



Local Adverbs in Hittite: Synchrony and Diachrony

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Abstract

Words expressing spatial relationships in Hittite are synchronically adverbs, not case forms of nouns as sometimes alleged. They are attested in three distinct syntactic roles: postpositions, preverbs, and freestanding adverbs. Some of these local adverbs are inherited from Proto-Indo-European, while others reflect petrified case forms of nouns. Postpositions from inherited local adverbs originally were construed with the dative-locative, while those from nouns took the genitive. The agreement patterns of enclitic possessive pronouns with postpositions show that the nominal postpositions developed variously from dative-locative, ablative, and accusative case forms. By attested Hittite, the postpositions from inherited adverbs and those from nominal case forms have mutually influenced each other's syntax, and both sets can be construed either with the dative-locative or with the genitive (including enclitic possessives).

Introduction

Local adverbs (also labeled place words) comprise the class of words exemplified by English 'up', 'down', 'in', 'out', 'on', and 'off'. These typically appear in a variety of syntactic roles. For example, English 'up' serves as a freestanding adverb indicating place ('The draw-bridge is up'), as a preposition ('Jill ran up the hill'), and as a verbal particle that spatially restricts the sense of a verb ('Jack turned up his nose'). In SOV languages, the unmarked position of the adverb in the last usage is immediately before the verb, hence the label 'preverb'. Adverbs in their role as preverbs often also develop extended and even non-spatial meanings (like the verbal particle in 'Jack ate up all the food.').

Local adverbs in Hittite (and in ancient Greek and other older Indo-European languages) have recently attracted much attention from researchers because they raise a number of serious issues, both synchronic and diachronic (see Hajnal 2004 on this class in Homer and Mycenaean Greek). Among these questions are: is the tripartite functional contrast cited above truly valid? If it is, by what objective criteria can we determine the syntactic role of a given example, especially in an ancient, corpus-based language?

In the case of Hittite, are these words actually adverbs at all, or are they rather inflected case forms of nouns? If they are not nouns as attested, are most or all of them nevertheless petrified relics of prehistoric nominal paradigms? How are we best to account for the fact that Luvian, Hittite's closest relative, shows prepositions like English, while Hittite has exclusively postpositions?

Through the efforts of a number of scholars our understanding of the formal and functional behavior of local adverbs in Hittite has advanced considerably in recent years, but much work remains to be done, and all of the questions posed above remain the subject of debate. The topic of local adverbs also exemplifies two methodological problems that have dogged the study of Hittite and its relationship to the rest of the Indo-European languages.

The first of these is a long-standing tendency to exaggerate the supposed archaicity of Hittite. In 1917, Bedřich Hrozný showed that Hittite, remains of which had been found in central Turkey beginning in 1906, is an Indo-European language. This unexpected discovery of another member of the family whose texts date from the sixteenth to the thirteenth centuries BCE caused a sensation and forced a major re-evaluation of the reconstructed parent language Proto-Indo-European (henceforth PIE). Hittite conspicuously lacks many of the complex formal features that had been posited for PIE chiefly on the basis of Sanskrit, Greek, and Latin. This difference immediately sparked a fierce debate that continues to this day: does Hittite lack such features because it reflects a prehistoric stage of PIE so archaic that they did not yet exist, or because it has lost them? There was little disagreement, however, regarding those instances where Hittite does share features with the other ancient Indo-European languages, but in a somewhat different form. Here there was for half a century a near consensus that Hittite consistently reflects the more archaic stage, while the others have innovated. Nowhere has this attitude been more prevalent than in regard to the local adverbs.

The second methodological problem has been a similar tendency to overvalue the position of Hittite within its own subfamily. The existence of other Indo-European languages in Anatolia has been known since 1922, and an Anatolian subfamily has been recognized since the 1930s. However, due to the accident of its far richer documentation, Hittite has been given a privileged status, and too often features of Old Hittite have been implicitly regarded without argumentation as representing the state of affairs in Proto-Anatolian. The facts of other Anatolian languages such as Luvian or Lycian have either been ignored or reflexively taken to be innovative.

The last two decades have seen the development of a more balanced and nuanced approach to the overall problem of the archaicity of Hittite vis-à-vis both the other Anatolian languages and the rest of Indo-European. See among others the works of Oettinger (1986), Zeilfelder (2001), and especially Rieken (forthcoming). In what follows, I re-examine in this light

some (by no means all) of the outstanding problems regarding local adverbs in Hittite and their prehistoric origins, first attempting to establish the synchronic facts of their use and then more tentatively to trace their development from Proto-Anatolian and Proto-Indo-European.

Synchronic Issues

HITTITE LOCAL ADVERBS AS NOUNS

Starke (1977: 131) argues that the Hittite local adverbs are synchronic case forms of nouns and are never postpositions or preverbs (see also from a very different perspective Wagner 1985: 68). This claim may be easily refuted on multiple grounds. First, as nouns the local adverbs would be highly and suspiciously defective in their inflection and use, since they would never occur in the nominative or accusative case and since they never function as either subject or direct or indirect object. Second, some local adverbs cannot plausibly be analyzed as ‘dimensional’ case forms of nominal stems (i.e. as dative-locative, allative, ablative, or instrumental). For example, *āppan* ‘behind’ with its ending *-n* cannot be identified as any dimensional case form of an alleged noun whose allative is supposed to appear in *āppa* ‘back(wards)’.¹

Third, analysis of preverbs as allative case forms of nouns such as *anda* ‘in(to)’ as ‘ins Innere’ = ‘into the interior’ (Starke 1977:149) leads to absurd interpretations (see already Salisbury 1999: 62), as the following Old Hittite examples show: *anda* + *šittariye-* ‘to seal’ = ‘secure a sealed deed for’ (Laws §§40–41, see Hoffner 1997:47–50), *anda* + *auš-* ‘to see’ = ‘to look at, covet’ (KBo 25.122 iii 1 and passim), *anda* + *lag-* ‘lean, bend (intr.)’ = ‘lean up against’ (KUB 36.110:10). Nor can the use of clause-initial adverb *anda* plus contrastive conjunction *-ma* (*anda* = *ma*) to mean ‘furthermore’ (KBo 20.31:5, see Hoffner 1992: 296) be explained as ‘ins Innere’.² Starke can likewise offer no explanation for how a noun *šēr* ‘Oberseite’ = ‘top surface’ means ‘for’ in:

šēr=šit=wa *šarnikmi*
for=of him=QUOTE make restitution-1SG.PRES.IND.ACT
‘I will make restitution for him’ (Laws §95).

Fourth, also false is Starke’s claim (1977: 155–159) that in Old Hittite the directional adverb always precedes a noun in the allative or dative and that these are two nouns in apposition. We find examples both with adverb before the noun and with adverb following with the same sense:³

[] *anda* ^{DUG}GÌR.KIŠ-*ya* *harnaueni*
[] into bowl-DATLOCSG sprinkle-1PLPRESINDACT
‘We sprinkle [] into the bowl’ (KBo 8.74+ ii 17)

[^{DU}]GÌR.KIŠ-*ya=an* *kuit anda war-[]*
bowl-DATLOCSG=PARTICLE what into VERB[]
‘What is *w.*-ed into the bowl’ (KBo 17.25 Ro 3)

For the adverb following the noun see also:

n=aš ANA KUR kūruri an[da] paizzi
 CONJ=he to land enemy into go-3SGPRESINDACT
 ‘And he goes into an enemy land’
 (Laws, §23, see Hoffner 1997:32 – not credible Starke 1977:55)

3[?] NINDA kištun LÚ.MEŠ MUḪALDIM LUGAL-i parā appanzi
 3 *k*-bread-ACCSG cooks-NOMPL king-DATLOCSg out hold-3PLPRESINDACT
 ‘The cooks hold out 3(?)*k*. to the king’
 (KBo 17.21+4 and elsewhere; false Starke 1977: 179–180)

LUGAL-i parā 1-ŠU paizzi
 king-DATLOCSg forward once go-3SGPRESINDACT
 ‘He goes forward once to(wards) the king’ (KBo 17.18 ii 13).

Finally, the fact that some local adverbs (as postpositions) are construed in Old Hittite with nouns in the genitive is not by any means sufficient evidence to prove that the former are themselves nouns. Greek μέχρι ‘up to, as far as’ and many other Greek adpositions are construed with the genitive (some in competition with other cases), but no one for that reason argues that they are nouns. In any case, we find also in Old Hittite postpositions with the dative-locative as well as the genitive: LUGAL-*i* *peran* king-DATLOCSG + ‘in front’ (KBo 17.15 Vo 18) beside LUGAL-*waš* *pēran* king-GENSG + ‘in front’ (KBo 17.11 i 5), both meaning ‘in front of the king’. Since personal pronouns in Hittite regularly appear in both accented and enclitic forms, we also predictably find both forms with postpositions: *ammel āppan* 1SGGEN + ‘behind’ = ‘after me’ with an accented possessive pronoun and *pēra(n)* = *ššet* ‘in front’ + 3SGPOSS = ‘in front of him’ with an enclitic possessive pronoun *-šet* ‘of him’ (on the *form* of the enclitic possessive pronoun see below). There is no basis for an interpretation ‘to my backside’ (note that the sense of ‘after me’ is temporal) or ‘to his front side’. In sum, Hittite local adverbs are synchronically adverbs, not nouns.

THE SYNTACTIC ROLE OF HITTITE LOCAL ADVERBS

In a language like Hittite where bare case forms of nouns are sufficient to mark spatial relationships (*parni* ‘in the house’, *parna* ‘to the house’), it is undeniably sometimes difficult to decide whether an accompanying local adverb is an adposition governing the noun or not. The existence of some indeterminate examples does not, however, justify the claim of Starke (1977: 131, note 4) that postpositions do not exist in Hittite. Several facts prove that they do. First, there is *katta*₂ ‘with, (next) to’, first identified by Starke himself (1977: 181–187). As his own examples show, this adverb *never* occurs alone, without an immediately preceding noun (in Old Hittite in the genitive, later in the dative-locative). Likewise, its competing form *kattan*₂ (not to be confused with *kattan*₁ ‘below; under’) always requires an accompanying

noun in the dative-locative. This fact and the assured sense ‘with, (next) to, in the presence of’ establish without doubt that *katta(n)*₂ is not only a postposition, but uniquely among the Hittite local adverbs exclusively so.

As shown by Salisbury (1999: 69), in New Hittite the local adverb *andan* ‘(in)to’ occurs with motion verbs *only* when preceded by a nominal phrase in the dative-locative. When there is no expressed location, we find rather *anda*. Contrast:

n=aš INA URU Šamuḫa andan pait
 CONJ=he to (city)Samuha (in)to go-3SGPRETINDACT
 ‘He went (in)to Samuha’

versus

n=ašta LÚMÁŠ.GAL anda lē paizzi
 CONJ=PARTICLE goatherd-NOMSG in PROHIB go-3SGPRESINDACT
 ‘Let no goatherd go in’.

This complementarity argues strongly that *andan* in such contexts is a postposition.

A reading as postposition is also the only possibility for the Old Hittite example in KBo 17.1 ii 31–32:

ug=a=šmaš=šan ERÍN.MEŠ-an šēr 3-ŠU wahnumi
 1SGNOM=CONJ=3PLDAT=PARTICLE troops-ACCSG over thrice turn-
 1SGPRESACTIND
 ‘I whirl (the figurines of) the troops over them three times’

The enclitic dative pronoun *-šmaš* ‘them’ has been obligatorily ‘fronted’ away from its postposition *šēr* ‘over’ by a required Hittite syntactic rule. As per Güterbock (1983), in Old Hittite dative enclitic pronouns were not yet used to mark possession, so *-šmaš...šēr* cannot be analyzed as an expression of the sort ‘mir auf die Oberseite’ = ‘to my top surface’ (cf. ‘mir in die Hand’ for ‘into my hand’).

It is also very hard to justify (as Starke 1977: 175 implies) reading LUGAL-*i peran* as two nouns in apposition ‘in/at the king, in front’. For obvious semantic reasons nouns referring to persons do not have locative sense as bare dative-locatives in the same way as *parni* ‘in/at the house’. As correctly seen by Francia (2002: 25–26), even in the case of Old Hittite *É-ri andan* ‘inside the house’ it is clear that *andan* is functioning as a postposition that more narrowly delimits the spatial specification: *É-ri andan* = Italian *nella casa/dentro la casa* ‘inside the house’ vs. mere *É-ri = in casa* ‘in the house’. The status of *andan* as a postposition is not altered by the fact that it can optionally be fronted to clause-initial position for contrastive purposes (as per Salisbury 2005: 233 contra Francia 2002: 23–25). We thus find contrastive:

[*ta*]kku LÚ ELLUM É-er lukkezz[(i É-er äppa we)]tezzi andan=a
 if man free-NOMSG house-ACCSG sets-fire house back builds inside=CONJ
 É-ri kuit ḫarakzi...n=at šarnikza
 house-DATLOCSSG what perishes...CONJ=it retribute-3SGPRESACTIND

'If a free man sets fire to a house, he shall rebuild the *house*, while that which is lost *inside* the house, he shall make restitution for.' (Laws §98).⁴

This Old Hittite example is entirely comparable to that in Middle Hittite where Francia herself (2002: 48) correctly assumes fronting of the postposition *šer* 'for' in the second clause in a chiasitic pattern:

m=š^š*an* ANA ^m*Madduwatta* *kuit* *šer* *zah[h]ier* [*m*]*an*=*kan*
 CONJ=PARTICLE M.-DAT-LOC because for they-fought IRREAL=PARTICLE
šer ANA ^m*Madduwatta* *kuener*
 for M.-DAT-LOC they-killed
 'Because they had fought on behalf of Madduwatta, they would have killed on behalf of Madduwatta' (KUB 14.1 + Ro 59).

The reading as a postposition here is forced by the derived meaning 'for, on behalf of', which naturally only occurs with a nominal object, never when *šer* is an adverb standing alone.

There is also no doubt that Hittite local adverbs function as preverbs. This fact is clearest when the preverb + verb combination acquires a sense not directly deducible from the sum of its parts, like those with *anda* cited earlier. However, as explicated at length by Tjerkstra (1999: 13–20 and *passim*), even in instances where the preverb retains its concrete spatial meaning, it can be shown in most instances that the preverb forms a 'derived predicate' with the verb, changing its valency or 'predicate frame'. One may contrast with her (Tjerkstra 1999: 33&38):

n=*aš* EGIR-*an* *iyattari*
 CONJ=he behind walk-3SGPRESACTIND
 'He walks behind'

versus:

^m*Pallānn*=*a*=*wa*=*kan* EGIR-*an* *iyahhut*
 P.-ACCSG=CONJ=QUOT=PARTICLE behind walk-2SGIMVACT
 'Go after (i.e. pursue) Palla too!'

In the first sentence the adverb *āppan* is entirely independent of *iyattari* 'walks', and its omission would not alter the sense of the verb. In the second, however, *āppan* forms a unit with *iya-* 'go after' and even makes the inherently intransitive verb transitive (^m*Pallānn* is accusative singular). Even when there is no change in valency, the preverb limits the meaning of a motion verb by specifying a particular vector of movement: *anda pai-* 'go in' = 'enter', *āppa pai-* 'go back' = 'return', *katta pai-* 'go down' = 'descend', *parā pai-* 'go out' = 'exit', *šarā pai-* 'go up' = 'ascend'. For further examples, I refer readers to Tjerkstra (1999), Francia (2002), and the entries for *parā* and *pēran* in Güterbock and Hoffner (1994–1997) and for *šarā* in Güterbock, Hoffner and van den Hout (2005).

Finally, the local adverbs may occur as independent constituents in the clause, forming a unit neither with a noun as a postposition nor with a verb as a preverb. There are again inevitably arguable examples, but most are quite clear:

takku IN.NU.DA *andan* NU.GÁL
if straw inside not-is
'If there is no straw inside' (KBo 6.2 iv 61)

ta GIŠ-*ru* *kattan*
CONJ tree-NOM-ACCSG below
'And a tree (is) below' (KBo 17.1 iv 16)

nu=kan *gurtan* *šer* *wetenun*
CONJ=PARTICLE citadel-ACCSG above build-1SGPRETACTIND
'I built a citadel above/up (there)' (KBo 4.4 ii 61–62)

Readers may again consult the works cited in the preceding paragraph for further examples. I must stress that the existence of numerous indeterminate examples over whose assignment modern scholars argue reflects merely the limitations of our knowledge based on a finite written corpus and the unavailability of native speakers. These in no way justify the inference that these cases were ambiguous for the native speakers themselves or that the division into the three functions of independent adverb, postposition, and preverb was blurred.

Diachronic Issues

LOCAL ADVERBS AS PETRIFIED CASE FORMS OF NOUNS

There have been repeated claims that virtually all of the Hittite local adverbs reflect petrified case forms of nominal paradigms: see, for example, Starke (1977: 131 and 149, but cf. 133, note 10!), Neu (1974: 67–69), and Luraghi (1997: 46). That many local adverbs in various languages have such a source is unquestionable. Hittite *arha* 'away' is a lexicalized allative **érh₂-h₂o* or **érh₂-eh₂* of an old root noun **arh₂*- 'boundary' seen also in the lexicalized ablative *arahza* 'outside' < **érh₂-ti*. The attested accusative and dative-locative singulars *arhan* and *arhi* 'boundary' could still show the root noun, but more likely belong to a secondary *a*-stem *arha-* (Melchert 1994: 84 with corrections by Rieken 1999: 68). Hittite also famously still shows a few forms of a noun stem *hant-* 'front, forehead' (see Puhvel 1991: 89–90), but the Hittite adverb *hanza* 'in front' is the true reflex of the original PIE locative singular **h₂énti* attested also as a preposition in Latin *ante* 'before' and Greek *ἀντί* 'instead of', while dative-locative singular *hanti* 'forehead' has been analogically restored (Jasanoff 1976: 126 contra Starke 1990: 125–129 and Puhvel 1991: 91).⁵

Other local adverbs in Hittite may thus in principle have a similar history. It is clear, however, that the chief motivation for analyzing adverbs such as *anda* 'in(to)' and *pēran* 'in front' as petrified nominal case forms

lies in two formal features of Old Hittite. The first of these is morphological. Starke (1977: 127–180) established that in Old Hittite there are two functionally contrasting sets of local adverbs, in which one of each pair indicates direction, and the other location.⁶

All members of the directional set share an ending *-a*, identical with the ending of the nominal allative case, as in *parna* ‘to/towards the house’. There is a strong temptation to take this correlation at face value and to suppose that all of the directional adverbs are in fact petrified allative case forms just like *arḫa* ‘away’ described above. However, Hittite final *-a* can reflect PIE **ā* or **ō*, and absolutely nothing assures us that all or any of the directional adverbs continue the allative nominal ending.⁷ In fact, the very uniformity of the pattern in an area of grammar where diversity is normal renders the Old Hittite system suspect of being a recent creation.⁸ In any case, the prehistory of each local adverb must be judged individually on its own merits, in the light of comparative evidence within Anatolian and in Indo-European more generally.

The second and undoubtedly stronger motivation for regarding the local adverbs listed in Table 1 as petrified case forms of nouns is syntactic. Several of them appear in Old Hittite with enclitic possessive pronouns: for example, *pēra(n)=ššiit* ‘in front of him’, *šēr=š(a)met* ‘over them’. As indicated earlier, this fact in itself carries no special weight in deciding whether the adverbs are historically nouns. Postpositions in Old Hittite regularly govern nouns and accented pronouns in the genitive. Since the rules of Old Hittite syntax require the use of enclitic pronouns except in cases of emphasis, we would be surprised if we did not likewise find enclitic possessives (functionally equivalent to the genitive) with postpositions.

This statement does not, however, answer the question as to why postpositions take the genitive case at all. Furthermore, enclitic possessive pronouns with postpositions do not appear in the form that we would predict from a synchronic perspective. Since those adverbs that appear with enclitic possessives are the locative set, we would expect the dative-locative of the enclitic possessive pronoun: **pēra(n)=šši* or **šēr=šmi*.⁹ What we find are rather *pēra(n)=ššiit* and *šēr=š(a)met* with what appear superficially to be neuter nominative-accusative singular forms of the enclitic possessives. We find the expected dative-locative forms only when the form of the

Table 1. Paired Local Adverbs in Old Hittite

<i>anda</i> ‘into’	<i>andan</i> ‘in, inside’
<i>āppa</i> ‘back’	<i>āppan</i> ‘behind, after’
<i>katta₁</i> ‘down’	<i>kattan₁</i> ‘below, under’
<i>parā</i> ‘out, forth’	<i>pēran</i> ‘before, in front’
<i>šarā</i> ‘up’	<i>šēr</i> ‘above, over’

Table 2. Spelling of Enclitic Possessives in Old Hittite Manuscripts

	Neut. N.-A. Sg./Pl.	<i>š̄r/kitkar</i>	<i>p̄ran</i>	Inst.-Abl.
-(<i>m</i>) <i>met</i> 'my'	4		0	
-(<i>m</i>) <i>mit</i>	0		1	
- <i>tet</i> 'your' (sg.)	2		1	
- <i>tit</i>	0		0	
-(<i>š̄</i>) <i>šet</i> 'his, her'	24	0	1	1
-(<i>š̄</i>) <i>š̄it</i>	0	1	2	0
- <i>š̄(e/a)met</i> 'their'	15	8	0	1
- <i>š̄(e/a)mit</i>	2	0	3	10
- <i>š̄ummet</i> 'our'	1			
- <i>š̄ummit</i>	0			
Total - <i>et</i>	46	8	2	2
Total - <i>it</i>	2	1	6	10

postposition itself has been altered: *katti=š̄ši* 'with him' versus regular *katta* 'with, next to'.

The pattern with possessives in *-e/it* led Neu (1974: 67–69) to interpret the locative forms ending in *-an* as old nominative–accusatives of *o*-stems that functioned originally as accusatives of direction. This analysis is plausible enough in syntactic terms, since the accusative of direction is attested as a recessive usage in Hittite (see most recently Zeilfelder 2001: 25–39), but Hittite also shows adverbial use of the nominative–accusative neuter singular in locative function: *nekuz mēhur* 'at twilight', *lammar* 'instantly, immediately'. However, as already argued in Melchert (1984: 122–125), a careful examination of the vocalism of the enclitic possessives in *-et* and *-it* clearly falsifies the claim that the enclitic possessives with postpositions are (all) neuter nominative–accusative singulars. Since the figures I gave in 1984 were inaccurate and the classification of the data was also inadequate, I must present a new summary in Table 2.

The predominant use of *-it* with *i*-vocalism with *p̄ran* precludes Neu's analysis of locative adverbs in *-an* as reflecting nominative–accusative singular neuter nouns (false also Garrett 1998: 157). On the other hand, I erred in 1984 in treating all of the locative adverbs alike. As already noted by Garrett (1998: 156), only *š̄r* is attested with the 'split genitive' construction in which a (usually inalienable) possessed noun takes both a genitive noun and an enclitic possessive: LUGAL-*aš̄* MUNUS.LUG[AL-*aš̄*] *š̄=a š̄er=[š̄a]* *met* king-GENSG queen-GENSG=and over=3PLPOSS 'over the king and queen'. Table 2 shows that *š̄r* also regularly takes enclitic possessives in *-et*. As Garrett correctly concludes, it cannot be coincidence that *š̄r* shares these features with *kitkar* 'at the head', a postposition whose nominal origin is assured (see further below).¹⁰

We thus have three patterns of agreement of the enclitic possessives with postpositions to account for: *katti=š̄ši*, *p̄ra(n)=š̄šit*, and *š̄er=š̄(a)met*. In

Melchert (1984: 124–125), I argued that all three patterns were secondarily created on the model of *pēdi=šši* place-DAT-LOCSG=3SGPOSSDAT-LOCSG, originally an ordinary nominal syntagm ‘in his place’ reanalyzed as a postposition plus enclitic object: ‘in place of him’. Original forms **pēra(n)=šši* and **šēr=šmi* matching *katti=šši* were allegedly remodeled to attested *pēra(n)=ššit* and *šēr=š(a)met* because the shape of *pēran* and *šēr* made them look like nominative-accusatives, not dative-locatives. The possessives in *-it* with *i*-vocalism would represent an intermediate step in the reshaping of the ending *-i* to *-et*.

This analysis as presented has justifiably failed to win acceptance. One reason is that there is no evidence whatsoever for the crucial forms **pēra(n)=šši* and **šēr=šmi* (see note 9). Another is that it cannot account for the patently different behavior of *pēran* and *šēr*. A common origin for the three distinct patterns of agreement is not remotely credible. For *katti=šši* the model of *pēdi=šši* has some plausibility, but one still wonders just how a nominal form in the dative-locative would have influenced a local adverb of the shape *katta*. Greek *κασίγητος* ‘brother’ < *‘born together’ assures us that there was a preform **kām-ti* ‘with, together’, and the coexistence of *katta* would have been enough to block the assibilation in *katti-* (or restore the unassibilated form).¹¹ I therefore consider the shape *katti* to be an archaism preserved in *katti=šši* precisely because it was reanalyzed as a dative-locative singular and fitted out with an enclitic possessive on the model of *pēdi=šši*. Once established, the pattern *katta* ~ *katti=šši* could be extended to *ištarna* ‘among’ ~ *ištarni=šmi* ‘among them’.

As Table 2 shows, the agreement pattern of *pēra(n)=ššit* at least superficially resembles that of the ablative-instrumental in nouns: cf. *iššaz=(š)mit* ‘from their mouths’.¹² If we look for an ablative noun model parallel to *pēdi=šši*, we find one ready at hand. Hittite *tapušz(a)* ‘beside’ is the petrified ablative of a noun *tapuš-* ‘side’ (Rieken 1999: 207–210). It is well-attested in Old Hittite in combinations like LUGAL-*waš* *tapušza* ‘beside the king’, which may easily be reanalyzed from a genuine nominal phrase ‘to/on the side of the king’. While it is not attested, we can be confident that **tapušz(a)=šit* ‘beside him’ existed (cf. attested ZAG-*az=tit* ‘to/on your right’). I repeat that already in our oldest Hittite texts, we find not only the genitive, but also the dative-locative with postpositions like *pēran*: both LUGAL-*waš* and LUGAL-*i pēran* ‘in front of the king’. Those who have claimed an exclusively nominal origin for Hittite local adverbs have not explained in that case how the dative-locative syntax with postpositions would have arisen. I assert that this is the original syntax with inherited postpositions and adverbs that developed into postpositions.¹³ These and newer postpositions of true nominal origin like *tapušza* then mutually influenced each other, adopting the other’s syntax: hence LUGAL-*waš pēran* and *pēra(n)=ššit* after LUGAL-*waš tapušza* and **tapušz(a)=šit*, but also conversely [KISL]AḪ-*ni tapušza* ‘beside the threshing floor’ and **-šši tapušza* ‘beside him’ (attested in Middle Hittite KUB 23.77a Ro 94) after

LUGAL-*i pēran* and **-šši...pēran* ‘in front of him’ (cf. attested OH *-šmaš...šēr* ‘over them’ cited above).¹⁴

In contrast to *pēran*, the behavior of *šēr* parallel to that of *kitkar*, especially its use with the split genitive, argues that unlike the other local adverbs it has a true nominal origin. As noted by Rieken (1999: 67), there are independent reasons to suppose that the source of *šēr* and *šarā* is a root noun. It is striking that alone among the local adverbs in Table 1, it has *no* adverbial cognates outside Anatolian.¹⁵ As Rieken suggests, *šarā* may easily reflect the allative of an ablauting root noun. Whether *šēr* represents the nominative-accusative, an endless locative (Neu 1980: 35–36), or a locative **šeri* matching Cuneiform Luvian *šarri* with regular loss of final **-i* after *r* (Melchert 1994: 183) is difficult to determine. A nominative-accusative (with original syntax of a directional accusative) seems preferable, since it would explain directly the agreement pattern with enclitic possessives in *-et*: LUGAL-*aš* MUNUS.LUGAL-*aš*=*a šēr*=*šamet* would have originally meant ‘to the top of the king and queen’. Once again, the competing syntax by which *šēr* is construed with the dative-locative would be modeled after the inherited pattern with *pēran* ‘in front’, *āppan* ‘behind’ and so forth.

Nussbaum (1986: 75–98) argues that *-kar* in *ketkar* ‘at the head’ continues **-kērh₂*, an endless locative with secondary zero-grade reflecting an old compound. A locative is supported by the collocation with *kēt* ‘on this side, here’, which would be quite unexpected with an old accusative of direction. In that case, the use of the enclitic possessive in *-et* would be analogical to that with *šēr*, perhaps helped along by the presence of neuter nouns in *-ar*. The resemblance of *šēr* itself to the neuter monosyllabic nouns ŠĀ-*er* ‘heart’ (**kēr*) and É-*er* ‘house’ (**pēr*) leaves open the possibility that use of enclitic possessives in *-et* with it is also analogical. However, as already stated earlier, there is no existing evidence for the agreement pattern **šer*=*šmi* ‘over them’ that would be expected if *šēr* were an old locative case form, and the unnecessary assumption of such a remodeling seems best left aside.

A detailed account of the individual etymologies of all the Hittite and other Anatolian local adverbs cannot be offered here. The restricted evidence of the Anatolian Indo-European languages other than Hittite in any case limits our ability to recover all features of the Proto-Anatolian system, and I do not at present see how Anatolian can contribute to settling the question of the primacy of pre- or postpositions in PIE (see the works cited in note 13). I do hope to have made clear that neither the syntax nor formal behavior of local adverbs in Old Hittite justifies deriving them uniformly from prehistoric nominal case forms. Nor can the highly symmetrical Old Hittite system of paired adverbs displayed in Table 1 be projected back to Proto-Anatolian.¹⁶ As in other aspects of its grammar, Hittite shows in its local adverbs a mixture of archaisms and innovations, in conformity with the historical behavior of all natural languages.

Notes

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¹ Starke is inconsistent regarding just what case forms the attested local adverbs allegedly represent. While at one point he insists that they belong to the ‘dimensional’ cases (1977: 131), he later argues that many of them are in fact nominative-accusative (1977: 133). This contradiction betrays the untenability of the entire analysis.

² Since the hyphen is used for other purposes in Hittite transliteration, I employ the equals sign to set off enclitics from their hosts.

³ Hittite is written in a mixed logographic-syllabic system similar to that of Japanese, with some further complications. Syllabically written Hittite is transliterated in lower case italic, both whole words and grammatical endings. Lexical morphemes *written* as Sumerian logograms are transliterated in upper case Roman (the phonetic shape of Hittite lexemes standing behind some logograms remains unknown). Lexical and grammatical morphemes *written* as Akkadian logograms are transliterated in upper case italic. The semantic class of some nouns is marked by preposed logograms called ‘determinatives’. These are superscripted in transliteration, since they do not stand for anything in the spoken Hittite.

⁴ Starke’s ad hoc attempt (1977: 175) to interpret both *andan É-ri* and *É-ri andan* as appositional noun sequences (the latter as *partitive* apposition!) does not require refutation. For the interpretation of this passage and the archaic verb form *šarnikza*, see Hoffner (1997: 96 and 197).

⁵ Pace Starke (1990: 127) and Puhvel (1991: 91), *hanza(n)* in the expression *hanza(n) hark-/ēpp-* ‘stay in front, keep in front’ is *not* a neuter direct object of the verb, but the adverb, as in English ‘hold back, keep left’: see correctly Rieken (1999: 33–35). Such intransitive constructions with normally transitive verbs in Hittite deserve a separate study.

⁶ As Salisbury (1999: 63–64) and Francia (2002: 7–9) independently affirmed, the locative set can also co-occur with motion verbs (a fact overlooked by Starke), but in these instances the adverb indicates the position attained by the movement, not direction, as in English ‘Jill stepped behind the door’.

⁷ The nominal allative ending was either **-h₂e* (Melchert 1994: 325) or **-ch₂* (Hajnal 1995: 98), appearing as **-oh₂* in *o*-stems. Hittite unaccented short final *-a* may also continue **-e*, as shown by enclitic *-tta* ‘you (dat.-acc. sg.)’ < Proto-Anatolian **te*, regularly shortened when unaccented from PIE **tē* (contra Melchert 1994: 183 with several false etymologies).

⁸ Compare the formal disunity of Latin *ad* ‘to’, *in* ‘in(to)’, *post* ‘behind’, *prō* ‘in front’, *sub* ‘under’, *super* ‘over’, and so forth.

⁹ Contra Melchert (1984: 124) the Old Hittite example *šēr=šī-i* in KUB 37.223 c 4 with its quite aberrant plene spelling in an enclitic must be regarded as erroneous for *šēr=šī-it* and cannot be used as evidence for a genuine use of the dative-locative possessive with a postposition.

¹⁰ The alleged example of the split genitive construction with *pēran* cited in Melchert (1984: 124) does not exist, being based on a misreading. However, contra Garrett (1998: 162), it is not the use of the split genitive construction that conditions use of *-et*, but rather the nominal origin of the adposition.

¹¹ As per Dunkel (forthcoming), Celtic also appears to require both **kēm-ti* (in Middle Welsh *gennyf* ‘with me’) and **kēm-ta* or **kēm-to* with back vowel (Old Irish *céta-bi* ‘feels’ < **is* thereby’ and verbal noun *cétbuiht* ‘feeling’. I am indebted to Stefan Schumacher for counsel on this point.

¹² The agreement pattern here shows suppletion, with the enclitic possessive in the instrumental modifying a noun in the ablative. Hittite never developed ablatival forms for the enclitic possessives.

¹³ See among others Dunkel (1990) and Hackstein (1997) for some use of local adverbs as adpositions already in PIE.

¹⁴ Norbert Oettinger has kindly provided me a modern parallel for such syntactic interference: in current colloquial German one hears ‘trotz des Wetters’ instead of correct ‘trotz dem Wetter’ for ‘in spite of the weather’, after the model of ‘aufgrund des Wetters’ = ‘on account of the weather’ and similar.

¹⁵ Don Ringe calls my attention to the analysis of Willi (1999), who argues that the Greek intensifying prefix *ἐπ-* is cognate with Cuneiform Luvian *šarri*. Willi makes a plausible case, and his derivation cannot be excluded, but he himself stresses that Greek *ἐπ-* originates as a

first member of bahuvrihi compounds. There is thus at least an equal, if not greater, chance that the Greek is a 'Caland' form **eri-* to the adjective **o/eru-* seen in Palaic, Hittite and Luvian *aru-* 'high'. Greek ἐπιούχιον would thus be an ordinary bahuvrihi 'high-necked'. As per Willi, Sanskrit intensifying *ari-* and Greek ἀρι- belong elsewhere.

¹⁶ For additional arguments that various parts of this system reflect specifically pre-Hittite innovations, see Melchert (2008) and forthcoming.

Works Cited

- Dunkel, George. 1990. *prae pavore, πρὸ φόβοιο*. Indogermanische Forschungen 95.161–170.
- . forthcoming. Lexikon der indogermanischen Partikeln und Pronominalstämme.
- Francia, Rita. 2002. Le funzioni sintattiche degli elementi avverbiali di luogo ititi anda(n), āpa(n), katta(n), katti-, peran, parā, šer, šarā. Rome, Italy: Herder.
- Garrett, Andrew. 1998. Remarks on the Old Hittite Split Genitive Construction. *Mír Curad. Studies in Honor of Calvert Watkins*, ed. by Jay Jasanoff *et al.*, 155–163. Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck.
- Güterbock, Hans G. 1983. Noch einmal die Formel *parnaššea šuwaizzi*. *Orientalia NS* 52.73–80.
- Güterbock, Hans G., and Harry A. Hoffner Jr. 1994–1997. The Hittite Dictionary of the Oriental Institute of the University of Chicago. Volume P. Chicago, IL: Oriental Institute of the University of Chicago.
- Güterbock, Hans G., Harry A. Hoffner, Jr., and Theo P. J. van den Hout 2005. The Hittite Dictionary of the Oriental Institute of the University of Chicago. Volume Š, Fascicle 2. Chicago, IL: Oriental Institute of the University of Chicago.
- Hackstein, Olav. 1997. Präverb, Post- und Präposition im Tocharischen. *Tocharian and Indo-European Studies* 7.35–60.
- Hajnal, Ivo. 1995. Der lykische Vokalismus. Graz, Austria: Leykam.
- . 2004. Die Tmesis bei Homer und auf den mykenischen Linear B-Tafeln: ein chronologisches Paradox? *Indo-European Perspectives. Studies in Honour of Anna Morpurgo Davies*, ed. by John Penney, 146–178. Oxford, UK: Oxford University Press.
- Hoffner, Harry A. Jr. 1992. Advice to a King. *Hittite and Other Anatolian and Near Eastern Studies in Honour of Sedat Alp*, ed. by Heinrich Otten, Ekrem Akurgal *et al.*, 295–304. Ankara, Turkey: Türk Tarih Kurumu.
- . 1997. The Laws of the Hittites. Leiden/New York/Köln: Brill.
- Jasanoff, Jay. 1976. Greek ἄμφοι, Lat. *ambō* et le mot indo-européen pour 'l'un e l'autre'. *Bulletin de la Société de Linguistique de Paris* 81/1.123–131.
- Luraghi, Siliva. 1997. Hittite. München/Newcastle: Lincom Europa.
- Melchert, H. Craig. 1984. *Studies in Hittite Historical Phonology*. Göttingen, Germany: Vandenhoeck & Ruprecht.
- . 1994. *Anatolian Historical Phonology*. Leiden/Boston: Rodopi.
- . 2008. Hittite *duwān (parā)*. *Morphology and Language History in honour of Harold Koch*, ed. by Claire Bowern, Bethwyn Evans and Luisa Miceli, 201–209. Amsterdam, The Netherlands: Benjamins.
- . forthcoming. Hittite *li-*Verbs from Adverbs. *Protolanguage and Prehistory. 12th Congress of the Indogermanische Gesellschaft*, ed. by Rosemarie Lühr and Sabine Ziegler.
- Neu, Erich. 1974. *Der Anitta-Text (Studien zu den Boğazköy-Texten 18)*. Wiesbaden, Germany: Harrassowitz.
- . 1980. *Studien zum endungslosen 'Lokativ' des Hethitischen*. Innsbruck, Austria: Institut für Sprachwissenschaft der Universität Innsbruck.
- Nussbaum, Alan. 1986. *Head and horn in Indo-European*. Berlin/New York: de Gruyter.
- Oettinger, Norbert. 1986. 'Indo-Hittite'-Hypothese und Wortbildung. Innsbruck, Austria: Institut für Sprachwissenschaft der Universität Innsbruck.
- Puhvel, Jaan. 1991. *Hittite Etymological Dictionary. Volume 3. Words beginning with H*. Berlin/New York: Mouton de Gruyter.
- Rieken, Elisabeth. 1999. *Untersuchungen zur nominalen Stammbildung des Hethitischen (Studien zu den Boğazköy-Texten 44)*. Wiesbaden, Germany: Harrassowitz.

- . forthcoming. Der Archaismus des Hethitischen – eine Bestandsaufnahme. *Incontri Linguistici* 31.
- Salisbury, Donna. 1999. *anda* and *andan* in Neo-Hittite. *Journal of Cuneiform Studies* 51.61–72.
- . 2005. Local Adverbs in Neo-Hittite. Chapel Hill, NC: University of North Carolina dissertation.
- Starke, Frank. 1977. Die Funktionen der dimensionalen Kasus und Adverbien im Althethitischen (Studien zu den Boğazköy-Texten 23). Wiesbaden, Germany: Harrassowitz.
- . 1990. Untersuchungen zur Stammbildung des keilschrift-luwischen Nomens (Studien zu den Boğazköy-Texten 31). Wiesbaden, Germany: Harrassowitz.
- Tjerkstra, Françoise A. 1999. Principles of the Relation between Local Adverb, Verb and Sentence Particle in Hittite. Groningen, The Netherlands: Styx.
- Wagner, Heinrich. 1985. Das Hethitische vom Standpunkte der typologischen Sprachgeographie. Pisa, Italy: Giardini.
- Willi, Andreas. 1999. Zur Verwendung und Etymologie von griechisch *ἐπ-*. *Historische Sprachforschung* 112.81–95.
- Zeilfelder, Susanne. 2001. Archaismus und Ausgliederung. Studien zur sprachlichen Stellung des Hethitischen. Heidelberg, Germany: Winter.