RRG Universal Verb Classes vs. Beja Verb Classifications Based on Morphologies and Textual Functions

Paper presented at the RRG Conference 2002, University of La Rioja, Logroño

Klaus & Charlotte Wedekind, Abuzaynab Musa, Asmara 2002

Overview of the Paper

1 Suffix and Prefix Verbs: The Traditional Classification[1]

The traditional classifications of Beja verbs start from derivation patterns and morphological shape:

- The "derivation" patterns are those common to Afro-Asiatic languages, such as "passive", "causative", "mutual", or "intensive".[2] For Afro-Asiatic languages in general, these "derivations" have received a lot of attention - in spite of their low frequencies in texts - and they will not be in focus in the present paper.

- The morphological shape divides verbs into two basic classes: "prefix verbs" and "suffix verbs". The choice of terms is not very fortunate (the so-called "prefix verbs" show gender, number and tense by suffixes) - but since the terms "prefix verbs" and "suffix verbs" are established, they will be used here.

Where they disappear

The so-called "prefix verbs" are not common in Cushitic languages. Table **#1**, when read from North to South, shows that the "prefix verbs" have a smaller and smaller share in the total verb inventory of Afro-Asiatic languages.

TABLE #1 Afro-Asiatic "Prefix / Suffix Verbs"

Prefix verbs	**Number**	**Language**	**Family**
100 %	all	Arabic	Semitic
about 45 %	650 of 1430	Beja	Cushitic, North
about 41 %	318 of 771	Saho[3]	Cushitic, East, Lowland, Nth.
about 1 %	12 of all	Somali	Cushitic, East, Lowl. Sth.
about 0 %	5 of all	Awngi	Cushitic, Central
0 %	none	Iraqw	Cushitic, South

For instance, in Arabic - as in other Semitic languages - the share of "prefix verbs" is 100%, while in Iraqw - the southernmost Afro-Asiatic language - the share of prefix verfbs is 0%.

Beja, with about 45%, holds a middle position.

The "prefix verbs" which have survived in Somali or Rendille include *"to be, to become, to know, to live, to say"*[4] These "prefix verbs" which are found in Southern Cushitic are also "prefix verbs" in Beja. In addition, they are the verbs with the highest frequencies in the Beja text collections. They are the following:

be [5]	**hay-a**
become	**kay-a**
know	**kan-a**

---

[1] The paper is a report on ongoing research at the Ministry of Eduation, Eritrea. One of the purposes of this research is to provide a basis for writing "mini dictionaries" and "mini grammars" for the hand of teachers at Beja schools which will be opened in late 2002. In Eritrea, Beja is known as "Hidaarab", while the self-name is Bidhaawi-yeet (with fem. obj. suffix) or Tu-Bidhaawi (with fem def. art. prefix). The transcription follows the Eritrean Beja orthography, where "dh, th" stand for retroflex sounds, "sh" for the palatal fricative, and double letters for long vowels and geminated consonants. Pitch accent is contrastive, but it is only shown in Table #7.

The form of this paper reflects the form of the oral presentation, where charts were used extensively.

[2] Hudson's grammar sketch gives a concise summary of these derivations.

[3] Moreno Vergari, personal communication. The statistics is based on entries in the new Saho dictionary.

[4] Giorgio Banti, personal communication.

[5] The Beja verbs will be given in the Imperative Sg 3rd ps. masc. form, which is conventionally given as the basic form. Glosses occasionally refer to this as if it were an English Infinitive.

live **fiy-a**

say **diy-a**

Some of them are cognates, as the following examples show.

I am in Beja this is **a-ki** - in Somali it is **a-hay**

I know in Beja this is **a-kan** - in Somali it is **a-qaan**

Where they come from

It might be asked where Beja "got" these two kinds of verbs; and it has been suggested that most of the Beja "suffix" verbs are derived from *nominal* roots (Nouns and Adjectives) - and so they would be good candidates for "stative" verbs. Actually this is not the case, as will be shown below. It has also been suggested that most of the Beja "prefix" verbs are *loans* from Arabic. Actually, this is not the case either.

Even in terms of productivity, it does not seem to be the case that one of these classes is more productive than the other, or that loans are integrated at a higher rate in the one or the other.

It is true, however, that there are regular relations between certain classes of "prefix verbs" and certain classes of "suffix verbs". For instance, "prefix verbs" of the shape CVC are clearly related to suffix verbs of the shape CVVC, as will be shown below. But it would be quite arbitrary to consider this a one-directional "derivation" from "prefix" verbs to "suffix" verbs.

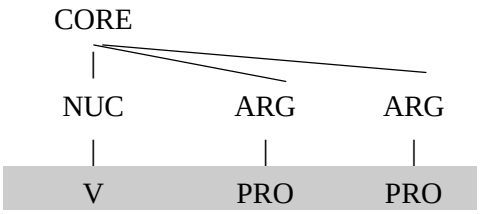
How they differ

The two verb classes differ in several ways, and two different syntactic templates will be set up: one for "prefix" verbs and one for "suffix" verbs.

Table #2 displays the two templates.

TABLE #2 "Suffix" and "Prefix" Verb Templates

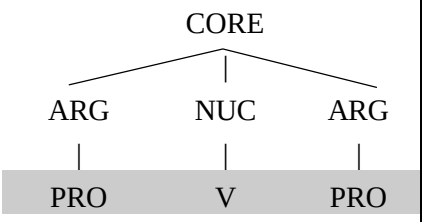
Suffix Verb



(an-eeb)*	**rhi-**	**-taa**	**-heeb**
(me-Acc)	*see*	*-you Sg Nom PERF*	*-me Acc*

"You saw me"

Prefix Verb



(an-eeb)*	**ti-**	**shbib-a**	**-heeb**
(me-Acc)	*you Sg Nom-*	*watch-M PERF*	*-me Acc*

"You watched me"

*The Table displays the independent object pronoun **aneeb** "me"; but it should be noted that in most contexts, the verb suffix alone would take care of the reference. The pronouns would be left out.

Head marking

There are several arguments against considering "head marking" a basic property of Beja:

- Not all undergoers are marked in all paradigms.
- Beja has case.

But Beja speakers don't seem to care about case, and often the vowel differences between case markers are neutralized phonologically. Starting in the 1880s with Almkvist, linguists have complained about the apparent nonchanlance of Beja speakers regarding case marking.

We would argue that Beja can afford to be "careless" about case *because* it is a head marking language.

Different Templates

Here are the reasons for assigning different templates to "prefix" and "suffix" verbs:

- The two verb classes obviously do have different places for "Agent" person affixes.

- The tense morphologies are different, in that the the "Past tense" of "to say" (a prefix verb) is used as the present tense suffix of "to start" (a suffix verb) - see Table #3 below.

- The "suffix verb" stems are the same throughout all paradigms, whilc "prefix verb" stems are not.

- There are systematic relations betweent the two; for instance, certain classes of "prefix verbs" express "Accomplishments", while the related "suffix verbs" express "Activities".

Paradigms

Table #3 displays the main paradigms of "prefix verbs" and "suffix verbs".

TABLE #3 Suffix and Prefix Verb (Samples)

Suffix Verb "to get up"

	Past		**Present**	
I got up	**yak**-an		**yak**-ani	I get up ...
you M ...	**yak**-taa		**yak**-tiniya	
you F	**yak**-taayi		**yak**-tiniyi	
he	**yak**-iya		**yak**-iini	
she	**yak**-ta		**yak**-tini	
we	**yak**-na		**yak**-nay	
you Pl	**yak**-taana		**yak**-teena	
they	**yak**-aan		**yak**-een	

Prefix Verb "to write" Basic pattern **CiCiC**

	Past		Present	
I wrote ...	a-**ktib**		a-**kantiib**	I write ...
	ti-**ktib**-a		**k**antii**b**-a	
	ti-**ktib**-i		**k**antii**b**-i	
	i-**ktib**		**k**antii**b**	
	ti-**ktib**		**k**antii**b**	
	ni-**ktib**		ni-**katib**	
	ti-**ktib**-na		ti-**katib**-na	
	i-**ktib**-na		i-**katib**-na	

Prefix Verb "to say" Modified pattern **Ciy**

	Past	alternative Past	Present	
I said ...	a-ni	a-di	a-ndi	I say ...
	ti-niy-a	ti-diy-a	ti-ndiy-a	
	ti-niy-i	ti-diy-i	ti-ndiy-i	
	i-ni	i-di	i-ndi	
	ti-ni	ti-di	ti-ndi	
	n-ee-n	ni-di	n-eeyad	
	t-ee-na	ti-dii-na	t-eeyad-na	
	ee-n	i-dii-n	eeyad-na	

Note some basic differences between the two classes:

- In "suffix verbs" the stem is the same in all paradigms, in "prefix verbs" it is not.

- The past tense morphology of "I said" is used in the present tense of "I get up" **yak-ani.**

Note also that the verb "to say" has two variant forms, e.g. **een / idiin** for "they said". This will be taken up again in the last section.

2. Tentative RRG Classification

An attempt was made to classify all frequent Beja verbs - including all (and only) those verbs which were found more than 20 times in the text collections. Table #4 shows the preliminary results.

TABLE #4 High Frequency Verbs: Tentative Classification

Class	*Verb (imperative)*	*Morphph. class*	*to X strongly*	*to X quickly*	*to X for 1 hr*	*to X in 1 hr*	*Text Frequ.*	*Used as Auxil.*	*Used with Accus. NP*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
State									
be, be there	fay-a	Cay			y		213	Aux	
have	biriy-a	CiCiy			y		186		Acc NP
be, exist	haay-a	Haay			y		161	Aux	
*know***	kan-a	CaC			y		133		Acc NP
see	rh-aa W	**suffix**			y		103		Acc NP
be like, similar	t'iy-a	CHiy			y		72		Acc NP
like	areey-aa	**suffix**			y		66		Acc NP
*spend the day**	'aayim-a	HaaCiC			?		49		Acc NP
spend evening	hawid-a	HaCiC			?		40		
*sit***	s'-a	CH			y		25	Aux	
*not be able***	gam-a	CaC			y		21	Aux	Acc NP
							1069		
Activity									
say, mean	diy-a	Ciy	y	y	y		2503	Aux	
do, put	d'iy-a	CHiy	y	y	y		181	Aux	Acc NP
refuse, not do	rib-a	CiC	y	y	y		77	Aux	Acc NP
try to find	hariw-a	HaCiC	y	y	y		66		Acc NP
look	shibib-a	**CiCiC**	y	y	y		62		Acc NP
seize, hold	'abik-a	HaCiC	y	y	y		35		Acc NP
stand, stop	gad-a	nCaC	y	y	y		29		
*throw pl.**	geed-aa	**suffix**	y	y	y		24		Acc NP
do, do with	daay-aa	**suffix**	y	y	y		23		Acc NP
*hear**	maasiw-a	CaaCiC	y	y	y		22		Acc NP
							3022		
Achievement									
be, become	kay-a	Cay					624	Aux	Acc NP
take	'ah-a	HaH					166	Aux	Acc NP
start, arise	yak-aa	**suffix**					135	Aux	
*add, redo **	shaaw-a	CaaC					50	Aux	Acc NP
be better	hayis-a	HaCiC					29		
call, give name	sim-a	CiC					27		Acc NP
throw sg.Obj.	gid-a	CiC		?			24		Acc NP
go away	giig-aa	**suffix**					24		
(Active)							1079		
Accomplishment									
come,	m'-aa	**suffix**		y		y	290		
*get to know***	kan-a	CaC		y		y	133		Acc NP
find, get	miriy-a	CiCiy		y		y	123		Acc NP
give	hiy-a	Hiy		y		y	106		Acc***
go to	bay-a	Cay		y		y	86		Acc NP
*go out***	fir'-a	CiCH		y		y	47		
take out	fir'-a	CiCH		y	y	y	47		Acc NP
tell, inform	sooy-aa	**suffix**		y		y	24		Acc NP
reach, arrive at	kitim-a	**CiCiC**		y		y	23		Acc NP
write sth.	kitib-a	**CiCiC**		y	y	y	38		Acc NP
trade, sell, buy	dilib-a	**CiCiC**		y	y	y	35		Acc NP
							954		

* Plural Accus. NP or "repetitive" ** Middle Voice *** Two Accus. NPs.

Classification problems

The results are preliminary in several ways:

The test questions which are displayed with columns 4 to 7 are tentative, ands so are the answers "y" and "n". (Obviously the test questions would need to be modified for verbs such as "to spend the day / spend the afternoon", which disallow for a test like "to X for one hour".)

There are other problems with a RRG classification as presented in Table #4 above.

TABLE #5 Classification Problems

bak	**a-ndi**	"So I say."	Main Verb "to say/mean"
yak-i	**a-ndi**	"I will stand up."	Auxiliary "Future"
aweeb	**gid-a!**	"Throw a stone!"	Literal meaning: punctual
kwal	**gid-a!**	"Sing (throw) a song!"	Metaphoric meaning: durative
fira'-a		"Take out!" (trans.)	**i > a** /_"hamzah"
fira'-a		"Go out!" (intr.)	**i > a** /_ middle voice

Some of the classification problems are exemplified in Table #5:

In "So I say" the verb is used as a "Main Verb", and it means "to say" - but in the second example, "I will stand up", the verb is used as an "Auxiliary", and it means "Future".

In "Throw a stone!" the literal meaning is "to throw", which is punctual - but in "Sing a song!", the idiomatic meaning is "to sing", which is not punctual.

In "Take out!", the verb is used as a transitive verb (in transitive verbs, the second vowel should be "i" - while here the "hamzah" changes it to "**a**") - but in "Go out!", the same verb is used as an intransitive verb (in intransitive verbs, the second vowel is "a", while here it is "**a**" anyway, which makes this verb form ambiguous).

So then, to summarize:

- Certain verbs function both as "full verbs" and "auxiliaries", e.g. "to say".
- The borderline between "literal" and "metaphoric" use can be thin, e.g. "to throw".
- Distinctions like "transitive" vs. "middle voice" may be neutralized by the phonology.

Conclusions from the tentative classification

In spite of the shortcomings of the classification displayed in Table #4 (above), it still allows for some observations.

- The two verbs "to throw" illustrate how a "Achievement" verbs relate to "Activity" verb:

Activity

to throw many things	geed-aa	y	y	y	

Achievement

to throw one thing	gid-a		?		

- The last three "Accomplishment" verbs of Table #4 illustrate that the basic pattern **CiCiC** is found in verbs of low textual frequencies - in spite of the fact that the **CiCiC** class is the largest verb class:

Accomplishment

to reach	kitim-a		y		y
to write sth.	kitib-a		y	y	y
to trade sth.	dilib-a		y	y	y

The preliminary results can be summarized as follows:

Frequency

- "Prefix verbs" which survive in Southern Cushitic are high frequency "Stative" verbs in Beja texts.

- Each of the 4 basic RRG classes is used to about same extent

- Each of the 4 RRG classes includes some "suffix verbs". So suffix verbs are not "static" *per se.*

- "Prefix verbs of the class **CiCiC** tend to be transitive, in terms of percentatge, 97% of them are transitive.

Morphological Shape, Derivation and RRG Class

- "Accomplishment" verbs of the pattern **CiC** derive into "Activity" verbs of the suffix class.

- "Middle voice" derivation changes **CiCiC** to **CiCaC** verbs; in RRG terms: "Transitive" to "Intransitive" verbs.

- "Frequentative" (or "Plural Object") derivation changes **CiCiC** to **CaaCiC** verbs; in RRG terms: "Action" or "Accomplishment" verbs to "Activity" verbs.

- There are other regularities such as the usual Afro-Asiatic derivations like "causative, passive" etc. (see Hudson 1974). But it should be noted that all of these have low textual frequencies.

3. Morphological Classification

The purpose of this brief section is is to point out the morphological regularity of the Beja verb system - against all appearances.[6]

Tables #6a to #6e display the cline which leads from basic so-called "regular" verbs to modified, so-called "irregular" verbs.

TABLE #6a Morpho-Phonological Changes

Note: all features by which the verb changes the "Basic Pattern" are underlined.

	Imperative	**Perf. 1.Sg**	**Impf. 1.Sg**	
Basic Pattern	**CiCiC-a**	**a- CCiC**	**a-CanCiiC**	
Basic	kitib-a	a- ktib	a-kantiib	"to write / I wrote / I write"
Disyllabic	__tib-a	a- _tib	a-__ntiib	"to fill / I filled / I fill"
Final "y"	dibiy-a	a- dbi_	a-danbi__	"to take care of ..."

TABLE #6b Derivational Changes

	Imperative	**Perf. 1.Sg**	**Impf. 1.Sg**	
Basic	ginif-a	a- gnif	a- ganniif	"bend (sth.), cause to kneel"
Middle Voice	ginaf-a	a- gnaf	a-t_ga_niif	"bend (oneself), kneel"
Basic	dilib-a	a- dlib	a- danliib*	"trade one thing" (*nl>ll)
Plural Object	daalib-a	a- daalib	ee- d__liib	"trade many things"

TABLE #6c Combinations of Changes

	Imperative	**Perf. 1.Sg**	**Impf. 1.Sg**	
Dis./Mid/Glott.	__sa' -a	a- _s'a	ee-s t__'i	"to sit"
and Metathesis				(ts>st)

Verbs of the "basic pattern" **CiCiC** are exemplified with **kitib** "to write". This pattern is considered "basic" in the sense of "unmodified", "unmarked" - for obvious reasons: It matches the common Afro-Asiatic triliteral pattern, and it constitutes the largest verb class.

Verbs which have the "diradical" pattern **CiC** are exexmplified with **tib** "to fill". A comparison with the "basic" pattern shows that the modification is regular: The only difference against the "basic" pattern is the absence of the first syllable. There simply is one radical less - but it should be noted that this is not a "weak" or "hollow" verb in the usual sense.

Verbs which have the "**y**-final" pattern are exemplified with **dibiy** "to take care of". Again the modifications, compared with the "basic" pattern, are regular.

Verbs with initial, medial or final "hamzah" or "h" are not listed here, but the modifications introduced by these radicals are predictable just as they are for "y-final" verbs.

The last example in this chain (see Table #6c) is the middle voice verb **sa'a** "to sit". It appears to be entirely "irregular"; but it could be shown that it just is one end of a chain of "modifications" all of which can be accounted for in a regular manner. In this case, the modifications include (1) reduction

[6] Previous analyses have tended to either declare certain verbs "irregular" or not list them at all.

from tri-radical to di-radical or "disyllabicity", (2) "middle voice" derivation **`i > a`** and insertion of **`"t"`** in the Imperfect, (3) glottal stop or "hamzah" as final radical, and (4) regular metathesis **`ts > st`**.

There are verbs with as many as 7 such "changes" of the "basic" pattern **`CiCiC`**.

The Continuum from "Basic"to "Special" Morphology

Table #6d displays the size of verb classes in relation to the number of "special features" or changes against the "basic" **`CiCiC`** pattern.

***TABLE #6d** Verb Classes by Features and Frequency*

No. of verbs per class

	0	1	2	3	4	5	6	7	8
128 ...	✓								
64									
32		✓							
16			✓	✓	✓				
8						✓			
4							✓		
2								✓	
1									
0									✓

No. of modifications

The correlation between the "number of verbs per class" and the "number of modifications per class" can be presented as a descending line: The more a verb class "deviates" from the "basic norm" **`CiCiC`**, the fewer verbs will be found in this class.

This is not surprising. But there are two things which should be noted here:

- In the largest verb class (that is, in the class of the "basic" pattern **`CiCiC`**, a class of more than 128 members), each verb has a low text frequency. And the reverse is true as well: In the smaller classes, each verb has a higher text frequency.[7]

- The line which relates the different verb classes is a continuum. This reinforces the claim that there is no categorial division between "regular" and "irregular" verbs.

[7] This is plausible in terms of "learnability": Verbs which occur infrequently tend to follow predictable patterns.

4. Textual Functions of Selected Verbs

Table #7 displays a text which is short enough to be displayed in full.

To give a rough overview of the structure, the text has been displayed like a score. Note that Table #7 follows the basic "SOV" structure, where all "Nominative NPs", "Accusative NPs", and "Verbs" are displayed in different columns.

So the text can be read in different ways: It is possible to read the story line by line, in its actual phonological form. But the text score also allows to follow the "time line", reading the column of "Verbs" from top to bottom - or to follow one single "Participant".

TABLE #7 Text Sample: Abuzaynab Musa "Two Gifts"

	Nomin. NP	**Accus. NP**		**Verb**	
	T**a**k *man*			**i**i-fi *he-was*	ee-n. *they-said*
There was a man, they say.					
	[he]	M**a**loot m'**a** *two women*		d'ur-**a**ab-u, *married-PTCP-is*	ee-n. *they-said*
He was married to two women, they say.					
	Mhalt**a** *both*		t**a**kt**a**k-iit *another-from*	sh**a**wawt-**a**. *neighbours-are*	
Both were neighbours of each other.					
G**a**al b'**i**, *one day,*	uu-t**a**k, *the-man*			- -	
One day, the man,					
tuu-ng**a**at-iid**a** *the-one-for*	*[he]*	giw**ee**shaab *bracelet*		h**a**'-iya. *took-came-he*	
for the one he brought a bracelet.					
Tuu-r**a**awt-iid**a** *the-other-for*	*[he]*	t**i**lal *earrings*		h**a**'-iya. *brought-he*	
For the other he brought earrings.					
	Igiweesh**a**a-y**e**et ankw**a**na *the-bracelets-of owner[1]*			yak-t**a**a-y ti-yih**a**-yit *started-she[1] held-she[1]-&)*	
The owner of the bracelets started &					
	[she[1]]	t**o**o-raaw *the-other[2]*		s**a**s-a tii-yid-**a**yt *incite-to she[1]-meant*	
in order to make the other envious					
	[she[1]]		te-heetaat**i**ih *the-wall*	riigam-t**a**a-yit, *stretched-she[1]-&*	
she looked over the wall &					
		"Misr**a**faat *fan*		ti-bar**i**i-na?" *you[2]-have-PL?*	
"Do you have a fan?"					
	[she[1]]			t**i**-di. *she[1]-said*	
she said.					
	[she[1]]	(I-giweeshaa-y**e**eh *the-bracelets-her[1]*		rh**i**s-a tii-yid-**a**yt.) *show-to she[1]-meant-for*	
(And she meant to show her bracelets.)					
	T**u**u-raaw *the-other[2]*			yak-t**a**a-yit, *started-she[2]-&*	
The other started &					
	[she[2]]	te-hamoot-**e**eh *the-hair-her[2]*		ti-ngil-**i**t, *she[2]-opened-&*	
let down her hair &					
"L**a**a l**a**a l**a**a *No no no*				k-**i**n-baru." *not-we[2]-have.*	
"No no, we don't have."					
	[she[2]]			t**i**-di. *she[2]-said*	
she said.					
	[she[2]]	(I-tilal-**e**eh *the-earrings-her[2]*		rh**i**s-a tii-yid-**a**yt.) *show-to she[2]-meant-for.*	
(And she meant to show her earrings.)					

Cushitic text structures and Beja text structures

In other Cushitic languages, the sequence of events would typically be outlined by chains of verbs, where only the last verb carries non-semantic information such as "aspect, tense, modality", or "evidentials". Participants would be traced in a "Switch Reference" system.

However, in Beja text *all* verbs tend to carry *all* of this information - except for evidentials. The "Switch Reference" system of Beja texts, on the other hand, is very much the same as that of other Cushitic languages.

Textual functions of different RRG verb classes

As one would expect, verbs of different RRG classes are predominant in different sections of a Beja discourse:

- In the introduction of discourse participants, or any "Attributive" sections, "Stative" verbs or "Stative" participles are predominant. Incidentally, this is also true for other genres such as songs or poems, where emotional states are presented. This is illustrated in the first lines of Table #7:

"There was a man (stative)". He was married (Stative). They were neighbours (Stative)".

- In the "Time Line", verbs of "Activity" and "Accomplishment" are predominant. Their tense/ aspect is the perfect / past paradigm, and the individual verbs are connected by the suffix **`-t`** which shows time sequence and "Same Subject".[8] This is illustrated in the last lines of Table #7:

`yak-t`**`a`**`a-yit,`	*started-she[2]-and*
`ti-ngil-`**`i`**`it,`	*she[2]-opened-and*
`t`**`i`**`-di.`	*she[2]-said*

Textual functions of "to say": Verb / Evidential

In the following section, the textfual functions of several selected verbs will be illustrated, starting with the verb "to say".

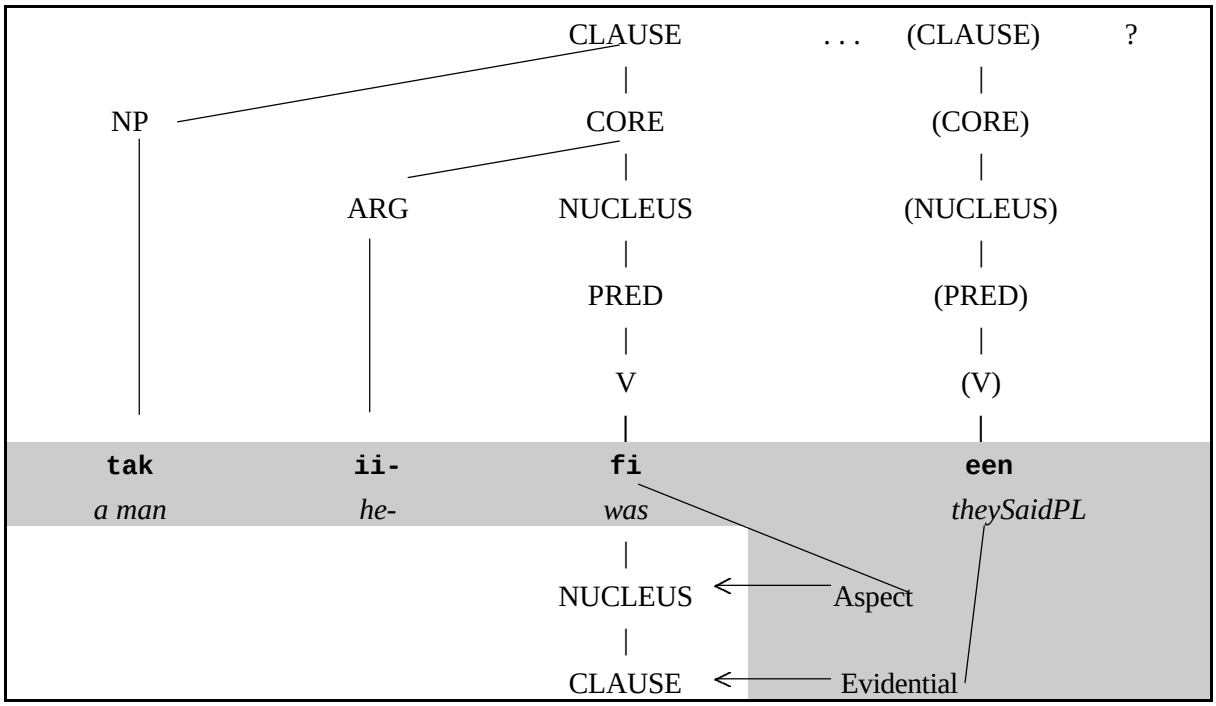
The verb "to say" in the first lines of the narrative (Table #7) could be interpreted in two ways, as the next table shows (Table #8 below).

[8] The perfect / past paradigm which Beja employs in the time-line serve the same functions as they would in other Cushitic languages. Therefore, the text collections give no indication that these tense / aspect forms have, at some time, served to express the notion "present / imperfect" - as Zaborski would suggest. To interpret this paradigm as "Aorist" - as Voigt would suggested - is possible in many text passages, but not in all of them.

TABLE #8 Textual Functions of "to say": Verb / Evidential

Common: **Tak iifi een.** *There was a man, they say (literally: "they said").*

Rare: **"Tak iifi" idiin.** *"There was a man" they said.*



The verb which serves several functions:

- Usually the verb "to say" concludes direct speech passages.
- But in the form **een** "they said", it serves as "evidential".[9]
- With **een** the narrator distances himself from what he reports, disclaims authorship, and ascribes the narrative to some impersonal tradition, "people say". This claim about **een** "they said" is supported by various kinds of evidence:
- The form **een** is unstressed - unlike other verb forms.
- Often it follows another verb of quotation, like **idi een** "he said they said"
- In some passages both forms are found side by side: **idiin een** "they said they said"
- Although the form **een** literally means "they said", in non-Narrative context an alternative form will be used to express the literal meaning "they said": **idiin**. (See above, "to say" in Table **#4**)

Textual functions of verb pairs: Adverbial / Aspectual

Table #9 summarizes various functions which other verbs may have in "verb pairs".

[9] See also Morin's remarks about the same verb form.

TABLE #9 Textual Functions of Verb Sequences

Function				**Example**
Adverbial	**Initial Verb**			
Up	"To raise (hold)"	**asa**	**y-'asi y-'abik**	"He held up"
Down	"To lower (sit)"	**n'a**	**i-n'a i-s'a**	"He sat down"
In	"To enter (come)"	**shuumaa**	**shuum-taayi ee-ta**	"She came in"
With	"To take (come)"	**aha**	**ah-at m'-aa!**	"Bring with you!"
Aspectual	**Both Verbs**			
Inchoative	"To arise hold"	**yakaa aha**	**yak-iyaay i-yihaa-yit**	"He started and"
Negation	**Final Verb**			
Negation	"To (see) refuse"	**riba**	**rh-at a-rib**	"I didn't see"

The "verb pairs" are shown in different Adverbial and Aspectual Functions, including "Operators" of different kinds. Beja verbs serve as aspectual operators, for example:

- The verb "to start" may be a full verb, meaning "to stand up", or it may convey the aspectual sense of "inchoative"

- Some verbs function as "Negative" Polarity marker, and there are different degrees of bleaching which lead from full verbs to negative particles: In the case of "to refuse", the original meaning is entirely lost. In the case of other negative verbs - such as "to fail, to dislike, to miss", the original meaning still adds some colour to the general senes of negation.

Items like these contribute to the uncertainty about the tentative RRG classification.

5. Summary of the Preliminary Findings

Frequencies

Most "Prefix verbs" which survive in other Cushitic languages are high frequency "Stative" verbs in Beja texts.

Each of the 4 basic RRG classes is used to about same extent in Beja texts.

Each of the 4 basic RRG classes includes suffix verbs. They express "Imperfect" by "Perfect" morphology. They were thought to derive from nominal roots - but they are not *per se* "Stative".

Of the **`CiCiC`** prefix verbs - including phonological modifications - 97% are transitive.

Prefix verbs include a number of loans from Arabic, but they are not *per se* Semitic loans.

Morphological Shape, Derivation and RRG Classes

"Frequentative" derivation (or, contra Bybee, "Plural Object" derivation) changes **`CiCiC`** to **`CaaCiC`** verbs; likewise "Accomplishment" verbs of the **`CiC`** class change into "Activity" verbs of the suffix class. in RRG terms: "Action/Accomplishment" to "Activity".

"Causative" derivation tends to produce verbs with "CAUSE" in the RRG logical structure

"Middle voice" derivation changes **`CiCiC`** to **`CiCaC`** verbs; in RRG terms: "Transitive" to "Intransitive".

There are other derivations (see Hudson 76), but all of them have low text frequencies.

Textual Functions and RRG Classes

As is common in other Cushitic languages, "State" verbs and "Stative" participles introduce participants.

Similarly, head-marked verbs keep track of Subj./Obj. participants - Case Marking is there, but optional.

Similarly, in the "Time-line", "Activity" and "Accomplishment" verbs are predominant,

Past/Perfect verbs in the "Time-Line" tend to be chained by "**`-t`**", indicating Same Subject, Time Sequence. (The texts give no indication about today's "Past/Perfect" having developed from an old "Present/Imperfect".)

The verb form **`ee-n`** "they said" serves as "evidential".

In verb pairs, the first verbs supply adverbial notions.

In verb pairs, the second verbs serve as Aspect and Negation operators.

References

Almkvist, H. 1881, Die Bischari-Sprache Vol. 1, Uppsala

Dik, S., 1989, The Theory of Functional Grammar, Dordrecht: Foris

Hudson, R. 1974, A Structural Sketch of Beja, AfLS 15: 111-142

Morin, D., 1995, Des paroles douces comme la soie, Paris: Peeters

Roper, E.M., 1928, Tu-Bedauye, Hertford

Van Valin, R.D. & R.J. LaPolla, 1997, Syntax, 1997, Cambridge: CUP

Voigt, R.M. 1999, Zur Gliederung des Kushitischen, in: (ed.) C. Griefenow-Mewis / R.M. Voigt, Proceedings, 3rd Symposium, Cushitic and Omotic Languages: 101-131

Voigt, R.M., 1988, Einige Ueberlegungen zum 'Aspektsystem' des Bedauye, in: (ed.) H. Jungraithmayr, W.W. Mueller, Proceedings, 4th Hamito-Semitic Congress

Wedekind, K., 1990, Generating Narratives, Berlin, New York: Mouton de Gruyter

Zaborski, A., 1999, Problems of the Beja Present Seven Years Later, in: Lingua Posnaniensis, 39: 145-153