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STUDIES IN LYCIAN AND CARIAN PHONOLOGY AND MORPHOLOGY

When investigating (historical) morphological issues in a certain language, it is of paramount importance to have a good understanding of the phonology of that language. In works dealing with Lycian and Carian, this has not always been the case. This is partly due to the fact that both languages are attested in a limited number of inscriptions, the bulk of which is still ununderstandable (in the case of Carian, the script has only recently been deciphered), but also because scholars often do not take seriously the difference between orthography and phonology. In this article I will treat (aspects of) the Lycian and Carian phonology and show how these insights can be of help when morphologically interpreting words. Since Lycian and Carian belong to the Anatolian language branch, and, to be more precise, to the Luwic[1] sub-branch therein, it is worth while to first summarize what we know of the phonology of the better known Anatolian languages, Hittite and Luwian, and what these languages reveal about the Proto-Anatolian level. For this Proto-Anatolian level I will focus on the consonantal phonemes only.

Anatolian background

It is well known that in Hittite the graphic opposition between single and geminate spelled consonants must phonologically be interpreted as an opposition between lenis and fortis, respectively. As I have argued in Kloekhorst 2008: 21f., this opposition must phonetically be interpreted as one between short and long consonants, e.g. [t] vs. [t:]. It is important to note that voice was not a phonemic feature in Hittite. According to the newest insights on the PIE stop system, voice was not a phonemic feature there either: Kortlandt (2003: 259) reconstructs the traditional threefold opposition *t, *d, *d^h as */t:/ (fortis/long), */$^{\text{ʔ}}$t/ (lenis/short and glottalized) and */t/ (lenis/

[1] For the term 'Luwic', cf. Adiego 2007: 4.

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short), respectively. Since Proto-Anatolian is the intermediate stage between Proto-Indo-European and Hittite, its stop system must as well be reconstructed as having an opposition in length and not in voice. In Kloekhorst 2008: 17–8, I therefore have given the following overview of the Proto-Anatolian consonantal phoneme inventory.

stops	fortis	/p:/	/t:/	/ḱ:/	/k:/	/k^{w}:/
	lenis	/p/	/t/	/ḱ/	/k/	/k^{w}/
fricative			/s/			
affricate			/t^{s}:/			
'laryngeals'		/ʔ/	/H:/	/H^{w}:/		
liquids		/l/	/r/			
nasals		/m/	/n/			

The reason for reconstructing a labialized laryngeal /H^{w}:/ has been given in Kloekhorst 2006b: 160.

The Cuneiform Luwian language uses the same graphic conventions as Hittite, and it is therefore likely that here the basic opposition between single and geminate spelled consonants represents a phonological opposition /t/ vs. /t:/, etc. as well, and not one in voice. Since in Luwian the reflexes of PAnat. lenis */ḱ/ and */k^{w}/ are *$\underset{\wedge}{i}$ > Ø and $\underset{\wedge}{u}$, respectively (Melchert 1994: 254), there is a gap in the consonantal system. Moreover, PAnat. */ḱ:/ has become an affricate /t^{s}:/ (Melchert 1987; 1994: 251). Due to the 'Anatolian lenition rules' (Eichner 1973) and assimilations of original clusters (e.g. PAnat. */rH/ > Luw. /r:/), new fortis/lenis oppositions came into being. The basic consonantal phoneme inventory of Luwian is therefore as follows:

	fortis	/p:/	/t:/	/k:/	/k^{w}:/
stops					
	lenis	/p/	/t/	/k/	
affricate			/t^{s}:/		
glottal stop			/ʔ/		
	fortis	/H:/	/H^{w}:/	/s:/	
fricatives					
	lenis	/H/	/H^{w}/	/s/	
	fortis	/r:/	/l:/	/n:/	/m:/
resonants					
	lenis	/r/	/l/	/n/	/m/

As we will see, this Luwian phoneme inventory serves as a blueprint for the phoneme inventories of the other Luwic languages.

Lycian phonology

Before looking at the consonantal phonemes in Lycian, I will first treat the vocalic phonemes. In Lycian, we find the following vocalic graphemes: 𐊀 <a>, 𐊁 <e>, 𐊂 <i>, 𐊃 <u>, 𐊄, 𐊅, 𐊆, 𐊇, 𐊈 <ã> and 𐊉, 𐊊, 𐊋, 𐊌, 𐊍 <ẽ>. The latter two, which are nasalized, will be treated together with the nasal consonants below. The former four are extensively treated by Hajnal (1995: 11f.).

𐊀 <a>

When Lycian names are written in the Greek alphabet, Lycian <a> is written as α:[2] *Hla* > Λ**α**ς, *Idazzala* > Εἰδ**α**σσ**α**λ**α**, *Ixtta* > Ἰκτ**α**ς, *Xpparama* > Κπ**α**ρ**α**μ**α**, *Xudara* > Κοδ**α**ρ**α**ς, *Xuwata* > Κο**α**τ**α**, *Mahanepi*[*jemi*] > Μ**α**ναπιμις, *Q̃nturaha* > Κονδορ**α**σις, *Sbikaza* > Σπιγ**α**σ**α**, *Urtaqija* > Ὀρτ**α**κι**α**ς, *Zzala* > Σ**α**λ**α**ς.

In the converse situation, namely when Greek names are written in the Lycian alphabet, <a> usually corresponds with Greek α: *Xelijãnaχssa* = Καλλιάν**α**ξ, *Alaχssa*[*ñ*]*tra* = Ἀ**λ**έξανδρος. In the latter form, <a> seems to correspond to ε as well, and in *Milasãñtra* < Μελ**ή**σανδρος even to η. Yet, in these cases, we are probably dealing with the well-known umlaut of Lycian, however: **e_a* > *a_a*.[3] There is thus no reason to assume that Lyc. <a> = Gr. α would represent anything else than a sound [a] or, more likely, [ɑ].

𐊁 <e>

When Lycian names are written in the Greek alphabet, Lycian <e> is usually written as Greek α: *Hlm̃midewe* > Ἑλμιδ**α**υ**α**, *Mahanepi*[*jemi*] > Μαν**α**πιμις, *Mlejeusi* > Μλ**αα**υσις, *Pubiela* > Πυβι**α**λης, *Purihimeti* > Πυριμ**α**τις, *Siderija* > Σιδ**α**ριος, *Ssepije* > Σ**α**πι**α**. In *Tikeukẽpre* > Τισ**ε**υσεμβρα, <e> is written as Greek ε, however. Once, <e> corresponds to Greek ο, namely in *Ikkwemi* > Ἐνδυ**ο**μις, but here the preceding <w> = Gr. υ may have been of influence.

In the converse situation, namely when Greek names are written in the Lycian alphabet, Lycian <e> usually corresponds to Greek α and η: *Erttimeli* < Ἀ**ρ**τεμ**η**λις, *Exeteija* = Ἑκατ**α**ῖος, *Ñtemuχlida* < Δ**η**μοκλ[εί]δ[ης], *Ijetruχle* = Ἰ**η**τροκλ**ῆ**ς. Sometimes, <e> corresponds to Greek ε: *Exeteija* = Ἑ**κ**αταῖος. In *Pulenjda* < Ἀπολλ**ω**νίδης, Lyc.

[2] In this context, '>' indicates a Greek equivalent that is directly attested in the same text as the Lycian, '=' indicates a likely Greek equivalent for which no direct evidence is present, whereas '<' indicates a non-Lycian name borrowed into Lycian (cf. Melchert 2004: 91).

[3] Cf. Melchert 1992a; 1994: 296f.

<e> seems to correspond to Gr. ω, but the rationale behind this is unclear to me.

Summing up, the Lycian grapheme <e> probably represents a sound [æ].

E <i>

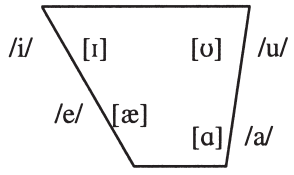
When Lycian names are written in the Greek alphabet, Lycian <i> is mostly written as ι: *Hlm̃**i**dewe* > Ἑλμ**ι**δαυα, ***I**χtta* > Ἰ**κ**τας, *Mahanep**i**[jemi]* > Μαναπ**ι**μις, *Pub**i**ela* > Πυβ**ι**αλης, *Sb**i**kaza* > Σπ**ι**γασα, *Sid**e**rija* > Σ**ι**δαρ**ι**ος, *Ssepije* > Σαπ**ι**α, *T**i**keukẽpre* > Τ**ι**σευσεμβρα. Yet, correspondences between <i> and Gr. ε occur as well: *Ikkwemi* > Ἐ**ν**δυομις, *Mizu* > Μ**ε**σος, *Zisqqa* > Σ**ε**σκως. In the name *Idazzala* > **Ει**δασσαλα, Lyc. <i> corresponds to Gr. ει.

In the converse situation, namely when Greek names are written in the Lycian alphabet, the same applies. It is likely that the Lycian grapheme <i> denotes a sound [I].

O <u>

When Lycian names are written in the Greek alphabet, Lycian <u> is mostly written as υ: *Kr**u**p[ssai?]* > Θρ**υ**πσις, *Mlej**eu**si* > Μλαα**υ**σις, *P**u**biela* > Π**υ**βιαλης, *P**u**rihimeti* > Π**υ**ριματις, *Tikeukẽpre* > Τισε**υ**σεμβρα. Often, <u> is written with Gr. ο as well, however: *X**u**dara* > K**ο**δαρας, *X**u**wata* > K**ο**ατα, *Miz**u*** > Μεσ**ο**ς, *Qñtur**a**ha* > Κονδ**ο**ρασις, ***U**rtaqija* > Ὀ**ρ**τακιας. The same applies for the converse situation, namely the spelling of Greek names in the Lycian script: *L**u**sñtre* < Λ**ύ**σανδρος, *Ijetr**u**χle* < Ἰητρ**ο**κλῆς, *P**u**lenjda* < Ἀπ**ο**λλωνίδης. The grapheme <u> therefore phonetically probably was [ʊ].

Combining these insights, we can set up a four vowel system for Lycian, probably like this:



Nasal vowels and nasals

The interpretation of the nasal vowels 𐊫, 𐊬, 𐊭, 𐊮, 𐊯 <ã> and 𐊰, 𐊱, 𐊲, 𐊳, 𐊴 <ẽ> cannot be treated separately from the other nasal graphemes, 𐊷 <m>, 𐊸 <n>, 𐊵 <m̃> and 𐊶 <ñ>. On the basis of correspondences like *Tikeuk***ẽ***pre* > Τισευσ**εμ**βρα, *Trij***ẽ***tezi* > Τρι**εν**δασις, *Lus***ã***tra-* < Λύσ**αν**δρος, etc. it is generally assumed that <ẽ> and <ã> represent nasalized vowels. The graphemic sequences <ẽC> and <ãC> therefore can be interpreted as denoting /e^{n}C/ and /a^{n}C/. The script does not possess separate signs for nasalized *i* and *u*: compare the parallelism between 3rd sg. *tadi* 'he puts', 3rd pl. *tãti* 'they put' vs. 3rd sg. *adi* 'he does', 3rd pl. *aiti* 'they do'. Just as 3rd pl. *tãti* shows the 3rd pl. ending *-˜ti*, we would expect the 3rd pl. form of the verb *a(i)-* 'to do' to be **aĩti*. Sometimes, this absence of signs for nasalized *i* and *u* is regarded as a graphic deficiency,[4] which would mean that *aiti* can also be read *aĩti* and therefore phonologically interpreted as /ai^{n}ti/. Yet, the fact that we find 3rd pl. *puñtẽ* 'they inscribed', which must be analysed as the verbal stem *pu-* + the (restored) ending *-˜tẽ*, phonologically /pu^{n}te^{n}/, shows that the nasalized variant of /u/ could be written when desired, namely as <uñC>. Similarly in *miñt(i)-* = Greek μίνδις, which points to a phonological interpretation /mi^{n}t(i)-/. I therefore rather assume that the absence of separate signs for the nasalized variants of /i/ and /u/ is due to a historical development, namely the loss of nasalization of older */i^{n}/ and */u^{n}/. New cases of /i^{n}/ and /u^{n}/ have found their way into the language via loanwords (as is probably the case in *miñt(i)-*) or via restorations (*puñtẽ*) and are spelled *-iñC-* and *-uñC-*.[5]

It is remarkable that in front of <m, n, m̃, ñ>, the graphemes <ẽ, ã> seem to freely alternate with <e, a>: *sij***ẽ***ni* = *sijeni* 'he lies', *m=***ẽ***ne* = *m=ene* 'and him', *mah***ã***na-* = *mahana-* 'god'. It therefore does not seem necessary to interpret these cases as /e^{n}nV/ and /a^{n}nV/, but rather as /enV/ and /anV/.

Similarly in the case of the sequence *VñnV*, where we find e.g. *esed***ẽ***ñnewe-* besides *esedeñnewe-* 'consanguineal descendent', or *Pñtr***ẽ***ñn(i)-* besides *Pñtreñn(i)-*, PN. Because of the equation of Lyc.

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[4] E.g. Melchert 1994: 291: "nasalized variants of the high vowels /i/ and /u/ may also exist, despite the lack of separate symbols".

[5] The sequence *-iñC-* only occurs in *miñt(i)-*, *Uwiñti* (PN) and *Piñteusi* (PN). The sequence *-uñC-* is only found in *puñtẽ*, *Xuñnijẽi* (PN), *nuñtãta* '90' (although Neumann 2007: 245 suggests that this word is a spelling error for **nusñtãta*), *mluñte* and *kduñtijãi* (which Neumann 2007: 162 analyses as *kdu ñtijãi*, however).

Xbidẽñn(i)- with Mil. *Xbidewñn(i)-* 'of Kaunos'[6] it is likely that *VñnV* must be the outcome of an assimilation in **VCnV*, and I therefore phonologically interpret it as having a geminate nasal: /VnnV/.

The sequence *-ẽC-* is clearly distinguished from the spelling *-ẽñC-*, and I therefore phonologically interpret the latter as /-enC-/. It should be noted, however, that whereas *-ẽC-* represents /-e^{n}C-/ < **-enC-*, the spelling *-ẽñC-* represents /-enC-/, which must reflect **-ennC-*.

To sum up, I propose the following phonological interpretations of Lycian spellings:[7]

ãC	/a^{n}C/
ãnV = *anV*	/anV/
ãmV = **amV*	/amV/
ãñC = *añC*	/anC/
**ãm̃C* = *am̃C*	/amC/?[8]
ãñnV = *añnV*	/annV/
ãm̃mV = *am̃mV*	/ammV/
ẽC	/e^{n}C/
ẽnV = *enV*	/enV/
ẽmV = *emV*	/emV/
ẽm̃C and *em̃C* do not occur[9]	
ẽñC = *eñC*	/enC/
ẽñnV = *eñnV*	/ennV/
ẽm̃mV = **em̃mV*	/emmV/

When standing in between consonants (*CñC*, *Cm̃C*), the signs <ñ> and <m̃> are usually regarded as vocalized nasals. Although this may be correct for the phonetic level, I see no reason not to regard these vocalized nasals as allophones of /n/ and /m/. The spellings *CñnV* and *Cm̃mV* in my view are parallel to e.g. *CttV* or *CχχV* (cf. below), i.e. I regard them phonologically as /CnV/ and /CmV/.[10]

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[6] For the reason for citing *Pñtrẽñn(i)-* and *Xbidẽñn(i)-/Xbidewñn(i)-* instead of usual *Pñtrẽñne/i-* and *Xbidẽñne/i-/Xbidewñne/i-*, see note 27 below.

[7] Note that the spelling *-nC-* only occurs in *Winbẽti* (PN) and [...]*nttañ*[...] (N 323), but this latter text shows more aberrancies, cf. note 11.

[8] This spelling only occurs in the PN *Am̃pu*[.]*peu*.

[9] Although the spellings *ẽm̃C* and *em̃C* do not occur, the sequence *-eml-/-ẽml-* does, namely in [*esẽ*]*nemla-* (N 324,9) and *ñtẽmle-/ñtemle-*. I analyse these as /-emlV-/.

[10] E.g. Bryce's statement (1987: 95) that Lycian *ñ* must have been pronounced *-in-* on the basis of the equation of the place name *Arñna* 'Xanthos' with Hitt. *Arinna*, is false. The name *Arñna* corresponds to Aramaic *'WRN*, which matches Hitt. ^{URU}*A-(u-)u̯a-ar-na* (KUB 19.55 left edge 1, KUB 23.83, 22) and HLuw.

Cñ̃C	/CnC/
Cm̃C	/CmC/
Cñ̃nV	/CnV/
Cm̃̃mV	/CmV/

In word-initial position, we have:

mV-	/mV/
m̃̃mV-	/mmV/
nV-	/nV/
**ñ̃nV-* does not occur	
m̃C-	/mC/
ñ̃C-	/nC/

In word-final position, I interpret <Cẽ> as /Ce^{n}/, etc. The word-final spellings *Cẽi* and *Cãi* are remarkable: they contrast with both *Cẽni* and *Cẽñ̃ni*. Moreover, these are the only environments in which <ẽ> and <ã> appear before a vowel. This suggests that in these sequences a hiatus has been preserved, e.g. /e^{n}'i/ and /a^{n}'i/ (from */-e^{n}hi/ and /-a^{n}hi/?). Yet, I will phonologically rewrite them as /Ce^{n}i/ and /Ca^{n}i/.

-Cẽ	/Ce^{n}/
-Cã	/Ca^{n}/
-Cẽi	/Ce^{n}i/
-Cãi	/Ca^{n}i/

Consonants

In Lycian, we find the following consonantal graphemes: 𐊁, 𐊃 <b>, 𐊄 <d>, 𐊇, 𐊉 <g>, 𐊊 <h>, 𐊋 <j>, 𐊍 <k>, 𐊎 <l>, 𐊑 <m>, 𐊓 <n>, 𐊔 <p>, 𐊗 <q>, 𐊘 <r>, 𐊙 <s>, 𐊛 <t>, 𐊜 <θ>, 𐊝 <τ>, 𐊞 <w>, 𐊟, 𐊠, 𐊡, 𐊢 <χ>, 𐊣 <z>, 𐊤 <K>.

The graphemes 𐊘 <r>, 𐊎 <l>, 𐊑 <m> and 𐊓 <n> clearly represent the phonemes /r, l, m, n/. Note that the fortis/lenis opposition as found in Luwian between /r:/ and /r/, etc., seems to have been given up in Lycian.

The graphemes 𐊋 <j> and 𐊞 <w> are only found intervocalically[11] and therefore must be regarded as mere allophones of the vowels /i/

Á-wa/i+ra/i-na-a$^{\text{URBS}}$ (YALBURT bl. 13) (cf. Borchhardt, Eichner et al. 1997–99: 17^{21}), which rather points to a pronunciation [Arna]. This is supported by the fact that Stephanus of Byzantium reports that ῎Αρνα is the older name of the city of Xanthos.

[11] The only exceptions are the personal name *Pulenjda* (TL 6,1) = Ἀπολλωνίδης, the form [...]*niiusj* (N323,2), which occurs in an incomprehensible inscription, the

and /u/. In the sequences *ije*, *ija*, *iju*, *uwe*, *uwi* and *uwa*, the graphemes <j> and <w> have to be regarded as spellings of phonetic glides that are not phonemical.[12]

The grapheme 𐊇 <h> represents /h/, which etymologically corresponds to Luwian /s:/ and /s/.

The grapheme 𐊋 <θ> occurs in words where we would expect to find <th> or <dh> (which both are unattested in the Lycian texts). Compare for instance *laθθe/i-*, the gen. adj. in *-Vhe/i-* of *lada-* 'wife' (instead of expected ***ladhe/i-*), or *leθθe/i-*, gen. adj. of 'Leto' (instead of expected ***lethe/i-*). The fact that <θ> renders a biphonemic sequence /th/ or /dh/ is in my view the reason that it is so often spelled with a geminate (*θθe-*, *laθθe/i-*, *Teθθiweibi*).

The grapheme 𐊊 <z> probably represents /t^{s}/, compare *Zeus-* = Ζεύς, *Idazzala* > Εἰδασσαλα, *Mizrppata* = *Miθrapāta*, but also Mil. *Trqqiz* < **-ent-s*.

The grapheme 𐊎 <s> represents /s/, e.g. *Milasãñtra* < Μελήσανδρος, *Seimija* < Σιμίας. Etymologically, /s/ corresponds to Luwian /t^{s}:/ < PAnat. */ḱ:/, but also can go back to **sT*, e.g. *esi* 'he is' < **h$_1$esti*, *esu* 'it must be' < **h$_1$estu*.

We are now left with the graphemes <b, d, g, k, p, q, t, τ, χ, K>.

Melchert (1994: 282f.) interprets the graphemes 𐊐 <p>, 𐊑 <t>, 𐊔 <τ>, 𐊒 <k>, 𐊖 <q> and 𐊓, 𐊕, 𐊗, 𐊘 <χ> as representing stops, phonologically interpreting them as /p/, /t/, /t^{w}/(ʔ), /<k/, /k/ and />k/, respectively.[13] The interpretation of especially the latter three seems incorrect to me. According to Melchert, the graphemes <k>, <q> and <χ> all three are reflexes of PAnat. */H:/, which are conditioned as follows: <χ> = />k/ represents the normal outcome of PAnat. */H:/; <q> = /k/ represents a palatalized version of <χ>, namely the reflex of */H:/ before a front vowel; <k> = /<k/ represents an even more palatalized version of <χ>, namely the reflex of */H:/ between two front vowels. These claims cannot be substantiated, however.

As I have argued in Kloekhorst 2006b: 97–101, the grapheme <q> must represent a phoneme /k^{w}/, the regular outcome of PAnat. */H^{w}:/,

particle chain *m=eñ=je* (TL 134,1) instead of expected *m=ẽn=ije*, and the personal name *Ikkwemi* (TL 32i) = Ἐνδυομις.

[12] The only exception seems to be word-initial *uwV-* that differs from word-initial *wV-*. I interpret the former as /uuV-/ and the latter as /uV-/. Compare, e.g., the stem *uwa-* 'cow' = /uua-/, which stands beside *wawa-* 'cow' = /uaua-/.

[13] Similarly, Van den Hout 1995: 138 interprets <p> as a labial tenuis, <t> as a dental tenuis and <χ>, <q> and <k> as dorsal tenues, without elaborating on the difference between the latter three.

corresponding to Luwian /Hʷ:/. Compare e.g. *trqqñt-* 'Storm-god' < **trh₂uent-*, but also ***Q**ñturahe/i-* > **Κο**νδορασις.

The grapheme <χ> clearly represents /k/, cf. ***X**udara* > **Κ**οδαρας, ***X**uwata* > **Κ**οατα, ***X**ñtabura* > **Κ**ενδαβορα. It indeed is the normal reflex of PAnat. */H:/, corresponding to Luwian /H:/.[14]

If we consider the correspondences of the Lycian grapheme <k> to sounds in other languages, e.g. ***K**rbbe*[*s*]*e* > **Θ**ε[ρ]βεσιος, ***K**izzaprñna* ~ ***Z**isaprñna* < Pers. **Çiçafarnā*, ***K**rupsse* > **Θ**ρυψις, *Ti**k**eukẽpre* > Τι**σ**ευ**σ**εμβρα, it is clear that <k> does not represent a velar, but rather a palatal stop. I therefore interpret it phonologically as /c/.

The interpretation of <p> and <t> as /p/ and /t/, respectively, is unproblematic.[15]

The interpretation of <τ> is unclear. It only occurs in words that are also spelled with <t>. According to Melchert, <τ> may only occur in words where /t/ reflects PAnat. */kʷ:/ before a front vowel. He therefore assumes that <τ> represents a transition sound between */kʷ:/ and Lyc. /t/, and hesitatingly suggests /tʷ/. Since the interpretation of <τ> does not affect the overall interpretation of the Lycian consonant system, I will leave it aside.

Summing up, I arrive at the following phonemic stops: /p, t, c, k, kʷ/. As Melchert correctly states, these stops are underlyingly voiceless, but after nasals they are realized as voiced (e.g. *miñ**t**i* = Gr. μίν**δ**ις, *Tikeukẽ**p**re* > Τισευσεμ**β**ρα, *Ñ**t**arijeuse/i-* < **Δ**αρεῖος).

It is generally thought that the graphemes 𐊁, 𐊃 <b>, 𐊄 <d> and 𐊇, 𐊉 <g> must represent fricatives,[16] usually interpreted as voiced: /β/, /δ/ and /γ/. This would indeed be a fitting interpretation for cases like *Xu**d**ara* > Κο**δ**αρας, *Prijenu**b**a* > Πριανο**β**ας, etc., where these graphemes correspond to Greek voiced stops. Yet, it is remarkable that e.g. Δαρεῖος is rendered as *Ñtarijeuse/i-*, and not as ***Darijeuse/i-*, and Ἰδα**γ**ρος, as *Idãχre*, and not as ***Idagre*. In my view, this indicates that these fricatives were voiced in intervocalic position only, but not elsewhere. I therefore assume that we are dealing with underlying voiceless fricatives, /φ/, /θ/, /χ/, which are realized as voiced in intervocalic position. Such a situation is also better understandable

[14] Cf. also Van den Hout 1995: 134.

[15] Lycian <t> always corresponds to Greek τ (but to δ after nasals) and Persian *t*, and Lycian <p> always corresponds to Greek π (but to β after nasals) and Persian *p* (but to *b* after nasals and liquids), cf. Van den Hout 1995: 131–2.

[16] Especially telling are the Lycian names *Dapara* and *Xesñtedi*, which in Greek are rendered Λαπαρα and Κεσινδηλις, both substituting Lyc. *d* by Gr. λ.

from a historical point of view: both in Proto-Anatolian and Luwian, voice was not a phonemic feature.

The last grapheme, 𐔘 <K>, is difficult to interpret because it is so rarely attested. Since the name *ArKKazuma* corresponds to Greek Ἀρκεσιμα, it is likely that it must reflect a velar-like consonant. If we look at the consonants that thus far have been treated, we see two gaps in the system, namely the absence of a fricative corresponding to /c/ and a fricative corresponding to /k^{w}/:

stops	/p/	/t/	/c/	/k/	/k^{w}/
fricatives	/φ/	/θ/		/χ/	

Since it is likely that the fricative corresponding to /k^{w}/ was absent (compare the absence of a lenis variant of /k^{w}:/ in Luwian), I tentatively assume that <K> represents the fricative corresponding to the stop /c/, so /ç/.[17]

Consonant clusters

It is well known that the Lycian orthography shows many geminate spellings of consonants, which gave rise to its characteristically high number of large consonant clusters. Van den Hout (1995) has elaborately treated these consonant clusters and has shown that the distribution between single and geminate spelled consonants depends on their position within the word. This distribution can be represented as follows (R = /r, l/, N = /m, n/, C = other consonants):

	#_	*V_V*	*C_*	*R_*	*N_*	*_CC*	*_R/N*
stops							
<p>	*p-*, *pp-*	*-p-*	*-pp-*	*-pp-*	*-p-*	*-p-*	*-p-*
<t>	*t-*, *tt-*	*-t-*	*-tt-*	*-tt-*	*-t-*	--	*-t-*
<k>	*k-*	*-k-*	--	--	*-k-*	--	*-k-*
<χ>	*χ-*	*-χ-*	*-χχ-*	*-χχ-*	*-χ-*	*-χ-*	*-χ-*
<q>	*q-*	--	*-qq-*	*-qq-*	--	--	*-q-*
fricatives							
<b>	--	*-b-*	*-b-*	*-bb-*	--	--	*-b-*
<d>	*dd-*	*-d-*	*-dd-*/*-d-*	--	--	--	*-d-*
<K>	--	--	--	*-KK-*	--	--	--
<g>	--	*-g-*	--	--	--	--	--

[17] Similarly Schürr 1998: 148, who rather suggests that <K> could be the lenited variant of <q>.

other							
<s>	*s-*, *ss-*	*-s-*	*-ss-*	*-ss-*	*-s-*	*-s-*	*-s-*
<z>	*z-*, *zz-*	*-z-*	*-zz-*	*-zz-*	*-z-*	*-z-*	*-z-*
<h>	*h-*, *hh-*	*-h-*	--	--	--	*-h-*	*-h-*

Although some of the empty spots are surely accidental, it seems to me that the absence of fricatives in initial position (except for *dd-*), and in clusters of the shape *N_* and *_CC* is systematic. The scheme also shows that single and geminate spellings are largely consistent: intervocalic consonants are always spelled single; after *R*, consonants are always spelled with a geminate; before another consonant (whether *C*, *R* or *N*), consonants are always spelled single. The apparent inconsistencies in the other rows each has its own explanation. In word-initial position we find e.g. *ttV-* vs. *tV-*, *ppV-* vs. *pV-*, etc. Heubeck (1985) explained these geminate spellings as reflecting morphological reduplication, which would mean that we can just phonologically interpret the spellings *#tt-*, *#pp-*, etc. as /tt-/, /pp-/, etc. respectively.[18] The spelling *ddV-* remains enigmatic, especially since it is the only case where we find a fricative in word-initial position. It therefore has been suggested that this sequence must reflect older **tdV-*, a morphological reduplication as well.

In the row *C_*, it is remarkable that *b* is always spelled single. In my view, this may be due to its origin: in most of the words with a cluster *Cb*, *b* is the reflex of PLuw. **u̯*: *kbi* 'two' < **tu̯i-*, *kbatra-* 'daughter' < **tu̯egtr-*[19], etc. In the same row, *d* shows two different spellings, namely *-dd-* and *-d-*. Van den Hout (1995: 122) clearly shows that these are conditioned by the preceding consonant: we find *-kd-*, *-td-* and *-sd-* vs. *-pdd-* and *-χdd-*. It cannot be coincidental that *k* = /c/, *t* and *s* are all phonetically very close to *d* = /θ/, which could point to some kind of dissimilation process.[20]

Summing up, we see that the difference between single and geminate spelling of consonants is only significant in word-initial position.

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[18] Van den Hout (1995: 125) does not believe that these cases reflect reduplication, since "commonly accepted examples of reduplicated presents, like *pibi-* 'to give' and *tideimi-* 'child' (from **tide-* 'to nurse'), never show a similar syncope". These examples are incorrect, however. As I have argued in Kloekhorst 2008: 876–7, *tideime/i-* rather reflects **dʰeh₁i-to-i̯e/o-* and therefore must not be regarded as a reduplicated formation. Although *pibi(je)-* indeed must be regarded as reduplicated, the simplex it belongs to, *pije-* 'to give', reflects **h₁p-i-* (cf. Kloekhorst 2006a), which means that *pibi(je)-* goes back to PLuw. **pībi-* < **h₁pi-h₁p-i-*, with a *long* reduplication vowel.

[19] Cf. Kloekhorst 2008: 902–4 for this reconstruction.

[20] Thus already Van den Hout 1995: 136 for explaining *-td-*.

In all other positions the choice between the two is automatically determined by the environments. As Van den Hout (1995: 131f.) rightly states, it is likely that the geminate spelling reflects a phonetic phenomenon, probably lengthening, so e.g. *hrppi* = [hrp:i]. Yet, since this lengthening is automatic, it is phonologically irrelevant. We are therefore allowed to phonologically analyse *hrppi* = [hrp:i] as /hrpi/.

Although the nasals have been extensively treated above, I think it is worth while to give the same overview for them as well. As we see, the difference between /n/ vs. /nn/ and /m/ vs. /mm/ is only relevant in initial and intervocalic position. In all other cases the 'geminate' spellings with *-ñn-* and *-m̃m-* are automatic and directly comparable to the geminate spellings of the other consonants.

	#_	V_V	C_	R_	N_	_R/N
nasals						
/n/	*nV-*, *ñC-*	*-n-*	*-ñn-*	*-ñn-*	*-ñn-*	--
/nn/	*ñnV-*	*-ñn-*				
/m/	*mV-*, *m̃C-*	*-m-*	*-m̃m-*	*-m̃m-*	*-m̃m-*	*-m-*
/mm/	*m̃mV-*	*-m̃m-*				

So, a word like *trisñne/i-* 'three year old', phonetically [trisn:e/i-], is phonologically to be interpreted /trisne/i-/. Similary *km̃mẽt(i)-* 'how(ever) many' = [cm:e^{n}t(i)-] = /cme^{n}t(i)-/.

Lycian phoneme inventory

Taking all the above into account, I arrive at the following phoneme inventory for Lycian:

vowels	/i/	/u/					
	/e/	/a/					
stops	/p/	/t/	/c/	/k/	/k^{w}/		
fricatives	/φ/	/θ/	/ç/	/χ/		/s/	/h/
affricate	/t^{s}/						
resonants	/r/	/l/	/m/	/n/			

To this, nasalization must be added as a phonemic feature as well, albeit that the original nasalization was lost after the vowels /i/ and /u/.

Let us now see how this insight into the Lycian phonemic system can be of help when judging individual words.

Lycian *sitẽni*

In his 1992b paper Melchert convincingly argues for interpreting some Lycian words as middle verb forms, therewith discovering a whole new category in Lycian that at that point had not been known. I will briefly mention the forms that Melchert discusses.

The form *aχagã* (TL 44c, 4) is interpreted by Melchert as 1st sg. pret. mid. of the verb *a(i)-* 'to do', showing an ending *-χagã* which he compares with the Hittite 1st sg. mid. ending *-ḫḫaḫa*, both reflecting PAnat. **-Haha* < **-h_2eh_2e*. The context in which this word occurs, TL 44c (4) *ñ*[*n*]*e=(e)mu : aχagã : maraza*, is convincingly translated as 'I *became* judge for them'.

The form *sijẽni/sijeni* (occurring several times) had already been translated by Pedersen (1945: 18) as 'lies', which is corroborated by Melchert's analysis of *sijẽni* as reflecting PIE **ḱéi-o*, therewith being cognate with CLuw. *zi-i-i̯a-ri* and Sanskrit *śáye* 'lies'.[21] Representative contexts are: TL 150 (1–4) *ebeli : me sijẽni : χssẽñzija : χñtlapah : tideimi : mutleh : prñnezijehi : prñnawate=ti : ñtatã : atli : ehbi* 'Here lies Xssẽñzija, son of Xñtlapa, household-member of Mutle, who has built the chamber for himself'; TL 49 *ebehi : isbazi : m(e)=ije=sijẽni : padrñma : kumaza* 'On the couch of this (monument) lies Padrñma, the sacrificial priest'. Phonologically, *sijẽni/sijeni* must be interpreted /sieni/, i.e. a verbal stem *si-* 'to lie' < **ḱei-*, followed by an ending *-eni* < **-o+*.

The form *s̰iχani* (TL 128, 2) is interpreted by Melchert as 1st sg. pres. mid. of the verb *si-* 'to lie' showing the ending *-χani*, corresponding to Hitt. 1st sg. mid. *-ḫḫa*. The context is: TL 128 (2) [... *ebei*]*la: isbazi: amu s̰iχani* 'Here on the couch I lie'.

Although the interpretation of these forms seems correct to me, Melchert's interpretation of the form *sitẽni* is in my view less probable. After having identified the form *sijẽni* as 3rd sg. pres. mid. 'lies' representing the preform **ḱéi-o* as attested in CLuw. *zīi̯ari*, Melchert argues that on the basis of the word for 'he lies' in the other Anatolian languages, namely Pal. *ki-i-ta-ar* and Hitt. *ki-it-ta(-ri)*, we must assume that besides a form **ḱéi-o*, in Proto-Anatolian a form **ḱéi-to* 'he lies' must have been present as well (a situation comparable to Sanskrit, where both *śáye* < **ḱéi-o* and *śéte* < **ḱéi-to* are attested). Since the preform **ḱéi-to* would in Melchert's view regularly yield pre-Lycian **site*, he predicts that this **ḱéi-to* after the addition of *-ni* as visible in Lyc. *sijẽni* and *siχani*, would in Lycian have yielded a

[21] Compare also Arc. κεῖοι.

form *sitẽni*. Such a form is indeed attested twice, namely in the Letoôn Trilingual (N 320, 25) and the Stele of Xanthos (TL 44b, 61). Since in the first text the sentence in which *sitẽni* occurs, *me=ije=sitẽni=ti : hlm̃mipijata*, is glossed by Greek καὶ ὅτι ἂν ἐχφόριον ἐκ τούτων γίνηται 'and which tribute out of these will be present', Melchert translates the Lycian sentence as 'and the tribute which lies therein', interpreting *sitẽni* as 3rd sg. pres. mid. 'lies'.

Although I do not disgree with the idea that *sitẽni* belongs to the verb *si-* 'to lie', I think that its interpretation as 3rd sg. pres. mid. reflecting **ḱéi-to* can hardly be correct.

First, there is a formal problem. Melchert states that the preform **ḱéito* would regularly yield pre-Lyc. **site*, but this is not fully correct. If we take into account Eichner's Lenition Law, we would expect that **ḱéito* would have yielded pre-Lyc. ***side*, showing lenition of PAnat. */t:/ to Lyc. *d* due to the preceding accented diphthong. Although in principle it is not impossible that the unlenited variant of a verbal ending is generalized (which is attested in e.g. *aχã* 'I did', which must show a secondary introduction of the unlenited ending *-χã* vis-à-vis lenited *-gã* in *agã* 'I did'), in the 3rd sg. forms of the active the distinction between the unlenited and lenited endings *-ti* and *-di* (for the present) and *-te* and *-de* (for the preterite) has consistently been preserved, which makes it likely that this would have been preserved in the 3rd sg. mid. endings as well.[22]

Secondly, it is *a priori* not very likely that in Lycian both **ḱéi-o* and **ḱéi-to* would have been preserved in exactly the same meaning and function. Kortlandt (1981: 126–7) argues on the basis of the distribution of the Sanskrit 3rd sg. mid. endings *-e* and *-te*, that for Proto-Indo-European we must distinguish between a 3rd sg. ending **-o* that is used in deponents (intransitive middles), and an ending **-to* that is used in transitive middles. This would predict that for the verb **ḱei-* 'to lie', the original 3rd sg. form was **ḱéi-o*. Just as the Sanskrit ending *-e* is being ousted by *-te* within the Vedic period, where 3rd sg. *śéte* eventually replaces the original form *śáye*, the distribution of the Anatolian forms can be explained in a similar fashion. The original form **ḱéi-o* is still attested in the Luwic branch, viz. as CLuw. *zīi̯ari* and Lyc. *sijẽni*, whereas in the Palao-Hittite branch an innovation has taken place, namely the replacement of the ending **-o* by **-to*, yielding **ḱéi-to* > Pal. *kītar*, Hitt. *kitta(ri)*. So the statement that the

[22] Especially if we take into account the fact that it is generally assumed that the 3rd sg. pret. act. ending *-te* and *-de* are etymologically identical to the 3rd sg. mid. ending **-to* (Yoshida 1993).

Lycian forms *sijẽni* and *sitẽni* are functionally identical can only be upheld if we assume that in Lycian an independent replacement of the 3rd sg. ending *-ẽni* by a renewed *-tẽni* has taken place, and if we are able to establish a chronological distribution between these forms (older *sijẽni* vs. younger *sitẽni*). Since I do not know of any evidence for such a distribution, and since I do not think that it is likely that such a replacement has taken place, I do not find it likely that *sijẽni* and *sitẽni* are functionally identical.

Let us have a new look at *sitẽni*. As said before, this form occurs only twice. Besides in the Letoôn Trilingual, which was cited above, *sitẽni* also occurs in the Stele of Xanthos. Although many details of this large text are unclear, the context in which *sitẽni* occurs is fairly well understood. After a list of sanctuaries built by several people, we read (TL 44b, 61–62) *me=sitẽni : eb*[*e*]*ija garãi : zeusi : ñtewẽ : χñtawati* ... 'And these (scil. the sanctuaries) lie opposite the Royal Zeus of the Garas ...'. It is crucial that the subject of *sitẽni*, the pronoun *eb*[*e*]*ija*, is a neuter plural form. Melchert (1992b: 195) is aware of this fact but states that "a singular verb with a neuter plural is, of course, quite natural for an old IE language". Yet, Van den Hout (2001: 170), who studied the use of singular verb forms with neuter plural subjects in the Anatolian languages in great detail, "did not find any certain examples" of this phenomenon in Lycian. A second argument that is uttered by Melchert against interpreting *sitẽni* as a plural form, is his assumption that the preform of the 3rd pl. form of 'to lie', which he reconstructs as "**kéyontor*", would regularly have yielded Lyc. ***sijẽtẽni*. Melchert's reconstruction of this preform is incorrect, however. On the basis of Hom. 3rd pl. impf. κέατο (N 763) < **kéi̯ato* we must reconstruct a 3rd pl. form **kéi-nto*.[23] If we start from this latter preform, we see that by regular sound change it would yield pre-Lyc. */si^{n}te/, which after attachment of the element *-ni* should yield */si^{n}teni/. As we saw above, nasalization of *-i-* has been lost in a pre-Lycian stage, which means that */si^{n}teni/ regularly would yield Lyc. /siteni/ = *sitẽni*. Thus, the attested form *sitẽni* would formally perfectly match the expected outcome of 3rd pl. **kéi-nto*. It therefore seems appealing to me to interpret *sitẽni* in this context as 3rd pl. pres. mid. 'they lie'.

A plural interpretation of *sitẽni* is also possible for the other context, the Letoôn Trilingual, where we find (25–27): *me=ije=sitẽni=ti*

[23] Although on the basis of Skt. 3rd pl. *śére* 'they lie' (AV) we must reconstruct a pre-form **kéi-ro*. The original ending **-ro* has been replaced by **-nto* in many branches, however.

: hlm̃mipijata m=ede=te=wẽ : kumezidi : nuredi : nuredi : arã : kumehedi. Melchert translates the first part as 'and the tribute that lies therein', interpreting *ti* (rel.pronoun) and *hlm̃mipijata* 'tribute' as nom. sg. c., together meaning 'which tribute'. As Melchert observes himself in 2004: 49, it is problematic that in the next sentence, the enclitic pronoun *=ede* seems to show gender discord with *ti hlm̃mipijata*: resumptive *=ede* is nom.-acc. sg. neuter, whereas *ti hlm̃mipijata* is nom. sg. commune. Melchert therefore states that we must translate 'that which lies therein as an income-gift, it ...'. I think another solution is possible as well. The enclitic pronoun *=ede* etymologically corresponds to Luwian *=ata*. In HLuwian, this *=ata* not only functions as nom.-acc. of the neuter singular, but also as nom.-acc. of the plural of both neuter and commune. With this in mind, we may be allowed to interpret Lycian *=ede* as the accusative form of the commune plural as well (to my knowledge, the enclitic pronoun of acc. pl. c. has not yet been identified in Lycian). If so, then we could interpret *ti* as nom. pl. c. 'which ones'[24] and *hlm̃mipijata* as dat.-loc. pl. 'among the income-gifts' (note that *ti hlm̃mipijata* 'which ones among the income-gifts' would then echo the Greek construction ὅτι ἐχφόριον ἐκ τούτων 'which tribute out of these'). I therefore would translate the context as 'And which ones among the income-gifts (will) lie therein, these one shall sacrifice each month as a rite with a victim', in which *sitẽni* must be regarded as a plural form 'they lie'.

Summarizing, I think *sitẽni* must be regarded as the third plural present form of *si-* 'to lie', whereas only *sijẽni* represents the third singular present form. Although in principle the spelling of *sitẽni* is ambiguous, I think that the etymological connection with Hom. κέατο < **ḱéinto* justifies a phonological analysis */si^{n}teni/. This means that the Lycian 3rd pl. pres. mid. ending can now be identified as /-^{n}teni/.

Lycian *ebẽñnẽ*

More than eighty Lycian inscriptions start with the word *ebẽñnẽ*,[25] which is usually regarded as acc. sg. c. of the demonstrative pronoun *ebe-* 'this', and translated accordingly. Compare, for instance, TL 3

[24] For the use of *ti* as a nom. pl. c. form, compare TL 111, 2 *ti=(i)je hrppi t*[*ã*]*ti tike* 'who place (3rd pl.) someone on top of him' and TL 139, 3 *ti hrppi tãti tike* 'who place (3rd pl.) someone on top'.

[25] With a variant *ebeñnẽ* in TL 70, 1, TL 80, 1 and TL 136, 1. The fact that we find both the spelling *ebẽñnẽ* and *ebeñnẽ* fits the establishment that <ẽ> and <e> vary freely before *-ñn-* (see above).

ebẽñnẽ : χupã : m=ẽ=ti=prñnawatẽ : tewinezẽi : [*s*]*ppñtazah : asawãzalah tideimi* 'This tomb, Tewinezẽi, son of Sppñtaza Asawãzala built it'; TL 11 *ebẽñnẽ prñnawã : m=ẽ=ti=prñnawatẽ : ddapssm̃ma : padrm̃mah : tid*[*eimi*] 'This building, Ddapssm̃ma, son of Padrm̃ma built it'; etc.

Although one of the most common words in the Lycian texts, the exact morphological analysis of *ebẽñnẽ* is still unclear. This has several reasons.

First, when compared to the other forms of *ebe-*, like nom. sg. c. *ebe* and nom.-acc. pl. n. *ebeija*, the form *ebẽñnẽ* is unexpectedly long. A priori, we would have expected that the accusative form corresponding to nom. sg. c. *ebe* would have been *ebẽ*. In fact, this form is attested in TL 61 *ebẽ : prñnawã : m=e=ti : prñnawatẽ : sbikezijẽi : mreχisa : tideimi* 'This building, Sbikezijẽi, son of Mreχisa, built it'. One could argue that in this inscription the form *ebẽ* is erroneous for *ebẽ<ñnẽ>*, but *ebẽ* is attested in other inscriptions as well, viz. TL 26, 22 and N325, 7, albeit that these latter contexts are less clear than TL 61. Moreover, just as nom. sg. c. *ebe* directly corresponds to Hitt. *apāš*, CLuw. *apāš*, HLuw. *á-pa-sa* < PAnat. **ʔobós*, acc. sg. c. *ebẽ* directly corresponds to Hitt. *apūn*, CLuw. *apān*, HLuw. *á-pa-na* < PAnat. **ʔobóm*.

Secondly, an extra confusing factor is the presence of the word *ebñnẽ*, which means 'him'. It is attested in the following inscriptions: TL 131 [... *pr*]*ñnawate : hrppi ladi : ehbi : m=ene : ñtepi : tãti : ebñnẽ : se ladã : ehbi* '[... b]uilt [it] for his wife. And inside it they will place him and his wife'; TL 111 *ebẽñnẽ : χupã : m=e=ti=prñnawat*[*ẽ*] *erzesinube : kumaza :* [*tr*]*zzuba*[-...] *tãti : ebñnẽ : ebei :* 'This tomb, Erzesinube, the Trzzuba[-..] priest built it [... And] they will place him there'; TL 84 ... *s=ed=adẽ : atli : hrzzẽ* [*i*]*spazijẽ : me=te : ñta tãti ebñnẽ : hãtã : se ladã* 'He made it for himself, the upper couch. And on it, they will place him *hãta-* and his wife'. Despite the fact that *ebñnẽ* in form, function and meaning clearly differs from *ebẽñnẽ* and *ebẽ*, it has played some part in the previous interpretations. This is probably especially prompted by the fact that in TL 52 *ebñnẽ* is attested where normally *ebẽñnẽ* is found. Some scholars see this form as a real variant of *ebẽñnẽ*, but I would just regard it as an error for *eb<ẽ>ñnẽ*.

Thirdly, beside *ebẽñnẽ* we also find a variant *ebẽñni*, e.g. in TL 14 *ebẽñni : prñnawã m=ene : prñnawatẽ : ahamãsi huniplah : tideimi* 'This building, Ahamãsi, son of Hunipla, built it'; N 316 *ebẽñni : χupã : m=e=ti : prñnawatẽ : qañnuẇili qasah :* 'This tomb, Qañnuwili,

(son) of Qasa, built it'. To my knowledge, this fact has not been used in the discussion of *ebẽñnẽ* before.

Finally, *ebẽñnẽ* sometimes has been misspelled. In TL 4, we find *ebẽñn : prñnawã* 'this building'. Since no other Lycian words end in *-n*, it is in my view obvious that this form should be emended to *ebẽñn<ẽ>*. In TL 41 (*ebẽnẽ prñnaw*[*ã*]), TL 124 (*ebẽnẽ χupu*) and TL 139 (*ebẽnẽ*[26] *χupa*), we find the form *ebẽnẽ*. Since in the latter text the following word contains a mistake as well (*χupa* instead of correct *χupã*) I regard these spellings as mistakes that should be emended to *ebẽ<ñ>nẽ*. As said above, in TL 52 we find *ebñṇẽ χupã*, which hardly can make sense ('him tomb' does not give a meaningful translation), and I would therefore emend this form to *eb<ẽ>ñnẽ*.

Thus, the starting point of our discussion should be the following: we are dealing with acc. sg. c. *ebẽñnẽ*, which has a variant *ebẽñni*, and which is commonly regarded as functionally identical to *ebẽ* 'this'. The word *ebñnẽ* 'him' clearly differs from *ebẽñnẽ* and *ebẽ* in form, function and meaning.

If we take the discussion of Lycian phonology as given above into account, we must analyse *ebẽñnẽ* as /eφenne^{n}/, *ebẽñni* as /eφenni/ (< */eφenni^{n}/), *ebẽ* as /eφe^{n}/ and *ebñnẽ* as /eφne^{n}/. This is important to keep in mind.

Let us look at previous attempts to explain *ebẽñnẽ*.

In 1960, Laroche stated that *ebẽñnẽ* must be "sûrement une réfection" and suggested an origin "*ebe-* + *-ne*" or "*eben* + *-en*" (1960: 181). As he remarks himself in note 3, this suggestion does not explain the variant *ebẽñni*. Moreover, this analysis does not explain the geminate /-nn-/ found in *ebẽñnẽ*. Lastly, it does not account for the presence of *ebẽ* 'this' with the same meaning as *ebẽñnẽ*.

Bryce (1987) assumes that the grapheme <ñ> has a syllabic value, just as the grapheme <ẽ> has a syllabic value (namely "*en*") and therefore argues that the spellings *ebñnẽ*, *ebẽnẽ* (which he takes seriously) and *ebẽñnẽ* are all different ways of spelling "the pronunciation *e-b-en-n-en*", the latter being a conflation of "the more 'authentic' variant forms *ebẽnẽ* and *ebñnẽ*, in which *ẽ* and *ñ* had their full syllabic value". This account drastically mixes up orthography,

[26] Transliterated thus by Kalinka. Note however, that the handcopy of TL 139 reads  . The third sign, which Kalinka transliterates as *ẽ*, rather looks like a ligature of *ẽ* and *ñ*. In my view, we must assume that the stonemason erroneously inscribed *ñ* (Ξ), discovered his mistake and tried to turn the sign into *ẽ* (Ѱ). When the result became too messy, he left the sign for what it was and continued with *nẽ*.

phonetics and phonology and cannot be taken seriously. Moreover, it does not take into account the existence of *ebẽ*, nor does it explain the variant *ebẽñni*.

Eichner (1993) states that *ebẽñnẽ* must have developed out of original *ebñnẽ*, in which the stem *ebe-* was restored. According to Eichner, this *ebñnẽ* then would be the regular reflex of "urluvisch **abana-an*", with syncope of the second syllable. In Borchhardt, Eichner et al. 1997–1999, this account is repeated, and here it is stated that the "kürzere und vermutlich ursprünglichere Nebenform *ebẽ* [...] eine andere, vielleicht im Schwachton entstandene Lautung ohne Synkope aufweisen [würde]". Apart from the fact that I do not understand how the preform **abana-an* is to be morphologically interpreted, this scenario does not account for the variant *ebẽñni*. Moreover, if this scenario were correct, we would expect that the result of the restoration of the stem *ebe-* in *ebñnẽ* = /eφne^{n}/ would have been **/eφene^{n}/, which should have been spelled ***ebẽnẽ* and not *ebẽñnẽ* = /eφenne^{n}/, as attested.

Hajnal (1995: 179) reconstructs *ebẽñnẽ* as */obṓn-mon/, which he explains as a topicalized pronoun followed by the conjunctive particle */mo-/ to which the enclitic anaphoric pronoun */-on/ has been attached. Although this analysis is the only one that could possibly explain the presence of geminate /-nn-/ in *ebẽñnẽ*, it is not fully satisfactory either. First, no account is given of the syntactic background in which such a word-chain could occur. Secondly, *ebẽñnẽ* does not necessarily occur sentence-initially, cf. TL 89 *χupã : ebẽñnẽ : m=en=adẽ* ... 'This tomb, ... made it'; TL 99 *purihimeti=ti : prñnawate : masasah : tideimi χupã :: ebẽñnẽ hrppi : atli : ehbi : se tideime : ehbije :* 'Purihimeti, the son of Masasa, built this tomb for himself and for his children'; N314a *χupã ebẽñni m=en=adẽ* ... 'This tomb, ... made it'. Lastly, but most importantly, this account does not explain the presence of the variant *ebẽñni* either.

I would like to propose the following solution. As we have seen above, *ebẽñnẽ* must represent phonological /eφenne^{n}/. Moreover, we have seen that /VnnV/ is the result of assimilation of an original cluster */VCnV/, as is clear from the equation between Lyc. *Xbidẽñn(i)-* and Mil. *Xbidewñn(i)-* 'of Kaunos', showing the appurtenance suffix *-ñn(i)-* = Mil. *-wñn(i)-*.[27] In fact, all Lycian words that show /VnnV/

[27] Note that this suffix is usually cited as *-ñne/i-* (Mil. *-wñne/i-*), but I see no reason for assuming that it was thematic originally: all forms with *-e-* belong to the gen. adjective (*wedrẽñnehe/i-*, *Xbidẽñnehe/i-*, *Pũtreñnehe/i-*), where *-e-* is inherent to

of which the origin is clear, contain this suffix. I would therefore propose that *ebẽñnẽ*, too, contains the appurtenance suffix *-ñn(i)-*.

Let us first look at the semantic side. If *ebẽñnẽ* indeed contains the appurtenance suffix *-ñn(i)-*, it would not mean 'this', but rather 'belonging to this'. How would this meaning fit the contexts in which *ebẽñnẽ* occurs? It is in my view important that *ebẽñnẽ* is used with the words *χupa-* 'tomb', *prñnawa-* 'building', *ñtata-* 'burial chamber', *tezi-/ʇezi-* 'sarcophagus' and [x-]*tisẽni-* '?' only, which all do not denote the grave monument as a whole, but rather parts of it. I therefore think that, for instance, the words *ebẽñnẽ χupã* denote 'the *χupa-* belonging to this (monument)'. Note that this interpretation is crucially supported by TL 106, where we read *ebehi χupa : me=i=ti sijẽni : sbi : ◊ : aza:* 'In the *χupa-* of this (monument), therein lies Sbi◊aza'. The genitival adjective *ebehi* does not mean 'this', but only 'of this'. This means that it does not refer to the *χupa-* itself, but to the monument the *χupa-* belongs to. Similarly in TL 131 *se=ije=ti : eseri=tadi : tike χupa : ebehi* 'And who places someone therein, in the *χupa-* of this (monument), ...'. In my view, *ebẽñnẽ* and *ebehi-* are semantically similar: in the former the appurtenance suffix *-ñn(i)-* is used to indicate the appurtenance to the monument as a whole, and in the latter the genitival adjective suffix *-Vhe/i-*.

It should be noted that this semantic analysis is supported by the fact that whenever the words are used that do denote the monument itself, namely *erawazije-/arawazije-* and *erublije-* 'monument' (both collectives), they are accompanied by *ebeija* (nom.-acc. pl. n.), which does mean 'this'.

The proposal to interpret *ebẽñnẽ* as containing the appurtenance suffix *-ñn(i)-* also fits the formal peculiarities. As we have seen, *ebẽñnẽ* has a variant *ebẽñni*, which seems to show *i*-motion. If *ebẽñn-* were a pronominal stem, this would be quite remarkable: both in CLuwian and HLuwian, pronouns do not use *i*-motion. With our new interpretation, the *-i-* is perfectly explicable: *ebẽñni* is the original form, still showing the *i*-motion that is originally present in the appurtenance suffix *-ñn(i)-* (compare also CLuw. *-u̯ann(i)-*). The fact that later on, the stem *ebẽñn(i)-* apparently was transferred to the thematic inflection *ebẽñne-* can in my view be explained by assuming that in the course of time the analysis of *ebẽñn(i)-* as containing the appurtenance suffix *-ñn(i)-* was lost, and that the stem began to be

the suffix. In view of the fact that in Luwian the suffix is *-u̯ann(i)-*, I assume that in Lycian we are dealing with *-ñn(i)-* (Mil. *-wñn(i)-*).

regarded as pronominal. Since pronouns do not use *i*-motion, this was removed from *ebẽñn(i)-* as well.

Although at first sight a derivation with the appurtenance suffix of a pronominal stem may look odd, a typological parallel is provided by Hitt. *tameuman-* 'belonging to someone else, strange', which shows a formation with the appurtenance suffix *-umen-/-umn-* attached to the oblique stem *tame-* of the pronoun *tamai-/tame-* 'other'.[28] Similarly, Lyc. *ebẽñn(i)-* must reflect **ebewñn(i)-* < PAnat. **ʔobo-ʔuen(-i)-* or **ʔobe-ʔuen(-i)-*.[29]

Summing up, the 'long' acc. sg. c. form *ebẽñnẽ*, which is usually translated 'this', as if belonging to the paradigm of *ebe-*, in fact shows the stem *ebẽñn(i)-* 'belonging to this', containing the appurtenance suffix *-ñn(i)-*. The original form of this suffix is still visible in the few attestations of *ebẽñni*, with original *i*-motion. The 'short' acc. sg. c. form *ebẽ* can now be regarded as the only correct acc. sg. c. form belonging to the paradigm of *ebe-* 'this'.[30]

Carian phonology

Although much remains unclear, the publication of Adiego 2007, the importance of which can hardly be overstated, offers a first establishment of the Carian phonology. Nevertheless, I think there are some points to be improved, especially with regard to the interpretation of some consonantal signs.

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[28] Although often referred to as "half-pronominal", *tamai-/tame-* in fact has a fully pronominal inflection, cf. Oettinger 2006: 1329.

[29] For the reconstruction of the appurtenance suffix Hitt. *-umen-/-umn-*, CLuw. *-u̯ann(i)-*, HLuw. *-wan(i)-*, Lyc. *-ñn(i)-*, Mil. *-wñn(i)-* as **-Huen-/*-Hun-*, cf. Kloekhorst 2008: 914–5.

[30] For the interpretation of *ebñnẽ* 'him', I agree with Eichner (1993: 238) who implies that this form must be regarded as a new accusative to a stem that is based on the original accusative **ʔobom*. So, *ebñnẽ* reflects virtual **ʔobon+ón*, and is therewith comparable to NHitt. *unin* 'him', which replaces older *uni* and must be regarded as a new accusative built on the original accusative *uni*. A similar scenario probably explains Carian acc. sg. c. *snn*, virtually from **ǩon+on*, a new accusative built on the original accusative **ǩóm* (> Hitt. *kūn*, CLuw. *zam=pa*, HLuw. *za-a-na*).
In the new 'Glossar des Lykischen' by G. Neumann (2007), I unexpectedly found references to Imbert 1900: 241, who identifies the element *-ñn-* of *ebẽñnẽ* with the *-ñn-* of *Tlãñna* 'of Tlos' and *Pilleñn(i)-* 'of Pinara', and to Carruba 1965: 556, who states that "das bisher rätselhafte *ebẽñne* [...] wohl as *apa-wanna* zu deuten ist und tatsächlich 'hiesig' heißt". Since both articles seem to have further been forgotten (they are not mentioned by e.g. Melchert 2004), I think that my account as given above still may be of use.

Adiego (2007: 242f.) gives 5 voiceless stops: 𐊢 = <p>; 𐊤, 𐊧 = <t>; 𐊫, 𐊬 = <k̂>; 𐊭, 𐊮 = <k>; and 𐊯, 𐊰 = <q>.

Since Carian <p> corresponds to Greek π and Egyptian *p* (and *f*), Adiego rightly concludes that this grapheme must represent /p/.

Carian <t> corresponds to Greek τ and ϑ and Egyptian *t*, on the basis of which Adiego concludes that <t> represents /t/.

Carian <k̂> is rendered by Egyptian *k* in the name *ursk̂leś* = Eg. *3rskr*, but by Eg. *dj* and Gr. τ in the name *pk̂simtś* = Eg. *P3-dj-sm3-t3wy* = Gr. Ποτασιμτο. It therefore seems appealing to me to interpret this grapheme as a palatal stop, /c/, comparable to Lycian <k> = /c/. In fact, Adiego also assumes that <k̂> represents a palatal stop, but since *c* "is a very ambiguous letter in Indo-European studies", he choses to transliterate it with the "more precise letter *k̂*" (Adiego 2007: 20[4]).

Carian <k> corresponds to Gr. ϰ, Eg. *k* and Lyc. <χ> = /k/, so it must be interpreted as /k/.

Carian names in which <q> occur, show in Greek ϰυ or ϰο: *qtblemś* = Κυτβελημις, Κοτβελημος, *qlalis*, *qlalíś* = Κολαλδις, Κυλαλδις, *quq* = Γυγος. Adiego interprets <q> as a uvular /q/, but in my view a labiovelar /k^{w}/ is much more likely. This is strongly supported by the fact that <q> is also found in the name of the Storm-god, *trqδ-*, which just as Lyc. *trqqñt-* /trk^{w}nt-/ must reflect PAnat. **trH^{w}ant-* < **trh$_2$uent-*.

Consequently, the graphemes <p, t, k̂, k, q> in my view represent /p/, /t/, /c/, /k/ and /k^{w}/, a set directly comparable to Lycian.

Adiego (2007: 245f.) cites two "voiced obstruents": 𐊡, 𐊣, 𐊥 = <b> and 𐊦, 𐊨 = <d>. The Carian grapheme <b> corresponds to Greek β and Egyptian *b*, whereas <d> corresponds to Greek δ and Eg. *d*. This straightforwardly seems to indicate that <b> and <d> must represent /b/ and /d/, respectively. Yet, Adiego states that in view of his interpretation of the graphemes <β> and <δ> as possible /b/ and /d/ as well, it is conceivable that <b> and <d> rather represent voiced fricatives /β/ and /δ/. This seems unnecessary to me: as we will see below, <β> and <δ> must be interpreted otherwise, and I therefore regard <b> and <d> as voiced stops /b/ and /d/.

The graphemes 𐊲, 𐊳, 𐊴, 𐊶 = <β> and 𐊻 = <δ> are called by Adiego (2007: 246–7) "voiced stops or nasal + voiced stops". On the basis of the name *(i)βrsi* = gr. Ιμβρασσις, Ιμβαρσις and *trqδ-* = CLuw. *Tarhunt-*, Lyc. *trqqñt-*, Schürr (1991–93) has argued that <β> and <δ> at least historically go back to **mb* and **nd*, respectively. Adiego therefore mentions three possible phonological interpreta-

tions: (1) /mb/ and /nd/; (2) /^{m}b/ and /^{n}d/; and (3) /b/ and /d/. Of these three, he seems to favour the latter one, primarily on the basis of his comparison of the first part of the Carian word *pδak̂mśuñ* (C.Si 2a) with Lyc. *pddẽ* (Adiego 2000: 145). Since this equation is based on a superficial formal similarity only, it cannot serve as an argument in favor of option (3). Moreover, why would for instance Carian *(i)βrsi* be rendered in Greek as Ιμβρασσις, Ιμβαρσις when the word phonologically was /ibrsi/? I think option (3) can safely be discarded. Option (1) seems unlikely to me as well: signs for on the one hand /m/ and /n/, and, on the other, for /b/ and /d/ are available, so why would a biphonemic sequence be written with one grapheme? Option (2) is therefore the most appealing one, but I would like to slightly adjust it. As we saw above, in Lycian the phonologically voiceless stops /p/ and /t/ are after a nasal realized as voiced: [mb] and [nd]. I think this is possibly the case in Carian as well, and I therefore want to interpret the graphemes <β> and <δ> as representing the phonemes /^{m}p/ and /^{n}t/, respectively.

Adiego (2007: 251–2) treats two more graphemes that in his view can represent nasalized consonants as well. On the basis of a possible connection between Carian *prŋidas* (E.xx 7) and Greek Βραγχιδαι (Schürr 1998: 158), we can tentatively interpret the grapheme 𐊰 = <ŋ> as /^{n}k/. Because of a possible correspondence between *śuγliś* and the Greek place name Σουαγγελα (Orozco and Melchert *apud* Adiego 2007: 415), which shows that 𐊲, 𐊳 = <γ> must have a tectal value, and on the basis of the possible figura etymologica in *qrdsγrdso*[-...] (C.Ka 2), we can tentatively interpret <γ> as the nasalized variant of /k^{w}/, i.e. /^{n}k^{w}/ (so *qrdsγrdso*[-...] = /k^{w}rds^{n}k^{w}rdso[-...]/). It is remarkable that both Carian and Lycian seem to possess phonemic nasalization, albeit that in Carian it is perceived as a consonantal feature, whereas in Lycian it is regarded as a vocalic feature.[31]

Carian *siδi*

With the help of the phonological interpretation as sketched above, I would like to look closer at one Carian inscription, namely C.Tr 2 (Adiego 2007: 131). This inscription is found on a funeral stele and reads as follows:

[31] This is probably due to the fact that in Lycian nasalization was lost after /i/ and /u/, which makes the presence of nasalization vowel-governed, i.e. a vocalic feature.

ansiδia
rtmipauś
parŋaq

Adiego (2007: 289f.) convincingly segments the inscription thus: *an siδi artmi pauś parŋaq*. Yet, he is not able to offer a cogent interpretation. One thing is clear, however: *artmi pauś* probably represents an onomastic formula, *Artmi*, (son) of *Pau*. As Adiego states, the name *Artmi* can be connected with Gr. Ἄρτεμις or Carian-Greek Αρτιμης. The name *Pau* probably corresponds to Carian-Greek Παος. The other three words are thus far unclear.

Let us first look at the last word. Adiego states that the final *q* is remarkable, and suggests to read *parŋaś*! instead, emending Θ = <q> to Θ = <ś>. This would have the advantage of giving a threeway onomastic formula: *artmi pauś parŋaś*! 'Artmi, (son) of Pau, (son) of Parŋa'. Yet, the drawings of this inscription clearly show the sign for *q*, and to my mind this emendation is unjustified. I therefore will work with the reading *parŋaq*.

The recent finding in 2004 of the missing piece of the Hyllarima inscription (published in Adiego–Debord–Varinlioğlu 2005), brought us a form *armotrqδosq*. The elements *armo-* (= Hitt. *Arma-* 'moon'?), *trqδ-* (= *Tarḫunt-*) and *-os* (an ending comparable to the Luwian gen. adj. suffix *-aššа/i-*?, cf. Adiego–Debord–Varinlioğlu 2005: 616) looked familiar, leaving us only with an element *-q*, which seems to be here used as a kind of suffix or enclitic particle. Adiego–Debord–Varinlioğlu (2005: 617) suggest that *=q* may be an enclitic connecting particle, which they etymologically connect with Mil. *=ke* and Luw. *=ḫa* 'and'. Semantically, this interpretation would certainly fit the present inscription as well: *artmi pauś parŋa=q* "Artmi, son of Pau, and Parŋa'. The fact that Artmi has a patronymic whereas Parŋa has not, and the fact that the name Parŋa ends in *-a* (= Greek Βράγχη?), could indicate that we are here dealing with husband and wife. Etymologically, the comparison with Mil. *=ke* and Luw. *=ḫa* is in my view less satisfactory. As explained above, there are good reasons to assume that the sign *q* denotes a phoneme /k^{w}/. It is therefore temping to regard *=q* as the direct descendant of PIE *=*k^{w}e* 'and'. On the basis of the convincing etymological interpretation of Carian *k̂i* as **k^{w}is* (Adiego 2007: 259, 320), it is clear that when palatalized, PIE **k^{w}* yields Carian *k̂* = /c/. That this did not happen in **=k^{w}e* > Car. *=q* is in my view due to the fact that word final **-e* was lost at an early stage already. Thus, PIE **=k^{w}e* yielded */=k^{w}/, which was

retained as such in Hitt. =*kku* 'and', CLuw. =*ku* 'and(?)', Pal. =*ku* 'and?' and now also in Car. =*q* 'and'.[32]

Now we will turn to the second word. If we take into account the phonological considerations given above, *siδi* must phonologically be interpreted as /si^{n}ti/. Let us treat this word phoneme by phoneme. On the basis of the very attractive equation of Carian *sa* with the Luwian word *zā-* 'this' < PAnat. **ḱó-* (cf. Hitt. *kā-*) (Adiego 1992: 33), it is clear that Carian *s* can reflect PAnat. **ḱ*. Since Proto-Anatolian short vowels seems to have been syncopated in Carian (cf. the large consonant clusters), it is *a priori* likely that *i* reflects an *i*-diphthong, so PAnat. **ei* or **oi*. As we have seen above, the phoneme /^{n}t/ reflects **nt*. The last phoneme, *i*, also must reflect **ei* or **oi*. Summing up, on the basis of common knowledge and common sense, *siδi* = /si^{n}ti/ can be reconstructed as PAnat. **ḱeintei*, **ḱeintoi*, **ḱointei* or **ḱointoi*. The second option immediately attracts attention, as it can be morphologically analysed as **ḱei-nto-i*, the Proto-Anatolian form of 'they lie', to which a presentic *-i* has been added. The same form is found in Hitt. *kīi̯antari* 'they lie', and has above been suggested for Lycian *sitẽni* 'they lie'. In outer-Anatolian, it is found in Greek κέατο.

As to the first word, I have two proposals. First, *an* could be comparable to Car. *san*, of which Melchert (1993: 79) argued that it corresponds to Hitt. *kāni* 'here', derived from the demonstrative *sa-* ~ Hitt. *kā-* 'this'. This makes way to assuming that *an* is derived from a thus far unattested demonstrative **a-* that would correspond to Hitt. *a-* (in *asi*, *uni*, *ini*) 'that' and would be comparable to a virtual Hitt. adverb ***āni* 'there'. Alternatively, *an* could be compared with Luw. *annan*, Lyc. *ẽnẽ* 'below, under' and translated 'underneath, below'.

Taking all these considerations into account, I think that the inscription C.Tr 2 *an siδi artmi pauś parŋaq*, which phonologically should be analysed as /an si^{n}ti artmi pauś par^{n}ka=k^{w}/, can be translated 'Here lie Artmi, (son) of Pau, and Parŋa' or 'Underneath lie Artmi, (son) of Pau, and Parŋa'.

The variant *sδi*

It is commonly thought that the word *sδi* as found in four inscriptions is "undoubtedly a variant form of *siδi* with defective vowel notation" (Adiego 2007: 291). It therefore is interesting to see if *sδi* can be translated 'they lie' as well. Although the inscriptions in which it

[32] See Kloekhorst 2008: 482f. for a treatment of Hitt. =*kku*, CLuw. =*ku* and Pal. =*ku*.

occurs are less clear regarding their interpretation, I think that this translation is at least possible.

The first inscription in which *sδi* occurs, C.Ka 1, reads as follows (cf. Adiego 2007: 151):

sñis:sδisa
s:psuśolś
malś:mnoś

On the basis of the fact that *-ś* is well known as the genitive ending, the last three words can be segmented as follows: *psuśolś malś mnoś*. The word *mno-* is commonly recognized as meaning 'son' and Adiego (2007: 291) regards *psuśolś* and *malś* both as personal names, giving a translation 'of Psuśol, the son of Mal'. The interpretation of the first string of words, *sñis:sδisas* is less clear. Adiego (l.c.), who argues in favor of interpreting the word *sδi* as a noun 'tomb, burial', proposes to parse *sñi-s sδi-s a-s*, of which he hesitatingly suggests that *-s* could be a plural ending, translating 'these (are) the burials ...' or 'these burials are those ...'. Borrowing this suggestion, I would rather parse *sñi-s sδi sa-s*, which could then perhaps be translated 'The *sñi- sa*-s are lying'. The ending *-s* could also be interpreted otherwise, however. In Adiego 2007: 314f., it has been discussed that in some inscriptions *-s* may have a dative function. Since both *sñi-* and *sa-* could in principle formally be connected with the pronominal stem *sa-/sn-* 'this' (Adiego 2007: 319–20), either *sñis* or *sas* may then be interpreted 'in this, here'. In sum, we could envisage that the whole inscription should be segmented as follows:

sñis : sδi sas : psuśolś malś : mnoś

This could then perhaps be translated as 'Here lie the *sa*-s of Psuśol, son of Mal' (interpreting *sñis* as belonging to the pronominal stem *sa-/sn-* and *sas* as a plural noun with unknown meaning), or 'The *sñi*-s of Psuśol, son of Mal, lie here' (interpreting *sas* as belonging to the pronominal stem *sa-/sn-* and *sñis* as a plural noun with unknown meaning). Although it must be stressed that all these considerations remain speculative, an interpretation of *sδi* as 'they lie' is in my view at least a possibility here.

The second inscription, C.Kr 1, reads as follows (cf. Adiego 2007: 158):

qoτ$_2$omusδisa
s$^?$nśšoδubrś
sbmnośknor
noril$^?$ams

Although much remains unclear, the element *sδi*, the conjunctive *sb* 'and' and the noun *mno* 'son' can be recognized. The presence of the conjunction *sb* 'and' as well as the fact that the tomb on which this inscription was found clearly contains three burial chambers (Adiego 2007: 292) indicate that this inscription may have referred to a number of people buried here (maybe *nś šoδubrś sb mno* 'Nś, son of Šoδubr and his son', or *nś šoδubrś sb mnoś knornoril²ams* 'Nś, son of Šoδubr and his son's *knornoril²am*-s'??), which certainly would fit an interpretation of *sδi* as 'they lie'.

The third inscription, C.Tr 1, is slightly damaged. It reads as follows (cf. Adiego 2007: 130):

sδiamτ[xx²]
pauś [ ]
art mon[x²]

The word *pauś* seems to be gen. sg. to the name *Pau*, 'Παος', which we found in C.Tr 2 as well. This may indicate that the word starting with *amτ*[..] is a personal name, too, which together with *pauś* forms an onomastic formula 'Amτ[..], (son) of Pau'. The word *art*{ }*mon* is equated by Adiego (2007: 357) with the Greek personal name 'Αρτέμων. If this is correct, this inscription would bear two names, namely 'Amτ[..], (son) of Pau' and 'Artmon', which would certainly fit the interpretation of *sδi* as 3rd pl. 'they lie'. Moreover, if we would be so bold to hypothesize that in the gap after *art*{ }*mon*[.] a sign *q* could have been present, this inscription would structurally be directly comparable to C.Tr 2.

The last inscription in which *sδi* occurs, C.Al 1, is unfortunately badly broken (cf. Adiego 2007: 132):

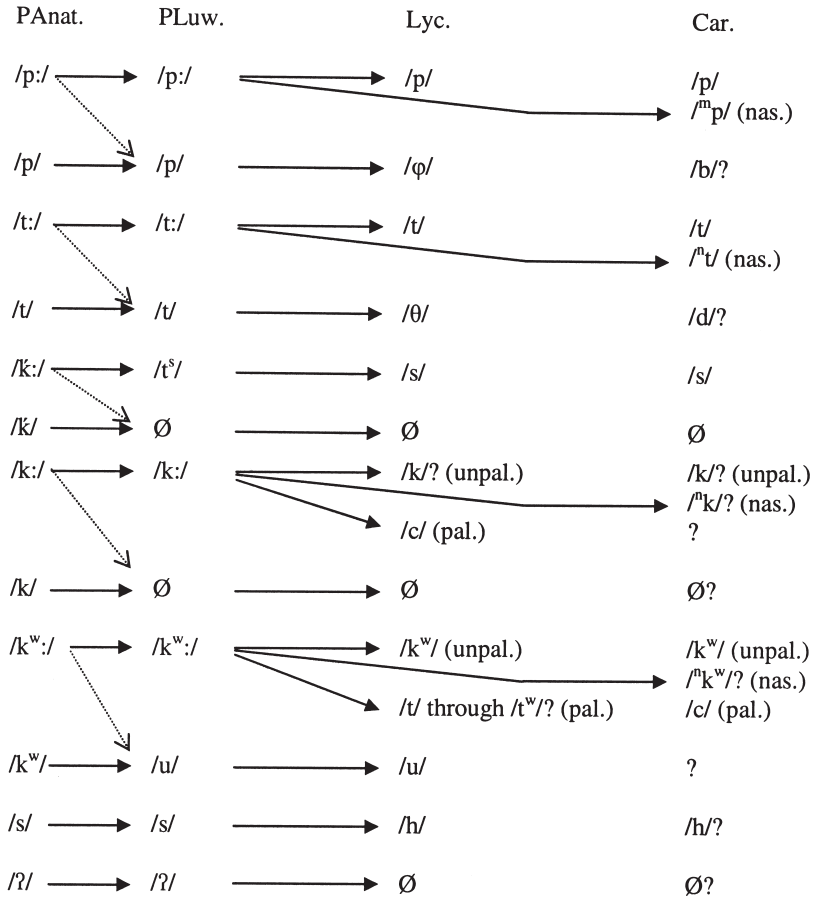
sδia[x]mob[..

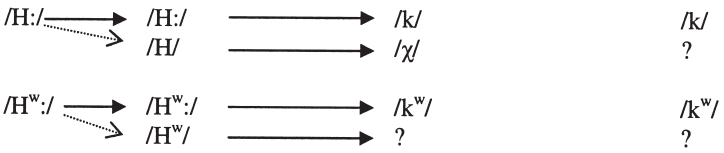
It therefore does not shed any light on the interpretation of *sδi*.

To sum up, it is certainly possible that also the word *sδi*, which is often regarded as a variant of *siδi*, should be interpreted as a 3rd pl. form, meaning 'they lie'. Nevertheless, since the ins and outs of Carian orthography are still very much unclear, it may be a bit too rash to assume "defective vowel notation" just like that. We cannot therefore exclude the possibility that *siδi* and *sδi* are in fact two different words.

Historical developments

After having treated (parts of) the Lycian and Carian phonology and having shown how these new insights can be of importance for the morphological interpretation of words in these languages, I would like to put the Proto-Anatolian, the Proto-Luwic (which is practically identical to the Luwian), the Lycian and the Carian phoneme inventories into a tentative historical overview, in order to make the developments that have led to the attested situations more transparent. The dotted lines indicate developments due to lenition.





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