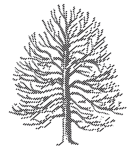
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in Honor of

Georges-Jean Pinault

edited by

Hannes A. Fellner
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Michaël Peyrot



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Hittite neuter *i*-stems

H. CRAIG MELCHERT

I am pleased and honored to join in this tribute to Georges-Jean Pinault, a much-valued colleague and a friend of more than two decades. Our honorand's impressively broad research includes study of nominal derivation and inflection in Indo-European generally plus analyses of classes and lexemes in Indo-Iranian, Tocharian, and elsewhere. These include *i*-stems, most recently a treatment of the "Caland-*i*" (Pinault 2018), but most relevant for what follows a demonstration that the Vedic adjective *bhū́ri-* 'much, many, abundant' and cognates reflect a PIE neuter substantive (Pinault 1998).

1 Introduction

As is well-known, neuter *i*-stems, primary or secondary, were extremely rare in PIE: of those cited by Brugmann (1906:2.174–5) only **mori* 'sea' is of any antiquity, while Chantraine (1933:272) and Debrunner (1954:637 n. and 642) claim that the highly productive PIE suffix **-ti-* formed exclusively masculine and feminine substantives.

Anatolian largely shows the same pattern. There are no assured neuter *i*-stems in Lycian or Lydian, and at best one in Luvian.[1] Aside from likely loanwords for sacrificial body parts (*ḫuwanḫuwani-*, *ḫuwaššanni-*, and *šāmūri-*), Palaic shows none. The few transparent primary/deradical *i*-stem substantives in Hittite are as expected common-gender: inherited *arki-* 'testicle' < **h₁órĝhi-/h₁rĝhi-*, cognate with Greek *ὄρχις* and Avestan *ərəzi-* (for the inflection see Schindler 1972:34–5), and likely innovative *ḫurki-* 'wheel' < **h₂wr̥ĝi-* *'turning' (root per *LIV*² 290–1), *ǰliki-* 'saltlick' < **l(e/o)iĝhi-* (Hittite, with Puhvel 2001:99), *ūrki-* 'track, trail' < **wr̥ĝi-* (root per *LIV*² 697), and *weši-* 'pasture' < **wési-* or less likely **wéisi-* (Tischler 2016:521–2 with references). The neuter gender of $^{A.ŠÀ}$*terippi-* 'plowed field(s)' < *teripp-* 'to plow' < **trep-* 'to turn' may be only apparent, since the word is likely a collective plurale tantum (attestations in Kloekhorst 2008:871).

[1] Most apparent exceptions in Luvian may be analyzed as neuter substantives in *-id-*. For Iron Age Luvian /sannawi-/ see Yakubovich 2016a:477–81.

Per the attractive analysis of Kloekhorst (2008:464–5), Hittite neuter *kattaluzzi-* 'lintel, threshold' < *"door/window frame' reflects *katta* 'beside' + *luzzi-* 'opening, window' = *"that beside the opening', to the collective *i*-stem seen in *luttāi-/lutty-* 'window' (< **leut-* 'to see'; root etymology independently by Morpurgo Davies 1987: 465 n. 13 and Kloekhorst 2008:535). Whereas the strong stem *luttāi* < **lut-ói* led to unassibilated *-tt-* throughout the base paradigm, the isolated **lut-i-* of *katta-luzzi-*, its shape likely conditioned by the univerbation, shows regular assibilation.

Neither of the two putative primary neuter *i*-stems in Hittite where a collective is far from obvious, *ḫāli-* 'pen, corral' (Rieken 1999:226) and *li/eššī-* 'liver' (Puhvel 2001: 98), has a straightforward root etymology. See the justified skepticism of Kloekhorst 2008:273 and 525. For the source of Hittite *ḫaštāi-* 'bone(s)' see Oettinger 2016:323.

Nevertheless, Hittite shows some undeniable neuter examples of *suffixes* usually associated with PIE animate stems, as well as two innovative neuter *i*-stem suffixes, one of which is reasonably productive. Since some of these have been overlooked or underappreciated, a review of the evidence seems in order.

2 Hittite nouns with a suffix *-*ti*

We begin with the primary suffix *-*ti-*. Direct reflexes of the unenlarged suffix in Hittite are few. One likely inherited example is Hittite *tukzi-* 'cultivation, breeding' < **duk-ti-*, matching OHG *zuht* 'upbringing, education; offspring' (feminine *i*-stem), OE *tyht* 'way, manner' (masculine *i*-stem), and Latin *ductim* 'in (full) drafts' (accusative singular of an animate **ducti-*): Melchert 1999a:22–3. Unfortunately, Hittite *tukzi-* (and its extended variant *tukkanzi-*) is attested only in the dative-locative singular, so its gender may only be inferred. The similarly structured Luvian pair *šallḫitt(i)-* and *šallḫ(i)ant(i)-* 'growth' (or similar), both common-gender, support the evidence of the Germanic and Latin cognates for *tukzi-* likewise having common gender, but this cannot be regarded as entirely assured (see below). Clearly common-gender is the newly discovered Luvian loanword into Hittite, the result noun *latti-* 'portion, share; contingent (of troops)' to *lā-* 'to take, receive' < **deh*$_3$- (Melchert forthcoming).[2]

However, there are indubitable examples of Hitttite *neuter* stems in *-zzi-* < **-ti-*. Perhaps clearest is *utezzi-* 'wetness' < **ud-eh*$_1$- 'be wet' (Oettinger 2003:313). However, the simplicity of this example (a hapax legomenon in the nominative-accusative singular) may be misleading. Already Watkins (1973:78) adduced LUGAL-*uezzi-* = *ḫaššuwezzi-** 'kingship', deriving it from *ḫaššuwe-* 'be king', which he analyzed as a stative in *-*eh*$_1$-, comparing for the noun Gothic *faheþs* 'joy' < *-*eh*$_1$-*ti-*. We may leave open whether *ḫaššuwe-* 'be king' reflects a stative in *-*eh*$_1$-, as per Watkins, or a de-

[2]The putative Cuneiform Luvian examples *az(zaš)ti-* 'food' and *ūtti-* 'drink' (Starke 1985) are doubtful, since attested *azzaštiš* and *ūttiš* are probably present second singular verbs (thus Morpurgo Davies 1980:94 and 106 n. 24). On the prehistory of Hittite common-gender *taiši-* 'shed' see Rieken 1999:190.

nominative in **-ye/o-* (Oettinger 1979:340–1 and 2003:312). In the latter case *utezzi-* 'wetness' < **ud-eh*$_1$*-ti-* may still serve as an example for **-eh*$_1$*-ti-*.[3]

The first problem, however, is the neuter gender of LUGAL-*uezzi-* and *utezzi-*. Since they are both abstracts, attempting to explain their neuter gender as back-formed from collectives (Oettinger 2003:313) is semantically dubious. The second overlooked difficulty is that Hittite LUGAL-*uezzi-* 'kingship' is attested *only* in the nominative-accusative singular (4×). Its alleged derivative LUGAL-*uezna-* 'idem' is attested *only* in the non-direct cases: genitive singular (7×), dative-locative singular (5×), and ablative (1×). Our suspicions increase when we observe that the reconstructed noun **warḫuēzzi-* 'natural-growth forest' < **warḫuē-* 'be thick with foliage' is actually attested only in the dative-locative plural *warḫueznaš* (Oettinger 2002: 257–9).

The key to explaining these discrepancies lies in *ku-ši-ez-za*, attested in a lexical text as the Hittite equivalent of Akkadian *biblu* 'marriage gift', but whose basic sense is 'marriage, wedding' (Oettinger 2003:312 against Rieken 1999:258 and others). The spelling *ku-ši-ez-za* is neither a scribal error for expected **kušiezzi* (Oettinger 2003: 312) nor a neuter plural adjective (Rieken 1999:258), but represents /kusyets/, the phonologically regular result of a pre-Hittite *neuter i*-stem nominative-accusative: (virtual) **ĝeus-ye-ti* < **ĝeus-ye/o-* 'be a bride/bridegroom'.[4] For the spelling one may compare the frequent New Script ablatives *ke-e-ez-za*, *a-pé-e-ez-za*, *ku-e-ez-za*, where the final vowel is patently unreal. These show the Hittite reflex *-z* from word-final **-ti* in the ablative ending, seen also in the rarer present third person verb endings as in *ēšz(a)* 'is' and *išḫianz(a)* 'they bind' < **-ti* and **-nti*.

The regular paradigms for 'kingship' and 'natural forest' would have been LUGAL-*uez**, oblique LUGAL-*uezn-* and likewise *warḫuez**, *warḫuezn-*, with the non-direct cases in analogy to the type of neuter *s*-stem in *-e/iš*, *-e/išn-* (*ḫatalkiš, ḫatalkišn-* 'hawthorn'; *ḫattar(i)eš*, *ḫattar(i)ešn-* 'crossroads'), for which see Rieken 1999:386–404 and Melchert 2012.[5] The attested nominative-accusative singular LUGAL-*uezzi* was trivially restored from forms with an enclitic possessive (e.g. KBo 13.31 iv 4 [LUGAL]-*uezi=šet*) and the denominative verb LUGAL-*uezziya-* 'be king'.[6] Lack of diagnostic case forms precludes our knowing whether *utezzi-* had an oblique stem **utezn-* and to what extent all neuter stems in *-ezzi-* had variation in the nominative-accusative singular between *-ezzi* and *-ez*. While 'natural-growth forest' would be compatible with a collective origin, the action noun 'wedding, marriage', like the abstracts 'wetness' and 'kingship', argues against such a derivation.[7]

[3]Neither of these nouns may be explained as secondary *i*-stem substantives to thematic adjectives in **-e-to-* (against Rieken 2009:152).

[4]I mildly prefer this derivation, parallel to 'to be king'; also possible despite the New Script spelling is /kuse:ts/ from /kuse:-/ < virtual **ĝus-eh*$_1$- (Oettinger 2003:313).

[5]Hittite *pēr*, *parn-* 'house' < **pér-i*/**pér-i*, **pr̥-n-* (Oettinger 2016:323–4) could have played a role, but as a monosyllabic ablauting stem it would have been a less direct model. Compare n. 12.

[6]Compare the preserved ablative ending *-zzi* before enclitic *=ya* 'and; also'.

[7]In pre-Hittite the collective of *i*-stems would have still been **-ī* < **-ih*$_2$ (as in Old Script *mekkī* < **-ih*$_2$),

3 Hittite nouns with a suffix *-*u-ti*-

The situation is similar for the mildly productive "enlarged" suffix *-uzzi-* < *-*u-ti*-, recognized since Sturtevant 1933:155.[8] We may set aside etymologically unclear examples: common-gender ^{GIŠ}*intaluzzi-* 'shovel, spade', neuter ^{GIŠ}*laḫḫurnuzzi-* 'foliage', and indeterminate ^{GIŠ}*ḫariuzzi-* 'table' (or similar). Common-gender ^{KUŠ}*annanuzzi-* 'halter' (or similar) is transparently deverbal from *annanu-* 'to train'. The nouns ^{GIŠ}*išparuzzi-* 'roof beam, rafter' and *kuruzzi-* 'cutting tool' of indeterminate gender from the root presents *išpar-* 'to spread' and *kuer-/kur-* 'to cut' may historically be derived from the attested verbal stems or be deradical. Technically, the same holds for neuter $^{(DUG)}$*išpantuzzi-* 'libation; libation vessel', but its absolutely consistent onset /ispand-/ versus the overwhelmingly predominant verbal stem /sipand-/ suggests that it is deradical (Melchert 2016:195, but compare for the overall analysis of *išpant-/šip(p)and-* 'to libate' the opposing views of Yakubovich 2016b).

However one judges $^{(DUG)}$*išpantuzzi-*, there are at least two examples that must be deradical. First, there is common-gender *išḫuzzi-* 'belt, band' < (virtual) *$*sh_2$-u-ti*-, which cannot be derived from the only attested Hittite verbal stem, the *ḫi*-present *išḫi-* 'to bind'. For further evidence for the unenlarged root *$*s(e)h_2$*- in Hittite see Rieken 1999:283–7. Likewise, as per Carruba 1966:33, common-gender *tuzzi-*, whose primary sense is 'camp' (*not* 'army, troops'!), as proven by the denominative verb *tuzziya-* 'to encamp', must reflect a virtual *$*d^{h}h_1$-uti-* *"that which is pitched', hence 'camp' < *$*d^{h}eh_1$*- 'to put, place' (thus with Kloekhorst 2008:908 against Puhvel 2015 [2016]).[9]

A more complicated case is neuter *luzzi-* 'compulsory public service, corvée', for which there are two equally plausible competing derivations: (1) *$*lh_1$-u-ti-* *"that which releases' to the root *$*leh_1$*- of *lā-* 'to release' (Carruba 1966:23, Neu 1974:261, and Kloekhorst 2008:536), parallel to *$*d^{h}h_1$-u-ti* < *$*d^{h}eh_1$*-; (2) **lu-ti-* < **leu-* (sic!) and equation with Greek λύσις 'releasing; atonement' (Puhvel 2001:131, following Kellogg and Sturtevant). Kloekhorst's objection to the latter, loc. cit., that Hittite shows no trace of a simplex suffix *-*ti-* is patently false. However, the root is **leuH-* with a final laryngeal, preserved in the Greek compound βου-λῡτός *"unyoking of the oxen' > 'evening' (*LIV*² 417), but inconsistently in the verb λύω 'I release' and not in λύσις (against Kloekhorst loc. cit.). There is also the discrepancy between the feminine gender of λύσις and the neuter gender of Hittite *luzzi-*.

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also diminishing, though not absolutely precluding, the possibility that these neuter *i*-stems are backformed from collectives.

[8] Various factors raise doubts whether Cuneiform Luvian *arūt(i)-* 'wing' = Hieroglyphic Luvian (L78)*arut(i)-* 'basket' (to which add Cuneiform Luvian *kalut(i)-* 'circle') may be directly compared with the Hittite type (as per Melchert 1988:225).

[9] Puhvel wrongly equates *tuzzi-* with ÉRIN.MEŠ 'troops' (a common-gender stem in *-att-*, as shown by Old Script nominative singular ÉRIN.MEŠ-*az*) instead of correct KARAŠ 'army camp', glosses over the evidence of the denominative verb, and falsely claims that all Hittite nouns in *-uzzi-* are instrumental nouns, while *išpantuzzi-* 'libation' is an action noun and ^{GIŠ}*išparuzzi-* 'rafter' a result noun.

On the other hand, *luzzi-* < **lHu-ti-* (sic!) might well be the "Scharnierform" that led to the creation of the "enlarged" Hittite suffix **-u-ti-*, which has never been properly motivated. That is, with the very early loss of the verbal stem **leHu-*, **lHu-* in pre-Hittite,[10] speakers could have reanalyzed a **lHu-ti-* as **lH-uti-* derived from the weak stem *l-* of *lā-* 'to release' < **leh*$_1$- (on whose Hittite inflection see Kloekhorst 2008:509). For the lack of metathesis in the supposed **lHu-ti-* and the relationship of an original **leHu-*, **lHu-* to "Core Indo-European" **leuH-* see Rieken 2016:270–1 and *LIV*^{2} 642 with n. 1 on **th*$_2$*eus-* 'to be silent', which shows reflexes of both **th*$_2$*us-* and **tuh*$_2$*s-*, and Melchert 2011:130 on Anatolian **leh*$_3$*u-* 'to pour, wash' vs. "Core Indo-European" **leuh*$_3$- (see also *LIV*^{2} 345–6 on **keh*$_2$*u-* and **keuh*$_2$- 'to strike').[11]

Such an account is independent of whether *luzzi-* is a direct cognate of Greek λύσις. The latter could be reshaped from an older **λῦσις*, but given the rampant productivity of action nouns in *-σις* in Greek, the attested word may easily be a Greek creation. As we shall see momentarily, Hittite *luzzi-* may be either a backformation from a collective or an original neuter.

The communal and repetitive nature of *luzzi-* 'compulsory public service' allows for, though it hardly proves, a backformation of the attested neuter gender from the collective of a common-gender noun. However, such an account for neuter $^{(DUG)}$*išpantuzzi-* is quite implausible. Both as an action noun '(act of) libation' and as 'libation vessel', *išpantuzzi-* is inherently countable, and it is frequently collocated with the equally countable common-gender ^{NINDA}*ḫarši-* 'breadloaf' (see the attestations in Puhvel 1984:437–8). Since Hittite undeniably has inherently neuter nouns in simple **-ti-*, there is no basis for trying to explain away the attested neuter gender of *išpantuzzi-*. That of *luzzi-* may or may not be original.[12]

Traces of neuter nouns in **-ti-* elsewhere are hard to find. Jay Jasanoff (email of April 22, 2011) has suggested to me that a neuter (nominative)accusative in **-ti* is the source of the Lithuanian infinitive in *-ti* (= dialectal Lithuanian and Latvian *-t*). Since the Slavic infinitive ending *-ti* continues a *ti*-stem locative **-tēi* (Olander 2015: 172 and others), as does the Old Lithuanian infinitive with reflexive particle *-ties(i)* (thus Petit 2017:285), the shorter ending *-ti/-t* has generally been assumed to have the same source (e.g., Petit, loc. cit.). Since *-ti/-t* cannot be the phonologically regular result of **-tēi*, its shape has been attributed to borrowing of an ending **-i*, *-∅* from the *t*-stems, due to confusion between obstruent stems and *i*-stems (e.g., Stang 1966: 447). Jasanoff reasonably objects that the isolated extraparadigmatic infinitive would be unlikely to have adopted such an innovation, even if normal *i*-stem nouns did. It

[10] If the hapax transitive verb ^{NA_4}*pe-ru-lu-u-wa-ri* contains a reflex of **l(e)Hu-* (cf. Puhvel 2013:93), one should say "loss of the simplex finite verb."

[11] In both **leh*$_3$*u-* 'to pour, wash' and **leHu-* 'to cut off, release' the non-syllabification of the initial liquid in **lh*$_3$*u-* and **lHu-* would be analogical to the matching full grades.

[12] Since neuter stems in *-uzzi-* bore no resemblance to nouns in *-eš/iš-*, the former naturally developed no non-direct stem in †*-uzn-*, and the phonologically regular nominative-accusative singular in **-uz* was trivially restored to *-uzzi* after the rest of the *i*-stem paradigm. A derivation of deverbative/deradical *-uzzi-* from a secondary *i*-stem to a nominal stem **-u-to-* (Rieken 2009:152) is quite impossible.

is also far from unusual that a single language has competing infinitive formations, and the Lithuanian and Latvian supine < *-*tum* shows that Baltic did form non-finite verbal forms from accusatives (Stang 1966:448, Petit 2017:284–5). The Hittite evidence that Proto-Indo-European did have some neuter nouns in *-*ti*- provides a phonologically regular source for the Baltic infinitive in -*ti*/-*t* that at a minimum deserves serious consideration alongside the standard derivation that requires irregular phonological or morphological processes.

4 Hittite nouns with a suffix *-*ri*-

Hittite attests a moderately productive set of deverbal/deradical substantives with a suffix -*ri*-: *au(wa)ri*- 'watchtower' < *au*- 'to see', *ēšri*- 'image, likeness' < *"essence' < *ēš*- 'to be' (with Puhvel 1984:315 and Kloekhorst 2008:261),[13] *ēdri*- 'food' < *ēd*- 'to eat', ˢᴵᴳ*kišri*- 'skein of carded wool'(?) < *ke/iš*- 'to comb', *lūri*- '(financial) loss; humiliation, disgrace' < **l(e)h*$_1$*u*- (with Kloekhorst 2008:534 against Puhvel 2001:123),[14] **misri*- 'gleaming, glistening' < **meis*- 'to glisten, glitter, flicker' (Neumann 1957:88), and *zēri*- 'fired clay cup' < *zē*- 'to be cooked done' (Neu 1988:239).[15]

Melchert (1999b:366–7) proposed to see the origin of this class in secondary *i*-stem substantives to adjectives in *-*ro*-, of the type of Greek ἄκρις 'mountain peak' < ἄκρος 'topmost'. The Hittite example ˢᴵᴳ*āntari*- 'blue wool' < *"the blue thing' < *āntara*- 'blue' likely is valid (no abstract 'blueness' is needed), but this account of the examples just listed is not straightforward. It is well-established that the adjectival *-*ro*- was an integral part of the "Caland system" and that the core of the latter is built on "property concept" roots (Rau 2009:79, following Balles and others). However, as Alan Nussbaum has reminded me (email of May 7, 2019), not *all* **ro*-adjectives are derived from property concept roots or have Caland associations (e.g. Latin *gnārus* 'knowledgeable' < virtual **ĝn̥h*$_3$*-ro*-). Some from transitive roots have passive sense: Sanskrit *chidrá*- 'split' and OHG *skiter*, *sketer*, MHG *schiter*, *scheter* 'porous, *bored through' < **skîd-ró*- (Heidermanns 1993:498). Despite the lack of direct evidence for **ro*-adjectives from such roots in Anatolian,[16] we may still reasonably suppose such an origin for the Hittite deverbative action/result nouns in -*ri*-. Compare beside Lithuanian *būrỹs* and Latvian *bũris* 'heap, crowd, mass' (~ Sanskrit *bhúri*-) Latvian *bũra* < (virtual) **bhuh$_x$-reh$_2$* 'idem'.

[13] With Kloekhorst loc. cit., ˢᴵᴳ*ēšri*- 'fleece' must be kept separate, against Puhvel, loc. cit. Its origin remains unclear, as does that of *tekri*- (some kind of verbal insult).

[14] Kloekhorst's etymology does not solve the problem of the sense of *lu-u-ri-uš* in the context of OH/OS KBo 17.15 obv.! 7 (see Neu 1980:73 and 1983:110), but opens new possibilities for a more concrete sense than in the other attestations.

[15] Luvian and Hittite *pūr-i*- 'lip, rim, edge' may be more directly compared with Poetto (1999:211 n. 4) with Latvian *purpas* 'lips' and other Balto-Slavic words in *p/bur*- for 'mouth, lip' than assigned via -*ri*- to a shadowy root < **Peu*- (Neuman 1957:88 and Puhvel 2013:131).

[16] Alleged Luvo-Lycian evidence for a **mis-ro*- 'shining' (Melchert 1994:274) likely does not exist. The Luvian name *Mizra-muwa*- means 'having the might of (the gods of) Egypt' (Yakubovich 2013:106), and the *a*-vocalism of Lycian *Mizratije* is highly problematic for a base **mis-ro*-.

I have thus far avoided the matter of grammatical gender. SÍG*kišri-* 'skein of carded wool'(?) is consistently common-gender, and whatever the sense of Old Script *lūriuš* may be (see n. 14), *lūri-* 'humiliation, disgrace' is definitely common-gender: the example *lūri* with the sense '(financial) loss' in a lexical text may easily be a collective to a common-gender noun (Melchert 2000:63). The noun *au(wa)ri-* 'watchtower' < *au-* 'to see' is overwhelmingly common-gender (attestations in Puhvel 1984:232–3), and the aberrant *a-ú-ri-iš-mi-it* (sic!) in broken context in the New Script copy KUB 31.110:8 is not compelling evidence for an original neuter (against Kloekhorst 2008: 230, with the false premise that other stems in *-ri-* are consistently neuter): for the erroneous use of enclitic possessives in *-e/it* in copies see Otten 1973:55–6.[17]

However, *zēri-* 'fired clay cup', an archetypically countable concrete object, is consistently neuter, and any attempt to explain it as backformed from a collective (e.g. Melchert 1999b:367) lacks credibility. Such an account is also extremely strained for consistently neuter *ēšri-* 'image, likeness' < *"essence' < *ēš-* 'to be', which began as an abstract and in its attested sense predictably occurs frequently in cult inventories explicitly numbered, most often 'one', but occasionally with higher numbers (see Cammarosano 2018:192–201, 308 and passim). While one might reasonably explain consistently neuter *ēdri-* 'food' via a collective, this seems gratuitous in the presence of the two preceding examples. We must conclude that PIE **-ri-* could form both animate and neuter substantives. Vedic feminine *vánkri-* 'rib' < *"that which bends' < **wenk-* (Brugmann 1906:2.382 and Mayrhofer 1992–6:493) beside originally neuter *bhū́ri-* 'much, abundant' confirms the mixed Hittite pattern.

5 Hittite neuter nouns with suffixes *-ulli-* and *-utri-*

Hittite attests a modestly productive set of neuter result/instrumental nouns with a suffix *-ulli-*, in all clear cases deverbative: SÍG*ḫuttulli-* 'strand/tuft of wool' < *ḫu(ē)tt-* 'to pull' (where the zero-grade root is notable), *ištappulli-* 'lid, cover' < *ištapp-* 'to shut, close', *kaliliulli-* 'binding' (or similar) < *kaliliye-* 'to bind', TÚG*kariulli-* 'hood' < *kariye-* 'to wrap, cover', DUG*kuškuššulli-* 'mortar' < *kuškušš-* 'to crush', NINDA*paršulli-* 'crumb, morsel'.[18]

Since the sign *liš* is used in Hittite with the value li_{12}, the example at KBo 18.93 rev. 9 may be read SÍG*ḫu-ut-tu-li*$_{12}$ (thus implicitly Puhvel 1991:351) and is no evidence for a common-gender variant. NINDA*paršulli-* 'crumb, morsel' is consistently neuter in Old Script, and the common-gender variant attested in the accusative plural NINDA*paršu*[*l*]*liēš* at KBo 17.65 obv. 22 in a context stressing the individuality of the morsels is likely a count plural to an inherently neuter noun, from which the likewise

[17] However, Kloekhorst (loc. cit.) correctly dismisses the significance of the spelling *a-wa-ri-*° in KUB 36.49 i 9 and iv 1, whose Old Script status is dubious. The variant *a-ú-ri-* is surely older than *a-(ú)-wa-ri-*, against Rieken 2001:375–6.

[18] The container DUG*ḫariulli-* and the cutting tool URUDU/ZABAR*tapulli-* likely belong here, but their verbal bases are unclear.

Middle Hittite accusative singular *paršullin* at KBo 15.37 ii 55 and 56 is a backformation (see Melchert 2000:65–7).

There is also a much smaller but undeniably real set of neuter "instrumental" nouns in *-utri-*: the clearest is *waššutri-* 'garment' < *weš̌š̌-/waš̌š̌-* 'to wear'. The reading *wa-aš-šu-ut-ri*, not †*wa-aš-šu-ut-tal* is now assured by *wa-aš-šu-ut-ri-eš-ši* = /wassut/dri=ssi/ at KUB 54.96 iv 4 (Tischler 2016:421).[19] We also find ^{KUŠ}*ḫapputri-* (kind of harness) < *ḫapp-* 'to attach, fit' beside *ḫappu-* 'railing' (or similar) and the verb *ḫap(p)uwe-*, providing a starting point for "expansion" of **-tri-* to *-utri-* (Puhvel 1991: 129–30, Kloekhorst 2008:298, and others). Finally, there is ^{GIŠ}*tiddutri-* (a tool), perhaps < reduplicated *titt(a)-* 'put, place' (compare *tit(ta)nu-* 'install').

Confirmation of the latter class in *-utri-* fully validates the derivation by Čop (1966–8:54–5) of *-ulli-* < **-u-t/d^{h}li-*, renewed from **-u-t/d^{h}lo-*, parallel to *-utri-* < **-u-t/d^{h}ri-*, replacing **-u-t/d^{h}ro-* (similarly also Rieken 2009:152 against Rieken 1999: 443–4). Formation of the *i*-stem in **-u-t/d^{h}lo-* and **-u-t/d^{h}ro-* must have preceded anaptyxis in final sequences of **-Cl/ros#* and **Cl/rom#* (Melchert 1993 and 1994: 87–8 and Rieken 2009:152). However, since the anaptyxis in stems in simple **-Cl/ro-* that escaped extension by *-i-* eliminated both **-tl/r-* and **-d^{h}l/r-* clusters, *-ulli-* could with Čop represent **-utli-* or **-ud^{h}li-* (Melchert 1999b:372–3 n. 6, against Melchert 1994:160) and likewise *-utri-* may reflect **-utri-* or **-ud^{h}ri-*.

The problem is: whence the *-i-*? That this reflects formation of *i*-substantives from **-t/d^{h}lo-* and **-t/d^{h}ro-* in an allegedly original *adjectival* function (Melchert 1999b:368 after Brugmann) requires that Hittite preserved a highly hypothetical *pre*-PIE stage for which there is no direct evidence anywhere. There is the further problem (despite the dismissal by Melchert loc. cit.) that all Hittite and Luvian reflexes of **-Cl/ro-* not enlarged by *-u-* are substantives, as expected (see Melchert 1993). This derivation must be rejected as "glottogonische Spekulation."

For Rieken (2009:152) *-ulli-* and *-utri-* reflect "Calandsubstitution" to thematic bases, but none of the alleged parallels are valid: as we have seen, Hittite nouns in *-zzi-* and *-uzzi-* are deverbative/deradical stems in **-ti-*. Likewise, all clear examples of *-ulli-* and *-utri-* have preserved the expected deverbative pattern of *substantives* in **-t/d^{h}lo-* and **-t/d^{h}ro-*. They cannot accurately be compared with *i*-stem substantives derived from thematic *adjectives* in **-o-*, including **-r-i-* < **-ro-*. I see no alternative but to suppose that the formally and functionally similar suffix *-uzzi-* < **-u-ti-*, which also forms result and instrumental nouns, is responsible for the renewal of **-u-t/d^{h}lo-* and **-u-t/d^{h}ro-*. Note that this would explain why the spread of *-i-* affected only the "enlarged" variants with *-u-* and none of the other nouns in **-t/d^{h}lo-* and **-t/d^{h}ro-* (some of which descriptively show another "connective" vowel).[20] The difference between *-uzzi-* and *-ulli-/ utri-*, namely that the latter are consistently neuter, merely

[19]The broken context permits a nominative-accusative singular/plural plus dative enclitic pronoun or a dative-locative singular plus possessive adjective.

[20]On *šāwitra-/šāwatar* 'horn' see Melchert 1993:105–6 and Rieken 2009:145 n. 1, and on **ḫannital-* 'lawsuit' (attested in *ḫannitalwan-* 'opponent at law') Melchert 1993:111.

reflects the original gender of the latter suffixes' immediate antecedents. The general recessiveness of neuter *o*-stems in Hittite may or may not have contributed to the development.

Abbreviations

*LIV*² = Kümmel, Martin, and Helmut Rix (eds.). 2001. *Lexikon der indogermanischen Verben: Die Wurzeln und ihre Primärstammbildungen*. 2nd ed. Wiesbaden: Reichert.

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