Phonetic value of Lydian letter revisited and the development of PIE *d in Lydian

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ABSTRACT.—The paper revises phonetic interpretation of the Lydian letter 𐤣 traditionally transliterated as <d> and commonly read as *ð*. It is argued that the unconditioned phonetic development PIE **i̯* > *ð* claimed for Lydian, which is allegedly responsible for the complete loss of the palatal approximant in the language, represents from a phonetic-typological point of view a highly unlikely process. Instead, it is proposed that Lydian 𐤣 renders *synchronic i̯* and its initial incorrect interpretation as <d> is due to the *sporadical* fortition of the Lydian approximant in the cluster *-rj-* > *-rð-*. The arguments for this are presented in the first part of the paper which analyzes the evidence of the Lydian phonetic system (§2), alphabet (§3) and synchronous onomastic evidence (§4). The second part of the paper deals with the issue arising from the re-definition of 𐤣 as <j> and discusses the development of PIE **d* in Lydian. It is argued that Lydian demonstrates the phenomenon of lenition **d* > *i̯* in weak positions, which is contrasted with a development **d* > *l* in strong positions and probable retention of PIE **d* in clusters.

Introduction

One of the most curious and, potentially, momentous linguistic phenomena claimed for Lydian over the last quarter century is a possible development of PIE and Proto-Anatolian (PA) **i̯* to a sound close or identical to the interdental spirant *ð*, rendered in the Lydian alphabet by the letter <d> (𐤣). The idea, first put forward by Craig MELCHERT in a 1994 article, was triggered by an observation that Lydian, in contrast with all other Indo-European languages of Anatolia and beyond, has no synchronic sound *i̯* (MELCHERT 1994a: 181). Initially, it was based on four pieces of etymological evidence which established the phenomenon for the position between vowels and word-initially before vowel: **(1)** 1.sg. pret. ending *-Vdv* < PA **-Vyom* (e.g., *pidv* 'I gave' < **píyom*); **(2)** adjectival suffix *-da-* (e.g., *sfẽnda-* < *sfẽni-*) < PA **-(i)i̯a-* < PIE **-(i)i̯o-*; **(3)** *dẽt-* 'movable property' (or sim.) < PA **i̯ont-* 'sheep', lit. '(the) walking (one)', cf. Hitt. $^{\text{UDU}}$*iyant-*; **(4)** *kλida-* 'earth' < PA **gliyā-*, cf. Greek γλία 'glue', Russ. *glej* 'clay' and Eng. *clay*.[1] The same quartet of etymologies is listed in the *Anatolian Historical Phonology* which

[1] To avoid confusion, Lydian forms are given in the current transcriptional system (𐤲 = *s*, 𐤶 = *š*, 𐤡 = *p*) regardless of the form in which they appear in works under discussion.

appeared the same year (MELCHERT 1994b:338) and became a standard reference work for the years to come. Ten years later MELCHERT returned to the question (MELCHERT 2004a:139-142) arguing that the process might have been operational also in the syllable-final positions being responsible for the disappearance of **Vy*-diphthongs in Lydian. The claim was based on *two* further pieces of etymological evidence: **(5)** the idea that the relative pronoun *qed* represents neutr.nom.-acc.coll.pl. form (as contrasted with neutr.nom.-acc.sg. *qid*) and corresponds to Hitt. *kue* < PA **kᵘé̯i*; **(6)** the idea that noun *καττadmẽ-* (LW 10:8, < *kat-* + *šadmẽ-*) which he takes to mean 'edict, decree' is based on the *o*-grade of the root **ši-* (**soy-* > *šad-*) seen in verb *καττi-* (LW 22:3, 6, 9, 11 < *kat-* + **ši-*) which MELCHERT derived from PIE **sh₂ieu̯-* 'bind' > 'enjoin, instruct', cf. Hitt. *išḫai-*/*išḫiya-* etc.

The hypothesis of the development **i̯* > *ð* in Lydian was favorably but rather uncritically received in the scholarly community. There followed no attempt to inquire the linguistic mechanisms which might lead this rather non-trivial sound change and only a limited endeavor to further explore consequences of the claimed process for the Lydian lexicon. The discussion took instead a rather peculiar twist targeting first of all the two ethnic names of the Lydians attested in the non-Lydian sources, Mᾱίονες/Μηίονες and Λύδοι/*Lud(d)u*. VAN DEN HOUT (2003) claimed, on the one hand, that ^{URU}*Maddun-(n)aš(š)a* attested in a few Hittite texts as the name of a city located somewhere in western Anatolia is based on the same root as the name of Mᾱίονες and their country Mᾱιονία (**Mai̯-un-* > *Maddun-* and **Mai̯-we/on-* > Μαιον-). On the other hand, BEEKES (2003), GÉRARD (2003 and 2004) and WIDMER (2004) proposed independently from each other that the other, more familiar name of the people, Λύδοι or *Lud(d)u*, as attested in Assyrian sources, continues the name which the Hittites *possibly* applied to a part of western Anatolia in the Old Hittite period, *Luwiya* (with slightly different reconstructions as **lūda-* < **lūya-* or **lūda-* < **luwida-* < **luwiya-*). From a linguistic point of view, both proposals hardly bring any further support for the claimed phonetic phenomenon in Lydian – if not indirectly discredit it – since they ignore both linguistic minutiae, most seriously the fact that ^{URU}*Maddun-(n)aš(š)a* and *Lud(d)u* are spelled in the majority of cases with *geminate* dental, which is hardly compatible with the expected form **lūða-* (not **lūda-*!), the chronology of the appellations and the ethnolinguistic realities standing behind them.[2] Much more pertinent was another proposal by GÉRARD (2006) who aptly observed that *šadmẽ-* in LW 74 is the designation of the inscribed object itself, i.e. a *seal*, and connected the underlying root **šad-* with Hitt. *šai-*/*ši(ye/a)-* and HLuw. *sa-* 'to impress, to seal' (< PIE **sh₁-ói̯-*/**sh₁-i-*), cf. Luw. *sasan-* 'seal'. Finally, a curious nuance to the picture was introduced by

[2] For more detailed criticism see YAKUBOVICH (2010:113-115) and ORESHKO (2013 [2015]:89-93).

MELCHERT's (2008:154-155) comparison of Lyd. deity name *Mariwdas*, which appears in LW 4: 3-4 in a close association with deity *Sãntas*, with Luw. ^{D}*Marwāinzi* (pl., **Marwāya*- in sg.) corresponding to Hitt. ^{D}*Mark(u)wayaš*, minor Netherworld deities who accompany the Plague-and-War God Sanda (< PIE **merg$^{\mu}$*- 'dark, murky'). If one considers *Mariwdas* as an inherited word, as Melchert did, one obtains another example of the historical development **i̯* > *ð* in Lydian. However, as **g$^{\mu}$* > *w* appears to be a specifically *Luwian* development,[3] one can rather see in *Mariwdas* a Luwian borrowing in Lydian (cf. ORESHKO 2018:107-108)[4], which means that the presumed development **i̯* > *ð* might also affect relatively late borrowings in Lydian.

Taken impartially, the hypothesis of the change **i̯* > *ð* represents an ambiguous case. Based primarily on the *etymological* evidence, it crucially depends on whether one accepts the given etymology or not. The cases adduced are not equal in their probative value: the connection of *kλida*- with Greek γλία 'glue' and *clay*, although good phonetically, may look somewhat suspicious in view of the fact that *kλida*- is supposed to be the *main* word for 'earth' in Lydian, and an alternative connection with Hitt. *kulēi* 'fallow land' proposed by GÉRARD (2004:128, fn. 17) may seem to be not out of place; the *precise* meaning of *dẽt*- is impossible to establish with certainty, which makes the connection with Hitt. ^{UDU}*iyant*- only a possibility; finally, both the interpretation of *qed* as nom.-acc.neutr.coll.pl. and its derivation from PA **k$^{\mu}$ḗi̯* is difficult to prove at the present level of understanding of Lydian texts (cf., however, below). However, both cases of morphological etymologies (-*Vdv* < PA *-*Vyom* and -*da*- < PIE *-*(i)i̯o*-) are systemic and hence more solid, especially the second one, and the derivation of *šadmẽ*- 'seal' from **sh$_1$oi̯-mén*- looks very plausible semantically. A connection of *Mariwdas* with ^{D}*Marwāinzi* also appears entirely convincing, although the case likely belongs to a different category (borrowed vocabulary).

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[3] Neither of three pieces of evidence adduced by MELCHERT (1994b:336) to support the development **g$^{\mu}$*- > *u̯* in Lydian looks in any way convincing. First, *walwe*- attested in the PN *Walwet(a)*-, found on coins and likely corresponding to Greek Ἀλυάττης, may well be an areal word or a Luwian borrowing in Lydian and in any case it is rather improbable that the word continues the PIE word for 'wolf', **u̯l̥k$^{\mu}$o*-. The word is likely related to Greek λέων and may be reconstructed rather as **u̯elu̯o*-/**u̯l̥u̯o*- – for detailed discussion see ORESHKO (2013 [2015]: 95-96). Second, the interpretation of Lyd. *šaw*- as 'see' is an entirely *ad hoc* assumption, as is a development **sek$^{\mu}$*-> **seg$^{\mu}$*- in the pre-tonic position which Melchert has to assume to connect the Lydian root with PIE **sek$^{\mu}$*- 'follow' (one should also note that the semantic shift 'follow' > 'see' seems to represent an exclusively Germanic innovation). Lastly, neither the separation in the attested form *owv* (LW 23:8) the root *ow*- and not *o*- (as, e.g., in GUSMANI 1964: *s.v.*, cf. also below) nor even its meaning 'proclaim' is entirely certain. In view of this, a connection with PIE **h$_1$u̯eg$^{\mu h}$*- (not **eu̯g$^{\mu h}$*-, as given by MELCHERT, cf. BEEKES 2010: *s.v.* εὔχομαι) 'solemnly proclaim' is at best hypothetic.

[4] The name of *Sãntas* itself may well be a borrowing in Lydian as well, cf. ORESHKO (forthcoming a, §7).

However, the hypothesis is fraught with a serous problem of a different kind virtually ignored hitherto: an *unconditioned* development *i̯* > *ð* resulting in the *complete* loss of the palatal approximant *i̯* from the phonetic system of a language represents an unparalleled and from a phonetic point of view highly unlikely process. In phonetic terms the development may be defined as fortition with the shift of the articulatory position. While fortition of the approximant *j*, especially in the strong word-initial and in the post-consonantal positions, represents a rather common phenomenon well documented for many languages of the world, including various members of the Indo-European family at different stages of their history (cf., e.g., Greek ζυγόν < PIE **i̯ug-o-*, Arm. *anowrǰ* /anūrʤ/ < **h₃nōr-i̯o-* or Fr. *juger* < Lat. *iūdicāre*), a *complete* articulation shift of the resulting consonant *without* an influence of a preceding consonant, i.e. in the intervocalic, word-initial and word-final position, is, if attested at all, exceptional and represents in all probability only the last stage of a multi-stage process. Normally, fortition of a palatal approximant leads to a voiced palatal fricative (*ʝ*) or a voiced palatal plosive (*ɟ*); rarer, *j* obtains a nasal component developing to a palatal nasal (*ɲ*) (cf. KÜMMEL 2007:159-161 and 165-166). The palatal fricative (*ʝ*) may further develop to a voiced post-alveolar fricative (*ʒ*), and the palatal plosive (*ɟ*) frequently ends up as a voiced post-alveolar (*ʤ*) or palato-alveolar affricate (*ʣ*) (ibid.:207-213.). Details of the development may slightly vary in accordance with the general phonetic tendencies operating in a given language at a certain period, but the consonant resulting from *j* almost always retains the *palatal* component. Besides the presumed Lydian shift **i̯* > *ð* itself, KÜMMEL (2007:206) registers only *three* other cases of the shift palatal > dental/alveolar: **(1)** the (presumably) unconditioned shift *ɟ* > *d* in the South-Egyptian dialect of Arabic, for which he assumes **ʤ* as an intermediary stage; **(2)** the proto-Greek shift **j* > **c* > *t* after *p*, which probably went, as is commonly assumed, through the stage of the voiceless palato-alveolar affricate *ʧ*; **(3)** the proto-Brittonic shift **ɟ* > *ð* which effected old **j* 'in bestimmten Positionen'. The proto-Greek case is irrelevant here, as it is only a particular example of a more general process of the development of *Cj*-clusters in Greek (the second Greek palatalization), and the dialectal Arabic case quite probably conflates two different phonetic processes. As for the proto-Brittonic shift, which might seem to be a close parallel to the Lydian case, it is by far not an unconditioned change. In fact, the old **i̯* is mostly either lost in the Brittonic languages or, under certain phonetic conditions, is retained unchanged (e.g., word-initially); the development **i̯* > *ð* took place only after *r* (possibly only before a stressed vowel) and in the sequence *-íi̯o-* (> *-ydd* in Welsh, e.g. *newydd* 'new' < **nou̯-íi̯o-*) and *-íi̯ā-* (> *-edd* in Welsh, an abstract suffix, as, e.g., in *duedd* 'blackness' < **dʰubʰ-íi̯ā-*), while even the same sequence with the stress on its second syllable did not lead to the effect (cf. SCHRIJVER 1995:

279-324 with further literature). Consequently, the change *$\underset{\wedge}{i}$ > *ð* was a very specific phonetic phenomenon in Brittonic effecting only a small segment of the system, thus very different from the case claimed for Lydian. One may add that the phenomenon of *fortition* of *$\underset{\wedge}{i}$ rarely, if ever, effects the *whole* system. Usually, it is confined to certain phonetic environments and/or stronger positions. These may differ from language to language, but at any rate the *absolute word-final* position, claimed for the case *qed* < *$k^{u}\acute{e}\underset{\wedge}{i}$, represents a highly improbable environment for the process, all the less probable as many facts of the Lydian historical phonology and morphology confirm that the word-final position in Lydian was, as in other Anatolian languages, *weak* and as a consequence conductive to the phonological lenition and morphological reduction.[5] It is difficult to imagine how under the given conditions PA *$k^{u}\acute{e}\underset{\wedge}{i}$ could produce in Lydian something so profoundly different from the Hittite *kue*. Lastly, the *complete* disappearance of the palatal approximant – cross-linguistically one of the most universal sounds of the human speech – from the phonetic system of a language again represents a highly unlikely phenomenon. In sum, the situation looks paradoxical: on the one hand, some fairly good *comparative* evidence suggests that Lydian <d> should somehow correspond to *j* in other Anatolian and IE languages; on the other hand, the claimed shift *$\underset{\wedge}{i}$ > *ð* resulting in the complete loss of the non-syllabic *i* from the system represents, from the point of view of *phonetics*, a rather improbable process. An attempt to re-define the character of the dental <d> in Lydian, for instance, as 'voiceless lenis palatal stop' proposed by KEARNS (1994:54-56) or a dental/alveolar flap (*ɾ*) considered as a possibility by MELCHERT (*apud* GÉRARD 2005:58), hardly satisfactorily resolves the contradiction, as it still runs counter against quite the same phonetic difficulties.

The present contribution aims to propose a radically different view on the problem which has given raise to the hypothesis formulated in MELCHERT (1994a), the absence of *synchronic sound* $\underset{\wedge}{i}$ in Lydian. In the following I will present the evidence that this absence is *illusory* and results only from the initial incorrect definition of the value of the Lydian letter <d> as a dental at the dawn of the Lydian studies. In a way reversing the argumentation of Melchert, I will argue that in the predominant majority of cases the letter should render not etymological, but *synchronic* $\underset{\wedge}{i}$ (and should be thus transliterated as <j>), which eliminates the contradiction between the etymo-

[5] It is noteworthy that this consideration presents an argument against the derivation of the Lydian dat.-loc. ending -λ from *$V\underset{\wedge}{i}$ (< PIE *-*ei*) argued by KLOEKHORST (2012). The derivation is certainly quite attractive if one considers Lydian as typical IE language. However, Lydian demonstrates so many other peculiarities in nominal and verbal morphology that there is every reason to doubt that it can be so easily squeezed into the usual PIE model. The development of the final $\underset{\wedge}{i}$ to λ is further contradicted by the fact that *-j* is regularly attested in this position in Lydian, as follows from the discussion below.

logical and the phonetic strands of evidence presented above. In all probability, the Lydian palatal approximant *j* might undergo fortition only in certain phonetic environments, notably in the position after dental trill, which gave rise to the present confusion. The arguments for the re-definition of the value of the letter <d> based on the different sorts of evidence will be presented in the first part of the paper. The second part will deal with the problem issuing form the re-reading of the letter revisiting the cases for which <d> was claimed to render a dental sound etymologically going back to PIE **d* or **d^{h}*.

PART I. ARGUMENTS FOR RE-DEFINING THE PHONETIC VALUE OF <d> AS /i̯/

1. Review of the evidence for the initial reading of 𐤣 as <d>

It is clear that the idea of the development **i̯* > *ð* in Lydian hinges upon two points: **(1)** the etymological evidence suggesting that the sound rendered with the Lydian letter <d> may correspond to *i̯* in other Anatolian or Indo-European languages and **(2)** that the letter <d> renders synchronically *some sort of dental*. In contrast with the first point, the second one may seem to be an axiom, as one finds no work touching upon the Lydian phonetics which would claim something essentially different in this respect, although definitions of the precise nature of the dental vary. It is thus quite surprising to find on how little firm evidence this seemingly certain fact is based. The definition of the value of the letter 𐤣 as <d> goes back to Enno LITTMANN (1916:5, cf. p. 12) who for the first time published and discussed the substantial corpus of the Lydian texts found during excavations in Sardis in 1910-1914 by the team of Princeton University. LITTMANN presented basically only *two* pieces of *synchronic* evidence which lead him to this idea: **(1)** the personal name of an Iranian origin *Mitridaštas* (found in LW 23 and 24) in the second part of which LITTMANN identifies, following a suggestion of ANDREAS, Old-Persian word for 'hand' ('*dusto*-', i.e. *dasta*- = Av. *zasta*-) and **(2)** the likely correspondence of Lydian form *Sfard*- to the name of Σάρδεις, *Sparda* in Old-Persian inscriptions, *Sprd* in Aramaic (LW 1) and *Sĕfārad* in Hebrew. He supplemented this evidence with an *etymological* observation pointing out that *eš-t mru-d* seems to stand in grammatical agreement just as *es-s wãna-s* seems to do, suggesting that *eš-t* may come from **eš-d*. In contrast to some other identifications of Lydian letters by LITTMANN, the reading of 𐤣 as <d> was accepted without much further discussion, apparently since the evidence seemed to be clear enough and to find no contradiction elsewhere (cf., e.g., BUCKLER 1924: XII). The attention of the subsequent studies quickly shifted onto *comparative* analysis of the Lydian lexicon – with the value 𐤣 = <d> taken now for granted. At the same time already

LITTMANN himself (1916:5) admitted, citing the opinion of HERBIG, that the dental rendered by the letter 𐤣 may be not a stop, but a spirant, *ð* or even *z*, considering, respectively, the reading *Mitri-zaštas* instead of *Mitri-daštas* as a possibility (but finally preferring the latter). The idea of a spirant character of Lydian <d>, interdental *ð* rather than anything else, was subsequently supported by many scholars, notably CUNY (1921:2-3), THURNEYSEN (1922:39), SOMMER (in KAHLE-SOMMER 1927:40), and was accepted also by MELCHERT (1994a) in his formulation of the hypothesis **i̯* > *ð*.[6] The idea was initially based on the observation that in several clear cases the Greek voiced dental is rendered in Lydian with <t>, cf. Ἀδράστης = *Atrastas*, Ἀλέξανδρος = *Alikšãntrus* (*Alikšantrus*), or, vice versa, the name having in Lydian <t> seems to be spelled, at least in some cases, by δ in Greek, cf. *Katowa* = Καδοας (cf. already LITTMANN 1916:6 and BUCKLER 1924:16). Later, it was supplemented by an observation that in some other cases, Greek *d* in the initial position may correspond to *l* in Lydian, cf. *Lamẽtrus* ~ Δημήτηρ and *Lefs*/*Lews* ~ Δέυς (= Ζέυς).[7] However one assesses it, the evidence shows that Lydian <d> is not the only and thus apparently not quite exact counterpart of the Greek δ.

Now, let us take a closer glance of the evidence on which the initial reading of the letter 𐤣 as <d> is based. The grammatical agreement between *eš-t* and *mru-d* is, taken separately, is a rather weak indication of a dental (or any other) character of <d>, as grammatical agreement between a pronoun and a noun does not necessarily imply the *phonetic* identity (or even proximity) of their final elements – as it does not, for instance, in Lat. *hic homo* or *illud vinum*. The case heavily depends on the general *reconstruction* of grammatical structures and phonetic processes in Lydian, as is the case with the rest of etymological evidence. The Iranian etymology of *Mitridaštas* and the correspondence *Sfard-* ~ Σάρδεις/*Sparda* etc. represent, in theory, much stronger cases, as both are examples of (more or less) *synchronous* renderings of names in different languages and may thus give a rather exact idea of Lydian phonetics. However, the case of *Mitridaštas* is patently problematic. Now as before, no counterpart of the name is known from Iranian or other

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[6] Cf. also GÉRARD (2005:57-58). It is noteworthy that GUSMANI always remained cautious about fully accepting the spirant value of the <d>, cf. GUSMANI (1964: 32), (1965: 209) and (1978: 834 fn. 4).

[7] ELDERKIN (1925:87 and 1933:387), BOSSERT (1944:111), cf. HEUBECK (1959:20) and GÉRARD (2005:57). Both cases are considered to be borrowings from Greek in Lydian. This idea contains, however, a number of inconsistencies of linguistic and historical character. A more likely possibility is that *Lamẽtrus* and Δημήτηρ represent independent reflexes of the name of an old Balkan-Aegean goddess and Lydian *Lefs*/*Lews* is not borrowing at all, but an inherited name going back to PIE **deį̯-u̯-ó-s* (= lat. *deus*), in contrast with *ciw-* < **di-ḗu̯-s* (> Ζέυς), for detailed argumentation see ORESHKO (forthcoming a, §3 [for *Lamẽtrus*] and §6 [for *Lefs*/*Lews*]). This means that Lydian <l> does not correspond to Greek δ *synchronically* (only <t> does), but had developed as a consequence of inner-Lydian processes from the old voiced dental.

sources, and even the second element alone (*-dašta*) finds no exact parallels in the Iranian onomastics. From a semantic point of view, its interpretation as 'hand' does not look especially appropriate – the Christian Abyssinian (!) parallels adduced by LITTMANN (1916:5) can hardly be taken seriously – and is inferior even to two verbal etymological suggestions put forward later, speculative as they are (see in detail below). The match between Lydian *Sfard-* and Σάρδεις, Persian *Sparda* and the Semitic forms is the strongest case and it is no doubt due to this seemingly undeniable corres-pondence that the reading of <d> as a dental has immediately established itself. However, under closer scrutiny this case also proves to be not quite 'clean'. Lydian <d> corresponds here to Greek δ not in a neutral intervocalic position, but in a *consonant cluster* <rd>, and actually shows only how the given *cluster* was perceived by the non-Lydian speakers. In the cluster, one may count with different sorts of influence of the dental/alveolar trill[8] upon the following consonant, the most probable ones being *voicing* and/or *shift* in the direction of more *alveolar/dental* articulation. On the other hand, the evidence about the name of the Lydian capital is by far more complex than the discussion by LITTMANN implies. Besides stem *Sfarda-* attested in LW 27:4 and LW 11:9 and its derivative *Sfard-ẽt-* (LW 22:1, 2, 4, 8 and 13), one has two attestations of the form *Sfarλ* (LW 22:5 and 10), which is obviously connected with *Sfard-ẽt-*, since both are attested in the same text. Taken straightforwardly, the dat.-loc. form *Sfarλ* presupposes a root **Sfar-* or **Sfari-*, as correctly pointed out by GUSMANI (1964: *s.v.*); the earlier attempts of LITTMANN (1916:11-12), CUNY (1921:10) and THURNEYSEN (1922:36) to argue for the loss of *-d-* before *-λ*, clearly triggered by the wish to connect the form with Σάρδεις, are unconvincing, as no such loss is documented for Lydian.[9] Furthermore, the idea that the native Lydian form of the name of Sardis was **Sfar(i)-* finds support in an ancient testimony preserved by Iohannes Lydus who asserted that Lydian historian Xanthos, active in the 5th century BC, called Sardis Ξυάρις. This form represents a rather exact phonetic approximation of **Sfar(i)-* in Greek (cf. GUSMANI 1964: *s.v. śfar-* and p. 276). This means that Lydian *Sfarda-* is a secondary derivative from *Sfar(i)-*. Now, the case *Sfar-da-* < **Sfar(i)-* proves to be strikingly reminiscent of the cases *taac-da-* < *taac-*, *sfẽn-da-* < *sfẽni-* and *mλwẽn-da-* < **mλwẽn-* (in *mλwẽ-šiš*) adduced by MELCHERT

[8] This is the likeliest, even if at present unverifiable, assumption about the character of the Lydian *r.* The sound is sporadically attested in interchange with *l*, cf. *alarm-/ararm-* or *mẽtri-/mẽtli-* (cf. GUSMANI 1964: *s.v.v.*), which indicates their close articulatory position. Lydian possessed two *l*-sounds: one rendered by <l> and one by <λ>. The latter was apparently palatalized variant of the former, which was most probably a usual alveolar or dental lateral approximant. Consequently, Lydian *r* was in all likelihood a usual alveolar trill, as it was the case in Greek.

[9] Cf. *awladλ* in LW 80:7 vs. *awladiš* in l. 14 or cluster *-dλ-* in *edλ=t=in* (LW 44:17) and *šidλ*[…] (LW 16:4).

(1994a:184-185) to demonstrate that Lydian suffix *-da-* likely goes back etymologically to PIE adjectival suffix **-(i)i̯o-*.[10] This means that etymologically *Sfar-da-* represent in all probability a *ya*-adjective **Sfar(i)-i̯a-* 'Sardian' – which the Greeks and other neighboring peoples should have adopted and generalized both for the 'inhabitant of Sardis' and the city itself. The question is now if in the last statement one really needs qualifier '*etymologically*'. As there proves to be *no other independent synchronous* evidence confirming the reading of 𐤣 as <d>, nothing prevents one from reading 𐤣 as <j> and synchronically interpreting the form as *Sfar-ja-* instead of *Sfar-da-*.

The form *Sfar-ja-* can be rather naturally reconciled with its renderings in other languages with a *dental*. As noted above, the trill *r* can lead to voiced and/or more alveolar/dental realization of the second component of a cluster, which in the case of palatal approximant *j*, in combination with its rather strong articulation, would naturally lead to the shift *rj > rð (> rd)*. As already mentioned above, this development is attested as a diachronic process for Brittonic, cf. *arddaf* 'I plow' < **ari̯-ámi* or *Iwerddon* 'Ireland' < **Īu̯eri̯on* vs. OIr. *Ériu* (cf. SCHRIJVER 1995:281-282). In a way similar shift is found in Armenian, where PIE *i̯* is generally lost in weak positions due to various sound changes, but has developed to *ǰ* /d͡ʒ/, i.e. a *dental* with the *retained* post-alveolar fricative, in the strong word-initial position and after sonorants *n* and *r*, as in *anowrǰ* < **h₃nōr-i̯o-* or *ǰnǰe-m* 'I destroy' < PIE **gᵘ̯ʰén-i̯e/o-* (cf., e.g. SCHMITT 1981:70-71).[11]

It is noteworthy that there is a further piece of evidence corroborating a general tendency to a rather strong articulation of the approximant *i̯* in Lydian. One of the Lydian words attested in the Lexicon of Hesychius is τεγοῦν, which he defines as 'robber' (τεγοῦν· Λυδοί τὸν λῃστήν). NEUMANN (1961:64-66, cf. GUSMANI 1964:277) convincingly compared the word with Hitt. *tāya/e-* 'steal' and Skr. *tāyú-* 'thief', both of which go back to PIE **(s)teh₂-* 'steal', which is attested also in other branches (cf. Av. *tāiiu-* 'thief', OCS *taiti* 'conceal' and *tatъ* 'thief', Gr. τητάομαι 'to be in want, be deprived or bereft' and OIr. *táid* 'thief'). The form τεγοῦν should thus go back to Lydian verbal root **taj(a)-* 'steal', reflecting either simple deverbal derivative **taja/o-* 'thief' or, in theory, a derivative with a nasal suffix (e.g., **tajān-*, cf. *Qalijān-*). Besides corroborating the tendency for the fortition of the palatal approximant in Lydian, even in the neutral intervocalic position, the case shows that a development *i̯ > ð* suggested by the case *Sfarja-* ~

[10] Similarly YAKUBOVICH (2017:266, fn. 3).

[11] For the development of PIE *i̯* in Armenian in the word-initial position, which is still a not completely settled question (some evidence may indicate also alternative reflexes as *l* and *j*), see KÖLLIGAN (2012).

Σάρδεις represents only a particular case of the fortition of *i̯* in Lydian triggered by certain phonetic ambience (preceding dental trill).

The shift from *etymological* interpretation of *ƛ* as *ð* < **i̯* (in some cases) to its *synchronous* reading as <j> resolves the contradiction between etymological and phonological strands of evidence. Now, Lydian 1.sg. pret. ending can be read as *-Vjv* and proves to be one step closer to the reconstructed form **-Vyom* or the former *dẽt-* turns into *jẽt-* and proves to rather straightforwardly correspond to Hitt. ^{UDU}*iyant-* – without the assumption of the phonologically unlikely change **i̯* > *ð*. Even more importantly, the re-interpretation of *ƛ* as <j> restores the 'human sounding' of Lydian, which turns out now to be a normal language with a palatal and a bilabial approximant (<w>) (for which see below), quite as it was the case with all other Indo-European languages of Anatolia, Phrygian, early Greek (before the loss of *u̯* (*F*) in many dialects in the 1st millennium BC) and many other ancient and modern Indo-European languages (for further observations on the phonetic system of Lydian see below). Moreover, the assumption of the synchronous interpretation of *ƛ* as <j> well agrees with a row of other indications and allows a fair amount of oddities and inconsistencies associated with the old reading of *ƛ* to be explained, many of which passed hitherto unnoticed or were, for the lack of alternative explanations, simply ignored.

2. Phonetic evidence

2.1. The first of the inconsistencies associated with the interpretation of *ƛ* as the voiced dental spirant *ð* is its occurrence in the *word-initial* position, which is attested frequently enough to be considered as normal for Lydian (cf. GUSMANI 1964:94-100). The general assumption, based on the joint evidence of spellings and the historical phonetics of the Anatolian languages, is that Proto-Anatolian lost the three-way opposition between plain voiced, voiced aspirated and voiceless stops reconstructible for PIE and, merging voiced aspirated with plain voiced, developed a two-way opposition between *voiced* vs. *voiceless* which at some point seems to have further developed into the opposition between *lenis* vs. *fortis* or, alternatively, *short* vs. *long* (see, e.g., MELCHERT 1994b:13-21 and 60-62, cf. KIMBALL 2017:252-253).[12] Lycian and Lydian alphabetic evidence shows that these languages generalized *voiceless*/*fortis* stops for the word-initial position, which seems to be supported also by Hieroglyphic-Luwian evidence and may be with good reasons further extrapolated for the languages of the second millennium BC attested in the cuneiform transmission (see MELCHERT 1994b:18-20, 38, 301 and 356, for

[12] Cf. also two recent discussions of the origin and the development of the Anatolian stops: KLOEKHORST (2016) and YATES (forthcoming).

Lydian cf. also MELCHERT 1997). As the word-initial position is usually associated with stronger articulation, this generalization looks entirely natural, and both the general binary opposition between the Anatolian stops and the *voiceless*/*fortis* word-onset appears to be an Anatolian *areal* feature. It is quite clear that the alleged appearance of *ð* in the word-initial position in Lydian quite directly contradicts this picture. MELCHERT (1997), adducing additional arguments in support of the fact that 𐤣 in the word-initial position cannot reflect PIE **d*- (or **dʰ*-) – which in all secure cases is reflected as <t> – recognizes the problem (p. 44), but proposes no solution for it, assuming only an 'unknown secondary origin' of the sound and pointing out as a possible parallel Lycian spellings with the initial *d(d)*-. In fact, the spellings with the initial non-geminated *d*- does not actually exist in Lycian.[13] The situation in Lycian, in which <d> indeed renders *ð* (excluding the cluster *nd*, cf. MELCHERT 1994b:301 with further refs.), is in any case different: the absence of words spelled with the simple initial *d*- once again confirms that the initial *ð* was impossible and whatever sound or combination was rendered by the geminate *dd*- in Lycian, it may have only indirect, if any, bearing on the problem of initial simple 𐤣 in Lydian.[14] YAKUBOVICH (2005:75-83) proposed

[13] The forms *da*-, *dau*, *dbijahe*, *deliñtãte* and *dem*[… registered in NEUMANN (2007: *s.v.v.*) – but not in MELCHERT (2004c) – all result either from false segmentation and/or false reading of the first sign. *Dadi* is artificially separated from :*eridadi:* in TL 118:5, which clearly represents one word. *Dau* in TL 128: 2 is a mistake for *lau*, which is in its turn probably only a part of the form *nalau* (contra MELCHERT 2004c: *s.v.* **la-*[2]). *Dbijahe* in 44a:48 is a part of the toponym *Medbijahe*. The form *dem*[… in TL 72 is part of the enclitic chain *hrppi=de=m[e]*. The form *deliñtãte* is extracted from the enclitic chain *sedeliñtãtẽ* in N320: 13. Its segmentation is not quite clear: *-de-* may represent here either enclitic *=de* or, which is likelier, one can analyze the sequence as *se=deli=ñtãtẽ* identifying *-deli-* as a *sandhi* variant of *teli* 'where' found also further down in the text in l. 17 (thus contra RIEKEN-YAKUBOVICH (forthcoming) and MELCHERT (2018) who speculatively separate *-eliñ-* attested nowhere else; the interpretation of the passage will be addressed in detail elsewhere). On the other hand, the form *dewẽ* found in TL 44b: 39 (*s*]*e=be dewẽ emu*) and 57 (*se dewẽ: zxxaza*) likely represents either a *sandhi* variant or simply scribal mistake for *ñtewẽ* 'before', which is suggested by the parallelism between 44b: 39 and 44b: 38 which features *ñtewẽ: n-emu* 'before me' (cf. NEUMANN 2007: *s.v. ddewe* for a similar idea expressed (but later dismissed) by CARRUBA). Given this picture, there is every reason to suspect that PN *Dapara* in the bilingual TL 6:1, which corresponds to Λαπαρας in the Greek part, is based on a mistake too: the drawing of Kalinka in TAM I:17 implies that the first letter of the Lycian name is partly damaged, which suggests that the lower horizontal stroke of Δ might be due its existence only to KALINKA's imagination and the letter is in fact simply Λ, which would give a one-to-one correspondence *Lapara* = Λαπαρας.

[14] The problem of the geminate spelling of *dd*- in the word-initial position can hardly be separated form the problem of geminate spellings of *d* and other consonants in other positions and first of all in the position immediately after another consonant, as, e.g., in *pddẽt*- or *hrzzi*. Anticipating a fuller discussion elsewhere, it is appropriate to add a brief note on the issue. Contra earlier discussions of the phenomenon of double spellings in Lycian (MELCHERT 1994b:295-296, VAN DEN HOUT 1995 and ADIEGO 2003) which proceed from the assumption that the geminate spellings reflect a real phonetic phenomenon, I'm prone to see in the spel-

that the initial *ð* in Lydian may result from a sound change */ⁿd-/ > */d-/ > /δ-/ considering the Lydian prefix *da-* (and the adverb/postposition *dãv* derived form it) to be cognate with Lyc. *ñte*, CLuw. *ānda* and Hitt. *anda* 'in(side)', and equating, on the other hand, the Lyd. prefix *ẽt-* with Lyc. *ẽti* which he translates, following MELCHERT (2003: s.v.), as 'down'. This construction seems to be quite improbable. The expected development of **éndo*, which gave Hitt. *anda* and CLuw. *ānda*, is **end-* > **ẽd-* in Lydian and the attested *ẽt-* represents a very likely match for it, as has been recognized long ago (cf., e.g., GUSMANI 1964: s.v. or MELCHERT 1997:33). On the other hand, it is highly dubious that Lyc. *ẽti* ever had a meaning 'down'. There is not a single context which would in any way compellingly require this meaning in addition to 'in/on' admitted by MELCHERT (2003: *s.v.*) and given as the only meaning by NEUMANN (2007: *s.v.*). In the Letoon trilingual the combination *ẽti sttali* (N320:22-23 and 33-34) clearly corresponds to ἐν τῆι στήληι in the Greek part and *ẽti* can thus mean only '(up)on' or 'in'. This meaning is further confirmed by the context of 44c:5, in which *ẽti: Malijahi: pddãti* clearly

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lings of the type $C_1C_2C_2$ a *purely graphic* devise to indicate a reduced vowel *ə* between two consonants (i.e. $C_1əC_2$) This assumption is based on two considerations. First, if one takes the geminate spelling straightforwardly as a real phonetic spelling, in most of the cases it is difficult, if possible at all, to explain *how* under the given phonetic conditions the process of *fortition*, implied by such geminate spellings, could take place. For instance, in the case of *pddẽt-* '(temple) precinct', which clearly represents a suffixal extension of the root attested in Hittite as *peda-* 'place, precinct' going back to PIE **pédo-*, one can be quite sure that the accent in this word falls on the ultimate syllable, which should mean that the alleged fortition of *d* should have taken place in the *pre-tonic* position. Both in typological perspective and in view of the 'Čop's Law' in Anatolian and specifically Luwian which postulates gemination (i.e. fortition) of the consonants just in the reversed prosodic circumstances, i.e. the *post-tonic* position (cf. MELCHERT 1994c), such a process looks quite odd. The second consideration results from my recent discussion of the initial part of the Xanthos trilingual (ORESHKO forthcoming b, §3 with fn. 58), where I proposed to interpret *ñterez*[*e:*] in 44a: 35 as an adjective derived from *ẽtre*/*i* 'lower, below' (= HLuw. *andara*) just as *hrzzi* 'upper' is derived from *hri* 'up, on' and *przzi* 'frontal' is derived from *pri* 'forth, in front'. It is clear that all three words represent fully identical formations and the only difference consists in the notation of vowels. It is difficult to propose an explanation for this, but the parallelism in any case implies that all three forms should have quite similar vocalic structure, which suggests that *hrzzi* and *przzi* could sound as /hᵊrətˢi/ and /pᵊrətˢi/, while **ñterezi* has a somewhat more distinct vocalization /ᵊnderetˢi/. The application of the rule $C_1C_2C_2 = C_1əC_2$ to *pddẽt-* produces a reading /pədẽt-/ which fully agrees with its derivation from **pedént-* and the reading of PN *Kuprlli* as /Kuprəli/ well agrees with its likely rendering in Greek as *Κοπριλις or *Κοπριλος (alongside with the folk-etymologically transformed Κυβερνις, cf. NEUMANN 2007: *s.v.*, with further refs.) There is, furthermore, at least one example which neatly supports the reading of the initial *dd-* in the same way. It is quite likely that PN *Ddxuga-* attested in 44d:19 corresponds to the Carian name *Dquq* (E.Th 44), attested also in Greek transmission as Ἰδαγυγος (cf. NEUMANN 2007: *s.v.* with further ref.). The Lycian spelling *Dd-* corresponds thus to Ἰδα- and presumably renders /ədᵊ-/ while Carian leaves the reduced vowels without any notation at all. Another strong advantage of the proposed reading is that it eliminates the problem the alleged presence of voiced dentals in the word-initial position in Lycian.

means ‘in the (temple) precinct of Malija’ (cf. 44b:1: *ẽti pddãt*[*i*]) and by the contexts of TL 48:3, TL 107a:1 and TL 309d:10 in which the combination *ẽti ... sijẽni* means ‘lies inside (the rock-tomb)’.[15] The attestation of the expression *ẽti xñtawata* (N314a:7-8: [*ẽ*]*ti: xñtawata* [*P*]*eriklehe*), which is contrasted with *ẽnẽ xñtawata* elsewhere (e.g. TL 43:2: *ẽnẽ: xñtawata: Xer[i]xehe:*), in no way implies full semantic identity of *ẽti* and *ẽnẽ* ‘under’: the two expressions are simply two different ways to indicate a date, one meaning ‘(with)in the reign’ and the other ‘under the reign/kingship’. In fact, given the semantics of *ẽti*, there is every reason to connect it with Hitt. *anda* and CLuw. *ānda*, as tentatively suggested by NEUMANN (2007: *s.v.*). Consequently, *ẽti* and *ñte* may well represent two different formations based on the pre-form **end-* with general semantics ‘in(side)’, differing in the character of the final vocal and, quite probably, the position of the accent: *ẽti* can be reconstructed as **éndi* and *ñte* as **endó*. The origin and exact meaning of the Lydian *da-* and *dãv* remain thus unclear.

One should stress that, contra MELCHERT and YAKUBOVICH, the problem of the initial *ð* in Lydian lies not so much in the etymological plane as it does in the *phonological* and *areal-linguistic*. The fact that voiceless/fortis word-onset was an *areal* feature in Anatolia necessarily implies that there existed a tendency to eliminate, sooner or later, the *voiced*/*lenis dentals* in the initial position. The case of *Lamẽtrus* ~ Δημήτηρ and *Leḭs*/*Lews* ~ Δέυς shows that devoicing/fortition was only one of two ways to do this. Thus, irrespectively of their etymological history, any voiced dental in the word-initial position should develop either to voiceless/fortis dental or a liquid and would synchronically appear as <t> or <l> in Lydian, and *ð*, if such a sound would have existed in Lydian, would in any case never appear in this position. The reading of *ʎ* as <j> completely resolves the problem.

2.2. An in a way very similar phonetic problem represents the fact that *ʎ* appears in the position after the dental nasal <n>, as in *sfẽnda-* or *mʎwẽnda-*. MELCHERT (1994a:185 and 1997:33) noted that the combinations cannot reflect original combinations **-Vnd-*/**-Vnt-* as the latter are reflected in Lydian as *-ẽt-*, cf. prefix *ẽt-* < **end-*, *dẽt-* < **yont-*, *mẽtli-* ‘harm’ vs. Lat. *mendum* ‘defect, mistake’ (and Lyc. *mẽte-* ‘harm’) or the *nt*-suffix in *Sfard-ẽt-*. As a solution, he proposed that *sfẽnda-* and *mʎwẽnda-* result from contraction of the original **sfẽnida-* < **sfẽniḭa-* and **mʎwẽnVda-* < **mʎwẽniḭa-*. This is not impossible, but the question wether Lydian form of the PIE suffix **-(i)ḭo-* was **-iḭa-* or simply **-ḭa-* is secondary, as the main difficulty lies again in the phonological plane. From a phonetic point of view a combination of a dental

[15] For a more detailed discussion of 44c:5 and 44b:1 see ORESHKO (forthcoming b, §2.) Cf. further 44a:49: *ẽti*: *zehi*, which means in all probability ‘in the field’ (cf. ibid., §8). Note also *ẽti: uhi*[… in N324:15 which may be tentatively interpreted as ‘(with)in a year’.

nasal with the following voiced dental spirant (*nð*) looks extremely unlikely if possible at all: the alveolar articulation of the nasal necessarily entails an equally strong alveo-dental articulation of the following voiced consonant, which simply excludes its spirantization. Cf., e.g., the absence in English of the cluster *-nð-* (in contrast with *-nd-, -nt-* and *-nθ-*) or the situation in Spanish, where the usual word-internal spirant (lenited) realization of the old *d* as *ð* does not occur after a nasal or a lateral consonant (i.e. *d* retains its plosive realization). Thus, even if *n* and *ð* would come into contact as a result of a vowel contraction, they would produce /*nd*/ which should be reflected in Lydian orthography as <*nt*>, cf. already mentioned *Aλiksãntrus* or *Sãntas*. Once again, phonotactic and orthographic considerations speak quite directly against the reading of *ʎ* as <d>, but well agree with the reading <j>. It is noteworthy that the reading *sfẽnja-* and *mλwẽnja-*, which presuppose phonotactic combinations *-nj-*, in no way contradicts the fact of the existence in Lydian of a palatal nasal *ɲ* rendered by a special letter <v>. The examples of other languages having palatal consonants, which often go back to the clusters *Cj*, show that the distinction between *-njV-* and *-ɲV-* is retained, if the former arises as a result of a *recent* modification of a word when morphological boundaries remain clear for the speaker, such as prefixation or suffixation (or grammatical inflection), cf., e.g., Sp. *campaña* < **campaɲa* < Lat. *campānia* vs. *con-yugo* < *con-* + *yugo* or Russ. *sʲestʲ* /çeçc/ 'to sit down' vs. *cjestʲ* /sjesc/ < perfective prefix *c-* + *jestʲ* 'eat'.

2.3. In fact, the alleged presence of the cluster *-nð-* in Lydian is only one facet of a much broader problem which was hitherto largely ignored: there is a significant amount of other consonant clusters which, under assumption of reading of *ʎ* as *ð*, prove to be from a phonetic point of view either quite unlikely or simply impossible.[16] To begin with, the cluster *dzð* or *tsð* (<cd>) attested in *taacdav* is a rather unlikely combination of a dental affricate with the following spirant. Although not entirely impossible phonetically, one would rather expect that in contact with the preceding *dz/ts ð* would lose its spirant component, as in the case of **-nð-*, and the simple dental would be reflected as <t> (cf. *factot* in LW 14:1). Even more problematic are the cases when *ʎ* appears immediately before a dental: *fedtros* (LW 44:6), *waredtaλ* (LW 11:5) and *ed=t=in* (LW 44:14). It is clear that the cluster *ðt* is articulatory *impossible*: in the contact with the following dental, *ð* would in any case lose its spirant component and quite probably completely assimilate to it, producing either /dd/ or /tt/, for which one would in any case expect the spelling <tt> (or simplified <t>). In two further cases, *ʎ* appears immediately before a *palatal sibilant ç* = <š> or a *palatal affricate cç* = <τ>[17]: (1) *edš*

[16] For a list of consonantal clusters with *ð* cf. MELCHERT (1994b:352-354).
[17] For the phonetic nature of the <š> and <τ> cf. below.

(LW 10:13) and *edš=in* (LW 44:13), *katʃλadš* (LW 14:10), […]*šedš* (LW 44: 6) and *patnẽdš* (LW 44:15) and (2) *kud=τ=in* (LW 13:5). Viewed in the phonetic perspective, these two cases can be hardly described other than *phonetic monsters*, since they flagrantly contradict even the principle of homorganic articulation. If *ʌ* would indeed be a dental of any value, one would expect that it would assimilate in the place of articulation with the following *ç* producing the affricate *cç* which would be reflected in writing as <τ>. Similarly, before <τ> a dental would lose its spirant and, quite probably, its voice component and would be reflected as <t>, cf. combination <tτ> in *kot=τ=in* in LW 13:4 and 10. A similar assimilation (*ð* > *t*) one would actually expect also in several further cases when <d> appears immediately before *k*, even if the combination /ðk/ is articulatory not impossible, cf. *kud=k=it* in LW 1:3, *kud=k=it* in LW 8:2 and 9, *katared=k=ms* in LW 11:2, *qed=k=in* in LW 11:6, *ed=ko=k* in LW 23:17 and *qed=k=mλ* in 24:6. Lastly, one should point out a rather wild combination of different 'dentals' in *dctdid* (LW 2:8), the mystery of which can hardly be resolved only by an assumption that some reduced vowels were not reflected in writing.

At this point it is appropriate to note that the Lydian system of writing in general was rather well adopted to convey the real sounding of the language, agreeing in this point with Greek or Phrygian systems and contrasting with the Carian one which seems to pay rather little attention to the notation of vowels. Except the clusters with *ʌ*, one does not find elsewhere unpronounceable consonant clusters, and the notation of vowels, for which there were as many as *seven* different common letters (<a>, <i>, <u>, <e>, <o>, <ã>, <ẽ>) plus <y> rarely attested as a phonetic variant of <i> and plus sporadical geminated spelling of vowels, was rather consistent and coherent. To this one may add that in the Lydian writing one employed a set of special *sandhi* rules, such as, for instance, deletion of *-s*, *-d*, *-t*, *-v* before the enclitic *-k* (cf. MELCHERT 1994b:351 with further refs.) and sporadically one can observe instances of a true phonetic spelling aimed to reflect phonetic processes on morphemic boundaries, cf., e.g., *kattadmẽs* < *kat-* + *šadmẽs* or *kattiwv* < *kat-* + **šiwv* (as contrasted with 'etymological' spelling in *kat-šarlokid*). In sum, the Lydian writing was sensitive enough in respect of the phonetics of the language and one cannot explain the noted contradictions by an *ad hoc* assumption of infelicities of the system. Re-interpretation of *ʌ* as <j> completely resolves the noted contradictions leading to entirely normal phonetic clusters: **(1)** *dzj* or *tsj* in *taacjav*; **(2)** *-jt-* in *fejtros*, *warejtaλ* and *ej=t=in*; **(3)** *-jç-* in *ejš*, *katʃλajš* and […]*šejš* and *patnẽjš* and **(4)** *-jcç-* in *kuj=τ=in*. The form in LW 2:8 can be now read as *jctjij* which is somewhat strange but quite possible, taking into consideration that the initial *j* before a consonant may

well have a vocalic component (i.e. *j*^{i}- or *j*^{ə}- which represents probably a contracted variant of prefix *ja*-).[18]

2.4. There are, furthermore, several indications that the sound rendered by *ʎ causes palatalization* when coming into contact with a consonant in a cluster. The observation have already been made by KEARNS (1994:55) who pointed out that the ending of comm.nom.sg. -*s* appears as -*š* when attached to the pronoun *ed*- (*edš* in LW 10:13 and LW 44:13), just as it does in combination with *i*-stems, as *qiš* or *Pakiwališ*, while retaining its dental-alveolar articulation with *a*-stems (e.g. *taadas*). This phonetic property of *ʎ* is clearly incompatible with its reading as *ð*, but Kearns' own suggestion that the letter conceals a voiceless lenis palatal stop is not a satisfactory solution either, as it runs counter to other indications concerning *ʎ*. The palatal character of the sound concealed behind the letter further well correlates with the fact that in the predominant majority of cases it appears in combination with palatal consonants, especially when it builds the first part of the cluster. Besides the examples of the combinations <dš> and <dτ> discussed above, one finds <dλ> attested in *šidλ*[…] (LW 16:3), *edλ=t=in* (LW 44:17) and *awladλ* (LW 80:7) and <dv> very frequently attested in the final positions (cf., e.g., *trodv* and *qistoridv* in LW 10:5). The reversed combination <λd> is found in the name of the Moon-God *Qaλdãns* and in the form *cuλdalẽλ* (LW 27:4). There is also every ground to think that the three-consonantal combination <λmd> attested in *cidaλmdav* (LW 22:6) and *τeλmdav* (LW 14:4) was also palatal. Moreover, the latter case seems to supply a further example of palatalization caused by *ʎ*. The application of the reading <j> produces *cijaλmjav* and *τeλmjav*, and the similarity between the words becomes now even more perceptible than it was before. In fact, now one can naturally explain the latter form simply as a contracted variant of the former. The cluster *cija*- can be most probably interpreted phonetically as *tsija*- (voiceless *ts* given the word-initial position of the affricate); contraction of this cluster to *tsja*- with subsequent palatalization and a sort of *i*-umlaut of *a* > *e* would produce *cçe*- which should be reflected in writing just as <τe>.[19] The form *τeλmjav* represents thus

[18] Cf. the possibility of syllabic realization of Lydian spirants, as, e.g., *r* in *srfast*- or *λ* in *pλtarwo*-, cf. MELCHERT (1994b:339).

[19] There are two further examples of palatalization of <c> to <τ> (phonetically likely /ts/ > /cç/ or /dz/ > /ɟʝ/, cf. below). The first one is *ši-τẽnit* (LW 13:10) which may be analyzed as prefix *ši*- + root *cẽn*- + -*it*. The root *cẽn*- is attested elsewhere in *cẽn-it* (LW 80:8), but the form identified as such by GUSMANI (1975:19) appears to be only a part of the word. The reading of the word before *cẽnit* as *kãnš* strikes as strange, as *š* as a palatal variant of *s* looks out of place as an ending after *n.* A look at the photo given in the publication (*ibid*., fig. 6 and 7) clarifies the issue: one can clearly see that <š> is written on the same level in the line as the following <c> and close to it, while the preceding <n> is put higher and the gap between <n> and <š> is wider. Moreover, the gap between <k> and <ã> is also somewhat wider than one would expect if it would be one word. In fact, there is every ground to separate in the passage the form *ãn*

a further example of a sensitive phonetic notation, which is contrasted with the case of *taacjav* likely representing a case of etymological writing oriented at rendering the morphemic structure of the word.

2.5. Discussing the evidence for the possible origin of <d> from **i̯* MELCHERT (1994a:185-186) argued that *-d-* in the verbs *fadi-*, *fadifi-* and *fadin-* goes back to a *secondary i̯* – a glide which developed between the prefix *fa-* and the root beginning with *i-*: **fa-i-* > **fayi-* > **fadi-*. This is an interesting observation, even if supportive evidence is somewhat slim. The case of *fadifi-* (attested in LW 24:4) is rather weak, since the context does not unequivocally define its meaning and **ifi-* is not attested as a separate root, while both its connection either with *ifrol* (LW 11:11) and *ifrliš* (LW 24:22) or with Hitt. *ēp-* 'take' remains speculative. The case of *fadi-* < *fa-* + *i-* is also ambiguous: although *i-* is attested (in the pret.3.sg./pl. form *il* in LW 12:6 and LW 13:1), the rather obscure contexts do not allow its meaning to be established with any certainty. The meaning of *fadil* attested in LW 15:1 with an object *ḳafolcv* (a hapax) in partly broken context is far from being clear either. However, the case of *fadin-* < *fa-* + *in-* is more solid. The verb *in-* is rather well attested in the corpus (cf. GUSMANI 1964: *s.v.*) and its regular appearance in short dedications (cf. *inal* in LW 101:2 and *inl* in LW 28 and LW 48) suggests its meaning either as 'make', as it is usually assumed (cf. GUSMANI 1964: s.v.) or, likelier still, 'put' > 'dedicate'. The verb *fadin-* is attested in LW 5:4-5 in a reasonably clear passage representing the protasis of a 'curse formula': *ak nã-qiš ẽmλ kãnaλ Kileλ puk ẽminav esav citalad fadint* which may be interpreted as "And whoever … to my wife Kile or to my children/descendants [may Artemis destroy his field and possessions]". Although the meaning of *citalad* is not quite clear, the interpretation of *fadint* as either 'make' or 'put' looks sensible in the context, referring either to 'making' something evil or to unauthorized 'putting' = 'burying' in the tomb.[20] The meanings of *in-* and *fadin-* can thus indeed be reconciled, which

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which recurs also in ll. 4 and 9 of the text. The line can be read thus as *ẽnarn nãns=k ãn šcẽnit ka*[… The form *š-cẽnit* can be interpreted either as contracted variant or simply a scribal mistake for *ši-cẽnit*. The palatalization *-cẽn-* > *-τẽn-* is caused in this case apparently by the preceding *i*, as it is the case with *s* > *š* under the same conditions. The form *τẽn-wv* attested in the next line of the text (LW 13:11) was written by scribe apparently automatically following *ši-τẽnit*. The second example of palatalization <c> to <τ> is likely found in the pair *cawλ-os* (LW 12:2) vs. *ẽn-τawλ-oλ* (LW 14:18). In this case, the process is probably triggered by the preceding nasal.

[20] It is quite likely that *citalad* is connected with *citollad* attested in LW 23:9 and LW 24:7 in a similar context of a warning (cf. GUSMANI 1964: s.v.). However, contra GUSMANI, it is highly unlikely that *citalad*/*citollad* means 'evil'. One can hardly doubt that *citollad* in LW 23:9 is in a way connected with *citoλs* in line 6 of the same text, which appears in the passage *ãntẽt Mitridaštas Mitratališ kawes citoλs puk afaris qλ dẽt amudãv* which may be interpreted as 'Speaking *Mitridaštas* son of *Mitratas*: *citoλ-* or *afari-* in/to which (movable) property of mine' (for *ãntẽt* see below). The interpretation of *citoλ-* or *afari-* as some sorts of legal documents (cf.

supports Melchert's suggestion. However, contra MELCHERT, the case has nothing to do with *historical* development of **i̯* > *ð*, as it can reflect only a *synchronic* process: in any ordinary language, the glide which arises between the front open *a* and the front close *i* can be nothing other than the palatal approximant *j*. It is noteworthy that the case finds a close parallel in the form *pu-w-as* attested in LW 46:3 in which *-w-* represents apparently a labial glide developed between *u* and *a* (*pu-* being the element found in *pu-k* and *-as* the enclitic pronoun 3.sg., cf. GUSMANI 1964: *s.v. buvaś* or GERARD 2005:61).

3. Evidence of the alphabet

3.1. Re-reading of the letter 𐤩 as <j> may be supported by observations on two aspects of the Lydian alphabet: the system of rendering consonants and the graphical shape of the letter in question. Taking out of consideration the sound rendered by the letter 𐤩, the *standard* Lydian system of rendering consonants in writing[21] can be represented as follows (for explanations see below):

	Bilabial	**Labio-dental**	**Dental-alveolar**	**Palatal**	**Velar**	**Labiovelar**
Plosive	𐤢 <p> p/b		𐤮 <t> t/d		𐤣 <k> k/g	𐤲 <q> k^{u}/g^{u}
Nasal	𐤥 <m> m		𐤦 <n> n	𐤪 <v> ñ		
Trill			𐤬 <r> r			
Fricative		𐤡 <f> f/v	𐤧 <s> s (/z)	𐤫 <š> ç (/j̨)		
Affricate			𐤯 <c> ts/dz	𐤭 <τ> cç/ɟj̨		
Approxi-mant	𐤤 <w> u̯					
Lateral approximant			𐤨 <l> l	𐤩 <λ> ʎ		

Table 1. Lydian alphabet without letter 𐤩.

GUSMANI 1964: s.v.v.) is by far not compelling; the terms could have more material meaning and refer to some places in which *dẽt* 'movable property' is found. For a possible interpretation of the verb *pit(a)-* used with *citollad* in LW 23:9 and LW 24:7 as 'break' see below, fn. 57.

[21] For earlier discussions of the Lydian consonantal system and alphabet cf. GUSMANI (1965 and 1978), KEARNS (1994) and GÉRARD (2005:22-28 and 56-71).

The most striking feature of the Lydian alphabetic system is the existence of a special row for *palatal* consonants. This implies that the opposition between the plain dental-alveolar consonants and their palatal counterparts played an important role in the Lydians' perception of their own language, which quite probably reflects linguistic realities of the language as one prone to heavy palatalization, not unlike the modern Slavic languages. In contrast, the opposition between different types of plosives (stops), which played an important role in PIE and retains this position, although mostly in modified form, in practically all modern Indo-European languages, was not perceived by the Lydians as important, who were satisfied, as it seems, with only one single row of letters for all plosives. Indeed, Lydian alphabet arguably does not make a contrast between *p* and *b* and there is only one sign for the labio-velar row (<q>). The same can be said about the velar row, although *four* Lydian inscriptions attest a sign 𐤣 which *probably* represents the voiced counterpart of <k>; its existence, however, does not change the overall picture, since it was obviously a marginal letter. Crucially, there is every reason to assume that the same principle is valid also for the letter 𐤮. As is suggested by the cases of Ἀδράστης = *Atrastas*, Ἀλέξανδρος = *Alikšãntrus* (*Alikšantrus*) and *Katowa* = Καδοας already pointed out above, the letter can render as voiceless/fortis, as voiced/lenis dentals. This interpretation is further supported by the alternation observed in *antola*/*anlola* 'grave stele' which implies that <t> in the former form renders a voiced dental; apparently the same phenomenon is reflected also in the double form of the name transmitted for one of the kings of the Heraclid dynasty, Ἀλυάττης/Ἀδυάτης (cf. BOSSERT 1944:112), which corresponds to Lydian **Walwetas*. The picture with rendering stops in Lydian alphabet does not look in any way surprising when considered against the background of the situation with occlusives in Anatolia, already in part sketched out above. As noted, there is good evidence that after the development of the system of the binary opposition between voiceless/fortis and voiced/lenis in Anatolian, the former stops have been generalized for the word-initial *strong* position. On the other hand, there is some evidence that voiced/lenis have been generalized for the word-final *weak* position, which finds parallel in Old Latin (cf. MELCHERT 1994b:18 and 85). As for the word-internal position, the observed distribution of voiceless/fortis and voiced/lenis only in part corresponds to one suggested by the evidence of other IE languages, as it has been influenced by the accent and/or the phonetic environment. The fact that the distribution of the voiceless/fortis and voiced/lenis variants in Anatolian depended not so much, if at all, on their synchronous semantic function of making distinction between words than on the phonetic environment (and in part on their pre-history), implies that *on the synchronic level* Anatolian stops functioned virtually as *allophones*. The

observed situation with the Lydian <p>, <k>, <t> and <q> perfectly mirrors this areal situation with stops.

Furthermore, there are good reasons to think that the rendering of *affricates* and *fricatives* was organized in the Lydian alphabet according to the same principle. For affricates it is practically self-evident, as they represent a combination of a *stop* and the respective fricative. The dental-alveolar fricatives *s* and *z* are rendered by one letter in many alphabets (cf. the situation in the Latin, modern Italian or German alphabets), so it is likely that this also was the case with Lydian <s> and, by extension, <š> – of course, provided that the respective voiced counterparts existed in the phonetic system of the language. As for the sound rendered by the letter <f>, one assumed from the time of LITTMANN (1916:11-12) that it can represent exclusively a *voiceless* fricative, either labiodental *f*, as commonly assumed, or bilabial *ɸ* (for an overview see KEARNS 1994:42-43, cf. GUSMANI 1965:206 or MELCHERT 1994b:334). MELCHERT (1994b:334 or 2004b:603-604) saw the voiced counterpart of <f> in <w>, following on this point GUSMANI (1965:206). GUSMANI based his interpretation of the sound as *synchronic* voiced fricative on two cases of (alleged) alternation, *Lefs* vs. *Lews* and *wiswid* vs. *fišfid*, adducing at the same time rather abundant evidence for the interpretation of <w> non-syllabic *u̯*, which was earlier in fact the prevalent interpretation of the letter (cf. KEARNS 1994:39-40). The approach of GUSMANI was rightly criticized by GÉRARD (2005:61), who pointed out that in the case of *Lefs* vs. *Lews* may equally reflect alternation *ɸ* vs. *u̯* and that there is otherwise no firm evidence for the transition *u̯* > *v* in Lydian. In fact, the case of alternation *Lefs* vs. *Lews* seems to be not diagnostic at all: in the position before sibilant *s*, bilabial *u̯* may easily assume labiodental articulation developing either to *v* or to *f*. Another similar case, *Kuwaw-*/*Kufaws-* may be equally explained either as alternation between *u̯* and *ɸ* – or, rather, between *u̯* and *v*. The other example of alternation adduced by GUSMANI is most probably false: *wiswid* (LW 22:3 and 6) is likely based on an alternative (possibly original) form of the nominal root *wissi-*, just as the form *ni-wiswa* (LW 44:17) reflects the alternative form of the root seen in **ni-wissi-* (in acc.sg. *ni-wis(s)cv*, cf. GUSMANI 1964: *s.v.*).[22] As for the form *fišfid*, it may be interpreted as a verb (pres.3.sg./pl.) containing prefix *fa-* and a root **išf-* seen possibly also in *išfollad* (LW 80:10), cf. *fišqãnt* < *fa-* + *iš-* + *qãn-*. On the other hand, there is, as noted, abundant evidence for the interpretation of <w> as *u̯*, which includes: **(1)** the secondary glide in *pu-w-as*, already mentioned above; **(2)** alternation between the 1.sg.pres. ending *-u* (e.g. in *kantoru*) and *-w* (e.g. *kow*); **(3)** existence of shorter form in *-u-* and longer in *-uwa*/*e-*, as in *mru-* vs.

[22] It is quite probable that it is due to this relatively recent development of *-ss-* from *-sw-* in *wissi-* that the sibilant shows no palatalization expected after *i*.

mruwa- 'stele' or *u*- vs. *uwe*- 'write'; **(4)** rendering of *kawe*- and *tawsa*- in Greek as καύης and ταύσας respectively. There are other two clear onomastic examples confirming the reading of <w> as *u̯*: the name **Walwetas* attested on coin epigraphs (in the form *Walwet[*) is rendered in Greek tradition as Ἀλυάττης (Ἀδυάτης) and *Katowa* as Καδοας, which obviously reflects the loss of *u̯* in the initial and intervocalic positions in most of the Greek dialects. To this one may add that the form of the Lydian letter <w> exactly corresponds as to that of the Greek *digamma* which was used to render the non-syllabic *u* in the dialects which preserved it, as early Doric, as to the Phrygian <v> and Lycian <w> all of which continue PIE **u̯*. In sum, there can be no doubt that Lydian <w> represents a bilabial approximant *par excellence*, even if it is possible that in some cases the sound was realized allophonically as a labio-dental fricative. The phonetic system of Lydian was thus in this respect no different from those of other Anatolian languages. As for the voiced counterpart of *f*, it was quite probably rendered by the same letter <f> and its voiced realization depended simply on the phonetic ambience, as it was the case with stops and affricates. For instance, it is quite likely that in *trfnod* or *tafaal* <f> rendered voiced/lenis *v*. It is noteworthy that the form Ξυάρις attested as an alternative and possibly phonetically more reliable form of the name of Sardis (cf. above) suggest that, contrary to what one might assume, <f> in *Sfarda*- renders voiced/lenis consonant too, which is supported also by the Pamphylian names Ζβαρδιανος, Σϝαρδιας/Ισϝαρδιας which likely mean simply 'Lydian' (~ Σαρδιανός/ Σαρδιηνός), cf. BRIXHE (1976:245-246).

It is not difficult to see that the Lydian system of rendering consonants in alphabet does not actually require a further letter for a voiced/lenited dental of some sort. Given that the *plain* voiced/lenis dental, whatever was its precise phonetic realization in Lydian, could be well rendered by <t> as a generic letter for dentals, one can with certainty rule out the interpretation of 𐤻 as a dental flap; it is noteworthy that in Luwian a similar sound were rendered by the signs for dentals alternating with those for liquids. However, in theory one cannot completely exclude the existence of a special letter rendering a dental fricative – which should have been, in accordance with the general principle, both voiced and voiceless (*ð*/*θ*) – seeing in it a certain counterpart of <f> which renders the labiodental fricative *f*/*v*. The latter sound seems to originate in part in the voiceless labial stop *p* (less certainly in the voiced *b*) and in part in the bilabial approximant *u̯* (cf. MELCHERT 1994b:335-336) and thus represents in a way an extra sign of the alphabet. However, the general areal situation with dentals in Anatolian lends little support to this idea. The interpretation of the letter 𐤻 as *ð*/*θ* would imply the existence of *three* phonetic rows of dentals in Lydian (plain voiceless/fortis, plain voiced/lenis and a fricative row), which runs counter the general Anatolian tendency for a *binary* opposition and poorly agrees with the fact that the fricative dental *ð* in

Lydian is commonly explained as the result of lenition of the old *d* and thus should actually correspond to the theoretical second row. In sum, the reading of 𐤩 as *ð*/*θ* would cause more difficulties than it resolves.

On the other hand, the absence of the palatal approximant *j* in the Lydian phonetic system and the alphabet looks fairly odd in several respects. First, all the languages of the Anatolian branch, as Hittite, Luwian, Lycian, Carian and other 'minor' languages of southern Anatolia, and Phrygian, which appeared in the region later, have this sound in their phonetic systems and demonstrate, as far as one can see, no tendency for its unconditional fancy developments. Second, all other epichoric alphabets of Anatolia of the early 1st millennium BC have a special sign for the palatal approximant, differing thus in this respect from Greek which used I both for syllabic and non-syllabic *i*, cf. Lycian <j>, Carian <j> (the alphabets attested in Egypt which present the most complete inventory)[23], Sidetic <j>[24] and Phrygian <y>. Likewise, Luwian Hieroglyphics also had a special sign <ia> (etymologically <i> + <a>) for the most common syllable starting with the palatal approximant, as did the cuneiform system employed for Hittite, Palaic and Luwian in the second millennium BC. Last but not least, it would be very strange if Lydian, as a language with an apparent tendency for *palatalization*, would have completely lost just the *palatal* approximant replacing it with something dental. In sum, re-interpretation of the letter 𐤩 as <j> and the concomitant restoration of the palatal approximant *i̯* in the Lydian phonetic system perfectly agrees with the linguistic facts and makes the structure of the Lydian alphabet coherent and clear, cf. Table 2.

[23] ADIEGO (2007:205-233) [on the Carian alphabets in general] and 234-236 [on semivowels].
[24] See, e.g., PÉREZ OROZCO (2007).

	Bilabial	Labio-dental	Dental-alveolar	Palatal	Velar	Labio-velar
Plosive	𐤁 <p> p/b		𐤕 <t> t/d		𐤊 <k> k/g	𐤒 <q> k^{u}/g^{u}
Nasal	𐤌 <m> m		𐤍 <n> n	𐤎 <v> ñ		
Trill			𐤓 <r> r			
Fricative		𐤈 <f> f/v	𐤔 <s> s (/z)	𐤟 <š> ç (/j)		
Affricate			𐤚 <c> ts/dz	𐤞 <τ> cç/ɟj		
Approxi-mant	𐤄 <w> u̯			𐤉 <j> i̯		
Lateral ap-proximant			𐤋 <l> l	𐤝 <λ> ʎ		

Table 2. Lydian alphabet with letter 𐤉.

3.2. The re-interpretation of the letter 𐤉 may be further supported by observations on its graphical shape. Needless to say, graphical shape is a not very reliable guide to phonetic value of a letter when considering it in a comparative perspective. The shape can be more or less significantly modified in the process of adoption or the old shape may be assigned a slightly divergent phonetic value or in some cases the value of a letter may be completely re-defined. The history of the decipherment of the Carian alphabet, for a long time flawed by the incorrect assumption that the letters similar in shape with the letters of the Greek alphabet should have the same or a similar phonetic value (cf. ADIEGO 2007:166-204), is a useful reminder of the difficulties involved in the comparative analysis of the Anatolian alphabets. However, the case of the Lydian alphabet is essentially different from the Carian case. All Lydian sounds which have more or less exact correspondences in Greek and Phrygian are rendered by letters very similar to those used for the respective sounds in the respective alphabets (with the simplification of the occlusives row according to the principles noted above), cf. 𐤀 <a>, 𐤁 <p>, 𐤄 <e>, 𐤄 <w>, 𐤉 <i>, 𐤊 <k>, 𐤋 <l>, 𐤌 <m>, 𐤍 <n>, 𐤏 <o>, 𐤓 <r>, 𐤔 <s>, 𐤕<t>, 𐤖 <u>; a less precise correspondence is 𐤟 <š> = Greek Z /zd/ < Phoenician *zayin*. Only the Lydian sounds which have no correspondences in Greek (or Phrygian) are rendered by letters which have no counterparts in the Greek alphabets and were in all appearances either adopted from other

alphabets (as is most probably the case with 𐤉 <c>) or simply invented, cf. 𐤌 <ã>, 𐤖 <ẽ>, 𐤄 <y> (/ü/), 𐤈 <f>, 𐤊 <q> (/k^{ų}/), 𐤎 <τ>, 𐤉 <c>, 𐤘 <λ>, 𐤒 <ν>.[25] It is quite obvious that the interdental spirant *ð* is close enough to the plain dental stop *d* to be rendered by a letter similar in shape to Greek Δ. The case of Lycian 𐤃 used for /ð/ demonstrates this clearly enough.

The Lydian 𐤁 was hitherto associated, in one way or another, with Δ. HEUBECK 1978 (cf. esp. the table on p. 60) had no doubts that Lydian letter <d> originates, as Greek Δ, from Phoenician *dalet* and was most probably adopted by the Lydians, together with the core part of the alphabet, from the Greeks (rather than via a Phrygian mediation). GUSMANI (1978:837) also connects the Lydian letter with Greek Δ, but sees its immediate prototype in the Phrygian variant of Δ which lacks lower horizontal hasta (Λ). GÉRARD (2005:24-25 and 57) also seems to derive the Lydian letter from the Greek Δ, but for some reason omits this correspondence in his table of the 'signes d'origine grecque orientale' (p. 24). However, an unprejudiced glance of any of the Lydian inscriptions containing 𐤁 would suffice to realize that the shape of this Lydian letter has simply nothing to do with the shape of Greek Δ and the noted 'derivation' of the Lydian letter represents a clear example of a confirmation bias. To avoid any misunderstandings, one have to start with the Greek *delta*: the letter, as its early West-Semitic ('Phoenician') prototype, represents invariably a *closed circuit*, either a more or less equilateral triangle, as for instance in the Ionic alphabet, or a bow-like shape (D), which arises apparently from the triangle put on its corner and the subsequent simplification of two sides to an arch, found, e.g., in the Euboean alphabet, which was adopted in Italy and was the source of D in modern alphabets. The Phrygian 'baseless delta' (Λ), which completely corresponds to the Greek delta in the arrangement of the two diagonal bars, arises obviously from the Phrygian practice of lineation of the surface prepared for writing, which resulted in that the lower horizontal hasta of Δ completely coincided with the bottom line. It is noteworthy that the practice of lineation is never, as far as one can see, found in Lydia. In contrast, Lydian letter 𐤁 represents something quite different (cf. fig. 1): it is a long *vertical* hasta – which is as vertical as, for instance, that of <q> or <t> – with a diagonal stroke attached approximately to the middle part of it, which mostly does not reach the imaginary bottom of the line. In essence, 𐤁 represents 𐤄 without the upper side stroke. To 'derive' 𐤁 from Δ one needs thus to suppose that the bottom hasta of the latter was 'lost' for some reason, then one of the diagonal hastae 'dropped down' and shor-

[25] The letter 𐤉 <c> is likely to be related in one way or another with similar letter in Phrygian and Carian alphabets and with Greek *sampi* and may go back to the Hieroglyphic Luwian sign <zi>, cf. ORESHKO (2013 [2015]:81-82) with further refs. The letter 𐤎 <τ> for the affricate /cç/ very probably results from the superposition of 𐤕 <t> and 𐤓 <š> /ç/ and represents thus an example of a rather fine phonetic analysis by the creator(s) of the Lydian alphabet.

tened, while the other one assumed an upright position. With a stretch of imagination it is not quite impossible process – however, the assumption of such a mutation finds no parallels in the case of other Lydian letters derived from, or having a common source with the respective Greek or Phrygian letters: they all demonstrate only very slight differences. In sum, it is quite improbable that 𐤣 has in its origin something to do with Δ.

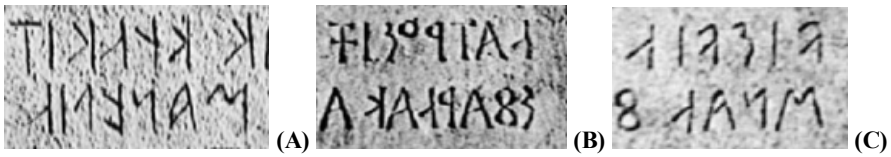

Fig. 1. Shape of 𐤣 as found in Lydian inscriptions: A. LW 1: 2-3 (*kud=k=it* and *Manelid*); B. LW 11: 8-9 (*datrosiš* and *Sfarda=k*); C. LW 22: 2-3 (*wiswid* and *ãnad*) (from LITTMANN 1916: pls. 1, 5, 9).

On the other hand, the reading 𐤣 as <j> naturally suggests a comparison with the West-Semitic *iodh* having the same phonetic value and the letters derived from it in the Greek, Phrygian and Lycian alphabets. In the early West-Semitic alphabets *iodh* (𐤉) represents a vertical or somewhat tilted stalk with three short strokes added: two at each end of the stalk looking in the opposite directions and one in the middle looking in the direction of writing (cf. fig. 2a). This letter was adopted by the Greeks for rendering both syllabic *i* and non-syllabic *i̯* in two different forms: in approximately two thirds of the Greek alphabets its shape was simplified to the familiar plain vertical stroke I (as, e.g., in the Euboian or the west-Anatolian Greek alphabets), but sometimes, as, e.g., in the Corinthian alphabet, the two end strokes of the Semitic *iodh* were retained and the letter developed into a three-bar (rarely four-bar) *iota* quite exactly corresponding to three-bar (or four-bar) *sigma* (cf. fig. 2b); to avoid confusion, the alphabets using the latter variety of *iota* used *san* (Ϻ) for the dental sibilant (cf. respective parts in JEFFERY 1990). In some alphabets, as, e.g. that of Aetolia and Epirus, both varieties of *iota* were used interchangeably, but no Greek alphabet developed a graphic contrast between syllabic *i* and non-syllabic *i̯*.

Fig. 2. A: West Semitic *yodh*; B: Greek three- and four-bar *iota*; C: Phrygian <y>; D: North-West Phrygian <y>

This distinction also seems to be absent in the earliest Phrygian alphabet, which uses a plain vertical stroke <i> for both *i* and *i̯*. A special letter for the non-

syllabic *i̯* was introduced at some later stage by adding two end strokes to <i> (cf. fig. 2c; see BRIXHE-LEJEUNE 1984: 279-281 and LUBOTSKY 1993:95-96). Although the letter <y> seems to be an *innovation*, it has an obvious similarity both with *yodh* and Greek three-bar *iota*. The paradox may be explained by the assumption that the model for <y> in the central-Phrygian alphabet was letter <y> found in the north-western variety of the Phrygian alphabet (Mysia and Bithynia) which has a very distinctive shape and may represent a *direct* descendant of *yodh* (cf. fig. 2d and BRIXHE 2004:29-31), reflecting thus original split of the semitic letter into two variants. Lastly, Lycian alphabet generalized plain vertical stroke for non-syllabic *i̯* (<j>), while for syllabic *i* was used 𐊄 derived either form West-Semitic *ḥēt* or from Greek E.[26]

The case of Lydian 𐤣 if read as <j> proves to be rather reminiscent of the situation with Phrygian <y>. The Lydian letter differs by only one stroke from Lydian <i> and can be naturally explained as its more complex variant, which may result either from *retention* of the middle stroke from the original shape of *yodh* or from *innovation*, i.e. *inner*-Lydian derivation by addition of a stroke serving as a sort of diacritic mark. A decision between these two options is not easy, as the Lydian texts provide little clues for a chronology of the development of the alphabet and the evidence of the central-Phrygian alphabet is ambiguous. The *retention* scenario seems, however, to be supported by the case of the north-west-Anatolian alphabet with its probably original distinction between <i> and <y>; it is noteworthy that the Lydian alphabet demonstrates a further curious correspondence with the latter alphabet in the shape of <s> (cf. BRIXHE 2004:26-29). On the other hand, an in a way very similar graphic phenomenon is found in the Oscan alphabet which has a letter 𐌉 <í> which very closely (in some varieties almost exactly) corresponds to the shape of the Lydian 𐤣 apart from the position of the stroke on the 'back' of the letter (i.e. on the side opposite to the direction of writing). In the Oscan alphabet it is, however, clearly a derivative from 𐌉 <i> which uses the side stroke as a diacritic mark to distinguish it from the phonetically close mid-vowels /ē/ and /e/ (see WALLACE 2007: XI with fig. 1 and p. 6). The Oscan case shows that the idea to derive a letter rendering a sound in a way similar to *i* was in the 1st millennium BC Mediterranean as natural as it was much later for Gian Giorgio Trissino who proposed in 1524 to reserve

[26] As for the Sidetic and Carian alphabets, neither seems to derive the letters for either syllabic *i* or non-syllabic *i̯* from the West-Semitic *yodh*. The Carian signs for <i> and <j> are obviously different and represent quite probably local Carian inventions (cf. ADIEGO 2007:230-233). Sidetic <i> has some similarity with *yodh*, but given the entirely original shapes of the predominant majority of the letters – which suggests rather a re-invention of the alphabet from scratch – this similarity may well be accidental. As for <j> in Sidetic, it is very likely that this sound is rendered by the letter read previously as <w>, as independently proposed by SCHÜRR (1997a :138, cf. 2016) and Pérez OROZCO (2003, cf. 2007). The form of the letter hardly suggests any connection with *yodh*.

<j> (found earlier simply as a graphic variant of <i>) for the non-syllabic *i* or for the inventor(s) of <й> (/i̯/) in the Russian variety of the Cyrillic script around the same time, who added an additional stroke to <и> (/i/). Thus, although the retention scenario appears to be somewhat likelier, the interpretation of 𐤣 as 𐤉 with a diacritic mark is not completely excluded; the question remains to be bound on chronology and source(s) of the Lydian alphabet. However it is, the shape of 𐤣 is entirely concordant with definition of its phonetic value as <j>.

4. Evidence of onomastics

4.1. Onomastic evidence in general plays an important if not crucial role in defining the phonetic reading of a sign, since, under the lucky condition that the respective name – or at least its constituents – is attested elsewhere, it may give a rather precise idea of how the word *sounded*. One may present here three pieces of onomastic evidence which bring support for the proposed reading of 𐤣 as <j>. Ironically, the first one is Iranian name of *Mitridaštas*, from which LITTMANN (1916:5) tried to derive his first clue for the reading of the letter as <d> (cf. above).[27] As already mentioned above, the interpretation of the name *Mitri-daštas* as 'Mitra-hand' proposed by Andreas and accepted by LITTMANN is not supported by any Iranian parallels. In addition, it faces a phonetic problem: Lydian <š> represents a *palatal* sound identical or close to /ç/ which seems to be rather inappropriate for rendering the Iranian *s* in the cluster *-st-* which in all probability was a simple dental-alveolar sibilant.[28] An alternative interpretation of the element *-dašta-* was suggested by KLINGENSCHMITT *apud* HEUBECK (1965:76, fn. 16), who saw in it a perfect passive participle based on the Avestan root **das-* 'to honor' commonly associated with Vedic Sanskrit root *dāś-* 'serve, honor (a god), grant, present'. Semantically this explanation looks quite possible and, contra SCHMITT (1978:409), the rendering of Iranian *š* by Lydian <š> in the cluster *-št-* would hardly represent a serious difficulty: from the two available alternatives, <s> and <š>, the latter was definitively closer to the Iranian post-alveolar *š*. The problem, however, is that the root **das-* and specifically form *dāšta-* are rather poorly attested in the Iranian languages. In Avestan, which provides the basis for the reconstruction, the root is found only in the noun *das(ə)ma* 'honoring, worship', with two attestations in the corpus, and in

[27] I use the opportunity to express my thanks to Alexander LUBOTSKY for a fruitful critical discussion of the Iranian evidence.

[28] In contrast, the objection of SCHMITT (1978:409, cf. 1982: 32) that the name, interpreted in this way, would present a dialectal mixture is not a very strong argument: the form of the word for 'hand' with the initial dental is not confined to Old-Persian, but found also in other Iranian languages, e.g. Khotanese *dasta-*, Parthian *dst*, Sodg. *δst* etc. (cf., e.g., BAILEY 1979: *s.v. dasta-*).

dāšta-, with four attestations in the corpus including two in personal names; the root *dāś-* attested in Khotanese may well represent a Sanskrit borrowing (cf. CHEUNG 2007: *s.v.* **das*[1], for attestations see BARTHOLOMAE 1961: *s.v.v. dasma*, *dāšta-*). In fact, the appurtenance of the form *dāšta-* to the root **das-* is not quite assured: BARTHOLOMAE (1961: *s.v. dāšta-*) connects it with the root *dar-/dār-* 'hold, keep', the respective form of the participle being attested already in the MPers. period (cf. CHEUNG 2007: *s.v.* **dar*[1]). However it is, the form *dāšta-* is never attested as the second element of com-pound names: both examples of Avestan names (*Dāšta-yānay-* and *Dāšta-γnay-*) have it in the first position, as does the compound *dāšto-ratav-*. Thus, even if formally not impossible, the identification of the second component of *Mitri-daštas* with Av. *dāšta-* finds no support in Iranian onomastics and looks quite suspicious given the rather restricted use of the root.

Lastly, MORGENSTIERNE (cf. TAVERNIER 2007: 485) suggested to see in the form *-dašta-* simply a variant of *dāta-* 'given, granted'. The idea is quite arbitrary and is directly contradicted by many dozens of attestations of the normal form Μιθραδάτης (Μιθριδάτης, Μιθροδάτης) 'Mitra-Granted' in Lydia and elsewhere in Anatolia and beyond (cf. SCHMITT 1978:418-455).[29] In sum, the reading of the name as *Mitridaštas* does not lead to any credible Iranian interpretation of the name.

In contrast, its reading as *Mitri-jaštas* suggests a rather obvious connection of the second element with the root *yaz-* 'worship, venerate, sacrifice'. The root, going back to PIE **Hi̯eh₂ĝ-*, is well represented practically in all Iranian languages (cf. CHEUNG 2007: *s.v. yaz-*) and is one of the central ritual terms of the Zoroastrian cult, as *inter alia* the names of important cultic Zoroastrian texts, *Yasna* and *Yašt*, and the generic term for 'deity', *yazata* (~ 'deserving worship') imply. The root, including form *yašta-*, is well represented in the ancient Iranian onomastics and, although *precisely* this name is not attested, close structural parallels of *Mitri-jaštas* are found elsewhere. Its closest counterpart is the East-Iranian (Median) name **Miθra-yazna-* 'Mithra-Worship' (TAVERNIER 2007:253), which is structurally parallel to OPers. **Mazda-yašna-* and East-Iranian **Mazda-yazna-* 'Mazda-Worship' attested much more abundantly (*ibid.*: 244-245, cf. SCHMITT 1978: 406 and 413). It is noteworthy that **Miθra-yazna-* has also an Indian counterpart *Mitra-yajña-*. Two other close names are found in the Middle Iranian period: **Miθra-yazata-* (*Myhr-ʿzd* (/Mihr-īzad/)) 'Mithra-Worshipworthy' attested in Central Asia (see COLDITZ 2018:388, cf. LURJE 2010:260) and its longer variant **Miθra-yazata-xᵛāsta-* (*Myhr-yzd-ẖw?sty* (/Mihr-yazd-xvāst/) 'Mithra-Worshipworthy-Desired' attested on a Sassanid seal (see GIGNOUX 1986:133). Further compound names based

[29] For Iranian names in Sardis (and Lydia) cf. a recent discussion by BOUZID-ADLER (2014).

on the root attested in the Old-Persian period are **Baga-yāza-* 'God-Worshiping' (TAVERNIER 2007:144), **Kāma-yaza-* 'Desire-Worshiping' (*ibid.*: 224), **Vaça-yāza-* 'Word-Worshiping' (*ibid.*:333) and **Yašna-manga-* 'Worship-Glorify' (*ibid.*: 364). The East-Iranian form *yaz-* is represented also in **Ā-yaza-* 'Very-Worshiping' (*ibid.*:130) and in two suffixal derivatives **Yaza-ka-* (*ibid.*: 366) and **Yašna-ka-* 'Worshiper' (*ibid.*:364), while OPers. form of the root *yad-* is attested in **Yad-auš-iya-* 'Worship-Burn(ing)' (*ibid.*:363). Lastly, **Yašta-* and its suffixal extension **Yašt-āta-* represent in all probability a form based on the part.perf.pass. and mean 'Worshiped' (*ibid.*:364-365). Needless to say, the root in attested in dozens of other Iranian names documented for later periods.

There are three possibilities of exact interpretation of the second element of *Mitri-jaštas*. The most straightforward would be probably to see in it the form of part.perf.pass. *yašta-* and accordingly interpret the name as 'Mithra-Worshiped'. The problem with this interpretation is that the semantics of *yaz-* 'worship' implies an action directed *towards* a deity not *vice versa*, so that the passive participle form looks somewhat out of place. From a semantic point of view a more plausible interpretation would be to see in *-jaštas* a Lydian adoption of the Iranian *nomen agentis yaštar* (nom.sg. *yaštā*), which produces plausible 'Mitra-Worshipper'.[30] A similar interpretation was envisaged by MAYRHOFER (1973:251) for PN **Yašta-*. Alternatively, one may see in *-jašta-* a reflex of the abstract noun *yaštay-* 'worship, worshiping' and interpret the name as 'Mithra-Worship', which finds a close parallel in **Miθra-yazna-*. However it is, the re-interpretation of ⱄ as <j> produces a good Iranian name supported by many parallels in common Iranian onomastics. The case is quite important, as it gives ⱄ in the intervocalic position, which excludes any contact phonetic phenomena.

4.2. The next relevant case is *Tiwdas*, which is attested in four inscriptions of the Lydian corpus[31] and represents thus a fairly common Lydian name. The comparison with Greek mythological name Τεύταμος initially considered as a possibility by GUSMANI (1964: *s.v. tivdali-*) is phonetically rather inexact and, given that the Greek name does not demonstrate any clear associations with Lydia or Asia Minor (cf. also ZGUSTA 1964:511), does not strike as especially appropriate. This idea has been later dismissed by GUSMANI himself (1980: *s.v.*). As an alternative possibility GUSMANI (1964: *s.v. tivdali-*) suggested a comparison with Luwian composite names with *Tiwata-*, the name of the Luwian Sun-God (= *Tiwad-*), in the first part (e.g., *Tiwata-para*). This inter-

[30] An interpretation suggested to me by Alexander LUBOTSKY.

[31] LW 5:1: *ess wãnas Atališ Tiwdališ* ..., LW 16:1: [*ess w*]*ãnas Tiwdališ* […], LW 25:3: […*K*]*aroliš Tiwd*[*ališ*...]), LW 26:2: [*Ti*]*wdališ Atalid*. The word *tiw* attested on a marble block (LW 39) possibly represents, contra GUSMANI (1980: *s.v. tiv*), a deity name rather than an abbreviation of *Tiwdas* (cf. below).

pretation of *Tiwdas* was generally accepted and the case came to be regarded as one of the example of Luwian influence on Lydian (cf. YAKUBOVICH 2010: 97 or MELCHERT 2013:36). From a phonetic point of view, the comparison of *Tiwdas* with *Tiwad-* might seem to be rather exact. However, on a closer glance the case is highly controversial. First, in the Luwian onomastic tradition itself, the name of the Sun-God is attested *only* in two-part compound names, as *Tiwada-Zida/i-* 'Sun-God-Man' or *Aza-Tiwada-* 'Love-Sun-God', or in the combination with a possessive suffix *-mma/i-*, i.e. *Tiwadammi-* 'Sun-God-Blessed' (cf. LAROCHE 1966:186-187 and MELCHERT 2013:36 and 39).[32] *Tiwdas* is, however, obviously neither a compound name nor even a suffixal derivative, thus seemingly *completely* coinciding with the name of the Sun-God itself. Borrowing a deity name from the neighboring tradition to make out of it an ordinary personal name is clearly a rather incredible procedure. Second, as was noted already by MELCHERT (2013:36 and 49), the name of the Sun-God *Tiwad-* is not attested in either Rough Cilicia, Pisidia, Lycia or Caria whatsoever, neither in personal names nor as a substantive. One can thus identify no obvious source from which the Lydians might theoretically borrow such a name. These two factors in combination decidedly discredit the Luwian derivation of the name. On the other hand, reading the name as *Tiwdas*, one finds no likely counterparts of the name in the more or less *contemporary* Greek inscriptions from either Lydia or Anatolia in general.

The re-interpretation of the name as *Tiwjas* changes the perspective, and now one can suggest both a plausible equivalent of the name in contemporary sources and a plausible etymological explanation. The name finds a rather exact phonetic correspondence in Τίβιος (Τίβειος), which may reflect either /Tiv̯a-/ or /Tiβ̯a-/, both of which would be natural results of fortition of *u̯* before *i̯*. The name is well attested in Greek epigraphical sources mainly from Central Anatolia (Phrygia and Galatia), but is also found in Tieion (the border region between Bithynia and Paphlagonia), in Iasos in Caria and in the Pisidian Antiochia (see LGPN VA-C: s.v., cf. ZGUSTA (1964: §1556, cf. also §428 [Θίμβις]). Strabo (7.3.12, cf. 12.3.25) mentions the name as a typical Paphlagonian name (cf. AVRAM 2018: 65, fn. 5 and AVRAM forthcoming[33]), and the name was well known in the Greek world as a slave name, being found both in epigraphical sources from Greece (Attica, Chios, Thessaly) and in some literary works, such as Theophrastus' *Characters* (9.3) or Menander's

[32] The correspondence of the form *Tiwdališ* (gen.adj.) with HLuw. *tiwadali-* pointed out by NEUMANN (cf. GUSMANI 1980: *s.v. tivda-*) is quite obviously accidental, as the latter Luwian word represents the name of a measure for barley and wine (cf., e.g. HAWKINS 2000:477).

[33] I use the opportunity to thank Alexandru AVRAM for sending me the manuscript of his article before its publication.

Perinthia and *Heros* (cf. LEWIS 2011:100, 102, 113).[34] In the form Τιβης/ Τεβης and Τίβειος, the name was known also on the northern and western coasts of the Black Sea (cf. TOKHTASEV 2007:182-183 and AVRAM forthcoming), being brought there most probably form the northern parts of Anatolia, Paphlagonia or Bithynia.[35]

It is quite clear that the name was *especially* popular in the northern parts of Anatolia and first of all in Paphlagonia, but there are doubts that its common definition as 'Paphlagonian' correctly reflects ethnolinguistic realities. Against such a definition speaks as its distribution in epigraphical sources in Anatolia, which makes clear that in Bithynia and Phrygia the name was as familiar as in Paphlagonia, as etymological considerations. Stephan of Byzantium mentions Τίβειον as a place (τόπος) in Phrygia and Greek proverbs know Τιβία as another name for the 'whole Phrygia'; Galen was aware of an ethnic Τίβιοι which he associates with Phrygians (cf. ZGUSTA 1964: §1556-2). It is furthermore quite likely that the name of the city Τιεῖον (= Τίος) located on the northern coast of Anatolia on the border between Bithynia and Paphlagonia represents an alternative form of Τίβειον with the loss of *u̯* in the intervocalic position instead of its development to **v/β* = <β>. Stephan of Byzantium (*s.v.* Τίος) cites the opinion of historian Demosthenes of Bithynia (FGrH 699 F 9) that the city was named in honor of Zeus (ἐκ τοῦ τιμᾶν τὸν Δία Τίον προσαγορεῦσαι). This etymology finds support in linguistic evidence. The name of Phrygian Zeus is attested in Neo-Phrygian inscriptions in the forms Τιαν (acc.sg.), Τιος (gen.sg.) and Τιη/Τιε/Τι (dat.sg.) (cf. LUBOTSKY 2004). The evidence of the Old-Phrygian inscriptions, which attest root *tiv-* (cf. *ibid.*: 229) in combination with the Greek evidence on Ζεύς < PIE **di̯ḗu̯s* suggests that the original form of the name was most probably **Tiu̯s* and consequently the loss of approximant *u̯* is a relatively late pheno-

[34] On the slave names cf. VLASSOPOULOS (2010:117, 123, 128) and on the name in general ROBERT (1963:530-532).

[35] Besides that, a feminine form of the name may be attested in a Phrygian graffito from Gordion (G-183) read as *Tiveia Imeneia*; this is, however, not the only possible and probably not the likeliest interpretation, see below, fn. 36. The presence of the name in Lycia in the form *Tibe-* or *Tibeija-* which may be suggested by TL 100 is very uncertain. The inscription, as given by KALINKA in TAM I:74, reads *ebe xupa metibeija* (no interpunction whatever), which allegedly represents the complete text. The separation of *ebe xupa* 'this tomb(chamber)' is clear; in the sequence *metibeija* one usually separates *me* and *tibeja*, analyzing the latter either as a full name (cf. NEUMANN 2007: *s.v. Tibeija*) or as an adjective in *-ija-* from *Tibe-* agreed with *xupa* 'Tibean tomb' (cf. MELCHERT 2004c: *s.v. Tibe-*). The problem is, however, that no comparable formulation is found in other inscriptions; instead, in similar formulae *xupa*/*xupã* is *never* followed simply by *me*, but usually either by *me=ti* or *m=ẽ-ti* (conjunction particle *me* (+ enclitic acc.sg.comm.) + pron. rel.) or, somewhat rarer, by *m=ene* (conjunction particle *me* + enclitic acc.sg.comm.). The pattern strongly pleads for separation after *xupa* in TL 100 of *me=ti*. The sequence *-beija-* makes little sense and there is a strong suspicion that the inscription is given by Kalinka in an incomplete and/or corrupted form.

menon in Phrygian. Now, the personal names Τίβιος (Τίβειος) can be naturally interpreted, analogically to the toponyms Τίβειον/Τιεῖον (and Τιβία), as derivatives with adjectival suffix *-i̯o- from the name of *Tiu̯s, which was the name of Zeus apparently not only in Phrygia, but also in Bithynia and Paphlagonia.[36]

Thus, Lydian *Tiwjas* can be interpreted as a Phrygian or a north-Anatolian name in Lydia. This is in no way surprising, given intensive cultural contact between Lydia and Phrygia and some other correspondences found in both onomastic traditions, as, e.g., *Ates, Manes, Alus* etc., cf. also *Sakarja* discussed below.[37] Even a connection with Bithynia would not look out of place, given a surprising but undeniable correspondence between PN *Šrkastus* attested in LW 11:7 and LW 103 and Συργαστης/Συργαστος, Συργαστειος or Συργαστωρ, the epithet of Zeus known first of all in Bithynia, but attested also in Phrygian inscriptions and sporadically in the Balkan region (cf. GUSMANI 1964: s.v. and now a detailed discussion in AVRAM 2016:72-74 with further refs.).[38] Quite curiously, the Lydian text LW 39 on a marble building block attests the form *tiw*. This may well refer to the Phrygian Zeus (rather than a person *Tiwjas*), which finds certain support in the fact that another similar block bears what might be a monogram of the name of *Artimus* (LW 37, cf. BUCKLER 1924:56), which is, however is difficult to prove in the absence of context. If right, this would imply that Zeus was known in Lydia both under his native name *Lews*/*Lefs* and under its Phrygian counterpart **Tiws*.

Lastly, one should mention that the name *Tiwjas* may be attested in the Greek texts from Lydia also in a different form than that known in other parts of Anatolia. The name Τυιος is found twice in the so-called Sacrilege

[36] It is noteworthy that the form *tiveia* attested in G-183 may be interpreted either as a PN or simply as an adjective (fem.sg. or neutr.pl.) 'of *Tiu̯s'. Ironically, the second word in the combination *imeneia* also allows for two interpretations: *iman* is attested both as a substantive, usually interpreted as 'monument', and as a PN (cf. VINE 2010 with further refs.). In fact, this double meaning of *iman* speaks against the interpretation of the substantive as 'monument': 'Mr. Monument' would be quite a bizarre name for a person. A much more likely interpretation would be 'dedication' or 'gift'. Consequently, *tiveia imeneia* could mean something like 'dedicatory stuff for *Tiu̯s*'. The fragmentary *tivi* in another graffito from Gordion (G-219) is likely a further dedication to **Tiu̯s* (dat.sg.).

[37] A detailed discussion of the question of the Phrygian-Lydian correspondences will be offered in a special paper, a short version of which I presented in a talk "Lydian Personal Names and the Question of Lydian Ethno-Linguistic Identity" at the International Symposium 'Archaeology and history of Lydia from the early Lydian period to late antiquity (8th century B.C.-6th century A.D.)' (Dokuz Eylül University, Izmir, 17-18 May 2017).

[38] The identification of Συργαστης as an 'old divinity with Hittite-Luwian roots' adopted by AVRAM (2016:74) from Gusmani who connected it with Hittite *šarku-* is rather incredible, as it is based only on rather vague phonetic similarity and does not explain either the deviant vocalism of the first syllable or morphology of the name or its striking association with northwestern Anatolia and even the Balkan area. The name clearly represents an element of the Balkan origin brought to Anatolia with the Phrygian and later Bithynian (Thracian) migrations.

Inscription from Ephesos (I. Ephesos 2 = SEG XXXVI 1011), which, with its dozens of Lydian names, bears important evidence on the naming practices in the lower strata of the Sardian population, and in several other inscriptions from Lydia (cf. ZGUSTA 1964: §1613). The comparable frequency pattern of Τυιος and *Tiwjas* suggests that it can be the same name, which would also present a logical explanation why Τίβιος (Τίβειος) is not directly attested in Lydia. The form Τυιος may reflect a phonetic development /Tiu̯i̯a-/ > /Tüi̯a-/ which possibly went through the stage /Ti̯ui̯a/ resulting from the exchange in syllabicity in the group *iu̯* > *i̯u*.[39]

4.3. A case in many respects similar to *Tiwjas* represents the name read hitherto as *Sakardas* which is attested in LW 54:2 (a funerary stele from Magnesia ad Sipylum). The second attestation of the name is probably found in the graffito on a small clay vessel (LW 32) which can be read as […]*x Aluliš Ṣ*[*a*]*kardal*[*iš*] '[This is dedication] of *Alus*, son of *Sakardas*'.[40] GUSMANI (1980: *s.v.* with further ref.) tried to interpret *Sakardas* as an Iranian name seeing in its first part the ethnic name of the Iranian nomadic people *Saka-* (Scythians) and in the second part *r̥ta-*, '(divine) justice, truth, right order'. No parallels for such an odd name, combining one of the most important religious terms with an ethnic name which had in the west-Iranian thought arguably not the most righteous associations, are known in the Iranian onomastics and this interpretation was rightly rejected by Schmitt (1982: 33; for an overview of the Old-Iranian onomastic evidence on *r̥ta-* cf. TAVERNIER 2007:542-543). It is noteworthy that both the son of *Sakardas* in LW 54 (i.e. the owner of the stele himself) and the son of his namesake in LW 32 bear common Lydian names, *Atrastas* and *Alus*. In the contemporary onomastics of western Anatolia attested in Greek transmission one finds nothing comparable to *Sakardas*; the name has clearly nothing to do with Σακέρδως, Σακέρδων or Σακερδωτιανός attested in Anatolia in the Imperial Period (cf. LGPN VA and VB: *s.v.v.*), as these names represent adoption of Lat. *sacerdōs* 'priest' as a personal name.

Re-reading of the name as *Sakarjas* produces a good Anatolian name attested in dozens of different sources which has, in addition, quite transparent Anatolian etymological associations. The name proves to exactly correspond to Σαγάριος found in Greek inscriptions from Lydia and widely attested, either in this form or as Σαγγάριος, Σάγαρις, Σαγαρεύς or feminine Σαγαρία, in western, north-western, central and northern Anatolia (Bithynia,

[39]A similar phonetic process may have a parallel in another case: as I argued elsewhere (see ORESHKO, forthcoming a, §8) the common Lydian name *Pakiwas* may correspond to Παχτύης (Παγτύης) also quite abundantly attested in Greek transmission, which probably reflects fortition of *i̯* in the cluster *-ki̯-* (> *-kt-*) following the exchange in syllabicity in the group *-iw-* (/iu̯/) to /i̯u/.

[40] Thus contra the reading […]*raluliš kardal* in BUCKLER (1924: 54) and GUSMANI (1964: 263).

Phrygia, Galatia and Pontos) (see LGPN VA and VC: s.v.v., cf. ROBERT 1963:536-537). The southern border of the name range reached Cappadocia (Ariaramneia and Mazaka) and Pisidia (Apollonia), but, strikingly, no attestations of the name are found in either Caria or on the south-Anatolian coast (cf. LGPN VB). It is noteworthy that the name Σαγγάριος appears in one of the bilingual Greek-Neo-Phrygian inscriptions (nr. 56 = MAMA VII 492). Furthermore, the name, just as Τίβιος, was well known in the Mediterranean as a slave name, appearing as such also in literary works – e.g. Σαγγάριος in Menander's *Heros* or *Sangario* in Plautus' *Trinummus* (cf. LAMBERTZ 1907: 15 and LEWIS 2011:101) – and is attested also on the northern coast of the Black Sea (cf. LGPN I-IV: s.v. and ROBERT 1963:536-537). Lastly, one may note that quite probably the same name is attested on one of the bullas form Daskyleion (DS 18) with the Aramaic epigraph *l-Sgry*.[41]

As for semantics of the name, it is usually connected with the name of the river Σαγγάριος (Σάγαρις, Σάγγαρις) in Phrygia with which it demonstrates an obvious formal correspondence (cf. ZGUSTA 1964:11 or TISCHLER 1977:129). This is indeed very likely, especially taking into consideration that the personal names derived from potamonyms – or, more exactly, theophoric names based on the names of the respective river-deities – were very popular among the Greeks in the western parts of Anatolia (cf. THONEMANN 2006), which apparently reflects the local Anatolian tradition. Lydian *Sakarjas* represents thus a further example of a name with good north-west Anatolian connections. It is noteworthy that although *j* appears in *Sakarjas* in exactly the same phonetic environment as in *Sfarja-*, the palatal approximant was retained unchanged in the Greek transmission, which demonstrates that fortition *j* > *ð* was even in the position after a trill only a sporadical process in Lydian.

PART II. DEVELOPMENT OF PIE **d* IN LYDIAN

5.1. Above we could see that very different strands of evidence support the reading of the letter 𐤣 as <j>. The single piece of *synchronic* evidence suggesting something different (*Sfarja-* = Σάρδεις/*Sparda* etc.) can be naturally

[41] Cf. LEMAIRE (2001:33). An alternative possibility of reading the name as *Sgdy* 'Sogdian' suggested by RÖLLIG (in KAPTAN 2002:199-200) and supported by SCHMITT (2005: 333-335) seems to me less likely. In contrast with Σαγάριος and other forms *widely* found in the region, **Sugdiya-* is actually *not* attested as a personal name in an undoubtedly Persian context; only form *Sugda* is found as a personal name in Persepolis (cf. TAVERNIER 2007:63). The form Σόγδιος adduced by SCHMITT (*ibid.*) as the name of a son of Artaxerxes I allegedly transmitted in Paus. 6.5.7 is only an emendation and as such has no priority over the Σογδιανός/Σεκυ(ν)διανός actually attested elsewhere. The name may well be connected in a way with Sogdiana, but is rather not the actual name – since 'Sogdian' or the like would be a rather odd name for a Persian prince – but only an 'ethnic nickname' which the Greeks learned for some reason instead of his actual name.

explained as a *special* case reflecting fortition of *j* in the cluster *-rj-* > *-rð-* (> *-rd-*). However, the new reading of 𐤣 – which is adopted for the rest of the present paper – faces another problem: a century of research proceeding from the reading of 𐤣 as *d* or *ð* produced a body of *etymological* evidence claiming that the sound rendered by this Lydian letter directly corresponds to PIE **d* or **d*^{h} (and PA **d*). MELCHERT (1994b:338) lists *eight* cases potentially supporting this claim. Clearly, re-interpretation of 𐤣 as <j> calls for revision of each of them and in doing so one faces basically two possibilities: **(1)** the proposed etymology may be simply *false* being produced only by the inertia of the received reading of the letter or **(2)** the etymology may be *correct* which would imply that PIE **d* (or **d*^{h}) at least in some cases developed in Lydian to *j̰*. Such a process, unlike the highly infrequent development *j̰* > *ð*, represents a rather common phenomenon well attested cross-linguistically and in no way undermines the reading of the letter as <j>. In phonetic terms, such a process may be defined as a *lenition* of a dental, more precisely its extensive *spirantization* resulting, usually through the phase of *ð*, in an approximant, which may frequently alternate with zero or, at a later stage, completely disappear (for definitions and an overview of lenition processes see, e.g., KIRCHNER 2004 with further refs.). Within the Indo-European family, similar developments are historically well attested for instance for the Romance languages, cf., e.g. Old Occitan *paire* /paj̰re-/ 'father' < Lat. *patrem* (vs. Fr. *père*) or Piedmontese *sèja* 'bristle' < Lat. *saeta* (vs. Fr. *soie*, but OFr. still has *seie*); for the Iranian languages, cf. MPers./NPers. *pay* 'foot' < PIE **pedo-*, the intermediary stage seen in Av. *paδa-* /paða-/ or for Armenian, cf., e.g., *bay* 'word' < PIE **b*^{h}*h*$_2$*ti-*.[42] On a synchronic level, a change *d* > *j* is attested for instance in Dutch, cf., e.g. *goede* 'good' or *raden* 'guess, advise' which may be realized either as /ɣudə/ and /ra:də(n)/ when the speaker follows the literary norm or, in the spoken language, as /ɣuj̰ə/ or /ra:j̰ə(n)/. As the change *d* > *j̰* represents a type of lenition, such a development is *a priori* quite thinkable for an Anatolian language (or: a language in the Anatolian linguistic milieu), as there is abundant evidence for the lenition in Anatolian which resulted, *inter alia*, in the binary opposition *fortis* vs. *lenis* already addressed above.

5.2. One may start with what appears to be the least ambiguous case of the Lydian development **d* > *j̰* found in the Lydian word for 'father' read earlier as *taada-* and now as *taaja-*. Although the word is not attested in a bilingual context, its meaning seems to be established with reasonable certainty by the context of LW 10:20 which features the combination *ẽna=k taaja=k* which, in view of similar combinations attested in Luwian (e.g., *ānniyan tātīyan* 'of

[42] For Armenian cf. a recent discussion by KIM (2016) and for further examples cf. KÜMMEL (2007: 58-65) [lenition of dentals] and (83-88) [the change fricative > approximant].

mother and of father' in KUB 35.43 II 5) hardly can mean anything other than 'mother and father'. In the old reading *taada-*, the word rather exactly corresponded to the word for 'father' found in Luwic languages, cf. Luw. *tāta*/*i-* and Lyc. *tedi-* (with '*i*-mutation'); in contrast, Hittite has *atta-*. Certainly, the re-reading of the word as *taaja-* may look a bit strange when taken against the Anatolian background, but in a more general linguistic perspective the form is no more bizarre than for instance Arm. *hayr* or Portuguese *pay* both going back to PIE **ph₂-tḗr*. Both *tāda-* and *atta-*, as well as many other Anatolian kinship terms, represent child-words and similar words are found also in other languages, as, for instance, Sanskrit (*tata-*), Slavic (e.g., Polish *tata*), English (*dad*) or Filipino (*tatay*), to give only a few examples. Curiously, the forms comparable with *taaja-* are also attested as kinship terms (not necessarily for 'father'), cf., e.g. Bulgarian and Serbo-Croatian *tajko*/*tajka* 'daddy' (in which *-ko*/*-ka* is a diminutive suffix), Filipino *tay* 'daddy' (along with *tatay* and *itay*) or *tāyā* 'father's elder brother' in Hindi and Urdu. In view of this evidence one may wonder if Lydian *taaja-* is necessarily a direct cognate of the Luwic words and should be traced back to **tāda-* or it is simply an alternative variant of the child-word. Although one cannot completely exclude the latter alternative, the first variant is preferable both in the Anatolian and in more general comparative perspective. The kinship terms based on **taḭ̯-* are much rarer and in many cases are arguably secondary forms going back to **tata-*/*tada-*. Thus, South-Slavic forms *tajko*/*tajka* obviously represents simplification of *tatko* which is diminutive form of *tate* (as *majka*/*majko* goes back to *mamko* < *mamo*) and Philipino *tay* is a shortening of *tatay*. The case of *taaja-* establishes thus with fair certainty that the old **d* developed in Lydian to *i̯* in the weak intervocalic position.

In contrast, two other cases of *root* etymologies adduced by MELCHERT (1994b:338) as evidence for retention of the voiced dental in Lydian, *šadmẽ-* (!) 'relief' < PA **sed-mǹ̥-* and (*fa-*)*do-l* 'put in' (or sim.) < PA **duwV-*, are irrelevant for the problem. As already discussed above, a far likelier etymological interpretation of *šajmẽ-* would be **sh₁oi̯-mén-* impression' (< **sh₁oi̯-* 'seal, impress') and *-j-* reflects simply the original non-syllabic *i*. The connection of the putative root **do-* with Luwian *tuwa-* 'put' is quite impossible on several grounds. In the word-initial position the dental would be normally reflected in Lydian either as <t> or as <l> (cf. above); in the position before **u* and **i* it *might* have developed to affricate <c> and a likelier – even if still by far not proven – reflex of PA **duwV-* 'put' in Lydian may be **cuwe-* (attested in *ja-cuwe-rs=t* in LW 23:1), as assumed by MELCHERT himself (1992:35). It is not excluded that the root of form *fa-jo-l* (LW 3:2) is **o-*, which may represent

a variant of *ow-*/*of-* (cf. GUSMANI 1964: *s.v. o-*),[43] and *-j-* is merely a connecting glide between the preverb *fa-* and the root.

5.3.1. One of the most important cases of the claimed reflex of PIE **d* as <d> in Lydian is the verbal ending of the 3rd person singular/plural *-d*. The common assumption is that this ending represents a *phonetic variant* of the ending *-t* which is supposedly attested, somewhat less frequently than *-d*, in the same grammatical function and both endings somehow go back to the PIE primary ending **-ti* (for a general overview see GÉRARD 2005:99-101). GUSMANI in his rather cursory discussion of the issue (1965:207-210) tended to see in *-d* a regular reflex of PIE **-ti* and in *-t* its *synchronic* variant conditioned by certain phonetic ambience, for example, by the preceding nasal (cf. *wcpaqẽnt*). OETTINGER (1978:84-85) suggested to see a regular reflex of PIE **-t* rather in ending *-t* and explained *-d* as its lenited variant caused by the accentual conditions established earlier by EICHNER for other Anatolian languages (lenition between two unaccented short syllables or after a long accented syllable). MELCHERT (1992) undertook a systematic attempt to underpin this explanation, basing both on EICHNER's lenition rules and observations on the Lydian accent (EICHNER 1986a and 1986b). Re-reading of the letter *λ* as <j> rather drastically changes the picture: now instead of two more or less close dental endings the Lydian verbs in 3.pres.sg./pl. prove to show two rather distinct final elements *-t* and *-j*. The question is if it is still possible – and really necessary – to derive both these endings from the PIE **-ti*.

A serious methodological problem of the previous discussions of the issue is the *excessive* reliance on the comparative method with the basic assumption that Lydian is just another Anatolian language and as such it *has* to comply with the rules established for other Anatolian languages (even if it refuses to do so). This is especially acutely felt in MELCHERT's treatment, in which *a priori* assumptions about Lydian in general and often *ad hoc* interpretations almost completely substitute the *synchronous* analysis of the given verbal forms in the context. The 'classical' Anatolian character of Lydian is, however, a fundamentally problematic assumption: the number of correspondences between Lydian and other Anatolian languages in roots and morphological elements are in fact *extremely* small and both phonetically and structurally Lydian arguably demonstrates a number of unique features, cf., e.g., the *complete* loss of laryngeals and the development of fricatives *f*/*v* and peculiarities of the nominal paradigm (gen.sg. in *-l* and dat.-loc.sg. in *-λ*) and especially the very peculiar verbal structure (e.g., strong tendency towards verbal composition with no less than ten different identifiable preverbs, form of the pret.3.sg./pl. in *-l*, forms in *-riš*/*-rs* etc.). No less seriously, the evidence

[43] On the other hand, one cannot exclude a connection of **o-* (and *ow-*/*of-*) with the root *u-* 'write' (cf. GUSMANI 1964: *s.v.*).

of both personal and divine onomastics sets the Lydians sharply apart from other Anatolian peoples suggesting that the former have a different ethnolinguistic background with only *some* Anatolian features.[44] It is quite possible – or even probable – that Lydian is in its origin not an Anatolian language, but an Indo-European language belonging to a different branch which appeared in Anatolia somewhat later than Hittite and Luwian and subsequently absorbed some Anatolian features; it is even not quite excluded that Lydian contains a substantial number of non-Indo-European elements, both in its structure and in the lexical stock. It is clearly impossible to revise here all the evidence concerning the alleged variation between the verbal endings *-t*/*-j*; below there will be presented only some observations on the *synchronous* situation with the Lydian verb without applying the Anatolian 'etymological glasses'.

5.3.2. MELCHERT (1992:33) gives 21 examples of forms ending in *-t*, as contrasted with 42 examples of the form in *-d* (= *-j*). As there can be no doubt that the latter is the *usual* ending of what can be conventionally termed presence-future of 3.sg./pl., the primary attention should be paid to the forms ending in *-t*. These forms are: *pitat, (kan)cat, ẽnšarptat, fẽtwintat, nirat(?); taqtulãt; ãnτẽt; cẽnit, šitẽnit; ẽtolt; fẽjavoλt, fišqãnt, inãnt, šawẽnt, wcpaqẽnt, (faj)int, factot, fawkufot, satrot, tatrot*[45]. Checking the forms in the contexts reveals that by far not all of them can be with any certainty identified as *present active* forms, which may suggest or require the derivation of the ending from PIE **-ti*. These are the following.

Present active meaning can be with certainty assumed for *fa-jint* which appears in the protasis of the 'cursing formula': *ak nã-qiš ẽmλ kãnaλ Kileλ puk ẽminav esav citalaj fa-jint* (LW 5:3-5) which may be tentatively interpreted as "And whoever (will) do(es)/put(s) … to my wife *Kile* or my children/ descendants". It is noteworthy that in a similar context in LW 23:9 and 24:7 a form in *-j* (*pita(a)j*) is used with *citollaj*. The form *int*, which represents apparently the same verb as *fa-jint* without the preverb *fa-* (cf. above), *may* be present-future too, but this interpretation is not the only possibility. The form appears in two almost identical clauses:

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[44] Cf. ORESHKO (forthcoming a). The question of the Lydian basic nominal lexicon and that of the Lydian verbal structure will be addressed in detail elsewhere.

[45] The case given by MELCHERT (1992:33) as *ẽndiplint* is excluded, as this reading is most probably false. Contra BUCKER (1924:51, cf. pl. XI) the identification of the last letter as <t> is highly dubious: it is quite impossible to discern on the photo any trace of the short horizontal bar on the top of the letter and, moreover, the vertical hasta is slightly tilted. The letter may well be <a>, which well corresponds with the other visible traces (cf. <a> in *Sfarja=k* almost immediately below the word in question). Also, the third letter in the word is likely <l> and not <j>, as the diagonal stroke begins, as far as one can see, at the top of the letter (cf. GUSMANI 1964:262). The form may thus be read as *ẽnliplinạ*[?].

qelλ=k puk mẽtlij puk pijẽv qi=k int (LW 24:10-11)

puk=in mẽtrij puk pijẽv qi=k int (LW 23:19-20)

Contra usual perception (cf. GUSMANI 1964: *s.v. bidẽ-*), the interpretation of *pijẽv qi=k int* as 'makes some *pijẽ-*' which should refer to some *harmful* action in addition to *mẽtrij* 'does harm (to)' is not the sole possibility. In fact, the interpretation of *pije-* as 'harm' (vel sim.) finds no support elsewhere. Instead, one may naturally interpret *pije-* as a deverbal derivative from root *pij-* 'give', i.e. 'gift/dedication'. Accordingly, the clause in LW 24 may be interpreted as '(who) will (do) harm either (to) the (sacral) property (*qela-*) or the dedication(s)/gift(s) which(ever) is/are deposited/made (in the temple)'.[46] The subordinate clause *qi=k int* proves to be practically indifferent in respect of tense and voice, and can mean either as 'which(ever) has/have been/are/ will be done' or as 'which one has made/makes/will make'. More importantly, the subject of the main and the subordinate clauses cannot be identical (one would hardly do harm to his own dedications), which implies that *int* is rather a *passive* form.

Two other examples of present active verbs in *-t* are also found in the protasis of a 'curse formula':

ak=aj qiš f-iš-qãn-t puk=as f-ẽjanoλ-t fa=(a)k=τ=aj kaprṭoki-j (LW 2-4)[47]
"Who breaks it/them, or ...-s, may he ... them."[48]

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[46] This interpretation of *pije-* implies that *qelλ* and *pijẽv* have the same grammatical form. The question is whether it is dative or accusative. Both interpretations are in theory possible. On the one hand, *qelλ* may be acc. sg. resulting from **qelv* < **qelav*. On the other hand, *pijẽv* can be dat.pl. form, parallel to *laqirišav* in LW 1:6 or *anlolav* in LW 4a:2 or LW 17:2; accordingly, **pije* can be interpreted as an umlaut form of **pija*, nom.acc.pl.neutr. The second option seems to be likelier on two accounts (besides avoiding the unverifiable assumption of a change **qelv* > *qelλ*): fist, the particle *=in* appearing in *puk=in mẽtrij* (LW 23:19) seems to grammatically correlate elsewhere with the presence in the clause of a noun in dat.-loc. (cf. *ak=t=in nã-qiš f-ẽn-šλip-ij ešvaẏ mλwẽnjaẏ ... puk wãnaλ ešλ* … (LW 2:4-5) and cf. below). Second, interpretation of *pijẽv* as 'gifts, dedications' much better agrees with the context of the clause.

[47] The reading *kaprdokid* proposed by BOSSERT (1936) and subsequently adopted by GUSMANI (cf. 1964:268) is probably false. An excellent photo of the inscription found on the internet page of the Sardis Excavation Project (**http://sardisexpedition.org/en/artifacts/latw-10**) shows that the space between <r> and <o> is perceptibly narrower than what one would expect for the rather broad form of <j> found in the inscription; on the other hand, in the top part of the letter one can rather clearly see the right part of horizontal hasta of <t>, but the diagonal stroke in the middle of the letter, which lead BOSSERT to its identification as <d>, seems to be merely an accidental damage. The reading *kapr-ṭok-ij* well agrees with the evidence found elsewhere in the corpus. The only two other verbs which contain the same suffix are *warb-tok-ij* (LW 6: 6, LW 7:6 and LW 8:12) and *kat-šar-lok-ij* (LW 17:3, LW 23:4 , 10 and LW 24:13); while variation <t> : <l> (phonetically apparently /d/ : /l/) is found elsewhere (cf. above), there are no clear cases of alternation <j> : <t> or <j> : <l>.

The roots can be defined as *qãn-*, which quite probably goes back to PIE **g$^{\mu h}$en-* 'strike', as usually assumed, and *ẽjanoλ-* respectively.[49]

The apodoses of the 'curse formulae' also contain several likely forms of the present-future. The first is *wc-paqẽnt* (LW 1:9, LW 3:5, LW 4b:5, LW 5:5) which denotes some action of the gods against the potential perpetrator. The root of the verb can be defined as *paqẽn-*: there is no preverb *-pa-* attested elsewhere and the hypothetical possibility that *-pa-* represent a phonetic variant of the prefix *fa-* is discredited by the fact that the respective clauses begin with *fa=(a)k-*, which likely already contains this element (i.e. to be analyzed as *fa-* + sentence initial *ak-*, cf. above, fn. 48). However, it is difficult to agree with MELCHERT's suggestion (1992:41, cf. 1994b:333) connecting the root with Hittite *pakušš-* 'pound, crash, grind'. There is nothing

[48] For the interpretation of *-aj* as 'them' see below. I follow SADYKOVA and YAKUBOVICH in connecting the appearance of *fak=* at the beginning of the particle chain with the optative/jussive mood of the clause (cf. "The Lydian Particle *fak* in Curse Formulae and Elsewhere" presented at the conference 'Beyond All Boundaries: Anatolia in the 1st Millennium BC", Ascona, 17-22 June 2018). However, I'm skeptical about the existence of a 'particle *fak-*'. In my opinion, a likelier analysis would be *fa=(a)k*, i.e. preverb *fa-* + connective *ak-*, as the appearance of *fa=(a)k* neatly correlates with the absence of preverb *fa-* in the verbal forms (as stated already in GUSMANI 1964: s.v. *fak(-)*) – which is otherwise almost indispensable element of a verbal form. The clearest evidence supporting this analysis is found in the passage LW 3:3-4: *qiš qišrej fa=(a)k=as ši-law-aj fa=t nij ẽn-šλipij ak=mλ Lews šarẽtas*. Even if the exact meaning of the verbal forms is not quite clear, there is no doubt that the passage represent a *positive* formula, in which *qiš qišrej* is protasis (~ 'who does something good') and the rest of the passage contains three parts of a positive apodosis. The second clause of the apodosis does not feature *fa=(a)k*, but only *fa=t* (which likely comes from **fa=it*), which proves that it is only *tmesis* and *fronting* of preverb *fa-* is the feature signalizing optative/ jussive sense of the clause, while *-ak-* is a secondary element. No less importantly, the third clause does not contain either *fa=(a)k* or *fa=*, although it clearly means 'May Zeus be *protector* (or the like) for him'. It is noteworthy that this sentence has a negative counterpart in line 5 of the inscription: *fa=(a)k=mλ Lews wc-paqẽn-t* 'May Zeus chase him!' (for the interpretation of *wc-paqẽn-t* cf. below). The absence of *fa=* in *ak=mλ lews šarẽtas* may be explained by the fact that the clause contains no *verbal* form, which once again confirms the identity of *fa=* in *fa=(a)k* with *preverb fa-*. It is noteworthy that these observations completely discredit the interpretation of *kapr-ṭok-ij* as 'steal' proposed by MELCHERT and elaborated by OETTINGER (1995:45-46), while its interpretation as 'pay' (GUSMANI 1994: *s.v.*) remains a plausible, even if not the sole alternative.

[49] The root *ẽjanoλ-* looks phonetically quite odd. The appearance of nasal *-ẽ-* just after *f(a)-* makes one think about preverbs *ẽt-* or *ẽn-* which appear in this position, cf., e.g. *f-ẽn-šλip-ij* passim or *f-ẽt-wint-at* in LW 12:4 or *f-ẽ(t)-tamv-ijv* in LW 23:18. It is likely that the verb contains one of these preverbs, even if there is no independent evidence for a root **anoλ-*. The simplest explanation would be probably an assumption of a slip on the part of the scribe who wrote <j> instead of <n> or <t>. However, one cannot exclude that we are dealing with a real form and *-ẽj-* represents a phonetic realization of either *-ẽn-* or *-ẽt-* before the root with a vocalic onset (**anoλ-*). It would be not impossible to see in *-ẽj-* a result of lenition of *-ẽt-*. Given the fact that the text LW 54 comes from the region of Magnesia at Sipylos, this might be a dialectal feature. This explanation seems to be supported by another strange spelling found in the text, *qi=g* instead of the expected *qi=k*, which may speak for the lenition *k* > *g* in the word-final position.

in the Hittite root which requires the reconstruction of the original labiovelar and the difference in the final parts is quite difficult to explain; moreover, *pakušš-* appears to be a rather technical term denoting specifically the action with grain (cf. CHD P: s.v. and KLOEKHORST 2008: *s.v.*). Instead one may suggest to connect the verb *paqẽn-* with PIE root *$b^heg^{\underline{u}}$- 'flee, run' attested in Greek (φέβομαι and φοβέω/φοβέομαι) and Balto-Slavic (OCS *běgati*/*běžati*, Lith. *bėgti* etc.). As already noted above (fn. 3), there is no strong evidence for the development of PIE *$g^{\underline{u}} > \underline{u}$ in Lydian, and given the preservation of its voiceless counterpart $k^{\underline{u}}$, the simplest assumption would be that *$g^{\underline{u}}$ is preserved as well, being rendered by the same letter <q> in accordance with the general principle (cf. above). If right, *paqẽn-* should represent a causative formation semantically comparable with Greek φοβέω 'put to flight, terrify'. This analysis may imply that the suffix *-ẽn-* attested possibly also in *sfẽn-* and *šawẽn-* (for which see below) may have a causative function; however, it is not excluded that the root **paq-* is already causative going back to the *o*-grade of the root (*$b^hog^{\underline{u}}$-) and the function of the suffix is more subtle. It is noteworthy that Lycian verb *qãñ-*/*qanuwe-* (and iterative *qas-*) used in the identical curse formulae contexts may well represent an exact semantical counterpart of the Lyd. *paqẽn-* being a causative derivative from PA *h_2uh_1- 'run' (cf. Hitt. *ḫuwai-*/*ḫui-* 'run' with caus. *ḫu(i)nu-* and Luw. *ḫui(ya)-*/*ḫu(i)ḫuya-* 'run').[50]

The next form, *šawẽnt*, is attested in two almost identical clauses in the negative apodosis of a 'curse formula':

Artimuλ=k=in ẽt-weršn šaroka=k ni-kumẽ-k šawẽnt ni=k piš ni=k pil sfẽniš
(LW 24:14-16) "And with/for *Artimus* neither he nor his *sfẽniš* (will be)
(n)ever *šawẽnt* (in respect of) either *favour*(?) or protection",

which finds a close parallel in LW 23:11-13[51]. The spelling of the form *šawẽnt* with *-n-* (not **šawẽt*) again defines a nasal type of the stem *šawẽn-* (cf. MELCHERT 1992: 40-41). It is quite probable that the stem is a derivative of the root *šaw-* attested elsewhere, and its suffix is identical with that seen in *paqẽn-*. Another possible example of this suffix may be found in the verb *fakan-sfẽn-al* (LW 80: 11) and the noun *sfẽni-* which are likely go back to PIE *$s\underline{u}e$- 'self, own'. In the latter case it is, however, not quite clear whether the suffix *-ẽn-* is a verbal or a nominal suffix. A less certain example of a formation with the suffix *-ẽn-* is verb *cẽn-* which possibly means 'dedicate' and then may be connected with *ca-* having a close meaning (cf. GUSMANI 1964:

[50] For the analysis (contra traditional connection with PIE *$g^{\underline{u}h}en$-'strike') see ORESHKO (forthcoming b, §7).
[51] (*Qδjãn=k Artimu=k …*) *ẽt-wers=k=in šaroka=k ešvav ciwav ni-kumẽ-k šawẽnt ni=k piš ni=k piliš arlylliš.*

s.v.). Thus, whatever the exact semantics of the underlying root *šaw-* is,[52] the case of *šawẽn-* represent once again a derivative verb in *-n-*.

On more comparable verbal stem is attested in the form *inãnt* appearing at the very end of LW 22. It also probably represents present-future, given the form *fa-kat-wãmi-j* in the previous line.[53] Its root *inãn-* may well be a derivative of *in-* with the suffix *-ãn-* (cf. GUSMANI 1964: s.v.), but it is impossible to prove this given the obscure context. It noteworthy that the form *inãnijv* in LW 10:19 is apparently connected with *inãnt* and is possibly 1.pres.sg. As two other parallel formations with the suffix *-ãn-* seen in *iš-qaš-ãn-wv* and *qλast-ãn-u* imply with high probability that the suffix ends indeed in a nasal, one should identify the ending as *-ijv* and not simply *-v*. As such forms as *ow-v* (LW 23:8) suggest that the ending of the 1.pres.sg. may be simply *-v* one may identify in *-ij-* a further suffix, possibly connected with PIE factitive suffix **-i̯e/o-* (note that the form *pijv* (LW 24:6) might well reflect **pij-ijv*).

The form *ẽtolt* in LW 14:5 also *possibly* represents 3.pres.sg. although its reading should be in any case corrected. The form always presented some difficulties, as the root **-ol-* is not attested elsewhere (cf. GUSMANI 1964: *s.v. ẽtolt*). Examination of the photo of the inscription (cf. BUCKLER 1924: pl. VI) reveals that the middle part of the letter is obliterated by a crack and the upper part of the letter is more rounded than it is usual for <l>. In all probability the letter is <w> with the lower oblique stroke lost in the crack. The reading *ẽt-o̯-t* allows one to identify the root as *ow-*/*of-*, which is attested elsewhere in *ow-v* (LW 23:8), *fa-ow* (LW 24:2 and 18) and derivative noun *kat-of-n* (LW 11:11) and likely means something like 'announce' or 'decree' (cf. GUSMANI 1964: *s.v.*).[54] The tense and mood of the form cannot be concluded with any certainty from the context, but 3.pres.sg. is quite possible.

Lastly, for two other forms the interpretation as 3.pres.sg.(/pl) is possible, even if not completely ascertained due to difficult or fragmentary context. The form *cat* is attested in the clause:

uwej=m=as warejtaλ sfatos kot=as cat (*qej=k=τ=aj* ...) (LW 11:5-6)

and its prefixed variant *kan-cat* in a structurally rather similar clause:

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[52] As noted above (fn. 3) MELCHERT's connection of the root with PIE **sekᵘ-* 'follow' is quite arbitrary. There are reasons to think that the root *šaw-* is in its origin a nominal root, which will be addressed in detail elsewhere.

[53] The interpretation of *aλijaj* as 'change' and *tasoj* as verb 'order' (cf. GUSMANI 1964: *s.v.v.*) is dubious. The latter likely represents the same nominal root as *tasẽv* 'dedication' in LW 40:1. The form *aλijaj* may be either a verb 'to change' or an adjective agreed with *tasod*.

[54] Contra GUSMANI the root form of the verb is not *o-*, but *ow-*/*of-*: this is implied by the forms *ow-v* in which the ending of 1.pret.sg. is *-v* (and not *-wv*), *kat-of-n* and now also by *ẽt-o̯w-t.* The form *fa-ow* is apparently 1.pres.sg. and comes from **fa-ow-u*.

kot=τ=in kocwij kan-cat […] (LW 13:10)

If *=as* represents an enclitic of 3.sg.nom.comm., as it is usually taken (cf. GUSMANI 1964: *s.v. -a-*), then the interpretation of *cat* as a final verbal form is quite compelling, although its tense and/or mood cannot be identified with certainty. The root *ca-* is indeed found elsewhere in the corpus in the verbs *f-ẽn-ca-l* (LW 50: 4) and *f-ẽn-cã-v* (LW 19:3 and 54:6) and in *ja-ca-l* (LW 10:4). The contexts establish its meaning as 'dedicate' with reasonable certainty.

5.3.3. For all other forms ending in *-t*, the interpretation as an active present form is not compelling and in some cases even unlikely. Possibly the most important case is the form *ẽnšarptat* attested in the short clause:

fa=(a)k=it mruλ=k ẽn-šarptat (LW 10:7)
"And may (it) (be) in-… on the stele"

which follows an even shorter clause: *f=as kat-ul* (LW 10:7)

which can be interpreted as 'May he/they write down' or 'May he/they have written it down' (cf. GUSMANI 1964: *s.v.v. katu-* and *u-*). The context strongly suggests that *ẽn-šarptat* renders the action of transferring the text onto the stele, i.e. its *incising*, which well agrees with the preverb *ẽn-* 'in-', as seen already by CARRUBA (1960:58, cf. GUSMANI 1964: s.v.). CARRUBA (*ibid*.) separated in the form an ending *-tat* comparing it with the Hittite medio-passive preterite ending *-t(t)at(i)*. However, against this MELCHERT (1992:44-45) objected that the Hittite ending should have reflected in Lydian as **-tad* as the second dental in the Hittite ending is voiced/lenis. The validity of the objection is questionable. At least two cases – 3.pres.sg. ending *-t* and the enclitic *-at* = Hitt. *-at*, for which see below – show that the final, quite probably *lenited*, dental may be reflected in Lydian as <t>. One cannot completely exclude that also in this case the final dental might have been retained by the force of analogy and CARRUBA's interpretation, being the most straightforward interpretation of the form, may well be true. However, it is not the only possibility. Given the probably jussive sense of the clause, signalized by the fronting of *fa=* (cf. above, fn. 48), it would be possible to see in *-tat* a reflex of the PIE 3.sg.jussive (or 'future imperative') ending **-tōd* (or **-tōt*), seen in Latin **-tō*, Greek -τω and Vedic *-tād/-tāt*. The development of PIE **ō* in Lydian is not quite clear (cf. MELCHERT 1992b:349), but it is not excluded that it gave **ā* > *a*, just as it was the case with **o* in some positions. However it is, the separation of the root *šarp-* may be supported by etymological considerations. Assuming that Lyd. *š* might develop from PIE *-sk-* – which is a rather trivial change, cf., e.g. *fish* < OE *fisc* < PIE

**peḭsk-o-* – one may connect *šarp-* with one of the roots which denoted the idea of 'scratching' and 'incising' in PIE: **skreb-* 'scratch, scrape' on which OE *screpan* and Balto-Slavic forms as Russ. *skrebu* are based; or **(s)kreḭbʰ-* 'incise' which gave Lat. *scrībō* and Oscan **scrif-* (in *skriftas* etc.); or **(s)krīp-* to which Latv. *skrīpât* 'to scratch, scribble, write down', ON *hrifa* 'scratch, tear' and MIr. *scrip(a)id* 'scratches' may be traced back; Greek σκαρῑφάομαι likely represent a further variant of the root **(s)kr(e)i̯P-* (cf. BEEKES 2010: *s.v.* σκαρῑφάομαι or DE VAAN (2008: s.v. *scrībō* with further refs.).

5.3.4. The form *fẽtwintat* is found in a clause which contains several unclear elements:

ak=av mλwẽšiš wvišλ lẽv šaw-karplos cinaλ qiš qiraλ fẽtwintat tutrloλ
(LW 12:3-4)

The second part is clearer syntactically and may be interpreted "… *šaw-karplos* which … in the sacred ground (is) (for/in) *tutrlo-*". Formally, the verb may be analyzed as *f-ẽt-wint-at* and its root is in all probability identical to that seen in *f-ẽt-wint-eλ* in LW 44:12 ([…] *f-ẽt-wint-eλ asturkos*) and *wintas* in LW 23:1-2 (possibly adjective agreed with *šyrmas* 'precinct'). The interpretation of the form of *f-ẽt-wint-at* crucially depends on the interprtation of *šaw-karplos* as animate or inanimate. The same root without the element *šaw-* is possibly found in LW 14:19 in the form *karftos*, which does not clarify its meaning any further. However, a clue comes from *tutrlo-*. As observed by SCHÜRR (2006:1570-1572), the word *tutra-* in found in LW 80:12 in an immediate context with *taaja-* 'father' (*tẽmwav tutra=k pslẽv taaja̯*[…]), which implies that it may be a further kinship term and suggests a comparison with Luw. *tu(wa)tra-* 'daughter'. This seems possible, even if difficult to prove. If right, then *tutrlo-* in LW 12 can be interpreted as '(stuff) of the daughter', which makes it probable that *šaw-karplos* is *something* intended for the 'daughter', which in the context of a funerary inscription (cf. *wãna-* 'tomb' in line 5) makes good sense and should refer either to a type of funerary monument or a burial parcel. This interpretation of *šaw-karplos* in combination with the context suggests that *f-ẽt-wint-at* means something like 'is situated' or 'is built'. The sense implies that it may be a (medio-)passive form. One cannot exclude that the form *f-ẽt-wint-at* may contain the same ending as *ẽn-šarp-tat*, if the latter is indeed a medio-passive form (i.e. < **f-ẽt-wint-tat*)

5.3.5. The next form, *pitat* it is attested in a syntactically difficult passage:

kuj=τ=in atvãv nak fa-ši-wv afaλaλ=k ni=k=τ=as pitat ul=τ=in koτ=τ=is tarplas (LW 13:5-6)

for which one may offer only very provisional interpretation 'which(ever) *atva-* and *afaλa-* they *sealed*/*appointed*(?)[55] and it (will) not *pitat* (he) wrote that (one) as (he is) the *owner*(?)'. Although the passage is too obscure to be sure about anything, one may consider two possibilities of interpretation of *pitat*. First, one may analyze the form as *pi-* + *-tat* identifying *pi-* as a phonetic variant of the root *pij-* 'give' and the ending with *-tat* found in *ẽn-šarp-tat* (and possibly **f-ẽt-wint-tat*). The interpretation of the ending *-tat* as the 3.sg.jussive ending going back to PIE **-tōd*/**-tōt* may look quite appropriate in the context, as the fronted negative particle *ni=* suggests that the clause may have prohibitive meaning. However, it is difficult to explain the loss of *j* in *pij-*: in all other clear forms based on the root the final palatal approximant is directly or indirectly preserved (cf. *pij-v* 'I gave' (LW 24:6), *pije-* 'gift, dedication' and *pil-l* 'he gave' (LW 50:6) which comes apparently from **pij-l*).[56] It is likelier that the root in question is *pit(a)-* attested elsewhere in *pita-(a)j* in LW 23:9 and 24:7 and in *pit-ocv* in LW 24:5. The form *pita-(a)j* is clearly 3.pres.sg./pl. and, since the alternation of final *-t* and *-j* is not attested for any other Lydian verb and is quite unlikely as a *synchronic* process, one should conclude that *pita-t* is something different. Whatever precisely this form

[55] For the interpretation of the form *fa-ši-wv* as 3.pret.*plural* see below. In interpreting the form, I tentatively follow MELCHERT's (2004a:141) suggestion that the root *ši-* represents zero-grade of *šaj-* seen in *καττadmẽ-* (cf. above). As the primary meaning of the latter is in all probability 'seal', the root can be interpreted as 'to press, to seal'. However, the context of LW 22:8-10 seems to suggest that *κατ*τ*i-* means 'appoint', which apparently comes from the administrative use of sealing the legal document when appointing somebody as a priest or transferring property rights.

[56] There are some doubts that the form (*fa-*)*pil* allegedly found in LW 30:1 and LW 99 represents a *normal* doublet of *pill*, as usually assumed (cf. GUSMANI 1964 and 1980: *s.v. bi-*[2]). If the form in the broken graffito LW 99 indeed represents a verb (and not a gen. of *pil* 'his'), it should be read, contra GUSMANI (1979:71-76), rather as *pill*: on the photo (*ibid*., Taf. 1) one can clearly see that at the end of the form there are *two* vertical hastae reaching the *bottom* of the line, in which it is quite impossible to see just an aberrant variant of <l>; these can represent rather two <l> with slightly damaged top parts. The form *fa-pil* in LW 30:1 is real, but is suspicious in another respect: the verbal form is found at the very end of the first line of the inscription on a boat-shaped vessel and it is quite obvious that the scribe struggled to squeeze the word into the available space making the letters significantly smaller than they are at the beginning of the line (cf. BUCKLER 1924: pl. XII and somewhat better photos in LITTMANN 1916:56). It is quite possible that the scribe just gave up and wrote only one <l> instead of two thinking that the context is reasonably clear for interpreting the verb as 'he gave'. Lastly, one may note a possibility to identify the form of 3.pres.sg. of the root *pij-* in the form *fišfij* attested in LW 46:2-3 (*qi*[*š*] *pijẽv fra-tin-ij pu-w=as fišfij*), which may be analyzed as *f-iš-fij*. The interpretation of *-fij* as a variant of *pij-* is suggested by the appearance of *pijẽv* in the first part of the clause. The preverb *iš-* is likely connected with the preposition *išt* which in all likelihood means '(in)to' (cf. below), *f-iš-fij* may be interpreted as 'gives to/in addition'.

means, the pair *pita-t* vs. *pita-(a)j*, if they indeed belong to the same paradigm, demonstrates that Lydian has a contrast between endings *-j* and *-t*.[57]

5.3.6. The form *taqtulãt* is attested in the passage:

ak=ms irjuv šiwraλmiš Artimul kaττirs ak=aj šiwraλmiš Artimul asfãv cẽqraλ qiraλ taqtulãt (LW 22: 10-13) "The *šiwraλmiš* of *Artimus* is/has *sealed*/*appointed* (?) the *irju-*, the *šiwraλmiš* of Artimus (is/will) … the *asfa-* on the sacred ground."

The syntactic structure of the clause clearly favors the analysis of *taqtulãt* as a form of a *transitive* verb. However, the question is if it is singular or plural. The context of the passage LW 22:8-10 listing one after the other *šiwralmiš Artimul … kawes Pakilliš* 'priest(s) of *Pakiš*' and *armτa-* (possibly 'interpreter' = Car. *armon*)[58] strongly implies that *šiwralmiš* is a personal designation (cf. GUSMANI 1964: *s.v.*). GUSMANI further assumed that it might be a *collective* body, something like 'collegium of priests'. On the other hand, as suggested by GÉRARD (2005:80-81), *-iš* may represent simply the ending of 3.pl.comm. This interpretation well agrees with likely *plural* referents of *pil sfẽniš* in LW 24:16 and *piliš arlylliš* in 23:13 which refer in all probability to *relatives* (lit. 'one's owns'), which is further supported by the clause *puλ=k pil=k sfẽnav* 'to him and his relatives (dat.pl.)' in LW 42:5. Moreover, the ending *-iš* may be naturally compared with PIE athematic 3.pl.comm. ending **-es*.[59] In any case, it is very likely that the verbal form *taqtulãt* is *plural* of the present tense, as tentatively noticed by GÉRARD (2005:100-101).

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[57] The appearance of *pitat* with negation after the verb *ši-* which likely means 'seal' (cf. above), suggests that *pit(a)-* might render an opposite action, i.e. to 'break (a seal)'/'open'. The root *pit(a)-* may then be tentatively connected with PIE **bʰeid-* 'break, cleave'. This meaning fairly well agrees with the context of LW 23:9 and 24:7 which both represent a 'curse formula'. The *pita(a)j* has *citollaj* as direct object which, as mentioned above (fn. 20), is something connected with the movable property of *Mitrijaštas*. It is unclear if *pitocv* in 24:5, which represent the direct object of giving by *Mitrijaštas* (*puk=mλ=aj amu pitocv pijv*), is really connected with this root.

[58] Cf. SCHÜRR (2006:1585 with further refs).

[59] I see absolutely no reasons to bring in for the explanation of the Lydian ending *-iš* the idea of '*i*-mutation' as suggested by GÉRARD (*ibid*.) and recently followed by SASSEVILLE (2017): the phenomenon of *i*-mutation is a specifically *Luwic* phenomenon and there is *a priori* no reasons to assume it for Lydian. The contrast between *sfẽniš* (nom.pl.comm.) vs. *sfẽnav* (dat.pl.) is no more suggestive of any sort of 'mutations' than for instance Greek ἄνδρες vs. ἀνδράσι. Similarly, I see no necessity to recur to an artificial comparison of Lydian *-iš* with Luwian nom.pl.comm. ending *-inzi*, for which one needs to assume several *ad hoc* sound changes (cf. MELCHERT 2009 [2010]:113). In contrast, nothing prevents a direct derivation of Lydian *-iš* from PIE **-es*, assuming a trivial rising of *e* > *i* with subsequent palatalization of *s*. Besides *šiwralmiš*, *sfẽniš* and *arlylliš* there are two further very likely candidates for nom.pl. comm. The first one is *jatrosiš* found in LW 13:3 (*jatrosiš=k*) and which is contrasted with *jatros=k* in LW 22:7; as nom. sg. *-s* is regularly elided before the enclitic connector *=k*, *jatros-* should represent an *s*-stem and *jatrosiš* may be naturally interpreted as nom.pl. comm. The

This interpretation may be supported by further observations. The next clause of the text reads: *ak=ms=as asfãv wc-pin-wv* (LW 22:13) and features thus the same direct object as the preceding clause. There is no explicit indication of a subject switch and the simplest assumption would be that *taqtulãt* and *wc-pin-wv* represent two verbal forms having the *same* subject – *šiwralmiš* – contrasted in *tense*. The now commonly accepted interpretation of the forms in *-wv* is 1.pres.pl., although it is not the only interpretation ever suggested for them (see GUSMANI 1964:41, cf. MELCHERT 2004a:147 or GÉRARD 2005:102-103). However, this interpretation runs counter the fact that two forms in *-wv* appear in LW 22 (besides *wc-pin-wv*, it is *kaτ-τi-wv* in l. 6), an inscription for which there is no special reasons to expect the forms of 1.pl. at all, since, being a sort of decree, it is formulated in the objective 3.sg./pl. perspective. There is every reason to think that this perception of the *wv*-forms is false, as it is based on the misinterpretation of the crucial clause featuring the grammatical form:

(*kuj=mãk cẽnšijn alarmas*) *amu=k nãši=k ẽmiš ištaminliš wstaas jatrosiš=k šarys nãv iš-qašãnwv* ... (LW 13:2-3)

The pronoun *amu* was taken together with the group *ẽmiš ištaminliš wstaas jatrosiš=k šarys*, and *nãši=k* was taken as 'emphatic coordinating conjunction' (cf. GUSMANI 1964: *s.v.*). However, this interpretation of *nãši=k*, which is found nowhere else, is just an *ad hoc* guess, as is the perception of *amu* as nominative 'I' and not dative 'me'. In fact, the enclitic connective *=k* is invariably attached to the *second* and the following members of a row (cf., e.g., *aaraλ piraλ=k* in LW 1:8 or *ess wãnas es=k mruj* in LW 3:1), only rarely being connected with the first member and, if so, then rather for stylistic purposes (cf., e.g., *fa=(a)k=mλ=t=in Qλjãn=k Artimu=k kat-šarlok-ij*). Thus for 'I and my …' one would expect **amu … ẽmiš=k ištaminliš*. The syntax thus speaks *against* the connection of *amu* and *ẽmiš ištaminliš* etc. and, whatever *nãsi=k* precisely is, there is every reason to take *iš-qašãnwv* as the verb having as subject only *ẽmiš ištaminliš wstaas jatrosiš=k šarys* which defines it as the *third person plural*, in all likelihood of the *preterit* tense, given the context. This interpretation well agrees with the presence of the forms in *-wv* in LW 22 and supports the interpretation of *taqtulãt* as 3.pres.pl.[60]

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second one is *Sfarjẽnτ* in LW 22:1, which can be naturally explained as contracted from of **Sfarjẽnt-iš* (with *t+š* > *τ*) for which the context suggests an interpretation 'the Sardians'.

[60] These considerations also discredit the interpretation of the forms in *-rs*/*-riš* as 3.pret.pl. suggested without arguments by MELCHERT (2004:147 and 2006:1164). The interpretation of these forms as 1.pret.pl. by SCHÜRR (1997b:206-207 and 209) is, however, as unlikely, since, as noted, the text is formulated in the objective 3rd person perspective. In fact, the variants *-rs* vs. *-riš* is very reminiscent of the contrast between nom.sg. *-s* vs. nom.pl.comm. *-iš* (cf. above).

The forms also neatly agree with the classical Indo-European contrast between primary and secondary endings. The ending *-ãt* may naturally be traced back to **-Vnti* with the loss of the final unaccented vowel, while *-wv* may be derived from **-Vnt* under an assumption of the loss of the dental in the word-final position; the element *-w-* reflects possibly vocalization **-unt* form the older **-ont*, which represents probably a result of grammaticalization of this phonetic variant as a specific indicator of the part tense.[61] It is noteworthy that while Lydian demonstrates a close similarity with the picture in Greek (primary 3.pl. *-(e/o)nti* (> *-usi*) vs. secondary 3.pl. *-(e/o)n*), there proves to be little correspondence between Lydian *-wv* and the respective endings in Luwian (*-aunta*, for which cf. MELCHERT 1993: V) and Hittite (*-er*, rarer *-ar*).

5.3.7. Despite these considerations, the analysis by MELCHERT (1992:39-40) of the form *ãntẽt* as 3.pres.pl. remains quite problematic. This interpretation of the form is directly contradicted by two of three contexts featuring the form. The subject of the clause:

ãntẽt Mitrijaštas Mitratališ kawes … (LW 23:5) and (LW 24:1)

is *Mitrijaštas Mitratališ* and thus arguably singular. The subject used with *ãntẽt* in LW 24:16 is *šerliš šrmliš* which formally might be plural (cf. above) and its usual perception as 'a sort of temple authority' (cf. GUSMANI 1964: *s.v.*) may be reconciled with this. However, this runs counter the fact that *šerliš šrmliš* in his proclamation uses pronouns *amu* and *ẽmv*, which are, as far as one can tell, associated exclusively with 1st person *singular*, and a verb *fa-o-w* (or rather *fa-ow-(u)*), which is also *singular* (pres.). Thus, *šerliš šrmliš* is also singular and represents, quite probably, a private individual, just as

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It is striking that in LW 22:1 the form *facniriš* follows *Sfarjẽnτ* which, as noted (fn. 59) very likely represents nom.pl.comm. Another form on *-riš*, *fawnẽriš*, in found in the next line of the inscription. On the other hand, in LW 23:1 the form *ja-cuwe-rs=t* is likely agreed with *šyrmas* (nom.sg.comm.). However, this distinction seems to be contradicted by *šiwraλmiš Artimul kaττirs* (LW 22:9 and 11); the contradiction may be, however, resolved by an assumption of contraction **kaττiriš* > *kaττirs* (cf. **Sfarjẽnt-iš* > **Sfarjẽnτ*). These considerations support the interpretation of the forms as a sort of participles (cf. GUSMANI 1964:42 and GÉRARD 2005: 103-104). However, a medio-passive meaning of the forms appears to be somewhat likelier than an active one (cf. also below, fn. 78).

[61] Cf. the two variants of the 1.pres.sg. ending *-u*, used after consonants, and *-w*, used after a vocal. It is noteworthy that the comparison of this ending with Luwian ending of 1.pres.sg. *-wi* whose origin itself is not quite clear (cf. GÉRARD 2005:98-99 with further refs.) is by far not compelling. In a general Indo-European perspective, a more straightforward and simpler comparison would be with PIE 1.pres.sg. ending **-oh₂* which represents a *common* ending for a good half of the Indo-European languages, including those of the Mediterranean area, cf. Greek -ω, Latin *-ō*, Goth. -a, OCS *-ǫ* (Russian > *-u*), Lith. *-u*. The Lydian *-u* may well represent a result of the rise of *o*/*ō*, as seen in Baltic and the Eastern Slavic, and *-w* (/u̯/) its reduced (non-syllabic) variant. The development PIE **-oh₂* > **-ō* > Lyd. *-u*/*-w* is parallel to PIE **-ont* > **-unt* > *-wv*.

Mitrijaštas Mitratališ.[62] An explanation of the verb in plural with a subject in singular as a *courtesy form* does not seem appropriate even in the case of *Mitrijaštas* – who is not even a governor, but a temple priest, even if one of quite a high status – and seems quite incredible in the case of *šerliš šrmliš*. However, contra doubts by GÉRARD (2005:101, fn. 661), the verbal character of the form is very likely: the form is long enough not to be taken simply as 'thus (speaks)' (as Akk. *UMMA* in Hittite letters) and it is clear that *ãntẽt Mitrijaštas Mitratališ kawes* (*na=k* ...) in LW 24:1-2 and *šerli=k šrmliš ãntẽt* (*na=k* ...) in LW 24:16-17 make separate clauses and thus require some sort of verbal form. In the context an interpretation of the form *ãntẽt* as a *participle active present* appears to be the likeliest option. The other probable form of an active participle is found in *šarẽtas* (LW 3:4 and 50:7), which is an epithet of *Lefs*, which is likely based on the root seen in *kat-šar-loki-j* and *šar-oka-*; *jẽt* 'movable property' represents historically, as already mentioned, also an active participle.[63] The absence of the grammatical agreement between *Mitrijaštas* and *šerliš* with *ãntẽt* can be explained by the usage of the latter in the function of a predicate, possibly with the omission of the verb 'to be'.[64]

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[62] First of all the usage of *amu* strongly implies the *private* character *šerliš šrmliš*. This is further supported by the context of the text (LW 18-21) which is one of the rare examples of a reasonably clear passages in a non-typical Lydian text: *ak=it amu nã-qij fa-sfẽnu n=ak aarav n=ak pira=k* [*n*]*=ak jẽtv ẽmv ak=at amu Mitrijaš*[*taλ*] [*ka*]*wελ kan-toru* 'Whatever I possess – as the farmyard, as the house, as my movable property – this I entrust to Mitrijaštas, the priest'. The possessions of *šerliš šrmliš* are strongly reminiscent of the private property of an individual, not some 'temple authority'. Thus, *Šerliš* is probably just a personal name; *šrmliš* may be a patronymic, but may be a title of *Šerliš*, derived from *širma-* (*šyrma-*) 'precinct' > 'precinct servant' or the like.

[63] Contra GUSMANI (1964: *s.v. laλẽ-*) it is highly dubious that *laλẽns* attested in LW 10: 11 represent a participle based on a putative verb **laλe-/ẽ-*. No such verb is attested even in Hittite, which has a noun *lala-* 'tongue', and formally *laλẽns* poorly agrees with this idea. In fact, it is quite probable that *laλẽns* is based on the same root as the word attested in a gloss of Hesychius: λαίλας· ὁ τύραννος ὑπὸ Λυδῶν. The connection of λαίλας with Hittite *laḫḫiyala-* 'warrior' (cf. GUSMANI 1964: 275) is untenable due to obvious semantic discrepancies. As 'king' in Lydian is *qaλmλu-*, one may assume that λαίλας represents a broader term, something like 'ruler' or 'master'. Given this interpretation, it would be most natural to perceive *laλẽns* not as a characteristic of the speaker (*amu*), but to connect it with the following *ciwv ... tawsẽv* 'great … god'. Accordingly, one may re-analyze it as *laλẽn=s*, acc. sg. of *laλe-* + enclitic particle *-s*.

[64] As for *ãnτ(V)-*, it may be tentatively analyzed as a derivative of *ãn-* with the suffix *-τ-* which finds parallel in *tarp-τa-j* (LW 13:9), which is apparently a derivative of *tarp-/tarf-/tarw-* (cf. GUSMANI 1964: s.v.). The nominal root *ãn-* is attested in *ãn=s* (LW 14:11 and 15:3) and *ãn=aj* (LW 22:4), cf. GUSMANI 1964: s.v. Moreover, there is every reason to see in *ãn* attested even more abundantly (LW 10:16, 12:7, 22:4, 62:6, 80:4 and 9) and in *ãn=as* (LW 13:1) the same word. Despite the frequency of attestations, its meaning is quite obscure. However, there are reasons to think that it represents an important legal term. The indications of LW 22:4 seems to suggest that it is a personal designation (possibly collective, cf. below, fn. 73), but one cannot be quite sure.

5.3.8. A separate issue is the meaning of the forms in *-ot*, of which there are attested four: *fa-ctot* (LW 14:1) *satrot* (LW 14:10), *fa-wkufot* (LW 12:5) and *tatrot* (LW 12:9). Both LW 12 and LW 14 represent something quite different from the usual tomb inscriptions (although the former deals with funerary matters) and the concentration of the forms in these two texts makes an impression that the element *-ot* has some specific grammatical function. The form *factot* is attested in the clause:

jum=iš qλ[…]*s factot astrkota=k šawtaars eλf=k*[….]*a=k taso=k* (LW 14:1-2)

which quite clearly implies that *factot* is a verbal form. Moreover, this is not the only form in the text which is based on this root: in LW 14:11 one finds (*ararms*) *fa-cato*[.] and in line 17 […] *facatil* (*kukok*). The syntactical parallelism between […]*s factot* and *ararms facato*[.] implies that *facato*[.] should be restored as *facato*[*t*] and that *factot* represents a contracted form of the latter. The form *fa-cat-il* is clearly preterit of the same verbal root *cat-*, which confirms the separation of the morpheme as *-ot* (and not just *-t*).[65] The form *satrot* is attested in the clause *es=t katfλajš qλ satrot* (*ãns qλ …*). Obscure as it is, the passage draws attention to the fact that the forms in *-ot* are found in *subordinate* clauses introduced by *qλ* 'in/to which': this is the case in the passage in line 1 and probably in the passage featuring *fa-cat-o*[*t*], as it seems to be the verb of the entire clause: *ãns qλ nsq*[…]*ararms fa-cat-o*[*t*] (LW 14:11) The picture in LW 12 is less clear: *fa-wkufot* is found in the clause: *nin=in nij qaašliš wãnaλ aktaλ fa-wkuf-ot* (LW 12:5) which *might* be prohibitive and *tatrot* is attested in the clause: *jum=mλ=it kocwij niqašllλ tatrot* (LW 12:9) which may be very tentatively interpreted as a temporal clause under assumption that *jum* represents a temporal conjunction based on the PIE relative root **i̯(o)-*.[66] Thus, although the evidence is too ambiguous to be sure in anything, it is possible that the forms in *-ot* are associated with some kind of *probability*, in other words represent future or conjunctive or optative mood.

[65] It is noteworthy that the form *catit* found in GUSMANI (1964: *s.v. cati-*) does not exist: the last word in LW 40:4 is *Maλiλ* (dat. of *Maλiš* = Greek Athene), see PAYNE-SASSEVILLE (2016).

[66] The traditional comparison of *jum* with Lat. *dum* 'while' (cf. GUSMANI 1964: *s.v.*) is impossible (which was clear even before the re-definition of <d> as it should have reflected in Lydian as **tum*). However, the character of *jum* as some sort of conjunction seems to agree well with contexts, which suggests that the initial *j-* may go back to the PIE relative root **i̯(o)-*, which is found in the respective conjunctions for instance in Greek (e.g., ὁπότε 'when' or ὅπου 'where'). A negative counterpart of *jum* is probably found in *ni=kumẽ=k* 'never' and the element *=um* (seen in *ak=um* or *fa=(a)k=um*) may represent deictic counterpart of *jum* ('then').

5.3.9. Lastly, several other forms in *-t* listed by MELCHERT are quite problematic and *might* be not verbs at all. The forms *šitẽnit* and *š(i)-cẽnit* (cf. above, fn. 19), which represent probably only phonetic invariants, are attested in partly broken and otherwise quite obscure passages which give little possibility to verify their meanings:

ẽnarn nãns=k ãn š-cẽnit kạ[… (LW 80:8)

ak=aj wratos asẽmλ wotlλ tarptaj [. . .]*ẽv šitẽnit* (*kot=τ=in* …) (LW 13:9-10)

Verbal prefix *ši-* makes an impression that they are verbal forms. However, the passage LW 13:9-10 contains what *might* be another verbal form, *tarptaj*, which would then exclude the interpretation of *šitẽnit* as a verb. And yet, the interpretation of *tarptaj* as a verb is neither very certain: the form is probably connected with the personal designation *tarwtalliš* attested in LW 5:1 after the name and the patronymic (*Atališ Tiwjališ*). The geminate spelling of *l* is certainly not accidental suggesting that the title (of *Tiwjas*) is *tarptal(a/i)-* which is structurally comparable with *tarpla-* 'master' (or the like) based on the same root, which seems to define *tarpta-* as a verbal root. However, three other words with the same suffix, *armta-*, *wãnta-* and now also *mλimti-*, found on a newly discovered Lydian coin (see SCHÜRR–TEKIN forthcoming), obviously represent nouns. This tilts the balance in favor of the interpretation of *tarptaj* as a nominal form (which might be then comparable with *ciwaj* < *ciw-* 'god', for the case cf. below) which supports the interpretation of *šitẽnit* as a verb. This interpretation is further supported by the attestation in the next line of the text (LW 13:11) of the form *tẽnwv* which very likely represents a verb (3.pret.pl., cf. above). Thus, one has to postulate the existence of a stem *cẽn(i)-*/*tẽn(i)-* which, unlike other stems of comparable structure (cf. *fra-tin-ij*), takes the ending *-it*.

On the other hand, the form *nirat* found in LW 12:7 represents in all probability not a verb ending in *-t* at all. First, the reading of the third letter as <r> is quite dubious: on the photo (cf. BUCKLER 1924: pl. V) one can clearly see that there is only a hook in the upper part of the letter and its shape in general quite exactly corresponds to <l>, thus the reading is *nilat*. Given that the word is immediately preceded by *išlukol* which may be naturally taken as a verbal form in 3.pret.sg. (*iš-luko-l*), it is likely that *nilat* begins a new sentence and as such may well contain enclitic *=at*. The form *nil* most probably represent a form of *nin* twice found in the inscription (ll. 5 and 10), possibly gen.sg. vs. acc.sg.

5.3.10. This digression into the realm of Lydian verb is aimed to demonstrate, first of all, how complex is the field and how many alternative possibilities can be taken into consideration when analyzing the forms. The claim

that the Lydian endings *-t* and *-j* represent merely alternative variants of the same ending is in many cases arguably unfounded and in general reflects only the fact that Lydian verbal system as a whole is rather poorly understood at present. The forms ending in *-t* prove to conceal in fact a motley collection of different things, and even if some of the suggestions made above may prove to be false, it is clear that Lydian possesses rather complex verbal system which should be analyzed either in its own terms or approached from the more general Indo-European perspective rather than form the specifically Anatolian one. As for the pres.3.sg.(/pl.) endings, the results are inconclusive, as the obscure contexts do not give much possibility for establishing fine semantic distinctions between many forms and the corpus in general is too limited. It is clear that many, probably even the *majority* of the forms in *-t* which can be with reasonable certainty interpreted as present forms demonstrate a *consonantal* stem (*in-, qãn-*, *paqẽn, šawẽn-*, *inãn-*, (*ẽj)anoλ-*, *ow-*/*of-*). However, there are exceptions: *ca-t*, *kan-ca-t*, *pita-t*, *ši-cẽni-t* and ending *-ot*, whatever its exact semantics, should be in a way connected with PIE **-ti* (or **-t*). The question is how one can interpret the picture. GUSMANI's interpretation of the endings as conditioned only by *phonetic* ambience does not really find support in the facts, now as before. Neither it seems in any way credible that the position of accent alone could be accountant for the entire picture in Lydian, as claimed by MELCHERT. The simplest interpretation of the synchronic picture would an assumption that we are dealing with different verbal *classes* or, in other words, different conjugation types. As in other Indo-European languages, the history of formation of separate verbal classes in Lydian might have been quite complex, which is at present practically unretrievable. What is important is that, if one accepts the existence of (at least) two different verbal classes in Lydian, one may think that their formation is due not only to different historical phonetic processes, but also to restructuring the older PIE verbal system, innovations, analogical leveling etc. As there is at present no evidence supporting the change of *voiceless* dental to *j* in Lydian in any position, the explanation of the verbal ending *-j* from PIE **-ti* remains the least plausible alternative.

A different and rather straightforward option would be to connect Lydian ending *-j* with a PIE verbal class which *originally* contained a similar sound in the 3.pres.sg. There are two possibilities, which are not necessarily entirely incompatible. First, one may connect the Lydian ending *-j* with the 3.pres.sg. ending *-i* seen in the Hittite *ḫi*-verbs, as, e.g. in *āri* 'arrives at' (*ār-*), *dāi* 'takes' (*dā-*), *pāi* 'gives' (*pai-*) or *laḫ(ḫ)ui* 'pours' (*laḫ(ḫ)w-*).[67] The variant of the ending after the vocalic stems – which at least in the case of *a-* and *ai-*stems realized as /-a̯i̯/ – exactly corresponds to Lydian ending *-aj*. In the case

[67] Cf. HOFFNER-MELCHERT (2008:180-181, 184, 214-229).

of the ending *-ij* the final *-j* may in theory be a syllable closing glide, comparable with one observed in Old-Persian primary endings (*-miy, -hay*, *-tiy* etc.). Or *-j* may result from grammaticalization of the non-syllabic variant of *-i*. The second option would be to connect Lydian ending *-j* with the Greek 3.pres.sg. ending -ει, as, e.g., in φέρει 'bears' (φέρε-) or ἐσθίει 'eats' (ἐσθί-). This is the ending of the *thematic* stems and its distribution rather exactly, as far as one can see, corresponds to the picture seen in Lydian. The ultimate origin of this Greek ending is not entirely clear, the views being traditionally divided between the derivation from the usual PIE 3.sg. ending **-ti* by some phonetic process and considering the ending as a separate entity representing the remnant of an alternative model of formation 3.pres.sg. which existed before the universal spread of the **-ti* ending in the IE languages (for an overview see WILLI 2018: 6-7 with further refs. and pp. 184-196 for further discussion). Phonetically, the derivation of -ει from **-e-ti* (via **-e-t̯i V- > *-e-tʲ V-* and the subsequent loss of final dental or the like) is basically an *ad hoc* explanation whose sole *raison d'être* is to trace back Greek to the common PIE model – an understandable, but not necessarily always justifiable crave for simplicity. The realization that now one more IE language from the same geographical area (Aegean-Balkan) – which is otherwise a rather poorly documented and understood linguistic region – has an identical ending in 3.pres.sg. once again calls for caution against reconstructing just one single unitary model for the PIE verb, already to a degree undermined by the Anatolian evidence. In fact, one of several different explanations proposed for the origin of the Hittite *ḫi*-conjugation, connects it, at least in part, with the Greek thematic conjugation (cf. esp. WATKINS 1969: *passim*, for an overview of different proposals and problems associated with them see JASANOFF 2003:1-29). Far from being free of problems, the hypothesis has at least the merit of comparing *semantically* comparable things (a present ending with a present ending) instead of trying to establish correspondence basing only on the formal similarity, as is the case with the 'canonical' connection of the *ḫi*-conjugation with the IE perfect. Without clearer understanding of both formal and semantical aspects of the Lydian verb it is quite impossible to decide whether Lydian verbal class featuring *-j* in 3.sg.pres. has more affinities with the Hittite *ḫi*-conjugation or with Greek thematic presents. At any event, either of these possibilities seems to present a more promising explanatory model than the attempt to reduce the ending *-j* to PIE **-ti*.

5.4. Another important case of the alleged 'double reflex' of the old dental is what is usually interpreted as the marker of the *neuter singular* thought to be present both in the nominal and pronominal paradigm as *-d* and *-t* (e.g. *mru-d*, *qela-d*, *qi-d* or *eš-t*) and as enclitics *-ad, -at* and *-t(-)*; sometimes also the enclitics *-it, -τ(-)* and *-iτ-* are considered to be further reflexes of it.[68] Just as in the case of verbal endings, there is every reason to suspect a great deal of confusion it this picture. The case has never been demonstrated conclusively and the old studies by CARRUBA (1959) and MERIGGI (1963:17-28) based on rather narrow set of examples seem to be too prone to quick generalizations. It is clearly impossible to revise the issue in full here. In the following I will focus on the crucial question of the meaning of the enclitic elements *-t*, *-it*, *-aj* (*-ad*) and *-at*. One should start, however, by briefly revising the neutr.nom.-acc.sg. ending of the relative pronouns and nouns, which represent a relatively unambiguous case.

There is no doubt that Lydian discerned two genders in the paradigm of both nouns and pronouns: common gender marked in nom.sg. by ending *-s/-š* and neuter gender marked by the ending *-j* ('*-d*'). Thus, the relative pronoun going back to the PIE root *$k^{u̯}i$- shows the form *qij* ('*qid*') when agreed with a neuter noun which shows the same ending (e.g., *mru-j*) and the form *qiš* when agreed with a common noun having the same ending (e.g., *wãna-s*). The contrast between *qiš* and *qij* ('*qid*') is so strikingly similar to the situation in Hittite (*kuiš* vs. *kuit*), Latin (*quis* vs. *quid*) or, structurally, with other IE languages, that one can hardly doubt that the ending of neutr.sg. goes back to PIE *-*d*. Now, re-interpreting the ending as *-j* one obtains another clear case of the Lydian development of the old *-*d* to *j* in the weak word-final position. The pronoun *qij* represents thus something like a transitional form between Lat. *quid* or Hitt. *kuit* which preserves the original dental and Greek τι (< *$k^{u̯}id$) which has lost it without a trace. More problematic and in a way quite intriguing is that neutral *nouns* have the same ending in nom.-acc.sg. (e.g., *mru-j*, *qela-j* or *qiraa-j*). In contrast to the pronominal paradigm, this situation is entirely untypical for other IE languages which mark neutr.nom.-acc.sg. ending either with *-*m* or zero. An explanation that the ending *-j* was transferred at some relatively late stage from the pronominal paradigm (cf., e.g. GÉRARD 2005:80) is not impossible, but it looks somewhat strange that pronouns serve as a model for nouns, which has not that many parallels in other IE languages. In fact, a more natural explanation would be that Lydian already at an early stage employed a different strategy for marking neutrals than it is the case in other IE languages, introducing the uniform *-*d* both for

[68] Cf. CARRUBA (1959: esp. 37), MERIGGI (1963:17-28), GUSMANI (1964:49-51, 102 and 206, cf. 1965: 207-208), cf. also MELCHERT (1994b:338).

nouns and pronouns. However it is, this peculiar feature of the nominal paradigm sets Lydian apart both from Anatolian and other IE languages.

The situation with the enclitic elements is different in a number of respects. The element *-t-* appears fairly frequent in the particle chain in different combinations, cf., e.g., *ak=t=in* (e.g. LW 1:7), *fa=t* (LW 3:3) (*fa=*)*ak=mλ=t* (e.g. LW 4a:1), *ej=t=in* (LW 44:14), etc. As was observed long ago (cf. GUSMANI 1964: *s.v.* *-τ-*), there are good reasons to identify *-τ-* as a phonetic variant of *-t-*, as both appear in very similar positions (cf., e.g., *ak=t=in* in LW 1:7 vs. *fa=(a)k=τ=in* in LW 13:7) and there can be identified no enclitic elements which could produce *-τ-* in crasis with *-t-*. Moreover, there are good reasons to think that also *-it* represents an invariant of *-t-*/*-τ-*. This is especially clear demonstrated by the parallel clauses in LW 23 featuring in identical contexts *fa=(a)k=mλ=it=in* (line 3) and *fa=(a)k=mλ=t=in* (line 10)[69], but also follows from the similar combinations *fa=(a)k=mλ=it* (LW 24:12) or *jum=mλ=it* (LW 12:9) as contrasted with *ak=mλ=t* in LW 4a: 1 or *fa=(a)k=mλ=t=in* LW 23:10. It is noteworthy that the form *-iτ* is found only two times in the corpus (*pλašo=k=iτ* in LW 2:2 and *fa=(a)k=iτ* in LW 11:10), as against 35 attestations of *-it*. The picture can be readily explained by the fact that *-τ-* is in itself a natural outcome of the palatalization by the preceding *-i-*, i.e. *-it-* = *-τ-*. This also neatly explains why *-τ-* is found both before *-i-* (e.g., *fa=(a)k=τ=in* LW 13:7) and before *-a-* (e.g., *nik=τ=as* in LW 13:6).

Although the formal side is rather clear, there have been proposed so far no definite semantic interpretation of this element. The situation in other Anatolian languages, which is at present, at least for Hittite (cf. MELCHERT-HOFFNER 2008:279-282 and 354-388), quite clear, suggests in general two possibilities: it may be either an enclitic pronominal element or a sort of *locative* particle. The dental element in *-it-* might suggest, on the first glance, a comparison with the ending of neutr.sg. seen in the deictic pronoun *ešt* or with Hittite enclitic of the 3.sg.neutr.nom.-acc. *-at*. However, not a single context in which *-(i)t-*/*-τ-* appears brings any support for this hypothesis. On the other hand, this element arguably appears in combination with the element *-aj* for which an interpretation as a neutral enclitic pronoun can be and in fact was (cf., e.g. MELCHERT 1994b:338 and below) seriously taken into consideration, cf. *puk=τ=aj* in LW 24:4 or *fa=(a)k=τ=aj* in LW 54:3. In contrast, a general interpretation of *-(i)t-*/*-τ-* as a sort of locative particle finds a fairly good support in the clearest contexts, which either feature locative prefixes or give other indications on location. Cf., e.g.: *kuj=k=it išt ešλ wãn*[*aλ*] *pλ-tarw-oj* (LW 1:3-4) "whatever belongs (in)to this grave-chamber", which features both preposition *išt* '(in)to' (cf. below) and preverb *pλ-*, which likely designates

[69] LW 23:3: *fa=(a)k=mλ=it=in Qλjãns tawsas Artimu=k Ipsimšiš kat-šarlok-ij* vs. LW 23:10: *fa=(a)k=mλ=t=in Qλjãn=k Artimu=k kat-šarlok-ij*.

belonging;[70] *pλašo=k=iτ qij kat-avil* (LW 2:2-3) "the (funerary) *stuff* which he *put* down (= deposited) (here)", in which prefix *kat-* indicates location;[71] *fa=(a)k=it mruλ=k ẽn-šarp-tat* (LW 10:7) "And my it be inscribed on the stele" (cf. above), in which *-it* correlates with dat.-loc. *-λ* and preverb *ẽn-*; *ak=t=in nã-qiš qelλ=k f-ẽn-šλip-ij* (LW 1:7) "and whoever makes *harm* in respect of this or in the respect of possessions (*qela-*)", in which *-(i)t-* correlates with dat.-loc. -λ.

As for the enclitics *-aj* and *-at*, they are, as noted, usually considered as doublets, the former being a more frequent variant. However, even when the former was read as *-ad*, the claimed unconditioned variation between these two variants was perceived as a problem (cf. MELCHERT 1997:33, fn. 3). Re-reading of *-ad* as *-aj* even further aggravates it. MELCHERT (*ibid.*) tried to explain *-at* as a combination of *-ad* + particle *-t*. This explanation does not look probable, as the particle *-(i)t-*/*-τ-* clearly appears on the position before the enclitic pronouns, cf. *qej=k=t=aj* (LW 11:6) or *nik=τ=as* (LW 13:6). In fact, even if the two forms are indeed close, it is possible to demonstrate that they are not fully identical. The crucial evidence comes from the funerary inscriptions LW 1 and LW 2, the initial parts of which feature similar constructions:

> *ess=k* [*wãnas*] *laqriša=k qela=k kuj-k=it išt esλ wãn*[*aλ*] *pλ-tarw-oj ak=aj Manelij Kumlilij Šilukalij* (LW 1:2-3) "This chamber-tomb, the *laqriša* and possessions and whatever belongs to this chamber-tomb – this (=*aj*) (is) of *Manes*, son of *Kumliš*, of (the tribe of) *Šilukas*",

> *ess wãnas mru=k pλašo=k=it qij kat-avi-l laqriša=k=in qij ẽt-os-rs ak=aj Karolij Šaplalij Ištupeλmlij* (LW 2:2-4) "This chamber-tomb, stele, (funerary) stuff which he deposited down (here) and *laqriša* which is in-…ed (here) – this (=*aj*) (is) of *Karos*, son of *Šaplas*, of (the tribe of) *Ištupeλms*".

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[70] In all probability, this prefix continues PIE **pr(e)i* preserved in Greek and Italic languages with the meaning 'before' (πρίν, Lat. *pri-*/*prī-* in *prior*, *prīdiē* etc.), but in Balto-Slavic designates immediate location 'at, with, by' (OCS *pri*, Lithuanian *priẽ* etc., cf. DE VAAN 2008: *s.v. prior*), which perfectly squares with the meaning of Lydian *pλ-*. It is likely that the semantics seen in Balto-Slavic is original, while in Greek and in the Italic languages it narrowed down, possibly due to the interference with *prō*/πρό and *prae*/πάρα.

[71] It is noteworthy that the following part of the clause *laqriša=k=in qij ẽt-os-rs* "*laqriša* which is in-…ed (here)" features an enclitic *=in* in combination with the prefix *ẽt-* 'in(to)'. A combination of *=in* with *ẽt-* is also found in *Artimuλ=k=in ẽt-weršn* (LW 24:14). It is also noteworthy that *-(i)t-*/*-τ-* is very frequently combined with *-in* (cf. GUSMANI 1964: *s.v. -t(-)* and *-τ-*). It is thus quite possible that *-in* represents a further locative particle, which has probably rather a *directional* meaning ('into').

It is quite clear that in the given contexts *-aj* picks up everything which is listed before and can be thus naturally interpreted as *neutrum plural*. This interpretation is supported by the passage:

> [*e*]*š anlola Atrastal Sakarjal ak=aj qiš f-iš-qãn-t puk=as f-ẽjanoλt fa=(a)k=τ=aj kaprṭokij …* (LW 54:1-4) "These *anlola* (are) of *Atrastas*, son of *Sakarjas*. And who breaks them (*=aj*) or …-s, may he … them."

Although *anlola* refers to the single monument (the funerary stele itself), *grammatically* it represents neutral plural (apparently *pluralia tantum*), as seen already by CARRUBA (1959:17 and 19-20). This is made clear first of all by the form of the noun itself, which features neither *-j* nor *-s* ending, and by the form of the deictic pronoun *eš*, which is contrasted with *ešt* for neutr.nom.-acc.sg. and *ess* for comm.nom.sg. This is further supported by the ending which it has in dat.-loc., *-(a)v* as contrasted with usual ending of dat.-loc.sg. *-λ*, cf.:

> *… ak=it qiš ešλ wãnaλ puk ešvav antolav puk ešvav laqrišav f-ẽn-šλipij* (LW 6:2-4) "who does *harm* either in respect of this chamber-tomb, or to these *antola* or to these *laqriša*".

The latter word, *laqriša*, is just another example of this type, cf. LW 7:1: *ess wãnas eš=*[*k*] *laqriša*. There can also be found finer indications supporting the interpretation of *=aj* as nom.acc.pl.neutr. Recently SIDELTSEV and YAKUBOVICH (2016:98-99), following a suggestion by MELCHERT, proposed to interpret the form *qida* (= *qija*) as neutr.nom.-acc.pl. This interpretation looks indeed quite compelling for the clause:

> *ak=t=in nã-qiš f-ẽn-šλip-ij ešvav mλwẽnjav iškon qija tamv puk wãnaλ ešλ puk mruλ …* (LW 2:4-6) "whoever does *harm* to all these *mλwẽnja* which (are) *tamv* or to this chamber-tomb or to this stele…".

It is clear that *mλwẽnja* is a further example of a neutr.pl. noun in *-a*, parallel to *antola* and *laqriša*. Now, in another clause featuring *qija*, it is combined just with the enclitic *=aj*:

> *ak=ms=aj šiwraλmiš Artimul kaττirs kawe=k Pakilliš armτa=k qija iitλ mλimn=s išt Sfarλ* (LW 22:8-10), which may be interpreted as "And these (*=aj*) *mlimn(a)* which the appointed (*kaττirs*) *priests* (*šiwraλmiš*) of

Artemis, the priest(s) of Pakiš and the interpreter(s) (*armτa-*) (will) … (in)to Sardis."[72]

This analysis finds support in another clause of the text which has a very similar structure and very likely contains the same enclitic *=aj* attached to *ãn* (possibly a noun):

ãn=aj f-ẽn-tašẽnav nã-qija mλimn=s išt Sfarλ iitλ (LW 22:4-5) "Whatever *mlimn(a)* (obj.) the *ãn* (will) ... (in)to Sardis in/for *fẽntašẽna* (dat.-loc.pl)."[73]

It is noteworthy that the interpretation of *qija* as nom.-acc.pl. neutr. discredits the interpretation of *qej* as such suggested earlier by MELCHERT (2004a:139-140, cf. above). The practically full parallelism between: *ak=it qej fa-sfẽn-u* (LW 23:8), *amu=k=it qyj fa-sfẽn-u* (LW 23:14), *ak=it amu nã-qij fa-sfẽn-u* (LW 24:18-19) makes it very likely that *qej* and *qyj* are merely phonetic variants of *qij*. As for origin of *qija*, there is no necessity to consider it as a secondary formation emerged from *qij* extended by the inflectional ending *-a* (cf. SIDELTSEV-YAKUBOVICH 2016: 99): the form naturally fits into the paradigm reconstructible for PIE pronouns and may be traced back to $*k^{\mu}i\text{-}h_2$ with a secondary glide *-j-* emerged after the vocalization of the laryngeal; the form exactly corresponds to Lat. *quia* 'because' which is supposed to originate as neutr. nom.-acc.pl. from the interrogative-indefinite pronominal set (cf. WEISS 2009:348).

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[72] There can be little doubt that *qija* and *=aj* refer to *mλimn(a)*, as there is simply no other appropriate noun in the clause. The interpretation of *mλimn(a)* as a *pluralia tantum* noun comparable with *antola* and *laqriša* is supported by the form which it has in line 1: *mλimna=s* (*wicv*), in which *=s* is either an emphatic particle (cf. MELCHERT 1991) or an enclitic pronoun or a sort of postposition, and in ll. 7-8: … *cẽntλ mλimnav šawv sfarjẽtav* which is apparently dat.-loc.pl. analogical to *antolav* and *laqrišav*. This also well agrees with the morphology of the word in which one may naturally separate suffix *-mn-* which likely reflects PIE **-men-*, suffix deriving neuter (action) nouns from verbs (cf. Luwian *-mman-*). In fact, there is every reason to see the verbal basis of *mλimn(a)* in the derived verb *mλatalaj* attested in l. 2 in combination with *mλimn(a)*. This quite obviously refutes the interpretation of *mλimn(a)* as a group of persons claimed by SCHÜRR (1997b) and adopted recently by YAKUBOVICH (2017) who resurrected in addition the old interpretation of *mλimn(a)* as 'Mermnads', arbitrary as it is. A detailed discussion of the text will be proposed elsewhere. One should also note that the proposed interpretation of the clause makes the interpretation of the verbal form *iitλ* as a medio-passive suggested by MELCHERT (2006:1164-1165) at least problematic: the verb should be transitive and is likely another example of 3.pres.pl. If the directional meaning of *išt* suggested above is right, then it is likely that the verb means 'bring' or the like.

[73] That *ãn* likely represents an *animate noun* follows from two indications: the parallelism with LW 22:8-10 which features *šiwraλmiš Artimul* etc. instead of *ãn* and the evidence of the preceding clause (LW 22:4) *fa=(a)k sfarjẽta=k ãn katwvẽl* which may be interpreted as 'And may the Sardian *ãn* (have) *appointe(d)* (?)'. It is possible that *ãn* represents, as *šiwraλmiš*, a collective body.

If *=aj* is nom.-acc.neutr. plural, then one may naturally suggest that *=at* represents nom.-acc.neutr. *singular* and see in it a rather exact correspondence to Hitt. *=at* which has the same meaning. One may point out, however, a clause which seems to present a counterargument to this distinction between *=at* and *=aj*. In LW 24:18-21 there appears a list of different things similar to those in LW 1 and LW 2, which are, however, referred collectively as *=at*:

ak=it amu nã-qij fa-sfẽn-u na=k aarav na=k pira=k [n]a=k jẽtv ẽmv
ak=at amu Mitrijaš[taλ] [ka]weλ kan-tor-u (LW 24:18-21) "What I possess – as the farmyard, as the house, as my movable property – (all) this I entrust to Mitriyaštas, the priest".

In fact, the contradiction is seeming: the collective plural may well be picked up by a neutral pronoun in singular, as for instance Greek ὁ = τὸ πᾶν or Latin *quid = id omne* would do. It is noteworthy that the same phenomenon is found in LW 2:3 in which *laqriša* is picked up by *qij*$^{!}$ (*laqriša=k=in qij*$^{!}$ *ẽt-os-rs*).[74]

The question is how one can etymologically interpret the forms of the enclitics *=at* vs. *=aj* and the formal discrepancy between these two forms and the endings of relative pronouns *qij* vs. *qija*. The most straightforward and simplest assumption would be that the enclitic *=at* reflects the same dental marker of the neutr.nom.-acc. sg. as seen in *qij* < **k^{u}id*. The retention of the dental character of the marker is due probably to the systemic factors: if *=at* would develop to *=aj* it would coincide with the respective plural marker, so it was kept unchanged within the enclitics set. The question is then what is the source of *=aj*. There is no possibility to trace back this ending to something containing dental. Instead, a natural comparandum would be the ending of Hitt. neutr.nom.-acc.pl. pronominal ending **-i* (or **i̯*) seen in *kue* (*kuie*) which may be reconstructed as **k^{u}éi̯* (cf. MELCHERT 2004a:140) and the respective Lat. pronominal ending *-e* seen in the forms *ha-e-c* and *qua-e* which seems to originate from the (deictic/emphatic) particle **-i* found also in Greek (τουτί etc., cf. WEISS 2009:344 and 351).

5.5. The next case of the alleged reflection of PIE **d* as Lydian <d> is *kud* usually interpreted as 'as' or 'where' and derived from PIE **k$^{(u)}$udV-* (MELCHERT 1994b: 338 with further refs.). The case is curious: although the interpretation of this element and the respective etymological connection is most probably false, an alternative interpretation which may be proposed for it leads to a very similar preform. The interpretation of *kuj* (= *kud*) as 'as' or 'where' was suggested by SOMMER when discussing the Lydian-Aramaic bilingual (in KAHLE-SOMMER 1927:44-45). Sommer recognized in *kuj* an ele-

[74] It is noteworthy that *qij* is in fact an emendation from *qii* which is very clearly seen on the photo (cf. BUCKLER 1924: pl. 1 and p. 6). It would be seducing to explain this scribal slip as triggered by the close articulation of *i* and *j*.

ment introducing a *relative* clause and, facing several alternatives, preferred the interpretation as a *local* relative adverb ('where') taking it to correspond in its second (out of two) occurrences to Aramaic *l-qbl zy* which he interprets as 'corresponding to, as far as' ('entsprechend wie, soweit wie'). This correspondence is, however, at least imprecise not to say false: in fact, in the passage in question one can establish only general correspondence of larger texts units in Lydian and Aramaic, namely:

Lydian *puk=it kuj išt ešλ wãnaλ pλ-tarwo*[*j*] (LW 1a:6)
= Aramaic *l-qbl zy prbr l-mʿrt-ʔ znh* (LW 1b:5-6)

A similar picture is found with the first occurrence of *kuj*, where

Lydian *kuj=k=it išt ešλ wãn*[*aλ*] *pλ-tarw-oj* (LW 1a:3-4)
= Aramaic *w-prbr zy ʿl sprb znh prbr-h* (LW 1b:3)

Many details of the Aramaic text are obscure, but the fact that *l-qbl zy* is absent in the Aramaic LW 1b:3 plainly speaks against the simple equation *kuj = l-qbl zy*. If one would like to establish a word-to-word correspondence between Lydian and Aramaic, a more likely variant would be *kuj = prbr*, whose meaning is, however, highly problematic[75] and this equation runs counter other evidence in Lydian which suggests that *kuj* is a sort of relative pronoun.

Fortunately, the structure of the Lydian text alone is transparent enough to suggest a more likely interpretation of *kuj* without engaging into the discussion of the Aramaic text.[76] In its first occurrence the clause *kuj=k=it išt ešλ wãnaλ pλ-tarw-oj* appears at the *end* of the passage listing different elements of the grave (LW 1:2-3): *mru-* 'stele', *wãna-* 'chamber-tomb', *laqriša* and *qela-*. In the second case (LW 1:6), it appears after *mru-*, *wãna-* and *laqriša*, but *qela* is for some reason transferred in the next clause (*ak=t=in nã-qiš qelλ=k fẽnšλifij*). Similarly, in LW 8 *kuj=k=it išt ešλ wãnaλ pλ-tarw-oj* appears after *wãna-*, *mru-* and *laqriša* (ll. 2-3 and 9-10). As was observed already by VETTER (1959:41) both these contexts and some others featuring *tarp-*/*tarf-* clearly imply that root *tarw-* (*tarp-*/*tarf-*) designates *belonging* (cf. GUSMANI 1964: *s.v.*). Then the clause *išt ešλ wãnaλ pλ-tarw-oj* may be naturally

[75] The word *prbr* is hapax in the Aramaic corpus and its connection with either Greek περίβολος, Hebrew *prbr* (*parbār*) or Iranian *prbd* and an interpretation 'precinct, entrance corridor' – see LITTMANN (1916: -26-27), cf. HOFTIJZER-JONGELING (1995: *s.v. prbr* with further refs.) – is quite uncertain.

[76] The problem of the relationship between the Lydian and the Aramaic parts, as well as difficulties involved in the interpretation of Aramaic terms of the bilingual, will be addressed in detail elsewhere.

interpreted as 'belongs *(in)to* this grave-chamber'.[77] Combining this interpretation and the position of the clause *kuj=k=it išt ešλ wãnaλ pλ-tarw-oj* in the texts, one may interpret the clause as 'and *whatever* belongs (in)to this grave-chamber', which serves to summarize all the objects placed into the grave besides the explicitly mentioned *wãna-, mru-* and *laqriša*. This interpretation fits well into two other relatively clear contexts featuring *kuj*. In LW 5:2 the short clause *ak=in kuj καταλreš* follows the first usual clause identifying the owner of the grave: *ess wãnas Atališ Tiwjališ Tarwταlliš*: 'this is the chamber-tomb of *Atas*, son of *Tiwjas*, of (the tribe of) *Tarwταl(a/i)s*'. Now, the second clause may be interpreted as a sort of addition to the first one, specifying that not only the tomb itself, but also all the objects found in it belong to *Atas*: 'and whatever is *put* (?) down (into it)'.[78] In LW 23:7-8 *kuj* appears in a short clause *fa=kuj amu owv* after which follows *ak=it qej fa-sfẽn-u ak=at qλ fa-kan-trow* "and which I possess, (and) whom I entrust to". Even if the interpretation of *ow-* as 'proclaim' is not quite certain, an interpretation of the clause *fa=kuj amu owv* as 'whatever I may proclaim' makes a fairly good sense in the context of an agreement, referring apparently to the part of the possessions to be 'entrusted'.

The question is what *kuj* represents etymologically. It is hardly possible to separate *kuj* from the PIE root of the relative pronouns **k^{μ}e/o/i-*. However, it cannot be simply identified as a phonetic variant of *qij*, as in LW 23:7-8 *kuj* appears side by side with *qej* which itself, as noted above, represents a variant of *qij*. A solution is suggested by the situation in the Italic languages, which have both the neutr. sg. forms based of **k^{μ}i-* and **k^{μ}o-*, cf. Lat *quid* used as an interrogative pronoun and *quod* used as an interrogative, relative and indefinite pronoun, and its Umbrian counterparts *pid* and *púd* and Oscan *pid* vs. *pod*. If Lydian *qij* may be derived from PIE **k^{μ}i-d* (cf. above), one may naturally interpret *kuj* as its counterpart based, as Lat. *quod*, on the stem **k^{μ}o-*. This derivation naturally explains the loss of labial component of *k^{μ}-* before *o* (cf. *kãna-* 'wife' < PIE **g^{μ}on-eh$_2$*) with the subsequent rising of the latter to *u*, due probably to the presence of *i* (as contrasted with *kot* 'as' (or the like) which likely goes back to PIE **k^{μ}ot*). If the pair *kuj*/*qij* is formally exactly comparable with Lat. *quod*/*quid*, the semantic distinction between *kuj* and *qij*

[77] This interpretation makes it likely that the preposition *ešt* is a counterpart of the Aram. *'l* 'on, to, for' (immediate location or direction). The claim of SCHÜRR (2000:126) that *'l* should somehow imply position *outside* the grave is based on some misunderstanding.

[78] The verb *καταλreš* apparently contains the prefix *kat-* 'down'. As for the final part, one may tentatively identify in *-reš* a phonetic variant of *-riš* which quite probably serves to form passive perfect participles (cf. above, fn. 60; cf. CARRUBA 1960:57 who also took the form as a participle). This interpretation perfectly agrees with the context, as *kuj* 'whatever' obviously requires a *passive* form of the verb. The root **šaλ-* which one may separate in the form is not attested elsewhere; very tentatively one may assume that *šλẽca-* attested in LW 10:11 and 15 is based on the same root. The context suggests a meaning 'put down', 'deposit' or the like.

is probably different: the latter seems to function as a usual relative pronoun, while *kuj* in all clear cases functions rather as an indefinite *generalizing* pronoun.

5.6. Much more problematic is the case of another short element, *-koj* ('*-kod*') which has been tentatively traced back to PIE **k^{u}od* (MELCHERT 1994b:338 with further refs.). GUSMANI (1964: s.v.) defines it as an enclitic with generalizing function and lists *three* attestations of *-koj* in the corpus (LW 22:14, LW 14:17 and LW 23:17), assuming that the sequence *kukok* in LW 14:17 and *ejkok* in LW 23:17 reflect the same element with the elision of the final consonant before *-k*. The meaning of *-koj* as a generalizing enclitic goes back to MERIGGI (1935:84-85) who separated it in the sequence *nãkukoj* attested in LW 22:14 assuming that the latter means 'everywhere' = 'in every respect' (überall(hin) = 'in jeder Hinsicht'). The derivation of *-koj* from PIE **k^{u}od* is based on the alleged identity of Lydian *-koj* and *-kot* 'as' (or the like), on the one hand, and on its alleged formal correspondence with Hitt. *k(u)wat* 'why' (and *k(u)wat-ka* 'somehow, anyhow, perhaps') and Palaic *k(u)wat* 'anyhow', on the other (see GUSMANI 1964: *s.v.* and MELCHERT 1994b:338 with further refs.).

The case is highly problematic, since not only the meaning of *-koj* but its very existence is very dubious. First, the equation of *-koj* and *-kot* is quite arbitrary, as there is not a single context supporting it (cf. already MELCHERT 1992:31) and now with the re-reading of <d> may be certainly dismissed. Second, even the separation of *-koj* is uncertain. The sequence *nãkukoj* which lead to identification of *-koj* as such is attested in the following context:

Sfarjẽti=k astrkos mλimlλ nãkukoj fa-kat-wãmij (LW 22:13-14)

MERIGGI (1935:85) interpreted the clause as "Der Sardische Bürger soll dem Mermnas überall(hin = 'in jeder Hinsicht') willfahren". This interpretation is, however, as arbitrary as that found in YAKUBOVICH (2017:282): "And *whenever* the Sardian Lady may approach a *mλimna-*", as the meanings of all crucial terms of the passage, the nouns *astrko-* and *mλimn-* and the verb *fa-kat-wãm-* (a hapax) are quite obscure.[79] No more certain is the analysis of

[79] For *mλimn-* cf. above, fn. 72. The comparison of *fa-kat-wãm-* with Hitt. *wemiya-* 'find' (cf. GUSMANI 1964: *s.v.*) is based only on phonetic similarity and hardly finds any support in the context. The verb contains prefix *kat-* 'down' and takes as an indirect object an inanimate noun in *dative-locative*, which poorly agrees with the meaning 'find'. GUSMANI's 'entgegenkommen' (im bildlichen Sinne) or YAKUBOVICH's 'approach' are as good guesses as anything else. No more verifiable is the meaning of *ast(u)rko-*: contra VETTER (1959:54-55) and GUSMANI (1964: *s.v.*), who follows him, the context of LW 11:1 and 9 is not clear enough to conclude that *ast(u)rko-* is an attribute or an epithet of a god. The interpretation of *šaristros* in LW 11:1 as a divine name is by far not compelling (in fact, the old comparison with Ξυρισταυροι may be seriously taken into consideration) and the perception of *caqrlaλ astrkoλ* in LW 11:9 as

nãkukoj as *nã-ku-koj*. The separation of the element *nã-* is quite likely in view of *nã-qiš* and *nã-qij* which obviously contain in the second part relative pronouns. As for *-kukoj*, clues for its analysis are somewhat ambiguous, but in any case speak against the separation of *-koj*. On the one hand, one has *kukok* attested in an obscure context in LW 14:17, which may be analyzed as *kuko-k*, i.e. root *kuko-* with the enclitic connective *-k*; in fact, given the elision of *-j* before *-k*, *kuko-k* may well reflect **kukoj-k*. The pair *nã-kukoj : *kukoj-k* would build then an exact parallel to the pair *nã-qij : qi=k* < **qij=k*. On the other hand, the combination *kuj=k=it* attested in LW 1:3 and LW 8:2, 9 suggests a theoretical possibility that *-kukoj* may come from **-kuj=k=oj*, in which *-k-* might be the connective enclitic. This possibility seems, however, unlikely, since the element *-oj* is not attested elsewhere as an enclitic.

As for *ejkok* attested in a short clause in LW 23:17 *ak=it ejkok ẽt-qrat-aj*, its analysis and meaning remain obscure. If one accepts the identification of *ej-* (*ed-*) as a demonstrative pronoun (cf. GUSMANI 1964: *s.v.*) it would be not impossible to analyze *ejkok* as *ej-ko=k*. Even if so, in the absence of other supportive evidence the connection of *-ko-* with the cuneiform *k(u)wat* is quite arbitrary. It is not excluded that **-ko-* represents a thematic suffix seen, besides *ku-ko-*, possibly also in *iš-ko-* usually interpreted as 'all, every' (cf. GUSMANI 1964: *s.v.*)[80] and *ast(u)r-ko-*; if right, it may be compared with IE adjectival *-(V)k-* suffixes attested in different branches, cf., e.g. ἱππ-ικ-ός, Lat. *bell-ic-us* and *juven-c-us*, OCS *vys-ok-ъ* etc.

5.7. Lastly, it has been suggested that the ending *-ad* (= *-aj*) seen in such forms as *qaλmλaj* (LW 11:8), *ciwaj* (LW 44:5) or *tarptaj* in LW 13:9 may reflect a PA instrumental-ablative ending which MELCHERT reconstructs as **-odi* (MELCHERT 1994b:338 with ref. to MERIGGI 1935:93-94 and 1936: 285). It should be said first of all that the reconstruction of such a PA ending is dubious: in all probability PA did not have a uniform instrumental-ablative ending, but employed a number of morphological means to express ablative and instrumental, which included **-ti, -d* and *-ad*, the last of which is likely connected with the PIE ablative ending commonly reconstructed as **-ōd* < poss. **-o-h₂-ad* (see MELCHERT-OETTINGER 2009). However, this does not change the idea significantly, since formally Lydian *-aj* may be derived from

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agreed with the preceding *Sfarja=k Artimuλ* is most certainly false: the latter is followed by the postposition/adverb *jãv* and *caqrlaλ astrkoλ* probably builds the *predicate* group of the clause, as there is simply no other elements in it. The clause can be interpreted as "With/for (or sim.) the Sardian Artimus (is) in/to the *caqrla- astrko-*."

[80] The interpretation of *išk̂o-* as 'all, every' is quite uncertain. Morphologically, the word may be tentatively analyzed as a suffixal derivative of *iš-* well attested as a preverb and possibly contained in the preposition *iš-t* and likely meaning '(in)to' (cf. above). If right, the meaning of *išk̂o-* is rather 'belonging', '(lying) within' or the like.

*-*ad* (or *-*ād*). If proven, it would give another example of the development **d* > *j* in Lydian in a weak position.

Unfortunately, there are no contexts which with any certainty corroborate the semantics of the element -*aj*. The context of the passage featuring *qaλmλaj* on which MERIGGI (1935:93-94) based his interpretation is in fact far from being syntactically transparent and the interpretation of *qaλmλaj* as a case form of *qaλmλu-* 'king' present an obvious formal difficulty: one would expect that the stem vowel -*u*- would be preserved in one from or another. Furthermore, there are two other possibilities: one may interpret *qaλmλaj* as a combination of *qaλmλu-* with the enclitic pronoun =*aj* or even as a verbal form of pres.3.sg. which might mean something like 'rule, hold sway'. Certainly, given that the Lydian case system appears to be amazingly simple, featuring, besides nominative, only genitive and dative, it would be tempting to identify in -*aj* another case. However, it is not excluded that the case system might have had been significantly rebuilt by the 5th century BC simply replacing old cases with some other means of indicating syntactical relationships in the clause (as, e.g., post- and pre-positions). The derivation of -*aj* from *-*ad* < PIE *-*ōd* remains at present only a possibility.

5.8. One can sum up the considerations on the development of **d* and the general situation with dentals in Lydian as follows. Contrary to the earlier reconstructions, the re-interpretation of the Lydian letter *ʎ* as <j> implies that PIE **d* developed in weak positions to *j̓*. The reasonably certain pieces of comparative evidence for this process include *taaja-* < **tāda-* and the nominal and pronominal ending of neutr.nom.-acc.sg. -*j* < PIE *-*d*. The phenomenon represents an advanced stage of lenition of **d*, a process well known in other Anatolian languages, where is reached, however, less advanced stages: the PIE **d* was largely preserved in Hittite and was probably phonetically realized as voiced/lenis dental; in Lycian it reached the stage of *ð* and in Luwian the stage of a dental or alveolar 'flap' (*ɾ*). At the same time, a number of other cases which were earlier adduced to demonstrate the retention of PIE **d* in Lydian as such does not stand scrutiny. Most significantly, the Lydian 3.pres.sg. verbal ending -*j* has probably nothing to do with PIE *-*ti*, but goes back to *-*i*/*j̓* matching either Hittite 3.pres.sg. ending of the *ḫi*-conjugation or Greek 3.pres.sg. thematic ending -ει. In contrast, several pieces of evidence suggests that in strong positions, notably in the word onset, the old **d* developed in Lydian to *l*. This development can be assumed, for instance, for *Lamẽtrus* which likely goes back to the form with the initial *d*-, be it a borrowing from Greek Δημήτηρ or from a third source, and for *Lefs*/*Lews* which may traced back to PIE **dei̯-u̯-ó-s*. In the consonant clusters PIE **d* was probably preserved as such and appears as <t> in graphics, although the evidence for it has more circumstantial character being essentially confined to onomastic material (cf., e.g. Ἀδράστης = *Atrastas*). This old voiced dental was

probably prone to the development to *l* also after nasals, as the variation *antola*/*anlola*- suggests. As for PIE **t* it retained its dental character in Lydian, being reflected as <t> in graphics. Its realization depended on position in the word and on phonetic conditions: in strong positions, as the word onset, it was realized as voiceless/fortis dental and in weak positions as voiced/lenis. Lastly, the case of *Sfarja*- = Σάρδεις/*Sparda* shows that in a postconsonantal position Lydian palatal approximant could assume a more fortis realization approaching a dental (*ð* or even *d*), although the case *Sakarjas* = Σα(γ)γάριος shows that it was a sporadic process rather than a rule.

ABBREVIATIONS

CHD = *The Hittite dictionary of the Oriental Institute of the University of Chicago*. Chicago, the Oriental Institute of the University of Chicago, 1989-.

LGPN VA = Thomas CORSTEN (ed.), *Lexicon of Greek Personal Names*. *Vol. VA: Coastal Asia Minor: Pontos to Ionia*. Oxford: Clarendon Press, 2010.

LGPN VB = Peter M. FRASER & Elaine MATTHEWS (eds.), *Lexicon of Greek Personal Names*. *Vol. VB: Coastal Asia Minor: Caria to Cilicia*. Oxford: Clarendon Press, 2014.

TAM I = *Tituli Asiae Minoris, I. Tituli Lyciae lingua Lycia conscripti*, ed. Ernst KALINKA. Vienna 1901.

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