

Conceptual Metonymy as a Process of Polysemic Extension: 'Repugnance' and 'Flight' in Hittite

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Abstract

The purpose of this paper is to reconsider (expanding and deepening with new data the ideas presented in Pozza 2021) a Hittite etymology to corroborate the hypothesis initially put forward by Kronasser (1952-1953) with the help of the theoretical framework of cognitive linguistics. The specific analysis of the verb *pukk*-, *pugga*- 'to be repugnant, hateful', therefore, will be carried out both under a new interpretation of the original PIE root and in the light of the theoretical issues connected explicitly with conceptual metonymy, capable of motivating semantic change.

Keywords: Hittite, Etymology, Semantic change, Conceptual metonymy, Language contact

1. Introduction: The Hittite Verb pukk-, pugga-

An essential premise is in order before we start reasoning about the specific issue, which is the article's subject. The case studies which are presented here are far from being incontrovertible interpretations of specific etymologies, but are meant to represent attempts to read some fragments of data from the past (and it is appropriate to call them fragments, because sometimes they are forms attested very rarely and in contexts that are not always clear) in the light of a possible interpretation that takes into account a cultural and corporeal framework and offers the cue for further investigations.

In Hittite, the verb *pukk-, pugga-* 'be hateful, be repugnant, be unpleasant, be shunned' is documented in Ashella's Ritual (CTH 394), in the 3 sing. imp. middle (KUB 9.32 Vs. 22 [New Hittite]) (Note 1): *nu-wa-šši-kan ŠA A-MI-LÚ-UT-TI* UZU *puggaru namma* "let human flesh be repugnant to him hereafter" (HED PE-PI-PU: 115), in the following variants: *pu-ug-ga-ta-ru* (dupl. *HT* 1 iii 32-33 [New Hittite]), *pu-uk-ta-r*[u] (dupl. KUB 9.31 iii 39-40).

A participial form is also documented: *pukkant*- 'hated, hateful' (nom. sing. c. *pu-uk-kán-za*, KBo 1.30 Vs. 18, matching *ibidem* Akk. *zée-ru zêru* 'dislike, reject, hate' (CAD Z: 97), MSL



12: 214-215 (1969), KBo 1.42 iv 3, MSL 13: 140 (1971), KUB 24.7 i 50; nom.-acc. sing. n. pu-uk-k án (ibid. I 25 nu-kan ^DGAŠAN-li [k]uit É-ir pukkan «whatever household is hated by Ištar» (Güterbock 1983: 156); «quale casa alla Signora è in odio» (Archi 1977: 308). Moreover, the causative pukkanu-/pugganu-/pukkunu- 'create dissent, make hate, cause to be shunned' (cf. the participle pukkanuwant-, the verbal noun pukkanumar and the iterative pukkanuški- too) is attested (for the attestations, see CHD P: 371-373, HED PE-PI-PU: 115 ff., HEG P: 642-643 ff.).

1.1 The Etymological Problem

The etymology of the verb is not unanimously agreed upon, and there are several proposals by scholars (Note 2). It is usually traced back to either PIE *bhewg- (IEW: 152, LIV²: 84) 'to flee', *bhewgh- 'to bend' (IEW: 152-153, LIV²: 85), *bhewgh₂- (Hendriksen [1941: 53]), cf. Gr. φεύγω 'to flee (from), seek to avoid' (DELG: 1191 ff.; GEW: 1005-1007), φυγή 'escape', Lat. fugiō 'flee (from), seek to avoid', Goth. biugan, Germ. biegen 'bend' (Note 3) (Kronasser [1952-1953], Oettinger [1976: 130]), or to *pūk-, *pewk- (IEW: 849) 'hairy, with hairy tail', cf. Goth. faúhō 'fox' (literally 'the one [which is] hated'), OHG fuchs 'fox', ONord. fox 'fraud, treason' (Wittmann [1964: 147]). According to Puhvel (HED PE-PI-PU: 116), a variant *bhew-k- is equally conceivable, if we think, for example, of allotropic PIE roots such as*stebh-/steb-/step-, documented in forms as Ved. stabh-, OldEngl. steppan, Hitt. ištapp- 'to plug up, to block' (cf. infra).

Tischler (HEG [P: 641 ff.]) underlines how, despite the various etymological proposals (which he accounts for in the discussion of the *lemma*), Hitt. *pukk*- has no convincing etymology. In his opinion, the connection with the PIE root **bhewg(h)*- 'to bend, flee' (cf. *supra*) would be difficult to accept from a phonetic point of view, given the mismatch between the double spelling of -*kk*- attested in Hittite and the voiced stop reconstructed for the PIE root. (Note 4) Kloekhorst (EDHIL: 681) agrees and finds the above hypothesis unlikely for the same reason.

However, Kronasser (1966: 14), who often expressed doubts about the status and regularity of *Sturtevant's law* (Note 5), considered the connection of the Hittite word with the PIE root *bhewg(h)- to be plausible: from a semantic point of view it would be possible, in his opinion (ivi: 318), to trace a correspondence between the values conveyed by Hittite ('to hate') and by other Indo-European languages ('to flee, bend over' etc.), based on the observation that 'one avoids/shuns those he hates' (cf. Lat. aversari 'get away'; 'to despise'). The problem linked to semantics – which according to Kronasser does not exist – would have led scholars not to take this hypothesis seriously.

1.2 The Hypothesis of Esposito (2011)

In the context of the arguments set out so far, the hypothesis put forward by Esposito (2011: 275) is particularly relevant, according to which it would be unnecessary to postulate, as the main etymological dictionaries tend to do, two distinct PIE roots, *bhewgh- and *bhewg-, one – also capable of explaining phonologically the Germanic outcomes – meaning 'to bend' (cf. Goth. biugan, Germ. biegen etc.), the other meaning 'to flee' (cf. Gr. φεύγω, Lat. fugiō etc.),



but a single polysemic root whose aspirated variant is attested only in Germanic. According to the theoretical assumption that semantic change, although not predictable, is not arbitrary but motivated (Lakoff 1987: 107), the motivation for the change could be reconstructed by identifying the metaphors and conceptual metonymies underlying the language.

Thanks to the comparison which Esposito (*ibidem*) makes with the Semitic (which is not genealogically related to Indo-European and, therefore, would seem to offer proof of an underlying more general cognitive mechanism) it would thus be possible to verify the semantic development 'to fold' > 'to flee' (cf. the biblical Hebrew idiomatic expression $p\bar{a}n\bar{a}h$ ' $\bar{o}re\bar{p}$ 'to turn the nape', which denotes the act of escaping). The semantic development by which PIE *bhewg(h)- comes to describe, in Greek ($\phi\epsilon\dot{v}\gamma\omega$) and in Latin ($fugi\bar{o}$), the act of 'running away', is based on the development 'bend' > 'yield, surrender, submit', encapsulated in the metaphor SURRENDERING IS BENDING ONESELF PHYSICALLY, clearly traceable in intermediate manifestations which describe a concrete action such as 'bowing', just as in Mod.Engl. $to\ bow$ from OldEngl. $b\bar{u}gan$ 'to bow, to bend', 'to flee' (Esposito recalls Italian sottomettersi — literally 'to put oneself under' in the sense of 'surrender', as a fully transparent metaphor).

Therefore, according to the scholar, the conceptual metaphor FLEEING IS BENDING (ivi: 276), at the origin of the semantic development found in the Semitic and Indo-European documentation, would provide further probative force in favour of the idea of an original polysemy of the PIE root *bhewg(h)- (Note 6): from the act of 'bending' we shift to that of 'yielding' and 'submitting', and, finally, to the act of fleeing (think of It. *piegare* 'bend', *ripiegare* 'retreat').

2. Discussion: The Hypothesis of a PIE Polysemic Root

At this point, bearing in mind the Lithuanian outcome bugti, which means 'to be frightened' (cf. also the adjective baugus 'fearful'), it would be possible to imagine that the Hittite verb pukk-, pugga-, which already Kronasser (1952-1953: 318) imagined attributable – in the context of a shift from the concrete to the abstract – to a polysemic root *bhewg(h)-, characterized by the value and of 'running away' and 'bending/turning' (hence, among other things, 'to save oneself', cf. Avest. bunjainti- 'to save, to save oneself, to free'), can be inserted in the lexical series just discussed because of the semantic shift (underlined by HEG P: 641) 'to discard, avoid' > 'hate' also found, as seen, in Lat. aversari 'turn their backs, despise, feel aversion'.

What appears particularly interesting, in my opinion, is the fact that Kronasser hypothesized, as a further possibility to semantically connect the Hittite verb with the above-mentioned lexical series, a semantic calque from Akkadian, a Semitic language with which Hittite was always strongly in contact. Alongside the Akkadian word $z \hat{e} r u$ 'to hate' (CAD: Z: 97; MjB $z \hat{a} r u$, cf. CDA: 446), the verb $z \hat{a} r u$ 'bend, fold, twist' (CAD Z: 72 $z \hat{a} r u$ A 'twist'), is also documented (Note 7): it would therefore not be excluded that the two verbs could have been understood as a unit by the Hittites and that the Hittite verb pukk-, pugga-, initially indicating only the act of bending, had been semantically influenced by Akkadian and from that language had taken the double value of 'to bend' and 'to hate'. The original meaning would have been lost in Hittite or



simply would not be (yet) documented. Whether it was an independent development or a semantic calque from the Akkadian, tracing the form to the root *bhewg(h)- remains plausible, even in the presence of some formal difficulties easily overcome. Several scholars (Note 8) have considered the possibility of analogical processes to explain what appears to be an alternation between the root-final voiced and voiced aspirated stop (which is reconstructed due to the German outcomes, which attest a plain voiced stop). Oettinger (1976: 130), in order to explain the mismatch between the presumed original voiced stop and the graphic gemination (* $bh \, \acute{e}wg$ -o-rey or *bhug- \acute{o} -rey > $pukk\bar{a}ri$), postulates an analogical levelling on the homoteleuton $wakk\bar{a}ri$ 'be lacking' (in the wake of the same analogical levelling occurred to $dukk\bar{a}ri$ <*dhugh- dh_1 -o-rey, ivi: 113). In addition, as we have seen (cf. supra), Hendriksen (1941) explained the graphic gemination with the presence oh * h_2 /, from a root * $bhewgh_2$ -, as in similar cases such as $m\bar{e}kk(i)$ - 'much' < PIE * $megh_2$ - (for more examples of the gemination of stop + laryngeal cf. Eichner 1973: 71, 96, Melchert 1994: 76-77, Kimball 1999: 406-407, and Pozza 2011: 633-634).

Finally, we highlight the hypothesis advanced by Puhvel (HED PE-PI-PU: 116), who reconstructs a basis characterized by different enlargements, *bhewgh-/bhewg-/bheuk-, according to a not uncommon reconstructive procedure which, moreover, would in turn solve the graphic problem: «the consistent geminate spelling pointing to etymological *k need not flout "Sturtevant's rule", nor require the crutch of a devoicing laryngeal suffix». We also refer to the work of Pozza (2011) for further insights about the hypothesis that the phonetic "law", not free from exceptions, was a graphic "trend" and that the apparent exceptions may not create problems for the etymological reconstructions previously considered in contrast to the norm. This could be such a case. After all, Szemerényi (1985: 122-125) (Note 9) points out how consonantal alternations within roots (unlike apophony) have no functional significance: therefore, in addition to highlighting cases such as s-mobile (cf. *teg-/*steg- 'cover'; *pek-/*spek- 'see' etc.), he shows exchanges between different stops, predominantly in final position and marginally in initial position (cf. *bhudh-/*bhud- 'ground, soil'; *wedh-/*wed-'lead, marry; *deyk-/*deyg- 'indicate' etc.). For variations in the final position, the origin can be seen in some combinatorial phenomenon (cf. Stang 1967). Incidentally, the verb is scarcely documented. Therefore, it is unknown whether any further possible attestations might have variants with a single intervocalic stop, as frequently happens in other cases, which present oscillations in the spelling of intervocalic stops.

On the other hand, from a semantic perspective, if we think about conceptual metonymy (cf. Lakoff and Johnson 1980 and Radden and Kövecses 1999), namely the use of one entity to refer to another connected to it, we can observe that, unlike the conceptual metaphor – where the entities that come into contact belong to different conceptual domains –, the two entities are within the same functional domain. In conceptual metonymy, the domains appear to be linked by a "pragmatic function", which activates the metonymic process itself, so that when we talk about an experience or an entity, we select a salient feature for our communication purposes. This means that, if 'feeling aversion' (or, in the specific case of some languages, such as Lithuanian, 'being frightened' – perhaps just as a result of having felt aversion) and 'running away' (therefore the 'act of moving away' with some haste from the place/entity for



which fear, repulsion, etc. is felt) are conceived as two semantic dimensions belonging to the same conceptual and functional domain of 'bending' – an act which in any case presupposes a spatial distancing from the sphere of action of the person or thing from which one wants to move away, even if only by means of an initial (?) bending of one's body –, these two values could also be conceived as manifestations of two different extensions of the more general (and physical) act of 'bending' according to a conceptual process of a metonymic type.

A further example of a possible conceptual metonymy connected with the idea of 'bending' is represented by the verb *kanenai-/kaninai-/kaniniya*- 'bow down, scratch, squat' (HED K: 41-42; HEG A-K: 480-481). Unless one considers it a loan from Akkadian *kanānu* 'bend down, stoop' (in the wake of Hrozný 1917: 78-79), or a derivation from *genu*- 'knee' (references in HED K: 42; *contra*, Eichner 1979: 59 footnote 58), to whom I refer for the details), the verb could be traced back, "durch expressive Binnenreduplikation", to a root "*ĝen*- 'bend' (cf. Eichner 1979: 59, footnote 58). According to Oettinger (1981: 148), also the form *ganenant*- 'thirsty' (see *kišduwanteš ganinanteš* 'hungry (and) thirsty', KUB 1.13 iii 25, iv 26) would represent an -ant- adjective built on "*ganen-/kanen*- (Note 10) 'that bends down thirstily' (cf. HED K: 48 for a derivation from a verb **kanen*- 'to thirst'), from which also the dissimilated *kanirwant*- 'thirsty' (and variants) (Note 11) from a previous **kanen-want*- derived. In his opinion, the word *kanint*- [ganent-] 'thirst' (which is interpreted as a *t*-stem < **kanen-t*-) could relate to the verb *kanenai-/kaninai-/kaniniya*-, in the meaning of 'stooping down to drink' ("semantically abortive") for HED K: 48).

In Oettinger's opinion, it could not be excluded that the graphic identity of *ganenant*- 'thirsty' and *ganenant*- 'bent down' is not a case, and it could be possible to assume a basic meaning of 'bent down to drink, thirsty', which can originate from the observation of both animals and humans. So, if etymologically connected, the two *g/kanen-ant*- could be traced back to the same root, from which also **ĝenu*- 'knee' derived, as stated, among others, by Neu (1972: 291-292), Eichner (1979: 59 footnote 58) and Oettinger (1981: 145, 149).

This would suggest a semantic specialization of the more general meaning of 'bending over', connected with the act of drinking (in a squatting position), according to a logic of conceptual contiguity typical of metonymy. Also, Rieken (1999: 151-152) thinks that *ganenant*- 'thirsty' and *ganenant*- 'bowing' could be etymologically connected, imagining a semantic narrowing from 'to bend down' to 'to bend down thirstily to drink'. *Contra*, Kloekhorst (EDHIL: 436), who, however, doesn't provide an alternative, but thinks that Neu's proposal is acceptable, so that from a hypothetical PIE **ĝen*- 'to bend', both the noun **ĝen-u*- 'knee' and the nasal-infixed verb **ĝ-nē-n-ti* 'to bow' were derived (Note 12).

3. Conclusion: On Polysemy and Embodied Metonymy

In conclusion, according to what was underlined by Esposito (2011: 276), the identification of the thought patterns underlying certain semantic developments enables us to assess the viability of a hypothesis of semantic change and, in the specific case here presented, gives us the possibility of framing the Hittite verb *pukk*-, *pugga*- within what could be usually defined as a semantic shift.



As noted above, Kronasser (1952-1953: 318) argued that the three PIE roots listed in IEW (*bhewg[h]- 'to bend', *bhewg- 'to get free, escape', *bhewg[h]- 'to free [oneself]') were originally the same one, and that also the meaning 'to save (oneself), to free' (documented in Avestan, cf. baog-, bunja- 'to save [oneself], to free') could be traced back to a previous 'to turn' (= 'to avoid a danger to save yourself'). The scholar, then, thought about a PIE polysemic root and a possible shift from the concretely perceptible sphere to the mental one.

From a strictly semantic point of view, the solution proposed by Kronasser (1952-1953) remains the most convincing, especially if it is framed within the prerequisites offered by cognitive linguistics (cf. above), which allow the Hittite verb pukk-, pugga- to be coherently placed within the etymological "system" also shared by other historical Indo-European languages documenting verbs indicating 'to flee'. Formally, it would be possible (contra, Kloekhorst 2014 and Yates 2019) to support further the explanation already provided by the scholar, while accepting his invitation to caution as far as Sturtevant's law is concerned (see above the other explanations for the formal mismatch between the PIE voiced stops and the graphic gemination attested by Hittite). Thus, the link between *bhewgh- and *bhewg-, besides being justified in the light of the semantics of the PIE root (via a semantic shift on a metaphorical/metonymic basis), appears congruent with the possibility of reconstructing a single archetype with alternation of the aspiration of the final consonant. In addition it could be also highlighted that the Sanskrit root bhuj- 'bend', which is usually considered as an outcome of PIE *bhewgh- 'bend' (see LIV²: 85) could only be explained either due to the influence of PIE *bhewg- 'flee, set free' or due to a (progressive) dissimilation from the original diaspirate root (cf. DELL: 258), which is unusual, according to the regular effects of (regressive) Grassmann's law in Sanskrit (see, among others, Pozza 2019). The hypothesis of a single polysemic root would solve this problem, too.

Indeed, for the conceptualization and expression of emotions (abstract concepts), metaphors, metonyms, and, in general, figurative language play a prominent role. For example, lexemes taken from Indo-European languages whose meaning is 'to be afraid' (cf. Lith. *būgti* 'to be frightened') seem to be also related to the concepts of 'flee' and the like (Kurath 1921). See, for example, Buck (1949: 1153): «Words for fear and the stronger (and in part more sudden) 'fright, terror' are mostly based upon those for physical actions expressive of fear, especially 'tremble, shake', also 'flee', 'be struck', etc. In some cases, there has been a shift from the objective 'danger' to the subjective 'fear', as, conversely, words for 'fear' are often used objectively for what inspires fear, 'a horror, a terror, danger'». As deeply discussed in Pompeo (2022: 1061), physiological effects, especially in the case of the most intense emotions, tend to recur at least in part interculturally and are characterized as independent of the will of the individual, who therefore has no control over them. The very close association between emotion and manifestations of the emotion itself makes it possible to develop linguistic expressions of these sensations starting from terms that originally indicate an effect considered typical of that specific feeling (see Gr. τρέω 'flee out of fear', Lat. terreō 'frighten', Old Persian tars- 'to fear' etc. < *tres- 'to tremble (for fear)', cf. LIV²: 650-651). This mechanism is of a metonymic type, because the relationship between the source and target concept involves only one domain and not two different domains as happens in



metaphor, and can be schematized with the expression THE PHYSIOLOGICAL AND EXPRESSIVE RESPONSES OF AN EMOTION STAND FOR THE EMOTION which, in turn, can be traced back to the more general metonymic principle EFFECTS OF A STATE STAND FOR THE STATE (Kövecses 2000: 134). In any case, as pointed out by Alfieri (2008), to which I also refer for a detailed analysis of the difference between metaphorical and metonymic processes and the critical evaluation of the main reference literature on the subject, metaphor and metonymy would represent a single mental process with two independent epiphenomenal realizations at the level of conceptual structures and linguistic expressions.

To sum up, framed in this analytical perspective, the semantic development of the root *bhewg(h)- from the concrete meaning of 'to turn around, to bend over, to flee' (as a probable reaction to a specific event/object in the extra-linguistic reality) to the more abstract meaning (the emotion itself, in fact) of 'to feel repulsion, disgust, hate' constitutes a case of a conceptual metonymy and appears entirely plausible, as it testifies how an emotion (fear, disgust, contempt in a broad sense) can cause (or be connected with) distancing, escape. Clearly, the limitations associated with the hypothesis, such as the one put forward here, are primarily documentary in nature: the verb analyzed is not frequently attested, and certainly broader contexts of use would shed light on the semantic aspects. However, the reading of the data provided here, in connecting semantic narrowing with the metonymic – more generally, metaphoric – processes of the mind, further supports some specific etymological proposals, loading them with new insights.

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Notes

Note 1. Doubts on *pu-ug-ga-t[i]* (IBoT 3.109 6), which has been tentatively analysed as III sing. preter. by Neu (1968: 143) but which should be read as Akkad. *PU-UQ-QÁ-T[I]* 'buttocks', cf. CHD (P: 371). A preliminary version of this study is presented in Pozza (2021).

Note 2. For the other etymological interpretations cf. HED, HEG and CHD s.vv.

Note 3. See *infra* for the phonological problem connected with the Germanic outcomes, which presuppose an aspirated voiced stop.

Note 4. For details about *Sturtevant's law* (the graphic-phonological correspondence between PIE voiceless stops and their intervocalic double spelling in Hittite, and between PIE



voiced/voiced aspirated stops and their intervocalic single spelling), cf. Pozza (2011 and 2012), Kloekhorst (2014: 543ff. and 2016), and Yates (2019).

Note 5. «Es fragt sich also, ob Etymologien abgelehnt werden können, weil die der Regel Sturtevants wiedersprechen [...] So meine ich, dass die Regel nicht als Richtschnur gelten kann ».

Note 6. For a similar reasoning, albeit relative to other PIE roots, cf. Pozza (2020).

Note 7. However, it is worth noting that Kronasser argues that the two etymologically disconnected but formally identical Akkadian verbs would be (sic!) $z\bar{a}ru$ 'hate, reject' (in place of $z\hat{a}ru$, which, according to CDA: 446, could also appear, in Middle Babylonian and "jungbabylonisch", as $z\hat{a}ru$) and $z\bar{a}ru$ 'bend (over), twist' (in place of $z\hat{a}ru$).

Note 8. See Benveniste (1969: 135-136), Oettinger (1976: 130) and Watkins (2000: 12). Cf. also LIV²: 84 (fn. 8); 85 (fn. 3: «mit nach rein formaler Analogie von * $b^h e \mu g^h$ - 'biegen' übertragenem * g^h -? Oder liegt einfach diese Wurzel vor?»).

Note 9. See also Belardi (1999: 120-121) and Lazzeroni (2011: 15-16), and, for some cases of alternation between velar and palatal, Gasbarra (2022).

Note 10. The heteroclitic original paradigm was (Oettinger 1981: 148) *ganér/ganén-.

Note 11. For the explanations regarding the other variants and their connection with *kanint*-see EDHIL: 434. According to Puhvel (HED K: 48) the verb **kanen*- may represent * $kn\bar{e}$ -n-< * $ken(-E_1)$ -.

Note 12. This verb, in Kloekhorst's opinion (cf. EDHIL: 434), was almost wholly lost in Hittite, apart from the participle *ganenant*-.

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