Beja grammatical sketch

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1. Introduction

The Beja language, named $be\dawije=t$ by the Beja people, is the sole member of the North-Cushitic branch of the Afro-Asiatic phylum. It is mainly spoken in Eastern Sudan, and also in the most southern part of Egypt and in Northern Eritrea. In Sudan, where the data collection took place, the number of speakers amounts to approximately 1,100,000. Lexico-statistic studies (Cohen 1988) show that only 20% of the “basic” vocabulary is shared with the two closest East-Cushitic languages, Afar and Saho, and with Agaw, a central Cushitic language. It’s hardly half of that ratio for the geographically more distant East-Cushitic languages, Sidamo and Oromo.

The Beja people are Muslims and were traditionally caravaneers, camel or cow breeders moving to summer pastures on collective lands, and still are to a lesser extent. The droughts of the mid-1980s brought about a mass exodus towards the cities, which is still going on.

The social organisation is territorially and genealogically based grouping the people in clans and tribes.

In Sudan, bilingualism with Sudanese Arabic is widespread and expanding, but discredited for women who lead a cloistered life. Beja speakers have a strong awareness of a hierarchy of speech related to rules of honour, politeness, and to taboos. Poetry recited by men and greetings are at the top of this hierarchy, while casual talk and ordinary conversations are at the very bottom. Hence the absence of this type of discourse in the Beja pilot corpus.

Beja dialectology is ill-known, but dialects do not seem to be much differentiated. Researchers of the late 19th century and up to the 1960s divided them into tribal dialects, but since Morin (1995) it is considered that there are two main geographically based varieties, a Northern one ($mim'h-i=t be'dawije$) and a Southern one ($ga'ʃ-i=t be'dawije$), the latter subdivided into the Sudanese Gash and a transition zone, the area of Sinkat, where my data was recorded. According to Morin the division is mainly based on a vocalic isogloss: i in the South vs. u in the North, plus a stronger tendency in the South towards vocalic lengthening.

The map below shows the localisation of the village of Sinkat, where the recordings took place.
2. Phonology

2.1. Consonant phonemes

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<th>bilabial</th>
<th>labiodental</th>
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<td>j</td>
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</table>

Table 1: Chart of consonants

The CorpAfroas corpus allowed to establish the phonological status of /ʤ/, although minimal pairs are rare and limited to first position in the stem, e.g. ʤik ‘cock’ ~ ḫik ‘chewing tobacco’; ḫhar ‘destiny, misfortune’ ~ ḫar ‘congratulate, bless’; ḫarab ‘try, test’ ~ darab ‘path’; ḫaw ‘quarrel’ ~ ḫaw ‘forest, jungle’ ~ ḫaw ‘pregnancy’. It is often in free variation with the retroflex /ɖ/ in the Beja lexicon, as well as in most borrowings from Arabic which supposedly form a large majority of the words containing /ʤ/. The voiceless retroflex /ʈ/ is rare.
The laryngeal /h/ is very frequent. (z) only occurs in recent borrowings from Arabic and tends to be replaced by /d/, hence the brackets as this is not a fully integrated phoneme.

2.1.1. Allophones, free variation and phonological rules

These phenomena represented in the tx tier of the corpus only take into account the most striking ones as perceived by the author.

In final position, all stops may be either released, unreleased, aspirated (e.g. BEJ_MV_NARR_04_DJINN_162), or released after a more or less long pause. In addition /b/ may be spirantisized as a bilabial fricative [β], a labio-velar approximant [w] (systematically before /w/), or nasalized as [m] before a pause or by regressive assimilation with a postvocalic nasal as first consonant in the stem of a following word, regardless of intermediate prefixes and clitics. The apico-alveolar trill /ɾ/ may also sometimes be unreleased.

/n/ is velarized as [ŋ] before all velars, labio-velars, and the labials /f/ and /w/ (e.g. BEJ_MV_NARR_08_DRUNKARD_019); the resulting consonant cluster is articulated as a semi-nasal. The semi-nasal articulation also concerns the other consonant clusters involving the voiced and voiceless series (Vanhove 2004).

/g/ and /k/ are systematically labio-velarized in front of the rounded vowels /ɔː/ and /uː/, sometimes also after ([hank“o:k”] = /hanka=ok/ ‘before you’) (e.g. BEJ_MV_NARR_04_DJINN_147).

In rapid speech, clusters of voiced and voiceless consonants tend to lead to regressive assimilation of sonority. In between vowels, voiceless consonants may become voiced, even at word boundary (e.g. BEJ_MV_NARR_01_SHELTER_036). The laryngeals /h/ and /ʔ/ may alternate with Ø when in second position in a consonant cluster and in initial position in a word (quite frequently for /ʔ/). /b/ is nasalized in front of /n/ or /m/.

2.2. Vocalic phonemes

The Beja variety of Sinkat in the pilot corpus has 3 short vowels i, e and a (contrary to 5 as usually stated in previous studies), and 5 long vowels iː, uː, eː, oː, aː.

/e/ does not contrast with e and is marginal. It only appears in unstressed syllables, and in final syllables before /j/ with which it phonetically forms a diphthong. Only in this position does it contrast with /a/, but never with /i/: /nʔaj/ ‘goat’ ~ /nʔej/ ‘goats’; /heːlej/ ‘hare’ ~ /helaj-a/ ‘hares’.

i-a /fif/ ‘pour’ ~ /faf/ ‘pour\REFL’

i-iː /ˈɁiʃa/ ‘urine’ ~ /ˈɁiːʃa/ ‘evening prayer’; /angwiː/ ‘ear’ ~ /angwiːl/ ‘ears’

a-aː /w-ʔaʃi/ ‘the enemy’ ~ /w-ʔaʃi/ ‘the fish’; /kaːm/ ‘camel’ ~ /kam/ ‘camels’

i-e /bətʃi/ ‘to crack, split’ ~ /tutʃi/ ‘buck, prance, plunge’

i-e /bəti/ ‘forehead’ ~ /bətʃi/ ‘towards’

i-ə /holiː ‘Salvadora Persica, siwak’ ~ /hoːb/ ‘time’

i-a /tʃiː/ ‘crack, split’ ~ /tʃiː/ ‘louse’

u-e /batuːk/ ‘2SG.F.NOM’ ~ /brateːk/ ‘2PL.F.ACC’

u-ə /batuː ‘3SG.F.NOM’ ~ /bətəː ‘3SG.F.ACC’; /hoːg/ ‘go north, go down’ ~ /huːg/ ‘grind’
2.2.1. Allophones, free variation and phonological rules

These are noted in the tx tier only.
In the pilot corpus /i/ alternates freely with [ə], [ɨ], [ɩ] and [a], particularly in unstressed syllables and in final position in a word. [ə] is even the preferred variety in some words which have an indeterminate form ending in -eːb or -eːt, e.g. hareː=b ‘a mount camel’, hareː=ɪ ‘mount camel’, hareː=ə ‘a mount camel’. /a/ may also sometimes alternate with [e], but this is far less common than for /i/. The two Beja narrators of the pilot corpus show a slight tendency to alternate short /i/ with [u], considered as characteristic of the Northern dialectal zone. The phonemic opposition between short /i/ and /u/ is not attested, but [u] is a phonetic and positional realisation of /gʷ/ and /kʷ/ in an unstressed syllable in a few derived words which have one of these consonants in the stem: /gʷimid/ ‘to lengthen’, [mugˈmid] = /mig wˈmid/ ‘length’, and an optional one after /w/.

When unstressed in initial position in a word, /oː/ keeps its quality but it may be shortened to [o].

Vowels in final position with a continuing prosodic contour are sometimes pharyngealized (e.g. BEJ_MV_NARR_01_SHELTER_043). Otherwise in this position short vowels often tend to be unpronounced or devoiced (with a terminal prosodic contour).

Some degree of progressive vocalic harmony also occurs: the back vowels /a/ and /aː/ lower a high vowel in a following syllable to mid-low [e] and [eː], but not necessarily if it belongs to a suffix or a clitic; /eː/ tends to raise the following /a/ to [e] if it belongs to a suffix or a clitic.

Unstressed short vowels in closed syllables drop in penultimate position when after a stressed syllable.

2.3. Phonotactics

The canonical syllabic structure is (C)(ʔ/h)V(:)(C)(t), the most common ones being CV, CV(:)C, CVt (Cohen 1988). Words with an initial vowel are limited to determiners (all vowels but /e/), flectional and derivational morphemes (/iː/, /eː/, /aː/), numbers (/a/), and particles.

A series of two vowels is separated by a glide.

Clusters of two consonants are possible in all positions, but if in initial position in a word the second element is limited to the two laryngeals, and in final position to the dental /t/ (Cohen 1988). Laryngeals are very rarely the first element of a consonant cluster. The syllabic juncture occurs in between the consonants. Clusters of three consonants are only possible in medial position when the third element is a laryngeal or, very rarely, a continuant or a trill. The syllabic break is after the first consonant.

---

1 [ɨ], [ɩ] are not transcribed as such in the broad phonetic transcription tx tier of the pilot corpus.
All consonants occur in all positions, except the two laryngeals which do not occur word-finally, and in between vowels.

2.4. Stress

Except in Narratives 1 and 18, stress is not marked on the text tier, but it is systematically marked in the mot and mb tiers when it has a distinctive function.

In words used in isolation, stress assignment rules are not necessarily conditioned by the syllabic structure and depend to some extent on the grammatical category, and on the presence or absence of affixes and clitics. It falls neither on a final open syllable with a short vowel, nor further left than the ante-penultimate syllable. Stress may be the only means to distinguish two homophones: \textipa{diˈluːb} ‘brown’ / \textipa{ˈdiluːb} ‘selling’. In continuous speech, stress heavily depends on pragmatics, speech tempo and intonation contours and still needs to be studied. For verbs conjugated with an auxiliary, the latter is most often unstressed (e.g. BEJ_MV_NARR_01_SHELTER_092).

In verbs, stress falls either on the stem or the flectional morpheme, depending on the verb class and on TAM. For monosyllabic verb class 1 (with prefixes), stress falls on the stem in 1SG, 1PL and 3SG in the PFV and IPFV, and on the prefix for the other persons (for disyllabic verbs see table 15, section 3.2.2.1 below). For verb class 2 (with suffixes), in the PFV stress is on the stem except 1SG and 3PL; in the IPFV, it falls on the stem in the PL, but on the first syllable of the flectional morpheme in the SG. Some particles clitic to verbs bear the stress: \textipa{=eːk} ‘if’: \textipa{tam-eˈn=eko} ‘if they eat’.

For nouns, stress is lexically assigned, unpredictable in most cases except for the penultimate stress of disyllabic nouns ending in a short vowel. It shifts according to grammatical rules of plural formation (‘\textipa{ragad} ‘foot’, pl. \textipa{raˈgad-a} ‘feet’), when certain enclitics are added like determiners (\textipa{w=ˈharrri} ‘the great millet’, \textipa{harˈroː=b} ‘great millet’), and with enclitic possessive pronouns (e.g. the stem of monosyllabic nouns is stressed with monosyllabic enclitic pronouns, \textipa{i=ˈkaːm=i} ‘my camel’, but the stress is on the first syllable of disyllabic pronouns: \textipa{i=kaˈm=uːkna} ‘your(PL) camel’). All the rules are not fully understood yet.

3. Morphology

The morphology of Beja has both agglutinative and flectional properties, often with syncretism characteristics on portmanteau morphemes.

The morphological structure of the lexicon is partially organised in consonantal roots to which various patterns apply, as in Arabic, the contact language. Beja is the Cushitic language where it is most developed. It concerns both the verb and the noun morphology (inflection, verb derivation, verb-noun derivation, derived nouns, adjectives, plurals…). Beja is also the sole Cushitic language to use qualitative vocalic alternation in the verbal stem as a derivational device for semantic and voice derivation. Neither borrowing, nor copying, replication or transfer from Arabic morphology took place (Vanhove 2012).

Cohen (1988) calculated that tri-consonantal (52.8%) and bi-consonantal (39.3%) roots are predominant; he claimed that the former are Semitic borrowings in majority.
According to Cohen (1988) intra-Cushitic and Afro-Asiatic comparison shows that bi-consonantal and mono-consonantal roots are often previous tri-consonantal ones.

3.1. Nominal morphology

3.1.1. Noun categories

Nouns in Beja are best defined syntactically and morphologically as opposed to verbs: they cannot be inflected for TAM; they are used with portmanteau morphemes which mark degrees of determination (proclitic definite determiners, enclitic indefinite determiners), case (Nominative, Accusative, Genitive), gender and number. All noun (and adjective) forms can be used as predicates in a verbless sentence; they are inflected with an enclitic copula which agrees in person and number with the subject, preceded by the indefinite article to mark gender concord; they may be followed by bound pronouns, if any. If the host ends with a vowel, the vowel-initial copulas add a glide $j$ before the copula:

```
1. t = ?ano$ʔ$ = t = a / DEF.F = sheep = INDF.F = COP.3PL.
2 = wa = ana
```

Table 2: Paradigm of the copula

3.1.2. Noun patterns

In part of the lexicon, nouns related to verbs of class 1 are characterized by a non-concatenative morphology, i.e. they belong to the root and pattern system, like Arabic. There are ten nominal patterns with qualitative ablaut for nouns, two of which (the bi-consonantal C1aC2i and C1iC2i) are shared with the adjective patterns (see below section 3.1.3.1). Two patterns have in addition a suffix -a, which is part of the whole pattern.

3.1.2.1. “Basic” noun patterns

The following is the list of noun patterns without dedicated semantics, and which are often linked to V1 verb roots (for further details and examples see Vanhove 2011):

- C1iːC2aːC3;
- C1iC2uːC3-a;
- C1aC2oːC3;
- C1aC2; C1iC2i; C1iC2a; C1aC2i; C1aC2a;
- C1aC2iːC3;
- C1aC2iːC3-a.

3.1.2.2. Instrument Nouns

There are a few instrument nouns whose (unproductive) pattern is made with qualitative ablaut and a prefix $m$- (like in Arabic). In one instance C2 is geminated. Another pattern consists of a suffix -an, in addition to the ablaut: $ʔ$afi ‘prevent, secure’, $m$-$ʔ$afaj ‘nail, rivet, fastener’; himi ‘cover’, $m$-himmeːj ‘blanket’; min ‘shave’, man-an ‘razor’.
3.1.2.3. Place Nouns

A few place nouns are also based on the (unproductive) pattern with the ablaut and the prefix \textit{mV}- like in Arabic: \textit{ginif} ‘kneel’, \textit{mi-gnaf} ‘camp’; \textit{ridif} ‘set on a pillion (sp. on camel)’, \textit{mi-rdraf} ‘croup’; \textit{mok} ‘take shelter’, \textit{ma-k’}a ‘shelter’.

The semantics of some words with the \textit{mV}- prefix patterns does not correspond to any of the above categories, e.g. \textit{rifif} ‘to drag an object along the ground’, \textit{mi-rfraf} ‘reptile’.

3.1.3. Adjectives

The adjective category is not always morphologically marked, and some nouns can also be used as attributive adjectives, determining another noun. Nevertheless there are two regular processes to form adjectives. All adjectives may be used as nouns with the definite article.

3.1.3.1. Adjective patterns

One process is to derive adjectives from verb class 1 through ablaut (in a few cases there is no corresponding verb). Beja has seven different patterns, two of which are common with noun patterns (see section 3.1.2.1 above). All are based on a qualitative vocalic alternation, in a few cases with the addition of a prefix \textit{a-}. These are marked as ADJ in the rx tier.

\begin{align*}
\text{a-C1a:C2, } & \text{a-mag} \text{ ‘bad’ (mig ‘to do evil’)} \\
\text{C1a:C2:C3-a, } & \text{marʔ-a ‘wide’ (mirʔ ‘to be wide’)} \\
\text{C1a:C2i(C3), } & \text{nak’is} \text{ ‘short’ (nik’is ‘to be short’); } \text{dajji} \text{ ‘good’} \\
\text{C1a:C2i(C3), } & \text{dawil ‘close’ (diwil ‘to be near’)} \\
\text{C1a:C2a:C3, } & \text{k’aqad ‘round’ (k’iqid ‘to make round’), } \text{fawaj ‘free’} \\
\text{var. C1a:C2a:C3-a ragag-a ‘long’} \\
\text{C1i:C2a:(C3), } & \text{fikwan} \text{ ‘aromatic’ (fikwan ‘to emit pleasant odour, perfume oneself’)}
\end{align*}

The seventh pattern with a geminated 2\textsuperscript{nd} consonant is most probably a fossilized form:

\begin{align*}
\text{C1a:C2:C3, } & \text{fallik ‘few’ (fillik ‘to be few’).}
\end{align*}

3.1.3.2. Adjectivizer affix

A second process is by circumfixation of an adjectivizer \textit{a-} + -(\textit{t})ijaj (pl. -(\textit{t})ijej) to a noun or, sometimes, a verb stem:

\begin{align*}
\text{2. bilbil} & \text{ a- } \text{nifir } \text{-am } \text{-ijaj } \text{biri } \text{=t } / \\
\text{cudgel} & \text{circ1.ADJZR be_horrible -PASS -circ2.ADJZR 1SG- have\textbackslash AOR =COORD} . \\
\text{N.M} & \text{PRFX- V1 -V2.DER-SUFX PNG- V1.IRG =CONJ} . \\
\text{‘I had an ugly cudgel and…’ (BEJ MV NARR 05 EREITREA 236)}
\end{align*}

Although not glossed as such in the pilot corpus the composition of the second element of the circumfix can be broken down further into four elements which index, on the dependent, the gender and number of the dependent, and the number of the head noun, in the following order: the gender of the dependent constituent, its number, the number of the head, and the adjectivizer proper (the final -\textit{j}). See Fenwick (2007: 73-74) for details.
3.1.4. Gender

Beja has two genders, masculine and feminine. Gender is not overtly marked on the lexical items, but indexed on the determiners (demonstratives and articles) and indicated syntactically by agreement on the verb (for 2 and 3 SG only).

The definite article is proclitic. It consists of a single vowel for the masculine (which amalgamates with case, see below section 3.1.6.1), e.g. \( i='dura \) ‘the uncle’, which is preceded by \( t \) for the feminine, e.g. \( ti='dura \) ‘the aunt’.

The indefinite article is enclitic. It is \( =t \) for all feminine nouns for all cases. For masculine, it is overtly marked with \( =b \) only for masculine nouns ending in a vowel, a portmanteau morpheme which also marks ACC (and the citation form). It is covert for all other syllabic types.

For animate nouns, gender opposition correlates with sex, except for \( fʔa \) ‘cow (M)’ and \( dɪg”at \) ‘messenger (F)’.

For inanimate nouns, gender is arbitrary and cannot be retrieved from the morphophonology.

A few animate nouns have suppletive forms that are biologically based: \( san \) ‘brother’, \( kʷa \) ‘sister’; \( bɔk \) ‘he-goat’, \( nʔaj \) ‘she-goat’, \( fʔa \) ‘cow’, \( ji \) ‘bull’.

3.1.5. Number

Beja distinguishes morphologically between a singular and a plural which is the marked form. There are three different types of plural formation which depend, to some extent, on the syllabic structure of the nouns: vocalic ablaut on the stem, stress alternation, addition of a suffix \(-a\). The latter is the most frequent one, followed by the first strategy. The following is a list of the most common patterns of plural formation for monosyllabic, disyllabic and polysyllabic nouns.

3.1.5.1. Vocalic ablaut

Almost all nouns ending in \(-aj\) form their plural in \(-ej\): \( ɖaj \) ‘root’, pl. \( ɖeʃj \); \( kilaj \) ‘bird’, pl. \( ‘kilej \); \( dhaninaj \) ‘wild animal’, pl. \( dhanineʃj \).

Disyllabic nouns ending in \(-ej\) form their plural by lowering the last syllable to \(-aj\) to which the plural suffix \(-a\) is added: \( kolej \) ‘stick’, pl. \( kolaj-a \); \( heʃlej \) ‘hare’, pl. \( heʃlaj-a \).

Some monosyllabic animate CVːC nouns with vowel \( oː \) or \( eː \) have a particular ablaut to \( a \), along with shortening of the vowel, in the plural: \( ?ar \) ‘child’, pl. \( ?ar; bɔk \) ‘he-goat’, pl. \( bak; mɛk \) ‘donkey’, pl. \( mak \).


Disyllabic nouns ending in \(-aj\) form their plural by shortening the final vowel to \(-a\): \( ganaj ‘gazelle’, pl. ganaj; hataʃ ‘horse’, pl. hataʃ; ?aʃaj ‘ruin’, pl. ?aʃaj.

For most nouns ending with a short \(-a\), the plural form differs from the singular one only when the indefinite article is added to the stem; \(-a\) is lengthened to \(-aː\) in the plural: \( u=ʃʔa \) ‘the cow’, \( a=ʃʔa \) ‘the cows’, but \( fʔa=b ‘a cow’, fʔaː=b ‘cows’; i=’deʃfa ‘the door(s), but \( deʃfa=b ‘a door’, deʃfaː=b ‘doors’; ti=karaːma ‘the alms (SG & PL)’, but
karaːma=t ‘an alms’, karaːmaː=t ‘alms’. The stress falls on the first mora of the final long vowel, hence stress is phonetically realized as a falling tone, while it is a rising one with short final stressed vowels (see Morin 1995).

3.1.5.2. Stress alternation

The indefinite form of disyllabic nouns ending in a short vowel (always lengthened with the indefinite determiner), and with a vowel a in the first syllable have stress on the last syllable in the singular and on the first one in the plural: ḥaɗa ‘lion’, ḥaɗaː=b ‘a lion’, pl. ḥaɗaː=b; ḥaɗa ‘lion’, ḥaɗaː=b ‘a lion’, pl. ḥaɗaː=b; ḥaɗa ‘lion’, ḥaɗaː=b ‘a lion’, pl. ḥaɗaː=b. Some C1aC2aC3 disyllabic nouns with a final stress form their plural by moving the stress on the penultimate syllable: haˈwad ‘night’, pl. ˈhawad.

3.1.5.3. The suffix -a

All other nouns (mainly ending with a consonant) and adjectives form their plural by suffixing the vowel -a (-ja after a final vowel) to the stem which remains invariable, except C1iC2iC3 disyllabic nouns which drop the second i: tirig ‘moon crescent, month’, tir-ga ‘full moon, months’, dabaloː ‘small’, pl. dabaloː-ja. Disyllabic C1aC2aC3 nouns with stress on the initial syllable move it to the penultimate: raˈgad ‘leg’, pl. raˈgad-a.

3.1.5.4. Reduplication

Two monosyllabic adjectives form their plural by reduplicating the initial consonant, followed by a vowel a: wa~win, dis ‘small, short’, pl. da~dis. They are not found in the pilot corpus.

One derived noun, whose singular is given as ḍhaːni ‘wild animal’ (a variant of ḍhaːninaj, see 3.1.5.1) by Roper (1928: 176), occurs in the pilot corpus only in the plural form, which consists in the reduplication of the final open syllable, shortening of the first vowel, and lengthening of the second one: ḍhaniː~ni ‘wild animals’.

3.1.5.5. Suppletive plurals

Two animate nouns have suppletive plural forms: tak ‘man’, pl. da and takat ‘woman’, pl. mʔa.

3.1.5.6. Inherent plural nouns


3.1.5.7. Singulative

A singulative suffix -aj is used for generic nouns: ḍoːhara-aj ‘one jewel’.

3.1.6. Cases

Beja has three core cases expressing grammatical relations: Nominative, Accusative, Genitive, to which one may add a Vocative semantic case for animate and personal names.
3.1.6.1. Nominative and Accusative

For NOM and ACC, case is not indexed on nouns but on the determiners (clitic articles; also demonstratives, see below section 3.1.7.2), which are portmanteau morphemes fusing degrees of determination (definite proclitic and indefinite enclitic articles) and, to some extent, number. It is a morphologically split system, which depends on the syllabic structure of the host, and on its gender.

For the proclitic definite article, case marking surfaces only when it cliticizes to monosyllabic nouns and disyllabic nouns whose first open syllable contains a short i (see Hamid-Ahmed, 2013); gender is marked by a zero morpheme for masculine, $t =$ for feminine (not parsed as separate morphemes in the pilot corpus).

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>F</th>
<th></th>
<th>M</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOM</td>
<td>$u =$</td>
<td>$a =$</td>
<td>SG PL</td>
<td>$t u =$</td>
<td>$t a =$</td>
</tr>
<tr>
<td>ACC</td>
<td>$o =$</td>
<td>$e =$</td>
<td>SG PL</td>
<td>$t o =$</td>
<td>$t e =$</td>
</tr>
</tbody>
</table>

Table 3: NOM and ACC with the definite article

NOM and ACC cases is not overtly marked for all other syllabic structures of the nominal stem for which the definite article is $(t)i =$ for both cases and numbers. The definite article also becomes $(t)i =$ if the noun is followed by a possessive NOM or ACC bound pronoun, and by the enclitic postpositions (see section 3.8 below) (for exceptions see ex. 4 and 5 below).

Nouns with an initial laryngeal h or ʔ have no overt marking either on the definite article, but these nouns still distinguish number in the masculine only: $w =$ in the singular, $j =$ in the plural; with feminine nouns, the article is $t =$ for all numbers and cases.

For the indefinite enclitic article, case is overtly marked on a portmanteau morpheme only for one subset of masculine nouns in the Accusative case: $=b$ is only added to nouns ending with a vowel; for nouns ending with -i the marker triggers in addition the lengthening of the vowel, and a synchronically unpredictable change of vowel quality: e.g. $i = 'bali$ ‘the sorgho’, $bal'tu = b$ ‘sorgho’, $w = 'hari$ ‘the great millet’, $har'ro = b$ ‘great millet’, but $hami$ ‘gall-bladder’, $ha'mu = b$ ‘a gall-bladder’. In NOM and for all other types of masculine nouns in both NOM and ACC, case is not overtly marked (case is not glossed in the ge tier of the corpus, but the subject function is marked as SBJ in rx for retrieval purposes). For feminine, case is never overtly marked: the indefinite article is an enclitic $=t$ for both cases (with similar unpredictable allomorphs for nouns ending with -i: e.g. $di 'mother$, $de = t 'a mother$; $hami 'hair$, $ha'mo = t 'one hair$, whatever the syllabic structure. Exceptions to these rules are due to dialectal interferences.

NOM is used for the subject function, but the use of ACC goes beyond its main syntactic function as direct object and also marks the recipient argument in a ditransitive construction (and the citation form in the indefinite).
The case system is not fully stable anymore, and mismatches between syntactic function and case occur as in (3) below where the subject dhej ‘people’ is in the Accusative case:

3. \( \alpha = \) dhej dhaːj guːd -en /
DEFSG.M.ACC = people DIR increase -IPFV.3PL.
DETSBJ.N.M.COLL = POSTP V2 -TAM.PNG.
‘People came to him in number’ (lit. the people are numerous towards him)

3.1.6.2. Genitive

The Genitive relation between two nouns is marked by a case suffix on the dependent noun, which differentiates singular and plural: -i (SG), -ε (PL)\(^2\) (var. -ji, -je: after a vowel i), preceded by =t- if the dependent is feminine, and the head masculine (for a more precise analysis see section 4.4). In addition, the definite article of the head is (t)i=, for both numbers, whatever its form in the NOM and ACC.

4. \( i = \) meːk -i m- ʔam
DEFTDEF.M = donkey -GEN.SG N.AC - mount\REFL
DETSBJ.N.M = N -CASE N.V - V1.DER.
‘The riding of a donkey’ (BEJ_MV_NARR_03_CAMEL_033)

There are a few exceptions to this rule in the pilot corpus, linked either to the decay of the case system, or to dialectal interference, as in (5) below where the expected form of the article is i=, not \( \alpha = \):

5. \( \alpha = \) gʷiba -i ?annur =ib /
DEFSG.M.ACC = shield -GEN.SG handle =LOC.SG.
DETSBJ.N.M = N -CASE N.M = POSTP.
‘In the handle of the shield’ (BEJ_MV_NARR_15_LEOPARD_058)

The Genitive may also mark a temporal and a spatial (Superessive) value:

6. \( \alpha = \) \(^3\) wjaː -i //
DEFSG.M.ACC = winter -GEN.SG.
DETSBJ.N.M = N -CASE.
‘in winter’ (BEJ_MV_NARR_05_ERITREA_209)

7. \( i = \) sikka -i //
DEFTDEF.M = road -GEN.SG.
DETSBJ.N.M = N.M -CASE.
‘On the road’ (BEJ_MV_NARR_10_RABBIT_15)

When the Genitive is used on an argument of a verbal head, it most often marks an instrumental value:

8. \( \alpha = \) nda i= gʷibi -ji bʔaḍaḍ -a -ji \(^4\)
DEFSBJ.PL.M.NOM = man\PL DEF.M = shield -GEN.SG sword -PL -GEN.SG.
DETSBJ.N.M = N.M -CASE N.M -. -CASE.
i- san = hook //
3SG.M- = wait\AOR-PL OBJ.2SG.
PNG- V1 -PNG = PRO.
‘May you find men with shields and swords!’ (BEJ_MV_NARR_12_WITCH_129)

---

\(^2\) Appleyard (2004: 183) makes the hypothesis that the plural form comes from the plural suffix -a + the Genitive singular.

\(^3\) This is again an exception to the rule that the Genitive suffix entails the definite article with a short i.

\(^4\) Sic. The Genitive plural form was expected.
9. **on**  
**w** = **hataj** **-i**  
**niwa**  
**wadak**  
**-i**  
PROX.SG.M.ACC  
DEF.SG.M = horse -GEN.SG  
tail  
grease  
-GEN.SG  
DEM  
DET =  
N -CASE  
N.M  
N.M -CASE  
ʃʔib **-a**  
coat  
-IMP.SG.M = COORD  
V1  
-TAM.PNG = CONJ  
‘Coat this horse tail with grease!’ (BEJ_MV_NARR_12_WITCH_075)

It may also express conventionalized non-anchoring values (Koptjevskaja-Tamm 2005):

10. **diw**  
**-anaː**  
**-i**  
**fanbib**  
sleep  
-N.AGN -GEN.SG  
look,IPFV.[3SG.M]  
V2  
-N.V  
-CASE  
V1  
‘He had to skip dinner’ (lit. he looks of the dinner) (BEJ_MV_NARR_16_PROPHET_FOX_326)

### 3.1.6.3. Vocative

The vocative (VOC) suffix has two free\(^5\) variants -i and -ej:  
\[ t = ?arit-ej \quad / \quad t = ?arit-i \]  
‘girls!’ (BEJ_MV_NARR_14_SIJJADOK_093 / 033). It is placed after the indefinite enclitic article and the bound pronouns:  
\[ hoːb = un-ej \]  
‘grand-father!’ (BEJ_MV_NARR_03_CAMEL_030), and may be reinforced by the vocative particle (glossed ADRF, address form)  
\[ iːha \]  
which follows the noun (or proper noun) in the vocative case:  
\[ maːlk-i jhaː \]  
‘Malik!’ (BEJ_MV_NARR_08_DRUNKARD_100).  
The vocative particle borrowed from Arabic  
\[ ja \]  
(glossed ADRF) is also used instead of the vocative suffix and precedes the noun, as in Arabic:  
\[ ja \ ?ar \]  
‘guys!’ (BEJ_MV_NARR_08_DRUNKARD_116).

### 3.1.7. Determiners and demonstratives

#### 3.1.7.1. Articles

Beja has two types of markers of definiteness: a proclitic definite article and an enclitic indefinite article which differentiate and/or amalgamate gender, number and case to a certain extent (see above section 3.1.7). They are analyzed as clitics since they can also be used with finite verb forms to form relative clauses.

Some nouns beginning with  
\[ b \]  
and a few with  
\[ d, \quad d, \quad f, \quad g, \quad g^\prime, \quad k, \quad s, \quad f, \quad t, \quad w \]  
insert a nasal after the definite article (either for etymological reasons, or through the development of a pre-nasalisation process, in particular for  
\[ b \]  
see Vanhove 2004), e.g.  
\[ da \]  
‘men’,  
\[ a = nda \]  
‘the men’. For some words like  
\[ bʔadq \]  
‘mat’, the nasal may be omitted (because of dialectal interference):  
\[ w = mbʔadq \] (BEJ_MV_NARR_01_SHELTER_025), but  
\[ i = bʔadq \] (BEJ_MV_NARR_01_SHELTER_020) ‘the mat’.

#### 3.1.7.2. Demonstratives

Proximal and distal demonstratives function as adjectives and pronouns. They are marked for number and gender, and there is a case distinction between NOM and ACC forms, except for the distal feminine forms. GEN is only attested for the proximal forms; like for all types of possessive phrases, agreement rules depend on both the head and the dependent (see below section 4.4.). Distals do not distinguish NOM and ACC in the F.

---

\(^5\) Roper (1928: 14) gives the variants as phonologically conditioned:  
-\(i\) after a vowel,  
-\(eː\) /  
-\(ej\) after a consonant.
Table 4: Demonstratives NOM and ACC

<table>
<thead>
<tr>
<th>Head noun</th>
<th>Dependent noun</th>
<th>PROX</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG.M &amp; PL.M</td>
<td>SG.M &amp; PL.M</td>
<td>onaj</td>
</tr>
<tr>
<td>SG.M &amp; PL.M</td>
<td>SG.F &amp; PL.F</td>
<td>tonaj</td>
</tr>
<tr>
<td>SG.F &amp; PL.F</td>
<td>SG.M &amp; PL.M</td>
<td>onati</td>
</tr>
<tr>
<td>SG.F</td>
<td>SG.F &amp; PL.F</td>
<td>tonati</td>
</tr>
<tr>
<td>PL.F</td>
<td>SG.F &amp; PL.F</td>
<td>tonatet</td>
</tr>
</tbody>
</table>

Table 5: Demonstratives GEN

<table>
<thead>
<tr>
<th>Head noun</th>
<th>Dependent noun</th>
<th>PROX</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG.M &amp; PL.M</td>
<td>SG.M &amp; PL.M</td>
<td>onaj</td>
</tr>
<tr>
<td>SG.M &amp; PL.M</td>
<td>SG.F &amp; PL.F</td>
<td>tonaj</td>
</tr>
<tr>
<td>SG.F &amp; PL.F</td>
<td>SG.M &amp; PL.M</td>
<td>onati</td>
</tr>
<tr>
<td>SG.F</td>
<td>SG.F &amp; PL.F</td>
<td>tonati</td>
</tr>
<tr>
<td>PL.F</td>
<td>SG.F &amp; PL.F</td>
<td>tonatet</td>
</tr>
</tbody>
</table>

In the feminine, the male speaker also makes use of a variant ?uːt / tuːt for PROX.NOM. When functioning as adjectives, the demonstratives most often precede the definite article, the monosyllabic demonstratives may cliticize to the definite noun, and the vowel is often shortened: u(ː)n = uː = ˈtak ‘this man’. In some rare instances, the demonstrative may follow the noun: ˈeː=jam baˈliːb ‘this water place’ (BEJ_MV_NARR_05 ERITREA 076).

Demonstratives can be used in combination with bound pronouns:
11. bet  ti =  tilʔi =  t =  oː
    DIST.SG.F.ACC  DEF.F =  hole =  INDF.F =  POSS.3SG.ACC
    DEM  DET =  N.F =  DET =  PRO
    ‘his hole’ (lit. this hole (of) his) (BEJ_MV_NARR_17 SHOEMAKER 274)

3.1.8. Pronouns

There are two main sets of pronouns: set 1 includes independent object and possessive pronouns; set 2 enclitic object and possessive pronouns. All distinguish several subsets. They vary for gender (2nd and 3rd persons only; the stem is bar- for M and bat- for F), number and case. In the corpus, two other cases are also partially attested, Dative and Ablative (which may also express Allative). There is also a set of Reflexive pronouns.

3.1.8 1. Set 1: Independent personal pronouns

<table>
<thead>
<tr>
<th>NOM</th>
<th>ACC</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG</td>
<td>PL</td>
</tr>
<tr>
<td>1</td>
<td>(un)ˈani</td>
</tr>
<tr>
<td>2M</td>
<td>(um)baˈruːk</td>
</tr>
<tr>
<td>2F</td>
<td>(um)baˈtuk</td>
</tr>
<tr>
<td>3M</td>
<td>(um)baˈruː</td>
</tr>
<tr>
<td>3F</td>
<td>(um)baˈtuː</td>
</tr>
</tbody>
</table>

Table 6: Independent personal pronouns

NB: (Vn/m) and (na) are optional. (Vn/m comes from the demonstratives un, etc.). Before the borrowed coordinating clitic =wa ‘and’, the 3.SG.M.NOM becomes barheː.
3.1.8.2. Set 1: Independent possessive pronouns

Independent possessive pronouns have the characteristic vowels i (SG) / eː (PL) of the Genitive inserted between the stem bar- / bat- and the variable part of the pronoun. They also index the gender, number and case of the head noun.

<table>
<thead>
<tr>
<th>Head</th>
<th>SG.NOM</th>
<th>PL.NOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP SG</td>
<td>PL</td>
<td>SG</td>
</tr>
<tr>
<td>1</td>
<td>'ani</td>
<td>'ani</td>
</tr>
<tr>
<td>2M</td>
<td>bari'jwuk</td>
<td>bari'jwak</td>
</tr>
<tr>
<td>2F</td>
<td>bati'jwuk</td>
<td>bati'jwak</td>
</tr>
<tr>
<td>3M</td>
<td>bari'ju</td>
<td>bari'ja</td>
</tr>
<tr>
<td>3F</td>
<td>bati'ju</td>
<td>bati'ja</td>
</tr>
</tbody>
</table>

Table 7: Independent possessive NOM pronouns with masculine head

<table>
<thead>
<tr>
<th>Head</th>
<th>ACC.SG</th>
<th>ACC.PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP SG</td>
<td>PL</td>
<td>SG</td>
</tr>
<tr>
<td>1</td>
<td>'o:nib</td>
<td>'emib</td>
</tr>
<tr>
<td>2M</td>
<td>bari'jwok</td>
<td>bari'jwak</td>
</tr>
<tr>
<td>2F</td>
<td>bati'jwok</td>
<td>bati'jwak</td>
</tr>
<tr>
<td>3M</td>
<td>bari'jwok</td>
<td>bati'jwok</td>
</tr>
<tr>
<td>3F</td>
<td>bati'jwok</td>
<td>bati'jwok</td>
</tr>
</tbody>
</table>

Table 8: Independent possessive ACC pronouns with masculine head

<table>
<thead>
<tr>
<th>Head</th>
<th>NOM.SG</th>
<th>NOM.PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP SG</td>
<td>PL</td>
<td>SG</td>
</tr>
<tr>
<td>1</td>
<td>'ani</td>
<td>'ani</td>
</tr>
<tr>
<td>2M</td>
<td>bari'tuk</td>
<td>bari'tak</td>
</tr>
<tr>
<td>2F</td>
<td>bati'tuk</td>
<td>bati'tak</td>
</tr>
<tr>
<td>3M</td>
<td>bari'tuk</td>
<td>bati'tuk</td>
</tr>
<tr>
<td>3F</td>
<td>bati'tuk</td>
<td>bati'tuk</td>
</tr>
</tbody>
</table>

Table 9: Independent possessive NOM pronouns with feminine head

<table>
<thead>
<tr>
<th>Head</th>
<th>ACC.SG</th>
<th>ACC.PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP SG</td>
<td>PL</td>
<td>SG</td>
</tr>
<tr>
<td>1</td>
<td>'o:nib</td>
<td>'emib</td>
</tr>
<tr>
<td>2M</td>
<td>bari'tok</td>
<td>bati'tok</td>
</tr>
<tr>
<td>2F</td>
<td>bati'tok</td>
<td>bati'tok</td>
</tr>
<tr>
<td>3M</td>
<td>bari'tok</td>
<td>bati'tok</td>
</tr>
<tr>
<td>3F</td>
<td>bati'tok</td>
<td>bati'tok</td>
</tr>
</tbody>
</table>

Table 10: Independent possessive ACC pronouns with feminine head

3.1.8.3. Set 1: Independent Dative pronouns

A small set of independent Dative pronouns are partly attested in the pilot corpus: 1SG houn, 3SG houn (which is identical to the 2SG bound pronoun, cf. KAR_MV_NARR.08_DRUNKARD.035), 3PL batiwa (BEJ_MV_NARR.17_SHOEMAKER.257).

3.1.8.4. Set 1: Independent Ablative pronouns

Independent Ablative pronouns are characterized by an Ablative morpheme -s- ‘from’ infixed between various stems (the DAT stem and the ACC.PL stem), depending on the
person, and the bound Accusative possessive pronouns. In the pilot corpus, only 1SG hoːs = i, 3SG hoː-s = aいただいて and 2PL.ACC bareː-s = okna. In addition there is the more common 3SG and 3PL hoːj which also has an inessive meaning with a few locative and stative verbs such as fi ‘be (there)’, mok ‘take refuge’, biri ‘have’, miri ‘find’... Ablative pronouns are also used with emotion and psychological verbs as the theme (in the sense of RRG, Van Valin 2005) of a predicative construction where the subject is the Experiencer.

12. hoːj libab -an dadiː i= raw =eb /
   3ABL be_happy -PFV.1SG work DEF.M = other\PL =LOC.PL .
   PRO V2 -TAM.PNG N.M DET= N =POSTP .
   ‘I was pleased with the other jobs.’ (BEJ_MV_NARR_04 DJINN_175)

3.1.8.5. Set 2: Bound object pronouns

The bound personal pronouns of set 2 are overtly marked for 1st and 2nd persons and function as direct and indirect object. There is no gender distinction, but a suffix is optionally added to express the sex of the person addressed (-a for masculine, -i for feminine). The form of the bound pronouns varies with TAM and the presence or absence of the enclitic temporal conjunction =hoːb ‘when’. The set of bound object pronouns with the Aorist are usually similar to 1st and 2nd bound possessive pronouns (for an exception, see second verb in ex. 15 below). The bound pronouns are directly attached to the verb form, but after the coordinating enclitic =t (and its allomorphs) when there is one (BEJ_MV_NARR_15 LEOPARD_057).

<table>
<thead>
<tr>
<th>After IPFV &amp; PFV</th>
<th>After AOR</th>
<th>before =hoːb</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG</td>
<td>PL</td>
<td>SG</td>
</tr>
<tr>
<td>1</td>
<td>=heːb =hoːn =i =un =’o(ː) =’oːn</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>=hoːk =’hoːkna =uk =’ukna =’ok =’okna</td>
<td></td>
</tr>
</tbody>
</table>

Table 11: Clitic personal pronouns

The bound pronouns used with the Aorist usually express a hypothesis or a doubt. They can also be used with the other two indicative paradigms to express the same modalities, and also with the negative Optative paradigm. This set of pronouns is used instead of the conditional particle =eːk ‘if’ which is not compatible with a pronominal object.

13. w= haˈwad jʔ =juːk /
   DEF.SG.M= night come -AOR.3SG.M =POSS.2SG.NOM .
   DET= N.M V2.1RG -TAM.PNG =PRO .
   ‘if night falls upon you’ (BEJ_MV_NARR_05 ERITREA_111)

14. aː= jas j-ʔaʃiʃ -n =uk fifi/k
   DEF.PL.M.NOM= dog\PL 3M- face_each_other\PFV -PL =POSS.2SG.NOM thorn
   DET= SBJ.N PNG -V1 PNG =PRO N.M
   fif -a he =ja /
   pour -IMP.SG.M give - IMP.SG.M .
   V1 -TAM.PNG AUX.BENF -TAM.PNG .
   ‘If dogs meet you, pour thorns to them!’ (BEJ_MV_NARR_12 WITCH_107)

15. aː= kʷan i= baː= hass -aj =uk /
   DEF.SG.M.ACC = flood DEF.M = NEG.OPT = pass -OPT.3SG.M =POSS.2SG.NOM .
   DET= SBJ.N.M REL = PTCL= V2 -TAM.PNG =PRO .

= hoːs is the 3SG.ACC bound pronoun in the Halenga tribe variety according to Roper.
Furthermore, with ditransitive and motion verbs, a particle \((j)eːt\) marking the recipient is inserted before the bound Aorist pronouns:

16.  

\[ \begin{align*}  
& \text{PROX.SG.F.NOM} = \text{DEF.SG.F.NOM} = \text{thing .} \quad \text{DEF.F} = \text{body} = \text{POSS.1SG.ACC} \\
& \text{DEM} = \text{SBJ.N.F} . \quad \text{REL} = \text{N.M} = \text{PRO} \\
& \text{PROX.SG.F.NOM} = \text{REL.F} \quad \text{DEF.SG.F.ACC} = \text{owner} . \quad \text{PRO.REFL} . \\
& \text{come\AOR.3SG.F} = \text{RCPT} = \text{POSS.1SG.NOM} \quad \text{Q.PLR} . \\
& \text{V2.IRG} = \text{PTCL} = \text{PRO} \quad \text{ADV.QUEST} ?  
\end{align*} \]

‘Would this thing itself that my body felt come to me?’ (BEJ_MV_NARR_05_ERITREA_325-328)

3.1.8.6. Set 2: Bound possessive pronouns

Bound possessive pronouns are similar to the bound object pronouns used with the Aorist form of the verb. In addition, possessives are overtly marked for 3rd persons, but there is no number distinction. They vary for case, and 1st & 3rd persons are alike with plural head nouns.

<table>
<thead>
<tr>
<th>NOM</th>
<th>ACC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head</td>
<td>SG</td>
</tr>
<tr>
<td>1SG</td>
<td>(=i/)= (=e:)</td>
</tr>
<tr>
<td>2</td>
<td>(=uk)</td>
</tr>
<tr>
<td>3</td>
<td>(=u)</td>
</tr>
<tr>
<td>1PL</td>
<td>(=un)</td>
</tr>
<tr>
<td>2</td>
<td>(=ukna)</td>
</tr>
<tr>
<td>3</td>
<td>(=u)</td>
</tr>
</tbody>
</table>

Table 12: Possessive pronouns in NOM and ACC

Whenever a bound possessive pronoun is attached to a noun which licenses the articles with the long vowels, the syllabic structure of the prosodic word changes, the stress shifts to the right, and the definite article is invariably \((t)i=:\ \(\alpha:\=mhiːn\) ‘the (ACC.SG.M) place’, \(i=mhiːˈn=i\) ‘my place’; \(u=jaːs\) ‘the (NOM.SG.M) dog’ \(i=jaːˈs=i\) ‘my dog’.

In the Genitive, the case markers SG -\(i\) and PL -\(e:\) are inserted between the noun and the ACC form of the possessive, e.g. \(=i/\) \(=iji\) ‘1SG.GEN’, \(=ijok\) ‘2SG.GEN’, \(=ij:\) ‘3SG.GEN’ (plural forms do not occur in the corpus). The concord rules with head and dependent nouns are the same as with the independent set. When the possessive is enclitic to a noun in the Genitive case, the feminine gender marker of the head noun precedes the possessive pronoun: \(duːr-i=t=uk\ t=t\?or\ ‘your uncle’s daughter’;\) when both nouns are feminine, the first feminine ending is that of the dependent noun, and the feminine marker of the head noun is placed before the possessive pronoun: \(ti=m?a=t\=e:\=t=t=akna\ ?ar\ ‘your wives’ daughters’ (the \(=t\) in \(m?a=t\) refers to the feminine gender of the dependent noun, \(m?a\ ‘women’\), while the \(=t\) in \(e:\=t\) refers to the head, \(?ar\ ‘daughters’\).
Because of rules of honour, the 1PL bound pronouns may be used out of politeness instead of 1SG (in this case glossed PRO.POL in rx tier), typically with kinship terms (BEJ_MV_NARR_03_CAMEL_030), or money (BEJ_MV_NARR_04_DJINN_088) or personal belongings such as cattle (BEJ_MV_NARR_10_RABBIT_66).

3.1.8.7. Set 2: Variants of bound possessive pronouns

Variants of the bound possessives are found in the pilot corpus; some are morphologically conditioned, others are due to dialectal interference. Before enclitic conjunctions, 3SG and PL.ACC become =hi.

17. \( \text{toː}=wʔa=t=hi=wa / \) 
\( \text{DEF.SG.F.ACC=} \text{container=} \text{INDEF.F}=\text{POSS.3ACC=} \text{COORD} . \) 
\( \text{DET=} \text{N.F}=\text{DET}=\text{PRO}=\text{CONJ} . \) 
\( \text{eː=jam}=hi=wa / \) 
\( \text{DEF.PL.M.ACC=} \text{water=} \text{POSS.3ACC=} \text{COORD} . \) 
\( \text{DET=} \text{N.PL.M}=\text{PRO}=\text{CONJ} . \) 
‘their container and their water…’ (BEJ_MV_NARR_12_WITCH_066-067)

POSS.1SG becomes =ox: before enclitics such as the copula: \( \text{dar=}\text{ox}=\text{ji} \) ‘it is my destiny’ (BEJ_MV_NARR_14_SUJADOK_377)

When used as a postposition after nouns, \( \text{dhaj} \) (and its allomorphs) triggers a different subset of bound GEN pronouns, only attested in the 3rd persons: 3SG and 3PL =lheː=da (BEJ_MV_NARR_02_FARMER_067) (normally with a singular dependent noun) / =eheː=d (BEJ_MV_NARR_14_SUJADOK_087) (normally with a plural head).

The 3PL.NOM has a free variant =hina (BEJ_MV_NARR_03_CAMEL_155), considered by Roper (who states that this variant is also used with SG) as typical of the variety spoken by the Hadendowa tribe.

3.1.8.8. Set 2: Bound ablative pronouns

A special subset of bound pronouns is used to express ablative (BEJ_MV_NARR_10_RABBIT_40), instrumental (BEJ_MV_NARR_08_DRUNKARD_052) and instructive (‘by means of’) meanings (BEJ_MV_NARR_02_FARMER_124). Ultimately they can be parsed into the Genitive case markers + the Ablative morpheme -s- ‘from’ + the ACC bound pronouns.

Table 13 provides the forms attested in the pilot corpus; 1SG and 3SG share one identical form (=isoː):

<table>
<thead>
<tr>
<th>Head</th>
<th>SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>=iso / =isisi</td>
<td>=esoxn</td>
</tr>
<tr>
<td>2SG</td>
<td>=isok</td>
<td></td>
</tr>
<tr>
<td>3SG</td>
<td>=iso / =isi</td>
<td></td>
</tr>
<tr>
<td>1PL</td>
<td>=ison</td>
<td></td>
</tr>
</tbody>
</table>

Table 13: Ablative pronouns

3SG.ABL \( \text{harʔi}=\text{isi} \) ‘at the back’ (lit. from behind her) (BEJ_MV_NARR_01_SHELTER_111)
1SG.ABL \( \text{khi}=\text{isisi} \) ‘from upon me’ (BEJ_MV_NARR_15_LEOPARD_096).
3.1.8.9. Reflexive pronouns

The most common expression of reflexivity consists in the use of the appropriate derived verb forms (see section 3.2.3.1.3). Beja also makes use of a particular set of definite nouns which function both as reflexive pronouns and as intensifiers. The most frequent one is made of the definite article + kina ‘owner’ (+ Possessive pronoun). The article agrees in number and gender with the noun it refers to.

The reflexive pronouns are often used as discourse particles to emphasize an assertive value (see e.g. ex. 19, 92).

3.2. Verb morphology

3.2.1. Verb classes, verb roots and stems

Together with four other Cushitic languages, Afar, Saho, Somali and South-Agaw, Beja has two morphological verb classes. Verb class 1 (V1), historically the oldest one, is conjugated with prefixes (and also infixes for disyllabic verbs in the singular). The root of the verbs of this class is consonantal (one, two or three consonants), and the vowels of the verb stem vary with TAM. Beja is the Cushitic language where this verb type is the most frequent. It contains the majority of the verbs (56%, cf. Cohen 1984\(^7\)). The stem, which forms the basis of the conjugation is, by convention, the bare form found in the construction with the light verb auxiliary di ‘say’ (see section 3.2.6.4), which is also that of the Imperative without the inflectional morphemes.

Verb class 2 (V2), the innovative paradigm, is conjugated with suffixes and the stem is invariable for all TAM and corresponds to the root without the inflectional morphemes.

Verb class assignment is synchronically arbitrary, but most borrowings from Arabic are conjugated following the V2 pattern.

3.2.2. Inflectional categories

The inflection system indexes, partly on portmanteau morphemes, person (1\textsuperscript{st}, 2\textsuperscript{nd} and 3\textsuperscript{rd}), gender (F and M in 2SG and 3SG only), number (SG and PL), and TAM. There are three basic Indicative forms with aspectual-temporal values: Imperfective, Perfective and Aorist, and two modal paradigms, Imperative and Optative.

3.2.2.1. Indicative paradigms

Below are the inflectional morphemes of the three main indicative paradigms at the base form. IPFV markers of verb class 1 are that of monosyllabic verbs.

\(^{7}\) For the Beja variety of Eritrea, K. & C. Wedekind (2002) give a lower figure, 45%.
<table>
<thead>
<tr>
<th>V1</th>
<th>SG</th>
<th>PL</th>
<th>SG</th>
<th>PL</th>
<th>SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2M</td>
<td>F</td>
<td>3M</td>
<td>3F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>an-ˈCiːC</td>
<td>'tin-ˈCiːC-a</td>
<td>'tin-ˈCiːC-i</td>
<td>in-ˈCiːC</td>
<td>tin-ˈCiːC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>an-ˈCiːC</td>
<td>'tin-ˈCiːC-a</td>
<td>'tin-ˈCiːC-i</td>
<td>in-ˈCiːC</td>
<td>tin-ˈCiːC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>an-ˈCiːC</td>
<td>'tin-ˈCiːC-a</td>
<td>'tin-ˈCiːC-i</td>
<td>in-ˈCiːC</td>
<td>tin-ˈCiːC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 14: Verbal inflection morphemes**

The variants with a final -n for 2SG, 3SG and 1PL, occur before the conjunctive enclitics =hoː 'when', =eːk 'if', =e=b/t) 'REL'.

Disyllabic verbs at the base form insert the IPFV marker -an- after the first consonant of the stem in the singular: -C1anC2iːC3-.

<table>
<thead>
<tr>
<th>V2</th>
<th>1</th>
<th>2M</th>
<th>F</th>
<th>3M</th>
<th>3F</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>-'ani</td>
<td>-tnja</td>
<td>-tini</td>
<td>-'tini</td>
<td>-tini</td>
<td>-en(a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-'an</td>
<td>-ta(n)</td>
<td>-taj /-tan</td>
<td>-ja(n)</td>
<td>-ta(n)</td>
<td>-jam(a)</td>
<td>-i</td>
<td>-ni</td>
</tr>
<tr>
<td>-na</td>
<td>-tan(a)</td>
<td>-tiːn(a)</td>
<td>-tiː</td>
<td>-tiːn(a)</td>
<td>-jaːn(a)</td>
<td>-ti</td>
<td>-tin(a)</td>
</tr>
</tbody>
</table>

**Table 15: Verbal inflection morphemes of disyllabic V1**

The prefixed 1SG index is usually elided before initial laryngeals.

In addition there is a small sub-class of bi-consonantal and tri-consonantal V1 which do not have the n prefix or infix in the IPFV at the base form, but are characterized by a post-stem suffix -i. This sub-class includes most verbs with stem C1i(C2)o:C3 or C1iC2e:C3 (e.g. a-for-i 'I flee', a-fibob-i 'I am good', a-hibe-i 'I spend the rainy season'), and some verbs (mainly stative) with a(ː) as V(2) (hadal 'be black', haragʷ 'be hungry', fikʷan 'smell nice', nhad 'finish', bʔan 'fear', kʷas 'create', war 'do', bar 'have'). They are noted as irregular (IRG) in the rx tier, together with a few other highly irregular verbs (often mono-consonantal) which have suppletive stems.

For the paradigms of derived verbs, see section 3.2.3.

The Aorist is the tense of narration (e.g. the first verb of a tale is almost always in the Aorist form), it often follows a first Perfective or Imperfective verb form in a series of events, and it is commonly used in conditional clauses (more often than the PFV and the IPFV).
3.2.2.2. Modal paradigms

3.2.2.2.1. Imperative and Prohibitive

For both verb classes the inflectional morphemes are suffixed to an invariable stem. IMP differentiates gender only in SG: -a (M), -i (F). Inflection is slightly different for V1 and V2 in the plural: V1 -na, V2 -ana. A suffix -n (EMPH in ge tier) is added to the IMP flectional morphemes to emphasize the imperative meaning and strengthen the illocutionary force of the command (BEJ_MV_NARR_01_SHELTER_044) and the urgency with which the command should be fulfilled.

For the Prohibitive, the proclitic modal negative particle ba= (SG.M & PL) / bi= (SG.F) (glossed as NEG.PROH) precedes the verb stem. The stem patterns of V1 undergo ablaut and are different from those of the Imperative: Ci:C and CaCi:C. The suffixes remain the same for each verb class, except the feminine morpheme of V2 which becomes -ej.

3.2.2.2. Optative affirmative and negative

The affirmative Optative (OPT) paradigm is based on the AOR paradigm for both verb classes, preceded by the invariable modal particle ba= (homophonous with the SG.M & PL prohibitive particle). It fully inflects for person, number and gender, thus functioning also as a Hortative with 1st persons, and as a Jussive with 3rd persons.

If the affirmative Optative is followed by a bound Object pronoun (instead of the Possessive pronouns which normally cliticize to the Aorist form), the use of the particle is optional: i-san-n = ho:k ‘may you find!’ (BEJ_MV_NARR_12_WITCH_129).

For the negative Optative (also negative Hortative and Jussive) a variable particle ba= / bi= (glossed NEG.OPT), added to the verb stem (Ci:C or CaCi:C for V1, as with the Prohibitive; no ablaut with V2) conjugated with prefixes for both verb classes + a set of suffixes (for monosyllabic V1 and for all V2) are used. The inflection is detailed in table 16 below:

<table>
<thead>
<tr>
<th></th>
<th>SG</th>
<th>V1 mono</th>
<th>V2</th>
<th>PL</th>
<th>V1 mono</th>
<th>V2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ba=</td>
<td>a-stem</td>
<td>-aj / ej</td>
<td>bi=</td>
<td>n-stem</td>
<td>-aj / ej</td>
</tr>
<tr>
<td>2M</td>
<td>bi=</td>
<td>t-stem</td>
<td>-a</td>
<td>-aja / ej</td>
<td>bi=</td>
<td>t-stem</td>
</tr>
<tr>
<td>2F</td>
<td>bi=</td>
<td>t-stem</td>
<td>-i</td>
<td>-aj / ej</td>
<td>bi=</td>
<td>t-stem</td>
</tr>
<tr>
<td>3M</td>
<td>bi=</td>
<td>i-stem</td>
<td>-aj / ej</td>
<td>bi=</td>
<td>i-stem</td>
<td>-na</td>
</tr>
<tr>
<td>3F</td>
<td>bi=</td>
<td>t-stem</td>
<td>-aj / ej</td>
<td>bi=</td>
<td>i-stem</td>
<td>-na</td>
</tr>
</tbody>
</table>

Table 16: Optative Negative

The variation in the suffixes is due to dialectal interference.

The SG suffixes change to -a before the enclitic pronouns, and the PL final vowel of V2 is elided before them and before the enclitic conjunction =e:k ‘if’.

18. harʔiː =isiː bi= t- jʔ -a =heːb =aj
     after =POSS.3SG.ABL NEG.OPT= 3SG.F- come -OPT =OBJ.1SG =CSL
     POSTP =PRO PTCL= PNG- V2.1RG -TAM =PRO =PTCL
     ‘it must not come from behind!’ (BEJ_MV_NARR_05_ERITREA_329)

In addition to its Optative/Hortative/Jussive negative function, this paradigm is used to negate verbs in relative and complement clauses in which it brings epistemic modal values (incapacity, necessity), and in conditional clauses (see Vanhove 2011):
There was really nothing that they did not have in it.

I thought it would not be able to run.

If they cannot do anything to you, we are going to complain to God

3.2.3. Verb derivations

The morphology, the number and the semantics (to some extent) of the derived verb forms vary according to the verb class.

3.2.3.1. Verb class 1 derivation patterns

Beja is the sole Cushitic language that uses qualitative ablaut in the stem as a derivational device for various semantic and voice derivations. The ablaut may be combined with reduplication of one syllable, or the use of prefixes. Full reduplication is also possible (without ablaut). Table 17 below provides the seven verbal derivation patterns (the vocalic patterns are those of IMP and PFV):

<table>
<thead>
<tr>
<th>monosyllabic</th>
<th>disyllabic</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT (bis ‘bury’)</td>
<td>bos</td>
</tr>
<tr>
<td>PLAC (bis ‘bury’)</td>
<td>babis, bababis</td>
</tr>
<tr>
<td>REFL (fif ‘pour’)</td>
<td>faf</td>
</tr>
<tr>
<td>CAUS (dir ‘kill’)</td>
<td>soc-dir</td>
</tr>
<tr>
<td>DBL.CAUS (di ‘say’)</td>
<td>sisi-jod</td>
</tr>
<tr>
<td>PASS (min ‘shave’)</td>
<td>axox-man</td>
</tr>
<tr>
<td>RECP (gid ‘throw’)</td>
<td>amox-gaad</td>
</tr>
</tbody>
</table>

Table 17: V1 derivation patterns

The inflection morphemes of the derived V1s are to some extent different from those of the base form. The n prefix or infix is not used for the IPFV of any derived form.

3.2.3.1.1. Intensive

All the prefixes have a long eː- in the IPFV and retain the characteristic -a of 2SG.M, -i of 2SG.F and -na in 2 & 3 PL of the base form; the stem vowel becomes i and α drops in
disyllables, while a suffix -i is added in monosyllables: e-ktim ‘I/he arrives’, e-jim-i ‘it rains’.

The Aorist has the characteristic i- in the preformatives.

The Intensive form is mostly used with plural objects and to express a plurality of actions. Not all Intensive forms have a corresponding base form and may not even be intensive in meaning.

3.2.3.1.2. Pluractional

It has the same flectional morphemes as the Intensive. Its semantics is also similar to that of the Intensive, but, according to Roper (1928: 54), it often adds a sense of haste and carelessness or of rapidity, which is not obvious in the data. Some Pluractional verbs become V2, and this is the rule for fully reduplicated verbs.

22. en i = taktʔi law~waw i- ni = hob / PROX.PL.M.ACC DEF.M = scarecrow go_beyond~PLAC 3SG.M say\PFV = when . DEM DET = CN.M V1.DER PNG- LV = CONJ . ‘when he prowls around these scarecrows’ (BEJ_MV_NARR_09 JEWEL_48)

23. law~waw -i = t law~waw -i = t go_beyond~PLAC -AOR.3SG.M = COORD go_beyond~PLAC -AOR.3SG.M = COORD V1.DER -TAM.PNG = CONJ V1.DER -TAM.PNG = CONJ law~waw -i = t / gig -i = t / go_beyond~PLAC -AOR.3SG.M = COORD . leave -AOR.3SG.M = COORD . V1.DER -TAM.PNG = CONJ . V2 -TAM.PNG = CONJ . ‘After he had prowled around a lot, he went away and…’ (BEJ_MV_NARR_09 JEWEL_51-52)

3.2.3.1.3. Reflexive

Beja is the sole Cushitic language to differentiate between Active (base form) and Reflexive voice by means of vocalic alternation. The Reflexive has a characteristic short a in the Perfective and Aorist (in the second syllable in tri-consonantal verbs) as opposed to i for the Active form. The IPFV and AOR forms have a prefix t- added to the stem: i-t-kʷabis ‘he covers himself’. This t is infixed after the first root consonant when it is s or f. For monosyllabic verbs, the IPFV prefixes have a long e- like INT and PLAC. The AOR prefixes of monosyllables have a long i-, but disyllables have a short i-. The syllabic structure of the three main paradigms is as follows (exemplified for 1SG):

<table>
<thead>
<tr>
<th></th>
<th>monosyllabic</th>
<th>disyllabic</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFV</td>
<td>a-ˈCaC</td>
<td>a-CˈCaC</td>
</tr>
<tr>
<td>IPVF</td>
<td>e-t-ˈCiC</td>
<td>a-t-CaˈCiC</td>
</tr>
<tr>
<td>AOR</td>
<td>i-t-ˈCaC</td>
<td>i-t-CiˈCic</td>
</tr>
</tbody>
</table>

Table 18: Paradigm of Reflexive V1

Some verbs following this pattern do not have a reflexive meaning (see the list in Roper 1928: 72).

3.2.3.1.4. Causative

All prefixes of the three main paradigms are with short vowels. IPFV has the characteristic long i (in the second syllable for disyllabic verbs) a-soː-ˈCiC, a-s-CaˈCiC. AOR has a short i in the stem, and a long u in the derivative prefix of monosyllabic stems: i-suˈCiC, i-s-CiˈCic. s becomes f when there is another f in the root or a retroflex.
3.2.3.1.5. Double Causative

The double causative (glossed DBL.CAUS) which reduplicates the causative morpheme is rare. The sole example of the pilot corpus *sisi-jod* has no causative meaning and simply means ‘say’.

3.2.3.1.6. Passive

The Passive is formed by prefixing *ato*- to monosyllables and *at*- to disyllables (infixed when C1 is s or j) to the variable stem which bears a characteristic *a* in PFV, *i* for IPF and *u* for AOR, like the Causative. All preformatives have short vowels (as in the base form). For transitive Intensive verbs, a particular prefix *ame*- is used instead (not mentioned in table 18 above) with the *m* characteristic of reciprocals of V1 and of passives of V2: *ame-biɖan* ‘I was forgotten’.

3.2.3.1.7. Reciprocal

The Reciprocal is formed by prefixing *amo*- to monosyllables and *am* - to disyllables. Again all preformatives have a short vowel. In the singular it means to ‘help, assist s.o in doing s.th’, in the plural it is a Dual-Reciprocal (between two persons only).

3.2.3.2. Verb class 2 derivation patterns

V2 has only five derivation patterns (as opposed to seven for V1). Passive and Reflexive are not distinguished morphologically, neither are Intensive and Pluractional. The Double-Causative is reported as rare by Roper (1928: 53) and does not occur in the pilot corpus. It means “to act in such a manner as to cause another to do something”.

<table>
<thead>
<tr>
<th>suffix</th>
<th>example</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLAC</td>
<td>Full RDP</td>
</tr>
<tr>
<td></td>
<td>Partial RDP</td>
</tr>
<tr>
<td>REFL.PASS</td>
<td>-am</td>
</tr>
<tr>
<td>CAUS</td>
<td>-(i)s</td>
</tr>
<tr>
<td>DBL.CAUS</td>
<td>-isis</td>
</tr>
<tr>
<td>RECP</td>
<td>-sam</td>
</tr>
</tbody>
</table>

Table 19: V2 derivation patterns

The full and partial reduplicated Pluractional forms both mean ‘do s.th several times, repeatedly’, but they are also partly specialized semantically. The former is ‘do s.th. hastily, carelessly’, while the latter is used for actions done quietly, carefully (see Roper 1928: 55).

Some monosyllabic Pluractional forms of V2 also undergo ablaut: the first reduplicated syllable always has *a(ː)*: *ɖa~ɖib* ‘trade’ (lit. PLAC~fall) * za~zuːr* ‘visit’.

Some V1 become V2 in the derived Pluractional form, e.g. *gab~gab* ‘PLAC~be rich’.

CAUS and REFL.PASS can be formed directly from adjectives: *dawri-s* ‘make beautiful, embellish’, *eːra-m* ‘be white’.

One RECP verb is formed on the basis of a noun, to which an inchoative suffix -*eː*- is inserted between the stem and the reciprocal derivation morpheme: *ʔaraw-eː-sam-ti* ‘he was becoming friend with him’ (BEJ MV NARR_16 PROPHET FOX_007).
3.2.3.3. Combinations of derivation patterns

Combinations of two or three derivation patterns are possible for both verb types. In some instances V1 double-derived verbs become V2. Below is the list of the combinations attested in the pilot corpus.

- Reciprocal + Pluractional: amoː-ra~rim ‘accompany one another’, liwa~wiw-sam ‘turn around’. When the reciprocal applies to three persons or more, it can only be used in the plural. For V1, it is based on a reduplicated stem different from the Pluractional derived form, i.e. with no long vowel in the first syllable of the reduplicated stem:
  amoː-ga~gaːd-na ‘throw at one another!’
  am-ʈa~ʈabɁ-aːna ‘beat at one another!’

- Reflexive + Pluractional: am-mar~ri ‘gather’ (lit. REFL-find~PLAC).

- Causative + Pluractional: fībib~fībib-s (V2) ‘look around’ (lit. look~PLAC(V1)-CAUS).

- Causative + Passive + Intensive: si-rakʷ~om ‘frighten to death’ (lit. CAUS-be afraid\INT-PASS).

3.2.4. Converbs

There are four converbs. Two of them (Simultaneity and Anteriority) are only used in adverbial clauses, while the other two (Causal and Manner) can also be used in complex predicate constructions. None of them inflect for person and number, and only the Manner converb inflects for gender.

3.2.4.1. Simultaneity converb

The Simultaneity converb (CVB.SMLT) is formed by the addition of a suffix -eː to the verb stem for both V2 and V1. It expresses the simultaneity of the action or event of the adverbial clause with that of the main clause. It may or may not share its subject with that of the matrix clause.

24. ontʔa fassa~sal -eː / w= haˈwaːd dhej jʔ -ini / now cut~PLAC -CVB.SMLT . DEF.SG.M= night DIR come -IPFV.3SG.M .
PTCL V2.DER -. . DET= SBJ.N.M POSTP V2.IRG-TAM.PNG .
‘now, while he was cutting them, night came’ (BEJ_MV_NARR_17_SHOEMAKER_072-073)

It is often used in complement clauses with the verb of perception rha ‘see’, and with miri ‘find’, sini ‘wait’, and iʃi ‘let’:

25. damʔara=b akaj -eː manri en /
  gold =INDEF.M.ACC be -CVB.SMLT find\IPFV.[3SG.M] say\PFV.3PL .
  N.M =DET V1.IRG -. V1 V1.IRG .
‘he finds out that it’s gold, they said.’ (BEJ_MV_NARR_02_FARMER_048)

When repeated (usually three times) it brings a value of long duration, and the simultaneity with another action is not a necessity:

26. mok -eː mok -eː mok -eː
  take_shelter\INT -CVB.SMLT take_shelter\INT -CVB.SMLT take_shelter\INT -CVB.SMLT
  V1.DER -. V1.DER -. V1.DER -. 
  un w= biri / 241 diʃet
  PROX.SG.M.NOM DEF.SG.M.NOM = rain . slowly
  DEM DET= SBJ.N.M . ADV
"ʔit -ja -n =hoːb //
lessen -PFV.3SG.M -L =when .
V2 -TAM.PNG -. =CONJ .
'I sheltered for a long time and when that rain decreased slowly' (BEJ_MV_NARR_01_SHELTER_034-036)

It is the only converb that can be negated. For V2, the negative is simply made by the addition of the prohibitive particle baː= (which does not vary for gender) to the affirmative converb; for V1, particular ablaut patterns, identical to those of the Prohibitive and Optative Negative, are used instead of the affirmative form: CiːC / CaCiːC. The negative Simultaneity converb has a deprivative meaning ‘without’.

3.2.4.2. Anteriority converb

The converb (CVB.ANT) with a suffix -tiːt (V1) / -eːtiːt (V2) expresses the temporal anteriority of the event of the adverbial clause to that of the main clause. It has a sequential value marking a succession of events. Chains of anteriority converbs (up to three, more rarely four) are fairly common. The subject needs not be co-referent with that of the matrix clause.

27. ani baː= sʔajiːn // hasara t=ʔalaja hasam -an /
1SG.NOM NEG.PROH= notice\CVB.SMLT . ADVSDEF.F= mark pass_by -PFV.1SG .
SBJ.PRO PTCL= V1 . PTCL DET= N.F V2 -TAM.PNG .
‘without noticing, I went past the marks’ (BEJ_MV_NARR_06_FOREIGNER_46-47)

3.2.4.3. Causal converb

The causal converb (CVB.CSL) is characterized by a suffix -ti (V1) / -eːti (V2).

As predicate of an adverbial clause, it expresses a cause-and-effect relationship between the dependent and the matrix clause when the subjects are coreferential:

29. gʷʔ -eːti hoːj i- lʔa eːn //
drink -CVB.CSL 3ABL 3SG.M- be_quenched\PFV say\PFV.3PL .
V2 -. PRO PNG- V1 V1.IRG .
‘he drunk from it until he was quenched, they said’ (lit. he was quenched because he had drunk from it) (BEJ_MV_NARR_16_PROPHET_FOX_133)

30. ʃigʷaɖ -ti i- nhis =aːt /
wash\REFL-CVB.CSL 3SG.M- be_clean\PFV =COORD .
V1.DER -. PRO PNG- V1 =CONJ .
‘he washed himself clean and...’ (lit. he was clean because he had washed himself) (BEJ_MV_NARR_14_SIJADOK_356)

31. mha -ti e- jaj eːn //
be_startled -CVB.CSL 3SG.M- die\PFV say\PFV.3PL .
V1 -. PNG- V1.IRG V1.IRG .
‘he was taken by surprise, they said.’ (lit. because he was surprised, he died) (BEJ_MV_NARR_18_ADAM_DEVIL_229)
When the subjects are not coreferential (which is rare), the CVB.CSL takes a purpose value:

33. t=ʔarbi fidin -ti hoːsoː gid -ti =hoːb / DEF.F=well_drawer move_away-CVB.CSL 3SG.ABL throw -AOR.3SG.F =when . DET=SBJ.N.F V1 -. PRO V1.IRG-TAM.PNG =CONJ .

‘when the well drawers were throwing (stones) at it to chase it away’

(BEJ_MV_NARR_05_ERITREA_050)

When the predicate of the matrix clause is a motion verb, the CVB.CSL expresses a manner value:

34. ʃabaka / 365 ontʔa / dabal =had siː- san -tit sikʷ -ti net . now . small =until CAUS- wait -CVB.ANT pull -CVB.CSL N.F . PTCL . ADJ =POSTP V1.DER-V1 -. V1 -. fanrʔi =jeːb α= doːr / go_out\IPFV.[3SG.M] =REL.M DEF.SG.M.ACC=time . V1 =CONJ DET=N.M .

‘so, after he has left a net for a while, when he pulls it out’

(BEJ_MV_NARR_02_FARMER_163-166)

With four verb roots, the CVB.CSL has become frozen as an adverbial form, ʔif-ti ‘let-CVB.CSL’ = ‘without’; digiː-ti ‘turn back-CVB.CSL’ = ‘backwards, back, away’; ʔas-ti ‘be up-CVB.CSL’ = ‘upwards’; nʔa-ti ‘be down-CVB.CSL’ = ‘downwards’.

35. ʔas -ti far -iːni eːn / be_up -CVB.CSL jump -IPFV.3SG.M say\PFV.3PL . V1 -. V2 -TAM.PNG =CONJ .

‘he jumps upwards, they said’

(BEJ_MV_NARR_14_SIJADOK_286)

For its use in complex predicates, see sections 3.2.6.7., and 3.2.6.8.

3.2.4.4. Manner converb

The manner converb (CVB.MNR) is marked by a suffix -a for both verb classes. Its subject is always co-referential with that of the matrix clause.

38. kʷibs -a / 449 kallaːf -iːna hide -CVB.MNR . feed -AOR.3PL V2 -. . V2 -TAM.PNG ‘they feed him on the sly’

(BEJ_MV_NARR_12_WITCH_025)

39. fassal -aː =t daː -s -αː =t i- kʷasi cut -CVB.MNR =INDF.F do -CAUS -CVB.MNR =INDF.F 3SG.M- create\IPFV V2 -. =DET V2 -V2.DER -. =DET PNG- V1.IRG ‘he was making them by cutting and putting them down, they said.’

(BEJ_MV_NARR_17_SHOEMAKER_112)
It is also used as a nominal modifier with a limited set of lexical items:

40. ʔakir -a rer //
    be_strong -CVB.MNR love .
    V1 -. N.M .
    ‘A strong love’ (BEJ_MV_NARR_02_FARMER_009)

There is one instance where the manner converb is derived from an adjective: kʷaɖaːɖ-a ‘round-CVB.MNR’, and is used as a noun modifier (BEJ_MV_NARR_02_FARMER_196).

For its use in a complex predicate construction expressing the Perfect aspect, and Emphasis, see section 3.2.6.1 and 3.2.6.8.

3.2.5. Negative polarity

Unlike a number of other Cushitic and Omotic languages, there are no specific Negative paradigms in Beja, but negation is expressed with different constructions according to TAM.

The Imperfective Negative is made with the negative proclitic particle ka=/ki= (1SG / other persons; only ka= for all persons before initial h), followed by the Perfective finite verb form.

The Perfective Negative is a complex form. The core verb is the Manner converb in -a (see section 3.2.4.4 above), which agrees in gender with the Subject (M = b, F = t), and is followed by the negative proclitic particle ka=/ki=, and an auxiliary, the verb ak ‘be’ conjugated in the Imperfective: rake-a=b ‘ka=a-ki ‘I did not see’.

In both cases, the negative particle bears the stress.

The Aorist has no specific negative form and shares it with the Perfective Negative.

For the negation of the modal paradigms, see section 3.2.2.2 above.

3.2.6. Complex verb predicates

Eleven periphrastic constructions with auxiliaries are used to express various TAM values, as well as light verb constructions with no specific TAM reference. The core verb is an invariable stem, a finite form, a non-finite form, or a verb-noun form. The list below is organized according to the auxiliary used.

3.2.6.1. Perfect

Perfect (PRF on rx) is expressed by the Manner converb in -a which agrees in gender with its subject (marked by the indefinite article) and is followed by the nominal copula.

41. kak jʔ -a =b =wa /
    how come -CVB.MNR =INDF.M.ACC =COP.2SG.M .
    ADV.QUEST V2.IRG -PRF =DET =PRED.N ?
    How have you come? (BEJ_MV_NARR_01_SHELTER_147)

In relative, complement and adverbial clauses, the Manner converb is followed by the auxiliary verb ak ‘be’ (instead of the nominal copula).

42. w= handi / wi= whi mir -a =b
    DEF.SG.M = tree . REL.M = under find -CVB.MNR =INDF.M.ACC
    DET = N.M . CONJ = POSTP V1 -PRF =DET
3.2.6.2. Future

The Future (FUT on ge) is based on frozen forms of the Aorist inflection, 1SG and 1PL respectively for all SG and PL verb forms, followed by the auxiliary ‘say’ (AUX.FUT on rx), in the Imperfective (or in a converb form in anteriority clauses, or an Optative form, in conditional and relative clauses):

43. niː- rakʷ =hoːk ni- jad =aj //
   FUT.PL- be.afraid\INT =OBJ.2SG 1PL- say\IPFV =CSL .
   TAM.PNG- V1.DER =PRO PNG- AUX.FUT =CONJ .
   ‘we will be terrified of you, so…’ (BEJ_MV_NARR_03_CAMEL_242)

44. w= haːʃ =iː tara giːg -i bi= i- diː =jeːk
   DEF.SG.M= land =ABL.SG or leave -FUT.SG NEG.OPT= 3SG.M-say\OPT =if
   DET= N.M =POSTP CONJ V2 -TAM.PNG PTCL= PNG- AUX.FUT =CONJ /
   142 tara tuːb -i bi= i- di= jeːk //
   or repent -FUT.SG NEG.OPT= 3SG.M- say\OPT =if .
   CONJ V2 -TAM.PNG PTCL= PNG- AUX.FUT =CONJ .
   ‘If he does not leave the country or repent’ (BEJ_MV_NARR_08_DRUNKARD_015-017)

45. w= hiʤ hiʤij -i diː -tiːt /
   DEF.SG.M= pilgrimage go_to_pilgrim -FUT.SG say\CVB.ANT .
   DET= N.M V2 -TAM.PNG AUX.FUT -. .
   ‘I shall leave for the pilgrimage and…’ (BEJ_MV_NARR_08_DRUNKARD_167)

Number concord is not systematic in the PL and the core verb can be frozen in the SG.

46. kak iː- wr =heːb eː- jad -na a- ni =hoːb /
   how FUT.SG- do =OBJ.1SG 3- say\IPFV -PL 1SG- say\PFV =when .
   ADV.QUEST TAM.PNG- V1.IRG =PRO PNG- AUX.FUT -PNG PNG- V1.IRG =CONJ ?
   ‘when I said: What are they going to do to me?’ (BEJ_MV_NARR_03_CAMEL_201)

The original intentional/volitional sense of this Future is sometimes still clear:

47. giːg -i diːt /
   leave -FUT.SG say\CVB.ANT .
   V2 -TAM.PNG AUX.FUT .
   ‘(because he has had enough coffee, this one) wants to leave and…’ (BEJ_MV_NARR_11_COFFEE_14)

3.2.6.3. Desiderative

The core verb is the Manner converb with -a followed by the auxiliary ‘say’ (AUX.VOL on rx).

48. barok tam -ar =hoːk eː- d -na /
   2SG.M.ACC eat -CVB.MNR =OBJ.2SG 3- say\IPFV -PL .
   PRO V2 -. =PRO PNG- AUX.VOL -PNG .
   ‘They want to eat you’ (BEJ_MV_NARR_12_WITCH_063)

3.2.6.4. Light verb constructions

There are three types of light verb constructions (LV on rx tier), which bring no TAM values, only pragmatic ones. The most common one is made of the bare verb stem (or in a few instances a noun or a stem which does not exist outside this construction), followed by the auxiliary ‘say’.
The auxiliary may also be the double-causative derived form of di, sisijoːd lit. ‘make say’.

50. nʔa -ti daː -s i- sis- jodí -n =hoːb /
be_down -CVB.CSL do -CAUS 3- DBL.CAUS- say\INT.PFV -PL =when .
V1.IRG -. V2 -V2.DER PNG- V1.DER- LV -PNG =CONJ .
‘when they put them on the floor’ (BEJ_MV_NARR_16_PROPHETFOX_109)

More rarely, the light verb is ak ‘be’.

51. on i= damʔaraː =joː bess hisik ak -etit /
PROX.SG.M.ACC DEF.M= gold =3SG.A CC only be_silent be -CVB.ANT .
DEM DET= N.M =PRO PTCL V1 LV -. .
‘He keeps quiet about his gold and...’ (BEJ_MV_NARR_02_FARMER_122)

3.2.6.5. Potential

The Potential form (POT) expresses epistemic modalities of inference or near-certainty, and is based on the verbal noun with a suffix -at (-it with verbs ending in -i) + the auxiliary jɁ ‘come’ in the IPFV (glossed AUX.POT on rx). It only occurs as a full-fledged inflected auxiliary in 3SG and 2PL. It is always omitted in 1SG, and formally reduced and grammaticalized to an inflection morpheme in 2SG and 2PL. Below is the full paradigm for the verb tam ‘eat’:

<table>
<thead>
<tr>
<th>SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>tam-at</td>
</tr>
<tr>
<td>2M</td>
<td>tam-at-a</td>
</tr>
<tr>
<td>2F</td>
<td>tam-at-i</td>
</tr>
<tr>
<td>3M</td>
<td>tam-at ejni</td>
</tr>
<tr>
<td>3F</td>
<td>tam-at etni</td>
</tr>
</tbody>
</table>

Table 20: Paradigm of the Potential (tam ‘eat’)

52. dijar -an =ek ka= a- kan / dabal =had //
be_tired -PFV.1SG =if NEG.IPFV = 1SG- know\REFL.PFV . small =until .
V2 -TAM.PNG =CONJ PTCL= PNG- V1.DER.IRG . ADJ =POSTP .
BI_569 fin -at =aj i- ndi en //
rest -POT.1SG =CSL 3SG.M- say\IPFV say\PFV.3PL .
V2 -TAM.PNG =CONJ PNG= V1.IRG V1.IRG . V1.IRG .
‘I am really exhausted (lit. I don’t know if I was tired), so I should rest for a while, he says, they said.’ (BEJ_MV_NARR_18.AdamDevil_165-168)

When the object argument of a transitive verb is a pronoun, it has the possessive form; it is inserted between the core verb and the auxiliary:

53. hinin rhi -is -at =ok enej //
1PL.NOM see -CAUS -POT =POSS.2SG.ACC come\IPFV.1PL .
SBJ.PRO V2 -V2.DER-N.V =PRO AUX.POT .
‘We are going to show you!’ (BEJ_MV_NARR_03.CAMEL_163)

3.2.6.6. Terminative

The core verb and the auxiliary bʔa ‘lie down’ are both conjugated in the same TAM, and for V2, an ending -j is suffixed to the inflection morphemes of 2SG, 3SG and 1PL. This
suffix drops before the temporal enclitic (and a linker clitic –n is added between the verb and the temporal enclitic), as in the sole example of the pilot corpus.

54. i- naʃʔa bʔi -ja -n =hoːb //
3SG.M- take_off\INT.PFV lie_down -PFV.3SG.M -L = when .
PNG- V1. DER AUX.TR M-TAM.PNG - = CONJ .
‘when he had finished undressing properly’ (BEJ_MV NARR 01 SHELTER 080)

3.2.6.7. Benefactive

When the verb hi ‘give’ is an auxiliary of a core verb, it expresses a benefactive meaning (AUX.BENF on rx); it allows the addition of an argument to verbs. The core verb can be either the Causal converb -ti (V1) / -etti (V2), or the Perfective form. In the Imperative both the auxilary and the core verb are in the Imperative form.

55. tak kan -ti hi -it =heb i- rib =hoːb
man know\REFL-CVB.CSL give -VN =OBJ.1SG 3SG.M- refuse\PFV = when
N.M V1. DER -. AUX.BENF.-N.V = PRO PNG- AUX.NEG.CONTR = CONJ
‘When no one could inform me’ (BEJ_MV NARR 04 DJINN 075)

56. ti= ʃarti -ja mhaj =t kw =t =e; /
DEF.F= line -PL three =INDF.F unit =INDF.F = POSS.3PL.ACC .
DET= N.F -. NUM = DET N.F = DET = PRO
i - dʔi i- heː = heb /
3SG.M- do\PFV 3SG.M- give\IPFV = OBJ.1SG .
PNG- V1. IRG PNG- AUX.BENF = PRO .
‘he is drawing for me three lines together’ (BEJ_MV NARR 06 FOREIGNER 38-39)

3.2.6.8. Emphatic

There are two emphatic auxiliaries (AUX.EMPH on rx) that emphasize that an action or an event is thoroughly and well done, and actually takes/took place. Core verbs may be constructed with either of them (not both), depending on their semantics.

dʔi ‘do’ is preceded either by the Causal converb (the most common), or, rarely, the Manner converb or the Perfective forms of the core verb.

58. hak*ir -ti dannʔi =hoːb /
attach -CVB.CSL do\IPFV.[3SG.M] = when .
V1 -. AUX.EMPH = CONJ .
‘When he ties it well’ (BEJ_MV NARR 18 ADAM DEVIL 159)

59. fidig -a dʔi -jaː =b =u /
untie -CVB.MNR do\IPFV. -CVB.MNR = INDF.M.ACC = COP.1SG .
V1 -. AUX.EMPH -PRF = DET = PRED.N .
‘I did let it loose’ (BEJ_MV NARR 03 CAMEL 106)

60. a- ngad a- dʔi = t /
1SG- stop\PFV 1SG- do\PFV = COORD .
PNG- V1. IRG PNG- AUX.EMPH = CONJ .
‘I did leave them, and…’ (BEJ_MV NARR 08 DRUNKARD 219)
The second emphatic auxiliary verb is *ah* ‘take’, preceded either by the Causal converb in *-ti (V1) / -eti (V2) or by the Perfective form + a linker *-i*, or, rarely, by the Manner converb or the Perfetive without a linker:

61. 
\[
\text{dab} -\text{eti} \quad \text{i-} \quad \text{nim} \\
\text{run} -\text{CVB.CSL} \quad 3\text{SG.M-} \quad \text{take\IPFV} \\
\text{V2} \quad \text{-} \quad \text{PNG-} \quad \text{AUX.EMPH}.
\]

‘He runs away.’ (BEJ_MV_NARR_18_ADAM_DEVIL_331)

62. 
\[
\text{haj} \quad \text{COM} \quad \text{PLAC-} \quad \text{be} \quad \text{rich} \quad -\text{CVB.CSL} \quad 3\text{SG.M-} \quad \text{take\IPFV} \\
\text{POSTP} \quad \text{V2.DER} \quad \text{-} \quad \text{PNG-} \quad \text{AUX.EMPH}
\]

‘he became over wealthy with it, they say, they said’ (BEJ_MV_NARR_09_JEWEL_64)

63. 
\[
\text{kak} \quad \text{ADV.QUEST} \quad \text{V2} \quad \text{-TAM.PNG} \quad \text{-} \quad \text{PNG-} \quad \text{AUX.EMPH}.
\]

‘How come you are so rich?’ (BEJ_MV_NARR_17_SHOEMAKER_143-145)

64. 
\[
\text{gud} -\text{gud} \quad \text{-a} \quad \text{ah} \quad \text{-a} \quad \text{V2.} \quad \text{TAM.PNG} \quad \text{-} \quad \text{PNG-} \quad \text{AUX.EMPH}.
\]

‘in huge quantities.’ (BEJ_MV_NARR_02_FARMER_062)

65. 
\[
\text{gir} \quad \text{V2} \quad \text{-TAM.PNG} \quad \text{PNG-} \quad \text{AUX.EMPH}.
\]

‘I held firmly’ (BEJ_MV_NARR_15_LEOPARD_059)

In yet two other instances, the core verb is used with a verbo-nominal suffix *-i*; the construction seems to convey in addition a deontic value of obligation: *da-s-i d? =ix*: ‘I have things to do, and…’ (BEJ_MV_NARR_18_ADAM_DEVIL_287)

### 3.2.6.9. Contrastive negation

Because of social rules of politeness and honour, negative verb forms are overused in order to tone down positive statements. When Beja speakers need to make clear a negative statement (e.g. by contrast) they use a complex predicate formed with the IPFV form of the auxiliary *rib* ‘refuse’ (AUX.NEG.CONTR on rx) + the verbo-nominal form with the suffix *-at* (for further details see Vanhove & Hamid-Ahmed 2004).

66. 
\[
\text{tak} \quad \text{kan} \quad \text{-ti} \quad \text{hi} \quad \text{-it} \quad =\text{hcb} \\
\text{man} \quad \text{know\REFL} \quad -\text{CVB.CSL} \quad \text{give} \quad \text{-VN} \quad =\text{OBJ.1SG} \\
\text{SBJ.N.M} \quad \text{V1.DER} \quad \text{-} \quad \text{AUX.BENF} \quad \text{-N.V} \quad =\text{PRO} \\
\text{i-} \quad \text{rib} \quad =\text{hcb} \quad \text{V2.} \quad \text{TAM.PNG} \quad =\text{CONJ} \\
\text{3SG.M-} \quad \text{refuse\PFV} \quad =\text{when} \quad \text{-PNG-} \quad \text{AUX.NEG.CONTR} \quad =\text{CONJ}.
\]

‘When no one could inform me’ (BEJ_MV_NARR_04_DJINN_075)

### 3.3. Verb-noun morphology

#### 3.3.1. Action Nouns

Action Noun (N.AC) formation depends on the verb class. Unless otherwise specified, N.AC are masculine.

Verb class 1 has two major vocalic ablaut patterns for monosyllabic and disyllabic verbs:
Monosyllabic verbs with CiC stem > CaːC, e.g. dif ‘to go’, daf ‘going’.
Disyllabic verbs with CiCiC stem > CiCuːC, e.g. kitim ‘to arrive’, kitum ‘arrival’; misis ‘die a natural death (animal)’, misus ‘corpse’.
A few other patterns of disyllabic verbs ending in a semi-consonant j have different ablaut patterns and are feminine, e.g. biɖaj ‘to yawn’, biɖeːj ‘yawning’.
For a few verbs, a prefix m(V)- is added, and the stem has a different ablaut system:
di ‘to say’, mi-jad ‘act of saying’
dir ‘to kill’, ma-dar ‘murder, killing’
rikʷi ‘to fear’, mi-rikʷaj ‘fear’
A few other Action Nouns (including some of the reflexive derived verb form, or derived from adjectives) with the m(V)- prefix have no ablaut in the stem:
ʔam ‘to mount (REFL)’, m-ʔam ‘mounting’
ʔat ‘to step, tread’, mi-ʔat ‘track, footprint’
haːdoːj ‘to turn’, m-haːdoːj ‘turning’
tig ‘to be heavy’, ma-tig ‘being heavy’
For four derived forms (Causative, Reciprocal, Reflexive and Passive), and the irregular verbs with (Ci)CoːC patterns, the Action Nouns are all characterized by a suffix -oːj, added to the verb stem. These N.AC are feminine. The other two remaining derived verb forms have no Action Noun or share it with the base form:
sar-oːj ‘being awake’ (REFL)
si-ganf-oːj ‘making kneel down’ (CAUS + INT)
sitoːb-oːj ‘conveying’ (IRG)
Action Nouns of verb class 2 (base and derived forms alike) are formed with a suffix -ti (homophonous with the suffix of the CVB.CSL of V1), whatever the syllabic structure of the verb stems:
bʔa ‘to lie down’, bʔa-ti ‘act of lying down’
gibit ‘to drink milk’, gibit-ti ‘act of drinking milk’
hadaj ‘to wander’, hadaj-ti ‘act of wandering’
sikʷ ‘to pull’, sikʷ-ri ‘pulling’

3.3.2. Agent Nouns

Agent Noun (N.AGN) formation varies according to the verb class.
Monosyllabic stems of verb class 1 form their agent nouns following a pattern with vocalic ablaut and a suffix -ana, CoːC-ana, e.g. ʔat ‘to curse’, ʔot-ana ‘curser’. For disyllabic stems, the pattern is CaːCC-ana, e.g. dibil ‘to collect’, daːbl-ana ‘collector’. For a few verbs, the Agent Noun pattern has a suffix -i instead of -ana, in addition to ablaut: CaːC(i)C-i, e.g. jibib ‘to look’, faːbb-i ‘sentinel’.
Verb class 2 has the same suffix -ana, there is no ablaut on the stem, e.g. diw ‘to sleep’, diw-ana ‘sleeper’; jandin ‘to report’, jandim-ana ‘tattletale’.

3.4. Compounds

Compound nouns are not uncommon in Beja (especially for proper nouns), although they are not very frequent in the pilot corpus. They are head-final, form one stress unit,
and cannot be separated by determiners, which only occur before the first element of the compound. There are three different types in the corpus. The first one consists of two juxtaposed nouns (with elision of the final vowel in the first noun): \textit{liːl-ʔawi} ‘rock’ (lit. ‘eye-stone’); \textit{liːli} ‘eye’). The second inserts a rare consonant in between the two nouns: \textit{haram-ʤ-ʔoːr} ‘bastard’ (lit. ‘crime-ʤ-child’). The third juxtaposes a noun and a verb stem: \textit{tak-tʔi} ‘scarecrow’ (lit. ‘man-resemble’). Compound nouns are not separated by a hyphen in the mot and mb tiers but are glossed CN in the rx tier.

### 3.5. Augmentative

An augmentative suffix \textit{-loj} is added to adjectives. It is inserted before the plural suffix: \textit{dawliː-loj-a}.

Manner converbs used as adjectives use a suffix \textit{-al}: \textit{halboːb} ‘hollow’ > \textit{halboːb-a-l}; \textit{akir-a} ‘strong’ > \textit{akir-a-al}.

### 3.6. Diminutives

Masculine inanimate nouns form their diminutive by changing their gender to feminine. The determiner is labelled DIM (not DET) in the rx tier: \textit{gʷaːb} ‘champaign’ > \textit{gʷaːb=t}; \textit{riba=b} ‘mountain’ > \textit{riba=t}.

Words containing an \textit{r}, whatever their category, turn it to \textit{l}: \textit{dawriː} ‘beautiful’ > \textit{dawliː}; \textit{era} ‘white’ > \textit{ela}; \textit{riːgam} ‘to look over’ > \textit{liːgam}.

### 3.7. Ideophones

Ideophones do not seem to constitute a word category in Beja. Two words, \textit{tib} ‘catch’, and \textit{hamʃak} ‘rattle’, have nevertheless been glossed as such (IDEOPH) in the rx tier in the pilot corpus because they are invariable as a predicate and could not be identified as deriving from another word:

67. \textit{tib} / 198 / 1 = niːwa t-ʔabik =hɔb /
catch .  DEF.M = tail 3SG.F- take\PFV =when .  IDEOPH .  DET = N.M PNG- V1.IRG =CONJ .

‘When she caught the tail...’ (\textit{BEJ MV NARR 12 WITCH 100-102})

### 3.8. Postpositions

Postpositions are either independent or enclitics; part of those which only occur as enclitics of nouns agree in number with their host. Enclitic postpositions are not analyzed as cases for various reasons detailed for each of them in the relevant subsections. But they have affinities with cases since they are the only postpositions which agree with their hosts.

#### 3.8.1. Ablative enclitic

The Ablative (ABL) enclitic postposition =\textit{iː} (SG) (var. =\textit{aj}) / =\textit{eː} (PL; not compulsory), feminine =\textit{t=iː} / =\textit{t=eː}, also has an instrumental value, and is quite polysemous,
meaning ‘of, out of, from, away from, in, with, by means of’. The definite article of the host noun is always (t)i=:

68. sagi hasf =i: //
  far   land =ABL.SG .
  ADJ N.M =POSTP .
  ‘from far away’ (BEJ MV NARR 03 CAMEL 075)

69. un ani / 394 tox tox= na / sagi
  PROX.SG.M.NOM 1SG.NOM .  PROX.SG.F.ACC DEF.SG.F.ACC= thing . far
  DEM SB.J.PRO .  DEM DET = N.F . ADJ
  mhin =i: / i= gnuf =i:   a- manri /
  place =ABL.SG .  DEF.M= nose =ABL.SG 1SG- find\IPFV .
  N.M =POSTP .  DET = N.M =POSTP PNG- V1 .
  ‘I can find anything with my nose from far away’ (BEJ_MV_NARR_02_FARMER_301)

70. i= manni -im -ti =iː i- mri =jeː =na
  DEF.M= wish -REFL.PASS -N.AC =ABL.SG 3SG.M- find\PFV =REL =thing
  DET= N.V -V2.DER -N.V =POSTP PNG- V1 =CONJ =CONJ
  ti- kati //
  3SG.F- be\IPFV .
  PNG- V1.IRG .
  ‘it becomes a thing he found by wishing’. (BEJ MV NARR 02 FARMER 301)

It may also have a perlative meaning (‘through’):

71. ox
  ti= tilʔi =t =iː ʃibib -eː /
  PROX.SG.F.ACC DEF.F= hole =INDF.F =ABL.SG look -CVB.SMLT .
  DEM DET= N.F =DET =POSTP V1 -. .
  ‘while they were looking through this hole’ (BEJ MV NARR 17 SHOEMAKER 188)

The Ablative postposition is not categorized as a case marker, as it can be added to postposition: geːb =i: ‘by beside’ (BEJ MV NARR 05 ERITREA 208).

3.8.2. Locative enclitic and equative comparison

=i=e (SG) / =e=b (PL) is a locative (LOC) enclitic postposition, meaning ‘in, at, among’. When the host is a feminine noun, the feminine indefinite article =t is inserted between the noun and the postposition. The definite article of the host is always with the short vowel, (t)i=, whatever its form in the NOM and ACC: i=ʃerg =ib ‘at Sharg’, i=jam =eːb ‘in the water’, ʔaː=t =eːb ‘in milk’. It is not categorized as a case marker as it can be added to a non clitic postposition as in (75) below:

72. i= mek -i jad =eb a- ndif //
  DEF.M= donkey -GEN.SG just_behind =LOC.PL 1SG- leave\IPFV .
  DET= N -CASE POSTP =POSTP PNG- V1 .
  ‘I leave right behind the donkey.’ (lit. ‘in just behind’) (BEJ MV NARR 05 ERITREA 060)

The plural form of the locative postposition is also used as the degree marker of the parameter in equative constructions. It is followed by the standard in the Genitive case and the standard marker, which is a noun meaning ‘extent, limit’, to which the copula is added. This construction is not found in the pilot corpus:

73. COMPAREEE PARAMETER = PARAMETER MARKER STANDARD
  baru: i=miɣʷmid =e=b i= san-i
  3SG.M.NOM DEF.M= length =LOC.PL DEF.M= brother-GEN

37
3.8.3. Similative enclitic

The similative standard marker is enclitic to the standard host (whatever its grammatical category), and varies with the number of the standard: =it ~ =t (SG) / =ext (PL) ‘like, as’.

74. \textit{ti=} [art]i -ja / 188 kam -i mes =it /
DEF.F= line -PL . camel -GEN.SG racecourse =SIMIL.SG .
DET= N.F - . N -CASE N.M =POSTP .
‘the lines like a camel racecourse’ (BEJ\_MV\_NARR\_06\_FOREIGNER\_59-61)

It is categorized as an enclitic postposition, and not as a case, as it may combine with all word categories.

The standard marker may be reinforced by the OBJ.2SG bound pronoun =hoːk which follows the similative marker (rules for its occurrence are still unclear).

75. on sur -n =eːt =hoːk // maːjʔa =oː
PROX.SG.M.ACC before -L =SIMIL.PL =OBJ.2SG . light =POSS.3SG.ACC
DEM ADV -. =POSTP =PRO . N.M =PRO
\textit{dʔ - iːtit} /
do -CVB.ANT .
V1.IRG -. .
‘after he has put the light on like before…’ (BEJ\_MV\_NARR\_17\_SHOEMAKER\_263-264)

3.8.4. Comparative and distributive enclitic

The comparative (CMPR) enclitic =ka does not vary for number. It occurs on both the parameter and the standard for the comparative of superiority. It licenses the Genitive case only on the comparee of the comparative of superiority:

76. \textit{i=} karas w= ?akir -a =ka =b / fibi-b-na
DEF.M= thorn DEF.SG.M= be\_strong -CVB.MNR =CMPR =INDF.M.ACC look-IMP.PL
DET= N.M DET= V1 -. =POSTP =DET V1 -TAM.PNG
‘Look for them amongst the sharpest thorns!’ (BEJ\_MV\_NARR\_16\_PROPHET\_FOX\_103)

77. \textit{i=} tak -i =ka aɖami =ka =b
DEF.M.GEN.SG= man -GEN.SG =CMPR young =CMPR =INDF.M.ACC
DET= N.M -CASE =POSTP ADJ =POSTP =DET
aka -je:
be -CVB.SMLT
V1.IRG -. .
‘While I was younger than the man…’ (BEJ\_MV\_NARR\_15\_LEOPARD\_047)

If the comparee is a pronoun, it is in the Ablative case:

78. allaj baresokna =ka / nhas =ka nija: =ju /
God 2PL.ABL =CMPR . clean =CMPR intention =COP.3SG .
N.M PRO =POSTP . ADJ =POSTP N.F =PRED.N .
‘God has better intentions than yours’ (BEJ\_MV\_NARR\_08\_DRUNKARD\_077-078)

The same postposition functions as a distributive (DISTR), i.e. a universal quantifier (‘each, every’). It has been glossed differently in the ge tier, because it could not be proved that they are not homophones. Unlike for the comparative function, it does not
license Genitive on its host (nor any other case), it always occurs in final position, following the indefinite article, postpositions, bound pronouns and coordination morphemes, and it can be used with all word categories:

79. \[ \text{hoːj} = \text{ka} / \text{ɖaːb} \ -\text{ini} / \]
   3ABL = DISTR \ run \ -IPFV.3SG.M .
   \( \text{PRO} = \text{POSTP} \ . \ V2 \ -\text{TAM.PNG} . \)
   ‘Each time it runs after her.’ (BEJ_MV_NARR_05_ERITREA_144-145)

80. \[ \text{miaːw} / 118 \ i- \ ni = t = ka \ harʔiː \ hirer\ -\text{ja} / \]
   \( \text{pro} = \text{DISTR} \ . \ \text{say} \ -\text{IPFV.3SG.M} . \)
   \( \text{ONOM} \ . \ \text{PNG} - \ V1.\text{IRG} = \text{CONJ} = \text{POSTP} \ \text{POSTP} \ V2 -\text{TAM.PNG} . \)
   ‘He miaowed each (step) and walked behind.’ (BEJ_MV_NARR_04_DJINN_105-107)

81. \[ \text{oːn} \ w= \ ?æfox = jox = ka / 915 \]
   \( \text{PROX.SG.M.ACC} \ \text{DEF.SG.M} = \text{fish} = \text{POSS.3SG.ACC} = \text{DISTR} . \)
   \( \text{DEM} = \text{DET} = \text{N.M} = \text{PRO} = \text{POSTP} . \)
   ‘All the fishes that he finds, that he catches in the sea, he sells them and …’
   (BEJ_MV_NARR_02_FARMER_152-155)

\[ = \text{ka} \] is also used as a universal quantifier for the expression of generic relatives:

82. \[ \text{ʔadim} = \text{e}: = \text{ka} / \]
   \( \text{word}\text{PL} = \text{POSS.3PL.ACC} = \text{DISTR} . \)
   \( \text{N.M} = \text{PRO} = \text{POSTP} . \)
   ‘whatever their words’ (BEJ_MV_NARR_03_CAMEL_131)

83. \[ \text{on} \ i- \ ha -n = i \ \text{gabal} -\text{e}; = ka \]
   \( \text{PROX.SG.M.ACC} \ 3\text{SG.M} - \text{take}\text{\text{IPFV.3L}} -\text{L} = \text{REL} \ \text{direction}\text{\text{\text{PL}-GEN.PL} = \text{DISTR} \}
   \( \text{DEM} \ \text{PNG} - \ V1.\text{IRG} - \text{.} = \text{CONJ} \ \text{N.M-CASE -CASE} = \text{POSTP} \)
   \( \text{harʔiː} \ saː\~sak -\text{ja} / \)
   \( \text{after} \ \text{PLAC} -\text{go} -\text{-IPFV.3SG.M} . \)
   \( \text{POSTP} \ V2.\text{DER} -\text{TAM.PNG} . \)
   ‘In whatever direction that I took he was following me’ (BEJ_MV_NARR_04_DJINN_67)

The distributive marker may be reduplicated to express the animate quantifier cliticizing to the numeral \text{gal} ‘one’ with (as an exception) the Genitive plural suffix (Constructions without reduplication are also possible, e.g. BEJ_MV_NARR_07_COLD_14):

84. \[ \text{gal} -\text{e}; = ka = ka \ na: = t = \text{e}; \ \text{firʔa} -\text{tix} / \]
   \( \text{one} -\text{GEN.PL} = \text{DISTR} = \text{DISTR} \ \text{thing} = \text{INDF.F} = \text{POSS.3SG.ACC} \ \text{go_out} -\text{-CVB.ANT} . \)
   \( \text{SBJ.NUM -CASE} = \text{POSTP} = \text{POSTP} \ \text{N.F} = \text{DET} = \text{PRO} \ V1 \ -\text{.} . \)
   ‘everyone pays some money and…’ (BEJ_MV_NARR_07_COLD_04)

3.8.5. Postpositions which License Accusative on nouns

\text{hoːj} ‘with; thanks to’ (glossed as COM, for comitative); it is most often used with the \( 3^\text{rd} \) person possessive pronouns and with motion verbs:

85. \[ j = \ ?ar = \text{e}; \ \text{hoːj} i- t- \ \text{dagi} -\text{ja} = t / \]
   \( \text{DEF.M} = \text{child}\text{PL} = \text{POSS.3PL.ACC} \ \text{COM} -3 -\text{REFL} -\text{go_back}\text{\text{\text{IPFV-SG.M} = \text{COORD} . \}
   \( \text{DET} = \text{N} = \text{PRO} \ \text{POSTP} \ \text{PNG} - \ V1.\text{DER} -\text{V1} -\text{PNG} = \text{CONJ} . \)
   ‘he went back with his children’ (BEJ_MV_NARR_02_FARMER_065)
This postposition can be cliticized and shortened to =had: faʤil = had ‘until the morning’

3.8.6. Postpositions which license Genitive on nouns

whi ‘under’: i = mbʔaḍ-i whi ‘under the mat’
khī ‘on’: e = rba-i khī ‘on the mountains’
gidhi: ‘beyond’: rajḥ-e: gidhi: ‘beyond happiness’
geb ‘beside’: w = ṭaraȗw = iji geb ‘with my friend’.
dasaj ‘near’: gamis = iji dasaj ‘in front of my gown’
jad ‘just behind’: i = mek-i jad = eb a-ndif ‘I leave right behind my donkey’
dhaːj (often reduced to an enclitic = dha, = da, = d after nouns, and always to a proclitic dh= before enclitic pronouns) is a directional (DIR) postposition meaning ‘to, towards; over’: i = mbaːbaː-i dhaːj ‘towards the father’; ti = zirʔaː=t=iheː=da ‘to his field’; α = bhar-i = dha.10 ‘towards the sea’.

Some postpositions which licence GEN with nouns can also be used as prepositions with the bound possessive pronouns, but they licence instead the bound ACC or ABL pronouns. These postpositions are harʔiː ‘behind, after’, sur ‘before’, geb ‘beside’, gidhiː ‘beyond’, an allomorph of dhaːj ‘DIR’, dh: dh = e: ‘to(wards) me; over me’, geb = ox ‘with us (ACC)’, gidh = o: ‘behind me (ACC)’; harʔiː-isi ‘after me’ (1SG.ABL).

3.8.7. Postpositions borrowed from Arabic

These borrowings are not frequent.
sabbi ‘because’, licenses Genitive and follows a relative clause:

87. ḏaːb -iːn =eː =naː -ji sabbi /
run -AOR.3PL =REL =thing -GEN.SG because .
V2 -TAM.PNG =CONJ =CONJ -CASE POSTP.BORR.ARA .
‘because they were running’ (BEJ MV NARR 03 CAMEL 192)

barrab ‘outside’ (marked with the Beja indefinite masculine article = b) licenses Genitive and directly follows a noun:

88. i = defa -i /
DEF.M = door -GEN.SG . outside be_seated -CVB.SMLT
DET = N.M -CASE . POSTP VI.DER -.
‘sitting outside the door’ (BEJ MV NARR 14 SIJADOK 102-103)

ʤuwwaːb ‘inside’, although ending with the Beja indefinite masculine article = b, is syntactically a calque from Arabic (the word order is the same); it is used as a preposition:

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9 Sic. The expected form is i = rba-je.
10 Sic. Note that the article is unexpectedly in the ACC case.
3.8.8. Postpositions grammaticalized from converbs

A converb form of baj ‘go’ has grammaticalized into a directional postposition: betti ‘towards’ (which becomes baži before object bound pronouns, a trace of its verbal origin): α = rba beti hirer-e: ‘walking towards the hill’ (BEJ MV NARR 05 ERITREA 195) baži = heb ‘towards me’ (BEJ MV NARR 01 SHELTER 115).

3.8.9. Postposition hanka ‘before’

In the pilot corpus, hank(a) ‘before’ is only found as a preposition with possessive bound Accusative pronouns: hank = ok ‘before you’ (or as an adverb meaning ‘first’):

90. ti = w = haqì = t = i = ka hanka / fitik -na /
DEF.F = DEF.SG.M = buttocks = INDG.F = 1SG.ACC = DISTR before . dig up -IMP.PL .
REL = DET = N.M = DET = PRO = POSTP PTCL V1 -TAM.PNG .
‘First take off each of those which are in my buttocks!’ (BEJ MV NARR 16 PROPHET FOX 289)

3.9. Conjunctions

3.9.1. Coordinating conjunctions

3.9.1.1. Conjunctive coordination

Beja has four conjunctive coordinating conjunctions.

– The Arabic borrowing = wa (var. = wwa) ‘and’ is an enclitic conjunctive coordination that links nouns, pronouns, proper nouns, adjectives, numerals, the Manner and Simultaneity converbs (BEJ MV NARR 14 SUIJADOK 283, BEJ MV NARR 13 GRAVE 126); when two nouns are followed by a postposition or a bound pronoun, the enclitic = wa comes in last position. = wa also links up a relative clause to another clause, be it relative or not. The enclitic = wa is often repeated on each conjunct.

91. α = kina ḍínema: = t = han //
DEF.SG.M.ACC = owner garden = INDF.F also .
DET = PRO.REFL N.F = DET PTCL .

α = mhin i- ?id = et = wa /
DEF.SG.M.ACC = place 3SG.M- cultivate\PFV = REL.F = COORD .
DET = N.M PNG V1 = CONJ CONJ .
hoj ti- fi = ji mhin / 180 3ABL 3SG.F- be there\AOR = REL place . find\IPFV\[3SG.M\] .
PRO PNG- V1.IRG = CONJ N.M . V1 .
‘he even finds in the place a real garden to cultivate, a place that there was in there’
(BEJ MV NARR 02 FARMER 293-297)

92. uñ an i t = ?arabijaj = wa /
PROX.SG.NOM 1SG.NOM DEF.F = car = COORD .
DEM SBJ.PRO DET = N.F.BORR.ARA = CONJ .

α = mail w = haj j? -a = b
DEF.SG.M.ACC = treasure DEF.SG.M = COM come -CVB.MNR = INDF.M.ACC
DET = N.M.BORR.ARA REL = POSTP V2.IRG-PRF = DET
There is only one instance in the pilot corpus where \=wa is, as an exception, not used after a nominal conjunct but after a locative verb; it is linked to a place name:

93. \( \text{ki} = \text{haj} = \text{wa} \) // \( \text{ben} \)
\( \text{NEG.IPV} = \text{be_there\IPFV.\[3SG.M\]} = \text{COORD} \). there
\( \text{PTCL} = \text{V1.IRG} = \text{CONJ} = \text{PRO} \).
\( \text{Khor_Arab} = \text{COORD} \text{ direction -GEN.SG be_there -IPFV.3SG.M} \).
\( \text{NP} = \text{CONJ} \) \( \text{N.M -CASE V2 -TAM.PNG} \).
\( \text{‘It was not there and it should be in Khor Arab, over there’} \) (BEJ_MV_NARR_03_CAMEL_109-110)

– The enclitic \( =t \) is a conjunctive coordination morpheme which occurs after verbs in the PFV and IMP, and sometimes AOR and OPT, to link two clauses. It is extremely rare after IPFV. It precedes the bound Object pronouns if any:

94. \( \text{ti} - \text{di} = \text{t} = \text{heb} \) // \( \text{heb} \)
\( \text{3SG.F- say\\IPV = COORD = OBJ.1SG} \).
\( \text{PNG- V1.IRG = CONJ = PRO} \).
\( \text{‘she told me and…’} \) (BEJ_MV_NARR_01_SHELTER_156)

– The variant \( =\text{at} \) is most often used after IPFV, but also sometimes after AOR and very rarely after PFV:

95. \( \text{u} = \text{dhej dhaj j? -i =t geb} \)
\( \text{DEF.SG.M.NOM = people DIR come -AOR.3SG.M = COORD beside} \)
\( \text{DET} = \text{SBJ.N.M.COLL POSTP V2.IRG -TAM.PNG = CONJ POSTP} \)
\( \text{askin -ena = at} \) // \( \text{inhabit\-IPFV.3PL = COORD} \).
\( \text{V2 -TAM.PNG = CONJ} \).
\( \text{‘The people came to them and lived with them and…’} \) (BEJ_MV_NARR_02_FARMER_315)

– The rare enclitic conjunctive coordination \( =ja \) occurs three times in the pilot corpus, after a PFV (2) and an IMP.SG.M (1):

96. \( \text{ti-} \) \( \text{wer} = \text{heb iranaj} \text{} \) \( \text{} \) \( \text{w=} = \text{tak} \)
\( \text{2SG.M- do\\PFV = OBJ.1SG gosh DEF.SG.M.NOM = man} \)
\( \text{PNG- V1.IRG = PRO EXCM DET} = \text{SBJ.N.M} \)
\( \text{\?ara\=w} = \text{i} \) \( \text{aka -je} = \text{hoj} \)
\( \text{friend\-SG = POSS.1SG.NOM be -CVB.SMLT 3ABL} \)
\( \text{SBJ.N} = \text{PRO V1.IRG -. PRO} \)
\( \text{g\=g} -\text{is} -\text{ta} = \text{ja} \) // \( \text{leave\-CAUS -PFV.2SG.M = COORD} \).
\( \text{V2 -V2.DER\-TAM.PNG = CONJ} \).
\( \text{‘You did me wrong, gosh! and you made the man who is my friend leave!’} \) (BEJ_MV_NARR_01_SHELTER_154-156)

97. \( \text{ti-} \) \( \text{bari} = \text{je} = \text{na bax=} = \text{hariw -a} \) // \( \text{167} \)
\( \text{3SG.F- have\\IPFV = REL thing NEG.PROH = seek -IMP.SG.M} \).
\( \text{PNG- V1.IRG = CONJ = CONJ PTCL} = \text{V1 -TAM.PNG} \).
Disjunctive coordination

This is expressed by the conjunction *tara* ‘or’, which precedes each conjunct, whatever its morphosyntactic status (NP, verb, clause). When the conjuncts are predicates, *tara* may precede the verbs or the whole clauses. See ex. 44 above.

Adversative coordination

The adversative coordinating conjunction is a borrowing from Arabic: *laːkin* ‘but’. It always occurs at the end of an intonation unit, followed or not by a pause.

Subordinating conjunctions

Temporal conjunctions

Apart from the temporal converbs of Anteriority and Simultaneity, Beja makes use of specific conjunctions to mark temporal clauses. The most frequent one in the pilot corpus is an enclitic conjunction *=hɔb* ‘when’, added to the verb form of the temporal clause which precedes the matrix clause:

Another conjunction clearly stems from a noun and a relative construction: *=eːb* (REL.M) followed by *=dɔːr* ‘the time’:

Another conjunction may also (rarely) precede the relative clause, which, in this case, also has an additional masculine relative marker, *wi* = :
In a series of repetitive events, only the last verb bears the relative construction; all preceding verb forms are only marked with =ka:

'A each time he comes in the morning, he finds them sewn' (BEJ_MV_NARR_17_SHOEMAKER_115-116)

3.9.2.2. Conditional conjunction

The conditional conjunction =eːk ‘if’ is enclitic to the verb of the conditional clause which precedes the matrix clause:

'If I had not looked I would have been afraid' (BEJ_MV_NARR_05_ERITREA_349-351)

3.9.2.3. Causal conjunction

A causal link between two clauses can be expressed in a dependent clause by an enclitic conjunction =it (after the 1SG/3SG copula =u; and flectional PFV morphemes ending in -n, i.e. 1SG, 2PL, 3PL) / =ajt or =aj (all other morphophonological contexts) ‘because, since’ placed after a nominal copula, a verb, a converb or a proper noun. The CSL enclitic may occur after (the most common order) or before the bound Object pronouns.

'When it found the seven headed snake' (BEJ_MV_NARR_12_WITCH_149)
With pronouns and relative clauses, the Arabic borrowing sabbi ‘because’ can be used instead of the above enclitics, preceded by the Genitive case:

109. ʔakir -a ɖab  ɖaːb -iːn =eː =naː -ji sabbi
be_strong-CVB.MNR run\N.AC run -AOR.3PL =REL =thing -GEN.SG because
V1 -. N.V V2 -TAM.PNG =CONJ =CONJ -CASE POSTP.BORR.ARA
‘because they were running so fast’ (BEJ_MV_NARR_03 CAMEL 192)

3.10. Discourse particles

3.10.1. The emphatic enclitic =i

This enclitic is used after verb forms and the nominal copula to emphasize an assertion:

110. i= maːl =i wi= iː- biri =i
DEF.M= treasure =POSS.1SG.ACC REL.M= 1SG- have\AOR =EMPH
DET= N.M.BORR.ARA =PRO CONJ= PNG- V1.IRG =PTCL
daː -ja  
be_there -PFV.3SG.M .
V2 -TAM.PNG .
‘all the fortune I had was there’ (BEJ_MV_NARR_04 DJJINN 128)

3.10.2. The contrastive enclitic =na / =ni

This enclitic particle marks a contrast between two clauses or two elements of clauses, usually underlying an unexpected event or state of affairs. It cliticizes to verbs or nouns:

112. ʔakir -a =ka =na han dh =eː
be_strong -CVB.MNR CMPR =CONTR also DIR =POSS.1SG.ACC
V1 -. =POSTP =PTCL PTCL POSTP =PRO
a- tʔi =jajt /
1SG- resemble\PFV =CSL .
PNG- V1.IRG =CONJ .
‘As I felt that I was also the strongest’ (by contrast with the old man) (BEJ_MV_NARR_15 LEOPARD 048)

113. mek -i =t misus =ni a- fanrʔi =jeːk /
donkey -GEN.SG =INDF.F die\N.AC =CONTR 1SG- go_out\IPFV =if .
N -CASE =DET N.V =PTCL PNG- V1 =CONJ .
‘sometimes I fish out the corpse of a donkey unexpectedly’ (BEJ_MV_NARR_02 FARMER 192)

114. dh =eː hadiːd -a ti= rhi -ta =ni  
dIR =POSS.1SG.ACC talk -IMP.SG.M DEF.F= see -PFV.2SG.M =CONTR .
POSTP =PRO V2 -TAM.PNG REL= V2 -TAM.PNG =PTCL .
‘tell me what you saw!’ (BEJ_MV_NARR_14 SIJADOK 325)
3.10.3. The additive and scalar focus particle han

*han*, which is also used as a polar question marker (see below section 3.12), is used as an additive and scalar focus particle, meaning ‘also, even’. It is glossed ‘also’ in the ge tier, and PTCL.FOC in rx. It most often follows directly a noun or a pronoun, sometimes precedes or follows an adjective in a comparative construction (ex. 112 above), or rarely a verb (BEJ_MV_NARR_18_ADAM_DEVIL_152).

115. taː= mʔa han mhaj =t =a =ajt /  
DEF.PL.F.NOM = woman\PL also three =INDF.F =COP.3PL =CSL .  
DET = SBJ.N.F PTCL NUM =DET =PRED.N =CONJ .  
‘Since the women are also three.’ (BEJ_MV_NARR_17_SHOEMAKER_251)

116. <*bani ʔaːdam*> han bi= i- hass -ej =t /  
<bani ʔaːdam> also NEG.OPT= 3SG.M- pass -OPT =COORD .  
CWS.ARA PTCL PTCL= PNG- V2 -TAM =CONJ .  
‘A human being cannot even pass!’ (BEJ_MV_NARR_05_ERITREA_178)

3.10.4. The reflexive pronoun as an assertive particle

See section 3.1.8.9., and ex. 19 in section 3.2.2.2.2, and 91 in section 3.9.1.1.

3.11. Adverbs

Adverbs do not form a morphologically coherent class. Most adverbs are best defined negatively as a category of independent words which have in common that they cannot be determined (even if some are historically derived from nouns with an article or a demonstrative) nor be inflected for case or TAM, and cannot be used as predicates, a characterization which also applies to some postpositions. But contrary to postpositions whose syntactic scope is limited to nouns and pronouns, adverbs have scope over the predicate or the whole clause.

Adverbs are either simple or compound (not hyphenated): *amas* ‘at night’, *amas-a-ngʔa* ‘midnight’ (lit. at night-the-back), *amsi* ‘today’, *ams-en-ok* ‘that day’, *ams-en-eb* ‘that day’, *bika-ka* ‘each time’, *hallam* ‘now’ (Arabic borrowing), *igesi* ‘immediately’, *iri* ‘yesterday’, *joj* ‘daily’, *lheːjt* ‘tomorrow’, *wana* ‘at dawn’, *abadan* ‘never’ (Arabic borrowing); *hidab* ‘together’, *num* ‘only’.

Place adverbs oppose proximal and distal: *naj* ‘here’ vs. *ben* / *bentoj* ‘there’ (*ben* is identical to the distal demonstrative).

There are four manner adverbs which have in addition a morphological marking: all end with the plural similitative marker =eːt; two of them are clearly derived from adjectives/stative verbs: *diːset* ‘slowly’ (*dis* < ‘(to be) small’), *winneːt* ‘plenty’ (*win* < ‘(to be) big’); one is derived from a temporal adverb; *hallanet* ‘at once’ (< *hallam* ‘now’); the fourth one has no base form: *ʔaːbireːt* ‘anyway’.

The temporal adverb *dabal=had* ‘for a while, a little (time)’ is made of the adjective *dabal* ‘small’ and the shortened form of the postposition meaning ‘until’.

As seen in sections 3.8.6 and 3.11, some postpositions also function as adverbs: *hanka* ‘first’, *sur* ‘before’, as well as the adjective *daji* ‘good’.
3.12. Interrogatives

With very few exceptions, all interrogative utterances have a question word. Polar questions are marked by the additive and scalar focus particle *han* (glossed Q.PLR on ge), which usually follows the verb, but it may occur elsewhere in the clause.

117. \( w = \text{handi} -i = t \) \( n?\text{anda}=t = \text{ib} \) \( \text{ti}-\text{ngadi} \)
DEF.SG.M -tree \(-\text{GEN.SG} = \text{INDF.F} \) shadow =INDF.F =LOC.SG 2SG.M-stop\IPFV
DET= N.M -\text{CASE} = \text{DET} \) N.F =DET =POSTP PNG- V1.IRG
*han* //
Q.PLR .
ADV.QUEST ?
‘do you stay in the shadow of the tree?’ (BEJ_MV_NARR_15_LEOPARD_036)

118. \( \text{dor} \) \( \text{han} \) // \( \text{hob} \)
Q.PLR \( \text{grand-father} = \text{1PL.NOM} -\text{VOC} \) gosh .
N.M ADV.QUEST . N.M =PRO.POL -\text{CASE} EXCM .
\( \text{ox} = \) \( \text{mek} \) \( \text{?am} = \text{b} = \text{wa} \)
DEF.SG.M.ACC=donkey mount\REFL-CVB.MNR =INDF.M.ACC =COP.2SG
DET= N V1.DER -\text{PRF} = \text{DET} = \text{PRED.N}
‘Grand-father, gosh, have you ever ridden a donkey?’ (BEJ_MV_NARR_03_CAMEL_029-032)

The corpus only has one example of a polar question without a question word:

119. \( \text{are}=\text{kam} =\text{on} \) \( \text{rhi}-\text{ta} a=\text{ni} =\text{ho} : \text{b} / \)
then camel =POSS.1PL.ACC see -PFV.2SG.M 1SG- say\IPFV =when .
PTCL.N =PRO.POL V2 -\text{TAM.PNG PNG- V1.IRG =CONJ ?}
‘Then, when I said: Did you see our camel?’ (BEJ_MV_NARR_10_RABBIT_66)

Constituent question words are either pronominal or adverbial. They always occur at the beginning of the interrogative utterance.

The human NOM pronoun *ʔab* ‘who?’ (PRO.QUEST in rx tier) is used with the copula:

120. \( \text{jha}=\text{ʔab} =\text{wa} \)
ADRF who =COP.2SG.M 3SG.M- say\IPFV say\PFV.3PL 2SG.M.NOM .
PTCL.PRO.QUEST =PRED.N PNG- V1.IRG V1.IRG PRO ?
‘he says: Oh, you, who are you? they said’ (BEJ_MV_NARR_02_FARMER_217)

Most of the non-human oblique interrogative pronouns and adverbs derive from the feminine dummy noun *na*: ‘thing’.

The non-selective interrogative *naː* ‘what?’ is invariable, and may also mean ‘how much’:

121. \( \text{na}=\text{haj} \) \( \text{j} =\text{t} =\text{ok} =\text{t} =\text{u} / \)
\( \text{what} \) COM come -\text{CVB.MNR} =\text{INDF.F} = \text{POSS.2SG.ACC} = \text{INDF.F} = \text{COP.3SG} .
\text{PRO.QUEST} \text{POSTP} V2.IRG-\text{PRF} = \text{DET} = \text{PRO} = \text{DET} = \text{PRED.N} ?
‘What has brought you there?’ (BEJ_MV_NARR_01_SHELTER_148)

122. \( \text{na}=\text{ti}-\text{fik} =\text{hon} \)
what 2SG.M- borrow\PFV =OBJ.1PL
\text{PRO.QUEST} PNG- V1 = \text{PRO.POL}
‘How much did you borrow me?’ (lit. us) (BEJ_MV_NARR_04_DJINN_088)

The selective interrogative is *naː* (M), *naː=t* (F) ‘which?’. With the feminine indefinite article it also means ‘how much?’, and ‘where?’:

123. \( \text{na}=\text{fix} =\text{e} a=\text{nfarid} / \)
\( \text{which} \) face =ABL.PL 1SG- talk\IPFV .
\text{PRO.QUEST} N.PL.M =POSTP PNG- V1 ?
‘How shall I have the guts to tell them?’ (lit. which face shall I talk?) (BEJ_MV_NARR_14_SUJADOK_140)
124. naː = t karama ti- firʔa
which = INDF.F alms 2SG.M- go_out\PFV
PRO.QUEST = DET N.F PNG- V1
‘How much alms did you give?’ (BEJ_MV_NARR_14_SIJADOK_302)

125. naː = t ti- mri -ji nifʔaː = juːk /
which = INDF.F 2- find\PFV -SG.M money = POSS.2SG.NOM .
PRO.QUEST = DET PNG- V1 -PNG N.M = PRO ?
‘Where did you find your money?’ (BEJ_MV_NARR_17_SHOEMAKER_142)

The selective interrogative can be reduplicated. When followed by the the feminine marker and the Ablative postposition it becomes an interrogative adverb meaning ‘why?’ (glossed ADV.QUEST in rx): naːnaː = t = iː.

126. jhaː naːnaː = t = iː ti- dir = i /
ADRF what = INDF.F = ABL.SG 2SG- kill\PFV.[M] = POSS.1SG.NOM .
PTCL ADV.QUEST = DET = POSTP PNG- V1 = PRO ?
‘Why did you kill me?’ (BEJ_MV_NARR_18_ADAM_DEVIL_160)

An alternative form consists in the addition of the directional postposition to the reduplicated selective interrogative in the Genitive case: naːnaː = t - i = da (BEJ_MV_NARR_08_DRUNKARD_125).

The dedicated manner interrogative adverb is kaːk ‘how?’

127. kaːk a- ndi / 110 kaːk i- d = heb a- ndi /
how 1SG- say\IPFV . how 3SG.M- say\PFV = OBJ.1SG 1SG- say\IPFV .
ADV.QUEST PNG- V1.1RG ? ADV.QUEST PNG- V1.1RG = PRO PNG- V1.1RG?
‘What shall I say? How shall I tell them what he told me?’ (BEJ_MV_NARR_14_SIJADOK_142-144)

There is one interrogative locative verb (V2) which occurs, as any verb form, at the end of the utterance: keː ‘be where?’:

128. j = ʔar = an keː -jan
DEF.M = child\PL = POSS.1PL.NOM be_where -PFV.3PL
DET = SBJ.N = PRO.POL V2.Q -TAM.PNG
‘Where are our children?’ (BEJ_MV_NARR_18_ADAM_DEVIL_299)

3.13. Numerals

Numeration has a radix five basis (the numeral for ‘five’, also means ‘hand’). The numerals are adjectives (except 100 and 1,000), and as such may be used with the articles. Numerals precede the nouns with which they agree in gender.
<table>
<thead>
<tr>
<th>M / F</th>
<th></th>
<th>M / F</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><em>gal</em> / <em>ga</em>=t</td>
<td>11</td>
<td><em>tamnag</em>ir / <em>tamnag</em>i=t</td>
</tr>
<tr>
<td>2</td>
<td>*mali, 'malox=*b / 'malox=t</td>
<td>12</td>
<td>'tamna-*mali, 'tamna-*malox=*b / 'tamna-*malox=t</td>
</tr>
<tr>
<td>3</td>
<td>*mhaj, mhaj=b / mhaj=t</td>
<td>13</td>
<td>'tamna-*mhaj, 'tamna-*mhaj=b / 'tamna-*mhaj=t</td>
</tr>
<tr>
<td>4</td>
<td>*'fadig / 'fadig=t</td>
<td>14</td>
<td>'tamna-*fadig / 'tamna-*fadig=t</td>
</tr>
<tr>
<td>5</td>
<td>*ʔaj, ʔaj=b / ʔaj=t</td>
<td>15</td>
<td>'tamnaj, 'tamnaj=b / 'tamnaj=t</td>
</tr>
<tr>
<td>6</td>
<td><em>'sag</em>ir / 'sag*i=t</td>
<td>16</td>
<td>'tamna-<em>sag</em>ir / 'tamna-<em>sag</em>i=t</td>
</tr>
<tr>
<td>7</td>
<td><em>asa</em>rama, asa<em>rama=b / asa</em>rama=t</td>
<td>17</td>
<td>'tamna-<em>sa</em>rama, tamna-<em>sa</em>rama=b / tamna-<em>sa</em>rama=t</td>
</tr>
<tr>
<td>8</td>
<td><em>asi</em>mhaj, asi<em>mhaj=b / asi</em>mhaj=t</td>
<td>18</td>
<td>'tamna-<em>si</em>mhaj / tamna-<em>si</em>mhaj=t</td>
</tr>
<tr>
<td>9</td>
<td><em>af</em>fadig / <em>af</em>fadig=t</td>
<td>19</td>
<td>'tamna-<em>af</em>fadig / 'tamna-<em>af</em>fadig=t</td>
</tr>
<tr>
<td>10</td>
<td><em>ta</em>min / <em>ta</em>min=t</td>
<td>20</td>
<td>'tagu*, tag<em>g / 'tagu</em>g=t</td>
</tr>
</tbody>
</table>

Table 21: Numerals

‘Hundred’ is *je* (cf. Amharic *fi ‘hundred’); ‘thousand’ is a borrowing from Arabic: *alif. Ordinal numbers (up to 30) are formed by adding a suffix -a to the stem of the cardinal numerals, except ‘first’ which is borrowed from Arabic: *‘awwali.*

4. Elements of syntax

4.1. Constituent order

Beja is predominantly a head final language, although the reverse, i.e. head initial, may also be found. The canonical constituent order is (S)OV (SVO with enclitic pronouns), but may vary for pragmatic reasons (mainly topic shift and afterthought topic shift). With few exceptions, main clauses follow dependent clauses. Suffixes, enclitics and postpositions are much more frequent than prefixes, proclitics and prepositions (with the notable exception of the V1 verb class with prefix inflection, the definite article, the demonstratives, the independent possessive pronouns and the definite adjective).

4.2. Number agreement

Plural nouns usually licence plural agreement on verbs, the copula, determiners (definite articles, demonstratives), adjectives, cases and postpositions, except for two nouns in the pilot corpus.

ʔarbi=t ‘well drawers’, a feminine noun which refers to a typically collective male activity, and unmarked for number, triggers SG.F concord on the verb: ʔarbi=t hoj sanvi <well_drawer=INDF.F 3ABL wait\IPFV.[3SG.F]> ‘it found in it well drawers’ (lit. well drawers is waiting for him in it) (BEJ MV NARR 05 EBITREA 046).

dhej ‘people’, a collective noun in meaning, triggers singular on determiners, adjectives, cases and postpositions, but plural on verbs and the copula (with one exception, (BEJ MV NARR 02 FARMER 317).
4.3. Adjectival phrases

Adjectives agree in number and gender with the head noun.
(i) They can be used as attributes to nouns. They generally precede the indeterminate and indefinite nouns:

- fagar fanha dhaj faga-am-i <clever work DIR work-REFL.PASS-AOR.3SG.M> ‘he worked hard work for them’ (BEJ_MV_NARR_02_FARMER_016)
- adaloː na manri <red.DIM thing find\IPFV.[3SG.M] > ‘he finds a small red thing’ (BEJ_MV_NARR_02_FARMER_030-32)
- wer mhin e-bi-na < other place 3-go\INT.IPFV-PL > ‘they go to another place’ (BEJ_MV_NARR_02_FARMER_109-111)
- dabalʔawi ‘a small stone’ (BEJ_MV_NARR_05_ERITREA_298)
- daːji=t mʔari eːwna <good=INDF.F meal give\IPFV.3PL > ‘they give him good meals’ (BEJ_MV_NARR_12_WITCH_028)
- billeː=t ribaː=t-i geːb <flat=INDF.F mountain=INDF.F-GEN.SG beside > ‘next to a flat mountain’ (BEJ_MV_NARR_05_ERITREA_321)
- dabaloː=t ?or ‘a small girl’ (BEJ_MV_NARR_03_CAMEL_022)

The reverse order is also possible but less frequent. The adjective bears the indefinite enclitic article (if the syllabic structure permits it):

- jam weːr ‘another water place’ (BEJ_MV_NARR_05_ERITREA_052)
- hallaː=t sagi=t ‘a remote village’ (BEJ_MV_NARR_02_FARMER_112)
- gaw dawri=b ‘a beautiful house’ (BEJ_MV_NARR_02_FARMER_289)
- amul faːdi=b ‘an empty milk container’ (BEJ_MV_NARR_16_PROPHETFOX_123)

If the adjective qualifies a predicative noun (with no article), it always precedes it:

- hekʷal tak=i ‘he is a lucky man’ (BEJ_MV_NARR_08_DRUNKARD_150)
- ti=gabaːti eːla=t gʷaːb=t=i <Gabaati white\DIM=INDF.F champaign=INDF.F=COP.3SG> ‘Gabaati is a deserted champaign’ (BEJ_MV_NARR_05_ERITREA_285)
- winnet dagʷagʷ kam=waː=it <plenty quick camel=COP.3SG=CSL> ‘because the camel was really fast!’ (BEJ_MV_NARR_03_CAMEL_250)

With determinate noun phrases, the definite prefixed article may occur on both the head noun and the adjective; the ADJ follows the head noun:

- j=ʔar=eːb uː=win=ka ‘<DEF.M=child\PL=LOC.PL DEF.SG.M.NOM=big=CMPR> ‘The eldest of his sons’ (BEJ_MV_NARR_02_FARMER_018)
- j = ?ar = i = dabaloː-ja ‘the small children’ (BEJ_MV_NARR_12_WITCH_108)
- t=huːri ti=dawri ‘the beautiful houris’ (BEJ_MV_NARR_14_SIJDOK_257-258)
- w=ʔamuːl i=fadī ‘the empty milk container’ (BEJ_MV_NARR_16_PROPHETFOX_125)

The reverse order is rare, and usually occurs for pragmatic reasons linked to emotions:

- w=hadal w=haramʤʔoːr ‘the black bastard’ (BEJ_MV_NARR_16_PROPHETFOX_213)

In this word order, only the definite noun may bear the article:

- t=huːri dawri dawri ‘very beautiful houris’ (BEJ_MV_NARR_14_SIJDOK_345)
If only the ADJ bears the article then it precedes the head noun:
\( ti = daːji\ nej\) ‘the nice things’ (BEJ\_MV\_NARR\_14\_SIJADOK\_271)
\( w = ?ataːb\ ?amul\) ‘the full milk container’ (BEJ\_MV\_NARR\_16\_PROPHET\_FOX\_131)

If the head noun bears a possessive bound pronoun, the adjective follows the head noun and bears no definite article:
\( halak = o:\ biddגיg\)il ‘his big clothing’ (BEJ\_MV\_NARR\_07\_COLD\_40-41)

(ii) Three adjectives can be used adverbiaelly as verb modifiers:
\( daːji = t = ?abk-i-n\) ‘so, take them well’ (BEJ\_MV\_NARR\_01\_SHELTER\_058)
\( daːji = b\ j = halak-a\ i-naʃʔa\ bʔi-ja-n = hoːb\ <\)good = INDF.M.ACC DEF.PL = cloth-PL 3SG.M-
take_off\INT.PFV lie_down-PFV.3SG.M-L = when\> ‘when he had finished undressing properly’ (BEJ\_MV\_NARR\_01\_SHELTER\_077-080)
\( dabal = \)had siː-san-tiːt <small = until CAUS-wait-CVB.CSL > ‘after he has left it for a while’ (BEJ\_MV\_NARR\_02\_FARMER\_166)
\( gaji\ daː~duːf-aː = b\ aka-jeː = wa\ <\)new INT~sweat-CVB.MNR = INDF.M.ACC be\CVB. SMLT = COORD > ‘while I sweat a lot again’ (BEJ\_MV\_NARR\_15\_LEOPARD\_107)

(iii) Adjectives can be also used as predicates, either with the nominal copula:
\( daːjiː = t = i\) ‘it is good’
\( nifiri\ ʤantaːji ?atorbi = b = u\ <\)detestable djinn nasty = INDF.M.ACC=COP.1SG > ‘I was a nasty unpleasant djinn’ (BEJ\_MV\_NARR\_02\_FARMER\_231)
\( u = kam\ hoːj\ dawil = i\ <\)DEF.SG.M.NOM = camel 3ABL nearby = COP.3SG > ‘The camel was nearby’ (BEJ\_MV\_NARR\_10\_RABBIT\_69)
\( nifiri = wa\ ‘You are detestable’ (BEJ\_MV\_NARR\_16\_PROPHET\_FOX\_212)
\( sagi = b = i\ ‘I am far away’ (BEJ\_MV\_NARR\_03\_CAMEL\_033)
\( rajh = a\ ‘they are happy’ (BEJ\_MV\_NARR\_17\_SHOEMAKER\_133)

or with a ‘be’ verb in dependent clauses:
\( fawaj\ ka = a-ka = aj\ <\)idle NEG.IPVF = be\PFV = CSL > ‘since I have no time’ (BEJ\_MV\_NARR\_18\_ADAM\_DEVIL\_284)

4.4. Possessive phrases and non-anchoring adnominals

The Genitive suffixes can be used for possessive anchoring relations and for various non-anchoring relations (partitive, quality, location, material attributes, purpose...) (see above section 3.1.6.2. for additional examples).
Beja belongs to a rare and complex type of Genitive indexing system, the double indexing type,\(^{11}\) which indexes on the dependent noun (the possessor) both the dependent constituent and the head (the possessed) of a possessive construction, for both gender and number (this complex cross-referencing system is not glossed as such in the pilot corpus).

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\(^{11}\) For the typology of Genitive indexing and a precise analysis of the three slots which form the template of the Beja Genitive suffixes, cf. Fenwick (2007: 217-218).
The head most often follows the dependent, and the possessor is compatible with the definite article. In the four examples below, the head is masculine and the indexing on the dependent of the head gender is covert:

129. \( i = kawm -i \text{ miʔat } =ib \) // DEF.M = camel -GEN.SG footprint = LOC.SG
DET = N -CASE N.M = POSTP
‘in the camel’s footprints’ (BEJ_MV_NARR_10_RABBIT_13)

130. \( ti = takat =t -i \text{ miʔat } =ib \)
DEF.F = woman = INDF.F -GEN.SG footprint = LOC.SG
DET = N.F = DET -CASE N.M = POSTP
‘in the woman’s footprints’ (BEJ_MV_NARR_05_ERITREA_084)

131. \( ʤannaː =t -i \text{ tak } \)
paradise = INDF.F -GEN.SG man
N.F = DET -CASE N.M
‘a man of the paradise’ (BEJ_MV_NARR_08_DRUNKARD_229)

132. \( waʤɣa \ -i \text{ gaw } \)
appointment -GEN.SG house
N.M -CASE N.M
‘A meeting house’ (BEJ_MV_NARR_01_SHELTER_027)

The double indexing is overtly expressed when the head is feminine: the feminine gender of the head is indexed after the Genitive marker of the dependent (and sometimes not on the head itself). In ex. 133 below, the first \( =t \) is the feminine marker of the dependent, \( lhawer =t \) ‘a fox’, while the second one refers to the head, \( sala \) ‘grilled meat’, a feminine noun:

133. \( lhaːweː =t -i =t sala \)
fox = INDF.F -GEN.SG = INDF.F grilled_meat
N = DET -CASE = DET N.F
‘The grilled meat of Fox’ (BEJ_MV_NARR_16_PROPHET_FOX_027)

When the dependent is plural and the head feminine, the Genitive suffix is \(-eː\). In the pilot corpus, the feminine gender of the head is not always indexed on the dependent. Ex. 135 in addition shows that the head, which is usually not determined by the definite article, may in some instances bear the article, for reason of emphasis:

134. \( i = miʃʔari -je: \text{ j} \lambda: =t \)
DEF.M = camel_driver -GEN.PL milk = INDF.F
DET = N.M -CASE N.PL.F = DET
‘milk of the camel drivers’ (BEJ_MV_NARR_05_ERITREA_084)

135. \( bet ti = naweː =t -e: \ / i = karas \)
DIST.SG.F.ACC \(^{12} \) DEF.F = thorn\PL = INDF.F -GEN.PL.
DEF.M = thorn
DEM DEF = N.F = DET -CASE . DET = N.M
‘a thorn of these thorns’ (BEJ_MV_NARR_16_PROPHET_FOX_102-103)

About one third of the possessive phrases of the pilot corpus have the reverse word order (head – dependent), more frequently when they express non anchoring relations, and always (3/3 examples) when the head refers to material attributes. The indexing of the feminine gender of the head on the dependent is not systematic. Rules are still unclear.

\(^{12}\) Sic. The distal demonstrative does not show the expected number concord.
136. \( \text{ʔamanaj} = t \quad \text{tam} \quad -i \quad = t \)

mouthful = INDF.F gruel -GEN.SG = INDF.F\(^{13} \)
N.F = DET N.M - CASE = DET

‘A mouthful of gruel’ (BEJ_MV_NARR_01_SHELTER_123)

137. \( t \quad = \quad \text{ʔaba} \quad \text{mhali} \quad i = \quad \text{dar} \quad -e: \)

DEF.F = wadi two DEF.M = edge -GEN.PL
DET = SBJ.N.F NUM DET = N.M -CASE

‘the two shores of the wadi’ (BEJ_MV_NARR_05_ERITREA_170)

138. \( \text{mhaj} = t \quad \\ / 210 \text{taga} / 266 \text{halak} -a : \quad -je: \quad = t \)

three = INDF.F bolt . cloth -PL -GEN.PL = INDF.F
NUM = DET . N.F . N.M -. -CASE = DET

‘three bolts of cloth’ (BEJ_MV_NARR_14_SIJOADOK_216-220)

139. \( \text{kʷaqād} \quad -a \quad \text{ʔalba} / 218 \quad \text{nihaːs} \quad -i \quad = t \)

round \· ADJ -CVB.MNR can . copper -GEN.SG = INDF.F
ADJ -. . N.F . N.M .- . -CASE = DET

‘a round copper can’ (BEJ_MV_NARR_02_FARMER_196-198)

140. \( \text{kōm} \quad -a \quad \text{ʔal} = \quad \text{mhin} / \text{damʔata} / -i \quad \text{ʔal} = \quad \text{mhin} / \text{damʔata} / -i \quad -ina \)

heap -PL DEF.SG.M.ACC = place . gold -GEN.SG 3- be_there\AOR -PL
N.M -. . DET = N.M . N.M . N.M . -CASE PNG- V1.IRG . -PNG

‘there were heaps of golden (things) in the place’ (BEJ_MV_NARR_02_FARMER_059-060)

In the pilot corpus, genitives do not stack. When an element of the Genitive construction denotes a material and the other two are in a part-whole relation, only the material is marked for Genitive; the dependent and the head of the partitive relation are just juxtaposed, in this order, as in the following example (to be compared with \( \text{diwaːn-i rifkak} \) (lit. jar-GEN.SG piece) ‘a piece of jar’ [BEJ_MV_NARR_02_FARMER_168-169]):

141. \( \text{ʔal} = \quad \text{dwaːn} \quad \text{rifkak} \quad \text{ʔin} = \quad -i \)

DEF.SG.M.ACC = jar piece clay -GEN.SG
DET = N.M . N.M . N.M . -CASE

‘the piece of earthenware jar’ (BEJ_MV_NARR_02_FARMER_173)

Information structure processing may result in the absence of a Genitive marker. In ex. 142 below, \( \text{on} \ \text{ʔal} = \text{jham} / \text{nakat} / / \text{mmm} \) ‘this leopard’, the dependent of the possessive relation, is topicalized and unmarked for Genitive (note that the Genitive marker of the head \( i = \text{girma-i} \) ‘the head’ corresponds to its locative value, not to the Genitive one, see above section 3.1.6.2).

142. \( \text{onom} \quad \text{ʔal} = \quad \text{jham} / \text{nakat} / / \text{mmm} \)

PROX.SG.M.ACC DEF.SG.M.ACC = leopard . how_much . mmm
DEM DET = N.M . PTCL . HESIT
nakat / talga / i = girma -i a - dʔi / how_much . bullet . DEF.M = head -GEN.SG 1SG- do\PFV .

‘how many bullets I shot in the leopard’s head!’ (BEJ_MV_NARR_06_FOREIGNER_49-57)

\(^{13} \) \text{tam} is masculine, the final \( = t \) indexes the feminine gender of the head.
4.5. Relative and complement clauses

4.5.1. Subject and object relative clauses

Relative clauses (RC) are head-external. Beja has several types of relativizing strategies which are, for the vast majority, subtypes of the so-called gap strategy, i.e. there is no overt case-marked reference to the head noun within the relative clause, hence no case-marked relative pronoun.

Most often, the relative clause is marked by a relative clitic marker, which shows gender, number and definiteness\(^\text{14}\) concord with the head. Two of the relative markers are transparently cognates with the indefinite and definite articles: =b (masculine), =t (feminine); SG \=w = (\=w = before consonants\(^\text{15}\)), PL \=i = (variant \=j = before consonants, \=j = before the two laryngeals). When the relative marker differs from the article (\=w =, \=j =), it is glossed REL in ge and CONJ in rx; if identical, it is glossed DEF in ge and REL in rx.

Other frequent relative markers are the enclitics =e (invariable), =eb (masculine), =et (feminine), glossed as REL in ge and CONJ in rx, which may be followed by the dummy noun \=na (‘thing’) (glossed as ‘thing’ in ge and CONJ in rx).

The relative markers may partially combine (provided the gender concord applies): the definite and indefinite articles may co-occur, as well as the definite articles and the enclitic relative markers =e(=b/t) and =e=na.

The enclitics directly attach to the verb of the relative clause, but the proclitics attach to the first constituent of the relative clause, whatever its word category and function.

Relativization on subjects and objects do not share all the strategies. The indefinite articles \=b, \=t are only found with subject relative clauses, while the dummy noun \=na (‘thing’) strategy is only found with object relative clauses; the use of the enclitic relative markers =e, =eb, =et is much more frequent with object relative clauses (it is even the most common one).\(^\text{16}\)

Concerning constituent order, the relative clause is usually embedded in the matrix clause, the head preceding the relative clause.\(^\text{17}\)

Examples of Subject RCs:

143. \text{takat} \text{miskin} =t \text{are} / 458 \{\text{ʔarit} / 288 \text{mhaj} =t /}
\begin{tabular}{lllllllllll}
\text{woman} & \text{poor} & = & \text{INDF.F} & \text{then} & . & \text{girl} & \text{PL} & . & \text{three} & = & \text{INDF.F}. & \\
\text{SBJ.N.F} & \text{N.M} & = & \text{DET} & \text{PTCL}. & . & \text{N.F} & . & \text{NUM} & = & \text{DET}. & \\
\end{tabular}

\text{147} \text{t\text{\text{-}}} \text{biri} \text{=} t] \text{t\text{\text{-}}} \text{fi} / \\
\text{3SG.F-} \text{have} \text{\&} AOR = \text{INDF.F} \text{3SG.F-} \text{be} \text{there} \text{\&} AOR . \\
\text{PNG-} \text{V1.IRG} = \text{REL} \text{PNG-} \text{V1.IRG} .

‘Then there was a poor woman who had three daughters’ (BEJ_MV_NARR_14_SIJDOK_009-015)

144. \text{ganaŋ} / 181 \{\text{walik} -\text{ini} =b] e- msiw /}
\begin{tabular}{lllllllllll}
\text{gazelle} & . & \text{shout} & -\text{IPFV.3SG.M} = & \text{INDF.M.ACC} & \text{1SG-} & \text{hear} & -\text{INT.IPFV} . & \\
\text{SBJ.N.M} & . & \text{V2} & -\text{TAM.PNG} = & \text{REL} & \text{PNG-} & \text{V1.DER} . & \\
\end{tabular}

‘I hear a gazelle which is calling’ (BEJ_MV_NARR_05_ERITREA_250-252)

\(^{14}\) There are some exceptions to the definiteness concord rule, and many to the number concord rule, in the pilot corpus.

\(^{15}\) This phonetic rule is not systematically applied with the laryngeals \=h and \=ʔ.

\(^{16}\) Appleyard (2007: 474), among others, claims that the enclitic is not used with subject relative clauses. Even if not very frequent, the pilot corpus does not confirm this.

\(^{17}\) The underlined \text{head} is underlined, \{the relative clause\} is bracketed and the relative marker is in bold script.
145. **hawat** = t  [**jiʔaː** = t  **tib** -a = b\(^{18}\)]

**goatskin_flask** = INDF.F  **milk** = INDF.F  **fill** -CVB.MNR = INDF.M.ACC

N.F = DET  N.PL.F = DET  V1 -PRF = DET

**iː - kti** = **jet**]  **sallam** -ja = ajt = heb //

3SG.M- be\¬ AOR = REL.F  **give** -PFV.3SG.M = CSL = OBJ.1SG .

PNG- V1.IRG = CONJ  V2 -TAM.PNG = CONJ = PRO .

‘Since he gave me a goatskin full of milk’ (BEJ_MV_NARR_01_SHELTER_051)

146. **tuk** = **takat**  [**ti** = waw -ti = t]

**PROX.SG.F.ACC**  **DEF.F= woman**  **DEF.F= cry** -AOR.3SG.F = 1INDF.F

DEM = DET = N.F  REL = V2 -TAM.PNG = REL

**rh** = heb /

see -AOR.3SG.M = when .

V2 -TAM.PNG = CONJ

‘when he saw this woman who was crying’ (BEJ_MV_NARR_14_SIJADOK_157)

147. **an**  **j=ʔar=i**

**PROX.PL.M.NOM**  **DEF.M= child\¬PL = POSS.1SG.NOM**  **DEF.F= DIR**

DEM = DET = SBJ.N = PRO

**jʔ -eːn =eːt =oːk** / heː = heːb //

1SG- give\¬ IPFV.3PL = RCPT = POSS.2SG.ACC .  give -IMP.SG.M .

PNG- V1.IRG -TAM.PNG = CONJ  V1.IRG = PRO

‘Give (everything) to my children who come to you!’ (BEJ_MV_NARR_04_DJINN_029-030)

Examples of Object RCs:

148. **mʔari =t** / 263  [**t=ʔar=t** = i]

**food** = INDF.F .  **DEF.F= child\¬PL = INDF.F = POSS.1SG.ACC**

N.F = DET .  DET = N = DET = PRO

**a- niːw** = eːt]

**heː = heːb** //

1SG- give\¬ IPFV.3PL = RCPT = POSS.2SG.ACC .  give -IMP.SG.M .

PNG- V1.IRG -TAM.PNG = CONJ  V1.IRG = PRO

‘Give me food that I’ll give to my daughters!’ (BEJ_MV_NARR_14_SIJDOK_194-196)

149. **j=halak -a =b** = wa /

**DEF.F= cloth -PL = INDF.M.ACC = COORD .**  **REL.M= DEF.M= man = LOC.SG**

DET = N.M - .  DET = CONJ .  CONJ = DET = N.M = POSTP

**en**  **eː= gadʔa = jeː** = na /

**PROX.PL.M.ACC**  **DEF.PL.M.ACC = weapon\¬PL = POSS.3PL.ACC**  **thing** .

DEM = DET = N.M = PRO  N.F

‘The clothes that the man has, and his weapons...’ (BEJ_MV_NARR_01_SHELTER_162-163)

150. **uː=jhsan**  **a- ndi = w= haˈwaːd /**

**DEF.SG.M.NOM = leopard**  **DEF.SG.M.ACC = place**  **DEF.SG.M = 1SG.NOM**

DET = SBJ.N.M  DET = N.M  REL = SBJ.PRO

**a- ngad**  **iː - kti = jet**] /

1SG- stop\¬ PFV 3SG.M- be\¬ AOR = REL.M .

PNG- V1.IRG  PNG- V1.IRG = CONJ

‘The leopard, (compared with) the place where I had stopped...’ (BEJ_MV_NARR_06_FOREIGNER_64)

151. **dh** = okna  **iː- filib**  **a- ndi /**  **w= haˈwaːd /**

**DIR = POSS.2PL.ACC**  **FUT.SG. = look 1SG- say\¬ PFV .  DEF.SG.M = night .

POSTP = PRO  TAM.PNG- V1  PNG- AUX.FUT .  DET = N.M .

**119 tartiːga** = t / 798  [**haj**  **ti- mir** -na = eː = na]

means = INDF.F .

3ABL 2- find\¬ PFV -PL = REL = thing

N.F = DET .  PRO  PNG- V1  -PNG = CONJ = CONJ

\(^{18}\) Sic. The femine enclitic = t was expected.
If the verb of the relative clause is negative, the Negative Optative/Hortative paradigm is obligatory:

If there are exceptions to the constituent order rule for reasons of speech processing and pragmatics; the entire matrix clause may precede the relative clause (ex. 157, 158), or the head may follow the relative clause. The relative clause may even be split in case of afterthoughts (ex. 161).

Subject:

There are exceptions to the constituent order rule for reasons of speech processing and pragmatics; the entire matrix clause may precede the relative clause (ex. 157, 158), or the head may follow the relative clause. The relative clause may even be split in case of afterthoughts (ex. 161).

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19 The SG marker \(w\) was expected, not the plural \(i\).

20 Sic! It seems there is a double marking of the relative clause, one on the Ablative pronoun which refers to a preceding determinate feminine noun (the paradise), followed, for an unclear reason, by the plural form of the locative postposition, and one on the verb, which refers to the following determinate masculine head of the relative clause.
156. [bək təi -it =eː] ma- dar /
thus resemble -VN = REL N.A- kill .
PTCL V1.IRG -N.V = CONJ N.V- V1 .
‘it was a killing like that’ (lit. a killing which resembling that) (BEJ_MV_NARR_15.LEOPARD_112)

Object:
157. hɔc = b hososː jʔag -aː = b = u
ləm = INDF.M.ACC 3SG.ABL carry_on_shoulder -CVB.MNR = INDF.M.ACC = COP.3SG N = DET PRO V1 -PRF = DET PNG- V1.IRG = CONJ
w = tak / [ʔasal-aː = b iː- kti = jetb] DET.SG.M.NOM = man . grill -CVB.MNR = INDF.M.ACC 3SG.M- be\AOR = REL.M DET = SBJ.N.M . V2 -PRF = DET PNG- V1.IRG = CONJ
‘The man was carrying a lamb on his shoulder that he had grilled’
(BEJ_MV_NARR_01.SHELTER.040-041)

158. j=ʔaɾi= mhali / 654 αː= ɾeːw
DEF.M = child\PL DEF.M = two . DEF.SG.M.ACC = cattle DET = SBJ.N . DET = NUM . DET = N.M
iː= kʷi -ina en // 310
3- pasture\INT.AOR-PL say\PFV.3PL .
PNG- V1.DER -PNG V1.IRG .
[wi= iː- biri -iːn =eb] //
REL.SG.M = 3- have\AOR-PL = REL.M .
CONJ = PNG- V1.IRG -PNG = CONJ .
‘The two boys were pasturing the cattle, they said, that they had.’
(BEJ_MV_NARR_02.FARMER.020-024)

159. baruːk han / [ɾeːw -ti =jet] hajʔa
2SG.M.NOM also . climb -AOR.2SG.M = REL.F way SBJ.PRO PTCL.FOC . V2 -TAM.PNG = CONJ N.F
ki= t- haj = aj /
NEG.IPFV = 2SG- be_there\IPFV = CSL . .
PTCL = PNG- V1.IRG = CONJ .
‘Since you cannot go up’ (lit. since there is no way that you climb)
(BEJ_MV_NARR_18.ADAM.DEVIL.123-124)

160. [wana i- dilib =et] / ti= gidʔaw = t = eb dajji
at_dawn 3SG.M- sell = REL.F . DEF.F= shoe = INDF.F = LOC.PL good ADV PNG- V1 = CONJ . DET = N.F = DET = POSTP ADJ
girf -a mir -aː = b = u = it /
money \PL find -CVB.MNR = INDF.M.ACC = COP.3SG = CSL . .
N.M -. V1 -PRF = DET = PRED.N = CONJ .
‘since he had got a good price from the shoes he had sold in the morning’
(BEJ_MV_NARR_17.SHOEMAKER.081-082)

161. oʈ # # 674 ti= karama = t = i
PROX.SG.F.ACC . DEF.F= alms = INDF.F = POSS.1SG.ACC DEM . DET = N.F = DET = PRO
[tː= firʔiː =jet] / 247 i- ktim -n = heb // 284
3SG.F- go_out\PFV = REL.F . 3- arrive\PFV -PL = OBJ.1SG . PNG- V1 = CONJ . PNG-V1 -PNG = PRO .
In the pilot corpus, one finds in addition a few other rare strategies. The first one is the gap strategy without a relative marker, which occurs twice with a Negative Optative/Hortative verb form, both with subject and object relative clauses, and several times when the head follows the relative clause. The head may be definite or indefinite. Roper (1928:92) mentions that this strategy is possible with non restrictive relative clauses (“if the dependent clause merely defines or describes the subject or the object of the principal sentence without governing it”), which is also the case in the pilot corpus examples. He (p. 90) also states that “[i]f an adverb or simple object of the verb in the subsidiary clause [i.e. relative clause] is introduced, the relative definite article may be omitted”.

Subject:


baŋ = akaj = wa / / [BI 421] ʔadami ʔor winnet NEG.PROH = be\CVB.SMLT =COORD . young son plenty PTCL= AUX.PRF = CONJ . ADJ SBJ.N ADV


‘A man, an old man, who was elderly and strong, who was not (bad), and a very strong young boy travelled together.’ (BEJ_MV_NARR_15_LEOPARD_001-011)

Object:

166. [na: = t bia = t - katiːm] mhiːn / w = mek thing =INDF.F NEG.OPT = 3SG.F arrive\OPT place . DEF.SG.M.NOM = donkey N.F = DET PTCL= PNG V1 N.M . DET = SBJ.N
Object relative clauses may also rarely be marked by an invariable enclitic marker = (j)i.

In the pilot corpus this marker only occurs in case of topicalization (ex. 167), and when
the head follows the relative clause:

167. \[ {\text{ut}} \quad {\text{ti}} = \quad {\text{dganna}} \quad {\text{sur}} / \quad 251 \quad {\text{barijok}} \quad {\text{dhaj}} / \quad 487 \]

PROX.SG.F.NOM \quad DEF.F = \quad paradise \quad before \quad POSS.2SG.M.ACC \quad DIR \quad .

DEM \quad DET \quad = \quad SBJ.N.F \quad ADV \quad . \quad PRO \quad POSTP \quad .

\[ {\text{si}} - \quad {\text{bisir}} \quad -a \quad =b \quad {\text{i}} - \quad {\text{kti}} \quad -n \quad =i] \quad / \quad \]

CAUS- \quad prepare \quad -CVB.MNR = INDF.M.ACC \quad 3- \quad be\AOR -PL = REL \quad .

V1.DER-V1 \quad -PRF \quad =DET \quad PNG- \quad V1.IRG \quad -PNG = CONJ \quad .

gasir \quad =i \quad \]

castle \quad = COP.3SG

N.M \quad = PRED.N

‘Before, this paradise that they had prepared for you, was a castle’

(BEJ_MV_NARR_14_SUJADOK_261-267)

168. \[ {\text{hoj}} \quad {\text{ti}} - \quad {\text{fi}} = {\text{ji]} \quad {\text{mhin}} / \quad 180 \quad {\text{manri}} / \quad \]

3ABL \quad 3SG.F- \quad be\there\AOR = REL \quad place \quad . \quad find\IPFV.[3SG.M] \quad .

PRO \quad PNG- \quad V1.IRG \quad = CONJ \quad N.M \quad . \quad V1 \quad .

‘he finds a place where to be’ (BEJ_MV_NARR.02.FARMER_295-297)

169. \[ {\text{hoj}} \quad {\text{da-}} \quad {\text{jan}} \quad =i] \quad {\text{daaj}} \quad {\text{ka}} = \quad a- \quad {\text{kan}} / \quad \]

3ABL \quad do- PFV.1SG = REL \quad do\VN \quad NEG.IPFV = 1SG- \quad know\REFl.PFV \quad .

PRO \quad V2 -TAM.PNG = CONJ \quad N.V.M \quad PTCL = PNG- \quad V1.DER.IRG \quad .

‘I don’t know how I made it!’ (lit. I don’t know an action that I made)

(BEJ_MV_NARR.03.CAMEL.219)

170. \[ {\text{on}} \quad i = \quad {\text{rew}} = {\text{ib}} / \quad {\text{bi}} = \quad i- \quad {\text{bari}} \quad -n \quad =i] \quad \]

PROX.SG.M.ACC \quad DEF.M = cattle = LOC.SG \quad . \quad NEG.OPT = 3- \quad have\OPT -PL = REL

DEM \quad DET = N.M = POSTP \quad . \quad PTCL = PNG- \quad V1.IRG \quad -PNG = CONJ

\[ {\text{dkinis}} \quad {\text{te}} = \quad {\text{kam}} \quad \quad \quad {\text{hadlit}} / \quad {\text{ki}} = \quad i- \quad {\text{haj}} \quad -na \quad \]

sort \quad DEF.PL.F.ACC = camel\PL \quad until \quad . \quad NEG.IPFV = 3- \quad take\PFV -PL

N.M \quad DET = = N \quad POSTP \quad . \quad PTCL = PNG- \quad V1.IRG \quad -PNG

‘there was not a single type of cattle that they could not have, (they) even (bought)
camels.’ (lit. there was not a sort that they did not have in this cattle)

(BEJ_MV_NARR.17.SHOEMAKER.127-129)

In one instance, one may wonder if Beja does not also use the resumptive pronoun
strategy. In the sole example of the pilot corpus, the Nominative head is refered to by an
Accusative independent pronoun which precedes the object relative clause. But the
pronoun is not formally and prosodically included within the boundaries of the relative
clause marked by both a proclitic (to the pronominal subject) and an enclitic relative
marker. The construction is probably linked to information structure processing and due
to topicalisation, rather than being a resumptive strategy proper. It is thus best described
as an “ordinary” gap strategy with relative markers:

171. \[ {\text{ut}} \quad {\text{tw}} = \quad {\text{na}} \quad {\text{ombator}} / \quad {\text{t}} = \quad {\text{?ani}} \quad \]

PROX.SG.F.NOM \quad DEF.SG.F.NOM) \quad thing \quad 3SG.F.ACC \quad . \quad DEF.F = 1SG.NOM

DEM \quad DET = \quad SBJ.N.F \quad PRO \quad . \quad REL = \quad PRO

\[ {\text{a-}} \quad {\text{kten}} \quad = {\text{etj}} / \quad 115 \quad {\text{ti-}} \quad {\text{kati}} \quad = {\text{jk}} / \quad \]

1SG- \quad know\REFl.IPFV = REL.F \quad . \quad 3SG.F- \quad be\IPFV = if \quad .

PNG- \quad V1.DER.IRG \quad = \quad CONJ \quad . \quad PNG- \quad V1.IRG \quad = \quad CONJ \quad .
4.5.2. Oblique relative clauses

Oblique RCs are rare in the pilot corpus. The few examples found use both the proclitic and enclitic relative markers, but unlike Subject and Object RCs, the proclitic does not attach to the first element of the RC. Enclitic postpositions cliticize to the enclitic relative marker (ex. 172), while non enclitic postpositions follow the proclitic relative marker (ex. 173). The head may precede or follow the RC:

172. \( [eː= kam \ ji= i= \text{birir} -n \ = eː \ = nə= jəb] \)
DEF.PL.M.ACC = camel \ PL REL.M = 3SG.M- have \ AOR -PL = REL = thing \ LOC.PL
DET = N CONJ = PNG- V1.IRG -PNG = CONJ = CONJ = POSTP
\( \text{kam} \ \text{hoj} \ \text{darni} \ \text{em} \ // \)
camel 3ABL kill \ IPFV. [3SG.M] say \ PFV.3PL.
N PRO V1 V1.IRG.
‘he killed them one of the camels they had, they said.’ (BEJ_MV_NARR_15_LEOPARD_018)

173. \( w= \text{handi} / 218 \ [wi= \text{whi} \ \text{mir} -aː =b] \)
DEF.SG.M = tree . REL.SG.M = under find - CVB.MNR = INDF.M.ACC
DET = N.M CONJ = POSTP V1 - PRF = DET
\( i= \text{kti} = \text{jeb}] \ \text{rhi} -is \ -i \ =\text{hox}b / \)
3SG.M- be \ AOR = REL.M see - CAUS - AOR.3SG.M = when .
PNG- V1.IRG = CONJ V2 - V2.DER - TAM.PNG = CONJ .
‘When he showed him the tree under which he had found it’ (BEJ_MV_NARR_02_FARMER_053-055)

4.5.3. Genitive relative clauses

Genitive relative clauses are rare in the pilot corpus. Only two examples illustrate the case-coding strategy which is similar to the relative pronoun strategy: the Genitive marker of the non-anchoring adnominal construction is suffixed to the relative marker (with or without the dummy noun), and not to the nominal head of the relative clause. The examples illustrate the instrumental and the locative use of the Genitive case:

174. \( \text{on} = \text{darab} / 1017 \ [w= \text{i} = \text{gabal} = i] \)
PROX.SG.M.ACC DEF.M = path . DEF.SG.M = DEF.M = direction \ PL = POSS.1SG.ACC
DEM DET = N.M . REL = DET = N.M = PRO
\( i= \text{nin} \ \text{di}= \text{jeb} ] \ \text{dif} -eː / \)
take \ IPFV.3SG.M 1SG- say \ AOR = REL = thing - GEN.SG leave - CVB.SMLT .
PNG- V1.IRG PNG- V1.IRG = CONJ CONJ - CASE V1 - .
‘leaving by this path that I thought my direction would take’ (BEJ_MV_NARR_05_ERITREA_278-280)

There is another strategy for Genitive RCs, the use of a resumptive pronoun, which is not exemplified in the corpus. The head is topicalized and referred to by a possessive bound pronoun on the dependent which is included in the RC; the invariable relative marker \( =eː \) is attached to the verb of the RC:

175. \( \text{w}= \text{tak} / \text{w}= \text{or} = u : \ \text{la} = b \)
DEF.SG.M.NOM = man DEF.SG.M = POSS.3SG.NOM = sick = INDF.M.ACC
\( i= \text{kati} = \text{jeb}] \ \text{gadab} -a : = b \)
3SG.M- be \ IPFV = REL be sad - CVB.MNR = INDF.M.ACC = COP.1SG
‘The man whose son is sick is sad’ (elicitation)
4.5.4. Headless relative clauses and complement clauses

The most frequent markers of both the subject and object relative clauses, \(=b/=t, =e\), are also used for the expression of headless relative clauses, which function as referring expressions:

176. \(\text{walj} \ -a \ \text{na} \ =\text{jet} \ [\text{bir} \ \text{biri} \ =\text{b}] / \)
\text{saint} \ -PL \ \text{thing} =\text{SIMIL.PL} \ 3SG.M- \ \text{have\AOR} = \text{INDF.M.ACC} .\nN.M- \ N.F \ = \text{POSTP} \ \text{PNG-} \ V1.\text{IRG} \ = \text{REL} .\n‘he has what saints have’ (lit. things like saints (is) what he has)
(\text{BEJ\_MV\_NARR\_08\_DRUNKARD\_154})

177. \([\text{t}i- \ \text{bari} \ =\text{je} \ =\text{na}] \ \text{ba}=\text{ hariw} \ -a / \)
2SG.M- \ \text{have\IPFV} = \text{REL} = \text{thing} \ \text{NEG.PROH} = \text{seek} \ -IMP.SG.M .
\text{PNG-} \ V1.\text{IRG} \ = \text{CONJ} \ = \text{CONJ} \ \text{PTCL}= \ V1 \ -TAM.PNG .
‘don’t look for what you had!’ (\text{BEJ\_MV\_NARR\_04\_DJINN\_165})

178. \([\text{ti=} \ \text{w}=\text{ hagi=} =\text{t} =\text{a} ] \ \text{hanka} \ \text{fitik} \ -\text{na} / \)
\text{DEF.F=} \ \text{DEF.SG.M=} \ \text{buttocks} = \text{INDF.F} = 1SG.\text{ACC} = \text{DISTR} \ \text{before} \ \text{dig\_up} \ -\text{IMP.PL}
\text{REL=} \ = \text{DET=} \ \text{N.M} \ = \text{DET=} \ \text{PRO} \ = \text{POSTP} \ \text{PTCL} \ \text{V1} \ -\text{TAM.PNG} .
‘First take off those (the thorns [PL.F]) which are in my buttocks!’
(\text{BEJ\_MV\_NARR\_16\_PROPHET\_FOX\_289})

179. \([i\text{f}abbi} \ =\text{t} \ \text{vi-} \ \text{d} \ -\text{n} =\text{et}j] \ \text{hoj} \ \text{ti-} \ \text{fi} / \)
\text{look\N.AGN} = \text{INDF.F} 3- \ \text{say\AOR} \ -\text{PL} = \text{REL.F} 3ABL \ 3SG.F- \ \text{be\_there\AOR} .\n\text{N.V} \ = \text{DET} \ \text{PNG-} \ V1.\text{IRG} \ -\text{PNG} = \text{CONJ} \ \text{PRO} \ \text{PNG-} \ V1.\text{IRG} .
‘among them, there was the one who was called Sentinel’ (\text{BEJ\_MV\_NARR\_14\_SIJADOK\_325})

180. \([\text{u=} \ \text{nif}\text{ʔa} \ \text{wi=} =\text{bir} =\text{t} / 440 \)
\text{DEF.SG.M.NOM=} \ \text{fortune} \ \text{REL.M=} \ 1SG- \ \text{have\AOR} .\n\text{DET=} \ \text{SBJ.N.M} \ \text{CONJ=} \ \text{PNG-} \ V1.\text{IRG} .\n[\text{ti=} \ \text{sak} \ -\text{ija} =\text{et}] \ \text{gallab} \ -\text{tan} =\text{e}\text{o} \ =\text{hob} \)
\text{DEF.F=} \ \text{do} \ -\text{PFV.3SG.M} \ =\text{REL} \ \text{tire\_out} \ -\text{PFV.3SG.F} = \text{OBJ.1SG} = \text{when}
\text{REL=} \ \text{V2} =\text{TAM.PNG} \ =\text{CONJ} \ \text{V2} =\text{TAM.PNG} \ = \text{PRO} \ = \text{CONJ} .
‘When I could not know what to do about the fortune I had’ (\text{BEJ\_MV\_NARR\_04\_DJINN\_131-133})

The syntax of complement clauses, i.e. a predication which is the object argument of a predicate\(^{21}\), is partly similar to that of headless relative clauses. Part of the most common relative markers are also used as complementizers: \(=e(b/t), =e=na\). The complement clause precedes the matrix clause:

182. \(\text{ani} \ [\text{i=} \ \text{mek} \ -\text{i} \ \text{m} -\text{tam} =\text{et}] / \)
1SG.NOM \ \text{DEF.M=} \ \text{donkey} \ -\text{GEN.SG} \ N.AC- \ \text{mount\RELF} = \text{REL}
\text{SBJ.PRO} \ \text{DET=} \ = \text{N} \ -\text{CASE} \ \text{N.V=} \ V1.\text{DER} = \text{CONJ}
\text{sagi} =\text{b} =\text{i} \)
\text{far} = \text{INDF.M.ACC} = \text{COP.1SG}
\text{ADJ} = \text{DET} = \text{PRED.N}
‘I am far from having ridden a donkey!’ (\text{BEJ\_MV\_NARR\_03\_CAMEL\_033})

183. \([\text{a=} \ \text{kazm} \ \text{ni=} \ \text{fabb} =\text{et}] \ \text{are=} \ \text{na} \ =\text{aj} / \)
\text{DEF.SG.M.ACC=} \ \text{camel} \ 1PL- \ \text{look\INT\PFV} = \text{REL.F} \ \text{like\-PFV.1PL} = \text{CSL} .
\text{DET=} \ = \text{N} \ \text{PNG-} \ V1.\text{DER} = \text{CONJ} \ \text{V2} =\text{TAM.PNG} \ = \text{CONJ} .

---

\(^{21}\) No clear instance of subject complement clause was found in the pilot corpus.
Another very common complementizing strategy, which is not shared with any type of relative clauses, is the use, in addition to the feminine relative marker =eːt (more rarely =eː), of the dummy noun preceded by the feminine Accusative definite article, toː=na the thing’. The complement usually precedes the matrix, but it may also follow it:

186. [waʤʤa -i gaw iː- kti =jeːt / toː= = na] /
appointment -GEN.SG house 3SG.M- be\AOR =REL.F . DEF.SG.F.ACC = thing .
N.M -CASE N.M PNG- V1.IRG =CONJ . DET= CONJ .

187. [dannʔi =jeː toː= = na] /
do\IPFV.[2SG] =REL DEF.SG.F.ACC = thing wish -REFL.PASS -PFV.1SG V1.1RG =CONJ DET= CONJ .
‘I wish that you do…’ (BEJ_MV_NARR_02_FARMER_275)

In one instance, toː=na is not used with the enclitic marker =eː(t), but precedes instead the definite article tiː=

189. [toː= toː= = na] /
dhaj -i =da baː= hadid -ana i- ndi en //
people -GEN.SG =DIR NEG.PROH= talk -IMP.PL 3SG.M-say\IPFV say\PFV.3PL .
N.M.COLL -CASE =POSTP PTCL= V2 -TAM.PNG PNG- V1.1RG V1.1RG .
381 [damʔaraː =b ni- mri =jeːt toː= = na] //
gold =INDF.M.ACC 1PL- find\PFV =REL.F DEF.SG.F.ACC = thing .
N.M =DET PNG- V1 =CONJ DET= CONJ .
‘He tells them: Don’t tell the people! they said, that we found gold!’
(BEJ_MV_NARR_02_FARMER_073-075)

In some rare instances, like relative clauses, complement clauses have no complementizer; the predicate of the embedded complement clause is the Manner converb:

190. [i= jaww =a han [harrə= = b haːj] /
def.\M = neighbour =POSS.3PL.NOM also sorghum =INDF.M.ACC COM DET= SB.\N = PRO PTCL N.M = DET POSTP
For the use of the Simultaneity converb as a complementizing strategy, see section 3.2.4.1.

### 4.5.5. Focus and relative clauses

Although not very frequent in the pilot corpus, a relative clause can be used as a focusing device, together with various discourse particles, like han ‘also, even’ or nun ‘only’.


`kaṃ han ?am -α:= b =i i - ni // camel also go_up\REFL -CVB.MNR = INDF.M.ACC = COP.1SG 3SG.M = say\PFV .

N PTCL V1.DER -PRF = DET = PRED.N PNG - V1.IRG .

`mhaj nafar -α nun / 477 na := t three person -PL only . thing = INDF.F NUM N.M.BORR.ARA = PTCL . SBJ.N.F = DET .

`bi= t -?am = eb // NEG.OPT = 3SG.F = mount\REFL = REL.M .

PTCL = PNG - V1.DER = CONJ .

Once, it’s not a donkey but a camel that I rode, he said, that only three men could ride.’

(2016) MV NARR 03 CAMEL 035-041)

### 4.6. Reported discourse

Reported discourse is always direct and has no dedicated marker. It may or may not (ex. 193) be followed by the quotative verb di ‘say’. When the nominal or pronominal subject of the quotative verb is overtly expressed, the reported discourse is, with few exceptions linked to afterthought topic shift, and embedded between the subject and the quotative verb (ex. 192):

192. `tak / 499 [kaṃ = i / 524 hoː kʷiɖ -ija] man . camel = POSS.1SG.NOM . 1SG.DAT disappear -PFV.3SG.M SBJ.N.M = SBJ.N = PRO . PRO V2 -TAM.PNG

i - ni // 3SG.M = say\PFV . PNG - V1.IRG .

‘A man said: My camel disappeared’

(2016) MV NARR 01 SHELTER 001-005)

193. `u= tak [halak hasara jhak -s -α:= b DEF.SG.M.NOM = man cloth ADVS get_up -CAUS -CVB.MNR = INDF.M.ACC DET = SBJ.N.M N.M PTCL V2 -V2.DER -PRF = DET .

ki = i - ki] NEG.IPVF = 3SG.M = be\CVB.SMLT .

PTCL = PNG - V1.IRG .

A man said: My camel disappeared’

(2016) MV NARR 01 SHELTER 001-005)

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22 The final =b of the verb ‘come’ is not the relative marker, but the concord marker of the Manner converb.

23 For a detailed analysis, see Malibert & Vanhove, in press).
‘the man thinks: Gosh, I have not taken any (warm) cloth!’ (BEJ MV NARR 07 COLD 22)

4.7. Adverbial clauses

Apart from the use of the converbs and the conjunctsions to mark adverbial clauses as described in sections 3.2.4 and 3.9.2, there is another subtype of adverbial clause, namely reason clauses, which uses a relativizing construction, and either the singular locative postposition =ib ‘in’, the directional postposition =da ‘towards’, or the Genitive case, added to the relative enclitic marker:

194. mimaf -a- dar -i hasam -ani =t
tomb -PL -GEN.SG side -GEN.SG pass_by -IPFV.1SG = INDF.F
N.M -. -CASE N.M -CASE V2 -TAM.PNG = REL

\[
ti = \text{na}: = t = i\beta \quad // = t = \text{?ade}
\]
DEF.F = thing = INDF.F = LOC.SG . DEF.F = skin
REL = N.F = DET = POSTP . DET = N.F
saffi -m -tini =heb han a- ndi /
have_creeps -PASS -IPFV.3SG.F =1SG.ACC Q.POL 1SG- say\IPFV .
V2 -V2.DER-TAM.PNG = PRO ADV.QUEST PNG- V1.IRG ?
‘Is it because I am passing near the tombs, that I get the creeps? I ask myself’ (lit. in the thing that I pass by the tombs) (BEJ MV NARR 05 ERITREA 214-215)

195. on PROX.SG.M.ACC PROX.SG.M.ACC = firʔa
DEM DET = N.V

\[
\text{wi} = t i - \text{fi} \text{r} \text{?a} = j e : = j o : = n a - ji = d a /
\]
REL.M = 2SG.M- go_out\PFN = REL = POSS.1SG.ACC = thing -GEN.SG = DIR .
CONJ = PNG- V1 = CONJ = PRO = CONJ -CASE = POSTP .
‘because you took me out’ (I’ll give you something) (lit. this outing towards which you took me out) (BEJ MV NARR 02 FARMER 244)

196. baruːk / et ti = tamaʔa
2SG.M.NOM . PROX.PL.F.ACC DET.F = meanness
SBJ.PRO . DEM DET = N.F.BORR.ARA

\[
ti = \text{ti}- \text{bir} i = j e : = n a = t - e : / B I 694
\]
DEF.F = 3SG.F- have\AOR = REL = thing = INDF.F -GEN.PL .
REL = PNG- V1.IRG = CONJ = CONJ = DET -CASE .

\[
t- \text{hagil} = t / 2SG- miss\PFN = COORD .
\]
PNG- V1 = CONJ .
‘you won’t have them, because of this meanness that you had and…’
(BEJ MV NARR 14 SIJADOK 274-277)

4.8. Conditional clauses

See sections 3.1.8.5. and 3.9.2.2.

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24 The quotative verb is not overtly expressed in this example. Internal discourse such as this one is translated by the verb ‘think’.
25 Sic. The Genitive plural was expected.
4.9. Tail-head linkage

Tail-head linkage, i.e. ‘a way to connect clause chains in which the last clause of a chain is partially or completely repeated in the first clause of the next chain’ (de Vries 2005:361), is a quite common strategy in Beja (see Vanhove 2005), although not so much in the pilot corpus. It is used in order to link ‘paragraphs’ (i.e. a new episode to a former one). Temporal clauses are used as head clauses, after the last clause of a chain of clauses. Only the predicate of the preceding unit may be repeated in the temporal clause, or the whole clause with its core and sometimes secondary arguments:

197. maja rha -tnija / maja rhi -ti =hoɔb /
    light see -IPFV.2SG.M . light see -AOR.2SG.M =when .
    N.M V2 -TAM.PNG . N.M V2 -TAM.PNG =CONJ .
    ‘You’ll see a light. When you’ve seen a light...’ (BEJ_MV_NARR_05_ERITREA_113-114)

5. List of glosses

In the Elan files, numbers on the tx and mot tiers represent the duration of a pause, indicated from 100 ms onwards. These tiers are not reproduced in the examples of the grammatical sketch, but the pause length has been copied on the transcription line (the mb tier). BI preceding a number means ‘breath intake’.
Since the Nominative and Accusative are not always overtly marked, SBJ has been added systematically on the rx tier for retrieval purposes before nouns, nominalized forms, pronouns, demonstratives, proper nouns and numerals when they correspond to a subject position (regardless of their possible pragmatic function as a topic). When SBJ are detached as topics, they are retrievable by a search on SBJ followed by a minor (/) or major (//) boundary of an intonation unit.
/ marks the boundary of a minor intonation unit; // of a major intonation unit.
\ marks a stem alternation.
~ marks a reduplicated stem.
# indicates a truncated word.
## indicates an abruptly cut intonation unit.

ge glosses

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INCH  Inchoative  PL  Plural
INDF  Indefinite  PLAC  Pluractional
INT  Intensive  POSS  Possessive
IPFV  Imperfective  POT  Potential
LOC  Locative  PROH  Prohibitive
M  Masculine  PROX  Proximal
N  Noun  RCPT  Recipient
N.AC  Action Noun  RECP  Reciprocal
N.AGN  Agent Noun  REL  Reflexive
NEG  Negative  REFL  Reflexive
NOM  Nominative  SG  Singular
NV  Verbal Noun  SIMIL  Similative
OBJ  Object  SING  Singulative
OPT  Optative  SUFX  Suffix
ORD  Ordinal  VN  Verbonominal
PASS  Passive  VOC  Vocative
PFV  Perfective

rx glosses

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References

Fenwick, Eva. 2007. *Head and dependent indexing within the phrase; towards a typology, with special reference to Beja*. B.A. Thesis, Melbourne, University of Melbourne (Department of Linguistics and Applied Linguistics in the School of Languages and Linguistics within the Faculty of Arts), 259 pp.


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