The Phrygian Zeus and the problem of the "Lautverschiebung"

1. In New Phrygian inscriptions, we come across several malediction formulae which involve the god Τι-[1], e.g.

... τος νι με ζεμελω κε δεος κε Τιη τιτ τετικμενος ε[ι]του (6) '... let him become cursed by T. among men and gods';

... Τιε τιτ τετικμενος ειτου (26) '... let him be cursed by T.';

... τιτ τετικμεγος ατ Τιε αδειτου (45) '... let him be cursed by T.';

... ατ Τιη κε αδειτου (39) '... and let him go to T.';

... γεγρειμεναν εγεδου Τιος ουταν (34) '... let him experience the written curse of T.';

... τιτ τετικμεν[ος] ας Τιαν ειτου (53) '... let him become cursed by T.'.

On the basis of these formulae we can establish the following paradigm: acc. sg. Τιαν, gen.sg. Τιος, dat.sg. Τιη/Τιε/Τι[2]. Stephanus Byzantius in his 'Bithyniaca' directly identifies the Phrygian deity with Zeus: Δημοσθένης δ'ἐν Βιθυνιακοῖς φησὶ κτιστὴν τῆς πόλεως γενέσθαι Πάταρον ἐλόντα Παφλαγονίαν, καὶ ἐκ τοῦ τιμᾶν τὸν Δία Τίον προσαγορεῦσαι (see on this passage Haas 1966: 67, Lubotsky 1989a: 85). It is therefore likely that Phrygian Τι- and Greek Ζεύς are also etymologically related, but there are two obstacles. First of all, it is now generally believed that Phrygian has no *Lautverschiebung* (LV), and secondly, we have to account for the loss of *-u̯- in the dative[3]. The latter problem can easily be solved. Since -u̯- was absent in the accusative (cf. Gr. Ζῆν) and in the genitive (in New Phrygian, -u̯- was probably regularly lost in front of o[4]), it might then analogically be removed from the dative. The developments can be represented as follows:

acc.sg. *diēm > *tian = τιαν;
gen.sg. *diu̯os > *tiu̯os > *tios = τιος;
dat.sg. *diu̯ei > *tiu̯ei >> *tiei = τι(η) (for the final syllable see Lubotsky 1997: 126, fn. 23).

It is conceivable that the same stem with preserved -u̯- is found in Old Phrygian *tiveia* (G-183 A. *tiveia*[5] B. *imeneia*), °*tivo*° B-01.4 (*yos* °*tivo* *[t]ạ* *speretạ* *aynị* °*kin* °*te[l]ẹmi*[6]), and

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[1] For the analysis of the formulae see Heubeck 1987, Lubotsky 1989a and 1998, Brixhe 1997: 42ff.

[2] In Lubotsky 1988, I assumed that *tiyes* (M-04 *ạkinanogavaṇ : tiyes / moḍroyanak : [?]avarạ[?]*) forms one paradigm with τιος, τιαν, τι(η), but this must be wrong, see Neumann 1986. The words *tiyes moḍroyanak* must mean 'Tiyes, the king of Modra'. The name is probably of Anatolian origin, cf. Hitt. *Tii̯a-*, Pisid. Τιηος, Τιος, Phryg. Τιηος, etc. (Zgusta 1964: 513f., Orel 1997: 26).

[3] These are the reasons why Witczak (1992-3: 265ff.) postulates Bithynian origin for the Phrygian god, which is of course possible, but unverifiable. Witczak assumes LV and the loss of intervocalic -u̯- in "Bithynian", but this rule is *ad hoc* and, further, it does not often happen that words are borrowed together with their inflection (for instance, the inflection of Modern German *Christus, Christi*, etc. is clearly artificial).

[4] There are no unambiguous examples of this sound change, but we never find /u̯o/ in NPhr. inscriptions (cf. also Lubotsky 1997: 126).

[5] Theoretically speaking, this can be an analogue of Gr. δῖα.

[6] For the readings see Lubotsky 1993b; [-] is a missing sign, word boundaries established on combinatoric grounds are indicated by °.

°*tiv[-]* (Dask2 2. *[--]es va[-]ḳnais manuka odeketoy meroske manes isyos tiv[-]*[7]), but the contexts are insufficiently clear.

The possible etymological connection of Τι- with Zeus is thus dependent on the problem of the Phrygian LV. Since there has been no full treatment of this issue since Lejeune 1979, it is worthwhile to reopen the discussion.

2. There can hardly be any doubt that Proto-Indo-European (PIE) mediae aspiratae developed into Phrygian mediae (*$*b^h > b$, $*d^h > d$, $*g^{(w)h} > g$, $*ǵ^h > g$*), cf. New Phrygian αββερετ, μεβερετ < *$*b^h er$*-; αδδακετ < *$*d^h eh_1-k$*-; γεγαριτμενος < *$*ǵ^h e$-$ǵ^h rH-i-t$*-; γεγρειμεναν < *$*g^h e$-$g^h rei(H)$*-, etc.[8]

As neither Old Phrygian (OPhr.) nor New Phrygian (NPhr.) regularly uses signs for k^h, t^h, p^h [9], the question whether or not PIE tenues developed into tenues aspiratae in Phrygian is only of theoretical interest. Those who argue in favor of this development can always hold that the opposition between tenues and tenues aspiratae was not expressed in writing. Assertions of the type "it looks as if I.-E. *p,t,k* yielded Phrygian p^h,t^h,k^h with a very weak aspiration" (Diakonoff – Neroznak 1985: 43) can hardly be verified. The fact that in Greek inscriptions of Phrygia we frequently find interchange of Κ and Χ, Τ and Θ, Π and Φ (Brixhe 1987: 58) can be interpreted in a variety of ways. The same is true for the substitution of Gr. χ by NPhr. κ in loan-words, cf. NPhr. ευκιν, borrowed from Gr. εὐχήν (Brixhe 1983: 129, 1999: 298) and NPhr. κορου (dat.sg.), borrowed from Gr. χῶρος (Brixhe 1983: 127). The only conclusion we can draw from these phenomena is that Phrygian did not have the same contrast between tenues and tenues aspiratae as Greek had.

It appears that the only issue at stake is the fate of the PIE mediae: do they yield mediae or tenues in Phrygian? Whereas the older scholarship (Solmsen, Marstrander, Haas) favored the idea of LV, nowadays the *communis opinio* follows Lejeune (1979), who argued against LV in Phrygian. I myself was for many years convinced of the correctness of Lejeune's position, but this is no longer the case. Here I would like to present the evidence and to weigh the arguments.

Lejeune only considered the OPhr. words and glosses. He first dismissed the evidence of the glosses (Φρύγες / Βρίγες / Βρυκεῖς, βέκος, βέδυ) as being unreliable and then stated that whereas there is no reasonable evidence in favor of LV in the OPhr. material, there are three words which seem to show no LV:

– *bagun* 'gift' < *$*b^h agom$*, if G-136 *tadoy : iman / bagun*, inscribed on a small statue of a falcon, means something like 'to Tados Iman (gives, offers) a gift'.

The interpretation is formally possible, but not very probable. The original meaning of the IE root *$*b^h ag$*- (*$*b^h eh_2 g$*-) was 'to (give) share', and derivatives of this root hardly ever get the meaning 'gift'.[10] If *bagun* rather means 'idol', then a borrowing from Iranian becomes likely. Since the meaning of the inscription is hypothetical, etymologizing separate words does not seem fruitful. For instance, we might as well take *bagun* as πῆχυν, acc.sg. of the word for 'arm'.

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[7] This inscription has been published by Gusmani and G. Polat (1999). I write ˘ instead of the question mark of the edition.
[8] As far as I know, only Bajun and Orel (e.g. 1986: 209) assumed that IE mediae aspiratae sometimes became tenues and sometimes mediae in Phrygian; later, this point of view was renounced by Orel 1997: 377.
[9] On OPhr. Φ, Ψ see Lejeune 1969 and 1978, on NPhr. θ and φ see Brixhe 1999: 298f.
[10] Lejeune further mentions in this connection the Hesych gloss Βαγαῖος· Ζεὺς Φρύγιος and interprets the name as "δοτὴρ ἑάων", which is of course very uncertain.

–   PN *benagonos* (G-116), if it is comparable to Gr. compounds in -γονος[11].   232

Since we usually do not know the meaning of the names, the etymologies based on them are gratuitous. Alternatively, we may think of a name in **-g^{wh}onos*, Gr. -φονος or even **-d$^h\acute{g}^h$onos*, Gr. -χθονος.[12]

–   The strongest argument is *podas*, apparently acc.pl. of the word for 'foot', which is attested in an inscription from Gordion (G-02), written next to two sculptured foot-prints. After the dedication *agarțioi : iktes : adoikavoi*, we read *iosoporokitis-˘/ kakoioitovo : podaska[?]*. It is probable that this is a malediction formula with the protasis 'whoever (*ios*) will ... (*oporokitis-˘ ?*)', but the syntax of the apodosis is unclear. Lejeune sees in *kakoioi* the 3sg. optative of the verb 'endommager' (= Gr. κακοῦν), but as far as the rest is concerned, "le détail soit encore incomplètement éclairci". Lejeune writes: "Après *podas*, ou particule, ou reprise (inachevée, faute de place) du verb 'endommager' (cette fois alors en principale, *kakoioi* étant en subordonnée). Dans un tel contexte, visant à protéger cette figuration de pieds, il est à peu près inévitable qu'on identifie, en *podas*, l'acc. pl. du nom du 'pied' (rigoureusement identique à gr. πόδας)" (p. 224).[13] There is no indication, however, that the inscription is incomplete. The last letters are written very small in order to fit the available space. The meaning 'may he injure his feet' is not very probable, and the remaining °*ka[?]* is unaccounted for. Of course, the interpretation of *podas* as 'feet' in combination with the sculptured foot-prints is tempting, but the context remains unclear. It cannot be excluded that the analysis is still wrong and that we have to do, for instance, with a derivative of the type **po(s)-d^{h}eh₁-* (cf. Slavic **podъ* 'under' < **po-d^{h}h₁-*).

3. We may conclude that, from Lejeune's list, only *podas* constitutes serious, albeit not decisive, evidence against the Phrygian LV. From NPhr., we may add the preverb αδ-, which is attested in the verbal forms αδδακετ, αββερετ, ατετικμενος, αδειτου. Whereas the first three   233 forms are ambiguous, αδειτου demonstrates the voiced consonant in Phrygian, which corresponds to Lat. *ad*, Goth. *at*, etc. < PIE **h₂ed*. This might be a case of final voicing, although I know of no parallels in Phrygian, or a secondary extension of the voiced stop from forms like αδδακετ. As far as I know, all other etymologies involving the development of PIE mediae into Phrygian mediae are inconclusive.[14]

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[11] Lejeune proposed the same analysis already in 1969b: 294; Neumann (1988: 9) quotes it with approbation.

[12] Lejeune's suggestion that *bena-* comes from **g^{w}enh₂-* and means 'woman' is very improbable. A name 'woman-born' is unlikely, there is no evidence for the development **g^w > b* in Phrygian, and the Phrygian word for 'woman' is now found in 116 κναικ-. As an alternative for the first member, Lejeune (1969b: 294) considered "*ben(n)ā-* en relation avec l'épithète de Ζεὺς Βέννιος".

[13] A different analysis of the apodosis is given by Orel (1997: 159ff.), who takes *kakoioitovo* to stand for *kakoio [o]itovo* 'of evil fate (gen.sg.)'. The syntax remains cumbersome.

[14] Consider, for instance, the Phrygian word acc.sg. °*duman*° B-01.3, dat.sg. δουμ(ε) 48 'religious community'. The origin of the term **dum-* can hardly be determined. It clearly belongs to the Kybele cultus and may well be non-IE. Neumann (1999 and 2002) hypothesized that **dum-* comes from Phrygian and derived it from the Indo-European word for 'house', PIE **dem-/dom-*, under the assumption of an original meaning 'Haus, Gebäude; Zimmer, Gelass', then 'private Hausgemeinschaft', 'Kollektiv (der Benutzer des Hauses), Verband'. The problem with this etymology is that it presupposes the development **-om- > -um-* in Phrygian, for which there is no evidence. Neumann's only parallel is the PN Νουμαδοας, attested in Phrygia, which he connects with Gr. νομάς, νομάδος. On the other hand, this development is contradicted by OPhr. *onoman* and NPhr. μειομον, ομουσας, ονομανια.

NPhr. ακροδμαν (116) has been analysed by Brixhe and Neumann (1985: 172) as "accusatif d'un composé AKPO-ΔMA, comparable au grec μεσό-δμη et désignant une partie du tombeau: "partie supérieure de..."" The word

4. Let us now consider the evidence in favor of LV, beside the already discussed Zeus. I have found six words with sound etymologies.

– *bekos*- n. 'bread' (acc.sg. βεκος 33 76 86 99 108 111, βε<κ>ος 18, βεκος(?) 120) < PIE *$b^h h_1 \acute{g}$-os-.

The Phrygian word is also mentioned by Herodotus and Hipponax and is given as a gloss by Hesychius. The only reasonable Indo-European etymology connects Gr. φώγω, ON *baka*, OHG *bahhan*, OE *bacan* 'to bake' < PIE *$b^h(o)h_1\acute{g}$- (Panagl – Kowal 1983: 186f). As indicated by Lejeune (1979: 223), however, a word of this meaning can easily be borrowed.

– *kenos*- n. 'generation' (?) (nom.pl.n. κενα: 35. ιος νι σαι κακουν αδδακεμ μανκαι, ας ανανκαι οι παντα κενα [ι]ννου) < *$\acute{g}enh_1os$-.

In the apodosis, παντα κενα must be nom.pl.n., correlated with 3pl. impv. [ι]ννου, presumably a form of the verb 'to be'. Since ανανκαι is likely to correspond to Gr. ἀνάγκη, the apodosis can be rendered: 'let all his κενα be [delivered] to mischief'. It seems tempting to me to explain κενα from *$keneh_2$ < *$\acute{g}enh_1es$-h_2 (Gr. γένεα, Lat. *genera*). It is generally assumed (Haas 1966: 119, Brixhe 1993: 341, Orel 1997: 255) that κενα is a loanword from Gr. κενός 'empty, idle' in view of common imprecations in Greek inscriptions, where οἶκον ἔρημον or χῆρον βίον are mentioned, but the syntax is then rather strained (Orel 1997: 256 translates: 'let all his [property] be void in (the hour of) need').

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– *knaik*- f. 'wife' (acc.sg. κναικαν 116; gen. κναικο 116) < *$g^w neh_2 ik$-.

This word has been compared with Gr. γυναικ- already by the editors of the inscription (Brixhe -Neumann 1985: 174). Since they are not prepared to assume LV in Phrygian, they explain κ- by neutralization of *k/g* in the position before a nasal. Although this explanation is not impossible, it is not very likely either. It is true that the sequence γν is not attested in NPhr., but in OPhr. we find °*bugnos*° (P-02), and in the position before *m* we find NPhr. αργμενα- (116) vs. τετικμενος (passim).

– *lak*- (3sg.impv.med. *lakedo* ° W-01b, °*lakeaǫ* B-03), cf. Gr. λαβεῖν ?

In B-03, °*lakeaǫ*[? is likely to be read *lakedo*, since the combination of three vowels is improbable in Phrygian (Lubotsky 1988: 21). In W-01b, *lakedo* starts the apodosis of the malediction formula (*lakedo* °*key : venavtun : avtay : materey* 'let he ... himself to the Mother herself'). The same function is possible in B-03, but the further text has disappeared. As to the meaning, we expect something like 'to devote, place oneself at the mercy of (+ dat.)'. The etymological connection of the root is unclear. If we assume LV in Phrygian, we may connect Gr. λαβεῖν (middle with the passive meaning 'to be grasped, taken') or, less likely, Gr. λήγω (connection with λάσκω, tentatively proposed in Lubotsky 1988: 21, is improbable).

Janda 1997: 273ff. offers a different analysis of the syntagm, viz. *la-ke-dokey*, where *la* is compared with Hitt. prohibitive *la*, *ke* is a particle or a preverb, and *dokey* is a verbal form, derived from the root *deh_3*- 'to give' (*$d(o)h_3 kei$*). He compares Gr. (Herodotus) δίδωμι ἑωυτόν 'sich übergeben an' and renders the sentence as 'der soll sich nicht besagter Mutter hingeben'. The major flaw in this analysis is the meaning of the apodosis. From the Luvian imprecations,

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looks like a borrowing from Greek, cf. μεσόδμη 'tie-beam, a box amidships', even though Gr. *ἀκρόδμη is not attested.

The etymology of the North-Phrygian river Γευδις from PIE *$\acute{g}^h eud$- (Neumann 1988: 20) is just a guess.

after which the Phrygian rulers coined their inscriptions (cf. Lubotsky 1998), we know that the usual curse for the next king, who puts his own name on the monument, is that he himself will deal with the deity.[15] Janda's analysis futher leaves °*lakedọ* (B-03) out of consideration, and postulates unattested particles *la* and *ke*.

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– *tetikmeno-* part. pf. med. 'cursed' (NPhr. *passim*) < **de-diḱ-mh₁no-*.

This participle is almost always preceded by τι(τ), except in 118 (without a preverb) and 51 ατε[τικμενο]ς, 103 ατιτικμενος (presumably influenced by αδ- of the formula α(τ) τι αδειτου). Assuming LV, we may compare τι(τ) τετικμενος with Greek δια-δικάζω 'judge', κατα-δικάζω 'to condemn', PIE **deiḱ-* (Lubotsky 1998: 420, fn. 22).

If ισγεικετ in the apodosis of 88 (... πουρ ουανακταν κε ουρανιον ισγεικετ διουνσιν) is to be read ιστεικετ (cf. Brixhe 1999: 304, fn. 46, for the analysis of this phrase see further Lubotsky 1989b), it seems possible to etymologically relate this verb to Gr. ἐκ-δείκνυμι 'to expose'. The meaning corresponds even better to ἐν-δείκνυμαι 'to declare oneself to smbd.' i.e. 'to be responsible towards'. The Phrygian malediction can then be rendered as '... he will be responsible towards the heavenly king Dionysos'.

– *ti* preverb 'Gr. δια-' (?) (τιτ-τετικμενος, τι-δρεγρουν, τιγ-γεγαριτμενος 88) < **d(u̯)is-*.

In previous scholarship, this word was usually analysed as a particle of pronominal origin, belonging to the apodosis (e.g. Lubotsky 1989a with an analysis of the formulae), but since τι only occurs in front of the verbal forms, it must be a preverb. Assuming LV for Phrygian, we may connect NPhr. τι with Gr. δίς, δια-, which go back to **d(u̯)is*.[16] Descriptively, the Phrygian preverb can be defined as τι + (optional) gemination of the next stop. There are indications that *s* assimilated to a following voiced consonant in Phrygian, cf. 3sg. impv. med. -εδου < **-e-sdʰō*, 3pl. impv. of the root 'to be' ιννου. It is also likely that final -*s* assimilated to the following velar (Orel 1997: 131), cf. αδιθρερακ ξευνε (31), ποκγονιον (116), possibly ικ κναικαν (116). We may therefore assume that gemination was generalized from these contexts, which accounts for τι(τ)τετικμενος.

We have already seen the comparison of τι(τ)τετικμενος with Greek δια-δικάζω 'judge'. As to τι-δρεγρουν (only found in the malediction ακ κε οι βεκος ακκαλος τιδρεγρουν ειτου 33, 76, 108 'may bread ακκαλος become τιδρεγρουν for him'), the most attractive etymology remains that of Haas (1966: 69, 84), who interpreted this adjective as 'unenjoyable, *innutribile*' and reconstructed PIE **d(u̯)is-dʰregʷʰ-ro-* with the same root as in Gr. τρέφω and τι- with LV (for more details on the formation see Panagl – Kowal 1983: 187f., who also point to Mycenaean adj. *to-ro-qa*, which modifies a word for 'oil' and may point to a labiovelar in the Greek verb).

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5. Of these six words, βεκος may be a loan word, while *lakedo* and κενα are slightly doubtful because the contexts are not absolutely certain. The other three (κναικ-, τετικμενος, τι) seem fairly convincing to me, and together with the name of Zeus, they tip the balance in favor of LV in Phrygian. For LV in other Indo-European languages and its implications for the reconstruction of the Indo-European system of stops see now Kortlandt 2003: 238ff.

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[15] For a typological parallel see, for instance, Karkamiš A11a, where we read 'If in future they [the gates] shall pass down to (one) who shall ..., and shall *overturn* these orthostats from (their) place(s), or shall *overturn* this god from (his) place, or shall erase my name, against him may Tarhunzas, Karhuhas and Kubaba litigate!' (translation Hawkins 2000: 96).

[16] Gr. δια- has probably taken over the -α from μετά, παρά, etc.

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