THE ORIGIN OF *S^3 IN THE ḤAḌRAMITIC AND MODERN SOUTH ARABIAN THIRD PERSON FEMININE PERSONAL PRONOUNS[1]

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Abstract

The Modern South Arabian third person feminine pronouns show an unexpected reflex *s* for Proto-Semitic *s^1. This *s* is argued to be the regular outcome of *s^3 = *^{t}s, which replaced *s^1 = *s in these forms due to phonological reanalysis in constructions like *malkat sī' 'she is a queen' → *malkat ^{t}sī'. In Ḥaḍramitic, these feminine pronouns also reflect *s^3, but their relation to the Modern South Arabian forms remains unclear.

The Semitic third person personal pronouns, also known as the demonstrative pronouns of far deixis, are of particular interest for the reconstruction of Proto-Semitic due to the variable reflex of their initial consonant. Whereas most West Semitic languages have /h/ (e.g. Ugaritic <hw> 'he' and <hy> 'she', Biblical Hebrew *hû'* 'he' and *hî'* 'she', Classical Arabic *huwa* 'he' and *hiya* 'she', Sabaic <h[w]'> 'he' and <h[y]'> 'she'), Akkadian and several Ancient South Arabian languages have a sibilant (Akkadian /šū/ 'he' and /šī/ 'she', Minaic <s^1> '[s]he', and Qatabanian <s^1[w]'> 'he' and *<s^1[y]'> 'she'[2]). This variation is due to the sound change of Proto-Semitic *s^1 > Proto-West-Semitic *h, as reflected by Akkadian /šumma/ 'if' ~ Proto-West-Semitic *him(ma)[3] 'idem', both < s^{1}im(ma) (Kogan 2011: 107), whatever the exact conditioning of this sound change may have been (for a plausible suggestion, see Al-Jallad 2015).

In Modern South Arabian, however, the initial consonant of the feminine forms unexpectedly differs from that in the masculine: thus Mehri has *hē* 'he' but *sē* 'she',[4] Jibbāli *šɛ* 'he' but *sɛ* 'she' (Rubin 2014).[5] The same consonants are found in the plural and the suffixed forms.[6] Similarly, Ḥaḍramitic (normally grouped with Ancient South Arabian) has <s^{1}w> 'he', but <s^{3}y> 'she', as well as <-s^3> and <-ṯ> (alternate spellings for the

[1] I sincerely thank Professors Holger Gzella, John Huehnergard, Alexander Lubotsky and Dr Ahmad Al-Jallad for their comments on earlier drafts of this paper. In this paper, * indicates a reconstructed form, ** indicates an expected but non-existent form, > and < stand for '(which) becomes' and '(which) comes from', respectively, and → stands for '(which) is replaced by', where this replacement is not the result of regular sound change.

[2] Not attested, but other components of the feminine paradigm are (Stein 2011).

[3] Cf. Ugaritic <hm>, Ge'ez *'əmma*, Classical Arabic *'in*.

[4] Thus in Rubin (2014); Watson (2012: 66) gives these pronouns as *hēh* and *sēh*, respectively.

[5] The other Modern South Arabian languages and dialects pattern like Mehri in this regard and will therefore not be discussed.

[6] Except for the Jibbāli masculine plural, *-hum*, which shows *h* for expected **š*.

same sound, the result of the merger of *s³ and *ṯ in this language) in the feminine suffixes (Stein 2011). This is unlike the situation found elsewhere in two respects. First of all, all other languages have the same consonant in masculine and feminine forms, reflecting either *s¹ or *h (from earlier *s¹), whereas Modern South Arabian and Ḥaḍramitic show two different reflexes, distributed by gender. Second, the consonants found in the feminine forms — Modern South Arabian *s*, Ḥaḍramitic <s³> ~ <ṯ> — correspond to Proto-Semitic *s³, cf. Mehri *ksū* 'to clothe' ~ Biblical Hebrew *ksy* 'to cover', Jibbāli *'ésɔ́r* 'to bind' ~ Biblical Hebrew *'sr* 'idem';[7] for Ḥaḍramitic, note that <s³> ~ <ṯ> corresponds to Sabaic <s³>, as in <ms³nd> and <mṯnd> 'inscription' ~ Sabaic <ms³nd> 'idem', and therefore, like Sabaic <s³>, to Proto-Semitic *s³, cf. Sabaic <'s³r> 'to bind' ~ Biblical Hebrew *'sr* 'idem' (Kogan 2011). This consonant, *s³, does not occur in this paradigm in the rest of Semitic. Nor can the Modern South Arabian *s* be the irregular outcome of *s¹, which normally shifts to *h* in Mehri and *š* in Jibbāli, preserved in this case to mark the gender distinction, as this explanation relies on the highly questionable concept of morphological conditioning of sound change.[8] The same goes for Ḥaḍramitic <s³> ~ <ṯ>. How, then, should we understand this anomalous appearance of *s³ in the third person feminine personal pronoun?

Since a phonological explanation for this phenomenon will presently be proposed, some phonetic consideration is appropriate. As was noted, the relevant sounds are *h* (masculine) and *s* (feminine) in Mehri, and *š* (masculine) and *s* (feminine) in Jibbāli. In Ḥaḍramitic, for which no direct phonetic evidence is available, the difference is between the grapheme <s¹> (masculine) on the one hand and both <s³> and <ṯ> (feminine) on the other. As is argued by Voigt (1998: 175), it is most plausible that the merger of *s³ and *ṯ in Ḥaḍramitic resulted in a voiceless alveolar sibilant [s]. Since this sound was phonologically distinct from *s¹ and *s², these may have been realized as a voiceless postalveolar sibilant [ʃ] (Semiticist transcription: *š*) and a voiceless alveolar lateral fricative [ɬ] (Semiticist transcription: *ś*), respectively, mirroring the system attested in Jibbāli and reconstructed for earlier stages of Hebrew and Aramaic.

[7] There are also cases of Modern South Arabian *s* corresponding to Proto-Semitic *s¹, but these are probably due to contact, *pace* Kogan 2011: 106; the most convincing, '[e]specially disturbing' examples of cases that are not likely to be contact-induced are precisely the third person feminine pronouns, and without those, contact seems the most plausible source of these irregular correspondences.

[8] Voigt's explanation (1987: 56–7) amounts to a conditioned preservation of *s¹ > *s before i-vowels while *s¹ > *š elsewhere in Hadramitic and Proto-Modern South Arabian, a conditioning which is contradicted by his own observation that *s¹ is reflected by Mehri *š* (and Jibbali *s̃*) before i-vowels (p. 55).

Different phonetic values, however, must be reconstructed for these sibilants in Proto-Semitic. According to the affricate hypothesis[9], the sibilants should be reconstructed as shown in Table 1.

Table 1. Proto-Semitic *$s^{1–3}$.

	IPA value	Semiticist transcription
*s^1	[s]	*s*
*s^2	[ɬ]	*ś*
*s^3	[t͡s]	*^{t}s*

If we agree with Rubin (2014), in a note on p. 127, that '[i]t is possible that in Ḥaḍramitic and/or in MSA [Modern South Arabian] the initial consonant of the 3fs pronoun was replaced (i.e. *s → *^{t}s-)', then a phonological explanation suggests itself. In non-verbal sentences with predicate–subject word order — a construction which is common to all Semitic languages and should probably be reconstructed for Proto-Semitic (Brockelmann 1913: 93–4) — the feminine pronouns would frequently be preceded by words ending in the feminine suffix *-(a)t-. The Modern South Arabian languages have lost case endings on nouns and adjectives, and many feminine words consequently end in *-t*. Assuming this was already the case in the ancestor of Modern South Arabian in which this change took place, these non-verbal sentences would therefore often contain a sequence of *-t s- if the subject was feminine, as in *malkat sī'[10] 'she is a queen'. Due to production and perception errors, listeners could have misinterpreted the [ts] sequence they were hearing as representing /-t ^{t}s-/, not the intended /-t s-/; that is to say that the contrast between /s/ and /^{t}s/ was neutralized after /t/, as both /-t ^{t}s-/ and /-t s-/ would have been realized as something ranging from [ts] to [tts] in speech, depending on the speaker's precise timing in the release of the plosive. This led listeners to reanalyse *malkat sī' as *malkat ^{t}sī', etc.

The phonetics of this development are paralleled in Akkadian. There, we find abnormal reflexes of the third person possessive suffixes, normally *-s^1u (masculine singular), *-s^1a (feminine singular), *-s^1unu (masculine plural) and *-s^1ina (feminine plural), after dental plosives. As Faber (1985: 103) puts it:

> In Old Akkadian, the suffixes would, in the ordinary case of events, have been written with the S series, and they are in fact so written when preceded by a sibilant (for example, *e-re-SU-nu* 'their tilling' [phonologically /erēs-sunu/, BDS] [<*erēšum*, 'to till']). However, the combinations of dental

[9] See Kogan 2011: 61–71 for a convincing overview of all the evidence for this reconstruction.

[10] As *malkat < *malkatu (< *malkatum) presupposes the loss of word-final short vowels, Proto-Semitic *sī'a would have shifted to *sī' in this stage of the language.

> stop + -S_1 are written with the Z series (as in *qa-ZU* 'his hand,' [phonologically /qāt-su/], *i-ZU* 'his arm' [phonologically /id-su/]).

This Z series of cuneiform signs was also used to spell the reflexes of Proto-Semitic *^{t}s, *^{d}z, and *^{t}ṣ, which were still affricates in Old Akkadian, so it seems that these clusters of dental plosives and *s^{1} were interpreted as affricates, for spelling purposes at least. Evidence from Old Babylonian makes the Akkadian development even more similar to that in Pre-Modern South Arabian. In the data examined by Streck (2006), excepting that from the Codex Hammurapi, the outcome of stem-final dental stops followed by the *s^{1} of the suffix is frequently spelled with two Z signs, i.e. as a long consonant, as in *qa-qa-AZ-ZU-* 'his head', phonologically /qaqqad-su/ (p. 230). Streck sees this as an argument against the realization of *s^{1} (/*š*/ in his article and the following quote) as [s] (p. 242), citing Buccellati's rhetorical question (1997: 29):

> if, e.g. *māt+šu* 'his land' is interpreted as *māt+su*, the resulting phonetic realization would indeed be /mācu/ [*c* representing an affricate, ^{t}*s* in the present paper]. But all is not as simple as it seems at first. For instance, the affricate realization /mācu/ yields a short consonant, whereas graphemic considerations suggest that the consonant in question was long; how then would we explain the realization /māccu/ from /mat+su/ [*sic*], since [ts] is /c/ and not /cc/?

Comparing the Akkadian situation to the proposed solution for Modern South Arabian, we may answer that these spellings show that *t and *s^{1} did not simply merge into a single affricate *^{t}s, which should indeed have been spelled with only one Z sign, but resulted in forms like [māt(t)su], interpreted as /mā^{t}s^{t}su/ with a geminate affricate and spelled accordingly. Phonetically, this is completely parallel to the suggested development of Pre-Modern South Arabian *malkat sī', realized as [malkat(t)sī'], although the phonological reinterpretation is different: [māt(t)su] was analysed as /mā^{t}s^{t}su/ in Akkadian, but [malkat(t)sī'] was analysed as /malkat ^{t}sī'/ in Pre-Modern South Arabian, not as /malka^{t}s ^{t}sī'/. Perhaps this difference in phonemization was caused by the word boundary, present in Pre-Modern South Arabian, but absent in Akkadian.

The development in Modern South Arabian can, then, be understood similarly. One might expect the feminine ending *-t to be lost, as it coalesced with the following *s- to form a new affricate *^{t}s-, but this is not necessary. The proposed course of events may be compared to the development of the second person singular verbal ending in many Germanic languages and dialects. In Old High German, second person singular verbs occurred with both the original, inherited ending, *-s*, and an innovative ending, *-st*. This second form originated out of a reanalysed syntagm of a verb followed by the second person singular pronoun *thu*: **gilaubis thu* 'do you believe?', frequently pronounced and written like *gilaubistu*, was reinterpreted as *gilaubist thu* (Braune and Reiffenstein

2004: 261). This new *-st* ending then also spread to situations in which the pronoun did not follow the verb, as in Modern High German *du glaubst* 'you believe'; note that the *t* did not simply move from one morpheme to another, which should have resulted in Old High German ***gilaubist u* and Modern High German ***u glaubst*. In the same way, the newly created form in the earlier stage of Modern South Arabian, *^{t}sī', could be extended to positions without a preceding predicate in *-t, while this feminine suffix was still preserved on the noun or adjective, resulting in forms like *^{t}sī' malkat. As masculine nouns are generally not marked with *-t in Semitic, the masculine forms of the pronoun remained unaffected. The regular changes of *s (= *s^{1}) > Mehri *h*, Jibbāli *š* and *^{t}s (= *s^{3}) > Mehri and Jibbāli *s* then result in the attested forms. An interesting parallel case of *ts → *^{t}s > *s* is found in the Modern South Arabian outcome of the numeral 'nine', Mehri *sāt* / *sɛ*, Jibbāli *sa*ʿ*áyt* / *sɔ*ʿ < Proto-Semitic *tisʿ(at)um, the initial cluster of *ts having developed from the loss of *i in this position (Testen 1998).

While the Modern South Arabian forms may be explained by this account, applying it to Ḥaḍramitic is problematic. The solution advanced above hinges on the contiguity of word-final *-t in the predicate noun or adjective and word-initial *s- in the pronoun. Ancient South Arabian, conversely, preserves mimation, so a predicate-first non-verbal sentence like 'she is a queen' would be something like *malkatum sī'(a). As the other Ancient South Arabian languages have <h> or <s^{1}> in both the masculine and the feminine forms of the pronoun, though, the Ḥaḍramitic forms with <s^{3}> ~ <ṯ> might not be an inherited development. Considering the geographical proximity of Ḥaḍramitic to the area where Modern South Arabian is spoken today, the feminine forms with *s^{3} may well have been borrowed from an ancestor of Modern South Arabian. As very little is actually known about Ḥaḍramitic, the most poorly attested Ancient South Arabian language (Stein 2011: 1046), there is also another intriguing possibility, which cannot as of yet be discounted: could Ḥaḍramitic actually be more closely related to Modern South Arabian than to Sabaic, Minaic and Qatabanian, perhaps only having acquired mimation through contact with these latter languages? There is no evidence that Ḥaḍramitic had replaced the Proto-Semitic imperfect, *yVqaṭṭVl, with the new, Central Semitic form, *yVqṭVlu (Nebes 1994: 78), which is the most important isogloss separating Ancient South Arabian from Modern South Arabian. Nor is there any evidence bearing on whether Ḥaḍramitic shares uniquely Modern South Arabian features like the innovative first person pronouns (Mehri *hō* 'I' and *nḥā* 'we', Jibbāli *he* 'I' and *nḥa*(*n*) 'we'; Rubin 2014: 127) or the numeral 'one' (Mehri *ṭād* / *ṭayt*, Jibbāli *ṭad* / *ṭit*; Rubin 2014: 128). Additionally, we have seen that Modern South Arabian and Ḥaḍramitic share a feature that is not found anywhere else in Semitic, viz. the presence of *s^{3} in the third person feminine pronominal forms, and another peculiarity of Modern South Arabian, the preposition *h*- 'to, for' (Simeone-

Senelle 2011: 1100), is only attested as such in Ḥaḍramitic (Stein 2011: 1062).[11] A close genetic relationship between Ḥaḍramitic and Modern South Arabian based on these shared features has also been proposed by Voigt (1987: 57) and Huehnergard (1992: 158). Given the current state of knowledge of Ḥaḍramitic, however, any speculation about the relationship between this language and its neighbours must remain just that.

In summary, the *s* found in Modern South Arabian third person feminine pronouns should not be seen as a morphologically conditioned, irregular outcome of *s^1, but as the phonetically regular outcome of *s^3. It is known from other evidence that this *s^3 was originally realized as *^{t}s. With this in mind, the shift of *s^1 (= *s) → *s^3 (= *^{t}s) in the feminine pronouns can be understood as the result of the neutralization of the distinction between /s/ and /^{t}s/ following the word-final /t/ of the feminine suffix on predicate nouns or adjectives in predicate-first non-verbal sentences. Phonologically, this development is paralleled in Akkadian and by another case in Modern South Arabian, and a syntactically similar example from outside of Semitic is found, for instance, in Old High German. Due to the scarcity of Ḥaḍramitic data, it cannot be determined whether this language shared in the development or whether the presence of *s^3 in its feminine pronouns is due to contact with an ancestor of the Modern South Arabian languages.

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[11] Huehnergard (2006: 16), on the other hand, compares *h-* to Akkadian /ana/ 'to, for', deriving both from *ha-(nă). If this is correct, the Modern South Arabian and Hadramitic forms could be independent retentions.

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