

TYRRHENIAN STUDIES. I

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In this writing my object is to give an account of an observation which I made of the text in the Tomb of the family Precu (the Tomb of Torre di San Manno), and the significance of it. The matter in question concerns the numerals of the Tyrrhenian language. I myself am not a trained etruscologist.

Towards the end of the Inscription of the Precu Tomb (Pauli, Corp. inscr. etr. 4116) the text goes as follows: ...ipa murzua cerurum ein heczri tunur clutifa zelur... It is conspicuous that the last words highly resemble certain words on the dice of Toscanella. The numbers of those dice are: mav, ou, ci, zal, huo, Γ a (Fabretti, Corp. inscr. it. 2552).

Presuming that -fa in clutifa is an enclitic (one could think that it is a borrowed conjunctive particle, cf. Canaanite we, and) I compare below the last four words of this quotation to the numerals: mav, ou, ci and zal. The four words might be inflexion forms or derivatives of the numeral stems. If the words have a suffix with a common meaning, so dissecting the similar parts -r, -ri and -ti-, as the suffix, we get the remainders: hecz-, tunu-, clu- and zelu-. I name them the Precu stems.

If the Precu tomb inscription contains the analogous forms, one after another, of the names of the four whole numbers out of the first six, what could be their mutual order? I consider the order of simple counting from one to four far more likely than the other, more complicated orders.

This would tell the sense of other Toscanella numbers but two. On the dice, mav and zal are written on the opposite

faces (the dice are deteriorated, therefore one has ma-, and the other lacks ci), likewise ou and huo, and ci and Γa. According to Skutsch, antique dice have on the opposite faces, either: 1 and 2, 3 and 4, 5 and 6, or else, 1 and 6, 2 and 5, 3 and 4. Provided that mav means 'one' and zal 'four', neither of the two locations of numbers would do. Now, there exists further one simple order of numbers: 1 and 4, 2 and 5, 3 and 6. I suppose accordingly that huo denotes 'five' and Γa 'six'.

On the stated suppositions the interpretation of the dice of Toscanella would be: mav 'one', ou 'two', ci 'three', zal 'four', huo 'five', Γa 'six'. Do the Tyrrhenian numerals now resemble the numerals of some other language? Yes, they resemble in some measure the numerals in the euskarian or Basque language. Their comparison produces similarities, when in my mind are not coincidental.

mav

In Euskarian 'one' is bat. A dialectal variant is at, a diminutive form baño, and plural 'some' batzuk, batzuk. The compound indefinite pronouns have -bat as second part, in varying forms, e. g. -bait, -baito, -beit, -beite-, baitzu-. A post-position stem used together with the personal names instead of local cases, baitha-, is perhaps related. Two derivatives have a stem of the same kind, bedera 'one at a time', and bederatzi 'nine'.

Save the important word at, there are other forms lacking the initial labial: elkar 'unique, singular', the second part -akar in betakar 'one-eyed' (begi 'eye' in compounds bet—, the second part of the numeral denoting 'eleven' hameka, amaika (hama-, ama- in compound numerals 'ten'), amaikaren 'eleventh'. Those words are in another respect important: they give evidence of the existence of a stem containing k. The formerly quoted words point to a stem containing t - let us term it t-stem. Especially the type bede-, and those with the affricate -tz-, as there are other instances of such alternations; not so much bat, as the word-type having a word-final t is infrequent in Euskarian, and this t may everywhere be secondary (an instance was mentioned above in passing, begi ~ bet-).

The multiplicative numerals ('-fold') are formed by adding a suffix -kun or -koitz to the numeral stem. As to the ending -koitz, in my opinion it cannot be derived from complex case endings, say -kotz, since their meanings are different. I think that this ending may have been abstracted from a numeral which at the outset perhaps was not a derivative nor a case form, namely: bakoitz or bakotx 'each'; only, one; singular, odd, uneven', a dialectal variant bakhoitz 'each'. Maybe this word reflects a more complete kt-stem, in contrast to the shortened k-stem and t-stem. A word with much the same meaning as bakoitz is bakhar 'only; singular; lonely'. This word, which markedly resembles ekar, represents the k-stem - kh seems to be only a quite irregular variant of k - but even the final r might be a development from t of the kt-stem. In Euskarian, d is often changed into a weak r (semi-tremulant), but the sound in question is a tremulant rr, as are most r's in the final position. The number of words with a final weak r is small, and a big part of them are monosyllables, so that one could think that often the weak r has changed into a strong r, particularly as in the final position they are pronounced in the same way. Anyway, amaikaren has the weak r, but it is not quite certain that it belongs to the stem. If both bakotx and bakhar represent the kt-stem, originally one of them might have been this stem, or then both might have been different derivatives, where the suffixes, say differing final vowels, are lost, and are reflected further in the divergent development of the stem consonant t.

Starting from the kt-stem, it is easy to account for the diphthong in the type -bait, -beit, as the second component of the diphthong may have developed from k. In this case the kt-group has perhaps never been split by a vowel.

Among Latin or Romance loan-words of Euskarian there seems to be none where the initial labial stop or initial f had been lost in Euskarian (b- is a usual representative), but Latin initial v seems either to have disappeared, or to be rendered by b—. This suggests that maybe a labial fricative, somewhat like Latin v, has disappeared in at, and developed into b- in bat, etc. I do not know any Latin loan-word in Euskarian displaying such dual development, but there may be a parallel case in the words Bizkaia and euskera, the basic stem of which seems to derive from the same origin, where the Latin

name 'Vasco' comes from. Leizarraga in the 16th Century had heusc- instead of moderna eusk-, and the h- may signify that the labial fricative sound at first became voiceless. That h- may have been pronounced labially, too, since Leizarraga seems to have had two h's, one of which is preserved, and the other lost.

The poet Martial tells that in Hispania b and v were pronounced in the same way. This points to a bilabial pronunciation of v. Ancient Vasconic maybe had just a sound of that kind.

The initial sound in the Precu stem hecz- is written with h, and it may have been pronounced as an aspiration of the same kind as in the Latin name "Hercules", Tyrrhenian Heracle. On the other hand, it seems that the alternation h: 8 was common in the Tyrrhenian language. 8 seems to have meant a labial fricative (probably), a sort of f. In an important bilingual inscription Tyrrhenian Cahatial is rendered by Latin 'Cafatia natus', born of Cafatia. This indicates in my opinion that h in Cahatial was pronounced as a labial fricative sound, since it was transcribed into Latin by f.

What is the connexion of the initial m- of the Toscanella number mav with the h- of hecz-? I think that the initial labial fricative, h-, or its predecessor, has been nasalized through sandhi, after a word ending in a nasal. Such nasalization would not be quite strange in view of the weak sonority of an unvoiced fricative that is bilabial, like the outcome of the nasalization. Certain facts of Euskarian may give a hint of the circumstances that brought about the nasalization. Contrary to other cardinal numbers, bat is put in syntagms after the noun that is qualified. Often in ancient texts, and still in certain dialects bat is constructed with the noun in the indefinite genitive case (indefinite, i. e. without an article), e. g. etxeren bat 'one house', instead of etxe bat; and the genitive ends in a nasal. The other cardinal numbers are not constructed thus.

Summing up, the initial sound of this numeral in Euskarian may have been at the outset a bilabial fricative; as it also is often pronounced (within a phrase, when not after m). In Tyrrhenian, in my opinion it is probable that the initial has been a voiceless bilabial fricative. Maybe h- has meant t hat pronunciation.

The words hecz- and mav resemble the kt-stem and k-stem proposed above, especially hecz- reminds one of bakoitz, bakotx. In Tyrrhenian the alternation c: v was common. Both letters signified unvoiced palatal stops, v could have been an aspirated stop. The letter z signified probably an affricate, and it had some relation to t; perhaps it alternated in some measure with t. At least, certain words have z instead of the expected t, e. g. Ziumioe, Latin 'Diomedes'. It seems possible that z in hecz- had developed from a dental stop.

As to the vocalism of the first syllable, both languages have one of the two vowels, a or e. What their relation to each other is, and what is the relation of the two languages at this point, is difficult to say. It is possible that the similarities here are not accidental; likewise for instance, that one of the vowels might have developed from the other. I shall treat of this matter below.

The vowels of other syllables (unstressed) are lacking in Tyrrhenian. Euskarian has various vowels. Perhaps it is worth while to note the lack also in bat, at, and the final vowel in the position after the first syllable: -u in batzu, -o in the diminutive form. It seems natural to think that the vowel, or vowels, have disappeared in Tyrrhenian. But there is the possibility that the vowel had not been written: heczri is difficult to say without more vowels. Skutsch has supposed the existence of a "schwa etruscum", and it would be likely that such a vowel had not always been written. If the Precu stem hecz- had a vowel like that, it need not have been originally epenthetic, however. If in Euskarian the stem consonants k and t formed at the outset a consonant sequence *-kt-, then the vowels like o in bakotx, perhaps the second a in bakhar, ekar, must be epenthetic (later inserted).

I quote yet two inscriptions from northern Tuscany written on little cippi: Tular spural ainpuratum fisl (f)evtatr. Tular sp a fis fv Au Cur clt (Pauli, Corp. inscr. etr., 3 and 8). They are unexplained, but they are not tomb inscriptions. Au Cur seems to denote a name of a person (more complete perhaps in a third inscription of the same kind, Pauli, Corp. inscr. etr., 4). The initial f- in fevtatr is not certain. This word fevtatr is reminiscent of heczri, likewise clt of clutifa in the Precu Inscription. If fevtatr and clt denote something akin to respectively 'one' and 'three', then the text quoted above might

comprise, say a consent or a deed, which grants to someone called 'fis' one lot, and the other, Au Cur, three lots. There seems to be a in the second syllable of fevtatr. Since the meaning of this word still is unknown, I would not go any further into this subject.

ou

In Euskarian, biga is 'two'. The shorter form is bi. These words resemble Latin 'bis', twice, double, the prefix 'bi-', 'bi-ni', two each, two at a time, etc. In my opinion, the second syllable of biga 'two' cannot be explained as an Euskarian suffix. I think that this word is simply borrowed from Latin, and the original has been 'bīga', two-horsed chariot.

The following words remind one much of the Latin words mentioned above: bina or biña 'two at a time', the indefinite mediative biz '-z is the case ending) 'by two'. They may be formed by means of genuine suffixes.

The numeral ou of the Toscanella dice reminds one of Indo-Germanic numerals denoting 'two'. As Tyrrhenian has no dsound, Greek d is in the loan-words rendered by o or t, in most cases t. The vowel -u may reflect original *u as well as *o, since original *o has in loan-words changed into u (mostly).

The Precu stem tunu- resembles as well the Indo-Germanic numerals, especially the derivatives in n. Such is for instance Latin 'binus', double, < *'duis-nos' (intermediate *'dui-nos').

As far as I can understand, there is no phonetic ground to prevent one from deriving both ou and tunu- from Old Latin, or a still older Italic idioma, if the derivation is well-founded.

The original for the Toscanella number ou in an Indo-Germanic language may have been formed out of the same root that Latin 'duo', two, comes from. Or then ou may have been shortened in Tyrrhenian out of a longer form similar to tunu-, though nothing directly points to such disappearance of a syllable. The alternation t: o was common in Tyrrhenian language.

A tomb inscription has a word which seems to be related to *tunu-* and *ou*. The inscription ends thus: ... *zilvnu cezpz purtsfana ounz* (Fabretti, *Primo Supplemento*, 387). The first and the third word signify some kind of a magistrate, and it seems certain that the second and the fourth word are iterative numerals, showing how many times the dead had held each magistracy. If *ounz* means 'twice', the stem may be *oun-*, or *n* may belong in the suffix. In *cezpz*, the suffix seems to be *-z*.

Another tomb inscription contains likewise a word that seems to be a numeral, and if it is, it comes very near *ou* and *tunu-*. It ends: ... *afils ounem mufalvls lupu* (Fabretti, *Corp. inscr. it.*, 2335a). This seems to mean that the person in question died at the age of *ounem mufalvls* years. The word *mufalvls* is probably a numeral of a higher degree (with a coefficient), and denotes a greater number than *ounem*, which has no sibilant as a suffix (for instance *-s*) like other numbers often in analogous position seem to have. It is difficult to tell what could be suffix in *ounem*, and whether it has a suffix. One could think that *-m* reflects more the initial of *mufalvls* than the final sound of the former word.

While Euskarian *biga* seems to be a Latin loan-word, Tyrrhenian *ou* and *tunu-* seem likewise to be borrowed from an Indo-Germanic language. If *tunu* comes from Old Latin, it is a far more ancient borrowing than the euskarian word. The Euskarian and the Tyrrhenian words are not directly connected.

ci

'Three' is *hiru* in Euskarian. The final *r* of a variant *hirur* is likely to be secondary, and due to influence on the part of *laur* 'four'. The ordinal, and fractionary number 'third; third part, one-third' is *heren*, or *aren*. The latter form comes from the southern dialects where *h* has disappeared.

The question about the origin of initial *h* in Euskarian is difficult. One would like to know whether it is genuine, or developed from some other sound. It seems certain that the matter is different in regard to *h* after a consonant, than in regard to initial or intervocalic *h*, since *h* after a consonant seems to be only a parasitic by-articulation, judging by its ins-

tability. The other sounds are phonematic, though they are lacking in many dialects.

A case was mentioned above, and there an ancient labial fricative seems to have developed to some kind of h-. These words had h- in the 16th Century, but have it no more. I mentioned that this h- may be of another type than the h- that has persisted. If it is so, nevertheless there seems to be a case of the former h-, which is preserved, namely in the number hogoi, or ogei 'twenty'. It is probably a loanword, and is regarded as a Gallic loan-word, but in my opinion it might be a Latin loan-word as well. One has to bear in mind that Euskarian has taken very few loan-words from Celtic (even those questionable); as to Latin, it is just the opposite. If hogoi, or hoguei < Latin 'viginti', twenty, i of the first syllable has developed into o. There seems to be other loans where Latin i corresponds to o, or u (e . g. xuko 'dry' < Latin 'siccum').

On the other hand, there has been another source of initial h. It seems obvious that it developed in certain words from initial *k.

Many Euskarian place-names are derived from or compound of a stem denoting 'stone': harri, arri. The stem is often har-, ar-, with strong r. The ancient form of some of those place-names is known, and they have k- instead of h-. For instance, the name of a village, Arluzea, which means 'the long stone', had initial k- in 1025.

The easternmost dialects have initial k in a few words where the other dialects have h- (except the southern dialects). An example is the word denoting 'cave, cavern': harpe, harbe; the easternmost dialects have karbe, karpe. Why is the stop preserved in this old compound word, the first member of which is the above-mentioned stem denoting 'stone'? It might be due to influence on the part of the stop of the second member, which denotes 'below, under'. Other examples are the demonstrative pronouns: hura, etc., the easternmost dialects kura. Most declined forms of these pronouns have a stop in the interior.

Thus it seems possible that the initial h of the numeral hiru developed from *k-. The Tyrrhenian numeral ci has just this initial sound, likewise the Precu stem clu-.

Euskarian weak *r* has developed from different sources. It was mentioned above that often a dental stop has changed into a weak *r* (irregularly). As it is known that an intervocalic **l* has developed into a weak *r* (as a rule, e. g. in Latin loans), it seems possible that the number *hiru* has originally had an intervocalic **l*.

Now this **l* may be compared with the *l* in the Precu stem *clu-*. But there is in this stem no sound corresponding to the vowel of the first syllable in the Euskarian words, if one does not think that a schwa vowel would be left without sign; this would seem to be inconsistent with the conception that the stress in Tyrrhenian was on the first syllable. In my mind it is better to assume that this stem had an initial consonant cluster as a result of the disappearance of a vowel. There could be parallel examples among Greek loans: *Mnele* 'Mene-laos' besides *Menle*, *Plunice* 'Polynices' (presumably), besides *ϕulnice*.

It is not easy to determine whether and in which order the vowels of the first syllable in the Euskarian words *heren* - *aren* - *hiru* have developed from each other. Maybe there are other examples of such vowel alternation in cognate words. Since in 1642 *hasqvara* denoted the Euskarian language (*Voltaire*, *Tresora Hirovr Lengvaietaqva*, *Bayona* 1642), a series *euskera* - *hasqvara* - *Bizkaia* can be constructed. The two cases are perhaps not directly comparable. The words in *a* do not come from same dialects nor the same epoch, but at least the words in *e* and *i* seem to belong to many dialects, even though not to all. As the earlier vowel sound in the latter series might have been near the vowel *a* in Latin '*Vasco*', one could infer that a -*as* in *aren* - reflects the earlier form of the vowel in the first syllable of *heren* and *hiru*.

If there existed in Tyrrhenian a schwa, it was either written with a letter or was not marked. In the first case, mostly the letters *u* or *a* were used. The vowel that according to my hypothesis could have been dropped from the Precu stem *clumay* have been of the same kind.

The comparison of the Euskarian words with the *Toscanna* number *ci* involves difficulties, since *ci* has no *l*. One could think that **l* had been dropped or that the vowel of the first syllable had disappeared with subsequent changes. Adhering to the latter hypothesis, I think it possible that *ci*

had shortened from another numeral word *ciem*. The words *ciem zaorum* are found in the text of the Mummy of Zagreb. The latter word *zaorum* seems to form compound numbers with other numeral words, like in *huoi zaorumi* (Text of the Mummy of Zagreb), *mav zaorum* (Fabretti, *Primo Supplemento* 388). Supposing that *ciem* is a numeral and related to the Precu stem *clu-*, the vowels *ie* might signify a diphthong where, the first member is a semivowel, and developed from *1. An explanation of why 1 in the Precu stem *clu-* had not developed thus, might point to the quality of the subsequent vowel. Such a development has probably had an intermediary palatalized lateral, if the lateral was not from the outset palatalized.

The second syllable of Euskarian *hiru* has the vowel *-u*. The Precu stem *clu-* has the same vowel. Perhaps it should be noted that there are other Precu stems with this vowel in the second syllable. As to the vowel *e* of the Euskarian ordinal number *heren*, *aren*, the other ordinal-fractionary numbers have this same vowel in the ending.

zal

'Four' is in Euskarian *laur*, and the ordinal-fractionary numeral 'fourth, quarter' *laurden*, or *lauren* (mostly fractionary, ordinal in some acceptions, for instance in *laurden 'quartan ague'*). In Tyrrhenian the *Toscanelle* dice seem to have *zal* 'four', and the corresponding, fourth Precu stem is *zelu-*. The connexion between the initial consonants *l-* and *z-* might be compatible with the following proposition.

The initial consonants may have developed in both languages from a nasal, perhaps a palatalized nasal. If the Euskarian genitive ending in *-en*, *-n* has the same origin as the Tyrrhenian genitive ending in a sibilant, often *-ŀ*, then in Tyrrhenian a final nasal may have, losing the nasality, changed into **-z*, the outcome being a sibilant. The **-z* has perhaps remained in some numeral: *cealvuz* ~ *cialvu ŀ*, if these numerals are in the genitive. On the other hand, of the Euskarian words with *l-* at the beginning a few constitute a special group. They have an initial nasal, mostly *n-*, in many dialects, especially in the western and easternmost, less often in the central dialects. In the southeast, *l-* is exclusive. Perhaps the-

re a nasal has changed into l-, and this pronunciation has spread to other dialects. The nasal may have been palatalized; some words have ñ-, e. g. lahar ~ ñar 'bramble'.

This explanation is defective; firstly, in that it is not known whether the sibilant of the Tyrrhenian genitive had developed from a nasal. Anyway, a word mentioned before can be important: ... afils ounem mufalvls lupu (Fabretti, Corp. inscr. it., 2335a). Here ounem has a nasal ending, not a sibilant. Normally, a number in such syntactic function has a sibilant, like for instance: afils huos celvls. Could the nasal be preserved in ounem? But it is not certain that ounem and huos are in the genitive.

Secondly, Euskarian laur seems not to belong to the said group of words. No forms with an initial nasal are known. But one could think that this nasal would be preserved in a corrupted name of a day of the week, namely Saturday, which is in Euskarian larunbata, laurenbata or neskanegun, neskenegun.

In my opinion it is likely that lauren- in laurenbata is to be connected with lauren 'fourth' and that the name had at the outset meant 'the fourth day'. The latter part of the name is nondescript, at least it reminds one of 'sabbatum' ('sambatum'?, n is only orthographic, pronounced m). Counting from Monday on, Saturday would be the fourth if the week were two days shorter. The names of the four first days seem not to represent the Roman type. Could the fifth and the sixth day be intercalated later? At least the name of Thursday, ortzegun, ostegun seems to be a translation from Latin 'Iovis dies', Jove's day 'ortzi 'thunder', egun 'day'). The name of Friday is problematic, ortzirale, ostirale, and it does not resemble the Roman name. I think that it might have been translated from the Roman name, if the word egun 'day' had disappeared and the mythologic name hidden in the word were not 'Venus' but Canaanite 'Ashtōreth', Then ortzi- could be due to influence on the part of ortzegun.

The presumable mythologic (astrologic) name might have come from Tyrrhenian; too. In Tyrrhenian, 'Venus' was Turan; together with a word ais 'god', it comes quite near ostirale. Turan may have been a Canaanite loan-word, if the first syllable of the original was conceived to mean the same as ais.

The other word for Saturday, *neskanegun* means 'the girls day' (literally *neskenegun*). The following hypothesis aims at explaining this word on the basis of the idea of the fourth day. If at some epoch a name for Saturday, not *lauren-bata* but another word beginning with a nasal, was becoming incomprehensible in its original signification, and it was sufficiently like a word for a young female person, then it was understood to signify for instance 'the girl's day', and besides or instead of it *neskanegun* was employed. Such a word for a female person has perhaps been the word that has a derivative *nerrabe* 'unmarried man', where *-abe* probably < *gabe* 'without'.

The vowel *u* in the end *-ur* of *laur* is probably secondary, and has come about from the neighbourhood of *hiru* 'three'; a common form *lau* is used together with *hiru*. There are forms that lack *u*: besides *larunbata*, *larogei* 'eighty, fourscore', *lareun* 'four hundred' (*ehun*, *eun* 'hundred'), and others.

The vowel of Euskarian *laur* is *a*, the *Toscanella* number *zal* likewise has *a*, and the *Precu* stem, *zelu-*, *e*. In my opinion it is noteworthy that in Euskarian the number *bat* 'one' has *a*, and in *Tyrrhenian* the corresponding numerals, *mav* and *hec-* have the same vowel as before. In addition there are forms with *e* in Euskarian. These relations may be interpreted, besides pointing to dialectal differences in *Tyrrhenian*, as an indication that both numerals perhaps have originally had the same vowel. Starting from the simple supposition that the vowel has been either *a* or *e*, there are some facts that might point the direction of the development. First, the *Toscanella* number *a*, which in my opinion is 'sic': if it is an *Italic* loan-word in *Tyrrhenian*, it gives the hint that *e* has been original. Secondly, Euskarian seems to have *Latin*, ancient loan-words where **e* > *a* (but not the other direction), like for instance: *arraba*, *arrau*, *arraun* 'oar', < *rēmum*, *id.*, *lagi* (*lege*), 'law', < *le-gem*, *id.* As to forms of Euskarian *bat* with *e*, *bedera* and *bederatzi* have also *e* in the second syllable. It might have had some influence. Or the *e* could have developed from a diphthong. The words *ekar* and *hameka* are of another kind.

The relation with the weak *r* of *laur*, *lauren* and *l* in *zal* and *zelu-* is probably the same as the relation of these same sounds that is set forth in the preceding chapter.

As intervocalic *l* has in Euskarian changed into weak *r*, it is likely that in *laur* the vowel of the second syllable has disappeared. The words *lauren* and *laurenbata* have *e*, *larunbata* *u*. The Toscanella number *zal* has nothing, the Precu stem *zelu-* has *u*.

On *d* of *laurden* I have considered, on basis of a form *birde* 'second', that it belongs to the ordinal ending. However, it seems to belong to the numeral stem in both cases, and the ordinal ending is only *-en*. It is possible that *r* in *laurden* has come through the analogic influence of the forms which have no *d*, and where *r* was intervocalic. Why the other forms lack *d*, is not quite easy to say. One could propose an anomalous shortening of the numeral. The Tyrrhenian words have no trace of it.

In Tyrrhenian a numeral stem resembling *zal* is found in the words *eslz*, *esals*, *eslem* (e. g., in Fabretti, Corp. inscr. it., 2335a, Primo Supplemento, 387, Text of the Mummy of Zagreb, repeatedly). The final consonants can be endings. In *eslz*, *-z* resembles the final *-z* e. g. in *cezpz*, *esals* is found in an age announcement: *lupu afils esals cezpalvals*, *eslem* resembles *ciem*. If these words are forms of a numeral denoting the same as *zal*, probably *z-* has developed, into *es-*, where *e-* is epenthetic, and the vowel (unstressed) tends towards disappearance or weakening. They could be dialectal forms.

huo

This is the number of the Toscanella dice that I compare with Euskarian *bortz*, *bost* 'five'. There are in Tyrrhenian texts other forms of this numeral, perhaps declined forms: *huos*, *huoi* ʔ.

Euskarian has the initial *b-*, while Tyrrhenian has *h-*. It is remarkable that in Euskarian *bat* 'one', and in Tyrrhenian, the first Precu stem *hecz-*, have *b-* and *h-*, the same sounds. It is likely that, in the beginning, both numerals have had the same, or a similar, initial sound, and a similar development, but different in each language.

The vowel in Euskarian is *o* and in Tyrrhenian *u*. Tyrrhenian had no *o*-vowel, nor was the letter *o* used.

In Euskarian, a group of words displays the same alternation as *bortz* ~ *bost*; chiefly, the northern dialects have *rtz*

and the southern st. There are a lot of words with the cluster rtz in all dialects, and likewise words with st in all dialects. (It is true that many words are obviously new, or compounds or derivatives where tz or t belongs to the latter member or to the suffix.) An explanation for the alternation could be looked for in three directions.

One could think that either consonant group has developed from the other. In fact, there seem to be some place-names indicating that the pronunciation with st has supplanted an older, at least in some dialects, e. g. Ostankoa, French Orsanco, near Donaphaleu, Saint-Palais. As for t and tz, tz could have developed from t (t ~ tz is a not infrequent alternation in Euskarian); but it could be possible as well that the affricate tz has lost its second component in bost, to facilitate the pronunciation.

The alternation might be of sporadic kind, and have arisen according to the patterns of some common word, for instance bost 'five'. For this word, Gallic origin might be possible: Spanish 'ambuesta' < *'ambosta', double-handful, comes probably from Gallic, the latter part '-buesta' corresponding to a Gallic word denoting 'hand'. To me, this seems an insufficient explanation.

Another possibility is a regular development, or sound change in a special combination of sounds. As I have not been able to detect such combination, I prefer a third explanation.

According to this third explanation the words in question differ originally from the other words with rtz or st. Setting aside the question of t and tz, if those latter words have at the outset had either a tremulant r or a sibilant, then perhaps the words like bortz, bost have not had such a sound, but another intermediate sound, say a dental fricative, perhaps a kind of weak r. Let us denote it by d. Then there might have been in ancient Euskarian the numeral *bodtz or *bodt, developing on one hand > bortz, on the other hand > bost.

Since *d presumably had been voiced —as it developed into r— it would have been inconvenient to utter the consonant cluster *dt, and likewise to prevent it from coinciding with *rt. So it would seem possible that the cluster *dt, or *dtz, could have been a result of the disappearance of the vowel of the second syllable.

When comparing Tyrrhenian *huo* with the reconstructed **bodt* or **bodtz*, the final *o* —a dental stop or aspirate— corresponds well with **t* (**tz*), but perhaps also with **d*. If **d* had been a weak *r*, it may have developed from a dental stop, as mentioned before in the first chapter. If the etymologic counterpart of *o* is **t* (**tz*), then apparently the counterpart of **d* must have disappeared in Tyrrhenian.

But if the counterpart of *o* is **d*, it would seem that in *huo* a final consonant, maybe an end syllable, had been dropped, and the counterpart of Euskarian *t* (*tz*) should be sought for instance in the final consonant of *huoi* Γ. But this consonant is probably a suffix, maybe an inflexional ending, the same as in the following word *zaorumi* Γ (*huoi* Γ *zaorumi* Γ). It is true that in another numeral, *eslem zaorumi* Γ, the former word *eslem* seems not to have the same termination as *huoi* Γ.

Euskarian has no trace of the vowel of the second syllable, if it had existed. Tyrrhenian *huo* is monosyllabic. The only vowel of that kind is *i* in *huoi* .

The just mentioned numerals, *huoi* Γ *zaorumi* Γ and *eslem zaorumi* Γ, are found in the Text of the Mummy of Zagreb. They are used together with words resembling highly the names of certain months, given by the Lexicon of Papias and a glossary of Leyden. It is considered that the numeals refer to the days of the month, and they might be ordinals. If Skutsch is not right in thinking that *mav zaorum* (Fabretti, Primo Supplemento 388) signifies a magistrate's age and for that reason *zaorum* cannot be 'ten' but denotes 'twenty', then it could be possible that *zaorum* denoted something like 'ten' and 'teen' —and had nothing to do etymologically with the number *zal*.

The Canaanite word for 'ten' resembles *zaorum*. Supposing that the word in question really was a borrowing from Canaanite, firstly the final *-m* may be dissected as being possibly a copulative enclitic particle with the meaning 'with' or 'and'. The remainder *zaoru-*, or *-* if *u* was some kind of an intercalary vowel —*zaor-*, may then be compared with Canaanite words.

The stem *zaoru-* can be compared with the Canaanite feminine form 'āšārāh', ten, which is used together with the masculine nouns. Then the sequence 'āš- should be thought

to be represented by the (presumably affricate z-. The final h has developed from t, which is preserved for instance in Aethiopian 'ashartū', ten (feminine). Seemingly, one should assume then that the Tyrrhenian cluster or was due to metathesis.

Starting from the masculine form 'éser', one need not assume the metathesis. There is in 'éser' no sound that would account for the dental stop, if it was a stop. Maybe o can be explained otherwise. The Semite r could have been rendered with the letters or, which maybe did not stand for a stop and a tremulant but for a single sound, a dental fricative.

If huo was 'five' and zaorum 'teen', then apparently huoi › zaorumi › was a form of the numeral 'fifteen'. The day of the full moon falls mostly on the fifteenth day of the lunation, when it is counted to begin with the day after the last day of the waning moon. Maybe huoi › zaorumi › referred to the day of the full moon.

The Roman ides, as well as the name, 'īdūs', are thought to be of Tyrrhenian origin; the word was itus in Tyrrhenian (Varr. ling. lat., VI, 28, p. 85), or itis (Macrob. Saturn. I, 15, 14). The ides on the fifteenth day of the month probably was at the outset the day of the full moon. It is natural to regard also the ides on the thirteenth day of the month probably was at the outset the day of the full moon. It is natural to regard also the ides on the thirteenth day as the day of the full moon, maybe originally with another name. The day of the full moon usually comes on the thirteenth day after the day of the new moon. It could be useful to compare the Tyrrhenian numeral for 'fifteen' or 'fifteenth' with Latin 'īdūs'. According to my hypothesis huoi › zaorumi › was a form of the numeral for 'fifteen'. If 'īdūs' comes from this numeral, in Latin apparently the latter word, possibly denoting '-teen', was omitted.

The sounds of huo and of 'īdu-' seem not to correspond quite well to each other. Particularly the initial h lacks counterpart. In the first chapter it was suggested that h might have been a labial fricative, since it had a near connexion with 8. Why did the ancient grammarians relate 'īdūs' to Latin words that have an initial labial fricative? One of the etymologies is: 'īdūs' signifies 'Iovis fidūcia', trust in Jove. It was said that some people thought that the day was called 'vidus', because the full moon was seen at that time: 'a viden-

do' (Macrob. Saturn. I, 15, 14 seq.). The reason could be that 'idūs' originally had a sound of that kind in the initial position.

If it holds true that there has been an etymological connexion with Latin 'idūs' and the Tyrrhenian numeral huo, maybe then in huo u < *i. (Often the Latin word was written with ei-, 'eidus'.) In Euskarian a development of the same kind seems to have occurred, but later, at least in some words where *i > o or u. I referred to this in the third chapter, and mentioned that Euskarian hogoi (twenty' perhaps < Latin 'vīgintī'. The vowel o may have developed from *i in Euskarian bortz, bost, too.

a

'Six' is in Euskarian sei. The last number of the Toscanella dice is Γa, and a word of Tyrrhenian texts, Γas, is perhaps a suffixed form of it.

Euskarian sei gives the impression of being a Romance loan-word. It might be borrowed from Hispanic Romance, 'seis'. If it has had a sibilant in the final position, that sound could have been taken for a genuine Euskarian ending.

As for Tyrrhenian Γa, I already have said that in my opinion it could have been an Indo-Germanic, viz. Italic loan. In Italic languages, the numeral probably had a final consonant group, as in Latin 'sex', six. There were in Tyrrhenian some names with such a consonant group (perhaps), as: Macstrna 'Mastarna' (probably), Pecse 'Pegasus', Elav antre, Alcsentre 'Alexander', but it seems simplified in Elsntre 'Alexander'. An explanation like in the preceding paragraph might be valid for the final sibilant, since a Tyrrhenian genitive ending was -Γor -s.

Tyrrhenian had these two kinds of sibilants. What their relation to each other was, is not easy to explain, but in certain cases they might have alternated irregularly. So it is difficult to say why this numeral had Γ-, if it is supposed that it represents an Indo-Germanic s.

If -a of Γa really corresponds to an Italic e of the original word, that can point to a change of *e into a in Tyrrhenian, as I already have mentioned.

Euskarian sei corresponds in fact so well to the Romance numeral that it seems not to be worth while comparing it with Tyrrhenian Γa , notwithstanding their similarity. They would both seem to be Indo-Germanic loan-words, without any direct connexion.

* * *

It is considered probable that in Tyrrhenian two stems, *sem* and *cezp*, signify certain numbers between six and ten. The former, *sem* ϕ , is somewhat, similar to Indo-Germanic numerals denoting 'seven', and likewise to equivalent Semitic numerals. So there exists the possibility that *sem* ϕ had been a loan-word. Nor is the Euskarian number, *zazpi* 'seven', very far from *sem* .

While the meaning of *sem* ϕ is unknown, according to my opinion it is likely that *cezp* denoted 'eight'. This opinion is based in the main on the resemblance of *cezp* to the Tyrrhenian name of the month of October, *Xoffer*, or *Xofer*, and I think that *Xoffer*, or *Xofer* is a Latin loan-word (or more ancient, Italic), < 'october'.

In the endings *-fer* and *'-ber'*, Tyrrhenian *f* (here equal to Latin *f*) corresponds to Latin *b*. The correspondence is on the same lines as for instance the relation of *8* and *p* in Tyrrhenian *ne8t* Γ and Latin 'nepōs', nephew or grandson; *ne8t* Γ is an Indo-Germanic loan, possibly < Latin, or its predecessor. There are some instances among names of Greed origin where Greedk *p* is represented by Tyrrhenian ϕ , as: ϕ erse (Perse) 'Perseus'. This ϕ may have been primary, or the change *p* ϕ > may have occurred in Tyrrhenian. In the latter case, the development need not necessarily imply a strengthening of pronunciation by an aspiration, but it may rather have been a weakening to an unvoiced media, or to a fricative (Tyrrhenian 8).

The development of the first part of the word, 'octō- > xof- or xo-, would imply the change of *t* into *s*, and the disappearance of the initial vowel. The latter change might be due to the accent; tyrrhenian had the stress on the first syllable. Since Tyrrhenian had no *o*, this letter in *Xoffer* need not signify just the same sound as in Latin.

The development of *t* may have taken place in two steps: *t* > **z* > *s*. If *cezp* was an Indo-Germanic loan-word 'eight', it

had come from a more ancient form than Latin 'octō', eight, perhaps Italic (Indo-Germanic **oktoṡ*'), the final labial of which was rendered by Tyrrhenian p. A near parallel to the development of t may be found in another numeral. In the first chapter, I supposed that z of the first Precu stem hecz-*t. Perhaps a regular assibilation *ct > *cz had occurred in Tyrrhenian. As for e in cezp, it can have been originally an intercalation.

The Indo-Germanic loan-words in Tyrrhenian are important in a certain regard. The question whether the Tyrrhenian language was original in Italy or brought there from the east has been a difficult one. Perhaps instead of it one may ask at first an easier question: did the (oldest) Indo-Germanic loanwords come from an Italic language or from an old form of Greek, do they resemble Greek or Latin. Accordingly, of three Tyrrhenian numerals which I have considered Indo-Germanic loans, at least ou (cf. Precu stem tunu-) seems to derive from Italic, and probably also Γ a.

The agreements in the sound-structure of Tyrrhenian and Euskarian numerals are so many that in my opinion it is likely that these numerals have developed from common primitive forms. If such agreement can be found elsewhere between the elements of the languages, which is my opinion, the original affinity between these languages and the idea of a common mother-language become probable. I finally want to present my reconstructions for ancient Euskarian numeral stems for 'one', 'three', 'four' and 'five'. They are hypothetical. If it proves true that the principal factor to transform the ancient Euskarian into a language more or less like the modern Euskarian was the Roman influence, then perhaps forms like my reconstructions, if they are correct, were used a little before the Roman influence began in Hispania and Aquitania. My reconstructions are: **ḅekto* (initial b- is fricative), **kalu*, **ñelu* (or rather **ñeldu*), **biḁt* (fricative b and d). I do not try to reconstruct more ancient forms for Tyrrhenian numerals, except one. The comparison of the Toscanella numbers for 'one', 'three' and 'four': maṽ, ci, zal, with the Precu stems: hecz-, clu-, zelu-, seems to reveal dialectal differences inside the Tyrrhenian languages; in addition the Precu stems seem to reflect an earlier stage of Tyrrhenian. For huo presumably 'five', I reconstruct a hypothetical older form **hit*.