ALWIN KLOEKHORST

Pronominal Morphology in the Anatolian Language Family

Abstract

In the following article, the pronominal morphology from four major ancient Anatolian languages (Hittite, Cuneiform Luwian, Hieroglyphic Luwian and Lycian) will be treated. It will be argued that apart from a few elements of unclear origin, the pronouns in these languages are for the most part built up of morphemes that can be traced back to Proto-Indo-European.

Keywords: Pronouns, Anatolian language family, Hittite, Luwian, Lycian

Many details regarding the morphology of the pronouns of the ancient Anatolian languages are still unclear. In this article, it is my aim to discuss the forms of the pronouns in the best known Anatolian languages, namely Hittite, Cuneiform Luwian, Hieroglyphic Luwian and Lycian, in order to reconstruct a Proto-Anatolian paradigm. Only when necessary is information from other Indo-European languages taken into account. Below, I have given the paradigms of Hitt. $k\bar{a}$-, 'this', $ap\bar{a}$-, 'that', $a\check{s}i$, 'that (over there)', kui-, 'who/which', CLuw. $z\bar{a}$-, 'this', $ap\bar{a}$-, 'that', kui-, 'who/which', HLuw. za-, 'this', apa-, 'that', kwi-, 'who/which', and Lyc. ebe-, 'this' and ti-, 'who/which'. Afterwards, I will discuss each case form separately.

			Hitt.	CLuw.	HLuw.[1]	Lyc.
*$\acute{k}V$-	sg.	nom. c.	$k\bar{a}\check{s}$	$z\bar{a}\check{s}$	$za(-a)-sa$	
		acc. c.	$k\bar{u}n$	$zam(=pa)$	$za(-a)-na$	
		nom.-acc. n.	$k\bar{\imath}$	$z\bar{a}$	$za(-a)$	
		gen.	$k\bar{e}l$		$za-si$	
		dat.-loc.	$k\check{e}dani, k\bar{e}ti$	– (see disc.)	$za(-a)-ti(-i)$	
		abl.	$k\bar{e}t, k\bar{e}z$	$z\bar{a}t\bar{\imath}$ (see disc.)	$zi(-i)-na$	
		instr.	$k\check{e}danda$			

---

[1] Since the phonetic / phonological interpretation of the HLuw. script is not always fully clear, I have cited the HLuw. forms in transliteration and not in transcription.

			Hitt.	CLuw.	HLuw.	Lyc.
	pl.	nom. c.	$k\bar{e}$	$z\bar{\imath}nzi$	$za(-a)-zi$	
		acc. c.	$k\bar{u}\check{s}$	$z\bar{\imath}nza$	$za(-a)-zi$	
		nom.-acc. n.	$k\bar{e}$	$z\bar{a}$	$za(-a)-ia$	
		gen.	$kinzan, k\bar{e}nzan$			
		dat.-loc.	$k\bar{e}da\check{s}$	–	$zi/a-t\acute{a}-zi/a, za(-a)-ti-ia-za$	
*h_1ob^hV-	sg.	nom. c.	$ap\bar{a}\check{s}$	$ap\bar{a}\check{s}$	$\acute{a}-pa-sa$	ebe
		acc. c.	$ap\bar{u}n$	$ap\bar{a}n$	$\acute{a}-pa-na$	$eb\tilde{e}$[2]
		nom.-acc. n.	$ap\bar{a}t$	–	$\acute{a}-pa$	$eb\tilde{e}$
		gen.	$ap\check{e}l$		–	–
		dat.-loc.	$ap\bar{e}dani$	$apatti$	$\acute{a}-pa-ti(-i)$	–
		abl.	$ap\check{e}t, ap\check{e}z$	–	*$a-pi(-i)-na$	–
		instr.	$ap\bar{e}danda$			
	pl.	nom. c.	$ap\bar{e}$	–	$\acute{a}-pa-zi$	–
		acc. c.	$ap\bar{u}\check{s}$	$apinza$	$\acute{a}-pa-zi-i$	$ebeis$
		nom.-acc. n.	$ap\bar{e}$	–	$\acute{a}-pa-i-ia$	$ebeija$
		gen.	$ap\check{e}nzan$			$eb\bar{e}h\tilde{e}$
		dat.-loc.	$ap\check{e}da\check{s}$	–	$\acute{a}-pa-ta/t\acute{a}-za$	$ebette$
*k^wV-	sg.	nom. c.	$kui\check{s}$	$kui\check{s}$	$kwa/i-i-sa$[3]	ti
		acc. c.	$kuin$	$kuin$	$kwa/i-i-na$	ti
		nom.-acc. n.	$kuit$	kui	$kwa/i-a-za$	ti
		gen.	$ku\check{e}l$		–	–
		dat.-loc.	$kuedani$	$ku\underline{u}atti$	$kwa/i-a-ti$	tdi
		abl.	$ku\check{e}z, kuedaz$	–	–	–
		instr.	–			
	pl.	nom. c.	$kuie\check{s}$	$kuinzi$	$kwa/i-i-zi$	$ti, tij\bar{e}i$
		acc. c.	$kuiu\check{s}$	–	$kwa/i-i-zi$	–
		nom.-acc. n.	kue	–	$kwa/i-ia$	$tija$
		gen.	–	–	–	–
		dat.-loc.	$kueda\check{s}$	–	$kwa/i-t\acute{a}-zi/a$	–

---

[2] I have argued elsewhere (Kloekhorst 2008a: 132 f.) that Lyc. $eb\tilde{e}\tilde{n}n\bar{e} / eb\tilde{e}\tilde{n}ni$, which is commonly seen as another acc. sg. c. form of ebe-, in fact belongs to a stem $eb\tilde{e}\tilde{n}n(i)$-, 'belonging to this, here located'.

[3] I have chosen to transliterate the hieroglyphic sign L. 329, which is usually cited in its logographic value REL (= 'relative pronoun'), with its phonetic value, kwa/i.

			Hitt.	CLuw.	HLuw.	Lyc.
*h₁V-	sg.	nom. c.	aši			
		acc. c.	uni			
		nom.-acc. n.	ini			
		gen.	ēl			
		dat.-loc.	edi, edani			
		abl.	edez, edaz			
		instr.	–			
	pl.	nom. c.	e			
		acc. c.	uniuš			
		nom.-acc. n.	–			
		gen.	–			
		dat.-loc.	edaš			

nom. sg. c.: Hitt. *kāš*, CLuw. *zāš* and HLuw. *za-a-sa* all point to PAnat. *ḱós*. Hitt. *apāš*, CLuw. *apāš*, HLuw. *á-pa-sa* and Lyc. *ebe* all point to PAnat. *ʔobós*. Hitt. *aši* must go back to *ʔós-i*. The relative-interrogative pronouns, Hitt. *kuiš*, CLuw. *kuiš*, HLuw. *kwa/i-i-sa* and Lyc. *ti* all point to PAnat. *kʷís*.

acc. sg. c.: Elsewhere (Kloekhorst 2008b: 54–55, 99) I have argued that Hitt. *ku-u-un* and *a-pu-u-un* represent /kón/ and /ʔabón/, respectively, containing an /ó/ that is the outcome of PAnat. *ó before *m in monosyllables, whereby the /ó/ in /ʔabón/ must then have been taken over from /kón/. This means that *kūn* /kón/ is compatible with CLuw. *zam(=pa)* and HLuw. *za(-a)-na*, which can all be reconstructed as PAnat. *ḱóm. Hitt. *apūn* /ʔabón/ can likewise be compared with CLuw. *apān*, HLuw. *á-pa-na* and Lyc. *ebē*, which reflect PAnat. *ʔobóm. In this light, Hitt. *uni* probably represents /ʔóni/ < *ʔóm + -i. In the relative-interrogative pronoun, the forms Hitt. *kuin*, CLuw. *kuin*, HLuw. *kwa/i-i-na* and Lyc. *ti* all point to PAnat. *kʷím.

nom.-acc. sg. n.: Hitt. *apāt* can be directly compared to HLuw. *á-pa*, both of which seem to reflect PAnat. *ʔobód. In Lyc., such a pre-form should have yielded **ebe, to which an element -ē (probably taken from neuter thematic stems in -ē < *-om) was attached, yielding *ebē*. CLuw. *zā* and HLuw. *za-a* seem to go back to a similar formation, *ḱód. The Hitt. form *kī* is remarkable, but not unparalleled. Within the paradigm of *aši*, we find a nom.-acc. sg. n. form *ini*, which must go back to *ʔí + *-m + -i. A form comparable to *ini* is sporadically also found within the paradigm of *kā-*, namely *kīni* (KBo 34.142 i 7 + KBo 8.55, 16 (MS?)). Just as *ini* served as a basis to the adverb *inišš an*, 'thus, as stated', *kīni* has given rise to an adverb *kīnišš an*, 'thus, as follows' (KUB 28.4 obv. 16b (NS)). The much better attested adverb *kišš an*, likewise 'thus, as follows', is built on *kī*, however. In this sense it is relevant that also an adverb *apinišš an*, 'thus', is well attested (from OS texts onwards), which proves that a nom.-acc. sg. n. form *apini* must have been present at an earlier, pre-Hitt. stage. The most straight-forward reconstruction of *kī* is PAnat. *ḱí, and *apini* must then ultimately go back to a pre-form *ʔobí. The Hitt. relative-interrogative pronoun *kuit* seems to reflect *kʷíd, whereas CLuw. *kui* and Lyc. *ti* could reflect both *kʷíd and *kʷí. In Hitt., a form *kuu̯āt* is attested in the meaning 'why', which must reflect *kʷód, a form supported by HLuw. *kwa/i-a-za*[4] /kʷatsa/ < *kʷód=so (the *=so being a specific Luwian enlargement to nom.-acc. sg. n. forms). Perhaps Hitt. *kuit* has taken over the *-d from *kʷód.

gen. sg.: In Hitt., the genitives *kēl*, *apēl*, *ēl* and *kuěl* contain an enigmatic ending -l, which is not known from other IE languages.[5] In *kēl* the vowel is consistently spelled long, *ke-e-el*, but this is due to the fact that this is a monosyllabic word (cf. Kloekhorst 2012: 251–252). It can therefore go back to either short *e or long *ē. Since the stem vowel in the dat.-loc. sg. forms must go back to a short *e (as will be shown below), I assume that this was the case in the gen. sg. forms as well. I therefore reconstruct PAnat. *ḱél, *ʔobél, *ʔél and *kʷél.[6] The HLuw. gen. sg. form *za-si* is probably a new formation, in which the nominal genitive ending -asi is attached to the pronominal stem *za-*.

dat.-loc. sg.: In CLuw., the dat.-loc. sg. form of *zā-* is usually cited as *za-a-ti-i* (e.g. Melchert 1993: 274). Yet, in most cases the meaning of *za-a-ti-i* cannot be determined since it occurs in broken contexts. In fact, only once is *zātī* found in clear context, a context which rather suggests an interpretation as an ablative form (see below).[7] For *apā-*, Melchert (1993: 20) cites the forms *a-pát-ti*[8] and *a-pa-a-at-ti* as dat.-loc. sg. forms (the latter with question mark), and Goedegebuure (2010) has convincingly shown that the form *ku-u̯a-at-ti* in KUB 9.31 ii 31 is also a dat.-loc. sg. form, belonging to the relative-interrogative stem. Note that both CLuw. *apatti* and *kuu̯atti* show a remarkable geminate -tt-.

The situation in HLuw. has been treated extensively by Goedegebuure (2010). She shows that the dat.-loc. sg. forms of *za-*, *apa-* and *kwi-* are spelled *zati*, *apati* and *kwati* throughout the HLuw. corpus. In the older texts, the forms *zati* and *apati* are graphically identical to the adverbs *zati*, 'here', and *apati*, 'there'. In younger texts, these latter adverbs undergo rhotacism to *zari* and *apari*, whereas the dat.-loc. sg. forms continue being spelled with -t-: *zati*, *apati*. In the literature, it is usually stated that all these forms are identical (e.g. Plöchl 2003: 69), and that because of the rhotacism in *zari* and *apari*, we must assume that the original forms are /tsadi/ and /ʔbadi/, with lenis /-d-/ (since only intervocalic lenis /-d-/ undergoes rhotacism) (Melchert 2003: 190; Kloekhorst 2008b: 191, 426). Goedegebuure argues, however, that since only the adverbs develop rhotacized forms in younger texts,

---

[4] E.g. BABYLON 1 § 4 *á-ma-za-pa-wa/i-'* *kwa/i-a-za* | *ta-ní-ma-za*, 'All that (is) mine' (cf. Hawkins 2000: 392).

[5] But cf. Oettinger (1999) and Rieken (2008) for a connection between Hitt. -l and some forms in non-Anatolian Indo-European languages.

[6] Note that in the gen. sg. form *ammel*, 'of mine', we find non-plene spelling of the e, *am-me-el*, which points to the presence of a short /e/ < PIE *é as well.

[7] In the only other preserved context, which indeed seems to speak in favor of a dat.-loc. sg. interpretation, the form itself is broken: *za-a*[-x-x] *pár-ni*, 'to this house' (KUB 35.54 iii 23). This context therefore cannot be used as an argument for *za-a-ti-i* in other contexts being a dat.-loc. sg. form.

[8] I.e. *a-pát-ti a-a-ri-i*, 'in that time' (KBo 9.141 i 15).

while the dat.-loc. sg. forms do not, we must assume that we are actually dealing with two different forms. She suggests that the adverbs are indeed /t^{s}adi/ and /ʔbadi/, which in younger times develop to /t^{s}ari/ and /ʔbari/, but that the dat.-loc. sg. forms actually contain a fortis /-t-/, /t^{s}ati/ and /ʔbati/, which is the reason why these do not show rhotacized forms in younger texts. By extension, also the relative-interrogative dat.-loc. sg. form *kwati* would then be /k^{w}ati/. These forms with /-t-/ are then compatible with CLuw. *apatti* and *ku̯u̯atti*.

Although Hitt. *kēti* is attested less often than *kĕdani*, it is clear that *kēti* must be compared with Luw. /t^{s}ati/. Since the difference between lenis *-t-* in Hitt. and fortis /-t-/ in Luw. can only be explained by Čop's Law, we must reconstruct PAnat. *$\acute{k}$édi*, with short accented */é/.[9] This form must go back to quasi-PIE *$\acute{k}$éd^{h}i* with an aspirate *d^h*, since a voiced *d* would have lengthened a preceding *e* to *ē*,[10] which means that a PIE pre-form *$\acute{k}$édi* would have yielded PAnat. ***$\acute{k}$édi* > Hitt. ***/$\acute{k}$édi/ and Luw. ***/t^{s}ádi/. The Hitt. form *kĕdani* must be an enlarged variant of *kēti*, containing a nasal element *-an-*. Below, I will argue that this nasal element goes back to *-nh$_1$-*, which means that *kĕdani* reflects quasi-PIE *$\acute{k}$éd^{h}nh$_1$i*. Although in the paradigms of *apā-* and *kui-* no forms ***apeti* or ***kueti* are attested, it is clear that Luw. /ʔabati/ and /k^{w}ati/ must reflect quasi-PIE *h$_1$ob^{h}éd^{h}i* and *k^{w}éd^{h}i*. Hitt. *apĕdani* and *kuedani* then reflect *h$_1$ob^{h}éd^{h}nh$_1$i* and *k^{w}éd^{h}nh$_1$i*. The origin of the Lyc. dat.-loc. sg. form *tdi* is not fully clear to me.[11]

abl.-instr.: In Hitt. the ablative case was in pronominal paradigms originally marked with an ending *-t* (*kēt*, *apĕt*; ***kuĕt* is unattested), which in nominal paradigms is used for the instrumental. This seems to indicate that the ablative and the instrumental originally formed one case in Hitt. pronominal inflexion. From MH times onwards, *kēt*, *apĕt* and ***kuĕt* were being replaced by *kēz*, *apĕz* and *kuĕz*, in which the nominal ablative ending *-z* was introduced. At the same time, a specific instrumental form was created, *kĕdanda* and *apĕdanda* (***kuedanda* is unattested). These must be analysed as having the ending *-t* attached to the stem *kĕdan-* and *apĕdan-* (as also found in dat.-loc. sg. *kĕdani* and *apĕdani*), reflecting virtual *$\acute{k}$é-d^h-nh$_1$-t* and *h$_1$ob^{h}é-d^h-nh$_1$-t*. Later on, we also find renewed abl. forms like *kĕdaz*, *apĕdaz* and *kuedaz*, in which the nominal abl. ending *-az* is attached to the stems *ked- < *$\acute{k}$é-d^h-*, *aped- < *h$_1$ob^{h}é-d^h-* and *kued- < *k^{w}é-d^h-*. Within the paradigm of *aši*, the form *edez*, attested in MH texts, may point to an earlier *ez*, which itself may have replaced original *et < *h$_1$é-t*. The younger form *edaz* is similar to *kĕdaz* and *apĕdaz*.

For CLuw., Melchert (1993) cites no abl.-instr. form for *zā-* or *apā-*. There does, however, seem to be one in the following context:

---

  [9]   Thus also Goedegebuure (2010).

 [10]   A development comparable to Winter's Law in Balto-Slavic, cf. Kloekhorst (2012: 258–259).

 [11]   Perhaps this form is the outcome of unaccented *k^{w}ed^{h}i*. Elsewhere (Kloekhorst 2011: 162–163) I have argued that in Hitt. the relative pronoun *kui-* was inherently unaccented, which is a feature inherited from PIE. When having the function of an interrogative, the stem probably was accented, however. So, if in Proto-Anatolian both the unaccented relative *k^{w}ed^{h}i* and the accented interrogative *k^{w}éd^{h}i* existed, then the former could have yielded Lyc. *tdi* (absence of Čop's Law and syncope of unaccented *e*) and the latter Luw. /k^{w}áti/.

KUB 32.8 + KUB 32.5 iv

(21)   [*ku-i*]*š=du-u=r a<-ad>-du-u̯a-a*[*l?*]*pí-i̯a<-at?-ti?*>[12] *a=du-u=t-ta*

(22)   [*ta-*]*ni-mi-in-zi* DINGIR^MEŠ-*z*[*i* x-x-x-]x *šar-ra za-a-ti-i*

(23)   [(*pu-*)]*u-u̯a-an-du a=(a)ta=tar za-*[*a-ti-*]$_Li$$^{?}_J$ *tar-ma-in-du* URUDU-*i̯a-ti*

(24)   [*tar-*]*ma-ti* ...

[Whoe]ver give<s> evil to him, may [a]ll the gods herewith [c]rush his [...], and may they he[rewith] nail it, (namely) with the bronze [na]il.

It seems that *za-a-ti-i* proleptically refers to abl.-instr. URUDU-*i̯ati* [*tar*]*mati*, 'bronze [na]il', and must therefore be an abl.-instr. form itself as well.[13] In HLuw. the word that formally corresponds to the CLuw. abl.-instr. *zātī* /t^{s}adi/, namely *za(-a)ti(-i)*, *za-ri+i*, *za+ra/i-i* /t^{s}adi/, is in fact an adverb denoting 'here'. The same goes for *á-pa-ti*, *pa-ti(-i)*, *a-pa-ri+í* /(ʔ)badi/, 'there', which must go back to an original abl.-instr. form as well. The combined evidence points to PLuw. abl.-instr. */t^{s}adi/ and */ʔabadi/. These forms are probably to be seen as a Luw. innovation, having attached the nominal abl.-instr. ending *-āti /-ādi/ < *-óti* to the demonstrative stems /t^{s}a-/ and /ʔaba-/. The synchronic HLuw. abl.-instr. forms *zi(-i)-na* /t^{s}in/ and *pi(-i)-na* /(ʔ)bin/ are original adverbial forms that only secondarily invaded the paradigms of *za-* and *apa-* after /t^{s}adi/ and /ʔabadi/ had become adverbs.[14]

nom. pl. c.: The Luw. forms, CLuw. *zīnzi* and *kuinzi*, HLuw. *za-a-zi*, *á-pa-zi* and *kwa/i-i-zi*, are clearly secondary, having acquired the specific Luw. nom. pl. c. ending *-nzi*, whereby CLuw. shows *i*-mutation in *zā-*, whereas HLuw. does not. The Lyc. nom. pl. c. form *ti* could in principle go back to *tī < *tinsi < *k^{w}i-msi*, being identical to CLuw. *kuinzi* and HLuw. *kwa/i-i-zi*. The form *tijēi* must be secondary, containing the nominal ending *-ēi < *-omsi* attached to the stem *ti-*. In Hitt., *kē*, *apē* and *e* are generally reconstructed as *$\acute{k}$ói*, *h$_1$ob^{h}ói* and *h$_1$ói*, with the ending *-ói* comparable to Gr. οἱ, Skt. *té*, OCS *ti*, etc. Hitt. *kuieš* seems to simply consist of the stem *kui-* to which the nominal nom. pl. c. ending *-eš* has been attached.

acc. pl. c.: The Luwic languages show a diffuse picture. In HLuw. *za-a-zi* and *á-pa-zi-i* we find the ending *-nzi*, taken over from the nom. pl. c., but no *i*-mutation. In CLuw. *zīnza* and *apinza* we find the ending *-nz*, which must be the original acc. pl. c. ending, reflecting *-ms*, attached to a stem with *i*-mutation. In Lyc. *ebeis* the ending *-s < *-ms* is attached to a stem *ebei-*, of which the *-i-* seems to be a remnant of the *i*-mutation, whereas the stem *ebe-* seems to be unmutated. Does this mean that in an original *ebis* the stem *ebe-* was reintroduced? The Hitt. forms *kūš* and *apūš* are more straightforward. As argued elsewhere (Kloekhorst

---

 [12]   For the addition of <-*at-ti*>, cf. Goedegebuure (2010).

 [13]   Melchert (1993: 274) books this form as a dat.-loc. sg. form, however. Goedegebuure (2010) translates *zātī* as an adverb, 'let [a]ll gods pound [something] upon him in this (following) way', equating it with HLuw. *zati, zari* /t^{s}adi/. Since she traces these adverbs back to original ablative-instrumental forms, her formal interpretation of *zātī* corresponds to mine.

 [14]   Cf. Goedegebuure (2007) for discovery, interpretation and historical analysis of these forms.

2008b: 57, 99), the spellings *ku-u-uš* and *a-pu-u-uš* represent /kṓs/ and /ʔabṓs/, respectively, in which /-ṓs/ is the outcome of *-óms* in monosyllables. On the strength of the Hitt. forms, we must therefore reconstruct PAnat. *$\hat{k}$óms* and *$\textrm{?}$obóms*. It is unclear whether Hitt. *kuiuš* /kʷius/ regularly reflects *k^wi-ms*, in which case it would correspond to HLuw. *kwa/i-i-zi* /kʷintˢi/ < *k^wi-ms+i*, or whether it must be interpreted as a recent form in which the synchronic acc. pl. c. ending *-uš* is attached to the stem *kui-*. Hitt. *uniuš* clearly is a secondary form for expected **uši*, in which the ending *-uš* is attached to the acc. sg. c. form *uni*.

nom.-acc. pl. n.: Interpretation of the Luwic forms, CLuw. *zā*, HLuw. *za-a-ia*, *á-pa-i-ia* and *kwa/i-ia* and Lyc. *ebeija* and *tija*, is difficult. All forms contain the ending *-a*, which is the synchronic nominal nom.-acc. pl. n. ending, going back to *-eh₂*. The form of the stems is more difficult to explain, however. In CLuw. the stem clearly is just *za-*, which presents no problems. The relative-interrogative forms are unproblematic as well: *kwa/i-ia* and *tija* show the synchronic stems *kwi-* and *ti-*. Analysis of the HLuw. stems *zai-* and *apai-*, however, which seem to correspond to the Lyc. stem *ebei-*, is more difficult. The Lyc. stem *ebei-* is reminiscent of the acc. pl. c. form *ebei-s*, which must be analysed as the stem *ebe-* + *i*-mutation. However, since *i*-mutation is unexpected in a neuter form, we might rather have to separate the acc. pl. c. stem from the nom.-acc. pl. n. stem. Perhaps the stems *zai-* and *apai-/ebei-* reflect *$\hat{k}$oi-* and *$\textrm{?}$oboi-*, the original nom. pl. c. forms (although unattested themselves), to which the neuter nom.-acc. pl. ending *-a* was secondarily added, yielding HLuw. *zāia* and *apaia* and Lyc. *ebeija*. The Hitt. forms *kē*, *apē* and *kue* have always been unclear. Elsewhere (Kloekhorst 2008b: 91, 162, 426 f.) I have argued that they might reflect PIE *$\hat{k}$íh₂*, *h₁obʰíh₂* and *k^wíh₂*, respectively, showing the development *-ih₂* > Hitt. *-e*. I believe that a similar development can be seen in Hitt. nom.-acc. n. 2-*e*, 'two', and 3-*e*, 'three', as well, which I now reconstruct as *duih₂* and *trih₂* (cf. Gr. nom.-acc. n. τρία, Skt. nom.-acc. n. *trī́*), respectively (cf. Kloekhorst 2010: 17).

gen. pl.: In Hitt. the gen. pl. form of *kā-* is attested only a few times: *ki-in-z[aˀ]-a[nˀ]* (KBo 6.2 iii 46 (OS)), *ki-in-za-an* (KUB 31.64 ii 42 (OH/NS)), *ke-e-en-za-an* (KUB 35.148 iv 15 (OH/NS)). In younger times it is replaced by *kēl*, the original gen. sg. form. The gen. pl. of *apā-* is attested a bit more often, as *apenzan*.[15] In Lycian, we find *ebēhē*. Already Sturtevant (1933: 205) compares the element *-zan* with *-som* as found in Skt. *tḗṣām*, 'of them' (with secondary lengthening on the basis of the nominal gen. pl. ending *-ām*), Lat. *eōrum*, 'of these', and OCS *těxъ*, 'of those'. The origin of the cluster *-nz-* in *-Vnzan* has always been difficult to explain, however. Since a cluster *-ns-* yielded Hitt. geminate *-šš-* in intervocalic position (e.g. PIE *dens-u-* > Hitt. *daššu-*, 'strong, heavy'), it was long thought that *VnzV* must be of secondary origin. For instance, Oettinger (1994: 322) assumed that original *-Vsan* underwent 'Fernassimilation' and was secondarily changed to *-Vnsan*, which regularly yielded *-Vnzan*. However, since a nasal is also present in Lyc. *ebēhē*, it must be PAnat. already. But also in Lyc., the ending *-ēhē* cannot reflect *-Vnsom*, since a sequence *VnsV* should have yielded Lyc. *ṼV* (e.g. nom. pl. c. ending *-omsi* > *-ēi*).

I would thus like to propose the following solution. It is incorrect that the Hitt. cluster *VnzV* must always be of secondary origin. In the noun *genzu-*, 'abdomen, lap', < *$\hat{g}$énh₁su-*, it is the regular outcome of a cluster *-nHs-*. And although I know of no parallels, it seems probable that a sequence *VnHsV* would yield *ṼhV* in Lyc. I therefore think that Hitt. *-Vnzan* and Lyc. *-ēhē* must go back to PAnat. *-V-nH-som*. It seems attractive to compare this element *-nH-* with the nasal element found in dat.-loc. sg. *kĕ-d-an-i* and instr. *kĕ-d-an-ta*. If these are the same element, we must reconstruct *-nh₁-* (since *C-nh₂/₃-V-* would have yielded Hitt. **CanḫV*). The vowel *-i-* in the OS form *kinzan* is usually ignored,[16] but must be explained (the long *-ē-* in the NH form *kēnzan* is analogical after nom. pl. c. *kē*). It contrasts with the *-e-* found in *apenzan* (and also *šumenzan*, 'of you (pl.)'). Sturtevant (1933: 205), e.g., reconstructs *-e-*, but this cannot explain *kinzan*. Kronasser (1956: 150) and Oettinger (1994: 322) reconstruct *-ē-*, but this cannot explain *kinzan* either. Melchert (1994: 121) reconstructs *-oi-*, but this should have yielded **-ai-* before *-n-*. The only possible reconstruction is *-ei-*. The diphthong *-ei-* in principle monophthongizes to Hitt. *-e-*, but after velar stops it yielded *-i-* (e.g. *$\hat{k}$éi-to* > *kitta*, 'he/she/it lies'). This means that both *kinzan* < *$\hat{k}$éi-nh₁-som* and *apenzan* < *h₁obʰéi-nh₁-som* are phonologically regular.

Lyc. *ebēhē* cannot easily go back to *-ei-nh₁-som*, since *i*-diphthongs normally yield Lyc. *-i-*. So, *ebēhē* rather seems to point to *h₁obʰé-nh₁-som*. Since a stem *Cei-* is also attested in Skt. *tḗṣām* and OCS *těxъ* < *téi-som*, I assume that Hitt. represents the original situation, *Céi-nh₁-som*, and that *Cé-nh₁-som* as attested in Lyc. is secondary, probably due to generalization of the singular oblique stem.

dat.-loc. pl.: In Hitt. we find *kēdaš*,[17] *apĕdaš* and *kuedaš*. Their ending *-aš* can be compared with the ending *-e* of Lyc. *ebette*, both of which must reflect PAnat. *-os*, the same ending as found in the nominal paradigm. In Hitt., the elements *kēd-*, *apĕd-* and *kued-* are directly comparable to the dat.-loc. sg. forms *kēti*, *kĕdani*, *apĕdani* and *kuedani*, and must reflect *Cé-dʰ-*.

The Lyc. form *ebette* is remarkable because of its intervocalic geminate *-tt-*: geminate consonants in Lyc. are always the result of contact with a preceding consonant (Kloekhorst 2008a: 126–128). We may therefore have to assume that the geminate *-tt-* was taken over from the genitival adjective *ebttehe/i-*, 'their',[18] and that the form was originally *ebete*.[19] The fact that *-t-* is a fortis consonant, whereas Hittite shows lenis /-d-/, can only be

explained by assuming Čop's Law in Lyc., which means that -t- must derive from $*-d^h-$ preceded by a short accented $*é$: $*h_1ob^héd^hos > *ebete$.

In HLuw. the forms $zi/a-tá-zi/a$ and $kwa/i-tá-zi/a$, both hapax legomena from Empire period texts, correspond in formation to $á-pa-ta-za$ and $*a-pa-tá-za$.[20] This means that the form $za-a-ti-ia-za$ as commonly attested in Iron Age texts is a renewed form: it is clearly built on the dat.-loc. sg. form $za-a-ti$ to which the ending $-anz$ is attached. This $-anz$ (which is also the Luw. nominal dat.-loc. pl. ending) must reflect $*-oms$, which apparently replaced earlier $*-os$ as found in Hitt. $-aš$ and Lyc. $-e$, probably due to generalization of the acc. pl. c. ending $*-ms$ throughout the plural paradigm. Within the forms $zi/a-tá-zi/a$, $á-pa-ta-za$, $*a-pa-tá-za$ and $kwa/i-tá-zi/a$ the spelling with the sign $tá$ is relevant. On another occasion, I will argue that this sign $tá$ represents a nasalized dental stop, $/^nta/$, adapting Rieken's (2010) interpretation of $tá$. This means that $zi/a-tá-zi/a$, $*a-pa-tá-za$ and $kwa/i-tá-z/ia$ must represent $/t^sa^ntant^s/$, $/ʔaba^ntant^s/$ and $/k^wa^ntant^s/$, respectively, reflecting pre-Luwic $*ḱé-nʔ-d-oms$, $*ʔobé-nʔ-d-oms$ and $*k^wé-nʔ-d-oms$. In my view, the stems $*ḱé-nʔ-$, $*ʔobé-nʔ-$ and $*k^wé-nʔ-$ are taken over from the Proto-Luwic gen. pl. forms $*ḱé-nʔ-som$, $*ʔobé-nʔ-som$ and $*k^wé-nʔ-som$ that we must reconstruct on the basis of Lyc. $ebēhẽ$. These stems apparently intruded into original $*ḱé-d^h-os$, $*h_1ob^hé-d^h-os$ and $*k^wé-d^h-os$ as attested in Hitt. $kēdaš$, $apĕdaš$ and $kuedaš$.

Stems in $*-o-$ vs. stems in $*-i-$
We have seen that in the nom.-acc. sg. n. form there is evidence for both $*ḱód$ and $*ḱí(d)$. It is not easy to determine whether one of these should be regarded as the older form, or if they stood side by side in PIE already. In fact, if we look at the evidence from the IE languages outside of Anatolian, we find more of these pairs. For instance, the Anatolian languages point to a nom. sg. c. $*ḱós$, acc. sg. c. $*ḱóm$, 'this', whereas the forms $*ḱis$ and $*ḱim$ can be found, e.g., in OCS $sъ$, Lith. $šìs$ and $šį̃$ and Goth. $hina$. Anatolian shows evidence for $*h_1ós$ and $*h_1óm$, 'that', whereas the forms $*h_1ís$ and $*h_1ím$ are reflected, e.g., in Lat. is and im and Goth. is and ina, etc. Such a difference is well known for the relative-interrogative pronoun as well: Anatolian has $*k^wís$ and $*k^wím$ (supported by, e.g., Lat. $quis$ and $quem$, Gr. τίς and τίν), whereas $*k^wós$ and $*k^wóm$ can be found, e.g., in Skt. $kás$ and $kám$ and Goth. $hvas$ and $hvana$. For the neuter, Anatolian shows reflexes of both $*k^wíd$ (supported, e.g., by Lat. $quid$, Gr. τί and Av. cit) and $*k^wód$ (supported by Lat. $quod$, Skt. $kát$ and Goth. hva). It is sometimes stated that the stem $*k^wi-$ was substantival, whereas $*k^wo-$ was adjectival (e.g. Beekes 1995: 203; Meier-Brügger 2002: 231). Such a difference may then possibly also underly the difference between $*ḱi-$ and $*ḱo-$, 'this (one)', and $*h_1i-$ and $*h_1o-$, 'that (one)'. In Anatolian, all oblique forms univocally point to a stem $*Cé-$.

---

[20] I.e., with initial-a-final (Hawkins 2003: 159): $pa-tá-za-pa-wa/i-ta-$' (KARKAMIŠ A11$b+c$ § 8), $pa-tá-za-pa-wa/i-$' (KARKAMIŠ A25a § 2), cf. Hawkins (2000: 103, 122).

Summarizing, the Anatolian evidence points to the following (quasi-)PIE reconstructions:

	sg.		pl.	
nom. c.	$*Có-s$	$*Cí-s$	$*Có-i$	$*Cí-es(?)$
acc. c.	$*Có-m$	$*Cí-m$	$*Có-ms$	$*Cí-ms$
nom.-acc. n.	$*Có-d$	$*Cí(-d)$	–	$*Cí-h_2$
gen.		$*Cé-l$		$*Cé-(i-)nh_1-som$
dat.-loc.		$*Cé-d^h-(nh_1-)i$		$*Cé-(nh_1-)d^h-os$
abl.-instr.			$*Cé-t$	

Apart from the specific gen. sg. ending $*-l$ and the elements $*-nh_1-$ and $*-d^h-$, which seem to have had a certain productivity in the oblique forms, the Anatolian pronominal system is clearly built up from Indo-European elements. The distribution between the stem $*Co-/*Ci-$ in the nom.-acc. forms vs. the stem $*Ce-$ in the oblique forms is remarkable, and must in my view be original.

Bibliography

Beekes, R. S. P. (1995): Comparative Indo-European Linguistics. An Introduction, Amsterdam – Philadelphia.

Goedegebuure, P. M. (2007): The Hieroglyphic Luwian Demonstrative Ablative-Instrumentals zin and $apin$. In: A. Archi / R. Francia (eds.), VI Congresso Internazionale di Ittitologia, Roma, 5–9 settembre 2005, Parte I (SMEA 49), Roma, 319–334.

Goedegebuure, P. M. (2010): The Luwian Demonstratives of Place and Manner. In: I. Singer (ed.), $ipamati$ $kistamati$ $pari$ $tumatimis$. Luwian and Hittite Studies Presented to J. David Hawkins on the Occasion of his 70th Birthday, Tel Aviv, 76–94.

Hawkins, J. D. (2000): Inscriptions of the Iron Age. CHLI I, Berlin – New York.

Hawkins, J. D. (2003): Scripts and Texts. In: H. C. Melchert (ed.), The Luwians (HdO I/68), Leiden – Boston, 128–169.

Kloekhorst, A. (2008a): Studies in Lycian and Carian Phonology and Morphology, Kadmos 47, 117–146.

Kloekhorst, A. (2008b): Etymological Dictionary of the Hittite Inherited Lexicon (Leiden Indo-European Etymological Dictionary Series 5), Leiden – Boston.

Kloekhorst, A. (2010): Review of H. A. Hoffner Jr. / H. C. Melchert, A Grammar of the Hittite Language I. Reference Grammar; II. Tutorial (LANE 1/1–2), Winona Lake 2008, Kratylos 55, 13–24.

Kloekhorst, A. (2011): Accentuation and Poetic Meter in Hittite. In: M. Hutter / S. Hutter-Braunsar (eds.), Hethitische Literatur. Überlieferungsprozesse, Textstrukturen, Ausdrucksformen und Nachwirken. Akten des Symposiums vom 18. bis 20. Februar 2010 in Bonn (AOAT 391), Münster, 157–176.

Kloekhorst, A. (2012): The Phonological Interpretation of Plene and Non-Plene Spelled e in Hittite. In: B. Nielsen Whitehead et al. (eds.), The Sound of Indo-European. Phonetics, Phonemics, and Morphophonemics, Copenhagen, 243–261.

Kronasser, H. (1956): Vergleichende Laut- und Formenlehre des Hethitischen, Heidelberg.

Meier-Brügger, M. (2002): Indogermanische Sprachwissenschaft, 8., überarbeitete und ergänzte Auflage unter Mitarbeit von Matthias Fritz und Manfred Mayrhofer, Berlin.

Melchert, H. C. (1993): Cuneiform Luvian Lexicon (Lexica Anatolica 2), Chapel Hill, N.C.

Melchert, H. C. (1994): Anatolian Historical Phonology (LSIE 3), Amsterdam – Atlanta.

Oettinger, N. (1994): Etymologisch unerwarteter Nasal im Hethitischen. In: J. E. Rasmussen (ed.),

In Honorem Holger Pedersen. Kolloquium der Indogermanischen Gesellschaft vom 25. bis 28. März 1993 in Kopenhagen, Wiesbaden, 307–330.

Oettinger, N. (1999): Zum nordwest-indogermanischen Lexikon (mit einer Bemerkung zum hethitischen Genitiv auf -l). In: P. Anreiter / E. Jerem (eds.), *Studia Celtica et Indogermanica*. Festschrift für Wolfgang Meid zum 70. Geburtstag, Budapest, 261–267.

Plöchl, R. (2003): Einführung ins Hieroglyphen-Luwische (DBH 8), Dresden.

Rieken, E. (2008): The Origin of the -*l* Genitive and the History of the Stems in -*il*- and -*ul*- in Hittite. In: K. Jones-Bley et al. (eds.), Proceedings of the Nineteenth Annual Indo-European Conference, Los Angeles, November 3–4, 2007, Washington D.C., 239–256.

Rieken, E. (2010): Das Zeichen <tá> im Hieroglyphen-Luwischen. In: Y. Cohen et al. (eds.), *Pax Hethitica*. Studies on the Hittites and their Neighbours in Honour of Itamar Singer (StBoT 51), Wiesbaden, 301–310.

Sturtevant, E. H. (1933): A Comparative Grammar of the Hittite Language, Philadelphia.

Alwin Kloekhorst
Leiden University Centre for Linguistics
PO Box 9515
2300 RA Leiden
The Netherlands
a.kloekhorst@hum.leidenuniv.nl