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THE RECONSTRUCTION OF THE PROTO-SEMITIC GENITIVE ENDING AND A SUGGESTION ON ITS ORIGIN

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The Proto-Semitic genitive ending on triptotic nouns is commonly reconstructed as *-*im* (unbound state)/*-*i* (bound state). In Akkadian, however, this case ending is long -*ī*- before pronominal suffixes. Since the length of this vowel is unexplained, I argue that it is original and that the Akkadian bound state ending normalized as -*i* should also be reconstructed as long *-*ī*, explaining its retention in word-final position. This form seems more original than Proto-West-Semitic *-*i*. Hence, the Proto-Semitic bound state genitive ending should also be reconstructed as *-*ī*. Through internal reconstruction supported by the parallel of kinship terms like **ʔab-um* 'father', I arrive at a pre-Proto-Semitic reconstruction of the genitive ending as *-*ī-m* (unbound), *-*ī* (bound). This paper then explores a hypothetical scenario where the genitive ending *-*ī* is derived from the adjectivizing 'nisbe' suffix through reanalysis of adjectival constructions like **bayt-u śarr-ī* 'the/a royal house' as construct chains with meanings like 'the/a king's house'. With the addition of mimation and the resultant vowel shortening, this yielded the Proto-Semitic construction with a genitive, **bayt-u śarr-im*. The genitive case failed to develop with diptotic nouns because they did not take mimation and in the dual and plural because the nisbe adjective was derived from the uninflected (singular) noun stem; hence, these categories all retain the more original contrast between the nominative and an undifferentiated oblique case.

INTRODUCTION

Proto-Semitic can securely be reconstructed with a simple case system,[1] distinguishing three cases: nominative, genitive, and accusative.[2] Based on the usage of these cases in Akkadian, Classical Arabic, Ugaritic, and Geʿez, it is clear that the nominative mainly marked the subject and non-verbal predicate, the genitive marked the *nomen rectum* (the second member of a construct

1 On the eve of Sasha Lubotsky's retirement, I would like to dedicate this paper to the Leiden University Indo-European department. I thank Chams Bernard for the question that sparked this investigation and Marijn van Putten, Xander Vertegaal, Roey Schneider, and several anonymous reviewers for their helpful comments on earlier versions of this paper; all remaining errors are my own.

2 The objections to this reconstruction recently raised by some contributors to Edzard, Sartori & Cassuto 2018 highlight the complicated history of cases in Arabic, but do not ultimately impact our view of Proto-Semitic; see my review of this work (Suchard 2020). This paper will not discuss the locative morphemes *-*u*(*m*) and *-*is*.

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chain/*ʔiḍāfah*) and words governed by a preposition,[3] and the accusative marked verbal objects, together with a number of other uses.

We can reconstruct multiple declension classes for Proto-Semitic, several of which are limited to certain numbers of the noun and adjective (dual, plural) while others were used for both singulars and broken plurals (i.e. plurals with different stems than the associated singulars). Despite the syntactic differentiation of three separate cases, most of these declensions have only two separate case endings, distinguishing the nominative from the genitive/accusative or oblique (see Al-Jallad & van Putten 2017):[4]

Table 1 The Proto-Semitic declension classes (unbound state)

	triptotic declension	diptotic declension	dual	'masculine' plural	'feminine' plural
nominative	*-*um*	*-*u*	*-*āna*	*-*ū*(-*na*)	*-*ātum*
genitive	*-*im*	*-*a*	*-*ayna*	*-*ī*(-*na*)	*-*ātim*
accusative	*-*am*				

As the triptotic ('three-case') declension is more common, having completely replaced the diptotic ('two-case') declension in many languages, it is usually taken as the norm. The question then arises why the other declensions all lack a distinction between the genitive and accusative. Based on the similarity to the relevant cases of the triptotic declension, it is sometimes asserted that the diptotic declension has generalized the accusative or that the plural declensions (and perhaps the dual) have generalized the genitive (e.g. Birkeland 1940: 48–52; Kuryłowicz 1951: 224; Kienast 2001: § 138.1; Hasselbach 2007).

Alternatively, many scholars believe that the diptotic declension preserves an older state of affairs (e.g. Philippi 1871: 181; Diakonoff 1988: 60, 64; Hasselbach 2013: 325–326). The four non-triptotic declensions then continue an original nominative-oblique case system, while the triptotic declension innovated a distinction between genitive and accusative. The genitive case, in particular, shows a striking similarity in form and meaning to a derivational morpheme that we will refer to as the *nisbe suffix*. This suffix, characterized by a high front vowel or palatal glide, occurs in many if not all Semitic languages and derives adjectives from nouns, often indicating ancestry or geographic origin, as in Old Assyrian *aššur-i-um* 'Assyrian', *zalp-āʾi-um* 'from Zalpa' (Kouwenberg 2017: § 7.2.10); Biblical Hebrew *yiśrʔēl-ī* 'Israelite' (Joüon & Muraoka 2009: § 88Mg); Biblical Aramaic *kaśd-āy* 'Chaldaean' (Bauer & Leander 1927: § 51d′′′); Geʿez *mədr-āwī* 'earthly', *bāʕəl-āy* 'rich' (Tropper 2002: § 42.155–156); and Classical Arabic *ʕarab-iyy-* 'Arab(ic)' (Fischer 1972: § 65b). It has frequently been suggested that either the nisbe suffix derives from the genitive ending, or vice versa. Previous proposals, however, remain vague on the exact developments that led to the creation of either morpheme, or rely on unmotivated and unrealistic *ad hoc* sound changes.[5] Moreover, proposals that derive

3 For a recent overview of genitive constructions in Semitic, see Cohen 2019.

4 Suchard & Groen (2021) argue that the 'masculine' and 'feminine' plural declensions go back to a unified pre-Proto-Semitic plural declension of nominative *-*u*-, oblique *-*i*-. The quotation marks around '*masculine*' and '*feminine*' are meant to convey that not all nouns in the 'masculine' declension are syntactically masculine, nor are all those in the 'feminine' declension syntactically feminine.

5 The most explicit account I have found is given by Brockelmann (1908: § 245a), who appeals to an *ad hoc* apocope of the nisbe's case ending together with the loss of the *nomen regens*'s definite article (which he reconstructs for Proto-Semitic): **hā-bayt-ŭ hā-malik-īy-ŭ* 'the royal house' > **bayt-ŭ hā-malik-ĭ* 'the king's house' (transcription adapted from the original). The phonetic rationale behind these deletions is unclear.

the nisbe suffix from the genitive ending leave unexplained why only the triptotic declension distinguishes between the genitive and accusative cases – while it is cross-linguistically normal for less basic categories like the dual and plural to show some case syncretism compared to the singular (see Schneider 2020: 15–22), the diptotic declension is used for singulars as well as broken plurals and is not obviously less basic than the triptotic declension.

In this paper, I will re-examine the reconstruction of the Proto-Semitic genitive ending. Based on evidence from Akkadian, I will argue that while the traditional reconstruction of the unbound state ending as *-*im* is correct, the bound state ending should be reconstructed as *-*ī* instead of traditional *-*i*. For a precursor of Proto-Semitic, the unbound form may also have had a long vowel, *-*ī-m*. This increases the similarity between the genitive ending and the nisbe suffix, which will lead me to propose a very hypothetical yet concrete scenario of how the former may have been created through reanalysis of the latter. Besides explaining the origin of the triptotic genitive ending, the proposed developments will also account for the lack of a formal genitive-accusative distinction in the diptotic, dual, and plural declensions.

THE PROTO-SEMITIC GENITIVE ENDING

The reconstruction of the unbound state of the genitive ending is straightforward. The most relevant attested forms are Akkadian *-im* (von Soden 1995: § 63b); Classical Arabic *-in* (Fischer 1972: § 147); Ugaritic /-*i*/ (Tropper 2012: § 54.111); and Geʿez *-ə*, which was apocopated in the later reading tradition (Tropper 2002: § 42.42).[6] Taking into account the replacement of mimation by nunation in Arabic and the loss of mimation in Ugaritic and Geʿez, these forms all support a Proto-Semitic reconstruction of *-*im*. Unsurprisingly, virtually all scholars accept this reconstruction (e.g. recently Huehnergard 2019: 60; I am unaware of any competing reconstructions in the recent literature).

In the nominative and the accusative, the bound state case ending is simply the unbound state ending minus mimation: *-*um* and *-*am* become *-*u* and *-*a*.[7] This would lead us to expect *-*i* for the genitive. This reconstruction is supported by Classical Arabic *-i* and Ugaritic /-*i*/ as well as Geʿez *-ə-* before pronominal suffixes (the Geʿez unsuffixed bound state ending *-a* does not inflect for case). In Akkadian, however, we find *-ī-* before pronominal suffixes, which is now generally taken to be a long vowel; it is frequently spelled plene, seems to count as a long syllable in poetry, and prevents following light syllables from undergoing syncope (Hecker 2000).[8] This ending is consistently found on nouns that are in the genitive, as in *ina kašād-ī-ki* ‘on your (f.sg.) arrival’; *ana amt-ī-ša* ‘for her maidservant’; and *šar māt-ī-šunu* ‘the king of their (m.) land’ (von Soden 1995: § 65a; examples taken from Huehnergard 2011: 86).

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6 The reconstruction of a vocalic ending in Geʿez is mainly based on metrical texts treating forms like *nəgūś*(*-ə*) ‘king (nom./gen.)’ as trisyllabic; note that the Geʿez script does not distinguish between *C* and *Cə* signs, making forms like <*n*(*ə*)-*gū*-*ś*(*ə*)> ambiguous. Geʿez *ə* is the outcome of a merger between **i* and **u*; the ending *-ə* thus supports the reconstruction of the genitive ending with a short, high vowel, but does not unambiguously point to *-*im*.

7 Cf. Classical Arabic *-u*, *-a* (Fischer 1972: § 149); Ugaritic /-*u*/, /-*a*/ (Tropper 2012: § 55.22); the frequent (but confused) use of the nominative ending *-u* in construct in literary Old Babylonian (von Soden 1995: § 64a); and Geʿez *-ə-*, *-a-* before pronominal suffixes as well as uninflecting *-a* in the bound state before nouns (Tropper 2002: § 42.541).

8 Hecker also adduces the argument by Sommerfeld (1987) that in Old Akkadian, the genitive ending before suffixes is spelled with signs marking syllables with long /ī/ where this is distinguished from short /i/, but as Hasselbach (2005) convincingly shows, Old Akkadian spelling does not use different signs to mark vowel length, only vowel quality.

The genitive ending contrasts with the nominative and accusative forms, which have separate markers, *-ū-* and *-ā-* respectively, in a small number of nouns like *ab-* 'father'; in the remaining majority of nouns, both the nominative and the accusative are marked the same way, either by a short *-a-* or by zero, for example, *ṭupp-a-ša* 'her tablet (nom./acc.)'; *kalab-ša* 'her dog (nom./acc.)' (examples from Huehnergard 2011: 86–87). This shared Akkadian distribution of bound state endings before pronominal suffixes is summarized in Table 2.

Table 2 Akkadian bound state endings before pronominal suffixes

	'(your) father'	'(your) tablet'	'(your) dog'
nominative	*ab-ū-(ka)*	*ṭupp-a-(ka)*	*kalab-(ka)*
accusative	*ab-ā-(ka)*		
genitive	*ab-ī-(ka)*	*ṭupp-ī-(ka)*	*kalb-ī-(ka)*

In Old Akkadian, the inflection of the bound state without pronominal suffixes is similar to that of the suffixed noun: a genitive ending *-i* is contrasted with an endingless nominative-accusative form (Hasselbach 2005: 182, 2013: 17).[9] Later dialects of Akkadian do not distinguish case in the unsuffixed bound state, but many nouns take a bound state ending *-i*. This ending is obligatory for some nouns ending in two consonants (e.g. *libb-i* 'heart of', *umm-i* 'mother of', *qīšt-i* 'gift of') and optional for some monosyllabic nouns (e.g. *šar* ~ *šarr-i* 'king of', *qāt* ~ *qāt-i* 'hand of', *bēl* ~ *bēl-i* 'master of'); other nouns take no ending but may insert an epenthetic vowel to resolve a word-final consonant cluster, as in *kalab* 'dog of' ← *kalb-um* 'dog (nom.)' (von Soden 1995: § 64b–h; examples from Huehnergard 2011: 58–60). Taking Old Babylonian as representative of these later dialects, we may thus contrast the two systems as in Table 3 (Old Akkadian examples from Hasselbach 2005: 182).

Table 3 Old Akkadian and Old Babylonian bound state endings without pronominal suffixes

	OAkk 'life of'	OB 'dog of'	OB 'heart of'	OB 'master of'
nominative	*naḥas*	*kalab*	*libb-i*	*bēl* ~ *bēl-i*
accusative				
genitive	*naḥas-i*			

Huehnergard (2011: 58) cautions that the Old Babylonian bound state ending *-i* is unrelated to the genitive, as it does not synchronically mark case. Diachronically, however, it seems likely that it derives from the bound state genitive ending as attested in Old Akkadian, which was generalized to all syntactic contexts in the nouns which retained it.[10] Nouns that have a zero ending in the bound state conversely generalized the original nominative-accusative form. Both of these processes, which effectively eliminated case marking in the unsuffixed bound state,

9 The nominative ending *-u* is also rarely preserved in the bound form, as it frequently is in literary Old Babylonian. The feminine plural bound state also ends in *-i* in the accusative, reflecting the syncretism between genitive and accusative in this declension. If the suggestion on the origin of the triptotic genitive ending presented below is correct, it is historically distinct from the 'feminine' plural oblique ending; in that case, the *-i* bound state ending attested in Old Akkadian is analogical with the triptotic genitive.

10 Cf. the generalization of the original genitive forms *ʔăḇī* 'father of' and *ʔăḥī* 'brother of' to all positions in Biblical Hebrew as well as the probable generalization of the accusative ending *-a* to non-accusative bound states in Geʿez.

can be understood as resulting from the tension between the construct chain–initial position of the *nomen regens* and the suffixal inflection typical of the older Semitic languages: as the word in the bound state is the head of the construct chain, it should normally be inflected to mark the case of the entire construct chain, but this causes the case-marking morphemes to appear in the middle of the construct chain, an unhappy position for suffixes.[11]

As was noted above, the Akkadian genitive ending before suffixes was a long *-ī-*. Despite its conventional transcription as *-i*, the unsuffixed bound state ending may also historically reflect a long vowel (whether it was still phonetically long in historical Akkadian or not). This is supported by the bound states *ab-i* 'father of' and *aḫ-i* 'brother of' (Huehnergard 2011: 59),[12] which go back to the Proto-Semitic genitive forms **ʔab-ī* and **ʔaḫ-ī* with the lengthened case vowel that is characteristic of these nouns (cf. Wilson-Wright 2016; more on these below). These forms show both that *-i* is the normal Akkadian reflex of **-ī* in this position and that in several words, at least, the genitive bound state ending was generalized to non-genitive positions (note that the *-i* of *ab-i* and *aḫ-i* can hardly be explained as an epenthetic vowel). Kouwenberg (2017: § 5.5.1.1) additionally notes that the bound state ending is occasionally spelled plene in Old Assyrian, although he calls this ending "doubtless[ly] short"; it is unclear to me what this strong conviction is based on, however. Either way, deriving the *-i* ending from historically long **-ī* makes the paradigm more regular, as what was originally the genitive bound state ending can now be reconstructed for Proto-Akkadian as **-ī*(-) in all positions, both word-internally and word-finally.

This reconstruction also explains why *-i* is preserved word-finally, while the nominative and accusative endings **-u* and **-a* were largely lost in the bound state. As [i] is a less sonorous vowel than [a], it tends to be reduced more often and lengthened less frequently.[13] It is therefore unexpected that **-i* would be retained if **-a* was lost. If the unsuffixed (genitive) bound state ending derives not from **-i* but from **-ī*, however, it is clear why it was preserved while **-u* and **-a* were lost: only short vowels were deleted in this position, but long **-ī* survived.

To sum up, it seems likely that the Old Babylonian and Old Assyrian bound state ending *-i* was originally limited to the genitive, as in Old Akkadian. Like the genitive ending before suffixes, it was probably originally long, **-ī*. Hence, the recent precursors of the Akkadian triptotic case endings may be represented as in Table 4.

11 The same tension underlies, for instance, the many cases where various Semitic languages mark the plural on the *nomen rectum* as well as on the *nomen regens*, as in Geʿez *ʔabyāt-a krəstīyān-āt* 'churches' (sg. *bēt-a krəstīyān*), Rabbinic Hebrew *talmīḏ-ē ḥăḵām-īm* 'Torah scholars' (sg. *talmīḏ ḥāḵām*), or on the *nomen rectum* exclusively, as in colloquial Modern Hebrew *orex din-im* 'lawyers' for normative *orx-ei din* (sg. *orex din*). I thank Elon Gilad for providing me with this last example and other Twitter users for confirming it.

12 Note that these forms do not inflect for case in Old Babylonian, unlike when these words are followed by pronominal suffixes. In Old Assyrian, the bound forms are *ab-ū*, *aḫ-ū*, which interchange with *ab-ī*, *aḫ-ī* in the genitive (Kouwenberg 2017: § 5.5.1.8.1).

13 Contrast, for instance, the behaviour of pretonic **a* and **i* in Biblical Hebrew: the former is lengthened in all environments, while the lengthening of the latter is conditioned (Suchard 2019b: 107–115). Similarly, many Arabic dialects retain **a* in open, unstressed syllables while **i* and **u* are elided (Fischer & Jastrow 1980: §§ 9.1.3, 10.1.2.3, 11.1.4.1). Finally, we may compare the apocope of *-ə* (< **-i*, **-u*) vs. retention of *-a* in Geʿez (Tropper 2002: § 42.42).

Table 4 The triptotic case endings in Proto-Akkadian

	nominative	genitive	accusative
unbound	*-*um*	*-*im*	*-*am*
bound	*-*u*	*-*ī*	*-*a*

As we have seen, West Semitic points instead to a genitive bound state ending with a short vowel. As there is no unambiguous West Semitic evidence for a long case vowel in the regular triptotic inflection (thus excluding the nouns like **ʔab-* 'father'), the Proto-West-Semitic situation can be reconstructed as in Table 5.[14]

Table 5 The triptotic case endings in Proto-West-Semitic

	nominative	genitive	accusative
unbound	*-*um*	*-*im*	*-*am*
bound	*-*u*	*-*i*	*-*a*

The Proto-Semitic situation is generally assumed to be the same as that in Proto-West-Semitic (e.g. Kuryłowicz 1951: 222; Moscati 1964: 94; Diakonoff 1988: 61; Lipiński 2001: § 32.16; Kienast 2001: § 135; Haelewyck 2006: § 677; Weninger 2011: 165; Hasselbach 2013: 36; Huehnergard 2019: 60). The length of the Akkadian genitive bound state ending, which is commonly accepted in the form used before pronominal suffixes, would then be secondary. Yet no plausible motivation for secondary lengthening has been identified. If it is due to sound change, we might expect the nominative and accusative endings *-*u* and *-*a* to have undergone the same lengthening. Especially **a*, being the most sonorous vowel, should be at least as susceptible to lengthening as **i* based on crosslinguistic phonetic tendencies (cf. footnote 13 above). Yet as we have seen, the nominative and accusative endings are lost in the unsuffixed bound state, suggesting that they remained short. Before pronominal suffixes, *-*a*- is retained in non-genitive forms that have -*i* word-finally, for example *libb-a-šu* 'his heart (nom./acc.)', but without lengthening. The lack of lengthening is confirmed by the syncope in Old Assyrian forms like **šuqult-a-šina* > *šuqult-a-šna*

14 Various Northwest Semitic languages provide evidence for a Proto-Northwest-Semitic alternation between nominative/accusative *-*ī* and genitive *-*ī-ya* for the first person singular pronominal suffix, corresponding to the Akkadian situation (von Soden 1995: § 42g–h). Ugaritic shows a tendency to spell this suffix as zero (reflecting /-ī/) in the nominative and accusative vs. -*y* /-ǐ-ya/ in the genitive (Tropper 2012: § 41.221.1). Phoenician shows the same spelling alternation and in fact supplies nouns in the genitive with the forms of the pronominal suffixes otherwise used on the plural for other persons too, e.g. third person plural -*nm* (Friedrich & Röllig 1999: §§ 112, 233). Biblical Aramaic, which has levelled the genitive case of most inflecting words (as in the relative pronoun **ð-ū/ī/ā* > *dī*), has stressed -*ī* < *-*ǐ-ya* on all nouns except for 'my father', which is *ʔáḇ-ī* with unstressed -*ī* < *-*ī*; this matches the Aramaic retention of the nominative form of this word before other pronominal suffixes, as in *ʔăḇū-ḵ* 'your (m.sg.) father', *ʔăḇṓ-hī* 'his father' with the *-*ū*- vowel characteristic of the nominative (Bauer & Leander 1927: § 20e,g). And Biblical Hebrew, which consistently levels the old genitive form, similarly has stressed -*ī* reflecting *-*ī-ya* (Suchard 2019b: 200). While these forms support the reconstruction of the genitive case ending proposed in this article, they could plausibly be explained in other ways as well, and the lack of Northwest Semitic evidence for genitive singular *-*ī*- before other suffixes cautions against relying too much on this argument. Similarly, the Biblical Hebrew *ḥireq compaginis*, an archaic and archaizing -*ī* ending occurring on some nouns and adjectives in construct or before preposition phrases (e.g. *rabbā́ṯ-ī ʕām* 'of much people', *rabbā́ṯ-ī ḇaggōyīm śārāṯ-ī bammḏīnōṯ* 'the great one among the nations, the princess among the provinces', all in Lam 1:1), could be interpreted as a remnant of a genitive ending *-*ī*, but a number of other explanations have also been put forward (see the discussion in Suchard 2019b: 198 n. 5).

'their (f.) weight', **ṭupp-a-kunu* > *ṭupp-a-knu* 'your (m.pl.) tablet' (Kouwenberg 2017: § 9.5.3; normalization mine); since syncope does not normally take place after heavy syllables, ***šuqult-ā-šina* and ***ṭupp-ā-kunu* would have remain unchanged (von Soden 1995: § 12). We do find long case vowels before suffixes in the feminine plural and masculine adjectival plural, which are *-āt-ū/ī-* and *-ūt-ū/ī-* before suffixes, respectively; compared to the corresponding unbound state endings *-āt-um/im* and *-ūt-um/im*, these appear lengthened (Huehnergard 2011: 85).[15] But these long vowels are most likely analogical with the substantival masculine plural ending *-ū/ī-* (von Soden 1995: § 65k).[16] Speakers interpreted the long vowels in forms like *kunukk-ū-ša* 'her seals (nom.)', *il-ū-šunu* 'their (m.) gods (nom.)', and *dayyān-ī-kunu* 'your (m.pl.) judges (gen./acc.)' as part of a distinct set of pronominal suffixes to be used on plural nouns. They then attached them wholesale to the plural base of feminine words and masculine adjectives, yielding forms like *epš-ēt-ū-ša* 'her deeds (nom.)', *puḫr-āt-ī-kunu* 'your (m.pl.) assemblies (gen./acc.)', and *mīt-ūt-ī-šunu* 'their (m.) dead (gen./acc.)'.[17] Analogy could hypothetically have lengthened the Akkadian genitive singular bound state ending in the same way, but then there is no reason why the nominative **-u-* should have remained short.

The length of the Akkadian genitive singular bound state ending thus remains unexplained. An alternative explanation would be that it is simply inherited. If we assume that the vowel length not secondary but actually continues a Proto-Semitic form with a long vowel, **-ī(-)*, we must then explain the short **-i(-)* found in West Semitic. Fortunately, this is not difficult. Based on the alternation between **-um* : **-u* in the nominative and **-am* : **-a* in the accusative, analogically shortening the vowel of the bound genitive ending to **-i* based on the unbound ending **-im* would be trivial. The length of the bound genitive singular ending would thus appear to be old, giving us the Proto-Semitic reconstruction presented in Table 6 (identical to the Proto-Akkadian paradigm given in Table 4).

Table 6 The triptotic case endings in Proto-Semitic

	nominative	genitive	accusative
unbound	**-um*	**-im*	**-am*
bound	**-u*	**-ī*	**-a*

PROTO-SEMITIC SHORTENING OF VOWELS IN CLOSED SYLLABLES AND THE GENITIVE ENDING

When reconstructing linguistic stages before Proto-Semitic, we must largely rely on internal reconstruction (see Hock 1991: 532–555). The first step in internal reconstruction is positing that a certain irregularity or allomorphy observed in a language derives from a more regular

15 Huehnergard notes that some Assyriologists believe the vowels in the suffixed forms to be short. The feminine endings are *-ēt-ū/ī-* and *-ēt-um/im* in words that undergo e-colouring.

16 On the origin of the vowel length in these suffixes, see Suchard & Groen (2021).

17 This is paralleled by the very common Biblical Hebrew plural forms like *miṣw-ōṯ-e-ḵā* 'your (m.sg.) commandments', where *-ōṯ-* < **-āt-* is the feminine plural ending, *-ḵā* < **-ka* is the second person masculine singular pronominal suffix, and *-e-* < **-ay-* reflects the masculine bound state ending (Joüon & Muraoka 2009: § 94f); similarly, Geʿez pronominal suffixes on plural nouns contain a linking vowel *-ī-*, originally the 'masculine' plural oblique ending, even though this ending does not occur in other contexts (Tropper 2002: § 42.541). Kogan (2015: 109) accordingly reconstructs the redundant use of 'masculine' suffixes between 'feminine' plural suffixes and possessives for Proto-Semitic.

situation. In the case of our genitive ending, reconstructing the bound state as *-*ī* has disturbed the regularity of the rule that derives the unbound state endings from the bound state endings by adding *-*m*. As no motivation for the lengthening of *-*i* to *-*ī* in this position can be found in Proto-Semitic either, let us assume that the paradigm in Table 6 goes back to a more regular one where in the genitive, too, the unbound state was formed by adding mimation to the bound state, as presented in Table 7.

Table 7 The triptotic case endings in pre-Proto-Semitic

	nominative	genitive	accusative
unbound	*-*u-m*	*-*ī-m*	*-*a-m*
bound	*-*u*	*-*ī*	*-*a*

The difference between the paradigms of Table 7 and Table 6 is that *-*ī-m* has been shortened to *-*im*. *A priori*, it is plausible for a long vowel to be shortened in a closed syllable; cross-linguistically, this is a very common change, and it must also be reconstructed for later precursors of Geʿez (Tropper 2002: § 37.3), Arabic (van Putten 2017a: 62–63), and Hebrew (Suchard 2019b: 139), among other languages. Assuming that this sound change took place in Proto-Semitic thus satisfies the condition that the developments postulated by internal reconstruction be natural. But we do not need to posit such a change for Proto-Semitic merely in order to explain the triptotic genitive ending. Supporting evidence comes from the kinship terms that were briefly mentioned above, 'father' and 'brother', as well as 'husband's father'. Based on their similar inflection in various West Semitic languages and Akkadian, these words can be reconstructed for Proto-Semitic as in Table 8.[18]

Table 8 Proto-Semitic 'father', 'brother', and 'husband's father'

	nominative	genitive	accusative
unbound	*ʔab-um	*ʔab-im	*ʔab-am
	*ʔaḫ-um	*ʔaḫ-im	*ʔaḫ-am
	*ḥam-um	*ḥam-im	*ḥam-am
bound	*ʔab-ū	*ʔab-ī	*ʔab-ā
	*ʔaḫ-ū	*ʔaḫ-ī	*ʔaḫ-ā
	*ḥam-ū	*ḥam-ī	*ḥam-ā

As argued most recently by Wilson-Wright (2016; see also Voigt 2001), the length of the case vowels in the bound state results from compensatory lengthening after the loss of these words' original third radical, **w*.[19] Wilson-Wright states that the compensatory lengthening only took place in open syllables, while **w* was lost without compensatory lengthening in closed syllables:

18 The Proto-Semitic paradigm is preserved mostly unchanged in Classical Arabic unbound state *ʔab-u/i/a-n*, bound *ʔab-ū/ī/ā*, etc. (Fischer 1972: § 150). For the relevant reflexes in other languages, see Wilson-Wright 2016: 24 and Suchard & Groen 2021: 6 n. 8.

19 More accurately, we are probably dealing with assimilation of the **w* to the following vowel, resulting in a long (bimoraic) vowel; see Suchard & Groen (2021: 6 n. 10).

hence, **ʔabw-um* > **ʔab-um*, but **ʔabw-u* > *ʔab-ū*.[20] While this may be so, the phonetic rationale behind this conditioning is unclear: it can hardly be the case that the lengthening was blocked in closed syllables to leave the syllable's weight unchanged, as the sound change in the bound state clearly does change the syllable structure (from **ʔab.wu* or **ʔa.bwu* to **ʔa.bū*, i.e. from CVC.CV or CV.CCV to CV.CVV). Hence, a consistent loss of the glide with compensatory lengthening in every context seems at least as plausible. This unconditioned lengthening may receive confirmation from pre-Proto-Semitic **pw-um* > Proto-Semitic **p-ūm* 'mouth', if the length in Aramaic forms like *pūm-ā* (with the mimation reanalyzed as part of the stem; e.g. Jastrow 1950 *s.v.*) is original—as it would appear to be, since no secondary cause for the vowel length is apparent.[21] If the loss of **w* between a consonant and a vowel caused compensatory lengthening in closed syllables as well, this would initially have yielded the paradigms given in Table 9.

Table 9 Pre-Proto-Semitic 'father', 'brother', and 'husband's father'

	nominative	genitive	accusative
unbound	**ʔab-ū-m*	**ʔab-ī-m*	**ʔab-ā-m*
	**ʔaḫ-ū-m*	**ʔaḫ-ī-m*	**ʔaḫ-ā-m*
	**ḥam-ū-m*	**ḥam-ī-m*	**ḥam-ā-m*
bound	**ʔab-ū*	**ʔab-ī*	**ʔab-ā*
	**ʔaḫ-ū*	**ʔaḫ-ī*	**ʔaḫ-ā*
	**ḥam-ū*	**ḥam-ī*	**ḥam-ā*

Positing a Proto-Semitic sound change that shortened long vowels in closed syllables then turns both **ʔab-ū-m* etc. into **ʔab-um* etc. and the unbound genitive ending of other triptotic nouns, **-ī-m*, into **-im*, bringing us back to the Proto-Semitic paradigms of Tables 6 and 8. That the long vowel was preserved in **pūm* 'mouth' may show that the shortening did not operate in monosyllables, or it may be due to a difference in stress.[22] We can thus reconstruct unbound **-ī-m*/bound **-ī* as an earlier form of the triptotic genitive ending.

THE NISBE SUFFIX AS A POSSIBLE SOURCE OF THE GENITIVE ENDING

The most widespread form of the nisbe suffix is generally reconstructed for Proto-Semitic as **-īy-* (e.g. Brockelmann 1908: § 220a; Moscati 1964: 83; Stempel 1999: 90; Kienast 2001: § 158; Huehnergard 2004: 149; Haelewyck 2006: § 383). In Classical Arabic, *-iyy-* regularly reflects

20 Wilson-Wright (2016: 26) attributes this conditioning to Huehnergard (2006; 2008), but I do not find any statement on a lack of lengthening in closed syllables there, nor in Huehnergard 2019; it may be in Huehnergard 2010, which I have not seen.

21 For the reconstruction of **w* as this word's original second radical, cf. the Geʿez plural *ʔa-faw* with the *ʔa-* prefix common in broken plurals, which was reanalyzed as *ʔaf-aw* and then gave rise to the secondary singular form *ʔaf* based on singular-plural pairs like *ʔab* : *ʔab-aw* 'father(s)'. On the reconstruction of word-initial consonant clusters like **pw-* in Proto-Semitic and pre-Proto-Semitic, see Testen 1985; Blau 2006; Suchard 2017.

22 Biblical Hebrew II-wy G-stem imperatives also have a long vowel (Joüon & Muraoka 2009: § 80c): *qūm* 'stand up (m.sg.)', not expected **qūm* > **qum* > ***qōm* with shortening (and the later development of stressed **u* to *ō*). This might offer further support for the lack of shortening in monosyllables both in Proto-Semitic and in the later shortening sound change affecting a more recent precursor of Hebrew. Alternatively, the form may simply be analogical with the plural, *qūmū*, or the Imperfect, **yaqūmu* > *yāqūm*. Classical Arabic does show shortening in these imperatives e.g., *qum* (Fischer 1972: § 244).

*-*ī̆y*- (which is also often encountered as a transcription of the nisbe suffix), as in the Aramaic loanword **nabī̆y*- > *nabiyy*- 'prophet'. The Biblical Hebrew form -*iyy*- seen before suffixes, as in *mōʔăḇ-iyy-ā* 'Moabite (f.sg.)', is similarly the regular outcome of *-*ī̆y*- before vowels, as is also seen in **naqī̆y-īma* > *nqiyyīm* 'innocent (m.pl.)' (Suchard 2019a: 59); word-finally, *-*ī̆y*- became -*ī*. In Old Babylonian, the nisbe ending contracts with the following case vowel, yielding the singular paradigm of nominative -*ûm*, genitive -*îm*, accusative -*iam* (Huehnergard 2011: 41); uncontracted forms occur in the rare numeral *ištīʾum* 'first' (Huehnergard 2011: 239) and regularly in Old Assyrian forms like *Akkidium* 'Akkadian' (Kouwenberg 2017: § 7.2.10), where a consonantal *y* is probably present before the case ending but not usually written.[23] The Old Assyrian forms are inflected like adjectives such as *rabium* 'big' < **rabiy-um* and unlike nouns that may have ended in *-*ī̆y*-, such as *warīʾum* or *werīʾum* 'copper'.[24] Hence, Kouwenberg interprets the shape of the nisbe suffix in Old Assyrian as -*ī*- or -*iy*-; as far as I am aware, this is also works for Old Babylonian. It does contradict the usual Arabic and Hebrew reflexes of the suffix, although Biblical Hebrew may also attest it in the noun *ʔiššе* 'offering brought by fire' if this is to be reconstructed as **ʔiss-iy*-, with a nisbe suffix with short **i* attached to the reconstructed stem of *ʔēš* 'fire'.[25]

Like other adjectives, those formed with the nisbe suffix were inflected for case in Proto-Semitic. The suffix was thus always followed by a vowel: nominative *-*ī̆y-um*, genitive *-*ī̆y-im*, and accusative *-*ī̆y-am* if we favour the reconstruction based on West Semitic forms like Classical Arabic -*iyy*-, or *-*iy-um*, *-*iy-im*, *-*iy-am* based on the Old Assyrian and possibly Babylonian forms with *-*iy*-. As Kouwenberg's analysis already implies, it is attractive to identify the final **y* as a glide that was automatically inserted between **ī* and another vowel. The actual form of the nisbe suffix would then be *-*ī*-: the extended West Semitic form *-*ī-y*- reflects the insertion of a glide after the suffix, while the Old Assyrian form *-*iy*- reflects the breaking of the long vowel into a short vowel and a semivowel. It seems unlikely that the case endings were only added to the nisbe separately in Proto-West-Semitic and Proto-Akkadian; perhaps both forms of the suffix coexisted in Proto-Semitic, or perhaps they reflect different parts of the paradigm, with one being generalized in Proto-West-Semitic (excluding possible holdovers like Hebrew *ʔiššе*) and the other in Proto-Akkadian.[26] One may also wonder whether the glideless Biblical Hebrew plural forms like *yhūḏ-īm* 'Judahites' (sg. *yhūḏ-ī*), usually taken to reflect an ad hoc contraction of *-*ī̆y-īm* to -*īm*, might not directly preserve the older form of the suffix in a context where no glide insertion was called for: *-*ī-īma* > -*īm* (although Biblical Hebrew forms where the glide is present, such as *ʕiḇr-iyy-īm* 'Hebrews', also occur).

As will be clear to the reader, the hypothesis that *-*ī*- is the original shape of the nisbe suffix makes it formally identical to the triptotic genitive case ending *-*ī*- reconstructed above. This sits well with the frequent assertion that these two morphemes are historically related. We will

23 *ištīʾum* is Huehnergard's normalization; based on the spelling given by CAD, *iš-ti*-IA-*um*, the vowel of the nisbe suffix may also be short, as in *ištiyum*.

24 As far as I can tell, the difference in inflection is clearest in the construct state before suffixes: contrast *ra-dí-šu* 'his escort' (from *rādium*) with the 'broken' spelling in URUDU-*ri-i-šu* 'his copper' (from *warīʾum*).

25 On -*e* as the Biblical Hebrew outcome of *-*iy*-, see Suchard 2019b: 132–139. Brockelmann (1908: § 42bb) derives the Classical Arabic forms like *yamān-iy*- (unbound nom.sg. *yamānin* with contraction of *-*iyun* to -*in*) from forms like **yamān-ī̆y*- through dissimilatory shortening after the preceding long vowel.

26 This distribution may be seen in light of the more general preference for adjective stems containing a long vowel in their final syllable in West Semitic versus those with a short vowel in the final syllable in Akkadian; see Huehnergard 2006: 10, but also the cautioning remarks by Kogan (2015: 58–59).

now consider how both morphemes, as well as the alternative nisbe suffixes, might have arisen from one and the same form in a way that accounts for their attested distribution and usage.

If the original shape of the nisbe suffix was *-*ī*- and the glide **y* was added to facilitate the combination with the following case endings, this implies that at one point, *-*ī* occurred word-finally, without case endings attached. It is impossible to say for certain whether this reconstruction should be placed in a precursor of Proto-Semitic that did not yet have case endings or whether adjectives formed with the nisbe suffix (or perhaps all adjectives) were uninflected for case at a time when other words were. In the speculative account that follows, I will add case endings to other words given in the reconstructed examples, but not to the oldest form of the nisbe; I ask the reader to bear in mind that this may be anachronistic.

The second difference in nominal morphology that we need to posit for this hypothetical ancestor of Proto-Semitic is the absence or optional nature of mimation. The secondary nature of mimation has long been recognized, although scholars disagree about its original function. As it occurs on various parts of the noun phrase in Proto-Semitic, it seems plausible that it originally functioned as an article, whether it marked definiteness (as I find more likely based on the parallel development of the definite article in Eastern Aramaic; see Tagliavini 1929: 242; Gzella 2015: 337–338) or indefiniteness (thus, e.g., Brockelmann 1908: § 246Ca; Kienast 2001: § 139.5, following Osiander 1866: 232; Barth 1913: 130; Tagliavini 1929; Diakonoff 1988: 66–67; contra Gelb 1930; Lipiński 2001: § 33.16; Stempel 1999: 92). Hence, the same word could probably occur with or without mimation at a certain point, the unmimated form being the older of the two.

Studies on grammaticalization in languages of the world have revealed that it is more common for words and morphemes to become more grammatical over time than vice versa (see Rubin 2005: 106; Norde 2011). Like many other scholars (e.g. Brockelmann 1908: § 245a; Kienast 2001: §§ 135.3, 158.7), I will therefore assume that the genitive ending, a purely syntactically conditioned inflectional marker, developed out of the derivational nisbe suffix.[27] In contexts where mimation was not used, then, the original construction would have been that given in (1).

(1) **bayt-u śarr-ī*

'the/a royal house'

Here, the nisbe suffix *-*ī* has been attached to the noun stem **śarr*- 'king' to form an adjective meaning 'belonging to the king, royal'.

I assume that the construct chain, which also occurs in Ancient Egyptian and may thus well be of Proto-Afroasiatic age (see Diakonoff 1988: 63), already existed at this time, as illustrated in (2):

(2) **bayt-u śarr-a*

'the/a king's house'

As these examples are set in a period before the grammaticalization of the genitive case, the *nomen rectum* occurs in the oblique case here, marked by the non-nominative case ending *-*a*.

27 A parallel is possibly found in the Italo-Celtic genitive ending -*ī* (as in Latin *domin-ī* 'the/a lord's') if this derives from an adjectival ending as stated by Beekes (2011: 212); the formal similarity to the nisbe ending must be coincidental, however.

Given the semantic closeness between ‘the/a royal house’ and ‘the/a king’s house’ and based on construct chains like (2), (1) could be reanalyzed as a construct chain:[28]

(1′) **bayt-u śarr-ī*

‘the/a royal house’ or ‘the/a king’s house’

In many regards, construct chains are treated as single words for syntactic purposes (cf. Lipiński 2001: § 51.24). Accordingly, in contexts where mimation was added, it was added to the end of the construct chain as a whole. For speakers who interpreted (1′) as a construct chain, this would yield:

(3) **bayt-u śarr-ī-m*

‘the/a king’s house’

Applying the sound change shortening long vowels in closed syllables then gives us the Proto-Semitic situation, with a bound state followed by a triptotic genitive noun:

(4) **bayt-u śarr-im*

‘the/a king’s house’

It seems likely that the formal similarity of this new ending **-im* to the mimated nominative **-um* and original oblique **-am* facilitated its identification as a productive, case-inflected form of the noun, obscuring its adjectival origin. This reanalysis as a case marker would have gone hand in hand with the extension of the unmarked and hence originally masculine singular form **-im* < **-ī* to contexts where the adjective would have displayed feminine or plural agreement: where we might originally have expected a different form in hypothetical pre-Proto-Semitic phrases like **bint-u śarr-ī-t* ‘the/a royal daughter’ or **ban-ū śarr-ǐ̄-y-ū* ‘(the) royal children’ – the reconstructions are obviously highly questionable – this variation is no longer seen in Proto-Semitic **bint-u śarr-im* ‘the/a king’s daughter’, **ban-ū śarr-im* ‘the/a king’s children’. This kind of generalization of one part of the paradigm, which Rubin (2005: 5) refers to as decategorialization, is very common in instances of grammaticalization like the one proposed here.

Over time, the newly grammaticalized genitive ending came to replace the more general oblique ending in its function of marking the *nomen rectum*, relegating the latter to the functions known to us as those of the Proto-Semitic accusative. Based on the genitive’s use after prepositions that are historically bound states of nouns, such as **bayn-a* ‘between’ < *‘in the intermediate space of’ and **taḥt-a* ‘under’ < *‘at the bottom of’, it then spread to words governed by prepositions that do not transparently derive from bound states, like **bi-* ‘in’. Since the nisbe adjective is derivational and based on the uninflected stem of the noun, no separate forms were created based on the noun’s dual or plural forms. Accordingly, no separate genitive case was

28 Such a reanalysis does not depend on any pre-existing structural similarity between (1) and (2); it merely involves a new interpretation of (1)’s structure. See Hock 1991: 177; Rubin 2005: 3.

grammaticalized for the dual and plural paradigms, and the old distinction of nominative vs. oblique was maintained here.[29]

By other speakers, or in other contexts, (1) would still have been analysed as a noun followed by an attributive adjective.[30] At some point in the development leading up to Proto-Semitic, the adjective in this construction came to be inflected for case, agreeing with its head, while both words received mimation in the appropriate context. Providing for the two different strategies of glide insertion and vowel breaking, this gives us:

(5) **bayt-um śarr-ī̆-y-um*

'the/a royal house'

The addition of mimation thus split the nisbe ending **-ī* into the triptotic genitive ending **-im*, which replaced the old oblique ending in some contexts, and the Proto-Semitic nisbe ending **-īy-*/*-iy-*. In some nouns, however, this split failed to take place. An example of such a noun, which is reconstructible for Proto-Semitic and attested as a name in several Semitic languages (Dirbas 2019: 215), is given in (6):

(6) **bayt-u liʔ-at-a*

'Leah's house'

Taking (6) the steps leading to the fully inflected Proto-Semitic nisbe results in the following:

(7) **bayt-u liʔ-ī*

'the/a Leahite house', i.e. 'the/a house belonging to (the descendants of) Leah'

(8) **bayt-um liʔ-ī̆-y-um*

'the/a Leahite house'

Note that the feminine suffix **-at-* is lost before the nisbe suffix, a morphological process that is broadly attested, as in Old Babylonian *šubar-t-um → šubar-ûm* 'Subarian' (von Soden 1995: § 56q), Biblical Hebrew *yhūḏ-ā → yhūḏ-ī* 'Judahite' (Joüon & Muraoka 2009: § 88Mg), and Classical Arabic *makk-at- → makk-iyy-* 'Meccan' (Brockelmann 1908: § 220dα).[31]

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29 Note the difference between the kind of number and gender agreement we are dealing with in this paragraph and the last. In the adjectival construction, 'the/a royal house/daughter/children', the adjective 'royal' would have agreed in number and gender with the nominal head, 'house (m.sg.)'/'daughter (f.sg.)'/'children (m.pl.)'. After the reanalysis of 'royal' as 'king's', this agreement broke down and the original masculine singular form was used unvaryingly in 'the/a king's house/daughter/children', etc. (decategorialization). Conversely, possessive expressions with dual or plural possessors like '(the) kings' (*sic*) houses' could not as easily be confused with expressions like '(the) royal houses', as the adjective 'royal' was only derived from the singular stem 'king', not the plural stem 'kings'. Hence, the oblique case of the noun was never replaced by the nisbe adjective in such constructions.

30 In historical Semitic, the nisbe suffix mainly occurs on adjectives denoting geographic or ethnic origin, as well as ordinal numerals in some languages. This may be due to the abstract nature of the words they are derived from, which would make reinterpretation as the *nomen regens* of a construct chain less likely. Concrete entities like 'the king' or 'the house' would more frequently have played an independent role in any given discourse than abstract ones like 'Amurru' or 'one'. Hence, constructions featuring words like **śarr-ī* 'royal' or **bayt-ī* 'domestic' would be more susceptible to reanalysis as construct chains like 'the/a king's …', 'the/a house's …' than those featuring words like **ʔamurr-ī* 'Amorite' or **ʕast-ī* 'first'. Consequently, it was predominantly the latter group that survived as nisbe adjectives.

31 The nisbe forms which preserve the feminine suffix, like Biblical Hebrew *naʕăm-ā → naʕăm-āṯ-ī*, are analogical.

Considering the occurrence of this process in far-flung branches of Semitic and the lack of any clear motivation that would account for parallel innovation, it should be reconstructed for Proto-Semitic and is therefore reflected in the examples given here. As **liʔ-ī*, etc. are adjectives, they agree in gender with their head (masculine **bayt-u(m)* in these examples), not with the noun they are derived from (feminine **liʔ-at-u*); hence the absence of a feminine agreement marker **-(a)t* at the end of the adjective.

Importantly, some Proto-Semitic nominals never took mimation, for semantic and/or syntactic reasons that are still poorly understood. As nisbe adjectives are not included in this group, the adjective is shown to incorporate mimation in (8). The feminine name **liʔ-at-*, however, was chosen here as an example of these unmimated nouns (Arabic: *mamnūʕ min al-ṣarf*). If a speaker were to reanalyse (7) as 'Leah's house' parallel to the reanalysis of (1) as 'the/a king's house', mimation would thus still not be added, since **liʔ-ī* would be interpreted as part of the (mimationless!) paradigm of **liʔ-at-*.[32] Without mimation, the conditioning would be lacking for the old nisbe suffix **-ī-m* to be shortened into the new genitive ending **-im*, formally so similar to the other mimated case endings. Instead, these unmimated nouns retained their old inflection markers: nominative **-u* and oblique **-a*. With the spread of mimation and the new genitive case to many other words, this class of words became marginalized and isolated; while faithfully preserving the old situation, they had now become an exceptional category, known to us as the diptotic declension. As most other singulars and broken plurals had become triptotic, many languages extended the triptotic declension to these few remnants of the original nominal inflection as well, abandoning diptotic inflection altogether.

CONCLUSION

In summary, I have argued that the long *-ī-* vowel of the Akkadian genitive ending before pronominal suffixes originally occurred in other parts of the paradigm as well. Reconstructing the (genitive) bound state ending *-i* as long **-ī* as well makes the paradigm more regular and provides a phonetically plausible reason why this ending was preserved word-finally while the nominative and accusative endings, **-u* and **-a*, were lost. Comparing this Proto-Akkadian genitive bound state ending **-ī* to its Proto-West-Semitic counterpart **-i*, we find that the latter can easily have been analogically shortened, while nothing accounts for the length of the former; **-ī* should thus also be reconstructed for Proto-Semitic. Based on the indications for shortening of long vowels in closed, word-final syllables in Proto-Semitic, we can go a step further and reconstruct the unbound genitive ending as **-ī-m* for a recent ancestor of Proto-Semitic, restoring the regular relationship between the bound and unbound forms of the triptotic case endings.

Interpreting the nisbe suffix's **-y-* as a glide that was automatically inserted to break up the hiatus between **-ī* and the following case vowels, we have tentatively identified **-ī* as the oldest form of the nisbe suffix as well. The homonymy with the reconstructed triptotic genitive ending provides us with a concrete (albeit speculative) scenario elaborating on the long-suspected relationship between these morphemes. In this scenario, **-ī* was originally attached to the noun stem to form a derived adjective. With glide insertion or breaking when case endings were added to this

32 The loss of the feminine suffix would have made it harder for speakers to associate the nisbe form with the paradigm of the unsuffixed noun. This may underlie the diptosy of common nouns containing the feminine suffix reconstructed for Arabic by van Putten (2017b), as suggested to me by the author.

nisbe adjective at a later point in time, this yielded the most common nisbe suffix, *-*īy*-/*-*iy*-. In other circumstances, the nisbe adjective was reinterpreted as an inflected form of the noun from which it was derived, marking the *nomen rectum* of a construct chain. If the noun took mimation, this was added to the nisbe suffix, yielding *-*ī-m* and later becoming the unbound triptotic genitive state ending *-*im* with the same vowel shortening reconstructed on internal grounds for the words like **ʔab-ū-m* > **ʔab-um* 'father (nom.)'. In longer construct chains, only the last word took mimation: thus, long *-*ī* was preserved in the bound genitive in cases like **bayt-u ʔil-ī śarr-ī* 'the/a royal divine house' > **bayt-u ʔil-ī śarr-im* 'the/a king's god's house'. Nouns that would later come to form the diptotic declension did not take mimation, which kept the nisbe suffix from being shortened and fully grammaticalizing into the genitive case. Finally, nisbe adjectives were not derived from inflected, dual and plural forms of the noun.[33] Hence, no separate genitive case evolved for any of these categories in the unbound state.

In Akkadian, the Proto-Semitic inflection of the genitive was preserved: unbound *-*im*, bound *-*ī*. In West Semitic, the model of unbound nominative *-*um* : bound nominative *-*u* and unbound accusative *-*am* : bound accusative *-*a* resulted in analogical shortening of the bound genitive ending's vowel: unbound genitive *-*im* : bound genitive *-*i*. It may have been at this point that this new bound state genitive ending was analogically extended to the diptotic declension, as reflected in Classical Arabic; this would later form the basis for the triptotic inflection of otherwise diptotic nouns following the definite article *al-* (Fischer 1972: § 152). Ultimately, the defining feature of the diptotic declension would thus seem to be its lack of mimation (or nunation in Arabic); if the account presented here has some historical accuracy, it was the absence of mimation that led these words to preserve the two-case inflection which has given them their name in the Western grammatical tradition.

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33 Forms like Biblical Hebrew *pnīm-ī* 'inner', derived from the *plurale tantum* noun *pān-īm* 'face', are clearly exceptional.

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