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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 3

The distribution of *-a-* and *-e-* in the Lycian genitival adjective suffix

Abstract: The Lycian genitival adjectival suffix A *-Vhe/i-*, B *-Vse/i-* is attested both with *-a-* and with *-e-*. The present treatment suggests that the main principle behind this variation is morphological, and tries to determine the default variant for each stem type, as well as to find explanations for the seeming exceptions. Lycian A and B are treated separately, but give comparable results. The ultimate origin of the suffix is argued to have been **-osio(-)*, which directly accounts for the variant with *-e-*. The variant with *-a-* is its counterpart in the *a*-stems. Some additional light is shed on the workings of Lycian vowel assimilation processes.¹

1 Introduction

The normal way of expressing a genitival relationship between nouns² in Lycian is by means of a genitival adjective (gen.adj.), inflected to agree with the head noun, which is formed with a suffix of the shape *-ahe/i-* or *-ehe/i-* in Lycian A, and *-ase/i-* or *-ese/i-* in Lycian B.³ For example, the

¹ I would like to thank Zsolt Simon, Alwin Kloekhorst, Kate Bellamy and Chams Bernard for their comments on earlier drafts of this paper.

² Proper names normally rather use a genitive. However, the declension of nouns and adjectives sometimes spills over to proper names, and I have included here the occurrences in which this is the case.

³ In this chapter the notation *-e/i-* refers to the combination of a neuter gender *e*-stem paradigm and a common gender *i*-stem paradigm (more commonly called “*i*-mutation paradigm”), found in virtually all adjectives. This contrasts with the alternative combination of a neuter gender consonant stem paradigm and a common gender *i*-stem paradigm, noted *-C(i)-*, e.g. *ḳṃṃēt(i)-* ‘how(ever) many’ (c. *ḳṃṃēti-*, n. *ḳṃṃē*) – although see 4.2.1 for a refinement of this statement. In nouns, common gender *i*-stems are here noted with *-i-* (e.g. *ēni-* ‘mother’) rather than with *-e/i-* and *-(i)-*, as there is no difference between these types. For an elaboration on these choices see Chapter 1.

gen.adj. of Lyc. A *xssadrapa* ‘satrap’ is *xssadrapahe/i-* ‘of the satrap’. The variation found in the suffix vowel, *-a-* or *-e-*, has so far not been well understood. This chapter will address this issue in detail.

2 Earlier interpretations

2.1 *-a-* and *-e-* as phonetic variants

The two variants of the suffix have sometimes been treated as phonetic variants without any further differentiation on a morphological level.⁴ This is true for Lyc. *a* and *e* in general, which were not only until relatively recently assumed to go back to one Proto-Anatolian phoneme corresponding to Luwian and Hittite *a*, but have also for a long time been known to be subject to umlaut rules that cause some wavering between the two. Specifically, *a* > *e* before the front vowels *e* and *i* (*i*-umlaut), and *e* > *a* before the back vowels *a* and *u* (*a*-umlaut). For instance, the gen.adj. of *atla-* ‘self’ is attested both as *atlahi* and as *etlehi*. In the latter case, *i*-umlaut must have been active, affecting even the radical vowel *a*.

It has sometimes been assumed that *-a-* was the original vowel of the suffix. Initially this assumption was based only on the general correspondence of Lyc. *a* ~ *e* with Luw. and Hitt. *a*. In the case of the gen.adj. suffix, cf. the Luwian equivalent *-assa/i-* (CLuw. *-ašša/i-*, HLuw. *-asa/i-*).⁵ But the original status of *-a-* has been defended even after it had become known that Lyc. *a* and *e* in principle continue different Proto-Anatolian phonemes (most relevantly **ā* and **ō*, respectively, see Melchert 1992). Melchert (1994: 77), for instance, used the supposed original *a*-vocalism of the suffix as an argument to uphold the suspected connection with the Latin suffix *-ārius*, explaining all forms with *-e-* as the result of *i*-umlaut, e.g. **ēnahi* > *ēnehi* ‘of the mother (*ēni-*)’ (Melchert 1994: 296). Melchert (2012) retracted this in favor of a morphological

⁴ Cf. e.g. Neumann (1969: 383-384).

⁵ Cf. e.g. Houwink ten Cate’s (1961: 55) citation of the suffix as *-ahi-*, after a comparison with the Luwian suffix.

distribution, but the idea that the distribution of *-a-* and *-e-* does not correlate with any morphological feature is still found today.⁶

2.2 *-a-* and *-e-* as morphological variants

Although umlaut undeniably plays a role in the variation between *-ahe/i-* and *-ehe/i-*, from early on it has also been stated that there is some correlation of these variants with the stem type of the base noun, viz. of *-ahe/i-* with *a*-stems and of *-ehe/i-* with *i*-stems. Meriggi (1928: 413-414), for instance, notes that “i temi in *-a* mantengono la vocale tematica ed hanno quindi più spesso la desinenza *-ahi*, mentre i temi in *-i* l’alterano in *e* ed hanno di regola la desinenza *-ehi*. Queste due desinenze *-ahi* ed *-ehi* si scambiano però di frequente, come in generale *e* ed *a*, oppure *ê* ed *â*, in licio.” He attributes the interchange of *-a-* and *-e-* to *i*-umlaut on the one hand (*-ahi* > *-ehi*), and analogy on the other (*-ahi* with *i*-stems).

Hajnal (2000: 170-171) finds support for a general correlation with the stem type in a collection of relevant occurrences. Apart from *-a-* correlating with *a*-stems and *-e-* with *i*-stems, he also finds *-a-* with consonant stems and with some *i*-stems which were originally *o*-stems.⁷ Recently, Sasseville (2018: 314-316) has proposed that *-ahe/i-* is used with *a*-stems and *i*-stems which were originally consonant stems, whereas *-ehe/i-* is used with *i*-stems which were originally *o*-stems, as well as with collectives.⁸

⁶ Cf. e.g. Neumann (2007: 17, s.v. *apuwarzahi*): “Das Suffix *-ahi-* erlaubt keine Aussage, ob der Stammaslaut *-a-* oder *-i-* gewesen ist”.

⁷ Specifically, Hajnal offers the following analyses (notations his): *-a-* with consonant stems in *pddātahi* (*pddāt-* ‘place’), *xñtawatahi* (*xñtawat(i)-* ‘king’), Lyc. B *Trqqñtasi* (*Trqqñt-* ‘Storm-god’), *-a-* with *o*-stems in *Sppartalijahe* (*Sppartali(je)-* ‘Spartan’), *uhahi* (*uhe/i-* ‘year’), Lyc. B *Xbadasi* (*Xbade/i-* TN). All of these will be treated below, except *Sppartalijahe*, which is better analyzed as belonging to **Sppartalija-* ‘land of Sparta’ (Melchert (2004: 59) interprets it as a genitive; Sasseville (2018: 314 n. 34) as a dative-locative plural of **Sppartalijsa-*); its base is unattested in any case.

⁸ Sasseville mentions for *i*-stems continuing *o*-stems (notations his): *ēnehe/i-/ēnese/i-* (*ēne/i-* ‘mother’), *esbehe/i-* (*esbe/i-* ‘horse’), *xñtawatehe/i-* (*xñtawate/i-* ‘king’), *prñnezijehe/i-* (*prñnezi(je)-* ‘house servant’), *telēzijehe/i-* (*telēzije-* ‘army’), *kbi(je)-* (*kbi(je)-* ‘another’); for *i*-stems continuing consonant stems: *pddātahe/i-* (*pddāt(i)-* ‘place’), *uhahe/i-* (*uh(i)-* ‘year’), *xθānahe/i-* (*xθān-* ‘?’), along with the preserved consonant stem *trqqñtase/i-* (*trqqñt-* ‘Storm-god’). He uses this distribution to

Hajnal uses the occurrence of *-a-* in other types than *a*-stems as an argument in favor of the original status of *a*-vocalism for all stems, supporting the connection with Lat. *-ārius*, with *-ehe/i-* or *-ese/i-* resulting from analogy after the stem vowel of the base. Kloekhorst (2008a: 216) and Yakubovich (2008: 195), however, note that if there is a correlation with the stem type, it could just as easily be attributed to the opposite analogy, in which **-eh₂-* or **-ǣ-* replaced **-o-* after the stem vowel of the base noun. Both favor a shared origin with a PIE *o*-stem genitive: Kloekhorst with **-osio* (Skt. *-asya*, Gr. *-o-jo*, -οιο, OLat. *-osio*, Arm. *-oy*), Yakubovich with **-oso* (Gr. *-ov*). Such an origin and analogy had already been proposed by Pedersen (1898-1899: 88).⁹

3 Outline

The distribution of *-a-* and *-e-* in the gen.adj. suffix is still quite unclear. First, not everyone seems to be convinced that there is any systematic distribution, the only factor at work allegedly being phonetic and haphazard in nature. This view can be abandoned right away in view of Hajnal's (2000) collection of forms, which shows that there is at least some relation to morphology, as had been claimed before. Additionally, the morphological significance of the vowel difference is confirmed by a minimal pair: *xñtawatehi* 'of the king' (to *xñtawati-*) and *xñtawatahi* 'of the kingship' (to *xñtawata-*). Those who do believe there is a pattern assume a general tendency for the vowel to correlate with the stem of the

interpret *xbad(i)-* 'river-valley' (gen.adj. *xbadase/i-*) and *al(i)-* '?' (gen.adj. *alase/i-*) as former consonant stems, and *-(w)ñne/i-* (ethnicon suffix, gen.adj. *-ñnehe/i-*) and *miñte/i-* (gen.adj. *miñtehe/i-*) as former *o*-stems. For *-ehe/i-* with collectives he mentions *uwehe/i-* (*uwa-* 'bulls, cattle') and *ehetehe/i-/esetese/i-* (*ahata-* 'peace'). All of these examples will be discussed below.

⁹ He considered the gen.adj. to be a derivation of the genitive in *-h(e)*, about which he remarks: "Dette kan være den indoevr. Endelse for *o*-Stammerne *-sjo* ... og endelig må Endelsen *-he*, *-h* fra *o*-Stammerne være overført til andre Stammer (f. Eks. *i*-Stammerne).", i.e. "This can be the IE *o*-stem ending *-sjo* ... and finally the ending *-he*, *-h* may have been transferred from the *o*-stems to other stems (for example the *i*-stems).".

base noun, but the exact assumed correlations differ. It is the purpose of the remainder of this chapter to refine our understanding of these patterns.

The existing accounts can be improved upon in several respects. First, some new inscriptions and improved interpretations have become available since Hajnal's (2000) collection.¹⁰ Moreover, rather than a treatment per suffix form, the course which has been taken so far, we would like to have synchronic rules indicating which stem in principle takes which form of the suffix, as well as systematic explanations of the exceptions to these rules. Furthermore, the historical split in *i*-stems that Hajnal and Sasseville observe is disconcerting and needs further scrutiny. Finally, Lycian A and B should be treated separately. Even though they are closely related, their synchronic rules cannot be assumed to have been the same.

In order to determine the relationship between the form of the gen.adj. and the stem form of the base as carefully as possible, it is necessary to take as a starting point those attestations of the gen.adj. whose bases have a stem type that can be determined with certainty or at least extreme likelihood on the basis of attestations. In what follows, I will therefore collect all forms of the gen.adj. suffix whose base is attested, ordering them according to the stem vowel of the base, and try to formulate rules. All apparent exceptions to these rules will be discussed. For determining the impact of umlaut it will be useful also to include the token frequency of the gen.adj. rather than type frequency only. After the assessment of the synchronic rules (4-6), I will also address the question of how we can best interpret the results historically (7).

¹⁰ Most importantly, Hajnal's collection was based on Melchert 1994, of which an improved edition appeared in 2004. The most noticeable addition to the corpus is N337, which contains new instances of *xñnahi*, *teθθi*, and *ēnehi*, as well as the first unambiguous Lyc. A instance of *xugahe/i-*, corresponding to Lyc. B *xugasi* (on which see 6).

4 Lycian A: attestations, rules and exceptions

4.1 Nouns

4.1.1 *a*-stems (c.)

The following attested *a*-stem nouns have attested gen.adj. forms.¹¹ Unless indicated otherwise, the listed gen.adj. forms are hapaxes. For the sake of completeness I also add nom.-acc.pl.n. forms in *-aha*, but in brackets, because these are not informative. There are no occurrences of ***-eha* in Lycian A, meaning that *a*-umlaut works without exception here, and the form always comes out as *-aha* irrespective of the stem vowel of the base noun.¹² The attestations are the following:¹³

	<i>-ahe/i-</i> (31) (19)	<i>-ehē/i-</i> (6/7)
<i>arkkazuma-</i> ‘(PN/title)’	<i>rkkazumahi</i> , (<i>rkkazumaha</i>)	
<i>mahana-</i> ‘god’	<i>mahanahi</i> , (<i>mahānaha</i>); <i>mahanahi</i> (subst.)	
<i>pedrita-</i> ‘Aphrodite’	<i>padritahi</i> (subst.)	
<i>qla-</i> ‘precinct(?)’	<i>qlahi</i> (13)	
<i>xñtawata-</i> ‘kingship’	(<i>hri-</i>) <i>xñtawatahi</i>	
<i>xssadrāpa-</i> ‘satrap’	<i>xssadrāpahi</i>	
<i>atla-</i> ‘self’	(12) <i>atlahi</i> (7), <i>atlahe</i>	(2/3) <i>etleh[i]</i>
<i>malija-</i> ‘Athena’	<i>malijahi</i> (4)	<i>malijehi</i> , <i>malijehe?</i> (subst.?)
<i>wawa-</i> , <i>uwa-</i> ‘cow’		(4) <i>uwehi</i> (4) (subst.?)

¹¹ For the places of attestation, as well as the exact determinations, as far as known, see Melchert 2004 and Neumann 2007.

¹² When *-aha* is the only form in which the gen.adj. is attested, I have not added the lexeme to the list. The forms thus excluded are *arñnaha* (*arñña-* ‘Xanthos’) and *zaxabaha* (*zagaba-* ‘Lagbos’).

¹³ A third form of the suffix is found in *laθθi* ‘in-law’ (subst.), to *lada-* ‘wife’, syncopated from **ladVhi*. The quality of the vowel has been lost along with the vowel, and the word therefore cannot help us further here.

Out of nine attested lexemes, six show only *-ahe/i-* (with a total of 19 occurrences), two show both variants, and one consistently shows *-ehe/i-*. In the two lexemes that show both, the form with *-a-* is more frequent: in the case of *atla-* we find *-a-* eight times and *-e-* only once; for *malija-* we find *-a-* four times next to *-e-* twice. The clear preponderance of *-ahe/i-* indicates that this is the morphologically regular form for *a-*stems, and that the forms with *-ehe/i-* are exceptions. The rest of this section will be devoted to scrutinizing these exceptions.

For *etlehi*, an explanation of the occurrence of *-e-* readily presents itself (cf. 2.1), because this form also shows the change *a > e* in the vowel of the root. This can only be due to *i*-umlaut, meaning that the morphologically aberrant *-e-* of the suffix likewise has to be attributed to the same process.

For *malijVhe/i-*, Sasseville (2018: 315) assumes that the occurrence of the variant with *-e-* is related to substantivization and lexicalization, and posits a neuter noun *malijehe-* ‘temple of Malija’, comparing Gr. Ἀθήναιον ‘temple of Athena’. This interpretation was also considered by Neumann (2007: 193), who compares *pttara malijehi* (TL 44a, 43) ‘in Patara, in the Malija-temple(?)’ with *padritahi arñna* (TL 44b, 53) ‘in the Aphrodision, in Xanthos’.¹⁴ Lexicalization would be a good explanation for a stronger resistance to analogical restoration of the stem vowel after it had been umlauted (see the discussion of *uwehi* below, and cf. perhaps *laθθi* in n. 13).¹⁵

This leaves *uwehi*, which stands out in not having a variant with *-a-*. Occurring four times, it rather seems that *-e-* was the inherent vowel of this word.¹⁶ Sasseville (2018: 314) assumes that the suffix variant *-ehe/i-* is regular if the gen.adj. belongs to a collective, and so regards it as belonging specifically to the collective *uwa* ‘cows’ rather than to the basic lexeme *wawa-/uwa-* ‘cow’. In my opinion, this is *a priori* unlikely given that the collective ends in *-a*. The contexts in which *uwehi* occurs also do not

¹⁴ The appurtenance of *malijehe* (TL 26, 12) is unclear; it may belong here, or be the gen.sg. of *malija-*.

¹⁵ Of course, not even lexicalizations are immune to analogical pressure, as *padritahi* and *mahanahi* exemplify.

¹⁶ The form [u]wahe featuring in Hajnal 2000 is better interpreted as part of a gen. of a proper name, *pu[nam||u]wahe* (see Melchert 2004: 102, Neumann 2007: 292).

necessarily point to this particular interpretation.¹⁷ A closer look at the contexts rather suggests a different explanation. In TL 22, *uwehi* is part of the title(s?) of Hrixttbili, who was a *mahanahi uwehi*. In TL 92, we find a tomb made by *[.]urttiya*, who is further designated as *mahanahidi axā[t]i uwehi*.¹⁸ The word also occurs twice in TL 29 (3, 4), in a much less clear context. But again, one instance is paired with *axāti* (here in the form *axuti*), which suggests that its use in this inscription is similar to that in the other two. Although its connection with *wawa-* ‘cow’ is not in question given the parallel *axāti : esbe[h]i* (TL 128, 1), which features the gen.adj. of *esbi-* ‘horse’,¹⁹ the collocations in which it occurs, especially with the derivations of *mahana-* ‘god’, as well as its use in or as a title, suggest that *uwehi* was specialized as a priestly designation, or a part thereof. In its co-occurrence with ‘priest’ (*mahanahi*), Melchert (2004: 78) interprets it as an epithet meaning ‘who oversees a cattle sacrifice’. Neumann (2007: 413) analyzes it as substantivized (‘the one of the cattle herds’, i.e. ‘the one responsible for the cattle herds’). Its specialized, perhaps even substantivized, but at least probably lexicalized status may well explain its deviant vowel pattern. Because of their defining separation from the base paradigm, lexicalizations often contain forms that deviate from the synchronic rules, preserving the regular form of an older stage of the language. There are two ways in which this may be true in this case. The first possibility is that we are again, just like Sasseville (2018: 315) proposed for *malijehe-*, dealing with an unrestored umlauted variant. A second possibility is that it is a morphological archaism. From a historical point of view, the *a*-stem *wawa-* is secondary. PIE had a *u*-stem **g^weh₃-u-* (Gr. βούς etc.), which survived as such in Proto-Anatolian (Hitt. GUD-*u-*), and then regularly became an *i*-stem in Proto-Luwic (still Luwian *wawi-*:

¹⁷ For a discussion of the original argument to regard *-ehe/i-* as regular with collectives, see 4.4.

¹⁸ Following Kalinka (1901: 71), the existing editions have *u[we]hi*, implying that *w* and *e* are completely illegible. If Kalinka’s accompanying drawing is accurate, however, what little is left of the vowel leaves no doubt that the form is *uwehi* (*uwehi*) and not ***uwahi*: .

¹⁹ For this word and its stem formation, see 4.1.2 with footnote.

CLuw. GUD-*iš*, HLuw. (BOS.ANIMAL)*wa/i-wa/i-*).²⁰ It may therefore be the case that the lexicalization *uwehi* preserves the gen.adj. that belonged to the older form **wewi-* rather than to the innovative *a*-stem *wawa-*.

For *a*-stems we may safely conclude that *-ahe/i-* is the paradigmatic form of the suffix. While in general it may be said that *i*-umlaut can account for the occasional occurrences of the variant *-ehe/i-*, it should be specified that only one attestation of *-ehe/i-*, viz. *etlehi* (against eight attestations of expected *atlahe/i-*), clearly occurs in the inflectional gen.adj. function and can therefore be attributed to the synchronic workings of umlaut. In the two other lexemes with a variant *-ehe/i-*, we seem rather to be dealing with lexicalizations: *malijehe-* quite possibly designates the ‘temple of Malija’ and *uwehi-* is (part of) a priestly title. The occurrence of *-e-* specifically in lexicalizations suggests that it is an archaism which resisted later restructuring. For *uwehi-*, the gen.adj. of a former *i*-stem, we may either be dealing with a morphological archaism, or with preserved umlaut, and the latter is the most likely option for *malijehe-*. This suggests that *i*-umlaut used to be more pervasive, but was regularly restored in the inflectional gen.adj. to align the vowel with the *-a-* of the stem of the base.²¹

4.1.2 *i*-stems (c.)

The following attested *i*-stem nouns have attested gen.adj. forms. The same considerations and systematicity as for the *a*-stems above apply.²²

²⁰ On the regularity of the change from consonant stems to *i*-stems in (pre-)Proto-Luwic, and the fact that this word effectively belonged to this type due to its consistently consonantal **-u-*, as well as on the productivity of *a*-stems in Lycian, see Chapter 1.

²¹ The analysis of the absence of *i*-umlaut as resulting from restoration leads to a reverse chronology compared to Hajnal’s (2000: 170) claim to the effect that *a*-umlaut is older, and *i*-umlaut is still in development. Rather, apart from the occasional exception (*etlehi*, and cf. [*er*]ewezijehed[i] in n. 29), *i*-umlaut seems no longer to have been active and its effects were regularly restored, at least paradigm-internally, whereas *a*-umlaut was an active process, not allowing for restoration of *-aha* to morphologically expected **-eha*.

²² Here, too, we find a syncopated form with *-θθ-*: *teθθi* (to *tedi-* ‘father’). Excluded for only being attested in the nom.-acc.pl.n. is *ttaraha* (to *t(e)teri-* ‘city’).

	<i>-ehe/i-</i> (16)	<i>-ahe/i-</i> (2)
<i>ēni-</i> ‘mother’	<i>ēnehi</i> (3)	
<i>ertēmi-</i> ‘Artemis’	<i>ertemehi</i>	
<i>esbi-</i> ²³ ‘horse’	<i>esbehi</i> ; <i>esbehi</i> ‘(PN?)’	
<i>miñti-</i> ‘a supervisory authority’	<i>miñtehi</i> (2), (<i>miñtaha</i> (4)) ²⁴	
<i>prñneziji-</i> ²⁵ ‘household member’	<i>prñnezijehi</i> (6)	
<i>xñtawati-</i> ‘king’	<i>xñtawatehi</i> (2), (<i>xñtawataha</i>)	
<i>uhi-</i> ‘year’		<i>uhahi</i> (2)

With six out of seven lexemes consistently (in all 16 attestations) showing the variant *-ehe/i-*, we can safely conclude that *-ehe/i-* is the morphologically regular gen.adj. suffix variant for *i*-stems.

The one deviating lexeme, *uhi-* ‘year’, is also consistent, showing the variant *-ahe/i-* in both of its occurrences. It should be noted that it is not completely certain that this noun was an *i*-stem. The only form securely belonging here is *uhi*, probably a dat.-loc.sg., which does not exclude *a*-stem or (neuter) *e*-stem inflection. However, *i*-stem inflection is the most likely option in view of the Luwian equivalent *ussi-* (CLuw. *ušši-*, HLuw. (“ANNUS”) *usi-*). Lycian did transfer some nouns from the *i*-stems to the *a*-stems, but the only secure examples refer to animate beings (*xawa-* ‘sheep’, *wawa-* ‘cow’ and probably *kbatra-* ‘daughter’, *atla-* ‘person, self’, *mahana-* ‘god’, see Chapter 1), meaning that assuming a transfer in this case would also mean assuming a deviation from this pattern. If the form *uhe* (TL 65, 15) is to be identified as the dat.-loc.pl. of ‘year’, it would all but rule out an *a*-stem (cf. 4.4 on the isolation of *-e* for *a*-stems). A neuter *uhe-* would be an unexpected mismatch to Luwian *ussi-*. In the current state of attestation, the best assumption is therefore that the word was *uhi-*.

²³ The only attestation of the base (abl. *esbedi*) and the undoubtedly common gender leave *esbi-* as the only realistic stem formation. Other stem forms which are more often assumed, most prominently *esbe-* and *esb-*, do not correspond to regular Lycian common gender noun declension types (see Chapter 1).

²⁴ We also find two forms with contraction: *miñta*, whose preform must have been **miñtaha*, and *miñte*, probably from **miñtehe*.

²⁵ More commonly noted *prñnezi(je)-*, which more accurately represents the fact that the *-i-* of the direct cases merged with the preceding *-i(j)-* inherent to the suffix.

Sasseville (2018: 315) explains the occurrence of *-ahe/i-* as resulting from *uhi-*'s former status as a consonant stem (PIE **uet-es-*), comparing the supposed former *nt*-stem *pddāti-* 'place' (gen.adj. *pddātahe/i-*). A distinction in the *i*-stems between former consonant stems and former *o*-stems would be highly remarkable. The merger that blurred this distinction took place in pre-Proto-Luwic, meaning that Lycian would have preserved an unmotivated distinction for at least 1500 years, from pre-Proto-Luwic onward, only in one grammatical category that is otherwise very productive and prone to analogy (cf. the near-absence of *i*-umlaut in *a*-stems). Indeed, I do not think the evidence can sustain the proposed rule. The word for 'place' suffers from the same defective state of attestation as does *uhi-*: the only securely attested case is the dat.-loc.sg. *pddāti*, meaning that the exact stem form cannot be determined. It is possible that the word was rather a neuter *nt*-stem (see 4.1.4). The rule would then rest only on *uhi-* → *uhahe/i-*. This example, however, contradicts the rule more than it supports it. PIE **uet-es-* cannot be the direct ancestor of PLuw. **ussi-*: even if we assume that **-ss-* can come from **-ts-*, PIE **uet-es-* is a neuter noun, PLuw. **ussi-* is not. The change of gender is probably to be attributed to suffixation. This is also favored by the stem form, which does not occur as such in the inflection of the *s*-stems. This suggests that the preform was rather **ut-s-o-* (for a similar process cf. Skt. *vatsarā-* m. 'year').²⁶ I therefore conclude that the *a*-vocalism of *uhahi* has to be explained in another way.

The contexts in which *uhahi* occurs may provide further clues. In TL 43, it is part of the appositional titular string *trijatrbbahi pñnutahi uhahi*. As both other words are obscure, except for apparently also being genitival adjectives (so probably all of them are substantivized), so is *uhahi* in this context. In this case, it is not even clear that it refers to 'year', although it is formally probable. In TL 40c, 7-10, *uhahi* occurs in the context *erawazija ebe[ij]a m=e prñnawaxã 10 uhahi ħiti ahāmadi arññadi* 'this

²⁶ Conversely, of the *i*-stems showing *-ehe/i-*, *miñti-* and *xñtawati-* are usually thought to go back to consonant stems, although admittedly neither really has a clear history. See also the provenance suffix *-ñne/i-*, which had a consonantal neuter in Proto-Anatolian and Proto-Luwic, but has a gen.adj. *-ñnehe/i-* in Lycian. In this case, however, the suffix seems to have been thematicized in pre-Lycian (see 4.2.1).

monument I built at/for a *hiti* of 10 years from/with the Xanthian *ahãma*'. Although not all aspects of this sentence are equally clear, what is clear is that *uhahi* is preceded by a plural numeral,²⁷ and must accordingly have a plural interpretation. The possibility arises, then, that this fact and the *a*-vocalism are related. The vocalism may stem from a collective, **uha*. Compare the collective *uwa* 'cows', both attestations of which occur after plural numerals (*ãmmãma kbisñtãta uwa* TL 111, 4, *nuñtãta aãmmãma uwa* TL 131, 3-4).²⁸

4.1.3 *e*-stems (n.)

The following attested neuter *e*-stem also attests a gen.adj.:²⁹

	<i>-ehe/i-</i> (2)
<i>telẽzije-</i> 'military camp/fort'	<i>telẽzijehi</i> (2)

We can assume from this that *e*-stems took the suffix form *-ehe/i-*.³⁰

²⁷ Neumann (2007: 400) interprets this number as '21' rather than '10', but this reading is not normally accepted. His tentative translation of the first part of the sentence is "Diese *erawazija* nun habe ich erbaut (als) 21-jährig(er)", with *uhahi* as a substantivized gen.adj. meaning '(21-)year-old (man)'. It seems more probable to me that the time indication refers to years passed relative to an event (given the context, possibly military).

²⁸ If the occurrence as a title in TL 43 is regarded as the same lexeme, the fact that it has the exact same form may suggest that the *-a-* was inherent to the gen.adj. rather than dependent on number, although the word for 'year', as a unit of measurement, probably occurred in a plural interpretation relatively frequently. This characteristic may even have prompted a shift in stem type. Hopefully, future attestations will bring more clarity about the morphological details of this lexeme.

²⁹ In addition, the neuter plurale tantum *erawazija*, *arawazija* 'monument' (dat.-loc. *arawazije*, abl. [*araw*]azijedi) is probably the base of the gen.adj.abl. [*er*]ewezijehed[i]. If so, however, the occurrences of *-e-* for *-a-* show that the word has undergone *i*-umlaut, which, like in *etlehi*, affected the entire word. This has obscured any morphologically motivated vowel quality.

³⁰ See 4.4, however, for the possibility that the *-a* of the plural also sometimes triggered the variant *-ahe/i-*.

4.1.4 Consonant stems (n.)

No attested gen.adj. has a base that can be securely identified as a neuter consonant stem noun. The two best candidates are the following:

	<i>-ahe/i-</i> (3)
<i>xθθan</i> -(?) ‘?’	<i>xθθanahi</i> (2)
<i>pddāt</i> -(?) ‘place’	<i>pddātahi</i>

For *xθθan*-(?), the gender of the base lexeme is clear from the neuter plural *xθθāna*. The analysis of the stem type depends on the singular, which may be *xθθā* (TL 44b, 38, and cf. [x]θθā in N325, 7). If this is correct, then the base noun is a neuter *n*-stem.

Another possible neuter consonant stem is *pddāt*-(?). Since we only have the dat.-loc. *pddāti*, its stem class cannot be determined with certainty. We may, however, perhaps compare the suffix of the HLuw. neuter LOCUS-*la(n)t-* ‘place’, whatever the root of this word was.³¹ For the implied form **pddā* cf. perhaps the PN *pddā-xñta*.

The gen.adj. of both potential neuter consonant stems is only attested with the suffix form *-ahe/i-*. Perhaps, then, this was the paradigmatic form for neuter consonant stems. The evidence, however, is rather flimsy.³²

4.2 Adjectives

4.2.1 *e/i*-stems

The *i*-stem adjectives are normally divided into *e/i*-stems, which have a thematic neuter, and (*i*)-stems, which have a consonantal neuter. Of the adjectives that are attested in the gen.adj., there are five whose base can be categorized beyond doubt, since they have either the suffix *-ije/i-* or *-ñne/i-*. Since both paradigms that are combined in the *e/i*-stem type, *i*-stems (c.) and *e*-stems (n.), in nouns take the ending *-ehe/i-*,³³ this is the

³¹ The gender of Hitt. *pēdant-* cannot be determined.

³² See also 4.4 for the possibility that the variant *-ahe/i-* may sometimes have been triggered by the neuter nom.-acc.pl. ending *-a*.

³³ *prñneziji-* (*prñnezi(je)-*) ‘household member’ is even a substantivization of (the common gender of) an adjective formed with the suffix *-ije/i-*.

only ending we would now predict for the *e/i*-stem adjectives. We find the following attestations:

	-<i>ehe/i</i>- (19)
<i>ebije/i</i> - ‘local, of this place’	<i>ebijehi</i> (13)
<i>ehbije/i</i> - ‘his’	<i>ehbijehi</i> (2), <i>ehbiehi</i>
<i>pñtreñne/i</i> - ‘from Pñtre’	<i>pñtreñnehi</i>
<i>wedrẽñne/i</i> - ‘from Wedre’	<i>wedrẽñnehi</i>
<i>xbidẽñne/i</i> - ‘from Kbidẽ’	<i>xbidẽñnehi</i> , (<i>xbidãñnaha</i>) ³⁴

The expectation is borne out by the data: all 19 occurrences of the five lexemes in question have *-ehe/i*-.

The ethnicon or provenance suffix *-ñne/i*- may be discussed somewhat more elaborately. This suffix was consonantal in Proto-Anatolian (Hitt. *-um(e)n-* < **-Hu(e)n-*), and the neuter still was in Proto-Luwic (cf. the HLuw. nom.-acc.sg.n. *-wan-za* rather than ***-wanan-za*, e.g. *á-ta-na-wa/i-za-ha*(URBS), from *átanawan(i)*- ‘of Adana’). However, a non-mutated pronominal version *-ñne-* is probably found in the Lyc. acc.sg.c. *ebẽññẽ* ‘this’,³⁵ which suggests that the suffix was transferred to

³⁴ And one syncopated form, *xbidẽñhi*.

³⁵ For this identification see Kloekhorst (2008b: 135-137), and cf. already the refs. in Neumann (2007: 46). It is also possible that *-ẽññẽ* somehow goes back to the acc.sg.c. ending, as is assumed by Eichner (2017: 282). The biggest advantage of this assumption is that it explains the suffix’s restriction to the acc.sg.c. The historical explanation it requires is quite intricate, however. Eichner compares the 3sg.acc.sg.c. enclitic pronoun, which is attested in the forms *=ẽ*, *=ẽne* and *=ene*. Whereas the first neatly continues PLuw. **=on*, the latter two point to virtual **=on-o*, with an extension of some sort. According to Eichner, the original input of *-ẽññẽ* was identical to the extended variant of the enclitic pronoun, and its ultimately diverging shape resulted from the addition of an extra accusative ending (**-ono+n*) – which is, however, not found in the enclitic pronoun itself – syncope (cf. *ebññẽ* ‘him’), and restoration. Although this is not inconceivable, the identification with the identical provenance suffix is formally more straightforward. Eichner’s (2017: 282) criticism of this identification is mostly beside the mark. Indeed *ebẽññẽ* seems to mean ‘this’ rather than ‘belonging to this’ (Eichner’s points (a) and (e)), but this does not invalidate the historical morphological analysis (cf. the occurrence of the suffix *-ije/i*- in the same paradigm). The claim that the suffix only forms ethnic designations derived from toponyms (point (b)) is based on only a handful of examples. The Luwian and Hittite counterparts of the suffix are also mainly found in detoponymic designations, but we nevertheless find atypical uses such as CLuw. *ãna-ũann(i)*- ‘stepmother’ (*ãnni*-

the normal *e/i*-stem type in Lycian. Such a transfer would not be unexpected. Even apart from the probably intolerable shape the consonantal neuter would have had (**-*ñn*), the (*i*)-stem type was moribund in general, the only rather secure surviving example being *kñmẽt(i)-* ‘how(ever) many’, nom.-acc.sg.n. *kñmẽ*, which may well be an archaism.³⁶

4.3 Pronouns

4.3.1 *e*-stem(s)

For the pronoun *ebe-* ‘this; he/she/it’ we usually find an adjective based on the gen.adj., *ehb-ije/i-* ‘his’ (see 4.2.1), rather than a true gen.adj. Nevertheless, *ebe-* also attests a gen.adj. without the effects of syncope, metathesis and suffixation: *ebehe/i-*,³⁷ with consistent *-ehe/i-*:

‘mother’), Hitt. *tame-umm-aḥḥ-* ‘to make different’ (*tamāi-* ‘other’). The absence of *-w-* in Lyc. B [*e/ab*]*aññu* (TL 55, 1) as opposed to *xbidewñni-*, *tunewñni-*, *trelewñni-* (point (d)) is a good point, but hardly decisive. First, although probable, the word is not securely attested. Not only is it damaged, the form of the proposed restoration is also not found in the rest of the corpus. Second, if correctly restored, there are several factors that may be connected to the deviant shape of the suffix in this case, such as the fact that it occurs in a different inscription than the other examples, the fact that the suffix is part of a pronoun, and potential influence from Lycian A (cf. *uwedri-* ← Lyc. A *huwedri-* ‘all’). In any case, caution about this form is due, and it is best not to base any argument on it. Eichner’s explanation of the variant *ebẽñni* as developed from *ebẽñnẽ* with *-ẽ > -i* parallel to *-ã > -u* (point (c)) cannot be correct, because we do not find it in other cases of *-ẽ*. This form is also only combined with head nouns in *-ã* rather than *-u*. The *-i* in *ebẽñni* must therefore be the *i*-stem ending. This strengthens the proposed connection with the provenance suffix (Kloekhorst 2008b: 136-137). Cf. similarly *ebeis* next to *ebeijes*. It is not excluded, however, that these forms are the result of a secondary encroachment of the *i*-stem inflection on the pronominal system.

³⁶ I assume that its survival was favored by the fact that the nom.-acc.sg.n. happened to end in *-ẽ*. Similarly, the survival of *-wan-za* in HLuw., where we find a similar situation to that of Lycian, may have been favored by its ending in *-an-za*.

³⁷ Morphologically and functionally (‘this here, of this place’) comparable with *eb-ije/i-* ‘local, of this place’ and, probably, *ebe-ñnẽ* ‘this’.

<i>-ehe/i-</i> (15)	
<i>ebe-</i> ‘this; he/she/it’	<i>ebehi</i> (13), <i>ebbehi</i> , <i>ebehẽ(?)</i> ³⁸

Additionally, its dat.pl. *ebtte*, *ebette* was used as a base for the gen.adj. meaning ‘their’.

<i>-ehe/i-</i> (9)	
<i>ebtte</i> , <i>ebette</i> ‘to them’	<i>ebttehi</i> (4), [<i>eb</i>]tte[<i>his</i>]; <i>epttehi</i> (2), <i>epttehe</i> ; ³⁹ <i>ebettehi</i>

Since *ebette* ends in *-e*, the choice for *-ehe/i-* is unsurprising.

4.3.2 Non-ablauting *i*-stem(s)

Although the word meaning ‘(an)other’, *kbi-*, declines very similarly to the *ije/i-* stems (and is analyzed as such by Melchert 2004), it may differ in one crucial point, namely the nom.-acc.sg.n., if this is how we should interpret *kbi* in TL 149, 15 (as opposed to otherwise expected ***kbijẽ*). If so, it would show that, rather than with the vowel-alternating *i*-stem paradigm known from nouns and adjectives, here we are dealing with a non-ablauting *i*-stem paradigm, featuring *-i-* throughout.⁴⁰ Nevertheless, as in the regular alternating *i*-stems and the adjectival *e/i*-stems, the gen.adj. is consistently *-ehe/i-*:

<i>-ehe/i-</i> (8)	
<i>kbi-</i> ‘(an)other’	<i>kbijehi</i> (6), <i>kbijehis</i> , <i>kbijehedi</i>

4.4 Attested but unclear bases

Some other gen.adj. forms have attested bases that can be interpreted in multiple ways: *ehetehe/i-/ahatahe/i-*, *exburahe/i-*, *admmahe/i-*.

³⁸ With Neumann (2007: 46), I would take at least [*e*]behẽ in TL 54, 1 as belonging here rather than as a gen.pl. (so Melchert 2004: 11). However, rather than as a nom.-acc.sg.n., in view of its head *tukedri* I would analyze it as an acc.sg.c. with lack of *i*-mutation in a pronominal form (cf. *ebeñnẽ*, *ebeijes*).

³⁹ And once *eptte*, probably for **epttehe*.

⁴⁰ For this type cf. Chapters 1 and 2.

The gen.adj. forms *ehetehe/i-* and *ahatahe/i-* are usually taken together with *ahata* ‘?’.⁴¹ This complex is quite obscure. The noun *ahata* seems to be attested as such as an object (*sej ahata : astte* ‘and made a.’, TL 29, 4);⁴² if this is the case, it has to be either a neuter plural or a collective. Since this is the only attested form, its stem form cannot be determined. If *ahata* is also correctly identified, with Schürr (1997: 65), in TL 44b, 47-49 (*ahata ha||[dē] ēnē : qla (e)bi : ehetehe : se mahāna : ehete||[he]*),⁴³ its co-occurrence with the only two attestations of *ehetehe/i-* may indeed suggest that they belong together. Sasseville (2018: 314) bases a rule on these forms by which the collective in *-a* regularly takes the suffix variant *-ehe/i-*, which he also observes in *uwa* → *uwehe/i-*. In 4.1.1, I have interpreted *uwehi* differently, and in 4.1.2, I have proposed that we may rather see the influence of the collective ending *-a* in *uhahi*. As for *ahata*, its forms also fit the established pattern of neuter *e*-stems, and we may therefore simply assume that the noun was *ehete-* (n.). Cf. also the Lyc. B dat.-loc.sg. *eseti*, which perhaps belongs to the same noun (Melchert 2004: 115). In Lyc. B, too, we find the gen.adj. *esetese/i-* as a divine epithet (*trqq[i]z : esetesi||[=k]e er[b]besi=ke*, TL 44d, 12-13). Since the gen.adj. in general almost never shows any effect of *i*-umlaut (see 4.1.1), it is unlikely that the underlying form is really **ahatahe/i-/asatase/i-*, and that all actual instances in both Lycian A and B are the result of *i*-umlaut (*pace* Hajnal 2000: 171). The attested hapax *ahatahi* is therefore best taken as a morphologically different form. Possibly, it belongs to an *a*-stem derivation **ahata-* (Sasseville 2018: 315). Alternatively, the two variants may be united by connecting the *a*-vocalism of *ahatahi* to the nom.-acc.pl.n. ending of *ahata*. Since both *-e-* and *-a-* occur prominently in the *e*-stem paradigm, the occurrence of both vowels in its associated genitival expression would not be all that surprising. We may especially expect *a*-vocalism to seep through to the gen.adj. when the referent has a plural interpretation (cf. *uhahi* in 4.1.2), or when the plural is generally

⁴¹ Its meaning has been conjectured to be ‘peace, rest’ (Melchert 2004: 4). Neumann (2007: 5) opts for ‘success, victory, fame’.

⁴² But the case is considered unclear by Neumann (2007: 5).

⁴³ But Neumann (2007: 5) rather considers it part of a gen.adj.nom.-acc.pl.n. *ahataha* and reads *ahataha ||[ñt]ēnē : qlabi : ehetehe* (2007: 52).

prominent. This could indeed be the case for *ahata*, if this really has a singular meaning such as ‘peace, rest’ (cf. *erawazija* ‘monument’).

Possibly, we find the same phenomenon in the hapax *exburahi*. Its base (indicating some family-related concept) is attested as *ekebura* and *[ek]eb[u]re*, analyzed by Melchert (2004: 13) as nom.-acc.pl. and dat.-loc.pl., respectively, and as a plurale tantum. Since the context of *ekebura* does not permit a solid syntactic analysis, we might alternatively be dealing with an *a*-stem (so Sasseville 2018: 315). The Lycian B form *kaburã* suggests as much, at least for this dialect. However, in favor of Melchert’s analysis it may be noted that the dat.pl. of *a*-stems in Lycian A is normally *-a* rather than *-e*; *-e* is attested only once, in *xahbe*, and even for this lexeme we find the expected form, *xahba*, twice.

In TL 44b, 9 we find the form *ad̃mahī*, whose base is probably attested three lines earlier as *[a]d̃medi* ‘?’. The mismatch between *-a-* and *-e-* might again belong to a neuter. Alternatively, but less likely, the base is **ad̃ma-* and *ad̃medi* is an *i*-umlauted form. In its current state of attestation, we cannot determine the stem or gender of the lexeme on independent grounds, and so we cannot use it to infer any rules.

4.5 Lycian A: conclusions

We can posit the following morphological rules for the suffix form of the gen.adj. in Lycian A.

Nouns

1. *a*-stems (c.) take *-ahe/i-*. We find *-e-* as the result of active *i*-umlaut in only one attestation, *etlehi*, whose expected counterpart *atlahi* is much more frequent. In *malijehi* and *uwehi*, we are probably dealing with unrestored *i*-umlauted forms in lexicalizations, if not morphological archaism in the case of *uwehi*.
2. *i*-stems (c.) take *-ehe/i-*. The only potential exception, *uhahi*, may be due to its plural interpretation, with *-a-* stemming from the collective ending *-a*. *a*-umlaut further turns **-eha* into *-aha* without exception.

3. *e*-stems (n.) take *-ehe/i-*. There is a possibility that the nom.-acc.pl. *-a* could also trigger the variant *-ahe/i-*.
4. Consonant stems (n.) possibly take *-ahe/i-*, but the evidence is scarce.

Adjectives

5. *e/i*-stems take *-ehe/i-*.

Pronouns

6. The *e*-stem *ebe-* takes *-ehe/i-*, as does its dat.pl. *ebette*.
7. The non-ablauting *i*-stem *kbi-* takes *-ehe/i-* (resulting in *-ijehe/i-*).

5 Lycian B: attestations, rules and exceptions

For Lycian B, due to the poor state of attestation we have only little material to work from. Only a small number of lexemes are attested both in a base whose stem type can be determined and in the gen.adj. When the base is not attested in Lyc. B, but it is in Lyc. A, I have added the Lyc. A form (indicated as such).

5.1 Nouns

5.1.1 *a*-stems (c.)

The following attested *a*-stems are also attested in the gen.adj.:

	<i>-ase/i-</i> (4)
<i>atla</i> - ⁴⁴ ‘person, self’	<i>atlasi</i>
<i>masa</i> - ⁴⁵ ‘god’	<i>masasi</i>
<i>pasba</i> - ‘?’ ⁴⁶	<i>pasbasi</i>
<i>xñtaba</i> - ‘rule’	<i>xñtabasi</i>

⁴⁴ The stem type cannot strictly be determined on the basis of Lyc. B only, where we only have the dat.sg. *atli*, but an *a*-stem is probable on the basis of Lyc. A *atla*-.

⁴⁵ This word seems to have belonged to a subtype of *a*-stems with a nom.-acc.pl. in *-aiz* rather than in *-āz/-az*. We also find this in *lijaiz* ‘nymphs’. Although the exact prehistory of this ending is still unclear, its aberrancy is undoubtedly related to the fact that these words are *ana*-stems in Lycian A (*mahana-*, *elijāna-*).

⁴⁶ Often interpreted as ‘sheep’ or ‘cattle’ on the basis of a formally possible connection with PIE **peku-* ‘cattle’.

The suffix form is consistently *-ase/i-*. This fits perfectly with what we would expect on the basis of Lyc. A (*-ahe/i-*).⁴⁷

5.1.2 *i*-stems (c.)

We find the following combinations of an *i*-stem base and a gen.adj.:

	<i>-ese/i-</i> (3)	<i>-ase/i-</i> (4)
<i>erbbi</i> - ⁴⁸ ‘battle’(?)	<i>erbbesi</i>	
<i>ēni</i> - ‘mother’ (Lyc. A)	<i>ēnesi</i>	
<i>tedi</i> - ‘father’ (Lyc. A)	<i>tedesi</i>	
<i>ali</i> -(?) ‘?’		<i>alasi</i>
<i>xbadi</i> - ‘(river) valley’(?)		<i>xbadasi, xbadasiz, xbadasadi, (xbadasa)</i>

Both variants of the gen.adj. occur. Three out of five lexemes show the expected variant *-ese/i-*.

The assessment of the stem class of *ali*-(?) depends on the analysis of *ali* in TL 44c, 55: if this is a nominative or accusative, the lexeme can only be an *i*-stem. If it is a dat.sg., however, the stem class cannot be determined. Although our current understanding of the context does not allow for a clear-cut decision, it is mostly assumed that this is a direct case. In any case, the lexeme *xbadi*- is very clearly an *i*-stem (nom.-acc.pl. *xbadiz*), and its gen.adj. with *a*-vocalism confirms the occurrence of this suffix variant for *i*-stems.

For *xbadase/i-*, the consistent *a*-vocalism suggests that this is the inherent quality of the suffix vowel for this word. There is no indication of an *a*-stem or collective form that could have exerted some influence. Given the other *i*-stems that take *-ese/i-*, the vocalism can also not depend on the stem type. I would like to propose a tentative solution based on all certain

⁴⁷ Perhaps the base of *xidrasadi* is found in the sequence *qi[]rasdditiu* (TL 44d, 18), from which an acc.pl. *qidras* is sometimes distilled. Both forms have also been emended to *qidrasadi*.

⁴⁸ The stem type is not identifiable as such in Lyc. B, where we only have the form *erbbi*, but Lyc. A has the same lexeme, whose forms *erbbi*, *erbbe* and *erbbedi* point to an *i*-stem or, less likely, a neuter *e*-stem. The gen.adj. in *-esi* is expected in either case.

or potential Lycian B gen.adj. forms. When we confront those featuring *-a-* (*atlası, masası, pasbası, xñtabası, alası, xbadası, trqqñtası, xıdrasadı, xınası, xugası*) with those featuring *-e-* (*erbbesi, ěnesi, tedesi, plejerese, esetesi, ñtemlesi, kuprimesi*), we can discern the pattern that whenever the vowel preceding the suffix vowel is *-a-*, we find a gen.adj. suffix with *a*-vocalism, whereas all occurrences of *-e-* in this position are followed by a gen.adj. suffix with *e*-vocalism. This suggests that Lycian B had some form of *progressive vowel harmony*.⁴⁹ Vowel assimilation typically works regressively, as in Lycian A (e.g. *etlehi* < **atlahi*). However, if it only partly affects a paradigm there is always a morphological counter-pressure to restore the stem (cf. the normal Lycian A form *atlahi*), and if such restoration happens it may trigger vowel harmony in the opposite direction (not so in Lycian A, cf. *xñtawatehi*). I suggest that this is what happened in Lycian B, and explain the occurrences of morphologically unexpected *a*-vocalism in *xbadı-* → *xbadası* and *alı-(?)* → *alası* in this way, i.e. as triggered by the preceding *-a-*. This phenomenon may also underlie the occurrences of ablatives such as *xıdrasadı, xbadasadı, kñmasadı*, whose desinential *-a-* is unexpected for an *e/i*-stem paradigm, although one could alternatively analyze these, with Sasseville (2018), as belonging to *a*-stems with a suffix *-asa-*. In general, however, the ablative shows the same distribution.⁵⁰

5.1.3 Consonant stem(s) (c.)

The only clear-cut common gender consonant stem in Lycian is the name of the Storm-god, which is attested in the base in both Lycian A and Lycian B, and in the latter also in the gen.adj.:

⁴⁹ For this phenomenon, cf. e.g. modern Turkish, in which the exact quality of the vowels in most suffixes and endings is determined by the preceding vowel (e.g. the plural suffix: *ev-ler* ‘houses’, *kitap-lar* ‘books’).

⁵⁰ We find *kñmasadı, laxadı/ulaxadı, luwadladı, sabadı, tuxaradı, xbadasadı, xıdrasadı, wax(s)adı* vs. *lelebedi, meredi, murēnedi, tuwemedi/[tuw]ēmedi, wesedi, zirememedi*. The only exception is *punāmadedi*. These are all the forms listed as abl.-inst. in Melchert 2004 in which the suffix is preceded by *-a-* or *-e-*. The only other form which could formally be analyzed as such, but is rather (tentatively) interpreted as a verb, is *sebedi*, which conforms to the same pattern.

	- <i>ase/i-</i> (1)
<i>trqqñt-</i> ‘Storm-god’	<i>trqqñtasi</i> , (<i>trqqñtasa</i>) ⁵¹

The *a*-vocalism may be compared with the potential *a*-vocalism of neuter consonant stems in Lycian A. It has to be borne in mind, however, that this lexeme is a proper name, which means that we cannot base a rule for consonant stems in general on it. This is especially true in view of the fact that the remaining consonant stems are all neuters. In proper names, *a*-stems are the most frequent type, and the choice for *a*-vocalism in *trqqñtase/i-* may well have been inspired by this.⁵² I would therefore regard it, like its base inflection, as *sui generis*.

5.1.4 *e*-stems (n.)

The best candidate for being a neuter *e*-stem with an attested gen.adj. is the following:⁵³

	- <i>ese/i-</i> (1)
<i>plejere-</i> ‘?’	<i>plejerese</i>

We find the expected suffix variant with *-e-*. It is also possible, however, that we are dealing with a common gender proper name and its genitive.

5.1.5 Attested but unclear base (n.)

One neuter noun of unclear meaning is attested in the nom.-acc.pl. as *xuzrñta*. Its stem form cannot be further identified. An extended form that could contextually well be genitival is found as *xuzrñtasi||si*. Since Gusmani (1968: 16), this is usually emended to *xuzrñtasi{si}*, supposing dittography. However, it is quite bold to correct an inscription written in a

⁵¹ In TL 55, if the readings are correct, we also find the odd forms *trqqñta[s]az* (2-3) and *trqqñtasati* (or °*zi*) (8). The first looks like a nom.-acc.pl. of an *a*-stem *trqqñtasa-* (cf. Sasseville 2018: 309), which would then have to be based on the gen.adj. The second seems to be a further derivation, apparently verbal.

⁵² Cf. the adaptation of **tarhunz* to *tarhunzas* in HLuw.

⁵³ The assignment of the base noun to the neuter gender stems from the fact that it is an *e*-stem noun. For the near-absence of common gender *e*-stem nouns, see Chapter 1.

language we barely know, and it would be advisable not to correct more than the obvious. The form as it is looks most like a genitival formation to a non-ablauting *i*-stem *xuzrñtasi-*, which would then most probably be the onomastic counterpart of a gen.adj. In either case, however, the form presupposes a gen.adj. *xuzrñtase/i-*. Perhaps the *-a-* should be compared to the *-a-* of *xθθanahe/i-* and *pddātahe/i-* in Lyc. A (4.1.4), both potentially belonging to neuter consonant stems. It may also not be a coincidence that the *a*-vocalism of this gen.adj. *xuzrñtase/i-* matches the ending of the only attestation of the base, *xuzrñta* (cf. 4.4). Given the uncertainties, however, we can hardly base any rule on this form.

5.2 Adjectives

5.2.1 *e/i*-stems

The best candidate for being an *e/i*-stem adjective is *kuprime/i-*, probably a participle in *-me/i-*, although formally it could also be a neuter *e*-stem:

	<i>-ese/i-</i> (1)
<i>kuprime/i-(?)</i> ‘desired’(?)	<i>kuprimesi</i>

The evidence points to *e*-vocalism, as in Lycian A.

5.3 Lycian B: conclusions

For Lycian B, we can posit the following rules:

Nouns

1. *a*-stems (c.) take *-ase/i-*.
2. *i*-stems (c.) take *-ese/i-*, but a preceding *-a-* appears to trigger the variant *-ase/i-*.
3. The only clear-cut common gender consonant stem in Lycian, *trqqñt-* ‘Storm-god’, in Lycian B takes *-ase/i-*, probably after the most frequent vocalism in proper names.
4. *e*-stems (n.) take *-ese/i-*, if *plejere-* is not rather a proper name. Possibly neuters could also take *-ase/i-*, if *xuzrñtasisi*, whose base is probably attested as the nom.-acc.pl.n. *xuzrñta*, is any indication.

Adjectives

5. *e/i*-stems take *-ese/i-*.

The picture is very similar to that found for Lycian A (4.5).

6 Conclusions: synchronic rules

The findings show that the distribution of *-a-* and *-e-* in the gen.adj. suffix is in principle morphological in nature. The most frequent types naturally allow us to discern their rules most clearly: *a*-stems (c.) take the variant with *-a-*, *i*-stems (c.) take the variant with *-e-*. *e*-stems (n., and c. in the pronoun *ebe-* ‘this’) that are clearly attested as such in the singular take the variant with *-e-*. *e/i*-stem adjectives, which combine *i*-stem (c.) and *e*-stem (n.) inflection, also expectedly show *-e-*. Morphologically, these rules are completely within the lines of expectation. The gen.adj., although inflected itself, is part of the inflection of its base, whose oblique cases feature the same vowels as are found in the gen.adj. (e.g. abl. *a*-stems *-adi*, *i*-stems, *e*-stems, *e/i*-stems *-edi*). The only surviving common gender consonant stem in Lycian, *trqqñt-* ‘Storm-god’, takes *-ase/i-* in Lyc. B, probably after the most frequent vocalism in proper names, that of the *a*-stems.

A few other attestations of the gen.adj. showing *a*-vocalism belong to bases of uncertain stem type, but at least in some cases to neuters. Lyc. A *pddātahe/i-* and *xθθanahe/i-* are the best candidates for having neuter consonant stem bases (*pddāt-(?)* ‘place’, *xθθan-(?)* ‘?’). We similarly find *a*-vocalism in Lyc. A *exburahe/i-* and Lyc. B *xuzrñtase/i-(?)*, whose bases are morphologically unclear because they are only attested in the plural. Since neuter consonant stems do not have a stem vowel, their choice of *-a-* or *-e-* is somewhat arbitrary, and either choice, which appears to have fallen upon *-a-*, should not surprise us. For *ahata* (‘peace, rest’?), formally a nom.-acc.pl.n., possibly of *ehete-/esete-* (Lyc. B dat.sg. *eseti?*), we may even find both variants, *ehetehe/i-/esetese/i-* and *ahatahe/i-*. One factor in the choice may have been the characteristic nom.-acc.pl.n. ending *-a*. Similarly, the collective ending *-a* may be responsible for the one (uncertain but probable) *i*-stem showing *-ahe/i-* in Lyc. A, *uhi-* ‘year’ →

uhahe/i-. In order to settle any of this with any certainty, we need more attestations.

The quality assigned by morphology is sometimes overruled by phonological factors. *a*-umlaut was apparently still an active process: any instance of morphologically expected ***-eha*, ***-esa* comes out as *-aha*, *-asa*. *i*-umlaut, on the other hand, was regularly overruled by morphology. In only one attestation do we find the opposite: Lyc. A *etlehi* for normal *atlahi* ‘of himself’. Cf. also [er]ewezijehed[i] to *erawazija* ‘monument’. Additionally, *malijehe-* ‘temple of Malija’ and *uwehi-*, a priestly designation referring to cows, probably show unrestored *i*-umlaut (if not morphological archaism, if *uwehi* was created to older **wewi-*) in lexicalizations: forms that had detached themselves from their bases and so could dodge their analogical force more easily. In Lyc. B, it appears that the restoration of root vowels affected by *i*-umlaut has triggered *progressive* vowel harmony: when the preceding vowel is *-a-*, the variant *-ase/i-* is found instead of morphologically expected *-ese/i-*.

One side-effect of these findings is that they allow us to determine the stem class of two kinship terms which are only attested in the gen.adj.: Lyc. A *xñnahi* (3), (*xñnaha*)⁵⁴ ‘of grandmother’ and Lyc. A *xugahi*, (*xugaha*), Lyc. B *xugasi* ‘of grandfather’. Since their bases are certainly common gender nouns (and very unlikely to base their gen.adj. on a collective), these bases must be the *a*-stems *xñna-* ‘grandmother’ and *xuga-* ‘grandfather’, respectively.⁵⁵

7 Historical interpretation

In view of the morphological distribution along the lines of synchronic stem types, sometimes overruled by sound changes, there is no need to assume a continued relevance for the *i*-stems of the former distinction between consonant stems and *o*-stems, the main donor categories of the *i*-

⁵⁴ Perhaps also Lyc. B *xinasi*.

⁵⁵ This is one more lexical link between the Lycian and Luwian *a*-stems (“without *i*-mutation”): Luwian has *huha-* (HLuw. (AVUS)-*ha-*, CLuw. abl. *hūhati*). This link is elaborated upon in Chapter 1.

stems, which had already merged by Proto-Luwic. Projecting the main Lycian rules back to Proto-Luwic, we can posit the use of *-osso/i- with *i*-stems, *o*-stems and *o/i*-stems and of *-āssa/i- with *ā*-stems.⁵⁶

Proto-Luwic *-osso/i- can hardly reflect anything else than *-osio-, an inflected form of the PIE genitive ending *-osio.⁵⁷ Additional evidence for this is the Luwian dat.-loc.sg. -assan. In Chapter 2, I propose that the unexpected dative ending -an was adapted from *-a, originally the allative ending, which I argue to have been used in Proto-Anatolian instead of the regular dative-locative ending *-i if the preceding element was *-i- as well. This implies that the preform indeed had an *-i-, leaving *-osio- as the only option.

Although its use as the main expression of a genitival relationship is clearly a Luwic innovation, the suffix has a cognate in Hittite (see Kloekhorst 2008a: 216, s.v. -ašša-), and will therefore be at least of PANat.

⁵⁶ Here I use **ā*, the intermediate stage between attested *a* and original **eh*₂, but quite possibly the vowel was already short in Proto-Luwic.

⁵⁷ Yakubovich's (2008: 208) proposal to reconstruct *-osso runs into various problems. First, it requires the assumption that PIE *-oso goes back to *-osso. According to Yakubovich, *-ss- was restored in Anatolian because it was (still) analyzed, in accordance with the origin of the suffix that Yakubovich supposes, as the gen.sg. *-os followed by a particle *-so, which he identifies with the Luwian neuter particle -sa. However, there is no evidence for this morphological analysis, and the original nature of the Luwian particle is obscure, meaning that this scenario has little chance of being correct (cf. for similar criticism Melchert 2012: 281). It could be improved by deriving non-Anatolian IE *-oso from PIE *-osso, assuming, with Kloekhorst (2016), that the sound law *ss* > *s* was a non-Anatolian IE development, but then we would still expect the geminate to undergo lenition in Anatolian. Second, the evidence for an *o*-stem genitive *-oso is very limited. It mainly consists of Greek -ou < *-oo and dialectal Germanic *-as, both of which are suspect of being secondary to *-osio, perhaps even by sound law (for Greek see Miller 2014: 338-339, for Germanic see Ringe 2017: 226-227). That Greek inherited *-osio is clear from the dialects (Myc. -o-jo, Hom. -οιο, Thess. -οι(ο)). The ending *-osio is widely found in the IE languages (see 2.2. above, and Fortson 2010: 127; for Hitt. -aš cf. the following note). The main reason for Yakubovich to prefer *-oso over *-osio as the origin of the Luwic gen.adj. is the idea that *-osio is instead the source of the HLuw. genitive ending -asi. It is not excluded, however, and indeed even likely, that both the genitive (whose original form is -asa rather than -asi, see Palmer fthc. and n. 59 below) and the genitival adjective reflect *-osio(-) (cf. Melchert 2012: 282-283). Finally, Yakubovich's proposal is contradicted by the positive evidence for *-osio- as the source of the gen.adj. adduced in the following.

date. There are also some potential comparanda in other IE languages (next to Lat. *-ārius* < **-eh₂sio-* we may consider e.g. Lat. *cuius -a -um*, Sab. *poi-* ‘whose’, perhaps < **k^wosio-*, and the ToB gen.adj. suffix *-šše* < **-sio-*). It is unclear whether these are the result of parallel developments, or that the suffix should be reconstructed for PIE. In any case, the related *o*-stem genitive ending **-osio* can be plausibly reconstructed for PIE,⁵⁸ since it is probably continued in the Luwic genitive **-V-s(s)o* (Lyc. *-ahe*, *-ehe*, HLuw. *-asa*).⁵⁹ In Luwic this ending is found with all stem types, with the distribution of Lyc. *-a-* and *-e-* matching that of the gen.adj. (e.g. *arttuṃpara*, gen. *arttuṃparahe*; *perikle*, gen. *periklehe*). Since **-osio* was restricted to the *o*-stems in PIE, the Luwic *ā*-stem variant (Lyc. *-ahe*) must be analogical to the *o*-stem form (in PIE transposition **-eh₂sio* after **-o-sio*). Similarly, the main shape of the PLuw. gen.adj. suffix was **-osso/i-* (< **-osio-*), and the *ā*-stem variant **-āssso/i-* (< **-eh₂sio-*) must be analyzed as parallel to the *o*-stem form **-osso/i-* (< **-o-sio-*). This essentially corresponds to the accounts of Pedersen (1898-1899: 88), and later Kloekhorst (2008a: 216) and Yakubovich (2008: 195) (see 2.2).

⁵⁸ The *o*-stem genitive **-osio* is often suspected to be a secondary intrusion in nouns and adjectives, motivated by the fact that in the *o*-stems the regular genitive ending **-(V)s* was indistinguishable from the nominative ending. It is also typically thought that the corresponding Hitt. ending *-aš* still reflects the older situation (cf. e.g. Fortson 2010: 127). This may be correct, but unless one assumes that non-Anatolian **-osio* and the Luwic genitive developed independently from the genitival adjective, **-osio* must have been present in Proto-Anatolian in one grammatical category or another, and have been replaced there in Hittite. This category may have been a subset of the *o*-stems, for example in the pronominal system, but it is also in principle not excluded that **-osio* was the general *o*-stem ending after all, with Hittite (re)generalizing the ending *-aš* from the other stems. As Hittite shows, formal identity of the nom. and gen. sg. does not have to be regarded as a problem, whereas the oddity of a unique *o*-stem ending may have been.

⁵⁹ Like the genitival adjective, the genitive is normally inflected in Lycian, with the secondary case forms nom. *-Vh*, acc. *-Vhñ*. For these forms see Adiego 2010. Similarly, in dialectal HLuw. a specific common gender form *-asi* was innovated from *-asa* in analogy to the vocalism of the *a/i*-stem adjectives (see Palmér fhc.).

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