# *Hi*-inflected verbal \*CóC-stems in Cuneiform and Hieroglyphic Luwian<sup>1</sup>

In Luwian, as in Hittite, the \*C $\acute{o}$ C-stem formation is the counterpart of PIE. perfect \* $C_1e$ - $C_1\acute{o}$ C<sub>2</sub>-. In Proto-Anatolian, the PIE. perfect shows very few traces of reduplication; principally, it shows only the o-ablaut. Structurally, the Hittite -hi verbs are best compared to the PIE. perfect \* $\chi oid$ - 'to know', which was unreduplicated. While this situation has been examined in depth in the case of Hittite, a study of this kind focusing specifically on Luwian is still lacking. This article aims to explore this issue for Cuneiform and Hieroglyphic Luwian.

**Key words:** -hi verbs in Luwian, Anatolian verbal morphology, Anatolian unreduplicated perfect stems.

#### 1. Introduction

It is well known that the conjugation of the Hittite finite verb is dominated by two sets of endings in the active singular, present and preterit, with no functional difference: these are known as the *-mi* conjugation and the *-hi* conjugation.

Luwian (Hieroglyphic Luwian and Cuneiform Luwian) has one verbal conjugation comparable to the Hittite *-mi* conjugation, and some (though very few) traces of a second *-hi* conjugation. A brief examination of Luwian (and also of Lycian and Palaic) indicates that the minor Anatolian languages do not show a distinction between the *-mi* and *-hi* conjugations within the active category, which is crucial in Hittite; in contrast, it seems that their present stems generalized the *-mi* series, while the preterite stems generalized the *-ha* series:

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Table 1. Present and	nreterite verhal	Lendinos	of the	-mi and	-H1 C	oniligation i	n I mwaan
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Present	Cuneiforn	n Luwian	Hieroglyphic Luwian		
Tresent	-mi	-ḫi	-mi	-ḫi	
act. sg. 1	- <u>u</u> i		-ŭi		
2	-ši, -tiš, -šši	-šši, -ti	-si, -tis		
3	-ti, -tti-	-(a)i	-ti, -ri,	i, ia	
pl. 1	-unni				
2	-ttani <sup>?2</sup>		-tani		
3	-anti		-nti		

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<sup>&</sup>lt;sup>2</sup> See Melchert 2003: 192.

Preterite	Cuneiform	ı Luwian	Hieroglyphic Luwian		
Treterite	-mi	-ḫi	-mi	-ḫi	
act. sg. 1	-ђа, -ђђа	-ђђа	-ha(n) <sup>3</sup>		
2		-š		-ta	
3	-ta, -tta	-tta	-ta, -ra	-ta	
pl. 1					
2					
3	-a(u)nta		-a(u)nta		

But a closer look at the data (see *table 1*) shows that Luwian shares the same feature in the endings of present and preterite: there are two sets of endings which correspond to the *-mi* and *-hi* conjugations (see Morpurgo-Davies 1980 and 1982). This observation is especially evident in the 3sg present endings, since the same phenomenon is attested in Cuneiform and Hieroglyphic Luwian and probably in Lycian (for Lycian, see Vernet *in print*). It is precisely this 3sg present that I have used as the basis for my compilation of the Luwian *-hi* verbs in order to focus on the *-hi* inflected verbal \*CóC-stems documented in Luwian, as I will explain in the following sections (2 and 2.1).

# 2. -hi verbs in Cuneiform and Hieroglyphic Luwian (3sg.pres. -i, -ia)

In their studies of the *-hi* verbs in Anatolian, scholars seem to have focused almost exclusively on Hittite, or at least have taken Hittite *-hi* inflected verbs as their point of departure. The contributions of Eichner 1975, Oettinger 1979, Jasanoff 2003, and the study on the Hittite verbal stems presented by Kloekhorst 2008 are examples of the interest this issue has raised in Hittite studies. But as far as I know, despite the contributions by Morpurgo-Davies (1979) and Yoshida (1993), a study of this kind focusing specifically on Luwian is still lacking.

In order to study these characteristics focusing on the *-hi* conjugation in Cuneiform and Hieroglyphic Luwian, I began by producing a compilation of all the *-hi* inflected verbs in Luwian, and then used it to try to identify the verbs which show *-hi* inflected verbal \**CóC*-stems. As mentioned above, since the only way we have of knowing whether a verb follows the *-hi* inflection in Luwian is the 3sg present ending in *-i* (and not *-ti*, *-ri*, which follow the *-mi* inflection), all the verbs for which this *-i* ending is attested were included.<sup>4</sup> I used the following reference works: for Cuneiform Luwian, Melchert's dictionary (1993), the *Cuneiform Luwian Lexicon*, and Yakubovich's online *Annotated Corpus of Luwian Texts* (henceforth ACLT); for Hieroglyphic Luwian, Hawkins 2000, and once again Yakubovich's *Annotated Corpus of Luwian Texts*.

<sup>&</sup>lt;sup>3</sup> The distinction CLuwian made between -ha and -ha (lenited vs. non-lenited) in the first person singular preterite cannot be found in HLuwian due to its imprecise writing system. However, the fact that the writing system of HLuwian does not reflect this distinction does not mean necessarily that it would have not existed in HLuwian (see. Melchert 2003: 192; Yakubovich 2015, § 6.5, and Melchert *forthcom*.). Lycian, a Luwic language of the first millennium closely related to Luwian, still documents a double ending for the first person singular preterite:  $-g\tilde{a}$  and  $-\chi\tilde{a}$ ,  $-\chi a$  (see Vernet *in print*).

<sup>&</sup>lt;sup>4</sup> For CLuwian I also consider the likelihood (observed by Melchert 1993: iv) of a CLuwian second singular -*hi* present ending -*ti* beside the third singular ending -(*a*)*i*, which only occurs in three verbs: *lāla-*, *nana-* and *waliya-*.

# 2.1 \*CóC-stems in Cuneiform and Hieroglyphic Luwian

In Luwian, as in Hittite, the \* $C \circ C$ -stem formation is the counterpart of PIE. perfect \* $C_1 \circ C_2$ -. In PA., the PIE. perfect shows hardly any traces of a reduplication syllable, only the o-ablaut. Nevertheless, a few examples have a reduplication syllable and may have had a PIE. perfect origin. But structurally, the Hittite -hi verbs are best compared to the unreduplicated PIE. Perfect \* $\mu$ oid- 'to know' (documented in Ved.  $\nu$ 0Av.  $\nu$ 0Av.

In my opinion, the situation of Luwian is similar to that of Hittite: we have very few examples of a reduplicated stem (< PIE. perfect  ${}^*C_1e$ - $C_1\delta C_2$ -), and we also find some cases of unreduplicated  ${}^*C\delta C$ -stems which are -hi inflected and may have had a PIE. perfect origin. According to the data I have compiled, in Luwian there are six examples of this stem formation:

- CLuw. lā, HLuw. la- (i) 'to take'
- CLuw. pai- 'to give', (HLuw. piya- 'id')
- HLuw. was- 'to buy'
- Probably PLuw. \*zahha- (cf. HLuw. zahhanuwa 'to attack')<sup>6</sup>
- Maybe CLuw. paš- 'to swallow' (see pappaša- 'id.')
- Maybe CLuw. tā- 'to stand' and HLuw. ta- 'id.'

These examples are important because it has sometimes been debated whether Hittite and Luwian or the Luwic languages really had etymologically connected *-hi* inflected verbs. In the light of this study, it seems evident that there did indeed exist inherited *-hi* verbs in both branches, although the examples are few; we will see this in detail below.

In what follows I present the list of -hi inflected verbs with a \*CóC-stem formation. For each verb I indicate the passages where a 3sg pres. in -i/-ia ending is attested, because this is

Luwian has other instances of reduplicated -hi inflected verbal stems, such as in ililha- (i) 'to wash (off)' (CLuw.), but with obscure etymology. In other examples, such as in CLuw. pupulla[ 'to write', or HLuw. puballa- 'to scribble', which do have reduplication of the stem, it is not possible to determine if they follow a -hi conjugation or not. In all these examples it is not possible to reconstruct either a PA. or PIE. etymology or an inherited -hi conjugation; consequently, they cannot be analysed as stems inherited from PIE. perfects.

<sup>&</sup>lt;sup>5</sup> The data I have gathered suggest that Luwian has a few verbs which show reduplication of the stem and have cognates in Hittite, and they are most certainly inherited. These examples can be interpreted as coming from PIE. perfects  $*C_1e-C_1óC_2$ - but also as reduplicated historical stems from a basis attested in Luwian, as for instance:

<sup>-</sup> CLuw. and HLuw. *mammanna-i* 'to see' (< PIE. perfect \**me-món/mn-*, although it could also be analysed as a reduplicated historical stem from CLuw. *manā-* (*ti*) 'to see').

<sup>-</sup> CLuw. nana (i) 'to lead' (reduplicated form of cognate of Hitt.  $n\bar{a}(i)^{-i}$  / \*ni- 'to turn, lead, send'. In my opinion, a parallel cognate of derivative is Hitt.  $nanna^{-i}$  / nanni-).

HLuw. sasa- (i) 'to release' (redupl. form of sa- (i) 'id.' (CLuw. and HLuw.); cognate of Hitt. sai-i/si- 'to impress, to seal' (Eichner 1983: 48-66) and sissai-/ssis- 'to impress' < PIE. \*seh₁(i)- 'säen, loslassen' (LIV²: 518), cfr. Lat. serō, Goth. saian, Lith. séju, OCS sějo 'to sow').</li>

HLuw. tatta- (i) 'to stand' (maybe < PIE. perfect \*ste-stoh<sub>2</sub> or instead, a reduplicated stem formed in historical times).

<sup>&</sup>lt;sup>6</sup> In this case, as in the following example, I must reconstruct a PLuw. -*hi* stem which is only indirectly documented in Luwian (*via* a derivative verbal stem), but is well attested in Hittite as a -*hi* verb.

how we know whether or not a verb follows the *-hi* conjugation. I also indicate whether it is attested in Cuneiform or Hieroglyphic Luwian, or in both, and finally I give an etymology of the verb, indicating its Anatolian cognates and its PIE. origin whenever possible.

# §1. *la-* (*i*) 'to take' (CLuw. *lā-* and HLuw. *la-*)

Melchert 1993: 120; ACLT s.v.

Cuneiform Luwian: no examples of 3sg. present are attested, whereas in HLuwian there are a great many examples (see the section below). The logogram CAPERE is frequently used for rendering the root. CLuwian shows long  $\bar{a}$  in the stem in some instances: 3sg. pret. act. la-a-at-ta, 3sg.imp.act. la-a-ad-du, 3pl.imp.act. la-a-an-du), just as in Hitt.  $d\bar{a}$ -d- 'to take' (see the etymology of this section below).

Hieroglyphic Luwian:

KARKAMIŠ A2+3 § 20: *wa/i-tà-tá-' \za-a-ti-i* (DEUS)TONITRUS-*ti-i ARHA* \ CAPERE-*i* '(and) takes them away from his Karkamišean Tarhunzas,'

Also documented in: BOROWSKI 3 § 9; ARSUZ 2 §23 (s. Yakubovich ACLT s.v.); BOYBEYPINARI 2 § 19; ANCOZ 7 B § 4; KARKAMIŠ A15b § 12; ALEPPO 2 § 13; ALEPPO 2 § 18; KARKAMIŠ A2+3 § 20; BOROWSKI 3 § 9; ARSUZ 2 § 23 (s. Yakubovich ACLT s.v.); ANCOZ 7 B § 4; KARKAMIŠ A15b § 12; III. ALEPPO 2 § 13; ALEPPO 2 § 18; KÖRKÜN 4 § 8; ARSUZ 1 § 23 (s. Yakubovich ACLT s.v.); KÖTÜKALE 5 § 5; KARKAMIŠ A6 § 28; KARKAMIŠ A6 § 30; KARKAMIŠ A6 § 27; KARKAMIŠ A4a § 12; ASMACIK 1.1-2; KELEKLİ 3 § 2; HAMA 5 1 § 1; HAMA 4 § 8.

ETYMOLOGY: PIE. *deh*<sub>3</sub>- 'to give', cfr. Skt. *dádāti*, Av. *daδāiti*, Arm. *tam*, Gk. δίδωμι, Lat. *dō*, *dare*, OLith. *duosti*, OCS *daxъ* 'he gave'.

Anatolian cognates: Hitt.  $d\bar{a}^{-i}$  /  $d^{-}$  'to take, to wed, to decide', a -hi verb. Pal. unclear: dahha '?' (1sg.pret.act); CLuw. and HLuw. lala 'to take' show a reduplicated verbal root; Lyc. B  $da^{-}$  'take' ?.

The exact morphological interpretation of Hitt.  $d\bar{a}^{-i}/d$ - 'to take, to wed, to decide' has caused some debate among scholars. Eichner (1975: 93f.), followed by Oettinger (1979: 500f.), contends that this verb was middle in origin and that 1sg.aor.midd. \* $dh_3h_2\acute{a}$  and 2sg.aor.midd. \* $dh_3th_2\acute{a}$  regularly yielded Hitt. \*dahha and \*\*datta, on the basis of which an active paradigm was built:  $d\bar{a}hhi$ ,  $d\bar{a}tti$ ,  $d\bar{a}i$ , etc. In a similar way, Melchert (1984: 25) proposed that 3sg.pres.midd \* $dh_3$ -e/o should be reinterpreted as a stem \* $dh_3e/o$ -+ zero ending, which caused the spread of this thematic stem in the singular, yielding \* $dh_3e/o$ - $h_2ei$ , \* $dh_3e/o$ - $th_2ei$ ,  $dh_3e/o$ -ei. But Eichner's assumption that \* $Ch_3C$  > Hitt.  $C\bar{a}C$  has no parallels; nor does Melchert's construct of a thematic -hi verb.

In my view, Kloekhorst's interpretation fits better. According to him, Hitt.  $d\bar{a}^{-i}/d$ - 'to take, to wed, to decide' was not originally middle, but a normal -hi inflecting root-present, and just like all -hi verbs it shows an original \*o grade: \* $doh_3$ - $h_2ei$ , \* $doh_3$ - $th_2ei$ , \* $doh_3$ -ei, \* $dh_3$ - $u\acute{e}ni$ , etc. These forms regularly yield  $d\bar{a}hhe$ ,  $d\bar{a}tti$ ,  $d\bar{a}i$ ,  $tum\bar{e}ni$ , etc.

The same interpretation should be applied to CLuw.  $l\bar{a}$ - 'to take', which still shows a long root vowel, and HLuw. la- 'id.', a -hi verb.

Lyc. B. *da-* 'take'? is attested in the following passages (Melchert 2004; Neumann 2007): pret. 3Sg *date* 55,3.

imv. 3Sg dadu 44d 36.

Shevoroshkin (2002: 138ff.) analyses it as a verb with the meaning 'take', equivalent to Hitt. *da-* 'take' according to Neumann (2007 s.v.). Since all the Anatolian languages show *-hi* 

conjugation, and since Lyc. B 3sg pret. does not indicate otherwise (there are no traces of lenition in pret.3sg), in my view (Vernet *in print*) it is highly plausible that this verb has inherited the *-hi* conjugation. Since these forms show a *-hi* inflection and are cognates, this verb must have been inherited and reconstructed for PA. It also seems plausible that it had an \*o-ablaut.

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§2. pai- (i) 'to give (?)' (CLuw.) Melchert 1993: 163; ACLT s.v.
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CLuw. *pai-* < \*PA. *pói-*. Cfr. CLuw. and HLuw. *pia-* 'to give', a *-hi* verb, Lyc. *pije-* 'to give' < thematicized stem \**piio-*.

ETYMOLOGY: Cognate to Hitt. *pai-i* / *pi-* 'to give', which clearly shows an ablaut *pai-* / *pi-* and a *-hi* inflection and Lyc. *pije-* 'to give'. In my opinion, and also according to Kloekhorst (2008: 615) this situation should also be reconstructed for PA. Luw. *piya-* and Lycian *pije-* generalized the thematicized stem \**piio-* with zero grade of the stem. However, CLuw. has preserved some Ištanuwian forms that reflect the full grade of the root *pai-* <\**pói-* 'to give'.

As far as the PIE. etymology is concerned, the verb is generally explained as a univerbation of the preverb  $pe-+*(h_1)ai-$  or \*(H)ei-, connected with Toch. B ai-, Toch. A e- 'to give' and Gk.  $\alpha$ ĭvuµı 'to take'. Lyd. bi- 'give' (Gusmani 1964: 78) would then come from PIE.  $*h_1ai-$  'geben; nehmen' (LIV²: 229). Kloekhorst (2008: 615) prefers to reconstruct another root, and proposes  $*h_1ep-$  'to seize, to grab' as is clear from Alb. ap- 'to give' and Germ. \*geb- 'to give' ( $*ga-+*h_1ep-$ ), and reconstructs a present stem  $*h_1p-oi-/*h_1p-i-$  for PA. \*pói-/pi-.

In my view, since Hitt., CLuw., HLuw. and Lyc. show *-hi* inflection of the verb, this inflection together with an \**o*-ablaut should also be reconstructed for PA.

## §3. was- (i) 'to buy' (HLuw.)

Hieroglyphic Luwian:

KULULU lead strip 2 §1, 2: 68 OVIS-na 'la-li-sá 'mara/i-sà-ta-ia 'pi-ia-i 'ku-ki-sà-ta-za 'kwa/i-za 'wa/i-si-i' 68 sheep Lalis gives to Marasatas, so that he will buy them for the KUKISATI'S'

ETYMOLOGY: In my view, a cognate parallel of Hitt.  $\mu \bar{a} \bar{s}^{-i}$  'to buy', which already shows -hi inflection in the oldest forms, as in HLuwian. In this case a PA. -hi inflected verb must be reconstructed from PIE. \* $\mu \dot{o}s$ - $e\dot{i}$  (see Kloekhorst 2008: 980 who does not mention the example of HLuw.), with the following IE. cognates: Skt.  $vasn\acute{a}$ - 'price', Gk.  $\dot{w}vo\varsigma$  (n.) 'price', Lat.  $v\bar{e}num$  dare 'to sell', Arm. gin 'price' < \* $\mu esno$ -. Hitt.  $\mu \dot{s}ni\dot{\mu}e/a$ -zi reflects a zero grade of the same root. In NS texts, a derived stem  $\mu \ddot{a} \dot{s} \dot{\mu}e/a$ -zi can be found.

## §4. PLuw. \*zahha- (cfr. HLuw. zahhanu(wa)- (i) 'to attack')

In my opinion, HLuw. zahhanu(wa)- 'to attack' is the causative of a basis stem \*zahha-, not attested in Luwian but a parallel cognate to Hitt.  $z\bar{a}h^{-i}/zahh$ - 'to hit, to beat', a -hi verb. According to Oettinger (1979: 446) and Kloekhorst (2008: 1020), it is likely that the -hi conjugation was the older one in Hittite. Kloekhorst (2008: 1020) reconstructs a root \* $tieh_2$ - for Hitt.  $z\bar{a}h^{-i}$  (<\* $ti\acute{o}h_2$ -ei) and connects it to Gk.  $σ\~ημα$  'sign', Gk.  $σ\~ωμα$  'corpse',  $σ\~ιτος$  'grain, food'. In Luwian the base verb \*zahha- of zahhanu(wa)- is not attested, but since a derivate of it can be found and is well attested in Hittite, it is likely that an o-ablauting -hi verb in PA. existed as the origin of all these Anatolian cognates.

# §5. CLuw. paš-'to swallow' (see pappaša-(i) 'swallow') (Melchert 1993: 165) (CLuw.)

Cuneiform Luwian:

Pres3Sg: *pa-ap-pa-ša-i*: KBo IV 14 iii 37 (+ arha).

Hitt.  $p\bar{a}\dot{s}^{-i}$  /  $pa\dot{s}^{-}$  'to swallow' shows -hi inflection together with some forms with -mi endings. However, the -hi inflection should be considered as the original one (in this regard, see Kloekhorst 2008: 649). Judging by the -hi infection of  $pappa\dot{s}a^{-}$  (i) 'to swallow' and Hitt.  $p\bar{a}\dot{s}^{-i}$  /  $pa\dot{s}^{-}$ , it is likely that the same -hi inflection operated in CLuw.  $pa\dot{s}\dot{s}^{-}$  'to swallow' (as occurs, for instance, in CLuw.  $sa^{-}$ 'to release', HLuw. redupl.  $sassa^{-}$  'id.' and Hitt.  $sai^{-i}$  /si, all three cases being -hi inflected), although no 3sg.pres. example that might confirm it is documented for CLuwian. If this is true, a -hi inflection with o-ablaut for \* $pa\dot{s}$ -/  $pa\dot{s}$ - should be reconstructed for PA.

# §6. tā- (i) and ta- (i) 'to stand' (CLuw. and HLuw. respectively)

Cuneiform Luwian tā-:

3sg.Pres. *ta-a-i* (*KBo* XXIX 31 iv 6 (?)).

Hieroglyphic Luwian ta-:

KARATEPE 1 Hu. § XLVIII 261–272: wa/i-na ¦i-zi-sa-tu-na ta-ia ("FLUMEN")há-pa+ra/i-sá ¦OMNIS.MI-i-sá ¦(ANNUS)u-si mara/i BOS.ANIMAL-sá (\*486)kwa/i-tu-na-ha (OVIS.ANIMAL) há-wa/i-sá ¦"VITIS"(-)há+ra/i-ha OVIS.ANIMAL-wa/i-sa 'and every river-land will begin to honor him: by (?) the year an ox, and at the cutting (?) a sheep and at the vintage a sheep'

KARATEPE 1 Hu. § LXXV 408–412: (DEUS)LUNA+*MI-sa-wa/i* (DEUS)SOL-*ha kwa/i-ri+i á-la/i-ma-za* "CRUS"-*i* 'as the Moon's and the Sun's name stands'

Also documented in: KARKAMIŠ A2+3 § 18; ALEPPO 2 § 25; SULTANHAN 2 § 38; SULTANHAN F1 § 40; BABYLON 1 5 § 10; YUNUS (KARKAMIŠ) § 4 (s. Yakubovich ACLT); TİLSEVET (alias EKİNVEREN) 3 § 6; KARKAMIŠ A18h § 4; CEKKE 11; KARATEPE 1 Ho. §XLVIII 261–272; HİSARCIK 1 § 3; SULTANHAN § 39; SULTANHAN § 21; KARKAMIŠ A5a §12; BOROWSKI 1, 2 (s. Yakubovich ACLT); KARKAMIŠ A2+3 § 18; ARSUZ 2 (AMUQ) § 5 (s. Yakubovich ACLT); KARKAMIŠ A5a § 13.

ETYMOLOGY: < PIE. \*(s)teh<sub>2</sub>- 'wohin treten, sich hinstellen' (LIV<sup>2</sup>: 590; IEW 1004–8), cfr. Ved. ásthāt 'ist getreten', Arm. er-t'a- 'gehen', Gk. ἔστην 'trat, stellte mich hin', etc. Morpurgo Davies (1987: 205–228) connected the Luwian  $t\bar{a}$ - and ta- verbs with Hitt. tiie/a- 'to step, to go stand'. Lyc. stta- 'to stand' is controversial (see the section below).

For CLuw.  $t\bar{a}$ - and HLuw. ta-, LIV² reconstructs a PIE. perfect stem \*ste-stóh₂/sth₂-, whereas in Kloekhorst's view (2008: 880) they come from a present stem with o-ablaut \*(s)tóh₂-ei, which in my opinion fits better, judging by its -hi inflection. In these examples, the loss of its -h- can be explained by analogy with all other forms of the paradigm where \*h₂ is dropped in preconsonantal position (see Kloekhorst 2008: 880). Lyc. stta- 'to stand' is a matter of controversy among scholars, who consider it to be either a loanword from Gk. ἵoτη $\mu$ u or a verbal form inherited from PIE. \*steh₂-; maybe, as Neumann suggests (2007: 333), following Oettinger, it is a reduplicated form \*ste-ste (< \*steh₂-) > dissimilation \*ste-te > stte- with geminated consonant. In any case, the original verbal stem of Lyc. clearly differs from the verbal stem of Luw. ta-.

As for Hitt.  $ti\underline{i}e/a$ - 'to step', the details of its reconstruction are also controversial. Since the beginning of Hittite studies it has been debated whether  $ti\underline{i}e/a$ -zi goes back to PIE.  $*d^heh_1$ - 'to put' or  $*steh_2$ - 'to stand'. Given that Morpurgo Davies (1987) explained that Luw.  $t\overline{a}$ - was used in similar contexts to Hitt.  $ti\underline{i}e/a$ -zi, in my view the connection with PIE.  $*steh_2$ - fits better. For Hitt.  $ti\underline{i}e/a$ -zi Kloekhorst reconstructs a present stem  $*(s)th_2$ -ie/o-, but in my opinion it is better to consider Hitt.  $ti\underline{i}e/a$ -zi as an 'Umbildung eines hi-Verbs  $*t\overline{a}i$ : tiyanzi', as proposed by Oettinger (1992: 236). In this case, a -hi inflection for this verb could be reconstructed for PA.

## 3. Conclusions

This article shows that the situation of the inherited -hi inflected  $*C \circ C$ -stems in Luwian is very similar to Hittite. As in Hittite, in Luwian these stems represent the counterpart of PIE. perfect  $*C_1e-C_1\circ C_2$ - and are to be compared to the unreduplicated PIE. perfect \*uoid- 'to know'. This article has shown that in Luwian there are still some inherited verbal stems of this kind which have cognates in Hittite: in both cases they are -hi inflected, show o-ablaut, and are etymologically related: CLuw.  $l\bar{a}$ , HLuw. la- (i), da- 'to take'; CLuw.  $pa\dot{p}$ - 'to give', (HLuw. piya- 'id'); HLuw. was- 'to buy'; probably PLuw. \*zahha- (cfr. HLuw. zahhanuwa 'to attack')<sup>7</sup>; maybe CLuw.  $pa\dot{p}$ - 'to swallow' (see  $pappa\check{s}a$ - 'id.') and maybe CLuw.  $t\bar{a}$ - 'to stand' and HLuw. ta- 'id.'

The etymological connection between Hittite and Luwian -hi verbs cognates is relevant here because it has sometimes been debated whether Hittite and Luwian really had etymologically connected -hi inflected verbs. The results of this research indicate that this is true, at least in the case of the -hi inflected \*CóC-stems, although the examples are few.

# Language abbreviations

Alb.	Albanian	Hitt.	Hittite	OLith.	Old Lithuanian
Arm.	Armenian	Lat.	Latin	PA.	Proto-Anatolian
Av.	Avestan	Lyc.	Lycian	Pal.	Palaic
Anatol.	Anatolian	Lyc. B	Lycian B (or Mylian)	PIE.	Proto-Indo-European
CLuw.	Cuneiform Luwian	Lyd.	Lydian	PLuw.	Proto-Luwian
Germ.	Germanic	Luw.	Luwian	Skt.	Sanskrit
Goth.	Gothic	OAv.	Old Avestan	Toch. A	Tocharian A
Gk.	Greek	OCS	Old Church Slavonic	Toch. B	Tocharian B
HLuw.	Hieroglyphic Luwian	OIr.	Old Irish	Ved.	Vedic

### Bibliographical Abbreviations

ACLT: Ilya Yakubovich (ed.). 2013–2016. *Annotated Corpus of Luwian Texts* (on-line dictionary of CLuwian and HLuwian). Available: http://web-corpora.net/LuwianCorpus/search/ [accessed 12.11.2016].

HED: see Puhvel, Jaan. 1984-. Hittite Etymological Dictionary. Berlin / New York / Amsterdam: Mouton.

KBo: Keilschrifttexte aus Bogazkoy (KBo 1-60, 1916-2009).

KUB: Keilschrifturkunden aus Boğazköi (KUB 1-60, 1921-90).

<sup>&</sup>lt;sup>7</sup> In this case, as in the following example, I must reconstruct a PLuw. -*hi* stem which in Luwian is only indirectly documented (*via* a derivate verbal stem), but is well attested in Hittite as a -*hi* verb.

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*Мариона Вернет.* Глагольные основы hi-спряжения на \* $C\acute{o}C$  в клинописном и иероглифическом лувийском

В лувийском, как и в хеттском, образование от корня типа  ${}^*CóC$  представляет собой аналог праиндоевропейского перфекта  ${}^*C_1e$ - $C_1óC_2$ -. В праанатолийском праиндоевропейский перфект не демонстрирует практически никаких следов редуплицированного слога (хотя примеры этого имеются); в принципе он демонстрирует только o-аблаут. Структурно хеттские hi-глаголы лучше всего сравнивать с изолированным праиндоевропейским глаголом  ${}^*yeid$ - «знать», который не был редуплицированным, но принимал окончания перфекта. В то время как в хеттском эта ситуация тщательно изучена, соответствующего исследования на лувийском материале до сих пор не существует. Статья ставит целью рассмотреть данное явление в клинописном и иероглифическом лувийском.

Ключевые слова: hi-глаголы в лувийском, анатолийская глагольная морфология, анатолийские нередуплицированные перфектные корни.