

The origin of Lydian /o/

This paper argues for new sources of the Lydian phoneme /o/ in addition to those acknowledged in contemporary scholarship. It is maintained that the Pre-Lydian accented long vowels **ǎ*, **á* and **ó*, as well as the accented short vowel **ú* next to a uvular sound, can all yield Lydian /o/. The proposed sound changes are conducive to refining our understanding of Lydian historical morphology and advancing several new etymologies. The phonetic merger under discussion finds parallels in Luwian and probably in Lycian, as opposed to Hittite and Palaic, and thus represents one more isogloss that is relevant for the subgrouping of the Anatolian languages.

Keywords: Lydian language; Luwian language; Lycian language; Anatolian languages; sound change; phylogeny

1. /o/ and research history

The Lydian language, attested in writing in the 6th-4th centuries BCE through inscriptions found in Sardes and elsewhere in the western part of Asia Minor, belongs to the Anatolian group of the Indo-European languages.¹ The Lydian alphabet, a close relative of the Greek alphabets, preserves distinct signs for seven vocalic phonemes, conventionally transcribed as /i/, /e/, /a/, /o/, /u/, /ẽ/ and /ã/.² The interpretation of Lydian /o/ as a rounded middle vowel derives support not only from its graphic resemblance to the Greek omicron but also from the Greek transliteration of Lydian personal names, for example Gk. Καδοας vs. Lyd. *katowa-* or Gk. Καρους vs. Lyd. *karo-* (Zgusta 1964: §§ 500–7, 542).³ An important observation on its distribution belongs to Heiner Eichner: the Lydian vowel /o/ does not appear in unstressed syllables, sharing this property with /e/, /ẽ/ and /ã/ (Eichner 1986: 9; Eichner 1987: 84).

Much less is known about the historical origins of the Lydian vowel /o/. According to Melchert 1994: 343, “the only clear sources of Lydian /o/ are *K^wó* and *wó/á*”. The elaboration

¹ The hypotheses reflected in this paper were first presented as a part of my Lydian course at the Anatolian Languages and Linguistics Summer School (Oxford, June 18–22, 2024). I am grateful to Michele Bianconi and Philomen Probert, who made this event possible, as well as to the summer school participants for their engaged feedback. H. Craig Melchert, who was also teaching at the same summer school, provided additional bibliography and made numerous comments that helped me to sharpen my views. The draft of the paper underwent improvements in the light of remarks by Ignasi Adiego, Alan Advagic, Oscar Billing, Norbert Oettinger, Diether Schürr, and the same H. Craig Melchert, as well as the insightful questions of Stephen Durnford, who also helped to improve its style. The final decisions, however, were my own, and none of the above scholars are responsible for my shortcomings. The paper was written under the auspices of the project “LuwGramm: A Grammar of the Luwian Language”, co-directed by Elisabeth Rieken and myself and funded by *Deutsche Forschungsgemeinschaft* (RI 1730/11-1 and YA 472/3-1).

² The graphemic sequence *aa* probably marks the accented allophone of /a/ (Melchert 1994: 369).

³ As suggested by the last correspondence involving the Greek spurious diphthong *ou*, Lydian /o/ was a higher vowel than the Greek omega, although more evidence would be required to corroborate this hypothesis. The interpretation of Lyd. <o> and <u> as /u:/ and /o/ respectively is offered in Kloekhorst 2023: 121. The main motivation behind the proposed solution appears to be an attempt to interpret the Lydian vocalic inventory as a symmetrical system consisting of contrastive long and short vowels.

of this hypothesis is found in Melchert 1994: 346 (Lyd. **kwóto* > *kot* ‘where’ or ‘as’, Lyd. **drowáHye-* > *tro(d)-* ‘to hand over’), where it is accompanied by the mention of additional possible sources for Lyd. /o/. Melchert proposes that, on the one hand, it may go back to a diphthong, as in the Lydian stem-forming verbal suffix **-neu-* > *-no-*, on the other hand, it may represent a reflex of “pre-Lydian **a* between dorsal & labial”, as in *kof(u)-* ‘water’. We will have an occasion to return to the last proposal in Section Two.

The most recent work aiming at a comprehensive treatment of Lydian historical phonology is Gérard 2005. The first three suggestions regarding the sources of Lydian /o/ found in that monograph (p. 45) replicate the hypotheses of Melchert 1994 addressed in the previous paragraph. At the same time, Gérard is unwilling to endorse the special development of **a* in the position between dorsal and labial consonants, but suggests instead that the accented **u* regularly develops into /o/, citing as the sole example Lyd. *porlλ* ‘in the year’, allegedly going back to **puruli* (contrast a different account for the same form in the following paragraph).

Yet one more origin of Lyd /o/ is proposed in Oettinger 1995: 48–49. The Lydian noun *wora-* ‘son’ is compared there with the Luwian Glossenkeil word (:)*warwatn-* ‘seed, progeny’, which is now mostly read as (:)*warwalan-* (see *eDiAna* ad locum). Regardless of the suffix shape in Luwian, the proposed etymology implies the reconstruction *wora-* < **wáurā-* < **wárwā-* for Lydian. Incidentally, the same metathesis followed by contraction is capable of explaining the evolution of the above-mentioned *porlλ* ‘in the year’ (dat.sg.), as opposed to *prwāv* ‘in the years’ (dat.pl.), if one assumes **párwali* > **páuraλ* > **porl* > **porlλ*, modifying in part the account in Yakubovich 2019a: 307–309. Yet another instance where the reconstruction of a diphthong appears plausible is nom.sg. *wratos* vs. dat.sg. *wratuλ* ‘(name of a priestly office)’, which implies a historical alternation **ou* ~ **u*, naturally, if these two forms belong to the same paradigm (see *eDiAna* under the appropriate lemma).⁴

The discussion above would suffice to demonstrate that the previous historical treatments of /o/ in Lydian tend to view this vowel as a result of secondary labializations or contractions. While such explanations can certainly account for some etymologies, I submit that they do not account for all the relevant cases. There are a number of reasonably well-understood Lydian lexemes, such as *ora-* ‘month’, *katos(i)-* ‘declaration’, *šaroka-* ‘patronage’, *ēt-os-* ‘to plant’, or *sfa-to-* ‘(ownership term)’, where a labial consonant is not found next to /o/, nor are there valid reasons to reconstruct a diphthong. Such a state of affairs is in marked contrast with the historical interpretation of the Lydian nasal vowels /ẽ/ and /ã/, which are either found next to nasal consonants or appear in contexts where tautosyllabic nasals are reconstructed on the Proto-Anatolian level. Conversely, there are instances, such as LW 11.12 *waars* or LW 12.8 *laafcv*, where the development **á* > *ó* demonstrably does not take place in a labial environment.⁵

The rest of the paper will be organized as follows. Section Two is devoted to the phonetic interpretation of those examples where /o/ appears in the vicinity of /k/. In Section Three, I focus on the origin of /o/ that appears in Lydian nominal endings and suffixes, while a verbal stem-forming suffix featuring the same phoneme is considered in Section Four. The remaining

⁴ The most recent treatment of Lydian /o/ in historical context is found in Kloekhorst 2023: 121 (cf. fn. 2 above). Kloekhorst’s discussion, however, does not question the established etymologies but focuses on the phonetic realization of /o/. The relevant conclusions are essentially reached based on the analysis of two Lydian forms, *kot* and *fakorfid*.

⁵ Here and below, the abbreviation LW refers to the inscriptions published in the *Lydisches Wörterbuch* (Gusmani 1964). This does not, however, mean that the forms adduced here are identical to those cited in this source. Although the Lydian transliteration conventions adopted in this paper are ultimately based on Gusmani 1964, it incorporates the new values proposed in Schürr 1997: 201, n.1 (<p>, <s>, <š>, and <w> for the earlier , <ś>, <s>, and <v> respectively).

lexical evidence for the origin of Lydian /o/ is addressed in Section Five. The concluding Section Six summarizes the sound changes proposed in the preceding sections and pursues their implications for the study of Anatolian linguistic filiation.

2. /o/ and “laryngeal colouring”

It was widely believed for many decades that Lydian is different from the other Anatolian languages in that it preserves no segmental traces of Proto-Indo-European “laryngeals”. This assumption was seriously challenged in Melchert 2004a. The Lydian suffix *-ok-*, found in the nominal forms *šar-ok-a-* ‘patronage’, *atr-ok-l* ‘?’, and *alt-ok-ad* ‘?’, as well as the denominative verbs *kaprd-ok-i-* ‘to steal’ (or rather ‘to forfeit?’), *katšarl-ok-i-* ‘(a punitive action)’, and *warpt-ok-i-* ‘(a hostile action)’ is compared there with the Hittite suffix *-ahh-*, which forms factitive verbs but is also found in abstract nouns, e.g., Hitt. *maniyahha-* ‘portion, share’, literally “what is entrusted”. Although the morphological match Hitt. *-ahh-* ~ Lyd. *-ok-* seems now to have won universal acceptance, its consequences for the historical development of the Lydian vowel system were never adequately explored. The comment of Melchert 2004a: 144: “I do not see that a partial or even complete merger of prehistoric short **a* and **o* can be excluded” can only be assessed in hindsight as an attempt to postpone the relevant discussion. Against the background of the commonly accepted lexical matches, such as Lyd. *ała-* ‘other’ vs. Lat. *alius* ‘id.’ or Lyd. *taada-* ‘father’ vs. Luw. *tad(i)-*, Lyc. *tede/i-* ‘id.’ (Proto-Anatolian **dodo-* or **dado-*), the instances where the Proto-Anatolian short vowels are reflected as /o/ rather than /a/ in Lydian beg for an explanation.

Billing and Sasseville 2024 represents a brand-new account for the vocalism of the Lydian suffix *-ok-*. The co-authors introduce the sound change of K-BACKING, according to which an accented **á* develops into *o* when adjacent to *k*. In addition to the suffix under discussion, this rule is relevant for the historical phonology of a number of other Lydian lexemes, such as *kof(i)-* ‘water’, the verb *fa-korf(i)-* ‘to undertake’ or ‘to impose’, and *kuko-* ‘grandfather’. Moreover, it is used to back up a new plausible etymology, namely the comparison between Lydian *kocwid-* ‘rite, ritual inventory’ and Hittite *hazziwi-*, Luwian *hazziwi(t)-* ‘rite’.⁶ K-BACKING is not described as a synchronic phonological rule but rather as a development that occurred at a pre-Lydian stage (Billing and Sasseville 2024: 103). In my opinion, the postulated sound change is descriptively adequate⁷ but not phonologically natural: no acoustic or articulatory features of a velar stop seem to be capable of prompting the rounding of a low vowel in its vicinity.

Revising the proposal in Billing and Sasseville 2024, I submit that the position next to a historical “laryngeal” provides a proper licensing condition for the appearance of /o/ instead of /a/ as a reflex of the Pre-Lydian low vowel. In order to address the issue of phonological naturalness, it is enough to assume that Lydian /a/ and /o/ correspond to Pre-Lydian **æ* and **a*. Given the emerging consensus that the Proto-Indo-European “laryngeals” **h₂* and **h₃* were reflected as uvular consonants in Proto-Anatolian (Simon 2014, Weiss 2016, Kloekhorst 2018,

⁶ In my view, Lydian *kocwid-* is more likely to represent an early borrowing from Luw. *hazziwi(t)-* than a cognate of the Hittite and Luwian nouns, since the Lydian suffix *-id-* (not to be confused with the ending *-i-d*) does not seem otherwise to be attested.

⁷ There are several forms relevant for the proposed sound change where the place of accent cannot be established on independent grounds, namely LW 1.4 *šilukalid* (PN, poss.adj), LW 10.17 *kastalcv* ‘skeleton, remains’, LW 11.7 *šrkaštus* (PN), LW 32 *kardal* (3sg.pst), LW 41.5 *pantakasa[s]* (PN), LW 54.2 *sakardal* (PN, gen.sg.), LW 103.1 *šrkaštuliš* (PN, poss.adj), and LW 110.2 *rašakas* (PN). Yet, given the absence of obligatory orthographic devices marking word accent in Lydian, such a residue of ambiguous case need not undermine the general rule.

Kümmel 2022), the backing of the front low vowel *æ in their vicinity would reflect a typologically common process (see the data in Sylak-Glassmann 2014, especially Figure 4 on p. 8).⁸ The licensing conditions of this sound change were obfuscated in the history of Lydian and no longer transparent by the time of its written attestation. On the one hand, the pre-Lydian uvular sound(s) merged with the velar stop /k/, on the other hand, *æ and *a were incorporated into the standard five-vowel system and became /a/ and /o/. The postulated relative chronology obviously adds a degree of complexity to the proposed account but can hardly undermine it, since the reconstructed later sound changes are also typologically common.

As acknowledged in Billing and Sasseville 2024, the empirical evidence for Lydian /k/ of “laryngeal” origin has substantially grown since 2004 and is no longer limited to the word-internal position. On the one hand, Luwian *hap(i)-* ‘river’ and *has(t)-* ‘bone’ are equated with Lyd. *kof(u)-* ‘water’ and *kast(V)-* ‘bone’ respectively in Yakubovich 2019b: 402. On the other hand, Oettinger (2021b: 120–122) regards Greek *κάπηλος* ‘merchant’ as a term of Lydian origin and derives it from the same root as Hitt. *hāppar* ‘transaction’. At first glance, the new etymologies may be taken as counterevidence against the Pre-Lydian “laryngeal colouring”: in two of the three cases we fail to find *ko-* in the relevant Lydian forms. At this point, however, one must remember that the presence of /o/ is synchronically limited to the accented position in Lydian. Neither of the potentially problematic Lydian lexemes were likely to be stressed on the first syllable: LW 10.5 *kastāv* ‘bones’ (gen.-dat.pl) directly shows the accent on the ending, while the Lydian source of Gk. *κάπηλος* presumably had the accent on the second syllable, since Greek (η) is expected to reflect the Lydian stressed vowel /e/ (Kloekhorst 2023: 119).⁹ In contrast, Lyd. *kof(u)-* ‘water’ shows the accent on the first syllable and /o/ next to the historical “laryngeal”.

The form *kuko-*, probably ‘grandfather’, contrasted with patronymic *kukali-* ‘(son) of Gyges’, offer a possible minimal pair involving the presence vs. absence of “laryngeal colouring” in Lydian. Although the phonetic word *kukok* is found in a fragmentary line LW 14.17, the presence of *taadas* ‘father’ in the neighbouring line LW 14.17 tips the scales in favour of the analysis *kuko=k*, where *kuko* is the cognate of Hitt. *huhha-*, Luw. *huhā-*, and Lyc. *xuga-* ‘grandfather’, while =k is the additive particle, the reflex of PIE **=k^{ve}* (Billing and Sasseville 2024: 105). In contrast, the possessive adjective *kukali-* ‘(son) of Gyges’ was traditionally taken as a Carian loanword (Adiego 2007: 384–385). Admittedly, a part of the reasoning behind this hypothesis was the assumption that all the “laryngeals” disappear in Lydian, and therefore if the name of Gyges, founder of the Lydian Mermnad dynasty, is related to the Anatolian word for ‘grandfather’, then it must have the Carian origin. This assumption is no longer valid, as stressed in Oettinger 2021b: 119–120. Yet, there also additional arguments that supply converging evidence for the Carian origin of the Mermnad dynasty, namely the Carian etymologies of the dynastic name *Μερμνάδες* (Hajnal *apud* Yakubovich 2017a: 289), the Lydian word for ‘king’ (Valério and Yakubovich 2022), and *Qldāns*, the most important Lydian god (Yakubovich 2024).¹⁰ If so, one can argue that the Carian personal name was borrowed as *kuka-*, either be-

⁸ As an additional justification of the proposed phonetic reconstruction of the Lydian low vowels, one should consult the discussion of their Luwian and Lycian comparanda in Section 6.

⁹ One can compare these cases with that of Lyd. *šaroka-* ‘patronage’, where the vowel /o/ is observed before but not after the historical “laryngeal”, because it can only appear in the accented position.

¹⁰ It is appropriate to mention here in passing that the name of the Mermnad king Alyattes, possibly a great-grandson of Gyges, also has a probable Carian etymology. The Lydian stem-form of the same name was preserved on coins as *walwet*, while the image of the lion head stamped on the same coins leaves little doubt that the name under discussion is etymologically related to Luw. *walw(i)-* ‘lion’ (Dale 2015). The suffix of *walw-et-* is presumably related to the Luwian suffix *-att-* deriving nouns from other nouns (e.g., Luw. *wan(i)-* and *wanatt(i)-* ‘woman’) but

cause it was a barytonic stem or because the Proto-Lydian change $*q/\chi\acute{a} > ko$ (where $[q/\chi]$ is the voiceless uvular stop/fricative) was not applicable to the recent loanwords.¹¹

It is obviously worth checking for possible empirical evidence that pleads against the revised interpretation of the K-BACKING rule. Such evidence could consist in the change $*a > o$ next to a velar stop that does not go back to an etymological “laryngeal”. Of paramount interest here is the group of probably cognate forms that includes LW 11.11 *fa-kórf-id* (3sg.prs), LW 12.3 *šaw-karp-lós* (nom.sg), LW 14.3 *šaw-kórf-λ*[...] (dat.sg), and LW 14.19 *karf-tós* (nom.sg).¹² The meanings of these respective forms, all occurring in poetic inscriptions, can only be conjectured, and therefore formal analysis must take precedence. The alternation between /o/ and /a/ in *korf/karf/karp* must be due to the difference in accent, as illustrated above, while the preservation of /p/ in *šawkarplos* can arguably have to do with the specific cluster where it occurs. The additional licensing conditions for the change $*a > o$ in *korf* are tied up with the etymology of *korf/karf/karp*. The traditional account connects this morpheme with the root of Hitt. *karpiye/a*-(mi) ‘to take away, lift’ (see, e.g., Oettinger 1978: 87), while the change $*a > o$ in *korf* is attributed to the environment between the labial and dorsal obstruents in Melchert 1994: 346. There are, however, just two examples cited in support of this conditioned sound change, and one of them, namely *kof(u)*- ‘water’, has already obtained explanation in terms of “laryngeal colouring”. Given the form *profri*, identified in the second Lydian inscription from Aprodiasias and compared with LW 23.8 *prafriλ* in Chaniotis and Rojas 2016, the sporadic but phonologically natural labialization of Lyd. $*a$ in the vicinity a labial consonant remains a distinct possibility (cf. Billing and Sasseville 2024: 106–107). If so, LW 11.11 *fa-korf-id* can be explained along the same lines, and the origin of *k-* in this form becomes irrelevant for our purposes.

There is, however, an alternative. One can compare *fa-korf-id* and the related forms with the primary verb *harp*-(mi) ‘to associate with’ and the secondary denominative verb *harpai*-(mi) ‘to pile, heap’, whose etymology, inner-Hittite development and nuances of meaning are addressed in Melchert 2010a. The Lydian phrase LW 11.11 *fakorfid katofn* belongs to the protasis of a sanction formula and refers to an undesirable act with regard to burial installations. Since Lyd. *korfi*-(d) may well represent a denominative verb, like Hitt. *harpai*-(mi), and may thus have a similar meaning, one can suggest a metaphoric development from an act of piling up to an act of imposition. From the contextual perspective, the phrase ‘imposes *katofn*’ is no worse fit than the conventional translation ‘undertakes *katofn*’, which implies the comparison with Hitt. *karpiye/a*-(mi) ‘to take away, lift’. The above-mentioned compounds with *šaw-* ‘eye’ are likewise compatible with both etymologies, essentially due to the fact that their meanings remain obscure. Thus, the agent noun *šaw-karp-los* may have the literal meaning “eye-lifter” or “eye-placer”; whether either of those implies the concept of keeping an eye on something depends on the overall interpretation of the relevant poetic passage, which remains a task for the future.

Thus, the comparisons of Lydian *-korf(i)*- with Hittite *karpiye/a*-(mi) and *harpai*-(mi) are both contextually admissible at the present stage of our knowledge. The advantage of the latter ety-

displays palatal umlaut, which is also attested in Carian (e.g., *ted* < $*tad(i)$ - ‘father’, *en* < $*ann(i)$ - ‘mother’) but not in Lydian (see Yakubovich 2022: 205–207).

¹¹ The explanation in terms of K-BACKING going back to “laryngeal colouring” is only one possibility in the instance of Lyd. *kuko-*. Alternatively, one may argue that this form reflects the etymological stressed ah_2 -stem (for their development into *o*-stems in Lydian, cf. Section Three). As such, it may be formally parallel to Hitt. *huhha-* ‘grandfather’. In contrast, Luw. *hūha-*, Lyc. *xuga-*, and possibly Car. *quq* ‘grandfather’ reflect the (virtual) barytonic stem $*h_2\acute{a}uh_2ah_2-$.

¹² Pace Billing and Sasseville 2024: 102, I find it risky to derive historical-phonological conclusions from the etymological analysis of the *hapax legomenon* LW 110.8-9 *kiqoršid*. Only isolated traces of the restored signs can be discerned on the photograph of LW 110 published in Gusmani and Akkan 2004: 142.

mology is that it simplifies the phonological account by invoking a sound law (“laryngeal colouring”) as opposed to a poorly documented tendency (labialization of **a* next to a labial obstruent). But whichever explanation one prefers, there are no compelling reasons to assume that /k/ of non-“laryngeal” origin was responsible for the shift **a > o* in the history of Lydian.

3. /o/ and nominal morphology

The most recent addition to the Lydian corpus is the Denizli inscription, whose principal edition is Rojas & Öztürk 2022. One of the surprises of this new text is the dative singular form *αωλολ* in line 3 contrasting with the dative plural form *αωλα̃ν* in line 4. Both forms belong to the paradigm of a noun denoting a burial installation (cf. also LW 2.8 *αωλα̃ν*). The question of how to reconstruct its stem has not obtained an answer thus far.¹³ One thing that is clear is that we are dealing with an oxytonic stem: the last syllables of both forms cited feature vowels that only occur when stressed. Another simple descriptive observation is that the stem is vocalic: contrast dat.sg. *porλλ*, dat.pl. *prwãν*, reflecting the accentual mobile paradigm of the word for ‘year’, a synchronic consonantal stem (Yakubovich 2019a: 307–308). Finally, there is a contrastive vocalic oxytonic stem exemplified by dat.sg. *αλαλ*, dat.pl. *αλε̃ν* ‘other’. In this case we are presumably dealing with a lexical cognate of Gk. *αλλός* and Lat. *alius* ‘other’, a reflex of the Indo-European thematic stem **aljó-*, which suggests that the Lydian *a/ẽ*-stems can be reconstructed as oxytonic *o*-stems (cf. Hajnal 2004: 191–192).

While the alternation *ã/o* has been unattested thus far in the context of Lydian nominal declension, it finds a suggestive parallel in Lydian verbal derivation. The verbal suffix *-ok-* addressed in the preceding section, e.g., LW 23.4 *kat-šarl-ok-id* (3sg.prs), has a variant *-ãk-* attested in LW 24.9 *pašv-sakv-ãk-id* (3sg.prs). The last form presumably reflects pre-nasalisation; although it is not a regular feature of the Luwian grammar, there is no doubt that the allomorphs *-ãk-* and *-ok-* belong together. This brings about the question about what the phonemes *ã* and *o* may have in common. According to a widely shared view, the contrast between *ã* and *ẽ* in Lydian closed syllables represents a reflection of the earlier opposition between long and short vowel before a tautosyllabic nasal (see already Melchert 1994: 343). If the final vowels in dat.pl *αωλα̃ν* and dat.pl *αλε̃ν* originally were long and short respectively, one can advance the hypothesis that the contrast between the matching paradigmatic forms, dat.sg. *αωλολ* and dat.sg. *αλαλ*, also had to do with length. Given that the paradigm of *αλαλ/αλε̃ν* ‘other’ ultimately reflects a simple thematic stem, one wonders whether the paradigm of *αωλολ/αωλα̃ν* is likely to reflect a historical stem in *-ã < *áh₂*. It is worth pointing out that the form *αωλα̃ν* was already treated as a reflex of a historical *ã*-stem in Hajnal 2004, while the development **ã > o* is attested in the neighbouring Carian language (Adiego 2007: 258).

The evaluation of the proposed historical interpretation must depend on the morphological analysis of nominal/adjectival *o*-stems on Lydian. Even though this class is empirically well-represented (e.g., *caωλο-*, *suλο-*, *ẽntarfλο-*, *šitarfλο-*, *sfato-*, *karfto-*, *ẽνωvato-*, *šanto-*, *kuko-*, *sako-*, *šawkarplo-*, *tutrlο-*, *kumlo-*, *mẽmulo-*, *iško-*, *astrko-*, *karo-*, *šaro-*, *wro-*, *psadwo-*, *płtarwo-*, *πλαšo-*), there seems to have been no systematic attempts to trace its origins at the Proto-Anatolian or Proto-Indo-European levels.¹⁴ This is rather unfortunate, since a number of suf-

¹³ See the undecided stance of Rojas and Öztürk 2022: 158 and Billing and Sasseville 2024: 107, fn. 29.

¹⁴ The following statement is found in Sasseville 2020a: 181: “[S]ince the vowel *-o-* in Lydian is often the phonological result of a contraction of *-uwa-* or of the monophthongization of a diphthong in **-aw-* (Melchert 1994: 346), it is very likely that Lydian *o*-stems go back to Proto-Anatolian substantival and adjectival *u*-stems”. Yet,

fixes yielding the stems listed above can be directly compared with their counterparts in Anatolian languages.

We have seen in the preceding section that the suffix *-lo-* is present in *šaw-karp-lo-s*, while phonotactic considerations plead for the segmentation of the same morpheme in *tutrlo-* and *kumlo-*. If one accepts the development $*\acute{a} > o$ in Lydian, there are no further obstacles to comparing the suffix *-lo-* with $*-e-lah_2-$, the suffix of agent nouns whose reflexes are attested in Luwian and Lycian A (Sasseville 2014/2015). The Lydian suffix *-wo-* attested in *pλ-tar-wo-* ‘periphery’ cannot be separated from Luw. *ir(hu)wa-* ‘interior’, where the suffix */-wa-/* goes back to $*-wah_2-$, especially given the existence of the Luwian merism *ir(hu)walliyan paritarwalliyan* ‘internal and external’, where *pari-tar-wa-lliyan* is cognate with Lyd. *pλ-tar-wo-* (Mouton and Yakubovich 2019). Finally, the suffix *-to-* is attested in *karf-to-s*, which is ostensibly derived from the verbal root *korf*, and *sfa-to-s*, a derivative of the noun *sfēni-* meaning ‘relative’ or ‘heir’.¹⁵ It seems reasonable to compare it with the Lycian¹⁶ suffix *-ta-* < $*-tah_2-$ forming abstract nouns, which can be both deverbative, e.g., *pijata-* ‘gift’ and denominative, e.g., *xñtawata-* ‘kingship’.¹⁷

To be sure, not all the Lydian *o*-stem nouns and adjectives can be mechanically equated with the reflexes of *ah*₂-stems in Luwian or Lycian. Good illustrations of a potential mismatch are LW 12.1 *ēn-tar-f-λo-d* (nom.sg.n), and LW 14.7 *ši-tar-f-λo-s* (nom.sg.c), two derivatives of local adverbs, whose suffix chains approximately match that of Luw. *pari-ttar-wa-lli-ya-n* ‘external’ (Mouton and Yakubovich 2019: 219–220). The former Lydian lexeme, derived from the adverb *ēn*, appears to mean ‘property’ or ‘belonging’ depending on whether it is a neuter noun or predicative adjective,¹⁸ while the latter one may represent a substantivized adjective ‘outsider’. Regardless of whether the Lydian forms function as nouns or adjectives, it is difficult to argue that they reflect the same morphological class as the Luwian neuter adjective *pari-ttar-wa-lliya-n* (acc.pl.n), since the Anatolian stems in $*-ah_2$ are usually assumed to be restricted to the nouns of the common gender. One has to account for the neuter form *ēn-tar-f-λo-d*, as opposed to the expected $**ēn-tar-f-λa-d$ continuing the Proto-Anatolian *o*-stem.

There are, however, Luwian data that help to mitigate this seeming contradiction. The proposed analysis of *ēntarfλod* and *šitarfλos* implies the existence of the secondary suffix $*-yā-$ <

given the presence of the Lydian *u*-stems, including those with the stressed final syllable, an account for the origin of the contrast between the *o*- and *u*-stems would represent a prerequisite for substantiating this view. Naturally, the alternation *awλoλ / awλāv*, of which David Sasseville could not yet be aware, represents an additional argument against his tentative solution.

¹⁵ The interpretation of *sfēni-* as ‘relative’ is the standard one, see, e.g., the *eDiAna* dictionary sub *sfēn(i)-*. The argument for the meaning ‘heir’ is the extension of curse formulae to the *sfēni-* of the perpetrator, while the Aramaic version of the Greek and Aramaic bilingual (LW 1) extends the curse to *yrt* ‘heir’.

¹⁶ Here and below, the labels “Lycian” or “Lyc.” are used in the sense of “Lycian A”, while references to Lycian B are not abbreviated.

¹⁷ The Lydian suffix *-to-* is interpreted as a marker of agent nouns in Sasseville 2020a: 182, but without illustrative examples. One derivational chain supporting this interpretation, namely *sfato-* ‘owner’ derived from *fa-sfēn-* ‘to own’, is adduced in Sasseville 2020a: 168–169, yet the passage LW 12.7–8 adduced in connection with the proposed translation of *sfato-* features too many forms of uncertain meaning to provide a real contextual support. Since *sfēn(i)-* ‘relative’ or ‘heir’ is attested without a prefix, it represents a more plausible derivational base for *sfato-*, which, as an abstract noun, presumably means ‘relationship’, ‘inheritance’ or something similar. Cf. also the stem *astrkota-* (LW 14.2) apparently a derivative of *astrko-*, the epithet of the Sardean Artemis, which may have the meaning “the status of *astrko-*” or “the property of *astrko-*”. The suffix *-ta-* found in this stem apparently represents the unstressed allomorph of the suffix *-to-*.

¹⁸ The relevant context is LW 12.1 *est mru šiwāmlλ šaroλ ēntarfλod* ‘This stele is *ēntarfλo-* of/to Šaro, son of Ši-wāmi’.

*-yah₂-, a derivative of the possessive marker *-yo-. Presumably, the morpheme chain *-li-yā- yielded Lydian -λo- with the same sort of iotation that is responsible for the development *al-yo- > *alā- ‘other’. The secondary suffix *-yah₂- was also reconstructed for Luwian as a marker of action nouns (Sasseville 2020b), but it is possible that it had a broader scope. Thus, the Luwian dialect of Istanuwa features *aliya-* ‘wild (animal)’ which functions as an attribute of the common-gender noun PIRIG.TUR ‘leopard’ in the attested context and represents a reflex of (virtual) *al-yah₂- > *al-yā-, itself a derivative of *al-yo- ‘other, alien’ (Rieken and Yakubovich 2022: 269). It is possible that *ēntarfλod* ‘property’ likewise represents a secondary nominalization, while Lydian, unlike Luwian, featured neuter nouns in *-yā-. Alternatively, one can propose that the morphological shift *-ā- > -o- was extended to the adjectives in the predicative position in Lydian. In any event, in the instance of *ēn-tar-f-λo-d* and LW 14.7 *ši-tar-f-λo-*, it is easier to justify a secondary ā-stem than a secondary stems in *-eu or *-ou, which would be implied by the traditional historical account of Lydian /o/.¹⁹

The hypothesis of secondary *o*-stems derived from *a*-stems in the history of Lydian would obtain a degree of confirmation from the availability of additional instances of morphological alternation *a ~ o* in this language. A case in point is the suffix -aλ- /-oλ- attested in the accusative case nominal forms LW 10.17 *kast-aλ-c-v* ‘skeleton, remains’ vs. LW 10.15 *qard-oλ-c-v* ‘?’.²⁰ The alternation between the allomorphs -aλ- and -oλ- in LW 10 is unlikely to reflect difference in stress: the accentual interpretation *kast-áλ-c-v* is the most plausible one, since otherwise one would expect ***kóst-aλ-c-v*, with the shift *á > ó next to a historical “laryngeal”, as argued in the preceding section. One must therefore prefer a morphological explanation: -áλ- < *-áli- < is the basic variant of the suffix, while -óλ- < *-áli- reflects the contraction of the suffix vowel with the final vowel of the derivational base or a derivation from an *o*-stem. A similar behaviour of the cognate suffix is arguably observed in Carian: *qm-oλ-š* ‘priest’ goes back to the earlier stem **kummálli-*, where the long vowel is due to contraction if it is cognate with Luw. *kummayall(i)-* ‘(a type of priest)’ according to Adiego 2019: 34. Alternatively, H. Craig Melchert (pers. comm.) compares **kummálli-* with Luw. *kumma-*, an etymological *ah*₂-stem noun.

We are returning the discussion of stem-forming suffixes with the question about the relationship between the -lo- and -la- stems in Lydian. In the instance of the nouns LW 43.2, 50.1 *kanlela-* vs. LW 12.3 *šawkarplo-*, the suffix -la- can easily be accounted for as an unstressed allomorph of -lo-. Such an explanation, however, is not applicable to the stem *mršla-*, where the stress on the suffix vowel appears to lack obvious alternatives, if the stem was indeed stressed at all. It is worth, however, pointing out that the stem under discussion occurs in the noun phrase LW 14.7 *mršlas šitarfλos* (nom.sg), where the first element functions as an attribute. A potential parallel here is the noun phrase LW 11.9 *caqrlaλ astrkoλ* (dat.sg), which likewise features a form in -la- in syntactic agreement with the following nominal *o*-stem. The last example is particularly revealing given the potential contrast with LW 14.5 *caqrlāv* (gen.-dat.pl), apparently a paradigmatic form of *caqrlō-* (cf. the paradigmatic relationship between *awλāv* and *awλoλ* addressed in the beginning of this section). Since *caqrlāv* is the final word in a clause, it is not a canonical syntactic attribute.

The data of the previous paragraph are compatible with two different historical accounts. On the one hand, it is possible to argue that the canonical attributive forms are inherently less

¹⁹ Another probable instance of a neuter *o*-stem noun in Lydian is *pλtarwod* ‘periphery’ (nom.sg) mentioned earlier in this section.

²⁰ The extension of -aλ- /-oλ- < *-ali- with the productive suffix -c- < *-ti- represents a peculiarity of the Lydian language. Contrast LW 43.3 *ta-c-v* or LW 12.8 *laaf-c-v*, where the relevant suffix is directly attached to verbal roots.

stressed than their syntactic heads, and therefore their final vowels undergo reduction in Pre-Lydian, even though they were originally accented. Under such an assumption, the forms *mršlas*, *caqrlaλ* represent innovations vis-à-vis *šawkarplos*, *caqrlāv*. A potential argument in favour of this hypothesis is LW 12.3 *cinaλ qiš qiraλ fētwinat tutrloλ*. This poetic line apparently contains a noun phrase *cinaλ ... qiraλ ... tutrloλ* (dat.sg.), which, however, does not form a phonetic unit. Therefore, *tutrloλ*, morphologically a derivative of *tutra-* ‘daughter’ (Schürr 2006: 1571), can be interpreted as an extraposed attribute preserving its original accentual properties if the proposed scenario is to be believed. On the other hand, if the Lydian derivatives in *-lo-* were all limited to the nominal forms, one can argue for the synchronic coexistence of adjectives in **-la-* vs. secondary nouns in **-lā-* in Pre-Lydian.²¹ It is not clear how far back one can project such a picture, especially given the fact that both formations must then have coexisted with the genitival adjectives in **-li-*. At any rate, this scenario would offer one more example of a morphological alternation between Lydian *-a-* and *-o-*.

Thus, there is sufficient evidence to claim that the bulk of Luwian *o*-stem nouns either continue Proto-Anatolian stems in **-ah₂-* or reflect the secondary stems in **-ā-* that were formed in the history of Lydian. At the same time, extending this conclusion to all the Luwian *o*-stems would represent over-simplification. We have seen in Section One that the alternation *wratos / wratuλ* supports the existence of ablauting (apophonic) *u*-stems in Lydian, but one can also advance arguments of various strength for the stems in *u*-diphthongs without traces of ablaut alternation.

One candidate for a historical diphthong stem is *astr-ko-*, the epithet of Sardean Artemis (LW 11.9), the first part of which can be compared with that of Luw. *ašr-ul-ahit-* ‘womanhood’ and its cognates. Accordingly, the relevant epithet is frequently translated as ‘lady’ (see already Schürr 2003: 118–119), but its second part has remained without explanation. Since the suffix *-ko-* is not otherwise attested in Lydian, the analysis of this noun as a root compound deserves a fair hearing. The second morpheme of *astr-ko-* can be compared to Lyd. *ko-*^(t) ‘to proclaim, announce’, which may in turn be related to *kawe-* ‘priest’. If so, the approximate meaning of the compound might be ‘lady making revelations’. Naturally, the proposed etymology represents a mere possibility and does not impose itself.

Structural rather than etymological considerations support the reconstruction of a diphthong stem in the instance of Lydian *iško-* ‘all, every’. Its dative plural form *iško-n* (LW 2.5) is exceptional not only with regard to the preservation of *-o-* before the final nasal but also in view of the phonetic realisation of this nasal as *-n* (contrast the other accented forms of gen.-dat.pl., namely LW 2.8 *awlān*, LW 3.1, 43.1 *prwān*, LW 26.3 *mastān*, also possibly LW 10.21 *malān*). While there are no other genitive-dative plural forms that display the same peculiarities, the accusative singular ending *-n* sometimes occurs instead of *-v* in the forms of the common gender, but this optional allomorph is restricted to the position after consonants, e.g., LW. 11.11 *katofn*, LW. 2.10 *šiwraλmn*, LW 50.3 *ešn taacn*. Given this state of affairs, the easiest way to account for *iško-n* is to assume the phonetic development from the earlier **iskaw-n*.²² While such a reconstruction is impossible for a dative plural form, one can hypothesize that it was levelled after acc.sg. **-aw-n*, since the two case endings are expected to coincide in the paradigms of many nouns (namely *-ān*, *-ēn*, and *-av* in the instance of *o*-stems, stressed *a*-stems,

²¹ Note that some nouns in **-la-* must have also existed in Pre-Lydian. One case in point is LW 13.5, 15.2 *tarplas*, a noun that was stressed on the final syllable, because it occurs both times at the end of poetic lines, where it rhymes with other oxytonic forms.

²² I am obliged to H. Craig Melchert for turning my attention to the exceptional declension pattern of this Lydian lexeme.

and unstressed *a/o*-stems respectively). Although the proposed explanation is not straightforward, I am unaware of any historical scenario implying the development $*\bar{a} > o$ and accounting for both exceptional properties of dat.pl. *iṣko-n*.

Summing up, although some of the Lydian *o*-stems can be reconstructed as historical stems in *-aw-*, such a reconstruction appears implausible for the bulk of this class, given the overall rarity of the stems in *u*-diphthongs in the Anatolian languages. At the same time, synchronic alternations plead of the reconstruction of many Lydian *o*-stems as Pre-Lydian \bar{a} -stems, and this conclusion squares well with the prominence of the stems in $*-ah_2-$ in other languages of the Anatolian group.

4. /o/ and verbal morphology

A salient feature of Luwian verbal derivation is the presence of structurally matching stems in $-a(d)^{(d)}$, and $-o(d)^{(d)}$. The verbs belonging to the respective conjugations display the stem variants ending in *-d-* in 1sg.pst, e.g., LW 10.18 *un-ad-v* ‘I proclaimed’, LW 10.6 *trod-v* ‘I handed over’, and their counterparts without *-d-* in the rest of the finite verbal forms. A distinct feature of the stems under discussion is that they all belong to the *d*-conjugation, which means in practice that they take the ending *-d* rather than *-t* in 3sg.prs, e.g., LW 3.3 *šilawa-d* ‘is reverent’, LW 11.12 *kanthro-d* ‘allows’. It is relevant for the discussion below that there are two additional Lydian verbal stem types, $-e(d)^{(d)}$, and $-i(d)^{(d)}$, which likewise belong to the *d*-conjugation and display the same morphophonemic distribution pattern, where the stem variants ending in *-d-* are restricted to 1sg.pst.

There is a broad consensus that the Lydian suffix $-a(d)-$ can go back to Proto-Anatolian $*-ah_2-yelo- > *-\bar{a}-yelo-$ (Melchert 1992: 50; 1997: 133, Gérard 2005: 108–109, Kümmel 2018: 175, Yakubovich 2019b: 405, Sasseville 2020a: 78). The scholarly treatment of Lyd. $-o(d)-$ shows less unity. Melchert (1992: 51–54) offers the derivation of *tro(d)^{(d)}* ‘to hand over’ from $*drow-\acute{a}ye-$, implying the labialization of the suffix by the preceding glide, but concludes on a pessimistic note: “We must simply admit that most examples in *-od* remain obscure”. The reason for this state of affairs is “our lack of understanding for the prehistory of Lydian *o*”. The obscure character of this verbal class is stressed again in Melchert 1997: 136, but a different suggestion is ventured immediately below: “I now wonder if these likewise reflect the Lydian outcome of Proto-Anatolian $-\acute{o}yedi$ ”. The last hypothesis is resumed in Kümmel 2018: 175, whereupon a new alternative is tentatively put forward: “Sg. $-od < *-\acute{o}jedi < *-\acute{o}jeti$... oder eher $< *-\acute{a}jeti$ (cf. $-oka- < *-\acute{a}Ha-$)”. Finally, Sasseville (2020a: 180) suggests that the Lydian stems in $-o(d)^{(d)}$ are cognate with the Luwian stems in $/(a)u-/$.

The first step in assessing these hypotheses should be drawing upon the available cognate stems. There is a cluster of Lydian verbal forms featuring the morpheme $(-)tro-$, which includes the base verb (LW 10.5,6 *trodv*, 1sg.pst), the prefixed derivatives (LW 14.16 *ēntrol*, 3sg.prt, LW 44.I.5 *fa-troš*, 2sg.prs; LW 44.I.13 *fa-tro-d*, 3sg.prs; LW 44.II.9 *fa-trol*, 3sg.prt, LW 45.2 *f-ēn-trol*, 3sg.prt; LW 15.7 *f-iš-trowv*, 1pl; LW 11.12 *kan-trod*, 3sg.prs), and a reduplicated form LW 12.9 *tatrot*, 3pl.prs). Melchert (1992: 52–53) plausibly conjectured that several verbs of this group denote acts of transfer (cf. already Gusmani 1964: 215) and compared its root with that of Luw. *tarāwi*^(ti) ‘to hand over, deliver’. This conclusion stood the test of time and was followed in Sasseville 2020a: 137–138 and the *eDiAna* dictionary (Proto-Luwic $*drE\check{u}-$). I submit, however, that one can go a step further and argue that the Luwian and Lydian verbal stems represent lexical cognates.

At face value, the Luwian stem prompts the non-Hittite Anatolian reconstruction **Treu-ye/o-*, where *T* is an archiphoneme for /t/ or /d/.²³ The full apophonic grade of the root suggests that it was accented, i.e., **Tréu-ye/o-*, although the absence of lenited endings in the paradigm of Luw. *tarāwi-*^(ti) may be indicative of a later analogical accent shift to **Treu-yé/ó-*. At the same time, the Lydian stem *tro(d)-*^(d) can be reconstructed as Proto-Anatolian **Tréu-ye/o-* without additional assumptions, simply based on the commonly accepted set of sound changes from Proto-Anatolian to Lydian. On the one hand, the development **éu > o* represents common knowledge in the field of Lydian Studies (see Section One) and is advocated in the instance of this particular root in Sasseville 2020a: 189–190. On the other hand, since the element *-(d)-* is universally reconstructed as **-ye/o-* in the instance of the stems in *-a(d)-*^(d), *-e(d)-*^(d), and *-i(d)-*^(d), it is only logical to extend the same conclusion to the stems in *-o(d)-*^(d), which show the identical distribution of allomorphs with and without *-d-*. Strictly speaking, **Tréu-ye/o-* remains the most straightforward reconstruction for the Lydian form even if one disregards the Luwian evidence.

Thus, in the instance of *tro(d)-*^(d) and its numerous derivatives, *°o(d)-* most probably goes back to **éu-ye/o-*, a combination of the final part of the root and the stem-forming suffix. The parallel reconstruction remains possible for other Lydian stems in *°o(d)-*. Thus, it was argued in Yakubovich 2019b that LW 10.16 *iš-lo-daλ* (3sg.prs.med) and LW 3.3 *ši-law-a-d* (3pl.prs) contain the same verbal root, which is compatible with the reconstruction *lo- < *láu-* (with or without extension **-ye/o-*). It seems, however, unlikely that the same historical analysis can be extended to those Lydian stems where *-ov-* should be taken as a suffix on structural grounds. The relevant forms include LW 23.19 *fa-wcv-as-o-đ* (3sg.prs), LW 11.11 *ifr-o-l* (inf), LW 12.6 *išluk-o-l* (3sg.pst), LW 12.10 *laf-o-d* (3sg.prs), LW 2.12 *ši-sir-o-rs* (3pl.pst), 22.15 *tas-o-d* (3sg.prs), LW 12.8 *tul-o-d* (3sg.prs).²⁴ There is simply no productive stem-forming verbal suffix in the Anatolian family of languages, which could be reconstructed as beginning with a *u*-diphthong. To be sure, this verbal class was recently compared with the Luwian stems in *-au-*, e.g., *ikkunau-* or *nakkuššau-* (Sasseville 2020a: 180–205). Yet, shortly afterwards the Luwian forms under discussion turned out to feature the 1pl.pst ending *-unta*, e.g., *ikkuna-unta* ‘we performed a liver rite’ or *nakkušša-unta* ‘we performed a substitution rite’ (Melchert and Yakubovich 2022).²⁵ The revision of the morphological segmentation renders these forms irrelevant for the present investigation.

This raises the question about the alternative sources of the Lydian verbal suffix *-o-*^(d) (most probably *-o(d)-*^(d), although the diagnostic forms of 1sg.pst are not attested in the available record). Melchert’s derivation from **-óye-* is not supported by the known rules of Lydian historical phonology, as is justly observed in Sasseville 2020a: 182. In contrast, Kümmel’s tentative derivation from **-áye-* is more promising, since it finds a direct parallel in the development **á > o* in Lydian, which was advocated in Section Three with reference to the evolution of the nominal *ā*-stems.²⁶ The Lydian stems in *-o-*^(d), the Lydian stems in *-a(d)-*^(d), and their presumable cognates, the Luwian verbal stems in *-a(i)-*^(di), all preclude the accentual reconstruction **-āyé-*, because it cannot yield the lenited personal endings.²⁷ The remaining two recon-

²³ According to Sasseville 2020a: 188, **Tréu-* goes back to earlier **drég^h-*, but I am not aware of independent evidence for the change **-g^h- > -w-* in the history of Lydian. At the same time, if one only accepts **Tréu-* as an intermediate reconstruction, this need not affect the remaining conclusions of the present paragraph.

²⁴ The fragmentary forms and forms of uncertain categorial attribution were not included in this list.

²⁵ The conclusions of Melchert and Yakubovich 2022 were accepted in the presentation “*Das Verhältnis zwischen u-Adjektiven und nu-Kausativa im Anatolischen*”, which David Sasseville made at the workshop *Deadjektivische Verbalableitungen im Indogermanischen* (Vienna, March 2023).

²⁶ The parallel with *-oka- < *-áHa-* adduced in Kümmel 2018 is less precise, because in this case we are dealing with the rounding of a historical short vowel next to a preserved “laryngeal” (cf. Section Two).

²⁷ For the Proto-Anatolian lenition rules, see Adiego 2001 with reference to the earlier literature.

struction options comprise the ictus on the first suffix vowel, i.e. **-āye-*, and the ictus on the root, i.e. **-āye-*. The Luwian stems in *-a(i)-(di)* are compatible with these both scenarios. The Lydian suffixed stems in *-o-(d)* and *-a(d)-(d)* appear to be synchronically in a complementary distribution with regard to their accent: the first one is stressed on the suffix, while the second one is stressed on the root, e.g., LW 11.6 *iš-aaλ-a-l* (inf) or LW 80.10 *iš-foll-a-d* (3sg.prs). Therefore, nothing contradicts the assumption that *-o-(d)* and *-a(d)-(d)* go back to the Proto-Anatolian verbal stems furnished with the suffix allomorphs **-āye-* and **-āye-* respectively.

A potential counterexample to the proposed distribution is LW 24.7 *pitaad*, which is interpreted as an oxytonic 3sg.prs. verbal form in Gusmani 1964: 82 and all the subsequent etymological sources (see the *eDiAna* dictionary under *pita-(d)*). I do not think, however, that the context imposes such an analysis. The relevant form occurs in the verbal phrase LW 24.7 *citollad pitaad* (cf. also LW 23.9 *citollad pitad*) but it is not a priori clear which form in this obscure phrase is a predicate and which represents its direct object.²⁸ Since the phrase belongs to the protasis of a curse formula and denotes a reprehensible action with regard to the transferred property, I suggest to interpret it as ‘steals the allotment’. Under the proposed interpretation, the denominative verb *citolla-(d)* represents a historical **āye-* stem that is ultimately derived from *cito-* ‘theft’, which in turn represents a reduplicated derivative of *to-* < **tah₂-* ‘to steal’.²⁹ The neuter direct object *pita-d* presumably represents a lexical cognate of Hitt. *pitta-*, *pietta-* ‘allotment’, and both patient nouns can be taken as lexicalized participles in **-to-* from the Proto-Anatolian verb **pāi-* ‘to give’.³⁰ The Lydian noun *pita-* (n) arguably provides a base for the denominative verb *pita-(t)* (LW 13.6 *pita-t*, 3sg.prs). The advantage of the new analysis lies not only in elucidating the relevant context but also in getting rid of two cognate denominative verbs, *pita-(t)* and ***pita-(d)*.

Another morpheme where *-o-* and *-a-* are likely to appear in a complementary distribution is the infinitive suffix. As pointed out in Gérard 2005: 113, the Lydian infinitives can end in both *-ol* and *-al*. Since the finite verbal forms of 3sg.pst can also end in both *-ol* and *-al* in Lydian, segregating the pool of the infinitive forms becomes a matter of syntactic analysis. It is not the place to attempt to gather the full corpus of the relevant forms, but LW 2.9 *arwol*, LW 10.8 *cēnal*, LW 11.6 *išaaλal*, LW 11.11 *ifrol*, and LW 24.21 *šawwasτal* demonstrably share clauses with finite verbal forms and therefore can be classified as infinitives without a further ado. The contrast between LW 10.8 *cēnal*, LW 10.20 *cēnu* (1sg.prs), and LW 22.8 *cēntλ* (3sg.prs.med) pleads for the segmentation *cēn-al*, *cēn-u*, and *cēn-tλ*, respectively, which is in turn compatible with segmenting the suffix variants *-al* and *-ol* in the other infinitive forms. According to the standard rules of Lydian accentuation, *arw-ol* and *ifr-ol* must be stressed on the suffix, while *cēn-al* and *iš-aaλ-al* must be stressed on the root; only in the instance of *šawwasτ-al*, the stress on the root represents a matter of analogical inference.³¹

²⁸ For the VO verb order in the immediate vicinity of the phrase under discussion, cf. LW 24.8 *fakaršed qi-k* ‘withholds anything’.

²⁹ The PIE root **tah₂* ‘to steal’ is attested in Hitt. *tāye/a-(mi)* ‘to steal’ (Kloekhorst 2008: 809–810). It must also be present in the verbal phrase LW 5.4–5 *citallad fadint* ‘commits theft’ (vel sim.), likewise occurring in the protasis of a curse formula, where *citalla-* is a verbal noun. The lack of *-o-* in this form is presumably due to its accentual pattern (stress on the initial syllable (?)).

³⁰ In contrast, the Lycian A action noun *pijata-* ‘offer’ (vel sim.), which occurs in the etymological figure TL 57.4–5 *pijētē pijatu* can be compared with Lydian *pitoc(i)-* ‘gift’, likewise occurring in the etymological figure LW 24 5–6 *pitocv pidv*. The Lycian A and Lydian forms can be reconstructed as **piyotah₂-* at the Proto-Anatolian level, but the Lydian noun reflects the accretion of the additional suffix **-ti-* > **-c(i)-*.

³¹ The attempt to compare the suffix of the Lydian infinitive with the Luwian infinitive suffix *-una*, found in Sasseville 2021: 644, cannot be considered successful. Besides the unparalleled character of the development **n > l*

At the same time, one must address the Lydian verbal stem *ca*-^(t), whose inflected forms provide evidence for the unexpected alternation *a* ~ *ã* (cf. the phonological alternations *a* ~ *ã* and *o* ~ *ã* addressed in Section Three). The relevant forms are LW 11.6 *cat* (3sg.prs), LW 10.4 *da-ca-l* (3sg.pst), LW 19.2, 54.6 *f-ēn-cã-v* (1sg.pst), LW. 50.4 *f-ēn-ca-l* (3sg.pst), and LW 13.10 *kan-ca-t* (3sg.prs). The contextually plausible meaning of the stem is ‘to offer, dedicate’. An important fact to be observed about its declension is the absence of the element *-(d)-* in 1sg.pst, which implies the absence of the **-ye/o-* extension at the Proto-Anatolian level. I agree with Sasseville (2020: 63) that the proto-form **d^hh₁-s^kél/ó-* (the imperfective of the verb ‘to put’, which yielded Hitt. *zaške/a*-^(mi)) was likely to play a role in the reconstruction of the stem under discussion (cf. Yakubovich 2022: 194–195 for the summary of historical-phonological parallels). I see, however, no compelling reason to assume a secondary, or rather tertiary, derivation via a verbal noun *d^hh₁-s^kah₂-*, since the historical generalization of the thematic vowel **-o-* would suffice to explain the vowel *-a-* of the 3sg forms.³² As for 1sg.pst *-cã-v*, it is possible to reconstruct this stem as **d^hh₁-s^kó-Vm*, where the 1sg allomorph **-Vm* was generalized from the athematic stems. The proposed analogical extension finds a partial parallel in Hittite, where the 1sg ending *-un* of the athematic stems is appended on top of the pre-existing endings of the verbs in *-ške/a-*, hence, e.g., *dašganun* ‘I took’ (Hoffner and Melchert 2024: 273). If this explanation is accepted, the alternation *a* ~ *ã* is not phonological but arose as a result of a merger between two vowels at a morpheme boundary.

Summing up, the analysis of the Lydian verbal stem formation provides corroborating evidence for both the commonly accepted sound change **éu > o* and the sound change **á > o* advocated in the present paper. The former historical development finds support in the history of the verbal root *tro-* < **Tréu* ‘to deliver’ while the latter one manifests itself in the formation of the suffix *-o-* < **-áye-*. Furthermore, we obtain two additional examples of the accent-sensitive alternation *a* ~ *o* in the reflexes of the same morphemes, which complement the parallel cases addressed in the previous section. The potential counterexamples to the proposed generalizations concern isolated lexemes and can be obviated via their refined etymological analysis.

5. /o/ and lexicon

Given the importance of the change **á > o* for both nominal inflection and verbal derivation, it would be odd if similar phonetic processes failed to manifest itself in Lydian roots. And indeed, a number of Lydian lexemes that represented a challenge for comparative linguistics obtain straightforward etymologies once one extends the pool of candidates for the ancestors of Lydian /o/. It turns out, however, that **á* is not the only accented long vowel that can turn into /o/ in Lydian: the vowels that are commonly reconstructed as **é* and **ó* at the Proto-Anatolian level yield the same reflex. I hasten to add that the new sound changes in no way undermine the development of Lydian /o/ from *u*-diphthongs: for this change in Lydian roots, see Section One.

in Lydian, one can point out that a historical *u*-diphthong would be better compatible with the alternation *o* ~ *a* rather than *o* ~ *a* (cf. the case of *wratos* ~ *wratuλ* addressed in Section One. The specific origin of the Lydian infinitive suffix remains unclear for the time being (cf. the discussion of the nominal suffix *-aλ-* /*-oλ-* in Section Three and the observations on the Armenian infinitive in Gérard 2005: 114).

³² Sasseville (2020a: 63) offers a lexical equation between Lyd. *ca*-^(t) and Lyc. *za*-^(ti) ‘to give a share’, which he segments in the hapax form TL 44b.4 *erizāna* (cf. Melchert 2004b: 16, where the same form is treated as unclear) and analyzes as a derivative of *za-* ‘allotment, portion’. More attestations seem to be required to confirm the existence of the Lycian verb *za-* and its conjugation pattern, but even if both are confirmed, it is not obvious why Lyd. *ca*-^(t) must represent its lexical cognate, given that *za-* ‘allotment, portion’ has no lexical match in Lydian.

The appropriate starting point for the discussion of the new sound changes is the well-attested Lydian noun *ora-* ‘month’. Neumann (2007: 245) tentatively compared it with the second component of Lycian *nure/i-*, which occurs in the phrase *nuredi nuredi* corresponding to Greek κατ’ ἐκάστην νομηνίαν ‘every new moon’ in the text of the Letoon trilingual (TL 320). The comparison implies that Lyc. *nur(e/i)-* represents a historical compound that is structurally similar to Gk. νομηνία ‘new moon’. The first element of this compound ultimately reflects Proto-Indo-European **neuo-* ‘new’ while the second one must have had the meaning ‘moon’ or ‘month’ based on context, which presumably represents the Lycian or pre-Lycian match of the Lydian word under discussion. At the same time, the second component of Lyc. *nur(e/i)-* was compared with Luwian *ar(i)-* ‘time period’, Gk. ὥρα ‘time period, season’, and Gothic *jēr* ‘year’ in Starke 1990: 116, fn. 339a (with ref.). The root under discussion is reconstructed as **iéh₁-rV-* in Melchert 1994: 75, but the Lydian form might as well continue the variant with the apophonic *o*-grade, whose existence is implied by the Greek noun.³³

A different approach is advanced in Oettinger 2021. Using Lyd. *aara-* ‘yard, estate’ as a minimal pair, Oettinger argues that the initial vowel of Lyd. *ora-* ‘month’ cannot continue the earlier **ā-* (or *á-*). This prompts him to reject the comparison with Luwian *ar(i)-* ‘time period’ and Lyc. *nure/i-* and to opt for the reconstruction *ora-* < **áwra-* < **árwa-*, on the assumption that **ár-wa-* represents a cognate of Hittite and Luwian *ar-ma-* ‘moon’, which feature a different suffix. The proposed sound changes are regular (see the discussion of *wora-* ‘son’ < **wáwra-* < **wárwa-* in Section One), but there is no comparative support for the proto-form **ár-wa-* ‘month’, nor independent evidence that Hittite/Luwian *arma-* ‘moon’ was morphologically segmentable at the Proto-Anatolian level. Therefore, the proposed alternative remains an uncertain root comparison, which represents its primary weakness vis-à-vis Neumann’s etymology. At the same time, Oettinger’s critique of the match between Lyd. *ora-* and Luw. *ar(i)-* seems to be based on a false premise: we do not know a priori that the first vowel of Lyd. *aara-* continues a Proto-Anatolian long vowel, but only that it belongs to a stressed syllable. In fact, the comparison between Lydian *aara-* ‘yard, estate’ and *arlil(i)-* ‘relatives’, etymologically “belonging to a homestead, household”, pleads at face value for the etymological short vowel in the root under discussion (Yakubovich 2017b, see especially pp. 17–18).³⁴

What remains necessary in order to corroborate Neumann’s tentative suggestion are other instances where Lydian /o/ represents reflexes of Proto-Anatolian **ā* < PIE **eh₁* or Proto-Anatolian **ó* < PIE **ō*, **oh_{1/3}*. Both developments find confirmation through the etymological analysis of other Lydian lexemes. Thus, the verbal phrase LW 24.2,18 *katošv faow* features an accusative noun *katoš-v* followed by a first singular present verbal form. The phrase belongs to a treaty concluded between the priest Mitridašta and the administrator of the temple of Artemis in Sardes and anticipates the respective declarations of both parties in its both occurrences. Therefore, its contextually appropriate translation is ‘I make a declaration’ (vel sim.), and the noun *katoš(i)-* refers to a performative statement.³⁵ The stem consists of the well-attested Lydian prefix *kat-* (cf. the Hittite preverb *katta* ‘down’) and the root *-oš-* > **-os-*, palatalized before the stem-forming vowel **-i-*. Given the contextual meaning of *katoš(i)-*, it is appropriate to compare **-os-* with Luwian *āšša-* ‘to say’, a denominative verb derived from *āšš-* ‘mouth’ (cf. the parallel derivation in the instance of Latin *orāre* ‘to orate, plead’ vs. *ōs-* ‘mouth’).

³³ The loss of the glide **i-* before **e* is tentatively regarded as a common Anatolian process in Melchert 1994: 75. In my view, PIE **i-* was lost in all environments in the history of Lydian, see Yakubovich 2022: 202, fn. 21.

³⁴ The alternative etymology of Lyd. *aara-* cited in Melchert 1994: 369 likewise presumes a Proto-Anatolian short vowel in the initial syllable.

³⁵ Cf. the translation ‘Verordnung’ in Gusmani 1964: 146.

Since Luwian $\bar{a}\bar{s}\bar{s}$ - and Latin $\bar{o}s$ - ‘mouth’ are commonly regarded as cognates, the Lydian root can also be reconstructed as $*\bar{o}s$ -, although the level of this reconstruction remains to be determined.³⁶ Thus, we obtain an additional example of the change $*\bar{o} > o$ in the history of Lydian.

A different root of a similar shape can be segmented in the verbal form LW 2.3 $\bar{e}t$ -*os*-*rs* (3pl.pst) after the common prefix $\bar{e}t$ -. It belongs to a passage enumerating parts of a grave installation and occurs in the phrase *laqriša=k=in qid! ētosrs* ‘and finally the tree/grove which they $\bar{e}t$ -*os*-ed’. The context is favourable to the interpretation of the stem $\bar{e}t$ -*os*- as ‘to plant’.³⁷ It seems therefore unwise to separate the root of this verbal form from that of the reduplicated stem Hitt. $\bar{a}\bar{s}\bar{a}\bar{s}$ -/ $\bar{a}\bar{s}\bar{e}\bar{s}$ -^(hi) ‘to seat, to make sit; to settle, to install’. Two etymologies of the Hittite stem are discussed in Kloekhorst 2008: 219; the Lydian evidence favours the former alternative, namely the reconstruction of the root $*h_1eh_1s$ ‘to sit’, which is expected to yield $*\bar{a}\bar{s}$ -/ $*\bar{o}s$ - at the Proto-Anatolian level. From the perspective of the present paper, the reconstruction of the Narten present $h_1\bar{e}s$ - $> *e\bar{s}$ - and the analogical “*he*-conjugation” stem $*\bar{o}s(V)$ - would also be an acceptable solution.³⁸ If the Hittite causative stem $\bar{a}\bar{s}\bar{a}\bar{s}$ - reflects the *o*-grade of the ablaut (i.e., Proto-Anatolian $*as\bar{o}s$ -), then the matching non-reduplicated causative stem $\bar{o}s$ - ‘to seat, plant’ can be reconstructed for the ancestor dialect of Lydian. Alternatively, one can hypothesize that the transitive meaning ‘to seat etc.’ was generalized by *-os*- in combination with the prefix $\bar{e}t$ -.

The verbal form LW 3.2 *fa-d-o-l* (3sg.pst) features the well-attested prefixes *fa*- and *d(a)*-. It occurs in a burial inscription in the clause *ardēc alarms fadol wstas*. The object *wsta*- was interpreted as ‘expenses’ (see the appropriate lemma in the *eDiAna* dictionary and cf. already Yakubovich 2017a: 277), while the subject *ardēt*- apparently refers to the owner of the tomb (see the appropriate lemma in the *eDiAna* dictionary). The emerging sense is that the owner of the tomb made (incurred) his own expenses, as opposed to letting his relatives construct the tomb for him (Poetto 2023).³⁹ This interpretation is compatible with treating the root *-o*- in *fa-d-o-l* ‘he made’ as a cognate of Hittite *ie/a*-^(mi) and Luwian *a*-^(di) ‘to make’, which are now usually reconstructed as $*(H)\bar{i}e\bar{h}_1$ - at the Proto-Indo-European level (see, e.g., Melchert 1994: 75, Sasseville 2020a: 317). This implies the development $*y\bar{a}e$ - $> o$ - ‘to make’ in the ancestor dialect of Lydian.⁴⁰

³⁶ For the Proto-Indo-European reconstruction h_1oh_1s - ‘mouth’, see Melchert 2010b. A different reconstruction $*h_1\bar{o}h_1\bar{s}$ -*es*-/ $*h_1eh_1\bar{s}$ -*s*- is preferred in the *eDiAna* dictionary. The principal difficulty at the Proto-Anatolian level consists in accommodating Hitt. *aiš*, *išš*- ‘mouth’, for which see Rieken 1999: 185–187. Depending on the reconstruction model and relative chronology adopted, Pre-Lydian $*\bar{o}s$ - may turn out to represent one of the two alternating stems of the word for ‘mouth’.

³⁷ For the combinatorial identification of *laqriša* as ‘tree/grove’, see Corral Varela and Obrador-Cursach 2023. Unfortunately, the co-authors failed to take into consideration that the neuter plural noun *laqriša* cannot trigger plural agreement according to the rules of Anatolian grammar and thus represent the subject of 3pl.pst $\bar{e}t$ -*os*-*rs*, which led to an impossible translation of the passage under discussion ‘and the tree(s)/grove which grew within’ (Corral Varela and Obrador-Cursach 2023: 72).

³⁸ We shall see in the following section that independent evidence for Proto-Anatolian $*\bar{o}s(V)$ - ‘to sit’ comes from the Luwian data in hieroglyphic transmission.

³⁹ A different interpretation of the clause under discussion is pursued in Gusmani 1964, where the verb *fado*- is translated as ‘*errichten*’ and compared with the root *cu(we)*- having a similar meaning (p. 116). The genetic comparison between the Lydian roots *do*- and *cu(we)*- is, however, impossible in the light of our present knowledge of Luwian historical phonology. For Gusmani, the implied object of the clause is apparently the tomb itself. Therefore, even if one accepts Gusmani’s overall syntactic interpretation of the clause under discussion, the verb *fa-d-o-l* can still be translated as ‘made, built’.

⁴⁰ A complication of the proposed etymology comes from the verbal form LW 15.1 *fa-d-il*, which occurs in a fragmentary context but can also be translated ‘he made’ (see the appropriate lemma in the *eDiAna* dictionary). Formally speaking, *fa-d-o-l* and *fa-d-i-l* can continue the *e*-grade and zero grade of the same Pre-Lydian root $*y\bar{a}e$ -/ $*\bar{i}$ -, but the competition between two ablaut grades in the same form would be unparalleled in Lydian. As an alterna-

The proposed interpretation of *fa-d-o-l* opens a possibility that the form *fa-o-w* attested in the phrase *katošv faow* features the same root *o-* ‘to make’. We have seen earlier in this section that the plausible contextual meaning of *katošv faow* is ‘I make a declaration’, while the absence of the prefix *-d-* in 1sg.prs *fa-o-w* may correlate with the absence of a specific addressee for the declarations made. A different hypothesis, entertained in Gusmani 1964: 178, implies the comparison between LW 24.2,18 *fa-o-w* and LW 23.8 *ow-v* ‘I declared’. The fact that the inscriptions LW 23 and LW 24 are closely interrelated adds credence to Gusmani’s hypothesis, and the redundant construction “I declare a declaration” is certainly conceivable in the legal language, but the existence of root allomorphs *o* and *ow* lacks obvious parallels within Lydian. While I do not consider the issue settled, it seems appropriate to give preference to the morphologically simpler alternative.

Finally, one can mention the form LW 14.14 *otran* (acc.sg or gen.-dat.pl) occurring in a fragmentary context, which explains why it has not been assigned any interpretation thus far. With due caution, one can propose its formal comparison with Luwian *atr(i)-* ‘soul, self’, Lycian *atla-*, *atra-* ‘person, self’, and Carian *otr-* ‘self’. The initial *a-* in Lycian and the initial *o-* in Carian both plead for the reconstruction of the initial long vowel in the Proto-Luwic word for ‘self’. If one accepts the further comparison with Greek ἤτορ < (H)eh₁t_ɾ ‘heart’ (Hajnal 1995: 244–245), it is conducive to the more specific Proto-Anatolian reconstruction **ǣtrV-* ‘self’. As long as we have no background knowledge of the meaning of Lydian *otran*, its chance resemblance with other Anatolian forms mentioned in this paragraph cannot be ruled out, but if the connection is real, we obtain one more example of the sound change **ǣ-* > *o*.

It is instructive to contrast the discussion of this section with the near-absence of suggestions regarding other Lydian reflexes of Proto-Anatolian **ǣ* and **ó* in the earlier literature. The only example for **ǣ* > *a* found in Melchert 1994: 368 is *taac(i)-* ‘votive offering’, allegedly going back to **dǣdi-* > PIE **d^heh₁-ti-*. Although repeated in Gérard 2005: 46, this example is by no means compelling, because *taac(i)-* can be derived from PIE **d^hh₁-ti-* equally well.⁴¹ No Lydian reflexes of **ó* are addressed in either Melchert 1994 or Gérard 2005, except for the position before a nasal, where it predictably yields /ã/ (cf. the discussion of the alternation *ã* ~ *o* in Section 3). Therefore, the new proposals are not meant to undermine the established sound laws, but, rather, they approach a fragment of Lydian historical phonology that failed to obtain adequate treatment in previous scholarship. As such, they are similar to the sound change **á* > *o*, which was also postulated against the background of complete uncertainty about the Lydian reflexes of Proto-Anatolian **á* or **áh₂*. We are lucky that the prominence of **áh₂* > **á* in inflectional morphemes facilitated the discussion of **á* > *o* in Sections Three and Four. The less systematic character of evidence for *ǣ* > *o* and **ó* > *o* in Lycian directly follows from the fact that it consists of lexical examples.⁴²

tive, one can venture an intermediate reconstruction of *fadil* as **fa-d-in-l* and assign it to the attested stem *fa-d-in-* ‘to cause’. The important thing to observe is that *fa-d-o-l*, with the reconstructed full grade, is the expected form of 3sg.pst; it is the form *fa-d-il* that requires some sort of *ad hoc* explanation.

⁴¹ The reflexes of the Proto-Indo-European nominal suffix **-ti-* are normally attached to the zero grade of the root in the ancient Indo-European languages, although there is a group of archaic formations that preserve the full grade of the root (Vine 2004). This discrepancy is in line with the reconstruction of “the proterokinetic pattern, with full-grade root and zero grade of the suffix in strong forms, and zero-grade root with full grade of the suffix in weak forms” (ibid., p. 357). The assumption that the vocalism of Lvd. *taac(i)-* reflects the weak form of the root is thus unproblematic, cf. especially its Greek cognate θεΐσις, likewise showing the weak form of the root.

⁴² This said, there is a possibility that the change **á* > *o* can also be traced in Lydian roots. Ignasi Adiego (pers. comm.) suggests an account of *wora-* ‘son’, which implies the same pre-Lydian form **wárwā-* as postulated in Section One with reference to Oettinger 1995, but assumes the compensatory lengthening **wárwā-* > *wārā* > *wora*. This

6. /o/ and phylogeny

The evidence assembled in the previous sections led to proposing four additional sources of Lydian /o/. This is Proto-Anatolian **á* next to a “laryngeal” (Section Two), Proto-Anatolian **áh₂* affected by the loss of a “laryngeal” (Sections Three and Four), as well as Proto-Anatolian **ǎ* and **ó* (Section Five).⁴³ The sheer number of new sound changes may look suspicious, in particular if the merger of the respective sounds is not attested elsewhere in Anatolian. Fortunately for the claims of the present paper, recent research on Luwian texts in hieroglyphic transmission yielded evidence that the same Proto-Anatolian segments merged into the low back vowel /a/ in the Luwian language. The relevant evidence is laid down in Burgin and Yakubovich 2024, therefore its brief summary will suffice for the purposes of this paper.

The hieroglyphic Anatolian signs ⟨a⟩ = L450 and ⟨á⟩ = L19 display a lexically conditioned complementary distribution in the Luwian texts composed before the orthographic reform of the mid-9th century BCE, and therefore must have corresponded to two different sounds.⁴⁴ Since ⟨á⟩ is normally limited to word-initial position, this is the only environment where the contrast between the two sounds can be systematically traced. In those instances where the relevant Luwian lexemes have cognates in Lycian, Lyc. *e-* and *a-* correspond to the Luwian initial vowels rendered with ⟨a⟩ and ⟨á⟩ respectively. For example, Luwian *a-sa-tu* ‘may he be’ matches Lycian *esu* ‘id.’, while the Luwian stem *á-* ‘to do, make’ represents a cognate of Lycian *a(i)-(di)* ‘id.’. At the same time, the Luwian cuneiform texts, which could in principle avail themselves of the sign ⟨e⟩, make no distinction between the counterparts of the glyphs ⟨a⟩ and ⟨á⟩, rendering them both as ⟨a⟩. This suggests that the contrast in Luwian was between /æ/ and /a/ rather than /e/ and /a/.⁴⁵

The fact that the contrast between /æ/ and /a/ was not limited to the word-initial position in Luwian follows from the attested paradigmatic alternations between these vowels. Thus, the forms *á-sa-ha* ‘I was’ and *a-sa-tu* ‘may he be’, attested in the same hieroglyphic inscription, belong to the same verb and yet show contrast between their initial vowels. This phenomenon resembles the palatal umlaut in Lycian, contrast *pija-xa* ‘I gave’ vs. *pije-te* ‘he gave’, where the allomorph *pija-* is used instead of *pije-* under the influence of the ending *-xa*, or *tas-a*, the collective plural of *tes-i* ‘oath’. If one assumes the same phenomenon for Luwian, *á-sa-ha* ‘I was’ can be transcribed as /as-xa/, where /-xa/ triggering the umlaut /æs-/ → /as-/ represents a cognate of the Lycian 1sg.pst ending *-xa*. In a similar fashion, **a-mi-i-sa* /æmm-is/ ‘my’ (nom.sg.c) can

scenario, which can, *mutatis mutandis*, be extended to *porlλ* ‘in the year’, derives support from a similar change in the geographically adjacent Ionic dialect of Greek, where the fall of digamma can likewise trigger compensatory lengthening, e.g., **kórwos* > κοῦρος ‘boy’, **ksénwos* > ξένος ‘guest’. Yet, since the disappearance of **w* is pervasive in the history of Greek but not typical of Lydian, the proposed parallel should be taken with a grain of salt.

⁴³ I am aware of the fact that the first two environments can in principle be collapsed, since **áh₂* is a combination where one finds **á* next to a “laryngeal”. They reason why I am listing them separately is the assumption that the conditional loss of **h₂* with compensatory lengthening may have preceded the merger addressed in this section, as suggested by the near-universal character of the change **ah₂* > **ā* in ancient Indo-European languages, including those where the merger under discussion did not take place.

⁴⁴ For a handful of exceptions to this distribution in texts predating the orthographic reform, see Burgin and Yakubovich 2024: 120, fn. 6.

⁴⁵ One must acknowledge Melchert 2024, a paper that appeared roughly simultaneously with Burgin and Yakubovich 2024 and advocates an orthographic distribution between ⟨a⟩ and ⟨á⟩ but steers clear from assigning divergent phonetic interpretations to these two glyphs. H. Craig Melchert now kindly informs me that he accepts the basic claim of Burgin and Yakubovich 2024 about ⟨a⟩ and ⟨á⟩ corresponding to two different low vowels before their eventual merger at some point in the history of Late Luwian.

be contrasted with *á-ma* /amm-a/ ‘my’ (nom.-acc.pl.n), where the Luwian ending /-a/ responsible for the umlaut represents a cognate of the Lycian 1sg.pst ending *-a* in *tas-a*.

Burgin and Yakubovich 2024 specifies four Proto-Anatolian sources of Luwian /a/. This is Proto-Anatolian **a* next to a “laryngeal”, as in the verbal ending /-xa/, Proto-Anatolian **ah₂* > **ā*, as in the nominal ending /-a/, Proto-Anatolian **ǣ*, as in the verb /a-(^{di})/ ‘to do, make’, and finally Proto-Anatolian **ō*. The last source is accepted on the strength of Luw. |á-lá/i-ma-za /alamæntsæ/ ‘name’, which cannot be separated from Latin *nōmen* ‘id.’; the initial *á-* in this Luwian word presumably reflects yet another umlaut effect.⁴⁶ The former three out of the four Proto-Anatolian segments under discussion are also adduced as sources of Lycian /a/ in Melchert 1994, while the outcome of Proto-Anatolian **ō* is regarded there as uncertain due to the lack of probative examples.⁴⁷ If one accepts the regular character of correspondence between Luw. /a/ and Lyc. /a/, this is tantamount to assuming that PAnat. **ō* yielded /a/ in Lycian. In particular the root vowel of Lycian nom.-acc.pl *alām-a* < **alamn-a* ‘names’ could be then accounted for in the same way as those of Luwian /alamæntsæ/ ‘name’, and not via umlaut caused by the plural ending *-a*. Yet, as long as the argument for Lyc. *a* < **ō* is solely based on the correspondences with Luwian, it obviously remains circular.

Now it is time to return to the Lydian data. It is easy to see that the new historical sources postulated for the Lydian /o/ in the present paper find a precise match in their counterparts offered for Luwian /a/ in Burgin and Yakubovich 2024. To be sure, there is an important difference between the two languages: as we saw in Section One, Lydian /o/ can also go back to other segments, whereas the sources of Luwian /a/ appears to be confined to the “backed” **a*, **ā*, **ǣ*, and **ō*. Furthermore, there are additional processes that affected the outcome of the proposed sound changes in both languages: in Lydian, the vowel /o/ was restricted to the stressed position and merged with /a/ in other cases, while in Luwian it spread to the left by umlaut, triggering the backing /æ/ → /a/. Nevertheless, the similarity of the mergers in the Luwian and Lydian languages remains remarkable, as illustrated in the table below on the basis of the tokens that were addressed earlier in this paper.

Proto-Anatolian Source	Luwian	Lycian	Lydian
<i>*a</i> next to <i>*h₂</i>	/asxa/ ‘I was’	<i>pjaxa</i> ‘I gave’	<i>kof(u)-</i> ‘water’
<i>*ah₂</i> > <i>*ā</i>	/amma/ ‘my’ (nom.-acc.pl.n)	<i>tasa</i> ‘oaths’	<i>pλtarwo-</i> ‘periphery’
<i>*ǣ</i>	/adi/ ‘makes’	<i>adi</i> ‘makes’	<i>fadol</i> ‘he made’
<i>*ō</i>	/alamæntsæ/ ‘name’	<i>*alāmē</i> ‘name’ (?)	<i>katoš(i)-</i> ‘declaration’

Table 1: Common sources of Luwian /a/, Lycian /a/, and Lydian /o/

⁴⁶ Note also Luw. |(SOLIUM)á-sa-tá ‘he sat’, which reflects the stem /asæ-⁽ⁱ⁾/. The significance of this example stems from the support that it lends to the reconstruction of the Proto-Indo-European root ‘to sit’ as **ēš-* ~ *ōš-* (cf. the preceding section). For a Lycian etymology that is compatible with the same reconstruction, see Réveillac 2023: 206.

⁴⁷ There were several attempts to argue for PAnat. **-ō* > Lyc. *-e*, but all of them concern the “laws of finals” and none of them can be regarded as compelling. Thus, Hajnal (1995: 93) offered the derivation of Lyc. gen.pl *-ē* and dat.-loc.pl *-e* from **-ōn* and **-ōs* respectively, but it remains unclear whether the variant with the long or short vowel has been generalized. According to another suggestion of Hajnal (1995: 98), the infinitives in *-na* and *-ne* contain the allatives in **-ā* (PIE **-eh₂*) and **ō* (PIE *-o-eh₂*) respectively. Alternatively, one can assume the synchronic influence of the Lycian dat.-loc.pl ending *-e* on the infinitive suffix. The derivation of Lyc. *se* ‘and’ from the Proto-Anatolian adverb **kō* ‘hither’ is entertained by Sasseville and Opfermann (see the appropriate lemma in the *eDiAna* dictionary). Yet, given the absence of Lycian particles featuring the *a*-vowel, it seems impossible to rule out the shortening **kō* > **ko* that accompanied the cliticization of this adverb.

A question that immediately imposes itself is whether the same merger can be traced back to the common ancestor of Luwian and Lydian. The answer depends on whether one is willing to extend the sound change $*\bar{o} > a$ to the history of Lycian. Scholars are united in the assumption that Lycian is more closely related to Luwian than Lydian is. Therefore, if the Lycian reflex of $*\bar{o}$ was different from a , one has to assume that the reflexes of, say PAnat. $*ah_2 > *\bar{a}$ and $*\bar{o}$ were also different in the common ancestor of Luwian and Lycian and merged in Pre-Luwian independently from Pre-Lydian. In contrast, if one accepts the change $*\bar{o} > a$ in the history of Lycian and reconstructs Lyc. $*al\bar{a}m\bar{e}$ ‘name’ as a singular form corresponding to the attested plural $al\bar{a}ma$, then all the columns in Table 1 can be taken as reflecting the inherited historical merger of the four segments. The argument for the latter solution is the counter-intuitive character of the swap between front and back vowels implied in the cluster of sound changes $*\bar{x}, *\bar{a} > a; *\bar{o} > e$. Ultimately, however, the choice between these two alternatives must depend on further progress in Lycian etymology, as well as the study of other Luwic languages, such as Lycian B, Carian and Sidetic.

Leaving aside the problem outlined in the previous paragraph, there are no obstacles to regarding the merger illustrated by the first three rows of Table 1 as the common feature of Luwian, Lydian, and Lycian. This conclusion is phylogenetically significant, since the merger of $*\bar{x}$ and $*ah_2 > *\bar{a}$ is not implemented in either Hittite or Palaic (Melchert 1994: 56). It is also relevant for historical phonology: if a short vowel next to a “laryngeal” merged with long vowels in the clade / dialectal area that included Luwian, Lycian, and Lydian, this pleads for a fairly early disappearance of vowel length opposition in the respective languages. Last but not least, the very fact that the Lydian merger finds approximate typological parallels in Luwian and Lycian enhances the plausibility of the empirical conclusions reached in the previous sections.

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И. С. Якубович. Происхождение лидийского /o/

В настоящей работе предлагаются новые источники лидийской фонемы /o/ в дополнение к уже отмеченным в научной литературе. Основной целью работы является показать, что до-лидийские (позднеанатолийские) долгие гласные *á, *ā и *ō, а также гласная *á в соседстве с увулярным, могут развиваться в /o/ в лидийском. Предлагаемые звуковые переходы позволяют уточнить наше понимание лидийской исторической фонологии и предложить несколько новых этимологий. Совпадение нескольких гласных, постулируемое в настоящей статье, находит параллели в истории лидийского и, возможно, ликийского языков, и таким образом данный параметр является релевантным при обсуждении филиации анатолийской языковой семьи.

Ключевые слова: лидийский язык; лувийский язык; ликийский язык; анатолийские языки; фонетические изменения; филогенез.