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ON THE COVER:

The Old Babylonian cylinder seal discussed in the last contribution of this issue (Photo: Zs. J. Földi)

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Hittite *dapi(a)-*, *dapit/d-*, *dapiant-* ‘all, every, each; entire’: a logographic interpretation


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Abstract: This article discusses the problematic aspects of the synchronic and diachronic interpretation of Hittite *dapi(a)-*, *dapit/d-*, *dapiant-* ‘all, every, each; entire’. It will be argued that earlier treatments of these words, including ones that propose Luwian origins for them, cannot explain these problems. Instead, a new, Hittite-internal analysis of these words is presented which states that they in fact contain a logogram, DA.BI, and actually are logographic renderings (DA.BI(-a)-, DA.BI-t/d-, DA.BI-ant-) of Hitt. *hūmant-* ‘all, every, each; entire’.

Keywords: Hittite, cuneiform, orthography, logographic writing

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1. Introduction: the Hittite *dapi*-stems

All Hittite handbooks cite the existence of the adjectives *dapi(a)-*, *dapit/d-*, and *dapiant-*, which function as universal quantifiers and can be translated ‘all, every, each; entire’.¹ There are quite a few problematic aspects regarding these adjectives, however. For instance: it is not clear what the functional distribution is between the three stems; there are several doublets of individual case forms that are difficult to account for; the spelling of most forms shows remarkable peculiarities; semantically and syntactically they are indistinguishable from the more commonly used quantifier *hūmant-* ‘all, every, each; entire’; see the full list of problematic aspects in section 2 below.

Most of these difficulties have been recognized before, and some attempts have been made to explain them, most recently, for instance, by proposing that these adjectives derive from a non-standard variety of Hittite² or by interpreting them as having a Luwian origin.³ To my mind, however, none of the proposed interpretations of *dapi(a)*, *dapit/d-*, and *dapiant-* has been able to offer a satisfying solution to all problems. In the sections to follow I will therefore discuss anew all problematic aspects of these adjectives and offer a radically new interpretation of these stems that accounts for all their remarkable features, viz. that these words contain a logogram, DA.BI.

¹ E.g. HW, 211–212; HEB², 70; Hoffner – Melchert 2008, 152; Kloekhorst 2008, 831–832; HEG T, D, 126–128.


² Kimball 2016.

³ Oettinger 2006; Melchert 2022; 2023. I am grateful to Craig Melchert for allowing me to cite the handout of his 2022 lecture on this topic as well as for sharing with me the text of his 2023 article before publication. Since this article in some points deviates from the lecture, I will refer to both.

2. Attestations and problematic aspects

	<i>dapi(a)-</i>	<i>dapit/d-</i>	<i>dapiant-</i>
nom. sg. c.	--	--	<i>dapianza</i> (9×)
acc. sg. c.	<i>dapin</i> (7×) <i>dapian</i> (24×)	--	--
nom.-acc. sg. n.	<i>dapi</i> (1×)	--	<i>dapian</i> (32×) ⁴
gen. sg.	<i>dapiaš</i> (2×)	--	--
dat.-loc. sg.	<i>dapī</i> (10×) ⁵	--	[<i>d</i>] <i>apianti</i> (1×)
abl.	<i>dapiza</i> (7×) <i>dapiaz</i> (1×)	<i>dapidaz</i> (1×)	<i>dapianda</i> [<i>z</i>] (1×)
instr.	--	--	--
nom. pl. c.	<i>dapieš</i> (1×)	<i>dapiteš</i> (1×)	<i>dapianteš</i> (8×)
acc. pl. c.	<i>dapiuš</i> (2×)	--	<i>dapianduš</i> (3×)
nom.-acc. pl. n.	-- ⁶	<i>dapida</i> (1×)	<i>dapianda</i> (8×) <i>dapianta</i> (2×)
gen. pl.	<i>dapiaš</i> (2×)	<i>dapidaš</i> (1×)	--
dat.-loc. pl.	<i>dapiaš</i> (7×) ⁷	<i>dapitaš</i> (2×)	<i>dapiant</i> < <i>t</i> > <i>aš</i> (1×)

TABLE 1: An overview of all attestations of *dapi(a)-*, *dapit/d-*, and *dapiant-*. See the Appendix below for the exact places of attestations of all these forms.

- ⁴ Schuol 1994, 102 cites a nom.-acc. sg. n. form *dapijan* for KBo 16.97 i 6 (MS), a line that she reads as [ša-]ru-ua-an da-pi-ia-an ar-nu-ma-an-zi SIG₅, translating (1994, 107) “Um die ganze [Be]ute fortzubringen? – Es ist günstig”. However, the hand copy of this tablet clearly shows a space between the signs DA and BI (likewise its photo, <http://hethiter.net/fotarch/BoFN06196>), which implies a reading [x-]ru-ua-an-da pi-ia-an ar-nu-ma-an-zi SIG₅ ‘[x-]ruuanda to bring forth the given? – Favorable’. The nom.-acc. sg. n. form “da-pi-ia-an” should therefore be stricken from our inventory.
- ⁵ Berman 1972, 100 cites a dat.-loc. sg. form “*dapi*”, implying *da-pi*, without mentioning its place of attestation (taken over by HEG T, D, 126 and Oettinger 2006, 1329, with reference to Berman). I have not been able to find such a form, however. Perhaps it has been cited from HW, 212 (“D.-L. *dapi*”, also without giving a place of attestation), but in that publication *plene* spelling is not always noted down correctly. It thus seems that the only attested dat.-loc. sg. form is *da-pi-i*, with *plene* spelling.
- ⁶ A form “da-pi-ia” has been cited for KBo 12.38 i 24 (NH/LNS), which is interpreted by e.g. Melchert (2022, 4; 2023, 156) as a nom.-acc. pl. n. form belonging to the stem *dapi(a)-*. However, the interpretation of this form is far from clear. First, it occurs in a broken context, with a break directly preceding DA, making [...(-)]da-pi-ia the last and only preserved sign sequence of its line, so that its function cannot be independently determined. Moreover, as Kimball (2016, 161) points out, the tablet on which [...(-)]da-pi-ia occurs, also contains the nom.-acc. pl. n. form *da-pi-da* (KBo 12.38 i 4), which diminishes the chance that [...(-)]da-pi-ia, too, is a nom.-acc. pl. n. form. Moreover, Valerio Pisaniello (*pers. comm.*) points out to me that, contrary to the hand copy, on the photograph (<http://hethiter.net/fotarch/B0459c>) and especially on the 3D-model of this tablet ([http://hethiter.net/3DArchiv\(548-t\):](http://hethiter.net/3DArchiv(548-t):) ) no sign BI can be found in this sequence. After DA there are indeed two horizontal wedges (allegedly of BI), but they are not followed by the expected two *Winkelhaken* to complete the sign BI, but rather by three horizontal wedges that belong with the following sign IA. Pisaniello therefore convincingly argues that the sign sequence should rather be read [...(-)]da-ni-ia, with NI instead of BI, and that this sequence could belong to, for instance, [kē] *dani-ia* or [kue] *dani-ia*. The nom.-acc. pl. n. form “da-pi-ia” should therefore be stricken from our inventory.
- ⁷ A dat.-loc. pl. form “da-pi-i[a²-aš]” is cited by Güterbock 1951, 146 for KUB 33.96 i 3 (MH/NS), which is followed by e.g. Rieken *et al.* 2009, Partitura §1 line 4 (“da-pi-y[a²-aš]”). However, the traces of the broken sign as drawn on the hand copy of this tablet or visible on photos like <http://hethiter.net/fotarch/BoFN09144> do not fit a reading -i[a-]. Instead, we are rather dealing with -t[a-, cf. the shape of the sign TA in line 6 of the same fragment. I therefore rather read this form as *da-pi-t[a-aš]* (or in fact, DA.BI-t[a-aš], as will be argued below). Note that Berman 1972, 100 cites this form as “*dapidaš*”, as if the broken sign can be read -d[a-.

The attested form of the three adjectives, all of which are found in (L)NS texts, are presented in Table 1.⁸ As has been noticed before, there are several problematic aspects regarding these adjectives that call for an explanation.

Problem 1. In the paradigm of the adjective that is cited here as *dapi(a)-*, we find both *i*-stem forms (with a stem *dapi-*) and *a*-stem forms (with a stem *dapia-*), but the exact relationship between these two stems is unclear. The stem *dapi-* is found in nom.-acc. sg. n. *dapi* (1×), acc. sg. c. *dapin* (9×), and abl. *dapiza* (7×), whereas the stem *dapia-* is present in acc. sg. c. *dapian* (28×), and, possibly, nom.-acc. sg. n. *dapian* (32×), although this latter form is usually interpreted as belonging to the *-ant*-stem *dapiant-*. Ambiguous forms are gen. sg. *dapiaš*, dat.-loc. sg. *dapī* (but see *Problem 4*, below), abl. *dapiaz*, nom. pl. c. *dapieš*, acc. pl. c. *dapiuš*, gen. pl. *dapiaš*, and dat.-loc. pl. *dapiaš*, which could in principle belong to both the stem *dapi-* and the stem *dapia-*. It is true that Hittite knows other adjectives that show both *i*-stem and *a*-stem forms, like the adjectives in *-ezzi(ia)-*, but here the two stems are usually chronologically distributed.⁹ In the case of *dapi(a)-*, however, the two stems are contemporaneous (all attestations of *dapi(a)-* are from (L)NS texts). The absence of a distributional pattern between the stems *dapi-* and *dapia-* thus remains unexplained. Moreover, the interpretation of some of the adjective’s key forms is problematic, like the distinction between the acc. sg. c. forms *dapin* and *dapian* (see *Problem 3*, below), or the interpretation of the abl. form *dapiza* vis-à-vis the form *dapiaz* (see *Problem 5*, below).

Problem 2. Whenever the *-i-* of the stem *dapi(a)-* is followed by an ending starting in *-a-*, we never¹⁰ find a spelling of the glide *i* with the sign *IA*, e.g. acc. sg. c. *da-pí-an*, never ***da-pí-ia-an*, or dat.-loc. pl. *da-pí-aš*, never ***da-pí-ia-aš*.¹¹ This also goes for the *-i-* in the *-ant*-stem *dapiant-*, which is always spelled *da-pí-an-t°*, never ***da-pí-ia-an-t°*.¹² By itself, spellings of the type *(-)Ci-aC(-)* need not be problematic, since these are found throughout the Hittite corpus. However, the glideless spelling *(-)Ci-aC(-)* is on average clearly less common than the spelling *(-)Ci-ia-aC(-)*, in which the glide *i* is overtly expressed with the sign *IA*. This is especially the case in (L)NS texts, where the ratio of the spellings *(-)Ci-aC(-)* vs. *(-)Ci-ia-aC(-)* is ca. 1 : 4.¹³ The fact that in *dapi(a)-*, which is only attested in (L)NS texts, we virtually only find spellings of the type *(-)Ci-aC(-)* (more than 100×), and never a spelling with the sign *IA* is, therefore, a remarkable feature that calls for an explanation.

According to Oettinger,¹⁴ the peculiar spelling *da-pí-aC(-)* may be explained by assuming that *dapi-* is a “fixed stem” (“starrer Stamm”), to which both the endings and the suffix *-ant-* are attached “ohne graphische und sprachliche Verbindung”.¹⁵ Moreover, since, according to Oettinger, such “fixed stems” are mostly found with loanwords from Luwian, he proposes that *dapi-* is borrowed from Luwian, even though in Luwian an adjective **dapi(a)-* is unattested (cf. also *Problem 9*). When it comes to the acc. sg. c. form *da-pí-an* (never ***da-pí-ia-an*), Oettinger proposes that this form should be interpreted as consisting of the “fixed stem” *dapi-* to which the ending *-an* has been attached, and that this form, therefore, should be interpreted as containing a stem *dapi-*,

⁸ This collection contains the attestations found in my electronic files, several Hittite dictionaries as well as secondary literature. Although I cannot claim exhaustiveness, I do believe that this collection is representative. See the Appendix below for the places of attestations of all these forms.

⁹ Cf. Kloekhorst 2008, 264–265.

¹⁰ See footnote 4 for the alleged nom.-acc. sg. n. form “*da-pí-ia-an*” in KBo 16.97 i 6 (MS); see footnote 6 for the alleged nom.-acc. pl. n. form “*da-pí-ia*” in KBo 12.38 i 24 (NH/LNS); and see footnote 7 for the alleged dat.-loc. pl. form “*da-pí-i[a²-aš]*” in KUB 33.96 i 3 (MH/NS).

¹¹ Oettinger 2006, 1330; Melchert 2022, 4; 2023, 156.

¹² Moreover, the nom. pl. c. form *dapieš* shows a spelling *-Ci-eš*, and not ***Ci-i-e-eš* or ***Ci-i-eš* as is attested in other *i-* and *-ia-*stems. However, since this form is attested only once, the absence of a spelling with *-i-* can in principle be coincidental.

¹³ Cf. Kloekhorst 2014, 326 with footnote 1271.

¹⁴ Oettinger 2006, 1330.

¹⁵ He refers to Rieken 2004 for similar cases.

not as a form with the stem *dapia-*. He even proposes that an *a*-stem *dapia-* never existed at all and should therefore be stricken from our dictionaries altogether.¹⁶ Note that Oettinger does not explain how the acc. sg. c. form *dapin* should be interpreted within the scenario that *dapi-* was a “fixed stem” (see also *Problem 3*, below).

Melchert¹⁷ takes over the tenet of Oettinger’s proposal and elaborates on it by stating that the “fixed stem” *dapi-* may go back to a Luwian collective noun **dapī* that, through an intermediate pre-Luwian stage **[tabiy]*, reflects PIE **d^hob-ih₂*. In Hittite, this **dapī* was converted to an adjective by “adding endings to an invariant base”, in which the “[l]ack of *yod* may reflect hiatus when vocalic stems [were] added”, i.e., for instance, gen. sg. *da-pí-aš* = *[tabi_as]*. However, since Melchert finds “it hard to believe that several generations of speakers could so consistently maintain a mere hiatus[, o]ne must seriously entertain the possibility that they adapted **[tabiyV]* to *[tabi?V]*, with a hiatus-filling glottal stop”.¹⁸ Melchert moreover adds that, when consonantal endings are attached to this invariable stem, a form like acc. sg. c. **[tabiy-n]* would have been “problematic” because of its final consonant cluster, and this form was therefore avoided by creating *da-pí-an*, i.e. *[tabi + an]* > *[tabi_an]* > *[tabi?an]*.¹⁹

Problem 3. The stem *dapi(a)-* shows two acc. sg. c. forms, *dapin* (spelled *da-pí-n°*, 7×) and *dapian* (spelled *da-pí-an*, 24×), without any chronological or semantic distinction. This situation therefore calls for an explanation.

According to Hoffner and Melchert,²⁰ the form *dapin* may be seen as showing a contraction of earlier *-iā-* to *-i-*, i.e. *dapin* < **dapi(i)an*. However, such a contraction is not a normal phenomenon in Hittite.²¹ Moreover, this hypothesis does not explain the following two peculiar distributional facts regarding the form *dapin*. First, all seven attestations of *dapin* are found in a single text, KUB 5.1 (NH/LNS), which also contains twelve attestations of the acc. sg. c. form *dapian*. Second, all attestations of *dapin* are followed by the clitic =*a*, *dapin=a*, whereas *dapian* always occurs without any clitics to it.

An attempt to explain these distributions is provided by Melchert,²² who points out that the form *dapin=a* of KUB 5.1 is aberrant anyway, since New Hittite “has no non-geminating clitic =*a*, and the sense calls for “and””. He, therefore, proposes to emend all attestations of *dapin=a* (spelled *da-pí-n=a*) in KUB 5.1 to *dapi<an>n=a* (i.e. *da-pí-<an>-n=a*). Although this emendation would indeed solve the formal problem of *dapin*, it remains unexplained why *all* attestations of *dapin=a* in KUB 5.1 would show this defective spelling.

Problem 4. The dat.-loc. sg. form *dapī* (spelled *da-pí-i*, 10×) is remarkable. Both *-iā*-stems and non-ablauting *i*-stems (nouns as well as adjectives) normally have dat.-loc. sg. forms that end either in *-iā* (spelled *-Ci-ā*), which is the original form, or in *-i* (spelled *-Cī*), which is a post-OH innovation.²³

¹⁶ Oettinger 2006, 1331.

¹⁷ Melchert 2022, 5; 2023, 161–162.

¹⁸ Melchert 2023, 161. According to Melchert (*loc. cit.*), a glottal stop “may exist in their [= Hittite speakers’] native *a-a-an-t°* ‘warm’ [aʔant-]”. This is an interesting remark, since thus far Melchert did not postulate the existence of glottal stops for synchronic Hittite (cf. Melchert 1994, 115–116; 2019, 268–270, where he only talks about “hiatus”, and Melchert 2019, 264–265, where he specifically denies the existence of word-initial glottal stops in Hittite). See Kloekhorst 2020 [2022] for the reasons to assume the presence in Hittite of word-medial intervocalic glottal stops (a view that Melchert now seems to have adopted) and of word-initial prevocalic glottal stops.

¹⁹ Melchert 2022, 5; 2023, 161. See the treatment of *Problem 3*, below, for Melchert’s explanation of acc. sg. c. *dapin*.

²⁰ Hoffner – Melchert 2008, 32.

²¹ Cf. e.g. Kloekhorst 2010a, 14–15 (although the account of *dapin* given there has to be given up, as will be clear from the remainder of the present article).

²² Melchert 2022, 4; 2023, 156 n. 9.

²³ See Norbruis 2021, 75–80.

The *-ī* as found in dat.-loc. sg. *dapī* (with *plene* spelling, *da-pī-ī*) is unparalleled. The only dat.-loc. sg. forms that regularly end in *-ī* (spelled *-Ci-ī*) are found in archaic, ablauting consonant-stems, where this ending represents */-ī/* < PIE **-ēi* (e.g. *ták-ni-i* ‘earth’ < **d^hĝ-m-ēi*; *ki-iš(-ša)-ri-i* ‘hand’ < **ĝ^hs-r-ēi*).²⁴ Such an analysis makes no sense for *dapī(a)-*, however. Melchert²⁵ therefore proposes that *dapī* (*da-pī-ī*) must be analyzed as consisting of the “fixed stem” *dapi-* + the regular dat.-loc. sg. ending *-i* (following Oettinger,²⁶ who does not mention the dat.-loc. sg. form, however), implying that the *plene* spelling with the sign I in *da-pī-ī* in fact represents the presence of a hiatus, [tabi_i], or of a glottal stop, [tabiʔi].

Problem 5. In the paradigm of *dapi(a)-*, we find two abl. forms: *dapiza* (spelled *da-pī-za*, 7×) and *dapiaz* (spelled *da-pī-az*, 1×). Although the latter form is in principle unsurprising as the abl. form of a stem *dapi-* or *dapia-* (apart from the absence of a spelling with the sign I, cf. *Problem 2*, above), the former, *dapiza*, is remarkable: there is no other *i*-stem noun or adjective that shows an abl. form ending in *-Ciz(a)*. This form therefore calls for an explanation.

As Oettinger cogently remarks,²⁷ the form *dapiza* cannot be explained from earlier *dapiaz* through syncope, since such a syncope is not found anywhere else. He therefore proposes an interpretation similar to the one we saw above for *Problem 2* and *Problem 3*, namely that *dapiza* consists of the “fixed stem” *dapi-* to which the ablative ending *-z* is attached. However, this account is problematic since in New Hittite no ablative ending *-z* existed: the only NH ablative ending was *-az*. Note that Melchert, who overall adopts Oettinger’s idea of a “fixed stem”, calls the abl. form *dapiza* “strange”.²⁸

Problem 6. The status of the stem *dapit/d-* is unclear, as well as its origin. In earlier handbooks, it is often claimed that forms containing the stem *dapit/d-* are to be interpreted as pronominal, comparable to forms like dat.-loc. sg. *tamedani* and dat.-loc. pl. *tamedaš* within the paradigm of *tamai-* ‘other’.²⁹ However, Oettinger offers two arguments against a pronominal interpretation of these forms.³⁰ First, he states that if the forms with the stem *dapit/d-* were really pronominal, we would expect them to end in *-ed-*, e.g. abl. *-edaz*, not in *-id-* (abl. *dapidaz*). This is not a decisive argument, however: the sign BI can in principle be read *pī* as well as *pé*, which means that a form like *da-pī-da-az* could theoretically be read *da-pé-da-az*, as well. Oettinger’s second argument is more cogent: we would expect pronominal stems in *-ed-* to occur only in oblique cases, which means that the attested direct case forms that show the stem *dapit/d-*, nom. pl. *dapiteš* and nom.-acc. pl. n. *dapida*, are unaccounted for. Oettinger³¹ therefore proposes that the stem *dapit/d-* is in fact based on the borrowing of a Luwian *-id*-stem **dapid-* (but note that this stem is unattested in Luwian, cf. *Problem 9*). As Oettinger himself points out, it is somewhat problematic that Luwian *-id*-stems are always neuter nouns, whereas the adjective *dapit/d-* also knows common gender forms (nom. pl. c. *dapiteš*). He therefore discusses the possibility that, in Luwian, **dapi-* was an *i*-stem, and that the *-d-* was added only in Hittite by analogy to the many *-id*-stems borrowed from Luwian. Yet, as Oettinger notes, this still leaves nom. pl. c. *dapiteš* unexplained. Melchert, too, recognizes the problem of Luwian *-id*-stems being nouns, not adjectives.³² He therefore proposes that we

²⁴ Eichner 1973, 77; Oettinger 1976, 31; Kloekhorst 2014, 445.

²⁵ Melchert 2022, 4; 2023, 156.

²⁶ Oettinger 2006.

²⁷ Oettinger 2006, 1331.

²⁸ Melchert 2022, 5. In Melchert 2023, 162 n. 17, Melchert states that the ending of the ablative was “[tʰ]”, which “had sufficient phonetic strength to cause the Luwian element [i.e. [y] < **h₂*] to be deleted or ignored, hence the variant *dapiz(a)*”. However, in New Hittite there was no ablative ending *-z*, so this explanation of *dapiza* simply cannot hold.

²⁹ E.g. HW, 211–212; HEB², 70.

³⁰ Oettinger 2006, 1331.

³¹ Oettinger 2006, 1330–1331.

³² Melchert 2022, 5; 2023, 158.

may assume an original Luwian derived adjective **dapida/i-* ‘aggregate’ (but note that such an adjective is in fact unattested in Luwian, cf. *Problem 9*), from which the Hittite stem *dapit/d-* can be derived. However, as Melchert explains, one would then expect the existence of forms like nom. sg. c. **dapiš*, etc., as well, which are unattested in Hittite. Taken together, the scenario in which the Hittite stem *dapit/d-* has a Luwian origin, ultimately going back to a neuter *-id-* stem noun, remains highly problematic.

A different approach can be found in Kimball’s paper,³³ which cites several forms with the stem *dapit/d-*, but in all cases emends them to *dapi<an>t-* / *dapi<an>d-*, i.e. as belonging to the *-ant-* stem *dapiant-*.³⁴ Moreover, in her article she only refers to the stems *dapi-* and *dapiant-*, not to a stem *dapit/d-*. This seems to imply that she assumes that a stem *dapit/d-* never existed at all, and that all of its attestations are in fact defective spellings of the stem *dapiant-*. Although the total number of attestations of *dapit/d-* is indeed small, only six, it is questionable, however, whether Kimball’s emendations can be substantiated (cf. Melchert, who calls them “totally illicit”³⁵).

Problem 7. The paradigm of *dapi(a)-* shows a remarkable gap: no nom. sg. c. form is attested (one would expect ***dapiš* or ***dapiaš*). At the same time, the paradigm of *dapiant-* shows a similar gap: no acc. sg. c. form is attested (one would expect ***dapiandan*). It therefore seems that in their singular direct cases, *dapi(a)-* and *dapiant-* form a suppletive paradigm,³⁶ with the nom. sg. c. form *dapianza* and the acc. sg. c. forms *dapin* and *dapiant* (for which see also *Problem 3*, above). It is remarkable, however, that in almost all other cases we find forms of both *dapi(a)-* and of *dapiant-* (e.g. nom. pl. c. *dapieš* vs. *dapianteš*, acc. pl. c. *dapiuš* vs. *dapianduš*, or abl. *dapiza/dapiaz* vs. *dapiandaz*).

According to Melchert,³⁷ the absence of a nom. sg. c. form with the stem *dapi(a)-* may be explained by the scenario according to which *dapi(a)-* is borrowed from a Luwian collective form **dapī < [tabiy] < *d^hob-ih₂* (but note that a form **dapī* is in fact unattested in Luwian, cf. *Problem 9*). He proposes that when the original, pre-Luwian, stem **[tabiy]* was enlarged with the Hittite nominal nom. sg. c. ending *-s*, the ensuing form **[tabiy-s]* contained a problematic word-final cluster, due to which it was replaced by the form *dapianza*. However, Melchert does not make explicit why this **[tabiy-s]* was not replaced by a form ***dapiaš* (parallel to acc. sg. c. **[tabiy-n]* which, according to Melchert, was replaced by *dapiant*). Moreover, this scenario still does not explain the absence of an acc. sg. c. form ***dapiandan*.

Problem 8. Kimball cogently points out that *dapi(a)-* and *dapiant-* show some remarkable distributional patterns when it comes to the types of texts in which they are found.³⁸ First, there is a remarkable pattern regarding chronology: attestations of *dapi(a)-* and *dapiant-* are only found in (L)NS texts, not in OS or MS texts. Second, there is a certain pattern regarding genre. As Kimball rightly notes, attestations of *dapi(a)-* and *dapiant-* are primarily found in “the kind of texts [...] that were not normally extensively copied or revised”.³⁹ This includes KIN oracles, which “were hastily written observations not normally edited or recopied”,⁴⁰ “letters, which were presumably taken down by dictation”,⁴¹ and cult inventories, many of which were “interim reports on

³³ Kimball 2016.

³⁴ See footnotes 92, 93, and 94 below.

³⁵ Melchert 2022, 4; 2023, 156.

³⁶ Thus Oettinger 2006, 1330.

³⁷ Melchert 2022, 5; 2023, 157, 161–162.

³⁸ Kimball 2016.

³⁹ Kimball 2016, 159.

⁴⁰ Kimball 2016, 160.

⁴¹ Kimball 2016, 160.

work in progress”.⁴² A third remarkable pattern described by Kimball⁴³ is that when forms of *dapi(a)-* or *dapiant-* are found in texts of other genres, they can be found in New Hittite copies of Old or Middle Hittite compositions in which the forms of *dapi(a)-* / *dapiant-* always replace a form of *hūmant-* ‘all, every, each; entire’ as present in the original composition, and that the use of *dapi(a)-* / *dapiant-* in these texts “looks like a sporadic, relatively superficial modernization”.⁴⁴

According to Kimball, all these distributional patterns imply that *dapi(a)-* / *dapiant-* “was a synonym of *hūmant-* that was freely used in writing that recorded relatively speech-like content”,⁴⁵ and therefore may be regarded a stylistic variant of *hūmant-*, and originated as a “dialect word” that was “somehow colloquial or otherwise marked”.⁴⁶ Although Kimball’s observations regarding the distributions of *dapi(a)-* / *dapit/d-* and *dapiant-* are certainly cogent, and her solution may theoretically be possible, it is difficult that other examples of dialectal diversity in Hittite are very scarce.⁴⁷

Problem 9. Etymologically, most scholars connect the stem *dapi-* to the Proto-Germanic adjective **dapra-* ‘heavy’ (Old High German *dapfar*, Middle High German *dapper* ‘heavy, strong’, Old Norse *dapr* ‘sad’), which would reflect a Proto-Indo-European formation **d^hob-ro-*, and thus point to a root **d^heb-*.⁴⁸ Semantically, this root **d^heb-* would then mean either ‘weighty’,⁴⁹ ‘heavy; possessing gravitas’,⁵⁰ or ‘compact(ed)’,⁵¹ out of which the Hittite meaning ‘all, every, each; entire’ would have developed.⁵² The Hittite stem *dapi-* would then ultimately go back to an *i*-stem formation **d^hob-i-*.

There are several problematic aspects surrounding this etymology, however. First, as we have seen above, there are formal and distributional peculiarities surrounding *dapi(a)-*, *dapit/d-*, and *dapiant-* that indicate that this word can hardly be a genuinely Hittite word. Kimball therefore proposes that it is rooted in a colloquial dialect of Hittite,⁵³ although there is hardly any further indication for the existence of such dialects. Oettinger⁵⁴ and Melchert⁵⁵ propose a Luwian origin of these words, but, in fact, in Luwian no noun or adjective with the stem ***dapi-* is attested. Moreover, their attempts to see the Hittite stem *dapit/d-* as having its origin in a Luwian

⁴² Kimball 2016, 161.

⁴³ Kimball 2016.

⁴⁴ Kimball 2016, 162.

⁴⁵ Kimball 2016, 166–167.

⁴⁶ Kimball 2016, 168.

⁴⁷ See Melchert 1996, 135; 2005, 458 for a possible case of a difference in register between two Hittite words in the Instruction for the Royal Bodyguard. Irrelevant for the present discussion is the dialectal diversity that I have proposed to exist between ‘Kanišite’ Hittite and ‘Hattuša’ Hittite (cf. Kloekhorst 2019a, 233–268), since this concerns the beginning of the 2nd millennium BCE, a much earlier period than the period in which the *dapi*-stems are used.

⁴⁸ Sturtevant 1934, 266; Kimball 2016, 167–168; Melchert 2022, 7; 2023, 169. As kindly pointed out to me by Valerio Pisaniello (*pers. comm.*), an alternative etymological interpretation was provided for by Carruba (1976, 141), who has proposed to analyze *dapi-* as reflecting **duo-pi-*, i.e. as consisting of the numeral ‘two’ + the element *-pi* as found in *kuyāpi* ‘where, when’. This analysis is not very convincing, however: the exact semantic development of ‘two’ to ‘all, every, each; entire’ is not fully clear, and the element *-pi* in *kuyāpi* is adverbial, whereas *dapi-* is an adjective.

⁴⁹ Sturtevant 1934, 266.

⁵⁰ Kimball 2016, 167–168.

⁵¹ Melchert 2022, 7; 2023, 169.

⁵² As kindly pointed out to me by Valerio Pisaniello (*pers. comm.*), Oreshko (2021, 128) has proposed that Hitt. *dapi(a)-* has a cognate in the Lycian verb *ese ... tebe-*, which he interprets as ‘to join with’, and that this implies that the underlying meaning of Hitt. *dapi(a)-* and Lyc. *tebe-* was “collect, gather, join”. Yet, Lyc. *ese ... tebe-* is usually interpreted as ‘to defeat’ (cf. e.g. Sasseville 2021, 377), which makes a connection with Hitt. *dapi(a)-* unattractive.

⁵³ Kimball 2016.

⁵⁴ Oettinger 2006.

⁵⁵ Melchert 2022, 4–5; 2023, 156–162.

-*id*-stem ***dapid-* is problematic for several reasons (see *Problem 6*, above), to which must be added that such an *id*-stem noun is in fact unattested in Luwian. A second overarching problem regards the Indo-European part of this etymology. The root **d^heb-* is only found in Germanic **dapra-* ‘heavy’, not in any other Indo-European branch. Some scholars have connected Germanic **dapra-* to Proto-Slavic **dobľb* ‘strong’, but this is formally problematic: the Slavic forms point to a root **d^(h)eb^h*, with **-b^h-*.⁵⁶ Moreover, attempts to connect Germanic **dapra-* with Hitt. *labarna-* ‘title of Hittite kings’ can hardly be taken seriously.⁵⁷ It thus follows that the question whether or not a root **d^heb-* can be reconstructed for Proto-Indo-European fully depends on one’s judgement of the etymological connection of the Germanic forms with the Hittite stem *dapi-*. An additional problem is that the root **d^heb-*, if we are allowed to reconstruct it for PIE, would contain a PIE **b*, which is generally assumed to have been either fully absent of the oldest layer of Proto-Indo-European, or at least to have been very rare.⁵⁸ Moreover, although a semantic connection between a stem meaning ‘heavy’ and a stem meaning ‘all, every, each; entire’ may not be impossible, it certainly is not a perfect match either. All these problems taken together do not make one optimistic about the chance of this etymological connection to be correct.

Problem 10. In all their attestations (more than 145 in total), the adjectives *dapi(a)-*, *dapit/d-*, and *dapiant-* are consistently spelled with the sign DA. This is remarkable, since almost all other Hittite words starting with a dental stop + *a* show an alternation in spelling between the signs TA and DA, especially in (L)NS texts. The few words that do show consistent spelling with DA are *dā-i* / *d-* ‘to take’, *dai-i* / *ti-* ‘to place’, and *daššu-* ‘heavy, dense’, for which it has been argued that this spelling marks the presence of an ejective stop /t’-/, the outcome of a PIE cluster of dental stop + laryngeal.⁵⁹ In the case of *dapi°*, this spelling would thus point to a phonological form /t’api-/, which should go back to a PIE preform **THVb^(h)-i-*. However, this does not match the etymological origin that has been proposed for this stem, which rather derives it from a PIE stem **d^hob-i-* (see *Problem 9*).

Problem 11. As Kimball clearly shows, there are no indications whatsoever that a semantic difference existed between the stems *dapi(a)-* and *dapiant-*.⁶⁰ This conclusion is supported by the fact that *dapi(a)-* and *dapiant-* seem semi-suppletive (see *Problem 7*). Moreover, although Kimball herself does not seem to recognize *dapit/d-* as a separate stem (she consistently emends forms of this stem to *dapi<an>t/d-*, cf. *Problem 6*, above), it is clear from the examples she cites that also *dapit/d-* does not show any semantic differentiation from *dapi(a)-* and *dapiant-*. This raises the question of why these three formally distinct stems arose in the first place and were maintained as such.

Problem 12. As Kimball shows at length,⁶¹ there is no semantic difference between *dapi(a)-*, *dapit/d-*, and *dapiant-*, on the one hand, and the adjective *hūmant-*, on the other. In fact, there are many examples of compositions in which *dapi(a)-*, *dapit/d-*, or *dapiant-* are found in one copy as duplicates to *hūmant-* in another copy. As Kimball rightly points out, there is no good explanation as to “why the copies might differ in such instances”.⁶² Kimball’s own solution to solve this problem, i.e. assuming that *dapi(a)-*, *dapit/d-*, and *dapiant-* derive from a more colloquial dialect of Hittite,⁶³ is difficult, however, since other examples of a dialectal diversity in Hittite are few and far between (see also *Problem 8*, above).

⁵⁶ Cf. Derksen 2008, 109.

⁵⁷ Kloekhorst 2008, 520–521, 830–831, *contra* Melchert 2003, 19.

⁵⁸ E.g. Olander 2020 [2022].

⁵⁹ Kloekhorst 2010b, 202–207; 2013, 127–131; 2019b.

⁶⁰ Kimball 2016, 159 n. 2, *contra* Josephson 2004, 112–113.

⁶¹ Kimball 2016.

⁶² Kimball 2016, 159.

⁶³ Kimball 2016, 167–168.

Problem 13. Melchert has shown that the syntactic behavior of *dapi(a)-*, *dapit/d-*, and *dapiant-* “entirely matches that of native Hittite *hūmant-*”, in the sense that when they are used attributively, they are usually postposed to the noun they belong to, but can also occur in preposed position when they have an intensifying meaning.⁶⁴ Melchert remarks,⁶⁵ however, that it is problematic that the stem *dapit/d-*, which to his mind must ultimately reflect a Luwian noun (see also *Problem 6*, above), developed attributive use in Hittite. As we saw above, as well, Melchert therefore considers it a possibility that Hitt. *dapit/d-* in fact goes back to a Luwian adjective **dapida/i-* that was derived from an *-id-* stem noun **dapid-* (although both ***dapid-* and ***dapida/i-* are in fact unattested in Luwian, cf. *Problem 9*).

As we see, there are quite some remarkable aspects regarding *dapi(a)-*, *dapit/d-*, and *dapiant-*. And although for several of these aspects explanations have been formulated, it may be clear that most of these explanations are quite *ad hoc*, and that the overall picture remains that these adjectives behave aberrantly in several ways. I therefore propose a radically different interpretation of these stems; one that, to my mind, can solve all problems that we discussed.

3. A new solution: a logographic interpretation

My proposal for a new interpretation of the adjectives *dapi(a)-*, *dapit/d-*, and *dapiant-* revolves around reading the two signs with which the stem *da-pí-* is spelled not in a phonetic way, but rather as denoting a logogram, DA.BI, that is used to render the adjective *hūmant-* ‘all, every, each; entire’. This means that all attestations that thus far were interpreted as forms of the adjectives *dapi(a)-*, *dapit/d-*, and *dapiant-*, are in fact forms consisting of the logogram DA.BI to which phonetic complements are added, which are used to logographically render inflected forms of *hūmant-*. To my mind, this solves all problems we discussed above.

Solution to Problem 1. The absence of a meaningful distribution between the *i*-stem *dapi-* and the *a*-stem *dapia-* can now be explained by the fact that these stems never existed as such. The forms that seemingly belong to a specific *i*-stem *dapi-* (nom.-acc. sg. n. *dapi*, acc. sg. c. *dapin=a*, and abl. *dapiza*), are in fact forms in which the phonetic complement to write the case ending just happened to not contain an *-a-*: nom.-acc. sg. n. DA.BI (without a phonetic complement at all), acc. sg. c. DA.BI-*n=a* (see also the *Solution to Problem 3*, below), and abl. DA.BI-*za* (see also the *Solution to Problem 5*, below). The form that seemingly belongs to a specific *a*-stem *dapia-*, viz. acc. sg. c. *dapian*, is in fact to be read DA.BI-*an*, i.e. as representing an underlying *hu-u-ma-an-t/da-an* (see also the *Solution to Problem 3*, below). For the interpretation of the other case forms, see Table 2.

Solution to Problem 2. The absence of the sign ĬA in forms like acc. sg. c. *dapian* (spelled *da-pí-an*), gen. sg. *dapiaš* (spelled *da-pí-aš*), and all forms of the stem *dapiant-* (spelled *da-pí-an-t°*) has now received a logical explanation since the sign BI in fact belongs to the logogram DA.BI. This means that these forms never contained a phonetic vowel *-i-* to begin with, and that there thus was no environment in which a phonetic glide *i* could have arisen. Instead, these forms are to be read as DA.BI-*an* (\approx *hu-u-ma-an-t/da-an*), DA.BI-*aš* (\approx *hu-u-ma-an-t/da-aš*), and DA.BI-*an-t°* (\approx *hu-u-ma-an-t°*), respectively. The same applies to nom. pl. c. “*dapieš*” = DA.BI-*eš* (\approx *hu-u-ma-an-te-eš*).⁶⁶

This solution removes the necessity of assuming that *dapi-* was a “fixed stem” borrowed from Luwian, and that its inflected forms contained a hiatus (***[tabi_V°]*) or a glottal stop (***[tabi?V°]*).

Solution to Problem 3. The relationship between the acc. sg. c. forms *dapin=a* (spelled *da-pí-n=a*) and *dapian* (spelled *da-pí-an*), occurring in one and the same text, can now be easily understood: the former represents DA.BI-*n=a* (\approx *hu-u-ma-an-t/da-an-n=a*), whereas the latter represents

⁶⁴ Melchert 2022, 4; 2023, 156–157.

⁶⁵ Melchert 2022, 4.

⁶⁶ Cf. footnote 12 above.

DA.BI-*an* (\approx *ḫu-u-ma-an-t/da-an*). In other words, the two forms no longer point to two different stems. Moreover, we no longer have to assume that the spelling of *da-pí-n=a* was defective for ****da-pí<-an>-n=a**: with the interpretation of this form as DA.BI-*n=a*, it is unproblematic to interpret its clitic as geminating =*a*.

Solution to Problem 4. The dat.-loc. sg. form *dapī* (spelled *da-pí-i*), with its aberrant *plene* spelled *i*, can now be read as DA.BI-*i*, the regular way of logographically writing an underlying dat.-loc. sg. form *ḫu-u-ma-an-ti-i*.⁶⁷

Solution to Problem 5. The two ablative forms *dapiza* (spelled *da-pí-za*) and *dapiaz* (spelled *da-pí-az*) can now be read DA.BI-*za* and DA.BI-*az*, respectively, and interpreted as logographic writings of *ḫu-u-ma-an-t/da-za* and *ḫu-u-ma-an-t/da-az*, respectively, both of which represent a single phonological form, /χōmāntats/.

Solution to Problem 6. The stem *dapit/d-* can now be read as DA.BI-*t/d-*, in which *-t/d-* is just part of the phonetic complement: abl. “*dapidaz*” = DA.BI-*da-az* (\approx *ḫu-u-ma-an-da-az*); nom.-acc. pl. n. “*dapida*” = DA.BI-*da* (\approx *ḫu-u-ma-an-da*); nom. pl. c. “*dapiteš*” = DA.BI-*te-eš* (\approx *ḫu-u-ma-an-te-eš*); gen. pl. “*dapidaš*” = DA.BI-*da-aš* (\approx *ḫu-u-ma-an-da-aš*); and dat.-loc. pl. “*dapitaš*” = DA.BI-*ta-aš* (\approx *ḫu-u-ma-an-ta-aš*).

Solution to Problem 7. The absence of a nom. sg. c. form ****dapiš** or ****dapiaš** of the stem *dapi(a)-* can now be explained by the fact that within the paradigm of *ḫūmant-* the nom. sg. c. form *ḫūmanza* ends in *-anza*, and thus could not be logographically spelled as ****DA.BI-iš** or ****DA.BI-aš**, but only as DA.BI-*an-za*, as is attested.

Solution to Problem 8. The fact that forms of *dapi(a)-*, *dapit/d-*, and *dapiant-* are only found in (L)NS texts, fits in nicely with the fact that in (L)NS texts the use of logograms increases, and that there are a large number of Hittite words that are only attested with logographic writings in (L)NS texts, not in OS or MS texts (e.g. EGIR-*an* for *āppan* ‘back, again’, or 𐎶𐎵𐎶𐎶 for *idālu-* ‘evil’⁶⁸). Moreover, the fact that forms with the stem *dapi°* are primarily found in texts that, according to Kimball,⁶⁹ were not extensively revised, or hastily written, can now be explained by the fact that, in general, such texts contain many logographic spellings. For instance, in the following passage of KUB 5.1, the *dapi-*forms would have been the only phonetically spelled lexemes:

KUB 5.1 i

13. 2 UGULA=za ZAG-tar ŠA LUGAL=ja **da-pí-an** ZI-an ME-aš nu=kán DINGIR^{MEŠ}-aš

14. 3-ŠÚ^aUTU AN^E GUB-iš ŠA LUGAL ZAG-tar **da-pí-n=a** ZI-an ME-aš nu=kán EGIR^{GIŠ}DAG SIG₅

‘Second: the chief took righteousness and the **entire** soul of the king, and (gave them) to the gods. Third: the Sun-god of Heaven arose, and took righteousness of the King and the **entire** soul, and (gave them) back to the throne. Favorable.’

With the logographic interpretation of *dapi-* as DA.BI, we now see that in fact all verbs, nouns, and adjectives in this passage are spelled logographically:

KUB 5.1 i

13. 2 UGULA=za ZAG-tar ŠA LUGAL=ja **DA.BI-an** ZI-an ME-aš nu=kán DINGIR^{MEŠ}-aš

14. 3-ŠÚ^aUTU AN^E GUB-iš ŠA LUGAL ZAG-tar **DA.BI-n=a** ZI-an ME-aš nu=kán EGIR^{GIŠ}DAG SIG₅

⁶⁷ See Kloekhorst 2014, 457–458 for the fact that *ḫūmant-* originally had a desinentially stressed dat.-loc. sg. form *ḫūmantī* = /χōmāntí/, and see Kloekhorst forthcoming for the fact that dat.-loc. sg. forms in *-Ci-i* are logographically spelled LOGOGRAM-*i*.

⁶⁸ Cf. Weeden 2011, 37.

⁶⁹ Kimball 2016.

Additionally, the fact that forms with the stem *dapi-* are used in (L)NS copies of older compositions as replacements of the adjective *hūmant-*,⁷⁰ can now be explained by the fact that they are just logographic spellings of *hūmant-*.

Solution to Problem 9. Since a phonetic stem *dapi-* no longer exists, there is no longer any need to etymologize it. This means that all proposals to connect *dapi(a)-*, *dapit/d-*, and *dapian-* with the PIE root **d^heb-*, either through an unattested Hittite dialect or through an unattested Luwian intermediary, all of which were problematic by themselves, are no longer necessary.

Solution to Problem 10. The fact that DA.BI is consistently spelled with the sign DA, which would be remarkable if it should be read as a Hittite phonetic sign, is fully understandable from a logographic point of view.

Solution to Problem 11. The fact that there is no semantic distinction between the three stems *dapi(a)-*, *dapit/d-*, and *dapian-* can now be explained by the idea that all these stems are logographic renderings of a single underlying adjective, *hūmant-*.

Solution to Problem 12. The fact that there is no semantic distinction between *dapi-*, *dapit/d-*, and *dapian-*, on the one hand, and *hūmant-*, on the other, has now become fully understandable: the *dapi*-forms are mere logographic renderings of *hūmant-*. Moreover, this elucidates passages like in the Ritual of Ḫantitaššu (KBo 11.14 i 24–25 (OH/NS)), which can now be read as follows: (24) [d]UTU-uš=za EZEN₄-an DÛ-at nu=za DA.BI-uš (= *hūmanduš*) DINGIR^{MEŠ}[-uš] ḫalzāiš (25) [nu=z]a *hūmandan* DUMU.LÚ.U₁₉-LU-an ḫalzāiš ‘The Sun-god made a party; he invited all the gods, he invited all of mankind’, in which the second and third clauses can now be regarded as full parallels of each other.⁷¹

Solution to Problem 13. The fact that the syntactic behavior of *dapi(a)-*, *dapit/d-*, and *dapian-* “entirely matches that of native Hittite *hūmant-*”⁷² is no longer problematic, since *dapi(a)-*, *dapit/d-*, and *dapian-* are merely logographic renderings of *hūmant-*.

As we see, all problematic aspects that thus far surrounded the adjectives *dapi(a)-*, *dapit/d-*, and *dapian-*, receive a fully natural explanation when we read the sign sequence DA BI not phonetically as *da-pí-*, but rather as denoting a logogram DA.BI that is used to logographically render the underlying phonetic stem *hūmant-*.⁷³ This logogram was provided with phonetic complements that either note down the last sign of the phonetic form (e.g. abl. DA.BI-az = *ḫu-u-ma-an-da-az*; nom. pl. c. DA.BI-eš = *ḫu-u-ma-an-te-eš*), or its last two signs (abl. DA.BI-da-az = *ḫu-u-ma-an-da-az*; nom. pl. c. DA.BI-te-eš = *ḫu-u-ma-an-te-eš*), or its last three signs (abl. DA.BI-an-da-az = *ḫu-u-ma-an-da-az*; nom. pl. c. DA.BI-an-te-eš = *ḫu-u-ma-an-te-eš*).

4. Advantages of this interpretation over previous ones

An anonymous reviewer of an earlier draft of this article remarked that my interpretation of the stem “*dapi-*” as a logogram DA.BI is conceptually not much different from viewing *dapi-* as

⁷⁰ Kimball 2016.

⁷¹ I owe this example to Valerio Pisaniello (*pers. comm.*).

⁷² Melchert 2022, 4; 2023, 156.

⁷³ As Willemijn Waal kindly points out to me (*pers. comm.*), this logographic interpretation implies that the forms that hitherto were interpreted as abbreviated spellings (acc. sg. c. *da-n°*, *da-an*, dat.-loc. sg. *da-i*, abl. *da-az*, cf. the Appendix below) in fact show a shortened logogram DA instead of DA.BI, i.e. *DA-n°*, *DA-an*, *DA-i*, and *DA-az*, respectively. These forms are mainly found in KIN oracles (KUB 5.1, KUB 6.46, KuSa 1/1.14, KuSa 1/1.18, KuSa 1/1.20, KuSa 1/1.23, KuSa 1/1.25), which abound in logographic and abbreviated spellings. See footnote 86 for further thoughts on this spelling DA. The seemingly abbreviated abl. form “*da-az*” of KUB 6.46 i 19 (NH/NS; CTH 381.B) may rather be seen as a mistake, and emended to *DA<.BI>-az*.

a “fixed stem” that was borrowed from Luwian⁷⁴ and that, therefore, there is no clear advantage of my interpretation over that of Oettinger’s and Melchert’s. However, within Oettinger’s and Melchert’s scenario the Hittite language contains four different stems, i.e. *hūmant-*, *dapi(a)-*, *dapit/d-*, and *dapiant-*, all of which would have the exact same semantics and syntactic usage, whereas in my scenario the Hittite language has only a single stem, *hūmant-*, which can also be written logographically by DA.BI. My scenario thus has to assume fewer linguistic entities to explain the same data and, according to Occam’s Razor, should thus be preferred over the alternative, more complicated scenario.

5. Parallels

A nice parallel to an *-ant*-adjective being written both phonetically and logographically is *āššuuant-* ‘good, favorable’, which can be rendered with the logogram SIG₅. And just as with DA.BI, the phonetic complements attached to SIG₅ can likewise consist of either one, two, or three (and occasionally even four) signs: for instance, nom. sg. c. *āššuūanza* is logographically attested as SIG₅-za, SIG₅-an-za, SIG₅-u-an-za, as well as SIG₅-u-*ua*-an-za; and instr. *āššuūante/it* is logographically rendered as SIG₅-it,⁷⁵ SIG₅-ti-it, as well as SIG₅-an-te-et. Compare also the adjective *kartimmiūuant-* ‘angry’, which can be spelled with the logogram TUKU.TUKU,⁷⁶ and for which the nom. sg. c. form *kartimmiūūanza* is logographically attested as TUKU.TUKU-za, TUKU.TUKU-an-za, TUKU.TUKU-u-an-za, as well as TUKU.TUKU-u-*ua*-an-za.

6. The origin of DA.BI

Although the Hittite-internal arguments in favor of interpreting the signs DA BI not as “*da-pi*”, but rather as a logogram DA.BI may be clear, from a broader Mesopotamian perspective this interpretation is less self-evident: as far as I am aware, a logogram DA.BI denoting ‘all, every, each; entire’ is unknown outside of Hittite.⁷⁷ This need not be too problematic, however: in his book on Hittite logograms, Weeden⁷⁸ lists dozens of logograms used by Hittite scribes that only occur in Anatolia and are not found elsewhere. He categorizes these logograms as follows:

1. inner-Hittite/Anatolian creations
2. logograms otherwise attested only on lexical lists
3. logograms that had gone out of usage in the 3rd millennium BCE
4. logograms re-analyzed from Sumerian
5. phonetic writings of Sumerian words
6. logograms adapted to fit Hittite/Anatolian phenomena
7. misunderstanding of Sumerian constructions
8. mistaking or varying the forms of Sumerian signs
9. pseudo-Sumerograms based on other languages
10. logograms from extispicy context
11. logograms that remain obscure

⁷⁴ Thus Oettinger 2006; Melchert 2022; 2023.

⁷⁵ Note that it cannot be fully excluded that SIG₅-it represents *āššauit*, i.e. the instr. form of the *u*-stem adjective *āššu-* / *āššau-* (cf. e.g. HED 1, 199).

⁷⁶ According to Weeden 2011, 321–322, 379, this logogram is only found in Hittite texts, and may be a Hittite innovation based on a phonetic writing of a Sumerian word. See section 6 for the proposal that DA.BI has a similar origin.

⁷⁷ Sumerian *da-bi* instead means ‘his/its side’.

⁷⁸ Weeden 2011, 376–382.

In my view, DA.BI may be regarded as such a Hittite-only logogram, too, and, more specifically, I would like to make a case that it possibly belongs to Weeden’s category no. 5, i.e. that it is based on the phonetic shape of a Sumerian word.⁷⁹

In other cuneiform traditions we find the Sumerograms DÛ.A and DÛ.A.BI ‘all, every, each; entire’ which in Akkadian are used to render the quantifiers *kalûm* ‘whole, entirety, all’ and *kalâmu* ‘all, everything’.⁸⁰ Moreover, we know that the sign DÛ = GAG can also be read as *dà*,⁸¹ and that the entire sequence DÛ.A is sometimes spelled DA.⁸² This implies that at some point in time DÛ.A and DÛ.A.BI may have been pronounced [da] and [dabi], respectively. In fact, this is supported by the phonetic writing of Sum. DÛ.A.BI as *ta-a-bi* in the Ugarit tablet RS 79.25: 18.⁸³ Additionally, Civil⁸⁴ reads line 3 of the Sumerian-Akkadian vocabulary list Ea II as “[*da-a*] = DÛ = *ka-la-m[a]*”, implying, too, that the sign DÛ in DÛ.A[B.I] ‘all, everything’ phonetically may have represented [da].⁸⁵ All this implies that in (the second half of) the 2nd millennium BCE in scribal circles the pronunciations [da] and [dabi] were used for the Sumerograms DÛ.A and DÛ.A.BI.

I therefore would like to propose that the Hittite logogram DA.BI is an attempt by Hittite scribes to render the scholarly pronunciation [dabi] of the original Sumerogram DÛ.A.BI.⁸⁶

As Weeden makes clear,⁸⁷ it is often difficult to reconstruct the exact way in which a Hittite-only logogram arose or made its way to the Hittite scribal inventory. The case of DA.BI, if it indeed is inspired by the original Sumerogram DÛ.A.BI, is no different: we may never know exactly when and where it was coined in this way; we only can observe that in New Hittite times it had become the standard logogram to render *hūmant-*.

7. Conclusions regarding the Hittite “*dapi-stems*”

All in all, I would like to propose that the adjectives “*dapi(a)-*”, “*dapit/d-*”, and “*dapiant-*” should be stricken from the Hittite dictionaries: in the attestations that were thus far interpreted as belonging to one of these stems, the sign sequence DA BI is rather to be read as a logogram, DA.BI, which is used to logographically write forms of the adjective *hūmant-* ‘all, every, each; entire’. The logogram DA.BI may be ultimately based on the Sumerogram DÛ.A.BI ‘all, every, each; entire’ that is well attested in other cuneiform traditions and which in scribal circles probably was pronounced [dabi]. This means that we can now cite the paradigm of *hūmant-* as follows:

⁷⁹ Cf. e.g. TUKU[TUKU] ‘angry’, which according to Weeden 2011, 321–322 is phonetically inspired by Sumerian TUKU₄ ‘to shake, to tremble’; or ^{DUG}KU.KU, which according to Weeden 2011, 532 is a phonetically inspired writing for ^{DUG}GUR₄.GUR₄ (cited in HZL, 178 as ^{DUG}ḪAB.ḪAB) = ^{DUG}ḫanišša- ‘a vessel’.

⁸⁰ Cf. Attinger 2021, 270 (*du₃-a* = ‘totalité, tout’); Cohen 2023 s.v. *ḫu’a* (*du₃-a* = ‘all’; *du₃-a-bi* = ‘everything, entirety’); CAD K, 65, 87. In Hittite itself, the Sumerogram DÛ.A.BI is once used as well, in KBo 3.13 i 8 (OH/NS; CTH 311: *Narām-Sîn in Anatolia*). It is therefore listed in HZL, 128, where it is glossed “insgesamt, alles”, and it is cited in HW² Ḫ, 712 as the Sumerogram to render Hitt. *hūmant-*. However, since the text in which it occurs, KBo 3.13, is a Hittite translation of an Akkadian text that, according to Güterbock 1938, 80, is very close to its original, we may assume that in this case the Sumerogram DÛ.A.BI was directly taken over from the Akkadian original, which implies that it cannot be seen as a general way to logographically denote Hitt. *hūmant-*: for this purpose the logogram DA.BI was used.

⁸¹ E.g. Labat 1976, 125. Note that HZL, 128–129 does not cite a reading *dà* for the sign DÛ in Hittite.

⁸² Attinger 2021, 223.

⁸³ Viano 2016, 161, 188, 212. I owe this reference to Valerio Pisaniello (*pers. comm.*).

⁸⁴ Civil 1979, 247.

⁸⁵ Although it must be admitted that it is not fully clear on which basis Civil restores the broken initial part of the line as “[*da-a*]”.

⁸⁶ Perhaps the “abbreviated” forms mentioned in footnote 73, above, which are written with only DA instead of DA.BI, represent the shorter Sumerogram DÛ.A = [da].

⁸⁷ Weeden 2011, 376–382.

	phonetic spellings	logographic spellings with phonetic complements
nom. sg. c.	<i>ḫu-u-ma-a-an-za</i> <i>ḫu-u-ma-an-za</i>	DA.BI- <i>an-za</i>
acc. sg. c.	<i>ḫu-u-ma-an-da-an</i> <i>ḫu-u-ma-an-ta-an</i>	DA.BI- <i>an</i> DA.BI- <i>n=a</i>
nom.-acc. sg. n.	<i>ḫu-u-ma-a-an</i> <i>ḫu-u-ma-an</i>	DA.BI- <i>an</i> ⁸⁸
gen. sg.	<i>[ḫ]u-u-ma-an-da-a-aš</i> <i>ḫu-u-ma-an-da-aš</i> <i>ḫu-u-ma-an-ta-aš</i>	DA.BI- <i>aš</i>
dat.-loc. sg.	<i>ḫu-u-ma-an-ti-i</i> <i>ḫu-u-ma-an-ti</i> <i>ḫu-u-ma-an-te</i> <i>ḫu-u-ma-an-ti-ja</i>	DA.BI- <i>i</i> [D]A.BI- <i>an-ti</i>
abl.	<i>ḫu-u-ma-an-da-a-az</i> <i>ḫu-u-ma-an-da-az</i> <i>ḫu-u-ma-an-ta-az</i> <i>ḫu-u-ma-an-da-za</i> <i>ḫu-u-ma-an-ta-za</i>	DA.BI- <i>az</i> DA.BI- <i>za</i> DA.BI- <i>da-az</i> DA.BI- <i>an-da-a[z]</i>
instr.	<i>ḫu-u-ma-an-te-et</i> <i>ḫu-u-ma-an-ti-it</i>	
nom. pl. c.	<i>ḫu-u-ma-an-te-eš</i> <i>ḫu-u-ma-an-te-eš₁₇</i> <i>ḫu-u-ma-an-ti-iš</i>	DA.BI- <i>eš</i> DA.BI- <i>te-eš</i> DA.BI- <i>an-te-eš</i>
acc. pl. c.	<i>ḫu-u-ma-an-du-uš</i>	DA.BI- <i>uš</i> DA.BI- <i>an-du-uš</i>
nom.-acc. pl. n.	<i>ḫu-u-ma-an-da</i> <i>ḫu-u-ma-an-ta</i>	DA.BI- <i>da</i> DA.BI- <i>an-da</i> DA.BI- <i>an-ta</i>
gen. pl.	<i>ḫu-u-ma-an-da-an</i> <i>ḫu-u-ma-an-da-a-aš</i> <i>ḫu-u-ma-an-da-aš</i>	DA.BI- <i>aš</i> DA.BI- <i>da-aš</i>
dat.-loc. pl.	<i>ḫu-u-ma-an-da-a-aš</i> <i>ḫu-u-ma-an-da-aš</i> <i>ḫu-u-ma-an-ta-aš</i>	DA.BI- <i>aš</i> DA.BI- <i>ta-aš</i> DA.BI- <i>an<-da>-aš</i>

TABLE 2: An overview of attested forms of Hitt. *ḫūmant-* ‘all, every, each; entire’, including its phonetic as well as logographic spellings. See the Appendix below for the places of attestations of all DA.BI-forms.

⁸⁸ Also once attested without a phonetic complement: DA.BI.

Appendix: Attestations of inflected forms of the *dapi*-stems / DA.BI-forms

Attestations of “*dapi(a)-*”: acc. sg. c. *da-pí-n=a* = **DA.BI-n=a** (KUB 5.1 i 14, 77, ii 31, 65, 72, iii 74, 81 (*da-pí-n=a* = **DA¹.BI-n=a**) (NH/LNS); also 2× abbreviated as *da-n=a* = **DA-n=a**: KUB 5.1 iii 36, iv 62 (NH/LNS)), *da-pí-an* = **DA.BI-an** (KBo 2.2 i 19, 27 (NS), KBo 2.6+ ii 47 ([*-an*]), iii 12, 14, iv 7 (NH/NS), KBo 16.98 iv 19 (NS), KUB 5.1 i 2, 3, 13, ii 23, 43, 50 (<*-an*>), 59a, 87 (*da-pí[-an]* = **DA.BI[-an]**), iii 20, 39, 59, iv 45 (NH/LNS), KUB 18.59 ii 20 (NS), KUB 16.58 iii 10 (NH/NS), KUB 41.8 ii 32, 37 (MH/LNS), VSNF 12.108 rev.⁷ 3 (<*-an*>) (NS); also 9× abbreviated as *da-an* = **DA-an**: KUB 5.1 i 41, ii 13, iii 41, 62 (NH/LNS), KuSa 1/1.14 rev. 3 (LNS), KuSa 1/1.18 obv. 6 (LNS), KuSa 1/1.20 r. col. 9 (LNS), KuSa 1/1.23 rev. 8 (LNS), KuSa 1/1.25 i 9 (LNS)); nom.-acc. sg. n. *da-pí* = **DA.BI** (KUB 28.92 i 10 (NS));⁸⁹ gen. sg. *da-pí-aš* = **DA.BI-aš** (KBo 25.180 rev. 10 (OH/NS), KBo 40.56 obv. 16 (*da-pí-aš-š=a*) (NH/LNS)); dat.-loc. sg. *da-pí-i* = **DA.BI-i** (KBo 2.6+ ii 33, iii 2 (NH/NS), KBo 14.21 i 17, 58 (NS), KBo 18.142, 16 (NH/NS), KUB 5.1 i 12, 37, 48 (NH/LNS), KUB 5.5 ii 25 (NH/NS), KUB 6.3 i 17 (NS); also once abbreviated as *da-i* = **DA-i**: KUB 5.1 i 6a (NH/LNS)); abl. *da-pí-za* = **DA.BI-za** (KBo 2.9 i 7 (MH/NS), KBo 6.28+ rev. 27 (+ *=kán*) (NH/NS), KUB 6.9 ii? 4 (NS), KUB 25.23 i 19, (NH/NS), KUB 26.43 rev. 13 (NH/NS), KUB 58.101 rev. 6 (MH/NS), KUB 60.56, 4 (NS)), *da-pí-az* = **DA.BI-az** (KUB 18.12 i 5 (NS); also once abbreviated as *da-az* = **DA-az**: KUB 6.46 i 19 (NH/NS)); nom. pl. c. *da-pí-eš* = **DA.BI-eš** (KUB 44.50 i 8 (LNS));⁹⁰ acc. pl. c. *da-pí-uš* = **DA.BI-uš** (KBo 11.14 i 24 (OH/NS), KUB 55.40, 6 (NS)); gen. pl. *da-pí-aš* = **DA.BI-aš** (KUB 16.77 iii 11 (NH/NS), KUB 31.136 ii 1 (LNS)); dat.-loc. pl. *da-pí-aš* = **DA.BI-aš** (KBo 25.180 rev. 10 (OH/NS), KBo 40.56 obv. 16 (LNS), KUB 6.45 iii 35 (NH/NS), KUB 25.22 iii 5, 8 (NH/LNS), KUB 33.118, 19 (*da-pí-aš* = **DA.BI-aš**) (NS), KUB 58.71 ii 19 (LNS)); unclear *da-pí-aš* = **DA.BI-aš** (KUB 51.81 rev. 4 (NH/NS)).

Attestations of “*dapit/d-*”: abl. *da-pí-da-az* = **DA.BI-da-az** (KUB 12.57 iv 4 (NS)); nom. pl. c. *da-pí-te-eš* = **DA.BI-te-eš** (IBoT 3.100, 9 (NS));⁹¹ nom.-acc. pl. n. *da-pí-da* = **DA.BI-da** (KBo 12.38 i 4 (NH/LNS));⁹² gen. pl. *da-pí-da-aš* = **DA.BI-da-aš** (KUB 36.18 ii 11 (MH/LNS));⁹³ dat.-loc. pl. *da-pí-ta-aš* = **DA.BI-ta-aš** (KUB 31.146 obv. 3 (MH/NS),⁹⁴ KUB 33.96 i 3 (*-t[a-aš]*) (MH/NS) (see footnote 8 for a discussion)).

Attestations of “*dapian-*”: nom. sg. c. *da-pí-an-za* = **DA.BI-an-za** (ABoT 1.56 i 22 (NH/LNS), KBo 3.15, 2, 10 (NS), KUB 15.1 iii 19, 24, 29 (NH/NS), KUB 15.11 ii 20 (2×: *da-pí-an-za-a=š-ši* = **DA.BI-an-za-a=š-ši** and *da-pí-a[n-za]* = **DA.BI-a[n-za]**) (NH/NS), KUB 55.48 i 13 (NS), KUB 55.65 iii 16 (OH/NS)); nom.-acc. sg. n. *da-pí-an* = **DA.BI-an** (KBo 2.2 i 19 (NH/NS), KBo 6.5 iv 25 (OH/NS), KBo 14.21 i 11, 53 (NS), KBo 18.48 obv. 2, 6, rev. 16 (NS), KBo 21.20 i 26 (MH/NS), KBo 29.2 ii 6 (NS), KBo 35.102 i 7 (NS), KBo 40.374 iv 1 (NS), KUB 6.9 ii? 4 (NS), KUB 16.20, 16 (NS), KUB 18.36 ii 9 (NS), KUB 19.23 rev. 18 ([*d*]a-pí-an=*pát* = [**D**]A.BI-an=*pát*) (NH/NS), KUB 23.59 ii 2 (NH/NS), KUB 24.9+ ii 16 (OH/NS), KUB 25.23 iv 56 (NS), KUB 28.4 i 5 (*d[a-]pí-an* = **D[A.]BI-an**) (NS), KUB 39.61 i 13 (LNS), KUB 41.8 ii 30, iii 39 (MH/LNS), KUB 51.69 obv. 13, 15 (NS), KUB 55.35 obv. 9 (NS), KUB 55.54 obv. 16, iii 11 (LNS), KUB 55.65 iv 19 (=pát[*t*]) (OH/NS), KUB 58.11 obv. 10 (NS), KUB 58.110 iii 6 (NS), KUB 59.29 ii 14 (NS), KUB 60.140 obv. 4 (NS)); dat.-loc. sg. [**d**]a-pí-an-ti = [**D**]A.BI-an-ti (KBo 40.51, 13 (NS)); abl. *da-pí-an-da-a[z]* = **DA.BI-an-da-a[z]** (KUB 12.25 r. col. 5 (NS)); nom. pl. c. *da-pí-an-te-eš* = **DA.BI-an-te-eš** (KBo 12.106 + 13.146 ii 11 (*-e[š]*) (OH/NS), KUB 5.1 iii 62 (NH/LNS), KUB 16.16 obv. 23, 24 (+ *=pát*), 26 (NS), KUB 17.14 rev. 17 (*-te[-eš]*) (NS), KUB 58.79 iv 6 (MH/NS));⁹⁵

⁸⁹ Note that in Kloekhorst 2008, 831, I booked the form *da-pí* = **DA.BI** of VSNF 12.108 rev.⁷ 3 (NS) as a nom.-acc. sg. n. form as well, but since this form seems to belong to the adjacent *ZI-an* ‘soul’, which is an acc. sg. c. form, it seems best to emend *da-pí* = **DA.BI** to *da-pí<-an>* = **DA.BI<-an>**.

⁹⁰ I owe this attestation to Craig Melchert (pers. comm.).

⁹¹ Note that Kronasser 1966, 192 states that *da-pí-te-eš* (IBoT 3.100, 9 (NS)) may also represent “*dapyantes*” “mit Nasalreduktion und *pí* = *pya*”, a suggestion that is repeated by HEG T, D, 127.

⁹² Note that Kimball 2016, 161 emends this form to “*dapi<-an>da*”.

⁹³ Note that Kimball 2016, 159 n. 2 emends this form to “*dapi<-an>daš*”.

⁹⁴ Note that Kimball 2016, 162 emends this form to “*dapi<-an>taš*”.

⁹⁵ A nom. pl. c. form “*da-pí-[ia-an-te-eš]*” is read by Haas – Wegner 1988, 191 for KUB 17.27 ii 14 (MH/NS), but

acc. pl. c. *da-pí-an-du-uš* = **DA.BI-an-du-uš** (KUB 58.94 i 4 (<-du->), 8, 9 (OH/NS)); nom.-acc. pl. n. *da-pí-an-da* = **DA.BI-an-da** (KBo 16.98 iv 21 (NS), KUB 1.8 iv 9 (NH/NS), KUB 8.65 i 5 (MH/NS), KUB 16.16 rev. 14 (NS), KUB 17.14 rev. 4 (NS), KUB 19.9 i 11, 24 (NH/NS), KUB 20.70 i 8 (OH/LNS)), *da-pí-an-ta* = **DA.BI-an-ta** (KUB 1.8 iv 9 (NH/NS), KUB 58.99 i 5 (NS)); dat.-loc. pl. *da-pí-an<-ta>-aš* = **DA.BI-an<-ta>-aš** (KUB 51.30 obv. 10 (OH/NS)); unclear *da-pí-an[...]* = **DA.BI-an[...]** (KUB 19.22, 13 (NH/LNS)).

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this restoration need not be correct. Although the immediate context indeed clearly requires *da-pí[...]* to be completed to a nom. pl. c. form, it is unclear on what basis Haas and Wegner complete this word specifically to “*da-pí-[ia-an-te-eš]*” with the sign *IA*. Based on the other attestations of nom. pl. c. forms, all of which are *da-pí-an-te-eš* = **DA.BI-an-te-eš**, without *IA*, it seems best to rather read this form as *da-pí[an-te-eš]*, i.e. **DA.BI[an-te-eš]**, as well.

- HW = FRIEDRICH, J. 1952–1966: *Hethitisches Wörterbuch. Kurzgefaßte kritische Sammlung der Deutungen hethitischer Wörter*. (Indogermanische Bibliothek 2. Wörterbücher) Heidelberg.
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