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► **To cite this version:**

Martine Vanhove. Refinitization of the Manner converb in Beja (Cushitic). Finiteness and Nominalization, John Benjamins, pp.323-344, 2016, 10.1075/tsl.113 . halshs-00920531

**HAL Id: halshs-00920531**

**<https://shs.hal.science/halshs-00920531v1>**

Submitted on 18 Dec 2013

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# Refinitization of the Manner converb in Beja (Cushitic)

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**Abstract:**  
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## 1. Introduction

As many Afroasiatic verb-final languages of north-eastern Africa (Azeb and Dimmendaal 2006: 394), Beja (North-Cushitic) presents a clear-cut distinction between finite and non-finite verb forms, among them four converbs (Simultaneity, Anteriority, Causal, Manner), marked with suffixes, which are prototypically used in adverbial clauses. One of them, the Manner converb, shows grammatical properties that most clearly illustrate the intricate relationship between parts of speech, in particular between nominal and verbal items.

This chapter, after a brief presentation (section 2) of the typological characteristics relevant for a better understanding of the data, focuses on the description and analysis of the Manner converb which functions at several levels of juncture, one of the properties of converbs according to Van Valin and LaPolla (1997): its predicative use in deranked adverbial clauses (section 3) and completive and relative clauses (sections 4 and 5) for the encoding of inter-clausal relations; as an adverb and a postposition (section 6), and a cognate object (section 7) at the level of the verb phrase; as a verbal adjective (section 8) in copredicative and attributive positions at the level of the verb phrase and the noun phrase; and finally its refinitization via periphrastic constructions with auxiliary verbs and a nominal copula (section 9) for the encoding of TAM values, including as the core verb in independent clauses. The concluding section (10) discusses the possible origin of the Manner converb and grammaticalization paths and scenari that may have taken place during the process of refinitization.

## 2. A brief overview of Beja

The Beja language, named *beḡawije:=t* by the Beja people, is the sole member of the North-Cushitic branch of the Afroasiatic phylum. It is mainly spoken in Eastern Sudan, and also in Northern Eritrea and there may be a few speakers left in the most southern part of Egypt. In Sudan, where my data<sup>1</sup> collection took place, the number of speakers amounts to approximately 1,100,000. In this country, it is still an unwritten language.

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<sup>1</sup> The data used for this chapter consist in a one-hour pilot corpus sound-indexed with the transcription, fully glossed and translated. The excerpts from the online corpus (Vanhove 2012a) all start with BEJ\_MV\_NARR. The corpus is freely accessible online and is part of the CorpAfroAs ANR project (PI Amina Mettouchi) whose financial support is gratefully acknowledged, as well as that of the Llacan. My gratitude goes to Ahmed Abdallah and his family, the main providers of these data, for their willingness to share their knowledge as well as their home with me during each of my stays in Sinkat, and to their relatives in Khartoum, Yacine Ahmed Hamid and his family who also host me with so much kindness. The spontaneous data is supplemented by elicited data (indicated as “elication MT”) when necessary. It was provided by Mohamed-Tahir Hamid Ahmed,

Beja is a marked-nominative language. It is predominantly head-final, dependent-marking in NPs but head-marking in VPs, and the canonical constituent order is SOV (SVO with object bound pronouns), dependent clause – matrix clause. Pragmatics (topicalisation, afterthought topic shift) license other rarer constituent orders.

The two morphologically based verb classes (V1 with prefixes, V2 with suffixes, for all TAM) have a set of finite paradigms: three aspectual ones, Perfective, Imperfective and Aorist in the indicative, and two moods, Imperative and Optative/Hortative, which all vary for person, gender and number (there is no gender distinction in the plural and in the 1<sup>st</sup> singular). They can be used in independent and dependent clauses (with some restrictions; Vanhove 2002b). Complex predicates with auxiliary verbs or a copula further complement the TAM system, as well as the negative polarity. There are also four nonfinite verb forms, namely converbs, which following Van der Auwera’s (1998: 281) definition are +dependent, –argumental, –adnominal and –finite and which are prototypically used in deranked adverbial clauses (Haspelmath 1995a). These converbs belong to the ‘specialized’ type: the Causal converb (verb stem + suffix *-e:ti / -ti*, depending on the verb class), the Anteriority (or Sequential) converb (verb stem + suffix *-e:ti:t / -ti:t*, depending on the verb class), the Simultaneity converb (verb stem + suffix *-e:*), and the Manner converb<sup>2</sup> (verb stem + suffix *-a<sup>3</sup>*). None of the converbs exhibits number and TAM markers. While the first three ones only have predicative functions and are fully invariable, the Manner converb, which is an implicit-subject and same-subject converb, is multifunctional and varies for gender. It shows both nominal and verbal properties, and has undergone a process of refinitization in several periphrastic and flecional constructions.

In the nominal domain, Beja distinguishes three core cases: nominative, accusative, and genitive (pronouns have more). The first two cases are portmanteau morphemes fused with the proclitic definite articles and the demonstratives, marked by vocalic ablaut<sup>4</sup>, or the indefinite enclitic articles, where case is only overtly marked by a consonantal morpheme =*b* in the accusative on masculine nouns ending in a vowel (zero in other contexts and in the nominative; the feminine indefinite article, which is always =*t*, does not differentiate cases). The genitive is marked on nouns with a suffix *-i* (SG) / *-e:* (PL), preceded by the indefinite article =*t* if the noun is feminine. If the noun bears the definite article, it usually also bears the characteristic vowel of the genitive, *i*, (*i*= M and *ti*= F). Nouns and adjectives in predicate position are conjugated with an enclitic copula which varies for person, gender and number, but not for TAM. Its paradigm is given in table 1 below as it played a role in the refinitization process of the Manner converb:

	SG	PL
1 & 3	= <i>i</i> / = <i>u</i>	= <i>a</i>
2	= <i>wa</i>	= <i>a:na</i>

Table 1: Paradigm of copula

When TAM have to be expressed, the copula is replaced by the verb *ak* ‘be’ in the appropriate paradigm.

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my Beja colleague at the Sudan University for Sciences and Technology in Khartoum. My thanks to him too for these data and his patient help and explanations about the Beja language and culture.

<sup>2</sup> The Manner converb is labelled with different names in the literature: “Particip Perfecti” (Reinisch 1893-94), “Past Participle” (Hudson 1976; Appleyard 2007); “Gerund” (Roper 1928), “gérondif” (Morin 1995).

<sup>3</sup> The vowel is long before a suffix, short in final position. A glide *j* is inserted after vowels.

<sup>4</sup> If the syllabic structure of the noun permits, otherwise it is an invariable (*ti*-. For details, see Hamid Ahmed (2013).

### 3. The Manner converb in adverbial clauses

The Manner converb is prototypically used in predicate position in adverbial clauses. It covers four inter-clausal semantic relations, detailed below. So, the Manner specialized converb behaves to some extent as a contextual converb defined as follows by König (1995: 58): “its interpretation in a specific utterance is the result of an interaction between a basic vague meaning of the converb and a wide variety of syntactic, semantic and contextual factors.” Even though the variety is not so wide in Beja, the semantic interpretation of the converb depends on the context and the semantics of the main and dependent verbs, but, it seems, not on the TAM value of the matrix clause verb. I labelled it “Manner” converb because it is its most frequent use and semantic value in adverbial clauses (cf. V. Nedjalkov 1995: 103 “it is ... clear that [the converb] form should be named according to its main function.”).

The Manner converb is the sole converb of the language whose subject is always co-referential with that of the matrix clause. This is in fact a general property of Manner converbs, which are used in “sentences describing two aspects or dimension of only one event.” (König (1995: 65), following Pusch (1980) and Halmøy (1982)). As König puts it “[t]he same-subject constraint that is invariably associated [with] this interpretation is a natural consequence of this semantic fact.”

As is often the case with converbs (but less so in north-eastern Africa, see Azeb and Dimmendaal 2006), the TAM value of the Manner converb is not encoded and is fully dependent on the verb of the main clause.

#### 3.1 Manner clauses

The Manner converb expresses, as expected, the manner in which the event of the matrix clause is realized. It specifies a parameter “implicitly given in the meaning of the verb in the main clause” (König 1995: 65). In Beja, this is typically the case when the main clause predicate is a manipulative verb, a verb of saying, or a motion verb (most motion verbs function like transitive verbs, triggering the accusative case on the goal of motion, see ex. 3). In accordance with the primary constituent order, the adverbial clause usually precedes the matrix clause:

- (1) *k<sup>w</sup>ibs-a*                      *kalla:f-i:na*  
 hide-CVB.MNR    feed-AOR.3PL  
 ‘They feed him on the sly’ (lit. hiding (him)<sup>5</sup> they feed (him))  
 (BEJ\_MV\_NARR\_12\_witch\_025\_27)
- (2) *mʔ-a:na*            *di-ja*                      *wali:k-a:=b=u=it*  
 come\IMP-PL    say-CVB.MNR    shout-CVB.MNR=INDF.M.ACC=COP.3SG=CSL<sup>6</sup>  
 ‘Since he was shouting saying come! ...’ (BEJ\_MV\_NARR\_03\_camel\_074)
- (3) *e:n*                      *e:=rba*                      *ʔabk-a*  
 PROX.PL.M.ACC    DEF.PL.M.ACC=mountain    take-CVB.MNR  
*u:=dhe:j*                      *mhe:-ja:na*  
 DEF.SG.M.NOM=people    be\_in\_the\_morning-PFV.3PL  
 ‘People arrived in the morning covering all the mountains’ (lit. taking the mountains, people become in the morning) (BEJ\_MV\_NARR\_03\_camel\_140-1)

Ex. (4) below illustrates an instance where the adverbial clause with the Manner converb follows the matrix clause. As the intonation pattern and the pause reflect (the final falling contour of the matrix clause is symbolized by the double slash //; the length of the pause is

<sup>5</sup> 3<sup>rd</sup> person bound object pronouns are zero morphemes in Beja.

<sup>6</sup> This Manner converb with the copula (as in many other examples in this chapter) encodes another function, i.e. the grammaticalized Perfect which will be discussed in section 8.3. For the sake of comparison the still transparent morphology prevails in the glossing. The perfect value is glossed in a second line of annotation in the CorpAfroAs database for retrieving purposes; it is not reproduced here. To avoid any misunderstanding, the Manner converb whose particular function is discussed in each relevant section is highlighted in bold script in each example.

indicated with numerals), the position of the adverbial clause is linked to information hierarchy: the intonation unit containing the converb is an afterthought.

- (4) *i=ga:di are: / 319 gi:g-ija=t // 119 gadab-a /*  
 DEF.M=judge then leave-PFV.3SG.M=COORD be\_sad-CVB.MNR  
 ‘Then the judge left, sadly’ (BEJ\_MV\_NARR\_14\_sijadok\_368-72)

Unlike the above examples in which the converb is invariable, be it used transitively (1, 3) or intransitively (2, 4), when the predicate of the matrix clause and that of the adverbial clause are transitive and share the same *lexical* object argument, the Manner converb agrees in gender with the common *object* argument, an unknown agreement pattern in Beja for finite verbs, and rare crosslinguistically for converbs (V. Nedjalkov 1995: 117). The converb has part of the morphological properties of an adnominal modifier in that gender concord is encoded with the indefinite article =*b* / =*t* and not with the gender morphemes of finite verbs. It also has morphological properties of a verb in that it uses the set of enclitic object pronouns, not the possessive one. Note that third person object pronouns are, unlike possessive pronouns, zero morphemes, i.e. they are not overtly encoded. Thus the object argument is overtly encoded only once as a lexical item. It precedes the first verb of the clause chain, i.e. the converb. Ex. (6) shows that the common lexical object may even be overtly encoded only in the clause preceding the manner adverbial clause if the object argument is also shared with it.

- (5) *me:k-i=t misu:s ti=fabaka ?abk-a:=t*  
 donkey-GEN.SG=INDF.F die\N.A DEF.F=net take-CVB.MNR=INDF.F  
*ha:j ti-t-far?i*  
 COM 3SG.F-REFL-go\_out\IPFV  
 ‘they pulled out the corpse of a donkey by taking it with the net’ (taking the corpse of a donkey with a net, they pull (it) out (BEJ\_MV\_NARR\_02\_farmer\_178-180)
- (6) *ti=gid?a:=t=e: bess har?i i:-ba=je:k*  
 DEF.F=shoe\PL=INDF.F=POSS.3PL.ACC only after 3SG.M-go\INT.PFV=if  
*fassal-a:=t da:-s-a:=t i-k<sup>w</sup>a:si*  
 cut-CVB.MNR=INDF.F do-CAUS-CVB.MNR=INDF.F 3SG.M-create\IPFV  
 ‘When he went on with his shoes like that, he made them by cutting and putting them down.’ (lit. when he just continued (= went after) his shoes, he created them by cutting (them), doing (them)) (BEJ\_MV\_NARR\_17\_shoemaker\_110-2)

### 3.2 Causal clauses

When the verb in the main clause is a motion verb, and when the Manner converb has a stative meaning or a passive morphology, the adverbial clause takes a causal value, a frequent circumstantial meaning of Manner converbs, e.g. in French (König, 1995: 68-69). The causal connection is based on the background assumption that the two events of the complex utterance belong to the same situation. So, even though Beja has a dedicated Causal converb, the Manner converb can encode the same type of semantic interclausal relations.<sup>7</sup> Note that in the following example, the adverbial clause contains two coordinated converbs, which show an additional nominal property: coordination is encoded with the nominal (not verbal) enclitic conjunction =*wa* ‘and’, which according to the morphophonological rules of Beja is obligatorily preceded by the indefinite article when the masculine word ends in a vowel. In contrast with the above transitive verbs in (5) and (6), the intransitive converbs of ex. (7) agree in gender with the *subject* argument, here indexed on the finite verb form of the matrix clause.

- (7) *winne:t si-ra:k<sup>w</sup>-o:m-a:=b=wa*  
 plenty CAUS-be\_afraid\INT-PASS-CVB.MNR=INDF.M.ACC=COORD  
*gadab-a:=b=wa ast?i far-i:ni*

<sup>7</sup> The reverse is also true for the Causal converb; there is some marginal overlap both ways between the two converbs, also for the purposive value (Vanhove 2012b: 31).

be\_sad-CVB.MNR=INDF.M.ACC=COORD upwards jump-IPFV.3SG.M  
 'He jumps up out of fright and anger' (BEJ\_MV\_NARR\_14\_sijadok\_281-2)

### 3.3 Attendant circumstance clauses

König (1995: 66) notes that “the term “attendant circumstance” ... should be used for cases where two independent events or actions are involved, either of which could be stopped without affecting the other, but which manifest a unity of time and place and thus also a “perceptual unity”.” In Beja, with other semantic types of verbs in the matrix clause than the three types mentioned in section 3.1, the Manner adverbial clause often has an attendant circumstantial function (see e.g. de Groot (1995: 294) for Hungarian), with in addition a resultative meaning, which is “the converse of causal relations” (König 1995: 67) described in section 3.2 above.

- (8) *fadžil=ka am-he:jd-a i-sin=he:b*  
 morning=DISTR PASS-sew-CVB.MNR 3SG.M-wait\PFV=OBJ.1SG  
 ‘every morning I find them sewn’ (lit. it (the pair of shoes) waits for me sewn)  
 (BEJ\_MV\_NARR\_17\_shoemaker\_154)

### 3.4 Purposive clauses

Purposive relations are not the converse of causal relations (section 3.3), but a variety of them (König 1995: 67). When two independent events are involved, the Manner converb of action verbs, may encode a purposive interclausal relation if the following verb is a motion verb:

- (9) *i=ka:m=iji haraw-a a-dif=ho:b*  
 DEF.M=camel=POSS.1SG.GEN seek-CVB.MNR 1SG-leave\PFV=when  
 ‘When I left to look for my camel...’ (lit. when I left looking for my camel)  
 (BEJ\_MV\_NARR\_01\_shelter\_010-012)

## 4. The Manner converb in complement and relative clauses

The syntactic use of converbs in complement and relative clauses seems to be rare and atypical crosslinguistically. Still there are evidence and attested examples in various languages of similar marginal usage with contextual and specialized converbs. For instance I. Nedjalkov (1995: 457) reports that in Evenki (Tungusic), “the contextual converb *-mi* may function as the infinitive in complement clauses containing [sic.; read “after”] modal and phasal verbs (the same is partially true for the purposive converb with the suffix *-da* ... which may be used in complement clauses after causative and, rarely, modal verbs)”. In Lezgian (Nakh-Daghestanian) Haspelmath (1995b: 425) mentions that the contextual Aorist (i.e. sequential) converb is used in complement clauses of a desiderative verb (“want”) if the complement clause has its own subject. Tamil presents a similar case for the sequential converb which encodes the complement of perception verbs (Bisang 1995: 157). As for relative clauses, Kortmann (1995: 195) mentions that the English contextual converb with the *-ing* suffix is used “as a modifier in restrictive relative clauses”, like in “*A girl smoking a cigarette entered the room*”, a usage which is related to its appositive use in “detached participial clauses immediately following a noun phrase” (Kortmann 1995: 201) such as in *The man, pacing the floor, said...* According to his analysis, such constructions, “neutralize the difference between nonrestrictive (or: nondefining) postmodifying clauses [i.e. relative clauses] and detached adverbial participles”. So there are crosslinguistically attested semantic and syntactic affinities between converbs and relative clauses which make the Beja construction less peculiar.

### 4.1 In complement clauses

In Beja, complement clauses are typically expressed with a finite verb form and a complementizer (which also functions as a relative marker in relative clauses), or with the Simultaneity converb (Vanhove 2012b: 30; 63-64). In some rare instances in my data, the Manner converb is used in a complement clause, functioning as an object argument of a cognitive verb. Unlike in adverbial clauses (but like in Lezgian), the subject of the converb,

retrieved from the preceding context, is logically different from the subject in the matrix clause which follows it. In ex. (10) below the final indefinite article on the converb is not an agreement marker with the object argument like in section 3.1, but a complementizer: the indefinite article is also used with this function (as well as a relative marker in relative clauses and headless relative clauses).

- (10) *i=faww=a:* *han* *harro:=b* *ha:j*  
 DEF.M=neighbour=POSS.3PL.NOM also sorghum=INDF.M.ACC COM  
*jʔ-a:=b* *hi:s-i:n=ajt*  
 come-CVB.MNR=COMP think-AOR.3PL=CSL  
 ‘Since his neighbours were thinking he was bringing back sorghum...’  
 (BEJ\_MV\_NARR\_02\_farmer\_103)

## 4.2 In relative clauses

The converb is also marginally used in subject relative clauses with indefinite heads. The construction in (11) is parallel to that of (10) above: the indefinite article (which can also be added to finite verb forms) functions here as a relative marker instead of a complementizer.

- (11) *tak* *whi* *dib-a=b* *rh-ani*  
 man under fall-CVB.MNR=REL see-IPFV.1SG  
 ‘I see a man fallen on the ground’ (lit. who (has) fallen) (BEJ\_MV\_NARR\_08\_drunkard\_187)

## 5. Adverbial and adpositional uses

The Manner converb does not only operate at the level of inter-clausal relations, i.e. it is not only used as a predicate in dependent clauses. It also operates at the level of the verb phrase, as an adverbial modifier to a main verb, as in other languages (e.g., in Maale, an Omotic language; Azeb (2001: 115; 192)). In Beja this usage is limited to a handful of Manner converbs which remain invariable when used as manner adverbs.

The property verb expressing a high degree, *ʔakir* ‘be strong’, is one of these. Used in adverbial position it undergoes some degree of semantic bleaching in the sense that the converb takes its precise meaning from the main verb (‘fast’ in 12, ‘really’ or ‘very’ in 13).

- (12) *ʔakir-a* *da:b~da:b-i:n=e:=na:-ji* *sabbi*  
 be\_strong-CVB.MNR run~INT-AOR.3PL=REL=thing-GEN.SG because  
 ‘because they were running so fast’ (BEJ\_MV\_NARR\_03\_camel\_192)
- (13) *u:=tak* *ʔakir-a* *mha-je:*  
 DEF.SG.M.NOM=man be\_strong-CVB.MNR be\_startled-CVB.SMLT  
 ‘the man was really surprised’ (BEJ\_MV\_NARR\_07\_cold\_72)

When the verb of the matrix clause is a motion verb, the Manner converb *fidin-a* ‘lit. leaving’ has been grammaticalized as a directional ablative adverb ‘away’:

- (14) *i=mifʔari* *di:se:t* *fidin-a* *kʷaf-a:=b=ajt*  
 DEF.M=camel\_driver slowly leave-CVB.MNR shift-CVB.MNR=INDF.M.ACC=CSL  
 ‘Since the camel drivers had moved away a bit...’ (BEJ\_MV\_NARR\_05\_eritrea\_033)

In the same kind of context, the Manner converb *abaj* (an irregular pattern) ‘lit. going’ was grammaticalized as a multicategorical grammatical morpheme: as a postposition (15; with a zero object bound pronoun) and as an adverb (16) indicating an allative or illative movement, meaning ‘into; towards’. Haspelmath (1995a: 37-38) notes that “converbs are commonly grammaticalized into adpositions with more specific functions”, and that “in this diachronic process, the object argument of the converb becomes the complement of the adposition, while the subject argument (which is generally implicit anyway) disappears completely.” Note that in Beja the adpositional usage of the converb at the level of the noun phrase seems to be limited to the zero third person bound pronouns, but further research is needed.

- (15) *abaj* *a-tar=t*

go\INT.CVB.MNR 1SG-turn\_aside\REFL=COORD

‘I made a detour towards him, and...’ (BEJ\_MV\_NARR\_10\_rabbit\_28)

- (16) *su:r abaj t=?aba=t-i=da hire:r-an=ho:b*  
before go\INT.CVB.MNR DEF.F=wadi=INDF.F.ACC-GEN.SG=DIR walk-PFV.1SG=when  
‘When I walked ahead into the wadi’ (BEJ\_MV\_NARR\_05\_eritrea\_299)

## 6. Argumental use: cognate object

The Manner converb may also be used nominally as the cognate object argument of a verb form, i.e. as an object which belongs to the same lexical root and semantic field as the predicate. Unlike when used in complement clauses, the gender of the converb, encoded with the indefinite article, is always controlled by the subject of the finite verb form. The whole construction has modal properties since the cognate object brings an emphatic/intensive (17) or an epistemic (18) value to the predicate (Vanhove 2002b: 36). Note that this semantic property of cognate objects is well attested crosslinguistically, e.g., in the distantly related Arabic (Semitic) language, for which a masdar (i.e. a nominal form) is used (Blachère and Gaudefoy-Demombynes 1975: 395).

- (17) *t=hu:ri dawri dawri ha-a=t ho:j h-i:n*  
DEF.F=huri beautiful beautiful be\_there-CVB.MNR=INDF.F 3ABL be\_there\AOR-3PL  
‘There are indeed very beautiful huris in it’ (BEJ\_MV\_NARR\_14\_sijadok\_344)
- (18) *hamil-a:=b a-kati=je:k ka:m=u*  
let-CVB.MNR=INDF.M.ACC 1SG-be\IPFV=if camel=POSS.1SG.NOM  
*haraw-a:=b haraw-a:=b=u*  
seek-CVB.MNR=INDF.M.ACC seek-CVB.MNR=INDF.M.ACC=COP.3SG  
‘since I had let my camel loose, it needed to be looked for.’  
(BEJ\_MV\_NARR\_03\_camel\_108)

## 7. Verbal adjective

Haspelmath (1995a:17-19) notes that converbal constructions share several features with copredicative adjective phrases (and noun phrases), like e.g., in ‘he came home drunk’, or ‘he drinks the milk warm’: their implicit notional subjects depend on an outside controller for their reference; they depend syntactically on the predicate; their precise semantic relations are determined from the context; and they are most often controlled by the subject of the main clause. It thus comes as no surprise that converbs can be used as participles, i.e. verbal adjectives, like in Latin or Greek. This is exactly the case in Beja, both in copredicative adjective phrases and in attributive phrases with a head noun (as also e.g., Latin and Greek participles).

### 7.1 Copredication

Ex. (19) below is one of the rare examples in my data of a copredicative construction (Plank 1985) (also called secondary predication in Nichols (1978)). Unlike when fully lexicalized as an adverb, the converb in a copredicative construction varies for gender. The Beja construction clearly illustrates that there is indeed an implicit notional subject since its gender is not controlled by any of the overt constituents of the clause: the converb is in the feminine, the verb indexes a 1<sup>st</sup> person singular which refers to a masculine human entity, and *do:r* ‘time’ is a masculine noun. The implicit controller of the gender of the converb is in fact another temporal noun *minda* ‘time’ which is feminine.

- (19) *g<sup>wid</sup>-a:=t a-s?a do:r*  
be\_numerous-CVB.MNR=INDF.F 1SG-be\_seated\REFL.PFV time  
‘after I had remained seated a long time’ (BEJ\_MV\_NARR\_05\_Eritrea\_333)



Below are a few more examples from elicited material. In (20) the feminine noun *minda* ‘time’ is again the implicit controller, in (21) it is the feminine dummy noun *na* ‘thing’, in (22) the masculine noun *bhali* ‘word’, and in (23) the masculine noun *da* ‘men’:

- (20) *g<sup>wid</sup>-a:=t*                                      *gad-na*  
 be\_much-CVB.MNR=INDF.F stand-IMP.PL  
 ‘stand up a long time!’ (elicitation MT)
- (21) *g<sup>wid</sup>-a:=t*                                      *i-kt-e:n*  
 be\_much-CVB.MNR=INDF.F 3-know\IPFV-PL  
 ‘he knows a lot (of things)’ (elicitation MT)
- (22) *g<sup>wid</sup>-a:=b*                                      *hadi:d-ja*  
 be-much CVB.MNR=INDF.F talk-PFV.3SG.M  
 ‘he talked a lot’ (elicitation MT)
- (23) *hi:d-a:=b*                                      *gad-na*  
 be-together-CVB.MNR=INDF.M.ACC stand-IMP.PL  
 ‘stand up together (united)!’ (elicitation MT)

## 7.2 Attributive adjective

Converbs also share with participles, i.e. with verbal adjectives, some of the “morphosyntactic properties of adjectives, in particular the ability to be used attributively, functioning as relative clause heads...” (Haspelmath 1995a: 18). In Beja any Manner converb, like any adjective (which are formed with specific patterns or a dedicated suffix (Vanhove 2002b: 11)), can be used in attributive position as the modifier of a head noun. The head noun can be the subject or object argument of the verb (24 to 27), or a predicate with the copula (28, 29). The construction is parallel to that of a relative clause using the gap strategy without a relative marker (Roper 1928: 38; Vanhove 2012b: 59-60). Agreement rules in gender and definiteness are those of regular adjectives, as well as the word order which is either Modifier – Head (ex. 24, 25, 27) or Head – Modifier (ex. 26).

- (24) *winne:t* *gadab-a:=t*                                      *takat*    *waw-ti:t*  
 plenty    be\_sad-CVB.MNR=INDF.F woman weep-CVB.ANT  
 ‘After the very sad woman had wept...’ (lit. after a woman who was very sad had wept)  
 (BEJ\_MV\_NARR\_14\_sijadok\_158)
- (25) *katʔ-am-a*                                      *gaw-a*    *ho:j*    *te:-stʔe:*  
 cut\REFL-REFL.PASS-CVB.MNR house-PL 3ABL 3SG.F-be\_seated\REFL.IPFV  
 ‘She sat in broken houses’ (lit. She sat in houses which were broken)  
 (BEJ\_MV\_NARR\_14\_sijadok\_132-4)
- (26) *taktʔi:=b*                                      *g<sup>wid</sup>-a:=b*  
 scarecrow=INDF.M.ACC be\_numerous-CVB.MNR=INDF.M.ACC  
*dannʔi=ja:t*  
 do\IPFV.[3SG.M]=COORD  
 ‘He makes a lot of scarecrows, and...’ (BEJ\_MV\_NARR\_09\_jewel\_13)
- (27) *bak* *m-hawaj*    *ʔakir-a-al*                                      *t=ʔaba=t=u*  
 thus N.A-turn be\_strong-CVB.MNR-DIM DEF.F=wadi=INDF.F=COP.3SG  
 ‘It is a wadi with a somewhat difficult curve like that.’ (BEJ\_MV\_NARR\_05\_eritrea\_166)
- (28) *gab-a*                                      *kalawa=u=u*  
 be\_full\_up-CVB.MNR belly=POSS.3SG.NOM=COP.3SG  
 ‘Its belly was full’ (lit. it is his belly which (is) fully) (BEJ\_MV\_NARR\_03\_camel\_149)
- (29) *aj-a*                                      *dʒhari=b=wa=ja:j*  
 die-CVB.MNR misfortune\VN=INDF.M.ACC=COP.2SG.M=thus  
 so, you are totally unlucky (BEJ\_MV\_NARR\_16\_Prophet\_Fox\_Crow\_212)  
 (lit. it is your misfortune that (is) deadly)

As any adjective, the converb can be used as the parameter of a comparative construction:

- (30) *i=karas w=ʔakir-a:=ka:=b fibib-na=t*  
 DEF.M=thorn DEF.SG.M=be\_strong-CVB.MNR=CMPR=INDF.M.ACC look-IMP.PL=COORD  
 ‘Look for the sharpest thorns’ (BEJ\_MV\_NARR\_16\_Prophet\_Fox\_Crow\_103)

Note that the suffix of the Manner converb is also used with one adjective: *kʷaqa:q-a* ‘round-CVB.MNR’, as an adnominal modifier:

- (31) *kʷaqa:q-a ʔalba niha:s-i=t sikʷ-ti fanrʔi*  
 round\ADJ-CVB.MNR can copper-GEN.SG=INDF.F pull-CVB.CSL go\_out\IPFV.[3SG.M]  
 ‘he pulls out a small round copper can’ (BEJ\_MV\_NARR\_02\_farmer\_195-197)

## 8. Refinitization of the Manner converb

The use of converbs as core verbs in periphrastic constructions with auxiliary verbs and copulas to encode TAM values is well attested crosslinguistically (for examples, see Haspelmath and König 1995). In Beja, the Manner converb not only encodes adverbial and adnominal functions as described in the previous sections, but it can be used in compound verb forms. In addition, the converb has also been fully refinitized as a verbal finite paradigm. The grammaticalization cline thus goes from syntactic constructions in which the Manner converb functions in the nucleus juncture, i.e. forming a complex predicate together with a main verb, to a morphological flectional paradigm. The converb and the auxiliary share the same subject and object arguments. Only a bound pronoun referring to an object argument, common to both verb forms, can intervene between the two elements of the complex predicate. This is also the case with the grammaticalized finite form, where the bound pronoun surfaces as an infix.

### 8.1 Emphatic polarity

Emphatic polarity is encoded in a periphrastic constructions in order to emphasize the positive polarity of a clause. The verb *dʔi* ‘do’ (similarly to English) is used as the emphatic auxiliary and the Manner converb is the core lexical verb of the construction. The converb remains invariable. All the subject properties (person, number, gender) are indexed on the auxiliary.

- (32) *fidig-a dʔi-ja:=b=u*  
 untie-CVB.MNR do-CVB.MNR=INDF.M.ACC=COP.1SG  
 ‘I did let it loose’ (BEJ\_MV\_NARR\_03\_camel\_106)

### 8.2 Volition

The Manner converb has been grammaticalized as the core verb of a periphrastic construction for the expression of volition as the complement of the quotative verb *di* ‘say’, which takes a desiderative meaning ‘want’ in this construction. Like in (32) above, the converb remains invariable and all the subject properties are encoded on the auxiliary. Note that the construction cannot be analyzed as a matrix verb with a complement clause (cp. section 4.1) since there is no complementizer.

- (33) *u:=wa:s rh-a i-ndi=ho:b*  
 DEF.SG.M.NOM=dog see-CVB.MNR 3SG.M-say\IPFV=when  
 ‘When the dog wants to see him’ (BEJ\_MV\_NARR\_18\_Adam\_devil\_228)

Like in adverbial clauses (section 3.1, ex. 5 and 6), the Manner converb in the volition periphrastic construction presents an additional verbal feature: the bound pronouns, enclitic to the converb, belong to the object set.

- (34) *baro:k tam-a:=ho:k e:dna*  
 2SG.M.ACC eat-CVB.MNR=OBJ.2SG say\IPFV.3PL  
 ‘They want to eat you.’ (BEJ\_MV\_NARR\_12\_witch\_063)

### 8.3 Perfect

The Manner converb has been fully refinitized as a finite verb form for the encoding of the Perfect/Resultative/Stative aspect. It is formed by adding the nominal copula, which indexes the number and person of the subject, to the indefinite article, which indexes the gender of the subject. This conjugation has an entirely nominal morphology, including with transitive verbs: the bound pronominal objects belong to the nominal morphology, i.e. to the *possessive* set, unlike the converbal construction (section 3.1) and the volition periphrastic construction (section 9.2). The morphology of the possessive bound pronouns itself is entirely that of any possessive construction: it indexes the gender of both the head and the modifier with the indefinite article.<sup>8</sup> This explains the position of the bound possessive pronoun before the copula and in between two feminine articles in (36). But even if the entire morphology is still clearly nominal, its semantic and syntactic properties are nevertheless those of a finite verb paradigm: it encodes a TAM value and is limited to the encoding of the predicative function. The Perfect paradigm is restricted to independent, main and causal clauses with the polyfunctional verbal coordination morpheme =*it*, in the affirmative polarity.

- (35) *ottʔa mar mhi:n-a:n kitim-a:=b=i*  
 now such place-ADVZR arrive-CVB.MNR=INDF.M.ACC=COP.3SG  
 ‘Now, he has arrived at a certain place’ (BEJ\_MV\_NARR\_12\_witch\_094)
- (36) *na:n<sup>9</sup> ha:j jʔ-a:=t-o:k=t=u*  
 what COM come-CVB.MNR=INDF.F=POSS.2SG.ACC=INDF.F=COP.3SG  
 ‘What has brought you (here)?’ BEJ\_MV\_NARR\_01\_shelter\_148
- (37) *o:=mhi:n faga-am-ani*  
 DEF.SG.M.ACC=place work-REFL.PASS-IPFV.1SG  
*de:-ja:=jo:=ju:=it*  
 say-CVB.MNR=POSS.1SG.ACC=COP.3SG=CSL  
 ‘Since he had told me: I work in this place’ (BEJ\_MV\_NARR\_04\_djinn\_070)
- (38) *mʔak<sup>w</sup>ara winne:t ʔakir-a:=b=u*  
 cold plenty be\_strong-CVB.MNR=INDF.M.ACC=COP.3SG  
 ‘It was very cold’ (lit. cold is very strong) (BEJ\_MV\_NARR\_07\_cold\_12)

In relative and complement clauses, as well as in causal clauses with the conditional marker =*e:k*, a periphrastic construction with the verb *ak* ‘be’ is used instead of the nominal copula. As in independent clauses, gender is encoded by the indefinite article, and the auxiliary encodes person, number and also gender, as all finite verb forms.

- (39) *w=ʔalif wi=di-ja:=b i:-kti=je:b*  
 DEF.SG.M=thousand REL.M=say-CVB.MNR=INDF.M.ACC AOR.3SG.M-be=REL.M  
*e:jawna=t*  
 give\IPFV.3PL=COORD  
 ‘They give her the thousand dinars that he had mentioned, and...’  
 (BEJ\_MV\_NARR\_14\_sjadok\_221)
- (40) *bʔar-a:=b i:-kti=je:t to:=na*  
 wake\REFL-CVB.MNR=INDF.M.ACC AOR.1SG-be=REL.F DEF.SG.F.ACC=thing  
*i-kan=t=he:b*  
 3SG.M-know\REFL.PFV=COORD=OBJ.1SG  
 ‘It knew that I was awake’ (BEJ\_MV\_NARR\_05\_eritrea\_379)
- (41) *w=haḏa dir-a:=b i-kati=je:k*  
 DEF.SG.M=lion kill-CVB.MNR=INDF.M.ACC 3SG.M-be\IPFV=if  
 ‘Since he has killed the lion (we won’t find a chief now)’  
 (BEJ\_MV\_NARR\_18\_Adam\_devil\_198)

The Manner converb, which cannot be negated when used in a prototypical converbal construction, is used in all clause types to express the negative polarity of both the Perfective

<sup>8</sup> Beja belongs to the typologically rare double indexing system (Fenwick: 2007) with markers referring to the head and the modifier. This is not always overtly marked because of morphophonological rules.

<sup>9</sup> The origin of the interrogative pronoun is the feminine noun *na:=t* ‘thing’, hence the feminine concord.

and the Perfect conjugations. It is marked for gender as in the affirmative polarity, and the auxiliary *ak* ‘be’ bears the proclitic negative marker and indexes person, number and gender.

- (42) *ka:m=o:k*                      *rh-a:=b*                      *ka=a-ki*  
 camel=POSS.2SG.M.ACC see-CVB.MNR=INDF.M.ACC NEG.IPFV=1SG-be\PFV<sup>10</sup>  
 ‘I did not see (or I have not seen) your camel’ (BEJ\_MV\_NARR\_10\_rabbit\_68)

Like with the affirmative Perfect, the bound pronouns are those of the possessive set:

- (43) *ani*                      *to:=na:*                      *to:=na:=t-i=da*  
 1SG.NOM DEF.SG.F.ACC=thing DEF.SG.F.ACC=thing=INDF.F-GEN.SG=DIR  
*jʔ-a=jo:k*                      *ka=a-ki=ho:k-a*  
 come-CVB.MNR=POSS.2SG.ACC NEG.IPFV=1SG-be\PFV=OBJ.2SG-ADRE.M  
 ‘I did not come to you about that thing’ (BEJ\_MV\_NARR\_08\_drunkard\_120-1)

- (44) *u:n*                      *u:=tak*                      *do:r*    *han*  
 PROX.SG.M.NOM DEF.SG.M.NOM=man time also  
*kan-a:=ji*                      *ki=i-ke*  
 know\REFL-CVB.MNR=POSS.1SG.ACC NEG.IPFV=3SG.M-be\PFV  
 that man had not even recognized me (BEJ\_MV\_NARR\_01\_shelter\_071-073)

## 9. Conclusion

The above analysis of the Manner converb in Beja has shown that it has morphosyntactic and functional properties of three major word classes: adverbs (as expected), adjectives, and nouns. Now if we compare its various functions with Haspelmath’s (1995a: 4) table of the relationships between derived verb forms, word classes, and syntactic functions, it is clear that the Beja converb has the prototypically syntactic functions of each of the three derived verb forms (converb, participle, masdar) associated with the above-mentioned word classes, namely adverbial modifier, adnominal modifier, and argument, respectively. The table is reproduced below:

<i>Word class:</i>	Noun	Adjective	Adverb
<i>Derived verb form:</i>	masdar	participle	converb
	(= verbal noun)	(= verbal adjective)	(= verbal adverb)
<i>Syntactic function:</i>	argument	adnominal modifier	adverbial modifier

Table 2: Derived verb forms with different word class status (Hapelmath 1995a: 4)

In the absence of historical data (the first description of Beja goes back to the second half of the nineteenth century: Almkvist (1881)<sup>11</sup>), it is difficult to figure out which of these three derived verb forms could have been the source of the other two or could have spread into their domains. Comparative data with Cushitic languages do not provide any evidence either (for a general overview, see Azeb and Dimmendaal 2006): only Oromo (East Cushitic) has a cognate converb form with a suffix *-áa*, but it is a same-subject simultaneity converb according to Banti (2007: 38), or a consecutive converb according to Gragg (1976: 192-193), not a Manner converb (or any of the other meanings of the Beja form). Typological evidence may be of some help to trace the origin of the converb, if not a proof in themselves. Haspelmath (1995a: 17) explains that from a diachronic point of view “[c]onverbs seem to arise from two main types of sources: (a) adpositional or case forms of masdars/verbal nouns which have become independent from their original paradigm; and (b) (copredicative) participles ... which lost their capability for agreement.” The first type of possible sources is not *a priori* impossible in Beja since the converb can function as the object argument of a verb form. But it should be noted that Beja has dedicated sets of patterns and suffixes to form masdars, and that there is no postposition that could be an undebatable diachronic source in

<sup>10</sup> The negative Perfective and Perfect is based on the *Imperfective* conjugation of the auxiliary verb. For the diachronic explanation of this asymmetry, see Cohen (1972 and 1973).

<sup>11</sup> If one excludes mentions of Beja in Munziger (1864).

Beja. As for case, a long vowel *a:* is found in the *nominative* plural form of the portmanteau definite article, but it would remain to be explained why the nominative and not the accusative as would be expected from its object function, and why the plural form and not the singular one. It seems really farfetched to relate the suffix of the Manner converb to the accusative case in *-a* of Arabic and other Semitic languages (a distantly related branch of Afroasiatic). Comparative studies are still in their infancy for Beja and caution is needed. As for the second possible source, i.e. participle, Beja clearly shows that the converb also often functions as an adnominal modifier (section 7). Even if not frequent in the world's languages (cf. Haspelmath (1995a: 19), who mentions (p. 46) Slavic converbs as an example), a participle origin is thus not to be entirely ruled out, even if we saw (section 7.1) that the Beja Manner converb in adverbial clauses has not lost its capability for agreement in copredicative constructions. An additional argument in favour of a possible participial origin of the converb is that this agreement (including in adverbial clauses, see section 3.1 and 3.2) belongs to the adjectival type of agreement, a type which, according to V. Nedjalkov (1995: 118), “always seems to go back to participles.”

Haspelmath (1995a: 43) among many others, mentions that “[c]onverbs in periphrastic constructions are commonly used as the form of the main verb in aspectual periphrastic constructions, especially in progressives and resultatives/perfects. The auxiliary used in such constructions is a locative or existential copula”. Haspelmath and König's (1995) volume provides various examples of different TAM formed this way, including the two common ones mentioned by Haspelmath. What is uncommon though is that a Manner converb would grammaticalize into a Perfect aspect, as it did in Beja. It is usually anterior (i.e. sequential) or perfective converbs that become a Perfect aspect, via a resultative construction (Nedjalkov 1988; Maslov 1988; Bybee and Dahl 1989: 68-73; Haspelmath 1995a: 44). Still the Beja evolution is not surprising from a semantic point of view if one examines the various semantic relations that are expressed by the Manner converb, in particular the resultative value of the Manner converb when it encodes “attendant circumstance” (section 3.3. ex. 8).

The possible grammaticalization path of the Perfect could thus have been:

Manner converb > Resultative adverbial clause > Perfect paradigm

As for the volition construction a plausible grammaticalization path would be:

Manner converb > Purpose adverbial clause > Volition

It is still unclear to me what kind of grammaticalization path could have taken place for the Emphatic polarity construction.

It is noteworthy that the converb has been reinitiated into a Perfect finite paradigm in main-declarative-affirmative environment, and also in causal clauses, which are not typically dependent clauses in Beja since the causal marker is also a coordination morpheme, and that its morphology is fully nominal (nominal gender, nominal copula, possessive set of bound pronouns with the same morphosyntactic properties as genitive constructions for object pronominal arguments). Conversely, the volition periphrastic construction is the most verb-like construction: the Manner converb, which is the core verb form, does not have the nominal gender markers, and the bound object pronouns belong to the object set.

## Abbreviations

ABL ablative; ACC accusative; ADJ adjective; ADRE addressee; ADVZR adjectivizer; ANT anteriority; AOR Aorist; CAUS causative; CMPR comparative; COM comitative; COMP complementizer; COORD coordination; COP copula; CSL causal; CVB converb; DEF definite; DIM diminutive; DIR directional, DISTR distributive; F feminine; GEN genitive; IMP imperative; INDF indefinite; INT intensive; IPFV Imperfective; M masculine; MNR manner; N.A action noun; NEG negative; NOM nominative; OBJ object; PASS passive; PFV Perfective; PL plural; POSS possessive; PROX proximal; REFL reflexive; REL relator; SG singular; SMLT simultaneity.

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