### An unexpected Semitic templatic morphology: the Mehri case (Modern South Arabic, South Semitic)

**1**. The Mehri (Modern South Arabic, South Semitic) verb system displays a set of peculiarities that sets it apart in the Semitic family (1b, c, d, g, h, i). Our aim is to show that all these peculiarities derive from the following two properties of the Mehri grammar:

(i) a verb template that differs from the one established for other Semitic languages (e.g. (Guerssel and Lowenstamm 1990)). More specifically, we will argue that the Mehri verb template does not have the "derivational syllable" (DS) usually taken to be the key signature of Semitic languages.

(ii) the systematic use in the morphology of both the skeletal and the segmental level of phonological representations.

The peculiarities of the Mehri verb system may be divided into two coherent clusters of properties, A and B in (1) on the data sheet below. We examine them successively. We adopt the CV framework ((Lowenstamm 1996), (Scheer 2004)). The relevant data are taken from (Johnstone 1975, 1987) and given in (2).

### 2. Cluster A: the Mehri verb does not have a derivational syllable.

**2.1**. A central property of the Classical Arabic verb template is the presence of a special templatic position, the "derivational syllable", located between  $R_1$  and  $R_2$  (Guerssel and Lowenstamm 1990), as shown in (3). The assumption of such a position makes it possible to unify the forms with medial gemination, the ones with vowel lengthening, that are pervasive in Semitic, and the ones with consonantal infixation. In all cases, the DS is identified (by  $R_2$  in geminated forms, by  $V_1$  in lengthened forms and by a C-morpheme in infixed forms). We argue that the peculiarities of Mehri listed in A all derive from a simple assumption: the Mehri verb template does not have a DS (4).

**2.2**. A salient peculiarity of Mehri within the Semitic family is the absence of verb forms with a geminated second root consonant (vs Class. Ar. kattaba, takattaba; Akk. uparris; Bibl. Hebr. qibber, qubbar, hitqabber; Class. Eth. qäbbärä, ?äqäbbärä, täqäbbärä, ?ästäqäbbärä, Syr. qabber; ?etqabber). This fact cannot be ascribed to a general constraint against consonant gemination in Mehri, since geminates do exist in the language. The absence of medial gemination in Mehri can only be due to the absence of a CV site between  $R_1$  and  $R_2$  in the template of the Mehri verb.

This is confirmed by the analysis of the opposition faruuk (va) ~ fod rek (vc). At first sight, this opposition seems to parallel the one observed e.g. in Class. Ar. *kataba* (form I) ~ *kaataba* (form III), Class. Eth. *qätälä* (I,1) ~ *qatälä* (I,3), *?äqtälä* (II,1) ~ *?äqatälä* (II,3), etc. It has indeed the 2 following properties: a) opposition short ~ long vowel between R<sub>1</sub> and R<sub>2</sub>, and b) opposition between a simple form and an intensive form. However, as we show, there is no phonological vocalic length in Mehri: the length in *fod rek* is an automatic consequence of the presence of stress on the vowel between R<sub>1</sub> and R<sub>2</sub>. More specifically, we argue that Mehri is a language with (a) Tonic Lengthening, and (b) Closed Syllable Vowel Shortening, where (c) the final syllable counts as an open syllable. Long vowels thus do not result from morphologically significant lengthening processes. In Mehri there is no more internal lengthening than medial gemination.

Finally, Mehri has apparently 2 forms with a *-t-* infix:  $fat r \partial k$  (vt<sub>1</sub>) and  $\partial f d \partial r u u k$  (vt<sub>2</sub>). We adopt the analysis suggested by (Lonnet 2006) according to which these forms are actually prefixed forms with a metathesis of the prefix and the first root consonant.

The template of the Mehri verb thus does not require an internal site hosting medial gemination, vowel lengthening and infixation. It has (a) the positions necessary for the realization of the root material, and (b) an additional (initial) position hosting the consonantal preformants. This template is given in (4a).

**2.3**. This said, the opposition  $\frac{1}{2}ruuk \sim \frac{1}{2}ruuk \sim \frac{1}{2}ru$ 

This is confirmed by the examination of prefixed forms like  $\check{s} \partial f \underline{e} e^{r \partial k}$  ( $v\check{s}_2$ ), where V<sub>1</sub> is also identified by A.

This means that  $CV_1$  is a morphological site in Mehri. Accordingly, we propose the verb template in (4b). To sum up: the Mehri verb template includes two morphological sites, the prefix and  $CV_1$ .

## 3. Cluster B: the interplay of the 2 levels of phonological representations.

Property (1g) corresponds to the fact that Mehri derives the passive by apophony on the vowel between  $R_2$  and  $R_3$  (*i.e.* the thematic vowel,  $V_{th}$ ) and not on  $V_1$  (*for<u>uuk</u> va \rightarrow for<u>eek</u> pass, vs Class. Ar. <i>kataba*  $\rightarrow$  *kutiba*, Bibl. Hebr. *kitteb*  $\rightarrow$  *kuttab*). We claim that this fact blocks the possibility of using apophony on  $V_{th}$  to derive different verb classes, and *all* va verbs in Mehri have *uu* as  $V_{th}$  (vs Class. Arabic *labisa / kataba / kabura*, Class. Eth. *läbsä / qätälä*, Bibl. Hebr. *labeš / qabar / qaton*, Syr. *ləbeš / qətal / qəpud*, Akk. *ipqid / ilmad / iprus*, property (1h)).

(1i) directly follows from (1h). We show that the verbs of the type <u>*fiirək*</u> are the Mehri equivalents of the Classical Arabic verbs with thematic vowel u (i.e. the statives of the type *kabura*). We propose that the argument structure properties are expressed in Mehri by shifting V<sub>th</sub> between R<sub>1</sub> and R<sub>2</sub>, *i.e.* to the CV<sub>1</sub> site defined in (4b).

The cluster of properties in B thus (a) constitutes an additional argument in favor of the analysis of  $CV_1$  as a morphological site in Mehri, (b) shows that i. both  $V_{th}$  and A may be associated to  $CV_1$ , and ii.  $V_{th}$  may attach to two sites:  $V_1$  and the V position located between  $R_2$  and  $R_3$ . Depending on the skeletal position they are linked to, the segments A and  $V_{th}$  are the exponents of different morphosyntactic features. Take for example the forms vc and vš<sub>1</sub> of the root *frk*. In *foorok*, A is associated to  $CV_1$  and it marks the form as *derived* (intensive conative); in *yo-šafrok*, the same A, associated to  $CV_{pref}$ , is a marker of *aspect/mood* (subjunctive).

The full set of attested combinations and the respective interpretations are given below :

segment	site			value	verb forms		
1	CV <sub>pref</sub>			aspect/mood	vh, vš <sub>1.</sub> subj		
A	-	$CV_1$		derivation	vc, v $\check{s}_2$		
h, š, t	CV <sub>pref</sub>			derivation	vh, v $\check{s}_1$ , v $\check{s}_2$ , vt <sub>1</sub> , vt <sub>2</sub>		
V		$CV_1$		argument structure	vb		
$V_{th}$			$V_2$	input of apophony ( $\rightarrow$ pass./subj)	va <i>etc</i>		

The variation of the values of segmental markers in function of their docking site counterbalances the lack of an internal derivational site (DS) in the Mehri verbal template. In cognate languages (all other Semitic ones, in fact) whose verbal template does display a DS, each segmental morpheme is associated to a single templatic site only, with a single morphosyntactic value.

# 4. Conclusion

To summarize, our analysis shows that the major characteristic of the Mehri verb template is the absence of an internal derivational site (Derivational Syllable).

The assumption that DS is a defining property of Semitic languages can therefore not be maintained. This result is in line with the classification of languages by the features of UG they instantiate, rather than their historical affiliation: on the one hand, DS is not a necessary property of Semitic languages; on the other hand, some non-Semitic languages have a verb template with DS, like the Creek language Muskogee ((5a), (Haas 1940, Ségéral 2005), and others do not, like Standard German ((5b), (Bendjaballah and Haiden 2002)).

### **Data and references**

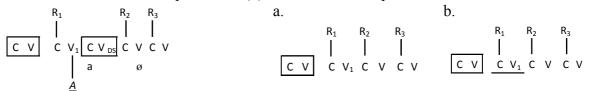
(1)	Abbreviations: Akk = Akkadian, Hbr = Biblical	Semitic N-East N-West South						]
	Hebrew, Syr = Syriac, Ar = Classical Arabic, Eth = Classical Ethiopian	N-East Akk	N-W Hbr	Syr	Ar	Sout Eth	n Mehri	-
a.	Templates	✓	1	1	1	✓	✓	
b.	R <sub>2</sub> -Gemination		1	1	1	<	NO	
c.	V <sub>1</sub> -Lengthening	NO	NO	NO	1	✓	NO	Α
d.	Infixation	✓	NO	NO	✓	NO	NO	
e.	Apophony	1	✓	1	1	✓	1	Ī
f.	(C) Preformants	✓	1	1	1	1	1	
g.	Apophony between $R_1 \& R_2$ in the passive derivation	NO	►	NO	1	NO	NO	
h.	Verb classes defined by V <sub>2</sub>	1	1	1	1	✓	NO	B
i.	$V_{th}$ between $R_1 \& R_2$	NO	NO	NO	NO	NO	1	

(2) Mehri verbal forms [ $\sqrt{\text{frk}}$  "to polish"; tonic vowel underscored]

Johnstone (1987)		pf	sbj			pf	sbj
simple v. type a, active	va	fər <u>uu</u> k	yə-fr <u>ee</u> k	reflexive v. type a	vt <sub>1</sub>	f <u>a</u> trək	yə-ft <u>ii</u> rək
simple v. type a, passive	pass.	fər <u>ee</u> k	yə-fr <u>oo</u> k	reflexive v. type b	vt <sub>2</sub>	əftər <u>uu</u> k	yə-ftər <u>uu</u> k
simple v. type b	vb	f <u>ii</u> rək	yə-fr <u>oo</u> k	caus. reflex. v. type a	vš <sub>1</sub>	šəfr <u>uu</u> k	yə-š <u>a</u> frək
intensive conative v.	vc	f <u>oo</u> rək	yə-f <u>oo</u> rək	caus. reflex. v. type b	vš <sub>2</sub>	šəf <u>ee</u> rək	yə-šf <u>ee</u> rək
causative v.	vh	fr <u>uu</u> k	yə-h <u>a</u> frək				

(3) *Classical Arabic* Verb Template

(4) *Mehri* Verb Template



(5) a. *Muskogee* Verb Template: **DS** nis "buy, compl. tenseless" níhs "buy, compl. immed. past"



# b. *Standard German* Strong Verb Template: (CV) (CV) <u>CV</u><sub>1</sub>CV<sub>2</sub>CV<sub>3</sub>

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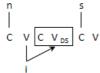
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s

nî:s "buy, incompl. all tenses"



no DS