

The Anatolian Reflexes of the IE. Syllabic Resonants*

It is only relatively recently that much attention has been paid to some of the fine points of Hittite or Anatolian phonology, and many details remain obscure. A large part of the problem has always been the cuneiform syllabary in which Hittite and its sister language Cuneiform Luvian (hereafter simply Luvian) are written. This was a borrowed script and one that was not completely adapted to the needs of writing the Anatolian languages, and it obscures or confuses a number of important details.

With Lycian, however, we do not have some of these problems because it is written in an alphabet that is derived from a Greek alphabet.¹ Unfortunately, Lycian is not very well attested and the Lycian texts do not provide much variety. Nevertheless, several interesting words with clear Hittite or Luvian cognates are preserved, and in some cases, a comparison of Lycian words with their Hittite or Luvian cognates helps to shed some light on the details of Anatolian phonology. One detail for which Lycian supplies interesting evidence is the development of syllabic resonants in Anatolian. First, however, it is important to note the function of plene writing in Hittite.

Plene writing can be connected with the effects of the Pre-Hittite accent. In many words, it is found where, in Indo-European terms, an accent would be expected, or where an accent

* This paper is taken from part of my dissertation, *Hittite Plene Writing* (= Kimball 1983). An earlier version, "Lycian Evidence and Anatolian Phonology" was presented at the March 1983 meeting of the American Oriental Society.

I would like to thank Warren Cowgill and Henry Hoenigswald for their thoughtful comments on the first draft. Whatever errors remain are, however, entirely my own responsibility.

Most of the abbreviations used here are standard ones. It should be noted, however, that the term Old Hittite (OH.) refers only to original texts from the Old Hittite period, and not to later copies.

¹ I am not distinguishing between Lycian A and Lycian B except where there is a difference.

would be likely as the result of easily understood analogy. It was not used as a way of indicating accent, however. Instead, it was used to indicate vowel length, and where it coincides with the Pre-Hittite accent, it indicates vowels that were lengthened when accented.²

Considerations of space do not allow a more detailed exposition of the evidence that supports this conclusion. One kind of evidence is, however, very important for the discussion that follows. Specifically, if plene writing did indicate accent, then we would expect to find that all non-enclitics had one, and only one, plene vowel. This is not, however, what is found. Instead, there are some words which do not have plene writing, even though they should have been accented in Pre-Hittite. This occurs in a number of distinct phonological environments. The most interesting of these cases for our purposes is that plene writing is not attested for the reflexes of syllabic resonants.

One of the clearest examples of this is provided by the singular forms of a number of *mi*-verbs with roots of the shape *CaRC*. These do not attest plene writing, even in Old and Middle Hittite texts, where, as a general rule, plene writing is most frequent.³ The following examples are taken from Old and Middle Hittite texts:

1. *har(k)*- "have," "hold" **h₂rk*-
OH.

har-mi KBo. XVII 1 I 7, III 24, IV 27 (2 ex.); KBo. XVII 3 IV 24, 33; KBo. XVII 6 II 4 (2 ex.), III 6, 20; KBo. XIX 1 II 26; KUB. XLIII 34 III 4 (*har-m[i]*)

har-si KUB. XXXI 143 I 21; KUB. XXXI 143 a I 4

har-zi KBo. VI 2 II 25, 28, 43; KBo. XVI 74 Rs 2; KBo. XVII 1 I 33, II 42 (*har-z[i]*); KBo. XVII 15 Vs! 20, Rs! 14, 16 (2 ex.)

2. *hark*- "be destroyed" **h₃rg*-
OH.

har-ak-zi KBo. VI 2 II 23, IV 2, 54; KBo. VI 2 + XIX 1 II 26 (*har-ak-[zi]*)

har-ak-tu KUB. XXXVI 106 Rs 7

² This analysis is given in Kimball 1983.

³ See Kimball 1983, p. 708-777.

MH.

har-ak-zi KBo. VI 3 II 37 ([*ha*]r-ak-zi), 43 ([*har*]-ak-zi), 47, III 74 (*ḥar-ak-zi*), IV 53 (*ḥar-ak-zi*)

har-ak-du KBo. XV 10 III 58

3. *kars-* “cut” **k̥r̥s-*

OH.

k̥ar-ḥs-zi KBo. VI 2 IV 22

MH.

kar-as-zi KBo. VI 3 IV 18; KUB. VII 41 Vs 25

kar-as-ta KUB. XVII 10 II 6

kar-as-du KUB. VII 41 Vs 27

4. *tarh-*, *tarhu-/taruh-* “prevail over” **t̥rh₂-*, **t̥rh₂u-*

OH.

tar-ah-zi KBo. XVII 21 Vs 12

tar-uh-zi KBo. VI 2 II 58

MH.

tar-hu-uz-zi KUB. XVII 10 I 33

These verbs can be derived from root presents or aorists, although athematic inflection is only preserved in Hittite for each. *Har(k)-* can be compared with, for example, Arm. *argel* “prevention,” “obstacle,” “prison” and with Lat. *arceō* and Gk. ἀρκέω. Watkins (1970, p. 69) points out that Arm. *argel* can, in formal terms, be the infinitive of an athematic **argem*. It would, therefore, point to an athematic present **h₂erk-ti* with a meaning something like “hold back” or “ward off.”⁴ *Hark-* “be destroyed” is found beside the nasal present *harni(n)k-* “destroy,” and the pattern: nasal present: athematic verb should point to an earlier nasal present **h₃r-ne-g-*: root aorist **h₃erg-t*.⁵ Although *kars-* does not have verbal cognates in the other IE. lan-

⁴ Watkins (1970, p. 71) considers the alternation, preconsonantal *har-* (*har-mi*, *-si*, *-zi*, *-weni*, *-teni* etc.): prevocalic *hark-* (*hark-anzi*, *-ant-* etc.) the reflection of a genuine root alternation, *har-*: *hark-* (**h₂(e)r-*: **h₂(e)rk-*). Alternatively, the loss of the preconsonantal *k* can perhaps be attributed to the use of the verb in the periphrastic “perfect.” See Cowgill apud Eichner 1975, p. 89–90.

⁵ For **h₃*, cf. O.Ir. *orcid*, *org(a)id* “slays.”

guages, an athematic present in **-s* is implied by Gk. ἀκερσε-κόμης “with unshorn hair,” Att. κουρά (< *κορσά) and M. Ir. *corr* “pointed.”⁶ *Tarh-* and *tarhu-* are from an earlier root aorist and athematic present in *-u* **terh₂-t* : **terh₂-u-*, the latter of which has been thematized in Skt. *tūrvati* (cf. e.g. Skt. *sravati*, Gk. ῥέω : Skt. *asarat*).⁷

Since each of these verbs may be derived from an earlier athematic, in Pre-Hittite or Proto-Anatolian each would have had a weak stem in **C₂RC* which could have subsequently been generalized throughout the paradigm.⁸ Since none attests plene writing for its root vowel, this is apparently what did happen. In the singular forms given above, a root accent is undoubtedly to be expected, and the lack of plene writing in these Old and Middle Hittite examples, therefore, suggests that the reflexes of syllabic resonants were not lengthened when accented.

It is important also to note that plene writing in Luvian is not exactly the same as plene writing in Hittite. There are some cases in which plene writing in Luvian does coincide with the expected position of the accent, and some words in which plene writing agrees with Hittite cognates. Examples would be: Luv. *a-ap-pa*, *a-ap-pa-an* “after,” “following” (Laroche, 1966, p.29): Hitt. *a-ap-pa* (e.g. OH. KBo. III 22 Vs 14, 21, 42, Rs 50, 76), *a-ap-pa-an* (e.g. OH. KBo. III 22 Vs 10, 22, 30, Rs 49) id. (P. A. **áp-ṇ* < **áp-m*); Luv. *a-as-ta*, *a-as-du* 3 sing. pret. and imp. of *ās* “be” (ib. p.32–33): Hitt. *e-es-ta* (e.g. OH. 22 Vs 2, 3; KBo. VIII 42 Rs 7), *e-es-tu* (e.g. OH. KBo. III 22 Vs 25, 26, also *e-es-du*) id. (IE. **(h₁)és-t*, **(h₁)és-tu*). In other cases, Luvian plene writing is very obviously different from what is found in Hittite.

⁶ See e.g. Frisk 1960, p.935 and Schwyzler 1959, p.442, and compare also Toch. A *kāršt-*, B *kāršt-* (class VI nasal present, B *karšnam*, *karšnatär*, A *karšnas*).

⁷ See Meillet, 1910/11 on athematic *u*-presents beside root aorists, and on Hittite specifically, see Jasanoff 1979, p.88.

⁸ For ablaut in *s*-presents, cf. Skt. *dveṣti*, *dviṣanti* or perhaps Greek σιών beside σείω. Earlier ablaut is implied for the *u*-presents by e.g. Skt. *tarute* : *tūrvati* or by Gk. ῥέω, Toch. B. 3 sg. *śaim* (**g^wyeh₃-w-*) : Skt. *jīvati*, Lat. *vīvō*, O. Pruss. *giwasse*, OCS. *živō* (**g^wih₃-w-*). See Jasanoff, loc cit. n.7. The earlier ablaut of root and suffix in these verbs is not entirely clear, however, cf. the full-grade **-ew-* in e.g. Skt. *sravati*, Gk. ῥέω (**sr-ew-*).

Note, for example: Luv. *a-ad-du-wa-a-al*, *a-ad-du-wa-li* “evil” (ib. p.35): Hitt. *i-da-a-lu-us* (e.g. OH. KBo.VI 2 I 60), *i-da-a-lu* (e.g. OH. KBo.IX 73 Vs 5; KBo.XVII 1 IV 2) id. (PA./IE. **h₁édwōl*)⁹; Luv. *a-an-ni-i-ti*, *a-ni-e-ya-an-t[i]* 3 sing. and pl. pres. of *ānniya-* “work,” “effect”: Hitt. *aniya-* id. (e.g. OH. *a-ni-e-m[i]* KBo.XVII 1 II 2; *a-ni-ez-zi* e.g. KBo.10 1 I 5, II 1; *a-ni-e-ez-zi* KUB.XXIX 30 Vs 21, 22, 23; *a-ne-e[nu-un]* KBo. III 22 Rs 48).

In some of these words, the plene writing may have something to do with accent. For example, the plene writing in the first syllable of *a-ad-du-wa-a-al*, *a-ad-du-wa-li* coincides with the expected position of the accent in IE. or PA. **h₁édwōl*. The plene writing in the initial syllable of *ānniya-* might point to thematization with **ye/o-* of the full-grade root of an earlier athematic while the lack of plene writing in Hittite *aniya-* might reflect independent thematization with **-ye/o-* of the zero-grade root. In other cases, however, it is less easy to see a connection between Luvian plene writing and accent. In *da-a-u-i-is* (Laroche, 1966, p.96) and in *ha-a-ú-i-is* “sheep” (ib. p.44–45) a root accent is likely (cf. Skt. *aviḥ* and Hmc. *öiç*) but the plene writing of the suffix vowel is less easily explained. It is possible that the plene writing in the second syllable of *a-ad-du-wa-a-al* etc. indicates that in Luvian, unlike Hittite, vowel length is retained in unaccented syllables.

This is an important reminder then, that Hittite and Luvian are different languages with different phonological histories. It should not be surprising that Luvian spelling conventions are different from those used for writing Hittite, and it should be borne in mind that Luvian spellings cannot be interpreted as if they were Hittite without further thought.

In light of the lack of plene writing for the reflexes of syllabic resonants in Hittite, it is very interesting that in several Lycian words with good etymologies, and with clear Hittite cognates,

⁹ See Watkins 1981, p.269–270 for **h₁édwōl*. Hittite *idālu* has been remodeled as a u-stem after its antonym *āssu* “good,” and its *ā* (< **ō*) has been reinterpreted as the root vowel. i.e. **h₁édwōl* ⇒ **(h₁)ed(w)ōl-u* (with accent on the reinterpreted root vowel: for **dwo* > **do* cf. *dān* “second(ly)” < **dwoyom*) > *idālu* (with **ō* > *ā* and unaccented **e* > *i*). See Kimball 1983, p.169–172.

reflexes of syllabic resonants are not spelled with vowels. The spelling of reflexes of syllabic resonants in Lycian has been noted before by Laroche (1958, p.33) and by Houwink Ten Cate (1965, p.22–24) but its implications have not really been examined very thoroughly. The present study represents the start of such an examination. First, however, we should consider the evidence.

The reflex of **h₂ent-*, **h₂nt-* “front” has no vowel in the Lycian words *χñtewete* “he led” and *χñtawata* “commander.” The group of words represented by Hittite *hantezziya-* “first,” *hantāi-* “put in order,” “be in order,” and by the adverbs *hantī* “separately,” and *hantāz* “from the front,” and by Luvian *hantil(i)-* “first” (*ha-an-ti-l(i)-*, Laroche, 1966, p.40) and *handawat* (*ha-an-da-wa-t-*, ib. p.40 = Lyc. *χñtawata*) seem to have generalized the zero-grade root. Plene writing is not regular in the initial syllable of some of the Hittite words. Note the following examples from Old and Middle Hittite texts:

hantezziya-

OH.

ha-aṇ-te-ez-zi-ya-as-pat KUB.XXIX 29 Vs 13

ha-an-te-ez-zi-an KBo.XX 16 Rs? 13; KBo.XXV 123 L.8 (*ha-an-te-ez-zi-an-te-et*)

ha-an-te-ez-zi-

ha-aṇ-te-ez-zi-e-es KBo.XXV 61 Vs? II 1

MH.

ha-an-te-ez-zi-ya-as KBo.XX 59 L.7

ha-an-te-ez-zi-an KBo.XVII 43 IV 4

ha-an-ti-iz-zi KBo.XVI 25 I 66

ha-an-te-ḡz-zi-e-es-ma KUB.XIII 2 I 28

ha-an-te-ez-zi-us KUB.XXXIII 68 III 8, 10

hanti

OH.

ha-an-ti KBo.VI 2 II 8; KBo.XVII 30 II 6

ha-an-di KBo.XXV 37 IV 8; KBo.XXV 38 L.7

ha-an-ti KBo.VI 2 II 8; KBo.XVII 30 II 6

MH.

ha-an-ti KUB.XVII 10 I 39; KUB.XXIII 14 II 11; KUB.
XXXIII 5 II 14; KUB.XXXIII 66 II 19 (MH.?)

hantāz

OH.

ha-an-ta-a-az KBo.XVII 22 III 19

MH.

ha-an-da-az KUB.XIII 2 II 8

ha-an-ti-is KUB.XVII 10 II 30

The Anatolian words are clearly to be derived from case forms of the root noun which is seen also in, for example, Skt. *anti*, Gk. ἀντί, Lat. *ante*, Goth. *and(a)-* and Lith. *añt-*. Hittite furnishes evidence both for zero-grade and for full-grade forms. Evidence for a zero-grade root in the oblique stem is provided by the plene writing in the second syllable of OH. *ha-an-ta-a-az* < **h₂nt-ó-*. A zero-grade root may also be reconstructed for *hantezziya-* “first” from **h₂nt-eí-tiyo-*.¹⁰ Compare also dat. **h₂nt-eí* which is probably to be seen in at least some forms of *hanti* “separately.” Interestingly, although plene writing pointing to an accented ending and, therefore, to a zero-grade root, is found for *hanti*, these spellings seem to occur only in relatively late texts e.g. *ha-an-ti-i* KUB.XXVI 1 IV 44, KUB.XXVI 12 III 11 (both NH.), KBo.IV 14 II 7 (Supp.II), KUB.X 88 I 15, KUB.XXXI 32 Rs? 4 (both undated, but not earlier than NH.); *ha-an-te-i* KUB.XLI 21 IV 18 (Supp.II). If OH. and MH. *ha-an-t/di* also continues the dative, then the lack of plene writing for the vowel of the second syllable is presumably accidental.¹¹

A locative **h₂ént(i)* with a full-grade root as in, e.g. Skt. *anti* and Lat. *ante* may be found in *ha-a-an-ti* in KUB.XXIII 14 II 11 (undated). The lack of assibilation of root-final **-t* before **-i* would presumably be analogical. Unfortunately, however, the

¹⁰ See Neu 1974, p.40–41. Although word-final **-éi* results in *-ī*, as in the dat. sing. ending *-ī* (e.g. *tak-ni-i*, *ha-as-si-i*), **éi* becomes *ě* before the affricate /ts/ (*-z(z)-*) from **ti/*t(i)y*. See Kimball 1983, p.684–697.

¹¹ On the inconsistent use of plene writing, see Kimball 1983, p.43–52.

passage in which *ha-a-an-ti* is found is badly damaged, and the context in which it is used has been lost.¹²

In the NH. ritual text, KUB.IX 28, a spelling *ha-a-an-za* which can reflect a full-grade nominative **h₂ént-s* is found in II 11 (cf. also *ha-an-za* ib. II 24, IV 3, 16).¹³ Plene writing is also found in the first syllable of *ha-a-an-da* in NH. KBo.III 14 III 17, although other forms, which are not quotable from early texts, are spelled *ha-an-da*.¹⁴

For Indo-European, we can probably reconstruct a paradigm with a full-grade root in the nominative and locative and a zero-grade oblique stem.

nom.	<i>*h₂ént-s</i>	in Hitt. <i>ha-a-an-za</i>
gen.	<i>*h₂nt-ó-s</i>	cf. Hitt. (abl.) <i>ha-an-ta-a-az</i>
dat.	<i>*h₂nt-éi</i>	in Hitt. <i>ha-an-ti-i</i> (Gk. ἀντί?)
loc.	<i>h₂ént-(i)</i>	in Skt. <i>anti</i> , Lat. <i>ante</i> (Hitt. <i>ha-a-an-ti</i> ?, Gk. ἀντί?).

Although the small amount of Luvian material that is found makes it impossible to determine whether the lack of plene writing in the Luvian vowels is regular, and it is difficult to tell whether lack of plene writing points to a zero-grade in Luvian, the lack of vowels in the Lycian cognates makes it likely that Luvian-Lycian had generalized the zero-grade **h₂nt-*.

The connection between the Anatolian Weather God's name *Tarhunt-* (Luv. *^DTar-hu-un-za*) and Lycian *trqqñt-* (dat. sing. *trqqñti*, Lyc. A and B), and nom.sing. *trqqas* (Lyc. A), *trqqiz*

¹² As Dunkel 1982/3, p.86-87 notes, the meaning of *hantī* is not "in front" but "specially." This can, however, have developed from the locative, i.e. "in front" = "separated from the rest" ⇒ "specially."

¹³ *Hānza* is, however, used as a locative in this passage: II 11 *nu si-pa-an-ti* MAŠ.TUR LÚAZU (12) *pa-ra-a- e-ep-zi nu ha-a-an-za ku-is* (13) *ar-ta na-an-kan si-pa-an-ti* "He makes sacrifice; the seer holds out a male kid; and he who is standing in front, sacrifices it." Cf. ib. II 24: *nu ha-an-za a-ru-wa-iz-zi* "And he prostrates (himself) in front" and ib. IV 16 *ha-an-za an-da URU-ya pa-iz-zi* "And he goes in front(?) into the city."

The nominative is also found as *ŠAG-KI-an-za* in the vocabulary text, KBo. I 42 II 12.

¹⁴ For example *ha-an-da* KUB.XXV 37 I 28, III 16 (NH. original); KBo.III 41 L.15, KUB.XXXI 115 L.9, KUB.XXXIII 67 III 7, VBoT.58 I 23 (NH. copies or adaptations of earlier texts).

(Lyc. B) is well known. Hittite cognates include *tarh-* and *taruh-/tarhu-* “prevail over,” and as was seen earlier, the root of these lacks plene writing, even when it should have been accented in Pre-Hittite. The Hittite verbs continue a root aorist and an athematic present in **-u* (see above).

Luvian *Tarhunt-* is formed from the stem of the *u*-present. Lycian *trqqñt-* is less clear. It can have been formed independently from the aorist stem, but given the otherwise close relationship between Luvian and Lycian, it is possible that it is also to be derived from the *u*-present with syncope of the **-u*. *Trqqas* and *trqqis* might also be derived from **tarhu-* with syncope of the **-u* or they could be derived from the stem of the root aorist **tarh-*.¹⁵ Presumably, the generalization of the root-grade root in the *u*-present and in the active aorist took place in Proto-Anatolian.

The plene writing in the initial syllables of Hittite *āppa* and *āppan*, and perhaps that in Luvian *āppa* and *āppan* (see above) points to an earlier accent. The Lycian cognate that is comparable to Hittite and Luvian *āppan* is *epñ* (*apñ*) also “after” cf. also *epñte* = Hitt. *a-ap-pa-an-da*, Luv. *EGIR-an-da* for **āp-panda* and *epi*, *-ppi* in *ñteppi*, *hrppi* (**anda-api*, **sri-api*) and *epri-* = Luv. *apparantis* “future” in *przis*, *se-y-epris* “first and last” or “before and after.”¹⁶

The etymology of the Anatolian words is not entirely straightforward. On the hand, they have been compared with e.g. Gk. *ἀπό*, Skt. *apa*, Lat. *-ab*, Goth. *af-*, Slav. *po-*, *pa-*, Lith. and O. Pruss. *pa-*, *po-*, Lat. *po-* (in *pōno*, *positus*, etc.) and Hitt. *pē-*, and on the other, they are compared with e.g. Gk. *ἐπί*, *ὀπίσσω*, Skt. *api*, Lat. *ob*, etc.¹⁷ Formally and semantically, the Anatolian words are closer to *ἀπό*, etc., but the alternation **ap-* : **p-* (e.g. in Lat. *ab* : *po-*) could imply **h₂ep-* : **h₂p-*,¹⁸ and the full-grade

¹⁵ The related Hittite *tarratta* “is able,” by contrast, is a thematic middle with an originally full-grade, accented root (i.e. **térh₂-o-to*), and is comparable formally to Skt. *tarate* (**térh₂-o-toi*). For the contrasting treatments **CéRH_{2/3}-* > *CaRR-* and **CéRH_{2/3}-* > *CaRR*, see Kimball 1983, p. 798–790.

¹⁶ See Laroche 1979, p. 347–352 for a full discussion of the Lycian words.

¹⁷ See the references in Tischler 1977, p. 41–43 and add Hamp 1981, p. 43, 46 and 47–48 and Dunkel 1982/3.

¹⁸ Pointed out by Beekes 1969, p. 128.

of this should result in Anatolian **happ-*. One explanation for the Anatolian words is that they are the result of contamination **h₂ep-* with **ep-/op-*, a phenomenon which, to judge from words in the other IE. languages which are clearly from **ep-*, but which imply the notions “after” or “following” (e.g. O. Ir. *iarⁿ*, *iarm* “after,” O.S. *eft* “after” or Gk. ἐπισσον· τὸν ὕστερον γένόμενον Hesych.) seems to have happened elsewhere too.¹⁹ Alternatively, the forms in **ap- : *p-*, which are fossilized case forms of a root noun meaning something like “back,”²⁰ might originally have had *a*-vocalism in the full-grade. Although **a* was at best a marginal phoneme in IE., *a*-vocalism is found in other nouns referring to body parts cf. e.g. Lat. *barba*, OHG. *bart*, Lith. *barzdà*, OCS. *brada*, Lat. *lacrima* (O.L. *dacruma*), Gk. δάκρυ, or Lat. *labia* (beside e.g. O.E. *lippe*).

Hittite and Luvian *āppan* and Lycian *epñ* can continue the accusative of a root noun (in P.A. terms, **áp-ṇ* cf. **pér-ṇ* > P.A. **pér-n* > Hitt. *pēran*, Luv. *parran*) beside a nominative **(h₂)áp-s* in Gk. ἄψ,²¹ a loc. **(h₂)áp-i* in Lyc. *epi*, *-ppi* and **(h₂)áp-o* in Hitt.-Luv. *āppa*, Gk. ἀπό, Skt. *apa*, etc. Since the plene writing of the initial vowel in Hitt. *āppan* implies a full-grade accented root, it implies a zero-grade ending, and for Proto-Anatolian, we can reconstruct **áp-ṇ*.

The Anatolian word for “house” does not have a satisfactory etymology. The forms that are attested in Hittite and Luvian, however, point to an *r/n*-stem with hysterodynamic inflexion, i.e. nom. **pēr* in *É-er*, oblique stem **pṛn-* Hittite *parna-* and Luvian *parnā-(?)*.²² In Luvian, plene writing is found once in the possessive adjective (nom.pl. *par-na-a-as-si-in-z[i]*) but not in

¹⁹ First suggested by Lohmann 1933, p.325. See also Hamp, op.cit., n.3, p.46 and 47–48.

²⁰ See e.g. Ivanov 1979, p.73.

²¹ Or perhaps a genitive-ablative. See Schwyzler 1959, p.620.

²² See Laroche 1965 on the Anatolian word for house. It is possible that similar looking words in other Near Eastern languages (e.g. Egyptian *pr* and Hurrian *purli*, *purni*) are borrowings from Anatolian.

A nominative-accusative **pēr* from underlying **/per-r/* beside gen. **pṛ-n-os* is reconstructed by Schindler 1973, p.153. The *e*-grade might also be found in Lyd. *bir* (Gusmani 1964, p.81). For evidence for a locative **pér(i)* with *ē* < **é* (cf. OH. *É-ri-is-si* KBo.VI 2 I 17) see Neu 1980, p.28–30 and 54.

other forms (dat.sing. [p]ar-ni, acc.pl. *par-na-an-za*, *parnant-*, nom.sing. [p]ar-na-an-za, nom.pl. *par-na-an-ti-in-zi*, Laroche, 1966, p.79). For the Hittite word, however, although the oblique-stem is well attested from the OH. period on, it lacks plene writing, as the following examples, taken from OH. texts show:

par-na-as KBo. XVII 15 Rs! 12; *par-na*[(–)] ib. Rs! 3
par-na KBo. VI 2 I 58; KBo. XVII 1 III 17; IV 11; KBo. XVII 3
 IV 7; KBo. XVII 4 II 12 ([p]ar-na); KBo. XVII 6 III 9
par-na-ma KBo. VI 2 II 35
par-na-as-se-e-a KBo. VI 2 I 3, 12, 21, 23, 25 (*par*-[na]-*as-se-e-a*), 41, III 32, IV 9, 17; KUB. XXIX 16 III 4, 6, 13
par-na-as-se-a KBo. VI 2 I 10; KUB. XXIX 30 Vs 6
par-na-se-e-a KBo. VI 2 III 30
par-na-se-a KBo. VI 2 III 34, 52, 55 (*par-na-se*-[a]), 57, IV 18
par-na-as-se-ya KUB. XXIX 28 L.9
par-na-[(as)-se-(e)-a] KUB. XXIX 16 III 8

In the original paradigm, accented endings would be expected in the oblique cases, e.g. gen. **pr̥n-ós*. If the endings had been accented in Pre-Hittite, we would expect OH. (and later) **par-na-a-as*, **par-na-a*, etc. (cf. e.g. *sa-ra-a* < **sró* or **sró*). The lack of plene writing in the OH. forms then, implies a root accent, presumably generalized from the nominative-accusative. The oblique stem **pr̥n-* also appears in Lycian in the derived words *pr̥nawa-* “build” (3 sing.pret. *pr̥nawate*), *pr̥nawa* or *pr̥nawu* (acc.sing.) “building,” or more specifically, “tomb” and *pr̥nezi* “household”²³ (**pr̥n-ei-tiyo-*)

A final, more interesting example is provided by the correspondence between Hittite *anda*, Luvian *ānta/ānda* and Lycian *ñte*, *ñteppi* (< **anda-api*). In the Luvian word, plene writing of the initial syllable is well attested (Laroche 1966 p.28 *a-a-an-ta*, *a-an-ta*, *a-an-da*, and *an-da*). Its Hittite cognate, however, does not have plene writing. The following are a few of the examples from Old Hittite texts, and there are many more:

an-da KBo. III 22 Vs 38; KBo. VI 2 III 19 ([a]n-da); KBo. XVII 1 I 21, 26 (*an-da-ma*), 31, 32, 33, III 27, IV 24 ([a]n-da) etc.

²³ Compare also HL. *parnawa-* and Hitt. *par-na-ú-i-is-ke[et]* in KUB. I8 IV 40 = *par-na-wa-is-ke-et* “built” in KUB. I 16 IV 63 (Hatt. IV 63).

Hittite *anda* is usually compared to Latin *indo* (O. Lat. *endo*), and the related *andan* has also been compared with Greek ἔνδον, but these comparisons run into difficulties.²⁴ Given the *t* of Lycian *ñte* and *ñteppi*, however, more likely cognates would be Greek ἐντός and Latin *intus*.²⁵ The Greek and Latin words continue the genitive-ablative of a root noun. By parallelism with e.g. *āppan* and *pēran* (**pér-ṁ* beside gen. **pros* in Gk. πάρος), Hittite *andan* should continue the accusative, while *anda*, Luv. *āntā/ānda*, and Lyc. *ñte* should be from **nt-o*.

The Hittite words can continue forms with a zero-grade root **nt-*, and the lack of plene writing implies a root accent (cf. *āppa*). It is not impossible that Luvian *āntā/anda* has a full-grade **ento* as in Greek ἐντός. Since there are other cases where reflexes of syllabic resonants lack vowels in Lycian however, and since Luvian and Lycian are otherwise closely related, it is probably more likely that the Luvian words also have the reflex of **ñ*.

What then are the implications of the Lycian reflexes of syllabic resonants for our understanding of Anatolian phonology? One possible explanation is that the reflexes of syllabic resonants remained as such and that the Hittite and Luvian spellings are simply artifacts of the writing system, i.e. “dead vowels.” This would perhaps explain the lack of vowels in Lycian and the lack of plene writing in Hittite. Another possibility however, is that the Anatolian reflexes of syllabic resonants were extremely short, schwa-like vowels that could be syncopated in Lycian and that were not subject to the lengthening rule in Hittite.²⁶ Perhaps there was considerable variation in their pronunciation – ranging from a resonant plus schwa-like vowel to a syllabic resonant pronunciation. One can compare the variation in the pronunciation of the final syllables of the English words *button* and *bundle*.

Greek transliterations of Lycian proper names with **tarh-* and **hant-* do have vowels, and the vowels have varying co-

²⁴ See the references in Tischler 1977, p.33–34.

²⁵ See Tischler, op. cit., n. 25, p. 34 for references.

²⁶ Pedersen 1945, ss 66 (p.40–41) and Houwink Ten Cate 1961, p.198 assume that syncope produced syllabic resonants.

lors.²⁷ For Anatolian **tarh-* or **tarhu-*, for example: Τροχον-
δας, Τροχονμας, Τροχομμας, Τροχονις, Τερκωνδος. Inter-
estingly, for **hant-*, the vowel is usually ε or ι, suggesting some
effect of the nasal: Κενεβορις, Κινδανυβας, Κενδεβορα, Κινδ-
ανυρις, Κινδυπρας.

The Greek transliterations can provide evidence for short an-
aptytic vowels of varying color. They would, in this case, imply
that the anaptytic vowels are not noted in the Lycian writing
system. The Greek evidence is not, however, unequivocal, since
it is also possible that these spellings simply represent attempts
to transcribe syllabic *r* and *ŋ*.

The Luvian spellings for *ānta/ānda* are also interesting. We
noted earlier that the lack of plene writing in Hittite *anda* and
andan implies a root accent. If the Luvian spellings do have
something to do with accent they might imply that the (analogi-
cal) root accent is Proto-Anatolian, and that reflexes of syllabic
resonants could be lengthened in Luvian. This would provide
evidence for an anaptyctic vowel, at least in the Luvian-Lycian
branch of Anatolian, and it would imply that the Lycian spell-
ings are due to syncope.

There is independent evidence for syncope in Lycian, al-
though the conditioning behind it is unclear.²⁸ Interestingly, in
several well known cases, the syllable that is syncopated in Ly-
cian corresponds to a syllable that was accented in Pre-Hittite,
implying perhaps that the Lycian accent was different from the
Pre-Hittite accent. Examples are: *ebñne* (3 sing.dem.pro.) be-
side *ebēñne* (passim) cf. Hitt. *apās*; *mñti* “council” beside
miñti,²⁹ cf. Luv. *mayant-* “numerous,” Hitt. *mekki-* < **mégh₂*-³⁰
hrzzi “upper” and *prz(z)i* “foremost” (cf. Hitt. *sarāzzi* < **sarā-*
+ *-zzi*, *hantezzi* < **h₂ŋteí-tiyo-* and *appezzi* < **(h₁)op-éi-tiyo-*).
Compare the lack of syncope in *prñnezi* “household.”

²⁷ The Greek transcriptions are given by Houwink Ten Cate, op.cit., n.26, p.
125-126 (*tarh-*) and 149-150 (*hant-*).

²⁸ See Pedersen, loc.cit., n.26 and Houwink Ten Cate, loc.cit., n.26 on Lycian
syncope.

²⁹ Cited by Pedersen, loc.cit., n.26.

³⁰ The etymology is that of Laroche 1963, p.78-79.

There is also internal evidence from Hittite for anaptyxis. The verb *sanh-* “seek” does not usually have plene writing of its root vowel, as the following examples from MH. texts show:

3 sg. pres.

sa-an-ah-zi KUB.XIII 7 I 17

3 pl. pres.

sa-an-ha-an-zi KBo.XV 33 II 32; KBo.XXIII 23 Vs 29 (*ša-an-ha-an-zi*) or NH. copy?; IBoT.I 36 I 6 (*sa-an-ha-an-[zi]*)

1 sg. pret.

sa-an-hu-u[n] KBo.XV 10 III 45

3 sg. pret.

sa-ah-ta KUB.XXXIII 10 Vs 2

2 sg. imp.

sa-an-ha KUB.XVII 10 I 31, 35; KUB.XXXIII 2 I 16; KUB.XXXIII 5 II 5; KUB.XXXIII 26 Vs 13

2 pl. imp.

sa-an-ha-a[t-te-en] KBo.XVI 27 II 13

3 pl. imp.

sa-an-ha-an-du KBo.XVI 27 II 13 (*sa-an-ha-a[n-du]*); KUB.XIII 1 I 30 (*sa-an-ha-(an)-du*); KUB.XIII 2 II 23

inf.

sa-an-hu-an-[zi] KBo.XV 10 II 76

iterative 3 pl. pres.

sa-an-hi-is-kan-zi KUB.XXIV 4 + I 19 (*sa-an-ḫi-ḫs-[kan-zi]*), 20 ([*s*]a-an-hi-is-kan-zi)

Sanh- is cognate with, for example, Skt. *sanoti*, aor. *asanat*, and Greek ἀνύω. Both the lack of plene writing and the retention of the root-final laryngeal indicate that it generalized the weak stem of the root aorist which has been thematized in Skt. *asanat* (**sénh₂-* > Hitt. **sann-* cf. **térh₂* > *tarr-* in *tarrata* “be able”: Skt. *tarate*). Its root should, therefore, have the reflex of **ṇ*.

A few forms of *sanh-*, however, show loss of their *n* before the root final *h*. Quite significantly, these have plene writing of

their root vowels, e. g. 2 sg. imp. *sa-a-ah* KUB. XVII 10 I 25, 26 (2 ex.) (cf. *sa-an-ha* ib. I 31, 35). 2 pl. imp. [*s*]*a-a-ah-te-en* KUB. XXIX 1 I 48 (NH. copy of an OH. text), iterative 3 pl. pres. *sa-a-hi-es-kan-ta-ri* KUB. XXXVI 89 II 19 = *sa-a-hi-is-ka* < *-an-* > *ta-ri* KUB. XXXVI 86 II 31 (NH. texts with earlier material). What the plene writing suggests is that these forms show compensatory lengthening of a vowel preceding the lost *n*. Presumably, then, the *a* of the allomorph *sanh-* was a genuine anaptyctic vowel and not a “dead vowel.”³¹

Additional evidence comes from oblique case forms of *r/n*-stems. The suffix *-ān-* of the oblique-stem of *pattar* “basket,” “tray” and *uttar* “word,” “affair,” “thing” continues a Sievers variant **-ŋ-V-* since both words may be derived from roots with heavy syllables (*pattar* < **póth₂r*:³² **peth₂-* “spread open” cf. Gk. πετάννυγι, Lat. *pandō*, *pateō* and *uttar* < **uktr* for **wéktr*/**wókr* : **wekt-* cf. e. g. Go. *waihts* “thing,” *niwaihts* “nothing”).³³ Oblique case forms of each attest plene writing of the vowels of their endings, and occasionally, plene writing of the suffix vowel is found. For example:

OH.

[*p*]*ad-da-ni-i* KBo. XVII 1 IV 21

pad-da-a-ni KBo. XVII 4 III 10

NH.

pad-da-ni-i-ma KUB. IX 6 I 12, 14

pat-ta-a-ni ib. I 3

³¹ Other examples, such as those given in Goetze 1930, p. 5–6 do not have plene writing, and note the lack of plene writing in the second syllable of *sa-an-ha* < *-an-* > *du* in KUB. XIII 2 II 23. This could suggest that lengthening occurred only before *h*, i. e. *Vnh* > *V̄h*. Compare the similar compensatory lengthening before *h* (< **k*) in Germanic in e. g. Go., OHG. *hāhan* < **hanhan*, Go., OHG. *brāhte*, OE. *brohte* < **braghte*.

³² See Schindler 1975, p. 5 = p. 216 for **poth₂-r*.

Accented vowels result in short vowels before geminates from consonant plus laryngeal (see Kimball 1983, p. 801–825). The lack of plene writing for the root syllable of *pattar* is, therefore, to be expected.

³³ For the etymology, see Puhvel 1972, p. 112. A parallel but opposite development can be seen in *mēmiyan* “word, affair, matter”: *mēma-* “speak, say.” Although *uttar* is usually compared with Gk. αὐδή etc., this etymology implies an original **h₂*, and there is every reason to believe that the initial laryngeal should be retained in Hittite.

MH.

ud-da-na-a-as KUB.XVII 10 II 24

NH. copy of an OH. text

ud-da-a-na-as KUB.XVII 18 II 29 (*ud-da-na-as* ib. II 29)

ud-da-ni-i ib. II 27

The *-ān-* of these words does not seem simply to be a variant for *-n-*. A comparison with, for example, *sa-ak-na-a-as* genitive singular of *sakkar* “excrement” (e.g. OH. KBo.XX 33 + Vs 7) or with *ud-ne-e* (e.g. OH. KBo. III 22 Vs 11, 28), nominative-accusative of *udnē* “country” indicates that the scribes could have written ***pat-ni-i* and ***ud-ni-i* if they had wanted to.

The occasional plene writing of the vowel of the suffix seems at first glance to provide an exception to the rule that reflexes of syllabic resonants do not have plene writing. It might, however, indicate that reflexes of Sievers variants are somehow different from those of ordinary syllabic resonants. For example, it could provide evidence for the kind of homorganic glide insertion that is attested in Hittite and the other IE. languages for *i* and *u* (cf. e.g. Hitt. *si-i-us*, Skt. *d(i)yau*).³⁴ It is possible, perhaps, that the sequence **ñn* resulted in *ān*. In other words, the plene writing could point to the following development: **C₁C₂-n-V* > **CC-ñ-V* (Sievers’ Law and assimilation) > **CC-ñn-V* (homorganic glide insertion) > *CC-ān-V-* (**ñn* > *ān*).

Alternatively, however, the long vowel can be analogical. Oblique case forms of, for example, the *r/n*-stems *wātar* “water” and *pahhur* “fire” seem to have derived from the locative stems *witēn-* (< **wedén-* for **ud-én-*) and *pahh(u)wēn-* (< **p(e)h₂(u)-wén-*) cf. e.g. gen. *ú-i-te-na-as* (KUB. VII 20 I 6), dat. *ú-i-te-e-ni* (KBo. V 2 I 12), *ú-i-te-ni* (KUB. VII 41 III 12), gen. *pa-ah-hu-e-na-as* (KBo. IV 2 I 10) dat. *pa-ah-hu-e-ni* (KBo. VI 2 II 33). The full-grade suffix of the locative should have been accented in the original paradigms, and in Hittite this accented vowel should have resulted in a long vowel (note the plene writing in *ú-i-te-e-ni*).³⁵ It is possible then that the stems *pattān-* and *-ud-*

³⁴ For a reformulation of Sievers’-Lindeman’s Law in modern terms with a discussion, see Schindler 1977, p.56–69.

³⁵ A somewhat different view of *witēn-* and *pahhwēn-* is given in Schindler 1975, p.4 and 6 = 216 and 218.

dān- were reanalysed as locative stems, and that the long *ā* of *pattān-* and *uddān-* is analogical to the long suffix vowel of other *r/n*-stem locatives. Even if the *ā* of *pattān-* and *uddān-* did not result from regular sound change, however, the suffix seems to have had a genuine vowel, since the analogical remodeling would be impossible otherwise (note the lack of remodeling in *sak-n-*).

A final Hittite-Lycian correspondence also suggests that the syllabic resonants developed anaptyctic vowels. The Lycian preverb *pere* “forth” can be compared with Hittite *parā* id. which is consistently spelled *pa-ra-a* and both can be compared with, for example, Skt. *pra*, Gk. *πρό* and Lat. *prō*.³⁶ Taken by itself, the Hittite word can be read either as /prā/ or as /parā/. The vowel of the initial syllable of the Lycian word, however, suggests that the Anatolian word had a vowel. Hittite *parā* and Lycian *pere* would, then, seem to point to a Lindeman variant **prō* beside **pro* in *pra*, *πρό*, and *prō* (cf. e.g. Gk. *πάρος* < **pr-ós*).³⁷ The lack of plene writing for the initial syllable of *para* would suggest that there was no homorganic glide insertion resulting in a long vowel plus glide, and that the long vowel of *pattān-* and *uddān-* is indeed analogical to the long vowel of *witēn-* and *pahhwēn-* etc.

The evidence that has been presented here suggests the following for the development of syllabic resonants in Anatolian. First, the vowel of the initial syllable of Lycian *pere* implies that syllabic resonants developed anaptyctic vowels. This is also implied by the plene writing of the suffix vowel in some forms of *pattān-* and *uddān-*, the oblique stems of *pattar* and *uttar*. The long vowel here is analogical to the long vowel of other *r/rn* stem oblique stems, however, rather than being the direct reflex of pre-vocalic **n*. Anaptyxis may also be implied by the plene writing in Luvian *ānt/da* beside Hittite *anda*, *andan* and Lycian *ñte*, *ñteppi*, and the plene writing in this word may further suggest that reflexes of syllabic resonants could be lengthened under some circumstances in Luvian.

³⁶ The significance of *pere* beside *pri-*, *prije-* is also noted by Houwink Ten Cate 1965, p. 22–24.

³⁷ For **pr-os*, see for example, Frisk 1960, s.v. *πάρος*.

In Hittite, where plene writing can be connected with the lengthening of accented vowels, the lack of plene writing for the reflexes of syllabic resonants, even in cases where it is likely that they came to be accented in Pre-Hittite, suggests that the anaptyctic vowel was a short, schwa-like vowel that was not subject to the Hittite lengthening rule. This conclusion is also supported by the Lycian spellings for a number of words which have reflexes of syllabic resonants. The lack of vowels for the reflexes of syllabic resonants in these can be compared with the vowel of the initial syllable of *pere*. This, in turn, suggests that the short, schwa-like vowel could be syncopated in Lycian in as yet unclear circumstances.

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