The Hieroglyphic Luwian genitive case: the synchronic distribution of the endings -as(a) and -asi
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The Hieroglyphic Luwian genitive case

The synchronic distribution of the endings *-as(a)* and *-asi*

Abstract: Descriptions of Hieroglyphic Luwian grammar assert that the genitive endings *-as*(*a*) and *-asi* are interchangeable; their distribution is said to be random rather than governed by any conditioning factor. However, recent studies have shown that the ending *-asi* is geographically and chronologically restricted in the corpus of Hieroglyphic Luwian texts, which suggests that the distribution is not entirely random. In this paper, it is argued that in texts from the "*-asi* area" – where texts containing both endings are found – the genitive endings are distributed in a non-random way. Genitives in *-as*(*a*) are dependent on neuter gender head nouns, whereas genitives in *-asi* are dependent on common gender head nouns. This means that, syntactically, Hieroglyphic Luwian genitives resemble genitival adjectives by agreeing with the gender of their head. Although several counterexamples exist, they are probably caused by translation errors, by language change in late Hieroglyphic Luwian, and possibly by the fact that *-as*(*a*) may reflect *-asa* as well as *-as*. Finally, a new account of the historical development of Luwian genitives is presented.

Keywords: Hieroglyphic Luwian, Luwic, Anatolian, nominal morphology, historical linguistics, Indo-European

1 Introduction

Like many other Indo-European languages, Anatolian languages mark possession and appurtenance using the genitive case. Within the Anatolian branch, the Luwic languages are characterized by the parallel use of a genitival adjective, which is functionally similar to the genitive case. The Hittite suffix *-ašša-* (e.g. *iugašša-* 'yearling') is probably etymologically related to the Luwic genitival adjective (EDHIL: 216), but is less frequently used and not functionally identical to the genitive case. An overview of genitive case endings and genitival adjective suffixes in Hittite and Luwic languages is given in Table 1 (p. 168).

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Table 1: Genitive singular endings and genitival adjectives in Hittite and Luwic

	Hittite	Hieroglyphic Luwian	Cuneiform Luwian	Lycian
Genitives	*-aš*	*-as* (?)		*-e*
	-š	*-asa* (?)		*-eh*
		-asi		*-ehe*
Adjectives	*-ašša-*	*-asa/i-*	*-ašša/i-*	*-e/ahe/i-*

In Hieroglyphic Luwian (HLuwian) the genitival adjective is formed with the suffix *-asa/i-*. Like any Luwian adjective, the genitival adjective is *i*-mutated[1] and agrees in case and number with its head noun, cf. (1) and (2).

(1)   *a-wa/i*   DEUS-*ni* DEUS-*ni kwa/i-ti-ha*   **á-pi-si-na**
       a=wa   masan-i   masan-i   kwa-ti=ha   api-si-n
       CONJ=QUOT god-DAT.SG god-DAT.SG REL-DAT.SG=CONJ that-GENADJ-ACC.SG.C
       "SOLIUM"-*sa-na i-zi-i-ha*
       asa-n   izi-ha
       seat-ACC.SG.C   make-1SG.PRET
       '... and for every single god I made his own seat ...'   HAMA 4, §5

(2) |*wa/i-ta* |*á-pa-sa-ha* |**á-pa-sa-za** |**sa-na-wa/i-ia-za**
       wa=ta   apa-s=ha   apa-sa-n-sa   sanawiya-n-sa
       QUOT=LOC   that-NOM.SG.C=CONJ   that-GENADJ-ACC.SG.N-PCL   benefit-ACC.SG.N-PCL
       |*za-ri+i* |*a-ta* |LITUUS.LITUUS-*na-i*
       zadi   anta   mamana-i
       here   in   see-3SG.PRES
       '... he too shall behold his benefit here'   SULTANHAN, §18

Unlike Cuneiform Luwian (CLuwian), HLuwian also has a genitive case (although it is less frequent than the genitival adjective), formed with the endings *-as*(*a*) and *-asi* (both are SG and PL since number is not distinguished in the genitive). Due to the nature of the HLuwian script, it is impossible to determine whether *-as*(*a*) reflects *-as* or *-as*(*s*)*a*.[2] It is perfectly possible that both variants existed in the language, but we are not able to distinguish them in writing. In previous descriptions of HLuwian grammar, no functional distribution between *-as*(*a*) and *-asi* has been reported (e.g. Yakubovich 2015b: 12). Hajnal (2000: 22) has explicitly claimed that the endings are interchangeable, based on the fact that the same word

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1 *i*-mutation implies that the theme vowel of the nominative and accusative of the common gender is *-i-*, but *-a-* in the neuter and oblique cases.
2 In the Hieroglyphic Luwian script, ⟨CV⟩ signs like ⟨SA⟩ were used to denote both full syllables and simple consonants. This means that an ending written ⟨-SA⟩ may reflect either *-sa* or *-s*.

may be inflected with either *-as*(*a*) or *-asi* in a seemingly random fashion. There are even cases where such variation is attested within one and the same text.

Recently, some progress has been made towards understanding the distribution of HLuwian genitives across texts. Bauer (2014: 142ff.) discovered that genitives in *-asi* are attested in texts originating from the south of the area in which HLuwian texts are found, and mainly in texts dated to the 10th and 9th centuries BCE. Following Bauer, it appears that, while genitives in *-as*(*a*) are attested across all HLuwian texts, the ending *-asi* and the usage of both genitive endings side by side is restricted to the southern area from the 10th century BCE onwards. Nevertheless, the conditioning factor governing the distribution of *-as*(*a*) and *-asi* remains a glaring *lacuna* in our understanding of HLuwian grammar.

In the present paper, it will be argued that the endings *-as*(*a*) and *-asi* are distributed in a non-random way in southern HLuwian texts. Where both endings are attested in the same text, *-as*(*a*) co-occurs with *neuter gender head nouns*, while *-asi* co-occurs with *common gender head nouns*. Moreover, this rule can be extended to texts where only *-asi* is used, as well as most texts from the "*-asi* area" that exclusively contain *-as*(*a*) genitives. Exceptions to this distribution are explainable as translation errors, by language change in late HLuwian, and possibly by the fact that *-as*(*a*) may reflect *-asa* as well as *-as*.

Section 2 describes the corpus used for this study. In section 3, the geographical and chronological distribution of HLuwian genitives is discussed. In section 4, the evidence for a distribution based on the gender of the head noun is presented, and counterexamples are discussed. Finally, section 5 presents a new scenario of the origin and development of the HLuwian genitive endings.

2 Material

The corpus used for this study comprises all HLuwian texts in the Corpus of Hieroglyphic Luwian Inscriptions (CHLI). Additionally, later publications included in the Annotated Corpus of Luwian Texts (ACLT) have been taken into account. After 28 ambiguous cases were filtered out, a corpus of 246 words in the genitive case was compiled. Of these, 188 are genitives in *-as*(*a*) and 58 are genitives in *-asi*.

Ambiguous cases are words for which more than one reading is possible, so that we cannot be certain whether they reflect genitives or not. In example (3) the uncertain readings are marked in bold.
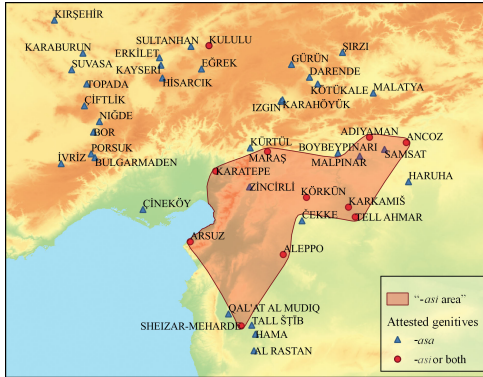
(3) (DEUS)TONITRUS-***tá-sa**-pa-wa/i-tá* |*kwa/i-i-sa* |*á-tá-na-**wa/i-na**||⁻ᵃ*
     tarhunt-**as(a)**=pa=wa=ta   kwi-s   atana**wi-n**[3]
     DN-**GEN**-CONJ-QUOT-LOC   who-NOM.SG.C ATANAWA-**ACC.SG.C**
     |*kar-ka-mi-si-za*(URBS) (DEUS)TONITRUS-*ti* |SUB-*na-na*[...
     karkamis-iz-a   tarhunt-i   anan
     GN-ADJ-DAT.SG   DN-DAT.SG   under
     '(He) who [...] the ATANAWA(NA)- of Tarhunt under Karkamišean
     Tarhunt ...'   Karkamiš A13d, §3

Since the inscription is damaged, the reading of this sentence is uncertain. The status of the possible genitive (DEUS)TONITRUS-*tá-sa* depends on the reading of |*á-tá-na-wa/i-na*||⁻ᵃ, the meaning of which is unknown. It could either be read as an ACC.SG.C *atanawi-n* or as an ACC.PL.N of an adjective in -*wana/i-*. In the former case, (DEUS)TONITRUS-*tá-sa* would be a genitive, but under the latter interpretation, it could be a genitival adjective in the ACC.PL.N, correlating with |*á-tá-na-wa/i-na*||⁻ᵃ. As the reading of the sentence is ambiguous, I have excluded this and similarly unclear cases to avoid distorting the analysis. A full list of ambiguous cases is given in Appendix B (p. 197ff.).

3 Distribution of genitives across texts

3.1 Geographical distribution of genitives

As shown in Bauer 2014: 142ff. the HLuwian genitives are geographically distributed in a non-random way. While genitives in -*as*(*a*) are attested all over the area where HLuwian texts have been found, genitives in -*asi* are limited to the southeast. Figure 1 (p. 171) shows the locations where texts containing genitives have been found and delimits what I will call the "-*asi* area".[4]

As evident from Figure 1, genitives in -*asi* are more geographically limited than genitives in -*as*(*a*). The former type is mainly found in texts originating south of the Taurus mountains, possibly reflecting a dialectal difference between northern and

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3 The ACLT's reading of this word as *antan=wa=an* (inside=QUOT=3SG.ACC.C), starting a new sentence, is impossible, since a final /-n/ is dropped if followed by a consonant-initial enclitic particle (like =*wa*) in HLuwian orthography.

4 Note that not all HLuwian locations are included here, e.g. Iraq and Western Anatolia. However, texts from these locations do not contradict the geographical distribution, as they only contain genitives in -*as*(*a*).

Fig. 1: Hieroglyphic Luwian texts containing genitives in *-as(a)* and/or *-asi*.

southern HLuwian varieties separated by a mountain range.[5] The only exception is Kululu lead strip 1, which contains two genitives in *-asi* but was found north of the Taurus mountains. However, since this text is written on a portable lead strip, it may have been moved from its original location, and therefore hardly falsifies the general geographical distribution. Apparently, the exclusive use of *-as(a)* persists in the periphery of southern HLuwian, e.g. in Hama and Haruha.

It is important to note that while texts from locations marked with triangles exclusively use *-as(a)*, texts from locations marked with circles may contain both genitive endings side by side. However, at certain locations in the "*-asi* area" texts contain exclusively genitives in *-asi*.[6]

3.2 Chronological distribution of genitives

In addition to the geographical distribution, Bauer (2014: 142ff.) also discovered tendencies of a chronological distribution between the endings *-as(a)* and *-asi*. While genitives in *-as(a)* are attested from the earliest HLuwian texts (12th century) up until the latest text Karatepe 1 (7th century), genitives in *-asi* are more frequent

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[5] I thank Stefan Norbruis for drawing my attention to the correlation between this linguistic isogloss and the Taurus mountains as a "natural border".

[6] At Adıyaman, Arsuz and Maraş, only *-asi* is attested. At the remaining locations marked with circles, both endings are attested, although not necessarily in the same text.

(in relative terms) in texts dated to the 10th–9th centuries.[7] A more detailed account of this chronological distribution is presented in Figure 2.
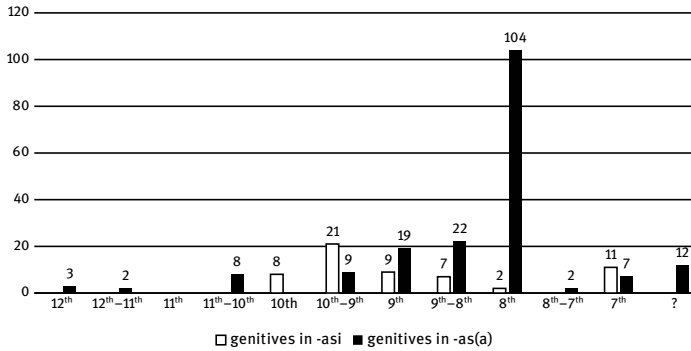

Fig. 2: Number of genitives attested at different chronological stages of HLuwian

Two main conclusions may be drawn from Figure 2. First, genitives in *-asi* are unattested before the 10th century BCE. Unless attributed to chance, this could be taken to indicate that the ending *-asi* did not exist before the 10th century. Figure 2 also supports Bauer's (2014) observation that genitives in *-asi* are more frequently attested in the 10th–9th centuries. However, *-asi* does not completely disappear from the written record until HLuwian stops being used as a written language. Note that all genitives from the 7th century category are from KARATEPE 1.

Second, the number of attestations of *-as(a)* increases dramatically in the 8th century. In sum, the use of *-asi* begins in the 10th century and declines in relative frequency from the 9th century, after which the ending *-as(a)* becomes relatively much more common.

3.3 Chronology of genitives in southern HLuwian

Although the frequency of *-asi* genitives after the 9th century declines in relative terms, it is mostly a result of the sharp increase in textual material from outside of the "*-asi* area" starting from the 9th century. In fact, if the chronological analysis is limited to the "*-asi* area", the ratio of *-asi* to *-as(a)* remains more stable, cf. Figure 3.

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7 I use the same chronological categories as CHLI, which vary in preciseness; hence texts dated to the 10th century are separated from texts dated to the 10th–9th centuries BCE.
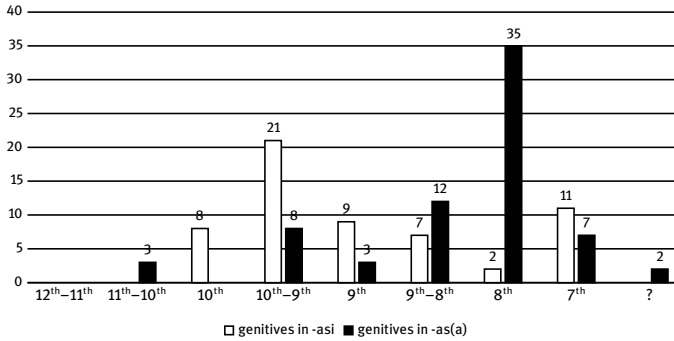
Fig. 3: Number of genitives at different chronological stages of southern HLuwian

Although there seems to be an increase in -*as*(*a*) genitives in 8th century texts, most of these (*n* = 17) are found in Kululu lead strip 1. As such, it is unclear at this point whether the numerical distribution reflects language change or the scarcity of the attested material. The question is further addressed in 4.3 where it is argued that a specific group of late HLuwian texts from the "-*asi* area" show a divergent use of the genitive compared to earlier texts from this area.

4 Evidence for a gender-based distribution

The geographical and chronological distribution of the endings -*as*(*a*) and -*asi* allow us to narrow down the study of their functional distribution in HLuwian to a subset of the corpus. Given that -*asi* is absent north of the Taurus mountains, as well as in texts from before the 10th century, we do not *a priori* expect a functional distribution of the endings here: -*as*(*a*) was the only genitive ending in these varieties of HLuwian. Therefore, I will limit the study to texts in the "-*asi* area" dated to the 10th century onwards.[8] Additionally, Kululu lead strip 1 will be taken into account, as it is hypothesized to originate in the "-*asi* area" despite its northerly findspot. Within this group, texts containing both genitive endings are crucial, since they alone provide unambiguous evidence of alternation in the use of the genitive endings.

8 This excludes texts outside of the "-*asi* area" (see Figure 1) as well as Karkamiš A4b and Karkamiš N1, which contain 3 genitives and are the earliest texts from Karkamiš (Dinçol, Dinçol, Hawkins, et al. 2014: 151) from the 11th–10th centuries BCE (CHLI: 80).

In the following, the genitives have been arranged into three groups based on whether they are attested in texts with both -*as*(*a*) and -*asi* genitives (4.1), texts with only -*asi* genitives (4.2), or texts with only -*as*(*a*) genitives (4.3). Within each section, the texts are ordered from oldest to youngest, following the dating in CHLI.

4.1 Texts with both -*as*(*a*) and -*asi*

Eight texts from different time periods contain both genitive endings. Together they contain 35 genitives in -*as*(*a*) and 25 in -*asi*, cf. Table 2.

Table 2: Texts containing -*as(a)* and -*asi*

Text	Centuries BCE	-*asi*	-*as(a)*
Tell Ahmar 1	10th–9th	3	2
Tell Ahmar 6	10th–9th	2	1
Aleppo 2	10th–9th	1	1
Karkamiš A2+3	10th–9th	3	1
Meharde	9th–8th	2	3
Körkün	9th	1	3
Kululu lead strip 1	8th	2	17
Karatepe 1	7th	11	7
Total		25	35

Tell Ahmar 1 contains 5 unambiguous genitives, all of the 3rd person pronoun *apa*- 'he/she/this', s. 4–8.

(4) *pa-si-*a |20-tá-ti-i-sa*
       apa-si   20-tadi-s
       that-GEN   kinsman-NOM.SG.C
       'his kinsman'   Tell Ahmar 1, §11

(5) *pa-s[a]-wa/i-*a* ("LIGNUM")*sà-la-ha-za*
       apa-s(a)=wa   salahant-sa
       that-GEN=QUOT   power.ACC.SG.N-PCL
       'his power'   Tell Ahmar 1, §12

(6) *pa-si-*a |*(INFANS)*ni-mu-wa/i-za-sa*
       apa-si   nimuwiza-s
       that-GEN   son-NOM.SG.C
       'his son'   Tell Ahmar 1, §13

(7) *pa-s[à²]-*a* "DOMUS"-[...]
 apa-s(a)   parna-?
 that-GEN   house.N-?
 'his house⁹'   TELL AHMAR 1, §15

(8) *pa-si-i-*a |(INFANS)ni-mu-wa/i-za-sa*
 apa-si   nimuwiza-s
 that-GEN   son-NOM.SG.C
 'his son'   TELL AHMAR 1, §19

A striking pattern emerges: *apasi* is dependent on head nouns of common gender, whereas *apas(a)* is dependent on head nouns of neuter gender. This suggests that the conditioning factor of the allomorphs *-asi* vs. *-as(a)* is the gender of the head noun. The same distribution may be observed in TELL AHMAR 6.

(9) (DEUS)TONITRUS-*si* SERVUS-*la/i-i-sa*
 tarhunt-asi   hudarli-s
 DN-GEN   servant-NOM.SG.C
 'Tarhunt's servant'   TELL AHMAR 6, §1

(10) EXERCITUS.*LA/I/U-na-si-ha* (DEUS)*sà-us-ka-sa*
 kwalan-asi=ha   sauska-s
 army-GEN=CONJ   DN-NOM.SG.C
 '... and Sauska of the army'   TELL AHMAR 6, §2

(11) ⁱ*ha-mi-i-ia-ta-sa-pa-wa/i-ta á-lá/í-ma-za*
 hamiyata-s(a)=pa=wa=ta   alaman-sa
 PN-GEN=CONJ=QUOT=LOC   name.ACC.SG.N-PCL
 '... and Hamiyata's name'   TELL AHMAR 6, §29

In (9) and (10), *-asi* genitives co-occur with common gender head nouns, whereas in (11) *-as(a)* co-occurs with a neuter head. The same holds for ALEPPO 2.

(12) (DEUS)TONITRUS-*si* |BONUS-*mi-i-sa*   SERVUS-*la/i-i-sa*
 tarhunt-asi   was-mi-s   hudarli-s
 DN-GEN   be.dear-PTC-NOM.SG.C servant-NOM.SG.C
 'Tarhunt's beloved servant'   ALEPPO 2, §1

(13) *pa-sa-*a |á-lá/í-ma-za*
 apa-s(a)   alaman-sa
 that-GEN   name.ACC.SG.N-PCL
 'his name'   ALEPPO 2, §10

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9 Although "DOMUS" must reflect the neuter word *parna-*, the sentence is unclear because the inscription is partly broken. CHLI takes "DOMUS" as a genitive attribute to the following |"DOMINUS"-*na-*[*ni²*]-*i-na*. It could also be taken as a locative.

In (12), -*asi* co-occurs with a common gender head, whereas in (13) -*as*(*a*) co-occurs with a neuter head. The same pattern is found in KARKAMIŠ A2+3.

(14) *pa-sa-*a* |*tá-ti-ia-za* |DOMUS-*ni-za*
  apa-s(a)   tat-iya-nz   parni-nz
  that-GEN   father-ADJ-DAT.PL.N house-DAT.PL.N
  'against his paternal houses'   KARKAMIŠ A2+3, §15

(15) |REGIO-*ni-ia-si* |DOMINUS-*ia-sa*
  wataniya-si   niya-s
  country-GEN   lord-NOM.SG.C
  'Country-Lord'   KARKAMIŠ A2+3, §16

(16) |("*273")*wa/i+ra/i-pa-si* |DOMINUS-*ia-zi-i*
  warpa-si   niya-nzi
  tool-GEN   lord-NOM.PL.C
  'master of tools'   KARKAMIŠ A2+3, §16, Yakubovich 2019

(17) |REGIO-*ni-ia-si* DOMINUS-*ia-sa*
  wataniya-si   niya-s
  country-GEN   lord-NOM.SG.C
  'Country-Lord'   KARKAMIŠ A2+3, §19

In (14), -*as*(*a*) co-occurs with a neuter head, while the -*asi* genitives in (15), (16) and (17) co-occur with common gender head nouns.

In MEHARDE, the gender-based distribution mostly holds, except for a minor counterexample in (18).

(18) |*za-a-wa/i* |(STELE)*ta-ni$^{?}$-sà-za* |(DEUS)REGIO-*ni-sa*
  za=wa   tanisa-n-sa   watani-s(a)
  this.NOM.SG.N=QUOT stele-NOM.SG.N-PCL   land-GEN
  |(MAGNUS.DOMINA)*ha-su-sa$_5$+ra/i-sa*
  hasusara-s(a)
  queen-GEN
  'This stele (is) of the divine queen of the land'   MEHARDE, §1

(19) |(DEUS)REGIO-*ni-si* |(MAGNUS.DOMINA)*ha-su-sa$_5$+ra/i-sa*
  watani-si   hasusari-s
  land-GEN   queen-NOM.SG.C
  'divine queen of the land'   MEHARDE, §6

(20) |*pa-sa-pa-wa/i*   ×-×-×-*za* |(DEUS)REGIO-*ni-si*
  apa-s(a)=pa=wa   ?-n-sa   watani-si
  that-GEN=CONJ=QUOT ?-ACC.SG.N-PCL land-GEN
  |(MAGNUS.DOMINA)*ha-su-sa$_5$+ra/i-sa* |*ARHA* |DELERE-*nu-tu*
  hasusari-s   arha   marnu-tu
  queen-NOM.SG.C   completely destroy-3SG.IMP.ACT
  'May the divine queen of the land destroy his ?'   MEHARDE, §8

In (18), the neuter head noun *tanisan-* 'stele' is qualified by the genitive attribute *hasusara-s(a)* 'of the queen', which in itself takes the genitive attribute *watani-s(a)* 'of the land'. As *hasusara/i-* 'queen' is a common gender word, we would expect *watani-* 'land' to take the *-asi* ending in agreement with its head noun. As this is not the case, *watani-s(a)* could be taken as a counterexample to the proposed distribution. However, it is possible that the entire phrase *watani-s(a) hasusara-s(a)* 'of the divine queen of the land' was governed by *tanisan-* 'stele'.[10] The remaining genitives in MEHARDE follow the gender-based distribution. In (20), the text is partly damaged. Since the word ×-×-×-*za* must be the object of *marnu-* 'destroy', it is most likely a neuter word ending in the neuter particle -*sa*.

KÖRKÜN contains 4 genitives, of which only 2 follow the distribution, cf. (21)–(24).

(21) ᴵ*á-zi-ni-sá* |(INFANS)*ni-mu-wa/i-za-sa*
    azini-s(a)   nimuwiza-s
    PN-GEN   son-NOM.SG.C
    'Azini's son'   KÖRKÜN, §1

(22) DOMINUS-*na-sa ha-ti-sá*
    nana-s(a)   hadid-sa
    master-GEN   command.ACC.SG.N-PCL
    'master's command'   KÖRKÜN, §3

(23) *wa/i+ra/i-pa-si* DOMUS-*na*
    warpa-si   parna
    tool-GEN   house.ACC.PL.N
    'workshops'   KÖRKÜN, §4, Yakubovich 2019

(24) X+*RA/I-sa* |*á-sa-ha-na-ti-sa-za*
    ?-s(a)   ashanati-sa-n-sa
    ?-GEN   blood.offering-GENADJ-ACC.SG.N-PCL
    'blood-offering of ?'   KÖRKÜN, §7

It appears that the genitives in (21) and (23) both contradict the proposed distribution. As will be proposed in 4.3, *-as(a)* genitives in names may reflect the archaic ending /-as/ rather than /-asa/, which could explain the usage in (21). In the case of (23), I see no plausible way of explaining *warpasi*. It should be noted that KÖRKÜN

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10 In my opinion, there is a further possible explanation of this phenomenon. Assuming that the gender-based distribution is correct, it could be argued that *hasusara/i-* has shifted from common to neuter gender, prompting *watani-* to take *-as(a)*. The reason for this shift could be that *hasusara/i-* itself is inflected in the genitive case, and has assumed the gender of its head noun in the process. This would imply that, syntactically, the genitive case functions not as an inflectional morpheme, but as a derivational morpheme, similar to the genitival adjective.

is dated to the same period as another group of problematic texts discussed in 4.3, all connected to the dynastic period of the *House of Astiruwas*.

Next in our discussion is Kululu lead strip 1, which originates outside of the "-*asi* area" but has been included here since it contains two -*asi* genitives.

(25) [I]*ku-ku-wa/i-ia⁻ᵃ* |CUM-*ni* [I]*la-la/i/u-wa/i-sá-na*
kukuwa-ya   CUM-ni   laluwa-sa-n
PN-DAT.SG.C   POSTPOS   PN-GENADJ-DAT.SG.C
wa/i+ra/i-tu+ra/i-si(URBS)
waratura-si
GN-GEN
'for Kukuwa, (son) of Laluwa, of the town Waratura' Kululu lead strip 1, §5

(26) [I]REL+*RA/I-mu-wa/i-ia⁻ᵃ* |CUM-*ni* [I]*mu-wa/i-sá-na*
kwarimuwa-ya   CUM-ni   muwa-sa-n
PN-DAT.SG.C   POSTPOS   PN-GENADJ-DAT.SG.C
wa/i+ra/i-tu+ra/i-si(URBS)
waratura-si
GN-GEN
'for Kwarimuwa, (son) of Muwa, of the town Waratura'

Kululu lead strip 1, §5

Evidently, both -*asi* genitives in Kululu lead strip 1 have common gender heads. However, the text also contains 17 -*as*(*a*) genitives, 14 of which have common gender heads.[11] Two examples are given in 27f.

(27) [I]*nu-ia* |CUM-*ni* [I]MAGNUS+*RA/I-mu-wa/i-sá*(URBS)
nu-ya   CUM-ni   uramuwa-s(a)
PN-DAT.SG.C POSTPOS   GN-GEN
'for Nu, of the town Uramuwa (alt. Uramuwa's town)'

Kululu lead strip 1, §2

(28) [I]*hu-li-ia-ia⁻ᵃ* |CUM-*ni* |*ku-ku-wa/i-sa-na* |*tu-na-sá*(URBS)
huliya-ya   CUM-ni   kukuwa-sa-n   tuna-s(a)
PN-DAT.SG.C   POSTPOS   PN-GENADJ-DAT.SG.C   GN-GEN
'for Huliya, (son) of Kukuwa, of the town Tuna'   Kululu lead strip 1, §3

Although each line of the text has the same type of content – the amount of a certain type of goods that is to be delivered to a certain individual in a certain town – the town names show great morphological variation. Besides the genitive case, town names are also encoded as genitival adjectives (e.g. §2 |*hu-wa/i-sá-na*(URBS)) or -*za*- adjectives (§5 |*za-k*[*a*]-*za*(URBS)) in the dative/locative. The reason behind this

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11 The three remaining -*as*(*a*) genitives in Kululu lead strip 1 have no head and are thus insignificant for the present study.

variation is unknown, but since the same construction is consistently used for each town name,[12] it is possible that these were lexically or regionally specific.[13] In any case, because KULULU lead strip 1 is so puzzling in terms of its style, geographical origin, and use of possessive constructions, its importance for understanding the usage of the genitive case is limited.[14]

The final text containing both genitive endings is KARATEPE 1, which is one of the longest and latest HLuwian texts. The text comprises two similar but not identical HLuwian versions (*Hieroglyphen unten*, *Hieroglyphen oben*) and a Phoenician version. Together, the HLuwian versions contain 11 -*asi* genitives and 7 -*as(a)* genitives. Below follow 4 cases of -*asi* that adhere to the gender-based distribution proposed above.

(29) *za-si-há-wa/i* ("CASTRUM")*há⟨+ra/i⟩-na-sá-si* DEUS-*ní-zi*
za-si=ha=wa harnisa-si masani-nzi
this-GEN=CONJ=QUOT fortress-GEN god-NOM.PL.C
'this fortress's gods' KARATEPE 1, Hu. §51

(30) *za-i^i-si-i-há-wá/í* ("CASTRUM")*há+ra/i-ní-sà-si* |DEUS-SA$_4$-*zi*
za-si=ha=wa harnisa-si masani-nzi
this-GEN=CONJ=QUOT fortress-GEN god-NOM.PL.C
'this fortress's gods' KARATEPE 1, Ho. §51

Evidently, the head noun *masan(i)*- is of common gender and co-occurs, as predicted, with genitives in -*asi*. However, the status of *zasi* 'of this' depends on one's syntactic analysis of the sentence. If the pronoun *za*- is analyzed as dependent on *harnisa*-, which is neuter, one could argue that *za*- should have taken the -*as(a)* ending. However, the genitive morpheme itself may be analyzed as the head of

12 Except in the case of ¹MAGNUS+*RA/I-mu-wa/i*-, which appears twice as a genitive and twice as a genitival adjective in the dative. However, although this is the name of a town, it is derived from a personal name, as evidenced by the "UNUS" sign, which is used to mark personal names. This may have caused it to behave differently than other town names.

13 A possibility, then, is that *Waratura/i*- takes the -*asi* ending because in the dialect of that town, this ending was used, whereas *Tuna*- takes the -*as(a)* ending because -*asi* was not used there. Naturally, this is highly speculative and impossible to verify.

14 An anonymous reviewer remarks that the KULULU lead strips are more poorly understood than most scholars think, and that the postnominal position of the genitives in this text might explain why they do not follow the gender-based distribution.

the phrase *za- harnisa-* 'this fortress', much like the '*s*-genitive in English.[15] This means that the *-asi* allomorph is determined higher up in the sentence structure.[16]

The following sentences contain five *-as(a)* genitives co-occurring with neuter gender head nouns.

(31) *za*   ("CASTRUM")*há+ra/i-ní-sà||-za i-zi-ia-ru*
     za   harnisa-n-sa   izi-aru
     this.NOM.SG.N fortress-NOM.SG.N-PCL   make-3SG.PRES.IMP.M
     (DEUS)BONUS-*sa* (DEUS)VITIS-*sá-há*
     BONUS-s(a)   tupariya-s(a)=ha
     DN-GEN   DN-GEN=CONJ
     'Let this fortress become (one) of the Grain-God and of the Wine-God.'
                                                                 KARATEPE 1, Hu. §53

(32) (LITUUS)*á-za-ti-wa/i-tà-sá á-lá/í-ma-za*
     azatiwada-s(a)   alaman-sa
     PN-GEN   name.ACC.SG.N-PCL
     'Azatiwada's name'   KARATEPE 1, Hu. §63

(33) (OCULUS)*á-za-ti-wa/i-tà-sa á-lá/í-ma-za*
     azatiwada-s(a)   alaman-sa
     PN-GEN   name.ACC.SG.N-PCL
     'Azatiwada's name'   KARATEPE 1, Hu. §74

(34) (DEUS)LUNA+*MI-sa-wa/i* [...] *á-la/i-ma-za*
     arma-s(a)=wa   alaman-sa
     moon-GEN=QUOT   name.NOM.SG.N
     'the Moon's name'   KARATEPE 1, Hu. §75

In examples (29)–(34), *-asi* co-occurs with common gender heads, whereas *-as(a)* co-occurs with neuter gender heads. However, there are other genitives in KARATEPE 1 that seem to contradict this distribution.

(35) *kwa/i-pa-wa/i-ta* || |REGIO-*ní-ia* *kwa/i-ia* *a-ta* |SOLIUM+MI-*sá-i*
     kwipa=wa=ta   watani-a   kwa-ia   anta asa-i
     indeed=QUOT=LOC country-NOM.PL.N REL-NOM.PL.N in   dwell-3SG.PRES
     wa/i-tà   *i-zi-ia-rú*   OVIS.ANIMAL-*wa/i-si*
     wa=ada   izi-aru   hawa-si
     QUOT=NOM.PL.N make-3SG.PRES.IMP.M sheep-GEN

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15 In a DP (determiner phrase) framework, the structure of such an '*s*-genitive phrase is e.g. [*this fortress*]'*s gods* (Carnie 2006: 197). In HLuwian, it would be [*za- harnisa-*]*asi masaninzi*.

16 Alternatively, this sentence may be taken as additional evidence of the proposal regarding MEHARDE in fn. 10, namely that *-as(a)* and *-asi* function as derivational morphemes that alter the gender of the stem.

BOS.ANIMAL-*wa/i-si* (DEUS)BONUS-*si* (DEUS)VITIS-*ia-si-há*
wawa-si BONUS-si tupariya-si=ha
OX-GEN DN-GEN DN-GEN=CONJ
'And so the nations that dwell in (it), let them become (those) of sheep, oxen, the Grain-God and the Wine-God.' KARATEPE 1, Hu. §54–55

(36) *kwa/i-pa-wá/í-ta* REGIO-*iá* ⟨*kwa/i-ia*⟩ *a-ta*
kwipa=wa=ta watani-a kwa-ia anta
indeed=QUOT=LOC country-NOM.PL.N REL-NOM.PL.N in

|(SOLIUM)*i-sà-nú-wa/i-ti* |*wá/í-tà* |*i-zi-ia-rú*
isa-nuwa-(n)ti[17] wa=ada izi-aru
dwell-CAUS-PL.PRES QUOT=NOM.PL.N make-3SG.PRES.IMP.M

|OVIS.ANIMAL-*wa/i-si* |BOS.ANIMAL-*si* |(DEUS)BONUS-*sa*
hawa-si wawa-si BONUS-s(a)
sheep-GEN ox-GEN DN-GEN

(DEUS)"VITIS"-*ia-si-há*
tupariya-si=ha
DN-GEN=CON
'And so the nations ⟨that⟩ he/they shall cause to dwell in (it), let them become (those) of sheep, oxen, the Grain-God and the Wine-God'
KARATEPE 1, Ho. §54–55

All but one of the 8 genitives in (35) and (36) have the ending -*asi*. The genitives all depend on the enclitic pronoun -*ada* 'they', which correlates with the subject of the preceding clause, *wataniya* 'countries', a neuter plural.[18] To explain this, I would like to compare the HLuwian sentence to its Phoenician counterpart (37, see Çambel 1999).

(37) W'M Z 'Š YŠB BN YKN B'L 'LPM WB'L
and=people.COLL.SG this.M REL dwell in=3SG.F become owner bovines and=owner
Ṣ'N WB'L ŠB' WTRŠ
small.cattle and=owner plenty and=wine
'And the people who dwell in it, may it become the owner of bovines and the owner of sheep and the owner of plenty and wine.'
KARATEPE 1, Phu /A III 7–9

In Phoenician, the head of the genitives, '*m*, is literally a plural of '*š* 'person, man', which may also be read as a collective noun meaning 'people, nation'. Following Yakubovich 2015a, the HLuwian version of KARATEPE 1 is a translation of the

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17 Alternatively, this may be read as 3SG -*ti*.
18 The plural pronoun pronoun -*ada* 'they' can be either common or neuter gender, but the fact that it is followed by a verb in the singular shows that it is grammatically neuter in this case.

Phoenician original.[19] It is therefore possible that the translator rendered Phoenician *ʿm* 'people' (masc./coll.) as HLuwian *watani-* 'country, land' for the lack of a better corresponding word, using the plural to indicate a collective meaning. Yet, the semantic animacy of 'people, nation' in the Phoenician original was retained in the translator's mind, which prompted the use of *-asi* in the following clause, since animacy is typically associated with the common gender.

One final counterexample occurs in the very first sentence of KARATEPE 1, s. (38).

(38) (DEUS)TONITRUS-*hu-ta-sa* SERVUS-*la/i-sá*
       tarhunt-as(a)   hudarli-s
       DN-GEN   servant-NOM.SG.C
       'Tarhunt's servant'   KARATEPE 1, Hu. §1

In (38), we find an *-as(a)* genitive with a common gender head. A possible explanation for this exception is that *tarhunt-* is an archaic consonant stem, which could have retained an older inflectional type where *-asi* was not included. Cf. section 5 for the hypothesis that *-asi* is an innovation within HLuwian.

To summarize this section, let us review how well the hypothesis that the use of *-as(a)* vs. *-asi* was conditioned by the gender of the head noun holds up against the material from texts which contain both endings, s. Table 3.

Table 3: Genitive endings and gender of the head noun in texts with both endings

	COMMON	NEUTER	Unknown	Total
-asi	17	8	0	25
-as(a)	3 (+ 14)	15	3	35

At first glance, the number of counterexamples seems glaring. However, it is important to remember that most of these are clustered together in the same texts. Out of the 17 cases of *-as(a)* + COMMON, 14 are from KULULU lead strip 1. One case from MEHARDE is possibly explained by the syntax of HLuwian genitives. Another case from KARATEPE 1 may be explained as an archaism. Out of the 8 cases of *-asi* + NEUTER, 7 are from KARATEPE 1. As argued above, the fact that this text seems to be a translation from Phoenician may account for its aberrant use of the genitive.

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19 Cf. also Payne 2006; Schmitz 2008 for similar views. Yakubovich's (2015a) analysis is based partly on the increased frequency of non-final verbs in KARATEPE 1 compared to the rest of the HLuwian corpus, which may be interpreted as influence from Phoenician syntax.

The two remaining counterexamples, one -*as*(*a*) + Common and one -*asi* + Neuter, are both attested in Körkün.

A common denominator of the counterexamples is that they occur in texts dating to the late 9ᵗʰ century onwards. Conversely, the strongest evidence in favor of the distribution comes from 10ᵗʰ–9ᵗʰ century texts like those from Tell Ahmar and early Karkamiš texts. This is potentially indicative of a process of language change in late HLuwian.

Based on evidence from texts containing both -*as*(*a*) and -*asi* genitives, I have argued that the conditioning factor of the allomorphs was the gender of the head noun. The next step is to determine whether the distribution holds for the rest of the data, namely the texts within the "-*asi* area" that either contain only -*asi* genitives or only -*as*(*a*) genitives.

4.2 Texts with only -*asi*

19 texts from the "-*asi* area" contain only -*asi* genitives. Together, the texts contain 33 -*asi* genitives (Table 4, p. 184).

All but one of the 33 cases presented above conform to the hypothesized pattern; i.e. they have head nouns of the common gender (39–40, see Appendix A, p. 194ff., for a full account). A single counterexample comes from Adiyaman 1 (41).

(39) *á-sa-tu-*[*wa/i*]+*ra/i-ma-za-si* |INFANS.NEPOS
 astuwaramanza-si   hamsi-s
 PN-GEN   grandson-NOM.SG.C
 'Astuwaramanza's grandson'   Maraş 8, §1

(40) [*mu*]*-wa/i-ta-li-si* [|INF]ANS-[*mu*]*-wa/i-za-sa*
 muwatali-si   nimuwiza-s
 PN-GEN   son-NOM.SG.C
 'Muwatali's son'   Maraş 8, §1

(41) *pa-si-i-*a á-lá/í-ma-za*
 apa-si   alaman-sa
 that-GEN   name.ACC.SG.N-PCL
 'his name'   Adiyaman 1, §8

While I cannot provide an explanation for this discrepancy, it may be noted that the genitive *pa-si-i-*a* is the only word spelled with initial-*a*-final in a post-850 BCE text (Vertegaal 2017: 255). Accordingly, Adiyaman 1 is exceptional in more than one way and may be regarded as an outlier.

Table 4: Texts containing only *-asi* genitives

Text	Centuries BCE	*-asi*	*-as(a)*
Arsuz 1 (Amuq)	10th	2	0
Karkamiš A1a	10th	2	0
Karkamiš A1b	10th	1	0
Karkamiš A14b	10th	1	0
Maraş 8	10th	2	0
Babylon 1	10th–9th	3	0
Karkamiš A11a	10th–9th	2	0
Karkamiš A11b+c	10th–9th	4	0
Karkamiš A16a	10th–9th	1	0
Tell Ahmar 2	10th–9th	1	0
Tell Ahmar 5	10th–9th	1	0
Maraş 1	9th	3	0
Maraş 2	9th	1	0
Maraş 4	9th	2	0
Potoroo	9th	1	0
Tell Ahmar fragment 10	9th	1	0
Adiyaman 1	805–773	1	0
Ancoz 7	9th–8th	1	0
Sheizar	9th–8th	3	0
Total		33	0

4.3 Texts with only *-as(a)*

20 texts from the "*-asi* area" contain only *-as(a)* genitives. Like texts from outside the "*-asi* area", these do not show both *-as(a)* and *-asi*, but under the present hypothesis they are nonetheless expected to show a correlation between *-as(a)* genitives and neuter gender head nouns on account of their geographical provenance, see Table 5 (p. 185).

Below, the genitives in the texts will be discussed one by one, starting with the ones that support the hypothesis of this paper.

4.3.1 Examples in favor

In (42)–(45), *-as(a)* genitives co-occur with neuter gender head nouns.

(42) *pa-sa-*a tá-ti-ia*   DOMUS-*ni*
      apa-s(a)   tadi-iy-a   parn-i
      that-GEN   father-ADJ-LOC.SG.N house-LOC.SG.N
      'her paternal house'   Karkamiš A23, §11

Table 5: Texts containing only *-as(a)* genitives

Text	Centuries BCE	*-asi*	*-as(a)* forms
Borowski 3	10th–9th	0	1
Karkamiš A23	10th–9th	0	1
Karkamiš N2	10th–9th	0	1
Ancoz 5	9th–8th	0	2
Ancoz 8	9th–8th	0	1
Karkamiš A6	9th–8th	0	4
Karkamiš A7	9th–8th	0	1
Karkamiš A15b	c. 800	0	1
Samsat fragments	9th–8th	0	1
Adana 1 (Karkamiš)	8th	0	1
Karkamiš A18h	8th	0	3
Karkamiš A31	8th	0	2
Karkamiš A4a	8th	0	1
Karkamiš A5a	8th	0	3
Malpinar	770–750	0	2
Karkamiš A18e	? (late)	0	1
Karkamiš fragments	?	0	1
Şaraga (Karkamiš)	8th	0	2
Yunus (Karkamiš)	8th	0	2
Zincirli signet	732	0	1
Total		0	32

(43) *za-wa/i* SIGILLUM |!-*zi* I*a+ra/i-ku-wa/i-ni-s*[*a*] LEP[US₂]+*RA/I*(?)
  za=wa   sasa-n-sa   arkwani-s(a)   tapariyali-
  this=QUOT seal-ACC.SG.N-PCL PN-GEN   governor-
  'This seal (is) of Arkwani, the governor (?)'
                    Karkamiš N2, Dinçol, Dinçol & Peker 2014

(44) *za-pa-wa/i-a*   I*i-a+ra/i-ri+i-sa* (STATUA)*ta-ru-sá*
  za=pa=wa   yariri-s(a)   tarud-sa
  this.NOM.SG.N=CONJ=QUOT PN-GEN   image.NOM.SG.N-PCL
  'This is the image of Yariri'   Karkamiš A7, §6

(45) *za-wa/i*   STELE-*ni-zi*!   VIR-*ti-sa*
  za=wa   wanid-sa   ziti-s(a)
  this.NOM.SG.N=QUOT stele.NOM.SG.N-PCL PN-GEN
  (DEUS)SOL-*wa/i+ra/i-ma-sa*⁻ᵃ CAPUT-*ta-sa*
  tiwadama-s(a)   CAPUT-ta-s(a)
  sun.blessed-GEN   person-GEN
  'This stele (is) of Ziti, the sun-blessed person.'   Karkamiš A18h, §1

According to CHLI: 180, the spelling STELE-*ni-zi*[!] in (45) for expected STELE-*ni-za* is too frequently attested in the corpus to be disregarded as a mistake, yet it is clearly a neuter given that an accusative STELE-*ni-za* or (STELE)*wa/i-ni-za* is attested 9 times in the corpus (cf. ACLT), and since the pronoun *za* is a neuter singular form. Thus, the three *-as*(*a*) genitives in the sentence follow the expected pattern of having a neuter head noun.

The sentence in (46) also has the unexpected spelling of the word for 'stele'.

(46) *za-wa/i* STELE-*ni-zi*[!] *za-ha-na-ni-sa* VIR-*ti-sá*
za=wa wanid-sa zahanani-s(a) ziti-s(a)
this.NOM.SG.N=QUOT stele.NOM.SG.N-PCL PN-GEN PN-GEN
|INFANS-*mu-wa/i-ia*[?]*-ia-za* (DEUS)SOL-*wa/i+ra/i-ma-sa* CAPUT[...]
nimuwiya-ya-n-sa tiwadama-s(a) CAPUT
son-ADJ-NOM.SG.N-PCL sun.blessed-GEN person.GEN(?)
'This stele (is) of Zahanani, of Ziti's son, the sun-blessed person'

KARKAMIŠ A5a, §1

This complex sentence contains three *-as*(*a*) genitives, all of which have neuter gender heads. The name *za-ha-na-ni-sa* depends directly on STELE-*ni-zi*[!]. The genitive of the father's name, VIR-*ti-sá*, depends on |INFANS-*mu-wa/i-ia*[?]*-ia-za*, which is a neuter adjective correlating with STELE-*ni-zi*[!]. The final genitive, (DEUS)SOL-*wa/i+ra/i-ma-sa*, can be analyzed as being dependent on either the adjective or *za-ha-na-ni-sa*. CAPUT also functions as a genitive, but since the inscription is broken its phonological form cannot be discerned. The remaining cases (47)–(51) are all straightforward.

(47) [(DEUS)]*ku*-AVIS-[*pa-p*]*a-sa* [DEUS].DOMUS[-*z*]*a*
kubaba-s(a) DEUS.DOMUS-had-sa
DN-GEN temple.ACC.SG.N-PCL
'Kubaba's temple'

KARKAMIŠ A31, §3

(48) *za-*[*a*]*-pa-wa/i* [[I]*á*]-*lá/í-ia-za-sa* [I]*HÁ+LI-sa* SERVUS-*la/i-ia-za*
za=pa=wa alayaza-s(a) hatusili-s(a) hudarli-ya-n-sa
this.ACC.SG.N=CONJ=QUOT PN-GEN PN-GEN servant-ADJ-ACC.SG.N
STATUA-*sa*
tarud-sa
statue.ACC.SG.N-PCL
'This statue of Alayaza, Hatusili's servant'

MALPINAR, §18

(49) [(DEUS)*ku*-AV]IS-[*pa*]*-sá á-lá/í-ma-zá*
kubaba-s(a) alaman-sa
DN-GEN name.ACC.SG.N-PCL
'Kubaba's name'

KARKAMIŠ A18e, §3

(50) |*za*[...]   *á-sa-ti-ru-wa/i-sá* "STATUA"-*sa*
    za   astiruwa-s(a)   tarud-sa
    this.NOM/ACC.SG.N PN-GEN   statue.NOM/ACC.SG.N-PCL
    'this statue of Astiruwa ...'   KARKAMIŠ fragments, 2

(51) *za-wa/i*   STELE-*ni-zi*   I*ta-sá* I*sà+ra/i-pu-wa/i-ní-sa-ha*
    za=wa   wanid-sa   ta-s(a) sarpuwani-s(a)=ha
    this.NOM.SG.N=QUOT stele.NOM.SG.N-PCL PN-GEN PN-GEN=CONJ
    'This stele (is) of Ta and Sarpuwani'   YUNUS (KARKAMIŠ), §2, Peker 2014

In total, 16 cases conform to the hypothesis that -*as*(*a*) co-occurs with neuter gender head nouns.

4.3.2 Ambiguous cases

The following cases contain -*as*(*a*) genitives, but for various reasons the gender of the head noun is uncertain or unknown.

The reading of (52) is highly uncertain, as the semantics of most words is unknown. Here I follow roughly the reading proposed in ACLT. The word *187-*sa* is most likely a genitive, but since the gender of its head noun |1-*ti*[-i] is unknown it does not inform on the hypothesis presented in this paper.

(52) *wa/i-ta-⋆a* |CAPUT-*hi* *187-*sa* |1-*ti*[-i] |(PES₂)*tara/i-zi-ha*[-i]
    a=wa=ta   harmah-i   187-sa   1-tat-i   tarzi-ha
    CONJ=QUOT=LOC head-LOC.SG.C clan(?)-GEN place(?)-LOC.SG roam(?)-1SG.PRET
    'I roamed in the chief place of the clan(?)'   BOROWSKI 3, §4

Example (53) is from a partly broken inscription, but if the reading in CHLI: 358 is correct, it would support the gender-based distribution.

(53) [*á*]-*pa-sa* [×]-*za*
    apa-s(a)   ?-n-sa
    that-GEN   ?-ACC.SG.N-PCL
    'his ×'   ANCOZ 8, §3

In (54), the context is unclear because of the fragmentary inscription, but it seems clear that SOL-*tà-sa* is a genitive.

(54) CUM-*ni* SOL-*tà-sa* *kwa/i-ti*
    CUM-ni   tiwad-as(a)   kwa-ti[20]
    with   sun-GEN   who-DAT.SG
    '... for (the one) who/that (is) of the sun...'   SAMSAT fragments, 1

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20 Alternatively, this may be read as ABL/INSTR *kwadi*.

The most likely head noun is the pronoun *kwa/i-ti*, which could be either common or neuter gender. Finally, we have a one-word text in (55).

(55) *pa+ra/i-ki-pa-sa*
parakipa-s(a)
PN-GEN
'of Parakipa'   ZINCIRLI signet

As the only word of the inscription, *pa+ra/i-ki-pa-sa* is likely a genitive, but lacks a head noun. Accordingly, the same restrictions as in the case of the SAMSAT fragments apply.

4.3.3 Counterexamples

The following sentences contain *-as*(*a*) genitives with common gender head nouns and are thus counterexamples to the proposed distribution:

(56) CUM-*pa-wa/i-tu*   *za-zi*   [I]HA+LI-*sá* [I]PURUS.FONS.*MI-sa-ha*
ani=pa=wa=tu   za-nzi   Hattusili-s(a) Suppululiuma-s(a)=ha
from=CONJ=QUOT=3SG.DAT REL-NOM.PL.C PN-GEN   PN-GEN=CONJ
SERVUS-*lá/í-zi* (*218)*sà-ka-ta-li-sà-tá*
hudarli-nzi   sakatalisa-nta
servant-NOM.PL.C SAKATALISA-3PL.PRET
'From it (= a mountain) these servants of Hattusili and Suppululiuma
SAKATALISA-ed.'   ANCOZ 5, §4, Poetto 2010

Since their head noun is in the plural, [I]HA+LI-*sá* and [I]PURUS.FONS.*MI-sa-ha* cannot be interpreted as genitival adjectives, since in that case they would have ended in *-inzi*. The same holds for KARKAMIŠ A6 (57)–(60).

(57) CUM-*ni-pa-wa/i-tú-ta*[-a] |*á-pa-sá* |FRATER.LA-*zi*[-i] |*i-zi-i-ha*
CUM-ni=pa=wa=tu=ta   apa-s(a)   FRATER.LA-nzi   izi-ha
with=CONJ=QUOT=3SG.DAT=LOC that-GEN   brother-ACC.PL.C make-1SG.PRET
'And with him I made his brothers'   KARKAMIŠ A6, §13

(58) *a-wa/i* |*kwa/i*||-*i-zi* |("*314")*ka-tú-na-sa*
a=wa   kwi-nzi   katuna-s(a)
CONJ=QUOT who-NOM.PL.C KATUNA-GEN
'(For them) who (are) of KATUNA-'   KARKAMIŠ A6, §14

(59) *kwa/i-zi-pa-wa/i-ma-za*[-a] |("LIGNUM")*tara/i-pu-na-sá*
kwi-nzi=pa=wa=manz   tarpuna-s(a)
who-NOM.PL.C=CONJ=QUOT=3.PL.DAT TARPUNA-GEN
'and for them who (are) of TARPUNA-'   KARKAMIŠ A6, §16

(60) (DEUS)*ni-ka+ra/i-wa/i-sá* CANIS-*ni*⁻ⁱ-*zi*

nikarawa-s(a)   zuwani-nzi

PN-GEN   dog-NOM.PL.C

'Nikarawa's dogs'   Karkamiš A6, §31

The interpretation of the passage is complicated. According to Hawkins & Morpurgo Davies (1986), (57) refers to the relief accompanying the inscription, which shows two rows of children behind a first-born son. The words *katuna/i-* and *tarpuna/i-* are argued to be infinitives in *-una-*, the former meaning something like 'fighting' and the latter 'ploughing', the idea being that the two rows of brothers are divided into two groups with different status. Although the exact interpretation is complicated, the morphology is rather unambiguous: the text contains four *-as*(*a*) genitives that all have common gender head nouns, contradictory to our hypothesis.

(61) (DOMUS)*ki-sà-ta+ra/i-sa* (DEUS)*ku*-AVIS-*sá*

kistara-s(a)   kubaba-s

KISTARA-GEN   DN-NOM.SG.C

'Kubaba of KISTARA-'   Karkamiš A31, §15

Although its meaning is uncertain, *kistara-s(a)* in (61) unambiguously has a common gender head. Karkamiš A31 contains an additional genitive, discussed in 4.3.1 above, which does co-occur with a neuter head, but this could potentially be accidental. There are five additional cases.

(62) ^I*á-sa-ti-ru-wa/i-sá* |INFANS-*ni-ia-za*

astiruwa-s(a)   niwarani-anz

PN-GEN   child-DAT.PL.C

'to Astiruwa's children'   Karkamiš A15b, §17

(63) EGO   [...] *k*[*a-ma*]-*ní-sa* REGIO.DOMINUS |FILIUS.NI-*za-sa*

amu   kamani-s(a)   REGIO.DOMINUS   nimuwiza-s

1SG.NOM   PN-GEN   country.lord   son-NOM.SG.C

'I am ... the Country-Lord Kamani's son'   Adana 1 (Karkamiš), §1

(64) |*á-pa-sá* ("CAPUT[[]"[]])[*ha+ra/i*]-*ma*-[*hi-na*]

apa-s(a)   harmahi-n

that-GEN   head-ACC.SG.C

'his head'   Karkamiš A4a, §14

(65) ^I*á-lá/í-mu-sá* "INFANS".*NI-za*[-*sa/sá*]

alamu-s(a)   nimuwiza-s

PN-GEN   son-NOM.SG.C

'Alamu's son'   Şaraga (Karkamiš), §2, Sasseville & Yakubovich 2016

(66) "INFANS".[*NI*]-*za-sá á-pa-sa*

nimuwiza-s   apa-s(a)

son-NOM.SG.C   that-GEN

'his son'   Şaraga (Karkamiš), §4, Sasseville & Yakubovich 2016

10 of the 12 counterexamples above are attested in texts dated to the 9th –8th century from Karkamiš (*n* = 8) or Şaraga (*n* = 2), which is close to Karkamiš. Additionally, all of the Karkamiš texts (A4a, A6, A15b, A31, Adana 1) belong to the *House of Astiruwas* group within the Karkamiš corpus. Conversely, many of the Karkamiš texts discussed in 4.1f. in which *-asi* and *-as*(*a*) genitives do follow the proposed distribution (A1a, A1b, A11a, A11b+c, A14a, A23) belong to the *House of Suhis* group, which is more archaic (10th –9th centuries BCE).

There is thus a correlation between texts from the *House of Astiruwas* group and counterexamples to the gender-based distribution of HLuwian genitives. This correlation has several possible explanations. One possibility is that the usage of the genitive case changed over time in Karkamiš, with *-asi* no longer being used in the 8th century. Against this idea stands the fact that Karkamiš A5a, Karkamiš A18e, Karkamiš A18h and Karkamiš fragments seem to follow the distribution, despite being "late" or dated to the 8th century. However, since no *-asi* genitives are attested in these texts, the fact that *-as*(*a*) always co-occurs with neuter head nouns here could theoretically be accidental. On the other hand, since *-asi* genitives are attested in the 7th century (Karatepe 1), it is difficult to imagine that the use of *-asi* disappeared already in the 8th century, unless one assumes that the use of *-asi* declined earlier in Karkamiš than in other areas.

In any case, it is clear that within the "*-asi* area", the *House of Astiruwas* texts are outliers in terms of their use of the genitive case.

4.4 Conclusion

Combining all the evidence presented in the three preceding sections, the evidence for a gender-based distribution of HLuwian genitives is summarized in Table 6.

Table 6: Genitive endings and gender of the head noun in texts from the "*-asi* area"

	COMMON	NEUTER	Unknown	Total
-asi	49	9	0	58
-as(*a*)	15 (+ 14)	31	7	67

It is evident that the strongest correlation is between *-asi* and common gender head nouns. Of the 9 counterexamples involving *-asi* + NEUTER, 7 have in my opinion been given a plausible explanation in 4.1.

In the case of *-as*(*a*), the numerical evidence is less favorable. However, two factors should be considered. First, almost half (14/29) of the cases of *-as*(*a*) +

COMMON are found in a single text, namely KULULU lead strip 1. Second, all coun-terexamples involving -*as*(*a*) + COMMON are attested in late texts, most notably in 8ᵗʰ century texts but also late 9ᵗʰ century texts. As the same is true for coun-terexamples involving -*asi* + NEUTER, it is possible that the original functional distribution of the genitive endings that is clearly present in 10ᵗʰ–9ᵗʰ century texts decayed over time due to language change. Third, it is important to keep in mind that -*as*(*a*) is graphically ambiguous. The attestations could theoretically reflect both /-as/ and /-asa/, which did not necessarily adhere to the same grammatical rules. In that sense, it is less unexpected to find variation in the use of -*as*(*a*) than in the use of -*asi*.

I conclude that the allomorphs of the genitive case in southern HLuwian were conditioned by the gender of their head noun, especially in the 10ᵗʰ–9ᵗʰ century. In this sense, the genitive functions somewhat like an adjective, agreeing (although only in gender, not case) with its syntactic head. As we will see in section 5, this finding forces us to reconsider the historical development of the genitive case in HLuwian.

5 The historical development of the Hieroglyphic Luwian genitive case

Several studies have claimed that the HLuwian genitive ending -*asi* derives from Proto-Anatolian (PA) GEN.SG *-osio*, itself a descendant of PIE GEN.SG *-osio*. According to Yakubovich (2008: 211), PA *s* > gen.sg. *ss* / _C (e.g. CLuwian *īš*(*ša*)*ra/i*-'hand' < *ǵesr*-),[21] implying that PA *-osio* became *-assia*, and, with subsequent apocope, HLuwian /-assi/. Melchert (2012) supports a similar scenario: PA *-osio* > *-osii̯* > *-ossi* > HLuwian /-assi/. A problem with both scenarios is the *ad hoc* assumption of apocope or reduction of final *-o*, for which I know of no other examples in Luwian.

This issue becomes even more apparent when the origin of the HLuwian geniti-val adjective -*asa/i*- is taken into account. The genitival adjective is likely etymolog-ically connected to the genitive case, both for formal and functional reasons.[22] As is

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21 It should be noted that both parallels given by Yakubovich (CLuwian *īš*(*ša*)*ra/i*- 'hand' and Luw. *immara/i*- 'open country' < *ǵemro*-) concern fortition before *r*, not *i̯*. Moreover, the HLuwian form of *ǵesr*-, *istra/i*-, shows a different development. The evidence for PA *s* > *ss* / _C is thus highly doubtful.

22 Yakubovich (2008) argues that the genitival adjective -*asa/i*- is derived from secondarily inflected genitive endings -*as*(*a*) and -*asi* within Luwian, and that this helps to explain the spread

clear from the CLuwian genitival adjective -*ašša/i*-, the suffix contains a geminate /ss/. In Hittite, we find remnants of a similar suffix -*ašša*- in *ḫanzāšša*- 'offspring', *iugašša*- 'yearling' and *pedašša*- 'place' (EDHIL: 216). Since fortis consonants were lenited between unaccented syllables in PA (Eichner 1973; Morpurgo Davies 1983; Adiego Lajara 2001), Luwian -*assa*- and Hittite -*ašša*- must contain secondary geminates. The most likely source of this secondary geminate is the cluster *-*si̯*-,[23] given the parallel development seen in Hitt. *u̯ašše/a-ᶻⁱ* 'to be dressed' and CLuw. *u̯ašš*- 'to wear' < **us-ié*- (EDHIL: 1007). Accordingly, a suffix *-*osio*- may be reconstructed, which developed into *-*osso*- within PA when the sound change **si̯* > **ss* took place. By the same logic, PIE GEN.SG *-*osio* would give PA *-*osso*. Therefore, HLuw. -*asi* cannot be derived from *-*osio* by regular sound change,[24] and another explanation must be provided for the origin of this ending.

Before such an explanation is provided, however, let us briefly discuss the origin of HLuwian GEN -*as*(*a*). As stated in section 1, this ending could be read as /-as/, /-asa/ or /-assa/. If read as /-as/, the ending is comparable to Hitt. -*aš* < **os*. If read as /-asa/, the ending may reflect *-*oso*, comparable to Gr. -ου and, according to Adiego (2010), Lyc. -(*e*)*he*. However, the Lycian ending may also be derived from *-*osio* (Schürr 2010). Since *-*osio* must be reconstructed anyway as the basis for the PA adjectival suffix in *-*osio*-, it appears uneconomical to assume a third genitive ending for PA besides *-*os* and *-*osio*.[25] Therefore, the readings of HLuwian GEN -*as*(*a*) may be limited to /-as/ and /-assa/.

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of *i*-mutation to the genitival adjective paradigm. However, as the genitival adjective has a parallel in Hittite, the morphological form of the suffix cannot be seen as a Luwic or Luwian innovation but must be of PA date. Moreover, since the *i*-mutated paradigm is the default declension type of Luwian adjectives, it is not unexpected in the genitival adjective: on the contrary, we would have expected *i*-mutation irrespective of whether GEN -*asi* was a basis for the *i*-stem variant of -*asa/i*- or not.

23 According to Yakubovich (2008), the geminate in *-*osso* could be restored due to a morpheme boundary *-*os* + *so*, where the second element is a pronominal particle. However, it is highly unlikely that such a morpheme boundary would have remained transparent in Luwic.

24 Melchert (2012) attempts to circumvent this problem by suggesting one of the following scenarios: 1) *-*o*# was apocopated before **si̯* > **ss*, or 2) *-*i̯o*# > **i̯i* before **si̯* > **ss*, whereas *-*i̯o*- remained unchanged. Both scenarios require *ad hoc* assumptions to derive two different outcomes (HLuw. -*asi* on the one hand and Hitt. and CLuw. -*ašša*- on the other) from the same (pre-)PA basis *-*osio*(-). Admittedly, cases of vowels in absolute final position are exceedingly rare, and one other secure case, namely Hitt. -*kku* 'now, even, and' < PIE *-*kʷe*, seems to show some kind of reduction of the final vowel (opinions differ on whether the vowel is lost or > **u*). However, since the vowel in question is not *-*o*, and the preceding glide is not *-*i̯*, this example does not render Melchert's assumptions any less implausible.

25 The proterodynamic ending *-*s* has been excluded from this discussion since it is mostly relevant for Hittite, but it must nevertheless be reconstructed for PA.

Keeping the above in mind, I would like to propose a new scenario for the origin of HLuwian *-asi*, outlined in Table 7 and 8.

Table 7: The parallel development of the genitive case and genitival adjective in Luwian

Proto-Anatolian	Proto-Luwic	Hieroglyphic Luwian	
*-os	*-os	/-as/	⟨-a-sa⟩
*-osio	*-osso	/-assa/	⟨-a-sa⟩
*-osio-	*-osso/i-	/-assa/i-/	⟨-a-sa/i-⟩

For PA, I reconstruct two genitive endings *-os and *-osio, as well as an adjectival suffix *-osio-. In Proto-Luwic, the latter became the genitival adjective suffix, which was *i*-mutated like all adjectives. Within HLuwian, a new genitive ending *-assi* was innovated by analogy to the stems of the genitival adjective and the genitive *-assa* (Table 8).

Table 8: Innovation of *-asi* by four-part analogy

	NEUTER head noun	COMMON head noun
Genitival adjective	*-assa-*	*-assi-*
Genitive ending	*-assa*	X = *-assi*

The analogical process has two steps: first, the ending *-assa* became associated with the stem *-assa-* and neuter head nouns. Then, *-assi* was innovated as its common gender counterpart. The association of *-assa* to *-assa-* may be explained by their phonological similarity and by the fact that the NOM/ACC.PL.N of the genitival adjective is *-ass-a*, which is homophonous to the ending *-assa* and appears in the same contexts.

Next to *-assa* and *-assi*, which were conditioned by the gender of their head noun, it is indeed possible that HLuwian retained GEN *-as*, especially in isolated archaic forms such as *tarhunt-as* 'of Tarhunt', but possibly also in other proper names (cf. (27) and (28) from KULULU lead strip 1 and (56) from ANCOZ 5).

This new explanation of the origin of HLuw. *-asi* has several advantages over previous accounts. First, it directly accounts for the gender-based distribution of *-as*(*a*) and *-asi* described in section 4. This distribution would be entirely unexpected if both endings were regularly derived from PA genitive endings. Second, it accounts for the fact that *-asi* is unattested before the 10th century BCE, whereas *-as*(*a*) appears even in the earliest HLuwian texts. Lastly, it provides a more eco-

nomical reconstruction of genitives in PA, as it explains the development of *-asi* without recourse to *ad hoc* sound changes and removes the need to reconstruct PA *-*oso*.

Appendix A

Below, all genitives from texts with only *-asi* genitives that have common gender head nouns (which were omitted from 4.2) are presented.

(67) *-n]a-na-si*   REX |FILIUS.NI-*za*
Amanana-si hantawati- nimuwiza-
PN-GEN   king-   son.C-
'King Amanana's son'   ARSUZ 1 (AMUQ), §1

(68) [1]*ma-na-na-si* REX |FILIUS.NI-*za*
Amanana-si   hantawati- nimuwiza-
PN-GEN   king-   son.C-
'King Amanana's son'   ARSUZ 1 (AMUQ), §18

(69) *kwa/i-i-sa* |OVIS(ANIMAL)-*si*
kwi-s   hawa-si
who-NOM.SG.C sheep-GEN
'... who (is a man) of sheep ...'   KARKAMIŠ A1a, §30

(70) *kwa/i-i-sa-pa-wa/i* |(PANIS)*tu+ra/i-pa-si-i*
kwi-s=pa=wa   turpa-si
who-NOM.SG.C=CONJ=QUOT bread-GEN
'But (he) who (is a man) of bread ...'   KARKAMIŠ A1a, §32

(71) [1]*su-hi-si*[-i] REGIO-*ní*-DOMINUS-*ia-i-sa* [...] ||FEMINA-*ti-i-sa*
suhi-si   watani-niya-yi-s   wanati-s
PN-GEN   country-lord-ADJ-NOM.SG.C   wife-NOM.SG.C
'the Country-Lord Suhi's [...] wife'   KARKAMIŠ A1b, §1

(72) [1]*su-hi-si* |IUDEX-*ní-sa* |(INFANS)*ní-mu-wa/i-zi+a-sa*
suhi-si   tarwani-yi-s   nimuwiza-s
PN-GEN ruler-ADJ-NOM.SG.C son-NOM.SG.C
'the ruler Suhi's son'   KARKAMIŠ A14b, §1

(73) *á-sa-tu-[wa/i]+ra/i-ma-za-si* |INFANS.NEPOS
 astuwaramanza-si   hamsi-s
 PN-GEN   grandson-NOM.SG.C
 'Astuwaramanza's grandson'   MARAŞ 8, §1

(74) *[mu]-wa/i-ta-li-si* *[|INF]ANS-[mu]-wa/i-za-sa*
 muwatali-si nimuwiza-s
 PN-GEN   son-NOM.SG.C
 'Muwatali's son'   MARAŞ 8, §1

(75) |"TERRA"-*si* |FINES-*sa*
 taskwara-si irhi-s
 land-GEN limit-NOM.SG.C
 'the limit of the land'   BABYLON 1, §5

(76) |"VITIS"-*si⁻ⁱ* |FINES-*sa*
 tuwarisa-si irhi-s
 vineyard-GEN limit-NOM.SG.C
 'the limit of a vineyard'   BABYLON 1, §6

(77) |"AEDIFICIUM"-*si-i* |FINES-*sa*
 AEDIFICIUM-si irhi-s
 building-GEN limit-NOM.SG.C
 'the limit of a building'   BABYLON 1, §7

(78) ᴵ*su-hi-si* REGIO.DOMINUS-[*ia-i-sa*] [|INF]ANS)*ni-mu-wa/i-za-sa*
 suhi-si watani-niya-yi-s   nimuwiza-s
 PN-GEN country-lord-ADJ-NOM.SG.C son-NOM.SG.C
 ᴵ*á-sa-tú-wa/i-la/i-ma-za-si⁻ⁱ* |REGIO-*ní*-DOMINUS-*ia-i-sa* |INFANS.NEPOS-*sa*
 astuwalamanza-si   watani-niya-yi-s   hamsi-s
 PN-GEN   country-lord-ADJ-NOM.SG.C grandson-NOM.SG.C
 'the Country-Lord Suhi's son, the Country-Lord Astuwalamanza's grandson'
               KARKAMIŠ A11a, §1

(79) ᴵ*su-hi-si*|REGIO-*ni*-DOMINUS-*ia-i-sa*|(INFANS)*ni-za-sa*ᴵ*á-sa-tú-wa/i-lá/í-ma-za-si*
 suhi-si watani-niya-yi-s   nimuwiza-s   astuwalamanza-si
 PN-GEN country-lord-ADJ-NOM.SG.C son-NOM.SG.C PN-GEN
 |REGIO-*ni*-DOMINUS-*i-sa* |INFANS.NEPOS-*si-i-sa* *a-wa/i* *za-a-sa*
 watani-niya-yi-s   hamsi-s   a=wa za-s
 country-lord-ADJ-NOM.SG.C grandson-NOM.SG.C CONJ=QUOT this-NOM.SG.C
 URBS+*MI-ni-i-sa* [...] ᴵ*447-nu-wa/i-ia-si sa-tá-*a*
 URBS-ni-s   ninuwiya-si   as-ta
 city-NOM.SG.SC PN-GEN   be-3SG.PRET
 'the Country-Lord Suhi's son, the Country-Lord Astuwalamanza's grandson. This city [...]
 was Ninuwiya's'   KARKAMIŠ A11b+c, §1–2

(80) (FLUMEN.REGIO)*ha*||-*pa-tà-si* DEUS-*ni-zi*
 hapada-si   Masani-nzi
 river.country-GEN   god-NOM.PL.C
 'gods of the river-country'   KARKAMIŠ A11b+c, §25

(81) REGIO-*ní-ia-si* DOMINUS-×-×
    wataniya-si   niya-
    country-GEN   lord-
    'Country-Lord'   KARKAMIŠ A16a, §1

(82) *pa-si-*a* |"CAPUT"(-)*h*[*a...*]
    apa-si   harmahi-n
    that-GEN head-ACC.SG.C
    'his head'   TELL AHMAR 2, §23

(83) *pa-si-i-*a* |CORNU+CAPUT-*mi-i-sa*
    apa-si   masanami-s
    that-GEN   prophet-NOM.SG.C
    'his prophet'   TELL AHMAR 5, §11

(84) [1]*mu-wa/i-zi-si* HEROS-*li-sà* |(INFANS)*na-wa/i-na-wa/i-sá*
    muwizi-si   hastali-yi-s   nawanawi-s
    PN-GEN   hero-ADJ-NOM.SG.C   great.grandson-NOM.SG.C
    'the hero Muwizi's great-grandson'   MARAŞ 1, §1f

(85) |*i-mára/i-si-ha*[-i]   (DEUS)*ru-ti-ia-sá*[-i]
    imara-si=ha   runtiya-s
    open.country-GEN=CONJ DN-NOM.SG.C
    'Runtiya of the open country'   MARAŞ 1, §6

(86) |*i-mára/i-si-pa-wa/i-mu*[-i]   (DEUS)CERVUS₂-*ti-ia-sá*
    imara-si=pa=wa=mu   runtiya-s
    open.country-GEN=CONJ=QUOT=1SG.DAT DN-NOM.SG.C
    'But to me, Runtiya of the open country ...'   MARAŞ 1, §11

(87) [1]*á-zi-ni-si* FEMINA-*ti-*[*i*]*-sá*
    azini-si   wanati-s
    PN-GEN   wife-NOM.SG.C
    'Azini's wife'   MARAŞ 2, §1

(88) [1]*mu-wa/i-ta-li-si*|(INFANS)*ni-mu-wa/i-za-sá*[1]*mu-wa/i-zi-si*
    muwatali-si   nimuwiza-s   muwizi-si
    PN-GEN   son-NOM.SG.C   PN-GEN
    |[<"]INFANS.NEPOS"-*kwa/i-la-sá*
    hamsukala-s
    great.grandson-NOM.SG.C
    'Muwatali's son, Muwizi's great-grandson'   MARAŞ 4, §10

(89) |*za-a-sa* |LIS-*si*   (DEUS)AVIS
    za-s   salahid-asi   kupapa-s
    this-NOM.SG.C confrontation-GEN DN-NOM.SG.C
    'this Kubaba of confrontation'   POTOROO, 6b

(90) (DEUS)TONITRUS-*si* SERVUS-*la/i-i-sa*
    tarhunt-asi   hudarli-s
    DN-GEN   servant-NOM.SG.C
    'Tarhunt's servant'   TELL AHMAR fragment 10, §1

(91) DEUS-*na-si*-*i* DOMUS.PONERE-*ti-zi*
masan-asi DOMUS.PONERE-ti-nzi
god-GEN habitation-NOM.PL.C
'habitations of the god(s)' ANCOZ 7, §4

(92) [1]*ta-i-ta-si* FEMINA-*na-tí-sa* HEROS-*sa* *wa/i-la/i-sà-ti-[ni-s]i*(REGIO)
taita-si wanati-s HEROS-s walistini-si
PN-GEN wife-NOM.SG.C hero-NOM.SG.C GN-GEN
'wife of Taita (who is) a hero of the country Walistini' SHEIZAR, §1

(93) ||DEUS.REGIO-*ni-si*-*i* (DOMINA)*ha-su-sa₅+ra/i-sa*
watani-si hasusari-s
land-GEN queen-NOM.SG.C
'the divine Queen of the land' SHEIZAR, §7

Appendix B

Below follows is a list of ambiguous cases that were excluded from the study.

(94) |*á-lá/í-mí-sa-sa-ha-wa/i+ra/i*
alamisa-?=ha=wa=ada/=ti
ALAMISA-?=CONJ=QUOT=NOM.SG.N/=2SG.REFL
'It is ALAMISA' or 'You are ALAMISA' ASSUR letter c, §3, CHLI: 545

According to ACLT, |*á-lá/í-mí-sa-sa* is a genitive *alamisa-s*(*a*). However, it could also be read as NOM.SG *alamisa-s*.

(95) *mu* [1]*pa-na-mu-wa/i-ti-sa* PURUS.FONS.*MI-sa* IUDEX-*ni-sa* FEMINA-*na-ti-sa*
mu panamuwati-s suppiluliuma-? tarwani-yi-s wanati-s
1SG.NOM PN-NOM.SG.C PN-? ruler-ADJ-NOM.SG.C wife-NOM.SG.C
'... I Panamuwati, the ruler Suppiluliuma's wife ...' BOYBEYPINARI 1, §1

Since it is written with logograms, PURUS.FONS.*MI-sa* could be read either as a genitival adjective NOM.SG.C *suppiluliuma-si-s* or as a genitive *suppiluliuma-s*(*a*).

(96) *á-sa*-TONITRUS-*hu-za-sa-ha*SA₄-*na-na-la-sa* PURUS.FONS.*MI-sa*
Asatarhunza-s=ha kwananala-s suppiluliuma-?
PN-NOM.SG.C=CONJ KWANANALA-NOM.SG.C PN-?
DOMUS-*ni*(-)NEPOS-*mi*-*i*(-*ni*?)-*sá*
parni(-)hamsi(?)-s
house.descendant-NOM.SG.C
'... and Asatarhunza the KWANANALA-, Suppiluliuma's "house-descendant" ...'
BOYBEYPINARI 1, §11

Since it is written with logograms, PURUS.FONS.*MI-sa* could be read either as a genitival adjective NOM.SG.C *suppiluliuma-si-s* or as a genitive *suppiluliuma-s*(*a*).

(97) *mu-u*   ¹*pa-na-mu-wa/i-ti-sa* PURUS.FONS.*MI* IUDEX-*ni-sá*   FEMINA-*na-ti-sa*
      mu   panamuwati-s   suppiluliuma-? tarwani-yi-s   wanati-s
      1SG.NOM PN-NOM.SG.C   PN-?   ruler-ADJ-NOM.SG.C wife-NOM.SG.C
      ¹*HÁ+LI-sa* ||[...]-*sá*
      hattusili-? [anati]-s
      PN-?   [mother]-NOM.SG.C
      '... I Panamuwati, the ruler Suppiluliuma's wife, Hattusili's [moth]er ...' BOYBEYPINARI 2, §1

Since they are written with logograms, PURUS.FONS.*MI* and ¹*HÁ+LI-sa* could be read either as genitival adjectives or as genitives.

(98) *u*(?)-*na*(?)-*sa*
      Una-?
      PN-?
      'of Una' (?)   DELAPORTE seal, Base.

As the only word of this inscription, *u*(?)-*na*(?)-*sa* could be a nominative or a genitive.

(99) ¹*(m)u-ka-*|FRATER.LA-*sa* |(INFANS)*ní-mu-wa/i-za-sá*
      (M)uka-FRATER.LA-?   nimuwiza-s
      PN-?   son-NOM.SG.C
      '(M)uka-FRATER.LA's son'   KARATEPE 3, §1

Following ACLT (*pace* CHLI), the Luwian word behind the FRATER.LA is likely **nani-*, cf. CLuwian *nāni*(*ia*)- 'of a brother' and Hitt. *nekna-* 'brother', implying that LA is logographic here rather than a phonetic indicator. As such ¹*(m)u-ka-*|FRATER.LA-*sa* could be read either as a genitival adjective NOM.SG.C (M)uka-FRATER.LA-*si-s* or as a genitive (M)uka-FRATER.LA-*s*(*a*).

(100) |*za-ia*   (DEUS)TONITRUS-*sa* DEUS.DOMUS-*tà*
      za-ya   tarhunt-?   DEUS.DOMUS-had-a
      this-ACC.PL.N DN-?   temple-ACC.PL.N
      '... these temples of Tarhunt ...'   KARKAMIŠ A2+3, §9

Since it is written with logograms, (DEUS)TONITRUS-*sa* could be read either as a genitival adjective ACC.PL.N *tarhunt-as-a* or as a genitive *tarhunt-as*(*a*).

(101) ("PANIS.PITHOS")*á-za-li-sa-pa-wa/i* DOMINUS-*na-ní* "*419*"-*sa-ha-sá⁻ᵃ* DARE-*mi-na*
      azali-?=pa=wa   nani-i   washa-s   piya-mina
      feast-?=CONJ=QUOT   master-DAT.SG.C fee-NOM.SG.C give-GER
      'And to the master of the feast a fee is to be given' (cf. ACLT) KARKAMIŠ A4a, §11

Since a final -*n* is dropped before a consonant-initial enclitic particle, ("PANIS.PITHOS")*á-za-li-sa* could be read either as a genitival adjective DAT.SG *azali-sa-n* or as a genitive *azali-s*(*a*).

(102) (DEUS)*ku*-AVIS-*s*[*a*ˀ] AMPLECTI-*mi*[...]
      kubaba-?   azami-
      DN-?   beloved
      'the beloved of Kubaba' (?)   KARKAMIŠ A13a–c, §1

The reading of the sign ⟨SA⟩ is uncertain.

(103) (DEUS)TONITRUS-*tá-sa-pa-wa/i-tá* |*kwa/i-i-sa* |*á-tá-na-wa/i-na*||⌐ᵃ
       tarhunt-?=pa=wa=ta   kwi-s   atanawa-?
       DN-?-CONJ-QUOT-LOC   who-NOM.SG.C ATANAWA-?
       |*kar-ka-mi-si-za*(URBS) (DEUS)TONITRUS-*ti* |SUB-*na-na*[...
       karkamis-iz-a   tarhunt-i   anan
       GN-ADJ-DAT.SG   DN-DAT.SG   under
       '(He) who [...] the ATANAWA(NA)- of Tarhunt under Karkamišean Tarhunt...'
                                                           KARKAMIŠ A13d, §3

See section 1, example (3).

(104) (DEUS)*hara/i-ma-na-wa/i-na-sa-pa-wa/i*(URBS) DEUS.DOMUS-*tà*
       harmanawana-?=pa=wa   DEUS.DOMUS-had-a
       GN-?=CONJ=QUOT   temple-ACC.PL.N
       '... temple of the Harmanean (god) ...'   KARKAMIŠ A15b, §10

Since a final -*n* is dropped before a consonant-initial enclitic particle, (DEUS)*hara/i-ma-na-wa/i-na-sa* could be read either as a genitival adjective ACC.PL.N *harmanawana-s-a* or as a genitive *harmanawana-s(a)*.

(105) [... (LITUUS)*á*(?)]-*za*-[*t*]*i-wa/i+ra/i-sa* DEUS-*ní-sa* IUDEX-*ni-sa*   SERVUS-*la/i-i-sa*
       Azatiwada-s   masani-? tarwani-s   hudarli-s
       PN-NOM.SG.C   god-?   ruler-NOM.SG.C servant-NOM.SG.C
       'Azatiwada, Ruler-Servant of god'   KARKAMIŠ A17b, §1

DEUS-*ní-sa* could be either an adjective NOM.SG.C *masani-yi-s* or a genitive *masani-s(a)*.

(106) NEG₂-*na*   PONERE-*wa/i*ⁱ *ka-ma-ni-si*[...
       na-an   tuwa-i   kamani-si-?
       NEG-3SG.ACC.C put-3SG.PRES PN-?
       'He shall not put him, Kamani's ...' (?)   KARKAMIŠ A25b, §1

As the inscription is fragmentary, *ka-ma-ni-si*[... could be either a genitival adjective or a genitive.

(107) ...]-*si-sa* |INFANS.NEPOS   ¹*á-sa-tu-wa/i-la*ⁱ*-ma-za-sa*[...
       -sis   hamsi-s   astuwalamanza-?
       -GENADJ-NOM.SG.C grandson-NOM.SG.C PN-?
       '...]'s grandson, Astuwalamanza's ...' (?)   KARKAMIŠ A27u, l. 2.

As the inscription is fragmentary, ¹*á-sa-tu-wa/i-la*ⁱ*-ma-za-sa* could be either a nominative or a genitive (see further CHLI: 165).

(108) ...*k*]*a-tú-w*[*a/i-sa*?] |REGIO.[DOMINUS]-*i*[...
       katuwa-?   niya(-yi)-
       PN-?   country.lord(-ADJ)-
       '... (of) Katuwa, the Country-Lord'   KARKAMIŠ A29 frag. 2, l. 2

As the inscription is fragmentary, the reading of *k*]*a-tú-w*[*a/i-sa*?] is uncertain and it could be either a nominative or a genitive.

(109) ¹MAGNUS+*ra/i*-TONITRUS-*sa* REX   BONUS-*sa-mi-sa*
       uratarhunt-?   hantawati- was-mi-s
       PN-?   king   be.dear-PTC-NOM.SG.C
       '... beloved of king Uratarhunt ...'   KARKAMIŠ N1, §7

Since it is written with logograms, ᴵMAGNUS+*ra/i*-TONITRUS-*sa* could be read either as a genitival adjective NOM.SG.C *uratarhunt-asi-s* or as a genitive *uratarhunt-as*(*a*).

(110) |*ni-pa-wa/i* |*wa/i-ia-ni-*[*si?-*]*i* |*tu-wa/i*[*+ra/i*]*-sà-za⁻ᵃ*
    nipa=wa   wiyani-?   tuwarisa-n-sa
    or=QUOT   vine-?   vineyard-ACC.SG.N-PCL
    '... or the vineyard (of) vine(s)'   Kululu 1, §8

Since the inscription is damaged, the reading of |*wa/i-ia-ni-*[*si?-*]*i* as a genitive is uncertain. Even if it is in fact a genitive, it most likely had the ending *-as*(*a*), despite the following *-i*, since non-corresponding space-fillers are known to occur in Kululu texts (Vertegaal 2017).

(111) ᴵ*la+ra/i+a-ma-si-sá*   LEPUS+*ra/i-ia-li-sa* |(INFANS)*ha+ra/i-tu-sá*
    larama-si-s   tapariyali-yi-s   hartu-?
    PN-GENADJ-NOM.SG.C   governor-ADJ-NOM.SG.C   descendant-?
    '... the governor Larama's descendant...' or '...of the clan of governor Larama' Maraş 1, §1g

The meaning of |(INFANS)*ha+ra/i-tu-sá* is uncertain and it could be read either as a nominative or as a genitive.

(112) ᴵTONITRUS-*hu-pi-ia-sa*
    tarhupiya-?
    PN-?
    'of Tarhupiya' (?)   Maraş 9

As the only word of this inscription, ᴵTONITRUS-*hu-pi-ia-sa* could be a nominative or a genitive.

(113) ["X"]-*tú-sa-pa-wa/i-tá* |1-*ti⁻ⁱ*
    hartu-?=pa=wa=ta   1-tat-i
    clan-?=CONJ=QUOT=LOC place(?)-LOC.SG
    '... in the place of the clan' (?)   Tell Ahmar 1, §6

Since a final *-n* is dropped before a consonant-initial enclitic particle, ["X"]-*tú-sa* could be either a genitival adjective LOC.SG *hartu-sa-n* or a genitive *hartu-s*(*a*).

(114) *pa-si-pa-*[*wa/i*]*-*a* |INFANS[...
    apa-?=pa=wa   nimuwiza-
    that-?=CONJ=QUOT son-
    '... and his son(s) ...'   Tell Ahmar 1, §28

Since a final *-n* is dropped before a consonant-initial enclitic particle, *pa-si-* could be either a genitival adjective ACC.SG.C *apa-si-n* or a genitive *apa-si*.

(115) *pa-si-pa-wa/i-*a*   (FILIA)*tú-wa/i-ta*[*ra/i-na*] FE[MINA   ...
    apa-?=pa=wa   tuwatari-n   taniti-
    that-?=CONJ=QUOT daughter-ACC.SG.C   hierodule-
    '... and his daughter a hi[erodule I made ...'   Tell Ahmar 1, §29

Since a final *-n* is dropped before a consonant-initial enclitic particle, *pa-si-* could be either a genitival adjective ACC.SG.C *apa-si-n* or a genitive *apa-si*.

(116) [(DEUS)]TONIT[RUS-*hu-tá*-[*sa/si* ...] || SERVUS-*la/i-sa*
    tarhunt-?   hudarli-s
    DN-?   servant-NOM.SG.C
    '... Tarhunt's servant.'   Tell Ahmar 2, §1

As the inscription is damaged, [(DEUS)]TONIT[RUS-*hu-tá*-[*sa*/*si* ...] could be either a genitival adjective or a genitive.

(117) |FRATER.LA-*sa* |NEG₂-*a-pa* |FRATER.LA-*sa* |INFANS.NI-*sá*
     FRATER.LA-s   napa   FRATER.LA-?   nimuwiza-s
     brother-NOM.SG.C or   brother-?   son-NOM.SG.C
     '... brother or the brother's son...'   Tell Ahmar 2, §18

Since it is written with logograms, |FRATER.LA-*sa* could be either a genitival adjective NOM.SG.C FRATER.LA-*si-s* or a genitive FRATER.LA-*s*(*a*).

(118) |*187-*wa*/*i-sa-pa-wa*/*i-ta* |1-*ta-ti*
     hartuwa-?=pa=wa=ta   1-tat-i
     clan-?=CONJ=QUOT=LOC place(?)-LOC.SG
     '... in the place of the clan ...' (?)   Tell Ahmar 6, §15

Since a final -*n* is dropped before a consonant-initial enclitic particle, |*187-*wa*/*i-sa* could be either a genitival adjective LOC.SG *hartuwa-sa-n* or a genitive *hartuwa-s*(*a*).

(119) |EXERCITUS.*LA*/*I*/*U-na-si-i-wa*/*i* (DEUS)TONITRUS-*na* (SOLIUM)*i-sà-nu-wa*/*i*
     kwalana-?=wa   tarhunt-an   isanuwa
     army-?=QUOT   DN-ACC.SG.C   seat.2SG.IMP
     'Establish Tarhunt of the army!'   Tell Ahmar 6, §23

Since a final -*n* is dropped before a consonant-initial enclitic particle, |EXERCITUS.*LA*/*I*/*U-na-si-i* could be either a genitival adjective ACC.SG.C *kwalana-si-n* or a genitive *kwalana-si*.

(120) ...]×-*ti*-× |AUDIRE?-*wa*/*i-sà*
     ?   AUDIRE-wa/i-?
     ?   ?-?
     '?'   Tuleil 1, l. 2

The inscription is too fragmentary to determine whether |AUDIRE?-*wa*/*i-sà* is a nominative or genitive.

Abbreviations

ACLT   Ilya Yakubovich (2013–). *Annotated Corpus of Luwian Texts*. URL: http://web-
          corpora.net/LuwianCorpus/search/ (visited on 08/21/2020).
CHLI   J. David Hawkins (2000). *Corpus of Hieroglyphic Luwian Inscriptions*. Vol. 1: *Inscrip-
          tions of the Iron Age*. Berlin & New York: de Gruyter.
EDHIL   Alwin Kloekhorst (2008). *Etymological Dictionary of the Hittite Inherited Lexicon*.
          Leiden & Boston: Brill.

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