hebrew cheth which it represents. The explanation of the Etruscan zal, "three," must be reserved to the fifth chapter, where the subject of numerals can be more fully discussed: at present I can only exhibit it in connexion with some other numerals for "three," to which it appears wholly or partially allied :-

^{*} Cf. Georgian phekhi, "foot."

Finnish
$$\begin{cases}
Finko-lmi \\
Syrianicku-jm*
\end{cases}$$
Caucasian ...
$$\begin{cases}
Lazicgu-m \\
Mingrelian ...su-mi \\
Georgiansa-mi \\
Etruscanza-l \\
Javaneseta-lu
\end{cases}$$
"three," = "2 from 5," iiv.

Another representative of "five," l or l-m, is introduced here, and may also be found in the Circassian pt-l'e, IV, and b'le, VII. + Such terms for "five," as will be shewn in the sequel, are all different words for "hand" or "foot": the Cornish lau, the Gaelic làmh, the Turkish él, and the Malay lima, all signify "hand." It is rather strange that the Etruscans should have used two languages for the numbers on their dice: but we do something of the same kind in England, as we usually employ French names for the numbers on dice, but sometimes English; while in the case of cards we begin with French, but soon pass into English. If the language of the Rasenæ be represented by Anglo-French, and that of the Pelasgians by English, then the six numbers on the Etruscan dice would be: ace, deuce (or two), three, four, five, six. Sa might be sice, but I think it more likely to be six, as sas would be the Etruscan representative of sice. Yet, as sa is

In speaking, we drop l before m in holm, and in balm, calm, psalm: but we retain it in elm, helm, and whelm, and also in film.

⁺ In Basque, bat is I, bi is II, and lau is IV, perhaps rightly V. If so, the two Circassian forms are easily explained from the Basque, as "one from five," and "two to five."

"six," sas might be "sixty" in Etruscan, if we had not avils tiers sas as well as avils sas. But how would the Etruscans have expressed "sixty," which, if sas were "six," ought according to analogy to be sas-s or sas-z? The Armenian gets over the difficulty by changing \ddot{z} into th. Thus "six" is we \ddot{z} ; "sixteen," westasan; and "sixty," wathsovn.

I have spoken of the Etruscan numerals, zal, huth, ki, and sa, as being Pelasgian. Now that there were Pelasgians in Etruria is so commonly known that one quotation will suffice. The writer who is called Scymnus Chius says:—

Μετὰ τὴν Λιγυστικὴν <u>Πελασγοί</u> δ' εἰσὶν, οἱ Πρότερον κατοικήσαντες ἐκ τῆς Ἑλλάδος, Κοινὴν δὲ Τυρρηνοῖσι χώραν νεμόμενοι.

To what element in the population of Etruria, unless to the Pelasgians, can we attribute the numerals in question? We know the Umbrian language to be an Aryan dialect resembling the Latin, and we meet continually with tre and tref, "three," in the Eugubine Tables. The Tyrrhenians, again, as distinguished above from the Pelasgians, are there derived, according to the common tradition, from Lydia, and would have spoken that Aryan language of the Armenian type which we have found predominant in Etruria. The conclusion seems almost inevitable. We learn from Herodotus that the Pelasgians whom he knew spoke a barbarous dialect. It would now appear that it was not even Aryan; although, if the numerals in question be considered as Caucasian, and the origin of the

Etruscans from Armenia be admitted, it might be urged as possible that the Etruscans borrowed them when there from the Caucasians, who would have possessed Armenia before the Aryans came thither out of Media. I should, however, for my own part, entirely reject such a solution, especially as the numerals are not the only indication of the presence of Caucasians in the South of Europe.

The following list will comprise such numerals as have been detected in Etruscan:—

I. mach, me-, muv-

II. thu

III. zal, thr-

IV. huth, kar- (?)

v. ki, ke-, kiem-, chiem (?)

VI. sa, sas

VII. se(m)ph

x. tesne

xiv. karutezan (?)

xv. chimths (?)

xxx. ti(e)rs.

L. kiemz-

LIII. kiemzathr-

LXX. se(m)phs (?)

c. tesnsteis, mealchl, muvalchl

D. kealchl

DCC. se(m)phalchl

We see here an Aryan language which contains some Turanian words, as dozen and century are contained in the English language. The explanation has just been

suggested. The Rasenæ, or Tyrrhenians of Etruria, were Arvans of the Thracian stock, while the Tuscans, who were the Pelasgians or "Aborigines" (ante, p. 11) of the country, were Turanians, and probably Caucasians. It seems likely, however, that the blood of the Etruscans, and of the Thracians in general, was more Turanian than their language, as the primitive Caucasian population on which they intruded would have been incorporated with them into one people. The language of the Etruscan nobles may have been at first Thracian, with some Caucasian accretions acquired on the way from Armenia to Etruria, while the language of the Tuscan commonalty may have been Caucasian, perhaps with a little Umbrian also. The languages would probably in time have coalesced, as Anglo-Saxon, Danish, and Norman-French did into English; but in Etruria it was the language of the aristocracy which prevailed. The Etruscan language is Thracian, while the English is German.*

^{*} Mr. Fergusson has inferred, on architectural and other grounds distinct from language, the Turanian character of the Pelasgians and Etruscans. I must come over to his opinion, as far as the Pelasgians are concerned. When I extended the Caucasians into Europe nine years ago, it was not among them, but among the Thracians, that I was inclined to include the Pelasgians. One result of the Thracian invasion of Europe by the Hellespont and the Bosphorus would probably have been a concentration of Pelasgians in Greece. To this predominant Pelasgian or Caucasian element in their blood the Greeks may have been greatly indebted for their beauty of form: nor would that form have undergone much alteration from what it was at first, if the Thracian element in the Greek population consisted principally of maritime settlers, Leleges, from Asia Minor, and the Italian element of

In the epitaphs which gave us the Etruscan numerals, we met with klan, puiam, and sech, words all indicating parentage or descent. Klan, which corresponds to natus in a bilingual inscription, seems connected with the Gaelic clann, "offspring, descendants"; the Welsh plan, "a scion," and plant, "a son;" the Latin planta; and the Greek κλάς, κλάδος, κλών, κλάω, φλάω, τλάω; words which may be allied to the Armenian khl-el; "to tear away, to root up (déplanter)," as glan, the Armenian for "cylinder," is derived from gl-el, "to roll." But another interpretation is given by K. O. Müller (Die Etrusker, vol. i, p. 446). He compares the two inscriptions on the same monument:

La. Venete La. Lethial* etera

Se. Venete La. Lethial klan

and observes: "If etera be taken to mean other, second,' klan must be first, firstborn." Etera is thus compared with the Greek έτερος, = Armenian ôtar. Dr. Donaldson argues in the same manner (Varronianus, p.

maritime settlers, Hellenes, from Messapia and its neighbourhood. In blood, though not in language, the Greeks and Lycians may have been very nearly allied, like the people of Cornwall and Brittany. Gauls have become French in like manner.

Of the Etruscan words mentioned by ancient writers, one is apparently Turanian. This word is damnus, "[ππος," which seems allied to the Lapponic tamp, "equus," the Fin tamma, "equa," the Armenian zambik, "equa, jument," the Basque samaria, "jumentum vectorium, caballeria," the Albanian samaros, "jumentum," the Pehlvi djemna, "camel," and the Mantschu temen, "camel." The Armenian has taken up some Turanian words.

^{*} Lethe, a man's name, and Lethi, a woman's name, are in Fabretti (1039).

171): "If then etera means, as is most probable, the second of a family, klan must mean the first or head of the family." This might bring us to the Armenian glovkh (= Polish gtowa), "head, summit, the first rank;" glkhan zovkn, "chub" (lit. "head-fish"); glkhani, "the chief persons in a city, the nobility." As there exists rain by the side of regen, and wain by the side of waggon and wagen, the aspirate kh might be dropped in glkhan.

Another group of words is presented by the following epitaphs in Lanzi:—

- 191. mi Kalairu fuius
- 315. Lth. Marikane via
- 310. Larthi Vetus Klaukes puia
- 311. Arnth Vipis Serturis puiak
- 123. Anes Kaes puil (t)hui....

The Latin filius and the Greek viós would be allied to these terms, and also the Gaelic fuil "blood, family, tribe, kindred." In Finnish dialects we find the Hungarian fiú, "son," the Syrianic pi, "son," and the Esthonian poia, "son." The Wallachian is very complete here; for it gives us putu, "what is young," fitu, "son," fia, "daughter," and fiika, "θυγάτριον, töchterlein." I find no such words in Armenian. The next expression appears to be both Finnish and Armenian:

- Larthia Kaia Huzetnas Arnthalisa Kafatl sak
- 37. Titi Velimnias Akril sek
- 471. Ramthn Matulnei sech

Lapponic sakko, "proles." Armenian zag-il, "to be born or derived;" żag-el, "to produce young;" żag,

"a young bird ($\nu\epsilon\sigma\sigma\sigma'$ s)," = Albanian zok. The Armenian zag and the Albanian zok mean also "a small bird," and are both employed to render "sparrow" (Luke x, 6).

The next expressions are of peculiar interest on account of the monuments where they are found, as they occur in the celebrated "valley of tombs" at Castel d'Asso, as well as at Norchia and Toscanella, and elsewhere. But their philological importance is of a still higher character, as they seem to dispose of the claims of the Sanskrit to include the Etruscan in its own peculiar division of the Aryan languages, while the claims of the Armenian stand the test, and are confirmed by the Etruscan forms. One of these forms is eka suthi (accompanied by a proper name in the nominative); an expression which Migliarini conjectures to mean "hic situs est," or "questa è la tomba," and which must, indeed, have some similar signification. The other form is eka suthi nesl; and one example of it is eka suthi nesl Tetnie, which I should render, "here is buried the dead Titinia, hic conditur mortua (necata) Titinia;" considering eka suthi nesl to be now represented in Armenian by ahá sovzani nekheal, "ecce sese condit putrefactus," which does not, however, exhibit the affinity which the Armenian bears to the Etruscan so clearly as it may be brought out by further consideration.

The letter-changes in different Aryan languages should be noticed here. Now we have in the first place—Sanskrit hrid = English heart = German herz

= Greek καρδ- = Latin cord- = Gaelic cridhe = Welsh craidd = Armenian sirt = Lithuanian szird- = Polish serce; and in the next place—Sanskrit cvan = English hound = German hund = Greek κυν- = Latin can- = Gaelic cu = Welsh ci = Armenian sovn = Lithuanian szun-.* From this it may be seen that, while German languages retain the Sanskrit h, and convert the Sanskrit c into h, and while Celtic and Classical languages convert both into k, = c, (and sometimes into g), Thracian and Sarmatian languages represent both by sibilants. Now let us apply this principle to deal with the roots of—

suth-i nes-l

If these two Etruscan words are rightly translated into Latin (supposing necatus = mortuus), then the following comparisons will shew, by the aid of the letter-changes, that the roots of the Etruscan and Latin are the same in both words, and that the Etruscan is like the Armenian in all respects. For we should have:—

Bötticher defines the Aric, or Thracian and Persian languages, as differing from Indian, German, and Latin, by using h for s, z for h, and s for ç.

```
Sanskrit.nac, "perire, mori." Cf. dac-an, "ten." 

{ Latin.nec-, "kill." dec-em. 

{ Greek.\nu \epsilon \kappa-, "die." \delta \epsilon \kappa-a. 

{ Armenian.nas, "a coffin." tas-n. 

{ Etruscan.nes, "die." tes-ne. 

Anglo-Saxon.nac, "corpse." ty-n, "zeh-n."
```

Similar letter-changes occur in the Sanskrit spac, "perficere," = Armenian spas, "function, service," spas-el, "to serve, to observe, to watch (épier)", = Latin spec-, = German späh-en, = English spy. The Armenian nekh-, "putrescere," found above in nekh-eal, "putrefactus," would not represent the Sanskrit nac, "mori," so much as the cognate Sanskrit nakk, "necare, destruere." There is a corresponding pair of forms in the Armenian dovstr and dokht, "daughter," = Sanskrit duhitri, Zend dughdar, Persian dokhter, dokht, Lithuanian dukte, Slavonic düśti. The termination of the Etruscan nes-l, = Latin nec-atus, is found in the Armenian nekh-eal. The Slavonic resembles the Armenian in having the Sanskrit and Latin t of the preterite participle converted into the weaker l; but the Lithuanian retains the t unchanged. Some Indian dialects exhibit l in the place of t, like the Armenian and Slavonic. In the preterite participle of the Sanskrit nac, the c becomes s; and nasta, "perditus," = Etruscan nesl, "mortuus," which resembles closely in form the Slavonic nes-l', "having borne."

We have considered the roots of the Etruscan suth-i nes-l, as well as the form of nes-l, and have found

them all three in the Armenian language. It only remains to notice the form of suth-i, "conditur." Now the general characteristic of the Armenian passive is i, which is equivalent to that of the Sanskrit passive, ya. Thus, in Armenian, "he loves" is $sir-\hat{e}$, while "he is loved" is sir-i, which is just the form of suth-i. The corresponding Sanskrit form would be -yate; the Etruscan and Armenian converting the Sanskrit ya into i, and dropping the t of the third person, with the vowel that follows it. In the aorist, however, the Armenian employs the a, not the y(i) of the Sanskrit ya, to form the passive: thus $sire\ddot{z}-i$ is "I loved," and $sire\ddot{z}-ay$ is "I was loved." Compare $\tau(\theta\eta\mu-\iota)$ and $\tau(\theta\epsilon\mu-a\iota,\tau\psi\pi\tau\epsilon(\tau)-\iota)$ and $\tau\psi\pi\tau\tau\tau-a\iota$.*

The Rhæto-Romance salipp, "locust," = Sanskrit calabha, "locust," = Armenian satap, "gliding, quick," implies that the ancient Rhætian was like the Armenian and Etruscan in one of its letter-changes. The Greek and Latin give kel- for the Sanskrit cal, "run." The Rhæto-Romance as-oula, "kid" (ante, p. 7), if

^{*} The characteristic of the Latin passive, r, is Celtic. Thus we find in Zeuss (Grammatica Celtica) these Irish forms:—predch-idir, "predic-atur"—consuidig-ther, "compon-itur"—tuc-atar, "intellig-untur"—tomn-ib-ther, "cogit-ab-itur"—and prom-f-idir, "prob-ab-itur." In the last two examples, the characteristic b of the Latin future appears also, as again in the Irish car-ub, "am abo," and the rest of the persons: cair-fe, cair-fed, car-fam, cair-fid, car-fat. In the Welsh par-assei, "effecerit," and agysg-assei, "dormiverit," we meet with forms similar to am-dsset: and in chlyw-yssynt, "aud-ivissent, aud-issent," the Latin form with the root of κλύ-ω, in-cly-tus, and cli-ens. The oldest Celtic writings, from which forms like these are taken, reach back about as far as 800 A.D.

allied to aly- and the Armenian ayz, would mark a similar peculiarity.

If the Etruscan suth- = Sanskrit hud, "coacervare, submergi," = Armenian sovz-, "hide, submerge," then the Aryan family to which the Etruscan belongs would not be Sanskrit, but Armenian, as it is between these two families that our choice would lie. Yet, as the question seems to be reduced to this point, it may be as well to notice another distinction between the Sanskrit on one side, and the Armenian and the Etruscan on the other. The Sanskrit names for a town are pura, nagara, and pattana, the -poor, -nagore, and -patam of our present India. But Etruria exhibits none of these names (though pattana resembles the Venetian Patavium), while the corresponding Armenian term, sên, gen. sini, does appear there, and may indeed serve to trace the Etruscan route from the supposed "Primeval Country" of the Aryans at the sources of the Oxus and the Jaxartes, up to the Po and the Tiber. The following names, which are all taken from one author, Ptolemy, may be sufficient to exemplify this; and it will be observed that even the Armenian vowel-change from sen, "village, habitation," to its genitive śini, and śin-el, "to build," is not without significance :-

Among "the mountain-towns of the Sogdians along the Jaxartes" is-

 $X_0λβ_η-σlva*$Sogdiana.

Ptolemy mentions two Armenian towns called Χολούα, and another called Χολου-άτα. Cf. Armenian holow, "a round."

Σίνα or ΣήναΜargiana.
Σινάκα*
ΣavaisMedia.
Σ áva Σ ivís Σ
ΣανίςPhrygia.
'Οπί-σινα or 'Οπί-σηνα†Thrace.
ΣενίαIllyria.
Kαι-σαίνα‡Cisalpine Gaul.
Σαίνα ξ Οὐολ-σίνιον }Εtruria.

Fel-sina, the Etruscan name of Bononia (Bologna), and Sar-sina, may be added from other authorities. The Lithuanian here touches the Thracian again; for in Lithuanian sena means "wall," and senys, "building." The root is also used in Georgian, and Sinope looks as if it were the Georgian senoba, "building." Cf. iifipfa (ante, p. 21).

Pliny writes, (H. N., vi. 31): "Oritur (Tigris) in regione Armeniæ majoris, fonte conspicuo in planitie. Loco nomen Elegosine est." This is a compound name like Volsinium, Felsina, and Sarsina. The ancients mention two places in Armenia called Elegia, and one in Noricum called Elegium. Pliny writes again (xvi. 66): "Est et obliqua arundo... vocatur a quibusdam elegia." One could wish that he had named

Armenian diminutives are formed in -ak.

[†] Compare on- with the Armenian oph, "trench."

[‡] Cf. Armenian kay, = Sanskrit kâya, "domus."

[§] Sena, now Siena.

these quidam, for elegia would be the Armenian etegn, "a reed," which appears again in the Phrygian ἔλυμος, "αὐλός,"* as well as in the Greek ἔλεγος, a word probably borrowed by the Ionians from the Lydians. It is said on the Arundel Marble: "Υαγνις ὁ Φρὺξ αὐλοὺς πρῶτος ηὖρεν; and by Pausanias (x. 7): Ἐλεγεῖα καὶ θρῆνοι προσαδόμενα τοῖς αὐλοῖς.

One use that the Armenians made of reeds was, according to Xenophon, to suck up beer or barleywine through them. This practice the Armenians had in common with the Phrygians and Thracians; a fact mentioned in his History of Gresce by Mr. Grote, who adds, with a just appreciation of national relationship: "The similarity of Armenian customs to those of the Thracians and Phrygians is not surprising." Nania, like ¿λεγεία, were sung to the flute, which is called in Armenian etégnaphot, "reed-trumpet." Thus Cicero says (De Leg., ii, 24): "Cantus ad tibicinem, cui nomen næniæ." Compare νηνίατον οτ νινήατος, "Φρύγιον μέλος," on which word Bötticher observes: "Nænia Romanorum in mentem venit, et radix nu, 'laudare.'" This Sanskrit root is found in the Armenian nov-ag, "a song," and nov-al, "to mew"; while νη- or næmay be referred to the Persian nay, "flute," = Sanskrit nada, "arundinis species," = Armenian net, "sagitta," i. e. "calamus." Thus nania seems the nay-nu, "flute-song," just like exeyos. The Armenian word for "lute," win, is the Sanskrit vina, "lute";

Bötticher's Arica, p. 34.

and the Armenian chnar, "lyre," is obviously the Greek κινύρα and the Hebrew kinner. We may see by these instances what the comparison of languages has exhibited all along from the first (ante, p. 7), how Armenia was connected with India on one side, and still more closely with Asia Minor, Thrace, and Italy, on the other.

In addition to Lorium (ante, p. 29), and Sena, Felsina, and Volsinium, or Volsinii, other Etruscan names of towns may be explained from the Armenian:— Veii, èφ' ὑψηλοῦ σκοπέλου, from weh, "high"—Volci, or "Ολκιου, from ovtkh, "a ravine"—Hasta, from hast, "strong"—Blera, from blovr, "a hill," and blrak, "a hillock"—Aharna, from akarn, "a castle"—and Nepete, from Mount Npat (Niphates), and npatak, "object, mark." Compare σκοπιά and σκόπελος.

I return from this rather long digression to complete the examination of Etruscan sepulchral forms of expression.

An Etruscan word for "tomb" appears to be tular. Tularu is found in the Perugian Inscription, and Lanzi supplies these four epitaphs:—

457. tular Rasnal

458. tular Hilar

460. tular Svuriu Au. Papsinasl

461. Tetrntertular.

Tular may be interpreted "tumulus," and thus connected with the Greek τύλη, τύλαρος, and the Gaelic tula, "hillock"; or else be explained from the Armenian that, "tellus," thatel, "to bury," thatar, "an

earthen vessel." Lanzi supposed tular = τὸ ollarium.

No Etruscan phrase has yet been noticed which expresses the sentiment of the Greek μνείας χάριν or μνήμης ἔνεκεν, or of our English "in memory of." But I believe that we have one in the following epitaphs in Lanzi :--

- Thutnei thui.
- 80. Laris Vete thui
- Thui Larth Petrni Larthalisa.

Thui might be interpreted "nominatur, memoratur," by the aid of these Armenian analogies :-

thiv (gen. thovoy), "numerus."

thovel, "numerare."

thové, "numerat."

thovi, "numeratur."

thovich (plural form of thovi), "sententia."

The next epitaph (Lanzi, No. 86) would thus imply that the person named is commemorated, and lived (i. e. is dead) :-

Larth Vete Arnthalisa thui. Larth Vete line.*

Thovi, it will be seen, being implied in thovich, is both a noun and a verb in Armenian; and in like manner the Etruscan suthi would probably signify not only "is buried," but also "grave, tomb." For the following inscription is given by Lanzi (vol. ii, p. 562):-

mi suthi Larthial Muthikus.

"I (am) the tomb of Muthicus the son of Lartia."

^{*} Why should the Latin line, "unge," be considered a probable explanation of this Etruscan line?

⁺ We know from Herodotus that the Lydian Myrsil(us) meant "the son of Myrs(us)."

It might, however, signify: "Muthicus the son of Lartia is buried in me." The stone containing this inscription was discovered at Busca, between Cuneo and Saluzzo, in the country of the ancient Vagienni; a remarkable locality for an Etruscan epitaph, though it might imply no more than a Greek inscription would do at Rome, or an English epitaph in a French or German cemetery.

In addition to the numerals, the Etruscan epitaphs will have furnished us with the following forms, which I collect together here. If the interpretations were undoubtedly true, the Etruscan question might probably be considered at an end. Where the Etruscan forms are accompanied by a number, it is represented by N. The proper name has to be supplied.

```
\{avil N\} " ætatis N."
avils N
ril N, "annos N," or "anno N."
line, "vivebat."
avil ril N, "anno ætatis N."
ril leine N ) " vivit annos N."
ril N leine
lupu, "obit."
lupu avils N
              "obit ætatis N."
avils N lupu
avils N lupuke
zilachnke, "sepelitur."
zilachnke avils N, "sepelitur ætatis N."
zilachnuke lupuke, "sepelitur, obit."
avils machs N lupu, "obit ætatis mensis (mense) N."
avils thunesi N lupu, "obit ætatis diei (die) N."
```

.. avenke lupum avils machs N, "deponit cadaver ætatis mensis (mense) N."

eka suthi, "hic conditur."
eka suthi nesl, "hic conditur mortuus."
thui, "memoratur."
tular, "tumulus."

As a companion to the Etruscan epitaphs, whose examination I have now concluded, the longest of the very few Phrygian epitaphs that we possess is here subjoined, with its interpretation from the Armenian:*

Kelokes fenaftun aftas materes sosesait,
Celoces sepulcrum suæ matris facit,
materes Efeteksetis Ofefinonoman. Lachit
matris Ephetexetis ex Ofefinone. Sepelit

ga materan aresastin. Bonok akenanogafos terra matrem præstantem. Bonocus illustris erekun telatos sostut; Inanon akenanogafos, usum { sepulcri vetat; Inanon illustris, { loci

aer atanisen, kursaneson tanegertos. vir judicialis, destructionem ædificii.

Cicero writes (De Leg., ii, 26): "De sepulcris nihil est apud Solonem amplius, quam 'ne quis ea deleat, neve alienum inferat'; pœnaque est, 'si quis bustum

^{*} It was said by Eudoxus (ap. Eustathium): 'Αρμένιοι τὸ γένος ἐν Φρυγίας, και τῷ φωνῷ πολλὰ φρυγίζουσιν. As might be expected from a contemporary of Xenophon and Agesilaus, and one who was himself a traveller, Eudoxus is right about language: but the Phrygians probably came from Armenia, not the Armenians from Phrygia.

(nam id puto appellari $\tau \dot{\nu} \mu \beta o \nu$), aut monumentum, aut columnam violarit, dejecerit, fregerit." This passage, as well as ancient epitaphs in general, will shew that the Armenian brings out a good sense for the whole of the Phrygian epitaph; in which Bonok may have been the lord of the ground, and Inanon a judge of the district. Both Bonok and Inanon were illustres, or "noblemen," while Celoces was an untitled man, perhaps a dependent or client of Bonok.

Fenaft-un, "sepulcrum," with an objective termination, is the Armenian anavth, or anoth, "vessel, pot, box, arca, ἀγγεῦον," and probably the Albanian ounth, "a pot."

Aft-as, "suæ," implies af, "he," which corresponds to the Kurdish au, "this, that," and to the Armenian iv, "he," which is found in ivr, "of him," and also "his." The genitive of ivr, "his," is ivroy.

The root of sosesait, "facit," may be discerned, most likely, in the Armenian śôś-aphel, "to handle, manier"; the composition of sosesait (and possibly its root) in the Armenian sar-as-el, "to form, to shape" (root sar, in Persian sâź); and the conjugation of sosesait in the Armenian t-ay, "he gives, dat." The Phrygian, like the Latin, retains the final t, which is dropped in Greek, Armenian, and Etruscan, as also in Italian and Spanish.

Ofefinonoman, "ex Ofefinone," has a termination which finds a parallel in the Armenian dmane, "from this," and yaygman, "in the morning (ayg)."

Lachit is a verb of the i conjugation, which, if ren-

dered "vorat," is explained from the Armenian lake, "he swallows"; and, if rendered "sepelit," contains the root of the Etruscan zilachnke, which is found in the Armenian etag, "fossa" (ante, p. 34).

Ga, "tellus," is the Aryan word which appears in Greek as $\gamma \hat{\eta}$, in Gaelic as ce, in German as gau, in Sanskrit as go, and in Armenian as kav, "clay," and gav(ar), "province."

Ares-astin, "præstantem," contains the Armenian yarağ, "before," arağ, "front," arağ-in, "first," combined with a termination like that of the Armenian navast, or nav-asti, "a sailor." Indeed, ares-ast-in might be obtained from the Armenian yarağ-anal, "præire, to excel," just as ovr-ast, "a denier," is obtained from ovr-anal, "to deny."

Erek-un, "usum," would contain the Greek έργ-, and the Armenian erk, "toil," herk, "cultivation."

Aken-anogafos, "illustris," is derived from the same word as the Armenian akan-avor, "illustrious," namely, akn, "an eye"; and may perhaps contain also the Armenian angov, "worthy of," so as to signify "worthy of respect, honourable."

Telatos, if interpreted "sepulcri," may be allied to the Armenian that-el, "to bury," and thatar, "an earthen vessel"; and to the Etruscan tular, "a tomb": or, if interpreted "loci," to the Armenian teti, "place," which seems akin to the root of thatar, namely, that, "tellus." The form of telatos is just like that of τέρατος.

Sostut, "vetat," is a verb of the u conjugation, and = Armenian sasté, "he reprehends." Aer (the word is doubtful) seems the Armenian ayr, "man."

Atan-isen, "judicialis," contains the Armenian atean, "tribunal, court of justice," and is equivalent in meaning to the Armenian aten-akan, "judicial, magistrate, judge," or to the Armenian aten-akal, "magistrate, senator."

Kursan-eson, "destructionem," is explained from the Armenian korzan-el, "to destroy," and korzanovthivn, "destruction." The termination -es- rather resembles the Armenian -ić "-tor," as in tov-ić, "giver, da-tor." If kursaneson signifies "destroyer" or "injurer," erekun ought to signify "user," not "use."

Tanegert-os, "ædificii," is a compound like Tigranocerta, and is composed of the Armenian words, tovn, gen. tan, "a house," and kert, "building."

That akenanogafos is a title may be seen also from the epitaph on the tomb of King Midas:—

Ates arkiaefas akenanogafos Midai gafagtaei fanaktei edaes.

Here arkiaefas might signify "royal," from the Armenian archay, "king"; or could perhaps be better explained from the Armenian yarg, "value, esteem, dignity," yargi, "respectable," yargoy, "honourable, precious, reverend." Gafagtaei may be derived from the Armenian gah, "throne," and possibly be equivalent to the Armenian gahakii, the dative of gahakii, "sharer of a throne, fellow-sovereign"; or else contain the Armenian gta-nel, "to acquire, to have." For fanaktei, "king," see infra, p. 79. Edaes, "posuit,"

is a first aorist, like $\epsilon\theta\eta\kappa\epsilon$ or $\epsilon\xi\eta\sigma\epsilon$, while the Armenian ed, "posuit," is a second aorist, like $\epsilon\theta\eta$. The terminations of the Armenian first aorist active, in the third person singular, are $-ea\ddot{z}$ and $-a\ddot{z}$, according to the conjugation. It usually wants the augment; but in $e-k-ea\ddot{z}$, "he lived," and $e-b-a\ddot{z}$, "he opened," we meet with forms completely like the Phrygian e-d-aes, "posuit." Edaes terminates two other short inscriptions, so that its meaning is clear.

I have already noticed the identity of the Phrygian έλυμος, "aὐλός," with the Armenian etegn, "reed." Another Phrygian plant-name was remenia, "hyoscyamus, henbane," which is merely mentioned in my Armenian dictionary as "a poisonous plant." But -enf forms names of trees in Armenian, as in keraseni, "a cherry-tree"; and the same language has rem-akal = okh-akal, "malignant," and therefore implicitly rem = okh, "malice." Yet the nearest word to remenia is the Sanskrit ramaniya, "pleasant, a charm," of which the root is ram, "love, delight." Henbane may have been used in philtres. An almost synonymous Sanskrit word, priya, "gratus," might explain the first element of the Dacian πρια-δήλα, "ἄμπελος μέλαινα," of which the second element, δήλα, is the Armenian det, "herb, medicine." The Phrygian σοῦσα, "λείρια," is obviously Semitic, but may have been derived immediately from the Armenian śovśan, "lily." Ζέλκια, the Phrygian for λάγανα, resembles more than one Armenian word: as zatik (in composition zatk-), "flower"; zatk, "stalk"; setkh, "melon," = Albanian śalkyi. The relics of the

Lydian language supply us with two names of the same kind. One is ἄκυλον, "βάλανον πρινίνην," which may be compared with the German eichel, and the Armenian katin, "acorn." The other is μυσός, "ὀξύη, beech"; a word which seems allied to the Abkhasian mića, "wood"; to the Sanskrit mićata, "sandal-wood"; and to the Armenian mośay, "tamarisk." The name of Mysia was supposed to be derived from μυσός. If we may trust Homer, the tamarisk was common in the Troad (Il., vi. 39; x. 466; xxi. 18, 350). Herodotus mentions it in Lydia (vii. 31), where Mr. Hamilton (vol. ii, p. 144) speaks of "thickets of tamarisk." There was a Mæsia Silva in Etruria, not far from Rome. The Proper Thracian supplies us with three plant-names. Bolζa was the name of a plant like $\tau l \phi \eta$, of which the thema is τίφος, "marsh, stagnant water." The Sanskrit vrîhi, and the Armenian brinz, "rice," and the Rhæto-Romance ritscha, "grass growing in water," would be akin to βρίζα. The second Thracian plant-name is κήμος, "ὄσπριόν τι." The Sanskrit has kâmin, "a climbing plant," and the Tuschi has kam, = Georgian kama, "dill." The Bessi supply the third Thracian plant-name, ἀσᾶ, "βήχιον, tussilago, coltsfoot," which is plainly allied to the Armenian haz, Sanskrit kāsa, "βήξ, tussis"; and, as the Germans call "coltsfoot" huf-lattich, the Armenian hazar, "lettuce," might also be compared with haz and ἀσâ. The change of the Sanskrit kasa into the Armenian haz is like the change, in Florentine pronunciation, of casa into xasa or hasa. Professor Max Müller has

noticed the apparent affinity of the Dacian μαντεία. "sentis, rubus, bramble, blackberry," to the Albanian; in which language we find man, mandë, "a mulberry, a mulberry-tree," mandë pherrë (pherrë, "bramble"), "a blackberry." In Armenian we have, according to Rivola, mandak, "genus herbæ"; and there is likewise the Armenian man-anekh, "mustard," and the Ossetic män-ärth, "a raspberry, rubus idæns." Perhaps the original meaning of man-, mand-, or μαντ-, is "berry"; and the root may appear in the Sanskrit mandala, "orbis, circuitus," and in the Armenian man, "a round," which is also found in the expression man pttož, "blossom of fruits (pttož)." All these words might have belonged to a race who spoke dialects closely allied to the Sanskrit, as the Armenian is, and who proceeded from a country in the position of Armenia. The Dacian plant-names (ante, pp. 8, 9) have exhibited still more striking Armenian affinities.

CHAPTER III.

ETRUSCAN VOTIVE INSCRIPTIONS.

The principle on which the argument in the preceding chapter has been conducted is, to determine in general the sense of each word without regard to its sound or form, and then to see what language or languages can explain that sense. This was possible in epitaphs, but is not so in votive forms of expression, or at least not so readily and completely. The shortest and, I think, the best mode of proceeding here will be, to exhibit at once the interpretations at which I have arrived, and then to prove their correctness, or at least their fitness.* I shall begin therefore by laying before the reader the three longest Etruscan votive inscriptions, accompanied by the interpretations which I put upon them. The first is on a statue, now at Leyden (Micali, Mon., tav. XLIII; Lanzi, vol. ii, p. 455). It runs thus:—

 Velias Fanaknal
 thuf-lthas
 alpan
 lenache

 Veliæ Fanacia-natæ
 signum-precis
 supplex
 facessit

 klen
 kecha
 tuthines
 tlen-acheis

 pia
 expiat
 gratiæ
 debitum-pretium

All the terms used here will be subsequently ex-

The other or analytical process was adopted in my Armenian Origin of the Etruscans (1861).

plained. The proper name, Fanak, deserves observation, on account of its resemblance to the Phrygian fanaktei (ante, p. 74), = Greek ἄνακ-τι, and of the connexion of these words with the Armenian nakh, "first," and with the naqa, "king," of the Persian inscriptions. In the Milesian traditions reported by Pausanias, Anax, = Armenian nakh, "first," is the Autochthon and the son of Earth (Ge). "Aναξ would be a Thracian, not a Hellenic word: at least it is Armenian, and is not Latin. The father of St. Gregory, the Apostle of Armenia, was said to be a Parthian called Anak.

The next long inscription, on the base of the statue of "the Orator" in the Uffizi at Florence (Micali, Mon., tav. XLIV; Lanzi, vol. ii, p. 468), is as follows:—

Aulesi Metelis Ve. Vesial klensi ken Aulus Metellus Veli filius Vesia-natus pius ut fleres teke sansl tenine tuthines chiseliks.*

donum ponit libens fert gratiæ monumentum.

The proper name, Vesia, may be compared with the Armenian wes, "superbus." Ken, "ut," seems found in the Armenian ken, which is, however, only employed in composition. There are in Armenian two triads of terms signifying "as, like":—

or-bar, or-pês, or-kên—hi-bar, hi-pês, hi-kên.
Or signifies "who, which," and so would hi, which
the Armenian him, "quare," = Sanskrit kim, "quare,"
shews to be identical with the Sanskrit ki, "who,

^{*} In the original, chisvliks. I have changed the v (F) into e (E), as in the case of tivrs, "thirty."

which," = Albanian kyë. Bar means "modus" in Armenian, and -pés = Sanskrit peça, "forma." All the six terms above therefore signify "quomodo"; and kén may thus be interpreted "ut."

The following is the third long votive inscription, and accompanies a statue of Apollo (Lanzi, vol. ii, p. 446:—

mi fleres Epul (a) fe Aritimi me donum Apollini et Artemidi Fasti R(u)fr(u)a turke klen kecha. Fausta Rufria dat pia expiat.

Afe, "and," would be identical with the Armenian ev, "and," which Bötticher refers to the Sanskrit abhi, "ad, versus," = Greek ἐπί. But the word is doubtful, and is not found elsewhere. Fabretti reads svulare instead of Epul afe.

On a candelabrum (Lanzi, vol. ii. p. 421) there is also this expression:—

Au. Velskus thup-lthas alpan turke.*
Aulus Veliscus signum-precis supplex dat.

I will next give a complete list of Etruscan votive forms, omitting proper names, and reversing in three instances, for the sake of comparison, the order in which two words occur. The list would be this:—

^{*} Alpan turke terminates two other votive forms. Fabretti, 1051, 1052. In the Etruscan kecha, "expiat," turk, "dat," suthi, "conditur," and lupu, "obit," we have examples of the four Armenian conjugations in a, e, i, and u (ov); as in the Armenian tay, "gives," até, "hates," lini, "is," and lizov, "licks." Three of the four appear in the Phrygian sosesait, lachit, and sostut (ante, pp. 72, 73).

1. kana					
2. suthina					
3. flezrl					
4. flerestlen-asies					
5. fleres-zek sansl					
6. turuke					
7. fleres turke					
8. fleres turke klen kecha					
9. alpan thup-lthas turke [acheis					
10. alpan thuf-lthas lenache klen kecha tuthines tlen-					
11. klensi fleres teke sansl tenine tuthines chise-					
[liks					
The next step in the argument will be to give the					
meaning of these words, as deduced mainly from the					
Armenian; and to shew, as in the case of sepulchral					
expressions, that such meanings make Etruscan votive					
forms correspond in sense to the forms used by the					
ancients. I therefore subjoin this comparative list of					
ancient votive terms:-					
LATIN & GREEK. ETRUSCAN.					
Elκών kana, "simulacrum, statua."					
"Αγαλμα zek, "statua, figura."					
'Aνάθημα suthina, "sacrificium."					
Εὐχῆς ἔνεκα thup-lthas, "signum-precis."					
Ex voto fleres, "donum."					
Donum flezrl, "datum."					
Votum					
Libens sansl, "libens."					
klen, klensi, "pius."					

alpan, " supplex, ἰκέτης."

LATIN & GREEK. ETRUSCAN.
ἀνέθηκε tenine, "fert."

Posuit teke, "ponit," or "facit."

Retulit

Fecit lenache, "facessit, fieri facit."

Dedit turke, "dat."

Solvit kecha, "expiat," or "solvit."

Dedicavit

Consecravit

Xaριστήριa tuthines chiseliks, "gratiæ monumentum."

Merito tuthines tlen-acheis, "gratiæ debitum-

[pretium." tlen-asies, debitum-

[pretium."

The meanings assigned to the Etruscan words are thus suitable, and therefore likely to be true; and this probability may be still further shown by the following inscription, which is found in Gruter, p. xlvii:—

Te precor* Alcide sacris invicte peractis
Rite† tuis lætus dona ferens meritis‡
Hæc tibi nostra potest tenuis perferre camina
Nam grates dignas§ tu potes efficere
Sume libens|| simulacra¶ tuis quæ munera** cilo
Aris Urbanus dedicat†† ipse sacris.

I shall now show how the meanings assigned to the

Alpan

[†] Klen, klensi.

[‡] Sansl tenine tuthines chiseliks, klen kecha tuthines tlen-acheis.

[§] Tlen-asies.

Sansl.

[¶] Kana, zek.

^{**} Fleres, suthina

^{††} Turke, kecha.

Etruscan words are obtained, almost entirely from the Armenian:—

Kana (1) "simulacrum" (Lanzi, vol. ii, pp. 465, 466). Gaelic caon, "simulacrum;" or Armenian k-al, "sistere," -an, Armenian termination, = Sanskrit -ana. Kana is found on statues.

Suthina (2), "sacrificium."

Tuthines (10, 11), "gratiæ, donationis, χάριτος." These words are of the utmost significance. Suthina is found alone on a number of objects; among others, on a statue (Micali, Mon., tav. xxxv, 9), and on the back of a patera (tav. XLVIII): it is also sometimes accompanied by a proper name (Fabretti, p. clxxxIII). The most probable meaning of suthina is obviously "a votive offering;" and it would therefore be duly explained from the Sanskrit hu, "Diis offerre, sacrificare," just as the Etruscan suth-i, "is buried," was explained from the Sanskrit hud, "coacervare, submergi" (ante, p. 62). Though it would seem probable, at first sight, that suthi and suthina were cognate words, yet they need be no more so than potis and potio; lot, lotus, and lotion; rat and ration. We may also fairly conclude that suthina does not mean "tomb" or "urn:" for such an inscription as Larth Seties suthina is found on several vases, "in nonnullis vasis" (Fabretti, 2095 quing. B). The ashes of a deceased person would not be distributed among a number of vases: nor, indeed, does there seem any sense but "votive offering" which will explain the fact of suthina being found as a single word on statues, pateræ, and, as in Fabretti, quing. A,

"in nonnullis monumentis aheneis," discovered at one place. As therefore suthi appears on tombs, it is probable that suthi and suthina have no etymological connexion; and it is also probable that, while suthina is a nominative, tuthines is the genitive of a similar nominative tuthina, where the termination is the same as that of suthina, but the root different, just as we find in Latin natio and ratio, motio and notio. We should thus have these words in Etruscan:—

su-thina, or else s(u)-uthina, "sacrificium." tu-thina, or else t(u)-uthina, "....."

In the termination -uthina, an Armenian would at once recognise his native termination -ovthivn, which is so common as to occur three times in the Lord's Prayer, as well as in twelve nouns derived from nar, "a ship," and in fifteen derived from mard, "a man." The Sanskrithu, "Diis offerre, sacrificare," becomes the Armenian zoh, which would be suh in Etruscan orthography; while the root of the Etruscan t(u)-uthina or t-uthina is found in the Armenian tov or t-, "give;" for "d-are" is t-al, and "d-atus" is tov-eal, in Armenian. We have, indeed, both the Etruscan words in Armenian: for "human sacrifice" is marda-zohov-thivn, and "giving of homage" is harka-tovovthivn, in that language.

The final vowel in suthin-a would be dropped in Armenian, as may be seen by such an instance as kin, " $\gamma \nu \nu \eta$," with which may be compared the Etruscan kina, that occurs in the beginning of an inscription at Volterra:—

Titesi Kalesi kina Ks Mestles.

The Etruscan proper name, Mestles, resembles the name of the Mæonian leader, Mέσθλης (Il. II, 864), and that of the Iberian town, Μεστλήτα, mentioned by Ptolemy. Mes-may be the Armenian mez, "great," = Zend mazô, = Sanskrit mah(at), another example of the change of the Sanskrit h into a sibilant.

The following table will exhibit the affinity between the Armenian and Etruscan in several points already considered; and may likewise explain, to some extent, by showing in what manner the Armenian uses infinitives and participles as nouns, how the Etruscan comes to have so many *l* terminations:—

armenian roots & words. ETRUSCAN ROOTS & WORDS. sovz, "cond-ere." suth, = Sanskrit hud. zoh, "sacrifice." su, = Sanskrit hu. tov, "give." tu. av, "age, increase." av, = Sanskrit av. rah, "go." ri, = Sanskrit ri. tes, "sight." tes-ové, gen. tes-éi, "inspector." tes-avor, "apparent." tes-il (videri), "appearance." av-il, "age." tes-avor-il, "to appear." r(i)-il, "year." tes-an-el, "to see." tes-an-el, "appearance." tes-ot (videns), "prophet." tes-an-ot (videns), "prophet." s(u)-uthina, "sacrificium." tes-ovthivn, "sight." tes-c-ovthivn, "inspection." t(u)-uthines, "donationis." tes-an-el-ovthivn, "visibility."
tes-ot-ovthivn, "sight."
tes-an-ot-ovthivn, "sight."
tes-an-eli, "visurus, videndus."
tesanelich, "the eyes, sight."

These last two Armenian forms will illustrate in its place the Etruscan chiseliks.

Flezel (3), "datum."
Fleres (4, 5, 7, 8, 11), "donum."

I have met with flezrl only once: it occurs on the back of a statue (Micali, Mon., tav. xxxiii). analogy of fleres would lead us to expect flerzl instead of flezrl, while we should infer from nesl, "mortuus," that flezrl or flerzl is probably a participle. On a patera in Lanzi (tav. xi), a pedestal with a bust is inscribed flere. The connexion with fleo and ploro is most likely a correct one. The Armenian gives :-eter, "fletus" -aters, "precis"-ovterż, "donum"-and eterżeal, otoržeal, and ovteržeal, "datus, oblatus." The initial yowels here may be due to the circumstance, that few Armenian words are allowed to begin with $t_i = \chi \lambda_i =$ Welsh *ll*, which the English pronunciation converts into thl or fl. The Armenian et ag (ante, p. 34) is an instance of a vowel being prefixed to \dot{t} . The f in fleres may represent the aspirate χ contained in t. But compare also the Armenian lov, "flea, floh," where f before l is entirely dropped. In li, "πλέ-ος," p is dropped.

Tlen-asies (4) Tlen-acheis (10) } "debitum pretium."

Gaelic dligh, "debe;" dlighe, "lex, debitum;" dleas,

" officium;" root dl-, in Etruscan tl-: -ean, Armenian adjectival termination.

Armenian aźéch, "pretium," a plural noun: in the objective, the final -ch becomes -s. Ossetic achos "a sum due;" achża, "money." Greek âţía. Compare acheis and asies with the two Armenian forms for "daughter," dokht and dovstr.

Armenian tourch, "gift," a plural noun, of which the root or base is tour: it is found in phar-a-trê, "he gives glory (phar)." As already noticed, a great many Etruscan verbs seem to terminate in -ke, like tur-ke; a form apparently used by the Lydians, as the Lydian βάσκε, "έξεθδαζε," would = the Armenian waz-êr, "he was rushing." Another example of such a form is supplied by the picture which forms the frontispiece to the second volume of Mr. Dennis' Etruria. It represents the self-devotion of Alcestis to death for her husband, and is accompanied by this inscription;—

eka erske nak achrum flerthrke.

Eka has already been interpreted "here" or "ecce," from the Armenian ahâ, "lo!" The Georgian has aha, "ecce;" ach, "hic;" and acha, "ibi." Ers-ke, as we know the subject of the picture, may be considered as equivalent to the Armenian eres-ê, "she offers herself." Nak may mean "to," like the German nach, the Hungarian nak, and the Tuschi naqw; and a similar word would appear in the Armenian nakh, "first, before," which is both adjective and adverb, and has in composition nearly the force of the German nach, as in the

Armenian nakhanż, "envy." And thus, as fler-thrke would be already explained under fleres (p. 86) and turke (p. 87), the whole inscription would probably mean: "Lo! she offers herself to Acheron as a devoted (or 'suppliant') gift." As a comparison of forms, notice that thrke elides the vowel in turke, as the Armenian srbé, "he sanctifies," elides the vowel ov, = u, in sovrb, "holy," = Sanscrit çubhra, "splendidus, albus." Compare the Sabine cyprum, "bonum," and the Etruscan Cypra, "Juno," which would be a Sabine word.

Zek (5), "statua, figura."

Armenian żev, żevak, "form, figure." Zek might likewise be rendered "brought," from the Armenian żgel, = German ziehen; or "produced," from the Armenian zagel, = German zeugen. Perhaps zek, which only occurs once, should be zeke, "brings," = Armenian żge.

Sansl (5, 11), "libens."

Armenian *znzavt*, *znzôt*, or *znzot*, "gaudens, libens." The inscription (5), when completed, is: fleres zek(e) sansl kver. It is found on the statue of a boy. I should interpret kver, "soror," guided by such Latin inscriptions as:—

D.M.C. Egnatio Epicteto et C. Egnatio Floro modesta soror.

Fortunato fratri pientissimo fecerunt sorores.

The Armenian for "sister" is choyr, which is pronounced like the English queer, and gives cher in the genitive. The Persian is khwaher; the Welsh, chwaer; and the Breton, choar. On another statue of a boy, with the inscribed arm unfortunately nearly broken off (Micali, Mon., tav. XLIV), is this fragment of an inscription:—

..... as velusa
..... is kelvansl
..... s kver thvethli
..... klan

As the Etruscan *Thanchvil* is the Latin *Tanaquil*, the Etruscan *kver* would probably be represented by *quer* in Latin. In the votive inscription, fleres tlen-asies sver, sver may = kver, as tlen-asies seems = tlen-acheis (ante, p. 86).

If the Etruscan sansl and nesl be "libens" and "necatus," and if avil and ril be infinitives as well as nouns, we should find these terminations in four languages:—

ETRUSCAN, ARMENIAN, PERSIAN, SANSKRIT.

Infinitive	-1	-1	-dan	$-tu\widetilde{m}$
Pres. Part	-7	-t	-n	-(n)t
Past. Part	-7	-1	-dah	-ta

The Lydian $\kappa a \nu \delta a \acute{\nu} \lambda (\eta s)$ would exhibit the present participle in a third Thracian dialect (ante, p. 7).

Klen (8, 10) \ "pius, rite," i.e. "with due religious Klensi (11) \ rites."

For the termination of klensi, which distinguishes it from klen, compare the Armenian layn and laynsi, "broad;" or bolor, "a circle," and bolorsi, "round;" and for the meaning of klen, compare the Gaelic glan and the Welsh glan, glain, "pure, holy, clean, beau-

tiful, fair;" and perhaps the Armenian getani, "fair, decent."

On a tomb at Vulci (Micali, Mon. Ined., tav. LIX) the sculptured figure of a man stands in a rock-hewn blank doorway, and is surrounded by an inscription which may be interpreted as follows:—

Eka suthik Velus Ezpus klensi kerinu "Hic tumulum Velus Ezpus pius sculpit."

For suthik may be considered as a diminutive of suthi, "a tomb" (ante, p. 69), like the Armenian masnik, "a particle," from masn, "a part;" or lovsik, "a little light," from loys, "light." Ker-in-u, like lup-u (ante, p. 33), would be an Armenian verb of the ov or u conjugation, derived from a root ker, which may be allied to cher-el, "to scrape," or gër-el, "to write," or kër-el, "to hammer, to carve." For the -in-in kerinu, compare Armenian forms like lizanê, lizê, lizov, lezov, "he licks"—gotanay, gotê, "he steals"—kheranay, kheri, "he insults"—kamenay, kami, "he wishes." Similar n forms are common in Aryan languages. Lini, "he is," supplies another instance in Armenian.

Kecha (8, 10), "expiat, consecrat," or else "solvit."

Armenian chahê, "expiat"——chakê, "solvit."

There is also kahê, "parat." See ante, p. 37, No. 2340:
klalum ke..., "funera...."

Tenine (11), "fert, offert."

Armenian tani, "fert, reddit, tenet." Ten-in-e would be a form like ker-in-u, just noticed, but in an e, not a u conjugation. The simpler form is tenu (ante, p. 36, note †). Compare the Armenian p ś nov, = $p ś n \hat{e}$, = $p ś \hat{e}$, "he considers."

Alpan (9, 10), " supplex, ἰκέτης, flehend."

Armenian otb, "fletus:" -an, -ean, Armenian adjectival terminations. The letters o and b are wanting in Etruscan.

Teke (11), "facit," or else "ponit."

Lapponic takk-et, Fin tek-ä, "facere." Sanskrit takś, "facere, fabricare, findere;" takśan, "faber lignarius." Armenian thak, "a hammer, a mallet;" thak-el, "to beat, to ram." Latin tignum, tigillum. Greek τέκτων, τέχνη.

Te-ke might also be regarded as an Etruscan verb in -ke from a root t-"placing." This Aryan root is in Armenian d-, and $d\ddot{e}$ - $n\dot{e}$ is "ponit," an n form like the Etruscan ten-ine and ker-inu.

Thup-lthas (9) } "signum precis, an ex voto."

Τύπος λιτῆς. Armenian tophel, thopel, dophel, "τύπτειν"—atôthel, "precari;" itż, "desiderium;" itżal, "desiderare." Though the Armenian avoids t as an initial, yet we find tżali, as well as ētżali, "desiderandus." Τύπος illustrates teke by exhibiting the connexion between "striking," and "forming" or "making." As τύπος and λιτή are not Latin (for typus is borrowed), they would be Thracian rather than Hellenic words, if the Hellenes were an offshoot of the same Italian race to which the Umbrians and Oscans belonged.

Lenache (10), "facessit."

Armenian etanakê, "modulatur;" etanak, "modus, forma;" etanil "fieri;" linel, "esse, fieri, existere." There is, besides, the suffix -etên, "fac(tus)," as in osketên, "made of gold (oski)".* In Armenian, the termination -ak is frequently causative, like the Sanskrit -aka: e.g. ê, "existence;" êak, "creator;" so that, as lin-el is "fieri," lin-akê would be "fieri facit." If lenache be "facessit," teke would be "ponit" rather than "facit."

Chiseliks (11), "monumentum, in memoriam."

Armenian yiśelich, "a memorial," the plural form of yiśeli, of which the diminutive would be yiśelik (a form like the Etruscan suthik), and its plural form yiśelikch, in the objective yiśeliks. Yiśeli is the future participle of yiśel, "to remember," of which the root is yiś. Similar forms to yiśelich are:—talich, "gift," lselich, "ear, audience," ëmpelich, "beverage," and tesanelich, "sight, eyes" (ante, p. 86). But the existing Armenian forms derived from the root khat, "playing," will most clearly exemplify the supposed formation of chiseliks from a root chis.

ARMENJAN.

ETRUSCAN.

khat, "ludus."

chis

khatal, "ludere."

khatali, "ludendus."

khatalich, "ludus," i.e. "ludenda."

khatalik, "ludus" (dimin.)

khataliks, "ludos."

chiseliks

For the affinity between the Etruscan chis and the Armenian yis, compare the Armenian khovzel, yovzel,

^{*} Cf. Lithuanian auksas, Prussian ausis.

"to seek." The Armenian y is aspirated.* In the mountains of Noricum there was a place called Candalicæ, which resembles the Armenian khat-alik in form, and which may, by the aid of the root cand, "throttle" (ante, p. 7), be interpreted "gorges," or "étranglements." The Albanian has ersëli, "honourable" (th. ers, "honour"), to compare with the Armenian yargeli, "venerandus." On the Noric Elegium, see ante, p. 66.

I have now completely gone through the votive words comprised in the forms at the beginning of the chapter (ante, p. 81). A few other words may be added to them. The first is the well-known Tins-kvil, which stands alone on three votive offerings (one of them the celebrated Chimæra), and in which the name of Tina, the Etruscan Jupiter, has long been recognised. Tina would be the Sanskrit dina, "day," a contraction of divana (Lassen) = divan, "day." The root is div, "to shine," which appears in the Armenian tiv, "day," in the Latin dies, divum, divinus, and, as already noticed, in the Albanian diel or dil, "the sun." It may be remarked here in passing, how the Albanian vëlazër, "brother," (which the plural shows to be the complete form of vëla, "brother"), enables us to pass from the Sanskrit bhratri to the Armenian etbayr, for btayr.

The Etruscan kvil in Tins-kvil seems = Armenian khilay, "gift;" which would make Tinskvil signify "Jovis donum, Jupiter's gift, a gift to Jupiter."

This word is found, together with some others, on

^{*} We have also the Etruscan kiem, chiem, "five," to put by the side of the Armenian hing, "five," and yi-soun, "fif-ty."

the beautiful candelabrum of Cortona. The inscription, which has slightly suffered from a fracture, appears to have run thus:—

thapna lusni (T)inskvil Athli(i) sulthn

As Ath and Athl are both proper names in Etruscan (Lanzi, tom. II, p. 363:—there is an Armenian district called Athli), the meaning of the inscription may be—

"A burner of light, offered to Tina, the work of Atilius."

Thapna, "καύστης,"—lusni, "luminis,"—and salthn, "cast, fonte, formatio, opus," may be thus explained:

- Sanskrit tap, "burn," = Armenian tap, thaph: Sanskrit svapna, "sleep;" Armenian masn, "part," otn, "foot."
- Armenian loys, "light;" lovsin, gen. lovsni, "the moon;"* lovsn-thag ("light-crown"), "the planet Jupiter."
- 3. Salthn might be explained either from the Armenian sat-mn, "an embryo," or from the Armenian śat-el, "to mix, to knead." The termination -thn may be a contraction of -ovthivn (ante, p. 84). In form, salthn resembles the Armenian śovrthn, "orifice.";

^{*} On a patera or mirror in Lanzi (tav. xxx, No. 6) Diana is called *Losna*, a name remarkable for containing the non-Etruscan vowel o.

[†] The Etruscan kech- (ante, p. 90) and the Armenian chah- (or chav-; cf. Sanskrit khav, "purificari") would explain two words in Hesychius, of which the last might exhibit the l termination of the Armenian, Lydian, and Etruscan present participle (ante, p. 89):—

Καί(ητ) or κό(ητ), " ίερεψε Καβείρων δ καθαίρων φονέα." Κοιόλ(ητ), " ίερεψτ."

CHAPTER IV.

THE INSCRIPTION OF CERVETRI.

In the two previous chapters, which have been devoted to the consideration of sepulchral and votive forms in Etruscan, the force of the argument is in a great measure derived from the fact, that the Armenian language enables us to explain the Etruscan words in such a manner as to make the sense of the Etruscan forms correspond closely to that of other ancient forms of the same kinds. The meaning assigned to the Etruscan words may sometimes be described as certain, as in the cases of avil, ril, and leine, and may be generally affirmed as more or less probable in every case; so that the argument in favour of the Armenian or Thracian affinities of the Etruscan becomes very strong. In the subject of the present chapter, there are no such analogies to guide us: there is no sense which we are bound to elicit from the Etruscan by the aid of the Armenian, if the intimate relationship, between the two languages is to be maintained. the inscription of Cervetri is Armenian, depends chiefly upon the singular closeness with which the Armenian fits it, and which is such that even the metre of the inscription, for it is written in verse, scarcely suffers at

all, while a good and appropriate sense is brought out for it at the same time.

The Inscription of Cervetri, the ancient Agylla or Cære, is written on a pot or cup of antique black ware, capable of holding nearly a pint; and it consists of two hexameter verses, but with the words all run together. They should probably be divided thus:—

mi ni kethu ma mi mathu mar am lisiai thipurenai ethe erai sie epana mi nethu nastav helephu.

As it might be objected that the lines are divided into words so as to adapt them to the Armenian, it may be as well to mention that my division of them is the same as that of Lepsius, with the exception that he reads maram instead of mar am in the first line. and minethu instead of mi nethu in the second, where I follow Dr. Donaldson. Maram may perhaps be preferable to mar am, as will ultimately appear: but, if we read mi ni kethu and mi mathu with Lepsius, then mi nethu seems more probable than minethu. As we have already met with mi, "I," in Etruscan, it may reasonably be conjectured that the cup is made to speak of itself, and that it affirms of mathu what it denies of kethu. Again, as the Etruscan is an Aryan language, it will be at once suspected that mathu means "wine," for such a word occurs in a great number of Aryan dialects, from the English mead to the Sanskrit madhu.

With this slight clue to the tenor of the inscription, I will now proceed to interpret it word for word, as I have divided it:—

Mi, "I."

The Armenian for "I" is es; for "me," (z) is: but me, "I," and me, "me," exist implicitly in the Armenian plurals, mech, "we" (= Lithuanian mes), and (z) mez, "us." For dov, "thou," makes dovch, "ye"; and the Armenian nominative plural is formed by the addition of -ch to the singular, and the accusative plural by that of -s.

Welsh and Gaelic mi, "I"; Georgian me, "I": etc. 2. Ni. "not."

Armenian $mi = \text{Greek } \mu \eta = \text{Latin } ne.$

Welsh and Gaelic ni, "not." Behistun Persian niya, "not." Persian mah, nah, "not."

3. Kethu, "of water"; less probably, "of milk." The Armenian get, "river," kath, "drop," kith, "milking," and kathn, "milk," are thus declined:—

Nominative.....get* kath kith kathn.

Genitive......getoy kathi kthoy kathin.

Dative......getoy kathi kthoy kathin.

Ablative.....getoy kathê kthoy kathinê.

Instrumental...getow kathiv kthow kathamb.

There is in Etruscan prose a remarkable deficiency of vowels, which does not appear in the Inscription of Cervetri; a difference which has led to the inference that the language of the Inscription of Cervetri is not Etruscan.[†] But this inference is too hasty, for the

^{*} Armenian infinitives are declined completely, like get.

^{† &}quot;This (the Inscription of Cervetri) is neither Latin, nor Greek, nor Umbrian, nor Oscan. It is equally certain that it is not Etruscan; since in that tongue harsh unions of consonants

same peculiarity exists in Armenian, where the vowel ë, which has the same sound as the Sanskrit a, is continually understood in prose, where it would be expressed in poetry. Aucher says of this Armenian letter: "Entre deux ou plusieurs consonnes elle est toujours sousentendue; mais dans la division des mots elle se met actuellement, comme aussi dans la poésie." Sir Henry Rawlinson, in his explanation of the Persian Cuneiform Inscriptions (p. 55), writes: "The short sound of a was optionally inherent in all the consonants of the (ancient) Persian alphabet. This principle of organisation is common to every single branch of Arian Palæography, with the exception of the Zend." The Armenians and Etruscans exercised such an option by dropping in prose the short a, = Armenian ë, while the Phrygians preferred expressing it. In Sanskrit, the short a is necessarily implied in every consonant or combination of consonants, when unaccompanied by the mark Virama, or the sign of some other vowel.

An Etruscan word where the deficiency of vowels is particularly great is trutnvt, which seems in a bilingual inscription (Lanzi, vol. ii. p. 565) to correspond to haruspex, and may be composed of the root or base

abound, while in this the distribution of vowels is as well proportioned as in the Negro-languages: moreover none of the well-known Etruscan words here occur."—Newman's Regal Rome, p. 7. Mi, "I, me," does occur in the Inscription of Cervetri: nor is there any reason why two verses on a drinking-cup should contain any votive or sepulchral words.

of trutinor, with the Armenian termination -ovaz, = Sanskrit and Zend -vat. But though in trutnvt there is only one vowel to six consonants, yet the same proportion is observed in two Armenian words of similar sound: in trtngel, "to murmur," and in θrθnguk, "sorrel," gen. θrθngki.* In two of the Armenian words cited above to explain the Etruscan kethu, namely kthoy and kthow, there is an ë deficient, and they would be written in poetry këthoy and këthow; or in Etruscan orthography, as the Etruscans had no o, kethu in both cases. Getoy and getow would become in like manner ketu, as the Etruscans had no medial consonants.

Gaelic cith, gith, "imber"; cè, gen. cèithe, "flos lactis." Albanian cheth, "stillare, fundere." Latin gutta.

4. Ma, "but."

Armenian na, "but, however, rather, in fact, verum." Sanskrit am, "næ." Tuschi ma, "but." Lapponic ma, "quidem."

- 5. Mi, "I."
- 6. Mathu, "of wine."

Armenian math, "syrup of grapes, raisiné, defrutum," which is declined like get (3). Mathoy would become mathu in Etruscan.

German meth: English mead: Welsh medd: Greek

^{*} I take this word to be the τερτανάγετα of Dioscorides, one of the five names by which the Romans knew artemisia or mugwort. Like Pliny's elegia (ante, p. 66), it might possibly have been borrowed from Etruria.

μέθυ: Zend mathu, "wine": Sanskrit madhu, "honey, wine, intoxicating drink"; mad, "to be intoxicated"; mada, "intoxication, madness": Persian may, mul, "wine": Lydian μῶλαξ, "είδος οἴνου." Armenian moli, "mad, intoxicated"; metr, "honey," gen. metov: Greek μῶλυ.

7. Mar, "a pot" or "measure" (German mass).

Armenian mar, "a measure of liquids"—" μετρητής, firkin" (John ii. 6): Persian mar, "measure, number": Greek μάρις, "a measure containing six κοτύλαι (about three pints)":* Albanian merë, "every liquid and dry measure": Lithuanian mëra, "measure": Russian mjera, "measure." Albanian marr, "to hold, to contain": Georgian marani, "a wine-cellar," — Armenian maran, Sanskrit, ma, mas, "to measure." The Etruscan mar and mathu seem to contain Aryan roots of universal prevalence.

8. Am, "am."

Armenian ...em
Persian ...am
Behistun ...amiya
Zendahmi
Albanian ...yam
Greekelµl
Sanskrit ...asmi
9. Lisiai, "for the tongue."

Armenian ...lezov
Lithuanian ...lēźuwis
Hebrewlaśon

"I am."

"I am."

Máois may be a Thracian word; and the Latin dolium appears in like manner == Armenian doyl, "bucket."

Observe the letter-change in the Sanskrit lih and the Etruscan lis-iai. The genitive and dative of the Armenian lezov (i. e. lezu) are lezovi. But the Etruscan lisia, "a tongue," would be declined more nearly like such borrowed Armenian proper names as Angtia, "England," gen. and dat. Angtiay; or Anania, "Ananias," gen. and dat. Ananiay.

Thipurenai, "for the thirsty" (tongue).

In thip we meet with a very common Aryan root for "heat." In Armenian this root is tap or thaph, which has been discerned before in the Etruscan thapna (ante, p. 94). The Armenian tapean, "burning, heated," would give the meaning of thipurenai, but the termination must be explained from such Armenian words as those which follow:—

```
{ hayr, "father." hayr-ôrên, "paternally." } archay, "king." { archay-ôrên, "royally." } { ham-ak, "entire, entirely": root ham, = ὁμ(ός). ham-ôrên, "entire, entirely." ham-ôrên. gen. and dat. of ham-ôrên. } get, "beauty." { get-a-yôrên, "fair."
```

\(\begin{aligned} \tilde{o}r\tilde{e}n, "a law, a rule." \\ \tilde{o}rin-ak, "example, type, form." \\ \tilde{y}\tilde{o}rin-el, "to form, to shape." \\ \tilde{o}rin-akel, "to form, to represent."* \end{aligned}

Nearly similar terminations may be found in the Armenian words:—Hay-erên, "Armenian, Haïcan"—phokh-arên, "payment"—kerp, kerp-aran, "form, figure." There is no indication of genders in the Armenian language; but such proper names as Athenas, "Pallas," gen. and dat. Athenay, are declined like thipurenai, which would be a feminine adjective agreeing with lisiai.

11. Ethe, "if," or "when."†

Armenian ...ethe
Zendyezi, yeidhi
Behistunyadiya
Sanskrityadi

^{*} Compare with brin-ake, "he forms," the Etruscan verbs, lenache, tur-ke and tur-uke, ers-ke, te-ke, zilachn-ke and zilachn-uke. Such Armenian words as hayr, "father," and mayr, "mother," intimate that the Armenian language, in its earliest existent state, is not very ancient. Indeed, the oldest Armenian writings only date from about 400 a. D. For the Armenian forms for "daughter," "brother," and "sister," see ante, pp. 63, 88, 93. The Phrygian inscriptions, as might be expected, bear evidence of much higher antiquity; for in them we find materes and materan, = unripos and unripa, = matrix and matrom, = Sanskrit materas and materam. Compare materan and mayr with matrom and mère. The Armenians have a word ovstr, "son," which possesses the Aryan termination of pa-ter, ma-ter, and daugh-ter, and seems peculiar to the Armenian language, where ovs means "teach," and also "shoulder."

[†] That ethe here means "when" or "if," was inferred by Dr. Donaldson from its position, and without the guidance of any linguistic resemblances.—Varronianus, p. 167 (2nd edition). This gives force to those resemblances which I have adduced.

Behistunyata, yatha } "when."

12. Erai, "joyous," or "of joy."

Armenian erah, khrakh, ovrakh, "joyous, merry": ovrakh linel, "εὐφραίνεσθαι" (Luke xv. 24): kér, árb, ev ovrakh ler, "φάγε, πίε, (καὶ) εὐφραίνου" (Luke xii. 19).

Armenian erakhan, "a banquet." Cf. ἔρανος. Erakhan would probably = erah khan, "joyous table," as khan means "table" in Armenian.

13. Sie, "it be."

Armenian $i\ddot{z}\hat{e}$, "it be, it may be, may it be." A comparison with the terminations of a Sanskrit parasmaipada verb (infra, cap. v) tends to shew that the Armenian has preserved here the precative form of the substantive verb, and that the subjunctive would be $\ddot{z}i\hat{e}$.

Sanskrit syat: Latin sit (= siet): German sei. Italian sia.

14. Epana, "the feast," nominative to sic.

Armenian eph, ephovmn, "cooking." Hebrew aphah, "to cook." Latin epulari. Greek ὀπτάω, ἔψω, ὄψω. For the termination of ep-ana, compare the Armenian kap, "a bond," kap-el, "to contract," kap-an, "a strait"—gël-el, "to roll," gël-an, "a cylinder"—chah-el, "to expiate," chah-anay, "a priest." The Armenian prefers to terminate words with -ay, instead of -a simply. Epana, and also kana (ante, p. 83), are just like in form to the Sanskrit dâna, "gift."

- 15. Mi, "me." See 1.
- 16. Nethu, "of liquor."

Armenian nivth, "substance, matter," hetanivth, "fluid substance, liquid," which are declined like math (6), and thus give in the genitive, dative, and ablative, nivthoy and hetanivthoy. Nethuns is the Etruscan form of Neptunus. As we have in Armenian ivt and et, "oil," and givt and get, "village," nivth would be very nearly neth, though the Armenian iv is usually pronounced like the German "i, and occasionally like the English u in tune. Compare the river-names Neda and Nith, and the Sanskrit nadi, "river."

Nastav, "the guest."

Armenian ...nśdeh Persiannáśtá* " stranger, foreigner."

Arabicnažíl, "stranger, foreigner, visitor, guest."

Hebrewnasa', "to migrate"; naśa, "to err."

Μηΐοσιν αδ ΜΕΣΘΛΗΣ τε καὶ "Αντιφος ήγησάσθην.

and—

ΝΑΣΤΗΣ αδ Καρών ἡγήσατο βαρβαροφώνων.

Lethe and Lethi, again, were Etruscan proper names (ante, p. 59); and Homer says that the Pelasgians at Troy were commanded by Hippothous and Pylæus,

υίε δύω ΛΗΘΟΙΟ Πελασγού Τευταμίδαο.

In Tuschi, leth- means "kämpfen, drohen, schelten."

^{*} C. Calidius Nasta, "Strange, Guest," appears as a proper name in a Neapolitan inscription (Donati, p. 4), and Nastes is mentioned by Homer as one of the two Carian leaders. I have already noticed (ante, p. 85) that Mestles was an Etruscan proper name. It is a singular coincidence that the names, Mestles and Nasta, should be found in Italian inscriptions, one of them at Volterra, and that Homer, "Mæonii carminis ales," who would probably know what proper names were used in Lydia and Caria, should have written:—

Sanskritneś, "ire, se movere." Nëś-deh would be one who goes from his country (deh).

18. Helephu, "empties."

Armenian . { zetovl, "to pour"; zetkh, "drunken."*·
hetovl, "to pour out, έξεχεῖν" (Rev.xvi.2).
hetov, "he pours out, he empties."

The root is het, "pouring, flowing," which is found just above in hetanivth (16), where nethu, being qualified by helephu, acquires the meaning of hetanivth instead of nivth. The formation of helephu from a root hel may be thus illustrated from the Armenian:—

```
\begin{cases}
\sistems \sistems \text{``causing tremor'' (root).} \\
\sistems \sistems \approx \text{``to tremble.''} \\
\text{thoth-aph-el, "`to shake" (active).} \\
\text{ded-ev-el, "`to fly.''} \\
\text{khovs-el, "`to fly.''} \\
\text{khovs-aph-el, "`to fly.''} \\
\text{sarsaph} \\
\text{sarsaph} \\
\text{sarsaph} \\
\text{sarsil} \\
\text{sarsaphil} \\
\text{sarsaphil} \\
\text{"`to tremble.''} \\
\text{sarsaphil} \\
\text{sarsaphil} \\
\text{"}
```

Similar forms are presented by \$ô\$aphel, "to touch," kachavel, "to dance," and \$ovthaphel, "to hasten": so that hetaphov, as well as hetov, "he empties," might exist in an Armenian dialect.

Helephu is the last word in the Inscription of Cervetri.

If all the Armenian words cited to explain this in-

^{*} Cf. Thracian ζείλα, "olvos."—Bötticher's Arica, p. 50.

scription be now collected together, and written in Etruscan letters, we should obtain in grammatical syntax, though the idiom might not be perfectly correct, the following Armenian couplet:—

es mi ketu na es mathu mar em lezui tapean : ethe erah ize ephumn, zis nithu nesteh helu.

Or, adopting such modifications as are warranted by the Armenian language itself—

me mi ketu na me mathu mar em lezui tapurini : ethe erah zie ephanay, me nithu nesteh helaphu.

This distich differs but slightly from the Inscription of Cervetri, and almost entirely preserves the metre in which it is composed. Nor can it be said that the sense which the Armenian supplies for the Etruscan is at all forced or inappropriate; but, on the contrary, that it expresses exceedingly well what so festive a nation might have inscribed on one of their drinking-cups. For the meaning of the two verses would be:—

1.		2.	
mi ni kethu ma mi mathu mar am lisiai thipurenai:	I not of water but I of wine a cup am for the tongue thirsty:	ethe erai sie epana, mi nethu nastav helephu.	if joyous be the feast, me of liquor the guest empties.

The sentiment of the second verse brings to mind

Goethe's line on the drinking-cup of the King of Thule: Er leert' ihn jeden Schmaus. Some unimportant modifications might be suggested in the interpretation of the inscription. Thus lisiai thipurenai might be made a locative, "on (his) thirsty tongue," and connected with the second verse instead of the first. If, again, remembering that the Etruscan is several centuries older than the earliest existing Armenian, we compare the Etruscan kethu, mathu, and nethu, with the Sanskrit madhu, the Zend mathu, the Greek μέθυ, the Phrygian βέδυ, "water," and the Macedonian βέθυ, "air" (both these last words being = Armenian vivth, "water, moisture, element, matter"), such analogies would lead us to consider the Etruscan words as nominatives or accusatives, rather than as genitives or ablatives. If they be in the accusative, then we should probably read, with Lepsius and Donaldson, maram instead of maram; and have to regard maram as a transitive verb of the second Armenian conjugation, like tam, "I give," or ertham, "I go," and signifying "I contain," or "I dispense." Compare the Albanian marr, "I contain," and the German fass and fassen. This alteration would have the advantage of obviating one little objection: for, if the Etruscan sie signify "it be," "I am" should rather be em than am. We have, however, both am and is, wast and wert, in English, where there is a similar change of vowel. If nethu be a nominative or accusative, mi nethu would be rendered "my liquor," or "my contents," mi being equivalent to "my" or "of me," both rendered in

Armenian by im. Finally, if mi nethu be a nominative, helephu would have a passive or neuter signification—the Armenian zetov is both active and neuter, like "pours" in English—and nastav would be in the instrumental case, and = Armenian nśdehiv. The instrumental cases of nav, "a ship," and kin, "a woman," namely navav and knav, come still nearer in form to nastav.

With these modifications the interpretation of the inscription would be: "I do not contain water, but wine: when there is a joyous feast, my liquor is poured out by the guest on (his) thirsty tongue." Perhaps this is on the whole the preferable interpretation of the two.

It does not require the knowledge of many sentences, nor of a large number of words and inflexions, to enable us to pronounce upon the character of any language; so that the properties of the Etruscan have probably been sufficiently displayed in the specimens already given and analysed, which seem to include all the forms whose meaning is tolerably clear. The result is that, instead of there being no language which can claim kindred with the Etruscan, there are, on the contrary, two in Asia which may succeed in establishing a near relationship to it by explaining it to a considerable extent. The Armenian appears to do this in a very close manner, especially when it is considered that Armenia and Etruria are at opposite extremities of a long and

not entirely unbroken chain of old Thracian countries, like Wallachia and Portugal among those of Latin speech. It may even be said, perhaps, that the Armenian resembles the distant Etruscan more than it does the neighbouring Phrygian, with which it was connected by the ancients. But even if the Armenian had perished with the rest of the Thracian languages, of which only a few relics survive, yet the affinities between the Sanskrit and the Etruscan would still have afforded some clue to indicate who the Etruscans were. Their language would be nearly allied to the Sanskrit, but would nevertheless belong to a different Aryan family, as the letterchanges would imply. No doubt the Sanskrit has some few advantages over the Armenian in the comparison of languages. Thus the Etruscan sempli-, "seven," is nearer to the Sanskrit saptan than it is to the Zend haptan, the Persian haft, or the Armenian erthn; and the Etruscan sas, "six," is nearer to the Sanskrit śaś than it is to the Armenian weż. But the Latin septem and sex are likewise nearer to the Sanskrit saptan and śaś than they are to the Greek έπτά and έξ; and yet the Latin and Greek are considered to belong to the same Aryan family of languages, while the Sanskrit and Latin are not so classed together. There are letter-changes which distinguish one Aryan family from another, as there are letterchanges which distinguish different members of the same family from one another. There is, besides, no letter-change in the case of the Armenian weż and the

Etruscan sas, as both would be ultimately derived, along with the Albanian gyaś(të) and the Persian śaś, from a form like the Zend khsvas, by the omission of different letters, after the manner in which the Old Norse fimm and the Anglo-Saxon fif are deduced from the Gothic form, fimf. The argument from similarity or dissimilarity of numerals must not be pressed too far. Thus the Swedish tio and the German zehn have not one letter in common. The Gothic fidvôr, too, resembles the Welsh pedwar more than the German vier: yet the Gothic was a Teutonic, not a Celtic dialect. The right conclusion would be, that the Gothic and Welsh forms are older than the German, as the Zend thri and the Etruscan thr- are older than the Armenian ere, "three." So, again, the Welsh pump and the Breton pemp are more like to the Gothic fimf than they are to the Gaelic cuig, as the Welsh pedwar and the Breton pevar are more like to the Gothic fidvôr and the Anglo-Saxon fcover than they are to the Gaelic ceathair.* Nor is the advantage all on the side of the Sanskrit in respect of the Etruscan numerals. Mach (with me- and muv-), "one," is Armenian, but not Sanskrit; and the Armenian hing, "five." leads us from the Sanskrit pańćan to the Etruscan kiem or chiem.

It might be conjectured, on account of proximity,

^{*} To get from pemp to cuig, we should pass through the Greek πέμπε and πέντε, the Lithuanian penki, the Armenian hing, and the Latin quinque. Greek and Oscan resemble Welsh, as Latin resembles Gaelic.

that the Etruscans were Illyrians rather than Thracians, if the Illyrians be supposed to constitute a distinct Aryan family. But, even if we set aside other arguments, and lay more stress than is allowable on numerals, there would yet be no necessity for such a conclusion, as the Albanian numerals hardly come nearer the Etruscan than the Armenian numerals do. These are the Albanian numerals from 1 to x: nyë, dû, trê, katër, pesë,* gyaś(të), śta(të), te(të), nën(dë), dhye(të). The corresponding Armenian numerals are: ez (and also mi, mov, and mên), erkov (not Aryan), er or ere(ch), ćor(ch) or char, hing, weż (in composition weś and wath), evthn, ovth, inn (= inën), tasn.

Such advantages as the Sanskrit may have over the Armenian in some few instances cannot counterbalance the weight of evidence on the other side, so as to take the Etruscans out of the Thracian family. It is not to be expected that every Thracian language should be quite like the Armenian, any more than that every Teutonic language should be quite like the English, or that every Celtic language should be quite like the English, or that every Neo-Latin language quite like the Welsh, or every Neo-Latin language quite like the French. And, while the Sanskrit explains so much of the Etruscan, it almost, by that very fact, disposes of its own claims to include the Etruscans in the Indian family. Such a word as suthina, for instance, if explained by the Sanskrit hu, "Diis offerre"—and a word found singly on votive offerings is perfectly so

^{*} Compare the Lettish peeri, which belongs to the same family as the Lithuanian penki.

explained—is nearly decisive by itself. Suthina would not be a Sanskrit word; while, on the other hand, the Armenian brings out suthina from hu by presenting both the right letter-change, as well as the termination, in the word zohovthivn, "sacrifice." It enables us also to form such Etruscan words as zilachnke and thipurenai from Aryan roots, where other Aryan languages would not qualify us to construct them; and it has, in addition, the Etruscan l terminations, besides the singular Etruscan peculiarity of retaining in poetry the vowel which is discarded in prose. The Slavonian family of languages might compete with the Armenian on the ground of the letter-changes, but would fall far behind it, as well as behind the Sanskrit, in explaining Etruscan words. There is likewise a geographical improbability against the Sanskrit by reason of distance, and because Armenia fills up the gap between the Caucasian and Semitic nations.

The evidence in favour of the Armenian affinities of the Etruscan is not exhausted by the Etruscan inscriptions. For we find in Etruria place-names resembling the Armenian sên and lori, which may be described as the town and home, or -ton and -ham, of Armenia; as we find among Dacian plant-names terms like the Armenian khot and det, which are the kraut and wurz of Armenia. Finally, the Etruscan and Rhætian were said on sufficient authority to be cognate languages, and in Rhætia there are still apparent relics of an Armenian dialect; while in the Pyrenean sern-eille, "glacier," a similar dialect seems to have

penetrated still farther west than Etruria. It can hardly be accidental that the only Thracian language still existing should emerge wherever the ancients have placed a Thracian people.*

[.] The quarter in which to look for the right language to explain the Etruscan was indicated by Bonarruoti a century and a half ago: "Hortari postremo fas mihi sit, doctos præcipue linguis Orientalibus viros, ut animi vires intendant, ad illustrandam veterem Etruscam linguam, tot jam seculis deperditam. Et quis vetat sperare, quod temporum decursu emergat aliquis, qui difficilem et inaccessam viam aperiat, et penetralia linguæ hujus reseret?" Niebuhr was less sanguine in his expectations. "People," he says, "feel an extraordinary curiosity to discover the Etruscan language; and who would not entertain this sentiment? I would give a considerable part of my worldly means as a prize, if it were discovered; for an entirely new light would then be spread over the ethnography of ancient Italy. But, however desirable it may be, it does not follow that the thing is attainable." And yet it has been known from the first that the ages of deceased persons were denoted in Etruscan by such forms as avil ril LXV, rilleine LV, and lupu avils XVII, which might, it would seem, have opened the way to the discovery, as they supply us with four words whose meaning can hardly be said to be doubtful, and which are thoroughly explained in every respect by the Armenian and Sanskrit languages.

CHAPTER V.

CONJUGATIONS AND NUMERALS.

It may be considered unnecessary to prove the Aryan character of the Armenian language by an analysis of the Armenian verb; so that the evidence in demonstration of the Etruscan being an Arvan language of the Armenian or Thracian type might have been closed with the interpretation of the Inscription of Cervetri. But the Armenians are even yet not universally admitted into the Aryan family, although it is difficult to perceive on what grounds their right to such admission has been disputed; as their vocabulary, and, what is of more importance, their grammar also, are both decidedly Aryan. That their vocabulary is so in substance, the previous chapters may have sufficiently shewn; and in the present chapter I shall endeavour, by an examination of Armenian conjugations, to complete the proof that their grammar is so too. Albanian and Rhæto-Romance conjugations will likewise be found compared with similar forms in other Aryan languages: and from these I have passed to Caucasian and Basque conjugations, in order to exemplify a little how far these languages deviate from the Aryan, and approach or differ from one another. Lastly, as

the primeval population of Europe and Asia Minor may be conjectured (ante, p. 12) to have been composed of Caucasian, Basque, and Finnish elements, I have attempted to gain some insight into the obscure question of the relationship among these three races by an examination of their numerals. There are some indications of primeval affinity here which I have not found noticed, and which may appropriately bring this present inquiry to a termination.

ARYAN CONJUGATIONS.

Present Indicative.

	1 1000	SHO THEFE	110.
Lithuania	n.	Sanskrit.	Rhæto-Romance.
esmi		asmi	sunt
essi		asi	eis
esti		asti	ei
esma		smas	essen
este		stha	esses
esti		santi	ean
Albanian.	Zend.	Behistu	ın. Armenian.
yam	ahmi	amiy	a em
уê	ahi		· es
ëstë	$a\acute{s}ti$	astiye	
yemi	hmahi	i amah	ya emch*
yini	$\acute{s}tha$		$\hat{e}ch$
yânë	henti		en

^{*} Here the Sanskrit -mas is converted into the Zend and Behistun -mah-, and the Armenian -mech, as we found (ante, p. 44) the Sanskrit mas, "moon," converted into the Behistun mah-, the Armenian mah-, and the Etruscan mach.

French.

Latin.

Italian.

enna

suis	sum		sono
es	es		sei
est	est		è
sommes	sum u	18	siamo
êtes	estis		siete
sont	sunt		sono*
]	Imperfect In	dicative.	
Sanskrit	Sanskrit.	Albanian.	Armenian
(1st aorist).			(1st aorist).
adik-śam	$\hat{a}sam$	yeśë	sir-eżi
-śas	âsîs	yese	-ezer
$-\acute{s}at$	$\hat{a}s\hat{\imath}t$	iś	$-ea\ddot{z}$
-śâma	$\hat{a}sma$	yeśëm	-eżach+
-śata	$\hat{a}sta$	yeśëtë	-eżich
-śan	$\hat{a}san$	iśnë	$-e\ddot{z}in$
Zend.	Behistu	a. A:	rmenian.
	$\hat{a}ham$		ėi
			êir .
âs	$\hat{a}ha$		$\hat{e}r$
			êach
,			éich
	$\hat{a}ha$		<i>ê</i> in

^{*} Dante on two occasions uses en and enno for sono; forms which are like the Armenian en and the Rheto-Romance ean.

[†] Here the Armenian omits the m of the Sanskrit and Albanian, but retains, under the form of ch, the final s which they drop. So, in the 2nd pers. plur., t is dropped, but s retained, in Armenian.

Zend. $ba\^om$	Behistun. abavam
bavô bavaţ	abava
bavata	abava
All	banian (aorist). <i>kërko-va</i> *
	-ve -i
	uam -uatë
	baôm bavô bavaṭ bavâma bavata

The root bhu or fu is not found in the Armenian language, which employs li or et instead. This may account for there being no such words as fuius or puia in Armenian (ante, p. 60). In the Armenian first acrist, as in sir- $e\ddot{z}i$, "I loved," the s of the Sanskrit root as appears as \ddot{z} , as it does also in the Armenian subjunctive. Scrip-si, $(\grave{\epsilon})\phi(\lambda-\eta\sigma a)$ (= $\grave{\epsilon}\phi\iota\lambda \acute{\epsilon}-\epsilon\sigma a$), and sir- $e\ddot{z}i$, are analogous forms, all bearing a similar relation to the imperfect or preterite of the substantive verb that the corresponding form in Sanskrit does: and $-e\ddot{z}i$ is to $\acute{\epsilon}i$ what $-\epsilon\sigma a$ is to $\mathring{\eta}\nu$, as may be readily seen when the Greek and Armenian forms are thus placed together:—

^{*} Kërkova, "I sought," = Italian cercava, "I was seeking."

Greek.		Armenian.			
1st aorist terminations.		Impft.	1st agrist terminations. Imp		Impft.
-εσa	$-\sigma a$	$\tilde{\eta}\nu$	-ezi		$\hat{e}i$
<i>-εσας</i>	-σας	ทิร	-eżer		$\acute{e}ir$
-εσε	- σε	ή	-eaż	•	êr
-εσαμεν	-σαμεν	ημ€ν	-ezach	•	\hat{e} ach
$-\epsilon\sigma a \tau \epsilon$	-σατε	$\mathring{\eta} \tau \epsilon$	$-e\ddot{z}ich$		$\acute{e}ich$
- <i>εσ</i> αν	$-\sigma a \nu$	ἦσαν	-ezin		êin

In the imperfect of the substantive verb, both languages assume the augment (which lengthens the initial e), but drop, with one exception in each case, the sibilant of the root, which the Greek retains in the 3rd pers. plur., and the Armenian, under the form of r, in the 3rd pers. sing. The 2nd aorist, as well as the 1st, is formed from the imperfect or preterite of the substantive verb; and the manner in which it is done is again similar in Sanskrit, Greek, and Armenian; as may be exemplified by the 2nd aorist of "to place" in those three languages, to which a second form of the Albanian aorist is added:—

2nd Aorist.

Sanskrit.	Greek.	Armenian.	Albanian.	
a-dh-âm ·	\check{e} - θ - $\eta \nu$	e- d - i	plyak-a	
a-dh-âs	ĕ-θ-ης	e- d - er	plyak-e	
a - dh - $\hat{a}t$	\check{e} - θ - η	e- d	plyak-i	
a-dh-âma	ĕ-θ-εμεν	e- d - ach	plyak-m	
a-dh-âta	$\check{\epsilon}$ - θ - ϵ $ au$ ϵ	e- d - ich	plyak-të	
α - dh - us	ἔ-θ-ε σαν	e- d - $in*$	plyak-në	

^{*} Though there are two forms of the acrist in Armenian, yet no verb has more than one of them, except in the participle.

Sir-êi, "amabam," sir-ezi, "amavi," and e-d-i, "posui," exhibit the three preterite forms of the Armenian.

Present Subjunctive, Potential, & Precative or Optative.

	Rhæto-Rom. (subj., pot. prec.)
syam	seig
syas	seias
syat	seig
$sy\hat{a}ma$	seian
syata	seias
syan	seian
Sansk. (pot.)	Alb. (subj., pot., prec.)
yam	yêm
yâs	yêś
$y\hat{a}t$	yét
yâma .	yêmi
$y\hat{a}ta$	yini
yus	yênë
Sansk. (prec.)	Arm. (subj., pot., prec.)
yâsam	iżem
yâs	$i\ddot{z}es$
$y\hat{a}t$	ižė
yâsma	$i\ddot{z}emch$
yasta	ížéch
yâsus	$i\ddot{z}en$
	in these Armenian forms, we g

If we omit the \ddot{z} in these Armenian forms, we get the Sanskrit and Albanian potential; and if we trans-

^{*} This and the two following forms are taken from a parasmaipada verb.

pose the i and \ddot{z} , the Sanskrit and Latin subjunctive, for sim = siem. The Armenian equivalent to the Latin sit would thus be $\ddot{z}i\acute{e}$, = Etruscan sie (ante, p. 103).

The only Armenian future is a futurum exactum, like scripsero and τυφθήσομαι, being formed from the acrist by the addition of terminations which are modifications of the different persons of the subjunctive of the substantive verb; as sirež-iž, "amabo" (amavero), from sirež-i, "amavi." One of the following examples will exhibit a first acrist future of the e conjugation, and the other a second acrist future of the i conjugation: an Albanian acrist subjunctive is added, as being a form almost identical with the futurum exactum:—

	Subjunctive.	
sir- <i>iżem</i> *		lin-iżim
sir-izes		lin-ižis
\sin - $i\ddot{z}\dot{e}$		$\lim -i\ddot{z}i$
sir-izemch		lin-iżimch
sir- <i>izêch</i>		lin-iżich
sir-izen		lin-iżin
	Future.	
sir <i>eż-iż</i>		l+-ižim
sir <i>es-żes</i>		l-ižis
sir <i>es-żê</i>		1 - $i\ddot{z}i$
$sires-\ddot{z}ovch$		1-izovch‡
sir <i>es-gʻich</i>		1-izich, or -igich
sires-žen		1 - $i\ddot{z}in$

^{*} The subjunctive of the substantive verb is accurately preserved here throughout all the persons.

⁺ The Armenian, like the Sanskrit and Greek, drops the conjugational n in the sorist and future.

¹ Cf. Armenian anovn = nomen.

Albanian Aorist Subjunctive.

plyak-śa or plyak-tśa

plyak-ś or plyak-tś

plyak-të

plyak-śim or plyak-tśim

plyak-śi or plyak-tśi

plyak-śinë or plyak-tśinë.

The Albanian $t\dot{s}$, in the second of these forms, shews a tendency to convert the Sanskrit s into a sound resembling the Armenian \ddot{z} (tz) or \ddot{g} ($d\dot{s}$). In the Armenian $sires\ddot{z}es$, etc., the \ddot{z} of $sire\ddot{z}i$ becomes s. The Armenian and Albanian forms are both analogous in their terminations to the Sanskrit 2nd future:—

Sanskrit.

Subj. of "to be.	" Subj. terminations.	2nd Fut. terminations.
$sy \hat{a}m$	-syam	-syâmi
$sy\hat{a}s$	-syas	-syasi
$sy\hat{a}t$	-syat	-syati
$sy\hat{a}ma$	-syama	-syâmas
syá ta	-syata	-syatha

The Armenian perfect is formed by combining the preterite participle with the present indicative of the substantive verb. For the participle compare:—

-syan

-syanti

Armenian { sir-eal, "loved," or "having loved." pah-eal, "kept," or "having kept."

Old Slavonic by-t', "having been."

syus

Mahratti pâh-ilâ, "seen" (cf. Dacian φιθοφθεθ-ελά; ante, p. 9).

And, for the perfect, compare :--

Armenian sireal em, "I have loved" (root sir).

Bengali köriläm, "I made" (root kör).*

Bohemian byl sem } "I was" (root by).

Polish bytem

An Armenian pluperfect, like sireal &i, "I had loved," i.e. "I was having loved," calls for no observation; and the same may be said of the imperative:—

Sanskrit.	Latin.	Armenian.
edhi	es	er
sta	este	êch or erovch.

CAUCASIAN AND BASQUE CONJUGATIONS.

Basque verbs are usually conjugated by combining a few auxiliary verbs and pronouns, united together in various agglutinate or incorporated forms, with the present participle, the preterite participle, and the future participle, of a particular verb. These participles are sometimes called infinitives. The Armenian sireal em and the French aimer-ai are modes of conjugation like those in Basque. Though Basque verbs have a strange appearance on account of the extent to which agglutination or incorporation is carried, yet they are simple enough when analysed. Thus ecarri nézaque, "je pouvais apporter," is quite plain when resolved into ecarri n-éza-que, "to-carry I-was-able"; n-being = ni, "I," eza the substantive verb, and que = Latin que-o. Nézaque is only "poteram" with the order of

^{*} These analogies are derived from Bopp (V. G., p. 1159). His argument, that körilüm "von participialem Ursprung zu sein scheint," would be strengthened by the Armenian sireal em, which is not agglutinate like körilüm.

the three elements reversed, as in the English "I was able." So again, ecarri guinitzaiztzuque, "nous te les pouvions apporter," is ecarri guin-itz-aiz-tzu-que, "to-carry we-them-were-to you-able."

As personal pronouns present some of the most intimate signs of affinity between different languages, I shall endeavour to detach from these agglutinate forms the personal pronouns, or pronominal affixes, which are the subjects of the auxiliary verbs. It will be found that there is more than one such affix for each person, and that the Basque pronouns, in their present state, cannot explain several of the affixes. the forms which I shall cite, all but the subjective affixes will be enclosed in brackets, so as to leave nothing but what belongs to the pronouns implicitly found in the Basque language; and I shall begin by placing the Basque naiz, "I am," between the Georgian var, "I am," and machûs, "I have." In both languages, as will be seen, the root of "being" has a common origin with the Aryan root; and this root takes three forms in Basque, as it does in the English am, art, is, ar(e).

Georgian.	Basque.	Georgian.
v(ar)	n(aiz)	$m(ach\hat{u}s)$
kh(ar)	(aiz), $c(era)$	$g(ach\hat{u}s)$
(ar)s	d(a)	(achûs, achûn)
v(ar)th	gu(era)	$gv(ach\hat{u}s)$
kh(ar)th	c(era)te	$g(ach\hat{u}s)th$
(ar)ian	d(ira)	h(chon)ian

There is a very clear resemblance here between

the Basque and the Georgian in the 2nd pers. sing. and in the 1st and 2nd pers. plur. Four other Basque conjugations are:—

n(uen)	n(uque)
(uen), cend(uen)	cend(uque)
z(uen), ce(uen)	l(uque)
guen(uen), guend(uen)*	guend(uque)
cen(u)t(en), $cend(u)t(en)$	cend(uque)te
z(u)t(en), $cen(uen)$	l(uque)te
n(ezan)	n(ioteque)
cen(ezan)	cen(ioteque)
c(ezan)	l(ioteque)
guen(ezan)	guin (ioteque)
cen(exa)te(n)	cin(ioteque)
c(exa)te(n)	l(ioteque)

Z-t(e), l-te, cend-te, and cen-te mark the plural of the persons z and l, "he," and cend and cen, "thou," just as we previously found in Basque, c(era), "thou art," and c(era)te, "ye are"; and in Georgian, v(ar), "I am," and v(ar)th, "we are"; kh(ar), "thou art," and kh(ar)th, "ye are."† In the Basque verbs cited above, the pronominal affixes were prefixed: in the verb which follows, they are postfixed:—

^{*} The d in guend- and cend- seems not radical, but phonetic or euphonic. The sound of d rises between n and u, like that of p between m and s, as in Sampson.

[†] Compare Ossetic forms like lag, "man," lagthä, "men"; ye, "he," yethä, "they." The Ossetic plural suffix is -thä or -the (Sjögren, p. 52).

These pronominal affixes, with the addition of the actual Basque pronouns, will give us the pronominal forms contained in Basque for "I, thou, he, we, ye, they." But, before they are compared with Caucasian and other forms, it is advisable to mention the complete Georgian form for "I." The pronoun itself is me, but the genitive cemi, as well as the other cases of the pronoun, shew that cem is another or a more perfect form, just as sen, "thou," makes seni, "of thee." The Aryan analogies to the Basque will suggest themselves without notice. The Basque pronominal forms are:—

"I."
$$\begin{cases} ni \\ holdsymbol{Hungarian} & en; \\ holdsymbol{Suanian} & holdsymbol{nois}, "we, nos"; \\ n- \\ holdsymbol{Lesgi} & holdsymbol{Hungarian} & hold$$

^{*} There are several Lesgi dialects. My authority for them is Klaproth's Kaukasische Sprachen.

"He, this, that."

a, au, o \ Tuschi o; Turkish o; Ab
ce-, c-. Georgian igi; Lesgi hegen,

gen. hegei.

z-. Turkish śu.

l-. Turkish ol; Lesgi il; Suanian

alle.

d-. Esthonian ta; Lapponic ta(t).

There would be more than a single

form here. form here. ηu-, -gu. Georgian gv-; Tuschi wai, thcho; "We." Lazic šku.

"We." Guen-, guin-. Georgian éven; Lazic škun(i).

Guen seems plainly the complete Basque form. "Ye." $\begin{cases} zue(c), -zue, -zute. & \text{Tuschi $\acute{s}u$, -\acute{s}.} \\ c-te. & \text{Georgian kh--$th, g--th.} \\ cin-, cen-, cen-te. & \text{Georgian $thchven, Lazic} \\ tqua, tquan(i). \\ \text{The complete Basque form seems nearly} \end{cases}$ "They." $\begin{cases} aie(c), & oie(c), & -ue. \text{ Lesgi } hai, & hoi, & ua, \\ & \text{"this."} \\ & -ute \\ z-t \\ c-te \end{cases}$ See under "he." $\begin{cases} -te \\ l-te \\ l-te \\ l-te \end{cases}$ Turkish -l(er); Lesgi il, "he." $\begin{cases} -te \\ l-te \\ l-te \\ l-te \end{cases}$ Turkish -l(er); Lesgi il, "he." $\begin{cases} -te \\ l-te \\ l-te \\ l-te \end{cases}$ Assuming ten, zchuen, guen. and plete or primition.

plete or primitive Basque forms for "I," "thou," "we," and "ye," some suggestive comparisons may be made between the Aryan, Caucasian, and Basque languages :—

Although the Caucasian and Basque languages are far from being Aryan, yet it seems as if there were some ancient connexion between the three forms of speech. There may have been some group of men in Western Asia, from which the Basques first broke

off, and then the Caucasians; while the remainder, or at least a part of the remainder, subsequently moulded their language into the primitive Aryan, which be-· came subject to different modifications when the Aryan race spread abroad, and became divided into families, and subdivided into nations. For it is with the most ancient Aryan forms that the Georgian and Basque languages appear connected by their pronouns. Georgian th-chve-n and the early Basque z-cue-n, "ye," must be older than the Welsh chwi, "ye," if allied to it; and the Georgian é-ven and the Basque g-uen seem even more ancient than the Sanskrit vayam, "we," though the Tuschi wai would be a younger form. If the resemblances in the cases of "we" and "ye" justify us in identifying the Georgian and Basque termination -en with the Sanskrit termination -am, then we should have a right to apply the same principle to "I" and "thou." Here then the Caucasian and Basque would retain signs of a characteristic which is only found in the most ancient Aryan languages: "Den ausgang -am in aham tvam, azem tûm, entbehren alle jüngeren sprachen" (Grimm). Yet we find in Caucasian dialects den, ćem(i), and śkim(i), - śen and skan(i), for the singular of the first two personal pronouns, and can construct from the Basque, ten, "I," and zchuen, "thou."

One more resemblance between the Caucasian and the Basque is worth notice. It may be seen from such forms as jangó nu-que, "que je mangerais," when compared with ecarri néza-que, "je pouvais apporter," that the Basque conditional or potential is formed by the suffix que, implying "ability." The subjunctive is formed in a similar manner by the suffix $l\acute{u}$. Thus we have:—

"venio," natór natorrelá, "veniam."

"venis," atór atorrelá, "venias."

"venit," datór datorrelá, "veniat."

"venimus," gatóz gatorrelá, "veniamus."

"venitis," zatózte zatocelá, "veniatis."

"veniunt," datóz datoztelá, "veniant."

The subjunctive is formed exactly in the same way in Tuschi by the suffix le, which is referred by Schiefner to the verb la(ar), "to wish." Cf. $\lambda \acute{a}-\omega$. In Tuschi, do is "facit," and dole is "faciat," like as in Basque dator is "venit," and $datorrel\acute{a}$ is "veniat." The conditional in Tuschi is formed by the suffix he or h: as dahe from da, "he is," and doh from do, "he does." In Lesgi we have bugo, "er ist," and bugabi, "es sei."

NUMERALS.

It has been said by Grimm, in the chapter of his Geschichte der Deutschen Sprache which is devoted to the subject of original affinity (urverwandschaft): "Mit recht hat man drei kennzeichen ermittelt, welche in sämtlichen urverwandten sprachen, wo nicht unverändert, doch höchst deutlich und eigenthümlich anzutreffen sind, und füglich als symbol derselben aufgestellt werden dürfen. Ich meine die übereinkunft der zahlen, persönlichen pronomina, und einzelner

formen des substantiven verbums." Conjugations and personal pronouns I have already examined as evidences of early affinity; and now, by the aid of such a comparison and analysis of numerals as I am able to make, I shall endeavour to penetrate a little further, if possible, into the difficult subject of the original relationship of the Basques, the Fins, and the Caucasians, the three races by whom Europe was probably peopled at the time when the Aryans first entered it. It will not be necessary to set down Aryan numerals, as they are so well known: the others which I shall notice are these:—

1	11	III	·IV	v.			
Finnish.							
Finyksi	kaksi	kolmi	neljä	wiisi.			
Esthonian üts*	kats +	kolm	nelli	wiis.			
Lapponicakt	qwekte	kolm	nelje	wit.			
Syrianicötik	kyk	kujm	njolj	vit.			
Hungarianegy	$kett\ddot{o}$	$h\acute{a}rom$	négy‡	öt.			
Basque.							
bat	bi	$hir\acute{u}$	lau	bost.			
Caucasian.							
Georgianerthi	$ori\S$	sami	othkhi	khuthi.			
Tuschiżha	śi	qho	dhew	phchi.			
Circassianse	tu	śi	ptl'e	t'chu.			
Abkhasianaka	vi	khi	$ph\acute{s}i$	chu.			
Turkish.							
bîr	îki	ûć	$d\hat{u}rt$	beś.			

Genitive, ütte.

[†] Genitive, katte.

[‡] Compare these Finnish numerals for "four" with the Tamil nángu, nálu, "four."

[§] Compare the Chinese ar, "two."

VI ,	VII	VIII	ıx	x.*		
Finnish.						
Finkuusi	seitsen	kahdeksa	yhdeksa	kymmen.		
Esthonian . kuus	seitse	kattesa	$\ddot{u}ttesa$	kümme.		
Lapponic kut	kietja	kaktse	aktse	lokke.		
Syrianickvajt	sizim	kökjamys	ökmys	das.		
Hungarian.hat	$h\acute{e}t$	nyoltz	kilentz	tíz.		
Basque.						
sei	zazpi	zortzi	bederatzi	amár.		
Caucasian.						
Georgianekhvsi	$\acute{s}vidi$	rva	zkkra	athi.		
Tuschiyethch	wort	bart	iss	itt.		
Circassian . chi	b'le	ga	bgu	pśe.		
Abkhasian.f'	$bi\acute{s}$	aa	ś'	śva.†		
Turkish.						
$\hat{a}lti$	yêdi	$s\hat{e}kiz$	$d\hat{o}kuz$	δn .		

The first point to which I would draw attention here is, the manner in which several of these numerals for "eight" and "nine" are formed. It will be at once apparent, on comparing the Fin, the Esthonian, and the Lapponic expessions for "one" and "two," "nine" and "eight," that in each of the three dialects the last element of "nine" and "eight" is the same, while "one" is the first element of "nine," and "two" of "eight." Thus, in Esthonian, "one" is it(s), and

^{*} Observe, as a basis for inquiry, that the decade comprises only three characters, "one," "five," and "ten." The Fin kak-, the Syrianic kyk, and the Turkish tki, "two," seem = yk yk, II.

⁺ The non-radical Abkhasian suffix -ba is omitted throughout (ante, p. 52).

I Cf. Pott, Zählmethode, p. 129, note.

"nine" is üt-tesa; "two" is kat(s), and "eight" is kat-tesa. The only solution of this is, that such numerals for "eight" and "nine" are formed on the principle of the Roman IIX and IX, duodeviginti and undeviginti; and consequently that in the Fin -deksa, the Esthonian -tesa, and the Lapponic -tse, we have three forms of a word allied to the Aryan for "ten," which is, besides, found explicitly in the Syrianic das, "ten" (= Ossetic das or das), and in the Hungarian tiz, "ten." Precisely in the same manner the Syrianic kökjamys, "eight," and ökmys, "nine," are formed, and would therefore imply a word mys or amys, "ten," which the Syrianic komyn, "thirty," neljamyn, "forty," and vitymyn, "fifty," would indicate to exist also under the form myn, amyn, or ymyn. This word seems to me the Fin kymmen and the Esthonian kümme, "ten," and may be akin to the Basque amár, "ten," which takes the form ama in ama-icá, "eleven," where icá would be "one," and = Sanskrit eka, Abkhasian aka, Hungarian egy, etc.

The Hungarian and Basque for "eight" and "nine" would likewise be compound terms, but of a different nature. As we can hardly avoid connecting nyol- in the Hungarian nyol-tz, "eight," with the Finnish words for "four," such as the Syrianic njol and the Lapponic nelje, it would follow that nyol-tz, "eight," must $= 4 \times 2$ (compare quatre-vingt), and consequently that -tz is equivalent to two, zwei, or the Tuschi \acute{si} , "two." In ki-lentz, the Hungarian for "nine," I should conjecture that lentz is the same as neltz or nyoltz, and that ki-len- $tz = 1 + 4 \times 2$.

The next step is to compare the Hungarian and the Basque for "eight" and "nine":—

Hungarian. Basque.

"One," egy, bat, 1.

"Eight," nyol-tz, zor-tzi, 4 × 2.

"Nine," ki-len-tz, bed-era-tzi, 1 + 4 × 2.

The Hungarian and the Basque seem here to have the same formation, but to possess only one element in common, which is tz or tzi, "two"; and, as the Basque for "two" is bi, which is to be compared with the Latin bi(s) and the Abkhasian vi, the Basque would apparently contain a complete form for "two" very nearly identical with the German zwei, = Sanskrit dvi or dva. So we have in Hindustani, du, "two," and ba-reh, "twelve." Again, the Basque forms for "eight" and "nine," if they are composed like the Hungarian, would contain zor and era, "four." These elements, too, may be allied to the Aryan, as "four" is in Sanskrit ćatvår or ćatur, in Afghan žalûr, in Hindustani car, in Armenian cor and char, in German vier, and in Swedish fyra. R is the letter which is retained in every Aryan form of "four."

When we pass from the Pyrenees to the Caucasus, and consider the Georgian for "eight" and "nine," this letter r immediately attracts attention. For, in the Georgian language, "eight" is rva, and "nine" is zkh-ra, which last form = 1 + 8; for zkh- would = Tuschi zha, "one," and -ra would = rva, "eight." The comparison between the Basque and Caucasian numerals for "one," "eight," and "nine," leads to these results:—

Using the term "Iberian" to include the Georgian, Suanian, and Mingrelian dialects, it may be said with great probability:—

I. In Iberian and in Basque, as in Hungarian, "eight" = 4×2 , and "nine" = $1 + 4 \times 2$.

which compose "eight" and "nine," "one" is different in Iberian and Basque, while "two" and "four" are the same, and are apparently Aryan as well as Basque and Caucasian: for the Caucasian r-, ar-, and or-, with the Basque zor- and era-, may all be referred to Aryan forms for "four"; and the Caucasian -va, -a, -uo, and -o, with the Basque -tzi, may all be brought out of such Aryan forms as dva, duo, and zwei. Indeed, the Aryan for "two" is explicitly found in Caucasian and Basque; as "two" is tu in Circassian, si in Tuschi, vi in Abkhasian, and bi in Basque; so that the Georgian -va, "two," in "eight," is nearly Basque, and the Basque -tzi, "two," in "eight," is nearly Tuschi.

III. The Hungarian contains the Aryan for "two," under the form -tz in "eight"; and the Hungarian, with other Finnish dialects, contains the Aryan for "one" and "ten" also.

All this seems as if there were a certain bond of connexion between the three races that preceded the Aryans in the West, the Basques, the Fins, and the Caucasians; and likewise as if these three races and the Aryans had in very remote ages a common ancestry and a common home.*

There are other signs in Basque of the use of numerals which are not explicitly found in that language. Thus "après demain" is in Basque etzi, which may be akin to the Georgian ze-q, "après demain," where -g is perhaps to be compared with the Georgian dghe or the Basque egun, "day." Again, in Georgian, mazeq is "en trois jours"; and, in Basque, etzi-damu is "en trois jours," and etzi-dazu is "en quatre jours." Here the Georgian ma-zeg appears to signify "one after-to-morrow," while the Basque etzi-da-mu and etzi-da-zu appear to signify "after-to-morrow and one," "after-to-morrow and two." If so, then zu, "two," is implicitly contained in Basque; and mu, "one," and ma, "one," are implicitly contained in Basque and Georgian, and are to be compared with the Armenian mi, mov, me-, "one," and the Etruscan mach, me-, muv-, "one." Da means "and" in Georgian,

^{*} The Tamil on-badu, IX, is formed like the Fin yh-deksa, "one from ten," out of the Tamil onrru, I, and pattu, X; as the Tamil aindu, v, and pattu, X, coalesce into aim-badu, L.

as eta, ta, enda, da, do in Basque. Etzi-da-mu and etzi-da-zu would be formed like the Basque oguei-ta-bat, "twenty and one," and oguei-t(a)-amar, "twenty and ten, thirty." The Georgian for "thirty" is a similar form, ożda athi = ożi-da-athi, "twenty and ten." The difference between the Basque o-guei and the Georgian o-żi, "twenty," is similar to that between the Latin vi-ginti and the Armenian ch-san, where the Latin g is changed for a sibilant. Both guei and -żi, as well as o-, might be Aryan.

The following Aryan numerals seem thus to have been detected in Caucasian, Basque, and Finnish:—

"One"—in Finnish as yk, ki-, and egy; in Basque as -icá; in Caucasian as aka.

"One"-in Caucasian as ma-; in Basque as -mu.

"Two"—in Caucasian as tu, \dot{si} , vi, -va, -a, -uo, and -o; in Basque as bi, -tzi, and -zu; in Finnish as -tz.

"Four"—in Caucasian as ar-, -or-, and r-; in Basque as zor- and -era-.

"Ten"—in Finnish as tiz, das, -deksa, -tesa, and -tse; and possibly in Caucasian as -zi (= tsi), and in Basque as -guei.

The most perfect Aryan form for "six" is the Zend khsvas, otherwise written csvas, which would have passed into khvas before it could give the Armenian wez and the Albanian gyaś(të). Now khvas is like the Georgian ekhvsi, "six," but gives no explanation of it. If, however, we interpret ekh-vsi by the Finnish dialects, it becomes significant. It would be yk-wiisi,

1 + 5, and = Fin k-uusi, Esthonian k-uus, "six"; which, with the three other Finnish forms for "six," may likewise be reduced to 1 + 5, vi. Having got thus far, let us again take up the Zend kh-svas, and suppose it, as well as the Ossetic ach-saz, "six," to be 1 + 5. In this case, svas, with the Sanskrit śaś and the Afghan śbaż, "six," would properly be "five"; just as the Armenian wez, "six," having lost the prefix implying "one," is to be compared with the Fin wiisi, the Lapponic wit, the Turkish bes, and the Basque bost, all signifying "five." In like manner, as we have seen (ante, p. 54), the Circassian chi, vi, would be the Etruscan ki and the Lesgi chewa, v; the Etruscan huth, IV, would be the Georgian khuthi and the Lazic khut, v; and the Abkhasian phśi, IV, would be the Tuschi phchi, v. It seems, then, as if there were once a primeval word, svas, "five," which was common to Aryans and Turanians; and this word would be found in Basque with its original sense, as the second element of the Basque zaz-pi, vII, would be the Basque bi, II: for zaz-bi would become zazpi, just as ez, "non," and ba, "si," coalesce in Basque into ezpa, "nisi." It is evident, if zazpi be vII, and pi = bi, II, that zaz must necessarily be v, though this would have been forgotten when terms like the Sanskrit sas were employed for "six." The adoption of a new term, such as pańćan, for "five," may have been the cause of such inaccuracy.

Signs of primeval affinity seem so remarkable here as to deserve being tabulated:—

Hebrewechad	, I.
Hungarianegy,	I.
Sanskriteka,	I.
Abkhasianaka,	I.
Chinese	wù, v.
Lapponic $\left\{ \begin{array}{ll} k \end{array} \right.$	
Esthonian $\dots \begin{cases} k \\ k \end{cases}$	wiis, v.
Georgianelch	—vsi, vi.
Armenian	weż, vi.
Osseticach-	<i>—säz</i> , vi.
Basque	<i>bi</i> , п. 202—рі, vп.
Hebrew	śêś, vi.
Sanskrit	śaś, vi.
Zendkh	svas, vi.
Afghan	śbaż vi.
Turkish	beś, v.
Basque	bost, v.

Have we any indications of what this supposed primeval word for "five" may have been? There cannot be much doubt about the most probable meaning for such a word. This meaning is "hand": and the apparent affinity between such words as the Persian paný, "five," and panć, "fist," has been noticed by several writers. The Basque bost, "five," might thus be related to the Slavonic pjast, "pugnus," and to the German faust and the English fist; all which words have nearly the termination of the Zend zasta,

Sanskrit hasta, "hand." So too the Turkish bes, "five," which seems akin to the Basque bost, "five," resembles the Gaelic bas, bos, "the palm of the hand," which is the same word as the Welsh bys and the Breton bez, "finger"; terms capable, like the Armenian boyth, "thumb," = Welsh bawd, of explaining the Basque bat, "one," and perhaps the Turkish bir, "one." In like manner, we might pass from the Tuschi bui, "fist," to the Chinese wù, "five." It may, too, be possible that both the Turkish bes and the Basque bost, "five," are originally allied to the Afghan śbaż, "six" (properly "five"), and to the supposed primitive svas, "hand." At any rate, a word like svas, "hand," seems contained in many languages of different families. It may emerge in the Armenian thath, "hand, fist"; in the Tuschi tot, "hand"; in the Egyptian toot, "hand"; in the Gaelic doid, "hand"; and again in the Armenian thiz, "a span," thëz-ovk, "a pygmy." It may be seen (ante, p. 105) how sos = thôth in Armenian. Svas may also appear, and in a form more like itself, in the Persian saz, "make"; in the Armenian śôś(aphel), "to handle"; in the Phrygian sos(esait), "he makes"; and in the Gaelic sàs, "lay hold of." A similar word might be discerned in the Basque escú, the Suanian śi, and the Chinese śeù, all signifying "hand": and even the Esthonian kässi and the Lapponic kät, "hand," the Lesgi koda, "hand," the Ossetic koch, kuch, "hand," kach, "foot" (cf. Armenian kach-avel, "to dance," and English kick), and the Tuschi k'hak, "hoof," may bear some

signs of an original likeness to svas, which has become the Welsh chwech, "six, έξ." The Lapponic kät, the Lesgi koda, and the Ossetic kuch, "hand," would help to explain the Georgian khuthi, "five," like as the Georgian phekhi, "foot," is apparently identical with the Tuschi phchi, "five." The Circassian t'chu, "five," and pse, "ten," seem allied to khuthi and phchi; and if so, then the Circassian pse would be "feet," as the Abkhasian śva, "ten," might be "hands." Reckoning by scores originated, most probably, in men once counting with their feet as well as their hands. Both Caucasians and Basques reckon by scores: thus "forty" is "twice twenty," and so on. The apparent identity of the Abkhasian śva, "ten," with the Basque zaz-, "five," in zazpi, "seven"; and of the Georgian phekhi, "foot," with the Tuschi phchi, "five," the Abkhasian phśi, "four" (properly "five"), and the Circassian pśe, "ten";-this shews how "ten" may be the plural of "five," and thus be nearly the same word. We may consequently compare the Tuschi itt, the Lazic wit, the Mingrelian withi, and the Georgian athi, all meaning "ten," with such Finnish words for "five" as the Lapponic wit and the Hungarian öt. The Finnish words might originally signify "hand" or "foot," and the Caucasian words, "hands" or "feet."

The five Finnish expressions for "six," kuusi, kuus, kut, kvajt, and hat, are all alike, and all probably = 1 + 5. But, in the expressions for "seven," a difference is discernible. The Lapponic kietja and the Hungarian hét, "seven," may = 6 + 1; but the Fin

seitsen, the Esthonian seitse, and the Syrianic sizim, "seven," seem differently composed, and bear a likeness to the Georgian and the Basque for "seven":—*

Finsei-tse(n).

Esthonian ...sei-tse.

Syrianicsi-zi(m).

Georgianśvi-di.

Mingrelian ...sqwi-thi.

Basquezaz-pi (= zaz-bi, 5 + 2).

There is no objection to making sei- = si- = śvi-= zaz-, as se-decim = sex-decem, and śo-daçan = śaśdaçan. Similar instances of elision may perhaps be found in the Hebrew śéś, śe-ba', and śē-môneh, "six," "seven," and "eight."+

Svas, "hand," especially as we have also the Basque escú and the Suanian \acute{si} , "hand," as well as the Abkhasian \acute{sva} , "ten," i. e. "fives" or "hands," will thus bring together the Basque zaz- (which is nearly svas), and the Georgian \acute{svi} - (which preserves the v of svas, and is like the Abkhasian \acute{sva}), and the Mingrelian \emph{sqwi} - (which approaches to the Basque $\emph{escú}$), and the Syrianic \emph{si} - and the Fin \emph{sei} - (which resemble the Suanian \acute{si}). In like manner, the Aryan \emph{dva} , \emph{dvi} , zwei, $\emph{bi}(\emph{s})$, and $\emph{\deltai}(\emph{s})$, with the Tuschi \acute{si} and the Abkhasian \emph{vi} , "two," will explain the Basque $\emph{-pi}$ (= \emph{bi}), and the Mingrelian $\emph{-thi}$, and the Georgian $\emph{-di}$,

It is worth noticing, by the way, that seitse-n and sizi-m have terminations like the Aryan sapta-n and septe-m.

^{† -}mônch seems allied to mânch, "part, number," and mônch, "part, time." "Parts" imply duality at the least.

and the Syrianic -zi, and the Fin -tse; which last two forms would thus = the Hungarian -tz in nyol-tz, 4 × 2, and ki-ken-tz, 1 + 4 × 2, as well as the Basque -tzi in the similarly composed numerals, zor-tzi and bed-era-tzi.* The Abkhasian bi-ś, "seven," may contain the elements, bi, "two," and ś, "five," = Suanian śi, "hand." In the Georgian, Abkhasian, and Basque, and in the three Finnish dialects, the Syrianic, the Esthonian, and the Fin Proper, there would consequently appear to be a similar combination of the same two elements in the number VII; and these elements would belong to the ancestors of the Aryans, as well as to the ancestors of the Fins, the Caucasians, and the Basques. These last three families or nations would, moreover, when they formed their "seven," have used svas rightly, as "five," not as "six." This cannot be said of the Aryans: for if the Sanskrit sa-pta(n) is connected with śaś (which may possibly be the case, though the Zend khsvas and haptan seem

^{*} The explanation of the Finnish sci-tse, "seven," as 6 + 1, from such forms as the Basque sci, "six," and the Circassian se, "one," might be possible, but would hardly be probable. In another Finnish dialect, the Ostiak, ki is II (= Syrianic kyk), vet is V (= Syrianic vit), and ta-vet is VII, i. e. ta + V. Therefore ta is II, as well as ki, which is used subtractively, as in kyt, III, i. e. ki, II, from vet, V. Ta-vet, VII, is thus formed out of the same elements as the other Finnish, the Caucasian, and the Basque terms for VII (p. 141); elements that are Aryan as well as Turanian. The Ostiak kyda, VI, seems = kyt-da (= ta), 3 × 2; as nida, VIII, would be net-da, 4 × 2, like the Hungarian nyoltz, the Basque zortzi, and the Georgian rva. The Ostiak net, IV, seems = "one from five (vet)," as the Tamil nángu, IV, seems = "one from five (aindu)."

against such a supposition), yet we could not well get "two" out of -pta.* If "two" is found at all in coalition with śaś, it would rather be in aś-ṭa(n) or aś-ṭāu, "eight." Aś is "six" in Lazic, and sa is "six" in (Pelasgic) Etruscan. As in the Georgian and Basque pronouns, so too in the formation of the Georgian and Basque for "seven," an affinity to the language which was becoming Aryan would appear, though the three forms of speech became afterwards very distinct.†

It may have been observed that Finnish dialects

i-spesk-e, "hand." shped-ee, "five"

Spesh and shped may = svas, as Armenian spit-ak = Sanskrit qvet-a = English whit-e = German weiss; analogies which shew how the Natchez shpedee, the Lapponic wit, and the Fin wiisi, all meaning "five," may be originally the same word. Compare also ispeshe, "hand," with the Sanskrit spaq, "facere," and the Gaelic spaq, "paw." Again, "hand" is shag-ai in Omahaw, and shak-e in Mohawk; and "foot" is see and seeh-ah in Sioux, and a-shoo in Pawnee. Su is "foot" in Chinese. At Norton Sound, near Behring's Straits, "hand" is ai-shet, "nails" are shet-ooe, and "four" is shet-amik. We may have here, and in the words cited in the text (ante, p. 139), different forms of one of the primitive words of the human race, and a sign of its original unity.

^{*} Compare the Circassian pt-l'e, "four," which seems = "one from five," iv. The Aryan numerals for "three," "four," "seven," and "eight," are not easily explained. "Four" is perhaps the most difficult.

[†] Dr. Latham, in his Varieties of Man (p. 127), gives the word khut, "hand," as used in the Manipur and Khoibu languages in Upper Birmah; and he compares it with the Lesgi koda, "hand." It is still nearer to the Georgian khuthi and the Lazic khut, "five," and to the Pelasgic Etruscan huth, "four." Svas, "hand, five," does not appear to be confined to the Old World, for I find in the same work the following Natchez words:—

employ in composition a different word for "ten" than their own (p. 132). So does the Etruscan in -lchl, "-genti," = lch-lch, 10 x 10. So does the Lithuanian in -lika, "-teen," = Polish lik, "number." And so, too, does the English in e-leven and twe-lve, the Gothic ainlif and twalif. Grimm agrees with Bopp in regarding -lif (and -lika) as forms of a primeval word for "ten," einer uralten zehnzahl. This word seems to be found, and in our English form -leven too, in the Malay sa-lapan, "nine," and du-lapan, "eight"; words which contain the Malay sa, "one" (cf. Circassian se, Lesgi za, Tuschi żha, "one"), and duwa, "two" (a perfect Aryan form like the Afghan duva), and are evidently constructed just like the Fin yh-deksa, "nine," and hah-deksa, "eight," ix and iix. As the Malay is thus connected in some points with more western and northern languages, it is possible that it may be so in other points, and thus be allowably employed in the explanation of such languages. Now the Malay for "five" is lima. Prefix to this the kah, "two," of the Fin kah-deksa, "eight," = 2 from 10, and we should obtain kah-lima, 2 from 5, "three," which might be contracted into the Fin kolmi and the Lapponic kolm, "three," nearly as two-leve becomes twelve in English. The Finnish words for "four," such as the Esthonian n-elli, may mean "1 from 5," rv, and be allied to the Turkish al-ti, "six," elli, "fifty," and el, "hand." If the Etruscan za-l and the Georgian sa-mi, "three," are allied to the Fin ko-lmi, and thus imply sa-lmi as a more perfect form, then za and sa would be "two,"

like the Tuschi śi and the German zwei. Compare also the Javanese ta-lu, "three." At any rate, since there are several ways, as will be more completely shewn directly, of making -l = "five," the Etruscan za- in za-l would most likely be "two," and thus = Georgian sa-; for it seems that the Georgian sa-mi = Mingrelian su-mi = Lazic gu-m = Syrianic ku-jm = Lapponic ko-lm, "three," i.e. "two from five." And thus the composition and the first elements of the Etruscan za-l and the Georgian sa-mi, "three," would apparently be the same, whatever may be thought of their second elements. If t be "five" in the Tuschi wor-t, "seven," and ba-r-t, "eight," then worand -r- would be "two," = Georgian ori, = Chinese år; while ba- would be "one," and probably allied to the Basque bat, "one," and possibly to the Hebrew -ba' in śe-ba', "seven." As the Tuschi ba-rt, "eight," seems = 1 + wort, "seven," so the Circassian b-gu, "nine," may = 1 + ga, "eight," as the Georgian zkh-ra, "nine," = 1 + rva, "eight." It is difficult to guess what the Circassian gu or ga, "eight," may have been originally; but, if we were to combine it with the Georgian rva and ra, "eight," we might get g-r, "four," and ua or va, "two." The Circassian would, however, in such a case, want the characteristic letter r of the Aryan "four"; and the Abkhasian a-a, "eight," if = 4 x 2, would have suffered still more than the Circassian q-a.

It may be as well to tabulate for the second, or l "five," as I have done for the first (ante, p. 138):—

Welsh $\left\{ \begin{tabular}{l} bys, \end{tabular} \right.$	llaw,	"finger." "hand."
Bretonbez,		"finger."
Cornish	lau,	"hand."
Armenianboyth,		"thumb."
Turkish	êl,	"hand."
Malay	lima, lima,	"hand." v.
Basque { bat,	bi,	I. II.
Tuschi	śi,	It.
Georgian	ori,	II.
Chinese	âr,	II.
Fin	ko — lmi,	mv (ko- = "two").
Syrianic	ku - jm,	HV.
Lazic	gu-m,	IIV.
Mingrelian	su - mi,	IIV.
Georgian	sa — mi,	IIV.
Etruscan	za - l,	IIV.
Javanese	$t\hat{a}$ — lu ,	IIV.
Circassianpt	l'e,	17.
Esthonianne-	lli,	IV (ne-= "one").*
Syrianicnjo	lj,	IV.
Basque	lau,	IV ("one" lost).
Circassian	b'le,	VII.
Tuschi { ba	wor—t, —r——t,	vii.

The Abkhasian bi-ś and the Circassian b'-le, "seven,"

^{*} See also note (ante, p. 142), and compare Tamil nalu, IV (ante, p. 130, note). Nyë is "one" in Albanian.

appear similar forms, with the same "two," and a different "five." $Bi-\acute{s}=2+5$, as the Basque zaz-pi and the Georgian $\dot{s}vi-di=5+2$. The Malay lima, "five," is evidently the lima, "hand, arm," of the islets between Timor and Papua.* Like the former word for "five, hand," this second word seems to stretch across Europe and Asia. For, as the Basque escii would be the Suanian si and the Chinese seù, all meaning "hand" (as the English skew and shy are the German scheu), so the Malay lima, "hand," "five," and -lapan, "ten," are to be compared with the following words cited by Diefenbach (Lex. Comp. s. v. lofa): Gothic lofa, "the open hand," = Scotch loof; Gaelic làmh, Welsh llaw, "hand"; Cornish lof, lau, "hand"; Gaelic lapadh, "paw"; Polish tapa, "paw"; Lapponic lapa, "the sole of the foot." The same root would also be found in the Welsh llam, "stride, step," and in the German lauf and the English leap; as well as, probably, in the Tuschi lap, "step, stair, treppe," and lam, "mountain." By a similar association of ideas, we may connect together the Tuschi it, "run," and itt, "ten"; and might detect svas in the Hebrew śûś, sûs, "rejoice, leap" (cf. Polish sus, "hüpfen"), sús, "horse," and sás, "moth," = σής. Svas might also supply the thema for the Armenian sôs- or thôth-, śovth- and kach-, as well as for śôś- (p. 105). Of the three characters which compose the decade, I, V, X,

^{*} Crawfurd's Malay Grammar and Dictionary, vol. i, p. xeviii. Cf. Pott, Zühlmethode, p. 121.

the most likely meaning for t is "finger"; for v, "hand"; and for x, "hands" or "fingers" collectively. The English ten, -teen, as the German zehn and zehen intimate, is "toes," i. e. "fingers";* and -leven would probably be "hands." The resemblance which the Circassian se, Lesgi za, Tuschi zha, "one," bear to the German zehe, zeig-, and zeich-, or to the Basque atz, "finger," should perhaps not be passed unnoticed.

The Polynesian dialects are connected with the Malay family. The following numerals are used in Hawaii and Tahiti†:—

	I	II	III	IV	v.
Hawaii	akahi	arua	akoru	ahaa	arima.
Tahiti	utahi	arua	atoru	amaha	arima.
	VI	VII	VIII	1X	x.
Hawaii	iono	ahitu	avaru	aiva	umi.

Rima means "hand, arm," in Hawaii, just as lima does in Malay; and thus explains the Polynesian arima, "five," as the Malay lima, "hand, arm," does the Malay lima, "five." The Polynesian initial a seems superfluous. There is a similar conversion of l into r in the Finnish dialects, where the Esthonian and Lapponic kolm, "three," becomes the Hungarian három, "three," which may enable us to pass to the Basque

^{* &}quot;Noch unleugharer stehn δάκτυλος, digitus und zeha (digitus pedis) mit δέκα, decem, δείκτυμι und zeigen in zusammenhang."—Grimm, Geschichte der Deutschen Sprache, p. 244.

[†] These islands are separated by 2500 miles of sea.

hirú, "three." Compare, too, the Hindustani so-leh, "sixteen," and set-reh, "seventeen." The Polynesian words for "three" are plainly "1 to 2," and not "2 from 5" like the Finnish. The Hawaiian umi, "ten," resembles the Fin kymmen and the Esthonian kümme, "ten," as well as the Basque amár or ama, "ten." The Polynesian arua, "two," is rather like the Georgian ori and the Chinese ar, "two"; and the Polynesian ava-ru, "eight," might possibly be compared with the Georgian r-va, "eight," supposing the two elements reversed, as well as with the kindred Suanian and Mingrelian terms for "eight," ara and ruo. The Lazic ovro, "eight," is still nearer to avaru. Such resemblances should be mentioned, though I hold to the former explanation of rva, ara, and ruo (ante, p. 134). Avaru seems = 4×2 , and is thus apparently composed like the Hungarian and Basque for "eight," though with different elements.+

^{*} L is always represented by r in Zend. The city of Lima in Peru is so called from the river Rimas.

[†] The Malay laki, "man, husband," may be compared with the following words:—Circassian lay, "flesh"; lay, "hlay, "blood"; tlay, "husband";—Ossetic lag, "man"; lappu, latu, "lad";—Leegi les, "man"; less, "husband"; tl'yadi, "wife";—Lycian lade, "wife";—Abkhasian lkhadza, "husband";—Esthonian laps, lats, "child." The Caucasian Leges and Lazi of antiquity were probably the "men." Olake means "man" in the Arawak dialect of Guiana, which supplies an example of "numeration of the rudest kind," where kabo is like the Tamil kai, "hand." See also p. 139.

Aba da kabo = "once my hand," = five.

Biama da kabo = "twice my hand," = ten.

Aba olake = "one man," = twenty.

(Latham, Ethnology of the British Colonies, p. 260).

With regard to the symbols, I, V, X, "the digit," "the hand," and "the hands" or "the fingers," I would represent accurately enough the extended finger, and V the angular space between the thumb and the forefinger when the hand is held up. This angular space is called in Armenian chil, which is like the Georgian kheli or qheli, "hand"; both which terms might contain the Etruscan or Pelasgian ki, "five," with the addition in one case of the Etruscan and Armenian termination -il, and in the other of the Georgian termination -eli. X would be the figure formed by placing the two hands across one another. The Chinese character for "ten" is a cross, which is called śi, as "hand" is called śeù in Chinese, and śi in Suanian, and as "ten" is śva in Abkhasian.

The results of the previous analysis of numerals are to be taken in conjunction with what seems to follow from the numbers on the Etruscan dice, namely, that the *Pelasgic* Etruscan numerals were Caucasian. See especially the tabular view (ante, p. 54). The inferences which I should be inclined to draw from the numerals, as well as from conjugations and pronouns, have been already explained in my first chapter, where I have brought together several other coincidences of different kinds, which appear by their combined force to conduct us to a similar conclusion. And this conclusion would be:—that before the Aryans began to spread from their original home, they dwelt there with Fins and Caucasians on their west; the

Caucasians tending towards the south, and the Fins towards the north: and that as the Fins scattered themselves, speaking in a general manner, over the northern half of Europe, the Caucasians did the same over the southern half, but probably at an earlier period; for the Caucasians, especially if it were allowable to include the Basques among them, cannot be said to have developed a common numeral system before dispersion, while the Fins would have done so, though not quite as perfectly as the Aryans. Both of the Turanian races would have been continually impelled farther westward, as the Dravidas would have been southward, by the expansion of the Aryans, who ultimately broke through the Western Turanians by . two different routes, one on each side of the Euxine, and gradually encroached upon them till they were left as they now are, in the Caucasus, and the Pyrenees, and the North of Sweden and Russia, though their ancient presence in the heart of Europe is still indicated by two or three words used in the Alps. When Livy attributed Etruscan affinities to the Alpine population in general, but especially to the Rhætians, he probably spoke with more accuracy than has been generally thought, or even perhaps than he himself was aware of. For all, or nearly all, the original inhabitants of the Alps (as well as of the pile-dwellings on the Swiss lakes) may have been Tuscan, i.e. Caucasian, while the Aryan Rasenæ penetrated no farther to the west than Rhætia, and a subsequent Celtic inroad made the Aryan population of Noricum quite as much Celtic as

Thracian. In Armenia and the Caucasus, Asia may thus claim both elements of the Etruscan people as her own, whether they were of Tyrrhenian or of Pelasgian origin. Such, at least, is the hypothesis which seems to explain all the evidence that I have brought forward, and to solve at the same time four ethnological problems. In ancient ethnology, we are led to ask, who were the Etruscans, and who were the Pelasgians? and, in modern ethnology, what has become of the two races of which the Armenians and the Caucasians are the surviving representatives? Each pair of questions supplies the answer to the other pair.

INDEX OF ETRUSCAN WORDS.

Achrum, " Hades, Acheron," 87. Alpan, "supplex," 78, 91. Am, "sum," 100: or see s. v. mar. Avenke or "deponit, relinquit," 38. (Ap)avenke Avil, " estas," 27, 28, 30. Avils, "etatis," 27, 33, 37. Chiem, "quinque," 49. Chimths, "quindecim" (?), 49. Chiseliks, "monumentum, μνήματα," 79, 92. Eka, "hic, ecce," 61, 87, 90. Epana, "epulum," 103. Erai, "hilaritatis," or "hilaris," 103. Erske, "sese offert," 87. Etera, "alter," 59. Ethe, "si, quando," 102. Fleres, "oblatio, donum," 79, 80, 86. Flezrl (qu. flerzl), "oblatum, datum," 86. Fuius, "vlós," 60. Helephu, "effundit," or "effunditur," 105. Huth, " quatuor," 51, 54. Kana, "simulacrum," or "statua," 83. Karutezan, "quatuordecim" (?), 49. Kealchls, "quingentos," or "quingentesimi" (gen.), 41, 43. Kecha, "expiat," or "solvit," 78, 80, 90. Ken, "ut," 79. Kepen, "tumulum," 36 (note). Kerinu, " sculpit," 90. Kethu, "aquæ" (gen.), or "aquam," 97, 107. Ki, "quinque," 51, 54. Kiemzathrms, "quinquagesimi tertii," 39. Kis, "μεκρός,"-or else "menses," or "mensis" (gen.), 47. Κίσιπ, "νεκρόν," 47.

Sie, "sit," 103.

```
Kizi, "verpois," or "verpos," or "moritur," 47.
 Klalum, "mœrorem, funera," 37 (note).
 Klan, "soboles," or "princeps," 59.
 Klen
Klensi "pius, rite," 78, 79, 80, 89, 90.
 Kver, "soror," 88.
Leine, "vivit, fit," 27, 28, 29.
Lenache, "facessit, fieri facit," 91, 92.
Line, "vivebat, vixit," 29, 69.
Lisiai, "linguæ" (dat.), 100.
 Lthas, " Airfis," 78, 80, 91.
 Lupu
         "obit, moritur," 33, 37.
 Lupuke |
Lupum, "cadaver, corpus," 37.
Lusni, "luminis," 94.
Ma, "sed," 99.
Mach, "unus, 51.
Machs, "mensis" (gen.), or "menses," 41, 44.
Mar, "vas, fass," 100: or else -.
Maram, "contineo, ich fasse," 107.
Mathu, "vini" (gen.), or "vinum," 99, 107.
Mealchls
           "centum," or "centesimi" (gen.), 41, 42, 43.
Muvalchls |
Mi, "ego, me," 60, 80, 97, 99, 103.
Nak, "ad, nach," 87.
Nastav, "hospes," or "hospite," 104, 108.
Nest, "mortuus," 61.
Nothu, "liquoris," or "liquorem," 103, 104, 107.
Ni, "non," 97.
Puia, "filia, θυγάτηρ," 60.
Puiak, "figliuola, θυγάτριον, töchterlein," 60.
Puiam, "filiam," 60.
Puil, "τέκνον," 60.
Rasne, "ulna," 49.
Ril, "annus," 27, 28, 30.
Sa, "sex," 51.
Sak
Sech {"proles," 60.
Salthn, "fusio, fusum, τόρευμα, opus," 94.
Sansl, "libens," 79, 88.
Sas, "sex," 38.
Semphalchls, "septingentos," or "septingesimi" (gen.), 41, 43.
```

Suthi, "conditur," 61.

Suthi "sepulcrum, tumulus," 69, 90.

Suthina, "θυσία," 83, 84.

Teke, "facit," or "ponit," 79, 91.

Tenine ("tenet, tendit, fert, offert," 79, 90.

Tenu f decem," 49.

Tesnsteis, "centum," 49.

Thapna, "καύστης, lampas," 94.

Thipurenai, "calidæ, sitienti," 101.

Thu, "duo," 51.

Thuf | "τύπος, signum," 78, 80, 91.

Thui, "memoratur," 69.

Thunesi, "diei," 42, 45.

Tinskvil, "Jovi(s) donum," 93.

Tiers or tivrs, "triginta," 38, 39.

Tlen-acheis | "debitum pretium, meritum," 78, 86.

Tular, "sepulcrum," 68.

Turke Turuke \ "dat," 80, 87.

Tuthines, "gratim, χάριτος," 78, 79, 83, 84.

Via, "filia," 60.

Zal, "tres," 51, 55.

Zek, "statua," 88: or perhaps zeke, "affert."

Zilachnke ("infoditur, sepelitur," 34, 36, 47.

THE END.

T. BICHARDS, S7, GREAT QUEEN STREET.



CENTRAL ARCHAEOLOGICAL LIBRARY. NEW DELHI

Issue Record.

Catalogue No. 410/E11. - 2505.

Author_Ellis, Robert.

Title_Asiatic affinities of the old Italians.

Borrower No.

Date of Issue

Date of Return

"A book that is shut is but a block"

"A book that I.

RCHAEOLOGICAL

GOVT. OF INDIA

Department of Archaeology

NEW DELHI.

Please help us to keep the book clean and moving.