Chapter Six

The Position of Anatolian

6.1 History of the Question

6.1.1 Discovery and Recognition

Hrozný (1917) showed that the chief administrative language of the Hittite

Empire, attested in cuneiform documents from Hattusha in central Turkey dating

from the 16th-13th centuries BCE, was Indo-European. Through the work of a

number of scholars it was known by the 1930s that Hittite was not alone in

ancient Asia Minor, but part of a new sub-branch of Indo-European now called

Anatolian, along with Palaic, Cuneiform and Hieroglyphic Luvian, Lycian, and

Lydian. Indo-Europeanists had to reckon with a large new set of data to be

integrated into the reconstruction of Proto-Indo-European. Due to its far more

plentiful evidence and hence better understanding, Hittite remained for many

decades the chief basis for comparison with the rest of Indo-European.

   Hittite presented a special challenge, because despite its antiquity it

conspicuously lacked some key features of "classical" PIE as reconstructed

chiefly on the basis of Sanskrit and Ancient Greek, with support from Latin and

Avestan. In the noun there was no feminine gender distinct from the masculine.

The verb showed no obvious trace of the aspectual contrast between "present" and

"aorist" or of the "perfect" category at all. The subjunctive and optative moods

were also missing. Hittite was typologically a synthetic and inflecting language

like those named above with recognizable Indo-European morphology, but it appeared to reflect either a more primitive or a more advanced stage of evolution than the other oldest attested representatives of the family. And precisely the choice between those alternatives quickly became the focus of a debate that has continued to the present.

6.1.2 First Responses

Strictly speaking, there were nearly as many responses to the "Hittite problem" as there were Indo-Europeanists, and any generalizations run the risk of oversimplification. Nevertheless, most reactions may be fairly characterized as adopting one of three fundamental approaches.

The first was to treat Hittite (respectively Anatolian) as merely one more subgroup of the Indo-European family like any other and to derive its features from the PIE already reconstructed, with a bare minimum of revisions to that model—as represented by the *Grundriß* of Karl Brugmann. Two articulate and nuanced presentations of this viewpoint may be found in Pedersen (1938) and Eichner (1975), but there have been many others. Since this account must assume that the features of "classical" PIE missing in Hittite are due to their having been lost there, it is often (simplistically) labeled the "Schwund-Hypothese". While there have been important exceptions (see below), it is fair to say that this approach was dominant among Indo-Europeanists in Europe until the 1990s.

Some, however, adopted essentially a diametrically opposed position: namely, that the major features cited above (and arguably others) represent massive common innovations of non-Anatolian Indo-European in which Hittite did not take part. In terms of the family-tree (Stammbaum) model, Hittite (Anatolian) is thus not a descendant of "classical" PIE, but a co-equal branch, both being derived from an earlier prehistoric protolanguage. The most famous proponent of this view was Edgar Sturtevant, who argued in a series of works that Hittite and PIE are descended from what he labeled "Indo-Hittite" (see Sturtevant 1933a: 30 with diagram). The conception of "Indo-Hittite" found little favor in Europe, but Sturtevant's ideas had rather more influence in North America, even if the explicit label "Indo-Hittite" was not always used.[1]

A third response to the new evidence of Hittite was exemplified by the work of Jerzy Kuryłowicz, in both phonology and morphology (see respectively 1927 and 1964 as representative). Kuryłowicz and others rejected both the "Schwund-Hypothese" and "Indo-Hittite", contending that proper integration of the Hittite

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[1] The labels one chooses for the more remote parent language and for its immediate non-Anatolian descendant are of no consequence. What is crucial is the claim of large-scale common innovations that set off the latter protolanguage from Anatolian. See Cowgill (1979: 27) and compare the remarks of Eichner (1975: 72^2).

evidence demanded a radical and far-reaching revision of reconstructed PIE—meaning PIE as the source of not only Hittite, but also the non-Anatolian languages including Sanskrit, Greek and the rest. Other representatives of this viewpoint include Watkins (1969), Meid (1963) and (1975), Neu (1976 and 1985), and Adrados (1963, 1982 and 2007). Unsurprisingly, the scholars just named disagreed, sometimes markedly, on just what radical revisions should be made.

6.1.3 Stalemate and Resolution

It was not at all clear by the decade of the 1980s how any compromise could be reached between the opposing models of the "Schwund-Hypothese" and that of a radical revision of PIE, cast in terms of "Indo-Hittite" or not (see the strong statement of Eichner 1975: 72). Nevertheless, several factors have since significantly altered the terms of the debate. First, there has been a significant maturation of Anatolian philology. A crucial breakthrough in our ability to establish the relative chronology of Hittite texts and manuscripts has brought reevaluation of nearly every aspect of its synchronic and diachronic grammar and a much better grasp of the Hittite facts. At the same time evidence for and our understanding of the other "minor" Anatolian languages has also dramatically improved, to the extent that these languages now actively contribute to the debate over the position of Anatolian vis-à-vis the rest of Indo-European.

Second, there has been a serious retrenchment regarding *some* of the evidence cited from non-Anatolian languages in support of the radically revised model for PIE. For example, while debate still continues on the precise formal details, a consensus developed by the 1980s that the Insular Celtic contrast of absolute and conjunct verbal endings reflects in some fashion the "classical" PIE system of primary and secondary endings (following Cowgill 1975a) and does not justify the radically innovative accounts of Meid (1963) and Watkins (1969).[2] Third, in response to proposals like those of Meid (1975) there has developed a widespread view that we need not view the problem as strictly a choice between Anatolian as another descendant of PIE like any other subgroup or Anatolian and PIE as representing branches of "Indo-Hittite" (see further 6.4 below).

Some archaisms claimed for Hittite/Anatolian have withstood scrutiny, and any viable reconstruction of PIE must take these into account. For that reason there are now few defenders of the strict Schwund-Hypothese or of an unaltered "classical" PIE. However, continued analysis of Hittite and the other Anatolian languages brings them ever closer to the rest of Indo-European (see in detail e.g. Rieken 2009, who recognizes fewer "Indo-Hittite" features than the present essay). Furthermore, many of the remaining differences involve relatively minor

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[2] Most aspects of the very novel analyses of Neu and Adrados in the works cited in the preceding section have also failed to win broad acceptance.

reshaping of the formal expression of grammatical categories (or changes in productivity of particular formal patterns), not the creation of—or major functional changes in—the categories themselves. Seeing Anatolian as uniquely reflecting a very archaic "Indo-Hittite" or "Early Indo-European" is thus also now a minor viewpoint (respectively Lehrman 1998 and Adrados 2007).

I do not mean to suggest that a full consensus has yet been achieved regarding just which features of Anatolian are archaisms and which are innovations. Nor are the differences in the conceptions of individual scholars by any means trivial. However, most Indo-Europeanists now agree on the basic terms of the debate: some revisions to "classical" PIE are required, in order to account for the genuine archaisms of Anatolian, whose prehistoric speakers "separated" (or became sufficiently geographically isolated) from the rest of the PIE speech community so as not to share in some common innovations. The goal of the debate is to identify which features constitute these common innovations and to determine just how radical the revisions to PIE need to be. On these points there is a broad spectrum of opinion. What follows in 6.3 reflects my own current best assessment, with due acknowledgement of divergent views.

6.2 Issues of Time and Space

I follow here the long-standing majority view that the Indo-European languages of Anatolia are intrusive to Asia Minor, having moved there from some point farther north in Europe. I reject the claim of Gamkrelidze and Ivanov (1995: 757-

852, especially 791, and elsewhere) for a PIE "homeland" in Eastern Anatolia and the even more radical proposal of Renfrew (1987) of a central Anatolian location for the PIE speech community dating to 7000 BCE, associating the presumed movement of Indo-European languages *into* Europe with the spread of farming dated to that era. For further discussion of this point see Melchert 2011a.

Contrary to earlier views, there has now developed a consensus among linguists that entry of Indo-European speakers into Asia Minor was much earlier than previously assumed. See Melchert (2003a: 23-6) with references to Carruba (1995), Oettinger (2002a) and others, and also Lehrman (2001: 116-7) and Yakubovich (2010: 6-7). The gist of the argument is that the attested degree of differentiation of the IE Anatolian languages such as Hittite and Luvian already by the beginning of the second millennium requires at a minimum that their divergence from Proto-Anatolian began by the middle of the third millennium. It may easily have begun as early as the end of the fourth.

The further inference of "early entry" into Anatolian rests on the premise that dialectal differentiation typically results from relative geographic separation of subsets of speakers of an original (putatively) unitary language (contact effects from different sub- or adstrate languages may play an important role). The default assumption in the present case is that this separation corresponds to the scattering of Proto-Anatolian speakers across Anatolia, after they had entered as a single group. I must stress, however, that we know virtually nothing about how Indo-

European speakers entered Anatolia. We cannot exclude the possibility that the dialectal differentiation began before such entry, with the speakers of pre-Hittite, pre-Luvian, etc. moving into the area at different times. See again Melchert 2011a.

As indicated earlier, for many years the relatively poor attestation of the IE Anatolian languages other than Hittite severely restricted the amount of useful information they could provide us for recovering the linguistic features of Proto-Anatolian. As a result, despite the recognition of an Anatolian subgroup, there was almost no serious reconstruction of Proto-Anatolian. This situation fostered an unfortunate tendency to effectively project the features of (Old) Hittite back to Proto-Anatolian and to reflexively view any divergences in the other languages as due to innovation on their part.

Due to the superior quantity and quality of its evidence, Hittite will perforce continue for the foreseeable future to occupy a privileged position within the study of Anatolian. However, we are now in some instances able to place it in its proper place as merely *one* of the languages that contribute to our picture of Proto-Anatolian, confirming that like all other natural languages Hittite reflects a mixture of archaisms and innovations. To the extent allowed by current knowledge, the following discussion of the relative position of Anatolian within Indo-European will be based on what we can reconstruct for Proto-Anatolian, not merely on the facts of Hittite.

6.3 Diagnostic and Non-Diagnostic Features

6.3.1 Basic Premises

I adhere in what follows to the widely accepted principle that the crucial factor in linguistic subgrouping consists of non-trivial common innovations. Only when a subgrouping has been established on the basis of shared innovations can common retentions, if numerous enough, perhaps be adduced as supporting evidence. One well-known limitation on this procedure is that not all linguistic changes are clearly unidirectional. That is, if one set of languages shows state A of a given feature, and another state B, we cannot necessarily determine which represents the innovation. Defining a "non-trivial" innovation is also not always straightforward. For these and other reasons not every observed difference between the Anatolian and non-Anatolian IE languages will be useful for our purposes. Furthermore, like every other subgroup of IE, Anatolian is itself defined by certain shared innovations. Before we turn to the question of possible non-trivial innovations shared by all other IE languages, it is therefore useful to summarize those innovations that characterize Proto-Anatolian—particularly since the list given in Melchert (1994a: 6-8) requires serious revision. One fact has not changed since 1994: it is the apparently divergent development of Lydian, combined with our limited understanding of the language, that results in so few assured common

Anatolian innovations. If we limited ourselves to the other better-attested languages, the list would be substantially longer.

Phonology. (1) the chief defining phonological innovation of Anatolian is the "lenition" (voicing) of PIE voiceless stops and $*h_2$ between unaccented morae (for this formulation see Adiego 2001, unifying what were previously treated as two separate changes, as per Eichner 1973: 79-83 and 100[86] and Morpurgo Davies 1982/83).[3] (2) unaccented long vowels inherited from PIE are shortened (Eichner 1973: 79 and 86[15]). (3) the sequence $*h_2w$ became a unitary labialized voiceless fricative ($[x^w]$ or similar): see Kloekhorst 2006: 97-101 and already *in nuce* Jasanoff 2003: 142-3. Evidence for the change to a unitary labiovelar in Hittite comes from alternate spellings *tarḫu-/taruḫ-* 'conquer' /tarx^w-/ parallel to *eku-/euk-* 'drink' /eg^w-/, but more importantly from the fact that the labial articulation of the new /x^W/ is absorbed by following /w/, just as in the case of the labiovelar stops: Pres1Pl *tarḫḫueni* just like *akueni*. A sequence of /xw/ before /w/ would have led via **tarḫuweni* to **tarḫumeni*, by the Hittite rule of dissimilation of $*w > m$ before or after /u/ (Melchert 1994a: 92 with refs.). Furthermore, in Lycian the unitary labiovelar $*/x^W/$ "hardened" into a voiceless labiovelar stop /q/.

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[3] Virtually all evidence for the alleged Proto-Anatolian "limited Čop's Law" proposed in Melchert (1994c) has been refuted, so the very existence of such a change must be regarded as extremely dubious.

Contrast *trqqñt-* (name of the Storm-god) < **tr̥h₂wn̥t-* *'mighty' vs. *esbe-* 'horse'

< **eĥwo-* with a sequence of stop plus *w. A pre-Lycian sequence *[xw] would

have led to Lycian *xb*. See Melchert 2011c for the claim that *h₃w likewise

became a unitary labiovelar */ɣʷ/. Since this change is assured for Hittite as well

as Luvian and Lycian, it is very likely that it is already Proto-Anatolian. The

question of whether any instances of Lydian *q* reflect this sequence deserves

reexamination.

   Morphology. (4) Anatolian has generalized a form of the first person dual

ending **-wen(i)* as that of the first person plural (see 6.3.11 below for details). (5)

already in Proto-Anatolian the non-subject stem of the orthotonic first person

pronoun was **(h₁)emú*, with borrowing of the *u*-vocalism of the non-subject stem

of the second singular pronoun **tu* (Sturtevant 1933a: 192, Pedersen 1938: 74). It

is likely that the enclitic non-subject form was also already **-mu*, replacing **-me*

(shortened from **mē*, as per (2) above). (6) Proto-Anatolian created a pronominal

stem **obhó/í-*, which definitely functioned as the orthotonic third person

anaphoric pronoun. Its precise function as a deictic pronoun at the stage of PA

remains indeterminate (see Melchert 2009b: 156-9 with references). (7) Proto-

Anatolian developed subject enclitic pronouns for "unaccusative" verbs (see

Garrett 1990a and 1996): NSgAnimate **-os*, N-ASgNeuter **-od*, NPlAnimate

*-oi, N-APlNeuter **-oi* (on the last see Jasanoff 2008: 145-8). (8) Proto-Anatolian

grammaticalized the instrumental singular of the deictic/anaphoric stem **e/o-*,

namely *oh_1, as a clause-linking conjunction (see 6.3.10 below for details and references). (9) Proto-Anatolian grammaticalized the "individuating" suffix *-ent- as a marker of "split ergativity": see further (11) below. For the synchronic status of Hittite -anz(a), Luvian -antis and Lycian -ẽti as marking split ergativity see Melchert (2011b), affirming Garrett (1990b), contra Patri (2007) et al. However, the derivation of the ergative ending from a prehistoric instrumental ending *-anti (Garrett 1990b: 276-8) cannot be upheld. For a partial account of the grammaticalization of "individuating" *-ent- to mark the ergative see Oettinger (2001b: 311-12). (10) In Anatolian the verbal adjective suffix *-e/ont- was grammaticalized as the past participle (see for further discussion 6.3.9 below), in stark contrast to the rest of Indo-European, where the suffix became rather the present/aorist active participle.

Syntax. (11) As per (7) above, Anatolian created third person subject enclitic pronouns whose use was obligatory with "unaccusative" verbs. (12) The PIE prohibition on grammatically neuter subjects as agents of transitive verbs (see Patri 2007: 171-5) was removed in Anatolian by the creation of an ergative case for grammatically neuter nouns in A(gent) function: see references in (9) above.[4]

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[4] Contra Melchert (1994a: 7-8), discrepancies both in the function assigned specific morphemes and in their relative ordering suggest that the famous

6.3.2 Laryngeals

The unique (partial) retention in Anatolian of the PIE "laryngeals" as consonants obviously per se furnishes no evidence for defining Anatolian as a subgroup versus the non-Anatolian languages. Scholars have proposed a number of putatively PIE rules for conditioned deletion of laryngeals. If it could be shown that one or more of these operated only outside Anatolian, they could be viewed as features establishing "Indo-Hittite". However, some of these deletion rules almost certainly include Anatolian: see Nussbaum (1997: 182-3) on the "Saussure-Hirt Effect" in Hittite (*$h_2wórs\text{-}o\text{-}$ > *waršsa-* 'mist, steam', *$\hat{k}olh_2\text{-}mo\text{-}$ 'stalk' > *kalmara-* 'ray, beam', *kalmi-* 'burning log', etc.)[5] and Mayrhofer (1986: 132) following Eichner on *$h_1ésh_2n\text{-}$ > Hittite *ēšnaš* 'of blood'(~ Sanskrit *asnás*). In the case of others known to me we cannot yet affirm with any confidence that they did not apply also to Anatolian.

"chains" of sentential clitics characteristic of most Anatolian IE languages is a Common Anatolian, not a Proto-Anatolian, development.

[5] The rejection of the latter etymologies by Kloekhorst (2008: 431) on semantic grounds is entirely unjustified. The words are named for their *shape*, as is Hittite *kalmuš-* 'lituus' (i.e., a stick), which is also derived from the same source (Rieken 1999a: 211-2), *pace* Kloekhorst and Puhvel (1997: 29).

There is no question that various non-Anatolian languages regularly show a vocalic segment as the reflex of a laryngeal in the position between obstruents (or obstruent and word boundary). Whether this reflects a direct syllabification ("vocalization") of the laryngeals or anaptyxis may be left open here. At issue is whether Anatolian shares in this development. Lindeman (1987: 106) and Melchert (1994a: 69-70) expressly deny this, but Kimball (1999: 388) insists that at least the word for 'daughter' (HLuvian *tu-wa/i-tara/i-* /twatra/i-/ and Lycian *kbatra-*) must reflect a preform **dhugəter-* with the same vocalic reflex as seen in Sanskrit *duhitár-* and Greek θυγάτηρ. Kloekhorst (2008: 903-4) boldly suggests an ablauting form **dhwegh₂tr* to avoid the need for anaptyxis in the Luvic word, but direct extra-Anatolian evidence for such an ablaut is lacking. Until we gain a better understanding of the conditioning for the loss of voiced dorsal stops in the Luvic languages and for the deletion of interconsonantal laryngeals in PIE, it is impossible to be sure whether the Luvic word for 'daughter' is a special case or does in fact show the same vocalic reflex of a laryngeal between obstruents as we find outside Anatolian.

6.3.3 Dorsal Stops

In Melchert (1987) I argued that Luvian shows a three-way contrast of voiceless dorsal stops before front vowel (see also the independent account of Morpurgo Davies and Hawkins 1988). There I left open the question whether this reflects an unconditioned contrast or a conditioned split of PIE *$\hat{k}$* (1987: 203). However, in

Melchert (1989: 23-32) I concluded that the contrast was unconditioned. This claim has been widely accepted (e.g. by Kloekhorst 2008: 17-8), but there has been occasional dissent (e.g. by Sihler 1995: 154). Most of the objections of Woodhouse (1998) are unfounded, and his own attempt to account for the Luvian and Lycian facts in terms of unrounding of labiovelars is not remotely credible. If my claim of 1989 were upheld, then Anatolian would show neither the "centum" merger of velars and labiovelars nor the "satem" merger of palatovelars and velars, and these two mergers would represent a "post"-Anatolian development.

However, the basis of my claim of an unconditioned three-way contrast (Luvian adjectival suffix *-(i)zza-* = Lycian *-is(e)-* < PIE *-i(s)k̂o-*) has been falsified: see Eichner apud Borchhardt et al. (1997-99: 83). A complete reassessment of the available evidence (Melchert forthcoming) points rather to a conditioned affrication of just the voiceless front velar *$*\hat{k}$* to Luvian *ts* and Lycian *s* in fronting environments (including *$*w$* and syllabic sonorants) versus the absence of such affrication in voiceless back velar *$*k$*. The facts for the voiced and voiced aspirate series are compatible with a similar conditioned change, but do not allow a strict proof of it.

The result of this revised account of dorsals in Luvic is that Anatolian may be regarded as "centum", showing eventual merger of the palatovelars and velars (or more likely front and back velars). Luvo-Lycian is in effect the "mirror image" of Albanian. In Luvo-Lycian there was before the merger of the front and back

velars a conditioned split of the former (but not the latter, confirming inheritance of a three-way contrast). Whereas Albanian, as a satem language, eventually merged the back velars and labiovelars, but not before there had been a conditioned split of the latter (see most recently on this issue Matzinger 2006: 70-73). Therefore nothing in its treatment of the PIE dorsal stops suggests that Anatolian is more archaic than any other subgroup.

6.3.4 Synchronic Phonological Rules

I know of no synchronic phonological rule of PIE that can be definitively shown to be a non-Anatolian innovation. One certainly is not: both Hittite and Luvian preserve the PIE rule by which the first of two (heterosyllabic?) dental stops is dissimilated to an affricate: Hittite /e:dten/ and CLuvian /a:dtan/ 'eat!' (imperative 2nd plural) appear as *ēz(zaš)ten* [e:tsten] and *āzzaštan* [a:tstan].[6] In Melchert (2003b) I have argued that CLuvian *īnzagan* means 'inhumation' and reflects a similar dissimilation of dental stop to affricate before dorsal stop, what is traditionally referred to as PIE "thorn". This claim must remain uncertain pending the discovery of a second Anatolian example of this development. In any case, however, as already noted in Melchert (1994a: 64), there is no basis for

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[6] Since a synchronic phonological rule may remain in a language indefinitely, the objection of Hill (2003: 4) to the PIE status of the rule is entirely specious.

establishing that the appearance of "thorn" is a common non-Anatolian innovation.

Positive Anatolian evidence for other synchronic phonological rules of PIE is likewise less than robust, but at least suggestive. Palaic present indicative 2nd singular *mu-ú-ši* to *muš-* 'enjoy' (thus with Yakubovich 2005: 117 against me and others) suggests that Anatolian inherited the PIE rule simplifying **ss* to **s* (Mayrhofer 1986: 120). Hittite present indicative 2nd singular *ēšši* 'you are' represents a trivial analogical restoration, just like Greek ἐσσί beside εἶ. For discussion of likely reflexes of "Sievers-Lindeman" in Hittite see Melchert (1984: 25-7 and 56-7) but compare also Eichner (1988: 137) and Melchert (1994a: 57-8).

The synchronic status in Anatolian languages of regressive voicing assimilation in obstruents is dubious, but Hittite indicative preterite 3rd singular *wakkiš* to *wak-* 'bit' and imperfective stem *akkuške-* to *eku-/aku-* 'drink' appear to be relics of such a rule (see the discussions in Melchert 1994a: 57 and Kimball 1999: 300-01). Puhvel (1972) argued that the effects of "Bartholomae's Law" are visible in Hittite, because original voiceless **kt* assimilates to *tt*, allegedly in *luttai-* 'window' < **lukto-* and *uttar* 'word' < **uktr̥*, but original **ght* does not, appearing as velar plus dental, due to the latter having not assimilated to *[kt] in PIE, but rather having undergone progressive assimilation to *[gdh], hence virtual **eigh-tu-* *'going' > *egdu-* 'leg'. However, the assimilation of **kt* to *tt* is falsified by *šaktā(i)-* 'perform sick maintenance' < **sokto-* (cf. Old Irish *socht* 'stupor', as

per Watkins 1976), and both *luttai-* and *uttar* have superior etymologies: < **leut-*
'to see' and **weth$_2$-* 'to speak' (see correctly for both Kloekhorst 2008: 535 and
933).[7] Therefore, even if *egdu-* < **eigh-tu-* is correct, it proves nothing about the
quality of the stop sequence. Nevertheless, the appearance of the PIE
"instrumental" suffix variant **-dhlo-* in Hittite *-ulli-* < **-u-dhli-* (Čop 1966-68:
54-5) with assimilation versus Hittite *šiyattal-* 'missile, spear' < **sh$_1$yo-tlo-*
(Melchert 1993: 110) suggests that Anatolian does reflect the effects of
Bartholomae's Law (on its status as a PIE rule see Mayrhofer 1986: 115-7 with
refs.).

6.3.5 Morphological Features: Gender

Perhaps no feature of Anatolian has generated more discussion than the absence
of a feminine gender distinct from the masculine. The chief argument cited in the
older literature for interpreting this fact as reflecting a loss lay in the putative
presence of the PIE "motion-suffix" **-ih$_2$/-yeh$_2$* in Hittite adjectives of the type
parkui- 'pure' (beside *parku-nu-* 'to purify'), comparable to the type of Sanskrit

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[7] The alleged Hittite variant †*uk-tar* is a ghost word (read Akkadian *AŠKUT* 'I
was silent', as per Eichner, *Sprache* 21 [1975] 164).

feminine *svādvī́-* 'sweet' (beside masculine-neuter *svādú-*): see e.g. Pedersen
(1938: 35-6) and Kronasser (1966: 107).[8]

The entire topic was renewed by the discovery by Starke (1990: 54-85) of the
phenomenon of "*i*-mutation",[9] by which many nouns and adjectives in Luvian and
Lycian—and to a lesser extent in Lydian—are marked by an *i*-suffix just in the
common gender nominative and accusative: e.g. CLuvian NSgC *ādduwališ*,
ASgC *ādduwalin*, NPlC *ādduwalinzi*, APlC *ādduwalinza** vs. N-APlNeut
ādduwala and Abl-Inst *ādduwalati*. Starke himself (1990: 85-9) suggested that
this pattern might reflect the PIE appurtenance suffix **-ih$_x$* of the type of Sanskrit
kṛṣṇī́- 'night' or *vṛkī́-* 'female wolf'.[10]

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[8] Goetze (1960: 45-46 and 50) adduced in addition the formation of feminine
personal names in *-ašwe* beside masculine names in *-ašu* in texts from the
Assyrian colony period. A close examination shows, however, that Goetze could
not actually show any such directly contrasting pairs. See the fully justified
skepticism of Kronasser (1966: 115-7).

[9] Starke's own designation as a "Motionssuffix" is infelicitous for the synchronic
feature, since the addition of the *-i-* does not alter the gender of the underlying
stem.

[10] It is important to stress that Starke characterized the suffix as a
"Zugehörigkeitssuffix", not as a feminine "Motionssuffix".

Oettinger (1987) argued that the Anatolian "*i*-mutation" was rather a reflex of the PIE ablauting feminine motion-suffix *-ih₂/-yeh₂*, and I followed him in Melchert (1994b) with some revisions. Furthermore, in Melchert (1992) I showed the existence of common-gender nouns in Lycian with *a*-vocalism and concluded that these must reflect specifically feminine nouns in *-eh₂*, since collectives formed with this suffix appear as neuter *pluralia tantum*. I made a parallel argument regarding Hittite *ḫāšša-* 'hearth' (= Latin *āra*): see for similar but slightly different reasoning regarding the latter also Harðarson (1994: 35-9).

However, Hajnal (1994) has decisively refuted the claims that the presence of common gender nouns in Anatolian with a suffix *-eh₂* demonstrates its prehistoric use there as a feminine motion-suffix. Many such nouns have masculine referents, and more importantly there is no evidence for feminine agreement in adjectives. Rieken (2005) has also now presented a convincing account of Anatolian "*i*-mutation" as originating in secondary derivatives in *-i-*.[11] This feature thus provides no compelling basis for the existence of either ablauting *-ih₂/-yeh₂* or *-ihₓ* in Anatolian *as a feminine motion-suffix*.[12]

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[11] On the Hittite type of *parkui-* 'pure' see Rieken (2005: 56-7 with note 7). The one suspiciously complicated step in her scenario (2005: 57-8) may be simplified if one assumes that a secondary *i*-stem like *só/élh₂-i-* was an endocentric

One cannot in principle prove a negative. However, the suffix *-eh_2* is undeniably present in Anatolian in its function of deriving abstracts and collectives, universally agreed to be older than its use as a feminine motion-suffix. Likewise, as per Widmer (2005), Hittite *nakkī-* 'heavy' probably reflects the "*vr̥kī́*-suffix" in its older use as an appurtenance suffix: *$*h_1nók̂o$-* 'burden' → *$*h_1nok̂-íh_x$* 'burdensome'.[13] This distribution must in the absence of compelling counterevidence be taken as prima facie evidence for an archaism, and contrary to my own earlier claims I now regard the development of the feminine gender to be a common innovation of the non-Anatolian Indo-European languages.[14]

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derivative *'the great (one)' from *$*só/élh_2-o$-* 'great', rather than an exocentric abstract *'greatness', following the idea of Nussbaum apud Vine (2006: 155).

[12] Eichner (1985: 135-6[13]), following Sommer (1947: 52-3), argues for the archaicity of *$*-ih_2/-yeh_2$* based on its ablaut, but this argument applies only to the suffix's *existence* in the prehistory of Anatolian, not its use as a feminine motion-suffix.

[13] I take no stand here on Widmer's further analysis of the origin of the suffix or on the question of the quality of the final laryngeal.

[14] Discussion of the much vexed question of just how this development took place is impossible here. I can only refer readers to *some* of the most relevant recent literature: Harðarson (1987ab), Tichy (1993), Ledo-Lemos (2000), Matasović

6.3.6 Number

Eichner (1985) argued that PIE had a four-way number contrast in animate nouns:
singular, dual, distributive plural and collective (or comprehensive) plural.
Inanimate nouns were defective in lacking a distributive plural (1985: 167-8).
This claim was rejected by Harðarson (1987a: 83-4) and Tichy (1993: 7-8), but in
Melchert (2000) I showed that Old Hittite still directly attests the contrast of
distributive and collective plural in animate nouns as posited by Eichner, while it
has only imperfectly filled the gap of a distributive plural for inanimates.
However, in non-Anatolian Indo-European we find only relics of the contrast in
animate nouns (Latin *locus, locī, loca*) and an indirect reflex of the lack of
distributive plural in inanimates in Tocharian (see again Melchert 2000). Already
in Vedic Sanskrit and Homeric Greek the old collective plural clearly functions as
a distributive plural: e.g. *trī́ṇi śīrṣā́* 'three heads' and δέκα τάλαντα 'ten talents'
respectively.[15] It is thus highly likely that reduction of the four-way contrast to
three and loss of the distinction between distributive and collective plural is a
common post-Anatolian innovation (cf. Neu 1976: 246). The fact that the same

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(2004), Luraghi (2006), Kim (2009), and the forthcoming volume edited by Neri
and Schuhmann.

[15] I am indebted to Siliva Luraghi for reminding me of this point.

loss took place independently in New Hittite does admittedly raise the possibility that the change outside Anatolian was independent in the various branches.

On the other hand, the absence of a synchronic dual in the noun in Anatolian is almost surely due to loss. The most secure reflex consists of the CLuvian forms *īš(ša)ra* 'hands' and *pāta** 'feet' (GÌR.MEŠ-*ta*), whether the ending -*a* continues original athematic **-h_1e* or generalized thematic **-oh_1*: see Eichner (1993: 110[56]), Schindler apud Watkins (1986: 60[33] = 1994: 715), and Starke (1990: 29).[16] A case has been made with varying degrees of plausibility also for traces of the PIE neuter dual ending **-ih_1*: Hittite [GIŠ]*ēlzi* '(pair of) scales' (Puhvel 1984: 270), [KUŠ]*išmeri* 'reins' and *dānḫašti* 'double-bone' (Starke 1990: 29), *mēni* 'cheeks' and *iniri* 'eyebrows' (Rieken 1994: 52). On dual number in the verb see 6.3.12 below.

6.3.7 Case

Hittite and Palaic dative-locative plural -*aš* and Lycian dative-locative plural -*e* reflect a PIE dative plural ending **-os* (Neu 1991: 14 and Melchert 1994a: 182 and 193 against Neu 1979: 193, Starke 1982: 423, et al.). As shown by Goedegebuure (2007), HLuvian *zin* and *apin* function as the ablatival-instrumental forms of the demonstratives *za-* 'this' and *apa-* 'that' and continue a

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[16] As per Eichner, these forms were synchronically incorporated into the system of collective plural in animate nouns.

PIE ending *-im*, for which see Dunkel (1997) following Delbrück. Anatolian

attests the ending *-bhi* only in a locatival function in adverbs, such as Hittite

kuwapi 'where; when'. As per Jasanoff (2008), the non-Anatolian ablative-dative

plural ending *-bh(y)os* is transparently a hybrid of *-bhi+os*. Given the now

demonstrated existence of *-(i)m* in Anatolian, Melchert and Oettinger (2009)

have suggested that non-Anatolian dialectal *-mos* is likewise a hybrid of *-m+os*.

Both complex endings surely represent post-Anatolian innovations. Further

suggestions by Melchert and Oettinger (2009) regarding the relative chronology

of developments in the endings of the ablative and instrumental remain to be

tested and will not be discussed here (for a radically different view of the ablative

and instrumental in Tocharian and PIE see Pinault 2006).

6.3.8 Nominal Thematic Inflection

It is well known that in Hittite and in Anatolian more generally there is no

fundamental contrast between athematic and thematic inflection in the noun,

except for the neuter nominative-accusative singular, where the class continuing

old *o*-stems shows the expected reflex of *-om*, whereas other stems have a zero

ending. It has been suggested (e.g. Villar 1974: 277-8, Hajnal 1997: 71[121]) that

this state of affairs reflects at least in part an archaism, in that some oblique forms

of the thematic class reflect the athematic endings with no thematic vowel: thus

genitive singular *-os*, locative singular *-ei*, not *-o-s* respectively *-o-i/-e-i*

(contra Tichy 2000: 66-7, Meier-Brügger 2000: 186, et al.).

However, the shortening of all unaccented inherited long vowels in Proto-Anatolian (Eichner 1973: 79 and 86[15]) would have led to widespread merger of the athematic and thematic genitive plural and dative-locative plural as *-om and *-os (oxytone o-stems are exceedingly rare in Anatolian, as is preserved accent alternation in athematic paradigms). The thematic dative singular *-ōi would have frequently merged with the locative singular in *-oi. In the prehistory of the individual languages *-oi would further have merged with *-ei (thematic locative singular or athematic dative singular). Outside Hittite there was likely further merger with athematic locative singular *-i. At least some shared endings of the athematic and thematic classes must be analogical: Hittite animate nominative plural -ĕš represents *-eyes generalized from i-stems (see most recently Sidel'tsev 2002), while Luvian and Lycian have rebuilt the animate nominative plural on the accusative plural. Under these circumstances, there is little basis for the putative archaic status of the thematic genitive or dative-locative singular.

On the other hand, there is positive evidence for Anatolian having inherited a full thematic declension. Palaic preserves the thematic animate nominative plural *-ōs (via shortened Proto-Anatolian *-os) in aškummauwaš 'sacralized meats' and mārḫaš 'guests'.[17] As per Hajnal (1995: 98), Lycian infinitives in -Vna reflect the

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[17] Athematic stems in -au- or -ḫ- in these nouns are structurally highly implausible. For marḫa- as 'guest' see Yakubovich 2005: 118-9. As per Eichner

expected athematic allative ending *-eh₂* (Hajnal) or *-h₂e* (Melchert 1994a: 324),

while *-Vne* continues the analogically spread thematic ending *-o-h₂* (as in Latin

quō 'whither?'). We also find evidence for the thematic genitive singular ending

-e/oso at least in Lycian (Bader 1991: 40 and Adiego 1994: 14-21) and Carian

(Melchert 2002: 309) and for thematic *-osyo* in HLuvian /-asi/ (Szemerényi

1990: 195) and Carian *-ś* (Schürr 2001: 117). See further on both endings

Yakubovich (2008), including the possibility that both are attested in CLuvian.

Their attested distribution argues against these genitive endings being confined to

the pronominal declension in Proto-Anatolian. I therefore conclude that Proto-

Anatolian inherited an already fully elaborated thematic inflection.

6.3.9 Nominal Derivation

Oettinger (1986) offered a very thorough survey of the Anatolian facts of nominal

derivation relevant for evaluating the position of Anatolian vis-à-vis the rest of

Indo-European. Much has changed in our overall picture of Anatolian nominal

derivation in the last two decades, but most of the attendant revisions have had

little effect on the diagnostic status of particular features as outlined by Oettinger.

I confine the discussion here to three points.

(1974:184) and Neu (1979: 192 and 1991: 15), it is possible that the Old Hittite

nominative plural *[ḫante]zziaš* to a *yo*-stem also reflects PIE *-ōs*.

Rieken (2008) has shown that Hittite stems in *-īl-* and *-ūl-* reflect syncopated thematic stems in **-í/úlo-*. The widespread presence of archaic *l*-stem inflection in Anatolian, first promoted by Benveniste (1935: 40-49) and still assumed by Eichner (1973: 85[6]), Oettinger (1986: 16-7), Starke (1990: 301) and Melchert (2001: 263) is thus illusory.

On the other hand, Oettinger (1986: 27[16]) dismisses rather too quickly the significance of the attested function of the participial suffix *-ant- < *-e/ont-* in Anatolian. It is true that Anatolian may have once had and lost the aspectual distinction between imperfective and perfective stems ("present" and "aorist" in traditional terminology): see 6.3.13 below. We therefore cannot determine on purely formal grounds whether the Anatolian *-ant-* participle reflects a formation built on characterized aspectual/tense stems or a verbal adjective originally derived directly from the root.

However, the Hittite participle in *-ant-* regularly expresses an attained state: *akkant-* 'having died, dead', *pānt-* 'gone'. In the case of transitive verbs the sense is usually passive (*appant-* 'taken, seized', *kunant-* 'killed, slain'), but may occasionally be active (*adant-* 'eaten' or 'having eaten', *akuwant-* 'drunk' or 'having drunk'). This function of *-ant-* is already Proto-Anatolian, as seen in relics elsewhere: CLuvian *walant(i)-/ulant(i)-* 'dead' and Lycian *lãta-* 'dead' (NB not 'dying'!). That in the case of a few intransitive verbs an attained state may be pragmatically equivalent to an ongoing one does not alter the basic function:

ešant- 'seated, sitting'. In the other oldest Indo-European languages suffixes reflecting **-e/ont-* have an exclusively active and processual meaning: Tocharian AB *eṣant/aiṣṣenca* 'giving', Sanskrit *bhindánt-/bhidánt-* 'splitting', Greek διδούς/δούς 'giving', Latin *ferēns* 'carrying', etc. It is difficult to see how either the Anatolian or non-Anatolian attested function could have developed from the other. They represent rather different specializations of a PIE verbal adjective that had not yet acquired the function of a true participle (thus Kuryłowicz 1964: 167).[18]

   The status of the adjectival suffix **-to-* is less clear-cut. Oettinger (1986: 23) emphasizes the extreme rarity of deverbative examples in Anatolian. There are in

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[18] Oettinger (1986: 35[119]) correctly argues against the enduringly popular derivation of the productive Luvian and Lycian participial suffix *-Vmma/i-* ~ *-Vme/i-* from the PIE thematic present medio-passive particple **-mh₁no-* on the same functional grounds, and the argument applies likewise to any equation with the present passive participle of Balto-Slavic (contra Kammenhuber 1969: 264 and Fortson 2004: 98). The Luvo-Lycian suffix is entirely parallel in function to Hittite *-ant-*, indicating an attained state, usually but not exclusively passive with transitive verbs. It almost certainly represents a secondary thematic derivative **-mn-o-* to neuter verbal nouns in **-men*, which are productive precisely in the Luvic languages, but not Hittite (see Starke 1990: 243-99, esp. 245).

fact no entirely assured cases. Given the plene spelling of the first syllable in

Hittite *ša-a-ak-ta-a-iz-zi* 'performs sick-maintenance', this verb may reflect a PIE

noun *sók-to-* (cognate with Old Irish *socht* 'stupor') of the type of Grk. νόστος

'return home', as per Watkins (1976: 25), and likewise Palaic *tarta-* 'curse' a

noun *tór-to-* (for a Proto-Slavic cognate *tortъ confirming this derivation see

Furlan 2007). If it in fact even means 'fasten', the Hittite denominative verb

mitā(i)- also would require a preform *(h₂)mói-to-* (Catsanicos 1986: 156 and

Kimball 1999: 215 against Oettinger 1979: 377), but the word more likely is

derived from *mita/i-* 'red': see Puhvel (2004: 166), Steer (2008: 143[7]), and

Kloekhorst (2008: 583). Hittite *āštawar* 'leftovers' (Beckman 2010) is clearly

ultimately to the verb *āš-* 'remain', but ambiguous in terms of its derivational

history: a verbal adjective *āš-ta-* 'left behind' is merely one possibility. Hittite

mūtā(i)- may mean '(re)move' and reflect an adjective *múh$_x$-to-* *'moved' with

irregular accent (Eichner 1979: 48-50[14]), but the assigned synchronic meaning is

not beyond question, and the etymology remains disputed: see the vigorous

dissent by Puhvel (2004: 194-5) and the doubts of Kloekhorst (2008: 588). If it is

correctly interpreted, Lydian *wśta(a)-* 'alive, living' may represent a verbal

adjective *h₂us-tó-* (see most recently Gérard 2005: 73), but the sense is by no

means certain. In any case, the almost complete absence of deverbative

(deradical) examples of adjectival *-tó-* in Anatolian is not in dispute. On the

other hand, denominative use of *-tó-* is reasonably productive. In addition to the

examples cited by Oettinger (1986: 23) see those adduced in Melchert (1999: 368-72).

One may interpret this state of affairs in more than one fashion. If one believes that the denominative use is analogical to the deverbative (e.g. Buck 1933[1963] 335 for Latin), then one would assume that Anatolian once had the deverbative type and had subsequently lost nearly all traces of it. On the other hand, if one believes that at least some of the denominative type are of PIE date (e.g. Schwyzer 1953: 1.503) and that the deverbative use may have originated in secondary adjectives to root nouns (e.g. Brugmann 1896: 2/1.394), then one may regard the productivity of the deverbative type as a post-Anatolian innovation (see the discussion of Chantraine 1979: 302-6, esp. 306). Evaluation of this scenario is complicated by the issue of whether deverbative adjectives in *-to- originated in compounds (thus Chantraine loc. cit. after Meillet and more cautiously Schwyzer 1953: 1.502) or not (Benveniste 1948: 164-7) and the status of compounding in Anatolian (cf. Oettinger 1986: 24).

6.3.10 Pronouns

As argued by Jasanoff (2008: 146-8), the replacement of the neuter nominative-accusative plural pronominal ending *-oi (preserved in Old Hittite kē 'these' and apē 'those') by *-eh$_2$ is a common innovation of non-Anatolian Indo-European. I know of no further compelling examples of common non-Anatolian innovations in the stem formation or inflection of the pronouns. Anatolian does show a quite

limited inflection of the accented personal pronouns, but it is by no means certain that the fully elaborated inflection seen in e.g. Sanskrit represents a common innovation of "inner Indo-European".

It has been argued (e.g. Sturtevant 1933b: 4 and Watkins 1963: 13-16) that the anaphoric/demonstrative stem *so-/to- with its unique allomorphy is a post-Anatolian innovation (NB that it appears in Tocharian). Hittite would represent a more archaic stage with its clause-initial conjunctions *šu* (for *so) and *ta* < *to to which enclitic forms of the pronominal stem *o/e- are added by synchronic syntactic rules. Recent research into the Anatolian clause-linking conjunctions makes this scenario highly unlikely.

First, there is no evidence for either *so or *to as a conjunction elsewhere in Anatolian. The only clause-initial conjunction assured to be Proto-Anatolian is that which appears in Palaic and Hittite[19] as well as Luvian as *a-*, and in extended form in Lydian *ak-*. The first two languages demand a prehistoric *o-grade, and this conjunction likely reflects an instrumental *oh_1 (Dunkel 2007: 57).[20]

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[19] The reading of the conjunction *a-* in KUB 48.99 and Bo 1391 (now KUB 60.59) as Luvian by Starke (1985: 253-5) is entirely arbitrary and unfounded, since every other word in these texts is indisputably Hittite.

[20] Dunkel chooses *eh_1 as the preform for the Luvian, which is phonologically possible, but economy demands *oh_1 as the common preform.

Second, as shown by Weitenberg (1992: 327), Hittite *šu* and *ta* are in complementary distribution such that the former occurs with preterites and the latter with present-futures. This pattern, which cannot be reconciled with the derivation from **so-/to-*, argues decisively for the alternate account of Hittite *šu* (attested only thus!) by Zimmer (1994: 160 with n. 17) < **h₁su* in asseverative function (which would be pragmatically justified mainly in past narratives). Rieken (1999b: 86) has plausibly derived the Hittite conjunction *ta* from an instrumental **toh₁**'then, next'.[21] All available evidence thus points to the Hittite system of clause-linking conjunctions as an innovation that is not even Proto-Anatolian.[22] Hittite *ta* from an adverb **toh₁* 'then', a frozen instrumental case

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[21] Whether this is cognate with Greek τώ 'then, therefore' or the two represent independent parallel creations may be left open. The attempt of Eska (2007) to refute Rieken's account and revive the connection with Celtic comparanda reflecting an alleged bare stem **to* is not remotely convincing. *None* of the uses he cites for the Gaulish conjunction *to* are actually attested for Hittite *ta* or any other Hittite clause-linking conjunction. The typological parallels to which he refers also support rather derivation of conjunctions from frozen case forms of demonstrative and anaphoric pronouns, not from uninflected pronominal stems.

[22] Contra Arbeitman (1992: 34), followed by Melchert (2003a: 86), the "particle" *-ša* added to neuter nom.-acc. singulars in Luvian does not reflect

form of the *so/to-* pronoun, does suggest that Anatolian inherited the latter just like all other branches, but almost entirely eliminated it in favor of the newly created **obho/i-*. If our knowledge of the pronominal systems of the other Anatolian languages were not so pitifully limited, we might be able to identify other isolated remnants of *so/to-*.

6.3.11 Verbal Inflection: Person and Number

There is ostensibly little to say about person, where Anatolian displays the standard three persons of Indo-European languages. As to number, it is clear that the Proto-Anatolian first plural ending *-wen(i)* is built on the *-we-* seen in the first dual forms of Indo-Iranian and Balto-Slavic.[23] I personally find merit in the suggestion of Watkins (1969: 47) that an early stage of PIE had in the verb (and

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deictic *so-*, but rather results from a reanalysis of an enclitic possessive adjective, as per Jasanoff 2010.

[23] The PA primary ending *-weni* is assuredly reflected in Hittite *-weni/-wani*, Palaic *-wini/-wani*, and CLuvian *-unni*, and secondary *-wen* at least in Hittite *-wen*, probably also in Lydian *-wv*. There are *no* traces of first plural endings with *-m-* in Anatolian. All examples of *-meni* in Hittite are due to dissimilation after *-u-* (Melchert 1994a: 169 after Kammenhuber and Eichner 1988: 137 and Melchert 1994a: 57). There is no HLuvian present first plural ending *-min(a)* (Melchert 2004).

the personal pronouns) not a contrast of first and second dual and plural but rather

of first person inclusive, first person exclusive, and second person plural.

However, even if this hypothesis is correct, there is not the remotest possibility of

proving that Anatolian directly reflects such a putative system. In the absence of

such a demonstration, one must follow the communis opinio (e.g. Pedersen 1938:

89, Eichner 1975: 87) that Anatolian inherited a contrast of first dual in *-we+ vs.

first plural *-me+ and generalized the former at the expense of the latter.

6.3.12 Tense

Anatolian clearly inherited the contrast of present and past tense marked in most

persons by the opposition of the so-called primary and secondary endings (with

and without final -i). There are no credible traces of the augment in Anatolian,[24]

but the augment as an obligatory prefix marking the past tense is unlikely to be a

common innovation of non-Anatolian Indo-European (see e.g. Meier-Brügger

2000: 170 and Tichy 2000: 119). The augment *é- cannot be equated with the

Anatolian clause-initial conjunction a- (contra e.g. Watkins 1963: 15), on which

see 6.3.10 above.

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[24] Contra Eichner (1975: 78) Hittite preterite first singular ešun and third plural

eter may reflect simply *h₁és-m̥ and *h₁és-ēr.

6.3.13 Aspect

One striking feature of the Hittite (respectively Anatolian) verb is that it is monothematic: all finite and non-finite forms are based on a single stem (which may show ablaut). It is obvious that most of these stems are built with suffixes that furnish the imperfective ("present") stem in the oldest non-Anatolian Indo-European languages. However, the very multiplicity of these suffixes suggests that at an earlier stage they marked varieties of Aktionsart, and it has been suggested that Anatolian reflects this stage: see e.g. Strunk (1979: 248-50 and more systematically 1994) contra Eichner (1975: 83-5). In Melchert (1997) I argued that some Hittite and Luvian verbs do show two stems, with and without the suffix *-ye/o-, with *no* discernible difference in Aktionsart, whose distribution suggests that they may reflect a prehistoric imperfective ("present") and perfective ("aorist") contrast. The evidence is sparse and brittle, and the question mark of my title retains its validity. It seems fair to say that at present one can neither affirm nor deny that development of a perfective/imperfective aspectual contrast is a common innovation of non-Anatolian Indo-European.

Even more indeterminate is the status of the "perfect" in Anatolian, which is inextricably bound up with views regarding the prehistory of the ḫi-conjugation.[25]

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[25] I follow the widespread view that in its oldest direct attestations the perfect expresses a (resultant) state (e.g. Hajnal 1999:6, Meier-Brügger 2000: 238, Tichy

Deriving the *ḫi*-conjugation as a whole from the perfect is not viable (see below

6.3.16), but it remains an open question whether some attested *ḫi*-verbs do reflect

old perfects, and if so which ones. Jasanoff (2003: 11 and 37 and 117-18) argues

that Hittite *wewakk-* 'demand' and *mēmi/a-* 'speak' continue *reduplicated* perfects

(on the former see already Jasanoff 1994: 156). See also Forssman (1994: 103) for

Hittite *šipand-* 'libate; sacrifice' < **spe-spónd-* (vs. *išpant-* 'idem' < **spend/spṇd-*).

On the other hand, Oettinger (2001a: 80-83, 2002b: xxiii-xxvi, 2006: 37-42)

views the perfect (along with the present type of Sanskrit *dadhā́ti* and the

intensive type of Sanskrit *várvarti*) as a post-Anatolian development of a PIE

reduplicated present that appears in mostly de-reduplicated form in the Anatolian

ḫi-conjugation. Hajnal (1999: 8-25) sees rather the Anatolian *ḫi*-conjugation and

the post-Anatolian perfect as separate developments of a PIE "proto-perfect", the

perfect having been formally influenced by inherited intensive presents. A

reasoned choice between these competing scenarios (and still other alternatives—

see 6.3.16 below) is not yet possible.

6.3.14 Voice

Anatolian clearly inherited the PIE contrast of active versus mediopassive. It

shares with Celtic, Italic, and Tocharian *-r* as the marker of mediopassive

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2000: 88). I treat it under aspect because I believe it clearly does not belong to the

categories of tense or voice.

primary endings in at least the third and probably the first person. As described by

Yoshida (1988: 112-19 and passim), final *-r was regularly lost in Proto-

Anatolian after unaccented vowel, but the third-person singular ending *-ór was

retained and renewed by the -i of the active primary endings, from which -ri was

then generalized as the marker of most primary mediopassive endings. The

appearance of primary mediopassive endings without -ri in Old Hittite thus does

not reflect an archaism (contra Watkins 1969: 78-9 and 175).

As shown by Hittite kitta(ri) and Palaic kītar versus CLuvian ziyar(i) and

Lycian sijẽni 'lies' (cf. Sanskrit śáye/śéte), Anatolian shows both *-o(r) and

*-to(r) as the third-person singular mediopassive ending. Whether one views this

as a chronological renewal *-o(r) > *-to(r) after the active ending (e.g. Watkins

1969: 84-7, Pooth 2000) or as the trace of an original category of "stative" distinct

from the mediopassive (e.g. Oettinger 1976 and 1993, Kümmel 1996), there is no

evidence that Anatolian preserves a more archaic state of affairs.

6.3.15 Mood

There are no obvious reflexes of either the optative or subjunctive mood in

Anatolian. Already Sommer (1947: 63) argued on the basis of its ablaut pattern

that the optative marker *-yeh$_1$-/-ih$_1$- could hardly be an innovation of non-

Anatolian Indo-European. For a more elaborated presentation of this argument see

Harðarson (1994: 30-32).[26] Sommer (1947: 63-4) suggested that by sound changes the subjunctive would have largely fallen together with the indicative in Anatolian. This certainly would have been true for all thematic stems where the thematic vowel was unaccented, due to the shortening of original unaccented long vowels in Proto-Anatolian (Eichner 1973: 79 and 86[15]). In Hittite the lengthening of accented short *e and *o (Melchert 1994a: 133 and 156 with refs.) would have likewise led to merger of indicative and subjunctive in the very productive stems in *-yé/ó- and *-sĝé/ó-.

I am aware of two serious attempts to show relic forms of the PIE subjunctive in Hittite. Eichner (1975: 80) suggested that the Hittite imperative (i.e,

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[26] As I understand it, the basic premise is that by "late PIE", which would surely include post-Anatolian Indo-European, productive ablaut of suffixes containing a glide *y or *w was restricted to alternations with the glide to the right of the thematic vowel: *(C)ey(C)/(C)oy(C)/(C)i(C) and *(C)ew(C)/(C)ow(C)/(C)u(C), not *(C)ye(C)/(C)yo(C)/(C)i(C) or *(C)we(C)/(C)wo(C)/(C)u(C). Thus suffixes of the shape *yeh₁/ih₁ (optative) and *yeh₂/ih₂ (feminine) could hardly be post-Anatolian innovations. The force of the argument is weakened by the fact that the evidence typically cited consists of the two suffixes in question, raising problems of circularity.

voluntative) first singular ending *-allu* reflects the PIE subjunctive first singular

ending **-oh$_2$* plus an *l*-particle remade with the imperative marker *-u*. A

prehistoric sequence **-oh$_2$lV* could explain the geminate *-ll-*, and the derivation is

functionally well motivated. However, the PIE subjunctive shows fixed *e*-grade of

the stem, that is, the *strong* stem in ablauting verbs, while the ending *-allu* clearly

is added to the *weak* stem in Hittite, in both conjugations: *ašallu*, *appallu* and

akkallu, šekkallu.[27]

Jasanoff (1986, 1987: 94-106 and 2003: 182-3) has analyzed Hittite second

singular imperative *paḫši* 'protect!', *eši* 'occupy!', and *ēšši* 'do!' as containing an

ending *-si* matching forms in Indo-Iranian, Celtic, and Tocharian. He further

derives such imperatives by haplology from subjunctive second singulars to a

variety of sigmatic formations (following but significantly expanding Szemerényi

1966): *paḫši* would represent a virtual **peh$_2$-s-(e-s)i*. The imperative ending in

Hittite is descriptively *-i*, but the two oldest examples *paḫši* to *paḫš-* and *eši* to *eš-*

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[27] The last example cited, with weak stem *šekk-* of the ablauting *ḫi*-verb *šakk-*

/šekk-, precludes Eichner's account of the *a*-vocalism of *ašallu* and *appallu* as due

to analogy with that of other endings with *a*-vocalism.

'sit' are formed to stems in final -*š*-, and a resegmentation leading to a new ending -*i* is quite plausible.[28]

Hittite *paḫš*- is a *transitive* medium tantum and so is *eš*- in the sense 'occupy'. As shown by Oettinger (2007), most other Hittite verbs with Imv2Sg in -*i* are also *transitive* media tantum, and on the basis of this distribution he advanced an alternative inner-Hittite account of the ending. However, Jasanoff (forthcoming) has shown that the analogical model on which Oettinger's analysis is based is not viable (the Pres3Sg of transitive mediopassive *ḫuett*- 'to draw, pull' is *ḫuettiyari*, not †*ḫuettāri*). The strong, but not exclusive, association of the synchronic Imv2Sg ending -*i* with transitive mediopassives reflects merely the pivotal role of *paḫši* beside *paḫšari* (a pattern paralleled in Sanskrit, where *juṣ*- 'enjoy' is middle in the indicative, but active in the subjunctive and has an Imv2Sg *jóṣi*). Therefore we may affirm that Anatolian did inherit the subjunctive, though due to sound changes it was lost as a verbal category, and we may suspect the same for the optative.

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[28] On the other hand, the hapax *e-iš-ši* 'do!' in the New Hittite copy KUB 1.16 iii 63 is of *no* probative value. KUB 1.16 contains many innovative forms and unreal creations of the copyist alongside genuine archaisms.

6.3.16 The *ḫi*-conjugation

Hittite and Luvian famously display two conjugation types. The indicative active

singular of the first reflects the well-known PIE present-aorist active endings

*-m(i), **-s(i)*, **-t(i)*, but the corresponding forms of the second show a strong

affinity with the PIE perfect as well as with the mediopassive.[29] The puzzle of the

ḫi-conjugation has led to a wide variety of solutions. I cite here merely as

representative Watkins (1969: 77-81), Eichner (1975: 85-99), Risch (1975),

Cowgill (1975b and 1979), Kuryłowicz (1979). None of these analyses can

plausibly account for the descriptive *a/e* ablaut of Hittite *ḫi*-verbs such as *karāp-*

/karēp- 'devour', and I regard as established that PIE had a set of root presents

with an **ó/é* ablaut, standing beside that with **é/*zero ablaut (the type of **h₁és-*

ti/*h₁s-énti* 'is/are'), entirely parallel to the two well established types of root noun

(see Jasanoff 1979: 83-7 and with revisions 2003: 64-90).[30] Anatolian preserved

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[29] For the Luvian reflexes of the latter see Morpurgo Davies (1979). Putative

traces of the *ḫi*-conjugation in Palaic and Lycian are questionable, but there is no

reason to doubt that the basic formation is Proto-Anatolian.

[30] I am not persuaded by the attempt of Kloekhorst (2012) to explain all cases of

attested *ā/e* alternation in Hittite *ḫi*-verbs as secondary either by analogy to the

mi-conjugation or due to anaptyxis in the weak stem. His assumptions regarding

and extended this "*h_2e-conjugation", while non-Anatolian renewed it by various thematic types.

Hittite and Luvian also continue a PIE present type in -i- that belonged to the *h_2e-conjugation. It probably followed an *é/zero ablaut pattern (Jasanoff 1979: 88-89, 2003: 91-107): *$dhéh_1y$-ei/dhh_1y-énti > Hittite dāi/tianzi 'put'. See, however, Kimball (1998), Oettinger (2002b: xxiv-xxv and xxviii and 2006: 42), and Kloekhorst (2008) for other proposals.[31] Outside Anatolian these presents were incorporated into the class of thematic *-ye/o- verbs.

Still unclear is the source of Hittite ḫi-verbs with descriptive ā/a ablaut (e.g. ari/arānzi 'arrive'). Jasanoff (2003: 84-6, 151-2) derives these from an altered *ó/é-aorist corresponding to the *ó/é-presents described above. For opposing views see the works of Hajnal (1999: 8-25) and Oettinger (2001a: 80-83, 2002b: xxiii-xxiv, and 2006: 43-4) already cited above in 6.3.13. Until the overall picture of verbal reduplication in Anatolian is clarified, one also cannot entirely exclude the possibility that the type of ari/arānzi reflects de-reduplicated (or unreduplicated?) perfects.

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anaptyxis in Hittite are contradicted by the attested patterns of genuine anaptyxis in the environments in question.

[31] The existence of an acrostatic "Narten" type of i-present with *$\acute{e}$/é ablaut (Jasanoff 2003: 107-10) depends entirely on non-Anatolian evidence.

6.3.17 Verbal Stem Formation

Virtually every means of forming the "present" (imperfective) stem attested

elsewhere in Indo-European is also used to derive verbal stems in Anatolian. As

indicated in 6.3.13 above, it remains uncertain to what extent these stems marked

aspect rather than Aktionsart in the prehistory of Anatolian. Only a few types call

for special comment here. Anatolian does not currently help to solve the problems

surrounding "u-presents" and "s-presents" in PIE. Anatolian evidence for the

former is very limited, and the attested contrast in inflectional type between

Hittite *tarḫu-zi/taruḫ-zi* (/tarx^{w}tsi/) 'is strong; conquers' and *lāḫu-i* 'pours' adds to

our difficulties. See the recent tentative discussion by Jasanoff (2003: 141-3) and

the important new demonstration by Kloekhorst (2008: 835-9) that the Anatolian

verb 'be strong, conquer' reflects only a stem *$terh_2u$-*, never *$terh_2$-*. There is

also no consensus on putative Anatolian reflexes of "s-presents": compare

Jasanoff (2003: 132-9) and Kloekhorst (2009) with the still useful treatment of

van den Hout (1988) and the relevant sections of Oettinger (1979). We cannot

draw any firm conclusions from this material regarding the relative position of

Anatolian vis-à-vis the rest of Indo-European.

    The strong claim of Lehrman (1998) that Anatolian inherited no "simple"

thematic presents (i.e., with the suffix *$-e/o-$* added directly to the root) appears to

be contradicted by HLuvian /tammari/* (AEDIFICARE+*MI-ri*+*i*) 'builds' <

dém(h₂)eti ~ Greek δέμω.[32] Nevertheless, the rarity of such presents in Anatolian

remains significant. For one account of this distribution in terms of a common

innovation excluding Anatolian *and* Tocharian see Jasanoff (1998) and compare

the remarks of Oettinger (2002b: xx).

There is no doubt that Anatolian attests reflexes of PIE root aorists: e.g.

Hittite *tē-* 'say' = Lycian *ta-* 'put' ~ Sanskrit *(á)dhāt* 'put', Hittite *kuer-/kur-* and

CLuvian *kuwar-/kur-* 'cut' ~ Sanskrit *(á)kar* 'made'. On the other hand, few

putative traces of a sigmatic aorist have been found. Such a source has been

proposed for Hittite *g(a)nešš-* 'recognize' (e.g. Oettinger 1979: 199, following

Rix), but for this verb there are two distinct competing analyses in terms of an *s-*

present (Jasanoff 1988 and Kloekhorst 2009).[33] On other alleged traces of the

sigmatic aorist in Hittite verbal *stems* see Neu (1974: 87-8[174]). It is widely agreed

that there is a historical connection between Hittite preterite third singulars like

naiš 'turned' and the sigmatic aorist (cf. Sanskrit *ánāiṣam* 'I led')—see e.g.

Eichner (1975: 83), Oettinger (1979: 405), Jasanoff (2003: 197)—but there is no

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[32] The attested form with rhotacism reflects a */tammadi/, with regular "lenition"

or voicing of the *t* of the ending (see Morpurgo Davies 1982/83: 261-2).

HLuvian orthography cannot express the geminate *-mm-* expected from either

démh₂-e/o- or *dém-e/o-*.

[33] The latter analysis is now accepted by Oettinger (2006: 44).

agreement on the nature of that connection. The radically innovative account of the development of the sigmatic aorist presented by Jasanoff (2003, Chapter 7) has not won general acceptance (see e.g. the remarks of Kim 2005: 194 and Oettinger 2006: 43-4), but has not yet led to any fully elaborated alternatives. What is significant for our present topic is that by Jasanoff's scenario the "classical" sigmatic aorist was an innovation of "inner Indo-European" that did not include Anatolian *or* Tocharian (see further section 6.4 below).

6.3.18 Syntax

I know of no assured examples of common non-Anatolian innovations in syntax. Four possible instances deserve brief mention. Patri (2007: 171-5) has argued that PIE may have had a prohibition against inanimate nouns taking the role of subject of transitive verbs. If this is the case, then the non-Anatolian languages innovated by removing this prohibition, while Anatolian developed "split ergativity".[34] Probert (2006) has shown that in addition to the well-established preposed, adjoined type, Old Hittite also has embedded relative clauses. She is suitably cautious about projecting the Old Hittite state of affairs back to PIE, allowing for

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[34] For this as the correct definition of the synchronic feature in attested Anatolian languages see Melchert (2011), against Patri and others. I stress, however, that the continuing controversy over the correct analysis of the synchronic facts of Anatolian does not affect the point being made here.

the possibility that embedded relatives are a pre-Hittite innovation, but she does stress two points (2006: 78-80). First, later Hittite clearly eliminates embedded relative clauses, reanalyzing them as adjoined. This fact falsifies the common assumption that there is only a unidirectional development from adjoined to embedded relatives. Second, since Hittite has SOV, not SVO, word order, the typical scenario by which adjoined relative clauses are said to be reanalyzed as embedded cannot apply to Old Hittite. We must therefore consider the possibility that PIE, like Old Hittite, had embedded as well as adjoined relative clauses, and that non-Anatolian Indo-European eliminated the former. Huggard (2011), following Goedegebuure (2009), has shown, based on interrogative clauses, that Hittite, contrary to previous claims, does not have overt "*wh*-movement", unlike Vedic Sanskrit and Ancient Greek. Whether Anatolian or "Nuclear Indo-European" innovated in this case is not (yet) clear. Garrett (1998) argued that the "split genitive" construction of Old Hittite used for inalienable possession (i .e., *ŠA* ^{LÚ}MÁŠDA *ēšḫar=šet* 'of the poor man blood-his' = 'the blood of the poor man') is an archaism that was eliminated elsewhere. This loss could be a common shared innovation of the non-Anatolian dialects.

Two claimed syntactic archaisms of Anatolian certainly do not exist. Neu (1979: 180-85), following Laroche, suggested that Hittite preserves traces of a PIE *casus indefinitus*, and the idea has been revived with modifications by Patri (2007: 81-95). However, the evidence cited by Patri himself (2007: 85-7)

confirms that the case used by Hittite even in the "naming-construction" is the nominative, and all alleged examples of an indefinite or "zero" case reflect merely pseudo-Akkadographic spellings (see correctly Zeilfelder 2001: 141-51).

Old Hittite shows constructions such as *ammel āppan* 'behind me' (*ammel* = accented genitive pronoun 'of me, mine') and *katti-šši* 'beside him' (-*šši* = dative-locative singular of the enclitic third singular possessive adjective 'his'). These have led some to argue that Hittite (*a fortiori* Anatolian) has preserved archaic PIE syntax in which local adverbs are still construed as the case forms of nouns which they reflect historically: see e.g. Starke (1977:131 and 149), Neu (1974:67-9), and Luraghi (1997:46). However, the syntax of *ammel āppan* and *katti-šši* is innovative in Hittite, having been modeled on true cases of secondary development of nouns to adpositions such as LUGAL-*waš tapušza* 'beside the king' < *'to the side of the king' and *pēdi-šši* 'in place of him' < *'in his place'. See for details Melchert (2009b). One instance of the development of an adposition from the case form of a noun may represent a common non-Anatolian innovation. In Hittite the original locative singular *$h_2$enti* of the noun for 'face, front' appears as *ḫanz(a)*, an adverb meaning 'in front' (the synchronic dat.-loc. sg. has been renewed as *ḫanti*). In non-Anatolian Indo-European, the same case form has developed to an adposition 'in front of': Grk. ἀντί, Lat. *ante* etc.

6.3.19 Semantics

The Hittite noun *nekut-* means 'twilight', including morning as well as evening twilight (see Güterbock and Hoffner 1980-89: 434-6), and the verb *neku-* from which it is derived means 'to become twilight'. In non-Anatolian Indo-European the meaning has shifted to 'night', probably including Tocharian, although the very limited attestation in the latter leaves some room for doubt (see Pinault 1990: 181-90 for discussion of the meaning and contexts of all occurrences). García-Ramón (forthcoming) makes a strong case for analyzing the Anatolian verb 'run' attested in Hittite *ḫuwai-/ḫū(i)ya-*, CLuvian *ḫū(i)ya-* and HLuvian /hw(i)ya-/ and various nominal derivatives as the reflex of a PIE root *h_2euh_1- that shifts from 'run' to 'help, assist' in non-Anatolian Indo-European (on the latter reflexes see already García-Ramón 1996). Further research is likely to reveal further instances of such semantic shifts not shared by Anatolian.[35]

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[35] The case of the verb 'to drink' is more complicated than the two just presented. Here there was likely an original suppletion of imperfective *$h_1e(h_2)g^wh$- and perfective *$peh_3(i)$-. The former is preserved as a verb 'drink' only in Anatolian and Tocharian, while the latter was lexicalized in Hittite and Luvian *paš(š)-* as 'swallow' and replaced in Tocharian (see Kim 2000: 164-5). In this instance the common "inner Indo-European" innovation was to eliminate *$h_1e(h_2)g^wh$- as a

6.3.20 Summary

If we review the discussion in the preceding sections, we find that the number of

putative common non-Anatolian innovations is decidedly modest, even if we

generously include those that may be characterized as merely probable or

possible. Those innovations involving the creation or loss of functional categories

are particularly few: among the former belongs almost certainly the feminine

gender, arguably true participles with fixed diathesis built on tense-aspectual

stems, and *perhaps* the perfect. Among the latter there is likely the loss of the

collective plural as a living category.

 The rest of the innovations cited consist merely in changes in the *formal*

expression of categories (see the similar remarks of Jasanoff 2003: 215 on those

features belonging to the verb): renewal of the dative plural ending **-os*,

replacement of the pronominal neuter nominative-accusative plural **-oi* by

nominal **-eh$_2$*, loss of the "*h$_2$e*-conjugation", marked expansion of the "simple"

thematic verbal stems, and more debatably the development of the fully

sigmatized aorist and the loss of embedded relative clauses. To these we may

cautiously add a few changes in the productivity of various derivational suffixes

and in the meaning of some lexemes.

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verb and to replace it with reduplicated **pí-ph$_3$-e-* (see in detail García-Ramón

2002: 124-6).

Future research may well reveal further common non-Anatolian innovations not identified above, but it may also eliminate some of the less certain candidates cited. Our findings seem difficult to reconcile with the notion that Anatolian reflects a proto-language (however we choose to label it) profoundly different from the source of the other Indo-European languages, as represented by Sturtevant (1933ab), Lehrman (1998), or Adrados (2007). The facts of Anatolian (along with those of Tocharian) do appear to require some revision to the previous model of Proto-Indo-European reconstructed without knowledge of these subgroups, but not nearly as radical as has sometimes been suggested. The question of how best to conceptualize the place of Anatolian with respect to the other subgroups of Indo-European will be the subject of the next and final section.

6.4 Issues of Modeling: divergence vs. diffusion

Discovery of Anatolian (and Tocharian) not only led to a reassessment of the features to be reconstructed for Proto-Indo-European, but also renewed a debate dating to the nineteenth century regarding how best to model the historical relationships of the Indo-European languages. A full treatment of this very complex methodological issue is not remotely possible here, and the following remarks focus only on its relevance for understanding the various approaches to treating the position of Anatolian within Indo-European.

The preceding discussion has been framed in terms of divergence—common innovations of non-Anatolian Indo-European. The choice between the "Schwund-

Hypothese" and "Indo-Hittite" has likewise been posed in terms of the family-tree

(Stammbaum) model: Hittite is either merely one among the subgroups

descended from PIE or is a collateral descendant with PIE of a more archaic

proto-language. See the formulations of Eichner (1975: 72) and Lehrman (1998:

3-7) and for a visual representation contrast the diagram of e.g. Baldi (1983: rear

flyleaf) among many others with that of Sturtevant (1933a: 30).

Meid (1975: 210-11) presents two different models for the filiation of the

Indo-European languages. The first portrays the attested languages (or subgroups)

as reflecting a *synchronically differentiated* PIE that included archaisms,

productive norms, and incipient innovations. The second views the descendant

languages as being derived from *successive* reconstructed stages of the proto-

language. If carried through, the first would be a truly radical departure from

previous conceptions. However, in the rest of his 1975 article it is the second

model that Meid himself follows, and for good reason. The very nature of the

available data and of the comparative method makes it virtually impossible to

realize the first model in any meaningful way (see Meid's own concession 1975:

212, top).

Meid's own elaboration of the second model and the formulations of Neu

(1976) and (1985) have not been so much rejected as rather co-opted by revival

(in modern guise) of August Schleicher's original conception of the Stammbaum

(1871: 9).[36] Schleicher saw PIE as evolving by a series of common innovations that successively separated one subgroup after another from the remaining linguistic unity. There was in effect not only a PIE stage, but PIE minus 1, PIE minus 2, and so forth, although the latter stages do not have fixed labels. The second model of Meid (1975: 211) is in practical terms merely an abbreviated and schematized variant of the same.

Explicit modern exemplars of this form of a divergence model may be found in the diagrams of Hamp (1984: 153), Gamkrelidze and Ivanov (1995: 363 with important preceding discussion), Ringe et al. (1998: 408 and 2002: 90), and Watkins (2001: 57) among others.[37] Most scholars do not commit themselves regarding the entire Indo-European family, but there is a broad consensus that "PIE minus 1" is that stage defined by a series of common innovations not shared

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[36] I am speaking here of the overall implications of their model. Most of their specific analyses regarding archaisms vs. innovations have failed to gain widespread approval.

[37] The published diagram of Hamp that I have cited describes the dialectal development of a single lexical feature, but his (unfortunately never published) handout at the IX. Fachtagung of the Indogermanische Gesellschaft held in Zürich in 1992 presented a stemma differing in only minor details based on *multiple* features.

by Anatolian. Also popular is the idea that Tocharian was the next subgroup to be isolated (e.g. Schmidt 1992: 114, Jasanoff 1994: 167 and 2003 passim, Winter 1998: 355, Ringe et al. 1998 and 2002, and Watkins 2001: 57). Some archaic features claimed to be shared by Anatolian and Tocharian have been mentioned in section 6.3 above. However, see for very different viewpoints Hamp (1984: 115), Meid (1988: 11) and Gamkrelidze and Ivanov (1995: 347) among others. One should also not forget the "marginal" versus "central" dialectal model of Meillet (1931), which is based a similar relative chronology of innovations.

Meid (1975: 208-9) also envisions a spatial component to his model and allows for the possibility of dialectal differentiation within stages of the proto-language, but admits the great difficulty in establishing any such features, given the possibility of subsequent contact and interference between already differentiated subgroups. Since the articulated Stammbaum or cladistic model also makes allowance for such contact and interference (see again Ringe et al. 1998: 408 and also Hamp, as cited in note 49), I contend that the practical conceptual difference between the two models is once again minimal. Both allow for *diffusion* of later innovations across speech communities that have *diverged* through earlier innovations.

The real issue is deciding just when and where the linguistic facts seem to demand assumption of such diffusion. Such scenarios have been proposed to explain certain features of the Indo-European languages of the Balkans, of

Germanic (Ringe et al. 1998: 407-8 and 2002: 110-11), and of other subgroups

(e.g. Meid 1975: 209). In the case of Anatolian the possibility of such diffusion

has generally been limited to possible influence of Anatolian on Greek (see e.g.

Puhvel 1991: 3-20 and Watkins: 2001: 56-9). However, it is far from clear that all

features shared by Anatolian with subgroups such as Italic, Celtic, Germanic, and

Tocharian are archaisms (see e.g. Puhvel 1994). Further investigation may or may

not confirm shared innovations between Anatolian and other subgroups. Future

study of the position of Anatolian should in any case pay as much attention to

what it shares with other Indo-European languages (as a group and severally) as

to what it does not.

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