

## The origin of the instrumental in Hittite

### 1. Introduction

The Hittite language, belonging to the Anatolian branch of Indo-European, is the oldest attested language within the IE language family, with the oldest sources dating back to c. 1800 BC. In spite of its early attestation, it portrays a surprisingly “simplistic” grammar compared to that of Greek and Indo-Iranian, the oldest IE languages until the discovery of Hittite. This has led to a wide speculation as to whether the Anatolian branch left the IE community before certain features developed there, or if Anatolian has lost these features later. In one field, however, the Anatolian languages – and especially Hittite – are just as rich as the most “sophisticated” IE languages, and that is the number of cases in nouns and pronouns.

One of these cases is the instrumental, a case that is found with distinct endings in many IE language branches. The interesting fact about the Hittite instrumental ending *-it* is that it does not coincide with any instrumental case ending in any other IE language. This short paper will make a summary of the suggestions that have been made about the reconstruction and origin of this ending from PIE to Hittite. No serious attempt will be made here to make new suggestions or theories – I will simply constrain myself to comment upon the suggestions that have been made.

### 2. Proto-Anatolian

The regular Hittite instrumental ending is *-it* and the ablative ending is *-az*. In the other Anatolian languages, the instrumental has either coalesced with the ablative to give a uniform ending *-ati* (Luvian), *-adi/-edi* (Lycian), or is simply not attested (Palaic, Lydian, Carian). The natural question is which of the two original endings the combined instr./abl. ending in Luvian and Lycian comes from.

The Hittite instrumental ending *-it* is not followed by a vowel, which means that the dental is either original in the final position or that a final vowel has been apocopated. Given that final *\*-e#* ends up as *-a* (Melchert 1994:183) and final *\*-o* is retained as *-a*, the only possibility of vowel apocopation would then be that the final vowel was an *\*-i*, which is known to apocopate after a dental in Hittite (Melchert 1994:183f.).

A Proto-Anatolian (PA) sequence *\*-iti* would, however, undergo assibilation of the dental to *\*-iz* in Hittite, cf. the 3.sg.pres.act. ending *-z(i)* of the *mi*-conjugation from PA *\*-ti*, as opposed to Luvian *-ti* and Lycian *-ti/-di*. It could nevertheless be possible that the PA ending was *\*-iti* and further satisfied the rules of lenition, whereby the sequence *\*-iti* would lenite to *\*-idi* when it was preceded by the accent (PA *\*-iti*). The Hittite spelling *-it* is of course ambiguous in that final stops are neutralized to the voiced/lenited variant. The Luvian *-ati* and Lycian *-adi/-edi* point both to a voiced/lenited /d/ and could therefore be from *\*-Vti*. It is obvious that they cannot be from *\*-iti* in that a PA *\*i* would not change to *a* in Luvian and Lycian, but we could easily say that the original ending was *\*-ti*, and that the *-a(-e-)* are the original stem vowels.

The main reason why the Luvian and Lycian endings are not to be equated with the Hittite instrumental in *-it* is that the geminating particle *=a* in Hittite geminates the

dental of the ending to *-itt=a*, and not to *\*-iz(z)iy=a*<sup>1</sup> as we would expect if the original ending was *\*-iti*. It would not seem illogical that the geminating particle could geminate the final dental by analogy after the *\*-i* had been apocopated, given that this particle would synchronically geminate the final consonant in other surroundings. Melchert 1977:439 shows, however, that the particle *=a* which follows a word that originally ended in *\*-i* in fact does not geminate what would be the final consonant in Hittite, but rather leads to a sequence *-iy=a*. The most likely conclusion is that the Hittite instrumental ending originally ended in a dental, which further means that the Luvian and Lycian instr./abl. endings cannot have an instrumental origin.

A further complication comes from the fact that a decent number of the Hittite instrumentals end in *-t(a)*<sup>2</sup> with no preceding *-i-* (Melchert 1977:458ff.). There are two possible ways of solving this. One way is to assume that the ending *-it* was conceived as the *i*-stem vowel *-i-* + *-t*, and from there a new instrumental in just *-t* was made. The fact that the instrumental in *-t* belongs to Old Hittite makes it look like an archaism rather than an analogy. Further, one would by such an analogy expect the instrumental in the *a*-stem to be *\*-a-t*, whereas it is *-it*.

The other explanation would be that the original ending was *-t*, preserved as such in some Old Hittite carvings, and that the *-i-* in fact is the *-i-* of the *i*-stem. This would once again not explain the *-it* in the *a*-stem. The *a*-stem ending could be explained as being the theme vowel *\*-e-* + the instrumental ending *-t* (Melchert p.c.). Since this *\*-e-* would be in an unaccented closed syllable, the *\*e* would rise to *i*, cf. e.g. *nēpis* “sky” < PA *\*nébes* (Melchert 1994:139).<sup>3</sup> A final complication is that this ending sometimes is written with plene writing as *-Ci-i-it*, which indicates a long vowel *-īt* (Melchert p.c.). However, this ending seems to be restricted to the *i*-stem (Melchert p.c.), which means that the instrumental ending *-it* is attached to the stem ending in *-i-*.

The original PA instrumental ending is therefore difficult to reconstruct. That it ended in a dental seems certain, but whether a vowel preceded or not is harder to establish. If there was a vowel there, it seems as if it would be a long or a short *\*i*, but the problem remains then to account for the fact that a number of cases show the ending *-t(a)*. The main problem with the older view that the PA ending was *\*-ēd* from a PIE ablative is that there probably never was any PIE ablative of that character in the first place (see Melchert 1977:466ff.).

The explanation for the Luvian and Lycian instr./abl. ending is then of course that it comes from the PA ablative. The assibilation in Hittite *-(a)z* indicates a lost following *\*-i*, and by comparison with Luvian *-ati* and Lycian *-adi/-edi*, it seems clear that the PA ablative ended in *\*-ti*, and that the Luvian and Lycian ending continues the lenited variant *\*-Vti*, whereas Hittite continues the unlenited variants *\*-Vti* (vocalic stems) and *\*-Cti* (consonant stems).

<sup>1</sup> A form *\*-iz(z)iya* could possibly because of the assibilation of *\*t* reintroduce the dental, i.e. *\*-it(t)iya*.

<sup>2</sup> Shields (1993) reads the final *-a* as a real Hittite vowel, but it is obvious from the forms listed in Melchert 1977:458ff. that this has no basis (explicitly Melchert 1977:460f.).

<sup>3</sup> We know that the instrumental ending *\*-h<sub>1</sub>* that shows up in many other IE languages could be affixed to the *e*-color of the theme vowel, e.g. in Latin *-ē* and Gothic *-ē-*.

### 3. The PIE origin

A Proto-Anatolian instrumental ending *\*-t*, *\*-et*, *\*-it* is quite different from all other instrumental endings in the IE languages. J. Schindler (apud Melchert 1977:469) has pointed out the Vedic use of a seemingly instrumental particle *-it* in *prá dakṣiṇít* “with the right hand” from *dákṣiṇa-* “right (hand)”. G. Pinault 1980 followed up on this idea, and claimed that the proper instrumental ending was *-t*, with the preceding *-i-* as a part of the Caland-system (wherein the thematic vowel *\*-o-* can be replaced by an *\*-i-*), in other words *dákṣiṇa-* “right” → *\*dakṣiṇi-* “the right hand” > *dakṣiṇi-t* “with the right hand”. The Hittite ending *-it* is according to him the thematic vowel *\*-e-* + the instrumental ending *\*-t*, an ending that in PIE was equal to the more frequent instrumental ending *\*-h<sub>1</sub>*. Speaking in favor of a simple ending *\*-t* are also the Hittite instrumental pronominal forms as *kēt*, which seems to indicate a stem *\*ke(i)-* + *\*-t* (see Melchert 1977:471.)

Garrett 1990:278<sup>25</sup> turns it around and claims that *\*(i)t* belonged to “marginal or adverbial forms” in PIE, and only secondarily in pre-Hittite (but after Proto-Anatolian) became the productive instrumental ending. This claim could of course be possible, but since it has no actual bearing on the origin of the ending, I will not discuss it further here.

Shields 1993 makes an equation of the Hittite ending and the IE conjunctive particle *\*eti* “and”, a connection that is a typologically possible one, since a decent number of the world’s languages are so-called “MIT-Sprachen”, “in denen die UND-Koordination durch dasselbe Morphem oder dieselbe Konstruktion geleistet wird, das/die auch zum Ausdruck von komitativischen und/oder instrumentalischen Relationen dient” (Stolz 1998:108). One formal difficulty would be to explain the lack of assibilation to *\*-iz* in Hittite, a problem Shields does not address, and further the fact that neither PIE nor Hittite can (to my knowledge) be shown to be MIT-Sprachen. In order to get rid of the formal problem, we could claim that *\*eti* was made up of the actual particle *\*et* + the ‘hic et nunc’ *\*-i*, and that the original particle form *\*et* was used as a post-position. The possible original ending *\*-t* could then be the post-ablaut form of this ending, i.e. *\*wéd-en-et* “with water” > *\*wéd-ṇ-t* > Hittite *wedand(a)*.

The fact that Hittite does not distinguish between the numbers in the instrumental should, in my view, not be overemphasized. There are several known cases where we know for a fact that such a condition is due to a later merger, cf. e.g. from Hittite itself, which uses the ending *-as* for the genitive in both numbers, even though the older plural ending *-an* is still present in Old Hittite. A more modern example is the number-indifferent use of *-s* as the genitive in English, whereas it was only used in the singular in Old English. That the number indifference in the instrumental in Hittite indicates that PIE lacked a proper instrumental case ending (as sometimes claimed) is in my view simply false. Certain phonological developments of the instrumental case ending indicate rather the opposite – that it in fact must belong to the protolanguage. This is seen in the use of the ending *\*-h<sub>1</sub>* in the thematic declension. In the singular, this was affixed to the *e*-grade of the thematic vowel to give *\*-eh<sub>1</sub>* (*\*-oh<sub>1</sub>* might have existed also). In the plural, however, the reconstructable PIE ending is *\*-ōis*, which surely has a pronominal origin (cf. Vedic *táih*). As there with all probability were no original long diphthongs in PIE,

this must be dissolved somehow. A pronominal plural element *\*-oi-* (ultimately stem vowel *\*-o-* + plural *\*-i*) is easily seen, and since it is obvious that PIE had the same case suffixes in both the singular and the plural,<sup>4</sup> the instrumental plural should be *\*-oi-h<sub>1</sub>*. Given that this form was unambiguously plural because of the plural element *\*-oi-*, the normal plural *\*-s* was not added. *\*-oih<sub>1</sub>* would regularly (by Szemerényi's law) develop to *\*-ōi*, unto which the plural *\*-s* was added at some point to give *\*-ōis*. As there are clear remnants of Szemerényi's law in Hittite (e.g. *\*d<sup>h</sup>ég<sup>h</sup>oms* > *tēkan*, 3<sup>rd</sup> pl.pret. *\*-érs* > *-ēr*), it follows that both this law and the formation of the instrumental plural belonged to PIE

## References

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<sup>4</sup> The plural suffix *\*-s* was simply added to the case form, e.g. acc.sg. *\*-m*, acc.pl. *\*-m-s*, loc.sg. *\*±i*, loc.pl. *\*±i-s(-u/-i)*, instr.pl. *\*-bhi* (Greek) vs. *\*-bhi-s* (Indo-Iranian). This is why the thematic nom.pl. *\*-ōs* comes from *\*-o-s-s*, and not *\*-o-es* as usually claimed (I will hopefully return to this on a later occasion).