

## Luwian *puwa-* and cognates<sup>1</sup>

### 1. Introduction

According to the attested forms (H.C. Melchert, 1993: 182) the paradigm of the Cuneiform Luwian verb *puwa-* is the following: Pres.3Sg. *pu-wa-a-ti* (KUB 37, 1 i 16), *pu-u-wa-ti* (KBo. 4, 2 i 40); Imp.3Pl. *pu-u-wa-an-du* (KUB 32, 8+ iv 23), *pu-wa-an-du* (KUB 35, 117 iv 3). The meaning, according to Melchert (l.c.) and F. Starke (1990: 378) is “to pound, to crash”,<sup>2</sup> which is guaranteed by the exact bilingual correspondence to Akkadian *tahaššal* (Pres.2Sg. instead of Pres.3Sg.) „you crash” in the medical text KUB 37, 1 i 15).<sup>3</sup> A similar verb (*puwai-*) is attested in Hittite as well (CHD, P: 368f.), but it is not clear whether it is a loanword from Luwian or just a Luwoid form (in any case, the “hittitized” forms present a regularized Hittite termination: Pres.3Sg. *pu-u-wa-iz-zi*, for instance in KUB 44, 64 i 12, and *pu-wa-a-iz-zi* ib., ii 13). The imperfective form *puššai-* (CHD, P: 398f.) seems to mean “to crush” and at least once (KUB 36, 25 iv 10) it is preceded by a “Glossenkeil”, which makes the already evident Luwian origin seem unquestionable.

Further derivatives, both showing a reduplication, are *puppušša-* and the apparently lenited *pupulli-* (*pubulli-*, substantive, “ruin?”, A. Kloekhorst, 2008: 684f.). As pointed out by Kloekhorst (l.c.), “It has been proposed that HLuw. *pupula/i-* “to inscribe” is cognate, but Hawkins (2000: 542) now suggests that *pupula/i-* may rather mean “to answer (vel sim.)” because of the use of the determinative LOQUI”. Since the problem of the connection between the Cuneiform Luwian *puwa-* word family to the Hieroglyphic Luwian verb *pupala/i-* (and not *pupula-*, see below) is still unsolved, I will try to produce a more detailed overview and a sketch of semantic interpretation.

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<sup>2</sup> The translation proposed by Starke (l.c.) is “zerstoßen, zerstampfen”. The verb occurs mainly in medical contexts, describing the preparation of a medication (CHD, P: 368f.); the minced object is, in KUB 44, 63 i 39f., a mineral.

<sup>3</sup> Text in F. Köcher, 1953: 48.

## 2. Cognates

Before starting to discuss the possible semantic and phonological aspects of the problem, I need to observe that a couple of interesting Anatolian cognates of Luwian *puwa-* and *pupala/i-* do exist. First of all, two Lycian A (henceforth simply Lycian) verbs, *pu-* and *(p)puwe-*, both meaning “to write (vel sim.)”, are attested under several forms (Melchert, 2004: 53f.). The argumentation by A. Kloekhorst (l.c.) questioning the connection of Hieroglyphic Luwian *pupula-* (SIC!) and Cuneiform Luwian *puwa-* to Lycian *(p)puwe-*, the meaning of which would have “been proposed on the basis of a supposed connection with *puwa-*, which therefore does not have much merit”, actually includes a mistaken reading of the Hieroglyphic verb, which is not written *pu-pu-la/i* but *pu-PA-la/i*, with an */-a-/* vocalization (CEKKE §3; ASSUR LETTER A §5). Kloekhorst evidently inherits the mistake from Melchert (1989: 52), who, writing the first version of his Lycian Lexicon before the extensive publication of the Iron Age Luwian corpus by J. D. Hawkins (2000), simply misread the transcriptions.<sup>4</sup> Kloekhorst also neglects the illuminating passage of the Xanthos trilingual (N320), 1.22-25, where the verb *(p)puwe-* corresponds to Greek γράφω:

22' *se=wa(j)=aitē: kumaha: ēti*  
 23' *sttali: ppuweti: kñmē: ebehi: xñta-*  
 24' *wataha: xbidēñnaha: se=rKKazuma-*  
 25' *ha: (sequitur)*

20' καὶ ὄσ-  
 21' α ἐν τῇ στήλῃ ἐγγέγραπται κατ-  
 22' ιερῶθε πάντα εἶναι βασιλέως Κα-  
 23' υνίου καὶ Ἄρκεσιμα

“And they made sacred as belonging to the King of Kaunos and to Argazuma what they had written on this stele.”

In Hieroglyphic Luwian, beside *pupala/i-*, one also finds an occurrence of an unclear Imp.3Sg. *pu-tu* (KARABURUN §13).<sup>5</sup> It must necessarily be read */putu/*, and a derivation from the same root *ph<sub>2</sub>u-* assumed

<sup>4</sup> The online version of Melchert’s Lycian Lexicon (available at <http://www.indo-european.nl/>) and his new Lycian dictionary (2004: 53f.) now contain the correct reading *pupala/i-*.

<sup>5</sup> Edition and commentary in Hawkins, 2000: 480-483.

below for *puwa-* is possible (I do not see any alternative explanation within Anatolian) even though the meaning “to write” hardly fits, despite the brilliant proposal by A. Morpurgo-Davies (*apud* Hawkins, 2000: 481ff.), who attempted to translate the section §§11-13 as follows:

*zaia=pa=wa=ta KWlZamaia KWls ARHA “MALLEUS”-ia  
apati=pa=wa REX haranawanis (DEUS)LUNA-MA<sub>x</sub>-sa kiharani(-)  
zarati INFRA(-)satu SARA=pa=wa=tu=ta nī manu=ha putu*

“He who shall erase these engravings, for him may the Haranean King, the Moon God, *go down*<sup>6</sup> on the *KIRAHANI-* (and) heart, above it may he by no means write”.

This interpretation seems unlikely to me, since the subject of the sentence that immediately precedes the quoted section is not the violator of the inscription, but rather the Moon God, who is supposed to take action against him (text in Hawkins, 2000: 482; also Meriggi, 1967: 103-106).

### 3. Morphology

The attested forms of Lycian (*p*)*puwe-* (only Pres.3Pl. *puwēti*, *ppuwēti*, (*p*)*puweti*, cfr. Melchert, 2004: 54) are apparently consistent with a derivation or cognacy from/with the Luwian verb *puwa-*. Nonetheless it is worth noticing that the writings with double /*p*/ may indicate a reduplicated stem (Melchert, 2004: 54, with references). As for Lycian *pu-*, the attested forms are Pret.3Sg. *pude*, *pudē* and Pret.3Pl. *puñtē*; (Melchert, 2004: 53<sup>6</sup>). Since the contexts leave little doubt about the meaning “to write (vel sim.)”, there is no reason to assume that it was not derived from the same stem as (*p*)*puwe-*. At any rate Kloekhorst (l.c.) does not mention the existence of this verb, as he reconstructs, for Hittite and Luwian *puwa-*, a *\*ph<sub>2</sub>u-je/o-* Indo-European antecedent.<sup>7</sup>

<sup>6</sup> The form *putu* is probably not a verbal one as per Hajnal (1995: 157), but rather the accusative of a substantive *puta-*, a sacrificial animal, as per Melchert (2004: 54).

<sup>7</sup> Kloekhorst (EDHIL: 685) proposes the root *\*péh<sub>2</sub>u/\*ph<sub>2</sub>u-* as opposed to the root *\*piéh<sub>2</sub>-*, “schlagen”, reconstructed by Rix (LIV<sup>2</sup>: 481), and he rejects the hypothesis that forms like Toch.B *pyakar*, “they defeated” and Gr. *πταίω*, “to let something hit” would belong to the same root as Gr. *πταίω*, “to beat, to hammer” and Lat. *pavīre*, with the same meaning (for a possible connection to Alb. *pah*, “powder” cfr. also M. Poetto, 1995: 147, with references). Nevertheless, a sporadic but regular loss of the glide /-*i*-/ after labial consonants in initial clusters was convincingly proposed by O. Hackstein (1992: 153f.; id., 1995: 191<sup>54</sup>; cfr. for instance Lat. *spuere*, “to spit”, from *\*sp(i)uH-*, and Lat.

Regarding the morphology of the suffix, Kloekhorst evidently assumes a regular loss of intervocalic *-i-*, a mutation that probably took place in some Luvic languages, although it has not yet been definitely proved. It seems to me safe enough to invoke such a sound law for Luwian, at least in the case of the historical derivation of *puwa*. It is also important to notice that Kloekhorst does not indicate the position of the accent in the sequence *\*ph<sub>2</sub>u- ié/o-*. Considering the attested forms of the verb in Cuneiform Luwian, which I have listed in the introductory paragraph, one will notice that locating the accent on the suffix, *\*ph<sub>2</sub>u- ié/ó-*, would make it impossible to explain why the Pres.3Sg. forms of Cuneiform Luwian *puwa-* show the lenition of the dental stop: from *\*ph<sub>2</sub>u- ié-ti* (always assuming a loss of intervocalic *-i-*) the expected outcome would be *\*puwati* (written *\*pu-wa-at-ti*), which is not the case. Therefore, the accent should fall on the root, which causes some problems because the root *\*ph<sub>2</sub>u-* is zero-grade. However cases of originally suffix-accented verbs that were analogically levelled to the root-accented class did exist. Examples of similar phenomena are already known in Vedic,<sup>8</sup> but the semantic background is frequently different, since almost all the examples are intransitive anti-causative verbs (an interesting exception is represented by the transitive Pres.3Sg. *míśyate* “forgets”<sup>9</sup>). Fortunately, some cases can be definitively reconstructed also in Anatolian, and a good example of transitive verb is represented by Hieroglyphic Luwian *izi(a)-*, “to do”, which according to Rieken’s (2007: 273) analysis derives from a dynamic *\*h<sub>1</sub>ig- ié/ó- > \*h<sub>1</sub>íg- ié/o-* pattern. In light of this consideration, the hypothesis of a dynamic *\*ph<sub>2</sub>u- ié/ó > \*ph<sub>2</sub>ú- ié/o* antecedent is probably correct.

The paradigm of a *puwa-* verb reconstructed assuming such an antecedent and the normal sound laws of Luwian would be the following:<sup>10</sup>

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*movēre* “to move”, from *\*m(i)euḥ<sub>1</sub>-*, which would allow the reconstruction of an original form *\*p(i)eh<sub>2</sub>u-* capable of explaining all the above-mentioned forms.

<sup>8</sup> For a discussion of the semantically-indifferent accent fluctuation in Vedic verbs see Kulikov, 1997: 198f.; id. 1998, 342f.

<sup>9</sup> Cfr. Rix, LIV 2: 440f., s.v. *\*mers-*.

<sup>10</sup> For the Luwian verbal system see the pioneering work by N. Oettinger, 1979: 561-570 and the discussion by Melchert, 2003: 191-194. For the transition from \*PIE to Luwian I assume here the following specific sound laws:

- [1] *ph<sub>2</sub>u > pu*
- [2] *uyV > uV*
- [3] *ě > ǎ*

<b>*PIE</b>		<b>Luwian</b>
* <i>ph<sub>2</sub>u- ĵó-mi</i>		* <i>puwawi</i>
* <i>ph<sub>2</sub>u- ĵé-si</i>		* <i>puwasi</i>
* <i>ph<sub>2</sub>u- ĵé-ti</i>	> * <i>pHú- ĵa-ti</i> >	<i>puwadi</i>
* <i>ph<sub>2</sub>u- ĵo-més</i>		* <i>punni</i>
* <i>ph<sub>2</sub>u- ĵe-th<sub>1</sub>é</i>		(?) <sup>11</sup>
* <i>ph<sub>2</sub>u- ĵo-énti</i>		* <i>puwanzi</i>

Regarding Lycian, it seems reasonable to assume that *pu-*, even if it does not present any visible sign of suffix, also derived from a \**ph<sub>2</sub>u- ĵe/o* (<\**ph<sub>2</sub>u- ĵé/ó-*) stem, otherwise it would be impossible to explain the lenited forms *pude*, *pudē* (Pret.3Sg.). This assumption necessarily implies that the loss of intervocalic *-j-*, postulated above for Luwian, was in this case extended to Lycian as well.

Turning now to the matter of Hieroglyphic Luwian *pupala/i-*, the presence of a reduplicated root is clearly evident. Since many Luwian redoubled words are relatively recent formations, it is natural to assume the following internal derivation sequence: \**puwa-puwa-* > \**pupuwa-* > \**pupa-*, where the second passage may look bizarre (the expected outcome being actually \**pupu-*), but it can be accepted if one assumes a loss of vocalic *-u-* and a consequent simplification of the group \**pupwa-* to \**pupa-*. Given the verbal root \**pupa-*, in order to explain *pupala/i-* it is necessary to reconstruct an intermediate nominal passage (since *-(a)l(l)a/i-* is a nominal morpheme) \**pupala-* or \**pupali-*,<sup>12</sup> the precise meaning of which remains obscure but must be related to the semantic field of “writing”. From the nominal phase, the formation of the *pupala/i-* verb can be clarified as an *-ā-* or *-iya-* denominative verb.

#### 4. Semantics

From a semantic point of view, it is perfectly clear that the Hieroglyphic Luwian verb *pupala/i-* and the Lycian verbs (*p*)*puwe-* and *pu-* all mean “to write”. The idea that the determinative LOQUI would imply a meaning “to answer” is actually derived from the context of the

<sup>11</sup> The form of Pres.2Pl. is, given the lack of textual evidences, impossible to reconstruct.

<sup>12</sup> It is also necessary to assume an intermediate neutral substantive \**pupal* between the \**pupa-* verb and the \**pupala/i-* substantive, since the *-(a)l(l)a/i-* nominal morpheme is denominative and cannot be directly added to a verbal stem.

ASSUR LETTER A (§5),<sup>13</sup> where such a translation would actually fit; still, the occurrence of the same verb in CEKKE (§3),<sup>14</sup> where DOMINUS-*tiwaras*, the servant of the ruler Sasturas, is not answering anyone but rather having a text inscribed, makes it clear that the word is unquestionably a scribal *terminus technicus*. Naturally, a connection with a family of words such as Luwian *puwa-* and derivatives, all meaning “to pound (vel sim.)” is not immediate, but given the existence of a genetic connection to Lat. verbs such as *pavīre*, “to beat” (Rix, LIV<sup>2</sup>: 481; cfr. Kloekhorst, 685), and *putāre*, originally meaning “to cut, to prune” (intensive from a participle *\*putum*, “cut, pruned (vel sim.)”, < *\*ph<sub>2</sub>u-tó-*), we can assume that the semantic derivation was due to the act of “hammering” that a scribe had to perform in order to inscribe or carve hieroglyphs on a stone stele.<sup>15</sup>

### 5. Conclusion

The linguistic and semantic history and the formal derivation of the Luwian words belonging to the *puwa-* family remain problematic, and every attempt at an explanation, including the one presented in this paper, will necessarily contain some speculative passages. Nevertheless, in the present reconstruction I have tried to eliminate incoherent derivations and unmotivated assumptions, sketching a general interpretation and an Indo-European etymology (zero-grade *\*ph<sub>2</sub>u-*, with addition of an originally accented *-je/o-* suffix) that present relatively few problems and a high degree of internal consistency. The inclusion of the words *puwa-* (and cuneiform Luwian/Hittite derivatives), (*p*)*puwe-* (Lycian), *pu-* (Lycian) and *pupala/i-* (Hieroglyphic Luwian) in the same family of words is almost unquestionable, and the two main semantic fields, “to beat, to hammer” and “to inscribe” are adjacent to each other, the latter being quite easily derivable from the former.

<sup>13</sup> Edition and commentary in Hawkins, 2000: 533ff. On the meaning of the verb see also Morpurgo-Davies, 1980: 101f.

<sup>14</sup> Edition and commentary in Hawkins, 2000: 143ff.

<sup>15</sup> The derivation of the meaning “to write” from an original meaning “to hammer (vel sim.)” is not unparalleled even in Hieroglyphic Luwian: consider for instance the case of the reconstructed verb *\*tupi*, “to inscribe” (*\*273-pi-* in BOYBEYPINARI I, §11), which according to Hawkins (2000: 502) is connected to Cuneiform Luwian *tupi-*, “to smite”. The extension of the meaning of the verb *pupala-* to the act of writing Hieroglyphs on metal (ASSUR LETTER A §5) is just a natural semantic generalization: “to inscribe” > “to write”.

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Institut für Assyriologie und Hethitologie  
 Ludwig-Maximilians-Universität München  
 Geschwister-Scholl-Platz 1  
 80539 München  
 email: federico.giusfredi@gmail.com

Federico Giusfredi