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## SOME HITTITE ETYMOLOGIES

The meaning 'urine' for *šehur* was determined by Sturtevant in 1936.<sup>1</sup> It denotes a liquid (KUB IX 28 III 17 *šehur lahuwān* 'urine [is] poured') occurring in combination with *šakkar* 'excrement', as in KUB VII 5 I 8-9 *nu-wa kāš lanlukešnaš DUMU-aš šaknaš šehunaš*<sup>2</sup> 'this (impotent) individual (was capable only) of feces (and) urine' (as opposed to seminal emission). The same juxtaposition occurs derivationally in KBo X 37 II 24-25 *arriš-(š)mel* [...] *šehuganiyauwanza šakki* 'their (?) anus dirty with urine (and) excrement', besides *ibid.* III 48-49 *aiš-(š)mil* [...] *arrišš-a šehuganiyauwanza* 'their mouth [...] and anus dirty with urine'.<sup>3</sup> The nom.-acc. sg. neuter *šehur* also underlies the denominative verb *šehuriya-* 'urinate' in KUB XXXI 71 III 10-11 *šarā-ga-mu-kan UL kuiški šehuriyat* 'and no one pissed on me' (vs. *šakniya-* 'defecate' from *šakkar*). KUB XXXV 132 III 7 *šehuni anku paizzi* can thus be routinely translated '(so-and-so) must absolutely go to urinate' (literally 'go for urine'). Yet a further collocational occurrence, that of *šehur* and *kam(m)arš-* 'defecate', points to something other than a clear-cut binary and complementary distribution of meanings. In IBoT I 36 I 33-47 provision is made for a royal bodyguard's "nature calls": (33-34) *mān-an-za-kan šehunanza-pat lamāšzi* 'if urination is pressing on him', word of the emergency is passed down the line and up the chain of command, until the commandant approves the trip to the pissoir (<sup>acc</sup>*kalli-*, with 'vessel' determinative). (43) *mān-za-kan gamaršuwanza-ma kuin lamašzi* 'but if defecation is pressing on someone', the same routine is described in abbreviated form (*araš ari lezzi* 'one says to the other'), yet the word reaches the commandant in the form (44) *šehuna-war-aš paizzi* 'he goes to *šehur*', rather than as previously (41) <sup>acc</sup>*kalliya-war-aš kallan paizzi* 'he goes down to the *kalli*'. Once the commandant gives the go-ahead, the bodyguard who

(1) E. H. Sturtevant, *Language* 12 (1936), 182.

(2) Spelled *ši-e-*, vs. the usual *še-(e-)*.

(3) Presumably a compound, *šehu(r)-* or the oblique case stem *šehu(n)-*, + *ganiya-*, a submerged verbal stem from a root denoting 'daub, smear' (cf. Gk. *κόπω*, *κόπω* 'dust, ashes', Lat. *cinis* 'ashes'), with deverbative *-want-* as in e.g. *kartimmiyauwant-* 'angered'. *šakki*[*ganiyauwanza*] might show the alternative compositional survival of a stem *šakki-* besides *šakkar*, as in Homeric *κῶδι-ἀνείρα* besides \**κῶδια* (*κῶδιον*, *κῶδιος*), or (under "Caland's law") *ἀργι-κῆρανον* besides Vedic *rjrá-*.

(4) Animate *-nt-* derivative *šehun-ant-* as subject of a transitive verb; cf. E. Laroche, *BSL* 57 (1962), 29.

(45) *šehuna paizzi* is also checked out by His Majesty, (46) *nu-ššan šehunašš-a ullar INA É.GAL-LIM ari* 'and word of *šehur* also gets to the palace'. Apparently *šehur* is here not merely 'urine' or 'urination' but can also (unlike *šakkar* and *kam[m]arš-*) serve as a more comprehensive term for the emptying of bladder and bowel, thus 'evacuation of body wastes' in general. Hence the authorization to go to the comfort station is a more serious matter in the second instance and has to be cleared all the way to the top.

Thus, while KBo XXI 20 I 25 UKÜ-*aš šehur* denotes 'human urine', KUB XXII 33 Vs. 9 Á<sup>MUŠEN</sup>-*ma ... šehur larnaš* means simply 'the eagle let fall droppings' (since birds have no urine). Finally, KBo X 45 IV 37-38 yields a meaning which is incompatible with bodily wastes or emissions of any kind and points rather to 'muck, crud': *karizz-a-kan GIM-an URU-az šehur IM-an ārri* 'as the deluge washes crud (and) mud off the city' (IM = *wilan-* or *purul-* 'clay, mud').

The last-mentioned sense is very probably the primary one, rather than city dirt being called 'urine'. Hence all the etymologizing starting from a base-meaning 'urine' has been semantically flawed.<sup>5</sup> The connection of *šehur* with IE \**sē(y)-* 'throw, sow' from Sturtevant to Carruba<sup>6</sup> is also formally implausible because the Hittite reflex of \**sē(y)-* is *šai-* 'press, shoot'. Furthermore, the postulation of any etymology with Indo-European \**s-* is rendered problematic by the gloss-wedged Luwoid neuter noun *du-ú-úr* 'urine' in KUB XIII 4 III 67-68 *apedani-ma DINGIR. MEŠ zakkar* 'dūr adanna akuwanna pianzi' 'to him the gods will give excrement (and) urine to eat (and) drink'. The meaning 'urine' is of course secure in asyndeton combination with *zakkar* (= *šakkar*), just as in *šaknaš šehunaš* quoted above, and is further reinforced by the distribution of the appropriate verbs. We thus have Hittite *šehur* vs. Luwoid *du-ú-úr*, and attempts to explain the Luwian phonetics as secondary (*t/d* < \**s*)<sup>7</sup> do not convince.

A first glimmer of an alternative approach to *šehur* was provided in very confused fashion by Carruba (*loc. cit.* in fn. 6) who, while certain of Sturtevant's explanation, also mentioned the verb *šah-* (allegedly 'verunreinigen')<sup>8</sup> as being possibly related to *šehur*. The idea was followed up by Eichner<sup>9</sup> who assumed that *šehur* is in origin

(5) The list of comparisons is almost too lengthy for convenient summary: Old Church Slavic *syrŭ* 'moist', Old Norse *sŭrr* 'sour', *saurr* 'sperm', Lat. *sēmen* 'seed, sperm', IE \**sē(y)-* 'throw, sow' (Sturtevant, *op. cit.* in fn. 1, 182-185); OCS *sīcati* 'urinate', Skt. *sic-* 'sprinkle', Old High German *sīgan* 'drip', *sīhan* 'filter' (W. Petersen, *JAOS* 59 [1939], 187; cf. also OHG *seihhen* 'urinate', Lat. *siat* 'urinates'); Lithuanian *sēilė* 'spittle', IE \**sey-* 'drip' (B. Čop, *Linguistica* 7 [1965], 100-102); Gk. *ῥεῖν*, Tocharian B *su-* 'rain' (W. Winter in *Evidence for Laryngeals* [1965], 194-197), thus IE \**sew-(H)-* which may also lurk in OCS *syrŭ* (etc.), but with 'laryngeal metathesis' in *šehur* (< \**sewHr*; M. Mayrhofer, *Die Sprache* 10 [1964], 183); *šehur* reflects a partial conflation of IE \**sē(y)-* 'throw, sow' with IE \**sey-* 'drip' and \**sē(y)-* 'strain, filter' (Gk. *ῥεῖω*, Lith. *sijóju*; H. Kronasser, *Etymologie der hethitischen Sprache* 1 [Wiesbaden 1966], 286). Cf. also F. O. Lindeman, *Einführung in die Laryngalthorie* (Berlin 1970) 53-54.

(6) Carruba, *Das Beschwörungsritual für die Göttin Wišurijanža* (*StBoT* 2, 1966), 52.

(7) Čop, *loc. cit.* in fn. 5, who also assumed Hittite *-h-* to be secondary, thus reconstructing IE \**sēy-ur*.

(8) For 'hier.-heth. *šah-*' read 'hier(her) heth. *šah-*'?

(9) H. Eichner, *MSS* 31 (1973), 69-70, who inconvincingly also connected Luwian *šahha-* 'dirt' (for which see under *šakkar* below).

a verbal noun from the root seen in *šah-*. In order to test this possibility, the verb *šah-* must be subjected to searching examination.

*šah-* is to be distinguished from *šanḫ-* (3 sg. pres. act. *šanahzi*, *šanḫazi*) 'seek, go after, assail, look for, search for, strive for, plan' (*appan šanḫ* 'care for, care about', [*anda*] *šanḫ-* 'exact, avenge'), especially its alternative forms spelled *šah(h)-*: KBo V 9 I 19-20 [*n*] *u luk ... EGIR-an šahhun* 'I have cared for you', besides *ibid.* 14 *šanahhun*; KUB VII 8 II 17 *luk EGIR-an šahla* 'he has sought after you', as *ibid.* 16; KUB XVII 10 I 24-26 *il-war-ašta pargamuš HUR.SAG.AŠ.AŠ.ḪI.A šāḫ ḫāriyuš-kan ḫallu-[wam]uš šāḫ* 'go, search the high mountains, search the deep valleys!', besides *šanḫa* (e.g. *ibid.* 31), *šanah* (KUB XXXIII 2 I 16), *anda šanḫi* 'avenge!' (KBo XI 1 Vs. 38). The etymological connection of *šanḫ-* is equally clear: Skt. *sanōti* (*sānilar-*, *sālā-*) 'gain, procure', Gk. *ἀνύω* 'effect, achieve, reach', Old High German *sinnan* 'strive for', Old English *sinnan* 'care for'.<sup>10</sup>

A second verb *šanḫ-*, *šah(h)-*, allegedly 'sweep', has sometimes been considered a semantic offshoot of 'seek',<sup>11</sup> while others have taken it as a separate homonym.<sup>12</sup> Yet this *šanḫ-* does not properly mean 'sweep' (which is *warš[iya]-* cognate with Latin *verrō*, or more mildly *an[a]š-* 'wipe'). It denotes a wet procedure distinct from *arra-* 'wash, rinse' (related etymologically to Toch. A *yār-* 'bathe'), *war(a)p-* 'bathe, scrub' (cf. OE *sweorfan* 'scrub'), *ḫurnai-* 'spray' (cf. Gk. *ἐρίνω* 'sprinkle'), *pappars-* 'sprinkle' (cf. Toch. AB *pārs-* 'sprinkle'), and *tallarai-* 'scour, scrub' (cf. Gk. *τείρω* 'rub'). I would propose something like 'flush (down), wash down, rinse'; the following selection of attestations seems representative for semantic purposes:

KUB XXVII 29 I 9 *n-an SAL ŠU.GI šanzi* (< *šanḫzi*) 'the old woman washes him down'.

KUB XVI 17 III 10-12 *namma IŠTU [...] SAL-TUM šanḫanzi nu-šši-kan [...] lāḫūwanzi* 'then they flush the woman with ... and pour ... over her'.

KBo V 1 IV 31-33 *maḫḫan-ma lukalla n-ašta DUMU šanḫanzi GIŠPA-aḫḫiša-ya-šši šarā walḫanzi* 'but when it dawns, they they rinse the child and beat on it with sticks'.

KUB XXXVIII 32 Vs. 9-10 É.MEŠ DINGIR.MEŠ-*kan šanḫanzi ḫurnanzi DINGIR-LUM war[panzi]* '(they) flush (and) spray the temples (and) bathe the deity'.

KUB IX 15 III 5-7 *nu-kan É DINGIR-LIM parā šanḫanzi daganzipuṣ tallarānzi nu É DINGIR-LIM andurza araḫza ḫurniyanzi* 'they flush out the temple, scrub the floors, and spray the temple inside (and) outside'.

KUB XLVI 39 III 7 *šanḫanzi parkunuwanzi* 'they flush (and) cleanse'.

KUB VII 49, 2-3 *n-ašta šanḫanzi [n]-ašta SAḪAR.ḪI.A-uš parā išḫūwānzi* 'then they flush, then they shed forth the dirt'.

KBo XV 33 II 22-23 *n-ašta šanḫanzi nu kiššaraš wālar ped[a]nzi* 'then they flush, and bring hand-water'.

KBo XIX 128 V 32-33 LU.MEŠÚ[.ḪUB š] *anḫanzi wālar pappars[a]nz[i]* 'the deaf men flush (and) sprinkle water'.

KUB XXVII 29 I 18 *n-ašta šanḫanzi papparsanzi-ya* 'then they flush and sprinkle'.

(10) Cf. T. L. Eichman, *KZ* 87 (1973), 269-271.

(11) E.g. H. Ehelolf, *Kleinias. Forsch.* 1 (1930), 146-150.

(12) Thus Kronasser, *op. cit.* in fn. 5, 423.

KUB XIII 4 I 19-20 *n-al-kan šanḥan ḥurnuwan ēšdu* 'let it be flushed (and) sprayed' (similarly *ibid.* III 60).

KUB XXIX 1 III 39-40 DINGIR.MEŠ-wa GUNNI *dāir nu-war-an [ku]nnanil ḥūrayir n-an AN.BAR-il šan[ahh]ir* 'the gods have placed the altar, they have "sprayed" it with copper (?), they have "flushed" it with iron'.<sup>13</sup>

There are two occurrences of the variant form *šah(h)*-, both connected with the 'rinsing away' of illness:

KUB XXIX 1 I 46-48 [l]akku *ilaš kardi-šmi naššu-ma ʔUTU-waš išlarningaiš kardi-šmi n-al-kan šarā šāḥlen* 'if weakness (is) in your heart, or the ailment of the sun (is) in your heart, flush it out!'.<sup>14</sup>

KUB XII 58 III 2-4 *kāša-kan NÍ.TE ḥūmanda šahḥiškimi nu-šši-kan kalla kišān ēšdu idalu papratar* 'lo, I am flushing all (his) limbs; from him let evil uncleanness be combed down'.<sup>14</sup>

Once the true meaning of this verb has been established, the etymology falls into place: *šanḥ-* is to IE \**snā-* what e.g. *tarḥ-* is to IE \**trā-*, or *palḥi-* is to Lat. *plānus*, or *ḥalzai-* is to Goth. *laþōn*; cf. Avest. *snayeilē* 'bathe, rinse', Skt. *snāti* 'bathe', Lat. *nā-* 'swim' (<'be awash'), Old Irish *snāid* 'swim, float'.

The verb *šah-* (3 sg. pres. act. *šāḥi*) was rendered by Laroche<sup>15</sup> as 'corrompre, gâter, barbouiller, salir'; Friedrich<sup>16</sup> turned that into 'verunreinigen, besudeln, schmieren'; he was followed by Kronasser<sup>17</sup> and still by Eichner in 1973.<sup>18</sup> A more cogent translation 'block, clog, stuff' was given by Güterbock<sup>19</sup> in 1964 and adopted by Berman.<sup>20</sup> I would gloss *šah-* by 'clog (with dirt), plug, stop up; stuff, cram, jam' and give the following renderings:

KUB XIII 2 II 22-23 *kuiša-kan welenaza šahāri n-an-kan šarā šanḥandu* 'whatever (sewer) is clogged with (waste) water, let them flush it out'.

*Ibid.* 2-4 *namma-kan URU-ri [arlahḥiūš] le šahḥiskantari<sup>21</sup> n-aš-kan MU-li. KAM-li šarā šanḥiskandu* 'also in the town let the sewers not be clogged; let them flush them out annually'.

KBo XI 1 Vs. 40 *našma-kan šuppa TÚL kuiški šahḥa* 'if someone has clogged a holy well'.

KBo XVII 61 Vs. 12-13 *nu-mu māt TUR-an parā pianzi [... n]-an-kan KA×U-*

(13) Apparent technical terms of metal-working, assuming that *ḥūrayir* is related to *ḥurnai-*.

(14) Cf. *ibid.* I 13-14 *nu edani antuḥši ... IŠTU ʔzuv UR.ḪI.A-ŠU idalu papratar arḥa mutāi* 'from the limbs of this man flush off evil uncleanness!' (unlike *šanḥ-*, *mutai-* has reference to the magical application of catbatic mud or urine rather than clean liquids; there is also the neuter noun *mūdan* 'flushing, rinsed dirt, refuse, offal' as food for dogs and pigs in KBo X 37 II 16). Cf. J. Puhvel, *AJPh* 97 (1976), 166.

(15) *RHA* 9 (1948-9), 16.

(16) J. Friedrich, *Helh. Wb.*, 175.

(17) *Op. cit.* in fn. 5, 423-424, 549.

(18) *Loc. cit.* in fn. 9.

(19) H. Güterbock, *JAOS* 84 (1964), 272.

(20) H. Berman, *ibid.* 92 (1972), 467: 'stop up'. Eichner also caught up in *Die Sprache* 21 (1975), 157-160: 'hineinstopfen, aufpressen, einstampfen'.

(21) With duplicate KUB XXXI 89 II 19 *šahḥiskantari* and parallel XXXI 86 II 31 *šāḥiškantari* (with *-l-* <*-nt-*; or 3 sg.?).

ŠU *šahmi* 'when they hand the baby to me ... I plug his mouth' (viz. if he turns out to be [*ibid.* 14] *UL-ma ḥuišwannaš* 'not viable'); *šahmi* also *ibid.* 15.

KBo III 8 II 29-30 EMJE-ŠU *šahdu nu saḥḥāšauwaš p[ait nu-šši] EME-ŠU šahla* 'let her plug his tongue; and the old woman went and plugged his tongue'.

KUB I 13 III 11 É L<sup>6</sup>IŠ-m]a *anda šahān* 'the stable (is) plugged shut'; *ibid.* 22 *anda šah[ān]zi*.

KUB IX 28 I 14 *pūriyaš-šaš wēlkuwan šāḥan* 'grass (is) stuffed into its lips'.

KUB XXXIX 88 I 10 si<sup>6</sup>k]i<sup>6</sup>šrin *anda šāḥi* '(he) crams in(to a potstand) a skein of wool'.

KBo X 47c, 14-17 (with duplicate KUB VIII 56, 1-4) "akku[šša] *tarneškizzi ʔEn[kiduš-ma-šši piran] iyallari nu k[an ŠAḪAR.ḪI.A-az] šahḥiskizzi* '(Sangasu) keeps sinking pits, (but) Enkidu will go ahead of him and stuff<sup>22</sup> (them) with dirt'.

We now also have the clue to the root-meaning of the neuter noun *šahḥēššar* 'stronghold, fortress' (KUB XXXVI 110 Rs. 8-9 *nu Labarnaš LUGAL URUḪatti šahḥēššar-šummet ēšlu* 'may Labarnas the king of Hatti be your fortress'); the semantic development would be from a verbal noun 'stopping up, jamming' > 'shut area' > 'stronghold'. BÅD-*eššar* may stand for either a deverbative *šahḥēššar* or a denominative abstract noun *kulleššar* ('walling', from *kult-* 'wall'; cf. Gk. *χωτῆ γαῖα* 'earth-heap').<sup>23</sup> The denominative verb *šahḥēšnai-* (BÅD-*ešnai-*) means 'make into a stronghold, fortify', with iterative *šahḥēšnaeški* (670/v, 5) or *šahḥēšneški* (KUB XXIII 1 l.R. 1 *n-an-za-aš šahḥēšneški PAP-nuški* 'keep fortifying [and] defending it!'); its derivation pattern matches that of e.g. (*arḥa*) *happešnai-* 'dismember' from *happeššar* 'limb'.<sup>24</sup>

*šah-* is a *-ḥi* conjugation verb, unique in its stem-final *h* which is consistently spelled single between vowels, thus pointing to a voiced laryngeal under "Sturtevant's law". The *a*-vocalism represents the *o*-grade of the Indo-European perfect stem. The *e*-grade can be postulated in a verbal noun *šehur* (with suffix as in e.g. *aniur* besides *aniyauwar* from *an[n]iya-*), with a semantic development 'clog(ging)' > 'crud' > 'body wastes' > 'urine'. For the meaning shift we may compare e.g. Latin > English *f(a)eces*, originally 'dregs, impurities'. *šehur* intimates that 1 sg. pres. act. *šahmi* may be a cross between \**šehmi* (cf. e.g. *wehzi*) and \**šah-ḥi* (the latter with a collision of *e-* and *a-* coloring laryngeals).

An Indo-European root etymology \**seA-* or \**saH-*<sup>25</sup> lacks plausibility, being based on the superseded meaning 'dirty, befoul'. Keeping in mind Hitt. *šehur*: Luwoid *du-ú-úr*, we can essay a parallel to such pairs as Hitt. *šiwall-* 'day': Luwian *tiwat-* 'sun' (<IE \**dyew-*) or Hitt. *šakui-*: Luwian *da-a-u-i-iš* 'eye' (<IE \**dhyagh<sup>w</sup>i-*).<sup>26</sup>

(22) Corresponding to *umtalli* 'he would keep filling' in the Akkadian *Gilgameš* from Nineve.

(23) A. Kammenhuber's rejection of any tie between *šahḥēššar* and *šah-* (*MIO* 2 [1954], 442; *OLZ* 54 [1959], 30) was based on the erroneous meaning 'dirty, smear'; but the connection could be defended even then with reference to e.g. Skt. *dih-* 'smear': Gk. *τεῖχος* 'wall' (cf. Eichner, *op. cit.* in fn. 9, 95).

(24) Cf. C. Kühne and H. Otten, *Der Šaušgamuwa-Vertrag* (*StBoT* 16, 1971), 48.

(25) R. Schmitt-Brandt, *Die Entwicklung des indogermanischen Vokalsystems* (Heidelberg 1967), 102-103.

(26) Cf. Puhvel, *California Stud. in Class. Ant.* 6 (1973), 229; *JAOS* 94 (1974), 294-295; *Incontri linguistici* 2 (1975), 129-134.

By this token we can posit a proto-form *\*d(h)yéE-wr* > Proto-Anatolian *\*dyeḫur* > Hitt. /zēhur/, whereas Luwian underwent loss of intervocalic *h*, contraction of hiatic vowels, and monophthongation of the resulting diphthong. The Luwian loss of intervocalic laryngeal may be comparable to that seen in the Luwoid 3 sg. preterit active *pawaritta* (KUB XIV 20, 11) 'bivouacked', if it means literally 'made fire' (*pawariya-* < *\*pahuwariya-*; cf. Hitt. *pahhu[wa]r* 'fire').<sup>27</sup>

Trying to find extra-Anatolian cognates, we can extrapolate from *\*dhyéE-* to a root *dhéy-E-* and see it reflected in Latin *fimur* 'ordure' (< *\*dhi-mó-*), *faex* 'dregs, sediment, impurities' (*\*dhoy-k-*, with Italic *a*-coloration as in e.g. *salvus* besides *sollus*, or perhaps *\*dhoyE-s*, with "hardening" of the laryngeal into a guttural stop before the *s*, as in *senex* < *\*seneA-s*),<sup>28</sup> and *foeleō* 'be odorous, stink' (*\*dhoy-t-ē*). The Hittite verb *šah-*, with a verbal noun *šaḫeššar*, then goes back to *\*dhyoE-* with a basic meaning 'clog with dirt, form crud', besides *\*dhyeE-* in *\*šehmi* with its more ancient and subsequently isolated verbal noun *\*dhyeE-wr* > Hitt. *šehur*.<sup>29</sup> Thus we may be on the traces of a significant Anatolian-Italic lexical isogloss, with the verbal root still in use in Hittite but only scattered derivatives extant in Latin.

In the context of *šehur* reference was made earlier to the marked terms for 'excrement' and 'defecate', *šakkar* and *kam(m)arš-*. Some further consideration of their derivational and etymological circumstances is likewise in order.

Nom.-acc. sg. *šakkar* or *zakkar*, gen. sg. *šaknaš*, the denominative verb *šakniya-*, and the possible compositional stem *šakni-* were all touched upon above. *zakkar* occurs not only in asyndetic juxtaposition to the Luwoid *dūr* 'urine' but also in a vocabulary list (KBo I 45 Vs. 9) matching Akkadian *zū* 'excrement'. *šakkar* can have the literal meaning (e.g. KUB XVII 28 I 4-5 *nu-kan*] *ḫallešni anda ... šakkar dahḫi* 'in the hole I put excrement' [of animals]; KBo XXI 107 II 9 UTUL *šaknaš tianzi* 'they place a bowl of feces'; KBo XXII 2 Vs. 2 *luppuš šakanda*<sup>30</sup> *šunnaš* 'she filled containers with excrement'), but also a more abstract sense of 'befoulment, impurity', as in KUB X 60, 1 LÚ.MEŠ <sup>61</sup>ŠBANŠUR *šaknaš* 'men of the table of impurity'. On top of *šakkar* and *zakkar*, the form *zašgar-* is attested compositionally in *zašgaraiš* 'anus', literally 'excrement-mouth' (KBo XVII 61 Rs. 14 *zašgaraiš-kan zašgarišši* 'anus on anus').<sup>31</sup>

Of further derivatives we need to distinguish *šaknumar* and *šaknuwant-*. *šaknumar* is a neuter abstract noun 'befoulment, feces' (KBo XXI 20 I 17 SAL-aš *šaknumar* 'a woman's feces'), apparently a derivative from a denominative verb *\*šakn-nu-* 'make shitty, befoul', comparable to e.g. *ešhar-nu-* 'to bloody', *aimpa-nu-* 'to burden'. *šaknuwant-*, i.e. /šakn-want-/, is a well attested denominative adjective which can mean literally 'full of feces' (KUB XXXIII 62 III 10-13 *šameš ezzašten nu-za išpillen ekullen-ma nu-za nikten nu-šmaš ŠĀ-KUNU šaknuan ēštu ZI-KUNU-ma-šmaš* [waršiy] *anza ēštu* 'eat and be sated, drink and be filled; may your innards be full of excrement,

(27) Cf. e.g. Luwian *er(hu)wa-*, *manna(hu)wanni-*, and see N. Oettinger, *MSS* 34 (1976), 102-103. KUB XIV 20, 13 (two lines later) mentions the army's (camp)fire (*pahḫur*).

(28) Cf. e.g. Lindeman, *op. cit.* in fn. 5, 85-86.

(29) Armenian *šer* 'urine' is conceivably a loanword from Hittite.

(30) This Old Hittite instr. sg., for more expectable *\*šakniit*, with intervocalic *-k-* rather than the normal *-kk-*, probably represents /šaknda/. Cf. also Otten, *Eine altheithitische Erzählung um die Stadt Zalpa* (*StBoT* 17, 1973), 17-18.

(31) Cf. Berman, *op. cit.* in fn. 20, 468; Puhvel, *ibid.* 95 (1975), 263-264.

and may your spirit be soothed'); but more often it has the sense of 'possessed of impurity, befouled, (ritually) unclean', as in KUB XIII 4 III 80, where someone is *šaknuanza* because (*ibid.* 79) *warapzi-ma-za nāwi* 'he has not yet bathed'; it is often antonymous to *parkui-* or *šuppi-* 'clean'.

Luwian *šahḫa-* 'dirt, filth' (acc. pl. in Hittite context 509/d, 5 *kuiš šahḫanza iššāi* 'who commits impurities') is an animate noun created by the dropping of final *-r*, as in *wida-* 'water' (acc. pl. *widanza*) vs. Hitt. *watar* (pl. *widār*), or *ḫappiša-* 'limb' vs. Hitt. *ḫappeššar*; the oblique case stem in *-n-* is still visible in the denominative verb *šah(h)aniya-* 'befoul' (KUB XXXV 45 II 21, XXXV 48 II 14) besides Hitt. *šakniya-*; *-ḫḫ-* < *-kk-* is comparable to Luwian *nahḫuwa-* 'consider important, take to heart' vs. Hitt. *nakkiyahḫ-*.<sup>32</sup>

*šakkar* has long been connected with Gk. *σῶρ* (gen. *σκατός*) 'excrement, dung'.<sup>33</sup> The initial spelling variations *šakkar*, *zakkar*, *zašgar-* may point to /t(s)kar/.<sup>34</sup> Yet oblique cases (*šaknaš*) and derivational forms (*šakn-uwant-*, *šak[n]-numar*, *šakn-iya-*) require rather /sahn-/ and thus a proto-form *\*sókr* (like e.g. *\*nómṛ* > Hitt. *lammar*, oblique stem *lamn-*).<sup>35</sup> Possibly the two interpretations are not mutually exclusive, with *šakkar* representing *\*sókr* and *zakkar*, *zašgar-* being attempts at expressing an allomorphic *\*(t)skór*, perhaps with some divergent nuance such as a "collective". In any event *šakkar* is an old radical heteroclititic noun which shows either *šakki-* or *zašgar-* as its compositional form, whereas the deverbative abstract noun *šehur* appears as either *šehu(r)-* or *šehu(n)-* (see fn. 3).

*kam(m)arš-* was definitely determined as 'defecate' by Güterbock.<sup>36</sup> The attestations, in addition to the already mentioned *gamaršuwant-* 'defecation', are not numerous and include no finite form of the basic Hittite verb:

KUB XXXI 100 Rs. 8-10 *nu k[amaršuwāš uddanī mekki nahḫ[anteš ēšten]* [nam] *ma-kan* <sup>URU</sup>Ḫattuši *šer ḫaššuš le [...]* [n-] *ašta* [ḫaš] *šuš kalla šallai ḫuššili-pat* [...] 'in the matter of defecation be very concerned; furthermore up in Hattusas the king shall not ..., rather the king ... down to the great (= royal) latrine'.

KUB XVIII 41 Rs. 8 *kamaršieškanzi*.

KUB XVII 27 III 12-15 *n-at-kan ANŠU-aš ešharreškiddu* [n-at-] *kan GUD-uš kammaršieškiddu DUMU.LÚ.ULÜ.LU-ma-šan* [kuiš] *šer arḫa iyallari nu-uš-šan* *šer* [all] *appahḫiškiddu* 'let the ass bloody them, let the ox shit (upon) them, let the man who walks over them spit upon them!'.

There is also the hapax attestation of a Luwoid *kalmaršilli* in line 6 of KUB XXX 31 I 1-8:

*kuiltman-kan* <sup>UTU</sup>U-uš *nawī ūpzi nu LUGAL SAL.LUGAL* <sup>URU</sup>Ḫattuši *šakniyanzi* *n-at-za arḫayan ešandari mahḫan-ma-kan* <sup>UTU</sup>U-uš *ūpzi ape-ma INA* <sup>URU</sup>Kizzuwalna *INA É* <sup>IM</sup>šinapšiya *kalmaršilli mahḫan-ma-kan ANA UD-MI* 2 1/2 *kipeššar*

(32) See Laroche, *Dictionnaire de la langue louvite* (1959), 135; pace Eichner, *loc. cit.* in fn. 9.

(33) Cf. E. Benveniste, *Origines de la formation des noms en indo-européen* (1935), 9; Sturtevant, *op. cit.* in fn. 1, 183.

(34) Cf. Benveniste, *BSL* 50 (1954), 35-36; Berman, *loc. cit.* in fn. 31.

(35) Cf. H. Frisk, *Indogermanica* (1938), 25-26; J. Schindler, *BSL* 70 (1975), 5.

(36) *Oriens* 10 (1957), 353. Kronasser, *op. cit.* in fn. 5, 403, still managed to hedge unhelpfully and incline towards 'urinate'.

5 *wakšur paizzi nu-za* LUGAL SAL.LUGAL *warpanzi namma apedani UD-li UL kuitki ienzi* 'while the sun is not yet up, king (and) queen make excrement in Hattusas, and they seat themselves apart; but when the sun goes up, they defecate in Kizzuwatna in the *šinapši* of the temple of the storm-god; but when of the day (something like half an hour) goes by, king (and) queen bathe and on that day do not do anything more'.

Of doubtful appurtenance is *kammarašniya-* with 3 sg. pret. midd. ]*kammaraš-niyattal* (1041/c IV 2; cf. *ibid.* 1 *ešhantet* 'blood'; thus 'befoul, stain'?) and 3 pl. pret. midd. *kamm]arašniyanlal* (KUB XXXIV 63, 9; similarly *ibid.* 10).<sup>37</sup>

*kalmaršilli* is perhaps a Luwian 3 pl. pres. act. \**kalmaršinti* for \**kalmaršiyanti*, rather than a contextually and syntactically erroneous 3 sg. of the type *kalutilli*. It may be that *kam(m)arš-* in Hittite is the Luwian-borrowed term for 'defecate', vs. Hittite proper *šakniya-*; typically, with their ritualized bowel habits, the royal couple *šakniyanzi* in "Hattusas" but *kalmaršilli* in "Kizzuwatna", i.e. in Luwian context, in what may be a symbolic microcosmic circuit of the "stations" of the empire.

Hence we may postulate a Luwian proto-form \**kalmar* < IE \**ghed-mr* 'defecation', allomorphic for \**ghed-wr* (cf. e.g. Gk. *χέζω*, Skt. *hādati* 'defecate', Avestan *zadah-* 'arse, anus'), comparable in formation with \**dhyeE-wr* > Luwian *du-ú-úr*, Hitt. *šehur*. There is no conclusive evidence for a primary verbal stem *kalmarš-*.<sup>38</sup> *kalmaršilli* < \**kalmaršiyanti* (spelled *kal-mar-ši-*) and the iterative *kam(m)aršieški-* (spelled *ka-mar-ši-eš-* or *kam-mar-ši-eš-*) can be interpreted as \**kalmar*+*šiya-* 'press, shoot' (cf. Hitt. 3 sg. pres. act. *šiyāizzi*, *šiezzi*, iter. *šiyaeški-*), whereas the verbal noun *kamaršuwār* (spelled *ka-ma-ar-šu-wa-*) may be haplologic for \**kalmar*+*šuwawar* 'excrement-fullness' (from *šuwai-* 'fill'; cf. *šunnumar* from *šunnai-* 'fill'). *gamaršuwant-* (spelled *ga-ma-ar-šu-wa-*) shows an "animate" -*nt-* extension of the neuter action noun (cf. fn. 4). For such kinds of compounds in this particular semantic sphere cf. e.g. *šehu(r)-ganiya-* and *zašgar-aiš* discussed above. After a certain point a secondary verbal stem *kalmarš-* (Hitt. *kam[m]arš-*) could have become abstracted from the obscured compounds, as the basis of the derivative *kammarašniya-* (spelled *kam-ma-ra-aš-ni-ya-*) with a factitive suffix.

(37) Cf. E. Neu, *Interpretation der hethitischen mediopassiven Verbalformen* (StBoT 5, 1968), 79.

(38) Attempts to etymologize such a *kalmarš-* have been pitiful: Čop (*op. cit.* in fn. 5, 104-105) postulated a prefix \**ka-* and a verbal root akin to Gothic *smarnōs*, Lat. *merda* 'excrement', unacceptably assuming Luwian *l/d* < \**s*. H. Wittmann's comparison (*Die Sprache* 19 [1973], 39) of *kamarš-* (as \**kam*+*arš-* 'let clods flow') with Russian *kom* 'ball, lump' displayed no awareness of the form *kalmarš-*.