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Ablative Formations.

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Ablative Formations¹

Olav Hackstein

MARTIN-LUTHER-UNIVERSITÄT IN HALLE

1. *The position of the ablative in IE case morphology.* Within the IE system of case formation, the ablative is peculiar in that it shows the most morphological constraints. Among these, two peculiarities in particular, found outside the Anatolian and Tocharian branches, are noteworthy: first, the declensional restriction of a distinct ablative morpheme to the thematic and the pronominal declensions; and second, the complete absence of a distinct ablative ending in the plural. The pronominal declension apart, only the singular of the thematic declension employed a distinct ablative ending. Otherwise, the ablative morphemes were homophonous with the genitive morpheme in the non-thematic singular, and with the dative in the plural of all declensions. This can be illustrated by the Sanskrit nouns *ásva-* (them./m.) 'horse' and *áp-* (cons./f.) 'water':

Singular:	distinct ablative (them decl.)	homophony (otherwise)
	ablative: {- <i>ād</i> }	ablative = genitive: {- <i>as</i> }
	<i>ásvād</i>	<i>apás</i>
Plural:	homophony (all declensions)	
	ablative = dative: {- <i>bhyas</i> }	
	<i>ásvebhyas</i>	<i>adbhyás</i>

FIGURE 1. RESTRICTION OF DISTINCTIVE ABLATIVE SG. MORPHEME OUTSIDE ANATOLIAN AND TOCHARIAN: SANSKRIT

The restriction of a morphologically distinctive ablative to the singular led Delbrück in his comparative syntax (1893:182, following Gaedicke 1880:144 n.) to hypothesize that the ablative was, morphologically and functionally, an intrinsically singular case. According to Delbrück the singular restriction followed automatically from the ablative's core function of designating a single point of reference and departure. This was taken by Delbrück to imply a singular noun. This argument, however, is flawed by the fact that grammatical number is not necessarily commensurate with natural number. A singular noun may designate several referents, and nothing would prevent us from conceiving of a singular entity as comprising a multiplicity (e.g. collectives). Conversely, a plural, if used distributively, may well designate several, individual points of departure.

Since Delbrück's era, new developments in Indo-European linguistics, notably the discovery of the Anatolian and Tocharian branches, have cast the singular restriction

x. The present paper grew out of a lecture presented in Erlangen on December 15, 2005. I would like to thank the audience for its comments, in particular Bernhard Forssman, Norbert Oettinger, and Eugen Hill. Many thanks also to Detlev Groddek for discussing the Hittite passage KUB 5.1 i 92 with me. Remaining infelicities are of course my own.

of the ablative in an entirely different light. In contrast to all other branches of Indo-European, both Anatolian and Tocharian are peculiar in employing a single distinctive ablative morpheme for *both* numbers indiscriminately. Accordingly, the Anatolian and Tocharian facts are suggestive not of a singular restriction of the Indo-European ablative, but rather of its indifference to number. The paradigm of Hittite *hapa-* (*a*-stem/com.) 'river, creek' will serve as an illustration of the lack of a number distinction in the Hittite ablative and the Anatolian ablative in general:²

Ablative sg.:	<i>hap-az</i>	ÍD- <i>az</i>
= Ablative pl.:	<i>hap-az</i> ³	ÍD ^{MEŠ} - <i>az</i>

FIGURE 2. SINGULAR-PLURAL HOMOPHONY IN THE HITTITE ABLATIVE

From the above singular/plural homophony it follows that the singular or plural meaning of an Anatolian ablative is in principle inferable only from the context and sense of a given passage. Fortunately, however, metalinguistic graphemic evidence is often available which can formally specify a plural meaning, notably the purely graphemic use of plural determinatives in ideographic spelling. An intended plural is indicated by the postposed determinative <MEŠ>, which—being purely graphic—remains unexpressed in actual speech. Thus the ideographic spellings ÍD and pl. ÍD^{MEŠ} each involve the self-same nominal stem, i.e., *hapa-*.

Tocharian (East Tocharian) shares with Hittite and Anatolian the homophony of the ablative morpheme (*-äs*) in the singular and plural. By contrast, however, Tocharian shows the vestiges of a free ablative morpheme. The status of *-äs* as an unbound morpheme is most clearly hinted at by its postpositional use with inflected case forms. The East Tocharian ablative is formed by tagging the same ablative morpheme *-äs* onto the oblique singular and plural stems:

	Singular	Plural
Nominative:	<i>yuk</i> 'equus'	<i>yukañ</i> 'equi'
Oblique (< *accusative):	<i>yuk</i> 'equum'	<i>yukas</i> 'equos'
	↓	↓
Ablative:	<i>yuk-äs</i> '(ab/de) equo'	<i>yukas-äs</i> '(ab/de) equis'

FIGURE 3. SINGULAR-PLURAL HOMOPHONY IN THE EAST TOCHARIAN ABLATIVE

In addition to the Anatolian and Tocharian evidence presented above, traces of an original lack of number distinction in the ablative are also furnished by the other Indo-European branches. An argument which to my knowledge has not been advanced heretofore is implicit in the inflection of the personal pronouns. While in the first and second person the singular and plural pronouns not only have distinct stems but also formally differentiate singular and plural endings for most cases, the ablative deviates in employing the same morpheme for both the singular and the plural. Thus, the PIE ablatives **méd* 'from me' and **nsméd* 'from us' end in the same morpheme *-éd*—contrary

2. See Neu 1979:191; Starke 1977:126, 1982:415, and 1990:42.

3. For attestations see *HW*² 2:203, 205 s.v. *hapa-*.

to the nominative, in which the nom. singular and nom. plural endings are different (singular {-Ø} versus plural {-(-e)s}).

	Singular	Plural
Nominative:	*eǵoh ₂ 'I'	*uei-(-e)s 'we'
	*tuH 'you'	*iuH-s 'you (pl.)'
Ablative:	*méd 'from me'	*nsméd 'from us'
	*tuéd 'from you'	*usméd 'from you (pl.)'

FIGURE 4. HOMOPHONY OF THE ABLATIVE MORPHEME IN THE IE PERSONAL PRONOUN

The question of how to account for the failure of the ablative to differentiate singular and plural has not been answered conclusively so far. The present paper sets as its goal to answer this question. In what follows I shall present facts indicative of an inherited agglutinating morphology in the formation of the Indo-European ablative.

1.1. *Survey of research.* Before proceeding, it will be useful to lay out some of the results of previous research. In fact, the possibility of an agglutinating ablative in Indo-European has been proposed before and was developed further in the wake of the discovery of Anatolian and Tocharian.

1.1.1. *Classical Armenian: Sophus Bugge 1893.* The year 1893 can be considered the starting point of all attempts to elucidate the morphological prehistory of the Proto-Indo-European ablative. In that year Sophus Bugge (1893:75) published a brief remark on the Armenian ablative morpheme {-ē}. Occasional instances of a postpositional use of {-ē} (e.g., nom. *akn* 'eye', gen.-dat.-loc. *akan* → ablative *y akan-ē* 'from the eye') led Bugge to conclude that the Armenian ablative morpheme originated as an independent word. Furthermore, Bugge suggested identifying {-ē} etymologically with Sanskrit *āti*, Greek *ἔτι* and other cognates thereof. Bugge's suggestion failed to influence the reconstruction of the PIE ablative for several decades, however, the more so because the remaining IE languages known in Bugge's time could not provide the missing link between an ablative in *-ti and the more customary type in *-d, as known from Latin and Indo-Iranian. This, however, and the isolation of an ablative in *-ti was to change soon with the discovery of Anatolian and Tocharian. As we shall see later on in this paper, these two branches provide the crucial key to a unitary analysis and an equation of the ablatives in *-ti and those in *-d.

1.1.2. *William Austin 1942, Pisani 1966: Classical Armenian and Anatolian.* The next step was taken half a century later by William Austin, a student of Edgar Sturtevant's, again with a brief remark stating that Classical Armenian {-oy} and {-ē}, if traced back to PIE *-oti and *-eti, could be identified with the ablative endings of Luvian *-ati* and Lycian *-adi/edi*.⁴ Although Austin's phonological account of Hittite {-az} from PIE *-ts is demonstrably false,⁵ his basic idea of setting up an equation between the Hittite and the Armenian ablative endings can be upheld. Consequently this idea was taken up again and (with the correct phonological interpretation) endorsed by Pisani 1966:220f.

4. Austin 1942:23: "These endings [= Arm. Abl. -oy, -ē] may be identified with the Lycian ablative endings *-adi* and *-edi* and more remotely with the zero grade of the same suffix (-ts) that was generalized in the Hittite ablative."

5. Hittite {-az} goes back to Common Anatolian *-ati as is clear from its sandhi variant *-azi* occurring before clitic = (y)a 'and'; see Oettinger 1976:23f. n. 6 and Garrett 1990:272 with references.

1.1.3. *Jay Jasanoff 1987: Armenian, Anatolian and Tocharian.* Austin's proposal, however, still did not provide the "breakthrough solution." The Armenian {-ē} was by itself still open to other reconstructions, and the Anatolian evidence as the sole secure indication of a **ti*-ablative was too meager a basis for further reconstruction. The crucial next step was not taken until 1987, when Jay Jasanoff (1987:109f.) freed the *ti*-type ablative from its isolation. In establishing that the East Tocharian ablative morpheme {-ās} can straightforwardly be reconstructed as *-*Vti*, Jasanoff added the missing link that was crucial to positing a Proto-Indo-European *ti*-type ablative. The key to the equation of the Anatolian and East Tocharian ablatives was a sound law according to which a voiceless dental between a vowel and word-final *-*i* becomes palatal ʃ in East Tocharian. This rule was independently discovered and published in 1987 by Klingenschmitt (1987:188 with n. 64), but without invoking the evidence of the ablative. Apart from the East Tocharian ablative formant {-ās}, Jasanoff's and Klingenschmitt's rule also explains the East Tocharian ending of the third singular active -^oās (< *-ssʰ < *-tsʰ < *-tʰi < PIE *(e)ti).

1.2.1. *Additional evidence: copulative ʃ in West Tocharian.* Recent studies have brought to light additional evidence corroborating Jasanoff's and Klingenschmitt's rule. Thus, it is possible to derive the West Tocharian conjunction /ʃ/ (← *iʃ < *yāʃa) from PIE *(h₁)eti (with the apheresis of the initial syllable common to words in clitic function) and equate it with Latin *et* and Gothic *ip*.⁶ Functionally, PIE *(h₁)eti is originally an ablative built on the demonstrative stem PIE *(h₁)e-, and the semantics of West Tocharian /ʃ/ 'and apart from that', 'and beyond/furthermore', 'and' are entirely consistent with its postulated ablative origin. The semantic development can be envisaged either as a) local 'from there' > temporal 'and then' > copulative 'and' or as b) figurative 'apart from that' > 'beyond/furthermore' > 'and'. The connecting particle /ʃ/ is also attested in fuller form as *šap*, which goes back to *(h₁)eti + *(h₁)epi. Toch B *šap* means 'and more thereof, additionally, and beyond', e.g. Toch. B LP 15 a5 (ed. Pinault 1987:90) *šap mā tärkanat* 'and more do not let pass through!', B HMR 3 b6 *tane špak pete* 'and thereof give more!'

In sum, the sound law behind the interpretation of East Tocharian ablative {-ās} as PIE *-*Vti* is secure, and so is the equation of the East-Tocharian and Anatolian ablative formants. With this established, there remains no reason to uphold any of the reservations against including the Classical Armenian morpheme {-ē} in the equation. Moreover, there are, it should be noted, probable instances of Armenian-Hittite equations of frozen case forms in *-*ti*; cf. Hittite *tuyaz* 'from afar' < **duēh₂ti* (cf. Rieken 1999:69f.) and Armenian *erkay-n* 'long' ← **erkay* < **duēh₂ti*. This account is much less complicated than Olsen's (1999:284) alternative explanation (< **erkapain* < **erkapani*) which requires a number of additional hypotheses. In addition to the phonological equation linking the respective ablative morphemes, further comparison reveals morphological and syntactic traits shared by Classical Armenian, Hittite and Tocharian. Morphologically, Classical Armenian {-ē}, Hittite {-(a)z}, Tocharian A {-ās} are indifferent to number. Furthermore, all three morphemes show the potential for postpositional use with inflected case forms. Syntactically, furthermore, in a branching noun phrase or within a group of coordinated nouns only the last member will take the ablative morpheme (group inflection). Given

6. I have dealt with this etymology elsewhere; see Hackstein 2004c:95, 2005:176.

these correspondences, Godel's reservations about equating the Classical Armenian and Hittite morphemes (1975:105) have to be given up.

1.2.2. *The ablative morpheme of West Tocharian: Toch. B {-mem}*. Given the presence of an inherited ablative formant **-ti* in Proto-Tocharian and East Tocharian, it would be surprising if not a single trace of it survived into West Tocharian. In fact, it is possible that the productive West Tocharian ablative morpheme *{-mem}*, for which there is no generally accepted etymology (Adams 1999:468), is ultimately related to this same **-ti*. West Tocharian *{-mem}* can plausibly be derived from an enclitic ablative demonstrative **tmem* 'from there, thereof, thence' with apheresis of the dental onset. A parallel to this derivation of an ablative by the postposing of an ablative demonstrative is furnished by the agglutination of Ved. *tāt* (< PIE **tōd*), on which see Bichlmeier 1999:28ff. The posited **tmem* in turn derives from < **tām*⁷-em and Proto-Tocharian **tam-anti*, replacing earlier **taδ⁸-anti*.⁹ This formation, if projected back phonologically into PIE, would reflect **tod-onti*. Along these lines, then, Toch. B *mem* contains an ablative ending **-onti*, a generalisation of the *n*-stem ablative ending. Crucially, such a generalisation of ablative **-onti* in Proto-Tocharian would be a perfect match for the spread of the same ending complex in Anatolian.¹⁰

1.2.3. *Case-derived ablative formation and group inflection.*

(a) *Classical Armenian*

Morphology: case-derived ablative formation

nom. *or* 'who', dat.-loc. *orum* → abl. *y orm-ē* 'of/from whom'

nom. *tehi* 'place', loc. *i tekvoj* → abl. *i tekvoj-ē* 'off/from the place'

Syntax: group inflection

Pronoun_{dat.-loc.} + noun_{ablative} *y-aism ašcarb-ē* 'of/from this world' (John 18:36)

Adjective_{dat.-loc.} + noun_{ablative} *i nor handerj-ē* 'from the new garment'

(Luke 5:36)

(b) *Hittite*

Morphology: case-derived ablative formation

Neo-Hitt. loc. *É-ir* 'in the house' → abl. *pir-za* (*É-ir-za*) 'from [in] the house'

= endingless locative *pir* + ablative morpheme *z(a)* (alongside *parnaz*)¹¹

Syntax: group inflection

adjective_{instr.} + noun_{ablative}¹² *kallarit uddanaz* 'from the harmful word'

7. *tām* as in Toch. A *tām*, showing the special development of weakly stressed or unstressed **-o/a- > Toch. -a/a- > -ä-* as found inter alia in clitics (see Hackstein 2004b:289, 2005:179 with references).

8. The replacement of the pronominal neuter ending *-d* by *-m* in Proto-Tocharian is borne out by Toch. B *māk-tau-ñe*, the abstract noun formed from *makit* 'self', with *tau-* from earlier **tom* before *-ñ*, cf. Winter (1989:29): "it [Toch. B *māk-te* 'self' << 'same' << 'like that'], too, should be taken to reflect a Proto-Indo-European neuter form in **-om* when occurring as the nucleus of B *māktauñe*."

9. On Toch. B *-em* < **-onti*, see Cowgill 1985:104 (following Szemerényi), Ringe 1996:77.

10. On the spread of ablative **-onti* in Anatolian see Jasanoff 1973:123f., Watkins in Garrett 1990:276, Oettinger 1994:324f., Melchert 2000:58f. n. 22.

11. Jasanoff (1973:109): "The element **-ri* seems originally to have been added to the endingless locative." Cf. Neu 1979:190 and 1980:29f.

12. Pedersen 1948:22-4, Kronasser 1956:104, Josephson 1966:136f., Jasanoff 1987:110 n. 40, Neu 1979:191 on *iššazmit* = *iššaz-šmit* 'from their mouth(s)', *kartazmit* = *kartaz-šmit* 'from their heart(s)'.
 13. Jasanoff 1973:109.

(c) *Tocharian*

Morphology: case-derived ablative formation

feminine oblique *tām* → ablative *tāmaš* (A 90 a4), *tāmāš* (A 57 b6, 333 b7 +;

cf. Sieg, Siegling, and Schulze 1931:170 §285)

Syntax: group inflection

pronoun_{oblique} + noun_{ablative} *kuc šurmaš ne* ‘for which reason’ = Skt. *yenārthena*

(cf. Sieg, Siegling, and Schulze 1931:177 n.1)

adjective_{oblique} + noun_{ablative} *ñäkyās wimāntwās* ‘from the gods’ palaces’

(A 58 a6)

adjective_{oblique} + noun_{oblique} + apposition_{ablative} *puttisparāṃṣi cakravartti lāntās*

‘from the Buddha-like Cakravarti, king’ (MSN 1.4[II.2] b2)

1.2.4. *Classical Armenian, Anatolian, Tocharian vs. the remaining branches of Indo-European.* Having demonstrated the affinity of the ablative morphemes of Classical Armenian, Anatolian, and Tocharian, the following question imposes itself: How are the *ti*-type ablatives related to the ablatives in **-d* of Latin, Indo-Iranian etc.? From a phonological standpoint, a unitary analysis is possible. While Classical Armenian, Anatolian, and Tocharian continue the ablative morpheme without apocope, all the other branches generalize the apocopated allomorph **-t#* throughout the paradigm. This variant, in origin an allomorph of PIE *date*, was voiced to **-d* by regular sound change already in the proto-language, for which see the thorough treatment by Szemerényi (1973:55–63, 72), Cowgill (1975:52), and Ringe (1997:134–8).

Ablatives in paradigms:

No apocope

Hittite, Tocharian, Classical Armenian

-(*V*)*ti*

Apocope and **-t > *-d/_#*

elsewhere

**-ōti > *-ōt > *-ōd*

**-āti > *-āt > *-ād*

The *d*-type ablatives show signs of a previously unbound morpheme. Among these indications are the circumflex intonation of the Baltic (**ablative-*)genitives and occurrences of metrically disyllabic *-ād* in Vedic. These features were already taken by Kappus (1903:13f.; likewise Hirt 1927:170), Meillet (1920:50), and Stang (1966:44, 181) to imply a contraction with an earlier postpositional unbound morpheme. None of these authors, however, noted the evident similarity of this to Bugge’s 1893 proposal, and Meillet, strikingly, although familiar with Hittite and especially Tocharian, did not follow up on the transparently agglutinating character of the Tocharian and Hittite ablative morphemes.

2. *Evaluation: problems and methods.* Despite these facts, however, the demonstrated possibility of reconciling the *ti*- and *d*-type ablatives remains a purely theoretical phonological option. The question emerges whether beyond this abstract possibility there is any concrete proof of the historical identity of the two ablative types. In the following, I shall present evidence to substantiate such an identity.

2.1. *Personal pronouns.* The connection between *ti*- and *d*-type ablatives is most conspicuously borne out by pairs of cognates which — while being etymologically equivalent — oppose the two types of ablative formation. One such case is provided by the personal pronouns, whose potential for preserving archaic morphology is well known. In com-

paring the ablatives of the first and second person pronouns of East Tocharian to their Indo-Iranian correspondents, we obtain etymologically identical pairs in *-eti (East Tocharian), *-oti (Luvian) and *-ed/od (Indo-Iranian).

EAST TOCHARIAN	LUVIAN	INDO-IRANIAN
PIE *tu-eti > Toch. A <i>cwäs</i>	PIE *tu-oti ¹³ > Luv. abl.- instr. <i>tuwari</i>	PIE *tuēt/*tuot > *tuēd/ *tuod > Skt <i>tvād</i>
PIE *ns-eti → Toch. A <i>wasäs</i> (e.g. A 119 b4), with <i>was-</i> generalized from nom.-obl. <i>was</i> ; cf. Lat. <i>nos</i> → <i>nobis</i>	PIE *ns-oti possibly in Luv. abl.-instr. CLuv. <i>ānzati</i> (if not <i>ānz</i> + refl. <i>-ti</i> , see Plöchl 2003: 64f.)	PIE *ns-et/*ns-ot > *ns-ed/ *ns-od (cf. Szemerényi 1990:228, *nsmed > Skt. <i>asmād</i>)
PIE *us-eti → > Toch. A <i>yasäs</i> (e.g. A 340 a4), with <i>yas-</i> generalized from nom.-obl. <i>yas</i> ; cf. Lat. <i>vos</i> → <i>vobis</i>	PIE *us-oti → *u-n-s-oti (-n- transferred from 1.pl. pronoun) > HLuv. <i>unzari</i>	PIE *us-et > *us-ed → *usmed > GAv. <i>xšmat</i> (< ** <i>šmad</i> ; cf. Hoffmann/ Forssman 2004:161), Skt. <i>yusmād</i>

2.2. *Indeclinables in PIE *-oti and *-eti, isolated case forms, and hidden ablatives: local adverbs.* It is possible to find similar pairings among (local) adverbs. These are again noteworthy because of the adverbs' tendency to preserve frozen case forms.

(a) Hittite *arahza* 'from outside' < **herh₂-ti*/**h₁gh₂-ti* (cf. Rieken 1999:68) and Vedic *ārāt* 'von fern, aus der Ferne' (EWAia 1:173; Puhvel 1984:135)

(b) Toch. A *täs* modal adverb 'thus'¹⁴ (< PIE **toti*) and Ved. *tād* 'thus' (RV, see EWAia 1:609), Hom. τῶ 'then' and 'therefore',¹⁵ Lith. *tō* genitive of demonstrative *tās* (m.) from PIE **tōd*.

2.2.1.1. *The preposition/preverb *proti.* Among the local adverbs of East Tocharian, one turns out to be particularly worth investigating: the local adverb and postposition *anäpräs*, which goes back to a univerbation **ono[d] próti/prōti*.

Toch. A *anaprä*, B *enepre* 'before' < PIE **ono[d]pro*

Toch. A *anäpräs*¹⁶ < PIE **ono[d]prōti* 'from before'

or Toch. A *anäpräs* instead of **anäpräs*¹⁷ < PIE **ono[d]prōti* 'from before'

13. PIE unstressed *-oti > Proto-Anatolian *-odi (lenition) > *-adi > HLuv. -ari (rhotacism); see Melchert 1994:60 and 2003:179.

14. See below, §2.3 (8).

15. Homeric τῶ—the reading of the papyri and most codices—is surely to be preferred to the reading τῷ or τῶ on the basis of the transmission alone. Deriving Homeric τῶ from an ablative **tōd* is a valid option. It is not possible, however, to rule out an alternative derivation from instrumental **roh₁* purely on formal grounds: monosyllables in a long acute-accented vowel change to circumflex intonation in Greek, cf. κῆρ from PIE **kérd* and Schwyzler 1939:377f. Nevertheless, the ablative option (< **tōd*) is clearly better semantically, at least in the case of temporal τῶ 'then' and plausibly also with causal τῶ 'therefore', assuming a shift from ablative to temporal to causal semantics. Given this, West's decision to print τῶ (West 1998:xxii and *passim*) purely on the basis of Apollonios Dyskolos, despite the textual transmission, ought to be rethought.

16. Toch. A *anäpräs* 'before' (MSN 1.2 [II.1] 25f., ed. Ji, Winter and Pinault 1998:68f.) with vowel weakening from A *anapräs*; see Pinault 1991:181f. As for the etymology see Hackstein 1996:102 n. 7.

17. Cf. *tāmas* (A 90 a4) alongside *tāmās* (A 57 b6, 333 b7 +).

What interests us most in the present context are two observations. First, it is hard to believe that *prās* (to be reconstructed as **prōti/prōti*) and the prepositions OCS *protivū*, Greek *πρότι, πρός*, Skt. *prāti* (< **prōti*) are not related. Second, East Tocharian *prās* is synchronically a transparent ablative in *ś*, whereas **proti* as presupposed by OCS *protivū*, Greek *πρότι, πρός*, Skt. *prāti* has never been conceived of as an ablative—at least not before now. Is it possible that PIE **proti* is itself a frozen ablative?

To tackle this question, let us first consider the semantics of *anāprās*. In the occurrence given below, *anāprās* is used as a postposition to a first person singular personal pronoun: *ñy anāprās*. Taken together with the verb *sām* ‘he stepped/came to stand’, the noun phrase *ñy anāprās* can be understood either as local ‘he came to stand in front of me’ (German ‘vor mir’)¹⁸ or as directional ‘he stepped in front of me’ (German ‘vor mich’).¹⁹

ñkāt yeś nakcu ñy anāprās epreram sām

“a god came to stand before me/stepped in front of me in the dark” (A MSN I.2 [II.1] asf.)

2.2.1.2. *Ablative and directional *proti: a contradiction?* We have just noted that *anāprās*, though morphologically marked as an ablative, is not ablative from a semantic standpoint, but rather locative or directional. In other words, *anāprās* would be an ablative with locative and/or directional meaning, and under our hypothesis the same goes for PIE **preti/proti*, whose descendants (OCS *protivū*, Greek *πρότι, πρός*, Skt. *prāti*) are mostly directional in the individual languages. But isn’t a locative or directional ablative a contradiction in terms? To anticipate the answer, by no means. There are in fact a host of parallels for ablative adverbs developing locative and directional meanings. Cf. for instance Latin *de ab ante* > Italian *davanti* ‘in front of’, Latin *ab ante* > Italian *avanti* ‘ahead, to the front’, or the directional/locative uses of the Hittite ablative (Melchert 1977:15f., 195f.) like Hittite *hantezziaz* ‘in front’, *kunnaz* ‘on the right’.

haššuš arahza wizzi tunakkišna paizzi

“Outside (from outside), the king is coming. He is entering the chamber.” (KBo 17.II iv 6’–7’ [StBoT 12 iv 32]). Cf. Starke 1977:199.

arahza paiwani MĀŠ.GAL-na peniwani

“We go outside and drive the goat away.” (StBoT 8 iii 43). Cf. Starke 1977:199.

However, parallels are not tantamount to an explanation. How are we to account for the shift from ablative to local and directional semantics?

(a) *Ablative to locative*. To begin with, a shift from ablative to locative can be induced by the context. Thus, when coupled with a verb of motion, an ablative adjunct will indicate the point of departure, with the ablative serving its core function, e.g., German

18. Ji, Winter and Pinault 1998:68f.: ‘a god came to stand before me in the dark’; Sieg, Siegling, and Schulze 1931:287: A 214 a2 ‘vor mir im Luftraum stand er’; Thomas 1990:31: ‘[Es] ging [kam daher] ein Gott des Nachts [und] stellte sich vor mir im Luftraum auf’; Pinault 1990:182: ‘un dieu venait nocturne, [et] en face de moi dans les airs se plaça’.

19. Cf. A 22 a2 *sām* ‘stellte er sich hin’ (Thomas 1957:19, 100), A 20 a4 *yok koc śmam* ‘richtete sich das Haar auf’ (Thomas 1957:99).

Er geht aus dem Haus. With non-motion verbs, however, things are different. Take, for instance, a verb with stative *Aktionsart* (lexical aspect) like *shine*. With a verb like *shine* the aspect of motion is certainly backgrounded, even strongly backgrounded; hence a shift of the focus of attention from the directionality of the shining to the location of the shining source is natural:²⁰

The sun shines (down) from the sky. > *The sun shines in the sky.*

Die Sonne leuchtet vom Himmel. > *Die Sonne leuchtet am Himmel.*

We are dealing with complementary perspectives that imply each other. The context apart, another factor triggering the shift from ablative to locative semantics is the change in constituency. In a sentence like (1) below, the prepositional phrase *from the distance* can be understood either as an adjunct to the verb (*he*) *hears* or as an adjunct to the object *the/a noise*. In the latter case, the semantics of *the noise coming from the distance* imply a locative interpretation, i.e., *the noise in the distance*.

(1) *He hears the/a noise [from the distance]_{adverbial PP}.*

(2) > *He hears [[the/a noise] [from the distance]_{adnominal PP}]*

Semantically = *He hears the/a noise, which is in the distance.*

(b) *Locative* >> *directional*. In addition to the shift from ablative to locative semantics, there is evidence for a distinct mechanism which brings about the change from locative to directional semantics. Thus, in some languages the concepts of locality and directionality may be more closely related than in others. A case in point is furnished by Latin verbs of placing (*ponere, locare, collocare, statuere, constituere*), which prefer to express the destination by a non-directional adjunct (*in fenestra ponere*). In other languages, by contrast, it is obligatory for adjuncts expressing the destination to be directional; cf. German directional *in* + accusative (*in das Fenster legen*). In Latin, it is the telicity of verbs of placing which downplays the directionality per se and highlights the destination, thereby enabling a local adjunct to stand in for a directional one. This state of affairs is very likely old. The double function of the PIE locative in signifying both the place *where* and the direction *whereto* was already noted by Delbrück (1893:217ff.); cf. also (and in the same vein) Neu 1980:13, 53f. on the Hittite locative.

(c) *Ablative* >> *locative* >> *directional*. Examples of a two-step process comprising a shift from ablative to locative to directional semantics can be found.²¹

• Skt. *paścād*

1) Ablative 'from behind'

nā nah paścād aghām naśat, bhadrām bhavāti nah purāḥ

"No vice would reach us from behind, and the virtue of auspiciousness would ever be before us." (RV 2.41.11bc)

²⁰ Cf. Delbrück 1893:559.

²¹ Cf. Gaedicke 1880:127f. with additional Vedic examples.

- 2) Locational 'behind' (*paścāt* in contextual opposition to *purāḥ*)

sā paścāt pātu naḥ purāḥ

"May Indra offer protection **behind us and before us.**" (RV 8.61.15d)

sā jāto āty aricyata paścād bhūmim ātho purāḥ

"Having been born he exceeded the earth at the back and in front." (RV 10.90.5c)

- 3) Directional 'to the back, backward'

gacchati purāḥ śarīram dhāvati paścād asamstutam cetah

"Forward moves my body, while **backward runs the restless heart.**" (Kalidāsa, *Abhijñānaśakuntalam* 1, Verse 31.1)

•Skt. *ārād*

- 1) Ablative 'from a distance'

sā sutrāmā svāvāṃ indro asmé ārāc cid dvésah sanutār yuyotu

"May that helpful and preserver Lord drive from us, even **from afar, all those who hate us.**" (RV 6.47.13cd)

- 2) Locational 'in the distance, far away'

hīranyadantum śúcivarnam ārāt kṣétrād apaśyam

"I saw the golden-toothed, bright-coloured, **far away from his place.**" (RV 5.2.3ab)

- 3) Directional 'to far away'

ārād vīśyā īśavaḥ patantu rukṣāsām

"**Far away let the discharged arrows of the demoniacs fly.**" (AV 2.3.6, trans. Whitney)

•Skt. *adhās-tād*

- 1-2) Ablative 'from below' and locational 'below, beneath, under'

vṛśēm adhāstād vī rujā sāhasva jāhī rākṣo . . .

"Cut him up (from) below, split him, subdue him, **kill the demon.**" (RV 3.30.16c)

- 3) Directional 'down', fig. 'to hell' (Classical Sanskrit)

adhastād gatam

"gone to hell" (Bāṇa, *Kādambarī* 289)

• Latin *intus*²²

1) Ablative 'from inside'

eo tibi argentum iubebo iam intus efferri foras

"I will order the money to be brought out there for you **from inside**." (Plautus *Bacch.* 95)

2) Locational 'inside'

intus est in aedibus

"He is **inside**, in the house." (Plautus *Mil.* 483)

3) Directional 'inside'

intus in artus

"**into** the limbs" (Lucretius 2.711)

iamque fores aperit, iam ducitur intus ...

"(She) opens the door and is brought **inside** ..." (Ovid *Met.* 10.457)

Even within the same language, the shift from ablative to locational and further to directional semantics can occur more than once. To name one significant example, the Italic branch of Indo-European and notably the Romance languages²³ show this process recurring in the same words, each time entailing a repair strategy to reinforce the ablative semantics by lexical means:²⁴

(a) PIE **h₂en* 'in' > Lat. *in*:

- 1) → ablative *intus* 'from inside' (Pl. *Bacch.* 95) > locational 'inside' (Pl. *Mil.* 483)
- 2) → renewed ablative *de intus* 'from inside' > locational French prep. *dans* 'within, inside' (cf. adv. *dedans* 'within, inside')
- 3) → renewed French ablative *de dedans* 'from inside'

(b) Latin ablative *unde* 'whence' > locational 'where'

- 1) → renewed ablative *de unde* 'whence' > Spanish locational *donde* 'where'
- 2) → renewed ablative Spanish *de donde* 'whence'

Returning to our initial question as to whether the locative/directional meaning of East Tocharian *anäpräs* is in contradiction to its posited ablative origin, we are now in a position to answer this question in the negative. Nor does the directivity of Skt. *prāti* preclude its derivation from a petrified ablative **proti* 'from ahead'. As we have seen, the

22. Cf. Hofmann and Szantyr 1972:278.

23. For documentation see Meyer-Lübke 1899:159f.; cf. Michel 1997:97f.

24. On the process of repetitive lexical renewal see Kurylowicz 1964:190, Lehmann 2002:20f. (reinforcement), and with additional examples Hacksstein 2004b:270.

developmental pathway leading from ablatival to locative and ultimately to directional use of adverbs is natural, and recurs both within the same language and across languages, related and unrelated.

2.2.1.3. *Word-formational vestiges of ablativ* **proti*. The comparative evidence of parallel developments apart, vestiges of the older ablativ meaning of **proti* ‘from ahead’ are still traceable in older layers of derivation. A promising candidate is the PIE compound **preti-h₃k^w-o-*, **proti-h₃(e)k^w-o-*, as presupposed by Skt. *prātika-*, Greek *πρόσωπον* and Toch. A *pratsak*, B *pratsāko*. The semantics of this compound have mostly been understood as active ‘looking ahead’, presumably on the basis of the meaning ‘face’, found in Sanskrit and notably in Greek. This, however, does not exhaust the range of meanings attested for this compound. Other languages, like Tocharian, attest the meaning ‘chest’, which – unless understood metaphorically – would seem more compatible with a passive reading, i.e., ‘that which is seen (from) ahead’. An underlying passive reading²⁵ would also fit better for a number of meanings attested for Vedic *prātika-*, which frequently can be glossed as ‘outward appearance’. In these cases, *prātika-* is more plausibly explained as designating an object ‘seen from ahead’, and less likely to be conceived of as an agentive compound ‘looking ahead’; the same holds for Skt. *ānika-* ‘face’ << ‘(what is) looked at’ (passive). Among the referents of Vedic *prātika-* we find the brightness of the dawn (RV 6.50.8 and 10.88.19), the outward appearance of a warrior described as resembling a cloud (RV 6.75.1), and the shining surface of the earth reflecting the radiant sun (RV 7.36.1).

A further piece of evidence indicative of the original ablativ semantics of **proti* is furnished by Greek. While it is normal for the reflexes of PIE **proti* to govern the accusative in the various daughter languages, and somewhat less often the dative (as in OCS *protivo*, *protivū*, LLP 3:387), Greek is strikingly deviant in that it is the only IE language to show genitival government after **proti* when used in the ablativ sense (for which see Chantraine 1986:133f.). To regard this use as an innovation does not carry much conviction in light of old, partly parallel constructions like *ἐκ/ἀπό* + genitive. By contrast, the explanation as an archaism would be perfectly consistent with the posited ablativ use of **proti*.

In light of the ablativ origin of PIE **preti*/**proti*, the reconstruction of sentences like the following appears plausible. And crucially, a change in constituency (ablativ adjunct ‘from in front’ > postposition ‘towards, against’) could induce a change from ablativ to directional semantics:

(a) PIE **t-m preti cuidet*

abl. ‘him from in front she saw’ >> direct. ‘she looked towards him’

(b) PIE **t-m preti cueuk^wet*

abl. ‘him from in front she spoke’ >>> direct. ‘she spoke towards him’

²⁵As independently supported by OCS *kako*, *tako* < PIE **k^wo-h₃k^w-o-*, **to-h₃k^w-o-* (etymology first given in Szemerényi 1956:99 n. 1) with passive semantics ‘what-like, seen like what’, ‘that-like, seen like that’. For transitive PIE **h₃ek^w-*, see LIV² 297. The passive use of **h₃k^w-o-*, however, is not meant to exclude an active meaning in other cases. Depending on the internal syntax of compounds, an active reading with first compound members that function as adjuncts expressing a shift of the perceptual focus (**h₃k^w-o-* : **apo-h₃k^w-o-* ‘looking away’: ai. *āpāka-*; cf. Klingenschmitt KS.540 n. 23) is certainly possible and attested.

2.3. *Quantifying pronouns in -ti* (PIE *to-ti, *k^wo-ti/k^we-ti, *H₁o-ti) as frozen ablatives. Prepositions and local adverbs are not the only lexical domains to show traces of petrified ablatives in *-ti. The same can be shown to apply to pronouns as well. A case in point are the quantifying interrogatives ('how many/much?') and demonstratives ('that many/much') in *-ti, Latin *quot, tot*, Young Avestan *čaiti*, Skt. *kāti, tāti* etc. from PIE *k^wo-ti/*k^we-ti, *toti/*teti. These PIE forms, like their descendants in the daughter languages, have the appearance of uninflected forms. The indications are, however, that they originated as inflected case forms, and more specifically as archaic *ti*-type ablatives.

Our working hypothesis will be, first, that the interrogative numeral pronouns Latin *quot*, Young Avestan *čaiti*, Skt. *kāti* descend from original pronominal ablatives and are akin to the Hittite interrogative ablative *kwēz*; and, second, that the demonstratives Latin *tot*, Skt. *tāti* are likewise of ablatival origin, with a possible cognate in East Tocharian ablatival-modal *tās* 'thus'.

In comparing the reflexes of PIE *k^wo-ti/*k^we-ti, *toti/*teti semantically, a striking dichotomy emerges. The Hittite and Tocharian forms attest to an ablatival[-modal] reading, while the quantifying function is characteristic exclusively of the non-Anatolian-Tocharian branches.

HITTITE/TOCHARIAN:	PIE	REMAINING BRANCHES:
<i>ablatival(-modal)</i>		<i>quantifying</i>
Hitt. <i>kwēz</i> also modal 'how' ²⁶	< ablative *k ^w óti/*k ^w éti 'whence, of which kind, in which way, how?'	> 'how [much/many]?' Lat. <i>quot</i> , Av. <i>čaiti</i> , Ved. <i>kāti</i> (analogical initial)
Toch. A <i>tās</i> also modal 'so' ²⁷	< PIE ablative *tóti/téti 'thence, of such a kind, so'	> Lat. <i>tot</i> , Ved. <i>tāti</i> 'so [much/many]'; cf. Ved. <i>tāt</i> 'so, thus'

26. Cf. also the newly identified ablative-instrumental HLuvian *REL-ati* (/kwadi/ 'with what/which' from PIE *k^wóti), Melchert 2003:191 and n. 19. (I owe this reference to R. Plöchl *per litt.*) No unambiguous trace of *k^wóti/*k^wéti survives in Tocharian. Toch. A *kāś* 'whence' is an inner-Tocharian creation, which superseded *k^wóti/*k^wéti in the prehistory of Tocharian. Despite claims to the contrary, Toch. AB *kos* 'how much, how far' cannot be considered a possible reflex of PIE *k^wóti/*k^wéti. Invoking an allegro variant *k^wot (alongside *k^wosi; cf. Hilmarsson 1996:169) would not resolve the matter, since a final syllable triggering the *u*-umlaut of (PIE */o/ >) PToch. *e to Toch. AB /o/ would be needed. The derivation of AB *kos* is open to other suggestions. Phonologically most straightforward is the suggestion (Hilmarsson 1996:169) of a preform *k^wo-swōs, or alternatively *k^wō-swō (Hackstein 2004a:177). With a slight modification one might also think of a preform *k^wos-swōs 'in which way', 'what so/thus' < *k^wod-swōs (cf. structurally *Hjod-k^wos in Greek ἤϊ(π)ως). Adams' alternative proposal to derive AB *kos* from *k^weh₂-wots (Adams 1999:207) would contradict the expected reduction (and loss) of word-final PIE *-s in Proto-Tocharian, cf. Ringe (1996:74–6).

27. Toch. B *tot* 'so much, so many, so far' has recently been proposed as a possible reflex of *toti (Adams 1999:310). It is not clear, however, how to reconcile the *i*-apocope and the missing final syllable with the /ō/ needed to trigger the umlaut of (*o/ >) */æ/ to /o/ in the first syllable. Also phonologically difficult is Adams' alternative proposal, Toch. B *tot* from *teh₂-wots (Adams 1999:310). Nor can Hilmarsson's suggestion *rodō = Skt. *tādā* be upheld as long as one takes Toch. /ts/ to be the regular outcome of intervocalic PIE *d; cf. Hackstein 2001:18–21 with references. A more promising starting point is the neuter demonstrative PIE *rod. Taking up again the old proposal of analyzing PIE *rod as an originally emphatic reiterative formation with reduplicated demonstrative *to-to (see Szemerényi 1973:60, 1990:217), which would result in *tot (by sandhi or apocope) and ultimately in *rod (by the voicing rule of word-final dentals; cf. Ringe 1997:134–8), one could reasonably propose an instrumental of this same base *to-to, PIE *totoh, (> *totō) 'thereby, thus'. This instrumental form would

These descriptive facts lend themselves to a diachronic interpretation. Anatolian and Tocharian are more conservative here in retaining the original ablatival and modal function. The remaining Indo-European branches, by contrast, are innovative in converting the pronominal *ti*-ablatives into quantifying numeral pronouns.

From the etymological link posited between Hittite *k^wez* etc. and Latin *quot* etc., it follows that the quantifying meaning 'how many' of Lat. *quot* etc. must have evolved from an original ablatival function. This leads one to ask whether a semantic development from an ablatival-modal function to a quantifying one is plausible. In fact, closer inspection reveals many instances of the shift

Qualitative >> quantitative.

(1) Depending on its context, the Latin instrumental-modal interrogative *quī* 'how?' can take on a quantifying meaning 'how much/many', when occurring as an adjunct of price. In the following Plautine passage (*Persa* 661), someone inquires about the price of a slave girl, saying literally, "How she is offered/sold, at that amount give indication," which may be rendered as, "Name at what amount she's being offered."

(*Tum tu pauca in verba confer:*) *quī datur, tanti indica.*

(2) French *combien* 'how much/many' can be traced back to Old French *con bien* and Latin *quomodo bene* 'how well'. Depending on the semantics of the accompanying verb, a shift to a quantitative reading may occur, e.g., *How/What is it? > How much is it?* Compare Old French *ja ne savras conuistre con bien tu vaudras* (Chrétien de Troyes, *Cligés* 2565f., ed. Micha 1982:78) "you will never know what (lit. how well > how much) you are worth."

The use of a qualitative interrogative to signify a quantitative meaning is common in other languages as well; compare, for instance, English-German translation equivalents such as English *What day (are you coming)?* = German *Am wievielten Tag (kommst du)?*

(3) A striking Anatolian-Tocharian correspondence is the use of the demonstrative or interrogative pronoun with the enclitic simulative marker Hittite *-man*, Luvian *-mant*, Lycian *-mēt*, and Tocharian B *-mänt*. While Tocharian B *se-mänt*, *ce-mänt* 'this-like, such (a)',²⁸ Hittite *kuit-man* 'while, as long as, until'²⁹ (cf. dialectal German 'wie dass, solange dass'), and CLuvian *ku-man* 'when, if' show the original qualitative meaning, Lycian *kñ-mē*, *kñ-mētis* 'as many as'³⁰ deviates in that it has developed a quantifying reading.

(4) The Latin quantifying pronouns *quantus* and *tantus* form part of a set of *nt*-derivatives built from the pronominal stems **mo-*, **k^wo-*, **H₂io-*, and **s/to-* (Hackstein 2004b:286ff.). Crucially, however, not all of these four *nt*-derivatives show quantifying function. Rather, the *mo*-derived *nt*-stem of Tocharian and the **H₂io*-derived *nt*-stem, as found in Indo-Iranian, bear witness to a qualitative function.

directly yield Toch. B *tot* 'so much' with no further complications. As for the semantic shift from 'thereby, thus' to 'so much', a host of parallels are available, for which see below (sections 1–8).

28. E.g., nominative *se-mämmt ñyatse empele* 'such a terrible danger' (B 295 b4 MQ), oblique *ce-mänt reki* 'such a word' (B 225 b2 MQR).

29. Cf. Sternemann 1966:271–4.

30. Cf. Laroche 1979:69f. and Melchert 2004:33.

qualitative: modal * <i>meh₂nt</i> Toch. A <i>mānt, mant</i> 'like, as, so' ³¹	quantifying * <i>k^weh₂nt</i> Lat. <i>quantus</i> 'how' 'much, how many'	qualitative: modal, temporal * <i>H₁eh₂nt</i> Skt. <i>yāt</i> 'in- asmuch as, as soon as' (RV), 'inasmuch as, since' (AV); GAv. <i>yāt</i> 'inasmuch as, since' (Narten 1986:164-7)	quantifying * <i>teh₂nt</i> Lat. <i>tantus</i> 'that much, that many'
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(5) Another case of the shift from qualitative to quantitative semantics is implicit in the comparison of Latin *quālis* 'which (kind of)', *tālis* 'such (a)' (PIE **k^weh₂-li-*, **teh₂-li-*) to Baltic and Slavic cognates, all of which have extended their meaning to include quantitative function, e.g. Lithuanian *kōl(ei)* 'how long', *tōlei* 'so long', and (with **k^wo-*, **to-* instead of **k^weh₂-*, **teh₂-*³²) OCS *kolĭ* 'how' and *kolĭ kraty* 'how many (times)' (LLP 2:42), *tolĭ* 'thus' and *tolĭ kraty* 'that many' (LLP 4:473ff.). Compare also the abstract nouns Latin *quāli-tās* 'quality' (**k^weh₂-li-*) versus OCS *koli-čĭstvo* (LLP 2:41, **k^wo-lei-*) 'quantity, number'.

(6) Sanskrit *iti* 'thus', when used to conclude an enumeration, takes on the meaning 'so much', e.g.:

yā evaṃ vidvān vākovākyaṃ itihāsapurāṇaṃ ity āharahaḥ svādhyāyāṃ adbhite

"who knowing this, studies day by day the dialogue, the traditional myths and legends, [*iti* =] so much, for his lesson" (ŚB 11.5.7.9; Eggeling).³³

Sanskrit *iti* was also assumed to be related to quantifying *kāti* by Wackernagel (1954: 640): "Verwandt [mit *kā-ti*] ist wohl das adverbiale *-ti* in v. *ī-ti*". There is in fact evidence to substantiate this claim, notably the phraseological match between specifications of time using Hitt. *kuēz*, Greek *ποσσ-*, and Latin *cot-* on the one hand, and Skt. *ity-* on the other hand as their first member; Hittite, Greek, Latin and Sanskrit furnish evidence for a temporal locution coupling **k^wóti*/**k^wéti*/**íti* with the coreferential expression for 'day':

INTERROGATIVE

Hitt. *kuēz šiwattaz* 'from what day, since when' = '(for) how many days' ~ *apēz šiwattaz* 'since that day' (KUB 14.8 obv. 31 +, see *HW*² 1:142), Greek *ποσσ-ἡμαρ* (Il. 24.657) 'how many a day'

INDEFINITE

Lat. *cotti-diē*
'on whichever
day'

DEMONSTRATIVE

Skr. *ity-ahé* (ŚB 3.3.4.17 and 19; 9.5.1.8) 'on such and such a day' (Eggeling), 'an dem und dem Tage' (PW)

This phraseological match illustrates, first, the correlation between *kāti* and *iti*, and secondly the aspectual shift from a temporal starting point to an expression of duration ('from what day, since when' > '(for) how many days'), and finally the ablative origin of **k^wóti*/**k^wéti* as in *ποσσ-ἡμαρ*, given that its Hittite correspondent is synchronically still clearly an ablative.

31. For the transition 'like' → 'so, thus', see Hackstein 2004b:284.

32. See Vasmer 1955:643 s.v. *skoliko* and more explicitly Szemerényi 1956:113 n. 3.

33. Cf. also *PW* 1.790 s.v. *iti* and Böhtlingk 1837:519.

(7) As has become clear from the examples in (1) through (6) above, the qualitative-modal use of adverbs and ablatives provides a frequent source for a quantitative reinterpretation. In this respect, it is worth noting that the Hittite ablative *kuēz* also appears in modal function:³⁴

DU URUNerik TUKU-an ZI-an
kuēz KASKAL-ahmi, URUTanizilan *kuapi* harkanumi
n=an ZI-an *apēz* ŠE₁₂-numi

“The angry mind of the Stormgod of Nerik,
 in that (modal *kuēz*) I march into battle [and] if (*kuapi*) I destroy the city of Tanizila,
 will I thereby (*apēz*) soothe it?”³⁵ (KUB 5.1 i 92)

(8) An adverbial-modal ablative **toti* is a possible source for East Tocharian *tās*.³⁶ There are instances where East Tocharian *tās* is employed as a modal adverb. Thus the closing section of the *Prātimokṣasūtra* (ed. Schmidt 1989:74, sub 353, V 4 Pr. 2) shows East Tocharian *tās tūprem* as the translation equivalent of Sanskrit *etā-vat* ‘so much’:

Sanskrit
etā-vat tasya bhagavataḥ sūtragatam

=Tocharian A
tās tūprem atsam cami ṅom-kālywātsyāp sutram kälko

“So-much forsooth has become part of the venerable’s Sūtra.” (353 a3)

For another attestation compare the prepositional phrase, attested in the East Tocharian *Maitreyasamitinātaka* (ed. Ji, Winter, and Pinault 1998:160):

tās tūprem māk k₂lewasāśiäl siya(k)
 “together with so many women” (Toch A MSN 23 [III.4] a2)

In sum, the suggested account of the quantifying pronouns in **-ti* as petrified ablatives

34. Cf. ablative-instrumental HLUvian *REL-ati* (*/kwadi/* ‘with what/which’, see n. 26 above with references. Cf. also CLuvian *kwati* ... *apati(n)* ... ‘as ... , thus ...’ in the following note.

35. The interpretation of this passage is not unanimously agreed upon. Haas (1970:17) has understood it as a single complex sentence. Some prefer to break it up into two sentences, e.g. Ünal 1974:49, Puhvel 1997:220. There is, however, unequivocal evidence in favor of a correlative construction *kuēz* ... *apēz* ... , e.g.:

a. *nu man* LÚ.MEŠ₃ME-ŠE-DI
 b. *kuēz* parṣnan harkanzi
 c. *n=at* *apēz* peššiazzi
 a. “If (there are) M.,
 b. where they crouch down
 c. from there he throws it ...” (KUB 25.3 obv. iii 28–30; cf. HW² 1:144)

Passages like this strongly suggest that KUB 5.1 i 92 should be construed in an analogous fashion.

A parallel to *kuēz* ... *apēz* ... is furnished by the CLuvian correlative construction *kwati* ... *apati(n)* ... ‘as ... , thus ...’. On the latter see Meichert 2003:207.

36. For the phonological development see n. 7 above.

has two virtues. First, it explains the status of these forms as indeclinables. Second, it explains their indifference to number,³⁷ which still reflects the state of affairs found with the Anatolian and Tocharian ablative.

3. *Summary.* Returning to the initial question of whether there is an etymological relation between the *ti*-type ablative and the *d*-type ablative, we may now conclude that there is ample evidence to support such a connection. Among the indications are etymological equivalents where the two types of ablative formation stand in opposition to each other. These can be found in the pronouns and as frozen case forms in the guise of adverbs.

As long as the two ablative types still remain an integral part of the nominal paradigm, the dichotomy between them largely coincides with the linguistic differentiation between Anatolian-Tocharian (and Classical Armenian) and the other IE languages. Once removed from the paradigm, however, this dichotomy becomes blurred, in that remnants of *ti*-type ablatives can also be found as extraparadigmatic archaisms in the non-Anatolian-Tocharian(-Classical Armenian) area. Among these we find particles (**(h)eti*), adpositions (**preti/*proti*), and interrogatives (**k^weti/*k^woti*).

As a result of the foregoing discussion, the contraction theory, as assumed for the *d*-type ablative, has been further substantiated. Positing originally agglutinating case morphology for PIE is by no means implausible. The formation of the ablative via agglutination in the PIE case system is parallel to PIE locative formations with the postposed adposition PIE **h₂en* 'in',³⁸ e.g. PIE **d^heg^hom* 'earth', with locative PIE **d^heg^hm-en* (Skt. *jmán* 'on (the) earth') from **d^heg^hm-en*³⁹ alongside locative PIE **d^heg^hm(i)* (Hitt. *dagan*). Agglutinative case formation with postposed **-en* continues to occur in a number of the Indo-European daughter languages including Lycian (adverb *pddē* 'right there, right away' < **pod-en* 'afoot', Hajnal 1995:183), Sabellic (von Planta 1897:44off.), and Lithuanian (inessive *žem-ėn* 'on the earth').

The status of the PIE ablative as an originally secondary (agglutinating) case form as opposed to primary (inflectional) case forms also accords well with typological observations and in particular with the case hierarchy set up by Blake 2001:153ff. According to this hierarchy the ablative case is found at the right end of a scale ranging from least marked to highly marked, and from the more essential to the less essential, implying that the tendency for language to dispense with a distinctive ablative case (and to express ablative semantics analytically) is quite strong.

Nevertheless, it must be admitted that the analysis I am proposing also has some loose ends. Although an agglutinating origin of the PIE ablative is secure, some uncertainties remain as to the exact components of the contraction. For one thing, the agglutinated particle can be set up as either **eti* (cf. Greek *ἐτι*, Skt. *āti*, Lat. *et*, Goth. *ip*, Toch. B 5), **oti/ati* (cf. OCS *otŭ* 'away ... from'),⁴⁰ **ati* (cf. Greek *ἀτ-ἄρ*, Lat. *at*, Goth. *ap-þan* 'but',

37. Cf. Lat. *quot* and Skt. *kāti* with a coreferential plural noun, e.g. Old Latin *quot inga* (Cato Agr. 62) and Vedic Sanskrit *kāti yōjanā* (RV 10.86.20).

38. See in detail Nussbaum 1986:187–90, 289–91.

39. Nussbaum 1986:190, Forssman 2000:50.

40. Cf. Kappus 1903:13f., Hirt 1927:170, Szemerényi 1990:231 and 233 *sub* (22) with references. The reconstruction of OCS *otŭ* as PIE **oti/ati* can only be upheld under the premise that OCS *-tŭ* goes phonologically back to **-ti*; cf. Aitzetmüller 1991:177. As for the formally comparable case of verbal 3sg. OCS *-tŭ* < PIE **-ti*, an (additional) analogical influence, exerted by the PIE imperative ending **-tu* is not excluded; cf. Forssman 1981 and, differently, Cowgill 1985:106.

OIr. *aith-* ‘again’) or apheresized **-ti* (as seen in the Anatolian and East Tocharian ablative endings). It is possible, however, to reckon with ablaut variants (cf. **preti/*proti*) or with different pronominal stems, e.g. **e-*, **a-* (without initial **h₂* because of Anatolian, see Starke 1982:416 n. 40a). Most branches of Indo-European – viz. Italic, Greek, Albanian, and Lithuanian – presuppose **-ōti > *-ōt > *-ōd*. Latvian presupposes **-āti > *-āt > *-ād*, if the formation is not analogical (cf. Hock 2005:16). Hittite and Tocharian bear witness to a variant **-ti* showing apheresis of the initial syllable.

A second and major problem is the question of how to envision the first component of the contraction, i.e., as a bare stem in **o-* or as an inflected case form of some kind. The present analysis and the indications of agglutination surely tip the scales in favor of an inflected case form, leaving us, however, with the problem of which case form to opt for. Tocharian would point to an oblique-accusative. It is true that the oblique-accusative functions as a basis for many other case forms in Tocharian, indicating that some sort of generalisation (and levelling) was at work in Proto-Tocharian. Nonetheless, Vedic construes *āti* (the particle thought to be cognate with the ablative morpheme under the present proposal) with the accusative, e.g. Vedic *jānām āti* RV 1.64.13a, 2.2.10b +.⁴¹ However, a phonological solution somehow reconciling a putative PIE syntagm PIE **h₂ek_uom eti* with **h₂ek_uōd* seems unlikely, and assuming allegro-variants with irregular drop of word-final **-om* would seem ad hoc.

From a Hittite standpoint, and judging from postpositionally derived formations such as locative-derived ablatives⁴² (Hitt. *per=z(a)* ‘from in the house’), another possibility suggests itself. One could posit a syntagm PIE **h₂ek_uoj eti* ‘from on the horse’. Hypothesizing a sandhi development of locative **-oj* to **-o∅* before *eti* (with a parallel in Skt. *nagare iha* ‘in this city here’ → *nagara iha*) and a subsequent contraction plus *i*-apocope, the actually attested outcome **-ōd* results.

A final problem is how to account for the declensional restriction of the *d*-type ablative to the *o*-declension outside the pronouns. Under the present hypothesis, which assumes the *d*-type and the *ti*-type ablatives to be ultimately identical, this constraint can only be secondary. For tracing the ablative morpheme back to an unbound postposition implies that it could originally be tacked on to any stem regardless of its declensional affiliation, which is precisely the situation found in Hittite and Tocharian. Two scenarios are possible. If the restriction of the *d*-type ablative to the *o*-stems is primary, preserving an earlier stage of the spread of ablative *{-ed}* from the personal pronouns, the generalization of *{-eti}* to all other declensions in Anatolian and Tocharian would be a secondary development. If, on the other hand, the constraint is secondary, a *d*-type ablative could originally be formed from all stem classes but subsequently came to be restricted to the *o*-stems in the wake of a functional extension of the inherited genitive and dative morphemes, whose functional breadth included ablative function. The entire question merits further study.

41. Matzinger (2005:124) rejects Bugge’s account of the Armenian ablative morpheme. His main argument is the functional discrepancy between directional Skt. *āti* (governing the accusative) and the ablative function of the ablative morpheme. Following the same line of reasoning, however, one would also have to reject the connection of Italian local and directional *davanti* ‘in front, ahead’ with Latin ablative *de ab ante* in light of their semantic discrepancy.

42. Not assumed to be a recent feature of Hittite morphology; cf. Jasanoff (1973:126): “the oldest form of the ablative in Hittite continues an older syntagm endingless locative + particle **-ti*.”

Abbreviations

- EWAia* = Mayrhofer, Manfred. 1986–2001. *Etymologisches Wörterbuch des Altindoarischen*. Carl Winter.
- HW²* = *Hethitisches Wörterbuch*. Zweite, völlig neubearbeitete Auflage auf der Grundlage der edierten hethitischen Texte. Carl Winter. 1975–.
- Klingenschmitt KS* = Klingenschmitt, Gert. 2005. *Aufsätze zur Indogermanistik*, ed. Michael Janda, Rosemarie Lühr, Joachim Matzinger, and Stefan Schaffner. Verlag Dr. Kovač.
- LLP* = *Slovník Jazyka Staroslověnského (Lexicon Linguae Palaeoslovenicae)*, 1–4. Academia. 1966–97.

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