The 1pl. and 2pl. personal pronouns in Luwian, Anatolian, and Indo-European

Alwin Kloekhorst
Leiden University

The interpretations of several Luwian pronominal forms of the first and second person plural are debated, and, as a consequence, their value for reconstructing the Proto-Anatolian and Proto-Indo-European state of affairs is unclear. In the following article I will try to elucidate some problematic forms, and establish the synchronic paradigms of the 1pl. and 2pl. personal pronouns in Cuneiform Luwian and Hieroglyphic Luwian. Moreover, I will attempt to reconstruct the Proto-Luwian paradigms of these pronouns, and discuss to what extent they can be used for reconstructing the Proto-Anatolian and Proto-Indo-European situations.[*]

§ 1. *The 1pl. personal pronoun in Cuneiform Luwian*

The interpretation of forms of the 1pl. personal pronoun in Cuneiform Luwian has been debated, although the last few years some consensus seems to have been reached. In his *Cuneiform Luvian Lexicon*, Melchert (1993: 24) cites the forms "dat.-acc. *an-za*, *a-an-za*(-*ti*); case? *an-za*(-*aš*)" and states that "it is unclear whether *anza* and *anzaš* represent different case forms". Later, in *The Luwians*, Melchert (2003: 189) cites for this pronoun a single form, "dat.-acc. *ānza*(*š*)". In *ACLT₁*, Yakubovich cites three different forms, however: nom. *an-za-aš*, dat. *an-za*, and instr. *a-an-za-ti*. In the same way, *eDiAna* (Payne *et al.* 2023) cites three

distinct forms, nom. *an-za-aš*, dat.-acc. *an-za*, and abl./instr.(?) *a-an-za-ti*, although the option is left open that *a-an-za-ti* should be analysed as a dat.-acc. form *ānza* + refl. *=ti*.

To my mind, the interpretation of *anzaš* as a nominative form is indeed convincing: as Payne *et al.* 2023 state, in KUB 35.133 iv 13–14, we read (13) **anzaš**=*pa kuṷari pāri ḫūp*[-....] (14) *ḫūiunni* ..., in which the form *ḫūiunni* is a 1pl.pres.act. form 'we run'. If *ḫūiunni* is part of the same clause as *anzaš* (but note that the gap in line 13 is quite substantial), it would definitively prove that *anzaš* is a nominative form. Also, the dative function of *anza* is clear, as we can tell from e.g. KUB 35.133 iii (14) **anza pīṷa māu[ṷ]allašša mašḫariešša** (15) GIŠGEŠTIN-*anza ṷa*[.]x-*šašša* 'Give **us** m., m., wine, (and) ṷ.!'. An accusative function of *anza* is, as far as I can see, unattested, but since in all Anatolian languages the dative and accusative forms of the 1st and 2nd personal pronouns (singular and plural) are formally identical to each other, we can assume this to be the case here too, hence dat.-acc. *anza*.

The interpretation of the form *ānzati* as an abl.-instr. form (thus also Plöchl 2003: 65; Hackstein 2007: 137) or as a dat.-acc. form *ānza* + *=ti* (Melchert 1993: 24; Plöchl 2003: 65; Payne *et al.* 2023) does not seem attractive to me, however. The form occurs in the following passage, where we indeed find many other forms of the 1pl. personal pronoun, as well as 1pl. verbal forms (all underlined).

KUB 35.133 iv

8 *pa-a* <u>*an-za-aš*</u> [   ]x x[...   ]

9 *ma-aš-ḫa-a-ḫi-š*[*a*   -]*li-ịa-an-ni-in*[(-)   ...   ]

10 **a-an-za-ti** *i-šar-ṷi₅-li-iš a-aš-ti* x[...   ]

11 <u>*ma-ar-šu<-un>-ni*</u> <u>*an-za-aš*</u> ZAG-*iš a-ṷa*[-   ...   ]

12 *ti-i ti-i-ịa* <u>*an-za*</u> *ad-du-ṷa-an-z*[*a*   ...   ]

13 <u>*an-za-aš*</u>=*pa ku-ṷa-ri pa-a-ri ḫu-u-u*[*p-*   ...   ]

14 <u>*ḫu-u-i-un-ni*</u> *at-ra-ḫi-ša ma-aš-ḫa-ḫi-š*[*a*   ...   ]

It is therefore understandable that scholars have attempted to interpret *a-an-za-ti* as an inflected form of the 1pl. personal pronoun, as well. However, *a-an-za-ti* would be the only form that is spelled with plene spelling of its initial *a*: all other attested forms of the 1pl. personal pronoun are spelled *an-z°* (9x), without plene spelling. I therefore want to propose that *a-an-za-ti* should be analyzed differently, namely as a particle chain, *ā=nz(a)=ti*, i.e. consisting of the conjunction *a=* + encl. dat.-acc. of the 1pl. pers.pron. *=nz* (comparable to HLuw. /=nts/, cf. section 2 below) + reflexive *=ti*. Note that the conjunction *a=* regularly

shows plene spelling of its *a* in forms like *a-at-ta* = *ā=tta*, *a-am-ma-aš* = *ā=mmaš*, etc. As kindly pointed out to me by Craig Melchert (pers.comm.), we may analyse the clause it occurs in as follows: *ā=nz(a)=ti išaru̯iliš āšti* 'you are / will be righteous to us'. This implies that *āšti* should be interpreted as a 2sg.pres.act. form 'you are / will be' (using the originally *ḫi*-conjugation ending *-tti*), which makes this clause a copula clause with a 2nd person subject, which automatically triggers the use of the reflexive *=ti*. Note that in line 12 the 2sg. personal pronoun nominative form *tī* is found, supporting the idea that the clause of line 10 is referring to the addressee in the 2nd person singular.

When it comes to the phonological interpretation of nom. *anzaš* and dat.-acc. *anza*, we have to keep in mind that they represent the freestanding, orthotonic forms of the paradigm (contrasting with the enclitic dat.-acc. form *=nz*) and thus should contain at least one accented syllable. Although in Cuneiform Luwian the place of accentuation in a word is not noted down specifically, several arguments can be given on the basis of which we can form an informed opinion. Both in *anzaš* and in *anza* the initial vowel is always spelled non-plene (*an-z°*, not ***a-an-z°*), which makes it unlikely that it was stressed. Moreover, also on the basis of etymological considerations we would not expect accentuation of *anz-*: we will see in section 7 below that this syllable reflects PIE **ns-*, i.e. a *zero*-grade morpheme, which, from an Indo-European point of view, we do not *a priori* expect to have been accented. On the basis of these two arguments, we can assume that the initial syllable /ants-/ was unaccented. For the nom. form *anzaš*, this implies that it represents an oxytone form /antsás/. In the case of the dat.-acc. form *anza*, it cannot be independently determined whether its final *-a* is a real vowel or not: compare the case of the dat.pl. ending that is usually spelled *-Vn-za*, but that on the basis of forms like ᵈ*lu-u-la-ḫi-in-za-aš=tar* (KUB 9.31 ii 24) and *pár-na-an-za-aš=ta* (HT 1 ii 7) clearly underlyingly was /-Vnts/, without a phonological final vowel. Yet, given the argumentation above on the basis of which it was deemed unlikely that the initial part of *anza* was accented, it seems best to assume that the word-final *-a* of this form does represent a real vowel and that this vowel bore the accent: *anza* = /antsá/.

We thus arrive at the following paradigm of the 1pl. personal pronoun in Cuneiform Luwian, in which the two accented forms are oxytone.

nom.	*an-za-aš*	/antsás/
dat.-acc.	*an-za*	/antsá/
encl. dat.-acc.	*=n-z(a)*	/=nts/

§ 2. *The 1pl. personal pronoun in Hieroglypic Luwian*

The interpretation of forms of the 1pl. personal pronoun in Hieroglyphic Luwian is relatively uncontroversial. We find an orthotonic nominative form *a-za5-za*, for instance in ASSUR letter *a* §3 | ***a-za5-za**-ha-wa/i-za* | *á-pi* | *ha-tu-ra+a* 'And as for us, **we** are in health' (Waal 2021: 273). The enclitic accusative-dative form is spelled *=za*, cf. e.g. ASSUR letter *e* §13 | *wa/i-**za**⁻ⁱ* | *ni-i* | *ARHA* | ("*69")*sa-tu⁻ⁱ* 'Do not let them miss **us**!' (Hawkins 2000: 536). A genitival adjective is attested with an *-a/i*-stem *a-za/i-* in nom.-acc.pl.n. *a-za-ia* (ASSUR letter *e* §12 ... | ***a-za-ia**-ha⁻ᵃ* | *sa-na-wa/i-ia* 'and **our** goods' (Hawkins 2000: 536)), whereas an *-ia/i*-stem *a-zi-ia/i-* is attested in abl.-instr. *á-zi-ia-ti* (IZGIN 1 §16 ... ***á-zi-ia-ti*** LEPUS+*RA/I-ti* 'by **our** authority' (Hawkins 2000: 316)). The nom.sg.c. form *a-zi-sa* (ASSUR letter *f+g* §9 | *kwa/i-sà⁻ᵃ-wa/i-sa⁻ᵃ* | ***a-zi-sa*** | *ha-tu-ra+a-sa* 'What will it be, **our** health?' (Waal 2021: 277)) can belong both to the *-a/i*-stem *a-za/i-* and to the *-ia/i*-stem *a-zi-ia/i-*. Next to these two stems, we also find a genitival adjective in *-asa/i-*, namely in TOPADA §26 ... ***á-za5-sa7-na*** FINES+*HI* ... '**our**⁽ᵎ⁾ frontier' (Hawkins 2000: 458–459). When it comes to the phonological interpretation of these forms, it is generally agreed upon that the orthotonic forms spelled *a-z°* and *á-z°* represent /ants°/, with an /n/ that is attested in CLuwian *anz°* as well.[1] The same is assumed for the encl. dat.-acc. form *=za*, which can be interpreted as /=nts/.[2] Note that the sign *za5* (HH 432) that is found in many forms (nom. *a-za5⁽⁻ᵃ⁾-za* (attested 5 times), *á-za5-sa7-na*), has in the past been read as "*zu*" (including in Hawkins 2000), but see Yakubovich (2010: 66–68) for the reason to assume that in Iron Age texts it has *a*-vocalism,[3] hence the transliteration *za5*. With

---

1. Cf. e.g. Payne *et al.* 2023 (*eDiAna*-ID 2684) who interpret *a-za5-za* as "/anzanz/", and Payne and Bauer 2023 (*eDiAna*-ID 2685) where *a-zi-ia-* is interpreted as "/anzi(ya)-/".

2. Payne *et al.* 2023 (*eDiAna*-ID 2684) cite the encl. 1pl. dat.-acc. particle as "/=anz/", but since it is always preceded by the particle *=wa*, (...-)*wa/i-za*(-...) = /(...)wants(...)/, the vowel *a* need not be part of the particle, hence my analysis as /=nts/.

3. His argument is based on the form in ASSUR letter *f+g* §3 that in Hawkins 2000: 536 is cited as "*a-zu*ᵎ⁻ˊ*-za*". According to Yakubovich 2010: 67–68, the sign *a* that Hawkins in this form renders as "ˊ", should be viewed as a plene spelling, and therefore implies that the preceding sign has *a*-vocalism: "*a-za*ₓ*-a-za*". Note that Vertegaal 2017: 254 has in the meantime convincingly shown that the sign *a* in this form should not be seen as plene spelling but rather as a word-medial space filler, "*a-za5⁻ᵃ-za*". Nevertheless, since in the ASSUR letters we always find the sign *u* as space filler after signs with *u*-vocalism (the only exception, *ni-pa-wa/i-tu⁻ᵘ⁻ᵃ* (ASSUR letter *f+g* §32) is a matter of "double filling", cf. Vertegaal 2017: 255), it is clear that the use of the space filler *a* in the form under discussion still supports Yakubovich's reading of HH 432 with *a*-vocalism: *za5*.

the reading of the nominative form as *a-za₅-za* (and not "*a-zu-za*", as earlier thought), its latter part has been interpreted as representing /-ants/, since it can then be equated with the nominal dat.pl. ending /-ants/ (Yakubovich 2010: 68: likewise, for 2pl. nom. / dat.-acc. *u-za₅-za*, cf. section 4 below). If we compare the use of *za₅* with that of the regular *za*-sign *za*, we see that the distribution of *za₅* in the Iron Age corpus is limited, but almost fully complementary to *za*: *za₅* is only found in the 1pl. personal pronoun (6x *a/á-za₅-* vs. 1x. *a-za-*), the 2pl. personal pronoun (5x *u-za₅-* vs. 2 *u-za-*), the toponym *pa+ra/i-za₅-ta_x-* (5x with *za₅*, never with *za*),[4] the toponym *pa+ra/i-za₅-mi-na-*(URBS) (2x with *za₅*, never with *za*),[5] the personal names ¹*ka-za₅-pi^?-sa* (*hapax*)[6] and *za₅-na-(m)u-* (*hapax*),[7] and the unknown word *ara/i-za₅-ta* (2x with *za₅*, not attested with *za*).[8] This peculiar distribution may imply that *za₅* had a specific phonetic realization that was distinct from *za*. Given the fact that in the 1pl. personal pronoun the consonant noted down by *za₅* is certainly preceded by an *n*, and that this may very well be the case in the 2pl. personal pronoun *u-za₅-*, as well (cf. CLuw. *ūnz-* 'id.'), it seems quite possible to me that the phonetic value of *za₅* was [(n)dza], with a voiced affricate [dz], whereas *za* in principle denotes [tsa], with a voiceless affricate [ts]. The voice of [dz] in *za₅* may then be seen as automatic after *n* in word-medial position. Note that *z* after *n* in word-final position is always spelled with the sign *za* (e.g. the dat.pl. ending *-anz*, which is always spelled °*a-za*, never **°*a-za₅*), which may imply that in word-final position a voicing after *n* did not take place, and that the dat.pl. ending thus phonetically was [-ants]. This also applies to encl. dat.-acc. =*za* '(to) us', which is always spelled with the sign *za*, not with *za₅*, and therefore phonetically probably was [=nts].[9] Since this distinction between [ndz] and [nts] seems to

---

4. TOPADA §§3, 7, 13, 23, 26.
5. KULULU lead strip 1 §5 (2x).
6. KÖRKÜN §1.
7. CEKKE §17o.
8. KARKAMIŠ A15*a* §§3, 4.
9. In the vast majority of cases, /=nts/ is the last clitic of its chain, and its affricate thus stands in word-final position. Only rarely is it followed by other clitics, but in these cases we do find spelling with the sign *za*, as well, not with **za₅: *wa/i-za-na* (ASSUR letter *f+g* §§35, 47) = /(a)=wa=nts=an/ and *wa/i-za-ta* (ASSUR letter *f+g* §29) = /(a=)wa=nts=a(θa)=nta/. The spelling with the sign *za* in these forms therefore seems to imply the phonetic forms [wantsan] and [wantsanta], in which the voicelessness of the word-final [ts] had been retained. See footnote 10 for the possibility that other similar cases could imply that a phonemic distinction between word-medial [-nts-] and [-ndz-] had recently emerged or was in the process of emerging within the attested period of Hieroglyphic Luwian.

largely have been environmentally determined –word-medial [-ndz-] vs. word-final [-nts]–, we may see the two as allophones of each other.[10]

Although, like in Cuneiform Luwian, also the Hieroglyphic Luwian writing system does not explicitly note down the place of accentuation, we can form an informed opinion about the accentuation of the attested forms of this paradigm on the basis of arguments like the ones used above for its CLuwian counterpart: freestanding, orthotonic forms of the paradigm should by definition have at least one accented syllable; and, from an etymological point of view, the initial syllable /ants-/, which reflects a PIE *zero*-grade morpheme **ns-*, was very likely unaccented. This implies that nom. *a-za$_5$-za* likely represents /antsánts/, and that the genitival adjectives can be analysed as /antsá/í-/, /antsiá/í-/, and /antsássa/i-/, respectively.

Taking everything together, we thus arrive at the following paradigm of the 1pl. personal pronoun in Hieroglyphic Luwian.

nom.	/antsánts/	[andzánts]
dat.-acc.	...	...
encl. dat.-acc.	/=nts/	[=nts]
gen.adj.	/antsá/í-/ /antsiá/í-/ /antsássa/i-/	[andzá/í-] [andziá/í-] [andzássa/i-]

10. Note, however, that nom.sg. (DEUS)TONITRUS-*hu-za-sa* (and variants) and acc.sg. DEUS(TONITRUS)-*hu-za-na* (and variants) 'Storm-god' are always spelled with *za* (15x *-za-sa*; 9x *-za-na*), never with *za$_5$*, implying that these forms end in [-ntsas] and [-ntsan], respectively, with voiceless [ts]. Since the stem *tarhunza-* is based on the original nom.sg. form **tarhunz* = [tarχunts] < **-nt-s*, in which word-final [-nts] was regularly voiceless, we may assume that [ts] was retained as a voiceless sound in the *a*-stem derivative *tarhunza-* = [tarχuntsa-]. This does imply, however, that the voicing of /ts/ after *n* in word-medial position was no longer automatic when this stem arose, and that therefore Hieroglyphic Luwian did have a (recently emerged) phonological distinction between word-medial [-ndz-] (as in *a-za$_5$-* = /andza°/ 'we, us') and [-nts-] (in (DEUS)TONITRUS-*hu-za-* = /tarhuntsa-/ 'Storm-god'). See also footnote 9 for another possible case of word-medial [-nts-]. However, since this distinction may have only recently arisen and thus has no bearing on the reconstruction of earlier forms, I will in the remainder of this article give the phonological interpretations of the forms of the 1pl. personal pronoun (as well as of the 2pl. personal pronouns, cf. below) as containing a word-medial cluster /-nts-/.

§ 3. *The 2pl. personal pronoun in Cuneiform Luwian*

There is quite some unclarity regarding the situation surrounding the 2pl. personal pronoun in Cuneiform Luwian. Melchert (1993: 241) cites the forms "case? *u-un-za-*; acc. *u-za-aš*", stating that "[i]t is doubtful that there is a clear functional distinction between *unz(a)* and *u(n)zaš*". In *The Luwians*, he cites "dat.-acc. *ū(n)za(š)*" (Melchert 2003: 189). In *ACLT₁*, Yakubovich rather cites *uzaš* as an accusative form, and *ūnza* as a dative form. This is unattractive, however, since otherwise Anatolian languages use a single form for the accusative and dative functions of the 1st and 2nd personal pronouns. Let us therefore focus on the individual forms.

§ 3.1. *CLuw.* uzaš

The form *uzaš* occurs several times. One of its attestations is in a passage that is too broken to reveal anything about its meaning / function: KBo 29.34, 18 [...]x-x-*šạ* **u-za-aš**=*pa=ụa* x-x[...]. Two other attestations are duplicates of each other, found in a passage from the Ritual of Zarpiịa of Kizzuụatna (CTH 757).

KUB 9.31 ii
30 *u-ra-az<-za-aš>* ᵈUTU-*az ta-ti-in-zi* DINGIRᴹᴱˢ-*in-zi*
31 ᵈÉ.A-*aš=ḫa pár-na-an-za=ta ku-ụa-at-ti an-da ḫu-u-i-na-i-<-im>-ma-an*
32 *la-la-an-ti pa-a* **u-za-aš** *a-da-ri-ta-an*

HT 1 ii
 6 *u-ra-az<-za-aš>* ᵈUTU-*az ta-ti-in-zi* DINGIRᴹᴱˢ[(-*in-zi* ᵈÉ.A-*aš=ḫa*)]
 7 *pár-na-an-za-aš=ta ku-ụa-at-ti an-da ḫu-u-ị-nạ*[(-*i-*)*im-*]
 8 *m*[*a-a*]*n la-la-an-ti pa-a* **u-za-aš** *a-ta-ri-ta-an*

Note that a third duplicate of this passage can be found in Bo 5510 iv 4–5, but here the relevant form is broken. According to Görke (2014), it should be read "⸢ú⸣⸢?⸣-za-a-aš", which would deviate from the two attestations *u-za-aš* in two ways, however: the spelling with the sign Ú instead of with U; and the plene spelling with the sign A. To my mind, this reading does not do full justice to what can be seen on the tablet (cf. the photograph, http://hethiter.net/: fotarch BoFN11315b: 🖼). Personally, I would rather read the sign that Görke interprets as ZA (𒍝) as the latter part of UN (𒌦) and interpret the traces of the vertical wedge and small horizontal wedge that precede it as its initial part, and not as traces of a sign Ú (𒌑), as Görke has it. Moreover, the sign that Görke reads as A (𒀀) should to my mind be read as ZA (𒍝). Taken together, I thus arrive at a reading [*u*]*n-za-aš*. Given the fact that the other form of the 2pl. personal pronoun, *ūnza*, is always

spelled *u-un-za*, we may even consider the possibility that on Bo 5510 we should read [*u-u*]*n-za-aš*. I therefore think the passage can be cited as follows:

Bo 5510 iv
4 [(*u-ra-az*<*-za-aš*> ᵈUTU-*az ta-ti-in-zi* DINGIR^MEŠ-*in-zi* ᵈÉ.A-*aš=ḫa*
      pár-n)]*a-an-za-a=t-t*[(*a*)]
5 [(*ku-u̯a-at-ti an-da ḫu-u-i-na-i-*)*im-*(*ma-an la-la-an-ti pa-a* **u-**)**u**]**n-za-aš**
      a-da-ri-da-a[(*n*)]

"Oh, great Sungod, fatherly gods, and Ea! In the houses from where they take the *ḫuinai‹m›ma-*, you must *adari-* ...!"

The form *adaritan* / *ataritan* / *adarida*[*n*] is 2pl.imp. of the verb *adari-^tti* that is generally compared with Hitt. *ētriii̯e/a-^zi* 'to feed', which is a transitive verb (e.g. Melchert 1993: 40). It therefore is understandable that scholars have assumed that CLuw. *adari-^tti*, too, is a transitive verb. This would then imply that the form *uzaš* / [*ū*]*nzaš* should be interpreted as the object of its clause, and therefore as an accusative form: *pā* **uzaš** / [**ū**]**nzaš** *adaritan* 'You must feed **yourselves**!' (thus Yakubovich *ACLT₁*). However, the verb's HLuwian counterpart, EDERE-*dari-*, rather seems to be an intransitive verb, meaning 'to feed oneself; to eat'.[11] If this applies to CLuw. *adari-^tti*, as well, then we should rather interpret *uzaš* / [*ū*]*nzaš* as a nominative form: *pā* **uzaš** / [**ū**]**nzaš** *adaritan* '**You** must feed yourselves! / **You** must eat!'. Contextually, the latter option is preferable, since in the same composition we find a semi-parallel passage in Hittite, where the gods 'must eat'.

11. This verb occurs only once, in MALPINAR §7 *wa/i-tà-*a ku-ma-ia-la* | *ARHA* EDERE-*tà-ri+i-tu*, which Hawkins (2000: 342) translates as "and let them feed up the sacrificial animals", interpreting EDERE-*tà-ri-* as a transitive verb, *=ada* as a nom.pl.c. form expressing the subject, and *kumaiala* as a neuter plural object. However, in a transitive clause we do not expect the subject to be expressed with an enclitic pronominal form (Melchert 2003: 204; cf. also the preceding clause, §6 *a-wa/i su-tu+ra/i-na* (PONERE)*sà-ti-tu^-u-a* 'let them *sati* the *suturi*", where the subject of the transitive verb is not expressed with an enclitic pronominal form). One could therefore consider seeing *=ada* as an acc.pl. form representing the object of the clause ("let the sacrificial animals feed them up"), but then we would expect the neuter subject to be in the ergative case (***kumaialantinzi*). It therefore seems best to assume that EDERE-*tà-ri-* is an intransitive verb here, with *=ada* as its subject, and that *kumaiala* does not express a direct case form, but rather a dat.-loc.sg. form (e.g. 'at the sacrificial place' *vel sim.*?): 'Let them eat their full (*ARHA*) at the *kumaiala*-!'.

KUB 9.31 ii
1 [...   (*ne-pí-ša-aš* ^dUTU)]-*uš* *a*[*z-zi-i*]*k-ki*
2 *É-aš* *ad-da-aš* DINGIR^{MEŠ} *az-zi-kán-du* *LI-IM* DINGIR^{MEŠ}
3 *az-zi-kán-du*

"Oh, Sungod of Heaven, <u>you must eat</u>! The gods of the father of the house <u>must eat</u>! The thousand gods <u>must eat</u>!"

This supports the interpretation of CLuw. *adaritan* / *ataritan* / *adarida*[*n*] as intransitive 'you must eat!', which implies that *uzaš* / [*ū*]*nzaš* is a nominative form. An additional argument in favor of this interpretation is that *uzaš* / [*ū*]*nzaš* has the same ending as 1pl. nom. *anzaš*.

It is not easy to determine the relationship between *u-za-aš* and [*u-u*]*n-za-aš*. One could consider the possibility that the latter form shows that the former should be emended to *u-<un->za-aš*. However, since *u-za-aš* is attested three times, it does not seem self-evident that we should assume the exact same scribal error in all three attestations. However, it should be noted that KUB 9.31 and HT 1, both of which contain *u-za-aš* (in ii 32 and ii 8, respectively, cf. the passages cited above), both show in the preceding line the exact same scribal error in the form *u-ra-az<-za-aš>* (KUB 9.31 ii 30, HT 1 ii 6).[12] It therefore may not be impossible that the one text was copied from the other, or *vice versa*, and that in this way scribal errors were taken over, and that the form *u-za-aš* as found in both texts counts as a single scribal error, i.e. *u-<un->za-aš*. This would lower the number of individual attestations of *u-za-aš* to two, which increases the chance that they are erroneous. Moreover, it is exactly the cluster *-nz-* that in Cuneiform Luwian often shows omission of its *n*.[13]

All in all, it may not be excluded that all three attestations *u-za-aš* should actually be emended to *u-<un->za-aš*. However, it is also possible that the forms spelled *u-za-aš* represents a linguistically real form besides [*u-u*]*n-za-aš*. See section 3.4 for additional considerations regarding these forms that would speak in favor of emending all cases of *u-za-aš* to *u-<un->za-aš*.

---

12. The addition of *-za-aš* in *u-ra-az<-za-aš>* can be based on KUB 35.9 ii 3, which has *ú*[*-ra-*]*za-ạš*.
13. Yakubovich 2010: 324.

§ 3.2. *CLuw.* ūnza

The analysis of the form *ūnza* is less clear. It occurs three times. In KUB 9.6 +
KUB 35.39, it is attested in a broken passage, which can be read and translated as
follows (adapted from Yakubovich and Mouton 2023: 60–61):[14]

KUB 9.6 + KUB 35.39 iii
  6 *nu* ᴹᵁᴺᵁˢŠU.GI ẸN SỊSKUR [...   ]
  7 *ki-iš-ša-ạn*   *me-ma-i* [   ]
----
  8 **u-un-za**=*ḫ*[*a-a*]=*t-ta a-ap-pa ma-a-an* x[...   ]
  9 *a-ad-d*[*u*]-*ụa-li-iš*=*ḫa ma-a-ra-an*-[...   ]
10 *ạ-ạt-tạ-ni-i a-a*=*m-ma-aš* *a-a*-[*aš-ša ta-a-i-na-a-ti*]
11 [*ma-al-li-t*]*a-a-ti e-el-ḫa-*[*a-ta-an*   ...   ]

"The Old Woman [...] the ritual patron [...]. She speaks thus: 'If also **(to?) you
(pl.)** [...] back, and the evil *māran*[- ...], you (pl.) will *ā*-[...]. [You (pl.)] must
wash your mo[uth] with [oil (and) hone]y!'"

The presence of =*ḫa* makes clear that *ūnza* is to be analyzed as a separate
word. Moreover, the presence of a 2pl.pres.act. from *āttanī* in line 10 makes it
likely that *ūnza* is a form of the 2pl. personal pronoun. However, it is difficult to
contextually determine its function. Yakubovich and Mouton (2023: 61) take line 8
and the beginning of line 9 as a single clause in which *ādduụališ māran*[...] is the
subject, which would imply that *ūnza* must be either direct or indirect object: "And
if also the evil *māran*-[...] **to you (pl.)** again". Yet, the =*ḫa* after *ādduụališ* may
also indicate that in line 9 a new clause starts, and that line 8 is a separate clause,
hence the translation offered above.

The other context in which *ūnza* may appear is KUB 35.142 iv! 5–7 (CTH
772; Ištanuwian Festivals; transliteration following Starke 1985: 324):

14. Note that Yakubovich and Mouton 2023: 60–61 read the broken verbal form in line 11 as
"*e-el-ḫa*[-*ta-ni*" which they translate as "[You (pl.)] will wash". However, since the remainder of the
text uses imperative constructions when describing the washing of the mouth (e.g. KUB 9.6 + KUB
35.39 ii 10–11 *āašša*=*mmaš elelḫāndu tāināti mallitāti* 'They must wash their mouth with oil and
honey!'; KUB 9.6 + KUB 35.39 ii 14 *āašša*=*ti ēlḫādu* 'He must wash his mouth!'), it seems best to
read the broken verbal form as an imperative form, as well: *e-el-ḫa-*[*a-ta-an*].

KUB 35.142 iv¹
  5 [*kiš-*]*an* SÌR*ᴿᵁ* **u-un-za**-*pí-i̯a-an*[(-)   ...   ]
  6 [**u-u**]**n-za**-*pí-ya-an-mi ta-pa-an za̧-a*[*n-*   ...   ]
  7 *pa-an-ku-uš=ša-ma-aš kat-ta-an Q*[*A-TAM-MA=pát* SÌR*ᴿᵁ*]

"They sing as follows: '*ūnzapii̯an*[- ... *ū*]*nzapii̯anmi tapan za*[*n* ....]'. The congregation [sings] after them [in the very] s[ame way]."

In both lines 5 and 6, there does not seem to be a space between the signs ZA and PÍ, so it is not fully clear whether these lines really contain the word *ūnza*. According to Yakubovich (2010: 65) we should read in both lines a sentence "*unza piyan=mi*", which he translates as '(It) is given to me by YOU'. It is problematic, however, that in this interpretation the particle *=mi* is not attached to the first word of the clause and thus does not seem to be grammatical.[15]

All in all, we may conclude that *ūnza* may well be the dat.-acc. form of the 2pl. personal pronoun, but that not all contexts in which it (seemingly?) occurs can be well understood.

§ 3.3. *CLuw.* =mmaš
  Although Melchert (1993) does not cite an enclitic dat.-acc. form of the 2pl. personal pronoun in Cuneiform Luwian, according to Yakubovich (*ACLT₁*), it is attested in KUB 9.6 + KUB 35.39 iii 10 as *=mmaš* (which Melchert 1993: 3 cites as an encl. dat.pl. form of the 3rd person), cf. the following passage.

KUB 9.6 + KUB 35.39 iii
  8 *u-un-za=ḫ*[*a-a*]=*t-ta a-ap-pa ma-a-an* x[...   ]
  9 *a-ad-d*[*u*]-*u̯a-li-iš=ḫa ma-a-ra-an-*[...   ]
 10 *a̧-a̧t-ta̧-ni-i a-a***=m-ma-aš** *a-a-*[*aš-ša ta-a-i-na-a-ti*]
 11 [*ma-al-li-t*]*a-a-ti e-el-ḫa-*[*a-ta-an*   ...   ]

"If also (to²) you (pl.) [...] back, and the evil *māran*[- ...], you (pl.) will *ā-*[...]. [You (pl.)] must wash **your** mo[uth] with [oil (and) hone]y!"

See above in section 3.2 for a treatment of this passage.

15. Perhaps we could consider the possibility that *ūnza* functions as a vocative form here, forming its own clause, and that we can analyse the passage it occurs in as *ūnza piy(a)=an=mi tapan* 'Hey you! Give it to me, the *tapa-*!'.

§ 3.4. *Phonological interpretations*

Although the enclitic dat.-acc. form *=mmaš* is by definition unaccented, we would expect the freestanding, orthotonic forms of this paradigm to have had at least one accented syllable. At first sight, it may seem obvious that the forms that are spelled *u-un-z°*, i.e. with plene spelling of their *u*, show a long vowel in their initial syllable, and therefore were accented on that syllable: /ū́nts-/. However, it is relevant that the sign with which the plene spelling is written is U, not Ú. For Hittite, it is nowadays commonly assumed that this language knew a phonological distinction between /ŭ/ (spelled plene with Ú) and /ŏ/ (spelled plene with U),[16] and according to Melchert (2019: 573; 2020: 263) this distinction was also present in Cuneiform Luwian. This implies that the 2pl. personal pronoun, which is consistently spelled with the sign U, contained an /o/-vowel. In Hittite, word-initial plene spelling of the type *u-uC(-)* can denote the presence of a long /ō/, which is always accented, but also the presence of a short /o/, which can be either accented or unaccented (Kloekhorst 2014: 529–533).[17] If we assume that the same spelling principles apply to Cuneiform Luwian, the stem of the 2pl. personal pronominal forms spelled *u-un-z°* may thus be either /ŏ́nts-/, /ónts-/, or /onts-´/. In other words, from the point of view of spelling, the accented forms of the 2pl. personal pronoun could in principle be either barytone or oxytone. Since in the 1pl. personal pronoun the accented forms can be assumed to have been oxytone, and since this paradigm forms a clear morphological parallel to the paradigm of the 2pl. personal pronoun, we may assume that the accented forms in the latter paradigm were oxytone, too: *u-un-za-aš* = /ontsás/ and *u-un-za* = /ontsá/.

Although hardly any research has been done regarding the phonological distinction between CLuwian /u/ and /o/ and especially its origin, we will see in section 7 below that the /o/ in *ūnz-* = /onts-/ reflects a PIE *u. This implies that we have to assume that this *u underwent lowering. Since Hittite knows a lowering of *u to /o/ before *n (Kloekhorst 2008: 54–55, 58), we may assume that this was the conditioning factor in CLuwian, as well: /onts-/ < */unts-/. In Hittite, such a lowering did not take place before /t/ and /ts/ (Kloekhorst 2008: 57, 59), and this could well have been the case in CLuwian as well, cf. forms like *ú-ut-na-aš-ša/i-* 'of a spell' and *ú-ut-ti-iš* 'you (will) drink', with a clear /u/-vowel before /t(ː)/. This would make it difficult to explain the nominative forms spelled *u-za-aš*, if they

16. Rieken 2005: 538–539; Kloekhorst 2008: 35–60.

17. In Hittite, the spelling *u-uC(-)* always represents a sequence of glottal stop + /ŏ/, but this may depend on the specific Hittite words that show this spelling. For CLuw. *ūnz-* there is no indication that we etymologically would expect a word-initial glottal stop.

would represent a form /otsás/, from an earlier */utsás/. This could therefore be seen as an extra reason to assume that the nominative forms spelled *u-za-aš* should in fact be emended to *u-<un->za-aš*, representing /ontsás/.

§ 3.5. *The paradigm*

Taking all evidence together, we arrive at the following paradigm of the 2pl. personal pronoun in Cuneiform Luwian:

nom.	*u-<un->za-aš*, [*u-u*]*n-za-aš*	/ontsás/
dat.-acc.	*u-un-za*	/ontsá/
encl. dat.-acc.	*=m-ma-aš*	/=m:as/

§ 4. *The 2pl. personal pronoun in Hieroglyphic Luwian*

In Hieroglyphic Luwian, several forms of the 2pl. personal pronoun are attested whose interpretation is uncontroversial. First, a nominative form is attested as *u-za₅-za*, for instance in ASSUR letter *e* §6 | *wa/i-ma-za* | **u-za₅-za** | *ha-tu-ra+a* | *a-sa-ta-ni* '**You** are in health' (Waal 2021: 276). A dative form seems to be attested as *u-za₅-za* in ASSUR letter *e* §17.[18] Ablative-instrumental forms are attested as *u-za-ri+i* (ASSUR letter *a* §4) and *u-za-ra/i+i* (ASSUR letter *a* §9) 'at your place / from your side(?)' (cf. e.g. Waal 2021: 273-274, with footnote 75). An enclitic dat.-acc. form is attested as *=ma-za*, e.g. in ASSUR letter *f+g* §2 | *sa-pi-su+ra/iˉᵃ-wa/i-ma-za* 'Peace be to **you**!' (Hawkins 2000: 536). And the

---

18. This clause is from a difficult passage from ASSUR letter *e*: (§15) | *á-lá/í-wa/i-za* | *kwa/i-sà-ha* | *a-sa-ti* (§16) | NEG₂-*wa/i-ma-za*ˉᵃ [|] *u-za₅-za* (§17) | *á-lá/í-ha-wa/i-ma-za* | *u-za₅-za* (*ala/i=wa=nts kwisha asti* ‖ *na=wa=mants untsants* ‖ *ala/i=ha=wa=mants untsants*) 'Whoever is in/at/by *ala/i* for us, you(!) are not. You are in/at/by *ala/i* for yourselves!'. In §15, the enclitic 1pl. dat.-acc. particle *=nts* cannot be in the accusative case, since *as-* 'to be' is an intransitive verb. It therefore must be in the dative case, meaning 'to us', implying that the phrase 'to be in/at/by *ala/i*' can be used with an indirect object. In §16, the clause is a nominal sentence, which means that the 2pl. enclitic *=mants* must be interpreted in its dative case, and is used here as the obligatory reflexive, whereas *untsants* denotes the orthotonic subject of the clause, and thus is a nominative form. It apparently was emphasized: 'Whoever is in/at/by *ala/i* for us, YOU (certainly) are not!'. In §17, which is a nominal sentence, too, *=mants* again is the obligatory reflexive, which means that it cannot function as the indirect object of the phrase 'to be in/at/by *ala/i*'. The only option therefore is that *untsants* denotes that indirect object, and thus is in the dative case: 'You are in/at/by *ala/i* for yourselves!'.

acc.sg.c. form *u-zi-na* of a genitival adjective is found in ASSUR letter *e* §7 ... | **u-zi-na** ... | *ha-tu+ra/i-na* ... '... **your** health ...' (transl. Waal 2021: 276), which could belong to a stem *u-za/i-* as well as to a stem *u-zi-ia/i-*.

There is also one form that is more controversial: *u-za₅-sa* in KARKAMIŠ A6 §22 **u-za₅-sa**-*wa/i-ma-ta⁻ᵃ* ᴹᴬᴺᵁˢ*i-sà-tara/i⁻ⁱ* | MAGNUS+*ra/i-nu-wa/i-ta-ni⁻ⁱ*. According to Hawkins (2000: 125, with reference to Morpurgo Davies 1980: 90), *u-za₅-sa* represents a nominative form that functions as the subject of MAGNUS+*ra/i-nu-wa/i-ta-ni⁻ⁱ*, and he therefore translates '**You yourselves** shall make them great in my hand'. This implies that he analyzes the first word + particle chain as follows: **untsas**=*wa*=*m(u)*=*ata*. Yakubovich (*ACLT₁*) takes *u-za₅-sa* as the dat.sg. form of a genitival adjective, however, and interprets the first word + particle chain of this clause as **untsassan**=*wa*=*m(u)*=*an*=*(n)ta*, implying a translation 'You shall make him great for me in **your** hand'. I agree with Yakubovich on the analysis of the particle chain as =*wa*=*m(u)*=*an*=*(n)ta*: the spelling °*a-ta⁻ᵃ* can no longer be interpreted as the enclitic 3rd person acc.pl., as Hawkins has it, since it has in the meantime become clear that this is always spelled °*a-tà*. Yet, I disagree with Yakubovich's interpretation of *u-za₅-sa* as a form of a genitival adjective modifying 'hand', since I think Hawkins' translation 'in my hand' (with enclitic =*mu* in a genitival function) is more attractive. I therefore agree with Hawkins' analysis of *u-za₅-sa* as a nominative form, and I would rather read the sentence as **untsas**=*wa*=*m(u)*=*an*=*(n)ta istri uranuwatani* '**You yourselves** will make him great in my hand'. If this interpretation of *u-za₅-sa* as a nominative form is correct, it would stand besides the nominative form *u-za₅-za* that was mentioned above. Since the latter is attested in the ASSUR letters, which date to the late 8th century BCE (Hawkins 2000: 534), and the former is from KARKAMIŠ A6, a text dating to the end of the 9th – beginning of the 8th century BCE (Hawkins 2000: 124), we may view the two forms as diachronic variants, with *u-za₅-sa* being more archaic than *u-za₅-za*. Since the latter is formally identical to the dat.-acc. form *u-za₅-za*, we may assume that nom. *u-za₅-za* is the result of an extension of the dat.-acc. form *u-za₅-za* to the nominative function,[19] ousting original *u-za₅-sa*.

When it comes to the phonological interpretation of these forms, it is difficult that in the Hieroglyphic writing system preconsonantal *n* is not indicated in spelling. Yet, since the CLuwian stem of the 2pl. personal pronoun contains an *n*, *ūnz-*, it is quite well possible that an *n* was present in HLuwian, as well. Moreover,

---

19. Thus already Yakubovich 2010: 68.

the presence of an *n* would explain the high number of forms spelled with *za₅*: see section 2 above for the possibility that this sign denotes a cluster [(n)dz], where the voice of [dz] is caused by the preceding *n*. As we saw in section 3.4 above, the CLuwian forms contain an initial /o/ (a vowel that is phonologically distinct from /u/). However, since in the Hieroglyphic writing system there are –as far as I know– no indications that a distinction is made between an /o/-vowel and an /u/-vowel, I will phonologically analyse the HLuwian forms as containing an /u/. Taken together, we may assume that the forms spelled *u-za₅-* represent a stem /unts-/ = [undz-] (possibly /onts-/ = [ondz-]). Note that the two attestations of abl.-instr., *u-za+ra/i* and *u-za-ri+i*, contain the sign *za*, not *za₅*. Since the two attestations are both from a single text (ASSUR letter *a*), where otherwise *za₅* seems to be used in opposition to *za* (cf. *a-za₅-za* in §3), this spelling with *za* may thus be relevant, and would then point to the absence of *n*: /utsaθi/. These could be used as an argument to claim that the Cuneiform Luwian forms spelled *u-za-aš* are to be phonologically analysed as having no *n*, either, but see the discussion in section 3.4 above for the difficulty of that assumption. Moreover, in the 1pl. personal pronoun we also find an attestation spelled with *za* (nom.-acc.pl.n. *a-za-ia* (ASSUR letter *e* §12) 'our') for which there can be no doubt that it represents /antsaia/, with /n/. It therefore may be best to assume that *u-za+ra/i* and *u-za-ri+i*, despite their spelling with *za*, represent /unts-/, like the forms spelled *u-za₅-* do. See section 2 above for the interpretation of the last part of nom. / dat.-acc. *u-za₅-za* as representing /-ants/. Also in encl. dat.-acc. *=ma-za*, its latter part is generally interpreted as /-ants/, yielding the form /=mants/.

When it comes to the place of accentuation in the freestanding, orthotonic forms, on the basis of the Hieroglyphic script no decisions can be made. Yet, on the basis of the parallellism between this paradigm and that of the 1pl. personal pronoun, and their relationships with the corresponding CLuwian paradigms, I assume that in these forms, too, the stem was unaccented and that it was the ending that bore the accent. Moreover, since in CLuwian we have indications that the *a*-vowel of the abl.-instr. ending is long, we may assume that this was the case in the HLuwian form as well, and that this /ā/ was accented. Taking all pieces of information together, we arrive at the following paradigm of the 2pl. personal pronoun in Hieroglyphic Luwian:

nom.	/untsás/ /untsánts/	[undzás] [undzánts]
dat.-acc.	/untsánts/	[undzánts]
abl.-instr.	/untsā́θi/	[undzá:ði]
encl. dat.-acc.	/=mants/	[=mants]
gen.adj.	/untsá/í-/ or /untsiá/í-/	[undz(i)á/í-]

§ 5. *Reconstruction of Proto-Luwian*

If we combine the evidence of the preceding sections, we arrive at the following table:

		CLuwian		HLuwian
1pl.	nom.	*an-za-aš*	/antsás/	/antsánts/
	dat.-acc.	*an-za*	/antsá/	...
	abl.-instr.	...		...
	encl. dat.-acc.	=*nz*(*a*)	/=nts/	/=nts/
	gen.adj.	...		/antsá/í-/ /antsiá/í-/ /antsássa/i-/

		CLuwian		HLuwian
2pl.	nom.	*u-<un->za-aš* [*u-u*]*n-za-aš*	/ontsás/	/untsás/ /untsánts/
	dat.-acc.	*u-un-za*	/ontsá/	/untsánts/
	abl.-instr.	...	...	/untsā́θi/
	encl. dat.-acc.	=*m-ma-aš*	/=m:as/	/=mants/
	gen.adj.	...	...	/unts(i)á/í-/

For reconstructing the Proto-Luwian shapes of these paradigms, we should take into account the following considerations:

Nominative: The idea that the HLuwian 2pl. form *u-za₅-sa* is more archaic than *u-za₅-za* = /untsánts/ (section 4 above) is supported by the fact that *u-za₅-sa* would formally fit the CLuwian nominative form *u-<un->za-aš*, [*u-u*]*n-za-aš* = /ontsás/. As was discussed in section 3.4 above, the /o/ in CLuw. /onts-/ may derive from an earlier */u/ that was lowered due to the following /n/. This gives the possibility to derive both forms from a PLuwian preform */untsás/.[20] In the 1pl. pronoun, the CLuw. nominative *an-za-aš* = /antsás/ does not match the HLuw. nominative *a-za₅-za* = /antsánts/. Since HLuw. 1pl. nom. /antsánts/ has the same ending as the 2pl. nom. form *u-za₅-za* = /untsánts/, and since the latter was explained in section 4 as an original dat.-acc. form that replaced the original 2pl. nom. form *u-za₅-sa* = /untsás/, it seems safe to assume that 1pl. nom. /antsánts/, too, originally was a dat.-acc. form[21] that ousted an unattested */antsás/. This */antsás/ can then be seen as the regular correspondant to CLuw. 1pl. nom. *an-za-aš* = /antsás/, with both forms continuing PLuwian */antsás/.

Dative-accusative: Like in all Anatolian languages, the dative and accusative forms of the 1st and 2nd personal pronouns are formally identical, and I have therefore cited them here as a single case, the 'dative-accusative'. The CLuwian forms 1pl. dat.-acc. *an-za* = /antsá/ and 2pl. dat.-acc. *u-un-za* = /ontsá/ have the same structure, but do not match HLuwian 1pl. dat.-acc. **a-za₅-za* = */antsánts/ (see the preceding paragraph) and 2pl. dat.-acc. *u-za₅-za* = /untsánts/. The latter two forms show the synchronic nominal dat.pl. ending /-ants/, and therefore may be seen as innovated forms *vis-à-vis* their CLuwian counterparts *an-za* = /antsá/ and *u-un-za* = /ontsá/, which show an ending *-a* that has no parallel anywhere in the Luwian pronominal or nominal system.[22] We may thus reconstruct PLuwian */antsá/ and */untsá/, respectively. An interesting aspect is that the HLuwian forms have adopted the specifically dative ending of the nominal system, not the accusative ending (which is /-ntsi/), which seems to indicate that these forms are

---

20. It may not be fully excluded that the /o/ was present in Proto-Luwian times already, and that we should reconstruct PLuw. */ontsás/. However, for the further etymological value of this form this is immaterial, and I will therefore reconstruct a PLuw. stem */unts-/, not */onts-/, for the entire paradigm.

21. Thus already Yakubovich 2010: 68.

22. It seems impossible to equate this *-a* with the nominal nom.-acc.pl.n. ending *-a*, since the 1pl and 2pl. personal pronouns almost by definition refer to animate beings and therefore are expected to show common gender.

primary dative forms that happen to be used in the function of direct object (i.e. as accusatives) as well.

Ablative-instrumental: Although only a single abl.-instr. form is attested, HLuw. 2pl. *u-za+ra/i-i*, *u-za-ri+i* = /untsā́ri/ < */untsā́θi/, we may assume that similar forms existed for the HLuwian paradigm of the 1pl. as well, i.e. */antsā́θi/, as well as for the CLuwian paradigms, i.e. 1pl. **anzāti* and 2pl. **ūnzāti*. On this basis we can reconstruct Proto-Luwian */antsā́θi/ and */untsā́θi/, respectively.

Enclitic dative-accusative: If my analysis of CLuw. *ānzati* as a particle chain containing a 1pl. encl. dat.-acc. form *=nz* = /=nts/ is correct (see section 1 above), it would be the direct counterpart to HLuw. 1pl. encl. dat.-acc. *=za* = /=nts/. In the 2pl. pronouns, CLuw. *=mmaš* = /=mːas/ and HLuw. *=ma-za* = /=mants/ do not formally match each other. Since the HLuw. form contains the synchronic nominal dative plural /-ants/, whereas the *-aš* in CLuw. *=mmaš* has no parallel, it seems best to assume that HLuwian has innovated in this regard, and that the CLuwian form is more archaic. Note that here, too, the enclitic dat.-acc. form functions both as an indirect object (i.e. as a dative) and as a direct object (i.e. as an accusative), but that it formally apparently was seen as a specifically dative form. Moreover, it is telling that both CLuw. *=mmaš* and HLuw. /=mants/ are formally identical to the encl. dat.pl. of the 3rd person personal pronoun (a situation that is also the case in Hittite, cf. section 6 below), from which they probably were taken over. Since in the 3rd person, a formal distinction between the accusative and dative case is made, the fact that the dative form was taken over in the paradigm of the 2pl. person confirms that its "dative-accusative" form apparently was seen as a specifically dative form.

Genitival adjective: In Hieroglyphic Luwian, we find genitival adjectives that end in *-a/i-*, in *-ia/i-*, and in *-asa/i-*. Since *-ia/i-* and *-asa/i-* are synchronically productive genitival adjective suffixes, these forms can be secondarily made. It therefore seems best to assume that the *-a/i*-stem forms are more archaic, and we can therefore reconstruct PLuwian */antsá/í-/ and */untsá/í-/, respectively.

All in all, we can reconstruct the following paradigms for Proto-Luwian:

		Proto-Luwian
1pl.	nom.	*/antsás/
	dat.-acc.	*/antsá/
	abl.-instr.	*/antsä́θi/
	encl. dat.-acc.	*/=nts/
	gen.adj.	*/antsá/í-/

2pl.	nom.	*/untsás/
	dat.-acc.	*/untsá/
	abl.-instr.	*/untsä́θi/
	encl. dat.-acc.	*/=mmas/
	gen.adj.	*/untsá/í-/

§ 6. *Reconstruction of Proto-Anatolian*

In order to reconstruct the Proto-Anatolian paradigms of the 1pl. and 2pl. personal pronouns, we have to compare the Proto-Luwian forms to their corresponding forms in Hittite.[23]

		Proto-Luwian	Hittite
1pl.	nom.	*/antsás/	*u̯ēš*
	dat.-acc.	*/antsá/	*anzāš*
	abl.-instr.	*/antsä́θi/	*anzĕ̆daz*
	encl. dat.-acc.	*/=nts/	*=nnaš*
	gen.adj.	*/antsá/í-/	...

23. I will not treat the 1pl. personal pronominal forms that are (allegedly) attested in other Anatolian languages. The only relatively secure form is Lyc. *ñzzijehe/i-* 'belonging to us(?)' (Melchert 2004: 46), which, together with Proto-Luwian */ants-/, points to a Proto-Luwic stem */nts-/. *eDiAna*'s claim that Lycian also knows a form *azi* 'us' that has a cognate in Myl. *ãzi* 'us' (Payne *et al.* 2023, *eDiAna*-ID 2684) seems far less secure to me, and I will therefore not include these forms in the remainder of this article.

2pl.	nom.	*/untsás/	*šumeš*
	dat.-acc.	*/untsá/	*šumāš*
	abl.-instr.	*/untsáɵi/	*šumet, šumĕdaz*
	encl. dat.-acc.	*/=mmas/	*=šmaš*
	gen.adj.	*/untsá/í-/	...

Moreover, we have to take into account the following considerations:

Nominative: The PLuwian forms */antsás/ and */untsás/ do not match the Hittite forms *u̯ēš* and *šumeš* when it comes to their stems. Yet, the PLuwian ending */-ás/ is a direct match with the ending of Hitt. *šumeš*, which synchronically was accented: /-és/ (Kloekhorst 2014: 74). Hitt. *u̯ēš* may originally have contained an */-és/ as well, if the long vowel of *u̯ēš* = /u̯ếs/[24] is the result of a contraction of earlier */ue_és/. Although on the basis of internal Hittite data it cannot be determined what the original shape of this uncontracted forms was, outer-Anatolian evidence clearly points to the existence of a 1pl. nom. stem */uei-* (Skt. *vayám*, etc.), which implies that Hitt. *u̯ēš* goes back to earlier */uei-és/. In Luwian, the stem of the 1pl. nom. form */antsás/ is identical to that of the oblique cases, */ants-/, which in turn is a direct match with the Hitt. 1pl. oblique stem *anz-* = /ənts-/ < PAnat. */nts-/ (cf. below). We may thus assume that Hitt. *u̯ēš* < */uei-és/ reflects the Proto-Anatolian form, */uei-és/, and that in Luwian this form was replaced by */nts-és/, which regularly yielded PLuwian */antsás/. In the 2pl. pronoun, the Luwian stem */unts-/ does not match Hitt. *šum-*. Despite attempts at explaining the latter from a preform **usm-* *vel sim.*, which ultimately would be related to PLuw. */unts-/ (cf. Katz 1998: 138–141, with references to earlier literature), I prefer to keep the two stems apart. Since the 1pl. pronoun shows a suppletive paradigm in Proto-Anatolian, using a stem */uei-/ for the nominative case and a stem */nts-/ for the oblique cases, I would like to propose that the 2pl. pronoun, too, originally knew a suppletive paradigm, and that both in Luwian and in Hittite one of the stems had been levelled out. Since the Luwian stem */unts-/ resembles the oblique stem **us°* that is attested in other Indo-European languages (cf. below), I propose that */unts-/ was the original oblique stem. The Hittite stem *šum-*, in turn, would

24. Cf. Kloekhorst 2014: 160 for this analysis. Although, in Hittite, plene spelling of *e* after the vowel *u* does not necessarily denote vowel length (Kloekhorst 2014: 134–161), in *u̯ēš* we can assume the presence of a long vowel since otherwise we cannot explain the introduction of long /ế/ in the New Hittite 2pl. nominative form *šumēš* = /somếs/, which has replaced the Old Hittite form *šumeš* = /somés/, with short /é/, cf. Kloekhorst 2014: 74.

then originally have been the nominative stem. As I will explain in more detail elsewhere, I think Hitt. *šum-* represents /som-/ and goes back to a pre-Hittite form */tiom-/ (with assibilation of lenis */t-/ + /-i-/ > Hitt. /s-/). The initial */t-/ of */tiom-/ is, to my mind, of a secondary origin,[25] which means that the original stem was */iom-/. Since */iom-/ always stands in prevocalic position, */iomV°/, it can be derived, through */iouV°-/, from an earlier stem *$iHuV°$, according to the sound law *$CHuV$ > Hitt. *$CumV$* = /ComV/ (Kloekhorst 2008: 94), i.e. *$i̯Ḫu̯V°$ > */iouV°/ > Hitt. /iomV°/. This *$iHu-$ is, to my mind, directly related to the PIE stem *$iuH(-)$ that we find in Skt. nom. *yūyám*, Lith. nom. *jū̃s*, obl. *jū́-*, Goth. *jūs* 'you (pl.)'.[26] We thus can reconstruct PAnat. 2pl. nom. */ioués/.

Dative-accusative: The ending */-á/ of the PLuwian forms */antsá/ and */untsá/ does not match that of the Hittite forms *anzāš* and *šumāš*, which is *-āš* = /-ás/. Since the latter is identical to the nominal dat.pl. ending *-āš*, whereas the former is isolated within the pronominal and nominal system, we can assume that PLuw. */-á/ is more archaic, and that in Hittite the original forms secondarily received the nominal dat.pl. ending *-āš* (comparable to the situation in Hieroglyphic Luwian, cf. sections 4 and 5 above). It is interesting to see that, although these forms function both as direct objects and as indirect objects, in Hittite the specifically dat.pl. ending *-āš* is added, and not the acc.pl. ending, which was *-uš*. This again implies that these "dative-accusative" forms in fact were seen as specifically dative forms. The PLuwian ending */-á/ cannot reflect earlier *o*-vocalism, since *-*ó* would have yielded a long vowel in PLuwian, **/-ā́/. The ending cannot reflect earlier *a*-vocalism, either, since this would require the presence of an adjacent *h_2, and a preform *-$h_2é$ should have yielded PLuw. **/-χ:á/ (*h_2 is retained in Anatolian when adjacent to *s), whereas a preform *-$éh_2$ should have yielded PLuw. **/-ā́/, with a long vowel. The ending therefore can only reflect a morpheme with earlier *e*-vocalism, since *-*é* would regularly yield PLuw. */-á/. We can thus reconstruct the ending as PAnat. */-é/. The stems of the 1pl. forms, PLuw. /ants-/ and Hitt. *anz-* = /ənts-/,[27] are a direct match to each other

---

25. Possibly taken over from the 2sg. personal pronoun nom. *zīk* = /tsī́k/. I plan to elaborate on this idea elsewhere.

26. This implies that *$iuH(-)$ is the result of laryngeal metathesis in *$iHu-$. Cf. Lubotsky 2011 for examples of laryngeal metathesis in the sequence *$°iHuC° > *°iuHC°$, which can explain, for instance, the relationship between the Skt. verb *sīv-* 'to sow' < *sih_2u- and its *tá*-participle *syūtá-* < *$siuh_2-tó-$, in which the latter shows the result of laryngeal metathesis: **$°iHuC° > *°iuHC°$.

27. Cf. Kloekhorst 2014: 340–341 for the specific interpretation of Hitt. *anz-* as /ənts-/, with /ə/.

and reflect PAnat. */nts-/.[28] We thus arrive at the reconstruction of the PAnat. 1pl. dat.-acc. form as */ntsé/. In the 2pl. forms, PLuw. */unts-/ and Hitt. *šum-* = /som-/ do not match each other, and of these two, it is probably PLuw. */unts-/ that reflects the original PAnat. stem of the dat.-acc. form (cf. the preceding paragraph). We can therefore reconstruct the PAnat. form of the 2pl. dat.-acc. as */untsé/.

Ablative-instrumental: In Hittite, the abl.-instr. forms *anzĕdaz* and *šumĕdaz* are only attested in NS texts, whereas 2pl. abl.-instr. *šumet* is attested in an OH/OS? text.[29] We may thus assume that the latter represents an archaic form *vis-à-vis šumĕdaz*, and that, likewise, *anzĕdaz* has replaced an earlier **anzet*. The exact mechanism by which *anzĕdaz* and *šumĕdaz* are created is not fully clear; perhaps they are the result of simply adding the syncronic nominal ablative ending *-az* after the original forms **anzet* and *šumet*. The Hittite ending *-et* does not match the ending that we find in the PLuwian forms, */-ā́θi/. In both languages, the endings are synchronically productive: PLuw. */-ā́θi/ is identical to the Luwian nominal abl.-instr. ending /-ā́θi/; and Hitt. *-et* is identical to the Hittite nominal instr. ending *-et*.[30] Both could therefore in principle have been the result of secondary developments, and it is therefore not possible to decide on internal arguments what to reconstruct for Proto-Anatolian. However, if we look beyond Anatolian, it is clear that the Hittite ending *-et* has a direct match to the Sanskrit and Avestan pronominal ablative endings *-ád* (1sg. *mád*, 2sg. *tvád*, 1pl. *asmád*, 2pl. *yuṣmád*) and *-aṯ* (1sg. *maṯ*, 2sg. *θßaṯ*, 1pl. *ahmaṯ*, 2pl. *xšmaṯ*), respectively. We may therefore reconstruct this ending for Proto-Anatolian, too. When it comes to the stems of these forms, cf. the discussion in the preceding paragraphs. All in all, we can reconstruct PAnat. 1pl. abl.-instr. */ntsét/ and 2pl. abl.-instr. */untsét/.

Enclitic dative-accusative: The 1pl. encl. dat.-acc. forms of PLuwian, */=nts/, and of Hittite, *=nnaš*, do not match each other: the former seems to reflect PAnat. */=nts/ and the latter PAnat. */=nos/.[31] As we will see below, the enclitic */=nts/ can in principle reflect PIE *=ns*, which would thus form the *zero*-grade allomorph

---

28. It is not fully clear whether the vocalization of syllabic resonants is a Proto-Anatolian development, or occured independently in the daughter languages (I intend to elaborate on this question on another occasion). In other words, it is unclear whether we should reconstruct PAnat. */nts-/ or */ənts-/. Yet, if Lyc. *ñzz-* indeed means 'us' (cf. footnote 23), it would point to PAnat. */nts-/ rather than */ənts-/. For the remainder of this article, I will therefore note down the PAnat. form of this stem as */nts-/.

29. Cf. Kloekhorst 2014: 102–103 for this form and its interpretation as an abl.-instr. form of the 2pl. personal pronoun.

30. Kloekhorst 2014: 103–105.

31. See Kloekhorst 2014: 588–591 for the origin of the fortis *-nn-* in Hitt. *=nnaš*.

of PAnat. */=nos/ < PIE *=*nǒs*. Since the one cannot be easily explained as having arisen from the other, and *vice versa*, it seems best to assume that Proto-Anatolian had both forms, */=nts/ as well as */=nos/, albeit that we cannot reconstruct what the semantic distinction was between the two. The 2pl. encl. dat.-acc. forms of PLuwian, */=mːas/, and of Hittite, =*šmaš*, do match each other, and can be reconstructed as PAnat. */=smos/.[32]

Genitival adjective: Only Luwian shows specific genitival adjectives, */antsá/í-/ and */untsá/í-/, whereas in Hittite genitival semantics are expressed with proper genitives (1pl. *anzel*, 2pl. *šumenzan*, *šumel*) or with enclitic possessive pronouns (1pl. =*šummi/e/a*-, 2pl. =*šmi/e/a*-). Since genitival adjectives are also found outside of Anatolian (see below), we can probably project the Luwian genitival adjectives back to Proto-Anatolian. Since Luwian adjectival -*a/i*-stems in principle go back to Indo-European *o*-stems,[33] we can reconstruct PAnat. 1pl. gen.adj. */ntsó-/ and 2pl. gen.adj. */untsó-/.

Taking all considerations together, we arrive at the following reconstruction of the Proto-Anatolian paradigm of the 1pl. and 2pl. personal pronouns:

		Proto-Anatolian
	nom.	*/ueiés/
	dat.-acc.	*/ntsé/
1pl.	abl.-instr.	*/ntsét/
	encl. dat.-acc.	*/=nts/, */=nos/
	gen.adj.	*/ntsó-/

		Proto-Anatolian
	nom.	*/ioués/
	dat.-acc.	*/untsé/
2pl.	abl.-instr.	*/untsét/
	encl. dat.-acc.	*/=smos/
	gen.adj.	*/untsó-/

32. Thus Melchert 1994: 270: see there for a discussion about the assimilation */-sm-/ > Luw. /-mː-/ that this reconstruction presupposes.

33. Norbruis 2021: 9–50.

§ 7. *The Proto-Anatolian reconstruction in an Indo-European context*

If we want to compare the Proto-Anatolian reconstruction to the data of the other Indo-European languages, it is helpful to transpose the Proto-Anatolian forms into Proto-Indo-European phonemes. Several things are relevant here. First, the Proto-Anatolian stem */nts/ can regularly reflect PIE *ns-, which, as we will see below, is the stem found in other Indo-European languages. Second, since Proto-Anatolian */=nos/ is unaccented, it can reflect both a PIE short and a long vowel, *=nŏ̆s. Third, the Proto-Anatolian form */ioués/ can be transposed to PIE *iHués (cf. the discussion in section 6 above). And fourth, the Proto-Anatolian 2pl. stem */unts-/ does not match the stem *us- that we find in other Indo-European languages (cf. below). Yet, since the PAnat. 1pl. stem is */nts-/, we may assume that its /-nt-/ was taken over by the 2pl. stem, implying that PAnat. */unts-/ ultimately goes back to PIE *us-. With these considerations, the Anatolian forms can be transposed into PIE phonemes in the following way:

		Proto-Anatolian	transposed PIE
	nom.	*/ueiés/	*ueiés
	dat.-acc.	*/ntsé/	*nsé
1pl.	abl.-instr.	*/ntsét/	*nsét
	encl. dat.-acc.	*/=nts/, */=nos/	*=ns, *=nŏ̆s
	gen.adj.	*/ntsó-/	*nsó-

		Proto-Anatolian	transposed PIE
	nom.	*/ioués/	*iHués
	dat.-acc.	*/untsé/	*usé
2pl.	abl.-instr.	*/untsét/	*usét
	encl. dat.-acc.	*/=smos/	*=smos
	gen.adj.	*/untsó-/	*usó-

Let us now compare these Anatolian transpositions to the data from the other Indo-European languages.

Nominative: The stem of the Anatolian 1pl. nominative form *ueiés matches the *uei- found in Skt. *vayám*, Av. *vaēm*, and Goth. *weis*, and the element *uei can therefore be securely reconstructed for Proto-Indo-European. In Anatolian, it was

apparently enlarged with the nominal nom.pl.c. ending *-és. The stem of the Anatolian 2pl. nominative form *iHués formally resembles the stem *iuH- found in Skt. *yūyám*, Av. *yūžэ̄m*, Lith. *jū̃s*, and Goth. *jūs*. As discussed in section 6 above, we may perhaps assume that the Anatolian shape, *iHu-*, is more original than *iuH-*, and that the latter derived from the former through laryngeal metathesis.[34] In Anatolian, *iHu-* was enlarged with the nom.pl.c. ending *-és.

Dative-accusative: The Anatolian dat.-acc. forms, 1pl. *nsé* and 2pl. *usé*, both show an ending *-é* that may be compared to the *-é* that is attested in the 1sg. and 2sg. accusative forms in other Indo-European languages. For the 1sg., compare Gr. ἐμέ, OLat. *mēd* < *me + Vd*,[35] Skt. *mā́m* = /ma(H)ám/, Av. *mąm* < PIIr. *me + Hóm*, all from *h₁m-é*; for the 2sg., compare Gr. σέ, OLat. *tēd* < *te + Vd*,[36] Skt. *tvā́m* = /tva(H)ám/, Av. *θβąm* < PIIr. *tue + Hóm*, all from *t(u)-é*. We may therefore analyse Anat. 1pl. *nsé* and 2pl. *usé* as containing the same ending: *ns-é* and *us-é*, respectively. Note that a preform *nsé* would also directly yield Goth. 1pl. acc.-dat. *uns*. In Indo-Iranian and Greek, the 1pl. and 2pl. accusative forms have an additional -m-: Skt. 1pl. *asmā́n* < *asmá + -ān*, Av. 1pl. *ə̄hmā*, Gr. 1pl. ἄμμε (Lesb.), ἀμέ (Dor.), ἡμέας (Hom.) < *ἡμέ + -ας*, all from *nsmé*; and Skt. 2pl. *yuṣmā́n* < *y- + *uṣmá + -ān*, Gr. 2pl. ὔμμε (Lesb.), ὑμέ (Dor.), ὑμέας (Hom.) < *ὑμέ + -ας*, all from *usmé*. I would like to propose that these forms, too, ultimately go back to *nsé* and *usé*, respectively, but that first in the 1pl. form the *m* of 1sg. *h₁mé* was introduced, *nsé* → *nsmé*, and that, later, this *m* was taken over by the 2pl. form as well, *usé* → *usmé*. This development may be dated to after at least Anatolian and Germanic had left the Proto-Indo-European speech community (for Tocharian, Italo-Celtic, Balto-Slavic, Armenian, and Albanian, it cannot be determined whether their prestages had *nsé* and *usé* or *nsmé* and *usmé*, respectively).

The fact that in Anatolian a single form is used both for the accusative and the dative cases is matched by Germanic, where the same phenomenon is found, and it is therefore attractive to reconstruct this for Proto-Indo-European. In Anatolian, these forms are consistently treated as specifically dative forms (whenever they are remade, it is with nominal dat.pl. endings, not with acc.pl. endings), which indicates that these forms in *-é* were original dative forms that are also used for indicating the direct object (i.e. in accusative function). I see this as a confirmation for my earlier suggestion that the ending *-é* of 1sg. acc. *h₁mé*, 2sg. acc. *tué*

34. Cf. footnote 26 above.
35. Weiss 2020: 347.
36. Weiss 2020: 349.

originally had allative function (Kloekhorst 2018: 192). This was based on a combination of two arguments: first, *-*é* can in this way be seen as an ablaut variant of the allative ending *-*o* that can be reconstructed on the basis of Hitt. all.sg. -*a*, -*ā* (Dunkel 1994; Kloekhorst 2008: 161; Norbruis 2021: 51–97); and second, the semantic connection between allatives and accusatives is typologically common, since cross-linguistically allatives often extend their function to become accusatives (Heine 2009: 467).[37] Yet, allatives also often extend their function to become datives (Heine 2009: 467), so that the Anatolian dative use of the 1pl. and 2pl. forms in *-*é* can straightforwardly be explained from an earlier allative function, as well. All in all, we may reconstruct for Proto-Indo-European a dative-accusative case for the 1pl. and 2pl. personal pronouns of the shape *-*ns-é* and *-*us-é*, respectively, which reflects an earlier allative case.

Ablative-instrumental: The Anatolian ending *-*ét* is a direct match to the ending of Skt. 1pl. abl. *asmā́t*, 2pl. abl. *yuṣmā́t*, Av. 1pl. abl. *ahmaṯ*, 2pl. abl. *xšmaṯ*, and can thus be reconstructed for Proto-Indo-European: *-*ét*.[38] The Anatolian stems, *-*ns-* and *-*us-*, do not match the Indo-Iranian forms, however, which rather reflect *-*nsm-* and *-*usm-*, respectively. Yet, see the preceding paragraph for the proposal that the *-*m* in Indo-Iranian *-*nsm-* and *-*usm-* is of a secondary origin, and that Anatolian preserves a more original state of affairs: PIE *-*nsét*, *-*usét*.

Enclitic dative-accusative: The Anatolian 1pl. encl. dat.-acc. *-=nŏ́s* (the ancestor of Hitt. =nnaš) could in principle be a direct match to the *-=nōs* that we find in the OAv. 1pl. encl. acc. *nā̊* (< *-*nās*), or to the *-=nos* that can be found in Av. 1pl. encl. dat.-gen. *nə̄* (< *-*nas*) and Skt. 1pl. encl. acc.-dat.-gen. *nas*. The distinction between OAv. encl. acc. *nā̊* < *-*nōs* and dat.-gen. *nə̄* < *-*nos* is interesting,[39] and may reflect an archaic pattern. Since in Anatolian, unaccented *-*nōs* and *-*nos* would merge in *-/=nos/*, anyway, it cannot be determined whether it also adhered to this pattern or not. The Anatolian 1pl. encl. dat.-acc. *-=ns* (the ancestor of CLuw. =nz and HLuw. /=nts/) does not seem to have a match in the other Indo-European languages. Nevertheless, this does not necessarily mean that it

37. Cf. also nominal acc.sg. *-*m* that probably originally had allative meaning, as is still the case in e.g. Lat. *Romam* 'to Rome' (Kloekhorst 2018: 192, with references).

38. Cf. Kloekhorst 2018: 194[53]; 2020: 170–172 for the reasons to reconstruct this case with PIE *-*t*, not with *-*d* as some scholars do.

39. In Young Avestan, we find *nō* (< *-*nas*) in all three cases, implying that here the distinction between the accusative and the dative-genitive forms has been given up. In Sanskrit, too, we find a single form, *nas*, for all three cases, and this language may thus have undergone a similar elimination of the original distinction between PIIr. *-*nās* and *-*nas*.

cannot be reconstructed for Proto-Indo-European. A similar situation is found in the case of the Anatolian reflexive */=t:i/ (Hitt. =z, CLuw. =ti (with lenition), HLuw. /=θi/ (with lenition)) that can be transposed to a PIE form *=ti, which appears to be a *zero*-grade allomorph of *=toi that is attested in Skt. 2sg. encl. dat.-gen. *te*, OAv. 2sg. encl. dat.-gen. *tōi*, Gr. (dial.) 2sg. encl. dat. τοι. It goes beyond the scope of this article to discuss possible functional distinctions between PIE *=ns and *=nō̆s, but I do think that both forms existed in the proto-language. The Anatolian 2pl. encl. dat.-acc. *=smos has no match whatsoever in the other Indo-European languages, where we rather find *=uō̆s (Skt. 2pl. encl. acc.-dat.-gen. *vas*, OAv. 2pl. encl. acc. *vå̄* (< *vās*), encl. dat.-gen. *və̄* (< *vas*)). It is therefore generally assumed that Anatolian innovated in this regard, and took over the 3pl. encl. dat. *=smos (> Hitt. =šmaš, CLuw. =mmaš, HLuw. /=mants/, Lyd. =ms) into the paradigm of the 2pl. personal pronoun.

Genitival adjective: The Anatolian genitival adjectives *nsó- and *usó- do not have direct matches in the other Indo-European languages. However, in the 1sg. and 2sg., we do find similar formations: PAnat. */ʔmó-/ (HLuw. *ama/i-*), Gr. ἐμό-, Av. *ma-* < PIE *h₁mó- 'my'; PAnat. */tuó-/ (HLuw. *tuwa/i-*), Gr. σό-, Skt. *tvá-*, Av. *θβa-* < PIE *tuó- 'your'. Moreover, the existence of Gr. ἁμό- (Dor.) 'our' < *nsmó- and Gr. ὑμό- (Dor.) 'your' < *usmó-, both with an additional *m* in comparison to the Anatolian forms (see also the paragraphs above), does support the idea that Anat. *nsó- and *usó- reflect a Proto-Indo-European formation.

Taking everything together, we can reconstruct for Proto-Indo-European the following paradigms for the 1pl. and 2pl. personal pronouns.[40] Especially the reconstruction of the dat.-acc. ending *-é, the 2pl. oblique stem *us-, as well as the genitival adjectives *ns-ó- and *us-ó- crucially depend on Luwian data.

	Proto-Indo-European	
	1pl.	2pl.
nom.	*uei	*iHu
dat.-acc. (< *all.)	*ns-é	*us-é
abl.-instr.	*ns-ét	*us-ét
encl. dat.-acc.	*=ns, *=nō̆s	*=uō̆s
gen.adj.	*ns-ó-	*us-ó-

40. I will not go into the reconstruction of the genitive case of these pronouns, since this case is unattested in Luwian.

§ 8. *References*

ACLT₁ = I. YAKUBOVICH, *Annotated Corpus of Luwian Texts*, web-corpora.net/LuwianCorpus.

DUNKEL, G. E. 1994. "The IE directive". In: G. E. Dunkel *et al.* (eds.), *Früh-, Mittel-, Spätindogermanisch. Akten der IX. Fachtagung der Indogermanischen Gesellschaft vom 5. bis 9. Oktober 1992 in Zürich*. Wiesbaden: Reichert, 17–36.

eDiAna = O. HACKSTEIN *et al*. (eds.), *Digital Philological-Etymological Dictionary of the Minor Ancient Anatolian Corpus Languages*. München/Marburg, www.ediana.gwi.uni-muenchen.de.

GÖRKE, S. (ed.). 2014. hethiter.net/: CTH 757 (Expl. E, 05.06.2014).

HACKSTEIN, O. 2007. "Ablative formations". In: A. J. Nussbaum (ed.), *Verba Docenti. Studies in Historical and Indo-European Linguistics Presented to Jay H. Jasanoff by Students, Colleagues, and* Friends. Ann Arbor/New York: Beech Stave, 131–153.

HAWKINS, J. D. 2000. *Corpus of Hieroglyphic Luwian Inscriptions: Inscriptions of the Iron Age*. 3 Vols. Berlin/New York: De Gruyter.

HEINE, B. 2009. "Grammaticalization of cases". In: A. L. Malchukov and A. Spencer (eds.), *The Oxford Handbook of Case*. Oxford: Oxford University Press, 458–469.

HH = E. LAROCHE. 1960. *Les hiéroglyphes hittites*, Paris: Editions Du Centre National De La Recherche Scientifique.

HT = L. W. KING (ed.). 1920. *Hittite Texts in the Cuneiform Character from Tablets in the British Museum*. London.

KATZ, J. T. 1998. *Topics in Indo-European Personal Pronouns*. Harvard dissertation.

KLOEKHORST, A. 2008. *Etymological Dictionary of the Hittite Inherited Lexicon* (= *Leiden Indo-European Etymological Dictionary Series* 5). Leiden/Boston: Brill.

KLOEKHORST, A. 2014. *Accent in Hittite: A Study in Plene Spelling, Consonant Gradation, Clitics, and Metrics* (= *Studien zu den Boğazköy-Texten* 56). Wiesbaden: Harrassowitz.

KLOEKHORST, A. 2018. "The origin of the Proto-Indo-European nominal accent-ablaut paradigms". In: E. Rieken (ed.), *100 Jahre Entzifferung des Hethitischen. Morphosyntaktische Kategorien in Sprachgeschichte und Forschung. Akten der Arbeitstagung der Indogermanischen Gesellschaft vom 21. bis 23. September 2015 in Marburg*. Wiesbaden: Reichert, 179–203.

KLOEKHORST, A. 2020. "The phonetics and phonology of the Hittite dental stops". In: R. I. Kim, J. Mynářová and P. Pavúk (eds.), *Hrozný and Hittite: The First Hundred Years. Proceedings of the International Conference Held at Charles University, Prague, 11–14 November 2015* (= *Culture and History of the Ancient Near East* 107). Leiden/Boston: Brill, 147–175.

KUB = *Keilschrifturkunden aus Boghazköi*. Berlin, 1921 ff.

LUBOTSKY, A. M. 2011. "The origin of Sanskrit roots of the type *sīv*- 'to sew', *dīv*- 'to play dice', with an appendix on Vedic *i*-perfects". In: S. W. Jamison, H. C. Melchert and B. Vine (eds.), *Proceedings of the 22nd Annual Indo-European Conference*. Bremen: Hempen, 105–126.

MELCHERT, H. C. 1993. *Cuneiform Luvian Lexicon* (= *Lexica Anatolica* 2), Chapel Hill: self-published.

MELCHERT, H. C. 1994. *Anatolian Historical Phonology* (= *Leiden Studies in Indo-European* 3), Amsterdam/Atlanta: Rodopi.

MELCHERT, H. C. 2003. "Language". In: H. C. Melchert (ed.), *The Luwians* (*Handbook of Oriental Studies, Section One, Near and Middle East Volume* 68). Leiden/Boston: Brill, 170–210.

MELCHERT, H. C. 2004. *A Dictionary of the Lycian Language*. Ann Arbor/ New York: Beech Stave.

MELCHERT, H. C. 2019. "Hittite and Luvian *uppa*- and Hittite *uiya-*". In: A. Süel (ed.), *IX. Uluslararası Hititoloji Kongresi Bildirileri Çorum 08–14 Eylül 2014 / Acts of the IXth International Congress of Hittitology Çorum, September 08–14, 2014.* Çorum: Baski, Dumat Ofset, 567–578.

MELCHERT, H. C. 2020. "Hittite Historical Phonology after 100 Years (and after 20 years)". In: R. I. Kim, J. Mynářová and P. Pavúk (eds.), *Hrozný and Hittite: The First Hundred Years. Proceedings of the International Conference Held at Charles University, Prague, 11–14 November 2015*. Leiden/Boston: Brill, 258–276.

MORPURGO DAVIES, A. 1980. "The personal endings of the Hieroglyphic Luwian verb". *Zeitschrift für vergleichende Sprachforschung* 94, 86–108.

NORBRUIS, S. 2021. *Indo-European Origins of Anatolian Morphology and Semantics. Innovations and Archaisms in Hittite, Luwian and Lycian*. Amsterdam: LOT.

PAYNE, A. and BAUER, A. 2023. Hieroglyphic Luwian /*anzi*(*ya*)-/, *a-zi*- (eDiAna-ID 2685), *eDiAna*.
(URL: http://www.ediana.gwi.uni-muenchen.de/dictionary.php?lemma=2685) last visited on 14/12/2023.

PAYNE, A., BAUER, A., BILLING, O. and SASSEVILLE, D. 2023. Proto-Anatolian *n̥s- (eDiAna-ID 2684), *eDiAna*. (URL: http://www.ediana.gwi.uni-muenchen.de/dictionary.php?lemma=2684) last visited on 14/12/2023.

PLÖCHL, R. 2003. *Einführung ins Hieroglyphen-Luwische* (= *Dresdner Beiträge zur Hethitologie* 8), Dresden: Verlag der TU Dresden.

RIEKEN, E. 2005. "Zur Wiedergabe von hethitisch /o/". In: G. Meiser and O. Hackstein (eds.), *Sprachkontakt und Sprachwandel. Akten der XI. Fachtagung der Indogermanischen Gesellschaft. 17. –23. September 2000, Halle an der Saale*. Wiesbaden: Reichert, 537–549.

STARKE, F. 1985. *Die keilschrift-luwischen Texte in Umschrift* (= *Studien zu den Boğazköy-Texten* 30). Wiesbaden: Harrassowitz.

VERTEGAAL, A. 2017. "Filling in the facts. The practice of space-filling in Hieroglyphic Luwian inscriptions". *Altorientalische Forschungen* 44/2, 235–260.

WAAL, W. J. I. 2021. "A new interpretation of the opening lines of the Assur Letters. Including a discussion of the Hieroglyphic Luwian lexemes *hatura-*, *api* and (*205)*atun*(*i*)-". *Zeitschrift für Assyriologie* 111/2, 263–281.

WEISS, M. 2020. *Outline of the Historical and Comparative Grammar of Latin. Second Edition*. Ann Arbor/New York: Beechstave.

YAKUBOVICH, I. and MOUTON, A. 2023. *Hittite-Luwian Ritual Texts Attributed to Puriyanni, Kuwattalla and Šilalluḫi* (*CTH 758–763*). *Volume I: Edition and Commentary* (= *Studien zu den Boğazköy-Texten* 72,1). Wiesbaden: Harrassowitz.

YAKUBOVICH, I. 2010. *Sociolinguistics of the Luvian Language* (= *Brill's Studies in Indo-European Languages & Linguistics* 2). Leiden–Boston: Brill.