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## **Indo-European origins of Anatolian morphology and semantics: innovations and archaisms in Hittite, Luwian and Lycian**

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## CHAPTER 2

# The Luwic inflection of proper names, the Hittite dative-locative of *i*- and *ija*-stems, and the Proto-Anatolian allative

**Abstract:** The chapter establishes the inflection of proper names in Luwian and Lycian, which differs from appellative inflection in all oblique cases. It is argued that the locative, genitive and ablative were reshaped after the pattern of the *ā*-stems, which were the most frequent type in names. The dative, however, was generalized from the *i*-stems, which were more frequent in personal names, and were found only there after the proterodynamic *i*-stems had been generalized in the appellatives. The pattern of its characteristic dative *\*-ijo* was extended to the other types. Its origin in the *i*-stems appears from Hittite, where the same dative is found and can there be traced back to the allative, which was used to circumvent the unfortunate combination of a stem in *\*-i-* with the dat.-loc. ending *\*-i*. The Luwic data can be used to determine the character of the PAnat. allative, which must have been *\*-o* on account of Lyc. *-e*. Since Anatolian shows a vigorous allative that is presupposed by petrified remnants such as *\*pr-o* ‘forward’ in other IE languages, the allative provides an additional argument for the Indo-Anatolian hypothesis.

## 1 Introduction

The main topic of this chapter is the inflection of proper names in Luwic, which has so far not received much scholarly attention. I will outline the paradigms and offer explanations for the deviations from the appellative paradigms. The dative of this paradigm requires a treatment of the second topic, the Hittite dative-locative of *i*- and *ija*-stems. Finally, these matters have some implications for the exact reconstruction of the Proto-Anatolian allative. In the process I will also make new proposals regarding the

aberrant forms in the paradigm of HLuw. *masani*- ‘god’,<sup>1</sup> the Luwian dative-locative of the genitival adjective *-an*, and the Lycian infinitive.

## 2 The Luwic inflection of proper names

While Luwic morphology has not received much attention in general, this is especially true for the inflection of proper names. The most comprehensive study so far is Meriggi (1980), which is restricted to synchronic Lycian. For Luwian, some details have occasionally been noted in passing, but the special status of the onomastic paradigms is not always recognized, the details remain fuzzy, and a dedicated treatment or even overview is lacking. Here I want to present the Luwian and Lycian onomastic stem types and their paradigms and compare them to the appellative paradigms (2.1-2.3), as well as to reconstruct their Proto-Luwic predecessors (2.4), providing explanations for their deviations from the appellative paradigms. The discussion of the origin of the dative will be concluded only after a treatment of the Hittite data that I propose to compare.

### 2.1 Personal names

#### 2.1.1 Hieroglyphic Luwian

The most complete picture of Luwian onomastic declension is found in Hieroglyphic Luwian. I will first focus on the main inflection types of personal names, which are tabulated below. The paradigms are also exemplified with divine names and toponyms, inasmuch as their inflection corresponds to that of personal names; the slight differences that these categories present will be discussed in 2.2 and 2.3. Forms with a following

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<sup>1</sup> In this chapter I will use the notation system proposed in Chapter 1: “*i*-mutation stems” are called (appellative) *i*-stems and are uniformly noted with *-i-*; the notations *-V/i-* and *-(i)-* are restricted to the adjectives and to be understood as a combination of the indicated stem types: *-i-* in the common gender and *-V-* (thematic) or zero (consonantal) in the neuter gender. The *i(iV)*-stems are noted as *-iḡV/i-*.

asterisk are not attested in any of these categories, but are expected on the basis of parallelism with the other stems.

	<i>a</i> -stems	<i>i</i> -stems	<i>u</i> -stems
nom.	- <i>as</i>	- <i>is</i>	- <i>us</i>
acc.	- <i>an</i>	- <i>in</i>	- <i>un</i>
dat.	- <i>aya</i>	- <i>iya</i>	- <i>uya</i>
abl.	- <i>adi</i>	- <i>idi</i> (*) <sup>2</sup>	- <i>udi</i>
gen.	- <i>asa</i> , - <i>asi</i>	- <i>isa</i> , - <i>isi</i>	- <i>usa</i> , - <i>usi</i> *
gen.adj.	- <i>asa/i-</i>	- <i>isa/i-</i>	- <i>usa/i-</i>

These paradigms can be illustrated with the following attestations.

nom.	(DEUS) <i>kar-hu-ha-sa</i> <i>ta-i-ta-sa</i>	<sup>1</sup> <i>ka-ma-ni-sa</i>	[ <sup>1</sup> ] <i>nu-nu-sa</i> <sup>1</sup> <i>á-lá/i-mu-sá</i>
acc.	[(DEUS) <i>kar-hu</i> ]- <i>ha-na</i>	<sup>1</sup> <i>ka-ma-ni-na</i>	(DEUS) <i>tá-sà-ku=ha</i>
dat.	(DEUS) <i>kar-hu-ha-ia</i>	<sup>1</sup> <i>ka-ma-ni-i-ia</i>	<sup>1</sup> <i>nu-nu-ia</i>
abl.	(DEUS) <i>kar-hu-ha-ti</i>	–	<i>za+ra/i-ha-nu-ri+i</i> (URBS)
gen.	(DEUS) <i>kar-hu-ha-sa</i> <sup>1</sup> <i>ta-i-ta-si</i>	<sup>1</sup> <i>ka-ma-ni-sa</i> <i>ka-ma-ni-si</i>	<sup>1</sup> <i>á-lá/i-mu-sá</i>
gen.adj.	(DEUS) <i>kar-hu-ha-sa/i</i> <sup>o</sup>	<i>ka-ma-ni-sa/i</i> <sup>o</sup>	<sup>1</sup> <i>á-sa-ti-wa/i-su-sá-na</i> (dat.)

The three paradigms all follow the same pattern, which is summarized in the following table, with *V* representing the respective stem vowels.

nom.	- <i>V-s</i>
acc.	- <i>V-n</i>
dat.	- <i>V-ya</i>
abl.	- <i>V-di</i>
gen.	- <i>V-sa</i> , - <i>V-si</i>
gen.adj.	- <i>V-sa/i-</i>

For contrastive purposes the corresponding regular appellative paradigms (restricted to the relevant common gender singular forms) are given below.<sup>3</sup> Diverging endings are given in bold.

<sup>2</sup> Not attested in names proper, but cf. the testimony of *masanidi* below.

<sup>3</sup> For -*a* as the regular dative-locative of *a*-stems, cf. already Werner (1991: 27), and more recently Yakubovich (2015: § 6.2).

	<b><i>a</i>-stems</b>	<b><i>i</i>-stems</b>	<b><i>u</i>-stems</b>
nom.	<i>-as</i>	<i>-is</i>	<i>-us</i>
acc.	<i>-an</i>	<i>-in</i>	<i>-un</i>
dat.-loc.	<b><i>-a</i></b>	<b><i>-i</i></b>	<b><i>-uwi, -u</i></b>
abl.	<i>-adi</i>	<b><i>-adi</i></b>	<b><i>-uwadi</i></b>
gen.	<i>-asa, -asi</i>	<b><i>-asa, -asi</i></b>	<b><i>-uwasa, -uwasi*</i></b>
gen.adj.	<i>-asa/i-</i>	<b><i>-asa/i-</i></b>	<b><i>-uwasa/i-</i></b>

The dative is different in all stem types: for regular *-a*, *-i*, *-u(wi)* we normally find *-aya*, *-iya*, *-uya* in the onomastic paradigm. In the *a*-stems, the dative is the only case with a different form. In the *i*- and *u*-stems, the ablative and the genitival forms differ as well.

The onomastic *i*-stems are analyzed by Yakubovich (ACLT) not as *i*-stems, but as *i(ya)*-stems, i.e. *iya/i*-stems (cf. e.g. *tadiya/i-* ‘of father’).<sup>4</sup> The appellative *iya/i*-stems do have a similar inflection:

	<b><i>iya/i</i>-stems</b>
nom.	<i>-is</i>
acc.	<i>-in</i>
dat.	<i>-i, (-iya)</i>
abl.	<i>-iyadi, (-idi)</i>
gen.	<i>-iyasa(/i), (-isa(/i))</i>
gen.adj.	<i>-iyasa/i-, (-isa/i-)</i>

Crucially, however, their inflection differs in the oblique cases: here *iya/i*-stems normally have *-iya-* rather than *-i-*, whereas the onomastic *i*-stems never have forms with *-iya-*. Indeed, in the *iya/i*-stems, the forms with *-i-* for *-iya-* are restricted to the southern part of the HLuw. area, meaning that the two declension types are always distinct in the north.<sup>5</sup> In

<sup>4</sup> When only direct case forms are attested, however, they are analyzed as “(*i*)-stems”, i.e. the appellative *i*-stem type. The confusion in stem type assignment disappears with the recognition that names have their own *i*-stem paradigm of the shape presented above: neither appellative type is applicable.


<sup>5</sup> Bauer (2014: 197) states about the forms of *āmi(ya)*- ‘my’ with *-i-* rather than *-iya-* that “attestations can be found in KULULU 3 in the north of Anatolia as well as in HAMA 4 in Syria and many locations between the two”. This does not accurately represent the distribution: the forms with *-i-* are limited to the south, with the sole exception of the abl. that is read by Hawkins as *ā-mi-ri+i* in KULULU 3 (§ 2). In this attestation, however, the last sign (*ri+i*, i.e. *i+ra/i*) has the beginnings of a slanting stroke at the

addition, in CLuw. the direct cases are also distinct: the *iya/i*-stems show plene spellings ( $^{\circ}Ci-i-iC$ ), whereas the onomastic *i*-stems do not ( $^{\circ}Ci-iC$ ). These differences show that we are dealing with two different types. This is also expected given the origin of the *iya/i*-stem type, viz. the *ijo*-stems (see Melchert 1990: 200, and Chapter 1),<sup>6</sup> whereas the onomastic *i*-stems are the onomastic counterpart of the appellative *i*-stems. Finally, there is also a genuine onomastic counterpart of the *iya/i*-stems in the form of *iya*-stems. These simply decline like *a*-stems, with *-iya-* throughout the paradigm, and a dative *-iyaya*:

<i>iya</i> -stems		
nom.	<i>-iyas</i>	<i>ku-pa-pi-ia-sa</i> , <i>su+ra/i-ia-sa=ha</i> (URBS)
acc.	<i>-iyan</i>	(DEUS.MONS) <i>ha+ra/i-ha+ra/i-ia-na</i>
dat.	<i>-iyaya</i>	<sup>l</sup> TONITRUS- <i>hu-ta-pi-ia-ia</i> , <sup>l</sup> <i>ha+ra/i-ha+ra/i-ia-ia</i>
abl.	<i>-iyadi</i>	<i>ku-rú-pi-ia+ra/i</i> (URBS)
gen.	<i>-iyasa</i> , <i>-iyasi</i>	<sup>l</sup> TONITRUS- <i>hu-pi-ia-sa</i> , <sup>l</sup> *447- <i>nu-wa/i-ia-si</i>

The recognition of a distinct onomastic declension of the shapes presented above can also help explain some forms that have so far been enigmatic. In the paradigm of the noun *masani*- ‘god’, which usually inflects like a regular appellative *i*-stem (*masan-is -in -i -adi -asa/i- -inzi -anz*), we also find the forms gen.adj. *masanisa/i-*, abl. *masanidi*, dat.pl. *masaninz*, with unexpected *-i-* for *-a-*. These forms do, however, conform to the *onomastic i*-stem inflection, which has *-i-* throughout. This suggests that *masani-* was also sometimes conceived of as a name (‘the Gods’), effecting a shift to the onomastic variant of the *i*-stem inflection. Indeed, such shifts from the



bottom (in Hawkins’ corpus: , of which there normally are two, effecting a change from *i* to *ia*. Indeed, from the pictures available to me, it seems that the stone is worn at the bottom of the sign. We are therefore probably simply dealing with *á-mi-ia+ra/i*, i.e. the expected form with *-iya-*. This means that the occurrences of *-i-* for expected *-iya-* are limited to the south.

<sup>6</sup> Rather than *a*-stems with frequent contraction of the sequence *-iya-* to *-i-* (thus Yakubovich 2015: § 6.2).

appellative variant to the onomastic counterpart of the stem class are the rule when a noun or adjective is used as a name. For example (cf. Chapter 1): adj. *ázama/i-* ‘beloved’, PN *ázami-* ‘mr. Beloved’ (gen.sg. <sup>1</sup>*á-za-mi-sá*), adj. *muwatala/i-* ‘mighty’, PN *muwatali-* ‘mr. Mighty’ (gen.sg. <sup>1</sup>*mu-wa/i-ta-li-si*). The noun *masani-* ‘god’ is also used as the personal name of an individual, showing the same shift: PN *masani-* ‘mr. God’ (dat.sg. <sup>1</sup>DEUS-*ni-ia*).

### 2.1.2 Cuneiform Luwian

Although the limited Cuneiform Luwian corpus allows us to discern only hints of its basic onomastic inflection, the forms it displays generally correspond to those of Hieroglyphic Luwian. Thus, the acc.sg. <sup>d</sup>*ja-ar-ri-in* is accompanied by a gen.adj.nom.sg.c. <sup>d</sup>*ja-ar-ri-iš-ši-iš*, pointing to <sup>d</sup>*jarri-* with onomastic *i*-stem inflection (*-i-* throughout). The nom.sg. *ḫa-ad-du-ša-aš* ‘Ḫattuša’ occurs next to a dative <sup>URU</sup>*ḫa-at-tu-ša-ia*,<sup>7</sup> with the dative ending *-aia* characteristic of the onomastic *a*-stems. These snippets show that the defining peculiarities of HLuw. onomastic inflection go back at least to Proto-Luwian.

Due to the different nature of its corpus, CLuw. also has a few attestations of a case of which no certain instances are found in HLuw.: the vocative. An example of an *a*-stem vocative is <sup>d</sup>*kamrušepa*, which shows a form identical to the stem. One potential attestation in HLuw. is (DEUS)*ku*+AVIS-*pa-pa*<sup>a</sup> (KARKAMIŠ A6 § 21), which would show the same ending, but it is not excluded that this is rather a dat.sg., with Yakubovich (ACLT).

### 2.1.3 Lycian

The Luwian state of affairs has a clear counterpart in Lycian, where we find the following main personal name paradigms.<sup>8</sup> In contrast with

<sup>7</sup> On this form and the slightly deviating inflection of toponyms in general, see 2.2.

<sup>8</sup> Two further types that are not so well attested should also be mentioned here. We have a few cases of nominatives ending in a nasalized vowel: *ati[bin]ē*, *xssbezē*, *xudalijē* (rendered in Greek as Κυδαλιη[ς]), and, with *-ā*, *ñturigaxā*. Only *xudalijē* also attests a genitive, *xudali[j]ēh*. We further have a type with a nominative in *-ēi*: *mutlēi*, *pigrēi*, *sbikezijēi*, *tewinezēi*, *uhetēi*, *xerēi*. In accusative function we find



Luwian, ablatives and genitival adjectives<sup>9</sup> are not normally used with personal names in Lycian. The genitive, on the other hand, is restricted to proper names. Of the allomorphs of the genitive, *-Vhe* is the oldest form, and *-Vh* and *-Vhñ* (no examples of the latter are included in the overviews below) are secondary forms created for nom.sg. and acc.sg. heads, respectively (see Adiego 2010, and 2.4.1 below).<sup>10</sup>

	<i>a</i> -stems	<i>e</i> -stems	<i>i</i> -stems	<i>u</i> -stems
nom.	<i>-a</i>	<i>-e</i>	<i>-i</i>	<i>-u</i>
acc.	<i>-ã, -u</i>	<i>-ẽ(*)</i>	<i>-i(*)</i>	<i>-u*</i>
dat.	<i>-aje</i>	<i>-eje</i>	<i>-ije(*)</i> , <i>-eje</i>	<i>-uje</i>
gen.	<i>-ah(e)</i>	<i>-eh(e)</i>	<i>(-ih(e))</i> , <i>-eh(e)</i>	<i>-uh(e)</i>

Illustrations:

	<i>a</i> -stems	<i>e</i> -stems
nom.	<i>xssẽñzija, erbbina, seimija</i>	<i>pigesere, perikle</i>
acc.	<i>erbbinã, eseimiju</i>	<i>tikeukẽprẽ</i> <sup>11</sup>
dat.	<i>xssẽñzijaje, eseimijaje</i>	<i>pigesereje</i>
gen.	<i>erbbinahe, xssẽñzijah</i>	<i>perikleh(e)</i>

*huzetẽi*, possibly also *xerẽi*. *pttlezẽi* and *xuñnijẽi* show the datives *pttlezeje* and *xuñnijeje*, respectively. The genitive is attested as *xerẽh* for *xerẽi*, and perhaps *mutleh* belongs to *mutlẽi*. It is not evident how we should interpret these types historically. In mechanical reconstruction, *-ẽ* and *-ẽi* point to PLuw. *\*-on* and *\*-ontsi*, respectively. Possibly they are to be analyzed as old *n*-stems, with the nom.sg. endings going back to *\*-õn* and *\*-õn+is* (Melchert 1994: 305).

<sup>9</sup> Save a handful of exceptions, which regarding their stem vocalism behave like the genitive.

<sup>10</sup> In a very small number of cases, the genitive appears without any ending (e.g. *epñxuxa tideimi*, *mrexisa tideimi*, *wazzije kbatra*). It has been speculated that these continue the old gen.sg. in *\*-s* (cf. Adiego 1994: 13, 2010: 5, Melchert 2012: 276-277, Kloekhorst 2013: 141). I would be more inclined to regard them, with Neumann (1970: 62), Hajnal (1994: 203) and Schürr (2010: 120-121), as secondary to *-h*, the regular nominative of the genitive, which resulted by analogy from *-he* < *\*-so* (see Adiego 2010). As a typologically weak sound, in absolute auslaut, phonologically isolated within Lycian, the occasional loss of *-h* would not be very surprising. The survival of the genitive *\*-s* would be.

<sup>11</sup> The acc.sg. ending *-ẽ* does not occur in any name that is attested in multiple cases, so it is strictly speaking not certain whether this example belongs to the *e*-stems or perhaps to one of the types mentioned in note 8. However, the acc.sg. of the *e*-stems will certainly have been *-ẽ*.

	<b><i>i</i>-stems</b>	<b><i>u</i>-stems</b>
nom.	<i>purihimeti, merehi, trbbēnimi</i>	<i>weqa[d]etu</i>
acc.	<i>sxxutrazi, trbbēnimi(?)</i>	–
dat.	<i>sxxulije,<sup>12</sup> ṁmije,<sup>12</sup> mereheje</i>	<i>metluje</i>
gen.	<i>purihimeteh(e), trbbēnimeh</i>	<i>arppaxuh(e), kiruh</i>

The *a*-stems, *e*-stems and *u*-stems are completely parallel to each other.<sup>13</sup> Also note the existence of *ije*- and *ija*-stems corresponding to the Luwian *iya*-stems, inflecting like regular *a*- and *e*-stems, e.g. *xssēñzija, xssēñzijaje, xssēñzijah*, and *wazzije, wazzijeje*. The only paradigm with deviant variants is that of the *i*-stems, which is clearly due to the encroachment on the onomastic *i*-stems of the appellative *i*-stem pattern, which has *-i* in the direct cases, but *-e* rather than *-i* in the oblique. Thus we find the old onomastic dat. *-ije* next to *-eje*, and in personal names the gen. *-ih(e)* has apparently completely given way to *-eh(e)*. The original onomastic genitive is still regular in toponyms, however, e.g. *telebehihe* (*telebehi* ‘Telmessos’), *xadawātihe* (*xadawāti* ‘Kadyanda’), *xākbihe* (*xākbi* ‘Kandyba’).

From these paradigms we can abstract the following pattern:

nom.	<b>-V</b>
acc.	<b>-V̄</b>
dat.	<b>-V-je</b>
gen.	<b>-V-h(e)</b>

We may again compare the relevant cases of the appellative inflection (different case forms again indicated in bold; the gen. may be compared to the gen.adj.).

<sup>12</sup> Unfortunately, we do not have any attestation of a direct case to verify that the datives *sxxulije* and *ṁmije* belong to *sxxuli*- and *ṁmi*-, but this is the only option if these forms follow the regular morphological pattern of datives, viz. stem + *-je*. There is also a possibility that they are datives in *-e*, like *uwīñte* and *tuhese* (cf. the following note), but given that this type is much rarer, this should not be our default assumption.

<sup>13</sup> A noteworthy deviation from the general pattern is that we occasionally also find datives of personal names without the characteristic *-je*; on these, see 2.5.2.

	<i>a</i> -stems	<i>e</i> -stems	<i>i</i> -stems
nom.	- <i>a</i>	- <i>e</i>	- <i>i</i>
acc.	- <i>ā</i> , - <i>u</i>	- <i>ē</i>	- <i>i</i>
dat.	- <i>i</i> , - <i>a</i>	- <i>i</i>	- <i>i</i>
gen.adj.	- <i>ahe/i</i> -	- <i>ehe/i</i> -*	- <i>ehe/i</i> -

A first thing to notice is that, unlike appellatives, the onomastic inflection also features *u*-stems. As far as case forms are concerned, we see that, like in Luwian, the one case that formally differs from its appellative counterpart in all paradigms is the dative. In addition, the *i*-stems (originally) differ from their appellative counterparts by having *-i*-throughout, rather than *-e*- in the oblique cases.

## 2.2 Toponyms

The inflection of toponyms is generally identical to that of personal names, with the exception of one prominent aspect: the additional locative functions, not found with personal names, are expressed with a separate locative case, which is identical to the stem. The functions of this case are not completely lexically complementary with dative function: toponyms also occasionally occur in dative function. In such cases, Luwian uses the separate dative ending as found in personal names, whereas Lycian uses the locative for this purpose as well.

### 2.2.1 Hieroglyphic Luwian

The following HLuw. examples may illustrate the functional and formal distinction between datives and locatives (translations from or after Hawkins 2000):

Locative:

*wa/i-ma-lá/i |zi-i-na* (“MÍ.REGIO”) *mi-za+ra/i*(URBS)  
|AUDIRE.MI-*ti-i-ta zi-pa-wa/i+ra/i* |\*475-*la*(URBS)-*a*  
|AUDIRE+MI-*ti-i-ta*

‘and men heard [my name] for me on the one hand in Egypt (*Mizra*),  
and on the other hand they heard it (for me) in *Babylon*(?)’  
(KARKAMIŠ A6 § 4-5)

*wa/i-mu-u* *kar-ka-mi-sà*(URBS) SUPER+*ra/i-a*  
 PUGNUS(-)*la/i/u-mi* PUGNUS-*ri+i-i-ia-ha i-zi-ia-ta* DEUS-*ni-zi*  
 ‘Me the gods made strong and *exalted* over Karkamiša’  
 (KARKAMIŠ A15b § 2)

[NEG<sub>2</sub>-*a-wa/i* |*tara/i-pa-i-mi-i-sa* |*za-na* |*a-pa-ha*  
 (“PES<sub>2</sub>”) *a+ra/i-ta-a* |*ka+ra/i-mi-sà*(URBS)  
 ‘Did not Tarpamis come now and then to Kar(ka)miša?’  
 (ASSUR letter a § 6)

*wa/i-mu* *pa+ra/i-za<sub>x</sub>-ta<sub>x</sub>*(URBS) 8 REX-*ti-sa* ... x[...?](*-*)||*sa-ta<sub>x</sub>*  
 ‘Against me in the city Parzuta eight kings ... were *hostile*’  
 (TOPADA § 3)

Dative:

*wa/i* BOS(ANIMAL) 15 OVIS *ka-na-pu-ia*(URBS) ...  
 DARE-*mi-na*  
 ‘an ox, 15 sheep to the city Kanapu ... are to be given’  
 (CEKKE § 11)

*wa/i-mu-u* (DEUS)TONITRUS-*hu-za-sa* *á-\*429-wa/i-||ia*(URBS)  
 MATER-*na-tí-na tá-ti-ha i-zi-i-tà*  
 ‘Tarhunzas made me mother and father to Adanawa’  
 (KARATEPE 1 Hu. § III 12-17)

|*hwa/i-sa-pa-wa/i-ti-i* *mu-ti-ia* (DEUS)MONS-*ti* |*ha-⟨zi⟩-ia-ni-sá-a*  
 |*⟨i-zi⟩-ia-ti-i*  
 ‘(He) who shall make himself governor for the divine Mount Muti’  
 (BULGARMADEN § 10)

The *a*-stems are by far the most frequent stem type in Luwian toponyms.  
 There are no certain attestations of a locative of an *i*-stem or a *u*-stem.

## 2.2.2 Cuneiform Luwian

The distinction can also be seen in CLuw., where *ḫattuša-* occurs in locative function (at least in our best current understanding) as *ḫattuša* and in dative function as *ḫattušaia*:

*a=ta* <sup>URU</sup>*ḫattuša* *zappijalli zanta šatteš pa=ta aḫidu*  
 “You let them go down to the z. city of Ḫattuša, let him come.” (?)  
 (KUB 35.133+ iii 15-16)

<sup>URU</sup>*ḫattušaia* *apparantien arin annarumāḫi ḫuituālāḫiša=ḫa úpa*  
 “Grant to the city of Ḫattuša a future, strength and vigor.”  
 (KUB 35.133+ ii 29-30)

## 2.2.3 Lycian

The Luwian locative also has a counterpart in Lycian, which adds the information that the vowel color of the locative ending is usually identical to the stem vowel, i.e. *-a* in the *a*-stems and *-e* in the *e*-stems, and also *-i* in the less frequent *i*-stems. Both *-e* and *-a* occur in the following passage:

*mukale* : *tewēt[e]* : *sāma=ti*  
 ‘at Mukale, which faces (towards) Samos’  
 (TL 44a, 53-54)

In Lycian, however, this case is not only used in locative, but also in dative function; the PN dative case form *-Vje* is not used with toponyms. Cf. the following sequence:

*[pijet]e=ñn=ē pixe[s]ere kat[amla]h arñna se tlawa se p[inale] se xadawāti*  
 ‘Pixesere son of Katamla gave it to Xanthos and Tlos and Pinaros and Kadyanda’  
 (TL 45, 1-3)  
 (= ἔδωκεν Πιξώδαρος Ἑκατόμ[νου Ξα]νθίοις Τλωίτοις Πιναρέοις Κανδα]υδέοις)

Here, *arñna*, *tlawa*, *pinale* and *xadawãti* are clearly syntactically parallel, as is confirmed by the Greek version (which is phrased slightly differently in that the people of the cities rather than the cities themselves are mentioned). *xadawãti* therefore exemplifies the dat.-loc.sg. of a toponymic *i*-stem (cf. gen. *xadawãtihe*).

### 2.3 Divine names

The most striking deviations from the inflection as outlined above are found in divine names. Most deviating of all are the name of the Storm-god, Luw. *tarhunt-*, Lyc. *trqqñt-*, and that of the Sun-god, Luw. *tiṽad-*. The deviant inflection of these names is related to the unique stem type they display, that of common gender consonant stems, which had been wiped out in appellatives due to a general conversion into *i*-stems. The type is clearly archaic. In the case of the Storm-god, we even find ablaut. We can establish the following paradigms:

	CLuw. <i>tarhunt-</i>	HLuw. <i>tarhunt-</i> , <i>tarhunza-</i>
nom.	<sup>d</sup> IŠKUR/U- <i>an-za</i> (voc.), <sup>d</sup> <i>tar-ḫu-un-za</i>	(DEUS.TONITRUS) <i>tara/i-hu-za-sa</i>
acc.	—	(DEUS)TONITRUS- <i>hu-za-na</i>
dat.	<sup>d</sup> IŠKUR- <i>u[n-t]i</i>	(DEUS)TONITRUS- <i>hu-ti</i>
abl.	—	(DEUS)TONITRUS- <i>hu-ta-ti</i>
g.(a.)	<sup>d</sup> IŠKUR- <i>aš-ša-°</i>	(DEUS)TONITRUS- <i>hu-ta-sa(-°)</i>

	Lyc. <i>trqqñt-</i>
nom.	<i>trqqas</i> (A), <i>trqqiz</i> (B)
acc.	—
dat.	<i>trqqñti</i> (A, B)
abl.	—
gen.adj.	<i>trqqñtase/i-</i> (B)

The oblique stem can be reconstructed as *\*trHunt-* (*\*trH<sup>w</sup>nt-*), and the dative ending is *-i*, as we would historically expect for consonant stems. In the nominative, the CLuw. form <sup>d</sup>IŠKUR/U-*anz* agrees with Lyc. A *trqqas*, pointing to PLuw. *\*trH<sup>w</sup>ants*.<sup>14</sup> An innovated form *tarḫunz*, resulting from

<sup>14</sup> Lyc. B *trqqiz* is more difficult to assess. Mechanical reconstruction leads to *\*trH<sup>w</sup>ints*.

leveling on the basis of the oblique stem *tarḥunt-*, was present already in CLuw., and is the basis for the HLuw. forms *tarhunzas* and *tarhunzan*. These forms show that the unique shapes of the direct cases were no longer understood, and were therefore adapted to agree with the most common onomastic type, that of the *a*-stems.

A name with a similar inflection is *tiḡad-*, the Sun-god. This lexeme is not found in our current Lycian corpus, but does survive in both versions of Luwian.

	CLuw. <i>tiḡat-</i>	HLuw. (DEUS)SOL- <i>wad-</i>
nom.	<sup>d</sup> <i>ti-ḡa-az</i>	(DEUS)SOL- <i>wa/i-za-sa</i> , (DEUS)SOL- <i>ti-i-sa</i>
voc.	<i>ti-ḡa-az</i> , <i>ti-ḡa-ta</i> , <sup>d</sup> <i>ši-ḡa-ta</i>	–
acc.	<sup>d</sup> UTU- <i>an</i>	(DEUS)SOL- <i>wa/i-ti-i-na</i>
dat.	<sup>d</sup> UTU- <i>ti</i> , <sup>d</sup> UTU- <i>ti-i</i>	(DEUS)SOL- <i>ti(-i)</i>
abl.	–	(DEUS)SOL- <i>tà-ti-i=ha</i>
gen.adj.	<sup>d</sup> <i>ti-ḡa-da-aš-ša-°</i>	–

The acc. <sup>d</sup>UTU-*an* is the only attestation of a consonant stem acc.sg.c. in all of Luwian. We further again find a dative in *-i*, and a remade nom. *-zas* in HLuw. on the basis of the older nom. in *-z*. In this case, we also find another strategy to regularize the paradigm in the direct cases: the introduction of *i*-stem inflection.<sup>15</sup> In vocative function, next to use of the nominative form, *tiḡad-* also attests *ti-ḡa-ta* and <sup>d</sup>*ši-ḡa-ta*,<sup>16</sup> with an ending *-a* resulting from a reinterpretation of *-a* in the *a*-stems as an ending.

There may have been other remnants of this kind (cf. e.g. CLuw. dat. <sup>d</sup>*a-ḡa-an-ti-i*), but most other divine names inflect according to the more familiar vocalic stem types. But these, too, behave slightly differently from regular personal names: like the consonantal stem type, their dative often matches that of appellatives rather than that of personal names. Examples from HLuw.:

<sup>15</sup> This may have been catalyzed by the fact that the word for ‘sun’ was (probably) *tiwadi-*, of which *tiwad-* ((DEUS)SOL) was a personification.

<sup>16</sup> The latter form, with *š-*, apparently shows the effect of Hittite interference (Hitt. *šīḡatt-* ‘day’).

HLuw. <i>a</i> -stems, dative in <i>-a</i>			
	<i>átrisuha-</i>	<i>santa-</i>	<i>saruma-</i>
nom.	(DEUS) <i>á-tara/i-su-ha-sa</i>	(DEUS) <i>sà-ta-sa</i>	(DEUS) <i>sa<sub>5</sub>+ra/i-ru-ma-sá</i>
acc.	(DEUS) <i>á-tara/i-su-ha-na</i>	–	(DEUS) <i>SARMA-ma-na</i>
dat.	(DEUS) <i>á-tara/i-su-ha</i>	(DEUS) <i>sà-ta</i>	(DEUS) <i>SARMA-ma</i>
gen.	–	(DEUS) <i>sà-ta-sa</i>	(DEUS) <i>SARMA-ma-sa<sub>6</sub></i>
g.a.	–	(DEUS) <i>sà-ta-s<sup>o</sup></i>	(DEUS) <i>sa<sub>5</sub>+ra/i-ru-ma-s<sup>o</sup></i>
abl.	–	(DEUS) <i>sà-ta-ti<sup>i</sup></i>	–

HLuw. <i>u</i> -stems, dative in <i>-u</i>		
	<i>hibadu-</i>	<i>sarku-</i>
nom.	(MAGNUS.DEUS) <i>hi-pa-tú-sa<sub>5</sub></i>	–
acc.	–	–
dat.	(DEUS) <i>hi-pa-tu</i>	(DEUS) <i>sa<sub>4</sub>+ra/i-ku</i>
gen.	–	–

The ending *-ya* does sometimes occur as well, however, and both variants may be found with the same name.<sup>17</sup> The dative of *kubaba-* is attested both as (DEUS)*ku*+AVIS-*pa-pa* and as (DEUS)*ku*+AVIS-*pa-ia*, and likewise for *tasku-* we find both (DEUS)*ta-sà-ku* and (DEUS)*ta-sà-ku-ia*. The datives of *álanzuwa-*, *iya-*, *karhuha-*, *tagamana-*, and *pahalati-* are only attested with the ending *-ya* ((DEUS)*á-la-zú-wa/i-ia*, (DEUS)*i-ia-ia*, (DEUS)*kar-hu-ha-ia*, (DEUS)*tá-ka-ma-na-ia*, (DEUS)*pa-ha-la-ti-ia*).<sup>18</sup>

<sup>17</sup> Both endings may also occur next to each other in one inscription, cf. e.g. (DOMINUS)*na-ni<sup>i</sup>* (DEUS)*kar-hu-ha-ia* (DEUS)*ku*+AVIS-*pa-ha kar-ka-mi-si-i-za*(URBS) (MAGNUS.DOMINA)*ha-su-sa<sub>5</sub>+ra/i-[i<sup>?</sup>]* ‘to [my] lord Karhuhas and to Kubaba, Queen of Karkamiš’ (KARKAMIŠ A25a § 6). Similarly (DEUS)CERVUS<sub>3</sub>+*ra/i-hu-ha-ia* 1 BOS(ANIMAL)-*sa* OVIS-*sa-ha* (DEUS)*ku*+AVIS-*pa-pa* 1 BOS(ANIMAL)-*sa* 1 OVIS(ANIMAL)-*wa/i-sa-ha* (DEUS)*sa<sub>5</sub>+ra/i-ku* OVIS-*wa/i-sa* (“\*478”) *ku-tú-pi-li-sa-ha* ‘for Karhuhas, one ox and a sheep; for Kubaba one ox and one sheep; for the god Sarkus a sheep and a KUTUPILIS’ (KARKAMIŠ A11b+c § 18b-d). But the same combination of names is found as (DEUS)*ka+ra/i-hu-ha-ia* (DEUS)*ku*+AVIS-*pa-ia-ha* ‘to Karhuhas and Kubaba’ in KARKAMIŠ A13d § 7.

<sup>18</sup> One complicated case is *runtiya-*, the Stag-god. Next to the dative (DEUS)CERVUS<sub>3</sub>-*ia*, which represents either the form in *-a* (*runtiya*) or that in *-aya* (*runtiyaya*), we also find (DEUS)CERVUS<sub>3</sub>(-)<*ru?*>-*ti<sup>i</sup>* and (DEUS)CERVUS<sub>3</sub>-*ti=pa=wa/i=ta<sup>a</sup>*, with unexpected *-i*. A similar unexpected variation of the stem vowel is, however, seen in the nom.sg., where we also find (DEUS)CERVUS<sub>3</sub>-*ti-sá*, an *i*-stem, and even (DEUS)CERVUS<sub>3</sub>-*za-sá*, which reminds of the old consonant stems *tarhunzas* and *tiwazas*. Its stem and endings may have been influenced by the latter



The *-a* of the *a*-stems, to which the other forms without *-ya* are likely to be analogical (see 2.5.2), corresponds to the dative-locative also found in the appellative *a*-stems.

In CLuw., we find a peculiar dative of a unique shape: the dative of the deity *kamrušepa-* is attested as *ka-am-ru-še-pa-i*. This form does not have corresponding forms elsewhere in the nominal system: appellatives have *-a*, personal names *-aja*. Its ending is nevertheless morphologically transparent: it consists of the stem vowel *-a-* and the dative ending *-i*. It may in principle have been formed after other divine names (e.g. *tarḥunt-s* : *tarḥunt-i* = *kamrusepa-s* : *X* → *kamrusepa-i*), but the morphological deviations in divine names we have seen so far are archaic, and so the ending may also be an archaism.<sup>19</sup>

In Lycian, the attested datives of vocalic stem divine names appear not to correspond to the general pattern of personal names either. The dative of *malija-* ‘Athena’ is *mali*, with *-i* (i.e. *\*-iji*) as in the appellative *a*-stems rather than with *-aje* as in the personal name inflection. Similarly, the datives of *ertēmi-* ‘Artemis’ and *natri-* ‘Apollo’ are *ertēmi* and (B) *natri*, respectively, rather than forms in *-ije* or *-eje*.<sup>20</sup>

## 2.4 Proto-Luwic

### 2.4.1 Differences

The Luwian and Lycian onomastic paradigms are very well comparable, but also show some differences. One noticeable difference is due to the introduction of the appellative vowel pattern (dir. *i*, obl. *e*) in the Lycian *i*-

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two lexemes, with which it occurs in collocations. Indeed, (DEUS)CERVUS<sub>3</sub>(-)<ru?>-*ti-i* is immediately preceded by <(DEUS)TONITRUS-*hu-ti-i* <(DEUS)SOL>, and likewise (DEUS)CERVUS<sub>3</sub>-*za-sá* is immediately preceded by (DEUS)TONITRUS-*hu-za-sá*.

<sup>19</sup> The same ending can be found in Hittite, e.g. <sup>d</sup>*ḥašgalāi* (*ḥašgalā-*), <sup>d</sup>*zinkuruuāi* (*zinkuruuā-*). In this case, too, it is unclear whether this is an archaism or an innovation. The match between CLuw. and Hitt. may however be taken to suggest that we are dealing with archaisms.

<sup>20</sup> The appearance of the dative ending *-i* in *zeusi* ‘Zeus’ is probably rather related to the Greek origin of this name; cf. similarly e.g. *mlejeusi* (also probably with *-eus-* from Gr. -εὐς, although the name is in this case (re)rendered in Greek as Μλαανσει), *ijeri* (*ijera-* ← Ἰέρων), and probably (B) *zrppeduni* (← Σαρπηδών).

stems. The more vestigial type which has *-i-* in the oblique cases as well corresponds neatly to the one *i*-stem type found in Luwian. Another difference is that Lycian still differentiates between *a*-stems (< *ā*-stems) and *e*-stems (< *o*-stems), which have merged into *a*-stems in Luwian as a result of sound law.

Next to these two clear innovations, one on the part of each Luwic branch, there is the further difference that Lycian genitives and genitival adjectives are, as a rule, distributed complementarily: genitives are used with names, genitival adjectives with nouns and adjectives. In Luwian there is no such distribution; CLuw., as far as we can tell, does not use the genitive,<sup>21</sup> and in HLuw. both forms occur with both types of lexeme. The existence of two morphologically different formations with the same function suggests the loss of an earlier distinction. Since Lycian shows a neat distinction by using the genitive with proper names and the genitival adjective with appellatives, I assume that this is the Proto-Luwic situation, and that this distribution became blurred in Luwian. HLuw. developed a tendency towards a new distribution by which the genitival adjective was preferred in the oblique cases (Yakubovich 2008). Since the direct cases can be seen as the default, operating in the core of the sentence, the desire to inflect the preceding genitival element to bring out its dependency on a functionally more marked form was naturally highest in the oblique cases. A similar situation may have triggered the eventual removal of the genitive in pre-CLuw.

The various allomorphs of the genitive can in both Lycian and Luwian be shown to go back to a single form that was reinterpreted as an inflected form, triggering the creation of other inflected forms to establish agreement with the head noun: in Lycian, the oldest form is *-Vhe* < *\*-Vsso*, on the basis of which the secondarily inflected forms nom. *-Vh* and

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<sup>21</sup> I do not accept Yakubovich's (2008: 202-211) evidence for a CLuw. genitive *-ašša*. This evidence is restricted to cases of the gen.adj. in which we normally find *-aššan*, i.e. the nom.-acc.sg.n. and the dat.sg. This indicates that we are dealing with a secondary variant of *-aššan*. Similarly, we find *-ašši* for (even alternating with) *-aššin* (Yakubovich 2008: 210), and *-aššizi* for *-aššinzi* (*ḫi-iš-ḫi-ša-aš-ši-zi*, KUB 35.48 ii 12). Therefore, whatever the exact linguistic reality behind these forms (nasalized vowels?), the deviations are nothing more than secondary variants of expected forms with a syllable-final nasal. They are not independent genitives.

acc. *-Vhñ* (B *-Vs* and *-Vzñ*) were created (see Adiego 2010). In a similar vein, in HLuw. the oldest form is *-asa*, which below the Taurus mountains obtained a pendant *-asi* for agreement with common gender head nouns in analogy to the pattern of the gen.adj., c. *-asi-*, n. *-asa-* (see Palmér fthc.); in other words, *-asa* was adapted to *-asa/i* in analogy to *-asa/i-*. Note that this analogy proves that *°a-sa* spells *-asa* rather than *\*\*as*, as was already likely in view of Lyc. *-Vhe*.

#### 2.4.2 Reconstruction of the paradigms

Apart from these differences, the paradigms match very closely. The overall pattern is completely parallel, and can therefore be straightforwardly reconstructed for Proto-Luwic.<sup>22</sup>

	Luwian	Lycian	Proto-Luwic
nom.	<i>-V-s</i>	<i>-V</i>	<i>*-V-s</i>
acc.	<i>-V-n</i>	<i>-Ṽ</i>	<i>*-V-n</i>
dat. (PN)	<i>-V-ia</i>	<i>-V-je</i>	<i>*-V-jo</i>
dat.-loc.	<i>-V</i>	<i>-V</i>	<i>*-V</i>
abl.	<i>-V-di</i>	<i>-V-di</i>	<i>*-V-di</i>
gen.	<i>-V-sa</i>	<i>-V-he</i>	<i>*-V-ssō</i>

The individual Proto-Luwic onomastic paradigms can be reconstructed as follows.<sup>23</sup>

	<i>ā</i> -stems	<i>o</i> -stems	<i>i</i> -stems	<i>u</i> -stems
nom.	<i>*-ās</i>	<i>*-os</i>	<i>*-is</i>	<i>*-us</i>
acc.	<i>*-ān</i>	<i>*-on</i>	<i>*-in</i>	<i>*-un</i>
dat. (PN)	<i>*-ājo</i>	<i>*-ojo</i>	<i>*-ijo</i>	<i>*-ujo</i>
dat.-loc.	<i>*-ā</i>	<i>*-o</i>	<i>*-i</i>	<i>*-u</i>
abl.	<i>*-ādi</i>	<i>*-odi</i>	<i>*-idi</i>	<i>*-udi</i>
gen.	<i>*-āssō</i>	<i>*-osso</i>	<i>*-isso</i>	<i>*-usso</i>

<sup>22</sup> Note that I reconstruct the genitive with *\*-ss-* rather than with *\*-s-* only on the basis of the genitival adjective, which probably shares its ultimate origin with the genitive.

<sup>23</sup> The length in the *ā*-stems is based only on etymological considerations and may be anachronistic.

## 2.5 Pre-Proto-Luwic: prehistory of the case forms

The nom. and acc. are always identical to their appellative counterparts. In the following I will discuss the prehistories of the remaining cases, in increasing order of the length of the discussion: the genitive and the ablative (2.5.1), the locative (2.5.2) and the dative (2.5.3), the latter of which will turn out to require a more in-depth look at Hittite (3).

### 2.5.1 The genitive and the ablative

With the disconnection of the Luwian onomastic *i*-stems from the appellative *ija/i*-stems (2.1.1), and the concomitant rejection of contraction as an explanation for the appearance of *-i-*, which is once more confirmed by the corresponding paradigm in Lycian, the inflection of the onomastic *i*-stems and the parallel *u*-stems, in particular their failure to show the vowel historically inherent to the genitival forms and the ablative, requires a different historical explanation. Fortunately, it is not difficult to find such an explanation. The various onomastic paradigms are completely parallel. Of these paradigms, the one corresponding most closely to its appellative counterpart is that of the *ā*-stems, which show a difference only in the PN dative singular. Similarly, the *o*-stems only differ from their appellative counterpart in the PN dative singular and the locative. Incidentally, unlike in appellatives, in names the *ā*-stems are the most frequent stem class, followed by the *o*-stems, whose counterpart in appellatives was annihilated by the process of *i*-mutation (Chapter 1). These facts suggest that the onomastic *i*-stem and *u*-stem gen. and abl. were reshaped analogically after the *ā*-stems and the *o*-stems: *\*-i-osso*, *\*-i-odi* were replaced with *\*-i-ssō*, *\*-i-di*, and likewise *\*-u-osso*, *\*-u-odi* with *\*-u-ssō*, *\*-u-di*, after *\*-ā-ssō*, *\*-ā-di* and *\*-o-ssō*, *\*-o-di*.

### 2.5.2 The locative

The history of the locative is not as straightforward. One complicating factor is the mismatch with the state of affairs in appellatives. This, in turn, is complicated in itself because Luwian and Lycian do not match, and because Lycian appears to display a morphological asymmetry.

In Luwian appellatives, *i*-stems have a dat.-loc. *-i*, and *a*-stems have a dat.-loc. *-a*. In Lycian appellatives, the dat.-loc. of *i*-stems is *-i*, but that of the *a*-stems comes in two allomorphs: *-i* and *-a*. These seem to be lexically distributed; there are no lexemes that show both endings. The distribution is largely semantic: *-i* is used with animates (e.g. *hrppi ladi* ‘to (/on) the wife’), *-a* with inanimates (e.g. *ebehi xupa* ‘in this tomb’, *ēnē periklehe xñtawata* ‘under the kingship of Pericles’), although there are also a few inanimates with *-i* (e.g. *prñnawi* ‘in the grave’, *ēti sttali* ‘on the stele’, *sixli* ‘for a shekel’). The main question is whether this allomorphy goes back to a Proto-Luwic distinction between dative and locative, which would suggest that the onomastic locative likewise goes back to a separate locative formation, or that it was innovated, through the introduction of a variant *-i*, from a situation like in Luwian, which only has the one dat.-loc. *-a* with *a*-stems.

In itself, the Lycian allomorphy lends itself well to being analyzed as a remnant of an earlier distinction between dative and locative: the form originally accompanying the most frequent function (the dative with animates, the locative with inanimates) would then also have come to be used in the less characteristic function, effectively merging the categories into a dative-locative with two allomorphs. We could therefore reconstruct a PLuw. dative *\*-i* (or perhaps *\*-āi*, in view of CLuw. <sup>d</sup>*kamrušepai*) next to a locative *\*-ā*.<sup>24</sup>

There are, however, several facts that speak against this scenario. Although it can explain the Lycian data, it creates additional assumptions for Luwian, which would then independently have merged the dative and locative into a dative-locative – and have chosen to generalize the locative ending *-a* rather than the dative *\*-i* or *\*-āi* for the designation of the merged case in the *ā*-stems (in analogy to the *i*-stem pattern?).

Moreover, the locative would have been a separate appellative case only in the *ā*-stems. There is no indication that there ever was a separate locative

<sup>24</sup> Thus e.g. Hajnal (1994: 156), who analyzes *\*-ā < \*-eh<sub>2</sub>* as an endingless locative. In addition to the objections to the reconstruction of a separate locative *\*-ā* put forth in the following, the reconstruction of an endingless locative is improbable because the evidence of the other IE languages suggests that the locative of the *eh<sub>2</sub>*-stems was *\*-eh<sub>2</sub>i* rather than *\*-eh<sub>2</sub>* (cf. e.g. Beekes 2011: 200).

in the *i*-stems. Even synchronically in Lycian, the *i*-stems do not have a separate locative, but only a unified dative-locative *-i* (cf. e.g. *ebehi xupa* ‘in this tomb’, not *\*\*ebehe xupa*; *ētri ñtata* ‘in the lower burial-chamber’, not *\*\*ētre ñtata*), and this agrees with the situation in Luwian and in Hittite.

In addition, Lyc. *-a* also occurs in dative function: in toponyms (*arñna* ‘to Xanthos’, *tlawa* ‘to Tlos’), and occasionally in personal names, e.g. *xñtawati xbidēñni sej arkkazuma xñtawati* = βασιλεῖ Καυνίῳ καὶ Ἀρκεσίμῳ ‘to the king of Kaunos and to king Arkkazuma’ (N320, 7-9), *hrppi prñnezi ehbi urebillaha* ‘for his household member Urebillaha’ (TL 11, 2), *epññēni ehbi hñprāma sej atli* ‘for his younger brother Hñprāma and himself’ (TL 37, 4-6). These forms bring Lycian closer to the situation in Luwian, and may be a testimony of a more archaic morphological state of affairs.

It can furthermore be understood why a unified dat.-loc. *-a* would have been in need of some degree of replacement or recharacterization in Lycian: the plural counterpart of this ending, *\*-ās* (which was created in analogy to the *o*-stem dat.-loc.pl. *\*-os*, Hitt. *-aš*), had lost its final *\*-s* by sound law, and had thus become identical to the singular (e.g. *hrppi lada epptehe* ‘for their wives’). This may well have triggered an importation of the ending *-i* from the other stem types. There was no similar motivation in Luwian, which still had a distinct dat.-loc.pl. ending (*-anz*). The peculiar restriction of Lyc. *-i* to animates may perhaps be explained by the same factor: the desire to be able to distinguish number may have been more acute with animate referents. The lexemes with inanimate referents but with the ending *-i*, among which relatively recent loanwords like *sttala* ‘stele’ and *sixla* ‘shekel’, confirm that this was the more productive ending, and that *-a* may be a residue from an earlier stage. A replacement scenario (*\*-a* >> *-i*) can also straightforwardly explain the lack of a functional opposition, i.e. the fact that only one ending per lexeme is found.

Thus, the Lycian appellative *a*-stem (dative-)locative *-a* may well be a remnant of a Proto-Luwic dative-locative *\*-ā*, which was on the way to attested Lycian partly, namely in animates, replaced by the *-i* as found in the other stems. Similarly, the occasional Lycian dative *-a* in personal names and the Luwian dative *-a* found in divine names (e.g.

(DEUS)*ku*+AVIS-*pa-pa*) can be regarded as archaisms reflecting the stage before the pre-Proto-Luwic recharacterization of the dative of personal names through the addition of *\*-jo* (on which more below). The same can then be assumed for the locative of toponyms.

If we assume that the *ā*-stem locative *\*-ā* is the old dative-locative, with the innovations of the PN dative *\*-ā-jo* and later Lyc. *-i* leaving it mainly in locative function, the main remaining explanandum is the shape of the Lyc. loc. ending *-e* (e.g. *mukale* ‘at Mykale’, *xbide* ‘at Kaunos’), which, like *-a* in the *a*-stems, also occasionally occurs in dative function with personal names instead of the more common ending in *-je*, e.g. *hrppi ladi ehbi uwiñte xumetijeh zzimazi* (TL 120, 2), *hrppi ladi ehbi tuhese* (TL 113, 2). The dat.-loc. of *e*-stems is expected to be *-i* rather than *-e*, as indeed it is in appellatives (cf. e.g. *isbazi*, dat.-loc. of *isbazije*- n. ‘bench, couch’, *esedeñnewi*, dat.-loc. of *esedeñnewe*- c. ‘offspring’). Since there appears to have been only one dat.-loc. case, and the ending *-i* corresponds to the Luwian and Hittite endings, the ending *-e* is likely to be the result of analogy. The most obvious source for analogy is the *a*-stem (dat.-)loc. *-a*: *-a -ā -ahe -adi -a = -e -ē -ehe -edi X → -e*. There are several factors that may have favored such an analogy. First, the *a*-stems were the most frequent onomastic stem type and were therefore a more logical source for analogy than they were in the appellatives; cf. the adaptation of the onomastic genitive and ablative (2.5.1). Second, common gender *e*-stems were all but restricted to names, and were therefore much more closely associated with the neighboring onomastic *a*-stems than with their almost non-existent appellative counterparts. The ending *-i* for the onomastic *e*-stems may well have felt out of place in comparison with the more frequent *a*-stem pattern in which the ending matched the stem, and have been adapted accordingly.

It is not surprising to find that the much less frequent toponymic *i*-stems follow the same pattern, at least in Lycian (*-i -i -ihe -idi -X → -i*). For Luwian we do not even have any certain attestations of an *i*-stem locative, but if the dative of divine names can indeed historically be equated with the locative, it suggests a loc. *\*-u* for *u*-stems, and by extension *\*-i* for *i*-stems. See the treatment of the dative of personal names below for the original shape of the dat.-loc. that this *\*-i* probably replaced (*\*-ijo*).

A final difficulty is presented by the *s*-stems (e.g. nom. *tr̥m̥mis*, acc. *tr̥m̥misñ* ‘Lycia’), which appear to show a dat.-loc. in *-e* (e.g. nom. *ar̥ñnas*, dat.-loc. *ar̥ñnase* ‘Xanthos’). This is not the only difficulty of this type, whose entire prehistory is shrouded in uncertainty. There is no corresponding type in Luwian.<sup>25</sup> On account of the dat.-loc., Melchert (2004: xi) analyzes them as stems in *\*-se-* with syncope of the *-e-*. Whatever the exact mechanism,<sup>26</sup> it is in any case probable that these stems have undergone some form of formal innovation, indeed perhaps with *\*-se-* as a starting point. If it is rather the consonantal type of the direct cases that is original, the ending *-e* may have spread from the *e*-stems so as to avoid having an endingless form, which we would expect as a parallel to the other stems. The choice for the *e*-stem form may be related to the default status of the forms with *-e-* in the appellative system (e.g. *-ehe/i-*, *-edi* everywhere except in the *a*-stems).

In sum, we seem to be dealing with the following developments. Pre-PLuw. had a dat.-loc. *\*-ā* in the *ā*-stems and a dat.-loc. *\*-i* in the *o*-stems. In personal names, these endings were largely replaced with *\*-ā-jo* and *\*-o-jo*, respectively (see below). The older endings remained possible variants in names, but were now mainly restricted to locative function (i.e. to toponyms). After the common gender *o*-stems had been annihilated in appellatives, the (dat.-)loc. *\*-i* was in the onomastic *o*-stems adapted to *\*-o* in analogy to the pattern of the more frequent *ā*-stems. In the Lycian appellative *a*-stems the dat.-loc.sg. and the dat.-loc.pl. had become homophonous (*-a*), and the singular was recharacterized with the ending *-i* from the other appellative types, with the older ending *-a* being left as a residue with inanimates.

<sup>25</sup> As far as the suffix *-(V)s-* is concerned, we may perhaps compare the Luwian suffix *-izz-a-* < PLuw. *\*-itts-ā-* that creates ethnicon adjectives, e.g. CLuw. <sup>URU</sup>*taurišizzaš* (dat. <sup>URU</sup>*taurišizza*) ‘from Tauris’, HLuw. *karkamis-izas* (dat. *karkamis-iza*) ‘from Karkamisa’. PLuw. *\*-itts(°)-* may be related to PIE *\*-isko-* or *\*-iko-*.

<sup>26</sup> The type could in principle also be analogical after the genitive (nom. *-Vh*, acc. *-Vhñ*, dat.-loc. *-Vhe*) rather than the other way around (as proposed by Adiego 2010, cf. 6 below), but the morphology of the genitive seems to be too much in flux to be a good model.



### 2.5.3 The dative of personal names

This leaves the dative in *\*-io*, whose shape is completely unlike that of its appellative counterpart. There is only one possible comparandum within Luwic. The dative of the Luwian appellative *iġa/i*-stems (as in *tadiġa/i*- ‘of father’) usually has the morphologically expected shape *-i* (*tadi*), but possibly there also exists a variant *-iġa* (*tadiġa*, see 5). Yakubovich (2015: § 6.2), who was only aware of the onomastic ending *-iġa* for *a*-stems, proposed that the onomastic ending might be analogical after this *iġa/i*-stem dative variant *-iġa*. The analogy would then have to be *-is* : *-in* : *-iġa* = *-as* : *-an* : *X* → *-aġa*. Even if we adjust this by replacing *-a*- with *-V*- to include the other stems, in accordance with the paradigms as established above, this proposed analogy runs into various problems. First, within Luwic this is quite an obscure ending, restricted to the *iġa/i*-stems, and all but ousted by the productive ending *-i* – indeed its very existence is not completely certain (see 5). It would in any case not have been a powerful model for an analogy. This is even more acute considering that it would have to have induced an apparently unmotivated analogy. Most poignantly, in this scenario it would not be understandable why the spread of the ending was restricted to personal names, whereas the appellative system, which even harbors the purported source of the analogy, remained unaffected. I therefore reject the (potential) *iġa/i*-stem dative variant ending *-iġa* as a possible source of the onomastic dative.

The lack of other comparanda within Luwic impels us to look beyond its borders. In Hittite, the inflected shapes of names are often concealed due to the common practice of akkadographic writing, which amounts to writing only the bare stem, in the dative typically preceded by *ANA*, rather than the full form. There are exceptions, however, which allow us to discern the following paradigm (exemplified with <sup>d</sup>*halki*-, <sup>d</sup>*impaluri*-, *kešši*- and <sup>d</sup>*kumarbi*-).<sup>27</sup>

<sup>27</sup> For these and other names, see the overviews of Laroche (1966) and Van Gessel (1998).

nom.	-iš	<sup>d</sup> halkiš	<sup>d</sup> impaluriš	keššiš	<sup>d</sup> kumarbiš
acc.	-in	<sup>d</sup> halkin	<sup>d</sup> impalurin	keššin	<sup>d</sup> kumarbin
dat.	-ija	<sup>d</sup> halkija	<sup>d</sup> impalurija	keššija	<sup>d</sup> kumarbija
gen.	-ijaš	<sup>d</sup> halkijaš	<sup>d</sup> impalurijaš	kiššijaš	<sup>d</sup> kumarbijaš

Some examples of the dative (for <sup>d</sup>halki- see n. 30):

[(*nu arunaš* <sup>d</sup>*impaluri*)]*a* EGIR-*pa memiškeu<sub>u</sub>an daiš*  
 “The sea started again to speak to Impaluri:”  
 (KUB 33.96+ ii 15)<sup>28</sup>

DINGIR<sup>MEŠ</sup>-*eš=kan* <sup>l</sup>*keššija išpanduzzi šer kar[tim]mi<sub>u</sub>au<sub>u</sub>anteš*  
 “The gods were angry at Kessi for the (lack of) libation”  
 (KUB 33.121+ ii 12-13)

<sup>d</sup>*kumarbija kiššarazza=šit=ašta arḫa huiellāet*  
 “He slipped away from Kumarbi’s hand” (lit. “To Kumarbi he  
 slipped away from his hand”)  
 (KUB 33.120+ i 21)

*nu* <sup>d</sup>*kumarbija memiškeu<sub>u</sub>an dāiš*  
 “He began to speak to Kumarbi:”  
 (KUB 33.120+ ii 58)

The inflection of these *i*-stem names is strikingly similar to that of the Luwic onomastic *i*-stems (\*-is, \*-in, \*-ijo, \*-is<sup>o</sup> << \*-ijos<sup>o</sup>), likewise featuring -i- throughout, and, promisingly, a dative of the exact same shape. I therefore propose to equate the two paradigms, including their peculiar datives, historically. Fortunately, within Hittite, this dative ending is not isolated, and we can put it into context and trace its origin. This is what I will do in the next section.

<sup>28</sup> Alternating with ANA <sup>d</sup>impaluri in duplicate KUB 33.102+ ii 4.

### 3 The Hittite dative-locative of *i*-stems and *ija*-stems

In Hittite, unlike in Luwic, names and appellatives have similar inflections. The reason we find the ending *-ija* in the paradigms of the names tabulated above is that these are non-ablauting *i*-stems. The non-ablauting *i*-stems are among the main loci of the ending *-ija*, together with *ai/i*-stems and *ija*-stems. The paradigms of these types (restricted to the singular) are given below. I also include the *i/ai*-stems, a similar stem type in which the dat.-loc. in *-ija* is conspicuously absent (more on this in 3.2). The ending is used both in datival and in locatival functions.

	<i>i</i> -stems	<i>ai/i</i> -stems	<i>ija</i> -stems	<i>i/ai</i> -stems
nom.	<i>-iš</i>	<i>-aiš</i>	<i>-ijaš</i>	<i>-iš</i>
acc.	<i>-in</i>	<i>-ain</i>	<i>-ijan</i>	<i>-in</i>
dat.-loc.	<i>-ija, -ī, -i</i>	<i>-ija, -ī, -i</i>	<i>-ija, -ī, -i</i>	<i>-ai</i>
all.	<i>-ija</i>	<i>-ija</i>	<i>-ija</i>	<i>-a, -aia</i>
abl.	<i>-iaz</i>	<i>-iaz</i>	<i>-iaz</i>	<i>-az, -aiaz</i>
gen.	<i>-iaš</i>	<i>-iaš</i>	<i>-iaš</i>	<i>-aš, -aiaš</i>
instr.	<i>-it</i>	<i>-it</i>	<i>-it</i>	<i>-it</i>

It is apparent from the overview that the dat.-loc. *-ija* is in all stem types in which it occurs in competition with *-ī* and *-i*, which are morphologically transparent: they result from the combination of the *-i-* of the stem and the dat.-loc. ending *-i*. We also notice that the alternative dat.-loc. ending *-ija* is identical to the allative ending. For the allative, the form *-ija* is morphologically expected: it results from a combination of the *-i-* of the stem and the allative ending *-a*. This suggests, as is also commonly thought, that the dat.-loc. ending variant *-ija* is originally the allative ending, whose function was extended to the domain of the dative-locative at the expense of the dat.-loc. ending *-i* (cf. Laroche 1970: 33). A reason for this replacement that has been put forward is that the latter ending had become blurred due to its identical shape to the preceding stem vowel. This scenario has recently been contested by Frantíková (2016). Also, the exact distribution of the various forms has been the subject of some confusion. These issues will be discussed in the following sections.

### 3.1 The distribution of the dat.-loc. -*ija*

In their grammar of Hittite, Hoffner & Melchert (2008: 87) state about *i*-stem nouns: “The allative of the *i*-stems ends in *-iya*, and the sg. d.-l. ends in *-ī* or *-i*. Forms with the ending *-iya* also occasionally appear in post-OS texts in a dative-locative function.” This statement implies that the emergence of the dat.-loc. function of *-ija* is a post-OS phenomenon.

This is contradicted by OS examples of the dat.-loc. *-ija*, which are listed by Hoffner & Melchert (2008: 69 n. 24, 87 n. 52) themselves. They mention the following examples: <sup>d</sup>*halkiia* ‘for Ḫalki’ (<sup>d</sup>*halki-*), *lulija* ‘in a vat’ (*lūli-*), *luttija* ‘at the window’ (*luttai-*), *šaniia* ‘in/on the same (year/day)’ (*šani-*), *takīia* ‘in another (city)’ (*taki-*). Frantíková (2016: 188–191) adds: *ubatiia* ‘on the land’ (*ubati-*), *utniia* ‘in the country’ (*utne-*), *ḫuuašīia* ‘at the ḫ.-pillar’ (*ḫuuaši-*).<sup>29</sup> Frantíková (2016: 188f.) concludes that “the locative *-a* is found in a number of instances” in OH. The impression remains that this is a marginal phenomenon. Indeed, Frantíková (2016: 193) explicitly states that “the *-a* ending is used only in a few dozen *i*-stem lexemes (the overall number of *i*-stem nouns and adjectives exceeds a thousand)”. She also speaks of “the scarcity of its occurrences and its even distribution throughout the recorded history of Hittite” (Frantíková 2016: 195).

A more systematic approach leads to a different picture. The following is intended to be an exhaustive collection of attested dat.-loc.sg. forms (NB not including *-ija* in *allative* function) of the relevant stem types in OS and OH/MS, whether of the shape *-ija*, *-ī* or *-i*.

<sup>29</sup> She also includes <sup>GIŠ</sup>*ḫulukanniia* ‘in the carriage’ (KBo 17.15 obv. 20, OS, KBo 20.18+ v 7, OS), and, for OH/MS, <sup>GIŠ</sup>*zaḫurtiia* ‘on the chair’ (KUB 20.11 ii 9, OH/MS, Frantíková 2016: 194 n. 4), but these attestations should be left out. <sup>GIŠ</sup>*ḫulukanniia eša* does not mean ‘is seated in the carriage’, but ‘sits down in the carriage’: it is an allative rather than a dative-locative. The same goes for <sup>GIŠ</sup>*zaḫurtiia eša* ‘sits down on the chair’. A locative instance of *ḫulukanni-* can however be found in MH: *nu* <sup>GIŠ</sup>*ḫuluganniia peran* GAL <sup>LÚ.MEŠ</sup>*šālašḫaš ḫuianza* ‘the chief of the grooms is marching in front of the coach’ (IBoT 1.36 ii 22, MH/MS).

Attested OS and OH/MS dative-locatives of *i*-stems and *ija*-stems

stem	lexeme	dat.-loc.	
		<i>-ija</i>	<i>-i</i>
<i>-i-</i>	<sup>(d)</sup> <i>halki-</i> ‘Grain-god’	<sup>(d)</sup> <i>halkija</i>	OS <sup>30</sup>
	<sup>NA4</sup> <i>huyāši-</i> ‘pillar’	<sup>NA4</sup> <i>huyāšija</i>	OS <sup>31</sup>
	<i>lūli-</i> ‘pond, vat’	<i>lulija</i>	OS <sup>32</sup>
	<i>šani-</i> ‘same’	<i>šanija</i>	OS <sup>33</sup>
	<i>taki-</i> ‘other’	<i>takija</i>	OS <sup>34</sup>
	<i>ubati-</i> ‘land’	<i>ubatiija</i>	OS <sup>35</sup>
	<sup>GIŠ</sup> <i>halpūti-</i> , cult-object		<sup>GIŠ</sup> <i>halpūti</i> OS <sup>36</sup>
	<sup>GIŠ</sup> <i>zahurti-</i> ‘chair’		<sup>(GIŠ)</sup> <i>zahurti</i> OS <sup>37</sup>

<sup>30</sup> *mān ANA halkija huekzi* <sup>LÚ</sup>GUDU<sub>12</sub>-š=a memai ‘when he calls upon the Grain-god, the anointed says:’ (KUB 28.75 iii 25, OS; this seems to be a hybrid between akkadographic ANA *halki* and phonetic *halkija*); <sup>URU</sup>ankuyāš <sup>d</sup>LAMMA-r[i] <sup>d</sup>*halkija* <sup>d</sup>zinkuruyāi=*ja parsija* ‘the city of Ankuya breaks (bread) for L., H. and Z.’ (KUB 41.10+ rev. 6, OH/MS).

<sup>31</sup> *mān DUMU-aš INA* <sup>URU</sup>*kākšat huyāšija ANA* <sup>d</sup>UTU *hukzi* ‘when the son slaughters in Kākšat at the *h*.-pillar for the Sun-god’ (KUB 28.75 iii 19, OS). Possibly *ja-si* in KBo 20.11+ iii 8, OS (*ja-si* 1 UDU *QA-TAM-MA* ‘... one sheep likewise ...’) has to be restored as [<sup>NA4</sup>*huy*]āš*i* ‘at the *h*.-pillar’, but this is not certain. Note that <sup>NA4</sup>*huyāšija āri* ‘he arrives at the *h*.-pillar’ (ii 4 and iii 4 of the same text) has to be regarded as an instance of the allative; *ār-i* is in OH constructed with the allative (cf. e.g. HW<sup>2</sup>: s.v., II2). For the same reason, *hatantiija* ‘at dry land’ (*nu* <sup>GIŠ</sup>MÁ *māhhan kuitman hatantiija ārhī* ‘until I arrive at dry land like a ship’, KUB 36.75+ iii 22, OH/MS, KUB 31.130+ rev. 6, OH/MS) is not included in the overview.

<sup>32</sup> [*takku*] <sup>LÚ</sup>U<sub>19</sub>.LU-aš <sup>DUG</sup>ÚTUL-i *našma lulija paprezzi* ‘if a person is impure in a pot or in a vat/pool’ (KBo 6.2+ i 56, OS). Note the parallelism with the dat.-loc. <sup>DUG</sup>ÚTUL-i.

<sup>33</sup> *šanija uitti* ‘in the same year’ (KBo 3.22:10, OS), *šanija šiṭat* ‘on the same day’ (KBo 3.22:60, OS).

<sup>34</sup> *takija* <sup>URU</sup>-ri ‘in another city’ (KBo 6.2+ i 7, OS).

<sup>35</sup> *nu* <sup>ÉRIN</sup>MEŠ-an *takkaliet kuṭāpit ubatiija* 20 <sup>ÉRIN</sup>MEŠ *kuṭāpit ubatiija* 30 <sup>ÉRIN</sup>MEŠ *ā[ššer?]* ‘he surrounded the troops; here on the *u*. 20 men, there on the *u*. 30 men (stayed?)’ (KUB 36.100+ rev. 7, OS). The interpretation is not completely clear; for this interpretation cf. HEG (s.v.).

<sup>36</sup> *mān DUMU-aš* <sup>URU</sup>-ri=*pat* <sup>GIŠ</sup>*halpūti* x[ ‘when the son in the city at(?) the *h*. (...)’ (KUB 28.75 ii 1, OS).

<sup>37</sup> <sup>GIŠ</sup>*zahurti*=š*ši kitta* ‘lies on his chair’ (KUB 36.104 rev. 5, OS); *zahurti* (KBo 38.12+ iii 9, OS, broken context). For <sup>GIŠ</sup>*zahurtija* (OH/MS) as an allative rather than a dat.-loc., see n. 29.

Attested OS and OH/MS dative-locatives of *i*-stems and *ija*-stems (cont.)

stem	lexeme	dat.-loc. - <i>ija</i>	- <i>i</i>
- <i>ai/i</i> -	<i>luttai</i> - ‘window’	<i>luttiija</i>	OS <sup>38</sup>
	<i>zašhai</i> - ‘dream’	<i>zašheja</i>	OH/MS <sup>39</sup>
- <i>ē/i</i> -	<i>utnē</i> - ‘land’	<i>utniija</i>	OS <sup>40</sup>
- <i>ija</i> -	<i>hantezziija</i> - ‘first’	<i>hantezziija</i>	OS <sup>41</sup>

This overview reveals that *-ija* is the normal dat.-loc. ending of the relevant stem types in OS and OH/MS texts. The list of OS dative-locatives essentially consists of the examples of *-ija* mentioned by Hoffner & Melchert and Frantíková, which therefore do not constitute exceptional cases – on the contrary, clearly *-ija* was *the* dat.-loc. ending of these stems in OH times.<sup>42</sup> It may further be noted that the two lexemes showing the exceptional dat.-loc. *-i*, <sup>GIŠ</sup>*halpūti*- and <sup>GIŠ</sup>*zahurti*-, are both generally regarded as loanwords (for <sup>GIŠ</sup>*halpūti*- the source is also identifiable as Hattic).

All other instances of *-ī* are from a later period. This suggests that the ending *-ija* received some competition from the paradigmatically expected form *-ī* in later Hittite, when the lack of an overt ending was apparently

<sup>38</sup> [*halmaššui(tti 1-iš lu)luttija 1-iš hattaluaš* GIŠ-*i 1-iš* [*luttij(aš tapuška 1-i)*]*š šipānt[i]* ‘he libates once at the throne, once at the window, once at the wood of the doorbolt, once next to the window’ (KBo 17.11+ iv 32, OS, with OH/MS duplicate KBo 17.74+). Note the parallelism with the dative-locatives *halmašuitti* and *hattaluaš* GIŠ-*i*. Five more occurrences of *luttija* in identical or similar sequences are found in KBo 17.74 ii 5, 11, 23, iii 5, iv 39 (OH/MS).

<sup>39</sup> *naššu=mu DINGIR-IA zašheja mēmau* ‘or let my god speak to me in a dream’ (KUB 30.10 obv. 25, OH/MS).

<sup>40</sup> [*tak*]ku *utniija=ma uemiezzi* ‘but if he finds it in the country’ (KBo 6.2+ iii 59, OS).

<sup>41</sup> [*hantezziija*] *šūat* ‘on the first day’ (KBo 25.17 i 1, OS). For the restoration see Neu (1980: 50 n. 172), who adduces other instances of this collocation, e.g. [*han*]tezziija *šūat* (KUB 20.4 vi 1, OH/MS), *hantezziija* UD-at (KBo 21.33+ iv 16, 30, MH/MS).

<sup>42</sup> Cf. Neu (1974: 60-61) on the OH Anitta text: “(...) die alte Direktivendung *-a*, die jedoch bei den *ai*- (und *i*-)Stämmen zur “normalen” Dativendung geworden ist.”

less universally regarded as problematic.<sup>43</sup> The fact that there are many *i*-stem lexemes that do not exhibit the ending *-ija* is, then, not because of lexical restrictions, but due to the limitations of our corpus: the overview suggests that these *i*-stems, too, had (or would have had) a dat.-loc. *-ija* in OH.

### 3.2 The origin of the dat.-loc. *-ija*

The origin of the dat.-loc. *-ija* is transparent. As was mentioned above (3), the dat.-loc. ending *-ija* is identical to the allative, *-ija*, where this shape is morphologically expected. The straightforward scenario is therefore that the allative form was in the relevant stem types used instead of the expected dative-locative form to express the dative-locative function. This is semantically unproblematic, as the domains of the allative and the dative-locative are very close. The motivation for this slight semantic stretch of the allative is also clear. The use of the allative form in dative-locative function is restricted to stems in *-i-*, *-ai/i-*, *-ē/i-* and *-ija-*. These share the formal feature that the oblique case endings attach immediately to a stem-inherent *-i-*. This formal distribution shows that the motivation behind the existence of the dat.-loc. *-ija* must be related to this formal feature, and it is not difficult to find it: the morphologically expected combination of the stem-inherent *-i-* and the dative-locative ending *-i* leads to a clash of identical phonemes. This was apparently so undesired that speakers preferred an alternative, which they found in the semantically close allative. This analysis is confirmed by the fact that the use of the allative form to express dat.-loc. function is conspicuously absent from the *i/ai*-stems (see 3): the oblique stem of this type does not have *-i-*, but *-a(i)-*, and thus it features a characterized dat.-loc. *-ai*.

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<sup>43</sup> Frantíková (2016: 193) already noticed this trend for *utnē-* ‘land’, and there are several other lexemes in which both *-ija* and *-ī* can be found at later stages, e.g. *zašhāi-* ‘dream’, whose dat.-loc. *zašhija* varies with *zašhī* in NH.

Frantíková's objections to such a scenario and her consequent aporia about the origin of the dat.-loc. *-ija* are unwarranted. She predicts that if the motivation behind the use of *-ija* instead of *-i* was to disambiguate, neuters should exhibit *-ija* more often, because they also have an identical nom.-acc.sg. in *-i* which adds to the ambiguity. However, in the scenario above, the only ambiguity that is being removed by the use of the allative form is that resulting from the clash of a stem vowel *-i-* with the dative-locative ending *-i*. The allative is used in order to have a dative-locative marker at all, rather than one that has disappeared due to the previous vowel. No disambiguation with other forms in the paradigm is implied in this explanation, so Frantíková's expectation that neuters would have shown the ending *-ija* more often does not apply. Neither is it a counterargument that OH already has examples of *-ija* in dat.-loc. function. Indeed, the allative could only be extended in function at a point in which it was still alive. Finally, the supposition that the dat.-loc. ending *-a* would have spread to other stems (Frantíková 2016: 191) is not justified, because these did not have the same formal problem which this form was created to solve.

The use of the dat.-loc. in *-ija* is at its peak in the oldest stage of Hittite, and only decreases with time. This means that the functional extension of the allative by which it arose must be placed in prehistory: in pre-Hittite.

#### **4 The origin of the Luwic onomastic dative**

From the investigation into the status of the Hittite dat.-loc. ending *-ija* in the previous section it is apparent that this ending must have come into being before our earliest records, meaning that it may be compared with Luwic data to see if it may be of Proto-Anatolian date. Since the *i*-stem type corresponding to the Hittite *i/ai*-stems was generalized in the Luwic appellative system, the main Luwic comparandum for the Hittite stems with *-i-* in the oblique stem, the locus of the dative-locative in *-ija*, are the onomastic *i*-stems. This leads us back to the identification in 2.4. The fact that we find exactly the ending *\*-ijo* (Luwian *-ija*, Lycian *-ije*) shows that it was there already in Proto-Anatolian.



	<b>PAnat.</b>	<b>Hitt.</b>	<b>PLuw.</b>	<b>Luw.</b>	<b>Lyc.</b>
nom.	*-is	-iš	*-is	-is	-i
acc.	*-im	-in	*-in	-in	-i
dat.	*-io	-ija	*-ijo	-ija	-ije
gen.	*-ios(°)	-ijaš	*-isso << *-ijosso	-issa	-ihe

For Luwic, the identification suggests that the dative of the personal name declension was inherited as such in the *i*-stems.<sup>44</sup> On the basis of Hittite (3.2), we now know that it was originally restricted to the *i*-stems, where it was borrowed from the semantically neighboring allative to remedy the clash of the *-i-* of the stem and the normal dative-locative ending *-i*. This suggests that the other Luwic onomastic stems received the ending \*-ijo analogically. Specifically, \*-is : \*-in : \*-isso : \*-ijo = \*-Vs : \*-Vn : \*-Vsso : X, which resolves into the reconstructable forms \*-ājo, \*-ojo and \*-ujo. After the generalization of the ablauting *i*-stems in nouns and adjectives, the non-ablauting *i*-stems survived only in the onomastic system, especially personal names, and their isolated dative in \*-ijo had become one of their characteristics. Its spread to the other PN stem types, showing the embracement of this characteristic, created parallelism in what had probably been a mixed bag of forms (\*-ā, \*-i, \*-ijo, \*-ui), leading to the unification of the PN declension pattern, which was realized in conjunction with the generalization of the *ā*- and *o*-stem pattern in the other oblique cases (2.4). That \*-ijo became characteristic of personal names, but not of toponyms, which would originally have had the same dat.-loc., may be understood from the much higher frequency of *i*-stems in personal names. In toponyms, \*-ijo was itself replaced with the *ā*-stem pattern, leading to \*-i.

Of course, the morphological analysis had originally been \*-i-o, with \*-i- appearing only as an automatic glide, resulting in \*-ijo. The analogy suggests that this was reanalyzed as \*-i-jo.<sup>45</sup> This reanalysis could easily happen in Luwic, where the form was no longer associated with an allative, causing the morphological boundary to become opaque. The analogy

<sup>44</sup> Cf. in essence already Laroche (1970: 32), Hajnal (1995: 93-94).

<sup>45</sup> For such a reanalysis cf. e.g. the Spanish 1-3sg.poss.pron. *mío*, *tuyo*, *suyo*, and similarly Neapolitan *mio*, *tuio*, *suio*, from an ancestral state as still found in Italian *mio*, *tuo*, *suo*, with generalization of the automatic glide after *i* in *mio*.

neatly explains the exceptional occurrence of intervocalic  $*\text{-}\dot{i}\text{-}$  after other vowels than  $*\text{-}i\text{-}$ . It suggests that the  $*\dot{i}$  was phonemic, unlike in Proto-Anatolian. For Proto-Luwic, we can indeed reconstruct a contrast between  $*i$  and  $*\dot{i}$ .<sup>46</sup> For example, the dative ending  $*\text{-}V\dot{i}o$  contrasts with  $*\text{-}Vi\dot{o}$ -, which resulted from the addition of the appurtenance suffix  $*\text{-}\dot{i}o/i\text{-}$  to vocalic bases, as for example in Lyc. *adaije-* (to *ade-*, a unit of money), contrasting with the onomastic *a*-stem dative *-aje*. The  $*\dot{i}$  had probably been phonemicized through the development  $*\dot{g}^{(h)} > *\dot{i} (> \emptyset)$ , e.g.  $*\dot{g}^hes\text{-}r\text{-}$  ‘hand’ (Hitt. *keššar*)  $>$  CLuw. *i-iš-sa-ri-* (does *i-* still spell  $\dot{i}$ -?), HLuw. *istri-*, Lyc. *izri-*.<sup>47</sup>

## 5 The Luwic dat.-loc. of $\dot{i}ja/i$ -stems

One other place in which we could potentially still find traces of the ending  $*\text{-}\dot{i}jo$  in Luwic are the appellative  $\dot{i}ja/i$ -stems ( $\sim$  Hitt.  $\dot{i}ja$ -stems). In Luwian, the usual dat.-loc. ending of  $\dot{i}ja/i$ -stems is  $-i$  (e.g. HLuw. *tadi* ‘to father’s’), but it is often thought that there also was a variant  $-\dot{i}ja$  (e.g. HLuw. *tadiya*). If this is correct, this variant could hardly be anything else than a direct cognate of the Hittite  $\dot{i}ja$ -stem dat.-loc. ending  $-\dot{i}ja$  (e.g. *hantezzija*).<sup>48</sup> Its existence is not beyond doubt, however. The morphologically expected ending  $-i$  is by far the most frequent one in Luwian,<sup>49</sup> and similarly in Lycian the dat.-loc.sg. ending of  $\dot{i}je/i$ -stems is  $-i$  rather than  $**\text{-}\dot{i}je$  (e.g.

<sup>46</sup> Contra Kloekhorst’s (2008b: 123-124) analysis of Lycian *j* as an allophone of *i*.

<sup>47</sup> Cf. also CLuw. *ku-um-ma-i-in-zi* = *kummajinzi*. Sequences of the shape  $*Vi\dot{V}$  seem to have been simplified to  $*V\dot{V}$  in Luwian. Cf. Lyc. *ebeija* (virtual  $*h_1ob^ho\text{-}\dot{i}je_h$ ) vs. HLuw. *ápaya* (and likewise *zaya*  $< *\dot{k}o\text{-}\dot{i}je_h$ ).

<sup>48</sup> Yakubovich (2015: § 6.2) analyzes the  $\dot{i}ja/i$ -stems as partly contracting *a*-stems, and accordingly, the dative  $-\dot{i}ja$  as containing the *a*-stem dative ending  $-a$ . This is certainly not correct: the *a*-stems ( $< *\bar{a}$ -stems, Lyc. *a*-stems) should be kept separate from the  $\dot{i}ja/i$ -stems ( $< *\dot{i}jo/i$ -stems, Lyc.  $\dot{i}je/i$ -stems).

<sup>49</sup> The regular ending  $-i$  is sometimes seen as a contraction of  $-\dot{i}ja$  (Hawkins 2000: 120, Yakubovich 2015: § 6.2). However, it can hardly be a coincidence that  $-i$  is also the morphologically expected form, resulting from a combination of the stem  $-\dot{i}(j)\text{-}$  and the normal dat.-loc. ending  $-i$ . Indeed, the CLuw. spelling  $^oCi\text{-}i$  points directly to a preform  $*\text{-}\dot{i}ji$ . The ending  $-i$  therefore rather results from morphological regularization: like in Hittite, the use of the morphologically aberrant form  $*\text{-}\dot{i}jo$  was at some point no longer preferred over the use of the morphologically expected form.

*ehbi*, dat.-loc. of *ehbije/i-* ‘his, her’). We should therefore probably reconstruct this ending for Proto-Luwic. This renders the claim of a sporadic survival of *\*-ijo* in (late) Luwian *a priori* doubtful. Nevertheless, there are one or two quite plausible examples. One of the best candidates is *hudarliya* (*hudarliya/i-* ‘slave’s’) in *wa/i-t[a<sup>a</sup>] |z[a-ti] á-mi<sup>i</sup> á-lá/i-ia-za-sa-na HÁ+LI-sa-na SERVUS-la/i-ia STATUA-ru-ti<sup>i</sup> OVIS(ANIMAL)-ti PRAE-i (“\*69”)sa-sa-tu<sup>u</sup>* ‘let them *present* to this my statue, (that) of Atayazas, servant of Hattusilis, with a sheep,’ (MALPINAR § 5; 8<sup>th</sup> c.; translation Hawkins 2000: 341): here *HÁ+LI-san SERVUS-liya* ‘Hattusili’s (dat.) servant’s (dat.)’ depends on and agrees with *STATUA-ruti* ‘statue (dat.)’. Another candidate is *tadiya* in *wa/i-ti<sup>a</sup> pa-sa<sup>a</sup> tá-ti-ia DOMUS-ni |BONUS-ia-ta* ‘She was good to/for/in her paternal house’ (KARKAMIŠ A23 § 11; 10<sup>th</sup> or early 9<sup>th</sup> c.; Hawkins 2000: 119, 120). If the interpretation of these forms is correct, they may indicate that Proto-Luwic still had *\*-ijo* (alongside innovative *\*-iji?*).

## 6 The Luwian dat.-loc. of the genitival adjective

With the identification of the Hittite and Luwic *i*-stem paradigms above, the practice of using the allative ending in dative-locative function in stems in *-i-* reveals itself to be Proto-Anatolian. One unexpected side-effect of this is that it provides us with an explanation for the enigmatic Luwian dative of the genitival adjective.

c.	sg.	pl.
nom.	<i>-ass-is</i>	<i>-ass-inzi</i>
acc.	<i>-ass-in</i>	<i>-ass-inz</i>
dat.-loc.	<i>-ass-an</i>	<i>-ass-anz</i>
abl.	<i>-ass-adi</i>	

The Luwian genitival adjective suffix *-assa/i-* is a regular *a/i*-stem in all respects except the dat.-loc. singular, which has the completely unexpected shape *-an* rather than *-i*. It was explained by Morpurgo Davies (1980: 135–137) as resulting from an analogy with the accusative and the plural: *\*-ass-inz* : *\*-ass-in* = *\*-ass-anz* : X → *\*-ass-an*. While this is plausible in

itself, it remains unclear why this analogy happened only in the genitival adjective, and not also in all other *(a/i)*-stems, and what triggered the analogy. Morpurgo Davies' assumption that it disambiguated the dat.sg. of the gen.adj. from the genitive in *-asi* can no longer be upheld in view of the secondary, dialectal character of *-asi* (Palmér fthc.), whereas *-an* goes back to Proto-Luwian.

A consensus is emerging that the only formally and etymologically plausible reconstruction of the genitival adjective is *\*-osio-*, an inflecting pendant to the IE gen. *\*-osio* (see e.g. Kloekhorst 2008a: s.v. *-ašša-*, Melchert 2012: 282, Sasseville 2018: 315). If we reconstruct the expected Proto-Anatolian paradigm of this suffix, crucially with a dative-locative *\*-o* after *\*-i-* in line with the analysis above, we end up with the following.

nom.	<i>*-osios</i>
acc.	<i>*-osiom</i>
dat.-loc.	<i>*-osio</i>
abl.	<i>*-osiodi</i>

After *\*-si-* > *\*-ss-* and the spread of the *i*-stem direct case endings, we get the following picture.

nom.	<i>*-ossis</i>
acc.	<i>*-ossin</i>
dat.-loc.	<i>*-osso</i>
abl.	<i>*-ossodi</i>

At this point, the *\*-i-* had been swallowed by the preceding *\*-s-*, leaving the remaining dative-locative ending *\*-o* isolated. Now the analogy proposed by Morpurgo Davies can be understood as an attempt to make sense of this *\*-o*. The dat.-loc. *\*-osso* was partly identical to its plural counterpart *\*-ossonts* (a Luwian adaptation of *\*-ossos*), but missed a final *\*-n* in comparison to the similar accusative pair *\*-ossin* : *\*-ossints*, which followed a familiar pattern. This scenario provides a motivation for the analogy, and explains its restriction to just this suffix. If the connection between the Luwian ending *-an* and the alternative dative-locative ending

\*-o is accepted, its implication of a preceding \*-i- definitively settles the reconstruction of the suffix on \*-osio.<sup>50</sup>

## 7 The Proto-Anatolian allative

The analysis above does not only shed light on the origins of the Luwic dative-locative in the onomastic inflection and in the appellative suffixes \*-i̯o/i- and \*-osso/i-, but also has consequences for our reconstruction of Proto-Anatolian, specifically for the reconstruction of the allative. Hitt. -i̯a, Luw. -iya, Lyc. -ije point to Proto-Anatolian \*-i-o (\*-i̯o), with -o on account of Lycian -e. Since this is originally the allative of stems in \*-i-, it follows that the Proto-Anatolian allative ending was \*-o.

Reconstructions of the allative have taken all shapes that Hittite -a, -ā could theoretically go back to (and even some to which it could not), most notably \*-o, \*-eh<sub>2</sub> and \*-h<sub>2</sub>e, all of which still feature prominently in the literature, with \*-eh<sub>2</sub> topping the list. The most recent cases were made by Melchert (2017, for \*-eh<sub>2</sub>), and Villanueva Svensson (2018, for \*-h<sub>2</sub>e). Both regard the Lycian infinitive as the only inner-Anatolian evidence that has any bearing on the vowel quality of the allative, which they identify as *a* (Melchert 2017: 535, Villanueva Svensson 2018: 147).

Unfortunately, the infinitive ending cannot carry the weight it has been given. Problematically, according to the current communis opinio, this ending comes in no less than three shapes: -ne, -na and -ni, in decreasing order of frequency (for an overview see Serangeli 2019: 227-250). Although it is indeed quite likely that the allative ending is continued in

<sup>50</sup> In Lycian, the dat.-loc. \*-osio > \*-Vhe was simply replaced by the morphologically expected form, -Vhi. In this context, it is interesting to note that the secondarily inflected genitive has a paradigm nom. -Vh, acc. -Vhñ, dat.-loc. -Vhe. However, it is hardly possible for this to reflect the old dat.-loc. \*-osio, since the nom. and acc. are analogical creations, and originally also had the shape \*-osio. The reinterpretation of \*-osio as a dat.-loc. that this presupposes may, however, suggest that there was a dat.-loc. \*-o around – perhaps \*-osio still existed in the gen.adj. at this point? Adiego (2010) rather proposes the *s*-stems as the model, which follow the same pattern (see 2.5.2).

the vowel of one of these formations,<sup>51</sup> it is on the basis of the infinitive data alone absolutely unclear whether it should be the one in *-ne* or the one in *-na*. Melchert (2017: 535; cf. already 1994: 325) speculates that *-na* continues the ‘genuine’ consonant stem ending, i.e. *\*-eh<sub>2</sub>*, while *-e* was reshaped after the supposed *o*-stem ending, *\*-o-h<sub>2</sub>*. This scenario is extremely problematic. Since the grammaticalization into an infinitive must have happened before Proto-Luwic, we expect it to have been chrystalized as such by Lycian times, and not to undergo any analogy on the basis of a continued analysis as an allative. Indeed, since Proto-Luwic, never mind Lycian, no longer featured the allative case, an innovation based on the allative is quite impossible at these stages. If the spread is supposed to have happened in pre-Proto-Luwic, some two millennia later we should expect any free variation to have been ironed out.

*A priori*, a much more likely scenario is that *-ne* and *-na* were made with different morphemes. This idea is strengthened by the existence of *-ni*, which clearly contains the dat.-loc. ending. It is further confirmed by the remarkable fact that almost all attestations of *-na* occur beside an occurrence of *-ne* in the same inscription, which strongly suggests that there was a synchronic distribution. Since there does not seem to be a phonetic distribution, it is likely that this distribution was functional. Unfortunately, our scarce data do not allow us to grasp the syntactic and semantic details. We cannot pretend to understand all details of TL 44a, which contains all cases of *-na* in unbroken context. At most, the restricted distribution of *-na* is itself noteworthy. Six out of seven attestations of *-na* occur in only two inscriptions, TL 44a (4x) and TL 29 (2x), which are also exceptional for containing a (military) narrative. This may not be coincidental. The function of *-na* may have been more in the realm of a participle or a verbal noun, perhaps comparable to the English *ing*-forms. This would make sense for a formation in *-a*, a suffix which among other

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<sup>51</sup> The Luwic infinitive is based on the Proto-Anatolian verbal noun suffix continued in Hitt. *-uar*, *-uāš* < *\*-ur*, *\*-uen-s*; in Luwian it has the shape *-una*, e.g. CLuw. *karš-una* ‘to cut’, HLuw. *ád-una* ‘to eat’. On the basis of the parallel that Hittite offers (inf. *-anna* < *\*-ot-n-* + all., based on the verbal noun suffix *-ātar*, *-annaš* < *\*-ót-r*, *\*-ot-n-os*), and the general typological likelihood of the development of an infinitive from a form with allative function (cf. e.g. Eng. *to* ...; see Heine & Kuteva 2002: 38, 247-248), an analysis as *\*-un-* plus the allative ending is quite plausible.

things is used to make abstract nouns, cf. e.g. *xñtawati*- ‘king’ ~ *xñtawata*- ‘kingship’.<sup>52</sup> I would therefore tentatively interpret *-na* historically as *\*-un-* plus the suffix *\*-eh<sub>2</sub>-*, used in the dative-locative (‘in (the process of) ...-ing’). Perhaps the form in *-a* was even directly based on the infinitive.

The upshot is that one simply cannot use *-na* to infer that the allative had *a*-character. If anything, the regular infinitive is that in *-ne*, which points to *o*-character. More importantly, however, since the morphological and syntactic details behind the variation in the shape of the infinitive are essentially unclear, both synchronically and certainly diachronically, we should let any conclusion based on the infinitive be overruled by the unambiguous evidence for the shape *\*-o* provided by the onomastic dative. Indeed, we may use this evidence to conclude that the infinitive in *-ne* is the one that goes back to the allative.

The situation with the alleged extra-Anatolian comparanda is comparable. Many mutually exclusive putative remnants have been identified in other Indo-European branches. They cannot all be correct. The analysis above is clear evidence that the reconstruction must be *\*-o*, and that reconstructions with *a*-character are incorrect. Villanueva Svensson’s (2018: 148) assertion that “potential extra-Anatolian cognates come as “*\*-ai*” (...), “*\*-a*” (...), and “*\*-ō*” (...)” which “seems to rule out reconstructions involving only *\*-o* (...) or only *\*-a* (...)” is a *non sequitur*: this would only be the case if the extra-Anatolian cognates pointing to *a*-character were compelling rather than only potential, and if better available evidence, namely in favor of *\*-o*, which is somehow left out of the equation here, were not incompatible with *a*-character.

I will briefly discuss some of the main motivations for reconstructing *a*-character for the Proto-Anatolian allative. One of the most popular is Gr. χαμαί ‘on/to the ground’ (cf. Melchert 2017: 535). This is clearly not a form in *-η* or *-α*, but in *-αι*, with an *-ι* that has been analyzed as an additional locative ending. While the assumed accumulation of endings is not obvious to begin with, more importantly, this analysis means that the locative

<sup>52</sup> Outside Anatolian, too, the suffix was used to create action nouns, cf. e.g. *\*b<sup>h</sup>ug-eh<sub>2</sub>-* ‘a fleeing, flight’ (Gr. φυγή, Lat. *fuga*), derived from *\*b<sup>h</sup>eug-* ‘to flee’ (Gr. φεύγω, Lat. *fugiō*). Cf. also the Gr. infinitive in *-αι-ι* < *\*-neh<sub>2</sub>-i* (cf. below and Rix 1992: 238).

semantics could be entirely due to the added *-i*.<sup>53</sup> The same is true for the Greek infinitive in *-vai*, which must also contain the locative ending *-i*, attached to an *ā*-stem abstract noun (see Rix 1992: 238). Greek adverbs in *-α* such as *ἀνά* ‘up along’, *ἄμα* ‘together’, *ἄντα* ‘over against, face to face’, *ἐνθα* ‘there’, *κατά* ‘down(wards) from’, *παρά* ‘from the side of’,<sup>54</sup> etc., not only often do not have allative meaning at all, but can also not be formally united with the Anatolian allative: in terms of reconstructions with *\*h<sub>2</sub>*, Gr. *-α* could only go back to *\*-h<sub>2</sub>* or *\*-h<sub>2</sub>e*, whereas Hitt. *-a*, *-ā* would require *\*-eh<sub>2</sub>* or *\*-oh<sub>2</sub>*. This can hardly be justified morphologically.<sup>55</sup> Moreover, a more straightforward and plausible interpretation is that Gr. *-α* goes back to the accusative ending *\*-m̥* (cf. e.g. *ἄντα* ‘over against’ ~ *ἐναντα* ‘opposite, over against’, *ἄντην* ‘against, over against’; *κατά* ‘downwards’ ~ Hitt. *kattan* ‘downwards’ < *\*kmt-m*). Even more tenuous is the contention that the allative can be distilled from Hitt. *menahhanda* ‘against, opposite, before, facing’ “< *\*menah anda* ‘in(to) the face’” and Lith. *žmogùs* ‘man’ “< *\*dʰgʰm-eh<sub>2</sub>-gʷ(h<sub>2</sub>)u-* ‘one who walks on the earth’” (Kim 2012: 122-123 with lit.), or < “*\*dʰgʰm-oh<sub>2</sub>a-gʷh<sub>2</sub>u-*” (Villanueva Svensson 2017: 135). The implied univerbation with an intact case form is

<sup>53</sup> It is in fact quite possible that the whole sequence *-ai* in *χαμαί* is analogical. An unexpected *-α-* also shows up in *χαμαῖζε* ‘to the ground’, the actual functional equivalent of the allative. The allative in *-δε* is normally built to the accusative, with *-ζε* resulting from the combination with the *-ς* of the accusative plural. However, an acc.pl. *\*\*χαμαῖς* does not exist. It is therefore likely that the element *-αζε* was taken over in its entirety from a source in which it was at home, such as the type of *θύραζε* and *Ἀθήναζε* (Chantraine 2009: s.v. *χαμαί*, Beekes 2010: s.v. *χαμαί*), or the other archaic word for ‘earth’, which made it to the historical period chiefly in the shape of the petrified allative *ἐραζε* ‘to the ground’. The expected locative of the latter lexeme is *\*ἐραι*, which may similarly have contributed to the creation of *χαμαί*. Whatever the correct scenario, it is clear that no sound argument regarding the allative can be based on *χαμαί*.

<sup>54</sup> Specifically, in order of frequency, ‘(+ gen.) from (the side of); (+ dat.) by the side of, at; (+ acc.) beside, along, past’ (see LSJ: s.v.). Note that the meaning is not allative.

<sup>55</sup> Note that the idea that Hitt. *-ā* would represent an *o*-stem variant “*\*-oh<sub>2</sub>*” is furthermore contradicted by the data: we only find *-ā* in *consonant* stems, whereas the *o*-stems only attest *-a*. It is very unlikely that such archaic paradigms as that of *keššar* ‘hand’ (allative *kišrā*) and *tēkan* ‘earth’ (allative *taknā*), much less petrified allatives such as *parā* ‘forward’, took their allative endings from the *o*-stems (and this idea is indeed shown to be incorrect by the clear correspondences of *parā* < *\*prō*).



a rarely seen process, and more straightforward explanations should be preferred. Hitt. *menahḫanda* is rather to be analyzed as a compound of *mēna-* ‘face’ and *ḫant-* ‘face, forehead’ (see Kloekhorst 2008a: s.v., for *ḫanda* cf. also Kloekhorst 2010: 223-225). The formation of Lith. *žmogùs* ‘man’ is unclear, and even in the unlikely univerbation scenario the *-o-* element does not have an allative meaning. The *-o-* also occurs in *žmónės* ‘people’, and may have a completely different origin (see Derksen 2014: s.vv.).

That the alternative analyses are to be preferred becomes even more evident in view of the positive evidence for *\*-o*. There is one relevant equation that all participants in the discussion (e.g. Melchert 2017: 530, Villanueva Svensson 2018: 139-140) regard as completely obvious: Hitt. *parā* ~ Gr. *πρό* ~ Skt. *prá* < PIE *\*pró* ‘forward’. This is universally analyzed as the adverbial root *\*pr-* (also seen in Gr. *περί*, etc.) plus an element *\*-o*. This element is identified as the allative ending by Dunkel (1994, 2014 I: 154-161), followed by Kloekhorst (2008a: s.v. *-a*, *-ā*). Within Hittite, *parā* is indeed very clearly the allative of the adverbial stem *per-* / *pr-*, which is also found in Hitt. *per-an* ‘before’ (acc.), *par-za* ‘...-wards’ (abl.), and in Luwic in Luw. *parī* ‘forward’, Lyc. *pri* ‘forth, in front’ (dat.-loc.).<sup>56</sup> In view of the obviousness of this example, it is unclear to me why anyone would prefer to dismiss it in favor of the unconvincing evidence for *a*-character.

Next to *\*pr-o*, more indications about the identity of the PANat. allative can be found in other similarly adverbialized allatives, such as Hitt. *āppa* ‘behind, afterwards, back, again, after’ (other case forms in Hitt., CLuw. *āppan* ‘behind, afterwards’ = Lyc. *epñ* ‘afterwards’, HLuw. *āpi* ‘back, again’), which cannot be separated from Gr. *ἀπό* ‘away from’ (cf. also *ἄν*

<sup>56</sup> Similar complexes are found in a whole range of other inflected adverbial stems, for example *\*ser-* / *\*sr-* (Hitt. loc. *šēr* ‘above’, all. *šarā* ‘upwards’, dat.-loc. CLuw. *šarri* ‘above’, Lyc. *hri-* ‘upper’, instr.pl. Lyc. *hrppi* ‘for’). Note that the anonymous reviewer *apud* Villanueva Svensson (2018: 148 n. 32) who suggested deriving “the hitherto unclear” CLuw. *šarra* ‘up(on)’ from *\*sér-h<sub>2</sub>e* seems not to have consulted Kloekhorst 2008a (s.v. *šarā*), where the straightforward reconstruction *\*sér-o* is offered, with the geminate resulting from Čop’s Law (cf. *šarri* ‘above’ < *\*sér-i*, from which the stem will have been taken analogically anyway, replacing older *\*sr-* as in Hitt. *šarā*).

‘backwards, back again’), Skt. *ápa* ‘away from’ (cf. also *ápara-* ‘posterior, later’), OHG *aba*, Goth. *af* ‘(away) from’ (cf. also Goth. *aftra* ‘again; back’), Lat. *ab* ‘away from, since, after’, PSlav. *\*po* ‘after, by, at’ < *\*h<sub>2</sub>op-o* ~ *\*h<sub>2</sub>ep-o* ~ *\*h<sub>2</sub>p-o*. Another example is continued in Hitt. *anda* ‘in(to), inwards’, CLuw. *ānta* ‘(in)to’, HLuw. *anta* ‘(with)in, in(to)’, which directly match Lyc. *ñte* ‘in(side)’. This again points unequivocally to PAnat. *\*-o*, which is further confirmed for PIE by OLat. *endo* ‘in, on, to’ < *\*h<sub>1</sub>ndo*. An example of a petrified allative adverb in *\*-o* that is not found in Anatolian is *\*up-o* (Greek ὑπό ‘from under’, Skt. *úpa* ‘towards’, OIr. *fo* ‘under’, Goth. *uf* ‘under’).<sup>57</sup>

Even on the basis of the extra-Anatolian comparanda alone, then, it was already likely that the allative was *\*-o*. The inner-Anatolian evidence now also clearly points to *\*-o*. The main piece of evidence is the testimony of the *i*-stem allative turned dative-locative *\*-i-o* (Hitt. *-ija*, Luw. *-ija*, Lyc. *-ije*). It is further confirmed by the allative adverb Hitt. *anda*, CLuw. *ānta*, Lyc. *ñte* < *\*h<sub>1</sub>ndo*, and by the regular Lyc. infinitive in *-ne* < *\*-un-o*.

Traditionally, the allative is not reconstructed for PIE, but this seems to be changing (cf. e.g. Fortson 2010: 117, Ringe 2017: 25-26, Kloekhorst & Pronk 2019: 4, Bauhaus 2019: 24-25). As an argument against an archaism one could object that the accusative seems to be an older device for expression allative function, as in Lat. *eō domum* ‘to go home’, a construction that may well be taken to suggest that the accusative originated from the grammaticalization of an allative to a direct object marker (cf. Sp. *veo a Juan* ‘I see Juan’, with use of the allative preposition *a* ‘to’). However, this is not necessarily the right scenario. Although grammaticalization from an allative to a direct object marker is indeed a plausible development, the opposite is as well. The development from a direct object marker to an allative marker is completely natural with verbs of going: as a direct object marker normally expresses what an action is directed towards, the combination with a verb of going naturally leads to a goal interpretation. Such a development happened for example in Modern Greek, cf. e.g. *πάω σπίτι* ‘to go home’, *πάω Ελλάδα* ‘to go to Greece’, *πάω σουπερμάρκετ* ‘to go to the supermarket’, etc. (see e.g. Holton et al. 2012:

<sup>57</sup> A curious further potential comparandum is Gr. *δεῦρο* ‘hither’, whose further etymology is, however, unclear.

335). Like in Greek, where direction is more usually expressed with the preposition  $\sigma\epsilon$  ‘to; in’, the PIE accusative of direction, which is also marginally attested in Hittite (Hoffner & Melchert 2008: 248-249), may always have been a marginal phenomenon.<sup>58</sup>

In my view, the PIE formations with petrified allatives such as *\*pr-o*, *\*h<sub>2</sub>p-o*, *\*up-o*, etc., can only have been formed when the creation of such allatives was productive. The state of affairs in non-Anatolian IE therefore already suggests that there once was a more vigorous allative. Since no non-Anatolian language shows any evidence for this case except for remnants in petrified adverbs, the stage in which the allative was a regular case must predate their common ancestor, in which it had been lost as such. The fact that we find a vigorous allative of exactly the right shape in Hittite can hardly be interpreted in any other way than that Anatolian descends from this earlier stage in which the allative still was a vigorous case. The allative is therefore an argument in favor of the Indo-Anatolian hypothesis.

## 8 Conclusions

We can draw the following conclusions. In Luwic, the inflection of proper names differs significantly from that of appellatives. In essence, this can be traced back to differences in the frequency of certain stem types, leading to different models for analogy in names and in appellatives. In names, the  $\bar{a}$ -stems were the most frequent type, followed by the  $o$ -stems. The genitives and ablatives of the less frequent  $i$ -stems and  $u$ -stems took on the pattern *\*-V-di* and *\*-V-sso* after *\*-ā-sso*, *\*-ā-di* and *\*-o-sso*, *\*-o-di*. Similarly, the  $\bar{a}$ -stem dative-locative *\*-ā* led to the creation of equivalents of the shapes *\*-o*, *\*-i* and *\*-u*. These endings remained mainly in locative

<sup>58</sup> Another critical thought could be that spatial cases can easily be secondary, as for example in Baltic. While the allative could indeed in principle have been secondary, and must of course have come into being at some point in time, the remnants in non-Anatolian IE clearly favor a scenario in which the allative did already exist in PIE but was lost on the way to the common ancestor of non-Anatolian IE. Baltic also offers a parallel for the opposite development, by which an allative case was lost as such and only survived in scattered remnants. For example, the Old Lithuanian allative in *-p* survives only in a few petrified expressions in Modern Lithuanian, such as the adverb *vakarop* ‘towards the evening’.

function, since personal names, in which the *i*-stem type was more frequent than in toponyms, generalized the pattern of the *i*-stem dative-locative *\*-i̯io* to create *\*-āi̯io*, *\*-oi̯io* and *\*-ui̯io*. This dative-locative had become a characteristic of names after the non-ablauting *i*-stem type was annihilated in appellatives due to the generalization of the proterodynamic *i*-stems. The *i*-stem dative *\*-i̯io* has an exact counterpart in the Hittite *i*-stem dative-locative *-i̯ia* (e.g. *kumarbi-*, dat. *kumarbi̯ia*). Hittite reveals that this is originally the allative ending which was used to avoid the unfortunate combination of a stem formant *-i-* and the dative-locative ending *-i*, namely in non-ablauting *i*-stems, in *ai/i*-stems (*ē/i*-stems) and *i̯ia*-stems (significantly not in *i/ai*-stems or any other type of stem). Traces of this process may further be found in the Luwian *i̯ia/i*-stems (e.g. *tadiya* ‘father’s (dat.)’), and in the Luwian gen.adj.dat.-loc.sg. *-assan* << *\*-assa* < *\*-osio*. The fact that Lyc. *-Vje* < PLuw. *\*-V̯io* can be traced back to the PAnat. *i*-stem allative *\*-i-o* shows that the PAnat. allative was *\*-o*. This confirms that the regular Lycian infinitive in *-ne* is the one corresponding to Luwian *-un-a* (< *\*-un-o*); the formation in *-na* may rather belong to a verbal noun in *\*-eh₂-*. The fact that the petrified remnants in other IE languages such as *\*pr-o* (Gr. *πρό* = Hitt. *parā*, etc.) presuppose that there once was a vigorous allative case in *\*-o*, which was lost as such before their common ancestor, combined with the fact that we find a vigorous allative of exactly this shape in Anatolian, suggests that Anatolian split off at an earlier stage than the rest. The survival of the allative case in *\*-o* is therefore an additional argument in favor of the Indo-Anatolian hypothesis.

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