STUDIES IN SLAVIC AND GENERAL LINGUISTICS

ALEXANDER LUBOTSKY
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EVIDENCE AND COUNTER-EVIDENCE

ESSAYS IN HONOUR OF FREDERIK KORTLANDT

VOLUME 1: BALTO-SLAVIC AND INDO-EUROPEAN LINGUISTICS

Evidence and Counter-Evidence

Studies in Slavic and General Linguistics

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Essays in honour of Frederik Kortlandt

Volume 1: Balto-Slavic and Indo-European Linguistics

edited by
Alexander Lubotsky
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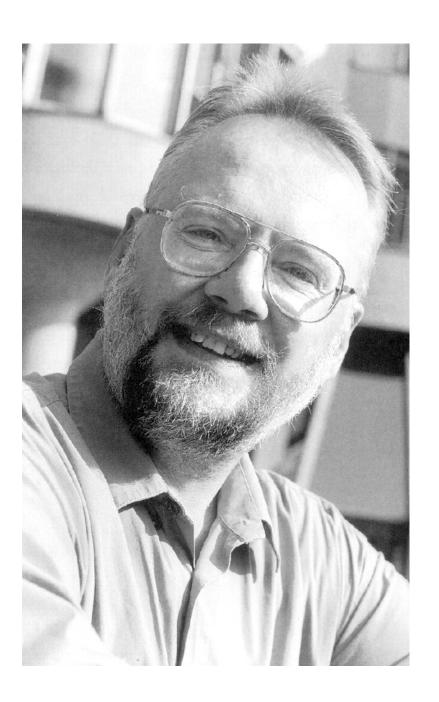
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PREFACE

These two volumes are dedicated to Frederik Kortlandt on the occasion of his sixtieth birthday, bringing together contributions by students and colleagues who have found inspiration in his linguistic work.

Except for this intellectual association, the texts have little in common. They thus reflect Frederik's abundant linguistic appetites, ranging from Slavic studies to Indo-European reconstruction, Tibeto-Burman fieldwork and the genesis of human language itself. The list is endless, owing to his knack for taking up an entirely new area of expertise, acquainting himself with its traditions, and proceeding to invigorate its specialists with new evidence, insights and incentives.

In obtaining evidence, Frederik's observations are penetrating and meticulous, but his empiricism does not rely on facts proving the theory. The role of the theory is to allow its own disproof: "a new insight means a new way of looking for counter-evidence rather than a new way of looking at known facts" (List of Publications, no. 104). This paradox is due to the fact that "human beings are driven by ideas" (no. 206). For if humans risk becoming victims of their own ideas, it is the responsibility of science to test these concepts in the exploration of unknown territories.

Frederik has intensified this quest into the unknown over the years. Realizing the speed with which traditional cultures succumb to political, economic and technological pressures, he has actively promoted the documentation of little-known written and unwritten languages and their various habitats across the globe. The resulting descriptions not only provide abundant and indispensable data for the analysis of our complex cultural heritage, they constitute a lasting contribution to the development of linguistic science.

Dear Frits: your colleagues hope you will enjoy the following pages and are, as ever, looking forward to your straightforward comments.

Alexander Lubotsky Jos Schaeken Jeroen Wiedenhof Leiden, 19 June 2006

PALATALIZED CONSONANTS IN PRE-GREEK

ROBERT S.P. BEEKES

Introduction

The study of Pre-Greek entered a new phase by Kuiper's article on ἄνθοωπος (1956) and the work of Furnée that was inspired by it. Furnée's book (1972) contained a mass of words that have variants which show that these words are of non-Indo-European, i.e. of Pre-Greek origin. His book is unsurpassed, and though not everything is acceptable, it must be the basis for further work. What one apparently did not well understand, is that it essentially contains facts which must anyhow be explained. There are some suggestions which are unacceptable, but one could hardly expect something else in such a new field, and Furnée everywhere strictly keeps facts apart from theory. Kuiper was well aware of the necessity of this work and realized that it would be essential for our understanding of Pre-Greek. To him it was obvious that one has to study the non-Indo-European material found in Indo-European languages. The neglect of Furnée's work can safely be called the greatest mistake of Indo-European linguistics. Instead, the idea of a Pelasgian language, which would be of Indo-European origin, kept the attention and diverted people from the real work.2

I have now been working for two years on an etymological dictionary of Greek, with the additional aim to create a reliable corpus of Pre-Greek material. I study not only instances with variations, but also other material that can be regarded as Pre-Greek. Half of the material is covered by now (I have completed the letter *kappa*, available on Internet³). I have found some 500 Pre-Greek words, so I expect to get a thousand of them (out of 7000 lemmas). I have published a preliminary survey of my conclusions on Internet (*Pre-Greek*; with a list of Pre-Greek suffixes). In that article I present some of my findings. It is in no way complete, as I have reviewed only half of the material, but some things may be of interest.

¹ See my discussion of his work (2005).

 $^{^2}$ Furnée (1972: 30-68) has amply shown that the theory is wrong; it should now be forgotten.

³ An etymological dictionary of Greek can be accessed at http://www.ieed.nl.

In general, it should be said that I have not seen the slightest attempt to understand something of this language; work has been, therefore, a rather disappointing exercise.

With much pleasure I dedicate this note to Frits Kortlandt, who, besides being one of the leading Indo-Europeanists, devotes so much attention to non-Indo-European languages; his work has always been very stimulating for me.

Labialized and palatalized consonants

I concluded that the language had no phonemes /e/ and /o/; it was a three-vowel system, with only a, i, u. ε and o were much less frequent in words inherited from Pre-Greek, and they could originate from a; also the diphthong $\varepsilon\iota$ probably arose from $\alpha\iota$ (Fur. 353 A 2 "in mehreren Fällen wahrscheinlich nur eine Nebenform von $\alpha\iota$ "); and $\varepsilon\upsilon$ is rare (Fur. 353 "überhaupt ist $\varepsilon\upsilon$ im Vorgr. selten".). There are many instances of variation α / o and α / ε (Fur. 339, 345, both 80 examples).

Palmer (1963: 39) proposed that the Pre-Greek consonant system was quite different from that of Greek. There was no opposition between plain: voiced: aspirated, but there was one between plain: labialized: palatalized consonants, e.g.

\overline{t}	t^w	t^y	
l	l^w	l^y	
S	s^w	s^y	

Palmer based himself on the Mycenaean signs for labiovelars, for *dwe*, *twe*, *dwo*, *two* and for those with *Cj: rja*, *rjo*, *pja*, *tja*, *sja* and for *zV* from **kjV*, and for *pte* < *pje*. Ruijgh 1967: 28 n. 35 accepted this interpretation. ⁴ I was convinced by this system when I saw that the assumption of a labialized *l* could explain without difficulty an old problem of Greek, the words for 'plough': if we assume * al^wak -, the forms $\alpha \tilde{\psi} \lambda \alpha \xi$ (with the labial element anticipated) and $\tilde{\alpha} \lambda o \xi$ (where the labial element coloured the following vowel to *o* before disappearing itself) receive a straightforward explanation. The assumed developments are phonetically simple. ⁵ Further speculations about a possible Indo-European origin of this word can now

⁴ On labiovelars cf. Kuiper 1968.

⁵ A difficulty is provided by the Homeric acc. $\check{\omega}\lambda\kappa(\alpha)$. Probably the α was syncopated in * $\check{\omega}\lambda\alpha\kappa$ -, which stands for $\alpha\check{\upsilon}\lambda\alpha\kappa$ - with ω - for $\alpha\check{\upsilon}$ -, s. Furn. 301 n. 32.

be forgotten. Note that there are two (and perhaps more) possibilities: the preceding or the following vowel was influenced.⁶

In the case of palatalized consonants we find the same type of effects. A good example is furnished by the words for 'suddenly'; we find $\alpha \phi \alpha Q$, $\alpha \psi \alpha$, $\beta \xi \alpha (\psi \eta \zeta)$, $\beta \xi \alpha (\psi \eta \zeta)$. We see that the first two have just $\beta \phi$, while the next two have $\beta \alpha (\eta \phi)$, and the last - $\alpha \pi \iota$. In the last three words we see an extra ι , either before or after the consonant. It seems then as if the ι came from the consonant, and this can be well explained if we assume a palatalized labial, p^y . (I find the grouping together of these forms a brilliant insight of Furnée.)

The appearance of an ι before a palatalized consonant is a rather frequent phenomenon. As in $\check{\alpha}\varphi\nu\omega$, the ι can also be absent; this gives variants, which we find in many words of Pre-Greek origin. I think that the palatal character was sometimes better and sometimes less well heard and accordingly taken over or not. It is the variations from which we can (more or less) see what happened. If we have only one rendering, we can hardly know what the original form was. Furnée (1972: 335-339) draws a list of the variation α / $\alpha\iota$. This might suggest that $\alpha\iota$ at some time became α , which is a possible assumption, but it rather indicates that a palatal consonant followed. Therefore we should rather speak of a variation ι / zero.

As examples, ψάκαλον / ψάικαλον (Fur. 339), λαφθία / λαῖφος (338), "Ηφαιστος / "Ηφαστος (336), Άσκληπιός / Αἰσκλαπιός may be given. In the case of Hephaistos it is clear that the i is inherent in the s, and that it is there to indicate the transition to the palatalized consonant.

$a > [\ddot{a}] = \varepsilon$

When an *a* is followed or preceded by a palatalized consonant, it was coloured to an [ä], which is rendered as ε. This can be well seen in the case of the word for 'galingale', where we find Myc. $kuparo /kuparos / beside kuparo_2 /kuparyos / , κύπαιοος , and κύπερος , κύπειρον /ς. So we have a form <math>kuparyo-$, which became κύπαιοος , and with neglect of the palatal feature κύπαρος; the α could also be changed to [ä] = ε, and this could also have an ι added before the palatal consonant; so we find α, αι or ε, ει. In the same way we have Κάβαρνοι / Κάβειροι; the word had a r^y which coloured the a to ε, while at the same time an ι was added to indicate the

⁶ Furnée mentions Palmer's view (p. 104), but did not adopt the system and thus missed a number of possible interpretations. The problem is that Furnée had no theoretical framework for his findings; he mostly assumed expressive forms, which is not of much help.

palatal character of the following consonant; in the first form the palatality was ignored (before the n); see Beekes 2004.

Beside ζακελτίς = γογγυλίς we have ζεκελτίς, where the a had become ϵ , I assume through a stage [ä]. Beside διφθέρα 'skin, leather' there is a form $\delta \psi \dot{\alpha} \rho \alpha$, which shows that the ϵ is an old a changed due to the preceding group, which may have been $-pt^y$. A good example is further $\check{\epsilon}\lambda(\lambda)$ οψ (also $\check{\epsilon}\lambda\alpha\psi$) beside $\dot{\alpha}\lambda(\lambda)\dot{\alpha}\beta\eta\varsigma$ (and $\dot{\alpha}\lambda\lambda$ οπίης); here we must assume * al^yap -, with a variant [* $\ddot{a}lla/op$ -] (an α varies regularly with o when adjacent to a labial). (On $l^y > \lambda(\lambda)$ see below.) $\xi \alpha \lambda o \zeta$ 'billy-goat' has several variants: ἰσσέλα, ἰτθέλα, etc. I assume that the word had a cluster $-kt^y$ -al-; the palatalized t easily became an -s-, which gave ξ or $\sigma\sigma$, but if the dental was retained, the preceding velar could be assimilated to it, which gave $-\tau\theta$ - etc. Also we see that $-\alpha\lambda$ - varies with $-\epsilon\lambda$ -, I think because of the preceding palatal consonant. Yet another example is $\kappa \alpha \lambda \lambda \alpha \rho (\alpha \zeta' a)$ fish' = ŏvoς and $\gamma \alpha \lambda \alpha \rho (\alpha \varsigma)$ $\lambda \gamma \theta \gamma \zeta$, $\delta \delta \gamma (\sigma \kappa \rho \varsigma)$ (and further $\gamma \gamma \alpha \lambda \lambda \epsilon \rho (\alpha \varsigma)$ and γελαρίης) beside χελλαρίης 'a sea-fish' = ὀνίσκος. They clearly show - al^y - $> -\alpha\lambda(\lambda)$ - or $-\epsilon\lambda(\lambda)$ -. I just came across $\lambda\alpha\mu\pi\eta$, with its (not prenasalized) variant $\lambda \dot{\alpha} \pi \eta$ 'scum' (of wine etc.), 'phlegm, filth, damp of the nether world'. This word has always been compared with λέμφος 'putrescent carcasses, mucous discharge from the nostrils, rheum, mucus'. This shows that $[l\ddot{a}mp^h]$ was a phonetic variant of /lamp/; the variation $a - \ddot{a} = \varepsilon$ was known, and also that aspiration was not distinctive. Furnée 316 added, no doubt correctly, $\lambda \alpha \pi \tau \dot{\eta} \varsigma$, of which Hesychius says: $\lambda \alpha \pi \tau \dot{\eta} \nu \, \tilde{\epsilon} \lambda \epsilon \gamma o \nu \, \tau \dot{o} \nu$ π άχυν ἀφούν, κτλ. The form shows that the word had a p^y which became $\pi\tau$ (see above and below); it also gives good information on the meaning; the word is not discussed in the etymological dictionaries.

$l^{y} > \lambda \lambda$

A palatalized l is represented as $\lambda\lambda$ or as single λ when the palatalization was ignored; hence the variation between $\lambda\lambda$ and single λ , as in the name of Achilles (the search for an Indo-European etymology is therefore useless). Of course, this recalls the development of IE $l \neq \lambda\lambda$. At the same time the palatal l is accompanied by $\alpha > \epsilon$.

After this $\lambda\lambda$ we never find (as far as I know) an ι to indicate the palatal consonant. I have not found in Furnée's material $\lambda\lambda$ ι in this function; apparently the palatal character was already expressed by the geminate. Also in other cases I have not found a following ι before vowel. E.g. τῦκον / σῦκον, which probably had a t^y -. I have found no ια (of course before i nothing comparable is to be expected).

The l^y is a clear case of a Pre-Greek phoneme, as a variation $\lambda/\lambda\lambda$ is impossible as an Indo-European phenomenon; PIE did not have a morpheme -al- to which an element -io- could be added, and in any case there could be no variation with or without the second λ . In the case of other palatalized consonants it is more difficult to recognize its origin: r^y for example always results in (single) ϱ .

Thus $-\alpha\lambda\lambda$ ος always represents the Pre-Greek suffix *-aly-, as Kuiper already remarked (1956: 215 n. 15). I checked all instances of $-\alpha\lambda\lambda$ ος in Kretschmer-Locker. Irrelevant are compounds. Irrelevant is also $\gamma\dot{\alpha}\lambda\lambda$ ος. I make a note on two words.

κούσταλλος 'ice'.⁸ The word is generally (s.v. κούος) connected with Lat. crusta; this is of course wrong, because crusta has a quite different meaning: 'the hard outside surface of a body, shell, crust'; the word has nothing to do with the meaning 'cold, ice'.⁹ Therefore κούσταλλος has no etymology. That it is Pre-Greek is proven by the gloss κούσταλλος εἶδος ὑέλου, to which Latte (1966: 534) notes "h. e. κούσταλλος (κουστ-S)". The gloss is not given by the etymological dictionaries (o - v is a well-known variation in Pre-Greek words).

ὀκταλλος 'eye' is a variant of ὀφθαλμός, beside ὀπτίλ(λ)ος. The three variants prove that this word was Pre-Greek. An Indo-European word with labiovelar could not have got at the same time a labial and, in exactly the same environment (o-τ), a velar. The Pre-Greek word may have been *ok**t-al*- (and prob. *ak**t-al*-, with a>o before the labiovelar). The addition of a suffix beginning with m- after a consonant is well known from Pre-Greek (see Beekes, Pre-Greek, Suffixes). Note that ὀπτίλ(λ)ος has $\lambda/\lambda\lambda$ which I consider typical for Pre-Greek, as will be explained here. (Cf. already Beekes 1969: 193f.) That the Pre-Greek word so strongly resembles the IE root * h_3 ek*- 'see' is a typical exception we might expect to occur now and then.

A form that I missed in the list of Kretschmer-Locker is κορύδαλ(λ)ος (crested) lark' (it is hard to find in *LSJ*). Hesychius gives καρυδοι καρύδαλοι, which shows the original a, which became o when followed

⁷ I found compounds of ἄλλος, βαλλος (?), -θαλλος, -καλλος (unclear is βαρμίγκαλλος ύπέρκαλλος), -μαλλος 'fleece' (no less than 24!), unclear are ἄναλλος, ἔνδαλλος, ἔξαλλος and πανέξαλλος (not in LSJ), -κόραλλος, -μεταλλος, -κρύσταλλος, -φαλλος, -κνέφαλλος.

⁸ The meaning 'rock-crystal' emerged because this material is similar to (a piece of) ice, notably because it was transparent, which was quite remarkable in antiquity; Pliny (37, 23) still thinks that it *is* ice; it is of course a mineral, quartz; so this meaning is irrelevant for the etymology.

⁹ *crusta* has no other etymology, so we cannot be certain that it is Indo-European.

by u in the next syllable; there can be no doubt, then, that the word is Pre-Greek.

Of the remaining, relevant words, it is generally accepted that $\dot{\alpha}$ $\dot{\alpha}$ $\dot{\alpha}$ $\dot{\alpha}$ $\dot{\alpha}$ $\dot{\alpha}$ λος is Pre-Greek. νεκύδαλλος 'the nympha of the silk-worm' is connected to νέκυς by Frisk (so this is wrong; not in Fur.). αἰγίθαλλος 'titmouse, parus', is not to be separated from $\alpha i \gamma \iota \theta \circ \varsigma$, which Frisk does not discuss (Fur. 254: Pre-Greek). δορίαλλος 'pudendum muliebre', is unknown according to Frisk (not in Fur.). σκίμαλλος 'middle finger' is unexplained (not in Fur.). θύμαλλος 'a fish', is wrongly connected with thyme (not in Fur.). τιθύμαλλος 'spurge', has no etymology (not in Fur.). κάρταλ(λ)ος 'basket with pointed bottom', unclear etymology in Frisk (not in Fur.). κραπαταλλός 'a worthless fish, or idiot, or coin(?)' Hdn. 1, 158 (elsewhere $-\alpha\lambda$ o ς , H., Poll.); the word is not given in Kretschmer-Locker; see Chantraine 1968-1980: 578. We see then that some of these words were already considered Pre-Greek, and that most have no etymology; we can be certain now that they were Pre-Greek. I think we can safely conclude that all forms in $-\alpha\lambda\lambda$ o- are of Pre-Greek origin, as Kuiper had seen in 1956.

The only form that is unclear is $\tau\varrho\dot{\alpha}\varphi\alpha\lambda\lambda\varsigma$, which one connects with $\tau\varrho\sigma\varphi\alpha\lambda\dot{\imath}\varsigma$ 'fresh cheese', but there is also $\tau\varrho\upsilon\varphi\alpha\lambda\dot{\imath}\varsigma$ (not in Fur.); was there an old Pre-Greek word which was adapted to $\tau\varrho\dot{\varepsilon}\varphi\omega$?

There are only few neuters in -αλλον. An example is μέταλλον 'metal'. The other is γνάφαλλον 'flock of wool, cushion' beside γνόφαλλον (with o < α before labial?) and κνέφαλλον. I cannot explain the ε in this last form (one might assume n^y , but I see no further indication for it); the variation γ - κ is unproblematic as voice was not distinctive in Pre-Greek.

A clear instance is κοράλ(λ)ιον (κουρ-, κωρ-) 'coral'. I do not think the ι indicates the palatal character of the λ(λ). (Does it continue an older * $kur-al^y-$?)

One might expect that $-al^y$ -o- would (also) have given -ελλο-, but the words in -ελλος do not seem to be old (there are several Latin loanwords: λ ίβελλος, μάκελλος, κάγκελλοι). The words in -ελλον show the same pattern as those in -ελλος. I think that the expected -ε- is seen in words in -ελλα: the form μάκελλα, μακέλη 'mattock, pick' will have $-al^y$ -a (note its variants μάσκη· δίκελλα and βασκα· μακέλη, and Arm. markel 'id.'); so δίκελλα will have the same source (and not IE *di-).

Several of these rules are confirmed by a rare coincidence. In the treaty of the Hittite king with Alaksandus of Wilusa, gods of Troy are invoked, one of which is called *Appaliunas* (-as is the added Hittite nominative ending). The god has been identified as Apollo. Now the name can be analysed as * $Apal^yun(-as)$. We see that -un was rendered as - ωv ; an Anatolian u is

often rendered by Greek ω (cf. Luw. Runt(a)-, Gr. $P\omega\nu\delta\alpha\varsigma$). Further the name shows that the l^y indeed became $\lambda\lambda$. The name and its Greek rendering shows that the (second) -a- became ε , for the oldest Greek form is $A\pi\epsilon\lambda\lambda\omega\nu$ (Beekes 2003, esp. p. 12-14); the Cyprian form $A\pi\epsilon\lambda\omega\nu$ continues * $A\pi\epsilon\lambda\omega\nu$. This form is confirmed by Myc.]pe- ro_2 [, i.e. (A)peljo(nei), recognized by Ruijgh, 1967: 67 n. 91, 274 and n. 13. That the e resulted from an earlier -e- we can see only in the Hittite rendering. So our form confirms the change e- e-. Thus the form goes back to an old form of Pre-Greek, found in Troy! e-

ι/zero

Furnée 382 pointed to a few forms that have an ι against closely related forms that do not. One is κνώψ 'poisonous animal, esp. snake' beside κινώπ-ετον. These forms can be easily explained if we assume that the form had * k^y n $\bar{o}p$ -, of which the palatal element could be indicated by ι or not. (As Pre-Greek in my view had no o (and so no \bar{o}), the \bar{o} might continue an u.)¹¹

A good example of this kind of ι is $\lambda \alpha \sigma$ ιτός· κίναιδος. ἤ $\lambda \epsilon \sigma$ ιτός beside ι-less $\lambda \acute{\alpha} \sigma$ ται, $\lambda \acute{\alpha} \sigma$ ταυρος. In the second form we see the $\epsilon < a$ indicated; so the form was *las*t-. Note that other variants may also have been possible: * $\lambda \alpha \iota \sigma$ τ-, * $\lambda \epsilon \sigma$ τ-, * $\lambda \epsilon \iota \sigma$ τ-, * $\lambda \epsilon \iota \sigma$ τ-, * $\lambda \epsilon \iota \sigma$ τ-, which drove commentators to despair, and induced them to reject Furnée's results.

ι/zero is a clear sign of a non-IE word, as ι cannot just disappear in Indo-European elements of Greek. Therefore I think we have to explain π ινυτός 'intelligent', beside which we have π νυτός (H. and in Cyprian) in this way. The usual connection with π νέω 'breathe' is not evident semantically, as was stressed by Chantraine in his dictionary. The complicated attempts to explain the ι (see Frisk) can now be forgotten. The word may be Pre-Greek and continue * p^y nutos. The association with π ε π νυμένος etc. would then have to be secondary.

With the same principle we can explain λ ίμινθες ξ ξ λμινθες H. The first form will be * l^y mint-; the second can be explained by assuming a prothetic vowel a- (Furnée 375-378 suggests more vowels as prothetic vowel, but

¹⁰ It probably confirms that in Troy, or nearby, Pre-Greek was spoken in the beginning of the thirteenth century, as we already supposed on the basis of the place names on the west coast of Anatolia, which are almost identical in structure to those of Greece.

¹¹ There is also a word κνωπεύς· ἄρκτος. ἔνιοι κνουπεύς H. with κυνοῦπες· ἄρκτος (read -oι?). As the meaning of this word is clearly different from that of κνώψ, I wonder whether we have here a different word with labialized k, viz. $k^w nup$ -.

I think that only a- occurred); the a- was turned to ε by the palatalized consonant (the aspiration might be secondary).

Ct before vowel

There are some words that may have ι after the consonant before vowel. A candidate is σ ιωπ-άω 'sleep'. The word has no etymology and can hardly be Indo-European. There are variants without ι: σ ε σ ωπαμένον, διασωπάσομαι, εὐσωπία. This suggests an original * s^y -. Even if one assumes that the loss of the ι was secondary, I think that * s^y $\bar{o}p$ - (from *syup-, as Pre-Greek had no o?) fits the structure of Pre-Greek. (I withdraw my suggestion of 1996: 233ff.) One may suppose the same for σ ι \bar{a} γών 'jaw', but here there is no parallel form without ι.

One might think that ἴωψ 'a small fish', Boeot. Fίωψ, continues * $w^y \bar{o}p$ -(from * $w^y up$ -?) with a palatalized /w/. The same phoneme could be assumed for ἰύζω 'cry', where the form ἀβίυκτον (cod.-ηκτον)· ἐφ' οὕ οὖκ ἐγένετο βοὴ ἀπολλυμένου and ἐκβιούζει· θοηνεῖ μετὰ κοαυγῆς may point to * $w^y ug$ -. But these would be the only instances of this phoneme, so we cannot be sure. The phoneme may also be assumed for κολουτ-έα, κολωτ-έα, κολωτ-έα, κολωτ-έα, κολωτ-έα can be considered as a mistake of some kind) 'a tree, Cytisus aeolicus'; if one assumes for the variation o-sound / oi the phoneme w^y , we would have * $kalaw^y t$ -; but other interpretations are also conceivable (does the ending continue -ay-a = - $\ddot{a}y$ -a, with y colouring the a?).

Palatalized stops

Palmer already suggested that *p" might have given $\pi\tau$, but I have not seen many good instances; above we saw $\lambda\alpha\pi\tau\eta\varsigma$. Perhaps $\pi\tau\delta\varrho\theta\circ\varsigma$, which stands beside $\pi\delta\varrho\theta\circ\varsigma$: $\pi\tau\delta\varrho\theta\circ\varsigma$ (not given in the etymological dictionaries; see Fur. 152) is an instance. From *b" one might expect βδ. One might adduce ($\alpha\dot{v}\tau$ ο-)καβδαλος beside κόβαλος, καυαλός. The t^y may have given well-known cases like $\tau\epsilon\tilde{v}\tau\lambda$ ον - $\sigma\epsilon\tilde{v}\tau\lambda$ ον and $\tau\tilde{v}$ κον - $\sigma\tilde{v}$ κον. A *d" will be the basis of ζιγνίς beside διγνύς, where the palatalization was not rendered ('a kind of lizard'). Here may also belong Κάδμος beside Κασσμος (cf. Hitt. Has(a)m-il-). Well-known is $\tau\tau/\sigma\sigma$, which was early recognized as a "foreign phoneme", "der Fremdphonem". A case like $\theta\dot{\alpha}\lambda\alpha\tau\tau\alpha$ - $\theta\dot{\alpha}\lambda\alpha\sigma\sigma\alpha$ beside $\delta\alpha\lambda\dot{\alpha}\gamma\chi\alpha\nu$ may show in the prenasalized form the neglect of the palatalization of the velar. I have at the moment no new conclusions on this problem. The whole is extremely complicated given the many possibilities of clusters; in *Pre-Greek* (section 5.5) I distinguished twice eleven types of variation.

The nouns in -ευς

The Greek nouns in $-\varepsilon v \varsigma$ have not yet been convincingly explained. An Indo-European explanation connects these forms to the Iranian nouns in $-\bar{a}u\check{s}$ (OP $dahy\bar{a}u\check{s}$). The idea is from Bartholomae. But Iranian is far away, and it seemed that there were only a few isolated forms, which were sometimes called innovations. Kuiper (1942: 40ff) put it in the frame of Pedersen's protero- and hysterodynamic inflexional types. He showed that the type was old, that the type is also found in Sanskrit, and connected Hitt. harnaus. Thus Rix (1976: 147) accepted it. However, the idea is mostly rejected because the relevant words have often no good Indo-European etymology.

Some scholars explained the Mycenaean feminine in -eja from * $-esy\bar{a}s$. Some of them concluded that $-\varepsilon v\varsigma$ must have arisen from *-esu-s. However, Indo-European has *-t(e)u- etc., but had no suffixes of the shape *-eCu-; this was simply impossible (Beekes 1995: 169). Therefore the proposal must be rejected.

If one rejects Indo-European origin (as I do because of the indications for Pre-Greek origin), we may consider the possibility of a suffix borrowed from Pre-Greek. Perpillou (1973: 34ff) states that there are very many words in -eus in Mycenaean, and from them many personal names: 100 -150 out of a total of 200 - 250. He draws the conclusion that it is hard to conclude for Pre-Greek origin, for reasons that I do not understand (o.c.: 45). I would rather draw the opposite conclusion: especially names were probably simply taken over; the solution that -ευς "hellenized" the words is a mere guess. That suffixes are taken over from another language is well known, and in this case, where there are so many loanwords from Pre-Greek, this is quite possible. But Perpillou even has difficulty to admit that βασιλεύς is a Pre-Greek loan! (o.c.: 32). Further, many names are probably of Pre-Greek origin (e.g. Schwyzer 1939: 477); one need only recall Achilles (discussed above) and Odysseus, where the variations rather point to an Aegaean, i.e. Pre-Greek word. This is further confirmed by the occurrence of geographical names, as the names of mountains (of which we know that they can be very ancient), e.g. Κερκετεύς, on Samos; it is a priori most probable that these are loans.

What confirms this conclusion is especially the feminine of these forms in Mycenaean. It was quite a suprise that we found there the ending *-eja*, while we would have expected *-ewya-: e.g. kerameu beside kerameja; in Mycenaean a -w- would have been retained. It has been suggested that this formation is also Pre-Greek; thus e.g. Ruijgh 1967: §212. ¹² Perpillou

(o.c.: 38) writes: "Cette accumulation de suffixes empruntés ...ne laisse pas d'être inquiétante". I do not see what is disquieting here; it shows that the author is against Pre-Greek elements in Greek, which does not point to a scientific attitude. Of course, the two suppositions reinforce each other strongly, and one would rather expect the two together.

As I suppose that Pre-Greek had no phonemes *e* and *o*, it is rather difficult for me to accommodate a suffix *-ēw-. I can propose the following solution. It seems probable that there was a vowel before the -w-, and the most frequent vowel was -a-. And we must also perhaps explain the length of the vowel though this could have been a Greek creation, once the morpheme had been incorporated. (I reckon with the possibility that the language had no distinctive vowel-length: there are many instances of variation between long and short vowel. Instances of η are (very) rare; there are some indications for $\eta < \alpha \iota$, as in $\lambda \dot{\eta} \theta \alpha \varrho \gamma \varrho \varsigma - \lambda \alpha \dot{\iota} \theta \alpha \varrho \gamma \varrho \varsigma$.) It would be easy if -aus was preceded by a palatalized consonant, as is the case with the name Achilles, where $\lambda(\lambda)$ points to l^y . Palatalized consonants may well have been frequent, and it can easily be assumed that -ευ- was generalized at some stage. It is impossible to measure this, as palatalized consonants are difficult to recognize. There is further some evidence for $\alpha v > \varepsilon v$ (Fur. 353 A 5), but it is meagre (add εὐλάκα beside αὐλακ-, and εὔλη0α beside α ὖλη α). Raising of the α to a mid-high vowel by the following υ is well understandable, but one would rather expect o than ε .

Lubotsky suggested to me to posit the phoneme w^y , which would have coloured a preceding a to ε . I had rejected the idea as the phoneme may have been rare. Also we would in that case expect a w in the Myc. feminine form. But aw^y might have given $-aiw^y$, where ai might have become η .

Another reconstruction one could think of is *-ay-us. This form may have given * $\epsilon(y)\upsilon\varsigma$, and perhaps, with early loss of the y, - $\epsilon\upsilon\varsigma$. But there is more. If the language had nominal inflection - of which we know nothing - the u might have come before a vowel of the ending, i.e. -ai-u-. Now there is evidence that η (sometimes) arose from older $\alpha\iota$ ($\lambda\alpha\iota\theta\alpha\varrho\gamma\varrho\varsigma$ - $\lambda\eta\theta\alpha\varrho\gamma\varrho\varsigma$). If this happened here, we would have got - η F-. The feminine may derive from *-ay-a > (Myc.) *-eja, which could confirm the suffix -ay-.

I checked the instances of α / ϵ in Furnée (345-353), and in most cases there seems to be no palatalized consonant to trigger the ϵ -form. So perhaps we must simply accept that /a/ could be realized as [ä] = ϵ .

 $^{^{12}}$ Surprisingly, Ruijgh later withdrew this view. I think that his earlier view is the correct one.

Conclusion

Along these lines I think we can have a better understanding of the Pre-Greek material, especially of the origin of the variations; they do not form an arbitrary mass of forms. I think much has become understandable, but I admit that much still remains unclear. Also the new insight makes it much easier to recognize Pre-Greek elements.

Leiden

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