

Caucasian imposes many constraints on the form of a syllable; it is likely that the phonology of some other members of Caucasian Sprachbund were adapted to their model. A particular example of this adaptation is the elimination of the initial group */#CR-/. At the same time the initial group */#sC-/ was touched much less by the interaction within this Sprachbund; the areal constraint on it was not very highly ranked. The last fact can be independently confirmed by the peculiar "native" development of Nakh languages (§ 7.2.1).

The influence of Hurrian (the language spoken on the Armenian plateau and in the adjacent areas in the second millennium BC) on Hittite and other Anatolian languages manifests itself on all levels of language organization.¹²⁶ It would be nothing strange to suppose that during a certain period of time Hittite-Hurrian bilingualism was widespread in the eastern part of the Hittite kingdom. Under those conditions Hittite could have become a member of Caucasian Sprachbund and acquire constraints that were imposed on the syllabic and/or morphemic structure of Hurrian.

The different destinies of the initial cluster */#CR-/ in Hittite, on the one hand, and in Armenian and Ossetic, on the other hand, are connected with the different treatment of internal clusters by those languages. Armenian and Ossetic choose the bizarre strategy of copying the syllable-driven (?) *inlaut* metathesis */-VCR(V)/ > /-VRC(V)-/, adding to the result a prothetic vowel, thus */#CR-/ > */#RC/> /#VRC-/. Hittite eliminates this cluster through the natural anaptyxis */#CR/ > */#CVR-/, which has typological parallels e.g. in Persian, Yakut, and Indonesian. Nobody doubts the reality of these sound changes in Armenian and Ossetic, so typologically there is less reason to doubt the much more normal kind of change that we propose for Hittite.

¹²⁶ We are not aware of any standard reference work dedicated to the issues of linguistic interaction between Hurrian and Hittite. Many useful references can be found in Ivanov // UCLA IE Studies 1 (1999): 147—264.

INDO-EUROPEAN ACCENTOLOGY AND HITTITE DATA. NOMINA

This paper is dedicated to the analysis of plene-writing in the Hittite cuneiform texts. The most recent works, known to me, concerning this problem of Hittite graphics and phonetics are G. R. Hart's "Some Observation on Plene-Writing in Hittite" (BSOAS 43/1 (1980): 1—17) and O. Carruba's "Pleneschreibung und Betonung im Hethitischen" (KZ 95/2 (1981): 232—248)¹. The general information about plene in Hittite, references to the previous literature and very useful discussions could be found there and I need not repeat these theses. Both scholars agree that the basic function of plene in Hittite seems to be the marking of accented (or etymologically accented) vowel and I am inclined to choose this opinion too. Two recent monographs (S. E. Kimball's "Hittite Historical Phonology" and E. Rieken's "Untersuchungen zur nominalen Stamm-bildung des Hethitischen" [StBoT 44]) also touch upon the plene question.

Below (§ 1) I list fourteen Hittite nominal lexemes, which:

- a) are attested with plene in old script (OS) and/or middle script (MS) texts². Forms from new script (NS) texts (including OH/NS and MH/NS ones) are out of play;
- b) have reliable cognates in other IE languages, relevant for accentological reconstruction (of course only direct stem correspondences are meant).

The next section (§ 2) is dedicated to the analysis of more problematic cases—six lexemes without direct IE parallels or with dubious etymology—

¹ Cf. also V'ac. Vs. Ivanov's "Новый источник для установления индоевропейских акцентуационных парадигм: Клинописные написания с гласными" (БСИ 1981 (1982): 192—205) and idem, "Заметки по индоевропейской акцентологии" (Историческая акцентология (1989): 110—115). Regrettably S. Kimball's Ph. D. dissertation "Hittite Plene Writing" (University of Pennsylvania, 1983) as well as C. Watkins' paper "Florilegium morphologicum Anatolicum of Hittite and Indo-European Studies" (1982) remain inaccessible to me.

² For datings of Hitt. texts see above, p. 11, fn. 3.

but I believe these Hittite words could be also interesting from the point of view of plene problem.

§ 1. HITTITE LEXEMES WITH DIRECT IE PARALLELS

1. *ajiš*, dat.-loc. *išši* 'mouth' (OS+).

|| dat.-loc. sg. *iš-ši-i*⁸, dir. sg. or dat.-loc. pl. *iš-ša-a-a-aš-ma*[↔]⁴.

⇒ HED, 1: 15; HW², 1: 48 ff.

✧ Though phonetic and morphological details remain vague, direct comparison with Skr. *ās*, Lat. *ōs* 'id.' hardly can be discarded. In Skr. only two forms of this lexeme are attested (BR, 1: 735): gen.-abl. *āsās* (RV), instr. *āsā* (RV). Hitt. dat.-loc. sg. *išši* corresponds to the virtual Skr. loc. sg. **āsi*.

2. *āra*, adv. 'right, proper concern, due' (frozen nom.-acc. pl. n. from adj. **ara-*) (MS+).

|| *a-a-ra* from MS on⁵. Spelling *a-ra* is very infrequent, but also from MS on⁶.

⇒ HED, 1: 118; HW², 1: 219 ff.

✧ Skr. adv. *āram* (RV, AV) 'zur Hand, zugegen; zurecht, recht, entsprechend; genug' (BR, 1: 407 f.).

3. *ēšhar*, gen. *išhanāš* n. 'blood' (OS+)

|| From OS on the "mobile" paradigm is attested: nom.-acc. *e-eš-har*⁷, gen. *iš-ha-na-a-aš*⁸, dat.-loc. *iš-ha-ni-i*⁹ (the late forms of the obl. cases like *e-eš-ha-na-a-aš*, dat.-loc. *e-eš-ha-ni-i* are analogical).

⇒ HED, 2: 305 ff.; HW², 2: 115 ff.

✧ Skr. *āsṛ-j* (V), gen.-abl. *asnās*, instr. *asnā* (AV) 'blood' (BR, 1: 546, 559).

4. *haštāi*, gen. *haštijaš* n. 'bone' (OS+).

|| In OS without plene. In MS: nom.-acc. sg. *ha-aš-ta-a-e*¹⁰, cf. also instr. sg. *ha-aš-ti-i-ūt*¹¹.

⇒ HED, 3: 233 ff.

³ OS: KBo 30.30 + StBoT 25, No 9 Vs. 1 I 4'; MS, e.g.: KBo 16.97 + Rs. 5, 9; KBo 39.8 II 29, 39.

⁴ OS: StBoT 25, No 2 I² 6', 8'.

⁵ MS, e.g.: KBo 16.25 III 20; KBo 17.65 + Vs. 14, 17.

⁶ MS: KUB 30.10 Vs. 13'.

⁷ For OS attestations see Neu, StBoT 26: 41, also KBo 22.1 Rs. 25'; MS, e.g.: KUB 33.66++ II 12'; KBo 15.10+ III 64', 66', 69'.

⁸ OS: StBoT 25 No 3++ + IV 8; MS, e.g.: KBo 15.10+ I 1, 20, 32, 39.

⁹ MS, e.g.: KBo 15.33+ III 31.

¹⁰ KBo 15.25 Rs. 18, 19.

¹¹ KUB 13.27 + 23.77 + 26.40 Rs. 128'—130'.

✧ Corresponds accentologically and morphologically to Grk. ὀστέ[*₁]ov (H.+)'id.' (LS: 1263); note that Grk. paradigm does not preserve suffixal ablaut, represented in Hitt. (for morphology cf. also Frisk, 2: 436 f.).

◇ Cf. IE root stem **Host-*: Avest. *ast-*, Lat. *os*, gen. *ossis*, Hitt. **hašt-* (nom.-acc. pl. **hašti* in ^{UZU}*danhašti*, see Rieken, StBoT 44: 47 ff.).

Cf. also traces of old heteroclis in Skr. (BR, 1: 562 f.; Grassman: 158 f.): gen.-abl. *asthnās* (AV), loc. sg. *asthán* (V), nom.-acc. pl. *asthāni* (V), instr. pl. *asthābhis* (RV) (*-a-* < **-ṇ-*); already in archaic language secondary forms of *i*-stem can be found: nom.-acc. sg. *ásthi* (AV), nom.-acc. pl. *asthīni* (ÇB), dat. pl. *asthibhyas* (AV; result of contamination between **asthibhyas* and **asthābhyas*), *asthibhyas* (ÇB).

5. *gēnu*, gen. *ginuwaš* n. 'knee' (OS+).

|| In OS & MS nom.-acc. sg./pl. *gēnu* vs. obl. cases without plene: nom.-acc. sg./pl. *gi-e-nu*¹², gen. sg./pl.[?] *gi-nu-wa-aš*¹³, instr. sg. *gī-nu-ta-at-kán* (+ pron. *-at* + partic. *-kan*)¹⁴, dat.-loc. pl. *gi-nu-wa-aš*¹⁵, *gi-nu-aš*¹⁶.

In NS plene-writing is attested in the obl. cases (as well as in the secondary acc. sg. or pl. of common gender), in principle these forms could be explained as analogical: acc. sg. c. (!) *gi-e-nu-wa-an*, gen. sg./pl. *gi-e-nu-wa-aš*, abl. sg./pl. *gi-e-nu-wa-za*, acc. pl. c. (!) *gi-e-nu-uš*, dat.-loc. pl. *gi-e-nu-wa-aš*.

⇒ HED, 4: 146 ff.

✧ Grk. γόνυ (H.+), gen. γουρός (H.), nom.-acc. pl. γούνα (H.), gen. pl. γούνων (H.), γόνων (Alc.), γεύων (Hsch.) 'id.' (LS: 357); Skr. *jānu* (RV+) 'id.' (accented forms of the obl. cases are not attested in the archaic language?). Accentologically Hitt. nom.-acc. sg. *gēnu* directly corresponds to γόνυ and *jānu*. Note especially the irregularity of Grk. accent: gen. sg. γουρός vs. gen. pl. γούνων, (the same as δουρός vs. δοῦρων, cf. below, § 1.12).

◇ For possibility of reconstruction of old heteroclis as a parallel formation see Mayrhofer, KEWA, 1: 429 (Grk.—Arm.—Skr.).

6. *keššar*, dat.-loc. *kišš(a)ri* c. 'hand, paw' (OS+).

|| Plene is attested only in dat.-loc. sg. and dir. sg.: *ki-iš-ša-ri-i*¹⁷, *ki-iš-ri-i*¹⁸, *ki-iš-ra-a*¹⁹.

¹² MS, e.g.: KBo 15.10+ I 25.

¹³ For OS attestations see Neu, StBoT 26: 97.

¹⁴ OS: StBoT 25 No 9+ IV¹ 12'.

¹⁵ MS, e.g.: KBo 17.61 Vs. 22, Rs. 16'.

¹⁶ MS, e.g.: KBo 17.54++ I 1'.

¹⁷ For OS attestations see Neu, StBoT 26: 97; MS, e.g.: HBM No 38 Vs. 6.

¹⁸ MS, e.g.: HBM No 44 Rs. 10'.

¹⁹ OS: KBo 8.42 Rs. 4.

⇒ HED, 4: 160 ff.; Rieken, StBoT 44: 278 ff.; Neu // FšIvanescu (1982—1983): 125 ff.

∅ Grk. χεῖρ, χεῖρα, χεῖρός, χεῖρί (H.+)'id.' (LS: 1983 f.). Accentologically Hitt. dat.-loc. *kiššari/kišri* directly corresponds to χεῖρί.

7. *lāman*, dat.-loc. *lamni* n. 'name' (MS+).

|| Plene in nom.-acc. sg. *la-a-ma-an*²⁰. In the obl. cases without plene: dat.-loc. sg. *lam-ni-^o21*, instr. sg. *lam-ni-it*²².

⇒ CHD, L—N: 31 ff.; HEG, 2: 27 ff.; HED, 5: 51 ff.

∅ Grk. ὄνομα, ὀνόματος (H.+)'id.' (LS: 1232 f.) with different anlaut variants of the dialectal nature (οὄνο-, ὄνο-, ἐνο-); Skr. *nāma*, instr. *nāmnā*, loc. *nāmāni*, etc. (RV+) 'id.' (BR, 4: 112 ff.); Slav. accentual paradigm *c: *ime*, gen. **imeně* (Slovenian, ORuss.), and accentual paradigm *a: *ime*, gen. **imene* (MBulg., SCR.—applied by Hirt—Illič-Svityč's law) 'id.'. The primary IE paradigm should be reconstructed as oxytonic/mobile, further see Dybo // GsKorolév (2002): 304 ff. (No 21); Grk. and Skr. show accent unification in *men*-nomina of neut. gender. Hitt. probably went through the same process. Why Hitt. does not show root-plene in the obl. cases in uncertain²³.

◇ IE ablaut pattern is not clear to me. For nom.-acc. one can reconstruct **nōmŋ* (Skr. *nōma*, Lat. *nōmen*) as well as **ŋmŋ/*ŋmon* (Grk.!, Slav., Arm. *anur*²⁴, OIr. *ainm n-*, etc.); note that Hitt. data is ambiguous: *laman* can go back to **nōmŋ* as well as **ŋmŋ*; for IE **ǵ̑* (**ǵ̑*) yielding Hitt. *Ra* cf. *hulana/i-* 'wool'.

8. *nēbiš* n. 'sky, heaven' (OS+).

|| Nom.-acc. sg. *ne-e-pi-iš*²⁵, gen. sg. *ne-e-pi-ša-aš*²⁶.

⇒ CHD, L—N: 448 ff.; HEG, 2: 310 ff.; Rieken, StBoT 44: 278 ff.

∅ Grk. νέφος, νέφους (H.+)'cloud' (LS: 1171); Skr. *nābhas*, gen.-abl. *nābhasas* (RV+) 'vapour, cloud' (BR, 4: 38); secondary *i*-stem in Lith. *debesis* 'cloud': accentual paradigm 2 *dēbesis*, gen. *dēbesiēs* (is preserved in texts from Prussian Lithuania and somewhere in dialects) → secondary accentual paradigm 4 *dēbesis*, gen. *dēbesiēs* (see Иллич-Свитыч, ИА: 61).

²⁰ MS: KBo 3.21 III 19'; KUB 31.124(++) II 23'.

²¹ MS: KUB 30.11++ Rs. 16'.

²² MS: HBM No 58 Vs. 10.

²³ If we suppose that IE accented short vowels yielded Hitt. long vowels and IE unaccented long vowels yielded Hitt. short vowels (i.e. that the plene-writing shows the vowel quantity and the length of vowels is reflex of IE accent), one can speculate about the vowel shortening in position before the cluster "resonant+resonant" (partly it runs parallel to Latin and Ancient Greek).

²⁴ *u* < **m*.

²⁵ For OS attestations see Neu, StBoT 26: 126; MS, e.g.: KBo 8.35 II 12'.

²⁶ For OS attestations see Neu, StBoT 26: 126; MS, e.g.: KBo 20.34 Rs. 14'.

9. *pad(a)-*, acc. pl. *pāduš*, gen. pl. *padān* c. 'foot' (OS+).

|| acc. pl. *pa-a-tu-u[š]*²⁷, gen. pl. *pa-ta-a-na* (+ *-a* 'but')²⁸, *pa-ta-a-an-^o29*, dat.-loc. pl. *pa-ta-a-aš-ša-aš* (+ poss. 3 sg. *-šaš*)³⁰.

⇒ CHD, P: 231 ff.

∅ Grk. πούς, acc. πόδα, gen. ποδός, acc. pl. πόδας, gen. pl. ποδῶν, dat. pl. ποσσ(ο)ί (H.+)'id.' (LS: 1456 f.); ; Skr. *pād*, acc. *pādam*, gen.-abl. *padás*, acc. pl. *padás*, gen. pl. *padām*, dat. pl. *paisú* (V+) 'id.' (BR, 4: 444 f.; Grassman: 770). Hitt. acc. pl. *pāduš* directly corresponds to πόδας³¹ as well as gen. pl. *padān* directly corresponds to ποδῶν and *padām*.

◇ Strictly speaking synchronically we should posit an *a*-stem in Hitt., not a *C*-stem, since the expected nom. sg. ***pazz(a)*, abl. ***pazz(a)* or instr. ***pazta* are not attested, while nom. sg. *GĪR-aš* (covering Hitt. *padas*) is attested, to my knowledge, thrice: in vocabulary KBo 1.52 9' (NS) and, functioning as voc., in MH ritual of Kizzuwatnean origin (fMaštikka; CTH 404)—KBo 39.8 III 11 (2Mast.; MS) // IBoT 2.109++ II 25 (1Mast.; NS). I believe that nom. *GĪR-aš* is a result of secondary thematisation (already in MH!)³², but forms of the obl. cases, quoted above, go back directly to the IE lexeme **pād*, *poledós*.

Cf. also nom. *GĪR-iš* in the ritual of clear Kizzuwatnean background KUB 9.4++ I 34' (MH/NS), [*GĪR-iš*] ibid. 15'; it seems natural to explain *GĪR-iš* as a Luwoid, but note that in this text in the same line 34' the form of *C(a)*-stem *pad(a)-* is used: acc. *GĪR-an* (besides the ambiguous dat.-loc. *GĪR-i*, ibid. 15'), not to mention *pad(a)-* is clearly a *C(a)*-stem in CLuw. itself³³. Probably *GĪR-iš* (covering Hitt. *padis*) is not a Luwism, but just one more way to eliminate the primary athematic form³⁴.

10. *pēran* adv., postpos. 'before, in front of' (OS+).

|| *pi-e-ra-an* passim in OS & MS texts³⁵, very infrequent is spelling *pi-ra-a-an*³⁶.

⇒ CHD, P: 291 ff.

²⁷ MS: KBo 25.46 3'.

²⁸ OS: StBoT 25 No 26 I² 4', 19'.

²⁹ OS or MS: KBo 17.74++ I 10.

³⁰ OS: StBoT 25 No 27 Rs. 10'.

³¹ Skr. acc. pl. *padás* (RV I 146.2) is apparently an innovation, cf. Hirt, Der Akzent: 225.

³² As e.g. nom. *nepišaš* & acc. *nepišan* vs. archaic *nepiš*, or nom. *šaštaš* 'bed' vs. *šašz(a)*.

³³ See Laroche, DLL: 81; Melchert, CLL: 173.

³⁴ As e.g. adj. *mekki-* 'much' vs. more archaic *mekk-*.

³⁵ Reading *pi-i-ra-an* in OS StBoT 25 No 23 Vs. 7', 8' is uncertain (pace CHD).

³⁶ According to CHD, only four times—HBM, No 24 Vs. 7 (MS; [*pi-r*]a-a-an); KBo 2.8 II 10, IV 3' (NS); KUB 58.83 III 20' (NS?).

ϝ Grk. adv., prepos. πέραν, πέρην (H.+) 'on the other side, across; over against, opposite' (LS: 1365)³⁷.

11. *pēda*- n. 'place' (OS+).

|| nom.-acc. sg. *pí-e-d/ta-an*³⁸, dat.-loc. sg. *pí-e-di*³⁹, etc.

⇒ CHD, P: 330 ff.

ϝ In Grk. and Skr. the "second type" of accentual correspondence is attested (see OCA Словарь, 1: 69 ff.): Grk. πέδον, πέδω (h.Cer.+) 'ground, earth' (LS: 1352) vs. Skr. *padám*, gen. *padé* (RV+) 'step; position' (BR, 4: 445 ff.). Hitt. plene corresponds to Grk. accent.

12. *tāru* n. 'tree; (piece of) wood' (OS+).

|| nom.-acc. sg. *ta-a-ru*⁴⁰; obl. cases are not attested with plene in the archaic language.

⇒ HEG, 3: 230 ff.

ϝ Grk. δόρυ (H.+), gen. δουρός (H.+), δορός (Trag.), dat. δουρί (H.+), δορί (Trag.), nom.-acc. pl. δοῦρα (H.+), gen. pl. δούρων (H.+), δορῶν (Hsch.) 'tree' (LS: 445); Skr. *dāru*, gen. *drós* (RV) '(piece of) wood' (BR, 3: 595, 809). Accentologically Hitt. nom.-acc. sg. *tāru* directly corresponds to δόρυ and *dāru*. Note especially the irregularity of Grk. accent: gen. sg. δουρός & dat. sg. δουρί vs. gen. pl. δούρων (the same as γουός vs. γούων, cf. above, § 1.5).

13. *tēgan*, gen. *tagnāš* n. 'earth, ground' (OS+).

|| nom.-acc. sg. *te-e-kán*⁴¹, gen. *ták-na-a-aš*⁴², loc. *ták-ni-i*⁴³, dir. *ta-ak-na-a*⁴⁴, loc. adv. *ta-ga-a-an*⁴⁵, etc.

⇒ HEG, 3: 292 ff.; Kassian, Zi: 98 f.

ϝ Goes back to IE **dhéghm̥/*dhéghōm* (the latter form < **dheghom-s*), gen. **dh^hgh^hmós*, for details see Kassian, loc. cit. (where the sign ϑ_2 stands for schwa secundum).

³⁷ -ā- in πέραν can be a result of analogy with adv., prepos. πέρα 'beyond, further; more than' (frozen nom.-acc. pl. n.?).

³⁸ OS: StBoT 25 No 25++ I 4 (*pí-e-da-aš-me-it* < *pedan* + *-smet*); MS, e.g.: IBoT 1.36 I 9, III 14.

³⁹ For OS attestations see Neu, StBoT 26: 148, also KBo 3.22 Rs. 48, KBo 22.61 + 6.2++ I 24; MS, e.g.: KBo 32.16 II 9.

⁴⁰ OS: StBoT 25 No 4 IV 12.

⁴¹ For OS attestations see Neu, StBoT 26: 194.

⁴² MS, e.g.: KBo 7.28 Vs. 5', 17'; KBo 32.13 II 11, 14 (2x).

⁴³ MS, e.g.: KUB 30.10 Vs. 4'.

⁴⁴ For OS attestations see Neu, StBoT 26: 194; note also the single instance (probably a scribal mistake) OS *ta-a-ak-na-a*, (Güterbock, Laws III 13').

⁴⁵ For OS attestations see Neu, StBoT 26: 194; MS, e.g.: KBo 15.10+ II 17.

14. *wādar*, dat.-loc. *widēni*, nom.-acc. pl. *wedār* n. 'water' (OS+).

|| nom.-acc. sg. *wa-a-tar*⁴⁶, dat.-loc. sg. *ú-i-te-e-ni*⁴⁷, nom.-acc. pl. *ú-i-t/da-a-ar*⁴⁸.

ϝ Grk. ὕδωρ n., gen. ὕδατος < *υδ-η-τ-ος (H.+) 'id.' (LS: 1845 f.)—accent is levelled out after nom.-acc. sg; Skr. gen.-abl. *udnás*, loc. *udáni*, *udán*, instr. pl. *udábhis* (V, TS) 'id.' (BR, 1: 911 f.).

Hitt. dat.-loc. *widēni* directly corresponds to *udáni*;

Hitt. nom.-acc. sg. *wādar* may correspond to ὕδωρ. Segmentally Grk. nom.-acc. sg. ὕδωρ corresponds to Hitt. nom.-acc. pl. *widār*⁴⁹; on the grounds of Hitt. and Grk. forms one can reconstruct IE nom.-acc. sg. **uódz*, nom.-acc. pl. (= collect.) **udór*, accordingly Grk. ὕδωρ should be recognized as a result of contamination between virtual nom.-acc. sg. **uódωp* and nom.-acc. pl. **uódōp*.

§ 2. DUBIA

AND HITTITE LEXEMES WITHOUT DIRECT IE PARALLELS

1. *halīn(a)*- 'clay' vel sim. (only OS).

|| gen. sg. *ha-li-i-na-aš*⁵⁰.

⇒ HED, 3: 32.

◇ If we proceed from the assumption that IE guttural can sporadically > Hitt. *h* (see now Yakubovich 2000: 135 ff.), the Hitt. word posses direct IE segmental and prosodic correspondences: Slav. **glīna* (accentual paradigm *a*) and the late Grk. γλίνη (Suid.), γλίνα (Hsch.), γλήνη (Hdn.Gr.) 'any glutinous substance, gum' (LS: 351)⁵¹.

Without resorting to spontaneous fricativisation (IE **g* > Hitt. *h*) one can connect Hitt. *halīn(a)*- with IE **Hlej-* 'schleimig, glitschig, etc.' (WP, II: 389 ff.). Cf. Grk. ἀλινεῖν (for ἀλίνειν) · ἀλείφειν (Hsch.) 'to smear', ἀλῖναι · ἐπαλείφαι (Hsch.) 'id.', ἄλιν-σις (Epid.) 'application of stucco or whitewash' (LS: 66; LS Suppl.: 19), where IE **H-* > Grk. ἄ-. See further HED.

⁴⁶ For OS attestations see Neu, StBoT 26: 212.

⁴⁷ MS: KUB 31.79 Vs. 8' (dating after Rieken, StBoT 44: 292); cf. the same spelling in MH/NS KBo 5.2 (passim).

⁴⁸ For OS attestations see Neu, StBoT 26: 194.

⁴⁹ For IE zero grade **uC-* vs. Hitt. *wiC-* cf. *witt-* 'year' below, § 2.6.

⁵⁰ For OS attestations see Neu, StBoT 26: 44.

⁵¹ Cf. also more archaic γλινώδης (Arist., etc.), γληνώδης (Geoponica) 'glutinous'. The postclassical writing with η indicates the historical length of i.

2. *hāraš*, acc. *hāranan* c. 'eagle' (OS+).

|| nom. sg. *ha-a-ra-aš*⁵², acc. sg. *ha-a-ra-na-an*⁵³, gen. sg. *ha-a-ra-na-aš*⁵⁴. All very infrequent examples of plene on the suffixal syllable are probably NS⁵⁵.

⇒ HED, 3: 137 ff.; Oettinger // GsKronasser (1982): 167 f.

⌘ Hitt. nom. sg. *haraš* goes back to **haran-* + *-š*. The closest parallel is Germ. **aro(n)* 'id.': Goth. *ara*, OIc. *ari*, OHG *aro*, but this forms are irrelevant for accentology. Cf. extended stem in Grk. ὄρνις, gen. ὄρνιθος (H.+)'bird' (LS: 1254).

3a. *hāš(ša-)* c. 'ash(es), soda ash, soap' (MS+)

|| The following MS forms are known to me: nom. sg. (secondary!) *ha-aš-ša-aš*⁵⁶, acc. sg. *ha-aš-ša-an*⁵⁷, acc. pl. *ha-a-aš-šu-uš*⁵⁸. The "correct" nom. sg. is attested only in pre-NH/NS texts: *ha-a-aš*⁵⁹. Cf. also NS instr. sg. *ha-aš-ši-i*⁶⁰.

⇒ HED, 3: 210 ff.; Rieken, StBoT 44: 19 ff.

3b. *hašša-* c. 'fireplace, hearth, brazier, fire-altar' (OS+)

|| nom. sg. (= voc.) *ha-aš-ša-a-aš*⁶¹, acc. sg. *ha-a-aš-ša-an*⁶², *ha-aš-ša-a-an*⁶³, gen. sg. *ha-aš-ša-a-aš*⁶⁴, dat.-loc. sg. *ha-aš-ši-i*⁶⁵, *ha-a-aš-ši-i*⁶⁶, dir. sg. *ha-aš-ša-a*⁶⁷, abl. sg. *ha-aš-ša-a-az*⁶⁸, nom. pl. *ha-a-aš-še-ša* (+ *-a* 'but')⁶⁹, other pl. forms are not attested⁷⁰.

⁵² For OS attestations see Neu, StBoT 26: 53; MS, e.g.: KBo 21.22 Vs. 9'.

⁵³ For OS attestations see Neu, StBoT 26: 53 f.; MS, e.g.: KUB 17.10 I 24'.

⁵⁴ MS, e.g.: KUB 15.34 I 12.

⁵⁵ E.g. acc. sg. *ha-ra-na-a-an* KBo 13.86 Vs. 16.

⁵⁶ MS: KBo 21.41 + KUB 29.7 Rs. 35.

⁵⁷ MS: KBo 21.41 + KUB 29.7 Rs. 32, 34. Cf. also MS *ha-a-aš-ša-an* in KBo 32.19 (passim) 'fireplace' or 'ash', see discussion in Neu, StBoT 32: 429 f.

⁵⁸ MS: KBo 15.10+ III 42'.

⁵⁹ KBo 4.2 I 45 (pre-NH/NS); KBo 11.10 II 12' (MH/NS); KBo 32.7 Vs. 17' (OH/NS).

⁶⁰ KUB 43.74 Vs. 4'.

⁶¹ MS: KBo 17.105+ II 19'.

⁶² Passim in OS, see Neu, StBoT 26: 59; MS, e.g.: KBo 17.105+ II 17'.

⁶³ Once in OS: StBoT 25 No 31 II 17'; seldom in MS, e.g.: KBo 17.105+ II 23'.

⁶⁴ Passim in OS, see Neu, StBoT 26: 59; MS, e.g.: KBo 17.105+ II 17'.

⁶⁵ Passim in OS, see Neu, StBoT 26: 60; passim in MS, e.g.: KBo 15.10+ III 61'.

⁶⁶ Once in OS: StBoT 25 No 25++ I 52'.

⁶⁷ For OS attestations see Neu, StBoT 26: 61.

⁶⁸ OS: StBoT 25 No 25++ I 38'; OS or MS: KUB 34.123++ I 39.

⁶⁹ MS: KBo 32.16 III 2' (cf. Neu, StBoT 32: 283 w. discussion).

⁷⁰ Pace Neu, StBoT 26: 61, *ha-aš-ša-an* in StBoT 25, No 43 I 7' (= *an haššan pīr[an tianzi]*) = StBoT 25, No 42 II 8' (= *an haššāš pīran tianzi*) is not gen. pl., but probably should

⇒ HED, 3: 221 ff.

◇ In my opinion from both morphological and semantic points of view there is no reason to separate 3a and 3b into two lexemes with different paradigms. We can posit athematic lexeme *haš* c. 'ashes (→ soap); fire-place' with "mobile" paradigm:

Sg. nom. [NS *hāš*] (back-formation: MS *haššaš*, *haššāš*)

acc. OS+ *hāššan* (analogical: OS+ *haššān*)

gen. OS+ *haššāš*

dat.-loc. OS+ *haššī* (analogical: OS *hāššī*)

dir. OS *haššā*

abl. OS+ *haššāz*

Pl. nom. MS *hāššeš*

acc. MS+ *hāššuš*

⌘ Beyond Neo Hitt. (nom. *hāš*), athematic forms are not attested elsewhere in IE. Cf. *a*-stem in Skr. *āsa-* m. 'ashes, dust' (BR, 1: 735)⁷¹; *āsa-s* can be a result of secondary thematisation, as e.g. well attested *dāma-s* (RV+) 'home, family' vs. relict *dam* 'id.'. Further cf. Lat. *āra* (Old *āsa*) 'altar', Umbr. *asa* (with unexpected *-s*), Osc. *aasa* 'id.'.

Thus one can posit IE athematic noun **Hās*, **Hās-ṃ*, **Hās-ós* with primary meaning 'ashes'. Secondary thematic nom. sg. is attested already in Middle Hittite and Vedic Sanskrit. Meaning shift 'ashes' → 'fire-place' → 'fire-altar' is natural. Eventually Lat. *āra* is probably a collective noun in **-ā*.

4. *gēm(a)-*, dat.-loc. *gēmi* 'winter' (MS+).

|| dat.-loc. sg. *gi-e-mi*⁷²; cf. without plene but with geminate: *gi-im-mi*⁷³.

⇒ HED, 4: 143 ff.

◇ Phonetics and morphology of the Hitt. word are obscure, cf. HED with discussions.

⌘ Cf. the following IE reconstructions (only forms relevant for accentology are quoted):

1) IE **g̃heĩmā*: Slav. accentual paradigm *c* **zimā*, **zĩmŏ* 'winter', Lith. accentual paradigm 4 *žiemā* 'id.'.

be read *ha-aš-ša-aš* and interpreted as gen. sg., since the use of more than one hearth is untypical for Hitt. festivals and rituals. For the same reason *ha-a-aš-ša-an* in StBoT 25, No 127+129+147++ II 20' (... *hāššan pīran dāi*) should be treated as acc. sg. (cf. StBoT 26: 59 with doubts; quoted as No 147 Rs. 6'), not as gen. pl.; for similar ritual action cf. e.g. KUB 25.3 (CTH 634.2) II 8—9 *haššan=kan pīran danzi* 'they take the brazier from before'.

⁷¹ Infrequent word, only nom. sg. *āsas* (AV, ÇB), nom. pl. *āsās* (ÇB).

⁷² MS: KUB 13.1(+) IV 12'.

⁷³ MS: KUB 13.2 + 31.84 IV 23' (dating after Neu, StBoT 32: 431); KBo 15.32++ I 4.

- 2) IE **ǵhijōm*: Grk. χιών, χιόνος (H.+) 'snow'.
 3) IE **ǵheimn* n., **ǵheimōn* m.: Skr. loc. *hēman* (TS+) 'in the winter', Grk. χειμα, χειματος (H.+) 'winter weather, frost' → 'winter', χειμών, χειμῶνος (H.+) 'winter'.
 4) IE **ǵhimos* m., **ǵhimā* f.: Skr. *himá-* (RV+) 'cold, frost', *himā* (RV+) 'winter'.

5. *tuēkka-* c., n. 'body, body part, limbs' (OS?; MS+).

|| MS: gen. sg. *tu-e-ig-ga-aš*⁷⁴, abl. sg. *tu-e-ig-ga-a[z-še-ū]* (+ poss. instr. sg. *-šēt*)⁷⁵, nom. pl. [*tu-*]*e-ik-ki-e-eš-^o76* (uncertain form with double plene), acc. pl. *tu-e-ik-ku-uš*⁷⁷, dat.-loc. pl. *tu-e-ig-ga-aš-^o78*, *tu-e-ig-ga-ša-ma-aš* (+ poss. *šmaš*)⁷⁹. Cf. also two MS forms with *-u-*: abl. sg. *tu-ug-ga-az-še-e-it* (+ poss. instr. sg. *-šēt*; note especially oxytonical plene)⁸⁰ and gen. sg. *tu-ug-ga-aš-ta-aš* (+ poss. *-taš*)⁸¹.

⇒ HEG, 3: 401 ff.

⚡ Root comparison with Skr. *tvák* f., acc. *tvácām*, gen.-abl. *tvácás*, loc. *tváci* (RV+) 'skin, hide' (BR, 3: 463 f.) seems undoubted. Morphological analysis, however, is more problematic. One can consider that Hitt. *tuēkka-* goes back to virtual IE *o*-stem **tuēko-s* (i.e. **tuēko-s?*) as opposed to nom. **tuējōk* (> Skr. *tvác*), but in this case it is hard to explain Middle Hitt. forms with *u*-vocalism (*tuggaš*, *tuggaz*).

On the other hand, we can suppose that Hitt. lexeme is a result of secondary thematisation; in this case root plene (and *e*-vocalism?) in the obl. cases is levelled out after old athematic nom. sg., while attested nom. sg. c. *tuēkkaš* (only NS?) and nom. sg. n. *tuēkkan* (only NS?) are in their turn back-formations of acc. *tuēkkan*, etc. Oxytonical *tuggaz=šēt* can go back directly to IE lexeme with mobile accentual paradigm. *U*-vocalism of gen. *tuggaš* and abl. *tuggaz* can be explained as a zero grade and the IE paradigm should be reconstructed as nom. **tuēk*, acc. **tuēk-ṃ*, gen. **tuk-ós* (note that Skr. did not preserve this ablaut pattern); or, if we reconstruct IE nom. **tuōk*, acc. **tuōk-ṃ*, gen. **tuek-ós*, Hitt. *-u-* is a result of contraction of *-ue-* in the non-plene position, cf. the same in OS prs. 3 pl. *huēttianta*⁸² 'they draw' vs. OS prs. 3 sg. *huttiannāi*⁸³.

⁷⁴ KBo 17.65++ Vs. 44, 47.

⁷⁵ KBo 32.14 II 1.

⁷⁶ KBo 15.10+ I 17.

⁷⁷ KUB 14.1+ Vs. 82'.

⁷⁸ KUB 15.34 II 28.

⁷⁹ KBo 32.19 II 23, III 48'.

⁸⁰ KUB 17.10 III 10.

⁸¹ KUB 30.10 Vs. 9'.

⁸² *hu-e-it-ti-an-ta* Güterbock, Laws III 6'.

⁸³ *hu-ut-ti-an-na-a-i* StBoT 25, No 43 I 3', 11'.

◇ Cf. *os*-stem in Skr. *tvacas* (with the same meaning, only in compounds: *tvacas-yā*⁸⁴, *sá-tvacas*⁸⁵, *sūrya-tvacas*⁸⁶, *hiraṇya-tvacas*⁸⁷) and probably Grk. σάκος, gen. σάκου (H.+) 'shield' (LS: 1581), root vocalism in Grk. stem remains, however, unclear.

6. *witt-*, dat.-loc. *witti* c. 'year' (OS+).

|| dat.-loc. sg. *ú-i-it-ti*⁸⁸, gen. pl. *ú-i[-(it-ta-an-na)]* (+ *-ja* '&')⁸⁹, *ú-i-it-ta-aš*⁹⁰.

⇒ Rieken, StBoT 44: 25 ff.

⚡ The most reliable evidence of the athematic stem in Hitt. is compound *wilez(za)paṃt-* 'old' (for morphology cf. discussion in StBoT 44: 26; for list of attestations see *ibid.*, fn. 103⁹¹), where *wiz(za)* could be sigmatic nom. sg. {*wit* + *s*} or rather old abl. {*wit* + *z*}, i.e. 'old' as 'passing through years'. Note that common half-logographic spelling MU-za, MU-an, MU-ti, etc. can cover either athematic stem *witt-* or *ant*-stem *wittant-* with the same meaning⁹².

The traces of athematic stem in other IE languages are more scarce. In all likelihood one can reconstruct IE adv. **per-ut(i)* 'last year' (< loc. sg. **uti*): late Skr. *parūt* (late Class., gramm., lex. 'id.' (BR, 4: 564; Mayrhofer, KEWA, 2: 219)⁹³; for Iran. parallels see KEWA; Grk. πέρυσσι(v) (Ion., Att.), πέρυσσι (Dor.) 'id.' (LS: 1395; Frisk, 2: 518); Germ. **fērūpīl* / **ferūpī* > **ferudī* > Oic. *î fjord* 'id.', MHG *vert* 'id.'; Arm. *heru* 'id.'; OIr. *on hurid* 'ab anno priore' (WP, 1: 251). How we should reconstruct IE accent: **utí* or **úti*—is uncertain.

Opposition Hitt. *witti* ~ IE **uti* is similar to Hitt. *widen-* ~ IE **uden-* (cf. above, § 1.14).

◇ Cf. widespread IE **uētos*, gen. **uētos-os* 'year; old'. Relationship of Hitt. *šaudišt-šawidišt* 'suckling (of animal)' (for list of attestations see Rieken, StBoT 44: 148⁹⁴) to this IE stem is somewhat problematic due the unusual voicing IE **-t* > Hitt. *-d-*. Cf. StBoT 44: 147 ff. with traditional

⁸⁴ AV (BR, 3: 464).

⁸⁵ ÇB (BR, 7: 590).

⁸⁶ AV, VS (BR, 7: 1174).

⁸⁷ AV (BR, 7: 1625).

⁸⁸ OS: Güterbock, Laws III 22'; KUB 4.72 Rs. d 2.

⁸⁹ OS: StBoT 25 No 1 I 2'.

⁹⁰ MS: Bo 4363 III 10' (apud StBoT 44: 26).

⁹¹ MS: *ú-iz-za-pa-an*, *ú-iz-za-pa-an-ta*; NS: *ú-e-iz-za-pa-an-ta*, *ú-e-iz-pa-an-ta*, also with spacing *ú-iz-za pa-a-an*.

⁹² For *ant*-stem cf. clear MU-*an-ti* KBo 22.2 Vs. 1 (OS or MS) and extended stem *wēttantadar* in *ú-e-it-t[a-(an-da-an-ni)]* KBo 3.22 Rs. 64 (OS) = *ú-i-da-an-da-an-ni* KUB 26.71 I 10' (NS).

⁹³ Cf. also secondary *parutna*, *parutná* (only gramm.) 'vorjährig' (BR, 4: 564).

⁹⁴ OS: *ša-ú-dī-iš-za*; MS: *ša-a-ú-i-ti-iš-za*; NS: *ša-a-ú-i-ti-te-eš-za*, gen. *ša-a-ú-i-ti-iš-ta-aš*.

analysis *sa-ud-iš-t-* and *ibid.*: 147 w. fn. 694 for speculative discussion about lenition.

§3. CONCLUSIONS

As we have seen in §1 in the nominal stems the place of plene in Hittite OS & MS texts always coincides with the place of IE accent (as far as we can reconstruct it on the grounds of Grk., Skr. and Balto-Slav. accentual systems as well as Verner's law in Germ.)⁹⁵. But since the Hittite data are so scant (only 14 lexemes are available to us), the hypothesis that in Hittite plene marks an accented vowel and that Hittite accentual system goes back to IE accentual system requires additional evidence.

⁹⁵ The single exception could be Hitt. nom.-acc. pl. *widār* vs. Grk. nom.-acc. sg. ὠδωρ, but Grk. form probably goes back to *ὠδῶρ (see above, § 1.14). Cf. also *lāman*, § 1.7.

INDO-HITTITE LARYNGEALS IN ANATOLIAN AND INDO-EUROPEAN

In 1927 Jerzy Kuryłowicz // FsRozwadowski, I (1927): 95—104 dusted off de Saussure's *coefficients sonantiques* and connected these precocious structuralist constructs, modified by Møller, VISWb (1911), with the evidence of Hittite, matched against the reconstruction of Proto-Indo-European as codified in the 2nd edition of Brugmann's *Grundriss*. The view that the *coefficients* posited by de Saussure corresponded to the Hittite *h*-sounds started gaining an acceptance that was quite disproportionate to the facts. In some instances the *coefficients* relabeled by Kuryłowicz *éléments consonantiques* (de Saussure's *A* and *O* rewritten as ϑ_2 and ϑ_3 and Møller's *E* rewritten as ϑ_1), did correspond to Hittite *h/hh*, but in many other instances they did not. Whereas it is true that Lat. *pāscō* 'pasture' (pf. *pāvī*), with the projected * ϑ_2 in lieu of the Brugmannian **ā*, corresponds to Hitt. *pahhaš-* / *pahš-*, and Lat. *ante*, Gk. ἀντί from the projected * ϑ_2 ent- corresponds to Hitt. *hanz(a)* 'front' and *hantezziš* 'first', and Lat. *os*, Gk. ὀστέον 'bone' from the projected * ϑ_3 est- corresponds to Hitt. *haštai* n. 'bone', it is also true that Gk. δί-δω-σι, δο-τό-ς from the projected * ϑ_3 give corresponds to Hitt. *daai* (3 sg. prs., *hhi*-conj.) 'take', *daaš* (3 sg. prt.), with no trace of *h* or *hh*; Gk. πῶ-θι 'drink!', O.Ind. *a-pā-t* 'drank', projected from * ϑ_3 pe ϑ_3 -, corresponds to Hitt. *pa(a)š-i* (3 sg. prs., *hhi*-conj.) 'swallow', with no trace of any *h/hh*. O.Ind. *stāyāt* 'furtively', *tāyū-h* 'thief', O.Ir. *táid*, OCS. тѣтъ 'thief', projected from *(s)te ϑ_2 -, corresponds to Hitt. *taiuzzi* (3 sg. prs., *mi*-conj.) 'steal' and not to an expected ***tahhiuzzi*. Gk. τί-θη-σι, Lat. *fē-c-i*, projected from * ϑ_3 dhe ϑ_1 -, corresponds to Hitt. *daai*, prt. *da(a)iš*, without any trace of *h/hh*. Greek ἐστί 'is' / εἰσί 'are', Lat. *est*, *sunt*, etc. from the projected * ϑ_1 es-ti / * ϑ_1 senti, correspond to Hitt. *eš-zi*, *aš-anzi*. Lat. *os* 'mouth', etc., from the projected * ϑ_3 é ϑ_1 s- or * ϑ_3 ó ϑ_1 s- or * ϑ_1 é ϑ_3 s-, depending on whom one believes, corresponds to Hitt. *aiiš* 'mouth', Luv. *aašš*^o id., with no trace of either * ϑ_3 or * ϑ_1 .

Moreover, none of the "disyllabic" verbs, which, according to W. Cowgill's well-known assessment of the evidence for the laryngeals, as the *éléments consonantiques* are widely known, "furnish the most powerful evidence for the laryngeal theory,—evidence that (...) would be sufficient to establish the theory