Historical Phonology of Anatolian

H. Craig Melchert
University of North Carolina at Chapel Hill

1. Introduction

Anatolian is among the earliest branches of Indo-European in the dates of its attestation, but is one of the last to be investigated. As in other cases, study of its history is complicated by the great discrepancy in the age, quantity and quality of the text corpora for the various languages of the group. Evidence for Hittite far surpasses that for Palaic, Luvian, Lydian and Lydian, the other assured members of the family. As a result, the history of Anatolian has until recently meant essentially the history of Hittite. While the concept of an Anatolian subfamily of Indo-European has been generally recognized for over half a century, little work has been done on reconstructing the features of Common Anatolian. Scholars have quite justifiably treated Common Anatolian as a backward projection of Hittite (abstracting obvious innovations), while citing the other languages selectively where they seem to illuminate the situation in Hittite. Several dramatic discoveries and the efforts of a number of specialists have in recent years considerably improved our understanding of the ‘minor’ Anatolian languages. We may now attempt a serious reconstruction of Common Anatolian, taking into account all the evidence available. Such an enterprise inevitably includes both elements on which there is broad agreement and more controversial aspects. In the following phonological sketch, I have tried to distinguish carefully between the two, and I ask readers to give full weight to all qualifiers.

I should at the outset make clear certain basic assumptions. While the irrelevancies of the Stammbaum are well-known, I continue to find it the most fruitful realizable model for describing the interrelationships of the Indo-European languages in general. I personally remains agnostic regarding the issue of ‘Indo-Hittite’ or ‘early separation’ of Anatolian, but for purposes of phonology we may treat Anatolian as simply another branch of Proto-Indo-European. On the other hand, I
find the Stammbaum unsuitable for describing the relationships among the Anatolian languages themselves. Current evidence suggests rather a dialect continuum along geographical lines. I consider all previous efforts at subgrouping within Anatolian to be premature, and statements about isolopes below should be taken as provisional.

As to the phonological system which I assume for PIE, I may be very brief. I follow on all essential points Mayrhofer 1986. Please note the following: (1) I retain the traditional definitions of the PIE stop series and explicitly reject the reanalysis in terms of the ‘glottalic theory’; (2) PIE has a phonemic */s/ which has nothing to do with the coloring of */e/ by */h/; (3) I posit three, and only three, laryngeals with the usual characteristics; (4) for me */h/ does not color either */o/ or */e/ in PIE (see Mayrhofer 1986: 132ff with references and counterarguments).

2. Common Anatolian

We may assume the following segmental phonemic inventory for Common Anatolian: voiceless stops */p/, */t/, */k/; */k'/, */k'/; voiced stops */b/, */d/, */g/; */g'/; voiceless fricatives */s/ and */h/, voiced fricatives */h'/; sonorants */m/, */n/, */l/, */w/; */y/; short vowels */i/; */a'/, */e'/, */e'/, */o'/ and */u'/; long vowels */a/; */e'/, */e'/, */o'/ and */u'/. There is also a voiceless dental affricate */ts/ as a conditioned allophone of */s/ and probably */z/ as an allophone of */s/. Some features of this list call for justification:

(1) none of the evidence presented thus far for a distinction of voiced and voiceless aspirates in CA is compelling. 'Cop’s Law' in Luvian (see 6.1.1) applies to etymological voiceless stops as well as voiceless aspirates (contra Cop 1970: 92 et al.): note */dhw/ → CLuv. adhaw- 'evil' (after Watkins 1982: 261) or */pedh/ → CLuv. pedhun-. 'of carrying' (Hitt. pedan). Contra Eichner (1980: 136f), non-assibilation of */dh/ before */i/ in */idi/ > Hitt. id. 'girt' is also non-productive, because CA */d/ from any source fails to assimilate in interior position in Hittite: cf. CA pret. mid. */uati/ > */ati/ > OHitt. *ati (Melchert 1992b after Eichner 1980: 140f and Neu 1968: 144f). Shervoroskin’s claim (1982: 212) of a different treatment of */d/ and */dh/ in Luvian and Lydian is based on false etymologies or interpretations. Finally, in the absence of a medial example of PIE */g'/, the appearance of */g'h/ as */hw/ in Palaic ązw- 'drink' may be regular for any medial voiced labiovelar vs velar */g'/ > */g'/.

(2) For the existence of three distinct sets of tectal stops in CA see Melchert 1987a and 1989.

(3) There is evidence for assimilation of */t/ to */ts/ before */y/ in all languages except Palaic, where its absence may easily be accidental. Since the conditioning */y/ remains in Hittite */yepu- → OHitt. āppu- 'earc; later', I assume that */ts/ is still a mere allophone of */t/ before */y/ in CA.

(4) I use */h/ for the regular CA result of PIE */hs'/ and */h'/ for its ‘lenited’ variant, which I identify phonemically with the reflex of word-initial */h'/: see section 3 for details.

(5) The voiced allophone */z/ of */s/ is rare in CA as already in PIE. Likely examples include 1st pl. mid. */swa'tdahu/ > Hitt. -wala (Oettinger 1979: 259f) and */Huma'ter/ > Hitt. baltur ‘branches’.

(6) For the preservation of five vowels in CA see Melchert 1992a and 1992c.

(7) CA long */e/ represents the monophthongization of PIE */eiy/.

(8) CA long */e'/ results from (tautosyllabic) */eiy/.

3. Changes from PIE to CA

3.1 Stops

In addition to the merger of the voiceless aspirates and voiced stops, CA also shows a radical reduction and redistribution of the remaining voiceless/voiceless contrast.

(1) voiced stops are generalized in wordfinal position (cf.
Pedersen 1938: 185, et al.). There is now widespread agreement that */h/ is also lost or assimilated in medial position: *tekhu- 'full' > Hitt. têku- /swau- (Melchert 1978b: 23ff with refs.). Hitt. lekhu- 'pour' continues *leku- (Oettinger 1979: 424, et al.), not *leku-. The regular reflex of */h/ is a voiceless fricative */h/ which appears as initial /h/ and medial /h/ in Hiittite, Palaiic and Clavian, and as /s/ /k/ in Lycian. Under the same three conditions as voiceless stops (see 3.1 above), */h/ is "lent" to a voiceless fricative */h/ , reflected as medial /h/ in Hiittite, Palaiic and Clavian and as /s/ /k/ in Lycian. Examples: */ух-2> CA */ух- > Hitt. uh- 'turn' (Oettinger 1979: 99f contra Lindeman 1987: 110f); *bъhъ- > CA */bъhu- > Clav. pho- and Lyc. pье- 'scandal'; might (Starke 1990: 314f); pret. 1st sg. mid. */хабуъ ca > CA */Хахауу(ъ) and Lyc. sагъ (Melchert 1992b).

One point of major controversy is the fate of word-initial */h/ . I follow Rimball (1987) and others in assuming that initial */h/ is preserved in Hiittite, Palaiic and Clavian as /h/, but lost in Lycian: */хабъ 'work, commerce, wealth' > Hitt. хабъ 'sale, transaction' etc. but Lyc. qье 'sell'. Other scholars reject this claim and assume loss of */h/ initially as elsewhere. See Melchert 1987b for a full discussion and opposing views.

If one accepts initial cuneiform /h/ from */h/ , this sound is in complementary distribution with the voice medial variant of */h/ . Given other evidence for a voice quality of */h/ (PIE *θekъ- 'drink' < *θεкъ-phrε) and its loss in Lycian, I choose to identify the CA reflex of initial */h/ phonemically with the voice medial variant of */h/ , both being voiced */h/ as opposed to voiceless */h/ , the regular variant of */h/ . Obviously, for those who assume a general loss of */h/ , CA voiced */h/ is merely a conditioned allophone of */h/ .

Laryngeals undergo at least one important assimilation in CA: a sequence *-VRH- becomes *-RRH-. Examples: */ръръV> Hitt. рръm- 'kick flat' (Melchert 1984a: 16ff after Oettinger 1979: 270); *тебъ > Hitt. тара- 'be strong, able'; *съ- /къ- > Hitt. съмъ 'ill', Pal. съмутъ- 'outpouring' (or sim.). I also continue to insist that at least */h/ /h/ and */h/ plus */s/ become geminate */sh/ (Melchert 1987b: 26f), but this claim is quite controversial. One should compare the summary of
laryngeals given here with that of Eichner (1988).

3.3 Sonorants

The PIE sonorants are generally stable in CA. It is likely that word-initial */r/ has already been eliminated, but the details of the process are unclear. Since there are no counterexamples in Lydian and Palaeic, the loss of word-initial */r/ before */c/ shown by Luvian, Lydian and Hittite may well be CA. Example: */khr/> CA */θr/> */θ/ Luvian and Lydian a- and Hitt. Ε (-usually remade to */e/) ‘do, make’. See Melchert 1984a: 14ff for discussion and references.

3.4 Vowels

CA preserves the PIE vowel system nearly intact. The contraction of (auto) syllabic */e/ to CA */e/ has already been cited in 2 (8). If one assumes as I do the loss of intervocalic */o/ and */o/ in CA, then the contraction of the diphthongs */oe/ and */aw/ to */e/ and */aw/ must also be CA, since they necessarily precede the former: */neg̣e/> */neg̣e/> */neg̣e/> OH /naw/ ‘turn’; */neg̣e/> */neg̣e/> */neg̣e/> Hitt. /haw/ /swaw/ ‘full’ (Melchert 1992c). A preform */neg̣e/ would yield Hitt. */neg̣e/ (Melchert 1984a: 32), while */neg̣e/ would become */neg̣e/ (Melchert 1984a: 22ff, with refs). Contrary to the general view, Kimball (1993) has shown that other short diphthongs do not monophthongize in all positions in Hittite. I therefore assume that */e/, */e/, */ou/ and */aw/ remain in CA.

4. Changes from CA to Hittite

I can treat only the most important developments here.

4.1 Stops

The synchronic status of the Hittite stops is probably the greatest remaining controversy in Hittite phonology. The tentative solution sketched here is my own and in no way reflects a consensus. It is an established fact that Hittite scribes do not use the CV signs for voiceless and voiced stops contrastively in either initial or medial position (see Hart 1983: 112). However, in

Historical Phono-logy of Anatolian

intervocalic position germinative stops do contrast with single stops. Furthermore, except for the conditioned changes described in 3.1 above, the germinative stops reflect etymological voiceless stops, while single stops continue voiced stops (thus ‘Sturne’/vam’s Law’, as per Sturtevant 1932). Evidence involving vowel lengthening (Melchert 1992c) argues that the orthographic germinatives are true germinatives, in that they close a preceding syllable. I follow Petersen (1953: 22) and others in interpreting these facts to mean that the inherited contrast in stops has been reanalyzed from one of voiceless/voiced tofortis/lenis. In intervocalic position fortis stops are realized as germinatives, while the contrasting lenis are simple stops which are indifferently voiced or voiceless.

A contributing factor to the above reanalysis would have been that, like all the Anatolian languages, Hittite had devolved initial stops by the historical period. The unexpected germinative stop of */ḍ/–’install’ < */ḍe/> is most easily explained by assuming that the reduplicated stem is formed in pre-Hittite after devoicing of initial */d/ to */d/. Recall that voiced stops had already been generalized in word-final position in CA (3.1). In the chief remaining position of contrast (intervocally), the phonetic difference was now germinative vs. simple. Under these circumstances the proposed reanalysis does not seem implausible and seems to beat account for the attested orthography.

One should note the following additional changes in stops from CA to Hittite.

(1) Hittite largely levels out the effects of the voicing rules in 3.1 (1) and (2).

(2) CA */t/ is assimilated to */t/ before */i/ except after */s/.

(3) CA */d/ becomes */s/ initially before */i/ and */j/ for this formulation see Kronasser 1956: 62 and Starke 1990: 150.

(4) CA palatal and velar stops merge as velars.

4.2 Fricatives

Aside from a number of assimilations, CA */s/, */h/ and

The Journal of Indo-European Studies

Volume 21, Number 3 & 4, Fall/Winter 1993

243
*h/ are generally preserved. I assume that in parallelism to the stops initial */h/ is devoted to /H/ and the contrast of /H/ and /h/ becomes fortis/lenis, but neither of these steps is strictly provable.

4.3 Sonorants

The nasals and liquids are stable, again different from assimilations. The glide */w/ is dissimilated to /m/ next to /u/; see Kammenhuber 1969: 137 and Melchert 1984a: 22ff (but I now believe the change is specifically pre-Hittite). CA */q/ is lost in Hittite between vowels (Oettinger 1979: 338 and Melchert 1984a: 31ff). Contra Melchert (1984a: 164) this change is specifically pre-Hittite, not shared by Livian.

4.4 Vowels

Changes from CA to Hittite are numerous and complex. Only an overview is possible here.

(1) All short vowels are lengthened in accented open syllables (Kimball 1983 passim, Eichner 1986: 19), a change shared in my view with Livian and Palαιc. Contra Kimball 1983 only short */e/ and */o/, not */a/, */i/ and */u/, are lengthened in accented closed syllables. Contrary */eh₂/ or */o₂/ I arrive at */ęhi/ with */eh₂o₂/ to the boundary > *ärH₂ (see below) > arha 'away' and see Melchert 1992c.

(2) The high vowels */i/ and */u/ are preserved. */o/o/ merges with */a/o/ after the lengthening in (2).

(3) CA */e/: merges with */e/ as */e/. On the possibility that */e/ remains distinct in Hittite, see Melchert 1984a: 141ff.

(4) The development of short */e/ is complex and much debated. It is reasonably certain that */e/ is raised to /i/ pretonically (*Kest-e₃e₃ < kide₃e₃ 'hungry'), posttonically in closed syllables (*næ₃e₃) > n e₃p₃i₃ 'sky, heaven'), and before non-coronal nasal (*em₃e₃ > ni₃ku₃u₃ in mmank₃u₃-k₃u₃ 'near'); see Melchert 1984a: 103f with refs. I remain unpersuaded that there is an un laut of */e/ to /j/ before /j/ in a following syllable (as per Eichner 1973: 76 and 1980: 144f). Note *opp₂p₂

The Journal of Indo-European Studies

Historical Phonology of Anatolian (a grain) with consistent */e/ before following */i/.

Following a suggestion of Warren Cowgill, I now assume a change of */e/ to */a/ in posttonic open syllables (revising Melchert 1984a: 104f). This rule explains the distribution of 1st and 3rd plurals in *anu₃ and *anu₃, which are found only in verb forms with accent on the stem, and also the oblique form */w-0/ of 1st stem adjectives (as *pe₃we₃- 'few' < *d₃we₃- *w- with generalized accented full-grade root). Short */e/ appears as */a/ before a coronal (dental) nasal (PederSEN 1938: 166), as in */endo₃-in(tono)/ > anda and pres. 3rd pl. */nui₃ > anu₃. Present 3rd sg. kunu₃ 'kills' is analogous to kunu₃. I do not find credible the attempt of Kimball (1986: 88ff) to derive all examples of */a-n/ plus dental from zero grades. Before */r/ and */l/, neither complete preservation nor a general change of */e/ to */a/ can account for all the facts. Some cases of */e/ to */a/ before liquid are certain, but the precise conditioning remains to be determined.

(5) As per Kimball (1993), the CA diphthongs */ay/, */oy/, */aw/ and */ow/ remain as */ay/ and */aw/ before dental continuants (/s/, /n/, /r/, /l/). Examples: *kono₃- > gina₃- 'in-law', *adu₃- > ada₃- 'windpipe, throat'. Elsewhere we find monophthongization to */e/ and */a/ respectively.

5. Changes from CA to Palαιc

The very limited Palαιc corpus necessarily makes much of the following provisional.

5.1 Stops

I assume the same reanalysis of the distinctive features of the stops as in Hittite (4.1), for the same reasons. Palαιc also shares with Hittite the merger of palatal with velar stops. Based on the example of ø₃we₃- 'drink' to the root */e₃we₃-*, there is apparently a special weakening of the voiced labiovelar in medial position (cf. 2.1 above).

5.2 Fricatives

CA */s/ is maintained, but the distribution of geminate

Volume 31, Numbers 3/4, Fall/Winter 1993
The dramatically revised readings of many Hittite\footnote{Cf. D. G. McCourt, Hittite.} and Luwian\footnote{Cf. D. G. McCourt, Hittite.} grammatical features have shown that a great deal of descriptive and analytic work has been done on Luwian.\footnote{Cf. D. G. McCourt, Hittite.} In their current form, the grammatical descriptions of the Luwian and Hittite languages are largely based on the work of such linguists as E. de Boer, D. G. McCourt, H. von Vegesack, and the late H. von Wartburg.\footnote{Cf. D. G. McCourt, Hittite.} The work of these linguists has provided a solid foundation for the study of these languages, and their contributions continue to be influential in the field of linguistics.

6.3.2. Syllables and Vowels

(1) Attested in the language of the Urartu (18th-17th centuries BC), the form *A-*/*A-ic/ is found in the root *A-ic/ (for the spelling compare *A-ic/; see also *A-ic/). In Luwian, the form *A-ic/ is retained.

(2) The root *A-ic/ is also found in the form *A-ic/ (for the spelling compare *A-ic/; see also *A-ic/).

6.3.3. Consonants

(1) *A-ic/ is also found in the form *A-ic/ (for the spelling compare *A-ic/; see also *A-ic/).

(2) The root *A-ic/ is also found in the form *A-ic/ (for the spelling compare *A-ic/; see also *A-ic/).

6.4. Vowels

(1) The root *A-ic/ is also found in the form *A-ic/ (for the spelling compare *A-ic/; see also *A-ic/).

(2) The root *A-ic/ is also found in the form *A-ic/ (for the spelling compare *A-ic/; see also *A-ic/).

In conclusion, the study of Luwian and Hittite languages continues to be an important area of research in linguistics, and the work of these linguists has provided a solid foundation for further investigation.

6.5. Changes from CA to Luwian

(1) The root *A-ic/ is also found in the form *A-ic/ (for the spelling compare *A-ic/; see also *A-ic/).

(2) The root *A-ic/ is also found in the form *A-ic/ (for the spelling compare *A-ic/; see also *A-ic/).

This research has provided a solid foundation for further investigation in the field of linguistics.
(4) In HLuvian */d/ often undergoes rhotacism to /r/, and doubles are frequent: *dhi/iruna/* = /d/di/ and /d/i/ = /g/oa', abl.-inst. *d/-a */= /d/-a/ai = /d/-a/ and /a/ai'. See Morpurgo Davies 1982/83.

6.2 Affricate
CA */tʃ/ is preserved in Lucian: CA */Haty transformed HLuv. ʃa-ssə(š) - 'inscribe' (cf. Hitt. ᶟašša - 'strike; play an instrument').

6.3 Fricatives

6.3.1
CA */h/ remains in Lucian. It is subject to 'Cop's Law' (see 6.1.1): CA */weš-šə/ - 'good' > CLuv. waššar - 'favor', waššar - 'be pleasing'.

6.3.2
CA */h/ and */h/ are for the most part maintained, but note the following specially conditioned changes:

(1) */h/ is weakened to /h/ and */h/ is lost, between accented long vowel and /u/ (cf. 5.2.2): CA */pata/ > Pre-Luvian */pata/ > CLuv. patah - 'fire'; CA */shir/ašwum/ > *shur/ašum/ > CLuv. duc/don - 'urine' (initial */a/ to /u/ is irregular).

(2) */h/ is sporadically lost in medial clusters between sonorant and /w/, and */h/ more generally medially before /w/: Pre-Luvian */m-ewa/ > CLuv. mammaš - 'crush' (beside mammašu); Pre-Luvian */mwa/ > CLuv. pazwir(š) - 'light a fire'.

6.4 Sonorants
These are mostly stable. They are all subject to 'Cop's Law' (6.1.1): CA */prtm/ > CLuv. parrəm - 'in front'; CA */mət/ > CLuv. mašš; *meš/ > CLuv. məsməš - 'crush'; *meši/ > CLuv. maššu; *meši/ > CLuv. maššu(š) (b) - smu (by syncope).

In HLuvian /l/ is often rhotacized to /r/:

CA */gʷəš/-or */swl- > HLuv. wə/swl - 'die' (beside wə/swl - 'la').

6.5 Vowels
Lucian shares with Hittite and Palaic the lengthening of all short vowels in accented open syllables. It differs from them in lengthening all accented short vowels in absolute initial position. The high vowels are otherwise preserved unchanged. As in Hittite and Palaic, */a/ in hiatus merges with */a/ (the unmarked treatment of short */e/ is /a/, but */e/ is raised to /e/ after */y/ (including from */g/ and */g/ as per 6.1.3); see Oettinger 1976/77: 135. CA long */e/ and */i/ are both raised to /e/; CA prohibitive negative */n/ > CLuv. sn/HLuv. sn- (sn); CA */gəš- > CLuv. CLuv. /i/. Note that short */e/ first becomes /a/ and only then undergoes lengthening as per above: CA */našu > CLuv. näštu - 'new' vs. Hitt. näštu. This shows that the lengthening in accented open syllable, though common to Hittite, Lucian, and Palaic, must be a parallel but independent process. As already discussed, CA */xe/ appears in Lucian as /a/; /s/ > CLuv. sa/HLuv. *səša - 'let go' (Melchert 1989: 400). Cf. 7.5 and 8.5 on Lycian and Lucian.

It is worth noting the intermediate position of Lucian, which shares certain developments with Hittite and Palaic on the one hand and with Lycian (and Lydian) on the other.

7. Changes from CA to Lucian
Most of the statements below apply to both Lycian (A) and Milyan (Lycian B). Differences will be noted.

7.1 Stops
Voiceless stops are generally preserved in Lucian, but they are voiced after nasals: CA */tréH₄t- > treš (Storm-god) - (remains) CA */ddi > ddi - 'places'. Elsewhere, they are weakened to fricatives (remains) /d/ - (for the fricative value see Pedersen 1945: 42, et al.). The spirantization of the voiceless stops is the likely reason for the
absence in Lycean of the reminiscence of the steps as front/ear in koine as in the cursive Lycean (see also the comments of the koiné / koine as in the cursive Lycean (see also the comments of the koiné / koine as in the cursive Lycean (see also the comments of the koiné / koine as in the cursive Lycean (see also the comments of the koiné / koine as in the cursive Lyce...
discussion and examples.

8. Changes from CA to Lydian

In the absence of an extensive Lydian-Greek bilingual, our grasp of the Lydian lexicon is poor. As a result, there are few secure etymologies, and most of what follows should be regarded as hypotheses, not firmly established facts.

8.1 Stops

The contrasting voiceless and voiced stops of CA become conditioned allophones: voiceless stops are generalized after nasals (and perhaps /ɾ/), voiceless stops elsewhere. For the letter ɾ as /p/ see Gussenatti 1965: 204ff. Examples: *indo > -lt- 'into' and *(h)vŏnt *walking > dêt 'mobile wealth' (cf. Dākāsinru = Akāsinru); but both *p(i)c(y) > šiši 'give' and *dēl-*that > bi- 'he' (with apocope). The above merger is apparently preceded by several conditioned spirantizations affecting the labial and dental stops. The details of these remain uncertain, but there are some clear examples of */p/ > /f/: conjunction/preverb *po- > /fə-. While *t/ is maintained as */t/ (cf. [d] after nasal as per above), CA */d/ undergoes a four-way split. Before */i/ and */u/ it becomes c, probably some kind of coronal affricate other than /ts/; */diw- > čew- 'god'; */ďa(e)V/- > (da)-čew- 'place'. Any word-initial example which does not become c is devoiced to /l/: */šam- > šam- 'build'. After nasals it is preserved as [d], synchronically an allophone of /t/ (see above). In other medial positions and word-finally it is spirantized to /θ/, spelled d: *ďiša > taša- 'father'. rt. nom.-acc. sg. *də-š -sd. For the fricative value of d see Gussenatti 1978: 8344 and Melchert 1994.

What little evidence we have suggests that Lydian merges the palatal with the velar stops. I follow Heubeck (1950) and Gussenatti (1964: 356) in viewing Lydian q as a voiceless labiovelar. As Gussenatti emphasizes, this value is supported by the apparent dissimilation of q to k before rounded vowel: e.g. *k(i)cə > kəd≥ (generalizing particle).

8.2 Affricate

The letter t is in several clear cases the result of /ts/. I also follow Shevoroshkin (1967: 248-43) in interpreting the suffix -təs > /təs/ < CA *dyyə > *tyə (2.3 above).

8.3. Fricatives

CA */s/ is regularly preserved as /s/, confusingly transliterated as š, while it is palatalized to /ʃ/ (< šf) before */f/ and */w/ and probably also after */l/: CA *koniş > kən-še 'cut (out)'; CA *ermə- 'of the precinct' > ərmə- 'temenos'; adj. nom. sg. *səs > šs.

The CA fricatives */H/ and */h/ are both apparently lost without a trace in Lydian, but examples are predictably scarce. Note at least *Htimų > wtiʃa- 'living'.

8.4 Sonorants

The liquids and nasals are for the most part preserved, but note the following two special changes:

(1) Original final */m/ and */n/ appear as v, a weakly articulated nasal, whose other sources are obscure: anim. acc. sg. *om- > av; pret. 1st sg. *on- > (cf. Gussenatti 1978: 8422).

(2) */n/ is lost before a following stop, leaving only a nasalized vowel e: *indo > -lt- 'into', *mony > dêt 'mobile property', etc. This means that all attested sequences of /n/ plus stop must be secondary due to syncopation.

(3) CA */l/ is palatalized at least before */y/ and */i/:
*aybə > akə- 'other'. Note the loss of the conditioning */l*/y/.

* */w/ becomes a voiced fricative /w/, as shown by alternations such as lemə/lem- /'Zeus' I (use w instead of v only to avoid confusion with v in (1) above). After */s/, the fricative is regularly devoiced to /l/: *Htimų > wtiʒa- 'living'.

As noted above, */y/ disappears after a consonant: *dyyə > təs; *abiy > akə. I have argued in Melchert (1994) that initially and intervocally */y/ becomes Lydian d (θ).)
*pimə > bidv 'I gave', ənt- *walking > dêt- 'mobile property' (= Hitt. UDU/timə- 'sheep').
8.5 Vowels

The high vowels are generally stable. Word-initial (unstressed) *u* is apparently reduced to /ə/. *Husté - utsa(a)-’alive’.

When accented(), the non-high vowels *e/*, *a/ and *a/o/ merge before a nasal, becoming /i/ in a closed syllable, but /i/ in an open syllable. Examples: *indo > Í-ìntu’; *issa > isa- ’mouse’; *i-ìni > i-ìni ’mobile property’; but *usi > usu- ’usury’ > usumú > ñumú > (fa-ká) ñumú ’meets with’; *gúna > kána- ’woman’. Unaccented short *e/*, *a/ and *a/o/ all merge as /a/: CA *emí > am’me’; *náli > lali’-other’; preverb *kon > kon-.

As in Luvian and Lydian, short *e/ is raised to /i/ after *y/: pres. 3rd sg. *yedí > pres. 3rd person -i (Oettinger 1976/77: 135). Accented short *e/ is apparently preserved before non-nasal: *Husté > sefla- ’living’.

Accented short *a/o/ is definitely preserved after labiovelar, which is delabialized by the o: *kía > kól (generalizing particle). Some other cases of o probably continue *Ca, but the source of most examples of a in Lydian is obscure.

Aside from before nasal and after *k/K/ and *w/; accented *o/ appears to merge with /a/: abáy > abá-

CA long *e/ is raised to /i/, and *æ/ lowered to /a/ as in Luvian and Lydian: *uf > u-f ’not’; *addi > *addi- ’putting’ > i.e. ’votive offering’. However, it is likely that CA *e/ appears as e: *e’ ñe > CA *e’ ñe > ge-’who’ (= Lat. gui). Despite some spellings in -ae, it seems unlikely that vowel length is contrastive in Lydian.

9. Accent

I have made no attempt to describe the accent systematically in the various languages. Several important secondary effects of the accent have been noted, both in CA (3.1,2,3) and in the prehistory of the various languages (4.1, 9.4; 6.1,1; 6.5; 8.5). Widespread syncope in Luvian and Lydian is also surely conditioned in part by the accent. All these changes suggest that the accent in Anatolian contains an element of stress as well as pitch. Several facts argue that the position of the accent is mostly maintained into the attested languages. Eicher (1986) has successfully determined the

References


The Journal of Indo-European Studies

Volume 21, Numbers 3 & 4, Fall/Winter 1993
1995 The IE Short Diphthongs *au, *oe and *uo in Hittite. Sprache Konsnassen, Heine
Lindeman, Fredrik
1987 Introduction to the 'Laryngeal Theory'. Oslo: Norwegian University Press.
Mayrhofer, Manfred
Melchert, H. Craig
Morpurgo Davies, Anna
Morpurgo Davies, Anna and J. D. Hawkins
Neu, Erich
1968 Das hethitische Mediopassiv und seine indogermanischen Grundlagen (Studien zu den Bogazköy-Texten 5). Wiesbaden:

The Journal of Indo-European Studies

Historical Phonology of Anatolian
Harrassowitz.
Oettinger, Norbert
Pederzen, Holger
Peteresen, Walter
1953 Hittite and Tocharian. Lg. 9:12-54.
Pulvel, Jan
Rautman, Jens
Swerowokin, Vitaly
1967 Lajzhik Jasper. Moscow: Instrat'o "Nauk".
Starke, Frank
Sturtevant, Edgar
Wallace, Rex
Watkins, Calvert