

Hittite *andurza* “inside, indoors” and the Indo-Hittite Hypothesis

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Hittite attests an adverbial form *andurza*, with the basic meaning “inside; indoors”. It is often found opposed in ritual texts to *askáz* (ablative of *aska*- ‘gate’) “out of the gate, outdoors” (see Puhvel [1984: s.v.] for citations); it also occurs in treaties with reference to rebellions in the meaning “in the interior, internally”, and is therein opposed to *aravza* (an old ablative of *arva*- “limit, boundary”) “from the outside”, which refers to attacks (*ibid.*). As Puhvel notes, a form *andurza* presupposes a base **andur-*, which is suggested also by the derivative adjective *anduriya*- “situated within”. This presumed base, however, is unattested as such in Hittite.

The internal segmentation of this presumed form **andur-* and consequently its etymology have both been much discussed and much disputed in the literature (for references and discussion, see Friedrich/Kammenhuber [1977: s.v.], Tischler [1978: s.v.], and Puhvel [1984: s.v.]). Although at present there seems to be little to go on to decide the question of the root etymology¹, two reasonable possibilities have emerged².

One hypothesis that has attracted considerable support derives **andur-* from some form of the Indo-European **dhwor-* ‘door’ (so Sturtevant [early in his writings], Hamp, Kronasser, Tischler, and others), and thus posits an etymological segmentation of **en-dhwor-*, though there is some disagreement as to the exact vowel grade of the prefix and the root that would allow for the Hittite vocalism. The alternative hypothesis treats **andur-* as related to Latin *inter*, Sanskrit *antár*, etc., from an Indo-European stem (adverbial or otherwise) **enter-*, (so Couvreur, Sturtevant [later in his writings], and Puhvel), and, as with **en-dhwor-*, there is no agreement as to the vowel grades involved in the derivation of the Hittite vocalism.

There is one point, however, on which there is unanimity in the literature on *andurza*, namely the status of the suffix *-za*. Most investigators (e.g. Sturtevant, Hamp, Tischler, Friedrich, Laroche, *inter alios*) are in agreement that *-za* is the Hittite ablative ending, once believed to be from **-ts* (zero-grade of **-tos* seen in Sanskrit *ta-tas* “from that, then”, etc.) but better (so Jasanoff 1972) taken from **-ti* (as the comparison with the Luvian oblique *-(a)ti* and the Lycian *-adi/-edi* would indicate). Even Jasanoff (1972: 124-5), who treats *andurza* as created from an earlier locative form, talks about the addition of *-za* in forms parallel to *andurza* as the “creation of an ablative ... [with] ... an ablative particle that appears ... as *-z(a)* in Hittite”. Moreover, the frequent occurrence noted above of *andurza* with the clear ablatives *askáz* and *aravza* provides some support for taking this adverb too to be in origin an ablative³.

One minor problem exists, however, with the analysis of *andurza* as an ablative: there is no obvious ablative meaning evident in this form—it has the purely illative or inessive meaning of “inside, indoors, in the interior”, not a purely ablative sense such as * “from the outside in” or * “from within”. Admittedly, this fact may not be too problematic, for two reasons, though in each case some doubts remain, opening the door for the consideration of other sources of the *-za* of *andurza*.

First, as Laroche (1970: 38) has pointed out, Hittite has examples of etymological ablatives taking on “une valeur positionnelle proche du locatif”, e.g. *tapusza* “alongside of”⁴, making it possible to posit such a development for *andurza*. However, a general shift of ablative meaning to locative meaning seems not to have occurred in Hittite⁵, for the (presumably) primary function of a distinct ablative case (indicating “place-from-which”)⁶ is present in all stages of the language; thus, the ablative-to-locative shift must pertain to the development of individual lexical items and the existence of parallels for such a shift, while interesting and potentially significant, does not in itself provide unassailable support for positing this change for any particular lexical item, e.g. the form in question here, *andurza*.

Second, the evidence of the adverbial *kitkar* “at the head (of)” with its variant *kitkarza* suggests that an endlingless locative, the most likely source of *-kar*⁷, could be remade with a *-za* that was “adverbial” without being necessarily ablative. While remodeling of *andurza* cannot be excluded, such a process would have to have taken place at a fairly early date, in the pre-Hittite period, since no fluctuation with a presumed **andur* is attested (as it is, for example, with *kitkar/kitkarza*). At such a stage, it cannot be excluded that *-za* had still a fully ablative force in general, as indeed it does in most occurrences in attested Hittite, excepting cases such as *kitkarza*⁸, thereby making the absence of ablative meaning from *andurza* more problematic. Thus while the remodeling account is certainly viable, it is not without a few questionable aspects.

Given the preceding discussion, it would seem desirable to at least consider other possibilities for the origin of *-za* in *andurza*, and accordingly, another hypothesis is advanced here. Moreover, it turns out that this hypothesis has potentially important implications for the matter of the relationship of Hittite with the other Indo-European languages.

In particular, instead of being the synchronically productive ablative ending for Hittite, the *-za* that occurs in *andurza* could simply represent **-s* added onto a stem with final *-r*. From a phonological standpoint, there is reason to believe that this combination of *-r* plus *-s* would be expected to yield, as its regular outcome, graphic < -r-za >, a sequence which presumably is to be interpreted phonetically as [-rts] with an epenthetic *t* having developed between the liquid and the sibilant. The parallel for this development, showing it to be the regular outcome, comes from the nominative < ha-as-te-ir-za > “star”, which derives from the Indo-European *r*-stem noun (continued directly, for example, in Greek *ἄσθρ*) but with an innovative sigmatic nominative. The relevant pre-form for *hasterza* is thus **H₂ster-s*, with the *-rs* sequence developing into < -r-za > ([-rts]), as also, possibly, in *andurza*.

Admittedly, *hasterza* does not provide an exact phonological parallel for *andurza*, since the adverb, under the analysis proposed here, has an old *-rs* sequence of Proto-Indo-European age whereas the noun has a more recently created secondary *-rs* that would thus post-date the sequence posited for *andurza*. Moreover, it is clear from examples such as *karsmi* “I cut off” from **kers-mi* and *arra-* “arse” from **orso-* that original **-rs-* was maintained before a consonant and yielded *-rr-* before a vowel. Nonetheless, the **rs* posited for *andurza* is in word-final position, so that neither *arra-* nor *kars-* is probative counterevidence to the development posited here, and, given that there appear to be no cases of word-final original **-rs* to work from, the parallel with *hasterza* is certainly suggestive. It can be noted as well that other sequences of sonorant with **s* show suggestive parallels: secondary **-n-s* in final position seems also to have developed an epenthetic *-t-*, as shown by *sumanz(a)* “cord” from **su(H₁)-men-s⁹*, and alternants such as *pirzavvanas* for *pirsavvanas* “belonging to fief-service” (Friedrich [1961: 21; 1966: 26]) suggest a tendency within Hittite to epenthesize in clusters of sonorant plus *s*.

Besides the phonological plausibility of **-s* in *andurza*, positing a final **-s* in *andurza* is quite reasonable from a morphological standpoint too. This element can be reconstructed for Proto-Indo-European as a marker that occurs on adverbials, with a clear function in one set of forms but otherwise associated with a variety of adverbial types. The clearly identifiable use of **-s* comes in the formation of multiplicative adverbs of the lower numerals: **dwi-s* “twice”, based on a comparison of Sanskrit *dvis*, Greek *divi*, Old Latin *duis* (later *bis*), and Middle High German *zwir*, **tri-s* “thrice”, based on Sanskrit *tris*, Greek *trivī*, Latin *ter*, and Old Norse *þris(-var)*, and **k^wetwr[≥]-s*, based on Sanskrit *catur* (from **caturs*), Avestan *caqrus*, and Latin *quater*.

The other evidence for adverbial **-s* for the proto-language comes from one word-equation and a handful of forms scattered around the various individual languages. The comparison of Greek *cqevī* “yesterday” with Sanskrit *hyás* “yesterday” permits the

reconstruction of a PIE adverbial **[h]dyes* which, following Schindler (1975: 45), can be segmented into “the zero-grade of an adverb or a deictic particle [**[h-]*] plus a case form of the word for “day” [**dyes*] which would also appear in Ved. *sa-dyás* “within one day”¹⁰; given, though, that “a different case form is found in Ved. *a-dyá* “today” < **e-dyē*” (*ibid.*), the most likely analysis of **dyes* would be **dye-s*, that is with **-s* as an added adverbial suffix.

Other traces of this **-s* are to be found throughout the Indo-European family, mostly in relic forms which do not, however, allow a clear picture of the function and distribution of this suffix to emerge. Some examples showing this **-s* include Latin *us-que* “all the way (to/from)” (from **ut-s-*), *cis* “on this side” (based on the deictic stem **ki-*), and Sanskrit *avás* “downwards” (cf. *áva* “down; off”), as well as, presumably, Greek adverbials with a final *-i*, often occurring as variants of asigmatic forms, e.g. *mevcrii* “as far as; until” (variant of *mevcri*), *likrifi%* “cross-wise, sideways” (*-fi* a variant of *-fi*), *Δegguvi* “near” (cf. stem *Δeggu-* in *Δegguv-qen* “from near at hand”, *Δeggu-tevrw* “nearer”, etc.), among others (see Meillet-Vendryes [1948²: §§781, 785] and Brugmann [1904: §584] for some further examples and discussion).

The existence of such a morpheme in Indo-European, therefore, is beyond question. Moreover, some conclusions about adverbial **-s*, however, are possible, even if a full understanding of its use awaits further investigation¹¹. Most manifestations of adverbial **-s* that can be seen in the forms cited above seem to have no systematic functional status other than that of generally marking adverbials, whereas in one group of forms--the multiplicatives--this suffix has an identifiable function. Thus, the most likely interpretation of this occurrence of one productive use versus scattered relics with no unified function is that the multiplicative use of **-s* is an innovative specialization of a once more general adverbial marker.

Overall, then, especially with *hasterza* to guarantee that the phonological development required to derive *andurza* from a formation with adverbial **-s* is unproblematic, this adverbial **-s* must be considered to be a strong possibility as a source of the *-za* in *andurza*. Such a source, unlike the *communis opinio* cited above, requires no additional assumptions within Hittite about the loss of ablatival meaning or about shifts in meaning for ablatival forms.

If *andurza* is thus to be reconstructed as something like **endhur-s* (or **entr \geq -s*) with the PIE adverbial **-s*, then we have a situation in which both Hittite and the rest of Indo-European show traces of an unproductive and apparently archaic element in word-formation. While noteworthy, such a situation says nothing about the relationship between Hittite and the other languages. With regard to the one productive use of this **-s*, however, several interesting possibilities emerge.

It is clear, from the evidence of **dwis* etc. cited above, that the Indo-European languages other than Hittite jointly show adverbial **-s* productively in the formation of multiplicative adverbs. In Hittite, however, the multiplicative adverbs involve a suffix *-anki* (*1-anki*, *5-anki*, etc., cf. Friedrich [1960: 72]) which is clearly unrelated to the **-s* of **dwis* etc. Interestingly, though, there is another numeral formation in *-is*, e.g. *2-is*, *3-is*, and *4-is*, but also *10-is*, *15-is*, *20-is*, *30-is*, and higher (Friedrich [1952: 304], which some scholars see as multiplicative adverbs (e.g. Laroche [1947: 205], but the identification of which Friedrich (1960: 73) labels as “unsicher”).

These forms, together with *andurza* under the analysis given here, therefore, present a crux for the Indo-Hittite hypothesis, the claim that the Anatolian languages constitute a sister branch to a single branch of the language family which gave rise to the rest of the languages (Greek, Indo-Iranian, Germanic, etc.)¹². If the Hittite numeral forms in *-is* are not multiplicatives and thus not related to the multiplicative use of adverbial **-s* elsewhere, and if, as has been assumed here, the original function of **-s* was to mark adverbs and its

use in **dwis*, **tris*, and **k^wetwr_≥s* is an innovative specialization of this morpheme, then there would be a productive late Indo-European suffix which is rare (or nonexistent) in Hittite and more generally, it could be said that Hittite would not have taken part in an innovation shared by a significant subset of the other branches. Such a situation, as Oettinger (1986: 6) has pointed out¹³, is consistent with--and expected under--the Indo-Hittite hypothesis.

If, however, the Hittite forms in *-is* are multiplicatives, then they must surely be connected in some way with the formative seen in **dwis*, **tris*, etc., presumably through the extraction of **-is* out of **dwis* and **tris* followed by its extension to other higher numerals (giving, e.g., *10-is*, *15-is*, *20-is*, etc.). In that case, Hittite and at least several of the other Indo-European languages share a common innovation, a situation which would be unexpected, again as noted by Oettinger (1986: 6), under the Indo-Hittite hypothesis¹⁴. The fact that, to judge from the higher forms such as *10-is* and *20-is*, Hittite took this innovation one step further and created a new morpheme with a higher degree of productivity would be a matter internal to the historical morphology of Hittite and would have no bearing on the validity of the Indo-Hittite model.

In either case, *andurza* is relevant to the assessment of the Indo-Hittite hypothesis. If the analysis proposed here for *andurza* is correct, and if *2-is* etc. are not multiplicatives, then it is difficult to argue that Hittite innovated away from the proto-language (and thus the other languages) by simply replacing all uses of adverbial **-s* (admittedly in different ways, but significantly with *-anki* in multiplicatives), a claim that would vitiate the value of the situation for supporting the Indo-Hittite hypothesis (see footnote 13); rather, the suggestion would have to be that the suffix was present in the language and that Hittite broke off from the others before the innovative creation of **dwis*, etc. If, however, *2-is* etc. are multiplicatives, then the presence of the unproductive use of **-s* in *andurza* would suggest that Hittite was indeed also involved in the specialization of more general adverbial **-s* to

multiplicative marking, contrary to the Indo-Hittite hypothesis; given a trace of **-s* in *andurza*, for instance, it is less likely that Hittite could have borrowed the *-is* suffix.

A lot, therefore, hinges on the precise status of the *-is* numeral forms. Although the exact determination of their status is uncertain and awaits a full reevaluation, there is one suggestive piece of evidence favoring the identification of these forms as multiplicative. In particular, a form *3-kis* is also attested (Friedrich [1960: 73]), presumably for *3-ankis*¹⁵, and thus apparently via a blend of the endings *-is* and *-anki*. If *3-kis* does come from such a blend, then it can be assumed that *-is* and *-anki* shared a common function, for otherwise a conflation of the two suffixes would be unlikely to have arisen. In that case, therefore, the blend would indicate that *-is* indeed is a multiplicative marker, and the conclusion that then follows is that the evidence of *andurza* and the *-is* forms taken together runs counter to the predictions of the Indo-Hittite.

To be sure, there are several points in this presentation that are far from conclusive, as certain aspects of its evaluation, for instance, must wait until more is known about the various manifestations of the element **-s*. Still, it seems that at the very least, the evidence of *andurza* and the multiplicative adverbs will have to be considered in future discussions of Indo-European and Indo-Hittite¹⁶.

NOTES

1. See, however, the discussion below (and footnotes 3 and 6) concerning the ablative origin of *-za* and what it might mean for the etymology of *andurza*.

2. The suggestions of JASANOFF (1972: 125) that “the adverb *andurza* is almost certainly derived from an unattested **andur* [which] if not simply a petrified noun meaning “interior” may well contain the same enlargement **-r* which elsewhere in Indo-European makes locative adverbs” are no less plausible, in my view, but seem not to have attracted much attention. I ignore here the suggestion of GEORGIEV (1962: 35) connecting *andurza* with a Etruscan *atrs / atrus*, in the light of the arguments provided by PFIFFIG 1962 against this proposal--and others--made by GEORGIEV; for example, it is generally accepted that *atrus* is possessive of a gentilicium *atru* that is well-attested from north Etruria.

3. An ablative source for *-za*, if accepted (but see below), might be taken to decide the question of the root etymology of **andur-* in favor of the analysis with the nominal root **dhwor-* inasmuch as one would not expect an ablative ending to have occurred originally on a non-nominal stem such as **enter-* (whatever the ablaut grade). See also footnotes 6 and 11 for some further relevant discussion.

4. Note also that an adverbial *tapusa* “sideways, aside” occurs as well in Hittite, presumably an old directive case form. The occurrence of such a case form used adverbially strengthens the conclusion that *tapusza* is an etymological case form, i.e. an ablative.

5. A shift of ablative to locative meaning may not be all that unnatural, since, as Hans Henrich HOCK has reminded me, Sanskrit *tatas* etymologically was ablative in nature, meaning literally “from that (place)”, but came to be used in a simple locative sense, as “there”.

6. MELCHERT (1977) argues for a perlative (“through ...”) sense for the Hittite ablative as well, as Andrew GARRETT has pointed out to me, so that *andurza* could be derived from a perlative ablative, i.e. roughly “in through the door”. A perlative origin for *andurza* would be possible, however, only if a form of **dhwor-* “door” were involved; this etymology, though, as noted above (see footnote 3), while certainly a strong possibility is not undisputed. Moreover, as with any derivation of *andurza* from “door”, it is not obvious that a root-noun in combination with a prefix could serve as a stem to which a true ablative case-ending could be added appropriately. In particular, while Vedic *pra-div-* “forward heaven” shows that a prefix-plus-root noun combination is possible in Indo-European, perlative semantics for the source of *andurza* would require that the relative semantic scope of the prefix and the case-suffix be “[in [through-door]]”. The inflectional case-suffix, however, would presumably be the last element attached in the derivation of a pre-form such as **en-dhwor-ti*, being added onto the stem created by the prefix-plus-root noun combination; assuming that scope correlates with order of attachment, though, that order of attachment would yield a semantic interpretation of “[through [in-door]]”, which would not be appropriate as a source for the ultimate meaning “indoors”.

7. See NUSSBAUM (1986: passim, but especially 96ff.) for detailed discussion of Hittite *-kar* and related formations elsewhere.

8. Interestingly, both JASANOFF (1972: 126) and NUSSBAUM (1986: 96) refer to *kitkarza* as reflecting an ablative form, suggesting that in their view, the addition of *-za* was not merely a formal reshaping of *kitkar* based on, for instance, *aravza*, but rather involved some ablative force to the *-za*.

9. Word-internal **-ns-*, though, yields *-ss-* when the sequence is original (e.g. *vassu-* “king” from **H₂ensu-*) and *-nz-* when secondary (e.g. *anzas* “us” from **n₂sos*).

10. In the formulation given in SCHINDLER (1975) of the relevant morphophonemic rules, the occurrence of a dental stop immediately after a guttural would yield the Proto-

Indo-European spirant often referred to as “thorn”, the voiced variety of which (here symbolized as ∂ [edh]) occurs after the voiced stop; *hyas* shows the effects of an Indo-Iranian reduction of the initial cluster to $*\text{[}hy\text{-}$, seen also in *yená*- “hawk”.

11. It is tempting to see in this adverbial $*\text{-s}$ the same morpheme that occurs as a genitive/ablative ending in some apparently archaic nominal inflection in Indo-European, e.g. relic forms such as Hittite *nekuz*, from $*\text{nek}^{wt}\text{-s}$, in the phrase *nekuz mevr* “time of evening”, or Vedic *dan*, from $*\text{dem-s}$, in the phrase *patir dan* “master of the house”. If this identification is made then (as noted in footnote 3 for a different ablative element) perhaps the derivation of *andurza* from $*\text{dhwor-}$ “door” gains some plausibility; however, the occurrence of $*\text{-s}$ on clear nonnominal stems throughout the various languages (e.g. Sanskrit *avás* noted above) means that this consideration cannot be given too much weight. One would have to reckon, of course, with a loss of genitive/ablative meaning for this $*\text{-s}$ relatively early on, even though such a development would not be unreasonable, given the archaic nature of $*\text{-s}$ in nominal inflection; it would have to have passed out of productive nominal use early in Indo-European and so would not be expected necessarily to have retained any ablative sense.

12. A review of the considerable literature on this subject is not possible here, but it is significant--when one considers who the scholar being memorialized in the present volume is--to note that one of the more recent discussions of the Indo-Hittite hypothesis is the piece by Charles CARTER himself, published posthumously in 1988. See also TISCHLER 1988, in which the Indo-Hittite question is recast into a question of relative chronology of various innovations characterizing early, middle, and late Indo-European.

13. Although OETTINGER gave this situation as one of four that would point to Indo-Hittite, the caveat I voiced in JOSEPH 1988, namely that the absence of the productive morpheme could itself be the result of an Anatolian innovative replacement, still holds; see, though, the discussion that follows.

14. A feature shared between Hittite and the rest of the languages could of course represent an element of Indo-Hittite age, i.e. an inherited feature in each putative branch of Indo-Hittite. However, contrary to such a view, the productivity of the **-s* multiplicatives vis-à-vis the scattered remains in other functions suggests instead a more recent (that is, “late” Indo-European) origin for the multiplicative, presumably, then, in a truly Indo-European (*cum*-Hittite) stage without needing recourse to a construct such as Indo-Hittite.

15. It is unlikely that *-is* in *3-is* (etc.), everywhere it occurs, merely stands for *-ankis*, though in any case, one would undoubtedly have to have recourse to something like Indo-European adverbial **-s* to explain the occurrence of [-s] in *3-kis*. Clearly, as the discussion below indicates as well, a reevaluation of these numeral forms in *-is* is needed.

16. I would like to take this opportunity to thank Craig MELCHERT and Rex WALLACE for extremely useful comments on an earlier version of this paper which helped to shape my understanding of some key points. Also, the audience at the 1990-91 Annual Meeting of the Linguistic Society of America--most notably Andrew GARRETT, Mark HALE, and Hans Henrich HOCK--are to be thanked for their comments during a presentation of a version of this paper at that forum. None of these scholars mentioned here, of course, bears any responsibility for the content of this piece and it need not be the case that any one of them agrees with the claims put forth here.

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