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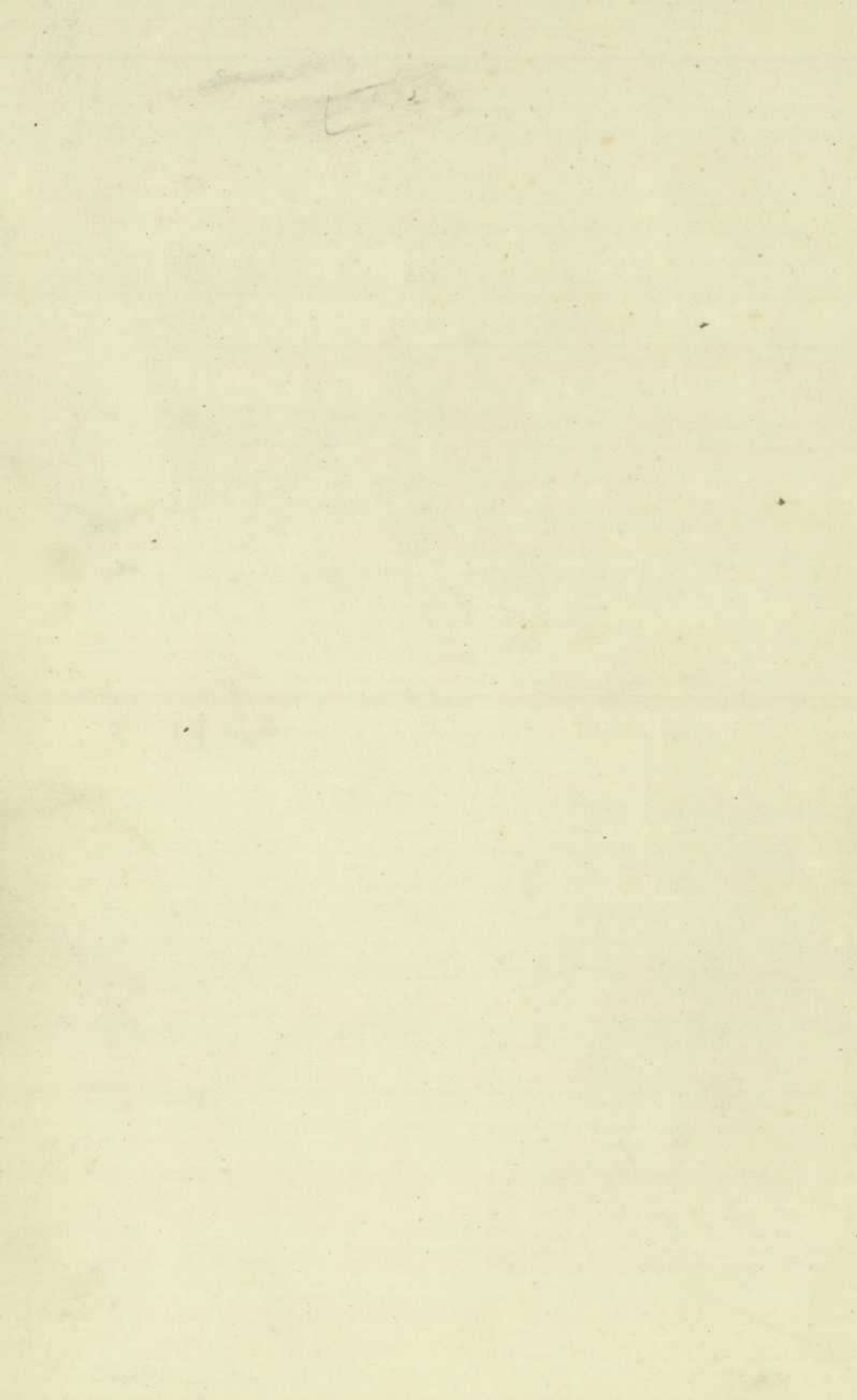
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SOURCES
OF THE
ETRUSCAN AND BASQUE
LANGUAGES.

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THE following work, the result of many years' study, was complete in manuscript at the time of the Author's death. During his last illness, he expressed a wish that it should be published; and after some necessary delay in finding a competent person to see it through the press, it is now put before the public by his widow, exactly as the author left it, without addition or alteration of any kind. Mr. WALTER DE GRAY BIRCH, of the British Museum, kindly undertook the task of revising the proofs, a task requiring special and unusual knowledge.

J. E.

Exeter.

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*The following characters are employed in the present work,
chiefly in Armenian words :—*

z, = *ds.*

ż, = *ts,* Hebrew *zain.*

z̈, = *tz,* Hebrew *tzaddi.*

r, a strong *r,* but in Sanskrit the usual vowel.

č, = English *ch* in *church.*

ǰ, = English *j,* or *dzh* (*zh* = *z* in *seizure*).

ǧ, = *dsh.*

t̄, nearly = Welsh *ll,* or Polish *ł*: it is interchanged in Armenian with *l* and with *kh* (χ), and might be represented by $\chi\lambda$ or $\prime l$. A stronger χ in Armenian, resembling the Hebrew *koph,* is represented by *ch.*

Before a consonant, the following are diphthongs in Armenian :—*ov,* = German *u*; *iv* = French *u*; *ev,* = English *u* in *unite*; *ow,* a long *o.*

The letters, *b, g, d, o,* are deficient in Etruscan.

SOURCES OF THE ETRUSCAN AND BASQUE LANGUAGES.

THE present treatise consists of three parts, the first two relating to the Etruscan language, and the last part to the Basque, which becomes involved with the Etruscan question in the course of the inquiry. The first part, which is confined to the Etruscan Numerals, is a reproduction of my tract bearing that title: but some additions and modifications have been introduced into it, though I have not found very much which seemed to me to require alteration.¹ To this I have added, in the second part, all that I considered necessary to complete the evidence bearing on the nature of the Etruscan language. So little is known of that language, as far as reading it is concerned, that, when what is merely conjectural is excluded, the materials for forming a judgment on its affinities lie within a small compass; and this, even when those materials are treated with much fulness, as they deserve to be, for on them the determination of the character of the language really rests. Nor are we obliged to remain in ignorance of what that character may be, although the meaning of all the Etruscan inscriptions, with the exception of some short ones, should for ever remain concealed from us. For whatever is actually known from such short inscriptions, whether it be a numeral, a gram-

¹ The only change of importance is in the interpretation of the Etruscan word *thunesi*, which is now rendered 'duorum' instead of 'novem'.

matical form, a term of relationship, or anything else, admits of satisfactory explanation from other languages; it is not here that the Etruscan language is rightly called mysterious, but in the unintelligibility, which is not to be wondered at, of the longer inscriptions, even when the affinities of the language have been determined. The principal difficulty with respect to the nature of the language lies in the fact, that, like the English, it consists of more than one element; and that, as long as we confine ourselves to the scanty materials that we are sure of, it cannot be so easy as it is in English to ascertain what is the characteristic element in the language—the element to which every other is subordinate. In English, the grammar assures us that the characteristic element is German; but we have less certainty in Etruscan, at least till the very end of the inquiry is reached, however confident we gradually become as to the two chief elements in the Etruscan language. One of these elements appears to belong to the same Eastern family as the Basque, the origin of which thus comes to be considered in the third part. Here we are enabled to go at once to the heart of the language, the structure and component parts of the verb; so that the investigation is of a different and shorter kind than in the case of the Etruscan.

PART I.

ETRUSCAN NUMERALS.

OUR knowledge of the numerals employed by the Etruscans is of recent date. That of the first six we owe to the discovery of a pair of Etruscan dice, each of which has six different monosyllables inscribed on its six faces, instead of, as usual, one or more pips or spots indicating the digits from 'one' to 'six'. Some of these monosyllables, in addition to other words, are found again in Etruscan epitaphs, and in the places where the age of the deceased is given, as we know from comparing them with other epitaphs where that age is expressed by arithmetical signs, according to the common method. From the dice and the epitaphs together we are enabled to learn all the Etruscan digits from 'one' up to 'eight', as well as one 'teen', and all the multiples of ten, or '-ties', from 'twenty' up to 'eighty'.

The Etruscan dice-numerals, *thu* and *huth*, *mach* and *zal*,
ki and *sa*.

The dice-numerals must be considered first. They are, according to the order adopted by Campanari, *mach*, *thu*, *zal*, *huth*, *ki*, *sa* (or *sha*).¹ This order, deduced from a com-

¹ In his *Etruskische Sprache*, Corssen makes out of the dice-syllables, which he denies to be numerals, the following Etruscan inscription:—

Mach thuzal huth cisa.
Magus donarium hoc cisorio facit.

How Corssen managed to divine the right arrangement of the six dice-syllables is inexplicable. The odds were 719 to 1 against him. Equally wonderful is the coincidence, that the right order for the dice-syllables, though they are not numerals, should be exactly the same as if they were numerals; i.e., *mach*, *thu*, *zal*, *huth*, *ki*, *sa*.

parison of these written dice with other Etruscan dice where the numerals are indicated by pips, would be perfectly correct, as I trust to show by the following investigation.

The arrangement of the numerals in Etruscan dice with pips is peculiar. In our own, as in Roman dice, the rule is for 'one' to be opposite 'six', 'two' to be opposite 'five', and 'three' to be opposite 'four'; so that the number of pips on each pair of opposites is seven in every case. But in Etruscan dice with pips, according to Campanari's law, the rule is different. Here 'one' is opposite 'three'; 'two' is opposite 'four'; and 'five' is opposite 'six'. Thus every Etruscan pair of opposites, such as *thu* and *huth*, must represent either 'one' and 'three', 'two' and 'four', or 'five' and 'six'; or else, 'three' and 'one', 'four' and 'two', or 'six' and 'four'.

In assigning the values of each pair of opposites, three different courses will be adopted in succession, in order to ensure the attainment of a result which is certain. In the first case, I shall begin with *thu* and *huth*, pass thence to *zal* and *mach*, and conclude with *ki* and *sa*. In the second case, I shall begin with *ki* and *sa*, pass on to *zal* and *mach*, and conclude with *thu* and *huth*. And at a later period, when the multiple of ten, *zathrum*, comes up for consideration, I shall begin with *zal* and *mach*, pass on to *ki* and *sa*, and conclude with *thu* and *huth*. The same result will be attained, whichever course of investigation be adopted.

To begin with *thu* and *huth*. It is a fact in numeration, throughout the world, that 'four', $= 2 + 2, = 2 \times 2$, is continually expressed by forms which are reduplications of 'two'. In Australia, where numeration is in its lowest or most primitive state, this is very crudely exhibited. For there *bularr* and *gudjal* are 'two', while *bularrbularr* and *gudjalingudjalin* are 'four'.¹ The case is similar in some of

¹ Latham's *Comparative Philology*, p. 352; Moore's *West Australian Vocabulary*, p. 42.

the languages of Venezuela :—“ Vi è anche di particolare, che 4 in alcune lingue Orinochesi non è una voce semplice, ma composta di due vocaboli, come se v.g. dicessimo *due due*.”¹ Other examples of this fact will be found in the following numerals, arranged in a kind of circuit on the face of our globe, and all deducible from some base for ‘two’ like *év-r* or *ǵv-r*:—

	‘Two’.	‘Four’, = ‘two-two’.
SOUTH AMERICA . . . Patagonian	<i>æukay</i>	<i>ke-kaguy</i>
	Aymara <i>pa</i>	<i>pu-si</i>
CENTRAL AMERICA . . . Quiche	<i>kieb</i>	<i>ki-eheb</i>
NORTH AMERICA . . . Netela	<i>wehe</i>	<i>wa-ža</i>
	Talatui <i>oyoko</i>	<i>oi-ssuko</i>
SIBERIA Mantshu	<i>ǵua</i>	<i>tu-ye</i>
	<i>zur</i>	<i>du-ye</i>
ARYAN Gothic	<i>tvai</i>	<i>fi-dvôr</i> ²
	Kashkari <i>ǵu</i>	<i>éo-d</i>
IBERIAN ³ Lazic	<i>zur</i>	<i>o-tkh</i>
	Georgian <i>ori</i>	<i>o-thkhi</i>
	Ude <i>pha</i>	<i>bi-p</i>
	Abkhasian <i>gwba</i>	<i>ph-shba</i>
	Chunsag <i>kigo</i>	<i>u-chgo</i>
	Kabutsh <i>kona</i>	<i>o-kona</i>
	Thusch <i>shi</i>	<i>dhe-v</i>
	Basque <i>bi</i>	<i>la-u</i>
AFRICA Tibbu	<i>do</i> ⁴	<i>to-zo</i> ⁵
	Batta <i>pe</i>	<i>fa-t</i>
	Houssa <i>biu</i>	<i>fu-du</i>

¹ Gilj, in Pott's *Zählmethode*, p. 16.

² Compare *fi-dvôr* with the Gaelic *fi-chead*, = Latin *vi-ginti*, = Welsh *u-gain*, = Greek *εἴκοσι*.

³ Caucasian and Basque. Why the Basque is thus classed will be seen in Part III.

⁴ Also *dim* and *dum* (Reinisch).

⁵ Also *deghe* and *tisur* (Reinisch).

	'Two'.	'Four', = 'two-two'.
MALAY . . .	Madagascar <i>rua</i>	<i>effa-t</i>
	Kayan <i>dua</i>	<i>pa-t</i>
	Gebe <i>lu</i>	<i>fa-t</i>
	New Ireland <i>ru</i>	<i>ha-t</i>
	Ende <i>rua</i>	<i>wu-tu</i>
	Marquesas <i>ua</i>	<i>h-a</i>

Thu and *huth*, 'two' and 'four'.

If we now proceed to apply the foregoing world-wide principle to the Etruscan dice-numerals, there can be no doubt which of the three pairs, *mach* and *zal*, *thu* and *huth*, *ki* and *sa*, is most likely to be 'two' and 'four'. For *za-l* bears no resemblance to *mach-mach*, nor *ma-ch* to *zal-zal*: neither does *s-a* bear any resemblance to *ki-ki*, nor *k-i* to *sa-sa*. But *hu-th* does bear an obvious resemblance to *thu-thu*; so that it becomes probable that *thu* is the Etruscan 'two', and *huth* the Etruscan 'four'. And this probability is increased by the additional circumstance, that 'twos' like *thu*, and 'fours' like *huth*, are found in all parts of the earth—in Europe, in Asia, in Africa, in America, and in Oceania. For all the 'twos' in the previous catalogue might be identical with the Etruscan 'two', *thu*, and all the 'fours' with the Etruscan 'four', *huth*. *Thu* and *huth* might, for instance, range as 'two' and 'four' with the American *pa* and *pusi*, or with the Siberian *gua* and *tuye*, or with the Aryan *gu* and *co-d*, or with the Iberian *shi* and *dhev*, or with the African *pe* and *fat*, or with the Malay *dua* and *pat*. When we say, therefore, that it is at least highly probable that *thu* is 'two', and that *huth* is 'four', we do not say more than is well warranted by the facts of the case, whatever may be the family of languages to which the Etruscan is allied. The elevation of this probability to moral certainty will depend upon the co-

herence and consistency, in all its parts, of our system of Etruscan numeration, when the present investigation has been brought to a conclusion.

Mach and *zal*, 'one' and 'three'.

Let us next take up the pair of dice-numerals, *mach* and *zal*, which, if *thu* and *huth* are 'two' and 'four', ought to be either 'one' and 'three', or 'five' and 'six'. Now, although the establishment of *thu* as 'two', and of *huth* as 'four', would hardly imply more than that the Etruscans belonged to the human race in general, without attaching them to any particular family of mankind, yet, if we find that a large number of languages in different families possess not merely a 'two' and a 'four' apparently identical with the Etruscan, but also a third numeral closely resembling a third Etruscan numeral, it then becomes probable that this third Etruscan numeral is identical in value, as well as in form, with the numeral which resembles it in so many languages apparently allied to the Etruscan in 'two' and 'four'. And this, as will be seen directly, leads us to the inference that *zal* is 'three', which makes its opposite on the dice, *mach*, to be 'one'. Moreover, as the 'threes' thus identified with *zal* (found also, as we shall see later, in 'thirty' as *zath-*) resolve themselves into 'one-two', just as 'four' does into 'two-two', it appears therefore that *za-*, in *za-l*, would be virtually another 'one', in addition to *mach*. So the Greek has two distinct 'ones' in *hen* and *mi*, and the Armenian in *ez* and *mi*. Taking then *mach* and *za-* for Etruscan 'ones', and *zal* and *zath-* for Etruscan 'threes', we shall have the following table of affinities for the first four Etruscan numerals:—

ETRUSCAN.

1. *mach*, *za-*
2. *thu*
3. *za-l*, *za-th-* (*za-thu*, 1 + 2)
4. *hu-th* (*thu-thu*, 2 + 2).

MALAY.

Kayan.	Ende.	New Ireland.	Gebe.	Saparua.
1. <i>gi</i>	<i>asa</i>	<i>tik</i>	<i>sa</i>	<i>isahi</i>
2. <i>dua</i>	<i>rua</i>	<i>ru</i>	<i>lu</i>	<i>rua</i>
3. <i>tu-lo</i>	<i>ta-lu</i>	<i>tu-l</i>	<i>tu-l</i>	<i>o-ru</i>
4. <i>pa-t</i>	<i>wu-tu</i>	<i>ha-t</i>	<i>fa-t</i>	<i>ha-an</i>

IBERIAN.¹

Chunsag.	Akush.	Thusch.	Ude.	Basque.
1. <i>zo</i>	<i>za</i>	<i>zha</i>	<i>sa</i>	
2. <i>ki</i>	<i>qui</i>	<i>shi</i>	<i>pha</i>	<i>bi</i>
3. <i>sha-b</i>	<i>a-b</i>	<i>qho (=qha-v)</i>	<i>chi-b</i>	<i>hi-ru</i>
4. <i>u-ch</i>	<i>oh-v</i>	<i>dhe-v</i>	<i>bi-p</i>	<i>la-u</i>

AFRICAN.

Gura.	Basa.	Bamom.	Momenya.	Matatan.
1.	<i>hi</i>	<i>mo</i>	<i>mo</i>	<i>moza</i>
2.	<i>yewi</i>	<i>mbe</i>	<i>mbe</i>	
3. <i>ta-l</i>	<i>ta-ti</i>	<i>ta-t</i>	<i>nta-d</i>	<i>ta-ro</i>
4.	<i>na-shi</i> ²	<i>gb-a</i>	<i>gbo-e</i>	<i>she-she</i>

SIBERIAN.

Mantshu.

1. *amoa*
2. *gua*
3. *gi-lañ*
4. *tu-ye*

AMERICAN.

Talatui.³

- 1.
2. *oyo*
3. *te-li*
4. *oi-ssu*

Ki and *sa*, 'five' and 'six'.

Ki and *sa* are the last pair of opposites on the Etruscan dice. One of these must be 'five', and the other 'six', if *thu* be 'two' (and therefore *huth*, 'four'), and if *zal* be 'three'

¹ Suffixes are omitted.

² *N* is the 'resonant' of *t*, and *m* of *p* (Reinisch), which last mutation will make the Etruscan 'twenty' and 'forty' appear later as *mealchl* and *muvalchl*.

³ Suffixes are omitted.

(and therefore *mach*, 'one'). Now, as results from Campanari's observations, if we take an Etruscan die with pips, and hold it with 'three' uppermost, and 'four' facing us, we shall find that 'four' thus faces us between 'five' on our left hand, and 'six' on our right. But, if we were to take either of the Etruscan dice with written numerals, and to hold it with 'three', *zal*, uppermost, and 'four', *huth*, facing us, we should then perceive that *huth* has *ki* on our left hand, and *sa* on our right. Therefore *ki* would be 'five', and *sa* would be 'six'; and Campanari's order for the written numerals would prove to be correct throughout.

Such is the course of the argument, if we begin our investigation with *thu* and *huth*, pass thence to *mach* and *zal*, and conclude with *ki* and *sa*. But I shall now take up the three pairs of dice-numerals, as I intimated before, in a different order. For *ki* and *sa* may be inferred to be 'five' and 'six' respectively, by another and an independent mode of reasoning. When we come to consider the Etruscan '-ties', or multiples of ten, we shall see that one of them is *semphalchl*, which would = *sa* × 10; and, as *mach semphalchl*, i.e., *mach* + *sa* × 10, appears from the effigy which accompanies the epitaph to be the age of an old man (*uomo vecchio*), we may assume, as an old man could not be under fifty, that *sa* is either 'five' or 'six'. But, if *sa* be 'five' or 'six', then its opposite on the dice, *ki*, must be 'six' or 'five': and of the two, *ki* is most likely to be 'five'. For, in addition to the circumstance that a man is more likely to appear old when over sixty than when over fifty, it is also a fact in numeration, that it is 'five', and not 'six', which usually combines with numbers below five to form numerals like 'seven', 'eight', or 'nine'.¹ But three Etruscan multi-

¹ This is apparent in several African languages (see Kölle's *Polyglotta Africana*), and also in Cambodian and in Yeniseian (see Latham's *Comparative Philology*).

ples of ten are:—*kealchl*, *kez palchl*, and *kiemzathrm*, probably ‘fifty’, ‘seventy’, and ‘eighty’; where *kiemzathrm* evidently contains the elements of another Etruscan multiple of ten, *zathrum*, which in all probability means ‘thirty’ (as will be afterwards more fully shown); for we know from the effigies on the tombs that *mach zathrum* is the age of a man in the prime of life, and *kiemzathrm* that of an old man. Their respective ages may thus easily have been thirty and eighty years, which would make *zath-* (= *zal*), ‘three’, and consequently *mach*, ‘one’; and *ki*, ‘five’, and consequently *sa*, ‘six’; *thu* and *huth* remaining for ‘two’ and ‘four’. The result is, therefore, the same as when we began with the pair, *thu* and *huth*.

Ki, ‘five’, and *sa*, ‘six’, have African analogies in the Momenya *kie*, ‘five’, and *tu*, ‘six’; and Iberian analogies in the Ude *qho*, the Georgian *khuthi* or *khethi*, and the Kasi Kumük *cheva*, ‘five’, as well as in the Circassian *shu* and the Basque *sei*, ‘six’. The Etruscan *sa*, ‘six’, might also be Aryan, or even Semitic; so that it is more easy to say what families of language have here no affinity to the Etruscan, than to decide upon the family with which it ought to be classed. There is indeed the possibility that the Etruscan *sa* and the Basque *sei* are not merely allied through the Circassian *shu* to the Caucasian languages, but likewise through the Annamitic *sau* to the languages of Eastern Asia. The following table will show the resemblances in ‘six’ between the Caucasian and these last languages:—

CAUCASIAN.	EASTERN ASIA.
Circassian <i>shu</i>	Annamitic <i>sau</i>
	Khyeng <i>sauk</i>
	Burmese <i>khyauk</i>
Ude <i>uqh</i>	Siamese <i>hok</i>
Thusch <i>yethch</i>	Nepalese <i>tuk</i>

CAUCASIAN.	EASTERN ASIA.
Tshetsh <i>yalch</i>	Chinese <i>luk</i>
Kasi Kumük <i>rach'</i>	Nepalese <i>ruk</i>
Akush <i>urek'</i>	

The Malay, one of the three families of languages which will ultimately be found the most closely allied to the Etruscan in their numerals, does not present any analogies to it in 'five' and 'six', the Malay (Proper) being *lima* and *anam*. But, as we shall see eventually, the Malay again resembles the Etruscan in 'seven' and in one 'ten', while 'eight' and the other 'ten' seem African. This will appear from the Etruscan multiples of 'ten', which it will be our next task to consider.

Etruscan multiples of ten.

The following are the Etruscan multiples of ten, with the interpretations which I put upon them :—

- x. Uncertain ; but *palchl* is 'decade' (see LXX).
- xx. *Me-alchl* (dice-numeral, *thu*, 'two'), as in *avils machs mealchlsk*, 'ætatis XXI'.¹
- xxx. *Zath-rum*, or *zath-rm* (dice-numeral, *zal*, 'three'), as in *lupu avils machs zathrums*, 'obiit ætatis xxxi', and *avils kis zathrmsk*, 'ætatis xxxv'.
- xxxx. *Muv-alchl* (dice-numeral, *huth*, 'four'), as in *avils kis muvalchl-*, 'ætatis XLV', and in *avils huths muvalchls lupu*, 'ætatis XLIV obiit', where 'four' assumes two forms, *huth* and *muv-*, as 'two' does in the Latin *duodeviginti*.
- l. *Ke-alchl* (dice-numeral, *ki*, 'five'), as in *avils huths kealchls*, 'ætatis LIV', and *avils kis kealchls*, 'ætatis LV'.

¹ *I.e.*, 'of the age of one and of twenty', -s being the sign of the genitive, and -k = Latin -que; two Aryan grammatical characteristics.

- LX. *Sem-phalchl* (dice-numeral, *sa*, 'six'), as in *avils machs semphalchls lupu*, 'ætatis LXI obiit'.
- LXX. *Kez palchl* (dice-numerals, *ki-thu*, 'five-two'), as in *lupu avils esals kez palchls*, 'obiit ætatis LXXIII', where *esal* would be a variant of *zal*, 'three'. It must be either 'three' or 'nine', for the other places are filled up.
- LXXX. *Kiemzath-rm* (dice-numerals, *ki-zal*, 'five-three'), as in *avils kiemzathrms lupu*, 'ætatis LXXX obiit'.¹

In the preceding citations, *machs* occurs thrice, *esals* once, *huths* twice, and *kis* thrice. As a case-suffix or inflection, *-s*, is found in all, it is clear that the words on the dice, though all monosyllables, are not abbreviated forms, as might perhaps have been conjectured. Should any doubt remain as to whether the expressions interpreted above as numerals are really so, it might be sufficient to compare an expression like *avils machs mealchlsk* with an epitaph like Laris Sethres Krakial *avils xxviii* (Fabretti, 2109); one like *lupu avils machs zathrums* with an epitaph like Arnt Thana *lupu avils xvii* (2136); and one like *avils machs semphalchls lupu* with an epitaph that terminates with the words, *avils xxxvi lupu* (2100). I have not met with any numerals expressed by words, instead of by symbols, in combination with the continually recurring word *ril*, 'annos', or the well-known form *avil ril*, 'ætatis anno'. As *avils*, 'ætatis', is found above in conjunction with *lupu*, and also elsewhere with *lupuke*, as in *avils lx lupuke* (2058), so is *ril*, 'annos', in conjunction with *leine*, as in the epitaphs, A. Pekni *ril liii leine* (333), Rav.

¹ In *kiemzathrm*, 'eighty', and *semphalchl* (= *saemphalchl*), 'sixty', *em* would probably be some particle introduced, as in the African (Kiriman) *tanu na taru*, 'eight' (5 + 3), and *kumi na taru*, 'thirteen' (10 + 3). So also the Slavonian has *trinadesyat'*, 'thirteen', which is distinguished by the insertion of *na*, 'upon, to', from *tridesyat'*, 'thirty'. The Etruscan distinguishes a '-teen' from a '-ty' by abbreviating the decade in the case of the '-teen'. Thus, as we shall find, *semph* is 'sixteen', while *semphalchl* is 'sixty'.

Velani Ar. *ril xlii leine* (342), and Thana Kainei *ril leine l* (2558). We thus learn that *leine* signifies 'vixit', and that *lupu* and *lupuke* signify 'obiit'. The affinities of these words, as well as of *ril* and *avil*, 'annus' and 'ætas', will be considered in Part II. At present we have to examine the Etruscan multiples of ten, which involve two different decades. One of them is *palchl*, *phalchl*, or *-alchl*; and the other is *-rum* or *-rm*. I begin with the first of these.

The first Etruscan decade, palchl, -phalchl, -alchl.

This decade will be found, like the word *deca-de* itself, to consist of two elements, a numeral and a suffix. Its possible affinities are very widely spread, and must all be taken notice of, at least unless we assume at starting, which I am not prepared to do, that certain families of language can have no affinity to the Etruscan. A full collection of parallels to *palch-l*, 'fingers, decade', will therefore be given in the following list, in which is exemplified the truth of Grimm's axiom, *alle zahlwörter gehn aus von den fingern der hände*:—

ETRUSCAN.

pa-lchl }
-pha-lchl } 'decade, -ty, -ginta'.
-a-lchl }

AMERICAN.

Atna	<i>p-lazha</i> , 'ten'.
Kowelitsk	<i>pa-nuéc</i> , 'ten'.
	<i>éé-laéc</i> , 'five'.
Skwali	<i>éa-lash</i> , 'hand, fingers'.
	<i>ži-laz</i> , 'five'.
	<i>pa-nués</i> , 'ten'.
Piskaws	<i>o-pa-nikst</i> , 'ten'.
	<i>éi-liksh</i> , 'five'.
	<i>ka-likh</i> , 'hand, fingers'.

AMERICAN.

Skittegats	<i>k-leith</i> , 'five'.
	<i>k-lath</i> , 'ten'.
Shushwap	<i>ci-likst</i> , 'five'.
	<i>lakhaleakst</i> , 'hand, fingers'.
	<i>leakhin</i> , 'feet'.
Shawni	<i>lehci</i> , 'hand'.
Hoopah	<i>lah</i> , 'hand'.
Maya	<i>-ppe-l</i> , 'numeral suffix'.
	<i>lahun</i> , 'ten'.
Huasteca	<i>lahuh</i> , 'ten'.
Quichua	<i>lloke</i> , 'left hand'.
Alashkan	<i>looga</i> , 'foot'.
Tarahumara	<i>pi-le</i> , 'one'.
	<i>ma -riki</i> } 'five'.
	<i>ma -liki</i> }
	<i>ma -li</i> }
Mexican	<i>ma pi-lli</i> , 'fingers' (<i>mai</i> , 'hand').
	<i>-pi-lli</i> , 'score'.

FORMOSAN.

a -pi-llo, 'finger'.

TASMANIAN.

logui, 'forefinger'.

AUSTRALIAN.

loca } 'one'.

lua }

ARMENIAN.

lok, 'sole, single'.

FINNISH.

Permian	<i>pe-lu</i> , 'finger'.
	<i>ly</i> , 'bone'.
Tsherimiss	<i>lu</i> , 'ten'.

FINNISH.

Esthonian	<i>lu</i> , 'bone'.
	<i>peo</i> , . 'inner hand'.
	<i>luggu</i> , 'number'.
Lapponic	<i>-lokk</i> , 'all, every one'.
	<i>lokko</i> , 'number'.
	<i>lokke</i> , 'ten'.
	<i>pe-lge</i> , 'thumb'.

TATARIC.

Tshuvash	<i>pi-lik</i> , 'five'.
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KAMTSHATKAN.

<i>kom-leh</i>	} 'five'.
<i>kum-nach</i>	

SARMATIAN.

Lithuanian	<i>-lika</i> , '-teen'.
Polish	<i>lik</i> , 'number'.
	<i>pa-lec</i> , 'finger'.
Bohemian	<i>pa-lec</i> , 'thumb' (<i>cf.</i> Latin <i>pollex</i>).

CAUCASIAN.

Thusch	<i>-loghe</i>	} ordinal suffix.
	<i>-lghe</i>	
Kubetsh	<i>leika</i>	} numeral suffix.
	<i>deika</i>	
	<i>neika</i>	
	<i>nik</i> , 'hand'.	
Akush	<i>nak</i> , 'hand'.	
	<i>likka</i> , 'bone'. ¹	
Georgian	<i>khe-li</i> , 'hand'.	
Avar	<i>ke-lesh</i> , 'finger'.	
Ude	<i>gi-lik</i> , 'claw'.	

¹ Compare *-neika*, *nik*, *nak*, and *likka*, with the Mongol *nege* and *nikka*, 'one'.

CAUCASIAN.

Tshetsh	<i>pe-lig</i> , 'finger'.
Kisti	<i>pa-lk'</i> , 'finger'.

NEPALESE.

Newar	<i>pa-laha</i> , 'hand'.
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AFRICAN.

Kisi	<i>pe-le</i> , 'one'.
Nguru	<i>laku</i> , 'one'.
Bagba	<i>laku</i> , 'foot-sole'.
Tsuwu	<i>lika</i> , 'palm of the hand'.
Nki	<i>legbo</i> } 'ten'.
	<i>degbo</i> }
	<i>e-legwe</i> , 'fingers'.
Banyun	<i>ha-lak</i> , 'ten'.
Matatan <i>mu</i>	<i>-logo</i> , 'ten'.

MALAY.

Tonga	<i>u-lu</i> , 'ten'.
Rotti	<i>hu-lu</i> , 'ten'.
Kisa	<i>wa-li</i> , 'ten'.
Madagascar	<i>fu-lu</i> , 'ten'.
Java	<i>pu-luh</i> , 'ten'.

The Etruscan decade, *palch-l*, would consist of 'ten', *palch-*, and a suffix; which suffix, in Etruscan *-l*, may be compared with the Caucasian (Akush) suffix *-al*, as in *quial*, 'two', *vezal*, 'ten', etc.: and the Etruscan *palch-*, 'ten', together with its less perfect forms, *-phalch-* and *-alch-* (which might be compared with the less perfect Malay forms, *fulu* and *ulu*), would find its nearest parallels in the Malay *puluh*, 'ten', the Nepalese *palaha*, 'hand', the Caucasian *palk'* and *pelig*, 'finger', the Finnish *pelge*, 'thumb', and *pelu*, 'finger', the Tataric *pilik*, 'five', the African *pele*, 'one', the Slavonian *palec* (= *palez*), 'finger', the Formosan *apillo*,

'finger', and the American *pile*, 'one', *plazha*, 'ten', and *-pilli*, 'score', with *mapilli*, 'fingers'.¹

It is, however, doubtful whether the Malay *puluh*, the 'ten' which most resembles the Etruscan 'ten', *palch-*, has any connection with the Nepalese *palaha*, 'hand', or with the Caucasian *palk'* and *pelig*, 'finger', or with the Finnish *pelge*, 'thumb'. At least, such high authorities as W. von Humboldt and Buschmann (*Die Kawi-Sprache*) agree in referring the Malay 'tens' to Malay words for 'hair'; and it is certain that the resemblances between the two sets of words are very close. Thus the Malay Proper has *puluh*, 'ten', and *bulu*, 'hair'; Java, *puluh*, 'ten', and *wulu*, 'hair'; Madagascar, *pulu*, *fulu*, 'ten', and *vulu*, 'hair'; Tonga, *fulu*, *ulu*, 'ten', and *fulu*, 'hair'; and Hawaii, *hulu*, 'ten', and *hulu*, 'hair'. Hawaii has another form for 'ten', *umi*, = New Zealand *kumi*, which might be allied, as will appear more clearly later on, to the second Etruscan 'ten' or 'decade', *-rum* or *-rm*.

Kealchl, 'fifty'; mealchl and muvalchl, 'twenty' and 'forty'.

With two exceptions, the value of all the Etruscan multiples of ten may be inferred from the dice-numerals. Thus *zath-rum* and *kienzath-rm* may be inferred to be 'thirty'

¹ Other American parallels, in addition to those cited in the text, are the Hidatsa *pitika*, 'ten', and the Mandan *pirack*, 'ten', = Riccari *parick*, 'fingers', = Acroa (Brazil) *paraiki*, 'toe'. For the change of *l* into *r*, compare, in the Caucasus, the Dshar *rekka*, 'bone', with the Akush *likka*, 'bone'; and, in Australia, *roka*, 'one', with *loca*, 'one'. 'Finger', the basis of numeration, may be either 'bone' (cf. German *bein*, 'bone, leg') or 'hand-bone'. Thus, in different Botocudo dialects in Brazil, we find *po*, 'hand', *jak*, 'bone', *jekke*, 'one', and *po-tchique*, 'one', = Algonkin *pey-gik*, *pa-suk*, 'one', = Payagua *pe-tshaah*, 'one', = Maxuruna *pa-zü*, 'one'. In Dakota, *pa* signifies what is done with the *hand* (Riggs); and, in Chinese, *pa* is a classifier of things held in the *hand* (Williams). In Africa, the Mampa has *pia*, 'arm', and *pia-dshok*, 'hand', *dshok* being = such African words for 'bone' as *dshoko*, *tsuku*, *suku*, *soku*, etc. In Finnish, *peo* is '(inner) hand', *lu*, 'bone', and *pe-lu*, 'finger'. The parallels to the Etruscan *palchl* thus tend to the same conclusion which I endeavoured to enforce in my *Numerals as Signs of Primeval Unity among Mankind*.

and 'eighty', from the dice-numerals, *zal*, 'three', and *ki-zal*, 'five-three'; *sem-phalchl* to be 'sixty', from the dice-numeral *sa*, 'six'; *kez palchl* to be 'seventy', from the dice-numerals *ki-thu*, 'five-two'; and finally *ke-alchl* to be 'fifty', from the dice-numeral *ki*, 'five'. There remain *me-alchl* and *muv-alchl*, where the initial elements only resemble the first of the dice-numerals *mach*, 'one': but neither *mealchl* nor *muvalchl* can be interpreted as 'ten' or '-teen'. For the age of an Etruscan lad, known as such by his effigy, is given by the words *avils semphs lupuke*, 'ætatis xvi obiit', which would be inconsistent with *avils machs mealchls* being interpreted 'ætatis xi', or with *avils huths muvalchls lupu* being interpreted 'ætatis xiv obiit'. The only multiples of ten left vacant for *mealchl* and *muvalchl* are thus 'twenty', 'forty', and 'ninety', of which the last would be of very rare occurrence in epitaphs; and, as 'four' is continually found to be a reduplication of 'two', it may be inferred that *me-alchl* is 'twenty', and that *muv-alchl* is 'forty'.

Although each 'four', in the comparisons which follow, would probably = 'two-two', yet I shall only draw attention, by the aid of italics, to those forms of 'two' which closely resemble the Etruscan *mu-* and *-v*, the two elements of *mu-v*. The reader will also bear in mind that *-alchl* = *-phalchl* = *palchl*, and that its initial *a* is thus radical, and not merely a connecting vowel.

ETRUSCAN	<i>me</i>	<i>-a-lch</i>	<i>-l</i> ,	'twenty'.
	<i>mu-v</i>	<i>-a-lch</i>	<i>-l</i> ,	'forty'.
CAUCASIAN.				
Kasi Kumük	<i>khi</i> ,	.	.	'two'. ¹
	<i>mu-q</i> ,	.	.	'four'.

¹ *Khi* is used in quick counting for 'two', as *muq* for 'four', and *az* (= *ats*) for 'ten': otherwise, 'two' is *khiva*, *khira*, or *khiba*; and the same suffixes are used in the cases of 'four' and 'ten'.

CAUCASIAN.

Kasi Kumük	<i>mu-q</i>	.	-z	.	-al,	.	'forty'. ¹
			az	.	.	.	'ten'.
Akush	<i>qui,</i>	.	.	.	-al,	.	'two'.
	<i>oh-v</i>	.	.	.	-al,	.	'four'.
	<i>a-u</i>	.	-z	.	-ale,	.	'forty'.
			vez	.	-al,	.	'ten'.

FINNISH.

Lapponic	<i>ne-lje</i>	.	<i>lokke,</i>	.	.	.	'forty'.
Tsherimiss	<i>ni-l</i>	.	<i>lu,</i>	.	.	.	'forty'.

MALAY.

Java	<i>pi-tañ</i>		<i>-pu-luh,</i>	.	.	.	'forty'.
	<i>pa-t,</i>	.	.	.	.	.	'four'.
			<i>pu-luh,</i>	.	.	.	'decade'.
Tonga	<i>h-a,</i>	.	.	.	.	.	'four'.
			<i>u-lu,</i>	.	.	.	'decade'.

In the two Lesgi dialects cited above, the Caucasus presents the closest parallel to the Etruscan 'forty' that can be found. The Etruscan *mu-v-*, 'for-', would contain the first element, = 'two', of the Kasi Kumük *mu-q*, 'four', and the second element, also = 'two', of the Akush *oh-v(al)*, 'four', where the *-l* suffix of the Etruscan *muvalchl*, etc., appears again. In order to complete the Etruscan 'forty', *muvalchl*, from the Kasi Kumük 'forty', *muqzal*, the Kasi Kumük *-q* in *muq*, 'four', must be changed into the Akush *-v* in *ohval*, 'four'; and the Kasi Kumük *-z*, = Kasi Kumük *az*, 'ten', = Akush *vez*, 'ten', must be replaced by the Kisti (Central Caucasus) *palk'*, 'finger'; for the Etruscan *muvalchl* is = *muvpalchl*, as the Tonga *ulu* is = Java *puluh*, 'decade'.

It may, perhaps, appear objectionable at first sight that *me-* and *muv-* should be interpreted as 'twen-' and 'for-',

¹ 'Forty' may be either *muqzalva*, *muqzalda*, or *muqzalba*, so that *muqzal* is the permanent form of 'forty'.

while *thu* and *huth*, which resemble them so little, are interpreted as 'two' and 'four'. But, as we have already seen, the only alternative would be to make *mealchl* to be 'ten', = *mach palchl*, 'one decade' (which is inconsistent with *semph*, 'sixteen'), and *muvalchl* to be 'ninety'; or *vice versa*. We can thus hardly avoid taking *mealchl* and *muvalchl* for 'twenty' and 'forty'. And, besides this, Iberian languages, as will now be made to appear, have as many different forms of 'two' as the Etruscan would have, even if *thu* and *me-* were 'two', and *huth* and *mu-* were 'four':—

ETRUSCAN *mach*, 'one' (*za-*, 'one').

thu, 'two'.

me-, 'twen-'.

za-l, 'three' (= 'one-two').

za-th-, 'thir-' (= 'one-two').

hu-th, 'four' (= 'two-two').

mu-v-, 'for-' (= 'two-two').

Kasi Kamük *ža*, 'one' (*mich*, 'finger-nail').¹

khi, 'two'.

sha-n, 'three' (= 'one-two').

mu-q, 'four' (= 'two-two').

m'a-i, 'eight' (= 'two-two-two').

Akush *za*, 'one' (*mekva*, 'nail').

quial, 'two'.

a-bal, 'three' (= 'one-two').

oh-val, 'four' (= 'two-two').

ge-hal, 'eight' (= 'two-two-two').

¹ In Australian, *peer* signifies both 'finger-nail' and 'one'. The Caucasian *mich*, *mekva*, *maach*, and *much*, 'finger-nail', may thus be compared with the Etruscan *mach*, 'one'.

Dshar *zo*, 'one' (*maach*, 'nail').

kigo, 'two'.

cha-bgo, 'three' (= 'one-two').

u-chgo, 'four' (= 'two-two').

mi-kgo, 'eight' (= 'two-two-two').¹

Ude *sa*, 'one' (*much*, 'nail').

pha, 'two'.

chi-b, 'three' (= 'one-two').

bi-p, 'four' (= 'two-two').

mu-gh, 'eight' (= 'two-two-two').

Georgian *erthi*, 'one' (*mkholo*, 'one, single').

ori, 'two' (*zqvili*, 'a pair').

sa-mi, 'three' (= 'one-two').

o-thkhi, 'four' (= 'two-two').

r-va, 'eight' (= 'two-two-two').

Basque *bat*, 'one' (cf. Basque *beatz*, 'finger').

bi, 'two' (cf. Ude *bi-p*, 'four').

hi-ru, 'three' (= 'one-two').

la-u, 'four' (= 'two-two').

zor-tzi, 'eight' (= 'two-two-two').

Lazic *ar*, 'one' (cf. Basque *erhi*, 'finger').

zur, 'two' (cf. Basque *zor-tzi*, 'eight').

ju-m, 'three' (= 'one-two').

o-tkh, 'four' (= 'two-two').

o-v-ro, 'eight' (= 'two-two-two').²

¹ Cf. Kasi Kumük *muq*, 'four'.

² In all these Iberian 'eights', with the exception of the Lazic, and perhaps of the Kasi Kumük, one 'two' has been lost: but their composition is nevertheless sufficiently obvious. So, in *quartus*, when compared with *quatuor*, the loss is *tuo*; and in *four* and *vier*, when compared with *fidvôr*, the loss is *dv*: i.e., a 'two' has been lost in each case.

Thusch *zha*, 'one' (cf. Andi *zeka*, 'finger').
shi, 'two' (*duq*, 'a pair').
qho, i.e., *qha-v*, 'three' ('one-two').
dhe-v, 'four' (= 'two-two').

'Two' thus presents itself in Etruscan under seven forms: *thu*, *hu-*, *mu-*, *me-*, *-v-*, *-th*, *-l*. Of these, the Etruscan *thu* may be compared with the Thusch *shi* and *dhe-*, the Lazic *zur* (cf. Mingrelian *shiri* and Georgian *ori*), and the Basque *zor-* and *-tzi*; the Etruscan *hu-* with the Kazi Kumük *khi*, the Dshar *u-*, the Georgian and Lazic *o-*, and the Basque *-u*; the Etruscan *mu-* and *me-* with the Kazi Kumük and Ude *mu-*, the Dshar *mi-*, the Kazi Kumük *m'*, the Georgian *-mi*, and the Lazic *-m*; the Etruscan *-v-* with the Lazic *-v-*, the Georgian *-va*, the Thusch and Akush *-v*, the Akush *-b*, the Basque *bi*, and the Ude *pha*, *bi-*, *-b*, and *-p*; the Etruscan *-th* with the Georgian *-th*, the Lazic *-t*, the Dshar *-ch*, and the Ude *-gh*; and finally the Etruscan *-l* with the Basque *la-*. An eighth form of 'two' appears in the Basque *hi-ru*, 'three' (cf. *hi-* with the Ude *chi-b*, the Dshar *cha-b*, and the Akush *a-b*, 'three'). This form *-ru* seems to be found in the Georgian *r-va* and the Lazic *o-v-ro*, 'eight'. Here $r = l = d = t$, as in the Malay 'twos' (*ante*, p. 6). Similarly, $m = v = p = t$. It is a single word that supplies all these eight forms of 'two'.

Klaproth, in his *Kaukasische Sprachen* (p. 52), notices that in the Lesgi languages *m* and *b* are continually interchanged (*beständig verwechselt*). Thus 'earth' is in Andi *misa* or *bisa*. So also, in Basque, *persica* becomes *merchika*, and *vagina* becomes *magina*. In like manner, in Etruscan, the *m* of *me-* and *muv-* represents a *b* or a *v*.

There still remain for examination two forms containing the first Etruscan decade. These will be found in *Corssen* (pp. 659, 678), but with interpretations which I have not adopted for them below:—

1. *avils machs semphalchls lupu.*
ætatís obiit.
2. *lupu avils esals kez palchls.*
obiit ætatís

The following forms would thus be numerical in Etruscan :—

1. *mach semphalchl.*
2. *esal kez palchl.*

Semphalchl, 'sixty', and semph, 'sixteen'.

As *mach semphalchl* is known from the accompanying effigy, as already stated, to be the age of an old man, it follows that *semphalchl* cannot be identified with the Malay *sapuluh* and *sampuluh*, 'ten', i.e., 'one decade', but must be taken as the decade of *sa*, 'six'. The form *sampuluh*, however, where *sa* is 'one', may illustrate the formation of *semphalchl*, and also of *semph*, in *avils semphs lupuke*, which we know from the effigy to be the age of a lad, and therefore to signify 'sixteen'. We thus learn that the Etruscan '-teen' and '-ty' would be formed in the following manner :—

palchl, 'decade, dizaine (French)'.
-phalchl } '-ty, -κοῦτα, -ante (French)'.
-alchl }
-ph, '-teen, -ze (French)'.

Other languages deal with their decades nearly as the Etruscan does here with its decade. Thus, if we were to take the Italian '-teen', *-dici*, and to prefix it to the commonest Italian '-ty', *-anta*, as in *sessanta*, the result would be *dicianta*, which is virtually the same word as *decem-ta*, or *decade*. In like manner, if we were to take the Etruscan '-teen', *-ph*, and to prefix it to the commonest Etruscan

'-ty', *-alchl*, the result would be *-phalchl*, which is = *palchl*, 'decade'. In Etruscan, it is with 'sixty' that a more complete form of 'decade' comes in as '-ty'; for *kez palchl* is 'seventy', and *sem-phalchl* is 'sixty', while *me-alchl* is 'twenty', *muv-alchl*, 'forty', and *ke-alchl*, 'fifty'. There is something analogous to this in Bohemian, where *deset* is 'ten', *dwa-dcet*, 'twenty', and *pa-desat*, 'fifty'. And, as the whole of the Latin *decem*, with the suffix *-ta* (both of which are united in the Bohemian *-dcet*, *-desat*, '-ginta'), is found in two fractions in the Italian *-dici*, *-anta*, and in the French *-ze*, *-ante*, so the whole of the Malay *puluh*, 'decade', or of the Caucasian *palk*, 'digit', with the Caucasian suffix *-al*, is found in two fractions in the Etruscan *-ph*, *-alchl*.

Kez palchl, 'seventy', and *kez*, 'seven'.

Let us now take up the numerical form, *esals kez palchls*. Here *esal* must, I think, as already mentioned, be considered as a variant of *zal*, 'three': compare, in Africa, the two Dsuku 'threes', *zala* and *azala*. *Kez palchl(s)*, which is given as two words, like the Lithuanian *keturi deszimtis*, 'forty', and all higher, but no lower Lithuanian '-ties', shows clearly enough that *palchl* is the complete form of the first Etruscan decade, like the Bohemian '-ty', *-desat*, while *-alchl* is an incomplete form, like the Sanskrit '-ty', *-çat*. In *kez*, which precedes *palchl(s)*, *ke-* would be 'five', as in *ke-alchl*, 'fifty', and *-z* would = *thu*, 'two'. It is true that in *za-l*, 'three', *za-* is 'one', which may seem against *-z* being 'two': but we have already seen how much 'two' is liable to vary its form; and moreover, in this particular epitaph, it is not *za-l*, but a different form of 'three', *esa-l*, which is found in conjunction with *kez palchl*. Again, in the Dshar *cha-bgo*, 'three' (*ante*, p. 21), *cha* is 'one', but in the Dshar *u-chgo*, 'four', *-ch* is 'two'. An Etruscan *za-* might in like manner be 'one' in *za-l*, while *-z* was 'two' in *ke-z*: and besides this, if *kez* is not 'seven', it must be 'nine', for

kiemzath-, as we shall see, is 'eight-'. But 93 is a very great age, and *ke-z* is less like *ki-huth* than it is like *ki-thu*.

The following appear to be the nearest parallels to *kez*, 'seven'; but that they are all allied to the Etruscan and to one another, is more than can be absolutely affirmed :—

'Seven'.

ETRUSCAN *kez*

DRAVIDIAN.

Tamil *ezh* (*zh* = *s* in *pleasure*)

ezhu

Kolami *yed*

Madi *yedu*

Gondi *yetu*

Yerukala *yegu*

vogu

Kuri *yeiku*

Keikadi *yal*¹

TURKISH.

Osmanli *yedi* (cf. Kolami *yed*)

Usbek *edi*

Kirghiz *ǰede*

Nogay *siti*

FINNISH.

Hungarian *het*

Lapponic *kietja*

Esthonian *seitse*

CAUCASIAN.

Ude *wugh* }
Abkhasian *bzhba* } cf. Dravidian *vogu*, *ezh*.

¹ According to Bishop Caldwell, the primitive form of the Dravidian 'five' is *ei*, and of 'seven', *edu*, *élu*, or *éru*: three forms easily resolved into 'five-two', and where the 'five' and the 'two' seem the same as in the Etruscan *ke-z*, and = Etruscan *ki*, 'five', and *thu*, 'two'. The Keikadi 'seven', *ya-l*, is 5 + 2, as the Etruscan 'three' *za-l*, is 1 + 2.

Georgian <i>shvidi</i>	}	cf. Turkish <i>siti</i> , <i>gede</i> ; Finnish <i>seitse</i> . ¹
Mingrelian <i>shqvithi</i>		
Suanian <i>ishkvid</i>		
Lazic <i>shkit</i>		
CHINESE.		
Amoy <i>éit</i>		
Canton <i>z'at</i>		
TAIC.		
Siamese <i>éet</i>		
Laos <i>zét</i>		
MALAY.	}	complete form, <i>tviǵuh</i> : cf. Georgian <i>shvidi</i> , etc.
Proper <i>tuǵuh</i>		
Java <i>pitu</i>		
Madagascar <i>fitu</i>	}	cf. Finnish <i>het</i> , <i>kietja</i> .
Saparua <i>hitu</i>		
Timor <i>hetu</i>		
Rotuma <i>hithu</i>		(cf. ETRUSCAN <i>ki-thu</i> , 'five-two').
New Zealand <i>witu</i>		
Guam <i>fiti</i>		
Gebe <i>fit</i>		
Caroline <i>fiz</i>	}	cf. ETRUSCAN <i>kez</i> , 'seven'.
New Ireland <i>his</i>		

If we select from these the closest parallels to the Etruscan, we shall find the list to be as follows:—

'Seven'.

Chinese *éit*

Siamese *éet*

¹ If all these 'sevens' could be referred to a common origin, the fullest form of the numeral would be found in the Caucasian *shqvithi* and *ishkvid*, implying *shqvi-* or *ishkvi-*, 'five', and *-thi* or *-d*, 'two'. Compare *ishkvi*, 'five', with the Basque *esku*, 'hand'. On the possible identity of Turanian, Aryan and Semitic 'sevens', see Max Müller in Bunsen's *Philosophy of History*, i, 451; and compare my *Numerals as Signs of Primeval Unity among Mankind*, p. 15.

'Seven'.

Finnish *het**kietja*ETRUSCAN *kez*Malay *his**fiz*Caucasian *bzh*Dravidian *ezh*

Finally, if we take the Etruscan *esal kez palchl*, 'seventy-three', which would consist of 'three', 'seven', and 'ten' or 'decade', we may obtain for it the following parallels, derived individually from various languages of the same family, although the factors compared, in any one of the horizontal lines, are not derived from a single language, but from several languages, of that family:—

	'Three'.	'Seven'.		
Malay	<i>tal</i>	<i>fiz</i>	<i>fulu,</i>	'ten'.
	<i>etalu</i>	<i>his</i>	<i>puluh,</i>	'decade'.
ETRUSCAN	<i>zal</i>		<i>-phalch-l,</i>	'ty'.
	<i>esal</i>	<i>kez</i>	<i>palch -l,</i>	'decade'.
Finnish	<i>kolm</i>	<i>kietja</i>	<i>pelu,</i>	'finger'.
	<i>kum</i>	<i>het</i>	<i>pelge,</i>	'thumb'.
Caucasian	<i>gum</i>	<i>bzh</i>	<i>palk',</i>	'finger'.
	<i>sami</i>	<i>shvidi</i>	<i>vez -al,</i>	'ten'.
Siamese	<i>sam</i>	<i>ét</i>		
Chinese	<i>sam</i>	<i>ét</i>		
Tataric		<i>yedi</i>	<i>pilik,</i>	'five'.

Zathrum, 'thirty', and kiemzathrm, 'eighty'.

Having now considered all the multiples of ten which contain the first Etruscan decade, we have next to consider those which contain the second decade. They are two in number, *zathrum* or *zathrm*, and *kiemzathrm*. *Zathrum* must be the '-ty' of *zal*; for that numeral ought, like the rest, to

have a corresponding multiple of ten, which multiple must be sought among the Etruscan '-ties', *mealchl*, *muvalchl*, *kealchl*, *semphalchl*, *kez palchl*, *zathrum*, and *kienzathrum*. Among these, there cannot be a doubt that *zathrum* should be chosen as the multiple of *zal*, whatever the value of *zal* may be. If, then, we can determine the value of *zathrum* first, we shall have another and an independent method of determining the value of *zal*. This, therefore, we will now proceed to do.

Mach zathrum is known, from the effigy which accompanies the epitaph, to be the age of a man in the physical prime of life. He would, therefore, be considerably under fifty. If we suppose *zathrum* to be 'twenty', *zal* would be 'two', and therefore its opposite on the dice, *mach*, 'four'. If *zathrum* be 'thirty', *zal* would be 'three', and *mach*, 'one'. Finally, if *zathrum* be 'forty', *zal* would be 'four', and *mach*, 'two'. Thus the age of the man, *mach zathrum*, would be 24, or 31, or 42 years. But, as the man died in the prime of life, we can have little hesitation in selecting 31 as the most appropriate of these ages. At 24 the prime of life is hardly reached, and at 42 it is already passed.¹

We thus reach the same conclusion as before, that *zal* is 'three', and therefore *mach*, 'one'; so that, as *ki* and *sa* would be 'five' and 'six' (*ante*, p. 9), *thu* and *huth* remain for 'two' and 'four'.

In *zath-rum*, 'thirty', 3×10 , *zath-*, 'thir-', would = *zal*, 'three', just as, in Africa, the Bamom *tat*, 'three', is = Gura *tal*, 'three': and *za-th-*, 'three', = 'one-two', corresponds

¹ "The Prince, in a simple letter, informed her that he was already past his prime, having reached his forty-second year."—Motley's *Rise of the Dutch Republic*, part IV, chap. 3.

"He looked like a gay ruffling serving-man, whose age might be betwixt thirty and thirty-five, the very prime of human life."—*Kenilworth*, chap. xiii.

"For, howe'er we boast and strive,
Life declines from thirty-five."

JOHNSON, in *Piozzi's Anecdotes*.

closely to *hu-th*, four, = 'two-two'. In *zath-rum*, it is the African languages which approach the Etruscan most closely, as will be readily seen by the following comparisons:—

CAUCASIAN.

Anzug <i>tav</i> ,	.	'three'.
<i>teb</i>	- <i>er</i> ,	'thirty'.
Chunsag <i>shab</i> ,	.	'three'.
<i>teb</i>	- <i>er</i> ,	'thirty'.
ETRUSCAN <i>zal</i> ,	.	'three'.
<i>zath</i>	- <i>rum</i> ,	'thirty'.

AFRICAN.

Momenya <i>ntad</i> ,	.	'three'.	
	<i>gum</i> ,	.	'ten'.
	- <i>ñgum</i> ,	.	'-ty'. ¹
Bagba <i>tad</i> ,	.	'three'.	
	<i>gum</i> ,	.	'ten'.
	- <i>ñgum</i> ,	.	'-ty'.
Balu <i>itat</i> ,	.	'three'.	
	<i>rom</i> ,	.	'ten'. ²
	- <i>ñgam</i> ,	.	'-ty'.
Dsawara <i>tat</i> ,	.	'three'.	
	<i>lum</i> ,	.	'ten'.
Gura <i>tal</i> ,	.	'three'.	
Dsuku <i>zala</i> ,	.	'three'.	
Marawi <i>tatu</i> ,	.	'three'.	
	<i>kumi</i> ,	.	'ten'.
Sechuana <i>taru</i> ,	.	'three'.	
	<i>shumi</i> ,	.	'ten'.
Boko <i>aro</i> ,	.	'three'.	

¹ Numerals above 'twenty' are not given in Kölle's *Polyglotta Africana*. In Momenya, *mbe* is 'two', and *be-ñgum* is 'twenty'.

² The initial letter in this African 'ten' has, according to Kölle, the sound of the Arabic *ghain*; "a harsh sound", says Gesenius, "uttered in the bottom of the throat with a kind of whirring, so that it comes very near to the letter *r*." It is the initial letter of the word which we write *razzia*.

	BASQUE	<i>hiru,</i>	.	'three'.	
			<i>amar</i>	}	'ten'. ¹
			<i>ama-</i>		
	MALAY.				
		Saparua	<i>oru,</i>	.	'three'.
		New Zealand	<i>toru,</i>	.	'three'.
			<i>kumi,</i>	.	'ten'.
		Ende	<i>talū,</i>	.	'three'.
		Caroline	<i>tal,</i>	.	'three'.
		Hawaii	<i>kolu,</i>	.	'three'.
			<i>umi,</i>	.	'ten'.
	FINNISH.				
		Esthonian	<i>kolm,</i>	.	'three'.
			<i>kümme,</i>	.	'ten'.
	TURKISH.				
		Osmanli	<i>on,</i>	.	'ten'.
			<i>-rmi,</i>	.	'-ty'. ²
<p>From <i>zathrum</i>, 'thirty', we proceed to the last Etruscan '-ty', <i>kiemzathrm</i>, 'eighty', 'eight' being here = 5 + 3 :—</p>					
	ETRUSCAN	<i>kiem</i>	<i>-zath</i>	<i>-rm,</i>	'eighty'.
		<i>ki,</i>	.	.	'five'.
			<i>zal,</i>	.	'three'.
	AFRICAN.				
		Momenya	<i>kie</i>	.	'five'.
			<i>ntad,</i>	.	'three'.
				<i>-ñgum,</i>	'-ty'.
		Balu		<i>rom,</i>	'ten'.
			<i>tan,</i>	.	'five'.
			<i>tato,</i>	.	'three'.
			<i>tun</i>	<i>-dato</i>	}
			<i>tun</i>	<i>-dat</i>	
				.	'eight'.

¹ The final *r* in *amar* would not be radical. *Amaika* is 'eleven', and *amabi*, 'twelve', etc.

² In *yighi-rmi* or *yi-rmi*, 'twenty', *iki* being 'two'. 'Thirty' is *otuz*, with a different '-ty'.

AFRICAN.

Gura	<i>tal,</i>	.	.	'three'.
	<i>de</i>	<i>-tal,</i>	.	'eight'.
Pulo	<i>tati,</i>	.	.	'three'.
	<i>ǵe</i>	<i>-tati,</i>	.	'eight'.

CAUCASIAN.

Kasi Kumük	<i>cheva,</i>	.	.	'five'.	
	<i>shanva</i>	.	.	'three'.	
Georgian	<i>khethi,</i>	.	.	'five'.	
	<i>sami,</i>	.	.	'three'.	
Chunsag	<i>shugo,</i>	.	.	'five'.	
	<i>shabgo,</i>	.	.	'three'.	
			<i>-ergo,</i>	.	'ty'.
Anzug	<i>shogo</i>	.	.	'five'.	
	<i>tavgo</i>	.	.	'three'.	
			<i>-ergo,</i>	.	'ty'.
Ude	<i>qho</i>	.	.	'five'.	
	<i>chib,</i>	.	.	'three'.	

Kiemzal or kiemzath, 'eight'.

Turanian and Iberian 'eights', where their formation can be made out, generally resolve themselves into 'two-two-two', or occasionally into 'two-' (from) -'ten': but, in Africa, 'eight' is very commonly 'five-three', as the Etruscan *kiemzath* appears to be, when it is compared with the dice-numerals, *ki*, 'five', and *zal*, 'three'. Indeed, in these two forms, *zathrum* and *kiemzathrm*, the claims of African languages to affinity with the Etruscan far surpass those of any other family, as the preceding tables will have made evident; although the African language which comes nearest to the Etruscan in 'five', *i.e.*, the Momenya, which has there *kie* to compare with the Etruscan *ki*, exhibits in *fo*, 'eight', no resemblance to the Etruscan *kiemzal* or *kiemzath*. But, if we consider the two forms of 'fifteen' in Momenya, *i.e.*, *ǵokie*, 10 + 5,

and *kienġo*, $5 + 10$, we get, from the last of these forms, *kien-*, 'five'. Next, adding to *kien-*, 'five', the Momenya *ntad*, 'three', = Bagba *tad*, = Gura *tal*, = Etruscan *zal*, we obtain from the Momenya, *kientad*, $5 + 3$, = Pulo *ġetati*, 'eight', = Gura *detal*, 'eight', to compare with the Etruscan 'eight', *kiemzath* or *kiemzal*. Finally, affixing to the Momenya *kientad*, $5 + 3$, the Balu 'ten', *rom*, = Dsawara *lum*, = Momenya *gum*, we obtain *kientadrom* ($5 + 3$) \times 10, to compare with the Etruscan *kiemzathrm*, 'eighty'. The Bagba *tad*, 'three', and the Balu *rom*, 'ten', would likewise give us *tadrom*, 3×10 , to compare with the Etruscan *zathrum*, 'thirty'.

As an epenthetic *m* is found in Etruscan, and *n* in African, so *m* is found in the Georgian *ormozi*, 'forty' (*ori*, 'two', *ozi*, 'twenty'), and *n̄* in the Java *pitañpuluh*, 'forty', (*pat*, 'four', *puluh*, 'decade').

Dr. Isaac Taylor's interpretation of zathrum and kiemzathrm.

Zathrum and *kiemzathrm* are employed by Dr. Isaac Taylor to supply the foundation on which his scheme of Etruscan numeration has been raised; a scheme which, in the dice-numerals, only agrees with that deduced by Campanari, and adopted by myself, in *mach*, 'one', and *zal*, 'three'. Having perceived that the Etruscan *zathrum* bore a certain resemblance to the Yeniseian *saithjuñ*, 'forty', in Siberia, Dr. Taylor was led by that resemblance to believe in the identity of these two multiples of 'ten', and thence to infer, as *saithjuñ* resolves itself into *sai-thjuñ*, that *-thrum* must be an Etruscan 'decade' or 'ten', and *za-* an Etruscan 'four', *za-* being assumed as identical with the Etruscan dice-numeral *sa*. *Sa* being thus taken as 'four', its opposite on the dice, *ki*, must be 'two', as Dr. Taylor consistently holds it to be. And these deductions he holds to be made

certain by the form *kiemzathrm*. "There are various subsidiary proofs", he says, "that we are right so far in taking *sa* as 'four', and *ci* as 'two'. First, the effigy of the man whose age is *machs zathrums* represents a man in the prime of life"—Dr. Taylor differs from Dr. Johnson and Sir Walter Scott as to what the prime of life is—"and we have seen that *zathrum* ought to mean 'forty'"—*i.e.*, because it is something like *saithjuñ*, for there is no other reason. "Again, the decade *ci-em-zathrms* must denote some multiple of 'forty', and, as 120 and 160 are impossible ages, *ci-em* must mean 'twice', and *ci-em zathrms* must be 'eighty'. This is confirmed by the effigy on the sarcophagus, which represents a very aged man." And then Dr. Taylor adds: "there is no escape whatever from this conclusion."

But, even if *zathrum* were 'forty', which there is every reason for believing it not to be, it would not follow that *kiemzathrm(s)* "must denote some multiple of forty". The dice-numeral in *zathrum* need not be combined by multiplication with *ki* in *kiemzathrm*. As Dr. Taylor has here taken us among the Yeniseians, we will go no further to test this than to another of their languages, the Kamacintzi, of which the numerals are given in Pott's *Zählmethode*, and in Dr. Latham's *Comparative Philology*. Among them we find *tonga*, 'three', and *tonga-tu*, 'thirty'; *-tu*, of course, being 'decade', and identical with *-tung* or *-tuñ* in *yn-tuñ*, 'twenty', where *yn-* is = *ynæ*, 'two', and *-tuñ* corresponds to *-thjuñ*, or *-thyuñ* (for the *j* is a German *j*), in the Yeniseian *sai-thjuñ*, *sai-* being = Kamacintzi *shagæ*, 'four'. In addition to these '-ties', there is another in Kamacintzi, *cheltongtu*, which ought to be a multiple of *tongatu*, 'thirty', if Dr. Taylor is right when he argues that *kiemzathrm* must necessarily be a multiple of *zathrum*. But *cheltongtu* is no multiple of *tongatu*, although it is the age of a very old man, and *tongatu* that of a man in the real prime of life. *Tonga*, 'three', gives *tonga-tu*, 'thirty'; and *cheltonga*, 'eight',

gives *cheltong-tu*, 'eighty'; *chel-tonga*, 'eight', being = 'five-three', as *khel-ina*, 'seven', is = 'five-two'. In like manner, if *kiem-* be 'five' in Etruscan, and *zath-* be 'three', *zathrum* may be 'thirty', and *kiemzathrm*, 'eighty'. Indeed, these numerals have already been explained from the African p. 31) as if they had been formed precisely on the same model as that on which the corresponding Kamacintzi numerals have been constructed. The parallels between the Etruscan and the African I need not here repeat; but I may add, if only to show how 'five' may take different forms, as in the Etruscan *ki* and *kiem-*, and the African *kie* and *kien-*, the following comparison between the Etruscan and the Yeniseian:—

ETRUSCAN	<i>ki</i> ,	.	.	'five'.
		<i>zal</i> ,	.	'three'.
		<i>zath</i>	<i>-rum</i> ,	'thirty'.
	<i>kiem</i>	<i>-zath</i>	<i>-rm</i> ,	'eighty'.
YENISEIAN.				
	Kamacintzi	<i>hkagæ</i> ,	.	'five'.
		<i>tonga</i> ,	.	'three'.
		<i>tonga</i>	<i>-tu</i> ,	'thirty'.
	<i>chel</i>	<i>-tong</i>	<i>-tu</i> ,	'eighty'.
	<i>chel</i>	<i>-tonga</i> ,	.	'eight'.
	Arini	<i>khala</i> ,	.	'five'.
		<i>tyonga</i> ,	.	'three'.
	Kot	<i>khel</i>	<i>-tonga</i> ,	'eight'.
		<i>khega</i> ,	.	'five'.
		<i>tongya</i> ,	.	'three'.

That 'eighty' should be 'five-three-ten' is simple enough; but Dr. Taylor's mode of forming 'eighty' is less simple, and still remains open to objection, even when the assumption is made that *zathrum* is 'forty', merely because *saithjuñ* is 'forty' in a Yeniseian language. It is common, no doubt,

to reckon by multiples of *ten*, and by multiples of *score* or *twenty*; but to reckon by multiples of *forty* would be something very unusual, if not unprecedented. We are acquainted with forms for 'eighty' like the English *fourscore*, the French *quatre-vingts*, and the Georgian *othkhmozi* (*othkhi*, 'four', *ozi*, 'twenty', with an epenthetic *m*); but a form like *deux-quarantes* is something quite different from these. How, if the Etruscan system of numeration were quadragesimal, did they manage to express 'twenty', 'thirty', 'fifty', 'sixty', and 'seventy'? Dr. Taylor's magic "key" does not open this lock for us, but only hampers it. For he gives us no more than three Etruscan decades; two for 'forty', *zathrum* and *kealchl*, and one for 'eighty', *kiemzathrm*. And every element in these three may be shown to be wrong.

But, though 'eighty' would not be 2×40 , Dr. Taylor's cause is not yet lost, if his pleading is amended for him: for 'eight' may undoubtedly be 2×4 ; and thus *kiem-za-thrm* might be 'eighty', $2 \times 4 \times 10$, if we had any previous reason for believing *ki* to be 'two', *za* to be 'four', and *thrm* or *thrum* to be 'ten'. Yet we cannot be said to have any such reason: nor are these conclusions drawn merely without reason, but even against reason. For all rests here upon three assumptions:—(1) that *zathrum* is 'forty'; (2) that it is to be divided into *-thrum*, 'ten', and *za-* 'four'; (3) that *za-* is identical with the dice-numeral *sa*. Yet Dr. Taylor holds at the same time the general opinion that *zal* is 'three'; and there is no multiple of ten but *zathrum* which can belong to *zal*. Moreover, he interprets *sesph* (a reading which he prefers to *semph*) as *sa* + 10, so that *semphalchl* (which he would read *sesphalchl*) should be the multiple of ten which begins with *sa*. It is morally impossible that the three forms, *semph*, *semphalchl*, and *zathrum*, should all belong to *sa*, and not one of them to *zal*. Surely, one '-teen' and one '-ty' are enough for *sa*, or for any other digit. If *zal*

be 'three', *zathrum* must be taken as 'thirty', not as 'forty', *zath-* being then 'thir-', and *-rum*, 'ty'. And thus, if *kienzathrm* be 'eighty', as both Dr. Taylor and myself hold, then *kienzath-* would be 'eight-'; and therefore, as *zath-* would = *zal*, 'three', *kien-* and *ki* would be 'five', and not 'two', as he would make them. Numerals may be combined by addition as well as by multiplication: indeed, Dr. Taylor himself so combines them when he obtains an Etruscan 'score', *lchl*, from the Lapponic *lokke* + *lokke*, 10 + 10, though the Lapponic 'twenty' is *qwekte lokke*, 'two-ten', and the Lapponic 'hundred', *lokkad lokke*, 'tenth ten'. We know, too, that 'eight' is resolvable into 5 + 3, as well as into 2 × 4. In Africa, for instance, the Pulo *ǰetati*, 'eight', is = Pulo *ǰowi-tati*, 'five-three'; and, in Siberia, the Yeniseian 'eights', *chel-tonga* and *geil-taniang*, are each = 'five-three'.

The elements of *kien-zath-rm*, 'eighty', are supplied, as we have seen, by the African *kien-*, 'fif-', *tad*, *tal*, etc., 'three', and *rom*, 'ten'; and it was, besides, inferred on independent grounds, and before analysing *zathrum* and *kienzathrm*, that the Etruscan dice-numerals, *zal* and *ki*, were 'three' and 'five' respectively. Dr. Taylor, on the other hand, starts with the supposition that *za-thrum* is = Yeniseian *sai-thjuñ*, 'forty'; and this, even though he considers that the Etruscans had another 'forty', *ke-alchl*, 'two-score'.¹ As, however, *-alchl* does not signify 'score', but 'ten',—for *mealchl*, *muvalchl*, *kealchl*, *semphalchl*, and *kez palchl* could not be five different 'scores', unless one of them were as much as *five-score*—it follows that *ke-alchl* would be 'twenty', and not 'forty', if *ki* were 'two', so

¹ If the Yeniseian *-thjuñ* (= *-thyuñ*), '-ty', may be assumed as = Etruscan *-thrum* it may be so, *a fortiori*, as = Mæso-Gothic *taihun*, 'ten', and Crimean Gothic *thüne*, *thune*, 'ten', and *-thyen*, '-ty'. This would identify, not only the Etruscan *sa*, but also the Gothic *saihs*, *seis*, with the Yeniseian *sai-*, 'four'.

that the argument against *zathrum* being 'forty' would derive no additional force from Dr. Taylor's erroneous interpretation of *kealchl*.

Zal is considered by him to be 'three', as being like the Yukahiri *yal-on*, 'three', in N.E. Siberia; and I do not dispute the ultimate identity of the Yukahiri *yalon*, the Mantshu *gilañ*, and the Fin *kolme*, 'three', with the Etruscan *zal*, the African *zala*, *tal*, *tat*, the Malay *tal*, *talu*, the Chinese and Siamese *sam*, the Georgian *sami*, the Talatui (California) *teliko*, and other similar 'threes'. But if, with Dr. Taylor, we make *ki* and *sa*, instead of *thu* and *huth*, to be 'two' and 'four', then one of our reasons for inferring *zal* to be 'three' would be much weakened. For it is not *ki*, *zal*, *sa*, but *thu*, *zal*, *huth*, which are analogous to such sequences of 'two, three, four', as the Malay *dua*, *tulo*, *pat*, or *ru*, *tul*, *hat*; or to the Tungusian *gúa*, *gilañ*, *tuye*; or to the Californian *oyoko*, *teliko*, *oissuko*; or to the Caucasian *kigo*, *shabgo*, *achgo*. And, if *sa* be 'four', and *zal*, 'three' (which implies *mach*, 'one'), then *mach semphalchl* would be 'forty-one', which could not be the age of an old man, as we know it to be from the effigy. In fact, Dr. Taylor argues that *mach zathrum* is 'forty-one', because the effigy there represents a man in the prime of life. He could hardly therefore interpret *mach semphalchl*, which is the age of an old man, as also 'forty-one'; but must be content with making *sa* to be 'six' or 'five', and consequently *ki*, 'five' or 'six'.

When *thu*, *zal*, and *huth* have been identified with 'two', 'three', and 'four', it necessarily follows, from Campanari's law, not only that *mach* is 'one', but also that *ki* is 'five', and *sa*, 'six' (*ante*, p. 8). But, on the other hand, even if Dr. Taylor were allowed to be right in the first four Etruscan dice-numerals, yet that law would not admit of his interpretation of *thu* as 'five', and of *huth* as 'six'. If he takes, as he does, and as the law will permit him to do, *mach* as

'one', *ki* as 'two', *zal* as 'three', and *sa* as 'four', he ceases to have any further option allowed him. *Huth* must then be 'five', and *thu*, 'six'. For, if we hold the Etruscan die with *zal* uppermost, and *sa* facing us, then *sa* will thus face us with *huth* on our right hand, or in the place of 'five', and *thu* on our left hand, or in the place of 'six'. Yet, while thus transposing *huth* and *thu*, and being aware that he does so, Dr. Taylor can yet believe that "the correspondence is so close as to clench the argument". Is there then, we may ask, when almost every link has a flaw—for there is nothing right but *mach*, 'one', and *zal*, 'three', *kiem-zà-thrm* being faulty in its three elements, and in its composition—is there "no escape whatever" from the chain of reasoning which is to establish the Siberian character of the Etruscan numerals?

Thunesi, a genitive of *thu*, 'two'.

There remains one other numerical form for consideration. It occurs in an epitaph, one of the most important in Etruscan (*Fabretti*, 2335*a*), terminating with these words:—

avils thunesi muvalchls lupu.

ætatis XL *obiit.*

As we already know the Etruscan digits from 'one' up to 'eight', it may seem probable, as it did once to me, that *thunesi* is 'nine'. If it were so, there would be another analogy between the Etruscan and the African, for African languages will give us the following 'nines', all reducible to 'five-four':—

Matatan *tan na ġeshe*, 5 + 4.

Bute *tenasib*.

Kamuku *tandashi*.

Basa *tindishi*.

'Five' and 'four' are in Bute *n̄gei* and *nasib*; in Kamuku, *taa* and *nashi*; and in Basa, *tana* and *nashi*: so that we perceive at once that the *-b* in *tenasib* is merely a suffix, and that in *tandashi* and *tindishi* the *d* is intrusive after *n*, as in *tender*, *cinder*, *jaundice*, and *Vendredi*. We have thus, as it were, 'nines' like *tenasi*, *tanashi*, and *tinishi*, to compare with the Etruscan *thunesi*.

There is, however, an objection, which appears to me conclusive, against interpreting *thunesi* as 'nine'. Etruscan numerals in epitaphs are always found affected with a genitive suffix in *s*. Thus we have *machs*, *esals*, *huths*, *kis*, and *sas*, by the side of the dice-numerals, *mach*, *zal*, *huth*, *ki*, and *sa*; but there is no corresponding form for the remaining dice-numeral, *thu*, unless it be *thunesi*. We should, however, even then, be without genitives for 'seven', 'eight', and 'nine'; so that we might also be without a genitive for 'two'. Now, it seems that the *-si* of *thunesi* may be identified with the *-s* of *machs*, *esals*, *huths*, *kis*, and *sas*; or, at least, that *-si* is a genitive termination. For, on one Etruscan vase occurs the word *Atrane*, and on the handle of another, *Atranesi*; while we find again, on two lamps, the same forms, *Atrane* and *Atranesi*, which would probably be the nominative and genitive of the name of the potter; a genitive which appears in the inscription, *La. Pu. Atranes*, under the form, *Atranes*. In Georgian, likewise, we have the double genitive, *amis* and *amisi*, 'of this', and *imis* and *imisi* 'of him': and, while the genitive of *Kriste*, 'Christ', is *Kristes*, the genitive of *Joane*, 'John', is *Joanesi*.¹

If the *-si* of *thunesi* be thus taken as a genitive termination, there would remain *thune-*, which would either have to be considered as a secondary form of *thu*, 'two', or else

¹ A primeval, if not a nearer affinity to the Aryan genitive suffix, *-sya*, may be suspected in *-s* and *-si*. As far as I am aware, it is only in the Georgian branch of the Caucasian languages that genitives in *s* are found. In Aryan languages they are general.

as 'nine'. In this last case, it might be compared with the African 'nines', *tene* (Dahome) and *tani* (Ndob). But I prefer considering it as a secondary form of *thu*. For, among the Caucasian 'twos' which have been compared with *thu*, one was the Thusch *shi*, which is also Tshetsh. But, in Thusch, the base of *shi*, 'two', is *shin*, which appears in the oblique cases, *shinna*, *shinva*, *shinchi*, and *shingo*, though not in the illative *shilo* (*Schiefner*, p. 46). In Tshetsh, again, according to *Schiefner* (p. 18), *shi*, 'two', takes the form *shini* in the oblique cases. Thus, if the Etruscan *thu*, 'two', be = Thusch and Tshetsh *shi*, 'two', it might take in an oblique case, as *thunesi* is, the form *thune*, corresponding to the Thusch *shin* and the Tshetsh *shini*. In a specimen of the Georgian language given by *Brosset* (p. 268, *sqq.*), the nominative of Constantine is given as *Kostanti* and *Kostantine*, and its genitive as *Kostantinesi*. *Kostanti*, *Kostantine*, and *Kostantinesi*, are forms like the Etruscan *thu*, *thune*, and *thunesi*.

The result of our investigation, which is now concluded, is, that we know all the Etruscan digits from 'one' up to 'eight', in addition to one '-teen', and all the '-ties' from 'twenty' up to 'eighty'. What now remains to do is to sum up the evidence obtained, and thence to decide finally upon the source, or sources, to which the Etruscan system of numeration is to be referred. With this end in view, I will first present four tabular views of the affinities of the Etruscan numerals from 'one' up to 'ten' or 'decade'. These affinities, or analogies, are with the Malay, the African, the Iberian, and the Finnish families of language.

Etruscan and Malay numerals compared.

ETRUSCAN.	MALAY.			
	Java.	New Ireland.	Caroline.	Hawaii.
1. <i>mach</i>				
2. <i>thu</i>	<i>ru</i>	<i>ru</i>	<i>ru</i>	<i>lua</i>
3. <i>zal</i>	<i>telu</i>	<i>tul</i>	<i>tal</i>	<i>kolu</i>
4. <i>huth</i>	<i>pat</i>	<i>hat</i>	<i>tan</i>	<i>ha</i>
5. <i>ki</i>				
6. <i>sa</i>				
7. <i>kez</i>	<i>pitu</i>	<i>his</i>	<i>fez</i>	<i>hiku</i>
8. <i>kiemzal</i>				
or				
<i>kiemzath</i>				
9.				
10. <i>palchl</i>	<i>puluh</i>			
<i>-alchl</i>				
<i>-rum</i>				<i>umi</i>

Malay languages thus explain five of these Etruscan numerals, 2, 3, 4, 7, 10, while they fail to explain four, 1, 5, 6, 8. But all these last may be explained from African languages, in addition to 3 and one 10.

Etruscan and African numerals compared.

ETRUSCAN.	AFRICAN.				
	Momenya.	Basa.	Gura.	Kamuku.	Banyun.
1. <i>mach</i>	<i>mo</i>				
2. <i>thu</i>					
3. <i>zal</i>	<i>ntad</i>	<i>tatu</i>	<i>tal</i>	<i>tato</i>	<i>halal</i>
4. <i>huth</i>					
5. <i>ki</i>	<i>kie</i>			<i>ta</i>	<i>kilak</i>
6. <i>sa</i>	<i>tu</i>	<i>dshihi</i>			
7. <i>kez</i>					

Etruscan and African numerals compared.

	ETRUSCAN.		AFRICAN.		
	Momenya.	Basa.	Gura.	Kamuku.	Banyun.
8.	<i>kiemzal</i>		<i>detal</i>		<i>kilagalal</i>
	or				
	<i>kiemzath</i>	<i>ndatu</i>		<i>tundat</i>	
9.					
10.	<i>palchl</i>				
	<i>-alchl</i>				
	<i>-rum</i>	<i>gum</i>			

Etruscan and Iberian numerals compared.

	ETRUSCAN.		IBERIAN.			
	Georgian.	Circassian.	Abkhasian.	Thusch.	Anzug.	Basque.
1.	<i>mach</i>	<i>mkholo</i> ¹				
2.	<i>thu</i>		<i>gwba</i>	<i>shi</i>	<i>kigo</i>	<i>bi</i>
3.	<i>zal</i>	<i>sami</i>			<i>targo</i>	
4.	<i>huth</i>	<i>othkhi</i>	<i>phshba</i>	<i>dhev</i>	<i>uchgo</i>	<i>lau</i>
5.	<i>ki</i>	<i>khethi</i>	<i>chuba</i>	<i>phchi</i>	<i>shogo</i>	
6.	<i>sa</i>					<i>sei</i>
7.	<i>kez</i>		<i>bzhba</i>			
8.	<i>kiemzal</i>					
	or					
	<i>kiemzath</i>					
9.						
10.	<i>palchl</i>					
	<i>-alchl</i>					
	<i>-rum</i>				<i>-ergo</i>	<i>ama-</i>

Etruscan and Finnish numerals compared.

	ETRUSCAN.		FINNISH.		
	Lapponic.	Esthonian.	Hungarian.	Tsherimiss.	
1.	<i>mach</i>				
2.	<i>thu</i>				
3.	<i>zal</i>	<i>kolm</i>	<i>kolm</i>	<i>harom</i>	<i>kum</i>
4.	<i>huth</i>				
5.	<i>ki</i>				
6.	<i>sa</i>				

¹ See *ante*, p. 21, and compare the neighbouring Armenian *mék*, 'one'.

² Also *tku*, in *ótshiri tkuri*, 'twenty-two', *ótshi* being 'twenty', in Georgian, *otsi*, and in Basque, *ogei*.

³ Also *bit*, in *ótshiri betli*, 'twenty-four'.

Etruscan and Finnish numerals compared.

ETRUSCAN.	FINNISH.			
	Lapponic.	Esthonian.	Hungarian.	Tsherimiss.
7. <i>kez</i>	<i>kietja</i>	<i>seitse</i>	<i>het</i>	<i>sim</i>
8. <i>kiemzal</i>				
or				
<i>kiemzath</i>				
9.				
10. <i>palchl</i>				
<i>-alchl</i>				
<i>-rum</i>		<i>kümme</i>		

Here the falling off in affinity is decided ; and this falling off is still more decided, when we compare the Etruscan numerals with the Turkish *bir, iki, üç, dört, besh, alti, yedi, sekiz (dokuz), on*. And yet we are told by Dr. Taylor that "it must be admitted that the Etruscan numerals are decisively Turanian". But it is manifestly not in the direction of the Ural, rather than in that of the Caucasus or of the Atlas, that the comparison of numerals would lead us to look for any element of the population of Etruria.

As Turkish and Finnish languages resemble Etruscan in 'seven', so do Aryan languages in 'one', 'two', and 'six' ; and Tungusian and Californian languages in 'two', 'three', and 'four' (*ante*, p. 37). But the three classes of languages which come nearest to the Etruscan are clearly the African, the Malay, and the Iberian. Our last step will therefore be to compare these with the Etruscan in greater detail.

Full comparison of Etruscan, African, Iberian, and Malay numerals.

ETRUSCAN.	AFRICAN.	IBERIAN.	MALAY.
1. <i>mach</i>	<i>moko</i> ¹ <i>mo</i> ³	<i>mkholo</i> ²	
2. <i>thu</i>	<i>do</i> ⁴	<i>shi</i> ⁵ <i>khi</i> ⁷ <i>pha</i> ⁹ <i>bi</i> ¹⁰ <i>ô</i> ¹¹	<i>dua</i> ⁶ <i>hua</i> ⁸
<i>me-</i>			<i>rua</i> ¹² <i>lua</i> ¹³ <i>tal</i> ¹⁵
3. <i>zal</i> <i>esal</i>	<i>zala</i> ¹⁴ <i>azala</i> ¹⁶ <i>tal</i> ¹⁷ <i>itat</i> ¹⁹ <i>tath-</i> <i>tat</i> ²⁰ <i>tato</i> ²¹ <i>tatu</i> ²² <i>taru</i> ²³ <i>aro</i> ²⁵ <i>kerad</i> ²⁸ <i>shomt</i> ²⁹	<i>hiru</i> ²⁶ <i>sami</i> ³⁰ <i>shan</i> ³¹ <i>shab</i> ³²	<i>tal</i> ¹⁸ <i>toru</i> ²⁴ <i>oru</i> ²⁷

¹ Undaza.⁴ Tibbu.⁷ Kasi Kumük (suffixes omitted).⁹ Ude.¹² Saparua.¹⁵ Ende.¹⁸ Caroline.²¹ Kamuku.²⁴ New Zealand.²⁷ Saparua.³⁰ Georgian.² Georgian.⁵ Thusch.¹⁰ Basque.¹³ Hawaii.¹⁶ Dsuku.¹⁹ Balu.²² Basa.²⁵ Boko.²⁸ Berber.³¹ Kasi Kumük.³ Momenya.⁶ Batta.⁸ Mayorga.¹¹ Circassian.¹⁴ Dsuku.¹⁷ Gura.²⁰ Bamom.²³ Udso.²⁶ Basque.²⁹ Coptic.³² Chunsag.

Full comparison of Etruscan, African, Iberian, and Malay numerals.

ETRUSCAN.	AFRICAN.	IBERIAN.	MALAY.
4. <i>huth</i>	<i>fudu</i> ¹	<i>oth</i> ²	<i>wutu</i> ³
	<i>fto</i> ⁴	<i>uch</i> ⁵	<i>hat</i> ⁶
	<i>kuz</i> ⁷		
<i>muu-</i>		<i>muq</i> ⁸	
	<i>de'e</i> ⁹	<i>dhev</i> ¹⁰	
		<i>bip</i> ¹¹	
		<i>boo</i> ¹²	<i>fah</i> ¹³
		<i>lau</i> ¹⁴	
	<i>haga</i> ¹⁵	<i>oko</i> ¹⁶	<i>haa</i> ¹⁷
5. <i>ki</i>	<i>kie</i> ¹⁸	<i>khe</i> ¹⁹	
		<i>che</i> ²⁰	
		<i>qho</i> ²¹	
		<i>shu</i> ²²	
		<i>se</i> ²³	
	<i>tie</i> ²⁴		
	<i>taa</i> ²⁵		
	<i>tan</i> ²⁶		
	<i>tana</i> ²⁷		
	<i>shan</i> ²⁸		
	<i>san</i> ²⁹		
	<i>kien</i> ³⁰		

¹ Houssa.⁴ Coptic.⁷ Berber.¹⁰ Thusch.¹³ Wahitaho.¹⁶ Kabutsh.¹⁹ Georgian.²² Chunsag.²⁵ Kamuku.²⁸ Tumu.² Georgian.⁵ Dshar.⁸ Kasi Kumük.¹¹ Ude.¹⁴ Basque.¹⁷ Rotti.²⁰ Kasi Kumük.²³ Dido.²⁶ Bamom.²⁹ Ndob.³ Ende.⁶ New Ireland.⁹ Tibbu.¹² Andi.¹⁵ Namaaqua.¹⁸ Momenya.²¹ Ude.²⁴ Bagba.²⁷ Basa.³⁰ Momenya.

Full comparison of Etruscan, African, Iberian, and Malay numerals.

ETRUSCAN.	AFRICAN.	IBERIAN.	MALAY.
6. <i>sa</i>	<i>soou</i> ¹	<i>sei</i> ²	
	<i>ġihi</i> ³	<i>shu</i> ⁴	
	<i>tu</i> ⁵		
<i>sem-</i>	<i>tun</i> ⁶		
7. <i>kez</i>			<i>his</i> ⁷
		<i>bzh</i> ⁸	<i>fiz</i> ⁹
			<i>fit</i> ¹⁰
			<i>fitu</i> ¹¹
			<i>pitu</i> ¹²
			<i>hetu</i> ¹³
		<i>wugh</i> ¹⁴	<i>hiku</i> ¹⁵
		<i>shridi</i> ¹⁶	<i>witu</i> ¹⁷
			<i>fik</i> ¹⁸
8. <i>kiemzal</i>	<i>detal</i> ¹⁹		
or	<i>tan na taro</i> ²⁰		
<i>kiemzath</i>	<i>tondad</i> ²¹		
	<i>tundat</i> ²²		
	<i>ndatu</i> ²³		
	<i>ġetati</i> ²⁴		
9. (caret)			
10. <i>palchl</i>			<i>puluh</i> ²⁵
<i>-phalchl</i>			<i>fulu</i> ²⁶
<i>-alchl</i>	<i>halak</i> ²⁷		<i>ulu</i> ²⁸

¹ Coptic.⁴ Circassian.⁷ New Ireland.¹⁰ Gebe.¹³ Timor.¹⁶ Georgian.¹⁹ Gura.²² Kamuku.²⁵ Java.²⁸ Tonga.² Basque.⁵ Momenya.⁸ Abkhasian.¹¹ Madagascar.¹⁴ Ude.¹⁷ New Zealand.²⁰ Matatan.²³ Basa.²⁶ Madagascar.³ Basa.⁶ Momenya.⁹ Caroline.¹² Java.¹⁵ Hawaii.¹⁸ New Guinea.²¹ Yagua.²⁴ Pulo.²⁷ Banyun.

Full comparison of Etruscan, African, Iberian, and Malay numerals.

ETRUSCAN.	AFRICAN.	IBERIAN.	MALAY.
	<i>ili</i> ¹		<i>wali</i> ²
	<i>kuli</i> ³		
	<i>kalawa</i> ⁴		
	<i>mulogo</i> ⁵		
<i>-rum</i>	<i>rom</i> ⁶		
	<i>lum</i> ⁷		
	<i>gum</i> ⁸		
	<i>kum</i> ⁹		
	<i>kumi</i> ¹⁰		
		<i>ama</i> ¹¹	<i>umi</i> ¹²
<i>-rm</i>	<i>aꝛum</i> ¹³	<i>-er</i> ¹⁴	

Etruscan numerals either Iberian and African, or Malay and African—Palæological evidence as to the earliest races in the South of Europe.

Of the three families of language which present in numeration the nearest analogies to the Etruscan, there is one, the African, which seems indispensable for the explanation of the Etruscan 'eight'. But it is not necessary to suppose that both an Iberian element and a Malay element co-existed with an African element in the Etruscan system of numeration. If an African element be combined, either with a Malay element, or with an Iberian element, the Etruscan numerals may be adequately explained. And it is the Iberian element which is here to be preferred to the Malay,

¹ Isoama.

⁴ Mandara.

⁷ Dsawara.

¹⁰ Marawi.

¹³ Param.

² Kisa.

⁵ Matatan.

⁸ Bagba.

¹¹ Basque.

¹⁴ Chunsag.

³ Boko.

⁶ Balu.

⁹ Babuma.

¹² Hawaii.

as the analogies with the Etruscan are in each case about on a par, as far as numerals are concerned. But other circumstances turn the scale in favour of the Iberian. For, when we come to consider the Etruscan language in general, as we shall soon do, we shall find further Iberian affinities, not only in words, but also in inflections or suffixes, in addition to affinities between Basque and Caucasian verbs as well as pronouns. The Caucasus, too, is much nearer to Etruria than are Malacca and the Eastern Archipelago; and it is remarkable that the ancients mention the names, *Iberi*, *Ligyres*, and *Tusci*, not only along the Mediterranean coast from the Straits of Gibraltar to the Tiber, but in the Caucasian regions as well. In Noricum, again, *Ligyrisci* are spoken of, and Cytæa in Colchis is called by Lycophron a *Ligustic* city.¹ From these considerations, taken in conjunction with the affinities of the Etruscan numerals, I should be led to infer that the Tuscans—the Pelasgians who, according to Scymnus Chius (so called), occupied Etruria in common with the Tyrrhenians from Lydia—were an Ibero-African race. They would have been subdued by some Aryans of the great Thracian family of nations, who retained them in subjection till the time of the Roman conquest of Etruria.

Two races thus appear to have settled before the Aryans in Etruria, and probably in Italy also—the Africans and the Iberians. Both would have issued originally from the cradle of mankind, which I believe to have been near the centre of the Old World; and the Africans, judging from their present area, which is the southern or south-western half of Africa, may be expected to have preceded the Iberians in passing the western limits of Asia, whence they are quite as likely to have spread themselves into Europe as into Africa, though it is also possible that they may have entered Europe from Africa at a later period.

¹ Cf. Diefenbach, *Celtica*, ii, p. 25.

Such is the inference from philology, when applied to the Etruscan numerals. It may be as well to compare it with the inferences drawn from other sciences.

That there were two races in Southern Europe before the arrival of the Aryans is an opinion commonly held by anthropologists. The second of these races in order of time, the Neolithic race, is considered by Professor Dawkins to have been Iberian, and to have included the Etruscans: a conclusion which will be seen to agree with my own to a great extent, though it does not allow for any Aryan element in the population of Etruria.¹ The Professor also brings the predecessors of the Neolithic Iberians, *i.e.*, the Palæolithic tribes, from the plateau of Central Asia, as I should do: but he holds that they—or at least such of them as settled in Southern Europe, the River-drift men—“cannot be referred to any branch of the human race now alive”.² It is, however, held by others that some of the Palæolithic tribes in Europe survived to mingle with the later Neolithic tribes.³ The cold of the Great Ice Age might also have caused a large emigration of the Palæolithic tribes from Europe into Africa, at a time when there were land-passages from Spain and Italy into the southern continent.⁴

¹ *Early Man in Britain*, p. 323.

² *Ib.*, p. 173. The Palæolithic race in Northern Europe, the Cave-men, are identified by Professor Dawkins with the Eskimos: a conclusion which waits for further evidence. Greenland, England, and the continent of Europe were then connected together by land-passages.

³ Geikie's *Prehistoric Europe*, pp. 551-554.

⁴ The effects of the increasing cold have been thus traced by Dr. Geikie (*Prehistoric Europe*, p. 353):—“A similar fate (to that of the flora) befell the fauna—the great pachyderms of southern habitats vanished from our continent, and the temperate forms eventually took possession of the Mediterranean region. All these changes came about in a gradual manner. . . . Thus Palæolithic man must have hunted the reindeer in Southern England, Belgium, and Northern France, for many generations before the increasing severity of the climate compelled both to retreat. Step by step, however, man was driven south; England and Belgium were deserted—perhaps even Germany, down to the foot of the Alps, was left unoccupied—until at last the Palæolithic race or races reached the south of France. . . . How far north the

We are not without material evidence of the existence of Palæolithic man in Barbary. "The Palæolithic hunter of the River-drift has left traces of his presence in Africa, at Ousidan near Tlemçen, Oran, where implements of the type of St. Acheul, made of limestone and gritstone, have been discovered by Dr. Bleicher in a rock-shelter."¹ If such implements prove identity of race, kindred tribes would have once existed on both sides of the Mediterranean, as some of the Etruscan numerals seem to imply. We need not suppose the early Palæolithic tribes to have possessed such a numeral as 'eighty', but only the materials of it, to be put together at a later time.

Division of the Etruscan numerals between the Iberians and the Africans.

If the Tuscans in Etruria—a people, as we may infer from Livy (v, 33), of the same race as the primitive population of the Alps—were a mixed race of Iberians and Africans, as the Etruscan numerals seem to imply, we might next endeavour to determine which of those numerals were of African, and which of Iberian origin. It is not indeed easy to draw the line of distinction everywhere in such a case, as Iberian and African numerals have a good deal in common, not only with each other, but also with numerals in other parts of the world. But, if the attempt were to be made, it might be well to begin with the two

arctic fauna ranged during the climax of the last glacial epoch can only be conjectured. . . . *The Palæolithic population of Europe would be confined to the southern parts of the Continent, but the hunters of Aquitaine may have followed the reindeer in their summer migrations to the north.*"

"At length the glacial epoch reached its meridian, and the severity of the winters began to abate. Gradually the vast ice-fields of the north melted away, and the glaciers of the Pyrenees, the Alps, and other mountain-ranges, slowly shrunk up their valleys. *At or about this time, or it may have been somewhat earlier, the land-connections between Europe and Africa disappeared, and the Mediterranean, in some places at least, advanced upon what is now land.*"

¹ *Early Man in Britain*, p. 165.

radically distinct forms of the Etruscan 'decade', *-rum* and *palchl*.¹ The first of these 'decades' appears to be African, for it has many forms in Africa, the nearest to *-rum* being the Balu *rom*, the Param *arum*, and the Dsawara *lum*. The other Etruscan 'decade', *palchl*, would be Iberian, and would consist of the Kisti *palk*, 'finger', with the addition of the Akush numeral suffix, *-al*.

If *-rum* be African, then the two multiples of ten ending in *-rum*, *i.e.*, *zath-rum*, 'thirty', and *kiemzath-rm*, 'eighty', would probably, but not necessarily, be African also, as well as the digits which enter into their composition; namely, *zal*, 'three', and *kiemzal* or *kiemzath*, 'eight', the last of which has not been found standing alone, but has to be elicited from *kiemzath-rm*, 'eighty'. That *zal* is African rather than Iberian might also be inferred from its coming nearer to African 'threes', such as *zala*, than it does to Iberian 'threes', such as *sami*. The reasons for inferring *kiemzal* or *kiemzath* to be African are still stronger; for Iberian languages have no such 'eight', while on the other hand, as I may concisely show once more, it is so easily obtainable from African languages:—

ETRUSCAN.	AFRICAN.
<i>-zal</i> , 'three'.	Gura <i>tal</i> , 'three'.
<i>kiem-zal</i> , 'eight'.	<i>de</i> — <i>tal</i> , 'eight'.
<i>kiem-zath-</i> , 'eight-'.	Pulo <i>je</i> — <i>tati</i> , 'eight'.
<i>kiem-</i> , . . 'five'.	Momenya <i>kien-</i> , . . 'fif-'.
<i>zath-</i> , 'thir-'.	<i>ntad</i> , 'three'.
<i>ki</i> , . . . 'five'.	<i>kie</i> , . . . 'five'.

As *kiemzathrm* involves the Etruscan *ki*, 'five', and contains the African 'decade', *-rum*, it might be guessed that *ki* is also African: yet *ke-alchl*, 'fifty', and *kez palchl*, 'seventy', likewise involve *ki*, but contain the Iberian

¹ As the Etruscan has two 'decades' in *zathrum* and *kez palchl*, so the English has two in *two-tye* and *fif-teen*, = Gothic *tva-lif* and *fimf-taihun*.

'decade'; so that *ki* and *ke-* are as likely to be the Iberian 'fives', *che-*, *khe-*, *chu-*, or *qho*, as they are to be the Momenya *kie* in Africa. It will therefore be best to leave the assignation of *ki*, 'five', unsettled, and to reckon it on both sides, as well as *mach*, 'one', which has African analogies in *mo*, *moko*, 'one', but seems found also in the Georgian *mkholo*, 'sole, only', as well as in a number of Caucasian words for 'finger-nail' (*ante*, p. 20).

The rest of the Etruscan numerals would be Iberian. They comprise:—

me-alchl, 'twenty'; and *thu*, 'two'.

muv-alchl, 'forty'; and *huth*, 'four'.

ke-alchl, 'fifty'.

'*sem-phalchl*, 'sixty', with *sem-ph*, 'sixteen', and *sa*, 'six'.

kez palchl, 'seventy'; with *kez*, 'seven'.

This completes the list of known Etruscan numerals; and the final result may be thus given:—

ETRUSCAN NUMERALS.

1. <i>Mach</i>	Iberian or African.
2. <i>thu</i> .	Iberian.
3. <i>zal</i> .	African.
4. <i>huth</i> .	Iberian.
5. <i>ki</i> .	Iberian or African.
6. <i>sa</i> .	Iberian.
7. <i>kez</i> .	Iberian.
8. <i>kiemzal</i> or <i>kiemzath</i> }	African.
16. <i>semph</i> .	Iberian.
20. <i>mealchl</i> .	Iberian.

ETRUSCAN NUMERALS.

30. <i>zathrum.</i>		African.
40. <i>muvalchl.</i>	Iberian.	
50. <i>kealchl.</i>	Iberian.	
60. <i>semphalchl.</i>	Iberian.	
70. <i>kez palchl.</i>	Iberian.	
80. <i>kiemzathrm.</i>		African.

In the place of these numerals, Dr. Taylor's system would give us:—

- | | | |
|-------------------|----------------------------------|----------------|
| 1. <i>mach.</i> | | |
| 2. <i>ci.</i> | | |
| 3. <i>zal.</i> | | |
| 4. <i>sa.</i> | | |
| 5. <i>thu</i> | } the preceding numerals require | { <i>huth.</i> |
| 6. <i>huth</i> |  |  | { thu. |
| 14. <i>sesph.</i> | | |

40. *za-thrum*, 'four-ten'; and *ke-alchl*, 'two-score'.

80. *ciem-za-thrm*, 'twice-four-ten'.

If, as Dr. Taylor holds, *-lchl* be 'score', and *-a-* a connecting vowel, then *me-alchl* and *muvalchl* might be made 'one-score', by referring *me-* and *muval-*, with *mach*, to Armenian 'ones' like *me-*, *mi*, *mov*, and *mék*. But, if *sesph* be 'fourteen', and *-alchl*, 'score', then *sesphalchl* (as Dr. Taylor reads it) must be fourteen-score, or 280, which is an impossible age. There is a like difficulty with *kez palchl*, or (as Dr. Taylor writes it) *cezpalchl*. As *cezpa* is not one of the dice-numerals, it must be 'seven' at least, so that *cezpalchl* would be 'seven-score', or 140; while, if *ci* and *cezpa* be made 'two' and 'twelve', as *sa* and *sesph* are made 'four' and 'fourteen', then *cezpalchl* would be 'twelve-score', or 240. Dr. Taylor would have improved his case, if he had

compared *cezpalchl* with the Lapponic *kietja lokke*, 'seventy'; or, better still, if he had referred *cez* to the Lapponic *kietja*, 'seven', and *palchl* to the Lapponic *pelge*, 'thumb', and the Permian *pelu*, 'finger' (see *ante*, pp. 14, 15). But both these analogies between the Etruscan and the Finnish were overlooked by Dr. Taylor, though they are all of real value; for the only others are those between the Etruscan *zal*, 'three', and *-rum*, '-ty', on one side, and the Finnish *kolm*, 'three', and *kümme*, 'ten', on the other.

PART II.

THE ETRUSCAN LANGUAGE.

IF the Etruscan numerals have been rightly inferred to be Ibero-African, in spite of the possibly Aryan origin of *mach*, 'one', *thu*, 'two', and *sa*, 'six', then such a fact would be no small argument in favour of the Etruscan language being either Iberian or African, rather than Aryan, in its character. The argument, however, is far from being conclusive. Some Non-Aryan languages in India have Aryan numerals, but remain Non-Aryan still; and the converse may have been the case in Etruria. Indeed, as we proceed in our inquiry, we shall find that the ruling element in the Etruscan language was Aryan, as an observant reader will have at least suspected from the grammatical forms under which the numerals have presented themselves in the previous chapter. But this ruling element in Etruscan was not European Aryan. It belonged to the Asiatic Aryan group of languages: a group which includes among its members the Sanskrit, the Afghan, the Persian, the Kurdish, the Ossetic, and the Armenian languages. The closest affinities of the Aryan element in Etruscan are with the Armenian, the only survivor of the languages spoken by the ancient Thracian family of nations, which once extended from Mount Ararat to the Eastern Alps.

The Bilingual inscription of Pesaro—Armenian and Sanskrit affinities of trutnvt fruntak, 'haruspex fulguriator.'

That an Asiatic Aryan element existed in Etruscan is learned from the only bilingual inscription that gives us a

translation of two consecutive Etruscan words, and which I shall therefore consider very fully. It runs as follows :—

(Caf)atius L. f. Ste. Haruspex Fulguriator.
Kafates *Lr.* *Lr.* *Netsvis* *Trutnvt* *Fruntak*.¹

Before taking up *trutnvt fruntak*, it may be as well to notice *Netsvis*, which is rendered in Latin by *Ste.*, an abbreviation for *Stellatina tribus*. *Netsvis* occurs again in the epitaph (560 ter b), *Nae. Kiku Pethnal Netsvis*.

In Grævius (i, 278), we have this passage :—

“Inter *Tuscos* populos *Stellates* quoque enumerantur. De hac etiam tribu multas inscriptiones vidi, quarum præcipuæ hæ sunt :”

L. Flavio L. f.

Ste. Cimbro

etc.

Q. Velcennæ

L. f. Stel.

etc.

Soli Invicto

Mithræ

T. Antistius

T. f. *Stella-*

tina Seve-

rianus de-

dicavit

As *Netsvis* means ‘*Stellatina tribus*’, compare *-vis* with the Zend *viç*, ‘dorf, clan’ (Justi), = Sanskrit *veça*, ‘domus’, Latin *vic-us*, Greek *οἶκος*, Gothic *veih-s*, ‘κώμη, ἀγρός’, Old High German *wîh*, *wîch*, ‘arx, civitas’.²

¹ Fabretti, *Corpus Inscriptionum Italicarum*, 69. The numbers attached to other inscriptions that will be cited refer to the same work.

² “Did the Irânians migrate in search of land in miscellaneous crowds, and thus found settlements? or, had they already grouped themselves according to relationship and in tribes? That the latter was the case is proved to a certainty. The word *vis* does not denote the village locally only, but at the

I now turn to *trutnvt fruntak*, 'haruspex fulgur(i)ator'.

About the second word, *fruntak*, 'fulguriator', there can be no difficulty, as it is obviously allied to the Greek *βροντή* and *βρέμω*; to the Sanskrit *bhraṇ*, *raṇ*, 'sonare'; to the Kurdish *brusi*, 'fulgur'; to the Proper Thracian *βρονχόν*, 'κιθάραν' (Hesychius); and to the Armenian *baṛanǰel*, 'to roar', *phrnǰel*, *phṛnǰal*, *phṛnkal*, 'to neigh, to sneeze, to bellow, to cry', *wrnǰel*, 'to neigh', and *oṛnal*, 'to howl', with *barać*, 'a roaring', *harać*, 'a groaning', *poṛoćel*, 'to roar', *poṛot*, 'roaring', and *orot*, 'thunder', = Greek *βροντή*, = Etruscan *frunt-*.

In *fruntak*, 'fulguriator', the Etruscan termination *-ak* corresponds to the Latin termination *-ator*. So does the Armenian termination *-ak*: cf. Armenian *loṭ-al*, 'nat-are', and *loṭ-ak*, 'nat-ator'; *dit-el*, 'observ-are', and *dit-ak*, 'observ-ator'; *khndēr-el*, 'rog-are', and *khndēr-ak*, 'rog-ator'. The equivalent Sanskrit termination is *-aka*.

The remaining word, *trutnvt*, 'haruspex', is marked by that deficiency of vowels which is characteristic of Etruscan prose, and which is further exemplified in a bilingual inscription (250), where *Praesentes* is transliterated into

same time also, genealogically, the race composed of several families. It is only in the original actual combination of both these ideas, when every race built and inhabited its own village, that the double meaning of the single word *vis* is intelligible. Often enough, indeed, this state of things was only the ideal, and not the actual one. The principle of relationship was obscured by purely accidental or local circumstances. It also happened that smaller tribes, not originally related, united themselves into a common settlement; or that neighbouring, though not kindred clans, were formed into a large community for practical reasons. But even such communities were evidently organised very much according to the old bonds of tribe. The village of a clan formed the model according to which the new settlement was arranged and managed. The inhabitants of a village, founded by two or more families, then form only a single clan, under common direction, under *one* head. If such were not the case it would be impossible that the two-fold signification of *vis* could have been preserved fresh through the entire literature of the Avesta."—Geiger, *Civilisation of the Eastern Irānians*, i, 247 (Eng. trans.). If the Etruscan *-vis* = Persian *viç* or *vis*, Etruscan would have been foreign to Latin, Greek, and German, although Aryan.

Presnts. The same deficiency is characteristic of Armenian prose, as may be seen in *Trdat*, 'Tiridates', *trtovm*, 'sad', *thrthnġovk*, 'sorrel', and *trtnġel*, 'to murmur'.

Trutnvt is probably a compound word, like its equivalent *haru-spex*: and, as the Latin roots *spec* and *vid* are nearly synonymous, we are led to divide *trutnvt* into *trutn-vt*, and to identify *-vt*, not only with the Latin *vid*, but also with the Sanskrit and Zend *vid*, 'scire, percipere', the Zend *vîd*, 'sciens', and the Sanskrit termination *-vid*, 'sciens, gnarus'. These are respectively identical, by means of an intermediate form, *gvid*, with the Armenian *git-el*, 'scire', *-gêt* (gen. *giti*), 'sciens', and *gêt*, 'sapiens, magus, fatidicus', which brings it into the region of soothsaying and augury.

Three Sanskrit forms analogous to *trutn-vt* are given in Benfey's *Sanskrit-English Dictionary*, s. v. *vid*:—*açva-vid*, 'conversant with the qualities of horses'; *ġyotir-vid*, 'knowing the stars, an astrologer'; and *dharma-vid*, 'acquainted with the laws, a jurist'. Similar compounds are very common in Armenian, as:—*Latina-gêt*, 'a Latinist', *kanona-gêt*, 'a canonist', *hna-gêt*, 'an antiquary' (*hin*, 'old'), *asteta-gêt*, 'an astrologer' (*astt*, 'a star'), *armata-gêt*, 'a botanist' (*armat*, 'a root'), *ôrêns-gêt*, 'a jurist' (*ôrêns*, 'laws'), *gra-gêt*, 'literary' (*gir*, 'a letter'), *matena-gêt*, 'a man of letters' (*matean*, 'a book'), *bana-gêt*, 'learned' (*ban*, 'a word'), *ira-gêt*, 'versed', (*ir*, 'a thing, a fact'), *amena-gêt*, 'all-knowing' (*amen-*, 'all'), *nakha-gêt*, 'prescient' (*nakh*, 'first'), and *kankha-gêt*, 'prescient' (*kanovkh*, 'premature'). Prescience and astrology are closely allied to haruspicy.

If *-vt* in *trutn-vt*, 'haru-spex', be thus referred to the Sanskrit *-vid* and the Armenian *-gêt*, we have to explain *trutn-* from one or both of those languages. Now, from the pair of Armenian synonyms, *asteta-gêt* and *asteta-ban*, 'an astrologer', we see that the Armenian suffix *-ban* (= *ban*, 'word, λόγος, understanding') is synonymous with *-gêt*. *Irava-ban* and *irava-gêt*, 'jurist' (*irav*, 'law, justice'),

are a similar pair of synonyms. But the Armenian has also *thṛćna-ban*, 'an ornithologist', to which would correspond a form, *thṛćna-gét*, to compare with *trutn-vt*. This would identify the Etruscan *trutn-* with the Armenian *thṛćovn*, gen. *thṛćnoy*, 'a bird', and make *trutnvt* signify 'auspex, augur, ὀρνιθοσκόπος'.

The root of the Armenian *thṛćovn*, 'bird', and *thṛíc*, 'flight', is found in *thiṛ*, gen. *thṛi*, 'flight', and *thṛanil*, 'to fly', = Sanskrit *drá*, *dru*, 'currere, fugere'. The Vedic *dravitnu*, 'running', appears the same word as the Etruscan *trutn-*, 'bird': and the Etruscan *tru-tn-vt* would correspond in all its elements to a Sanskrit *dru-tnu-vid*, which the Etruscans would write *tru-tnu-vit*. The triple analogy between the two languages is very close indeed.

Kindred words are found in other Aryan languages. The Latin has *turd-us*, 'a thrush'; the Welsh, *dryw*, 'a wren'; and the Gaelic, *druid*, 'a starling', and *dreadhan*, 'a wren'. *Dreadhan* is reduced in Manx to *drean*, the base of the Irish *dreannoyr* (Coneys), 'an augur, a diviner by birds', which indicates 'bird' as the original sense of *drean* and *dreadhan*. O'Reilly gives *dreallanaiche* as Irish for 'augur', where *dreallan* appears = *dreadhan*, and would likewise mean 'bird'. We call a partridge a 'bird'.

The Armenian *thṛćovn* is to the Etruscan *trutn* nearly what the Armenian *poṛócel*, 'to roar', and *poṛóčovn*, 'a roaring', are to the Armenian *poṛot*, 'roaring'. As a question of mere combination of letters, it may be noticed in passing that several Armenian words terminate, as *trutn* does, with an *n* preceded by another consonant. Such Armenian words are:—*matn*, 'hand'; *otn*, 'foot'; *tovtn*, 'tail'; *gortn*, 'frog'; *ordn*, 'worm'; *mlovkn*, 'bug'; *movkn*, 'mouse'; and *ezn*, 'ox'.

If *trutnvt* be rendered 'auspex', its meaning would not be far from 'haruspex', and would indeed be very near it, if it were allowable to adopt the etymology of *haruspex* given by

Servius, who derives *haru-* from the name of a bird of augury, *hara*, with which may be compared the Persian *harrah*, 'an owl', and also the Latin *parra*, = Umbrian *parfa*. Another bird of augury, mentioned with the *parfa* in the Eugubine Tables, was the *angla*, which has been rendered 'oscen' and 'aquila', and seems = Armenian *angt*, 'vulture'. The vultures in the story of Romulus and Remus will occur to the mind. The names, *angla* and *hara*, might both have been borrowed from the Etruscans, the great teachers of the science of augury.¹ The derivation of *haru-* from *hara* is, however, rejected by eminent authorities, though not on conclusive grounds, in favour of one from *hira*, 'entrails'.²

But it is of slight importance, as far as the etymology of *trutnvt* is concerned, which of the two derivations of *haru-* we adopt. For it was from lightning, and not from entrails or from birds, that the *trutnvt fruntak*, or *haruspex fulguriator*, derived his omens; so that neither the Etruscan nor the Latin expression can imply, as, whichever derivation we adopt, they would literally do, 'an observer of entrails (*hira*) by lightning', or 'an observer of birds (*haræ* or *parræ*) by lightning'. Both *haruspex* and *trutnvt* must thus have an enlarged meaning like 'observer of omens', as *sorcery*, *lunatic*, *electric*, have in English enlarged meanings beyond their etymological sense. But, if *trutnvt* signifies 'observer of omens', it signifies the same as *ὄρνιθοσκοπός*, as we may learn from an old authority on the subject:—

"The omens given by birds were by the Greeks called *ὄρνιες*, *ὄρνεοσκοπικά*, *αἴσιμα*, *οἰωνοὶ*, *οἰωνίσματα*, etc., and

¹ The Eugubine Table containing the bird-names begins thus:—*Este persklo aveis aseriater enetu parfa kurnase dersua peiqu peika merstu poei angla aseriato. . . .*

² See Aufrecht, in Bunsen's *Philosophy of History*, i, 104; and Curtius, *Griechische Etymologie*, s. v. *χολάδες*. But, if *haru-* be = *hira*, then the Latin form, *haruspex extispicus*, would signify etymologically 'extispex extispicus', which is open to objection.

the observers of them, ὀρνεοσκόποι, οἰωνισταί, οἰωνοθέται, οἰωνοπόλοι, etc.; but afterwards, these names were promiscuously used for almost all the species of artificial divination, as *aruspicium* and *augurium* were among the Latins. The Scholiast of Aristophanes hath observed, that οἰωνοὺς καλοῦσι καὶ τὰ μὴ ὄρνεα, they called omens, which are not made by birds, by the name of οἰωνοί. And the same author affirms, that πᾶν σύμβολον ἐκφευκτικὸν, ἢ προτρεπτικὸν λέγεται ὄρνις, every omen that either encourages to, or dissuades from anything, was termed ὄρνις.¹

The case was similar in Latin, as Horace uses the word *ales* for 'omen', with the epithets, *lugubris*, *potior*, *mala*, and *secunda*; and also *avis* in the same sense with the epithet *mala*. If therefore the Etruscan *trutn* be rendered ὄρνις, *ales*, or *avis*, it means 'omen' as well as 'bird', and has the sense which it must bear in *trutn-vt*, whatever its etymology may be.²

The words, *trutnvt fruntak*, 'haruspex fulguriator', thus intimate to us that a language allied to the Armenian was used in Etruria. And this is no more than what might have been suspected, as the Etruscans are traditionally derived from Lydia; and as the Dacians, the Mæsians, the Lydians, the Phrygians, the Armenians, and other less important nations, were all members of the great Thracian race, now represented in language by the Armenian. Such a probable extension of the Armenian language into Europe is noticed

¹ Potter's *Antiquities of Greece*, i, 374 (ed. 1832).

² Servius's derivation of *haruspex* is objected to by Dr. Aufrecht, not only on the ground that no ancient author mentions such a bird as *hara*, but also because the functions of the *haruspices* and *augures* were quite distinct from each other. Yet these functions, if distinct, were certainly cognate, as appears indeed from Aufrecht's own words (*Philosophy of History*, i, 107):—"The principal business of the *haruspices* was to observe the entrails of a sacrificed animal, and to foretell the future according as the appearances were *auspicious* or *inauspicious*." And, on the same page, the following quotation from Cicero is subjoined:—"Quod Hetruscorum declarant et *haruspicini* et *fulgurales* et *tonitruales* libri, vestri autem *augurales*."

by Dr. Latham (*Ethnology of Europe*, p. 229), although he considers, but I do not know on what grounds, that many facts are against it:—"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*." We are not without linguistic evidence that such was the case; and it is evidence of a kind that would be sufficient to betray the affinity between English and German.

Armenian affinities in Dacian plant-names.

The relics of the Dacian language consist of rather more than thirty names of medicinal plants; names which in English frequently terminate in *-wort*; in German, in *-wurz* and *-kraut*; and in Armenian, in *-det*. This last word, at least, seems to be Dacian as well as Armenian. For the two languages give us the following words:—

Armenian	<i>det</i> ,	'herb, medicine, poison'.
	<i>khashn — det</i> ,	'rhubarb'.
	<i>mëkn — det</i> ,	'arsenic'.
Dacian	<i>τευ — διλά</i> ,	'calamint' (also <i>τέυδειλά</i>).
	<i>πρια — διλά</i> ,	'black-briony (also <i>πριαδηλά</i>).
	<i>δουω — δηλά</i> ,	'origan'.
	<i>κοικο — διλά</i> ,	'night-shade'. ¹
	<i>προπο — διλά</i> ,	'cinquefoil'. ²

Another Dacian plant-name, *διέλεια* or *διέλλεινα*, 'henbane', may begin with the Armenian *det*, as may the Dacian *κοτίατα* or *κοτήατα*, 'grass', with the Armenian *khot*,

¹ The readings are:—*κοικοδιλά*, *κοικοδι* . . . , *κυκωλίδα*. See Grimm, *Geschichte der Deutschen Sprache*, c. xxx.

² The readings are:—*προποδιλά* (twice), *προπεδουλά*.

‘grass, hay’. A second Armenian word for ‘grass’, *sêz*, would likewise supply the termination of the Dacian *ἀνιασσεξέ* or *ἀνιαρσεξέ*, ‘onobrychis’; and an additional case of affinity might be derived from the following words:—

Armenian	<i>phthith</i> ,	.	‘a blooming’.
	meshta — <i>phthith</i> ,	.	‘ever-blooming’.
	yara — <i>phthith</i> ,	.	‘ever-blooming’.
	lovsa — <i>phthith</i> ,	.	‘light-shedding’.
Dacian	<i>φιθο</i> — <i>φθεθ</i>	-ελά,	‘adiantum’.

As *adiantum* bears also the names, *cincinnalis* and *capillus Veneris*, the first element of its Dacian name, *φιθ-ο*, might be compared with the Armenian *hivs*, ‘a tress of hair’, and *hivs-el* or *vivs-el*, ‘to adorn’, = Zend *piç*, ‘adorn’ (Justi). The termination -ελά, if not = -(δ)ελά, = -δηλά, = -διλά, is perhaps found again in the Dacian *δοχ-ελά* or *χοδ-ελά*, ‘ground-pine’, where -ελά seems = Greek *ἐλάτη*, and Armenian *ełat*, *ełevin*, ‘a pine’. Other Armenian plant-names begin with *eł-*; as *ełerd*, ‘endive’, and *ełégn*, ‘a reed’, = Phrygian *ἔλυμος*, ‘a reed’. Cf. *ἔλεγος*, and also *elegia*, in Plin., *H. N.*, xvi, 66:—“Est et obliqua *arundo* vocatur a quibusdam *elegia*.” *Elegia* was the name of an Armenian town (Ptolemy). But -ελά might also be identified with the Armenian termination -*eł*, as in *hot-eł*, ‘odoriferous (*hot*, ‘scent’), and *ban-eł*, ‘verbose’ (*ban*, ‘word’).

In Dacia, however, as in Etruria, it seems probable that Thracians were mingled with Iberians. The names of forty-four Dacian towns are given by Ptolemy; and thirteen or fourteen of these terminate in -*dava*, which thus corresponds to such an English termination as -*ton*, or such a German one as -*dorf*, and may therefore be referred to the Georgian *daba*, a village, which comes nearer to *dava* than do the Persian and Armenian *deh*. In Armenia likewise there are indications of Aryan and Iberian intermixture; for the

ancient names of the first three Armenian months are *Navasard*, *Hori*, and *Sahmi*. Of these, *Hori* and *Sahmi* would be identical with the Georgian *ori*, 'two', and *sami*, 'three', and *Navasard* with the Sanskrit *nava-çarad*, the Zend *nava-çaredha*, and the Lydian *νέος σάρδης*, 'νέον ἔτος'.¹

The Etruscan sepulchral words, avil, ril, leine, lupu, and lupuke—they belong to the same element in the language as trutnvt fruntak.

Three elements have now been found in Etruscan—an African, an Iberian, and an Aryan element. But it would be only one of these that has stamped its character on the Etruscan language. Was that language, then, we have next to inquire, African? Or was it Iberian? Or was it Aryan? Now the Aryan claims rest mainly at present on the nouns *trutnvt* and *fruntak*; while the African, and especially the Iberian claims, rest upon the Etruscan numerals, at least in their uninflected state, for their grammatical appendages remain to be considered. But numerals are a higher test of affinity than nouns in general, as we may see from our own language, where the numerals are German, like the language itself, while a large number of the words are French, and many geographical names Celtic. As far as we have hitherto gone, therefore, we should be inclined to infer that the Etruscan language was Iberian, or even perhaps African, and that the effect of the Aryan element upon

¹ In classical Armenian, which has an age of some 1,500 years, and is therefore about as old as the most ancient German language, the Mæso-Gothic, *nor* is 'new', and *tari*, 'year'. *Navasard*, unless the word is borrowed, thus points to a still older form of Armenian, like such a word as *Witenagemote* in English. The early Iberian population of Armenia has been considered to be represented by the Alarodians of Herodotus. Compare Dr. Wright's *Empire of the Hittites*, p. 82. The supposition that the Hittites were Iberians seems to me very probable: but we cannot be certain of this till the very difficult Hittite inscriptions are further interpreted. A valuable beginning has been made by Professor Sayce.

it was similar to the effect of the introduction of the Norman French into our own Anglo-Saxon.

But the structure of a language is a still higher test of affinity than are its numerals; and the structure of the Etruscan betrays its Aryan character. It is true, indeed, that there is scarcely a sentence of Etruscan that can be interpreted, except by guess-work that leads to nothing: but yet enough can be ascertained to determine the character of the language, without calling for the assistance of an Etruscan Rosetta Stone. There are, in the first place, a few words and forms which are continually associated in epitaphs with the age of the deceased, and about the meaning of which there can be no reasonable doubt. Such words are *avil*, *ril*, *leine*, *lupu*, and *lupuke*. Thus we have:—*avil lxxiii*, *avils xx*, *ril xxv*, *avil ril lxxv*, *ril leine l*, *ril liii leine*, *lupu avil xxxiii*, *lupu avils xvii*, *avils xxxvi lupu*, *avils lx lupuke*.¹ Now all these words are at once explained by the Asiatic Aryan languages that have given us the explanation of *trutnvt fruntak*; and they are explained, as they evidently ought to be, with the senses:—*avil*, ‘age’, with the genitive *avils*, ‘ætatis’; *ril*, ‘year’;

¹ The interpretations collected by Fabretti from various authors, mostly Italian, are unfortunately vitiated throughout by the groundless assumption that the Etruscan was a kind of Græco-Latin language, rather canine at times. Thus *lupu* is referred to *λοπός* and *locus*; and *leine* to *lenis*, *linere*, *ληνός*, and *λάϊνος*. As the Latin *linere* means ‘ungere’, and not ‘vivere’, therefore such an epitaph as *Thana Kainei ril leine l* is not allowed to signify ‘Thana Cainnia annos vixit quinquaginta’, but ‘Thana Cainnia annos unge quinquaginta’; “che sarebbe cortese prego o sì veramente ricordo ai posteri o agli eredi di tribuire al sepolcro offerte di unguenti, di che assai credevano dilettersi gli dei Mani.” *Annos unge quinquaginta* can, however, be construed: not so, *annos leniter quinquaginta*, *annos ληνός quinquaginta*, or *annos λάϊνος quinquaginta*, which have no meaning whatever. It need not be said that this system of interpretation, inaugurated by Lanzi, has effected nothing during the century in which it has been prevalent. Such a result was inevitable. Micali, with his usual wisdom, keeps aloof from it, and does not attempt to explain the Etruscan language, though he has done more than anyone for Etruscan archæology.

leine, 'lived'; *lupu* and *lupuke*, 'died'. This may be shown at no great length as follows:—

In *avil-s*, 'ætatis', -s is the sign of the Aryan, as in the Etruscan *Truial-s* (2162), which certainly means 'Trojanus', it appears to be the sign of the Aryan nominative. So the Latin has the nom. *navis* = Sanskrit *nâus*, as well as the gen. *navis*, = Sanskrit *nâvas*: and, in Etruscan itself, *Churchles* is both a nominative and a genitive. The Etruscan *av-il*, 'age', and *r(i)-il*, 'year' (cf. *nil*, = *nihil*), have the Armenian termination -*il*, which regularly forms passive and neuter infinitives, but is also found in the two nouns, *tes-il*, 'aspect' (*tes*, 'see'), and *kath-il*, 'a drop', which means likewise 'to drop'. Infinitives are commonly verbal nouns, and are declined as nouns in Armenian. The Etruscan for 'Aurora', *Us-il*, = Sanskrit *ush-as*, is another form like *av-il* and *r-il*. The root of *av-il*, 'age', exists in the Sanskrit *av*, 'grow, increase', and in the Armenian *av-ag*, 'elder', *av-el-*, 'add, increase, abound', and perhaps in *av-z*, 'a day'. Similarly, the root of *r-il*, 'year', appears in the Sanskrit *r-tu*, 'a season of the year', and *r*, 'go'; in the Armenian *rah-el*, 'to go'; in the Zend *ra-tu*, 'a set time'; in the Gaelic *rà*, 'go', and *rà-idh*, 'a quarter of a year'; and in the Irish *ré*, 'time, season, the moon'. Compare also the Avar (Caucasian) *rih*, 'season', and *rii*, 'summer'. It is by the recurrence of *seasons* that the lapse of years is marked. The Sanskrit *çarad* means both 'autumn' and 'year'; and the Zend *hama*, 'summer', is = Armenian *am* and Sanskrit *samâ*, 'year'. *Av-il-s*, *av-il*, and *r-il*, are thus completely explained, as *trutn-vt* and *frunt-ak* were before, from the Armenian and the Sanskrit.

With regard to *leine*, 'he lived', it is a form like *ἐβίωε*, but without the augment; which is, however, preserved in the Sanskrit equivalent of *leine*, i.e., *alinât*, 'he was dwelling', but not in the Armenian *linér*, 'he was, he was living, he abode (*ἐμεινεν*, John x, 40)', though the Sanskrit is other-

wise the nearer form to *leine*, as the Armenian *lin-ér* corresponds in form to the Latin *pot-erat*. The Armenian *linel* or *linil*, 'to be, to live, to abide', has no aorist: its base is *lin*, = Sanskrit *lin*, and its root, *li*, = Sanskrit *li*. There is thus a triple correspondence with the Aryan in the Etruscan *lei-n-e*, as there was in *av-il-s*.

Finally, *lupuke* and *lupu*, 'he died', are Aryan first and second aorists, like *ἔδωκε* and *ἔδω*, and such other forms are those that follow:—

ETRUSCAN.	GREEK.	PHRYGIAN.	ARMENIAN.
<i>lupuke</i>	<i>ἔθηκε ἔζησε</i>	<i>edaes</i> , 'posuit'. ¹	<i>ekeaž</i> , 'vixit'.
<i>lupu</i>	<i>ἔθη</i>		<i>ed</i> , 'posuit'.

Though the Armenian has both aorists, yet any particular verb has only one of them. In Armenian second aorists the augment is commonly preserved; but in Armenian first aorists it is always deficient, excepting very rarely in the third person singular, as in *ekeaž*, 'he lived', and *ebaž*, 'he opened', which so closely resemble the Phrygian *edaes*, 'he placed'. In Etruscan, as in Latin, and generally in Zend, the augment has been dropped, at least if we may judge from *lupuke* and *lupu*, as well as from *leine*. The root of *lup-u*, 'obit', is found in the Sanskrit *lup*, 'destroy', or *lûp*, 'kill'; in the Gaelic *lobh*, 'putrefy'; and in the Irish *lubha*, 'corpse'. *Lup-u* and *lup-u-ke* are thus completely explained from the Aryan, as were previously *lei-n-e*, *av-il-s*, and *r-il*, in addition to *tru-tn-vt* and *frunt-ak*.

The Etruscan votive words, suthina, tuthines, turke, fleres, and sansl, explained from the Armenian and the Sanskrit—a Sanskrit h, originally = dh, becomes a sibilant in Etruscan.

As far as the six or seven words just explained are concerned, we could hardly tell to which of the two languages,

¹ Inferred from Phrygian inscriptions like:—*Ates arkieafas akenanogafos Midai gafagtaei fanaktei edaes*, 'Atys ... Midæ ... regi posuit'.

the Armenian or the Sanskrit, the Etruscan was most nearly allied. But we now come to a very common Etruscan word, which, though allied to both languages, yet shows by a letter-change that it cannot belong to the Indian family, of which the Sanskrit is the oldest member, while it may belong to the Thracian family, now represented by the Armenian. This word is *suthina*, which is found continually on votive offerings, sometimes standing by itself, and sometimes with a proper name in the genitive. Such a word can hardly signify anything else than ‘*ἀνάθημα*, donarium’, and is therefore well referred to the Sanskrit *hu*, ‘Diis offerre, sacrificare’, = Zend *zu*, = Armenian *zoh*. These three roots give, for ‘sacrifice, offering’, the three nouns, *hotra*, *zaothra*, and *zohovthivn*, which last form, the Armenian, may be entirely identical with the Etruscan *suthina*.

As *suthina* is found in votive, so is *suthi* in sepulchral inscriptions; a word not to be connected with the Sanskrit *hu*, ‘Diis offerre’, = Armenian *zoh*, but with the Sanskrit *hud*, *hund*, ‘coacervare, submergi’, = Armenian *sovz-*, ‘submergere, celare’, = Lithuanian *szut*, ‘acervus’, = Welsh *cudd-*, ‘condere’. *Suthi* and *suthina* need not be any more allied etymologically than are the English *seeth* and *seething*, or *hear*, *heart*, and *hearth*.

If *su-thina* is rightly referred to the Sanskrit *hu*, ‘Diis offerre’, it cannot be Indian, or Greek, or Latin, or German, or Celtic: but it may be Persian, or Thracian, or Sarmatian (Slavonian and Lithuanian).

What is apparently the genitive of a form like *suthina* occurs among other words in two votive inscriptions which will be given at a later period. This apparent genitive is *tuthines* (cf. *Ramtha*, gen. *Ramthes*, and *μῶσα*, gen. *μῶσης*); and what would be its nominative, *tuthina*, may be compared with the Armenian *tovovthivn*, ‘a gift, a giving’, which occurs also as *tovthivn* in *pataskhanatovthivn*, ‘defence,

answer-giving' (Phil. i, 7, 17). These forms consist of the Armenian root *tov* (= *tu*), 'give', and of the Armenian termination—*ovthivn* (= *-uthün*), which is found in *zoh-ovthivn*, = Etruscan *su-thina*, and in above a thousand Armenian words altogether. Another Armenian root for 'give' is *tovr* (in *tovr-ch*, 'gift'), = Etruscan *tur* in *tur-ke* or *turu-ke*, 'dedit'; a form like *lupu-ke*, 'obiit', and occurring on a number of votive inscriptions, which will also be cited later. One of them, which is on a statue, begins:—*Larke Lekne turke fleres . . .*; i.e., 'Larcus Licinius donum dedit'; *fleres* being another common Etruscan word for a votive offering, and apparently = Armenian *ovterž*, *óterž*, 'gift, homage', as *flezrl*, standing singly on the back of a statue, may be for *flerzl*, = Armenian *éteržéal*, *ovteržéal*, *ótoržéal*, 'datum, oblatum': cf. Etruscan *fru(n)t-*, = Armenian *orot*, 'thunder' (*ante*, p. 57). Another Etruscan votive form is *fleres teke sansl* (1922). Here *teke*, if = 'posuit', would be a first aorist like *lupuke* and *turuke*, and be derived from the common Aryan root for 'place, put', in Armenian *d-*: the same root exists in Georgian; but the Georgian for 'posuit' is *hsdva*. *Sansl*, a form like *flezrl*, seems = Armenian *žnžot*, 'gaudens, libens', or *žnžéal*, 'gavisus, gavisus'. Here, as in the Etruscan *trutnvt*, = Armenian *thřénagét*, the agglomeration of consonants which is so remarkable in both languages, takes place in Armenian more at the beginning, and in Etruscan more at the end of the words.

Etruscan terms of relationship.

A most important body of evidence still requires consideration, and nearly completes what we know of the Etruscan language. In Etruscan inscriptions there occur a number of words which must be terms of relationship, and of which the meaning can be ascertained. These words are much more numerous than has hitherto been recognised: but as they all, at least when we can fix their sense, are

terms of relationship by descent or marriage, we are still ignorant of some of the Etruscan words which we should most wish to know, such as those for 'father', 'mother', 'brother', and perhaps 'sister'. The terms of relationship that we shall have to consider are:—*klan*; *sek* or *sech*; *sech farthana* or *sech harthna*; *farthn* and *farthnache*; *tusurthi*, *tusurthii*, or *tusurthir*; *husiur*; *nefis*; *ruka*; *etera* and *eteri*; *puia*, *puiak*, and *klanpuiak*; *zilath*, *klanzilath*, *zilk*, *eslz zilachnthas*, and *eslz*.

The inquiry will be best commenced with the commonest Etruscan words for 'son' and 'daughter', which, as they are so well known, may be briefly treated.

Klan, 'filius'.

The meaning of *klan* is evident from the following bilingual inscription (460):—

C. Cassius C. f.

Saturninus.

V. Kazi K. *klan*.

Klan thus signifies 'f(ilius), son'. Its only near parallel is the Gaelic *clann*, 'offspring', with which it has long since been compared.¹

Sek or *sech*, 'filia'.

The meaning of *sek* is likewise evident from a bilingual inscription (967):—

(Tha)na Thania

Sati Satia

Kumerunia Cumerunia

¹ I doubt whether there is anything in the supposed connection of *klan*, 'son, offspring', with the name of the Etruscan river *Clan-is*, through the senses, 'derivation, devolution, flowing down, descending'. Compare, however, the name of the river with the Armenian *glél*, 'to roll', and *glan*, 'cylinder', i.e., 'roller'. There is a river *Glan* in Carinthia, where Bopp (s.v. *dru*) identifies the name of the river *Dravus* with the Sanskrit *dravas*, 'fluens'. We have already seen how the Etruscan *trutn* is = Sanskrit *dravitnu*, 'currens'.

(Mar)knisa Marcanisa
 Tlesnal Leniæ
sek. filia.

Unlike *klan*, *sek* or *sech* has many parallels, such as these:—Thusch *shekhnil*, ‘son’; Circassian *shagha*, ‘fruit’, *sim-shagha*, ‘son’, *saghu*, ‘boy’; Lapponic *sakko*, ‘offspring’. Medo-Scythian *sak*, ‘son’¹; Basque *sehi*, ‘servant (male or female)’; Egyptian *se*, ‘son, daughter, girl’; Houssa *shika*, ‘grandson’; Hebrew *seh*, ‘lamb’ (from *siach*, ‘to bring forth’); Maya (Yucatan) *zih*, ‘to be born’; Armenian *zag-el*, ‘to produce young’, *zag*, ‘a young bird’; Albanian *zok*, ‘a young bird or animal’.²

The Etruscan *sek* or *sech* is probably not Aryan, but Iberian. We shall eventually meet with another Etruscan word, which would be its Aryan equivalent.

With regard to the two words, *klan* and *sek*, Dr. Isaac Taylor says in his tract on the *Etruscan Language* (p. 16, note):

“For *clan* we are referred to the Latin words, *genitus*, *gnatus*, and *grandis*.”—Dr. Taylor might have mentioned also the Gaelic *clann*, ‘offspring’.—“Mr. Ellis allows that *sec* must be a Finnic word, but does not see that his admission is fatal to his theory of the Aryan character of Etruscan.”

That eagle's fate and mine are one—for I was the first to cite the Lapponic *sakko* as one of the parallels to the Etruscan *sek*. But how its citation as one of those parallels should be equivalent to allowing that *sec*, not may be, but *must be* a Finnic word; or how such an admission, if made, should be fatal to my theory, when the overwhelming majority of Etruscan terms of relationship is Aryan—these

¹ Oppert, *Le Peuple et la Langue des Mèdes*, passim.

² The English *burd*, ‘a young woman’, *bird*, *bride*, *brat*, *brood*, and *breed*, are all kindred terms.

are two things which I confess that I do not see. Dr. Taylor's ratiocination is not always easy for inferior intellects to follow.

His four Etruscan terms of relationship are thus given by him (p. 16) with their supposed Turanian affinities :—

Etruscan CLAN	son	}
Turcoman <i>oglan</i>	son	
Etruscan -ISA	wife	}
Mongol <i>izi</i>	wife	
Tungus <i>asi</i>	wife	
Etruscan -AL	child	}
Tungus <i>uli</i>	child	
Tatar <i>aul</i> and <i>ol</i>	son	
Etruscan SEC	daughter	}
Lapp <i>sakko</i>	offspring	
Susian <i>sak</i>	son	
Scythic <i>sak-ri</i>	son	
Tungus <i>a'satk-an</i>	daughter	

Of these, *-al* and *-isa* will be considered at the end of the next section. They are not Etruscan words for 'child' and 'wife'. The connection of *klan* with the Turkish *ôghl*, 'son', and *ôghlan*, 'boy', is of no account.

The knowledge that *klan* is 'son', and that *sek* or *sech* is 'daughter', may be made to lead to the determination of a number of other Etruscan terms of relationship. For any word or expression, which occupies in an inscription the same place as *klan*, would define in all probability a *filial* relationship of some kind, such as *son*, *grandson*, *step-son*, or *son-in-law* : and the case would be similar with expressions corresponding in position to *sek*. Moreover, when anyone is described as the son of A. and B., it follows that A. and B. must have been *husband* and *wife*. This will enable us, by comparing together different epitaphs, to

discover Etruscan terms for these two important connections.

Sech farthana or sech harthna.

From *sek* or *sech*, 'daughter', we pass to the consideration of four kindred words of relationship applied to females, and forming two pairs; one pair consisting of *farthn* and *farthnache*, which would be synonymous; and the other pair of *farthana* and *harthna*, which would not only be synonymous, but also identical, as *f* and *h* may be interchanged in Etruscan.¹ The following are the epitaphs which contain the four words in question (2220 *bis*, 2327 *ter b*, 1226, 734) :—

1. An. *farthn* (on the side of a sarcophagus).
An. *farthnache* (on its lid).
2. An. *farthnache* Markes Tarnes Ramthesk Chaireals.
3. Afli Hustnal *sech farthana*.
4. Thana Tlesnei Umranal *sech harthna*.

Of these words, we may see from 2. that *farthnache*, and therefore *farthn* in 1., would probably be substantives, while *farthana* and *harthna* would be adjectival; for *farthana* and *harthna* both follow *sech*, 'daughter', as if to qualify it, in the same manner as *daughter* is qualified in the English expressions, *granddaughter*, *step-daughter*, *daughter-in-law*. Now it seems possible to determine the nature of the qualification implied in *farthana*, by comparing together four consecutive epitaphs from the same tomb, one of them being the third epitaph cited above. These four epitaphs are (1225, 1227, 1226, 1228):—

1. La. Afle *Se. Anainal*.
2. La. Afle *Se. Hustnal*.

¹ Thus we have *Pasti* and *Hasti*, 'Fausta', and *Kafati* and *Kahati*, 'Cafatia'. The Spanish likewise converts *f* into *h*.

3. Affi *Hustnal sech farthana.*
 4. Se. Afle La., Fa. *Hustnei Arznal atiu.*¹

In the last of these epitaphs, *Se(thre) Afle*, the son of *La(rth)*, and *Fa(sti) Hustnei*, who are represented reclining together on the lid of their common ossuary, would have been, as in similar cases, husband and wife; and it results from the second epitaph, *La. Afle Se. Hustnal*, that they had a son *La(rth)*, called after his grandfather. Again, there must have been an *Afle* who was the father of the *Afli* mentioned in the third epitaph, *Afli Hustnal sech farthana*; and this *Afle* was in all probability *Sethre Afle*, the husband of *Hustnei*, as the occurrence of the name of his wife, *Hustnal*, in the epitaph on *Afli*, seems otherwise inexplicable. Nevertheless, *Afli* can hardly have been the daughter of *Hustnei*, for, had she been so, we should have expected her to be described as *Afli Hustnal sech*, not as *Afli Hustnal sech farthana*. Now, from the first epitaph, *La. Afle Se. Anainal*, it follows that a *Sethre Afle* had a son *Larth* by a wife *Anainei*; so that, if he were the same *Sethre Afle* who had also a son *Larth* by a wife *Hustnei*, he must necessarily have been married twice; and *Hustnei*, who is represented with him on their common ossuary, would in all probability have been his last wife, *Anainei* consequently having previously died, or been divorced. If then *Afli*, in the third epitaph, *Afli Hustnal sech farthana*, was (as we have before inferred) not the daughter of *Hustnei*, but yet the daughter of her husband *Sethre Afle*, she would have been, we may conclude, his daughter by his deceased or divorced wife *Anainei*; and such a daughter would become, when her father married again, the *step-daughter* of that second wife

¹ So in Fabretti's text: in his index, *atiu*. The word occurs once more, and is again applied to a woman, in the epitaph (1013):—*Larthi Seianti Fraunisa atiu Piutes*. *Atiu* is commonly regarded as a proper name, and = *Aties*, 'Attii'. If so, then Fausta Hostinia would be the daughter of Attius Hostinius by a lady of the Arsinian family. In 4., I have inserted a comma between the names of the husband and the wife.

Hustnei. Everything is therefore consistently explained, if *Afli Hustnal sech farthana* be interpreted 'Ofelia Hostiniæ privigna'. *Sech farthana* thus appears to be a modification of 'daughter' (*sech*), like its English equivalent *step-daughter*, or like the Armenian *khorth dovster*, 'natural daughter, daughter-in-law': and, as a *step-daughter* is a daughter by marriage, so *farthana* and *harthna* are readily elucidated from the Armenian *harsan-ich*, 'nuptials', *harsan-eak*, 'paranymph, bridesman', *harsn* and *harsn-ovhi*, 'wife, bride, daughter-in-law', and *apa-harzan*, 'divorce', where *apa-* = Sanskrit *apa*, Greek *ἀπό*. The comparison between the Etruscan *harthna* and the Armenian *harsn* is facilitated by two consecutive epitaphs in Fabretti (2065, 2066), where the same name is written *Alethnas* and *Alesnas*.

A hybrid expression like *sech farthana* indicates the confluence of two languages into one, as *granddaughter* and *daughter-in-law* likewise do.

Farthn and farthnache.

These two words, which are synonymous, would probably, as they are allied to *farthana* and *harthna*, and therefore to the Armenian *harzan* or *harsan-*, 'marriage', have one of the meanings of the Armenian *harsn* or *harsnovhi*, 'uxor, nurus'. It is easy to see which of the two following translations of the same epitaph must be taken:—

Annia	<i>An.</i>	Annia
<i>uxor</i>	<i>farthnache</i>	<i>nurus</i>
Marci	<i>Markes</i>	Marci
Tarnæ	<i>Tarnes</i>	Tarnæ
Ramthæque	<i>Ramthesk</i>	Ramthæque
Chæreanæ.	<i>Chaireals.</i>	Chæreanæ.

Annia might be the daughter-in-law, but could not have been the wife, of Marcus Tarna and of Ramtha the daughter of Chærea.

Farthnache would thus mean 'nurus', as also would *farthn*, unless it were merely an abbreviation of *farthnache*; for *An. farthn* is the inscription on the side of a sarcophagus, and *An. farthnache* on its lid. If *farthn* and *farthnache* be synonyms, they might be respectively identical with the Armenian synonyms, *harsn* and *harsnovhi*, 'sponsa, nurus'. Here the termination *-ovhi* (= *uhi*) marks the feminine, as in *kaysr*, 'emperor', *kaysrovhi*, 'empress', *chovrm*, 'priest', *chrnovhi*, 'priestess', etc.; but this termination is not indispensable in the Armenian for 'spouse', because *harsn* has become restricted to the feminine, and is therefore synonymous with *harsnovhi*, as the Etruscan *farthn* would be with *farthnache*. Nevertheless, I should rather prefer considering the Etruscan termination *-ache* as equivalent to the Armenian termination *-eak*, which usually marks diminutives, although in *harsaneak*, 'bridesman', it does not. We have, however, the Armenian *harsn* and *harsneak* for 'νύμφη, chrysalis', as we have the Etruscan *farthn* and *farthnache* for 'νύμφη, daughter-in-law'; and also such forms as the Armenian *ordi* and *ordeak* for 'son' (corresponding to the Persian *pisar* and *pisarak*), and *patani* and *pataneak* for 'boy', in addition to the feminine *putanovhi*, 'girl'. Other Armenian diminutives terminate in *-k*: thus *navak* is the diminutive of *nav*, 'ship'; and *hayrik* of *hayr*, 'father'. The Etruscan synonyms, *farthn* and *farthnache* may also be compared with the Greek γυνή and γυναικ- (= γυναικι); or with the Sanskrit *putra* and *putraka*, 'son'; or with the Zend *mashya* and *mashyāka*, 'man'; etc.

In the Armenian version of Rev. xix, 7, where γάμος is translated *harsanick*, γυνή, 'wife', is rendered by *kin harsn*, 'γυνή νύμφη', as *privigna*, 'step-daughter', is rendered in Etruscan by *sech harthna*. *Harsn* is found again in the Armenian *yaverzhaharsn* and *yaverzhakan harsn*, 'a nymph', where *yaverzh* and *yaverzhakan* mean 'immortal'.

Though the meaning of the Etruscan words, *harthna*,

farthana, *farthn*, and *farthnache*, is thus supplied by the Armenian, yet it is from the Sanskrit, a language twice as old as the Armenian, that we must learn their etymology. For the key-word here is the Sanskrit *parigāna*, consisting of *pari*, = Greek *περί*, and of *gāna*, 'vir, homo, homines, men, folk'. The fundamental idea in these and in other similar Aryan compounds is thus the idea of domestication or cohabitation, as in the Greek *οικέτης*; and the Aryan group in question will comprise the following terms:—

Sanskrit *parigāna*, 'comitatus, famuli, famulæ'.¹

Ossetic *firthon*, 'pecu'.²

Persian *fartaná*, 'famula'.

ETRUSCAN *sech farthana* } 'privigna' (*sech*, filia').
sech harthna }

farthn } 'nurus, νύμφη'.
farthnache }

Armenian *harsanich*, 'νυμφεία, nuptiæ'.

harsn } 'νύμφη, sponsa, nurus'.
harsnovhi }

harsn } 'νύμφη, pupa, chrysalis'.
harsneak }

yaverzhaharsn } 'νύμφη, nymph'.
yaverzhakan harsn }

kin harsn, 'wife, bride' (Rev. xix, 7).

noraharsn, 'nouvelle épouse' (*nor*, 'new').

apaharzan, 'divorce, ἀποστάσιον'.

harsaneak, 'παρανύμφιος'.

The transition from the Sanskrit *parigāna* to the Persian *fartaná*, the Etruscan *farthana*, *farthn*, and *harthna*, and

¹ *Parigraha*, another Sanskrit word for 'comitatus', means 'uxor' as well, one sense of the Armenian *harsn*.

² "Vieh und namentlich die grössern vierfüssigen zahmen Thiere" (Sjögren). Here *-thon* has come to signify animals instead of men, *firthon* being the animals that dwell with us. *Sturthä*, another Ossetic word for 'cattle', would be the plural of *stur*, = Zend *çtaora*, 'a beast of burden'. Cf. Armenian *strovk* 'a slave', where the subject becomes human.

the Armenian *harzan*, *harsan-*, and *harsn*, will illustrate that change of *p*, first into *f*, and then into *h*, which may have taken place in the conversion of the Latin *parra* into *hara* (*ante*, p. 60). Compare also the Sanskrit *pramāṇa*, 'arbitrium, auctoritas', = Persian *farman*, = Armenian *hraman*, 'mandate, order', = Behistun *framānâ*, in *Auramazdâhâ framānâ*, 'the law of Ormuzd', = (probably) Lydian *παραμήνη*, 'ἡ τῶν θεῶν μοῖρα' (Hesychius). According to Bötticher (*Arica*, p. 91), a Sanskrit or Zend *p* may become a Persian *p*, *b*, or *f*, or an Armenian *p*, *ph*, *b*, *v*, or *h*. In the Etruscan *faland-um*, 'heaven' (Festus), *i.e.*, 'what is heaved or elevated', we are thus enabled to recognise the Persian *buland*, 'high'.

In several words in the inscriptions already cited, such as *Tlesnal*, *Umranal*, *Hustnal*, *Anainal*, and *Chaireals*, we meet with the Etruscan termination *-al*. It is probably identical with the termination of the Etruscan *Truial-s*, 'Trojanus' (2162, 2166), where it seems affected with the Aryan sign of the nominative, *-s*, as in *Chaireal-s*, 'Chæreanæ'; it is also affected with *-s* as the sign of the Aryan genitive. In *Kainal*, which is rendered in a bilingual inscription (792) 'Cainniâ natus', 'natus' or 'filius' would be understood, and *-al* would be a genitive suffix; for we cannot refer the Etruscan *-al*, with Dr. Taylor, to the Tungusian *uli*, 'child', nor to many similar words which might be cited; such as the Haytian *el*, 'son, child,' the Quichua *aylla*, 'family', the Gaelic *àl*, 'brood, race', and the Arabic *âl*, 'offspring'. When *Tlesnal sek* is rendered 'Læniæ filia' in the bilingual inscription which gives us the meaning of the "fatal" word *sek*, it is to be analysed into *Tlesna's*, *daughter*, not into *Tlesna-child*, *a daughter*, which would be a very strange way of expressing filiation.

Dr. Taylor again mistakes a case-termination for a term of relationship, when he infers that *-isa* is an Etruscan word

for 'wife', and = Mongol *izi* and Tungusian *asi*, 'wife' (*ante*, p. 72): for it is plain that Vel. Umrana Arnthalisa (785), who is known from his effigy to have been a man (*vir*), could not have been Aruntia's child's wife. So, again, Arnth Velsi Vesialisa (235), who is similarly known as a man, must have been the son of Vesia, not the wife of the son of Vesia. Dr. Taylor's Altaic interpretations of *-al* and *-isa* would make men into women. Yet there is no doubt that *-sa* (not *-isa*) implies 'wife of' in Etruscan: but it is merely a case-termination. Cæcilia Metella was the wife of Crassus: but it does not follow from her epitaph, Cæciliæ Q. Cretici Filiaë Metellæ Crassi, that *-i* is Latin for 'wife', any more than it follows, from an Etruscan epitaph like Thania Seianti Tutnal sech Herinisa, that *-sa* is an Etruscan word for 'wife', although the Latin rendering, Thania Seiantia Tutiniæ filia Herennii, implies that Thania was wife to Herennius (*Herini*). Tutnasa, Leknesa, and Sinusa, are corresponding forms to Herinisa, and show that the suffix is *-sa*, and not *-isa*, as Dr. Taylor would desire, in order to fit the Mongol *izi*, 'wife'.

In further illustration of the terminations, *-alisa* and *-sa*, I may add here two more inscriptions, the first of which (251, 466) is bilingual:—

Aelie Fulni Aelies

Kiarthalisa.

Folnius A. f. Pom.

Fuscus.

Larthi Titinei

Kiarthisa.

Kiarthalisa and Kiarthisa are rightly rendered 'Ciartiâ natus' and 'Ciartii uxor' by Fabretti, who notices aptly that the Gentile name *Ciartius* is found in Latin inscriptions. It would = Etruscan *Kiarthi*, as *Folnius* above is = Etruscan

Fulni. 'Natus' and 'uxor' are understood after *Kiarthialisa* and *Kiarthisa*, as is 'filius' after *Aelies*, which is rendered in the Latin 'A(elii) f(ilius)', and is plainly the genitive of *Aelie*. *Kiarthialisa* does not correspond to the Latin *Pom. Fuscus*.

An article will be eventually devoted to the full consideration of the Etruscan suffixes which mark relationship. For the present I will merely observe, in reference to the suffixes, *-sa*, *-al*, and *-alisa*, that *-sa* is a Georgian dative suffix, *-isa* a Georgian genitive suffix, and *-al* an Avar (E. Caucasus) genitive suffix, on which various genitive and other suffixes are frequently engrafted. Iberian case-suffixes, as well as Iberian numerals, have passed into the Etruscan language.

There is, however, one occasional addition to Etruscan proper names, which may well be a term of relationship, and not a case-suffix. This is *-thura*, which occurs in *Velthurithura* (2603), and in *Larth Vete Aneithura* (1413). Compare *Velthurithura* with *Velthuriaë gnatus* in an Etrusco-Roman epitaph at Perugia (1313), *C. Sulpicis C. f. Velthuriaë gnatus*; and *-thura* with the Accadian and Medo-Scythian *tur*, 'son, child, young', and the Akush (E. Caucasus) *durha*, 'boy, son, child'.

In *Aneithura* we have one of the Etruscan equivalents of the Latin *Annia*, which are:—*Ana*, *Anei*, *Ani*, and *Ania*, one of which is abbreviated in *An. farthnache*. *Ane* is the Etruscan equivalent of *Annius* or *Anius*.¹ Here the Etruscan masculine termination *-e* may be compared with the Sanskrit masculine termination *-a*; and the Etruscan feminine terminations, *-a*, *-i*, *ei*, and *-ia*, with the Sanskrit feminine terminations, *-ā* and *-ī* (= *yā*).²

¹ Cf. *Æn.* iii, 20:—" *Rex Anius*, rex idem hominum, Phœbique sacerdos", and the Accadian *anai*, 'king'.

² Schleicher, *V. G.*, p. 28.

Dr. Taylor's Etruscan genitive of position—real Etruscan genitives in -s and -al.

Dr. Taylor's determination to recognise no genitives in Etruscan but what are Altaic could hardly fail to lead him into great embarrassment. We may see this from the latest measures which he is compelled to adopt, in order to make a refractory Etruscan inscription conform to his views. Thus he asks (*Etruscan Language*, p. 18):—

“What was the Etruscan genitive? This is not difficult to detect, and is of great importance.” To both these propositions I fully assent. “The inscription on a recently found sarcophagus runs as follows”:

Ramtha Phursethnei Arnthal sech Thanchvilus Seinthial avils xxxii.

“Here the first three words constitute the name of a woman” :—*Arnthal* is no part of the name of *Ramtha Phursethnei*, but is the genitive of her father's prænomen, or personal name, governed by the next word *sech*—“the word *sech*, as we have seen, means ‘daughter’; and the next two words constitute the name of a man.”¹

“What is the inference? If we had such an inscription as

‘Sarah Jane daughter William Johnson age 32’,

we should conclude that Sarah Jane was the daughter of William Johnson, and died at the age of 32.”—*Phursethnei* is a surname, and would not correspond to *Jane*, but to *Johnson*

¹ These words are *Thanchvilus Seinthial*: and thus Dr. Taylor, whose system of interpretation has previously converted men into women, now converts Tanaquil into a man. He is apparently unacquainted with the legend connected with Tanaquil's name; and I may therefore refer him to Professor Bachofen's work, *Die Sage von Tanaquil, eine Untersuchung über den Orientalismus in Rom und Italien*. With much acuteness, the author compares the Etruscan Tanaquil with Tydo, Damonno, and Omphale in Lydia, with the wife of Gordius in Phrygia, with Semiramis in Assyria, and with Nanaea and Anaitis in Persia. Language and legend are here in agreement. The solution of the Etruscan question lies in the word, *Eothen*.

—“Hence it appears that the name *Thanchvilus Seinthial* is in the genitive case.”—It is so—“But there is here no inflection. This genitive case can only be explained as a genitive of position.”

This intelligence is fairly astounding; for it relates to two genitives which are manifest at a glance as genitives by inflection or suffix. Nor is this all: for in the same inscription, though it contains only seven words, there are two more inflectional genitives. These four genitives are:—*Arnthal* (nom. *Arnth*, passim); *Thanchvilus* (nom. *Thanchvil*, passim); *Seinthial* (a genitive like *Arnthal*, *Larthial*, etc.); and *avils* (nom. *avil*).¹ For it scarcely needs to be said that the inscription is to be translated:—

Ramtha Forsetinia Aruntis (Forsetinii) filia (et) Tanaquilis Sintia ætatis XXXII.

So obvious is this, that the following comparison of this epitaph with two other Etruscan epitaphs may perhaps be deemed superfluous:—

	2058.		2071.	
Lars	<i>Larth</i>	<i>Ramtha</i>	<i>Larth</i>	Lars
Aletinius	<i>Alethnas</i>	<i>Phursethnei</i>	<i>Churchles</i>	Curcilius
Aruntis	<i>Arnthal</i>	<i>Arnthal</i>	<i>Arnthal</i>	Aruntis
			<i>Churchles</i>	Curcili
		sech		
		<i>Thanchvilus</i>	<i>Thanchvilusk</i>	Tanaquilisque
Rufiaque	<i>Rufialk</i> ²	<i>Seinthial</i>	<i>Krakial</i>	Gracchæ

¹ In *avil ril*, however, *avil* would be a genitive, and *ril* an ablative (more properly, inessive), unmarked by inflection. They are probably forms like *ann.* and *atat.*, where the cases or nominatives of the nouns are alone given. So also, in *ril leine*, ‘vixit annos’, *ril* is a plural without any plural sign; just as we say in English *two brace*, *two score*, *two foot*, *two fish*, *a two-year old*, *a fortnight*; and as the Germans say *zwei Pfund*, *hundert Mann*, etc. The Hebrew also employs ‘year’ (*shannah*) for ‘years’, as the ages of the kings, and the lengths of their reigns, sufficiently show. Dr. Taylor detects an Etruscan plural form in *ril*, as it stands for ‘annos’ as well as for ‘anno’.

² From this lady’s own epitaph (2069), which is *Thanchvil Rufi puia Arnthal Alethnas*, ‘Tanaquil Rufia, wife of Aruns Aletinius’, we see that her personal name also was Tanaquil. The name was as common in Etruria as Mary is in England.

filius	<i>klan</i>		<i>klan</i>	filius
ætatis	<i>avils</i>	<i>avils</i>	<i>avils</i>	ætatis
LX	LX	XXXII	<i>kiemzathrms</i>	LXXX
obiit	<i>lupuke</i>		<i>lupu.</i>	obiit.
etc.	etc. ¹			

No other translations are possible. The third epitaph is the only one complete in all its parts, and therefore the normal form. Here the initial words, *Larth Churchles*, must be a nominative, the subject of *lupu*, and in apposition with *klan*, as *V. Kazi* is in the bilingual inscription, *V. Kazi K. klan*, which is rendered *C. Cassius. C. f. (Velus = Caius)*, i.e., 'Velus Cassius, the son of Caius (Cassius)'; while *Arnthal Churchles* must be the genitive of the father's name, and *Thanchvilus Krakial* the genitive of the mother's name, both governed by *klan*, and connected by the particle *-k*, '-que', attached to the mother's personal name. In the first and second epitaphs the surname of the father is omitted, as being implied in that of the son and daughter. This is usually the case in Etruscan; and the personal name of the mother is also generally omitted, as is done in the first epitaph, where the connecting particle *-k*, '-que', is attached to the genitive of her surname, *Ruvfial*. In these, and in other epitaphs, but not universally, a distinction is observed in the employment of the Aryan genitive in *-s*, and the Iberian genitive in *-al*. The Iberian *-al* forms the genitive of the masculine personal name, and of the feminine surname; and the Aryan *-s* that of the feminine personal name, and of the masculine surname. This we find *Arnthal Churchles*, 'Aruntis Curcili', but *Thanchvilus Krakial*, 'Tan-aquilis Gracchæ'.

In the first epitaph, 'obiit' is expressed by the Etruscan

¹ The inscription on this sarcophagus concludes with the words, *munisvleth kalusurasi*: and there are some other words, beginning with *tamera*, on the lid of the sarcophagus: while the next inscription in Fabretti concludes with *lupuke munisurethkalu* on the sarcophagus, with *avils LXX...* on the lid. *Muniklet* and *munikleth* occur elsewhere. The meaning of *munisvleth*, *munisureth*, *muniklet*, *munikleth*, etc., is quite uncertain.

first aorist, *lupuke*; and in the third epitaph by the Etruscan second aorist, *lupu*.

When I come to consider Dr. Taylor's alleged Etruscan genitive in *-n*, I shall have to return again to his Etruscan genitive of position, "which is decisively non-Aryan, but is used in various Altaic languages, ancient and modern".¹ The *raison d'être* of this genitive is to prove the Turanian character of Etruscan grammar; a grammar which here looks so unmistakably Aryan to a superficial eye, in spite of the genitive termination *-al* not being Aryan, but Caucasian. Well said Dr. Taylor, though speaking less positively than usual, that it is not difficult to detect the Etruscan genitive. It is like detecting the sun at noonday. For the three epitaphs compared above contain seven genitives in *-s*, and six in *-al*; thirteen inflectional genitives in twenty-four words, but not one genitive of position.

Tusurthi, tusurthii, or tusurthir.

The two words which I now pass on to examine are found among the Perugian inscriptions. Each of them is preceded by the genitive of the mother's surname; and one of the words is masculine, and the other feminine. The first thus corresponds in position to *klan*, 'filius', and the second to *sech*, 'filia', *sech farthana*, 'privigna', and *farthnache*, 'nurus'.

I begin with the feminine word. It occurs three times, and is differently given every time: in 1246 as *tusurthir*; in 1247 as *tusurthi*; and in 2003 as *tusurthii*: but these discrepancies do not affect the meaning of the first part of the

¹ In England, we find such names as *Newton Abbot*, *Morchard Bishop*, and *Cleobury Mortimer*, to be placed by the side of *Abbot's Langley*, *Bishop's Castle*, and *Mortimer's Cross*. Similar names, in French, are *Château Thierry*, *Bar le Duc*, *Nogent le Roi*, and *Pont l'Évêque*; and, in Italian, *Isola Farnese*, *Castel Gandolfo*, *Palazzo Colonna*, *Villa Medici*, etc. Thus the genitive of position, though "decisively non-Aryan", is yet English, French, and Italian. It is also Welsh, as we see from such names as *Cader Idris*, *Capel Curig*, *Llyn Idwal*, *Ty Coed*, etc.

word, *tusur-*, which is the same in all three forms. In endeavouring to ascertain the sense of the word (or words) in question, we may first compare the six following inscriptions, all found in Etruria, though only the third and the fourth are in the Etruscan language, the remaining four being in Latin:—

1018 bis <i>f.</i>	2020.	1922.	1247.	1280.	562 ter <i>n.</i>
L.	C.	Aulesi	Veilia	L.	Arria
Hirrius	Landius	Metelis	Klanti	Pomponius	
L.	Vel.	V.		L.	C.
<i>f.</i>	<i>f.</i>			<i>f.</i>	<i>f.</i>
Voesia	Vessia	Vesial	Arznal	Arsiniæ	Arisnai
					Teilniæ
natus.	<i>gnatus.</i>	<i>klensi</i>	<i>tusurthi</i>	<i>gnatus</i>	<i>nata.</i>
		ken		Plautus.	
		fleres			
		teke			
		sansl			
		tenine			
		tuthines			
		chisvliks. ¹			

¹ For *fleres*, *teke*, *sansl*, and *tuthines*, see *ante*, p. 67. *Klensi* would be an oblique case of *klan*, 'son', in apposition with *Aulesi*, an oblique case of *Aule*, 'Aulus'. A paragraph in the great Perugian inscription (1914) begins with the words:—*Aulesi Velthinas Arznal klensi thii*; while an epitaph at Vulci (2183) runs thus:—*eka suthik Velus Ezpus klensi Kerinu*; and one at Perugia:—*Fasti Kvinti Sales klens puia*. *Klens* would be a genitive singular, and probably *klensi* also. In considering the Etruscan *thunesi* (*ante*, p. 38), it has been already noticed that the Etruscan proper name *Atrane* would have two genitives, *Atranes* and *Atranesi*. Another Etruscan form is *klenar*, which in 2056 is followed by *zal*, 'three', and in 2055 by *ki*, 'five', while in 2340 *klenar* is preceded by *ki*. *Klenar* is thus likely to be a plural, as Dr. Taylor has rightly inferred. In Ude, *-ur*, and in Thusch and Suani, *-ar*, is a plural suffix, as also in Tamil; and Teutonic plurals end in *-ar*, *-er*, *-ir*, and *-ur* (Latham, *Handbook of the English Language*, p. 149). Finally, we have the form *klen-ar-a-si* (1915), where the supposed plural suffix *-ar* seems followed by the genitive suffix *-si* (a non-Aryan arrangement, though existing in Ossetic), with a connecting vowel *-a-*; or else *klen-ar* might be compared with the Thusch *wazh-ar*, and *klen-ara* with the kindred Tshetsh *wezh-irii*, 'brethren'. The suffix *-si* occurs again in *Prekuthurasi*, apparently a genitive of *Prekuthura*, 'descendant of Precus'. For *Prekuthura* would be analogous to *Aneithura* and *Velthurithura* (*ante*, p. 80), *Preku* or *Prechu* being an Etruscan proper name (1713, 1715), of which the genitive *Prekus* is found

From these inscriptions there is ground for inferring that *tusurthi* implies some sort of filial relationship, as it holds in the fourth inscription the same position as *gnatus*, *natus*, *klenesi*, and *nata* hold in the others. The next parallels will lead us to a similar result:—

1491.	1246.	1662.	1613.	1748.
Aule	Fasti Kapznei Ve.	Tlapu Lautni	Amthni	Sauturini
Velimnas Thefrisa Nufzrnal klan ¹	Tarchisa Chvestnal <i>tusurthir</i> .	Kapznas Tarchisla.	Kapznas Velkznal <i>sek</i> .	Chvestnas Velthurnal <i>sek</i> .
2003. ii Tarknei nei ² <i>tusurthii</i> .	1781. Veilia Surti Velkznal <i>sek</i> .	1247. Veilia Klanti Arznal <i>tusurthi</i> .	734. Thana Tlesnei Umranal <i>sech</i> <i>harthna</i> .	1226. Affi Hustnal <i>sech</i> farthana.

The conclusion to be drawn from these comparisons is, that *tusurthi* (or *-thii*, or *-thir*), as it corresponds to *sek*, 'daughter', and *sech farthana*, 'step-daughter', must express either daughterhood, or else some modification of daughterhood. And, as in *sech farthana* the daughterhood is expressed by the first word *sech*, so in *tusur-thii* or *tusur-thi* the daughterhood would in all probability be expressed by the first element *tusur-*, since we know that *thi* or *thii* was an Etruscan word in itself, and that it did not signify 'daughter'. For, in the great Perugian inscription (1914) we meet with the following paragraph:—

in the same epitaph (1915) as *Prekuthurasi* and *klenarasi*, the three words appearing in the following connection:—

. . . Aules Larthial *Prekuthurasi* Larthialisvle Kestnal *klenarasi* eth fanu Lautn *Prekus* . . .

If *Aules* and *Prekuthurasi* are here in apposition, then the case-suffixes, or inflections, *-s* and *-si*, must be identical in force.

¹ *Thefri* Velimnas Tarchis klan (1490), was probably the father of this Aule Velimnas *Thefrisa* Nufzrnal klan.

² We should expect here *-nal* instead of *-nei*.

Aulesi Velthinas Arznal *klensi thii* thilskuna kenu eplk felik Larthals Afunes.

Here *thii* follows *klensi*, a genitive of *klan*, 'son', in apposition with *Aulesi* (nom. *Aule*), so that there would be a parallelism between—

Aulesi Velthinas Arznal *klensi thii*,
and— Veilia Klanti Arznal *tusur-thi*,

where *tusurthi* is a nominative in apposition with *Veilia*.

The result is that, as *-thi* would be identical with *thi-i*, *tusur* would be the feminine correlative of the nominative of *klensi*, i.e., of *klan*, 'son'. In other words, *tusur* means 'daughter'.

Again, an epitaph from Viterbo runs thus¹:—

(Ale)thnas Arnth Larisal *zilath Tarchnalthi anke*.

Arnth Alethnas was a man, and therefore *Tarchnalthi* cannot signify 'Tarquinia's daughter'. What the meaning of *thi* most probably is, will be inferred shortly. *Zilath*, as will be noticed later, is a term of relationship, and *anke* (if = *amke*) a term of relationship or endearment. As *-thi* does not imply daughterhood, *tusur-* would do so.

Tusur, 'daughter', is at once explained from the same languages as have already explained *farthana* or *harthna*, and would be identified with the Greek *θυγάτηρ*, German *tochter*, Sanskrit *duhitṛ*, Zend *dughdar*, Persian *dokhtar*, Armenian *dovstr*, Old Slavonian *dushti*, gen. *dushtere*, Russian *doć*, gen. *doćeri*, Lithuanian *duktere*, *dukre*, *dukte*, Irish *dear*, Ossetic *tyüzg*, *tyizg*, *khizge*. As the Sanskrit *svasṛ* = Gothic *svistar*, and as the Lithuanian *dukre* = Lithuanian *duktere*, so the Etruscan *tusur* = Armenian *dovstr*, Sanskrit *duhitṛ*. A Sanskrit *h* thus appears as a sibilant in Etruscan, as it does in Armenian; a letter-change already seen (*ante*, p. 68) in the comparison of the Etruscan *su-* with the Sanskrit *hu* and the Armenian *zoh*. The case is

¹ Corssen, *Die Etruskische Sprache*, ii, p. 621.

similar in the Ossetic *tyüzg* or *tyizg*, 'daughter', the plurals of which are *tyüzdyi-thä* and *tyizdyi-thä*, which imply *tyüzdyi* and *tyizdyi* as more perfect singulars, *thä* being the Ossetic plural termination. In *tyüzdyi* and *tyizdyi* we have forms resembling the Etruscan *tusurthii* and *tusurthi*, the Ossetic *tyüz-* being to the Etruscan *tusur-* nearly what the Ossetic *jüd* and *mad* are to the complete Aryan forms for 'father' and 'mother', and what the Russian *doć*, 'daughter' (nom.), is to its base in the gen. *doćer-i*. In Albanian, again, we have two forms for 'lad', *dyallë* and *dyallythi*, to compare with *tusur* and *tusurthi*. Finally, in Greek, there are diminutives like *κορίδι-ον*, or such forms as *θυγατριδῆ*, to compare with *tusurthi*. But, as already said, *thi* would be an Etruscan word, and therefore could not be a mere termination.

As nothing will be made to depend upon *thi*, the determination of its meaning is little more than a point of curiosity. *Tusurthi* may, however, be a compound like the Phrygian *sminthus*, 'mouse', if we adopt Bötticher's explanation of *sminthus* (*Arica*, p. 39), 'terrigena, in terra creatus', where *-thus* is considered as = Sanskrit *hita* (for *dhita*). *Sminthe* is a proper name in Etruscan. Compare also the Etruscan proper names, *Sein-al* and *Seinthi-al*. The *-thi* of *tusurthi* would then be referable to the Sanskrit roots, *dhā*, *dhi*, 'ponere, tenere, ferre, gerere', = Zend *dā*, = Armenian *dē* (in *dnel*, 'ponere'. *Tusurthi* might then be such a compound as *υιοθέτος*, and *klensi thii* might signify *υιοῦ θετοῦ*. *Tusurthi* might also signify 'born daughter', or 'daughter-born'; i.e., either 'own daughter', or 'granddaughter'.

In addition to *dē*, the Armenian has a second base for 'ponere', *dir*, which appears in *dir*, 'position', and in compounds like *nakhdir*, 'preposition', *nakhadir*, 'put before', *martadir*, 'warrior', *storadir*, 'subjected', and *ovshadir*, 'attentive'. This might explain the Etruscan from *tusurthir*, if genuine, which occurs in one epitaph here given in

full, where I have inserted a comma between the names of the husband and wife:—

La. Tite Petruni Ve. Klantial, Fasti Kapznei Ve. Tarchisa Chvestnal *tusurthir*.

A similar compound of 'daughter' would be found in the Armenian *dsteragir*, 'adopted daughter' (*dovstr*, 'daughter', *gir*, 'write'). If *-gir*, 'written', were changed into *-dir*, 'placed', *-θετή*, we should have the form *dsteradir* to compare with *tusurthir*, supposing this last form not to be an error, as I am inclined to think it is, for *tusurthii*.

On the whole, referring *tusur-* to the Armenian *dovstr* and the Sanskrit *duhitṛ*, 'daughter', and *-thi*, *-thii*, and *-thir*, to the Sanskrit *dhâ*, *dhi*, 'ponere', 'gerere', and the equivalent Armenian *dë* and *dir*, we shall have three senses to choose from for *tusurthi*, *tusurthii*, or *tusurthir*:—'daughter', 'granddaughter', 'adopted daughter'. Of these, I much prefer 'daughter' simply. *Klensi thii* and *tusurthii* might then be expressions like *fratris germani* and *κασυνήτη*; and *tusurthii* would signify 'own daughter, *filia gnata*', in contradistinction to *sech farthana*, 'step-daughter', and *farthn*, *farthnache*, 'daughter-in-law'. *Tarchnal thi*, which should perhaps be divided into *Tarchnal thi* (though *Διόσκουροι* is one word), would mean 'Tarquiniaë gnatus'. The epitaph where it occurs is the third in the following list, and may be illustrated by the other epitaphs with which it is there compared:—

2065.	2061.		2055.	2070.	1280.
				Arnth	L.
Alethnas	Alethnas	Alethnas	Alethnas	Churkles	Pomponius
Laris.	Lari(s)	Arnth	V.		
	Larisal		V.	Larthal	L.
		Larisal		<i>klan</i>	<i>f.</i>
		<i>zilath</i>	Thelu		
			<i>zilath</i>		
			Parchis		
			<i>zilath</i>		
		Tarchnal			Arsiniaë
		<i>-thi</i>			<i>gnatus</i>

2065.	2061.	2055.	2070.	1280.
			Ramthas	
			Pevtnial	
			<i>zilk</i>	
			Parchis	
	<i>anke</i>		<i>amke</i>	
				Plautus.
		etc.	etc.	

The term of relationship which comes nearest to *thi* is the Greek $\theta\epsilon\iota\text{-}\sigma$ (cf. Italian *zi-o*), which is most probably allied to the *dhâ*, *dhe*, the Zend *dâ*, and the Armenian *di-el*, 'sugere', and *day-eak*, 'nutrix'. The most probable meaning of *zilath* is $\gamma\alpha\mu\beta\rho\acute{\sigma}$, and of *zilk*, $\gamma\alpha\mu\acute{\epsilon}\tau\eta\varsigma$; but neither interpretation is certain.

Husiur.

The Perugian word which seems to be a masculine correlative of the Perugian *tusurthii*, or nearly so, is only met with once. It is found at the entrance of the tomb of the Volumnii, where this inscription in three lines may be read: but the words in each line are not separated from each other, as they are below, though *husiur* must certainly be detached from *Arzneal*:—

Arnth Larth Velimnas
Arzneal *husiur*
suthi akil heke.¹

The meaning of *husiur* seems deducible from the following inscriptions:—

1841.	1247.	1487.	1281.	1491.
Titi	Veilia	Arnth	L.	Aule
		Larth		
	Klanti	Velimnas	Pomponius	Velimnas
			L.	Thefrisa

¹ As the Sanskrit *hita* is = *dhita*, so *heke* may = *teke*, 'posuit' (*ante*, p. 69). *Larth* is probably short for *Larthal*, as *Lr* is in the bilingual inscription of Pesaro (*ante*, p. 56).

1841.	1247.	1487.	1281.	1491.
			<i>f.</i>	
Velimnas ¹				
Akril	Arznal	Arzneal	Arsiniæ	Nufrznal
<i>sek.</i>	<i>tusurthi.</i>	<i>husiur</i>	<i>gnatus</i>	<i>klan.</i>
			Plautus.	
		suthi		
		akil		
		heke.		

As *tusurthi* corresponds here to *sek*, 'daughter', so likewise does *husiur* to *klan* and *gnatus*. This tends to identify *husiur* with the Armenian *ovstr*, 'son', a word frequently occurring in conjunction with *dovstr*, 'daughter'. Thus, in 2 Cor. vi, 18, we have *yovsters ev 'i dsters*, 'εις υιοῦς καὶ (εις) θυγατέρας'; and in Matt. x, 37, *zovstr kam zdovstr*, 'υἶὸν ἢ θυγατέρα'. Two verses above (Matt. x, 35), we find *zharsn*, 'νύμφην,' with *zdovstr*, 'θυγατέρα'; so that the Armenian gives us *ovstr*, *dovstr*, and *harsn*, and the Etruscan, *husiur*, *tusurthi*, and *farthn*, for 'son', 'daughter', and 'daughter-in-law'. The Armenian *ovstr* and *dovstr* have preserved, like *daughter*, the original Aryan *t*, which the Etruscan has lost in *husiur* and *tusurthi*: but the Armenian *hayr* and *mayr*, 'father' and 'mother', have also lost this *t*.

Ovstr, like *dovstr*, seems to belong to the Aryan group of terms of relationship formed with the suffix *t-r*; and, if the Armenian *ovs-tër* be = Etruscan *hus-iur*, both words may be traced up to the same root as *son*, which they signify. For, as the Sanskrit *sûnu*, 'son', = Zend *hunu*, is derived from the Sanskrit *sû*, 'generare', = Zend *hu*, so may the Etruscan *husiur* and the Armenian *ovstr* be derived from the Sanskrit *sûsh*, 'generare'. For the loss of the initial *h* in the Armenian *ovstr*, compare the Persian *hôsh*, 'mind' = Armenian *ovsh*, 'thought'; the Sanskrit *saptan*, = Zend *haptan*, = Armenian *cvthn*, 'seven'; and the Sanskrit *samâ*, 'year', = Zend *hama*, 'summer', = Armenian *am*, 'year'.

¹ 'Volumnii (uxor)'.

Nefis and ruka.

These two words belong to the neighbourhood of Orvieto, as *husiur* and *tusurthi* do to that of Perugia. Indeed, *nefis* and *ruka* are found in the same tomb, which contains several inscriptions, and among them the two following:—

	2033 bis D. c.	2033 bis E. b.	
	Vel.	Arnth	
	Leinies	Leinies	
	Larthial	Larthial	
	<i>ruka</i> ¹	<i>klan</i>	'soboles',
	Arnthialum	Velusum	
'soboles',	<i>klan</i>	<i>nefis</i>	
	Velusum	ailf	
	Prumaths ²	marnuchte(f)	
		Esari	
		<i>ru</i> . .	
		L	
		<i>amke</i>	
'etatis'	avils		
xvi	semphs ³		
'obiit'.	lupuke.		

As *ruka* in the first of these inscriptions holds the same position as *klan* in the second, while *nefis* in the second holds the same position as *klan* in the first, therefore *nefis* and *ruka* would be, like *klan*, terms of relationship by descent. *Nefis* is thus to be assigned to the Aryan group which comprises the following words:—Anglo-Saxon *nefa*, German *neffe*, 'nephew'; Old Norse *nefi*, 'brother'; Kurdish *nevi*,

¹ So in Fabretti's text: in his index, *ruva*.

² *Prumathe* is the Etruscan form of Prometheus; and Arnth *Prumathni* Arnthal, and La. Anaini *Prumathnal*, are Etruscan proper names. *Prumath-*, one of the Velian race, would probably have been the father of Velus Leinies.

³ So in Fabretti's index: in his text, *sesphs*.

'grandson', = Latin *nepos*, = Behistun *napâ*: and for *ruka* we have the following Aryan analogies:—Sanskrit *ruh* (for *rudh*), 'nasci, crescere', *ruha*, 'crescens', *tanûruha* (*tanû*, 'corpus'), 'filius'; Zend *rud*, 'crescere'; Old Slavonian *rod-*, 'parĕre'; Gaelic *rug*, 'parĕre, nasci'; Armenian *aroyg*, 'young'; Albanian *ri*, 'young'. These resemblances allow us to take *παῖς*, *puer*, *putra*, as the sense of *ruka*; and the first of the previous epitaphs would then imply:—

'Velus Leinies, Lartiæ puer, Aruntiorum soboles (a patre) Prometheus (ex gente) Veliorum, ætatis xvi obiit.'

Here *Larthial ruka*, *Arnthialum klan*, 'Lartiæ puer, Aruntiorum soboles', may be compared with the familiar line of Virgil:—*Cara Deûm soboles, magnum Jovis incrementum*. Perhaps divine descent is similarly claimed for Arnth Leinies in the second epitaph by the words, *Esari ru(ka)*, as *æsar* is said to have been an Etruscan word for 'god'. *Esari ruka*, 'Deo natus, Διογενής', is followed by the words, L..... *amke*, which conclude the epitaph. To L..... *amke* we have several parallels. Thus Arnth Churkles, who died at the age of sixty-one, is described as *Larthal klan*, *Ramthas Pevtnial zilc*, *Parchis amke* (2070). In the middle of another epitaph (2340) we meet with the words, *amke Sethres Keis(in)ies*. A third epitaph (2104) runs thus:—*Larthi Keisi Keises Velus Velisnas Ravnthus sech avils sas amke Uples*: and, finally, there is the epitaph already cited (p. 89):—*(Ale)thnas Arnth Larisal zilath Tarchnalthi anke*. The term *amke* is thus applicable to a girl of the age of six (*avils sas*), as well as to a man of the age of sixty-one (*avils machs semphalchls*). It would be, as I have said before, some term of relationship or endearment, and has been plausibly connected with the Latin *am*, 'love', = Sanskrit and Armenian *kam*. Cf. also the Armenian *am-olch*, 'jugum', and *am-ovsin*, 'conjux'.

The Etruscan words for 'divinity', æsar, maris, and lasa—their Aryan character—foreign names of gods attached to maris and lasa.

Æsar is given by the ancients as an Etruscan word for 'god', and *αισ-οι* for 'gods'. These, with the *Esar-i* of the inscription just noticed, are to be compared with the Gaelic *aos, aosar*, and the Irish *æsar*, 'god', and also with the Armenian *ays*, 'spirit, demon.'

Other inscriptions would show that the Etruscans had two more words for 'divinity', *maris* or *marish*, and *lasa*. For, on one mirror (477) we find a personage named *Maris* in company with the deities, *Fuflun, Sethlans*, and *Laran*: on another (480), *Marishalna* and *Marishusrnana* in company with the deities, *Turan, Menrva*, and *Leinth*: on a third (2094), *Marishalna, Marishusrnana*, and *Marisisminthians*, in company with the deities, *Turan, Menrva, Laran*, and *Turms*, and another personage called *Amaputun(ia)*: and on a fourth (2141) is the imperfect inscription:—*Maristura ist...ena ...upan mus*. As a divinity is an object of veneration, *numen, σέβασμα*, the Etruscan *maris* or *marish* may be well identified with the Sanskrit *mārisha*, 'persona venerabilis, in linguâ scenicâ histrio primarius'. *Mārishâ*, the feminine of *mārisha*, was the name of the mother of Daksha, the son of Brahmâ.

The name of the Persian prince, *Meres* (Esther, i, 14), has been compared by Benfey with the Sanskrit *mārsha*, 'worthy'—akin to 'worshipful' and 'worship'—another form of *mārisha* (Gesenius, s. v. ed. Tregelles). *Maris* was the name of the bishop of Chalcedon at the Council of Nicæa.¹ We have thus two stepping-stones, as it were, between India and Etruria.

The third Etruscan name for 'divinity, spirit, δαίμων', was *Lasa*. On one mirror (2514) are represented, *Lasa, Aivas*

¹ Milman's *History of Christianity*, book III, chap. iv.

(Ajax), and *Hamphiar* (Amphiaraus): on a second (2484), *Lasaveku* and *Menrva*: on a third (2096), *Lasasitmika*, *Turan*, and *Atunis* (Adonis): and on a fourth (2500), *Lasathimrae* and *Lasarakuneta*, associated with several divinities and Homeric personages. As the Sanskrit words for 'deity', *sura* and *deva*, are traced to the Sanskrit *sur* and *div*, both meaning 'shine', so may the Etruscan *lasa* be traced to the Sanskrit *lash* (also *laç* and *las*), 'shine'. The three Etruscan words for 'divinity', *æsar*, *maris*, and *lasa*, seem thus to be all of Aryan origin, though *lash* signifies 'shine' in Abkhasian also.

The Marises, who seem masculine, and the Lasas, who are winged females, were genii, spirits, *δαίμονες*, izeds, or angels, rather than deities. When names of deities are attached to *Maris* and *Lasa*, the compound name would not be that of the actual deity mentioned, but of some divine emanation or messenger; some representative, it might be, of the deity, such as Hermes and Iris were of Zeus and Hera. The divine names attached to *Maris* and *Lasa* would thus have an adjectival or a genitive force. *Marishalna* and *Maristura*, if = *Maristhalna* and *Maristuran*, are not the deities, *Thalna*, 'Juno', and *Turan*, 'Venus', but rather a 'Juno-maris' and a 'Venus-maris'. Dr. Taylor makes them signify 'boy of Juno', and 'boy of Venus': but this could hardly be admitted. For on one mirror there are four personages, *Maris*, *Fuflun*, *Sethlans*, and *Laran*. An undefined 'boy' is not likely to have been one of the four, but an undefined genius or ized might have been so, as an angel might be introduced in one of our religious pictures.¹

Of the eight names attached to *Maris* and *Lasa*, two

¹ The name of the ecclesiastical metropolis of Armenia, usually written *Etshmiadzin*, is a form like the *Maris* and *Lasa* compounds. For its elements are:—*etsh*, 'descent', and *miadzin* (gen. *miadzni*), 'only-begotten'. *Etshmiadzin* thus signifies 'the descent of the Only-Begotten', as *Marishalna* and *Maristura(n)* appear to signify 'the Maris of Juno' and 'the Maris of Venus'.

seem to be native, *Halna* and *Tura(n)*; but the others resemble foreign divine names, and may indicate a certain amount of eclecticism in the Etruscan worship, as there was in other ancient religions; thus the Latins, for instance, borrowed the worship of Cybele from Phrygia, of Mithras from Persia, and of Serapis from Egypt. Similar influences appear to be intimated by the Greek legends of Pelops, Cadmus, and Danaus.

We have already met with the following names in the Maris and Lasa groups:—

<i>Maris.</i>	<i>Lasa.</i>
<i>Maris-isminthians.</i>	<i>Lasa-thimrae.</i>
<i>Maris-husrnana.</i>	<i>Lasa-veku.</i>
	<i>Lasa-rakuneta.</i>
	<i>Lasa-sitmika.</i>

Lasa-thimrae and *Maris-isminthians* imply connection with Phrygia, either direct or indirect. For *Lasa-thimrae* at once recalls Apollo *Thymbræus*, with the Trojan river and town, *Thymbrius* and *Thymbra*, and the Phrygian river and town, *Thymbres* and *Thymbrium*. *Thymbræus* and *Thimrae* differ only like the Armenian synonyms for 'torpor, drowsiness', *thimbir*, *thmbrovthivn*, and *thmrovthivn*. In like manner, *Maris-isminthians* reminds us of the *Sminthian* Apollo, whose title was said to be derived from the Phrygian *sminthus*, 'mouse'.¹ The following proper names are met with in Etruscan:—*Sminthe* Eknatna (2095 bis *a.*); Vel. Kae. Kestna *Sminthinal* (1143); and Larthia Kaia Ls. *Sminthina(z)* (1145). The name was therefore known in Etruria, as *Mus* and *Sorex* were at Rome.

Similar to *Isminthians*, 'Sminthian', are:—*Neth-unus* and *Neth-uns*, 'Nept-unus'; *Sethl-ans*, 'Vulc-anus'; and *Fufl-unus* and *Fufl-uns*, 'Bacchus'. Without the final *s* are:—*Fufl-*

¹ Compare Mr. Lang's essay, *Apollo and the Mouse*, in *Custom and Myth*, p. 103.

-*unu* and *Fufl-un*, *Thes-an*, *Tur-an*, and *Lar-an*. Etruscan words are *kl-an* and *alp-an*: but we cannot assume that in all these cases *-an* is merely a formative element, as it is in the Armenian *ishkhan*, 'a prince', from *ishkh-el*, 'to rule'.¹

In *Maris-husrnana*, *husr-* is like 'Ὀσρό-ης or χροσρό-ης, = Zend *huçrava*, 'renowned'. There was the province of *Osrho-ene* in Mesopotamia, and a river *Khosr* still runs by the ruins of Nineveh. The name of the deity derived by the Persians from the Babylonians is recalled by *-nāna*. "Before the time of Herodotus they had borrowed from the Babylonians the worship of a Nature-Goddess, whom the Greeks identified at one time with Aphrodité, at another with Artemis, at another (probably) with Heré. . . . The Babylonian Venus, called in the original dialect of her native country *Nana*, was taken into the Pantheon of the Persians under the name of *Nanæa*, *Anæa*, *Anaitis*, or *Tanata*, and became in a little while one of the principal objects of Persian worship."² The etymology of *Nana* is uncertain. In Tshetsh (Caucasus) *nāna* signifies 'mother'. In Syria, *Nani* is one of the names of the planet Venus. In Etruscan, according to Tzetzes, *νάνος* signified *πλανήτης*,

¹ If, however, it be so in the case of *Tur-an*, 'Venus', then, as the root *tur*, 'give', = Armenian *tovr*, appears in the Etruscan *tur-ke*, 'dedit', the name *Turan* might be interpreted as 'the giver'. Compare here Gesenius (*Hebrew Dictionary*, ed. Tregelles, s. v. *Asherah*):—"According to this view, *Asherah* is properly 'fortune, happiness', and hence became an attribute of *Astarte*, or *Venus* as *Fortuna Datrix*, which was made great account of among the Hebrew idolaters. To this we may add that the Romans, too, regarded *Venus* as the *giver* of good fortune and a happy lot."

Fabretti cites two derivations of *Turan*. One is Lanzi's, *τα Urania*; and the other, which Fabretti prefers, is *turanna*, i.e., 'regina'. For *Thalna*, which once means 'Venus', but is properly 'Juno', we are left to choose between *θηλώ*, 'nutrix', *θ'άλινα*, 'marina', and *θάλλω*, 'orior, germino'. "Juno seems to be related to Jovis, as Dione to Dis, and to have originally signified *goddess* in general, perhaps a patron-goddess. Female slaves used to swear by the Junones of their mistresses" (Keightley's *Mythology*). Compare the Thusch *Dal*, 'God'.

² Rawlinson, *Ancient Monarchies*, iv, 344.

and was applied to Ulysses. There was a temple of Nanaea at Thiln, near Erzingan, in the west of Armenia.¹

For *Lasa-veku* we have these Sanskrit parallels, though *-veku* must belong to a different Aryan family of languages:—*Purâ-vasu*, ‘a name of *Bhîshma*’ (*purâ*, ‘of old’); *Mitrâ-vasu*, = *Mitra*, ‘a Vedic deity, the sun’; *Vibhâ-vasu*, ‘the sun’ (*vibhâ*, ‘light’). According to Benfey (s. v.), some of the meanings of *vasu* are:—‘sweet, dry, wealth, a kind of demigod, a name of Agni, Kuvera, a name of Vishnu and Çiva’. The Sanskrit *vasu* is the Zend *vañhu*, *vohu*, *vah-*, ‘good’, and the Armenian *weh*, ‘superior, great, sublime’. Justi gives eight Zend proper names compounded with *vañhu* for a final, as the Etruscan *Lasa-veku* is with *veku*, and the Sanskrit *Mitrâ-vasu* with *vasu*. *Vohu* occurs in *Vohu-manô*, the name of the chief of the Amshaspands.

As *thimrae* and *isminthians* would be of Phrygian origin, and as *husrnana* and *veku* seem to be Persian, so *rakuneta* in *Lasa-rakuneta*, has a thoroughly Egyptian sound. For, in ancient Egyptian, *ra-khu-ta*, or (inserting the preposition *en*, ‘of’) *ra-khu-en-ta*, would signify ‘Ra the protector of the land’. The first king of the thirteenth Egyptian dynasty assumed as his divine throne-name the title *ra-khu-ta* (Bunsen), or rather *ra-hku-ta-ui*, ‘Ra the protector of the two lands’, *i.e.*, Upper and Lower Egypt, *Mizraim*. A great number of Egyptian throne-names begin with the name of

¹ *Thiln* is identified with the *Thalina* of Ptolemy, both names resembling that of the Etruscan Juno, *Thalna*. This part of Armenia is very rich in religious memories. Here stands Thordan, in ancient times one of the chief seats of the worship of Anaitis; and on the other side of the Euphrates lay the Anaitic province of Pliny, which derived its name from the great goddess of the Armenians. In this province, just opposite Erzingan, Kiepert’s map places a town called Belti, a name like that of the Babylonian Beltis, who “seems to have united the attributes of the Juno, the Ceres or Demeter, the Bellona, and even the Diana of the classical nations”, and from whom Ishtar or Nana “is often scarcely distinguishable”. See Rawlinson, *Ancient Monarchies*, i, 175; Spiegel, *Erânische Alterthumskunde*, i, 158; and St. Martin, *Mémoires sur l’Arménie*, i, 45.

the sun-god *Ra*, which is sometimes followed by *khu*, as above in *ra-khu-ta-ui*, and again in *ra-khu-teti* and *ra-khu-en-sotep-en-ra*, 'Ra the protector of the approved of Ra', in which last title the preposition *en*, 'of', is twice inserted. "The very early intercourse between Etruria and Egypt" is attested by Egyptian articles found in Etruscan tombs.¹ The Etruscans are even supposed to have joined in two invasions of Egypt in the fourteenth and thirteenth centuries B.C., though this rests only on the resemblance which the names, *Tyrsemi* and *Tursee*, bear to *Tulusha* or *Turusha*.²

Queen Hatasu assumed as her throne-name the title of *Ra-ma-ka*.³ If we substitute here the name of *Set* for that of *Ra*, the result would be *Set-ma-ka*, which is not far from *sitmika* in *Lasa-sitmika*. "Mr. Birch thinks that the name (*Sethrô-s*) means 'Nome of Set-Ra'. . . . Set-Ra would, in itself, be easily explained, for Set may as well be coupled with Ra as Osiris is."⁴ *Sethre*, like *Sminthe*, is an Etruscan *prænomen*; and *Sethl-ans*, like *Isminthi-ans*, an Etruscan divinity. Similarly, in England, we have churches dedicated to foreign saints, like St. Nicholas and St. Giles, while Nicholas and Giles have become Christian names with us. In *Sethl-ans*, who corresponds to *Vulc-anus*, the terminations seem identical, as they are in *Neth-unus* and *Neth-uns*, both = *Nept-unus*. This leaves *Sethl-* to be compared with *Vulc-*, 'fire' (cf. *fulg-ere*, *fulg-ur*, and $\phi\lambda\acute{o}\xi$). Now, if *Seth-l* = *Seth-re* = *Set-Ra*, then its first element, *Set*, would be Typhon, the destroyer; and its second element would be *Ra*, the Sun, or Light. The connection of 'fire' with 'destroying light' is plain enough. Set was much worshipped

¹ Dennis, *Cities and Cemeteries of Etruria*, i, 437, ed. 2.

² Rawlinson, *History of Ancient Egypt*, ii, 329-33. The same character stands in Egyptian for the cognate letters, *l* and *r*. According to Heeren (*African Nations*, i, 102, Eng. trans.), the enterprise of the Etruscans towards the west would have extended as far as Madeira.

³ *Ib.*, ii, 199, 220. She probably reigned about 1550 B.C.

⁴ *Egypt's Place in Universal History*, iii, 122.

in Egypt between 1400 and 1250 B.C., to which period the Etruscan invasions are assigned.¹

The influence “dell’ Oriente e del misterioso Egitto” upon the religion of the Etruscans is deduced from their monuments with learning and judgment by Micali in his *Storia degli antichi popoli Italiani*, i, 143. Language now comes in to confirm the conclusions which he drew so well more than half a century ago.

In the two Orvietan inscriptions which have led to this digression, and to which I now return, the Etruscan mode of nomenclature is very like what we find in Latin and Old Persian. For on Latin monuments we meet with such names as these:—

Q(uintus) Fulvius, M(arci) f(ilius), Q(uinti) n(epos), Flac-
cus.

L(ucius) Cornelius, Cn(æi) f(ilius), Cn(æi) n(epos), Scipio.

The Behistun inscription, again, begins thus, with the Persian at the top, and the Medo-Scythian translation of it at the bottom²:—

<i>Adam Dârayavush,</i>	. . .	<i>Vis-tâspahyâ</i>
Ego Darius,		Hystaspis
<i>U Dariyavaos,</i>	. . .	<i>Vistaspa</i>

<i>putra,</i>	<i>Arshâmahyâ</i>	<i>napâ,</i>	<i>Hakhâmanishya.</i>
filius,	Arsamis	nepos,	Achæmenensis.
<i>sakri,</i>	<i>Irsama</i>	<i>ruhhusakri,</i>	<i>Akkamanisiya.</i>

¹ Herodotus makes the Egyptian *Sethon* to be a priest of Vulcan.

² I have retained the vaguer name of *Medo-Scythian* in preference to that of *Median*, finally adopted by Oppert, who objects to *Proto-Median* on the ground that the Proto-Median would be rather the Zend or the Old Persian, and not the Scythian language (if Scythian it may be called) which is found at Behistun, and which he considers to be the language of the Median kings, Deioces, Phraortes, Cyaxares, and Astyages. In reference to the position of what he therefore calls the Median between the Persian and the Semitic at Behistun, and elsewhere, he says:—“La seule nation dont le glorieux passé pût permettre aux rois Perses d’accorder à son idiome une préséance constante sur celui de Ninive, c’était le peuple Mède.” The argument is a very strong one.

So one of the two Orvietan inscriptions is:—

Arnth Leinies, Larthial klan, Velusum
Aruns Leinies, Lartiæ filius, Veliorum
nefis, ailf marnuchte(f), Esari ru . . , L amke.
nepos, Deo natus,

And the other Orvietan inscription is:—

Vel. Leinies, Larthial ruka, Arnthialum klan,
Velus Leinies, Lartiæ puer, Aruntiorum soboles,
Velusum Prumaths, avils semphs lupuke.
Veliorum Promethei, ætatis xvi obiit.

Both the deceased had apparently taken the surname of Leinies from their mother Larthia. *Ruka*, 'puer', seems identical with the Medo-Scythian *ruhhu*, 'son', implied in *ruhhusak*, 'son's son', where *sak*, 'son', would = Etruscan *sek*, 'daughter', and Circassian *saghu*, 'boy', etc. (*ante*, p. 71). As the Aryan analogies for *ruka* are so strong (*ante*, p. 92), we might be inclined to think that the Medo-Scythian *ruhhu*-, 'son', was borrowed from an Aryan source: but, in Medo-Scythian, *ruh* is 'man', as *rum* is in Accadian. In any case, whether *ruhhu*- be Aryan or not in origin, yet the Aryan Persian and the Non-Aryan Medo-Scythian stand clearly apart at Behistun. They have not coalesced into one language, as the Aryan Thracian and the Non-Aryan Iberian have done in Etruria.

In the last of the Orvietan inscriptions, which can be entirely translated, everything seems Aryan, with the exception of the numeral *semph*, 'sixteen', and of the genitive termination *-al*, which are Iberian. *Velusum* and *Arnthialum* have been taken, and, I think, rightly, as genitives plural; and in *Arnthial-um* an Aryan genitive plural suffix *-um* appears to follow the Iberian genitive suffix *-al*, just as in *Truial-s*, 'Trojanus', the same Iberian suffix *-al* is followed by the Aryan nominative singular suffix *-s*. A similar form occurs in *Μυρσίλος*, '(son) of Μύρσος (Herod., i, 7), where

the Greek nominative suffix *-os* follows the suffix *-ιλ*. Cf. also *Troilus*, which nearly resembles *Truials*. In the Caucasus, the commonest Avar genitive suffix is *-il*, a second Avar genitive suffix being *-al*, on which other suffixes may be engrafted. In a bilingual inscription (493), the Etruscan *Venz-ile* corresponds to the Latin *Vens-ius*. Dr. Taylor compares *Osmanli*.

The Etruscan case-suffixes expressing relationship, -sa, -al, -alisa, -alislā, -nal, -nalislā—their Iberian character—further consideration of Dr. Taylor's Etruscan genitive of position—his Etruscan genitive in -n—both these supposed genitives non-existent in Etruscan.

The way has now been sufficiently prepared for the consideration of the Etruscan case-suffixes expressing relationship; a body of evidence of the most important character. These suffixes constitute by far the strongest proof—for the proof is a grammatical one—of the extension of the Iberians from the Caucasus into Italy; as the analysis of the Basque verb will evince that they extended still farther westward, into Spain. I shall therefore examine these Etruscan suffixes minutely, before proceeding with the rest of the terms of relationship.

The relationship of wife to husband is expressed in Etruscan by the suffix *-sa*. Thus, in the epitaph, *Larthi Vuisinei Leknesa* (408), *Lartia Væsinia* was the wife of a *Licinius*, by whom she would have had a son, *A. Lekne Vuisinal* (409). Similarly, in the epitaph, *Thania Seianti Tutnal sech Herinisa* (705), the suffix *-al* in *Tutnal* implies descent, and the suffix *-sa* in *Herinisa*, marriage; as *-alisa* and *-sa* likewise imply descent and marriage in *Arnza Tlesna Arnthalisa Kamarinesa* (730), and in *Thania Tlesnei Kikunia Arnthalisa Sinusa* (494 bis *g*). In the epitaph, *Thana Skiria Tutnasa* (517), *Tutnasa* implies 'Tutinii (uxor)', as *Tutnal sech* (705) signifies 'Tutiniæ filia'. The four follow-

ing epitaphs (495, 498, 499, 500), would thus belong to a husband, a wife, and two of their sons, and may therefore be arranged as below, although the husband may have been *Lth. Herini Lth. Rathumsnal klan* (496), instead of *Lth. Herini Umranal*:—

<i>Lth. Herini Umranal</i>	=	<i>Tha. Tlesnei Herinisa Pulufnal</i> ¹
	—	
<i>Lth. Herini Tlesnal</i>		<i>Ath. Herini Lth. Tlesnalisa.</i>

Similar suffixes to those above are found in *Larthal*, *Larthalisa*, and *Larthalisa*; and also in *Varnal* and *Varnalisa*, which are both rendered in bilingual inscriptions 'Varia natus', as *Arntnal* is rendered 'Arria natus'.² This looks as if *-nal*, as well as *-al*, were an Etruscan suffix, though the proper names, *Varnei* and *Varna*, *Arntnei* and *Arntna*, may make it possible, in spite of such renderings, and of such forms as *Venatei* and *Venatnal*, that *-al*, and not *-nal*, is the suffix in *Varnal* and *Arntnal*. But at any rate *-al*, and most probably also *-nal*, was a genitive suffix in Etruscan.

Now both *-al* and *-nal* are genitive suffixes among the Lesgi nations in the Eastern Caucasus. In Avar, for instance, we have *rukn-al*, 'of a nest (*rukun*)', and *ghal-al*, 'of a tress (*ghal*)'; and, in Kasi Kumük, *nech-al*, 'of a river (*nech*)', *shin-al*, 'of a year (*shin*)', *las-nal*, 'of a man (*las*)' *Urus-nal*, 'of a Russian (*Urus*)', and *ars-nal*, 'of a son (*ars*)' and also, 'by a son', Kasi Kumük genitives being instrumentals as well as genitives.³

¹ *Thana Tlesnei Pulfnal* (736) would have been related on both sides to this wife of Herennius.

² *Arriá* can hardly be a close rendering of *Arntnal*. We should at least expect *Aruntiá*.

³ In Thusch, *Rusa* is 'Russia', and *Rusachi*, 'Russian'. Compare the Etruscan *Rumach*, in Kneve Tarchunies *Rumach* (2166), which is supposed to mean 'Cnæus Tarquinius Romanus'. Dr. Taylor compares *Ostiak*, *Wotiak*, *Karakalpak*, etc. A Turkish scholar should have remembered that *Kara-kalpak* signifies 'Black-cap'. The word *calpac* is almost naturalised in English since Byron wrote:—"His calpac rent—his caftan red. . . ."

In Etruscan, again, the addition of *-isa* to the suffix *-al* leaves the sense unchanged. Thus *Tlesn-alisa*, *Larth-alisa*, and *Arnth-alisa*, are synonyms of the genitives, *Tlesn-al*, *Larth-al*, and *Arnth-al*. In like manner, we find in Avar the two synonymous forms, *radal* and *radalisa*, for 'in the morning (des Morgens, am Morgen)', and *radaradal* and *radaradalisa* for 'an den Morgen'. The following forms also occur in Avar:—

<i>bog</i> , 'time'.	<i>rii</i> , 'Summer'.	<i>ich</i> , 'Spring'.
	<i>riidal</i>	<i>ichdal</i>
	<i>riidalil</i>	<i>ichdalil</i>
<i>bog-ol</i> , 'of time'.	<i>rool</i>	} 'of Spring'.
		} 'of Summer'.
		<i>ocholisa</i> , 'in Spring'.

Ocholisa is formed from a non-existent genitive, *ochol*, 'of Spring', corresponding to the actual genitives, *bogol*, 'of time', and *rool*, 'of Summer', just as *Larthalisa* is formed in Etruscan from the commoner genitive, *Larthal*.

This Avar termination *-isa* stands by itself as a suffix in the adverbs, *seisa*, 'übermorgen', and *leisa*, 'überübermorgen', as well as in such oblique cases of nouns as *tohisa*, 'von der Spitze, from the point', and *Muhammedisa*, 'von Mohammed, by Mohammed'. In fact, *-isa* is the mark of the instrumental case; and it consists of the instrumental suffix, *-za*, *-sa*, *-s*, to which one of the vowels, *a*, *i*, *o*, *u*, but especially *i* or *u*, is usually prefixed (Schiefner). In Georgian, *-isa* and *-is* are genitive suffixes, as in *mam-isa*, *mam-is*, 'of a father (*mama*)'; and they are apparently formed by prefixing the vowel *-i* (a genitive suffix by itself) to the dative suffix, *-da*, *-sa*, *-s*: this dative suffix is found in *mam-sa*, 'to a father', and in *shen-da*, *shen-s*, 'to thee', 'of thee' being *shen-i*, *shen-isa*, or *shen-is*. This Georgian dative suffix, *-da*, *-sa*, *-s*, is probably identical with the Avar instrumental suffix, *-za*, *-sa*, *-s*, as well as with the Kasi Kumük suffix *-sa*, which forms participles, adjectives, and strong possessives: thus, *e.g.*, from the root *u*, 'be', the

Kasi Kumük forms the participle *u-sa*, 'being'; and from *qhami*, gen. *qhandil*, 'women', the two adjectives, *qhami-sa*, 'womanish', and *qhan-dil-sa*, 'womanly'; while from *tul*, which is employed as the genitive of *na*, 'I', and also signifies 'my, mine', is derived *tu-l-sa*, 'mine, my own'.

Two Etruscan genitives resembling Georgian genitives are found in the epitaphs (1490, 1491):—*Thefri Velimnas Tarchis klan*, and *Aule Velimnas Thefrisa Nufzrnal klan*; which are to be rendered:—'Tiberius Volumnius, son of Tarquius Volumnius', and 'Aulus Volumnius, son of Tiberius Volumnius by Noforsinia'. *Tarchis*, the genitive of *Tarchi*, corresponds to the Georgian *vardis*, the genitive of *vardi*, 'a rose', as *Thefrisa*, the genitive of *Thefri*, does to the Georgian *Antonisa*, the genitive of *Antoni*, 'Antony'. The Georgian *puri*, 'bread', has two genitives, *puris* and *purisa*, corresponding to *Tarchis* and *Thefrisa*. Its dative is *pursa*.

With respect to the Georgian particle *sa*, which appears in the dative *pursa*, and the genitive *purisa*, it is said by Brosset (*Langue Géorgienne*, p. 30):—"Les noms qui indiquent *la possession* sont également formés avec la particule *sa*, qu'on place avant le nom primitif." This possessive force of *sa* readily enables us to see why it should become the dative suffix *-sa*, and be employed in the formation of the genitive suffix *-isa*; and likewise why it should be identical with the Kasi Kumük suffix *-sa*, which has a possessive force, besides forming participles and adjectives. Such a suffix, which is at once genitive, dative, possessive, participial, and adjectival, implies 'what belongs to', or 'what is a property of', and thus gives a satisfactory explanation of the Etruscan suffix *-sa*, as in *Tutnasa*, *Leknesa*, *Herinisa*, *Sinusa*, 'belonging to Tutna, etc.'; *i.e.*, 'wife to Tutna, the wife of Tutna, etc.'; a relationship expressed in Latin by a simple genitive like *Crassi*.¹

¹ In *Thusch*, the suffix *-sa* implies similarity, as in *mechsa*, 'like lightning, as lightning'. In *Accadian*, *sa* (or *sha*) signifies, as in *Iberian* generally, 'possession, property' (Lenormant, *La Langue primitive de la Chaldée*, p. 444).

The Etruscan genitive forms in *-alisa* may have been produced by engrafting the suffix *-isa* (containing the possessive suffix *-sa*) on the genitive suffix *-al*; *-al* being, as we have seen, a Lesgi genitive suffix, and *-isa* a Georgian genitive suffix, and also a Lesgi instrumental suffix. In Avar, we find a similar doubling of genitive suffixes in the examples already cited of *ich-dal-il*, 'of Spring', and *rii-dal-il*, 'of Summer'; as well as in such a form as *nak-al-tul*, 'of a knee', where the genitive suffix *-tul* is preceded by *-al*, "welche (Silbe)", says Schiefner, our great authority for the Caucasian languages, "*eine ältere Genitivendung zu sein scheint.*"¹ Many other Avar suffixes are engrafted upon this ancient genitive suffix *-al*. For we have such Avar forms as those which follow:—

ruk-n-al, 'of a nest' (single genitive suffix).

bazar-al-de, 'to the market' (double suffix).

nak-al-da, 'on the knee' (double suffix).

duniyal-al-da-sa, 'from the world' (triple suffix).

zaman-al-dasan, 'after a time' (quadruple suffix).

Very similar is the use of *-al* in the Etruscan *Larth-al*, *Larth-alisa*, and *Larth-alisla*, to say nothing of the apparently half-Aryan forms, *Trui-als*, 'Trojanus', and *Arnthi-alum*, 'Aruntiorum'.

In the Avar *duniyal-al-da-sa*, 'from the world', *-al* is a genitive, *-da* a locative, and *-sa* an instrumental suffix: but the combination of the locative and instrumental suffixes, *-da* and *-sa*, will also produce an elative or ablative suffix, without *-al* being prefixed to them. As locatives and genitives are nearly allied, *Romæ* being really a locative, it seems probable that the Etruscan forms, *Papa-sla*, *Sethre-sla*, *Tarch-isla*, *Larth-alisla*, and *Var-nalisla*, 'Variâ natus', are ablatives or elatives; and that they are produced by suffixing *-la*, not to a locative, or to a genitive + locative,

¹ Compare the Ude participial suffix *-al*, as in *uk-al*, 'saying, making'.

as in Avar, but either to a simple genitive, like *Papas*, *Sethres*, or *Tarchis*, or else to a compound genitive, *-al-is* or *-nal-is* (for *-al-isa* or *-nal-isa*). If this be so, and if *-la* be originally an instrumental suffix in Etruscan, then it might be identical with the Abkhasian instrumental suffix *-la*, which appears in such forms as *napyla*, 'with the hand', *myshla*, 'by night', and *yalazghueit*, 'I write (*izghueit*) with it'. The Georgian instrumental suffix, *-tha* or *-itha*, is elative, "marque aussi le lieu d'où", as well as instrumental; it may be engrafted on the genitive suffix *-isa*, as the ablative suffix *-gan* may be in like manner on the genitive suffixes, *-isa* and *-is*.

The following scheme may be of use in exhibiting concisely, in conclusion, the Iberian character of the Etruscan suffixes, *-sa*, *-al*, *-alisa*, *-alislal*, *-nal*, and *-nalisla*:—

ETRUSCAN possessive suffix	. <i>-sa</i> ¹	
Kasi Kumük possessive suffix	. <i>-sa</i>	
Georgian dative suffix	. <i>-sa</i>	
Avar genitive suffixes	. .	<i>-tul</i>
		<i>-al -tul</i>
		<i>-al</i>
		<i>-nal</i>
ETRUSCAN genitive suffixes	. <i>-nal</i>	
		<i>-al</i>
		<i>-al -isa</i> ²
Georgian genitive suffixes	. <i>-isa</i>	
		<i>-is</i>
Georgian ablative suffixes	. .	<i>gan</i>
		<i>-isa -gan</i>
		<i>-is -gan</i>
Georgian elative suffixes	. .	<i>-isa -tha</i>
		<i>-tha</i>

¹ As in *Leknesa*, 'the wife of Licinius', or 'wife to Licinius'.

² As in *Larthal*, 'son of Lars'; and in *Tlesnal* and *Tlesnalisal*, 'son of Lænia'; and in *Varnal*, 'son of Varia'.

Georgian instrumental suffix .	-tha
Abkhasian instrumental suffix	-la
ETRUSCAN elative suffixes .	-al -is -la
	-nal -is -la ¹

After these striking analogies between the Caucasus and Etruria, we might expect, judging from the proximity of the two countries, to find something of the like decisive character between the Caucasus and Media. It cannot, however, be said that we do so. The following is the Median (or Medo-Scythian) system of suffixes, as given by Oppert:—

Nominatif	<i>sak</i> , 'fils'; <i>sakri</i>	'le fils'.
Possessif	<i>sakri</i> , 'de' . . .	'le fils' (<i>i.e.</i> , 'son of').
Génitif	<i>sakna</i> ,	'du fils'.
Accusatif	<i>sakir</i> ,	'le fils'.
Datif	<i>sakikki</i> ,	'au fils'.
Ablatif	<i>sakmar</i> ,	'du fils'.
Abessif	<i>sakikkimar</i> ,	'loin du fils'.
Locatif	<i>sakva</i> ,	'dans le fils'.
Inessif	<i>sakvamar</i> ,	'au dedans du fils'.
Distributif	<i>sakhativa</i> ,	'parmi le fils'.
Comitatif	<i>sakidaka</i> ,	'avec le fils'.
Relatif	<i>sakçubaka</i> ,	'à l'égard du fils'.
Nominatif	<i>sakpé</i> ,	'les fils'.
Génitif	<i>sakpéinna</i> ,	'des fils'.
etc.	etc.	etc.

¹ As in *Larthaliska*, 'ex Larte' (or ex Lartiâ), and *Varnaliska*, 'ex Variâ'. In a few Abkhasian (W. Caucasus) terms of relationship, an *l* suffix has a genitive force for females, as the Abkhasian comitative suffix *-ei* has for males. Thus *apha* or *pha*, 'son', and *aphha* or *phha*, 'daughter', give *apheipha*, 'son's son', but *aphhalpha*, 'daughter's son'. Compare the Etruscan *Krakial* clan, 'son of Graccha', and also the Akush (E. Caucasus) *durhalladurhe*, 'son's son' (Klaproth, *Kaukasische Sprachen*, p. 60). The Akush *durha*, 'boy, son', has been already compared with the Accadian and Medo-Scythian *tur*, 'son', and with the Etruscan *-thura*, as in *Aneithura* and *Velthurithura*.

Here the genitive suffix, *-na*, *-inna*, is thoroughly Turanian. See Lenormant, *La Langue primitive de la Chaldée*, p. 406. But it is also Iberian: for, in Ude, the genitive suffixes are *-nai*, *-nei*, *-ei*, *-i*, *-un*, *-in*, *-n*: in Tshetsh, they are *-añ*, *-eñ*, *-iñ*, *-uoñ*, and *-uñ*: and, in Basque, the genitive suffix is *-en*. Compare the Egyptian preposition, *en*, 'of'. The Median (or Medo-Scythian) plural suffix, *-pé*, seems analogous to the Lazic plural suffix, *-phi*, and to the Georgian, Thusch, and Avar plural suffix, *-bi*. Sometimes, in the Caucasus, a final vowel in the singular undergoes change in the plural. Thus we have in Lazic, *koǵi*, 'man', and *koǵ-ephi*, 'men'; in Georgian, *kaz̄i*, 'man', and *kaz̄-ebi*, 'men'; and, in Avar, *roso*, 'village', and *ros-abi*, 'villages'. Compare *-abi*, *-ebi*, *-ephi*, with the Lycian *prinêz-eyêwê*, 'οἰκεῖοι'; *prinêze*, which occurs elsewhere, but not in a bilingual inscription, almost certainly meaning 'οἰκεῖος'. It is remarkable that a Caucasian demonstrative should seem to occur in Lycian, where *êwêeya êrafazeya mête prinafatu* is rendered:—τὸ μνήμα τόδε ἐποιήσατο; so that *êwînu prinafu ménê prinafatu* would have a similar signification. Now, with regard to *mênê* and *mête*, it is to be noticed, that, in Georgian, *-man* forms the demonstrative case. Thus *mama* is 'père', and *mamaman*, 'ce père'. "Dans la traduction de la Bible", writes Brosset, "et en général dans tous les ouvrages écrits en géorgien ancien, l'usage de la particule *man* est très-fréquent. Elle sert, dans la première, à remplacer l'article grec ὁ, ἡ, τὸ," Among the examples given by Brosset are:—*da thchwa ghmerthman*, 'et dixit Deus': *da pirwel man angelosman . . .*, 'et primus angelus . . .' *Mono* is a demonstrative pronoun in Ude: "in den obliquen Casus hat jenes den Stamm *me*, an welchen der Character *tu* tritt" (Schiefner). This may explain the two Lycian forms, *mênê* and *mête*.¹

¹ Whence came the Georgian name for 'God', just mentioned, *ghmerth-* or *ghmerthi*? I believe it to be identical with the name of the primitive man, or

It may be remembered how Dr. Taylor produced an Etruscan genitive of position by assuming a feminine inflectional genitive, *Thanchvilus Seinthial*, to be a masculine nominative. He obtains two more genitives of position by writing *Marishalna* and *Maristura* as *Maris Thalna* and *Maris Turan*, and by interpreting these factitious forms as 'boy of Juno' and 'boy of Venus'. In like manner, if it were requisite, a genitive of position might be created in English by the simple expedient of writing Fitz Patrick for Fitzpatrick; in French, by writing *Pont Oise* for *Pontoise*; and, in Welsh, by writing *Aber Ystwith* for *Aberystwith*. Finally, Dr. Taylor returns to his first method of assuming an inflectional genitive to be a nominative, and thus finds a genitive of position in *hinthial Patrukles*, which he correctly

Urmensch, of the Persians, *Gayomarth*, *Gayomard*, or *Gayô-maretan*, which contains the elements, *gaya*, 'life' (root *gi*, = Armenian *ke*), and *maretan*, 'man, mortal', = Armenian *Mard*. This *Urmensch* passed into the Manichæan system, where his production by the "Lord of Paradise" is thus described by Spiegel (*E. A.*, ii, 211):—"Mit dem Geiste seiner Rechten, seinen fünf Welten und seinen zwölf Elementen erzeugte er ein Wesen, welches er zur Bekämpfung der Finsterniss bestimmte und dieses Wesen heisst der Urmensch. Man darf sich aber durch den Namen Urmensch nicht irre leiten lassen, *es hat dieses Wesen keine Aehnlichkeit mit dem Menschen*, sondern ist vielmehr eine ähnliche Vereinigung der Lichtsubstanzen wie der Satan der Substanzen der Finsterniss ist." And then Spiegel adds a little later:—"Der Urmensch ist kein anderer als der *Gayomard* der Erânier." As this *Urmensch* had become in the third century of our era, under the Manichæan system, the antithesis of Satan, it is easier to understand why his name *Gayomarth* should be adopted by the Georgians as the name of God when they embraced Christianity in the following century.

We learn also from Spiegel that, according to a Mohammedan writer of the twelfth century, the Magians were divided at that time into three sects: the Gayomarthians, the Zervanites, and the Zarathustrians; the Gayomarthians being then considered as "die Anhänger des ersten Fürsten Gayomarth" (ii, 187). As the Gayomarthians were a Persian, while the Buddhists were an Indian sect, *Ghmerthi*, 'Gayomarth', might become the name for God in the Georgian "traduction de la Bible", as "*Borhan*, 'Buddha', is the name for God in the Mongol version of the Scriptures" (Edkins, *China's Place in Philology*, p. 220).

holds to mean 'ghost of Patroclus'.¹ But *Patrukles* is rightly given by Fabretti as a genitive, not a nominative. For we know that Etruscan genitives regularly terminate in *-s*; and we also know that when the Etruscans borrow names from the classical languages, they commonly, though not invariably, omit a final *s* in the nominative. Thus we have *Herkle* for *Heracles* or *Hercules*; *Achele* for *Achilles*; *Utuze* for *Odysseus*; *Pultuke* for *Polydeuces*; and *Eita* and *Aita* for *Aïdes*, with the genitive *Aitas* in *Turms Aitas*, 'Mercurius Ditis', who is depicted as conducting *hinthial Terasias*, 'the shade of Tiresias'. It might indeed be said, that *Patrukles* (and *Terasias*) may be (= must be) nominatives like *Churchles* and *Velimnas*: but this would be of no avail; for *Churchles* and *Velimnas* are known from the inscriptions to be, according to Aryan principles, genitives as well as nominatives. And thus, even on the most favourable supposition, it is as unreasonable to assume *hinthial Patrukles* to be a genitive of position, as it would be to assume that we have genitives of position in such expressions as *nidus avis*, *mel apis*, *vellus ovis*, *velum navis*, *nervus*

¹ A near parallel to *hinthial* is presented by the Malay *hantu*, 'Geist, Gespenst' (*Die Kawi-Sprache*, ii, 243). The form of *hinthi-al* is like that of *Trui-al(s)*, 'Trojanus'. Another inscription (2147) gives *hinthia Turmukas*. But here *hinthia* may be properly *hinthial*. In 1227, Fabretti reads *Hustna*, but observes that the final *a* has a small stroke at the bottom, and that the character, therefore, is "fortasse pro *al'*". All analogy requires that we should read *Hustnal*, as I have accordingly done (*ante*, p. 73). The small stroke may have been unobserved, or worn away by time, in *hinthia*. Judging from the form, *tular Rasnal* (1044), the case may be suspected to be similar in *tular Larna*, where Dr. Taylor finds another genitive of position, which he translates, with good reason, 'tomb of Larna'. One Etruscan epitaph runs thus:—*Vel. Plaute Velus Kaiai Larnal klan Velaral Tetals* (1717). I am sorry to see that Fabretti accepts Lanzi's identification of *tular* with *τ'ollar*, or *τὸ ollar*, 'ollarium columbarium'. It would have been better to refer it to the Latin *tellur-*. Cf. Sanskrit *tala*, 'solum, fundus'; and Armenian *tha'l*, 'place, district', *tha'l-el*, 'to inter, to bury', *tha'lar*, 'an earthen vessel'. With *Rasn-al* or *Rashn-al*, and with *Rasena*, the native name of the Etruscans, we might compare the name of the Persian Genius, *Rashnu*. "Verwandt ist *rashni*, 'Wahrheit', *rashnya*, 'aufrichtig'." (*Spiegel*.)

arcus, and *digitus manus*. As Dr. Taylor holds *Patrukles* to be a nominative with a genitive sense, it is incumbent on him to show that *Patrukles* cannot be a genitive. The case is one where it is required to prove a negative. But here the *onus probandi* is on one side, and the evidence on the other.

Dr. Taylor does, however, find one inflectional genitive in Etruscan (p. 19):—"The genitive of position is decisively non-Aryan, but is used in various Altaic languages, ancient and modern. . . . Side by side with this genitive of position we have in the Altaic languages a genitive of inflection, the sign of which was *-na* or *-n*. This also is represented in Etruscan. In one bilingual inscription *Varnal* is translated *Variâ natus*. The matronymic suffix is *-al*, and it is difficult to account for the letter *n*, which does not belong to the mother's name, except by supposing it to be a genitive sign as in other Altaic languages. Thus *Var-n-al* would correspond to *Varia's child*."

Unfortunately for this explanation, it has nothing to rest upon, and everything against it. Out of many hundred genitives in Fabretti, there is not one which terminates in *-n*; while *-al* does not mean 'child', but is itself, as the most careless reader of these pages will by this time have abundantly seen, a genitive termination employed both for males and females. In order to make Etruscan grammar Altaic, Dr. Taylor ignores real genitives by the hundred, if not by the thousand, and detects genitives which have no existence in the Etruscan language.

It is not only *Varnal*, but also *Varnalislâ*, which is translated in a bilingual inscription, 'Variâ natus'. Dr. Taylor has refrained from analysing *Varnalislâ*, and thus leaves us uncertain how he would explain it. Is it to be resolved into *Varn*, 'Varia's', and *alislâ*, 'child', like *Varnal*? But, as *-al* is made = Tungusian *uli*, 'child', and *-isa* = Mongol *izi*, 'wife', it would be more in accordance with

the *data* to interpret *Var-n-al-is-la* as 'Varia's child-wife-la', the final element *la* still awaiting explanation from some Tungusian, or Mongol, or Samoyed, or other Altaic language.

I now return to the subject of Etruscan terms of relationship.

Etera, eteri, etri, etria.

These words occur in a great many inscriptions, of which the following may be taken as examples:—

1396. La. Venete La. Lethial *etera*.
 1643. Aules Kekias Arnthial *etera*.
 1399. Ar. Venete Ar. *etera*.
 1260. Pumpu Snute *etera*.
 1595. *Etera* Latites.
 1018 bis *aa*. Lautn *eteri*.
 2565. Arnthal Lautn *eteri*.
 1966. Ar . . . f Arsa Lautn*eteri*.
 914. Vel. Tetina Titial Lautn *eteri*.
 186*b*. Arnth Musklena Larthal Lautn *eteri*.¹
 1532. Tite Atrani *etri*.
 1596. *Etria* Palias.

The sense of *etera*, etc., seems best obtained by comparing together, as below, three pairs of epitaphs. The fourth of the following epitaphs (957) is Latin, and the third (956) is Etruscan in Latin letters:—

1397.	1396.	956.	957.
Se.	La.	Ar.	Vel.
Venete	Venete	Spedo	Spedo
La.	La.		

¹ It will be seen that *eteri* is in these epitaphs always preceded by *Lautn*, which is also written *Larthn* (170), and may be compared with *farthn*, where *-thn* = 'homo'. Perhaps *Lau-* or *Lav-* may be explained from the Armenian *lav*, 'good', so that *Larthn* or *Lautn* may = 'good man', *i.e.*, 'nobleman', or 'high-born'. Cf. Armenian *lavazgi* (*azg*, 'family'), 'of good family, noble'.

Lethial	Lethial	Thocernal	Thoceronia
<i>klan.</i>	<i>etera.</i>	<i>clan.</i>	<i>natus.</i>

As *klan* in the first pair of epitaphs must = *clan* in the second, so *etera* in the first pair should = *natus* in the second, and therefore be nearly a synonym of *klan*, 'filius'. And this is corroborated by the following pair of epitaphs, which exactly correspond to 1397 and 1396 above:—

1756.	1757.
Ar. Semthni Aules	Au. Semnthe Aules
Hel verial <i>klan.</i>	Helverreal <i>klan.</i>

It has been thought that, where *klan* and *etera* are in contrast, *klan* signifies an elder, and *etera* a younger son. But, in the last pair of epitaphs, the younger as well as the elder son is called *klan*. And even if *etera* frequently denoted a younger son, yet this would not hinder *natus* from being the primary sense of *etera*: nor does the reference of *etera* and *eteri* to the Sanskrit *itara*, 'alius', or to the Greek *ἕτερος*, or to the Armenian *ôtar*, 'other', or to the Albanian *yatërë*, 'other', seem consistent with many of the epitaphs that have been cited (p. 113), where *etera* and *eteri* are used without any apparent reference to *klan*, either expressed or implied. I therefore accept 'natus, child', as the sense of *etera*, etc., which will then have both Aryan and Non-Aryan parallels, as will now be shown.

Aryan parallels are:—Sanskrit *putra*, 'son, children', *putrî*, 'daughter'; Breton *paotr*, 'boy'; Latin *puer*; Persian *pisar*, 'son, child'; Albanian *pizërë*, 'little'; Zend *puhtra*, 'son'; Ossetic *furth*, 'son'; Armenian *ordi*, 'son'.

Non-Aryan parallels are:—Yakut *eder* (for *ilder*), 'young' (Schott); Corean *ater*, 'boy' (Klaproth); Thusch *bader*, 'child, boy'; Georgian *patara*, 'little'. To this may perhaps be added the Avar *'eder*, 'swift', and the Basque *eder*, 'beautiful', as swiftness and beauty are attributes of youth.

The claims of the Aryan and the Iberian to affinity with

the Etruscan are here so evenly balanced that I cannot decide between them. They may be thus put forward:—

ARYAN.	IBERIAN.
Albanian <i>pizërë</i> , 'little'.	Georgian <i>patara</i> , 'little'.
Persian <i>pisar</i> , 'child'.	Thusch <i>bader</i> , 'child'.
Sanskrit <i>putra</i> , 'son'.	
Zend <i>puthra</i> , 'son'.	
Ossetic <i>furth</i> , 'son'.	
Armenian <i>ordi</i> , 'son'.	
	Avar <i>'eder</i> , 'swift'.
	Basque <i>eder</i> , 'beautiful'.

ETRUSCAN.

<i>etera</i>	}	'natus'.
<i>eteri</i>		
<i>etri</i>		

The Armenian *ordi* and the Ossetic *furth* evidently stand for *odri* and *futhr*; and in the Armenian *ordi* the initial *p* of the Sanskrit *putra* is lost, as an initial *p* may have been lost in the Etruscan *etera*, *eteri*, and *etri*. So, again, an initial *p* is lost in the Gaelic *athair*, 'father', = Armenian *hayr*, = Latin *pater*; and also in the Welsh *aderyn*, 'bird', and *adar*, 'birds', which are apparently = Sanskrit *patrin*, 'bird', and *patra* (= Zend *patara*), 'wing', = Armenian *phetovr*, 'feather'. If *athair* be = *pater*, and *adar* = *patra* and *patara*, then *etera* may = *putra*, *puthra*, etc. We have, besides, already seen how the Sanskrit *parigana* becomes the Etruscan *farthana* and *harthna*, and the Armenian *harsan-* and *-harzan*; as also the Sanskrit *pitṛ* becomes the Armenian *hayr*, and the Sanskrit *putra* the Armenian *ordi* (= *odri*).

As *Lautn* is not a genitive, *Lautn eteri*, or *Lautneteri* may be analogous to such a Sanskrit compound as *Râgaputra*, 'son of a king, Rajpoot', or to such an Armenian compound

as *archayordi*, 'son of a king (*archay*), prince'. The Armenian has several similar compounds.

Puia, puiak, and klanpuiak.

The next Etruscan term of relationship which I shall consider is *puia*, sometimes appearing under the shorter or contracted forms, *pui* and *pu*. It is feminine, and occurs in many epitaphs; as, for instance, in RENCHIES *puia* (698 *ter*), and in *Puia* Alknis Nufzrnas Parmnial *sech* (1541). Its meaning may be elicited without difficulty from the following epitaphs (2069, 2058, 1463, 1629, 1755):—

1.	2.	3.	4.	5.
Thanchvil	Larth	Larthi	Larth	Se.
Ruv(f)i	Alethnas	Vipi	Satnas	Satnas
<i>puia</i>	Arnthal	<i>puia</i>	Larthial	Larthial.
Arnthal	Ruvfiak	Tites		
Ale(thna)s	<i>klan</i>	Satnas		
	avils	Vatinial		
	LX	<i>sek.</i>		
	lupuke.			

It appears from 2. that *Arnth Alethnas* had a son *Larth* by a wife *Ruvfi*; and this *Ruvfi* was in all probability the *Thanchvil Ruvfi* of 1. (an epitaph in the same sepulchre), who is there described as the *puia* of *Arnth Alethnas*; so that the meaning of 1. would be given by Orioli with partial correctness:—'Tanaquil Rufia, *moglie* d'un degli Alezii, figliuolo d'Arunte'; though it should be:—'Tanaquil Rufia, *moglie* d'Arunte Alezio'. It appears again from 3. that *Larthi Vipi* was the *puia* of Tite Satna; and from 4. and 5. that *Larthi* was the mother of two *Satnas*, and therefore the *wife* of a *Satna*: as also, from another epitaph (1524), *Ve. Tituia Alfial*, it results that an *Alfi* was the mother of one *Tituia*, and therefore the *wife* of another; and from the epitaph (1527), *Thana Alfi Tituis puia*, that *Thana Alfi* was the *puia* of a *Tituia*.

Puia thus signifies 'wife', as K. O. Müller rightly inferred long since. It is therefore to be compared with the following Persian words:—*piyû*, 'bride', *puyûs*, 'bride'; *pîwak*, 'bride', *paywakân*, 'nuptials'. From the same origin as *puia*, 'wife', would come the Etruscan *puiak* in the following epitaphs:—

- 702 bis. Vel. Sethre *puiak*.
 930. Arnth Vipis Serturis *puiak* Mutainei.
 1157. Aule Petrus Kasnis *puiak* Lethi.
 987. Arnth Kaes Anes Ka . . *klanpuiak*.

As *klan* means 'son', and *puia*, 'wife', *klanpuiak* may well mean 'son by marriage', *privignus* or *gener*: and it may be *klanpuiak* which means 'privignus', while *puiak* means 'gener'. At least, this would be according to analogy: for we have already found that *sech harthna* and *sech farthana* mean 'privigna', while *farthn* and *farthnache* mean 'nurus'; *harthna*, *farthana*, *farthn*, and *farthnache* being akin to the Armenian *harsanich*, 'nuptials', and *harsn* and *harsnovhi*, 'bride, daughter-in-law', as *puia* and *puiak* would be to the Persian *paywakân*, 'nuptials', and *piyû* and *pîwak*, 'bride'.

There is an epitaph (1653):—Fasti Kvinti Sales *klens puia*. This may be rendered:—'Fausta Quintia Salii filii uxor'; *klens puia*, 'son's wife', being a synonym of *farthn*, 'nurus'.

Zilachnke or zilachnuke, eslz, eslz zilachnthas, zilk, zilath or zilat, and klanzilath.

We have already seen (p. 116) that the epitaph, *Thanchvil Ruvfi puia Arnthal Alethnas*, is to be rendered:—'Tanaquil Rufia, the wife of Aruns Aletinius'; and therefore the first words of another epitaph (2051), *Alethnas Arnthal klan Thanchvilusk Ruvfi al zilach...*, should be translated:—

'Aletinius the son of Aruns, and the *husband* of Tanaquil Rufia'. Their son was *Larth Alethnas Arnthal Ruvfialk klan*. This requires indeed that the omitted *prænomen* of Aletinius the son of Aruns should be the same as his father's, which is sufficiently probable. For an epitaph on another member of the same family (2056) begins thus:—*Arnth Alethnas Ar. klan ril xxxii. i*; and we have, besides, such forms as *Arnth Kupsna Arnthal*, *Arnth Tite Arnthal*, *Arnth Remzna Arnthal*, and *Sethre Puska Sethres*; while, in the bilingual inscription of Pesaro, *Kafates Lr. Lr.* is rendered:—*Cafatius L. f.*, *i.e.*, 'Lartis filius', the *prænomen* of the son being omitted in the Latin, as it is in the Etruscan *Alethnas Arnthal klan*, possibly because the *prænomina* of the sons were the same as those of the fathers.

Only two Etruscan words begin with *zilach-*. One of them is *zilachnthas*, and the other is *zilachnke*, *zilachnuke*, or *zilachke*. The imperfect word *zilach...* would stand for one of these, and in all probability for *zilachnke*, as *zilachnthas* occurs but once, and is then preceded by *eslz*, which appears to be employed to complete the meaning of the term of relationship, the epitaph where it occurs running thus:—*Larth Arnthal Plekus klan Ramth(as)k Apatrual eslz zilachnthas avils thunesi muvalchls lupu*. The following epitaphs (2055, 2059, 2339, 2071) offer no objection to the identification of *zilachnuke* or *zilachnke* with *zilach...*, 'maritus, conjux':—

Alethnas	Alethnas		Alethnas
V.		Larth	
		Keisinis	
V.	Sethresa	Velus	Arnthal
	Ness		
	sak	klan	klan
Thelu	.....	
<i>zilath</i>			
Parchis	S.....		
<i>zilath</i>			

eterav				
klenar	klen . . . i			
ki				
aknanasa	muleth- svalasi			
Vlssi		kizi	Thanchvilusk	
			Ruvfiäl	
<i>zilachnu</i>	<i>zilachnuke</i>	<i>zilachnke</i>	<i>zilach . . .</i>	'conjux'
<i>kelusa</i>	<i>lupuke</i>	<i>meani</i>	<i>spurethi</i>	
<i>ril</i>	<i>munisureth</i>	<i>munikleth</i>	<i>apasi</i>	
XXVIII		<i>methlm</i>	<i>svalas</i>	
Papalser		<i>nup . zi</i>	<i>marunuchva</i>	
aknanasa	<i>kalu</i>	<i>kalus . . .</i>	<i>kepen</i>	
VI		<i>lupu.</i>	<i>tenu</i>	
Manim			<i>eprthnevk</i>	
Arke			<i>eslz</i>	
<i>ril</i>	<i>avils</i>		<i>te . .</i>	
LXVII.	LXX (?).		<i>eprthnevk</i>	
			<i>eslz.</i> ¹	

The last of the epitaphs given above will be seen to terminate, after the word *zilach...*, 'maritus, conjux', with the words, *spurethi apasi svalas marunuchva kepen tenu eprthnevk eslz te . . eprthnevk eslz*; as another epitaph (2070) does with the words, *marunuch spurana kepen tenu avils machs semphalchls lupu*. The words following *kepen tenu* in the first instance, *i.e. eprthnevk eslz te... eprthnevk eslz*, I should take to be a valediction; such as exists, for instance, in a Latin epitaph (Gruter, DCCCXL. 8) which terminates thus:—L. Virius conjugii dulciss. *Have domina vale domina*. With regard to *eprthnevk*, which twice precedes *eslz* in the same epitaph, it is to be noticed, that, in 2033 *bis E. a.*, we find the words, . . . *marnu spurana eprthne . . .*; and, in 2100, the words, . . . *eisnevk eprthnevk (t)makstrevk . . .*. I suspect these forms in *-evk* to be

¹ *Eslz* is only found in this epitaph, and in the one, just cited, which contains the form, *eslz zilachnthas*. The meaning of *eslz* will be assigned directly.

superlatives; such as occur in the following forms derived from Gruter:—*conjugi carissimo*;—*marito optimo et indulgentissimo*;—*uxori optimæ sanctissimæ castissimæ fidelissimæ*.¹

Eslz, which follows *eprthnevk* on both occasions at the end of the epitaph containing the word *zilach(nke)*, 'husband' (*ante*, p. 118), would seem from these considerations to be some synonym of *zilachnke*, such as *conjux* is of *maritus*; a sense readily deducible from the Armenian. For the meaning, 'conjux', is obtained for *eslz* by combining the Armenian *ez*, 'one', and *lovz*, 'yoke', into one word. The Armenian has two words for 'one', *ez* and *mi*; and from these are formed, by the addition of *ban*, 'word', *tesak*, 'form', *wank*, 'syllable', and *andam*, 'part', the four pairs of compounds:—*ezaban* and *miaban*, 'unanimous';—*ezatesak* and *miatesak*, 'uniform';—*ezawank* and *miawank*, 'monosyllable';—and *ezandam* and *miandam*, 'once'. In like manner, *ezalovz*, though not existent in Armenian, would yet be a genuine Armenian synonym of *mialovz*, 'συζυγής, accouplé', which does exist in that language. It has been already inferred, from the Etruscan 'threes', *zal* and *esal*, 1 + 2, that the Etruscan had virtually a 'one' like *z-* or *es-*, in addition to their dice-numeral *mach*; as the Armenians have *ez*, 'one', in addition to *mi*, 'one'. This may render still more probable the identification of the Etruscan *es-lz* with the Armenian *ez-lovz*, 'coupled, conjoined'. The genitive of *lovz* is *lzoj*, which brings us ever nearer to the Etruscan *-lz* is *es-lz*.

For the sake of greater clearness I tabulate here the resemblances between the two languages:—

¹ One comparative is formed in Armenian by adding *evs* to the positive, and one superlative by adding *evs* to a different form of the comparative: e.g., *bari evs*, or *baregoyn*, 'better'; *baregoyn evs*, 'best'. *Evs*, 'also, more', is derived from *ev*, 'and', which Bötticher connects with the Zend *aiwi*, *aibi*, 'supra, super', an appropriate suffix to form superlatives.

	}	<i>miandam</i>	'once'.
		<i>ezandam</i>	
	}	<i>miawank</i>	'monosyllable'.
		<i>ezawank</i>	
ARMENIAN	}	<i>miaban</i>	'unanimous'.
		<i>ezaban</i>	
	}	<i>miatesak</i>	'uniform'.
		<i>ezatesak</i>	
	}	<i>mialovz</i>	'conjoined', = 'conjux'.
ETRUSCAN		<i>eslz</i>	

This is the second time that the Etruscan has come in to complete an Armenian pair of synonyms. For we have already had (*ante*, pp. 58, 59):—

	}	<i>iravaban</i>	'a jurist'.
		<i>iravagêt</i>	
ARMENIAN	}	<i>astetaban</i>	'an astrologer'.
		<i>astetagêt</i>	
		<i>thṛénaban</i> , 'an ornithologist'.	
ETRUSCAN.		<i>trutnvt</i> , 'ὄρνιθοσκόπος, haruspex'.	

It has been previously noticed that the Armenian *gêt*, 'sciens' (gen. *giti*), is identical with the Sanskrit, Zend, and Latin *vid*, and with the Etruscan *-vt* in *trutnvt*. Similarly, the Armenian *gini* is the Latin *vinum*. Cf. Curtius, *Griechische Etymologie*, p. 527. German and English supplement each other like Armenian and Etruscan: for, while we say *kingdom* and *bishopric*, the Germans say *königreich* and *bisthum*.

Having obtained 'husband' and 'consort' as the meanings of *zilachnke* and *eslz*, we may now proceed to the epitaph containing the words, *eslz zilachnthas*, which I should take to be an expression for 'husband' like the Latin *particeps connubii* or *consors thalami*; in which case *zilachnthas* would be the genitive of a word implying 'marriage', an

inference agreeing well with the fact that *zilachnke* signifies 'husband'. The epitaph (2335a) containing the words, *eslz zilachnthas*, is the first of the three which follow:—

1.		2.		3.	
<i>Larth</i>	Lars			<i>Arnth</i>	Aruns
		<i>Alethnas</i>	Aletinius	<i>Churkles</i>	Curcilius
<i>Arnthal</i>	Aruntis	<i>Arnthal</i>	Aruntis	<i>Larthal</i>	Lartis
<i>Plekus</i>	Pleci				
<i>klan</i>	filius	<i>klan</i>	filius	<i>klan</i>	filius
<i>Ramth(as)k</i>	Ramthæque	<i>Thanchvilusk</i>	Tanaquilisque	<i>Ramthas</i>	Ramthæ
<i>Apatrual</i>	Apatrcæe	<i>Rufial</i>	Rufiæ	<i>Pevtnial</i>	Peutiniæ
<i>eslz</i>	consors				
<i>zilachnthas</i>	matrimonii	<i>zilach(nke)</i>	maritus	<i>zilk</i>	
				<i>Parchis</i>	
				<i>amke</i> ¹	
		<i>spurethi</i>			
		<i>apasi</i>			
		<i>svalas</i>			
		<i>marunuchva</i>		<i>marunuch</i>	
				<i>spurana</i>	
		<i>kepen</i>		<i>kepen</i>	
		<i>tenu</i>		<i>tenu</i>	
		<i>eprthnerk</i>			
		<i>eslz</i>	consors !		
		<i>te . .</i>			
		<i>eprthnerk</i>			
		<i>eslz.</i>	consors !		
<i>avils</i>	ætatis			<i>avils</i>	ætatis
<i>thunesi</i>	II			<i>machs</i>	I
<i>mucalchls</i>	XL			<i>semphalchls</i> ²	LX
<i>lupu.</i>	obiit.			<i>lupu.</i>	obiit.

In the third of these epitaphs we observe *zilk* taking the place of *eslz zilachnthas* in the first, and of *zilach(nke)* in the second. *Zilk* may be a synonym of these terms for 'husband': in the following epitaphs (2055, 2056) the positions of *zilachnuke* and *zilk* are very similar:—

Alethnas V. V. Thelu *zilath* Parchis *zilath* eterav *klenar ki aknanasa* Vlssi *zilachnu kelusa* ril XXVIII papalser *aknanasa* VI manim arke ril LXVII.

¹ In 2055 (*ante*, p. 118) we find *Parchis zilath*, as here *Parchis amke*.

² So in Fabretti's text, but in his index, *semphachls*, and also (s. v. *mach*) *semhalchls*. The correct reading would be that of his text.

Arnth Alethnas Ar. klan ril xxxii. i eitva tamera sarvenas klenar zal arke aknanasa zilk marunuchva tenthas ethl matu manimeri.¹

In the first of the last two epitaphs we perceive a word *zilath* occurring twice, in addition to *zilachnuke*; and in the epitaph next to follow (2335*b*) we have in like manner *zilath* and *zilk*, *zilath* being there connected with *klan*, 'son', as in the first epitaph above it is followed by *eterav*, which seems either an oblique case, or else a derivative, of *etera*, 'natus':

. . risal Krespe Thanchvilus Pumpnal klanzilath
 rasnas marunuchn zilk thufi tenthas marunuch pachanati ril . . III.

If *klan* and *zilath* are here rightly joined together (and not erroneously, as are *Krespe* and *Thanchvilus* just before), or even if *klan* and *zilath* are to be taken in conjunction, though as two words, then *klanzilath* or *klan zilath* would be analogous to *klanpuiak* (*ante*, p. 116), and to *sech farthana*, 'step-daughter'. As we have *sech farthana*, 'privigna', and *farthn* and *farthnache*, 'nurus', so we have in like manner *klanpuiak* and *puiak* (akin to *puiā*, 'uxor'), and also *klanzilath* and *zilath*, which would be derived from the same root as *zilachntha*, 'connubium', and *zilachnke*, 'maritus'. We observe once more, from the following inscriptions (702 *bis*, 701 *bis*, 2282), that *puiak*, and *zilath* or *zilat*, may stand alone: —

1. Vel. Sethre *puiak*.
2. Arnth Seate Kuisla *zilat*.
3. Lar
klan
zilath

The exact meaning of *zilath* cannot perhaps be accurately determined: but it doubtless implies some relationship, and

¹ Compare the thrice recurring *aknanasa* with the Phrygian *akenanogafos* (*ante*, p. 67, note).

most probably some relationship by marriage. Very likely it has one of the meanings of the Greek *γαμβρός*, as *zilachnke* means 'conjux, *γαμέτης*', and *zilachnthas*, 'matrimonii, *γάμου*'.

If *klanpuiak* and *klanzilath* are both to be rendered 'stepson', what, it may be asked, is the difference between them? This question would not be difficult to answer; for the two inscriptions where the words occur are:—

1. Arnth Kaes *Anes* Ka . . *klanpuiak*.

2. (La)risal Krespe *Thanchvilus* Pumpnal *klanzilath*, etc.

Here *Ane* is a man's name, and *Thanchvil* (with Dr. Taylor's leave) a woman's; so that *klanpuiak*, 'stepson', would mean 'wife's son', and *klanzilath*, 'stepson,' would mean 'husband's son'. This is perfectly consistent with the facts, that *puia* means 'wife', and *zilachnke*, with perhaps *zilk* also, 'husband'.

The Etruscan root, zil, and the formation from it of the words, zilk, zilath, zilachnke, and zilachnthas.

Latin, Greek, and Sanskrit analogies may guide us to the sense of *zil-*, from which the four following terms of relationship are derived in Etruscan:—

zilk.

zilath.

zilachnke, 'maritus, conjux'.

zilachnthas, 'matrimonium'.

In Latin we find this group:—

gener, 'son-in-law'.

genialis, 'matrimonial'.

genitor, 'father'.

genitrix, 'mother'.

gens, 'breed, family, tribe'.

genus, 'offspring, breed, family, race, sort'.

And in Greek this group :—

γένος, 'family, race'.

γενετήρ, 'father'.

γένεθλον, 'child'.

γαμβρός, 'son-in-law', = Latin *gener*.¹

γαμέτης, 'husband'.

γαμήλιος, 'matrimonial'.

And in Sanskrit this group :—

ḡanaḡa, 'father'.

ḡanya, 'groomsman, paranymp'.

ḡāti, 'family, tribe, kind'.

ḡāni, 'wife'.

ḡāmi, 'sister'.

ḡāmā, 'wife'.

Analogies like these lead us to infer that the Etruscan *zil* has probably a sense like that of *gen-*, *γεν-*, or *ḡan-*. *Zil* may therefore be identified with the Armenian *zet*, 'family, tribe, sort, kind', a synonym of *genus*, *γένος*, and *ḡāti*.

We have next to consider the *formation* of the four Etruscan terms of relationship derived from *zil*.

The first of them, *zil-k*, may be compared with the Armenian *zat-k*, 'a rod, a sprig', and also with the Phrygian ζέλ-κ(ια), 'λάχανα' (Hesychius). So, likewise, *zil-at* or *zil-ath* may be compared with the Armenian *zit* and *zël-ot*, 'a sprig, a stem'; *arm* and *arm-at*, 'a stem, a root'; *ḡok* and *ḡok-at*, 'a band, a troop'; *môr* and *môr-at*, 'a marsh'; *kën-at*, 'effeminate' (*kin*, 'a woman'); and *bor-ot*, 'a leper' (*bor*, 'leprosy'). As words like φυλή, φύλλον, φυλλάς, are all akin, and as the letters, *z*, *z̄*, *z̄̄*, are interchanged in Armenian, so the Armenian *zit*, *zat*, and *zet*, may be ultimately identical with one another, and with the Etruscan *zil*.

¹ Thus *γαμ-* and *γεν-* are merely different forms of the same root (Curtius, *Gr. Et.*, p. 64, ed. 2).

In *zilachn-uke* and *zilachn-tha* we may have the Armenian formative element *-akan*, as in *armatakan*, 'radical'; *ezakan*, *miakan*, 'unique'; *trakan*, 'dative'; *arakan*, 'masculine'; *igakan*, 'feminine'; *hayrakan*, 'paternal'; *mayrakan*, 'maternal'; *ordiakana*, 'filial'; *mankakan*, 'puerile'; *harsnakan*, 'bridal'; and *amovsnakan* 'matrimonial, *genialis*': this last sense, if the Etruscan *zil* were = Armenian *žet*, 'genus', would be appropriate to the Etruscan *zilachn-*; *zilachntha*, 'marriage', being then the matrimonial *state*, and *zilachnuke*, 'conjux', a matrimonial *person*. The element *-akan* is not, indeed, found in combination with *žet*, but it is so with a word *azg*, which is synonymous with *žet*; for *γένος* and *φυλή* are both rendered in the Armenian New Testament by *azg* and by *žet*, although, when the two words occur in the same passage, as they do in Phil. iii, 5, *γένος* is rendered by *azg*, and *φυλή* by *žet*. *Azgakan* means 'relative, cousin, *συγγενής*' (Luke i, 36).

As for the termination of *zilachnuke* or *zilachnke*, it may be compared with the Sanskrit termination *-uka*, as in *varshuka*, 'rainy'; or with the Armenian termination *-ovk*, as in *tamovk* (gen. *tamki*), 'moist', *thzovk*, 'a pigmy' (*thiz*, 'a span'), and *strovk* (gen. *strki*), 'a slave' (*ante*, p. 77, note). So, again, the Armenian *het-*, 'pour', gives *het-akan*, 'infused', and *het-ovk*, 'liquor': *yalth*, 'strong', gives both *yalth-akan* and *yalth-ovk*, 'victor, victorious': and *givt*, *get*, 'a village' (gen. *getǰ*), gives *givt-akan* and *getǰ-ovk*, 'a peasant'. The terminations of *het-akan* and *het-ovk*, *yalth-akan* and *yalth-ovk*, *givt-akan* and *getǰ-ovk*, may be combined in *zil-achn-uke*, which would then correspond to an Armenian *žet-akan-ovk*. The agreement is as close as that between the Etruscan *tru-tn-vt* and a Sanskrit *dru-tnu-vid*.

The termination of *zilachntha* seems to be found again in the proper names, *Ramtha* (cf. Sanskrit *ram*, 'gaudere', *râma*, 'amœnus, pulcher') and *Lautntha* (814 bis), or *Lautnitha* (250). We have also the forms, *Lautnita* (208)

and *Lautnitas* (270), which last appears to be a genitive, like *zilachnthas*. For *Lautn*, see *ante*, p. 113, *note*. This final formative element in the Etruscan *zilachn-tha*, 'marriage', resembles that of the Zend *dâ-tha*, 'gift'; that of the Sanskrit *pr̥thu-tâ*, 'bread-th'; and that of the Gothic *diupi-tha*, 'dep-th'. The nearest Sanskrit form to *zil-achn-tha*, 'matrimony', would be *ġan-aka-tâ*, 'paternity'; for *zil* and *ġan* are synonymous and very probably identical roots, as the Sanskrit *ġan* is = Zend *zon*, Armenian *zin*, and as a Sanskrit *n* may become in Armenian an *t*, as well as an *n*. Compare also the Lydian *κανδαύλης*, 'σκυλλοπνίκτης' (Tzetzes), = Armenian *khetdavt*, 'πνίγων', where *t* represents both *ν* and *λ*. In the Etruscan *-achn* and the Armenian *-akan-*, however, the Sanskrit *-aka-* would be heightened by nunnation; a supposition favoured by the occurrence of *zilachke* (2116) instead of *zilachnke*, and by such Armenian forms as *nerhak* and *nerhakan*, 'contrary'. The Zend *vañhu*, 'good', and *qañhar*, 'sister', offer similar instances of nunnation or nasalisation.¹

The Armenian does not appear to possess a suffix equivalent to the Sanskrit *-tâ*, the Etruscan, Zend, and Gothic *-tha*, and the English *-th* and *-t*, unless it be in a word like *tô-th*, 'heat', or in such words as *erev-oyth*, 'appearance',

¹ The Lydian *κανδαύλης* may also be compared with the Ræto-Romansch or Grison *candarials*, 'eine Art Drüsenübel, das das Athmen sehr erschwert' (Carisch). The Etruscans may have left the word behind in Rætia. The Armenians, the Phrygians, the Bithynians, the Lydians, and the Mysians, are all to be classed with the Thracians. "Allem Anscheine nach haben wir es auch hier mit einem Zweige des Indo-germanischen Völkerfamilie zu thun" (Spiegel, *E. A.*, ii, 343, 346). The Dacians have to be added to the list. With regard to the Caucasian languages, including the Georgian, Spiegel is able to affirm with confidence that they are all allied to each other, and form a class of their own akin to no other class, neither to the Aryan nor to the Turanian (*türkisch-tatarisch*). In this I substantially agree, though without being prevented from classing the Basque with the Caucasian languages under the title of Iberian, and from being inclined to consider the Iberians, the Turanians, and the Armenians, as three branches of one vast family of tongues, to which the name of Scythian might be applied.

avag-oyth, 'dignity', and hivr-oyth, 'guestship'. In like cases, the Armenian usually employs the termination *-ovthivn*; which may, however, be a heightened form of *-oyth* (gen. *-ovthi*), seeing that *erev-ovthivn*, *avag-ovthivn*, and *hivr-ovthivn*, occur as synonyms of *erev-oyth*, *avag-oyth*, and *hivr-oyth*. This termination *-ovthivn*, which has been already recognised in the Etruscan *su-thina*, 'votum', and *tu-thines*, 'donationis' (*ante*, p. 68), is sometimes suffixed in Armenian to the formative element *-akan*, in the same manner as the Etruscan termination *-tha* is suffixed to *-achn* in *zil-achn-tha*. Thus, in Armenian, *azgakan* is 'a relative', and *azgakan-ovthivn*, 'relationship'; *banakan* is 'intelligent', and *banakan-ovthivn*, 'intelligence'; *nivthakan* is 'material', and *nivthakan-ovthivn*, 'materiality', and *azatakan* is 'free', and *azatakan-ovthivn*, 'freedom', as well as *azat-ovthivn*. The two forms, *nerhak* and *nerhakan*, 'contrary', produce in like manner *nerhak-ovthivn* and *nerhakan-ovthivn*, 'opposition'; and *ê*, 'existence', produces *êak*, 'existence, creator', *êakan*, 'essential', *ê-ovthivn*, 'essence, existence', *êak-ovthivn*, 'entity', and *êakan-ovthivn*, 'existence, essence'.

The Etruscan terminations noticed in this last section would thus have the following parallels in Armenian and Sanskrit:—

ETRUSCAN.	ARMENIAN.	SANSKRIT.
zil -k	-k	-ka
-ath, -at	-at	
	-ot	
	-ik	
	-eak	
	-ak	-aka
-achn-uke	{ -akan ¹	
	{ -ovk	-uka

¹ This and the three previous *k* terminations are all found in the following Armenian words for 'happy':—*erani*, *eramik*, *eraneak*, *eranak*, *eranakan*; which, with *eranovthivn*, 'happiness', illustrate the Etruscan forms, *farthn*, *farthn-ache* (*ante*, p. 76), *zilachn-*, and *suthina*.

<p><i>-achn-tha</i></p> <p>su <i>-thina</i></p>	<p><i>-aka-tâ</i></p> <p><i>-akan-ovthivn</i></p> <p><i>-ovthivn</i></p> <p><i>-oyth</i> (gen. <i>-ovthi</i>) <i>-tâ</i></p>
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The Etruscan language, as it is exhibited in two epitaphs which admit of complete translation—Etruscan numerals become Aryan words in inscriptions—Physical type of the Etruscans.

The epitaph which contains the word *zilachnthas* is deserving of especial attention, because it supplies us, in one sentence, with what we most want; *i.e.*, with a good example in epitome of what the Etruscan language really is, and of the relative importance of the two main elements of the language. I will therefore cite the epitaph once more in conclusion, and take notice of the affinities which it presents:—

Larth Arnthal Plekus klan Ramthask Apatrual
Lars Aruntis Pleci filius Ramthæque Apatroææ
eslz zilachnthas avils thunesi muvalchls lupu.
 consors matrimonii ætatis II XL obiit.¹

Here the numerals, *muvalchl*, 'forty', and *thu* or *thune*, 'two', are Iberian, in addition to the genitive terminations of *Arnthal*, *Apatrual*, and perhaps *thunesi*. But *lupu*, *avil*, *klan*, *eslz*, and *zilachnthas*, are Aryan, as would be also the genitive terminations of *Plekus*, *Ramthas*, *avils*, *zilachnthas*,

¹ The next epitaph but one (2335c) is thus given:—*Ramtha Apatrui Larthal sech Larthialk Alethnal ...tnas Arnthal Larthalislaluia Pepnas.*

We should perhaps read *puia Plekus* for *-luia Pepnas*, as a *Plecus* was the husband of *Ramtha Apatroææ*. Or *Plekus* in the text might be an error for *Pepnas*. *Plekus* occurs nowhere else: but we meet with *Prechu* and *Preku*, and the genitive *Prekus*.

All Etruscan inscriptions are not given with the accuracy which eminently distinguishes those transmitted by the late Count Giancarlo Conestabile, to whose indefatigable care all students of Etruscan are so deeply indebted.

and muvalchls. The suffix *-k* in *Ramthask*, 'Ramthæque', is likewise Aryan, for it would = Latin *-que*, = Sanskrit and Zend *-ca*, the original Aryan form being *-ka* (Schleicher, *V. G.*, p. 137), reduced to *-k* in Etruscan. A number of examples of this suffix will not fail to have been observed during the course of this investigation. Thus, in one epitaph (2340), we meet with *(m)achs mealchlsk*, 'of one-and-(of)-twenty', instead of *machs mealchls*, 'of twenty-one'. Another form is *kis zathrmsk*, of five-and-(of)-thirty'. Other examples are afforded by the following epitaphs (2071, 2058), which have been already cited, and of which the first can be completely translated:—

Larth Churchles Arnthal Churchles Thanchvilusk
Lars Curcilius Aruntis Curcili Tanaquilisque
Krakial klan avils kiemzathrms lupu.
 Gracchæ filius ætatis LXXX obiit.

Larth Alethnas Arnthal Ruvfialk klan
Lars Aletinius Aruntis Rufiæque filius
avils LX lupuke, etc.
 ætatis LX obit, etc.

In these epitaphs all is Aryan, with the exception of the numeral *kiemzathrm*, 'eighty', which would be African, and of the genitive terminations of *Arnthal*, *Krakial*, and *Ruvfiak*, which are Iberian. But, in spite of these exceptions here, and of those noticed in the preceding epitaph, it is sufficiently plain that all three epitaphs are written in a language in which an Aryan element is the ruling element. The two forms for 'obiit', *lupuke* and *lupu*, are hardly to be explained on any other hypothesis: and indeed the whole structure of Etruscan is Aryan generally. This is the decisive point; for the affinities of a language are to be finally determined by its words, not as they appear in a vocabulary, but as they appear in a sentence. Thus our words *serve*, *effected*, and *undoubtedly*, are not Romanic

but Teutonic, though *serve*, *effect*, and *doubt* are not Teutonic, but Romanic. In like manner, the Etruscan numerals, which I believe to be all Non-Aryan, as well as Non-Turanian, yet show the Etruscan language to be Aryan. For, though *mach*, 1, *ki*, 5, *mealchl*, 20, and *zathrm*, 30, are either Iberian or African, yet *machs mealchlsk*, 21, and *kis zathrmsk*, 35, are both Aryan forms by virtue of their grammatical appendages. And thus Corssen, who holds Etruscan to be akin to Latin, needlessly brings ridicule and discredit on his cause by endeavouring to make out that the Etruscan numerals are not numerals at all. With such a form as *zathrm-s-k*, where *-s-k* = Latin *-is-que*, to appeal to, he might have admitted the fact, without any prejudice to his theory. *Zathrmsk* and *zathrums* are Aryan at least. For, if *avil-s ki-s zathrm-s-k* means 'of the age of *ki* and of *zathrm*', and *avil-s mach-s mealchl-s-k*, 'of the age of *mach* and of *mealchl*'—and such an epitaph as *An. farthn-ache Marke-s Tarne-s Ramthe-s-k Chaireals* may be sufficient to show that they do so—then, whatever be the sense or the etymology of *mach*, *ki*, *mealchl*, and *zathrm*, we are sufficiently certain that *mach-s*, *ki-s*, *mealchl-s-k*, and *zathrm-s-k*, are all Aryan words. *Mach-s mealchl-s-k*, 'of *mach* and of *mealchl*', is as undoubtedly Aryan, as 'of *ace* and of *deuce*', 'of *quatre* and of *cing*', are Teutonic. And, if *mach-s*, *ki-s*, *mealchl-s*, and *zathrm-s*, are Aryan, so also are *esal-s*, *huth-s*, *sa-s*, *muvalchl-s*, *kealchl-s*, *semphalchl-s*, *kez palchl-s*, and *kiemzathrm-s*.¹

Dr. Taylor seems to be quite unconscious of what he is doing, when he marshals (p. 7) the sixteen numerical forms derived from Etruscan epitaphs, which are to be instrumental in proving the Etruscan language not to be Aryan,

¹ For other borrowed numerals in English, in addition to the dice-numerals, see Hotten's *Slang Dictionary*, s. v. *saltee*. *Chinker saltee* = *cinque soldi*, and *nobba saltee* = *nove soldi*. *Half-a-crown* is expressed by *madza caroon*, or *dove beony say saltee*, 2s. 6d.

but Turanian. For, of the fifty-two words cited, sixteen being *avils*, all are grammatically Aryan, excepting perhaps *thunesi* and *tivrs*, each of which occurs only once.¹ Of Dr. Taylor's sixteen forms, it may be sufficient to cite four, premising that he acknowledges (p. 6) that *lupu* must mean 'he died':—

'ætatis'			'obiit'.
<i>av-il- s</i>		se(s)ph- s	<i>lupu-ke.</i>
<i>av-il- s</i>	huth- s	muvalchl- s	<i>lupu.</i>
<i>av-il- s</i>	mach- s	mealchl- s-k	
<i>av-il- s</i>	ki- s	zathrm- s-k	

We have here a language in which everything is Aryan, with the exception of the *uninflected* forms of the numerals. These, therefore, must have been borrowed, although Dr. Taylor affirms such a thing to be impossible, but without deigning, no doubt from excellent reasons, to inform us why it should be so. "The latest advocates of an Aryan solution of the Etruscan problem", he says (p. 15), "have been obliged to contend, with Dr. Corssen, that the words on the dice are not numerals at all, or else with Mr. Ellis, that

¹ In *avils tivrs sas*, *tivrs* would imply 'days', or 'months', or 'years'; but most probably 'days' or 'months', as *ril* is Etruscan for 'year'. We may therefore compare *tivrs* with the Armenian *tiv*, 'day', or with the Georgian *thve*, 'month', or with the Armenian *thiv*, 'number, era, epoch', a word which is used for 'year' also in the following verses:—

Thovoy *hazar* *ev* *erkov* *harivr*
Anni mille et duo centum
E *hangëstiv* 'i *Tër* *hangeal.*
Est quiete in Domino quietatus.

Thovoy- is the genitive of *thiv*, and *-s* is a pronominal determinative. For *hazar* (=Zend *hazañhra*, Sanskrit *sahasra*) and *harivr*, see Bötticher's *Arica*, p. 62. *Er-kov* would be borrowed from the Iberian: compare the Georgian *or-i* and the Suanian *ier-u*, 'two', and the Lesgi numeral suffix, *-ko*, or *-gu*. The primitive form of the Dravidian 'two' is *ir* (Caldwell).

Tiv, *thve*, and *thiv*, may all be akin to the Sanskrit *div*, 'shine'. The lights in the firmament of the heaven were to be "for signs, and for seasons, and for days, and for years". In Georgian, the root appears as *thov*, in *mthovare*, 'the moon', i.e., 'what shines.'

the Etruscan was an Aryan language which possessed Turanian numerals. Which of these suppositions is the more impossible I will not undertake to say." As it was thus impossible for the Etruscans to have borrowed their Non-Aryan numerals, it must have been their Aryan grammar which they borrowed,—a fact the more remarkable, as there was no Aryan element in the Etruscan language. If English grammar were Tungusian or Zulu, the case would be similar to what we should have to believe of Etruscan. It would be a Turanian language that borrowed its grammar from the Aryan, with the exception of some Iberian case-suffixes; nearly all its terms of relationship from the Aryan, though two or three are Iberian; and its numerals, in their crude form, mainly from the Iberian, but partly from the African.

For I must take exception to the statement, that I admit the Etruscan numerals to be Turanian; as I have always denied that there was a single Turanian numeral in Etruscan, though it is possible for *kez*, seven, to be so. I have the misfortune to differ with Dr. Taylor as to both elements in the language and the population of Etruria. While he holds the Pelasgic aborigines of the country to be Finnic, I consider them to be Iberian, with a dash of African; and while he pronounces their conquerors to be "a horde of Tatars", I believe them to be a Thracian people, like the Dacians, the Lydians, the Phrygians, and the Armenians. And thus it comes to pass, that in a form like *mealch-l-s-k*, 'and of $x \times 10$ ', *-l-* is an Iberian numeral suffix, *-s-* the sign of the Aryan genitive, and *-k* the Aryan suffix for 'and', of which the original form was *-ka*. In *zathrm-s-k*, we have an entirely different decade, which is found on examination to be African. As grammar overrides everything, I might almost be content to rest my case on the Etruscan numerals alone, without any further evidence. *Av-il-s*, *mealchl-s-k*, and *lupu-ke*, are all more "fatal" words than *sek* is.

Another first aorist like *lupuke* is to be found in *turuke*, which occurs in an inscription from Ravenna (49), Thuker Hermenas *turuke*. Other forms are *turke* and (once) *trke*: for the elision of the *u*, compare the Armenian plural form *tovrch*, 'gift', ablative *trowch*. That *turuke*, *turke*, and *trke*, mean 'dedit', is sufficiently clear to my mind from the following inscriptions taken from Fabretti:—

255. Larke Lekn(e) *turke fleres* uthurlan veithi.¹
 804. (L)autni Thufulthas *turke*.
 1051. V. Kvinti Arntias Kulpiansi *alpan turke*.
 1052. V. Kvinti Arntias Selansl tez *alpan turke*.
 1054. A. Velskus Thuplthas *alpan turke*.
 1055 bis. Larthia Ateinei *fleres Puantrns*l *turke*.
 2180. Vipia Alsinai *turke Versenas Kaiia*.
 2582. (T)ite Kale Atial *turke Malstria kver*.
 2613. Mi *fleres svulare Aritimi Fasti Ruifris trke klen*
 kecha.

Fleres occurs also in the two following inscriptions, which both terminate with *kver*, like 2582:—

1930. *Fleres zek sansl kver*.²
 2599. *Fleres tlenakes kver*.³

¹ For *fleres*, 'votum, donum', see *ante*, p. 69. It is quite uncertain whether the last two words of the inscription contain proper names, or what they are.

² For *sansl*, 'libens', see *ante*, p. 69.

³ We should be glad to recover the Etruscan for 'sister' in *kver*, written *keer*, *i.e.*, with *E* instead of *v*, in 2582, where it is preceded by *Malstria*, a word which occurs nowhere else, though from its termination it may well be a female name, as *Kaiia* in the inscription above it certainly is. If *Vipia Alsinai turke Versenas Kaiia* is to be translated, 'Vipia Alsinia dedit (et) Caia Versenii'—Caia may have been a sister of Vipia Alsinia, married to a Versenius—so *Tite Kale Atial turke Malstria kver* might be rendered, 'Titus Callius Attiæ (natus) dedit et Malistria soror (ejus)'. Compare *kver* with the Persian *khwâhar*, the Armenian *choyr*, the Ossetic *chore, cho*, and the Welsh *chwaer*, 'sister.'

Vipia, or Vibia, appears to have been a *prænomen* in the Versenian as well as the Alsinian family; at least if we may judge from the Faliscan inscription (2452):—*Vipia Vertenea loferta Marci Acarcelini mate he cupa*; which is

Fleres and *sansl* are found in this inscription:—

1922. Aulesi Metelis Ve Vesial klensi ken *fleres* teke *sansl* tenine *tuthines* chisvliks.¹

And *Thuplthas alpan* (1054), *tlenake(i)s* (2599), *tuthines* (1922), and *klen kecha* (2613), in this:—

1055. Velias Fanaknal *Thuplthas alpan* lenache *klen kecha tuthines tlenacheis*.

In another inscription we find *kechase* instead of *kecha*:—

2280. Laris Pumpus Arnthal klan *kechase*.

Kechase may be the second form of the Aryan first aorist, and = Armenian *chaheaž*, 'expiavit', though we are not certain that *kecha* and *kechase* are synonymous for 'consecravit', as we know that *lupu* and *lupuke* are for 'obiit'. *Lenache* (1055), and *teke* (1922), would, judging from their

rendered:—'Vibia Vertennia liberta Marci Acarcelini mater hic cubat'. Cf. *Vipia* Alsinai turke *Versenas* Kaiia. If the two families were connected by marriage, it is natural enough that the same prænomen should become common to both.

I do not know whether it would be considered as an objection to the supposition that *kver* may mean 'sister', that *kver* and *klan* both occur in the following fragment of an inscription (2334):—

. . . . tas Velusa
. . . . is Selvansl
. . . . s *kver* Thvethli
. . . . klan.

But we cannot tell how much of this inscription is lost. It was engraved on the arm of a boy, of which only the shoulder is left. Hellenising interpreters identify *kver* with *κόρος*. Yet *Velusa* seems to show that the first part of the inscription relates to a woman. For Arnth Antni *Velusa*, and Tutnei *Velusa*, would be rightly rendered in Fabretti, 'Aruntia Antinia *Velii* uxor', and 'Tutinia *Velii* uxor'. *Selvansl* appears to be the same as *Selansl* in 1052:—V. Kvinti Arntias *Selansl* tez alpan turke. It occurs again in another inscription (2582 *bis*):—

Kanzate
Selvansl
Lethanei Alpnu
Ekn turke Larthi.

Selvans- is probably, as conjectured, = *Silvanus*.

¹ For *tuthines*, see *ante*, p. 68.

positions, have meanings similar to *turke*; *teke* probably meaning 'posuit', while *lenache* may signify 'fecit'. Compare the Armenian *-etén*, as in *oskelén*, 'made of gold'; *erkath-elén*, 'made of iron'; *phaytelén*, 'made of wood'. The meaning of *alpan* is obscure, though its position (1051, 1052, 1054) nearly corresponds to that of *fleres* (1055 bis, 255), each word being connected with *turke*. Compare therefore the Armenian *otb*, 'complaint', *i.e.*, 'supplication'; *eter*, 'complaint'; and *ovlerž*, 'homage, gift.' For the termination of *alpan*, compare the Armenian *glan*, 'cylinder', with *glel*, 'to roll'; *kakhan*, 'a gibbet', with *kakhel*, 'to hang'; and *ishkhan*, 'a ruler', with *ishkhel*, 'to rule'. We meet with *fler* (cf. Armenian *eter*) and *thrke*, combined into one word, in an inscription, which, as we gather from the picture that accompanies it, refers to Alcestis (*Alksti*) presenting herself as an offering devoted to death (Acheron, *Achrum*) for the sake of her husband Admetus (*Atmite*). The inscription runs thus:—

2598. *Elka erske nak Achrum flerthrke.*

Compare *erske* with the Armenian *eresel*, 'se présenter, paraître'; and *nak* with the Armenian *nakh*, 'avant, ci-devant', whence *nak* = 'devant, coram'. *Elka* probably means 'here', or 'lo!'. Cf. Armenian *ahá*, 'voici voilà', and Latin *ecce*.

As, however, these explanations are not free from conjecture, I will not rest upon any of the words in question as evidence, with the exception of *turuke*, which can hardly fail to mean 'dedit.' The inscription, Thuker Hermenas *turuke*, would thus contain an Aryan first aorist, the root being the Armenian *tovr-*. This inscription is engraved on the thigh of a very ancient bronze statuette about fourteen inches high.¹ The statuette represents an ill-favoured

¹ The position of the inscription affords the best illustration extant of Rev. xix, 16. Dean Alford, in his note on this verse, cites a passage from

warrior, who makes his appearance in Dr. Taylor's tract on the *Etruscan Language* (p. 20) as a type of the Etruscans. The same figure is given also in Micali (*Monumenti*, xxxviii), where the eyes, however, are much less oblique, but very narrow; and the nose has not yet been deprived of its well-raised un-Altaic bridge, and is not splayed upward from the lip, but is like those of the three other warriors portrayed on the same plate, whose eyes are perfectly straight, although those of the last but one, who has small Aryan features, are represented as half-shut, like those of the first warrior.¹ Yet, even in Micali, and before being made a presentable witness by acquiring the title of *Rhinotmetus*, this first figure is far from attractive, though Dr. Taylor seems to have been drawn to it in preference to the others with it, and to many more figures of nobler type, which he might have chosen as representatives of the

Pausanias relative to an *ανάθημα*, *ἀνδρὸς εἰκῶν*, which bore *ἐπὶ τοῦ μηροῦ* an *ἐλεγείον* terminating with the words, *ἔθηκαν Μενδαῖοι*, as the Etruscan figure bears the inscription, *Thuker Hermenas turuke*, which was perhaps followed by something more. The Greek *ἀνάθημα ἔθηκε* and the Etruscan *fleres teke* appear to be synonymous, the augment being as usual omitted in Etruscan. Another Etruscan statue (Micali, *Mon.* XLIII) bears a long inscription, the first line down the thigh, and the second all down the leg. It is the inscription (1055) given above (p. 135).

¹ Should it be asked what I mean by Aryan features, I would reply by referring to the three figures which are given as Aryan types in Prichard's *Natural History of Man* (ed. Norris). One is the figure of a Brahman (169), the most Etruscan of the three, at least in breadth of visage: the second is a royal figure from Persepolis (p. 171), who has a face like Dante's: and the third is the Belvedere Apollo (p. 198). An Etruscan lady with "a profile of the ideal Greek type", whose portrait was discovered at Tarquinii in 1868 (Dennis, i, 346), might well be the sister of the Apollo: her name appears to have been Vel(ia), and she was the wife of Arnth Velchas. Dr. Taylor considers that his figure of an Etruscan warrior "might pass for the representation of a Samoyed". But let anyone compare the features of the warrior (in Micali) with the features of a Samoyed in Prichard (p. 226), or with the description of the Samoyeds there cited:—"Ils ont de larges lèvres retroussées, le nez large et ouvert, peu de barbe, les cheveux noirs et rudes." Such features bear no resemblance to those of the Etruscan warrior: nor have I been struck with any traces of a Samoyed origin in the countenances or forms of the living representatives of the Etruscans.

ancient Etruscans. I may mention one example, as it is readily accessible to many, and as it is a strictly parallel case; for it is a bronze statuette of similar size to the first, and likewise represents a warrior. The features are Aryan, but not Roman. This statuette is in the British Museum, and is depicted by Micali (*Monumenti Inediti*, XII), who well describes it:—"Bella è la grave e insieme placida espressione del volto, tutto che vi sieno mancanti le pupille degli occhi, che potevano essere state d'argento, o d'altra materia. Per la quieta azione della figura mostrasi un nobile guerriero che scioglie il voto." Dr. Taylor does not notice this exquisite work, which could only be repulsive in his eyes; but he refers to a pair of portrait-figures on a sarcophagus in the same collection, and decides with some haste (p. 21):—"It may, I think, be safely said that those two portraits are alone sufficient to dispose of a whole library of books which have been written to prove the Aryan affinities of the Etruscans." A whole library of books written to prove that the Greeks were Aryans, and not Satyrs, would be disposed of in like manner by the busts of Socrates. It would probably be useless to draw Dr. Taylor's attention to the many portrait-figures which tell an entirely different tale about the Etruscans. A whole gallery of such statues might be disposed of by his remark:—"the type changes in later works of art." No doubt it does, as the style of Florentine art changed in the three centuries between the eras of Cimabue and of Da Vinci. Yet, however anxious Dr. Taylor may be to keep all Aryan intruders off the soil of Etruria, it is nevertheless impossible for us to admit that Etruscan art ceases to be evidence of what the Etruscans were like, as soon as that art passes out of an imperfect into a mature stage. Before the evidence of art is admitted on such questions as the present, all its imperfections should be eliminated, instead of being made the foundation for a theory. We do not believe that the eyes of the ancient Egyptians were

on a level with the centre of their ears, though they are so represented on their monuments; nor that the Florentines of the time of Giotto were characterised by an eye, described by Dr. Kugler as "scharf geschlitzt", and by Professor Springer as "obliquely drawn"—in other words, by a Mongol eye, like those of Dr. Taylor's two or three carefully selected figures.

As the reader may be glad to have a trustworthy idea of the appearance of the ancient Etruscans, I subjoin one taken from the very highest authority, derived from a multitude of Canopic vases:—

“La testa umana, che hanno per coperchio, figurava il ritratto del defunto, uomo o donna si fosse. La molta varietà delle teste, l'età diversa, le differenti capellature, l'aria tutta nazionale dei volti, la conformità dell'angolo faciale, non lascian dubbio nessuno che dessi non sieno veri ritratti: tanto più importanti, quanto più fedelmente, e senz'abbellimento alcuno, ci mostrano il tipo fisico dei nostri padri. *Desso è lo stesso della grande variata razza del Caucaso.* Il diametro verticale è corto, quindi il viso largo: il contorno della testa, vista di faccia, si direbbe come quadrato, atteso che il cranio v'apparisce schiacciato alla sommità, e orizzontale l'estremità inferiore della mascella. La fronte è bassa, *il naso aquilino con base piana*, il mento tondeggiente dinanzi, la posizione delle orecchie alquanto alta.¹ Tali sono ancora i caratteri principali del tipo odierno in Toscana, e più generalmente propri della universale razza italiana.”²

¹ This is a fault in representation, derived from the imitation of Egyptian art, as noticed by Micali.

² Micali, *Storia degli antichi popoli italiani*, iii, 11. The last statement is too broad. There is more than one race in the Italian nation.

*List of Etruscan terms of relationship.*¹

In addition to the expressions already noticed, there are other words in Etruscan inscriptions, such as *amke*, *spurana*, *spurethi*, *tamera*, which may be terms of relationship or affection: but, as their meaning cannot be ascertained, they are not qualified to be used as evidence of affinity in language; a question which must be decided by what we know, without any appeal to what we are ignorant of.

All the Etruscan terms of relationship of which the sense can be determined with any accuracy appear to be included in the following list:—

Relationships by descent.

<i>klan</i>	}	'child, son, boy'.
<i>etera</i>		
<i>eteri</i>		
<i>husiur</i>		
<i>ruka</i>		
<i>-thura</i>		

<i>sech</i>	}	'daughter'.
<i>sek</i>		
<i>tusurthii</i>		

nefis, 'grandson'.

¹ "If it be admitted, as it must be, that the Etruscan numerals are decisively Turanian, it follows, I think, without further evidence, that the Etruscan belongs to the Turanian family of languages. If, however, this should be disputed, there is abundance of other evidence. We can try our key in other locks, and see if it will open them. One lock, hitherto unopened, lies ready to our hand. Next to the numerals, the household words denoting the commonest relationships of life are the most persistent in their vitality. Other words change as languages grow old. These words, which are the first to be whispered by baby lips, outlive almost every other element of language. Such words, therefore, rank very high in philologic value" (Dr. Isaac Taylor, *Etruscan Language*, p. 16.) I accept the test: but, with the possible exception of 'sister', there are none of the Etruscan words that have been whispered by baby lips. 'Father', 'mother', 'brother', are all deficient.

Relationships by marriage.

eslz, 'consort'.

eslz zilachnthas
zilachnke
zilachnake } 'husband'.

puia, 'wife'.

klens puia
farthn
farthnache } 'son's wife', 'daughter-in-law'.

sech farthana
sech harthna } 'step-daughter'.

I have omitted *zilk* as uncertain, though it is likely to be a synonym of *zilachnke*, 'husband'. *Puiak* and *zilath* are likewise omitted, which probably mean 'gener', and correspond to *farthnache*, 'nurus'; and also *klanpuiak* and *klanzilath*, which appear to mean 'privignus', and to correspond to *sech farthana*, 'privigna'.

Of the terms of relationship in the list, *sech* or *sek* might be Aryan, but is much more likely to be Iberian. It may also be Turanian and Medo-Scythian. *Thura* is Iberian, as well as Medo-Scythian and Accadian. *Etera* and *eteri* may be either Aryan or Iberian, and also Turanian. The root *zil*, and the *Wortbildung* of *zilk*, *zilath*, *zilachnthas*, and *zilachnke*, are completely Aryan. All the other words, *klan*, *husiur*, *ruka*, *nefis*, *tusurthii*, *eslz*, *puia*, *farthn*, *farthnache*, *farthana*, and *harthna*, are likewise Aryan. A great deal of Aryan, with a little Iberian, explains everything. Recourse to Turanian languages is quite unnecessary: and, as they can only explain *sech* and *etera*, they do but little at the best; scarcely more, in fact, than with Etruscan numerals, though immeasurably more than with Etruscan grammar.

Among Aryan languages, as far as these terms are concerned, the Asiatic Aryan predominates over the European

Aryan; and, among Asiatic Aryan languages, the Armenian, which survives to represent the ancient Thracian, predominates decidedly over the Sanskrit or Indian family, as well as over the Persian.

Review of the whole evidence.

Such, then, is the evidence which may be elicited from Etruscan terms of relationship. Now the results to which we were led by all the previous evidence were these:—The Etruscan numerals were found to be chiefly Iberian, but partly African, while the words in the bilingual inscription of Pesaro, *i.e.*, *trutnvt*, ‘haruspex’, and *fruntak*, ‘fulguriator’, were neither Iberian nor African, but Asiatic Aryan, and in all probability Thracian. We were thus enabled to discern the co-existence of three elements in the Etruscan language, and therefore proceeded to inquire, in the next place, with which of the three it ought to be classed as a language. A test was supplied by words and forms found in conjunction with numerals in Etruscan epitaphs, reinforced by some other votive and sepulchral inscriptions; and these appeared to show, not merely by the sense of the words, but also by their grammatical structure, that the Etruscan language was Thracian, instead of being either Iberian or African. We then took up the Etruscan terms of relationship, which involved other grammatical forms; and these fully confirmed our previous inference, that the Thracian was the predominating element in the Etruscan language. We also learned, from the same evidence, that the second element in the Etruscan language was Iberian, and not African.

Indeed, were it not for the numerals, *zal*, *zath-rum*, and *kiem-zath-rm*, there would be no necessity for resorting to African languages to explain the Etruscan at all: but it does not appear to me that those numerals can be satisfactorily explained from the Iberian, and still less from the

Aryan, so that the African cannot here be dispensed with. And, if it cannot, then the African are the most important of all the Etruscan numerals. For the others tell us no more than we knew without them. From the rest of the evidence—that contained in this second part—we were sufficiently assured that the Etruscan was a Thracian language with a strong Iberian infusion; so strong, indeed, that it affects the declension of nouns, though not the conjugation of verbs. That the majority of the Etruscan numerals should prove to be Iberian makes no material difference. The additional weight which it throws into one scale still leaves the balance in favour of the Thracians. But the African numerals inform us of something quite new, as they intimate that there was an African substratum below the Iberians and the Thracians in Etruria, and probably elsewhere.¹

Some indirect evidence that the Pre-Aryan language of Etruria was Iberian may be afforded by another language than the Etruscan, *i.e.*, the Basque; though Basque numerals do not absolutely require African languages for their explanation, as some of the Etruscan numerals seem to do; and therefore the Basque language might be expected to be less African than was the Pelasgian or Tuscan in Etruria.² But, as Etruria lies between the Caucasus and the Pyrenees, it is of some importance to show, if it were only in corroboration of the Iberian character of two-thirds of the Etruscan numerals, with other signs of Iberian affinity in Etruscan, that the Basque and the Caucasian languages belong to one family. A comparison of Basque and Caucasian

¹ Perhaps the Cynetæ or Cynesii of Herodotus were a remnant of this most ancient race. They dwelt in the extreme west of Europe, beyond the Celts and the Iberians, and would have inhabited Galicia, with the neighbouring parts of Spain and Portugal.

² Yet the Basque 'twenty', *ogei*, is worth comparing with the following 'twenties' from Eastern Guinea:—*ogu, ohu, ogo, oko, uge, uwe*.

numerals is not unfavourable to such an inference; but a more decisive test may be applied in this case. It is verbs which afford the most irrefragable proof of affinity in language, if such proof can be had. The Basque verb will therefore be the main subject of the pages which follow.

PART III.

CAUCASIAN CHARACTER OF THE BASQUE VERB.

MY authorities for Caucasian verbs are Brosset's *Langue Géorgienne*, and the works of Schiefner on the Abkhasian, the Thusch, the Tshetsh, the Ude, the Kasi Kumük, and the Avar languages. Of these languages, the Abkhasian lies in the N.W. Caucasus; the Georgian occupies the S.W. and S. Caucasus; the Thusch and the Tshetsh are in the Central Caucasus; and the Kasi Kumük, the Avar, and the Ude are in the E. Caucasus. All the Caucasian regions are thus represented with sufficient completeness by the seven forms of speech with which it is proposed to compare the Basque. It is with the Ude that the comparison will begin.

The Basque active auxiliary verb compared with the Ude active auxiliary verb.

Basque verbs are for the most part conjugated periphrastically; a process effected by the aid of two auxiliary verbs which are presented under the form of verbal nouns, after the manner in which infinitives appear in Ude, and in languages generally. One of these Basque auxiliaries is used in the conjugation of active verbs, and thus corresponds to the English verb *have*. Its verbal noun-adjective is *ukan*, *ukhan*, or *ukhen*, and its root therefore *uk* or *ukh*, which is reduced in conjugation to *u* and *e*. *Euki* is commonly given as an additional form, but is with good reason considered by Van Eys to be syncopated from *eduki* or *iduki*, which

occur in some Basque dialects, and will be noticed in their appropriate place.

In Ude, active verbs are conjugated by the aid of the auxiliary verb *phesun*, 'to say, to make, to do'. Here the root would be *ph-*, which has no connection with the Basque *uk-* or *ukh-*. Some of the tenses of the Ude *ph-esun* are, however, derived from a verb of which the base is *uk-*; and the present participle of *ph-esun* is *uk-al*, while the preterite participle is *ph-i*. In the first future of *ph-esun* the base *uk* is again employed, the personal pronominal signs being infixed between the *u* and the *k*; for in *u-z-k-o*, 'I shall say', *z* is = 'I', and *-o* is the sign of the future. This Ude root, *uk*, 'say, make, do', would be identical with the Kasi Kumük root *uk*, 'say' (Schiefner, p. 29): its infinitive is *uċin*, the Kasi Kumük infinitive terminations being *-an*, *-ān*, *-in*, and *-un*, which are like the terminations of Basque verbal adjectives, such as *uk-an* or *ukh-en*.

In the following comparisons between the Basque and the Ude auxiliary verbs the root is italicised:—

BASQUE.	UDE.
Verbal adjective	Pres. conj. ¹
<i>uk-an</i>	<i>uk-a-z</i>
<i>ukh-an</i>	<i>uk-a-n</i>
<i>ukh-en</i>	<i>uk-a-ne</i>
	<i>uk-a-yan</i>
	<i>uk-a-nan</i>
	<i>uk-a-qun</i>
Pres. ind.	Pres. ind.
<i>d-e-t</i> ²	<i>ech-zu</i>

¹ Here the *-a-* is the sign of the conjunctive, and *-z-*, *-n*, *-ne*, *-yan*, *-nan*, *-qun*, indicate the pronouns of the verb. Caucasian and Basque pronouns will be compared together later.

² 'I have it', the initial *d-* implying the objective 'it'; so that the Basque *-e-t* corresponds to the Ude *ech-zu*, the vowel *u* in *uk* or *ukh* being changed in each language into *e*.

BASQUE.	UDE.
Pres. ind. (<i>contd.</i>).	Pres. ind. (<i>contd.</i>)
d-e-zu	ech-nu
d-u	ech-ne
d-e-gu	ech-yan
d-e-zute	ech-nan
d-u-te	ech-qun
Pres. ind. (Navarrese)	1st fut. ind.
d-u-t	u-z-ko
d-u-k	u-n-ko
d-u	u-ne-ko
d-u-gu	u-yan-ko
d-u-zute	u-nan-ko
d-u-te	u-qun-ko

The Basque passive and neuter auxiliary verb compared with the Ude passive and auxiliary verb, and with the Georgian verb 'to be'.

The second auxiliary verb in Basque is employed in the conjugation of passive and neuter verbs. Its verbal adjective is *izan*, and one form of its root *iz*. Its general signification is 'be', as in *n-aiz* or *n-iz*, 'I am'; but it is also used to signify 'have', as in *izan det*, 'I have had it', = 'had (*izan*) it-have-I (*d-e-t*)'. One sense of this auxiliary verb is thus like that of the English *become*, while the other sense is like that of the German *bekommen*. The English *get* is in a similar manner both active and neuter; as in 'I get (*bekomme*) money', and 'I get (*become*) old'.

As the Basque *izan* is employed in the conjugation of passive and neuter verbs, it may therefore be compared with the Ude *esun*, 'to come', which is employed in like manner in the conjugation of passive and neuter verbs. In both cases, the root assumes several forms, as the root of the

substantive verb does in the English *a-m*, *ar-t*, *is*, *are*. As before, I italicise the root in the following comparison of the Basque and of the Georgian in the upper part of the table with the Ude in the lower part of the table :—

BASQUE.	GEORGIAN.
Pres. ind. of 'be'.	Pres. ind. of 'be'.
<i>n-aiz</i> , <i>iz</i>	<i>v-ar</i>
<i>z-era</i>	<i>kh-ar</i>
<i>d-a</i>	<i>ar-s</i>
<i>g-era</i>	<i>v-ar-th</i>
<i>z-era-te</i>	<i>kh-ar-th</i>
<i>d-ira</i>	<i>ar-ian</i>
UDE.	
Pres.-ind. of 'come' ¹	Aorist of 'come'.
<i>e-z-sa</i>	<i>ar-i-zu</i>
<i>e-n-sa</i>	<i>ar-i-n</i>
<i>e-ne-sa</i>	<i>ar-i-ne</i>
<i>e-yan-sa</i>	<i>ar-i-yan</i>
<i>e-nan-sa</i>	<i>ar-i-nan</i>
<i>e-qun-sa</i>	<i>ar-i-qun</i>

In composition, as will be perceived below, the Ude aorist is not *ari* but *ezi*; the root thus being either *ež* (= Basque *aiz* or *iz*), or *ar* (= Georgian *ar*).² The *-i* marks the preterite tense. The following are examples of the use of the active and the passive auxiliary verbs in Basque and in Ude :—

¹ The pronominal signs are infixes, as before in the Ude *u-z-ko*, instead of being prefixed or suffixed; an indication, perhaps, that neither *esa* nor *uk* is a simple root, but that each is composed of two primitive elements.

² The root of this Iberian substantive verb seems to have a primeval affinity to the root of the Aryan substantive verb, *as*, *es*, *is*, *er*, *ar*. So also the Ude *bu*, 'be', appears originally identical with the Zend *bū* and the Sanskrit *bhū*.

- BASQUE *galtzen d-e-t*, 'I lose it'.¹
galdua n-aiz, 'I am lost'.²
- UDE *kal-zu-echa*, 'I call'.
kal-zu-esa, 'I am called'.
kal-zu-ezi, 'I was called'.
- BASQUE *izan d-eza-ke-t*, 'I can have it'.

The Basque conditional and potential suffix, -ke.

The last of the Basque forms given above, *izan d-eza-ke-t*, 'I can have it', signifies literally 'to-have it-am-able-I', the potential being expressed in Basque by *-ke*, as is also the conditional: *e.g.*, *nin-za-ke*, 'I should be'. In Thusch, the conditional suffix is *-he* or *-h*, as in Basque it is *-ke*: thus we have in Thusch *da-he*, 'he would be', and *do-h*, 'he would do'. Another analogy between the Thusch and the Basque is, that the sign of the preterite, in Thusch *-r*, and in Basque *-n*, follows the conditional suffix, in Thusch *-he*, and in Basque *-ke*. 'He would be' is in Thusch *da-he*, and 'he would have' is in Basque *izango luke*; while 'he would have had' is in Basque *izango luke-an*, and 'he might know' is in Thusch *chehe-r*.

The Basque preterite suffixes, -en or -an, and -du.

In addition to the *n* suffix of the preterite, which has just been mentioned, the Basque has another, of which the characteristic is *d* or *t*. It appears in the preterite or passive participle, as in *galdu* 'lost', and *maitatu*, 'loved'; while the *n* characteristic appears in several tenses of the verb, as well as in a verbal adjective like *izan*, which is also employed as the preterite participle, 'been'. Among Caucasian languages, the Georgian here exhibits analogy to

¹ Literally, 'losing-in it-have-I'.

² Literally, 'lost-the I-am'; *-du* forming the passive participle, and *-a* being the definite article.

the Basque in both terminations, and the Abkhasian and the Avar in one :—

BASQUE.

galdu, 'lost'.

nekarren, 'I carried'.

nuen, 'I had'.

ekusan, 'saw'.

GEORGIAN.

vikmdi, 'I made'.

vhkmen, 'I have made'.

ABKHASIAN.

syqan, 'I was'.

AVAR.

ugoan, 'was'.

Basque imperative and conjunctive forms—their Georgian and Thusch affinities.

Besides having a preterite force, as in *izan*, *ukhen*, *nuen*, and *ekusan*, *n* has likewise an imperative and a conjunctive force in Basque. For in Basque the following imperative and conjunctive (or optative) forms are found—forms which seem on examination to betray very remarkable instances of Caucasian affinity :—

1. *z-are-n* (or *z-ar-en*), 'sois' (*z-era*, 'tu es').
2. *d-e-n*, 'qu'il soit' (*d-a*, 'il est').
3. *b-iz*, 'qu'il soit' (*iz*, root of substantive verb).
4. *izan adi* (also *izan z-aite*) 'sois'.
5. *izan b-edi*, 'qu'il soit'.
6. *izan n-adi-n*, 'que je sois'.
7. *izan d-edi-n*, 'qu'il soit'.

From 1, 2, 6, 7, we see that *n* or *en* suffixed has an imperative and a conjunctive force in Basque. It is the same in Georgian, as we may perceive from the following verbal forms :—

gržam-s, 'tu crois'.

hržam-s, 'il croit'.

vikm, 'je fais'.

gržam-n, 'croie'.

hržam-n, 'qu'il croie'.

hkm-en, 'fais'.

Again, from 3, 5, we see that *b* prefixed has an imperative force in Basque. Compare here the Basque and the Thusch :—

BASQUE.	THUSCH.
<i>b-eza</i> , 'qu'il ait'.	<i>di-b</i> , 'fais'.
<i>b-eza-te</i> , 'qu'ils aient'.	<i>di-b-ath</i> , 'faites'.

Thus, in Thusch, an imperative is formed by suffixing *b*, as it is in Basque by prefixing the same letter. But this is not the only analogy exhibited above; for there, as will be perceived, a *th* suffix forms the plural in Thusch, and a *t* suffix in Basque. The Basque is analogous to the Georgian also in this respect, as the following examples will show :—

BASQUE.	GEORGIAN.
<i>z-era</i> , 'thou art'.	<i>v-ar</i> , 'I am'.
<i>z-era-te</i> , 'ye are'.	<i>kh-ar</i> , 'thou art'.
	<i>v-ar-th</i> , 'we are'.
	<i>kh-ar-th</i> , 'ye are'.

There remains, among Basque imperatives and conjunctives, the form *adi*, *edi*, or *aite*, in 4, 5, 6, 7. This form stands by itself in *izan adi* or *izan z-aite*, 'sois' (*z-* being the pronoun 'thou'), but has the imperative prefix *b-* in *izan b-edi*, 'qu'il soit', and the imperative suffix *-n* in *izan n-adi-n*, 'que je sois', and *izan d-edi-n*, 'qu'il soit'. By itself, therefore, *adi*, *edi*, or *aite* seems not to have an imperative force; for we know that, in the 2nd pers. sing., as in *izan adi*, 'sois', the simple verbal root may be imperative, without any addition to it. Cf. Latin *fac, i, dic, fer*. Indeed, analogy would lead us to conclude that *adi* or *edi* must be indicative rather than imperative, for we have such Basque forms as those which follow :—

<i>n-ator</i> , 'je viens'.	
<i>ator</i> , 'tu viens'.	
<i>ator</i> , 'viens'.	<i>izan adi</i> , 'sois'.
<i>b-etor</i> , 'qu'il vienne'.	<i>izan b-edi</i> , 'qu'il soit'.

In reference to this verbal form, *adi* or *edi*, which is used to express an imperative in Basque, we may compare what Brosset says of the Georgian in his *Langue Géorgienne* (p. 166) :—

“ Il y a encore une maniere d'exprimer l'impératif par une forme verbale, *ed*, *id*, *od*, servant à toutes les personnes des deux nombres, et dont il n'est pas aisé de se rendre compte.”

Brosset gives as examples :—*itqod-ed*, ‘qu'ils parlent’ ; *shehkrb-id*, ‘qu'il se rassemble’ ; and *iržmun-od*, ‘qu'ils croient’. Now, in *shehkrb-id*, ‘qu'il se rassemble’, the verbal base is *sh-kr*, so that *-b-* seems to have here in Georgian an imperative force, as it has in the Thusch *di-b*, ‘do’, and in the Basque *b-eza*, ‘let him have’ (*ante*, p. 151). Again, in *iržmun-od*, ‘qu'ils croient’, the verbal base is *ržam*, so that *-un-* has probably an imperative force, as an *n* suffix has in the Basque *d-e-n*, ‘qu'il soit’, and in the Georgian *hržam-n*, ‘qu'il croie’, and *hkm-en*, ‘fais’. The Georgian *ed*, *id*, *od*, appears thus, like the Basque *adi*, *edi*, not to be necessarily imperative by itself ; and this agrees with what Brosset goes on to say (p. 167) about this “forme verbale” having “un sens plus précis”. He gives as examples of this :—*hsğam-ed*, ‘ils mangent’ ; *ari-ed*, ‘ils sont’ ; *ćan-ed*, ‘paraître’. However this may be, the use of the Georgian *-ed*, *-id*, *-od*, is clearly like the use of the Basque *-adi*, *-edi*, *-aite* ; a remarkable similarity between two languages separated from each other by an interval of two thousand miles for more than as many years.

The explanation of these verbal forms in Georgian, and of their use, does not appear so difficult as Brosset thinks, if indeed there can be more than one explanation of them. They are auxiliary verbs : and the Georgian *ed*, *id*, *od*, with the Basque *aite*, *adi*, *edi*, may thus be identified with a Caucasian root for ‘stand’, which occurs in Thusch as *eth* and *oth*, in Ude as *aiz*, and in Kasi Kumük as *iz*. We

know, from French, Italian, and Spanish, that the Latin *stare* has become an auxiliary verb, as well as *esse* and *habere*, and also *venire* (in Italian). In this case, periphrastic conjugations would exist in Georgian, as they do in Ude and in Basque. Thus the Georgian *hs-ǰam-ed*, 'ils mangent', where the transitive verb is *ǰam*, and the auxiliary verb is *ed*, would be a periphrastic form, as much as the Basque *jan d-u-te*, 'ils l'ont mangé', where the transitive verb is *jan*, and the auxiliary verb is *u* = Basque *ukh* or *uk*, = Ude *uk*. In like manner, the last two elements of the Georgian *i-ržm-un-od*, 'qu'ils croient', would correspond, when their order is reversed, so as to take the form *-od-un* instead of *-un-od*, to the last two elements of the Basque *izan n-adi-n*, 'que je sois', and *izan d-edi-n*, 'qu'il soit'; while the Georgian *shehkr-b-id*, 'qu'il se rassemble', would correspond to the Basque *izan b-edi*, 'qu'il soit', where the two auxiliary verbs, *iz* and *edi*, are combined, as *ar* and *ed* are in the Georgian *ari-ed*, 'ils sont'.

An auxiliary similar to the Basque *-adi*, *-edi*, *-aite*, and the Georgian *-ed*, *-id*, *-od*, may be found in the Abkhasian *-eit* or *-it*. For we have in Abkhasian, from the root *bl-*, 'burn', the indefinite present, *i-z-bl-u-eit*, 'I burn it', and *dy-z-bl-u-eit*, 'I burn him'; the perfect, *i-z-bl-y-it*, 'I have burned it'; and the pluperfect, *i-z-bl-y-ch-eit*, 'I had burned it'. In the Abkhasian *i-s-yr-bl-u-eit*, 'I cause to burn it', and in other like forms, we seem to have causatives containing the same element as Basque causatives: cf. Basque *ikasi*, 'appris', *irakasi*, 'faire apprendre, enseigner'; *egin*, 'fait', *eragin*, 'faire faire'; *edan*, 'bu', *edan erazo*, 'faire boire'. The Abkhasian causative element *yr* appears = the Basque causative element *ir* or *er*.

Van Eys (*Dictionnaire Basque-Français*, p. 135) considers that the verbal noun-adjectives, *uk-an* and *eduk-i*, have probably a common origin: "Mais en tout cas les formes sont distinctes, *ukan*, 'eu'; *eduki*, 'tenu'." It is, however, more

likely that the two Basque auxiliary verbs, *ed-i* and *uk-an*, are combined in *ed-uk-i*; *ed* being = Georgian *ed*, = Thusch *eth*, 'stand'; and *uk* being = Ude *uk*, 'have' (auxiliary). For 'to have (*avoir*) and to hold (*tenir*)' is 'to have and to continue to have'. *Ed-uk-i*, 'to hold', is thus 'to stand or continue (*edi*, *ed*, *eth*) to have (*uk-an*)'. And, if the Basque *edi* and the Georgian *ed* imply 'standing' or 'continuance', then the Basque *izan b-edi*, 'qu'il soit', would properly signify 'let him be permanently' (*stia* rather than *sia* in Italian); as the Georgian *ari-ed*, 'ils sont', would likewise signify 'they are permanently', and as the Georgian *hs-ġam-ed*, 'ils mangent', would be equivalent to the Italian *eglino stanno mangiando*.

In addition to these Georgian forms in *ed*, there is another example of a periphrastic conjugation in Georgian: and it is one where a substantive verb would be employed which is identical with that employed in the Basque periphrastic conjugation, *etorten naiz*, 'I come', = 'in-coming I-am', and in the Ude *kal-zu-esa*, 'I am called'. This Georgian conjugation, which is formed by suffix *-s* or *-es*, is thus given by Brosset (p. 136):—

m-ržam-s, 'je crois'.

g-ržam-s, 'tu crois'.

m-ržam-da, 'je croyais'. *m-ržam-d-es*, 'je croirai'.

g-ržam-da, 'tu croyais'. *g-ržam-d-es* 'tu croiras'.

m-ržam-ena, 'j'ai cru'. *m-ržam-en-es*, 'j'aurai cru'.

g-ržam-ena, 'tu as cru'. *g-ržam-en-es*, 'tu auras cru'.

The two Georgian futures are evidently *futura exacta*, i.e., futures formed from preterites, as also Basque futures are, though in a different manner: cf. Basque *izan naiz*, 'j'ai été', = 'been I-am, sono stato'; and *izango naiz*, 'je serai', = 'futurus sum', *izan* being used as a preterite participle, and *izan-go* as a future participle. This brings us to the Basque future.

The Basque characteristic of the future, -go or -ko.

The Basque future suffix, *-go* or *-ko*, has been already compared with the Ude future suffix, *-o*, as in *uzk-o*, 'I shall have'. One characteristic of the future in Georgian is likewise *o*, as in the conjugation of *tan*, 'to carry' (Brosset, p. 120). The initial *mo-*, which will be observed below running all through this conjugation, "indique vers moi, vers ici", and seems identical with the root *mo*, 'come'. *Tan*, 'tragen', is therefore conjugated under the form 'hertragen'; and *mo-vi-tan*, 'I carry,' is really 'hither I carry,' *i.e.*, 'I bring'. The present and future of *tan* are conjugated thus:—

Pres. ind.	Fut. ind.
<i>mo-v-i-tan</i>	<i>mo-v-i-tan-o</i>
<i>mo-i-tan</i>	<i>mo-i-tan-o</i>
<i>mo-i-tan-s</i>	<i>mo-i-tan-o-s</i>
<i>mo-v-i-tan-th</i>	<i>mo-v-i-tan-o-th</i>
<i>mo-i-tan-th</i>	<i>mo-i-tan-o-th</i>
<i>mo-i-tan-en</i>	<i>mo-i-tan-o-n.</i>

In *mo-vi-tano*, 'je porterai', and *mo-i-tano*, 'tu porteras', *i* is one of the four vowels which are called by Brosset *pronominal* complements. Yet, if these four vowels employed in conjugation, *a*, *e*, *i*, *u*, were pronominal originally, they seem nevertheless to have eventually become as much verbal as pronominal, like the Aryan *i*, *ka*, *ta*, *ya*.¹ At any rate, the four Georgian pronominal complements have certainly a verbal force. Thus Brosset says that *a* is always active, and often transitive, *i.e.*, causative, which is as if the idea of *doing* or *making* lay in it. *V-a-gor-eb* is 'je fais rouler', and *v-a-vlin-eb*, 'je fais aller'. *A* has consequently the force of the French *faire*, the German *lassen*, and the English *let*. It may thus be compared with the Thusch imperative sign

¹ Schleicher, *V. G.*, p. 287.

-*a*, as in *ich-a*, 'go' (emphatic), or with the Ude imperative and conjunctive sign -*a*, as in *ugh-a*, 'drink', *ugh-a-n* 'thou mayest drink' (*ugh-sun*, 'to drink').

The second Georgian pronominal complement, *e*, is sometimes active or neuter, but radically passive. It may thus be compared with the Ude passive auxiliary verb *e-sun*, 'to come', as in *ugh-esun*, 'to be drunk'.

The third Georgian pronominal complement, *i*, has nearly the same force as *e*, being often active or neuter, but especially passive, as it is the characteristic of the passive voice. Cf. Abkhasian *ii*, 'to be born (*nasci*)'.

The fourth Georgian pronominal complement, *u*, is never passive, and may thus be compared with the Abkhasian *uy*, 'to make', and with the Ude active auxiliary verb, *uk*, *u-k*, *ech*, and the Basque active auxiliary verb, *ukh*, *u*, *e* (*ante*, p. 145).

Tense, as well as voice, is indicated by vowels in Caucasian verbs. Thus the characteristic of the present is in Abkhasian *u*, as in *sy-qo-u-p*, 'I am', and *i-z-bl-u-eit*, 'I burn it'. In Thusch, it is *o* or *u*; more rarely, *e* or *i*. In Tshetsh, it is *u*; more rarely, *e*; still more rarely, *a*.

The characteristic of the preterite in Abkhasian is *y* (in addition to *n* and *ch*): *e.g.*, *i-z-bl-y-it*, 'I have burned it'; *i-z-bl-y-ch-eit*, 'I had burned it'; *i-z-bl-y-n*, 'I burned it'; *i-z-bl-y-p*, 'I shall have burned it'. In Thusch, the characteristic of the perfect is *i*, but a few verbs have *e*. Both these vowels form preterites in Ude, where they are very ingeniously employed: *e.g.*, *b-esa-zu-i*, 'I was making' (*b-esa-zu*, 'I make'); *b-i-zu*, 'I made'; *b-e-zu*, 'I have made'; *b-e-zu-i*, 'I had made'. In the Abkhasian, *i-z-bl-y-it*, 'I have burned it', *i* represents the objective 'it', and -*z*-the subjective 'I': -*eit* and -*it* have been already explained (*ante*, p. 153).

In the Abkhasian *i-z-bl-y-n*, 'I burned it', the final *n* would probably be identical with the final *n* in the Abkhasian *sy-qa-n*, 'I was', which has already been compared

with Georgian, Avar, and Basque forms (*ante*, p. 150). In like manner, the final *-p* in the Abkhasian *i-z-bl-y-p*, 'I shall have burned it', would be identical with the final *p* in the Abkhasian *sy-qo-u-p*, 'I am', and might be compared with such common Georgian forms as *v-a-erth-eb*, 'I unite' (*erthi*, 'one'), and *v-a-thb-ob*, 'I warm' (*thbili*, 'hot'); *i.e.*, 'I (*v-*) do (*-b*) make (*-a-*) hot (*-thb-*)'. As 'do' is with us an auxiliary verb, so the Georgian *-b* and the Abkhasian *-p* might have some analogy to the Ude *b-esun*, 'to make', or to the Ude *ph-esun*, 'to say, to make, to do', which last is the Ude active auxiliary verb.¹ Thus we have in Ude the preterite forms, *kam-zu-ph-i*, 'I wrote', *kam-zu-ph-e*, 'I have written', and *kam-zu-ph-e-i*, 'I had written'; as we have in Abkhasian *sy-qo-u-p*, 'I am', *i.e.*, 'I do now exist', and *i-z-bl-y-p*, 'I shall have burned it', *i.e.*, 'I do (so as to) have burned it'. Here the Abkhasian *sy-* and *-z-*, 'I', are nearly the same as the Ude *-zu*, 'I', which is sometimes reduced to *-z-*.

¹ Compare here the Lycian *prin-êzeyêwe*, 'οἰκεῖοι' (*ante*, p. 109), *prin-afu*, 'μνημα', and *prin-afatu*, 'ἐπιθήσατο'; and these last forms, *prin-afu* and *prin-afa-tu*, with the Georgian *shen-eba*, 'building', and *ashen-eb-da*, 'he built', *shehkr-ev-da*, 'he bound', *zrach-vi-da*, 'he thought', *thkh-ov-da*, 'he asked', and *kl-av-da*, 'he killed'. In the E. Caucasus, Klaproth (p. 71) cites a similar form, the Akush *kebag-ev-da*, 'I saw'. The nearest parallels to the Lycian *prin-*, 'οἰκ-', are:—Tibetan *bran*, 'slave, οἰκεῖος', and *brañ*, 'mansion, station'; Armenian *wran*, 'tent, hut'; Assamese *ren*, 'house'; Nepalese *pañ*, 'house'; Thusch *p'hen-*, 'village'; Chinese *fan*, *liñ*, *loñ*, *luñ*, 'tomb'. The Lycian *tedleme*, 'υἱός', has even more extensive Scythian analogies. The most remarkable are:—Burmese *thatham*, 'child'; Japanese *kodomo*, 'child'; Galibi (Guiana), *tigami*, 'child'; Guayacuru (Brazil) *couttamo*, 'son'; Tupi (Brazil) *columi*, 'little'; Patagonian *calum*, 'child', *tudem*, 'little'. Albanian *dyclym*, 'boy'; Ossetic *svallon*, 'child'. In the Albanian *dyclym* and the Ossetic *svallon*, the Scythian seems to crop out through the superincumbent Aryan, just as it does in the Etruscan *sech*; for the Albanian and the Ossetic are also Aryan languages. The greater part of the Albanians are still called *Toscans*, which tends to connect them with Etruria and the Caucasus. The Lycian *ladé*, 'γυναῖκ', finds a parallel in the Avar *lyadi* or *tlyadi*, 'woman, wife', where *ly-* or *tly-* is a single consonant, with a sound between the Welsh *ll* and the Italian *gli*. For such reasons as these, I believe the Lycians to have been an Iberian and not an Aryan race, as I have more fully urged in my *Peruvia Scythica*, pp. 59-77.

I now return to the Georgian characteristic of the future, *o*, which appeared in *movitano*, 'I shall carry', where *mo-* implies 'hither, *her*', *-v-*, 'I', and *-tan*, 'carry', a verbal root preceded by the pronominal complement, *-i-*. The same characteristic, *o*, occurs in the future of *gon*, 'think', and is there followed by *-s*, as the signs of the preterite, *d* and *n*, are by *-es* in the two futures of the Georgian *ržam* (*ante*, p. 154), *ržam-d-es* and *ržam-en-es*. The future of the Basque *izan* presents several points of correspondence with the future of the Georgian *gon*, where the root *gon* is preceded by the pronominal complement *e*. The parallelisms between the European and the Asiatic Iberian may be thus brought out:—

BASQUE.				GEORGIAN.					
	<i>n-aiz</i> ,	. 'je suis'.		<i>v-</i>	.	.	<i>ar</i> ,	. 'je suis'.	
	<i>z-era</i>			<i>kh-</i>	.	.	<i>ar</i>		
	<i>d-a</i>						<i>ar-s</i>		
	<i>g-era</i>			<i>v-</i>	.	.	<i>ar-th</i>		
	<i>z-era-te</i>			<i>kh-</i>	.	.	<i>ar-th</i>		
	<i>d-ira</i>						<i>ar-ian</i>		
	1	2	3	4	3	1	2	4	
	<i>izango n-aiz</i> ,	. 'je serai'.		<i>m-</i>	<i>egon-o-s</i> ,	. 'je penserai'.			
	<i>izango z-era</i>			<i>g-</i>	<i>egon-o-s</i>				
	<i>izango d-a</i>				<i>egon-o-s</i>				
	<i>izango g-era</i>			<i>gv-</i>	<i>egon-o-s</i>				
	<i>izango z-era-te</i>			<i>g-</i>	<i>egon-o-s-th</i>				
	<i>izango d-ira</i>				<i>egon-o-s-th</i>				

Here the sign of the plural, in Basque *-te*, and in Georgian *-th*, makes a fourth parallelism between the two languages. In Abkhasian, *arth* and *anth* are the plurals of *ari*, 'this', and *ani*, 'that'.

There is a second mode of conjugating the Georgian *gon*, 'think'; and this mode presents the same signs of the perfect and the future as are found in Ude and in Thusch. For, while the Georgian has *vi-gon-e*, 'I have thought', the Ude has *u-z-gh-e*, 'I have drunk'; and, while the Georgian has *vi-gon-o*, 'I shall think', the Ude has *u-z-gh-o*, 'I shall

drink', and the Thusch, *chas-o*, 'I shall fall'. The more common sign of the perfect in Thusch is, however, not *e*, but *i*, as in *daq-i*, 'he has eaten'. This corresponds to the Ude sign of the aorist, *i*, as in *u-z-gh-i*, 'I drank', and *u-ne-gh-i*, 'he drank'. It is also the sign of the Ude preterite participle, as in *ugh-i*, 'drunk'. Compare the Basque verbal nouns, *adi*, *edi*, *eduki*, *ĩduki*, in which *ad-*, *ed-*, *id-* have been already identified with the Georgian auxiliary, *od*, *ed*, *id*, and *-uk-* with the Ude auxiliary *uk*. The Basque *eduki*, 'tenu', and the Ude *ughi*, 'bu', appear similar forms.

List of points of analogy between the Basque verb and Caucasian verbs.

I have now gone through such points of analogy between the Basque verb on one side, and Caucasian verbs on the other, as I have been able to discover. What are summed up below appear to be the chief points of correspondence:—

1st auxiliary verb.¹

BASQUE <i>eza</i>	UDE <i>esa</i>
<i>aiz</i>	<i>ež</i>
<i>iz</i>	GEORGIAN <i>es</i>
<i>are</i> (or <i>ar</i>)	<i>ar</i>
<i>era</i>	UDE <i>ar</i>
<i>ira</i>	

2nd auxiliary verb.²

BASQUE <i>uk</i>	UDE <i>uk</i>
<i>ukh</i>	<i>u-k</i>
<i>u</i>	
<i>e</i>	<i>ekh</i>

¹ Passive or neuter.

² Active.

3rd auxiliary verb.¹

BASQUE <i>adi</i>	GEORGIAN <i>od</i>
<i>edi</i>	<i>ed</i>
	<i>id</i>
	ABKHASIAN <i>it</i>
<i>aite</i>	<i>eit</i>

1st imperative and conjunctive sign.

BASQUE <i>-n</i>	GEORGIAN <i>-n</i>
	<i>-en</i>

2nd imperative and conjunctive sign.

BASQUE <i>b-</i>	THUSCH <i>-b</i>
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3rd imperative and conjunctive sign.

BASQUE <i>b-edi</i>	GEORGIAN <i>b-id</i>
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1st preterite sign.

BASQUE <i>-en</i>	GEORGIAN <i>-en</i>
<i>-an</i>	AVAR <i>-an</i>
	ABKHASIAN <i>-n</i>

2nd preterite sign.

BASQUE <i>-tu</i>	
<i>-du</i>	GEORGIAN <i>da</i> or <i>di</i> ²

3rd preterite sign.

THUSCH *-r*

Potential or conditional sign.

BASQUE <i>-ke</i>	THUSCH <i>-he</i>
	<i>-h</i>

Conditional and preterite signs combined.

BASQUE <i>-ke-an</i>	THUSCH <i>-he-r</i>
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¹ Probably permansive.

² In Turkish, *di*, and in Dravidian, *d* or *du*, are preterite signs.

Future sign.

BASQUE -go
-ko

GEORGIAN -o
THUSCH -o
UDE -o

The Basque suffix, -go or -ko.

The Basque future sign, -go or -ko, is identified by Van Eys with a suffix for nouns, -go or -ko, of which he says in his *Grammar* (p. 54):—"Ce suffixe exprime le rapport d'une personne ou d'une chose à une autre, et toujours avec l'idée du repos." Though the idea of motion is thus excluded from the Basque -go as a noun-suffix, we may, nevertheless, compare it with the Thusch allative suffix -go, 'towards, to, at, upon', especially as motion is implied in a future like the Basque *eman-go d-e-t*, 'je le donnerai', *i.e.*, 'give-to it-have-I', = 'I-have-it to-give', = 'I have to give it', = 'je le donnerai'. Another Basque dialect has *emanen det*, instead of *emango det*, where -en is the Basque genitive suffix, as -in and -un are genitive suffixes in Ude. The suffix -go, or -co, has been recognised in the name of the Basque people (Humboldt, *Die Urbewohner Hispaniens*, p. 54):—"Bascontum in Vasconien is baso-coa, 'zum Walde gehörig'. Auf dieselbe Weise leitet man Vasconien und Vasconen ab." Here the Basque *baso*, 'forest', may be compared with the Kasi Kumük *waza*, 'forest', and with *Baza*, the native name for the Thusch country (*Schiefner*, s. v.).

The Basque noun-suffix, -go or -ko, the Thusch allative suffix, -go, and the Ude dative suffix for plural nouns, -gho, have this in common, that they are found in combination with a number of other suffixes, as may be seen from the following examples:—

BASQUE SUFFIXES.

-ez-ko, 'de', as in *zillar-ez-ko*, 'd'argent'.

-ra-ko, 'pour, vers', as in *España-ra-ko*, 'pour l'Espagne'.

BASQUE SUFFIXES (*continued*).

- ki-ko*, 'à l'égard de'.
 -*gana-ko*, 'à l'égard de'.¹
 -*tza-ko* (= *tzat-ko*), 'pour, envers'.
 -*ko-tzat*, 'bien que, pour'.

THUSCH SUFFIXES.

- Stak-go-h*, 'bei dem Menschen'.
Dal-go-i-h, 'zu Gott hin'.
Dal-go-re, 'von Gott her'.

UDE SUFFIXES.

- Usur-gho*, 'to oxen'.
Usur-gho-i, 'of oxen'.
Usur-gho-ch, 'oxen' (accusative).
Usur-gho-ch-o, 'from oxen'.
Usur-gho-ch-o-l, 'with oxen' (comitative).
Usur-gho-n, 'by oxen'.
Usur-gho-n-k, 'with oxen (instructive)'.

*Pronominal analogies of the Basque with the Georgian, and
 with other Caucasian languages.*

It will have been perceived, in the course of the preceding investigation, that subjective pronouns, or subjective pronominal signs, are in conjugation incorporated with the verbs, both in Basque and in Georgian, as they are in Aryan and in other languages. Objective pronouns, or objective pronominal signs, are likewise so incorporated in Basque and in Georgian, as they are in Hebrew. The following examples of such incorporations are derived from Van Eys and Brosset; the verbal bases being the Basque *akus*, 'see', and the Georgian *ažqen*, 'hurt',

¹ *Ga-na*, 'chez'; *ga-n*, 'dans, en'; *n*, 'dans, en'. Compare the Georgian postpositions:—*ga-n*, 'de, par'; *ga-mo*, 'de, par'; *ga-re*, 'hors, de'; *ga-r-da*, 'hors, hormis'.

in which last the initial *a-* is one of Brosset's "pronominal complements", and has a force always active, and often causative. In each case, the objective pronoun, or its sign, begins the compound word, though the plural suffix belonging to it may be at the end of the word and immediately preceded by the subjective pronoun, or its sign, to which the plural suffix might rather be expected to belong. When a pronoun is understood, but not expressed, in either language, its meaning in French will be enclosed in brackets. The conjugations are not periphrastic, like those which we have hitherto considered in Basque, but are effected without the intervention of an auxiliary verb.

	Objective pronoun.	Verbal base.	Subjective pronoun.	Objective plural sign.	
BASQUE	<i>d-</i>	<i>akus,</i>	.	.	'(il) le voit'.
	<i>d-</i>	<i>akus-</i>	<i>t,</i>	.	'je le vois'.
	<i>d-</i>	<i>akus-</i>	<i>zu,</i>	.	'tu le vois'.
	<i>n-</i>	<i>akus-</i>	<i>zu,</i>	.	'tu me vois'.
GEORGIAN	<i>m-</i>	<i>ažqen-</i>	<i>s,</i>	.	'il me nuit'.
		<i>ažqen-</i>	<i>s,</i>	.	'il (lui) nuit'.
		<i>ažqen-</i>	<i>s-</i>	<i>th,</i>	'il leur nuit'.
BASQUE	<i>z-</i>	<i>akus-</i>	<i>te,</i>		'(il) vous voit'.
	<i>g-</i>	<i>akus-</i>	<i>zu,</i>	.	'tu nous vois'.
GEORGIAN	<i>gv-</i>	<i>ažqen-</i>	<i>s,</i>	.	'il nous nuit'.
BASQUE	<i>z-</i>	<i>akus-</i>	<i>gu,</i>	.	} 'nous te voyons'.
	<i>h-</i>	<i>akus-</i>	<i>gu,</i>	.	
GEORGIAN	<i>g-</i>	<i>ažqen-</i>	<i>s,</i>	.	'il te nuit'.

The Georgian *gv*, 'us', in the fourth line from the bottom here, would be identical with the Basque *g-*, 'us',

in the line above it, and also with the Basque *-gu*, 'we', in the two lines immediately below it, and with the Basque personal pronoun *gu*, 'we'. But the Basque personal pronouns are generally more perfectly preserved when they are in agglutination with a periphrastic verb than when they stand alone, while the converse is the case in Georgian. Thus a Basque form like *izan genezake*, 'nous pourrions l'avoir', shows that *gen-*, as well as *gu*, is 'we', the full Basque form consequently being *guen* or *gven*, which is to be compared with the Georgian pronoun *éven*, 'we, us', as also with the Ude *yan*, 'we'. Again, the Basque forms, *izan zenezake*, 'tu pourrais l'avoir', and *izan zenezateke*, 'vous pourriez l'avoir', show that *zen-*, as well as the pronoun *zu*, is 'thou', and that *zen-te* is 'ye'; so that the full Basque forms for 'thou' and 'ye' may be taken as *zven* and *zvente*, *zen* and *zven* being analogous to the Georgian pronouns, *shen*, 'thou' (cf. Turkish *sen*, 'thou') and *thchven*, 'ye', as also to the Ude pronouns, *un*, *hun*, 'thou', and *van*, 'ye'. The Basque plural suffix *-te*, in *zen-te*, 'ye', has been already compared with the Georgian plural suffix *-th*; as when the Basque *zera*, 'thou art', and *zerate*, 'ye are', were placed by the side of the Georgian *var*, 'I am', and *varth*, 'we are'; *khar*, 'thou art', and *kharth*, 'ye are'. In addition to *zu*, the Basque has a second form for 'thou', *hi*; so that we have in the above list the two forms, *zakusgu* and *hakusgu*, for 'nous te voyons'. It is this second form, *hi* or *h-*, which corresponds to the Georgian *kh-* in *khar* and *kharth*, and also to the Thusch *ho*, 'thou', the Tshetsh *huo*, 'thou', and the Ude *hun* and *un*, 'thou', which last form, *u-n*, would be preserved in the Abkhasian *u-*, the prefix for 'thou' in conjugation, as in *uqan*, 'thou wast.'

When the third person singular is the subject of the verb in Basque, it is but rarely expressed. Thus, in *d-akus*, 'il le voit', *d-* stands for the objective *le*, not the subjective *il*. But, in the Basque *d-a*, 'he is', the demonstrative sign *d-* is

subjective, as in the Thusch *d-a*, 'it is'. The Abkhasian prefix for 'he, she' is *dy-*, as in *dyqan*, 'he was'.

The Georgian pronoun, 'I, me', is *me*, as the Basque is *ni*; but the Georgian genitive, 'of me', is *ćemi*, *ćemis*, or *ćemisa*. These imply a form, *ćem*, 'I', perhaps originally identical with *ćven*, now employed for 'we', as well as with various Lesgi forms for 'I', such as the Avar *ton* and *dun*, the Andi *ten* and *den*, the Akush *du*, and the Dido *di*; forms which explain the Basque suffix *-t*, 'I', as in *d-akus-t*, 'je le vois', the Ude pronoun *zu*, 'I', in conjugation *-zu* and *-z-*, and the Abkhasian *s-* and *sy-*, which are the prefixes for 'I' in conjugation, as in *sqalueit*, 'I become', and *syqan*, 'I was'. The Georgian *me*, 'I', appears in *machus*, 'I have', and the Basque *ni*, 'I', in *naiz*, 'I am'.

I have already anticipated, towards the end of Part I, the inference that is to be drawn from these analogies between Basque and Caucasian verbs and pronouns; an inference which is corroborated in a singular manner by the Caucasian character of the Etruscan case-suffixes implying relationship (*ante*, pp. 80, 102, *et seq.*), as well as by other evidence. Such analogies, in pronouns, in the declension of nouns, and in the conjugation of verbs, point to the existence of an Iberian population extending, before the arrival of the Aryans, from the Caspian to the Atlantic, and occupying probably the whole South of Europe. It is not an accidental coincidence that *Iberi*, *Ligyæ*, and *Tusci* should have been named by ancient authors as inhabitants of Spain and Italy as well as of the Caucasian regions, any more than that *Belgæ*, *Atrebates*, and *Parisii* should have been named in like manner in Gaul and Britain. Indeed, such coincidences of names might have caused us to suspect a possible connection, through the *Tusci*, between the Caucasian languages and the Etruscan, as the affinity implied in the reported derivation of the Etruscans from Lydia might have

led us, on the other hand, to class the Etruscan language with the Armenian. Both inferences would have been well-founded. There is a Caucasian as well as a Thracian element in the Etruscan language, though the Thracian is the dominant element of the two.

THE END.

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