THE ORIGIN OF THE LYDIAN DAT. SG. ENDING -λ

In Lydian, the ending of the dat. sg. is -λ: e.g. esλ wānāλ ‘in/to this grave’, artimuλ ‘to Artemis’, bλ ‘to him’, etc. An λ is also found in the dat. sg. form of the enclitic anaphoric pronoun, which is =mλ, e.g. f=a=k=mλ ‘and to him’. In this article, the origin of this ending -λ will be discussed.1

In the Lydian script, the letter that is now generally transliterated as λ has the shape ῦ. Since this letter is unknown in any of the other alphabetic scripts used in Anatolia and Greece, it was at the time that the Lydian texts were first studied not immediately evident how it should be read. In his 1916 book ‘Lydian Inscriptions’, in which the Lydian texts found in Sardis are first published, and with which Lydian studies started, Littmann (1916: 15–6) proposes to read ῦ as a nasalized vowel ū.2 This interpretation was soon challenged by Danielsson,3 however, who points to the similarity between the form aτικσάλαντρυ- and the Greek name Ἀλέξανδρος (cf. the fact that Lydia was occupied by Alexander the Great in 334 BC), and

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1 In my transliteration of the Lydian signs, I will in principle follow Gusmani 1964, except for the following signs: the sign \ is transliterated as s (vs. š in Gusmani); the sign ũ as ċ (vs. s in Gusmani); and the sign ť as w (vs. v in Gusmani). See Schürr 1999: 171–3 and Melchert 2006: 1161 for these renewed transliterations.

2 Littmann’s reasoning was as follows. On the basis of forms like “bτ, qτ, qτns, etc.” (with “qτns” probably referring to the sequence of signs as found in LW 14, 11, which nowadays is read qaλ nsq [...] ), he assumed that τ represents a vowel. On the basis of the forms “sawτnt” (with which he probably refers to the word from LW 23, 13 that nowadays is read sawēnt), “akmτnt” (with which he probably refers to the word from LW 23, 9 that nowadays is read akmēit) and “qτns” (see the commentary on this form above), he concludes that that vowel must have been nasalized. On the basis of forms like artimuτk (LW 23, 1), suτos (LW 11, 7), “cuτdanē-” (i.e. culdalē, LW 27, 3) and qaτmtuτ (LW 41, 2), he concludes that the vowel should have a u-quality, ergo: ū. As we see, especially the conclusion that τ should represent a nasalized vowel is based on incorrectly read forms. In fact, the letter τ never occurs before n or v.

concludes that ₡ must have been a lateral consonant.⁴ Since the Lydian script contains another lateral consonant as well, namely ♂, which was transliterated l, Danielsson transliterates ₡ with l. These two lateral sounds are consistently distinguished,⁵ and Danielsson therefore concludes that there must have been a phonetic difference between the two, although he is unable to determine with certainty what kind of lateral sound ₡ must represent (guttural, cerebral, etc.). Yet, he hesitatingly suggest that the alternation between b□ and bu□ (which must represent the same word)⁶ could point to a velarized pronunciation.⁷

The recognition that ₡ must represent a lateral sound was soon followed by several scholars, among which was Cuny, who, instead of Danielsson’s l, proposed to transliterate ₡ with the sign λ (Cuny 1921: 2). This transliteration was canonized by Littmann’s successor Buckler in his 1924 Part II to the book ‘Lydian Inscriptions’ (1924: XIII), and has been standard ever since.

Although Danielsson’s recognition of λ as a lateral sound was accepted by most scholars, his assumption that it might represent a velarized lateral did not convince everyone. It was Thurneysen (1922: 35–6), who pointed to the fact that in i-stem nouns, i.e. stems that show a nom. sg. in °Cišt and a genitival adjective °Cišt-, the dat.-loc. sg. form is spelled °Ciλ, and not **°Ciλ, and that λ thus “ein vorhergehendes i [verschluckt]” (1922: 36).⁸ He therefore concluded that λ must have been a palatalized sound. Yet, since Thurneysen was one of the few scholars that did not believe that λ could have

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⁴ Also Arkwright *apud* Cook 1917: 82, 221 reads ₡ as a lateral consonant, but does not give specific reasons for this.

⁵ The only seeming exception being the form *ql’dănλ* (LW 23, 1), which can hardly be anything else than the dat. sg. form to *ql’dăn- ‘Apollo’ and therewith would show an ending -l instead of the normal dat. sg. ending -λ. Perhaps the presence of -l instead of -λ is phonologically conditioned (note the complete absence of the sequence (-)nλ(-) in the Lydian corpus).

⁶ Best seen in the parallelism between the passages LW 24, 13–14 (... *katšarlokid bλ bilək arššt qaตรλ*) and LW 23, 10-11 (... *katšarlokid buλ bilək arššt qaตรλ*). Note that to Littmann (1916: 17) the parallelism between bλ and buλ was “a confirmation of the theory that ₡ is ữu”.

⁷ Interestingly, Danielsson states that this alternation “jedenfalls ein »palatales« l’ aus [schliesst]” (1917: 16).

⁸ Indeed, all i-stems show a dat. sg. in -λ: e.g. *artimulλ*, dat. sg. to the i-stem adjective *artimul*- ‘of Artemis’; *ibsimlλ*, dat. sg. to the i-stem adjective *ibsimši*- ‘Ephesian’ (with -lλ < */šl*).
The origin of the Lydian dat. sg. ending -\( \lambda \) had a lateral quality,\(^9\) he instead proposes to read it as a palatal \( \tilde{\eta} \). It were Kahle–Sommer (1927: 23–4\(^2\)) who combined Danielsson’s and Thurneysen’s views and stated that \( \lambda \) must have been a palatal lateral ([\( \Lambda \)])\(^10\), an interpretation that has been generally followed ever since. Moreover, in his Lydisches Wörterbuch, Gusmani (1964: 33) adduced an additional argument for this view, namely the connection between Lyd. \( \alpha \lambda \alpha \)- ‘other’ and e.g. Lat. \( alius \), which would show that -\( \lambda \)- can etymologically reflect *-\( \bar{\lambda} \)-.

In view of the above, we can confidently state that the Lydian dat. sg. ending consists of a palatal lateral \( [\Lambda] \), which is written down by the letter \( \Upsilon \), which we transliterate as \( \lambda \). Yet, from an Indo-European point of view, it is not easy to account for this fact: in no other Anatolian or Indo-European language do we find a dat. sg. ending that contains a lateral consonant.

Some scholars have therefore proposed that -\( \lambda \) originally was not a dat. sg. ending at all: Schmidt (1968: 236) assumed that -\( \lambda \) reflects a PANat. adverbial suffix *-\( \lambda \) that is also found in the Lycian locativial adverbs \( \epsilon \beta \varepsilon \lambda \varepsilon \) ‘here’ and \( \tau \varepsilon \lambda \iota \) ‘where’,\(^11\) whereas Gérard (2005: 80\(^{484}\)) hesitatingly proposed a connection with the Hitt. pronominal gen. sg. ending -\( \varepsilon \lambda \), assuming a development of *\( i \lambda > \lambda \) after *\( \varepsilon \) (> *\( i \)). Although both etymologies cannot be fully ruled out, I want to propose another, in my eyes much more straightforward solution for the origin of -\( \lambda \).

When looking at the Lydian phoneme inventory, we notice a remarkable gap: although Lydian possesses a \( w \), it does not have a \( y \). Moreover, although Lydian possesses \( u \)-diphthongs, which are spelled with a \( w \) (\( au \), \( ew \), \( iw \), \( ow \))\(^12\), it does not have \( i \)-diphthongs.

\(^9\) As Thurneysen states: “Wortformen wie \( bak\lambda l\), \( b\lambda l\), \( b\lambda l\), \( h\lambda l\) [i.e. \( gel\lambda l\), A.K.] erscheinen mir unannehmbar” (1922: 35).

\(^{10}\) The form \( bu\lambda \) besides \( b\lambda l \) is in the eyes of Kahle–Sommer non-probative, since “[h]ier der labiale anlaut b- mitspielen [kann]” (1927: 24\(^2\)). And indeed, \( b(u)\lambda \) is the dat.-loc. sg. form to the stem \( b\iota \)-, which means that its preform must have been *\( bi\lambda \). Therewith, the form \( bu\lambda \) must be regarded as an epenthetic form of \( b\lambda \), the \( u \) of which can have been coloured by the preceding \( b \).

\(^{11}\) Followed by Melchert 1994a: 342.

\(^{12}\) That these (in preconsonantal and word-final position) must be regarded as real diphthongs can be deduced from the following facts: the 1sg. pres. act. ending -\( u \) is in postvocalic position spelled -\( w \), e.g. \( fak\lambda tr\lambda w, fa\omega w \); the deity name \( le\upsilon \) is generally assumed to be a rendering of (dialectal) Greek \( \Lambda\varepsilon\upsilon \) ‘Zeus’; the adjective \( taw\upsilon s\)-, which is i.a. used to describe \( g\lambda\dalpha n\)- ‘Apollo’ and therefore may be regarded to mean something like ‘powerful’, could be the term that underlies the Hesych glosses \( t\omega s\); \( m\varepsilon\gamma\alpha s, p\omega\lambda l\) ‘great, many’ and \( t\omega \iota s\varepsilon s\); \( m\gamma\alpha\lambda\upsilon\alpha s, p\lambda\varepsilon\varepsilon\nu\alpha\varepsilon s\) ‘having furthered, having enlarged’ (cf. Gérard 2005: 46–7 for all these). Note
This suggests that at a certain point in the prehistory of Lydian, Proto-Anatolian *i was either lost or changed its character.

In 1994, Melchert convincingly showed that this indeed is the case in word-initial and intervocalic position, where there are good examples for a previous *i yielding Lydian d: Lyd. dēt- ‘mobile wealth’ < *jont- (cf. Hitt. UDU*i*ant- ‘sheep’), and Lyd. bidv ‘I gave’ < *pijom (cf. CLuw. pai- / piā- ‘to give’) (Melchert 1994b). It is in this context important to realize that the Lydian letter that we transliterate with a d (Δ) probably represents a dental fricative, [0] or [δ].

In a follow-up article, Melchert (2004: 139–42) argued that also in the position *VN and *VN# an original *i yielded Lyd. d. For the position *VN he adduces the following example. The noun šadmē-, which he translates as “injunction, instruction, bidding” (also attested in the compound karradmē- < *kat-šadmē- “decree”), is according to Melchert synchronically related to the verb karrt-, which he translates as “to decree” and analyses as a compound *kat-ši-. He then assumes that *ši- and šad- must reflect ablaut variants and go back to *si- and *soi-, respectively (with *soi- having taken over the palatalized sibilant from the zero-grade stem), ultimately reflecting PIE *sbi*- / *sbɔi- ‘to bind’ (Hitt. išbi- / išhai-). The derivative šadmē- would then reflect a PIE -men-stem *sbɔi-ːmén-. This ingenious connection between (kat-)šadmē- and karrt- is indeed appealing.

that the only example of a u-diphthong spelled with the letter u, ʊrauk (LW 41, 4), may be a mistake for uraʊk (as attested in LW 11, 3).

13 The habit to transliterate the sign d as d stems from Littmann (1916: 5), who proposes to interpret the name mitrikāštas as representing Old Persian “hand of Mit(h)ra” (with *kāsta* corresponding to Persian dast ‘hand’), and compares the Lydian spelling of the name of the city of Sardis (sfarA) with its Aramaic counterpart (sprd). Yet, since Greek words containing a d are in Lydian represented either with <l> (e.g. Dēmētēr = Lyd. lamētʳ-, Deus (variant of Zeus) = Lyd. lews) or with <t> after a resonant (Alexandros = Lyd. alikšan trú-), but not with <d>, it is nowadays generally assumed that the latter cannot represent /dl/. Instead, most scholars assume that d represents a dental fricative. E.g. Melchert asserts that d represents /ðl/, but I rather assume that the fricative in principle was voiceless, /θl/, having a voiced allophone in specific environments only (e.g. in intervocalic position). In this way we can easier account for e.g. nom.-acc. sg. n. ešt ‘this’ from older *eʃd: since eʃt represents [ɛt], it is more likely that its preform was *[eʃʔ] and not *[eʃd], which we would rather expect to have yielded *[eʃd]. Moreover, all other fricatives (f, s, š) and also the stops (b = /p/, t, c = /cl/, k, q = /kʰ/) were in principle voiceless (except in certain environments where they could be realized as their allophonically voiced counterpart). The assumption that in intervocalic position the /θl/ was realized as a voiced sound, [ðl], can explain the spelling mitrikāštas: in Old Persian the initial sound of the word for ‘hand’ probably was a [ð] ([ðasta-] < PIE *gʰesdo-, cf. e.g. Mayrhofer 1989: 6).
This is less so, however, for the example Melchert gives for the position *\textit{Vj}\. He argues that the form \textit{qed}, which is an occasional variant of the more generally used nom.-acc. n. sg./pl. form \textit{qid} of the relative pronoun \textit{qi} ‘who, what’, may originally have been the neuter plural form cognate with Hitt. \textit{kue}, and could perhaps go back to a “hysterokinetic” \textit{i}-stem plural form *\textit{kw}\textit{\textbeta}_{1}t\textit{i}, which would be “more archaic” than the neuter plural form *\textit{kw}\textit{ib}_{2} as attested in the other IE languages. This *\textit{kw}\textit{\textbeta}_{1}t\textit{i} would then have regularly developed into Lyd. \textit{qed}. Melchert himself is aware of the very tentative nature of the reconstruction of a preform *\textit{kw}\textit{\textbeta}_{1}t\textit{i} (“with due reserve”), and indeed, it is not very convincing. As I have argued in Kloekhorst 2008: 490, the Hitt. nom.-acc. n. pl. form \textit{kue} can be explained from *\textit{kw}\textit{ib}_{2} through the assumption that *\textit{b}_{2} had a lowering effect on the preceding *\textit{i} (parallel to *\textit{ub}_{2} > Hitt. \textit{lol}, cf. Kloekhorst 2008: 95), which means that we do not need to postulate hypothetical “more archaic” forms for which there is no other evidence at all. If the Lydian form \textit{qed} indeed ultimately reflects the neuter plural form, it seems unproblematic to me that it would reflect *\textit{kw}\textit{ib}_{2}, which must have yielded *\textit{kw}\textit{\textbeta} in Panatolian times already, to which in pre-Lydian the synchronic neuter ending -\textit{d} was added.

With this elimination of the only example Melchert gives for the development *\textit{i} > Lyd. \textit{d} in word-final position, we may consider other possible outcomes of the sequence *\textit{Vj}\. I want to propose that in word-final position, the sequence *\textit{Vj} yielded Lyd. -(\textit{V})\textit{\lambda}. Such a development would straightforwardly explain the following three morphemes.

(1) The dat. sg. ending -\textit{\lambda} can now be traced back to PIE *-\textit{e}\textit{i} (which is attested in the Hittite ending -\textit{i} of desinidentally stressed nouns like \textit{ta\textkappa\textn}\ ‘earth’ < *\textit{d}\textit{\textg}\textit{m-}\textit{\texte}\textit{i}, \textit{ki\textsh\texts\texta}\texti\textr\textr ‘hand’ < *\textit{g}\textit{\textk}\textit{s-r-}\textit{\texte}\textit{i}, etc.), the full grade variant of PIE *-\textit{i} (as attested in Hitt. -\textit{i}, Luw. -\textit{i}, Lyc. -\textit{i}). It will be immediately clear that the big advantage of this proposal is that Lydian at once becomes much less ‘exotic’, and now shows the exact same dat. sg. ending as the other Anatolian languages.

(2) The dat. sg. form of the enclitic personal pronoun, =\textit{m\lambda}, can now be traced back to *\textit{smo}\textit{j}, the normal expected form besides the dat. pl. form =\textit{ms} < *\textit{smo}\textit{s}.

\textsuperscript{14} Cf. Carruba 1969b: 44 for the identification of =\textit{ms} as the dat. pl. form of the enclitic personal pronoun =\textit{a} ‘he, she, it’, and its connection with Hitt. =\textit{\textsh\textm\texta}\texts\textx\textx and CLuw. =\textit{mma}\textx.
(3) The verbal ending -tλ (also attested once as -tal), which according to Melchert (2006) may have to be interpreted as a 3sg. pres. midd. ending, could now be reconstructed as *-toj.15

Before we can fully accept this new sound law, we need to treat one seeming counter-example, however, namely the ‘reflexive’ particle =s. In 1963, Meriggi argued that the enclitic particle =s that can be found in some sentence initial particle chains and that thus far had been seen as a variant of the enclitic nom. sg. c. form =as ‘he, she’, in fact must have been a separate particle, that may have a reflexive meaning (Meriggi 1963: 23–6). According to Meriggi, the most important example is the particle chain akmsas (22.13), which he interprets as ak=m=s=as “er ... für sich(?)”. In a 1991 article, Melchert (1991: 142) states that this particle =s must reflect PIE *=soj, the particle that in Hittite had yielded the enclitic dat.-loc. sg. form =šše ‘to him’, and that in Luwian may survive as the element -si found in the preterite middle endings.16 If =s would indeed derive from *=soj, it would be an argument against the hypothesis that *Vj# yielded Lyd. -(V)λ.

Yet, I have severe doubts about the correctness of the analysis of this ‘reflexive’ particle =s. Most of Meriggi’s examples of this particle deal with particle chains where the s is preceded by an m, which for a long time was thought to be a separate particle as well. Yet, in 1969 Carruba has convincingly shown that in these cases we are in fact dealing with a particle =ms, which forms the dat. pl. of the enclitic pronoun, meaning ‘to them’ (Carruba 1969a: 69–75, 81; 1969b: 44). Also Meriggi’s prime example for analysing a reflexive particle, the sentence initial particle chain akmsas (22.13), in fact contains this dat. pl. form: ak=ms=as ‘these (=as, acc. pl. c.) to them (=ms, dat. pl.’).17 With the elimination of these cases, only a few examples of a separate particle =s are left (e.g. ak=s (23.18), kshλtal=λ=k=s (11.4),

15 Melchert himself suggests that the ending -t(a)λ may reflect *-tori, with which it would match Hitt. -tari. According to Melchert, the *r in *-tori was palatalized before *i, after which it was substituted by palatalized λ. Yet, since it is likely that in Proto-Anatolian the middle endings were still tenseless (cf. the fact that in the Anatolian languages different strategies are used to mark the present tense: in Hittite and Luwian an element -ri is used, whereas Lycian uses an element -ni: this means that we cannot reconstruct a single Proto-Anatolian present tense marker of the middle endings), Lydian may have chosen a different strategy to mark the present tense on middle endings. With the newly found sound law, it has become possible to reconstruct -t(a)λ as *-toj.


17 Cf. Schürr 1997: 204–5 for this analysis. Another analysis may be possible as well, namely akmsas = ak=ms=a(d)=s ‘even (=s, emphatic) it (=ad, nom.-acc. sg.
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\(\ddot{\text{a}}n=s\) (14.10, if parsed correctly)). For none of these, a reflexive translation seems to be obligatory. Instead, I would rather assume that in these cases the particle =s is identical to the emphatic particle =s that was identified by Melchert 1991. As Melchert convincingly argues, in some sentences an enclitic particle =s can be found that is attached to a word that is not in sentence initial position and that therefore must have had an emphasizing meaning (Melchert 1991: 132). According to Melchert, this emphasizing =s is etymologically cognate to the reflexive particle =s as was postulated by Meriggi. I would go a step further and propose that they are one and the same particle. To Melchert, the connection with the reflexive particle =s means that the emphasizing particle =s originally must have meant something like ‘-self’, which was used in emphatic contexts as well (1991: 135). To me, there is no need to assume that this particle ever had a reflexive meaning, and I would rather assume that in all instances where =s is found it has an emphasizing meaning (in sentence initial position, it would then emphasize the sentence as a whole). In this way, there is no need to assume that the emphasizing meaning of =s went through a reflexive meaning, which is the reason for Melchert to assume that it reflects *=so\(\ddot{i}\). Instead, one could think of an original demonstrative meaning, and reconstruct =s as *=so.\(^{18}\)

Whatever be the etymological origin of =s, I think it is clear that reconstructing it as *=so\(\ddot{i}\) is not the only option, with which this particle cannot be used as a counterargument to the development *\(V_i\#\) > Lyd. -(V)\(\lambda\) as postulated here.

I conclude that all relevant material supports the assumption that word-final *-\(V_i\#\) yielded Lyd. -(V)\(\lambda\), and that therefore the thus far enigmatic Lydian dat. sg. ending -\(\lambda\) can be traced back to the plain PIE dat. sg. ending *-\(e\(\ddot{i}\).\)

Finally, a word on the phonetic development of *\(\ddot{i}\) to \(\lambda\) can be added. Of course, we can assume that PIE *\(\ddot{i}\) (which phonetically must have been [jj]) through PAInat. *\(\ddot{i}\) ([jj]) directly yielded Lyd. \(\lambda\) (which is regarded to have phonetically been [\(\ddot{\lambda}\)]), but it may be more attractive to connect the development of *-\(V_i\#\) > Lyd. -(V)\(\lambda\) with the development of *\(\ddot{i}\) > Lyd. \(d\) in all other positions. We therefore could assume that *\(\ddot{i}\) first unconditionally turned into Lyd. \(d\), which

\(^{18}\) From a phonological point of view, it seems much more likely to me that the sentence initial particle =((i)t) is in fact the reflexive particle: it would be the regular outcome of PAInat. *\(=ti\). Yet, such an identification requires a semantic research on the use of =((i)t), which I am not able to offer within the scope of this paper.
then later on, in word-final position, further developed into $\lambda$. This would mean that the development of PAnat. $^*d$ (phonetically probably $^[t]l$) to Lyd. $d$ (which in fact phonetically was $[0]$) must have postdated this latter development. Such a chronology is in my view unproblematic.

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