

Hittite *šia*-‘1’ and its implications for the etymology of Indo-European numerals

Abstract

This brief paper explores the implications of Goedegebuure’s (2006) recent identification of *šia*- as the Hittite numeral ‘1.’ Specifically, it is proposed here that *šia*- lends additional support to the notion that the lower numerals of Indo-European can be derived from deictic/demonstrative elements – in this case a contamination of an original deictic/demonstrative in **(e/o)s* with another in **io* (**yo*). Moreover, the etymon of the Hittite form, in conjunction with the alternative Indo-European Proper root for ‘1,’ **sem-*, a contamination of deictics in **(e/o)s* and **(e/o)m*, confirms the existence of an alternation in deictic extensions of **(e/o)s* (**yo* ~ **em*) which parallels a similar alternation in deictic extensions involving the alternative Indo-European Proper root **oi-* ‘1’ (**oi-no-* ~ **oi-k^wo-*, etc.). **oi-* itself is commonly traced to a deictic source (cf. Shields 1994).

The contribution of Hittite to the study of the etymology of Indo-European numerals is limited because Hittite scribes generally used logograms to represent these lexemes. However, in some cases syllabic renderings of numerals are attested directly, or insights into the pronunciation of Hittite numerals can be ascertained indirectly through their appearance in related word-forms. In an important recent article, Goedegebuure (2006) has proposed that the Hittite cardinal ‘1’ is *šia*-. By analyzing contexts in which *šia*- appears, she demonstrates that – formally – it is neither a demonstrative nor an accented anaphoric pronoun in function, thereby implying logically that it is a numeral, and that – semantically – its use is consistent with the meaning ‘one.’ Hoffner & Melchert (2008: 154) endorse this finding, characterizing it as “promising” in comparison to previous attempts at identification which “have proven uncertain.” Of course, Indo-European Proper attests two roots for ‘1’ – **oi-*, which is variously extended by **-no-* (e.g., Latin **oi-no-* [*ūnus*]), **-k^wo-* (e.g., Vedic **oi-k^wo-* [*éka*-]), and **-wo-* (e.g., Old Persian **oi-wo-* [*aiva-*]), and **sem-* (e.g., Mycen. *e-me*, Toch. A *sas* (masc.), *sam* (fem.), Lat. *semel*, Go. *simlē* ‘once, formerly’) – the former of which is traditionally associated with “singleness or isolation” and the latter of which, “togetherness or unity” (Hoffner & Melchert 2008: 154, cf. Waanders 1992: 370). “It is

possible that in Hittite also there were two words,” but the scribal practice alluded to earlier makes it impossible, at present, to verify this fact (Hoffner & Melchert 2008: 154).¹

The purpose of this brief paper is to explore the potential implications of Goedegebuure’s hypothesis (2006) for the etymological origin of the numeral ‘1’ in early Indo-European itself. I shall argue that it provides significant confirmation for the view expressed in Shields (1994), where I maintain that the lower numerals can be traced to deictic/demonstrative elements. In my opinion, the system of Indo-European numerals developed gradually into the historical period, with the original system consisting of only a few digits originating as deictics/demonstratives and a so-called “limit of counting,” i.e., *one, two, three, many*. I developed this latter notion in a series of articles beginning in 1984 (see, e.g., Shields 1984, 1991, 1994, 2000); the same view was more recently – and apparently independently – formulated by Carol Justus beginning in 1988 (see, e.g., Justus 1988, 1999, 2004).

The idea that, following common typological developments, the lower numerals of many languages have a deictic/demonstrative source is not new; indeed, both Conant (1896: 75) and Menninger (1969: 17) subscribe to this position. In Shields (1994: 179) I point out that Brugmann (1911: 311) reconstructs, as one of “die *n*-Demonstrativa,” a form in **oino-*, which itself represents a contamination of the demonstratives in **oi-* and the deictic/demonstrative element **no-* and that extensions of **oi-* by **k^wo-* and **wo-* also “are homophonous with deictic particles which can be independently reconstructed for Indo-European” (cf. Hirt 1927: 11–13, Brugmann 1911: 349–350). I conclude that these deictics which were attached to **oi-* may have originally expressed differing degrees of remoteness/proximity to the speaker, i.e., *one-here, one-there, one-yonder*, but that “as the proto-language evolved, the importance of specifying the deixis of the numeral ‘one’ lessened until various dialects merely generalized (and/or specialized) the original deictic variants” (1994: 182). I likewise propose there that **sem-* derives from the demonstrative stem **se/o-* (cf., e.g., Skt. *sá-s*, Gk. *hó-s*, Go. *sa*), which has been extended by the deictic **e/om*, reconstructed for Indo-European, for example, by Hirt (1927: 13).

¹ On the basis of paradigmatic variation exhibited by the Hittite logogram ‘1,’ Goedegebuure (2006: 185) speculates that Hittite had two roots for this numeral. However, she admits that other interpretations of the data are possible.

The deictic/demonstrative origin of the numeral roots **oi-* and **sem-* is, of course, controversial. Szemerényi (1996: 221–222), for instance, explicitly rejects deictic/demonstrative sources for any cardinal numeral, and Fortson (2004: 131) similarly describes the Indo-European word-forms for ‘1’ as independent lexical entities. On the other hand, Sihler (1995: 404–406) sees in **oi-* “an ablaut grade of the pronoun root **i-*,” although he posits no such deictic/demonstrative source for **sem-*. This same position is endorsed by Buck (1949: 937) and Mallory & Adams (1997: 398–399). Among the few proponents of a deictic/demonstrative source for **sem-* are Brugmann (1916/17: 160–161) and Hahn (1942).

In support of deictic/demonstrative etyma underlying the Indo-European forms for ‘1,’ I have attempted to demonstrate in a series of articles that other lower numerals of Indo-European can easily be derived from such elements, which “frequently show a secondary affixation of ... [various non-singular markers like **(e/o)s*, **i*, **u*, **e*, **(e/o)r*, and **-t/d*] as a means of hypercharacterizing their inherent non-singularity” (Shields 1985: 189). (See Shields 1985 and 2004: 572 for details.) For example, in Shields (1991: 270), I note that “if Schmidt (1978: 172) is correct in reconstructing **de-/di-* (cf. Hitt. *da-*, Lat. *dis-*) as variant forms of the Indo-European root for ‘2,’ cf. Shields 1984, then ‘2’ corresponds formally to the demonstrative stem in *di-* (cf. ‘Iran. balt. *di-*: z.B. Akk. Sg. av. *di-m* preuss. *di-n*, Neutr. Av. *di-t* ‘es’ ...’ [Brugmann 1904: 402]) and the Greek deictic particle *-de*,”² while in Shields (2000), I posit the demonstrative/deictic **te/o-* plus the non-singular affix *-r* as the basis of **ter-* ‘3’ (cf. Hitt. *ter-*, Skt. ordi-

² In Shields (2004b: 24), I argue that **de/o-* was the primary form of the Indo-European numeral ‘2’: “Although **duwo-* (e.g., Gk. *dúo*, Lat. *duo*, Ved. *duvá*, OCS *dъva*) is its most common reconstruction, a variant in **dw-* (e.g., Ved. *dvá-*, Go. *twai*, Armen. *er-ku*) is also generally ascribed to the proto-language (cf. Szemerényi 1996: 222). However, as Sihler (1995: 407) argues, since ‘all other numerals have *e*-grade in the simplex forms, so the truly original form for ‘two’ must have been something like ***dewo*.’ I, too, believe that the latter form should be ascribed to the proto-language and that it should be segmented as **de-wo*, with the truly original form for ‘2’ – **de* – directly attested, for example, in the numeral **de-kmt* ‘10’ (see Shields 1984 for details, cf. also Szemerényi 1960: 69 and Markey 1984: 284: ‘two hands (full)’). An *o*-grade variant of **de* may be found in the Hittite numeral *da-* ‘2’ (e.g., *da-ma-a(-i)* ‘(an)other’), cf. Sihler (1995: 408).” The lexeme **di*, as both numeral and deictic, probably represents a contamination of the deictic particles/demonstratives **de* and **i*.

nal **tr-* [zero grade, cf. Benveniste 1962: 87]). I have also argued that the Indo-European Proper root for ‘4’ (**k^wetwor-*: Skt. *catvāras*, Gk. *téttares*, Lat. *quattor*, Go. *fidwōr*) contains the root **k^we-*, which “is probably related to the Indo-European interrogative-indefinite stem in **k^we-*, an element that “bears close semantic and inflectional affinities to demonstratives (cf. Brugmann 1904: 379 ...)” and that “probably represents an etymological demonstrative which has lost much of its deictic force (cf. Lane 1961: 469–470)” (Shields 1991: 269–270). To this root **k^we-* has been added two hypercharacterizing non-singular markers, specifically **-u* and **-or*. Similarly, I have derived the Hittite numeral *mey-u-* ‘4’ from an Indo-European demonstrative stem in **me/o-* (cf. Vedic *āma-* ‘this one’ < **e-mo-*, i.e., a contamination of the demonstratives **e/o* and **mo-*, cf. Misra 1968: 81), to which the non-singular suffixes **i* and **u* were attached (Shields 2004a). Moreover, it is my opinion that even the Indo-European numeral for ‘6’ (cf. OIr. *sē*, Lat. *sex*, Go. *saihs*, Gk. *(w)éks*) lends itself to analysis as an original demonstrative in **s(w)e*, augmented with the non-singular elements **-k* and **(e/o)s*. This original demonstrative also developed eventually into a reflexive pronoun (see Shields 1996 for details).

However, my primary point in this brief paper is that a Hittite numeral in *šia-* ‘1’ provides very substantial support for my analyses of the etymology of **oi-no*, etc. and **sem-*. I am now convinced that the Indo-European deictic/demonstrative in **se/o-* actually reflects an original deictic/demonstrative in **(e/o)s* which has been contaminated with another particle in **e/o* (cf. Hirt 1927: 10–11) or has been thematicized (Shields 1992: 29). Strong evidence for a deictic/demonstrative in **(e/o)s* comes once again from Hittite in the form of “a pronoun/adjective *aši*,” which “is not an anaphoric pronoun,” as has been assumed (cf. Laroche 1979: 148 and Puhvel 1984), “but the 3rd person demonstrative ‘yon’ instead, accompanying the 1st person demonstrative *kā-* ‘this, near me’ and the 2nd person demonstrative *apā-* ‘that, near you’” (Goedegebuure (2002/03: 1). Goedegebuure carefully documents her assertion with textual data and by showing that the form meets all the typological criteria for demonstratives. Although Goedegebuure (2002/03) does not consider the etymology of *aši*, I argue in Shields (2007: 132–133) that “it derives from a late contamination of the deictic/demonstrative **(e/o)s* (specifically, its *o*-grade) and a comparable element **i* (cf. Hirt 1927: 11). Such a con-

tamination of deictics/demonstratives is a common development because of the need to reinforce the deixis of these forms.” Moreover, “Hoffner (2002/03: 81–83) proposes that the Hittite adverbial form *āšma* contains an original deictic element which ‘was not proximal (close to or on the ‘deictic center’), but distal’” and that it is to be etymologically connected to *aši*. In my opinion, “the long-initial of *āš-ma* could have resulted from the contamination of the deictic particle **(e/o)s* with the non-proximal deictic **e/o* (cf. Hirt 1927: 10–11), i.e., **e/o + (e/o)s > āš*” (Shields 2007: 132–133).³ Like Hoffner (2002/03: 83), I see *-ma* as an affixed particle in *-a/-ma*, widely attested in Hittite.

I should point out that Patri (2008) has recently questioned Goedegebuure’s conclusion that *aši* is indeed a demonstrative and presents evidence that it “est simplement un déterminant défini” (165), i.e., a definiteness marker. However, since Patri (2008: 169) acknowledges the well-known typological generalization that the etymological source of definiteness markers is deictic particles (cf. also Hazelkorn 1983: 110), the implications of this critique for the conclusions reached in Shields (2007) are minimal. In short, Indo-European possessed a deictic particle in **(e/o)s* which underlies the demonstrative **se/o-* of Indo-European Proper and the demonstrative (Goedegebuure) or definiteness marker (Patri) *aši* of Hittite.

Now on the basis of this view that Indo-European possessed a deictic/demonstrative in **(e/o)s*, it is reasonable to assert that Indo-European Proper **sem-* shows **(e/o)s* plus the deictic/demonstrative element **(e/o)m*. Likewise, Hittite *šia-* can represent a contamination of **(e/o)s* and the deictic/demonstrative form **io-* (**yo-*),⁴ which is to be connected etymologically to the so-called indefinite-interrogative pronoun **yo-*.⁵ As Szemerényi (1996: 210) points out, “The origin of [indefinite-interrogative] **yo-s* from a demonstrative, namely the

³ Hoffner (2002/03: 82) says of the difference in the length of the initial vowels of *aši* and *āšma*: “Since in Hittite texts from Boğazköy word-initial writings like *a-a-*, *e-e-*, *i-i-*, and *u-u-* are confined to Hurrian, Luwian, and Hattian words,” *aši* may have had a long vowel not indicated as such by the script, or, less likely, “an alternate account could suppose compensatory vowel lengthening accompanying contraction” for *āšma*. I feel that the contamination of deictic elements provides a less ad hoc explanation for the initial vocalic segment.

⁴ On the plausibility of reading *šia-* as /sya-/, see Hoffner (2006: 191).

⁵ In some dialects (Indic, Greek, Phrygian, and Slavic), this form also assumed a relative pronoun function (Szemerényi 1996: 210).

anaphoric **i-*, is certain.” Thus, the Hittite numeral *šia-*, like **oi-* and *sem-*, can easily be derived from deictic/demonstrative sources; and it appears to confirm the existence of an alternation in deictic extensions of **(e/o)s* (**s-yo-* ~ **s-em-*) which is much like the alternation in deictic extensions of **oi-*.⁶

Controversy surrounding the etymologies of Indo-European numerals will most certainly continue. However, new data do sometimes become available, and when they do, they most certainly can prove useful in assessing the explanatory power of current theoretical statements.

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⁶ Goedegebuure (2006: 185) also briefly (in a footnote) speculates that *šia-* may be etymologically related to the demonstrative **se/o-* and ultimately to Indo-European Proper **sem-*; however, she does not explain in detail the developmental processes which underlie arguments for such a potential relationship. Moreover, she points out that Hittite itself may attest reflexes of **sem-* in such forms as “1) *šani-* ‘the same’, 2) *kiššan* ‘in the same way’ (and not ‘in this one way’), and 3) *šauitišt-* ‘in the same year’” (2006: 185).

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