Towards a semantic map of the Optative in Beja (North-Cushitic)

Martine Vanhove

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MARTINE VANHOVE (LLACAN, CNRS – INALCO)

(vanhove@vjf.cnrs.fr)

1. INTRODUCTION

The verbal system of Beja, the sole North-Cushitic language, possesses several indicative and modal verb paradigms whose precise semantic values and syntactic uses are still ill-known. The fact that almost each linguist developed its own terminology (with fortunately some commonalities), does not help clarify the situation and the analyses are often different and controversial for some TAM. This paper focuses on one of the Beja paradigms, the so-called Optative, as labeled by ROPER (1928), in its negative form on the basis of spontaneous narrative data that I recorded in Sinkat (Sudan) between 2004 and 2007.[1] Their analysis, which confirmed in their great lines previous studies, nevertheless brought to light particular syntactic uses and modal values of capacity and necessity that have never been mentioned before.

Section 2 presents a brief overview of the main Indicative (2.1) and Mood (2.2) paradigms in order to give the reader the basic knowledge required to better understand the morphology and the semantics of the Optative within the verbal system. Section 3 is dedicated to the analysis of the Optative Negative as an optative in independent clauses (3.1), as a dependent verb form in relative (3.2), completive (3.3) and conditional (3.4) clauses, and as a modality marker of capacity and necessity in exclamatory utterances (3.5). Section 4 proposes a tentative semantic map of the Optative Negative.

2. THE MAIN VERB PARADIGMS

The following sketch is based on my own analysis of the Beja verbal system (for further details, see VANHOVE forth.), as I understood it from the above-mentioned data and other data that I collected between 2001 and 2011. My terminology differs to some extent from the previous ones[2] partly because I consider the whole system as more aspect oriented than previous researchers, and most probably also partly because of dialectal differences.

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[2] ALMKVIST (1981-85), REINISCH (1893-94), ROPER (1928), HUDSON (1974, 1976), DAHL (1984), MORIN (1995), APPLEYARD (2007), GRAGG (forth.).

Together with four other Cushitic languages, Afar, Saho, Somali and South-Agaw, Beja has two morphological verb classes. The prefix-inflecting or "strong verb" class 1 (V1), historically the oldest one, is characterized by prefixed indexes (also infixed for disyllabic verbs) for all finite Indicative paradigms and by a stem with ablaut patterns. Like in Semitic Arabic, the root of this verb class is consonantal (one, two or three consonants), and the vowels of the stem vary with TAM. Beja is the Cushitic language where this verb type is by far the largest, and V1 contains the majority of the verbs (56%, according to COHEN 1988: 275). Suffix-inflecting or "weak verb" class 2 (V2), the innovative verb class, has its indicative paradigms conjugated with suffixes and the stem is invariable for all TAM, like in most Cushitic languages. Verb class assignment is synchronically arbitrary; however most borrowings from Arabic, the contact language, are integrated as V2 verbs.

The inflexion system indexes person (1st, 2nd and 3rd), gender (F and M, in 2nd and 3rd persons singular only), number (SG and PL), and TAM. There are three main Indicative finite forms with aspect-temporal values: Imperfective, Perfective, Narrative,[3] to which a fourth paradigm, the Perfect, morphologically different from the above mentioned TAM has to be added (see Section 2.1 below), and two Mood paradigms, Imperative and Optative (Section 2.2). Several non-finite forms, i.e. converbs, and complex predicates with various auxiliary verbs complement the TAM system, too numerous to be presented within the limits of a short overview and of no particular importance for the purpose of this article.

2.1 INDICATIVE FINITE PARADIGMS

Tables 1 and 2 below present the main inflexion morphemes of three of the four Indicative finite paradigms in the base form for V1 and V2.[4] The IPFV markers of V1 in Table 1 are those of monosyllabic verbs. Table 2 provides the patterns for disyllabic V1.

	Indicative					
	IPFV		PFV		NAR	
V1	SG	PL	SG	PL	SG	PL
1 2M F 3M 3F	*an-ˈCiːC* *ˈtin-CiːC-a* *ˈtin-CiːC-i* *in-ˈCiːC* *tin-ˈCiːC*	*neː-ˈCiC* *ˈteː-CiC-na* *ˈeː-CiC-na*	*a-ˈCiC* *ˈti-CiC-a* *ˈti-CiC-i* *i-ˈCiC* *ti-ˈCiC*	*n(ii)-ˈC C* *ˈti-CiC-na* *ˈi-CiC-na*	*iː-ˈCiC* *ˈtiː-CiC-a* *ˈtiː-CiC-i* *iː-ˈCiC* *tiː-ˈCiC*	*niː-ˈCiC* *ˈtiː-CiC-na* *ˈiː-CiC-na*
V2						
1 2M 2F 3M 3F	*-ˈani* *-ˈtinija* *-ˈtiniː* *-ˈiːni* *-ˈtini*	*-nej/-naj* *-teːn(a)* *-eːn(a)*	*-ˈan* *-ta* *-taj* *-ija* *-ta*	*-na* *-taːna* *-ˈijaːn*	*-i* *-tija* *-tiː* *-i* *-ti*	*-ni* *-tiːna* *-iːna)*

Table 1: Indicative inflexion morphemes

Disyllabic verbs in the base form insert the SG.IPFV marker *-an-* after the first root consonant of the stem: *-C1anC2iːC3-*, as shown in Table 2.

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[3] Called "conditional" (ROPER, MORIN), "aorist" (APPLEYARD, GRAGG; also in some of my previous works), "Pluquamperfect" (REINISCH).
[4] The stems and indexes of derived verbs and a small verb class in the base form do not conform to these patterns. It is out of the aim of this paper to provide them all. For a still valid overview see ROPER (1928). Clear synthetic and more modern overviews are provided in APPLEYARD (2007) and GRAGG (forth.). See also VANHOVE (forth.).

	Indicative					
	IPFV		PFV		NAR	
V1	SG	PL	SG	PL	SG	PL
1	*a-ˈCanCiːC*	*neː-CaˈCiC*	*a-ˈCCiC*	*neː-CaˈCiC*	*iː-ˈCCiC*	*niː-ˈCCiC*
2M	*ˈCanCiːC-a*	*teː-ˈCaCiC-na*	*ˈti-CCiC-a*	*teː-ˈCaCiC-na*	*ˈtiː-CCiC-a*	*ˈtiː-CCiC-na*
2F	*ˈCanCiːC-i*		*ˈti-CCiC-i*		*ˈtiː-CCiC-i*	
3M	*CanˈCiːC*	*eː-ˈCaCiC-na*	*i-ˈCCiC*	*eː-ˈCaCiC-na*	*iː-ˈCCiC*	*ˈiː-CCiC-na*
3F	*CanˈCiːC*		*ti-ˈCCiC*		*tiː-ˈCCiC*	

Table 2: Indicative inflexion morphemes of disyllabic V1

The prefixed index of 1SG.IPFV is usually elided before initial laryngeals (*ʔ* and *h*) for both syllabic types.

The fourth finite Indicative paradigm, the Perfect, is built with the verb-noun form with the nominalizer suffix *-a(ː)*[5] (its stem is that of the Imperative for V1), followed by the indefinite article (a portmanteau morpheme which also marks gender and accusative case), and the suffixed nominal copula: *ʃʔag-aː-b-u* 'he has carried', *ʃʔag-aː-t-u* 'she has carried'.

2.2 MOODS

Moods are morphologically different from the Indicative. In the *Imperative*, the flexional morphemes are *suffixed* for both verb classes. They are identical in the singular and differentiate gender: *-a* (M), *-i* (F). V1 and V2 suffixes are slightly different in the plural (with no gender distinction): V1 *-na*, V2-*aːna*.

1. V1: *dif-a* 'go (SG.M)!'; *dif-i* 'go (SG.F)!'; *dif-na* 'go (PL)!'

2. V2: *jhak-a* 'get up (SG.M)!'; *jhak-i* 'get up (SG.F)!'; *jhak-aːna* 'get up (PL)!';

For the *Prohibitive*, a proclitic negative Mood particle *baː=* (SG.M & PL) / *biː=* (SG.F) precedes the stem for the two verb classes, also both conjugated with *suffixes*. The V1 stems undergo ablaut and their vocalic patterns are different from those of the Imperative: CiiC and CaCiiC (which are otherwise nominal patterns, see VANHOVE, forth.). The suffixes are the same as the Imperative for each verb class, except the feminine morpheme of V2 which becomes *-ej*.

3. V1: *baː=diːf-a* 'don't go (SG.M)!', *biː=diːf-i* 'don't go (SG.F)!', *baː-diːf-na* 'don't go (PL)!'

4. V2: *baː=raːt-a* 'don't ask (SG.M)!', *biː=raːt-ej* 'don't ask (SG.F)!', *baː=raːt-aːna* 'don't ask (PL)!'

The *Optative*[6] *Affirmative* paradigm, with either *suffixes or prefixes* depending on the verb class, is based on the Narrative paradigm of each verb class, with the obligatory addition of an invariable proclitic particle, *baː=*,[7] homophonous with the SG.M & PL prohibitive particle.

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[5] This form is called "particip" (REINSICH), "gerund" (ROPER, MORIN) or "past participle" (HUDSON, APPLEYARD). As it is highly polyfunctional, I preferred to gloss the *–a* suffix with a more neuter term: "nominalizer".

[6] REINISCH gives the label "optativ" to another form, taken up from MUNTZIGER (1864), but unrecorded in other sources.

[7] The short *a* given by APPLEYARD, following HUDSON, is a dialectal variant (Northern variety).

	'arrive' (V1)		'eat' (V2)	
	SG	PL	SG	PL
1	*baː=iː-ktim*	*baː=niː-ktim*	*baː=tam-i*	*baː=tam-ni*
2M	*baː=tiː-ktim-a*	*baː=tiː-ktim-na*	*baː=tam-tija*	*baː=tam-tiːn(a)*
2F	*baː=tiː-ktim-i*		*baː=tam-tiː*	
3M	*baː=iː-ktim*	*baː=iː-ktim-na*	*baː=tam-i*	*baː=tam-iːn(a)*
3F	*baː=tiː-ktim*		*baː=tam-ti*	

Table 3: Optative Affirmative paradigm

The *Optative Negative*[8] is characterized by flexional *prefixes* for both verb classes, the same verb stems as the Prohibitive (CiiC or CaCiiC for V1), and makes use of an obligatory variable particle *ba=* / *bi=*, which precedes the inflexion morphemes. It is followed by a set of suffixes for monosyllabic V1 and for all V2; disyllabic V1 have no suffixes. The vocalic variation of the negative marker is due to the regressive assimilation of the 1SG index *a-*; the underlying form of the negative particle is thus *bi=*. The paradigms are detailed in Table 4 below:[9]

	SG	V1mono	V2	PL	V1mono	V2
1	*ba=a*-stem		*-aːj / ej*	*bi=n*-stem		*-aːj / ej*
2M	*bi=t*-stem	*-a*	*-aːja / ej*	*bi=t*-stem	*-na*	*-eːna*
2F	*bi=t*-stem	*-i*	*-aːj / ej*			
3M	*bi=i*-stem		*-aːj / ej*	*bi=i*-stem	*-na*	*-eːna*
3F	*bi=t*-stem		*-aːj / ej*			

Table 4: Optative Negative paradigms

The final vowel of 2SG.M and 3PL of V2 is elided before clitic pronouns.

5.   V1 monosyllabic: *bi=i-dʔiː-na* 'let them not do!'

6.   V1 disyllabic: *bi=t-katiːm* 'let her not arrive!'

7.   V2: *ba=a-kʷinh-aːj* 'Let me not shout!'; *bi=i-hass-ej* 'let him not cross!'

Note that some of the Optative Negative verbs in the data used in the following Section are either irregular, often mono-consonantal, V1 and V2 verbs or derived V1 verbs whose stems are different from the base form.

3.   THE OPTATIVE NEGATIVE

As already mentioned by ROPER, HUDSON and APPLEYARD, in addition to its optative negative function, this verb paradigm is used to negate a verb in embedded clauses, more precisely relative, completive, conditional clauses, as well as the Future auxiliary verb *di* 'say' in all clause types. The analysis of the pilot corpus also showed that the Optative Negative can express modal internal-participant[10] values of necessity and capacity in independent clauses. All these different values and uses are detailed in the following sub-sections.

3.1.   THE OPTATIVE NEGATIVE VALUE
As described in e.g. ROPER (1928: 51-52 & 62, 67), the basic prototypical value of the Optative Negative in independent clauses is precisely the negation of the Optative

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[8] This form is called "bound negative" by HUDSON.
[9] APPLEYARD (2007: 470) analyzes the marker as *b[i]-* + the incorporation of the personal marking. Consequently his parsing is different.
[10] The terminology is that of AUWERA et al. (1998) and concerns part of the non-epistemic modalities.

Affirmative form as in (8) and (9). The data used for this article only provided examples with V2 and non in the 2nd persons:

8. *tidirʔa han baːʃagaːmaːj diːt*
    *ti-dirʔa han **ba=a-ʃaga-am-aːj**   diːt*
    DEF.F-field also NEG.OPT=1SG-work(V2)-REFL.PASS-OPT say\CVB.ANT
    'After he had told himself: Let me not work in the field anymore!'
                          (BEJ_MV_NARR_02_farmer_142)[11]

9. *harʔiːsiː bitijʔaheːbaj anit*
    *harʔi=isi   **bi=t-jʔ-a**=heːb=aj   ani*
    after=1SG.ABL NEG.OPT=3SG.F-come-OPT=1SG.ACC=INTSF say\PFV.1SG
                      V2.IRG
    'Don't let it come from behind me! I told myself' (BEJ_MV_NARR_05_eritrea_322-326)

3.2. IN RELATIVE CLAUSES

The syntax of relative clauses depends on definiteness criteria and on the syntactic role of the head. Several strategies, which may combine, are possible:

1. No relative marker. This is the rule with subject heads and only optional with oblique indefinite heads (and for focused cleft constructions).

2. With oblique definite heads, (i) a proclitic conjunction, which derives from the definite article, *i= / wi= / ji=* (M), *t= / ti=* (F), is added to the verb (or the whole relative clause; together with the indefinite article *-t* for the feminine); or (ii) an enclitic conjunction follows the verb: *=eː* (neuter), *=eːb* (M), *=eːt* (F); (iii) in addition to (ii), the dummy noun *toː-na* (lit. 'the thing') may precede or follow the verb of the relative clause (or the whole relative clause); (iv) the enclitic and proclitic conjunctions may combine.

Relative clauses in Beja are head external, and in the canonical order relative clauses are embedded within the matrix clause.[12]

In affirmative relative clauses, the four finite main Indicative paradigms can be used. Whatever the corresponding affirmative paradigm, in negative relative clauses, only the Optative Negative paradigm can be used; the Indicative Negative particle *ka= / ki=* cannot occur in this context. If this syntactic constraint has been noticed since the early works about Beja, it does not tell the whole story, at least in the data studied here. In all the examples of the spontaneous data used for the purpose of this paper this verb tense expresses in addition a modality of capacity which has never been recorded before. The pilot corpus only provided examples with an oblique head.

Example (10) below is a relative clause with an indefinite head (*mhiːn* 'place').

10. *naːt bitkatiːm mhiːn*
    *naː-t   **bi=t-katiːm**   mhiːn*
    thing-INDF.F.ACC NEG.OPT=3SG.F-arrive\OPT(V1) place
    uːmeːk ingad
    uː-meːk   i-ngad
    DEF.SG.M.NOM-donkey 3SG.M-stop\PFV
    'The donkey stopped in a place where nothing can arrive'
                        (BEJ_MV_NARR_05_eritrea_180-181)

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[11] The references in between brackets are those of the pilot corpus.
[12] Beja is a "canonical" SOV language, rather consistently head final, and the matrix clause usually follows the dependent clause.

Example (11) illustrates the case with the proclitic relative conjunction and a definite head (*oː-kʷan* 'the flood).

11. *oːkʷan ibiːhassej isinneːk*

oː-kʷan	*i=bi=i-hass-ej*	*i-sin-n=eːk*
DEF.SG.M.ACC-flood	REL.M=NEG.OPT=3SG.M-cross(V2)-OPT	3M-wait\PFV-PL=if

‘When it found the flooding river that cannot be crossed’ (BEJ_MV_NARR_12_witch_144)

Example (12) is with the neuter enclitic relative marker. Note that the dummy noun =*na* clitic to the verb form has the function of an indefinite negative pronoun, head of the relative clause.

12. *oːkna hoːj biːbariːneːna*

oːkna	*hoːj*	*bi=i-bar-iːn=eː=na*
PRO.REFL.SG.M.ACC[13]	3ABL	NEG.OPT=3-have\OPT-PL=REL=thing (V1.IRG)

kithaːj eːn
ki=t-haːj
NEG.IPFV=3SG.F-be_there\PFV
‘There was really nothing that they could not have from it.’

(BEJ_MV_NARR_02_farmer_323)

Example (13) has two successive relative clauses. The first one is in fact a cleft focus (‘once it is not a donkey that I rode’; lit. ‘once I am not this donkey’) with a definite head (*oː-meːk* ‘the donkey’) and has no overt relative marker. In the second one (‘a camel that even three men could not ride’), the enclitic masculine conjunction is used with an indefinite head (*kaːm* ‘camel’). Note that the modal value of capacity occurs only in the relative clause.

13. *doːr oːmeːk oːn baːkaj kaːm*

doːr	*oː-meːk*	*oːn*	*ba=a-kaj*	*kaːm*
time	DEF.SG.M.ACC-donkey	PROX.SG.M.ACC	NEG.OPT=1SG-be\OPT V1.IRG	camel

han amaːbi ini mheːj nafara

han	*ʔam-aː-b-i*	*ini*	*mheːj*	*nafar-a*
also	ride\REFL-NMLZ-INDF.M.ACC-COP.1SG	say\PFV.3SG.M	three	person-PL

nuːn naːt bitʔameːb

nuːn	*naː-t*	*bi=t-ʔam=eːb*
only	thing-INDF.F.ACC[14]	NEG.OPT=3SG.F-ride\REFL(V1)=REL.M

‘Once, it is not this donkey that I rode but a camel, he said, that even three men could not ride at all.’ (BEJ_MV_NARR_03_camel_035-041)

3.3 IN COMPLETIVE CLAUSES

The syntax of completive clauses with cognition and perception verbs is similar to that of the relative clauses with the enclitic conjunctions. In negative utterances, the use of the Optative Negative is also obligatory. Similarly to relative clauses, the modal reading of capacity is also present.

Examples (14) and (15) have the masculine enclitic conjunction. The two completive clauses in (15) present an alternative, the first one affirmative with the Imperfective, the second one negative with the Optative Negative. Recall that for the Future Negative tense as in (14), the

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[13] The reflexive pronouns are often used as enunciative particles with an assertive value.
[14] The dummy noun is also a negative particle.

auxiliary verb *di* 'say' is obligatorily in the Optative form even in matrix and independent clauses.

14. *ḍaːbi biːdiːjeːb hiːsan*
    ḍaːb-i   ***bi = i-diː = jeːb***   *hiːs-an*
    run-FUT   NEG.OPT = 3SG.M-say\OPT = REL.M   think-PFV.1SG
                                V1.IRG
    'I thought he would not be able to run.'   (BEJ_MV_NARR_03_camel_152)

15. *uːn ani dhoːkna iʃibib andi*
    uːn   *ani*   *d = hoːkna*   *i-ʃibib*   *a-ndi*
    PROX.SG.M.NOM   1SG.NOM   DIR = 2PL.ACC   FUT-look   1SG-say\IPFV
    whawaːd tariːgat hoːj timirneːna
    w-hawaːd   *tariːga-t*   *hoːj*   *ti-mir-na = eː = na*
    DEF.SG.M-night   means-INDF.F.ACC   3ABL   2-find\PFV-PL = REL = thing
    tikatijeːb bitkaːjeːb
    ti-kati = jeːb   ***bi = ti-kaːj = eːb***
    3SG.F-be\IPFV = REL.M   NEG.OPT = 3SG.F-be\OPT = REL.M
                                V1.IRG
    'I'll see for you whether there is a way from which you can get something at night, or not'   (BEJ_MV_NARR_18_Adam_devil_036-044)

Examples (16) and (17) have in addition to the relative marker the dummy noun *toːna* 'the thing'. When it follows the verb (16), the enclitic relative conjunction is feminine, when it precedes it (17), the enclitic is neutral.

16. *ʃanbiːbhoːb ikteːni*
    ʃanbiːb = hoːb   *i-kteːni*
    look\IPFV.[3SG.M] = when   3SG.M-know\REFL.IPFV
    biːrhajeːt toːna
    bi = i-rh-aj = eːt   *toː-na*
    NEG.OPT = 3SG.M-see(V2)-OPT = REL.F   DEF.SG.F.ACC-thing
    'When it (Porcupine) looks, it realizes that he (Adam) cannot see it.'
                                        (BEJ_MV_NARR_18_Adam_devil_055-057)

17. *wʔaraːwoː baːkajeː toːna*
    w-ʔaraːw = oː   *toː-na*   ***ba = a-kaj = eː***
    DEF.SG.M-friend = 3SG.ACC   DEF.SG.F.ACC-thing   NEG.OPT = 1SG-be\OPT = REL
                                              V1.IRG.
    tikanheːb
    ti-kan = heːb
    3SG.F-know\REFL.PFV = 1SG.ACC
    'She realized that I was not (or could not be) her friend.'
                                        (BEJ_MV_NARR_01_shelter_133-137)

3.4   IN CONDITIONAL CLAUSES

Conditional clauses with the enclitic particle = *(j)eːk* 'if' are regularly negated with the Optative Negative, as clearly stated already in ROPER (1928: 46-47). The modal reading of capacity also crops up in the examples of the data.

18. *bithiːweːk geːn niːʃibibhoːkaːj*
    bi = t-hiːw = eːk   *geːn*   *niː-ʃibib = hoːk = aːj*
    NEG.OPT = 2SG.M-give\OPT = if   thus   NAR.1PL-look = 2SG.ACC = CSL
                  V1.IRG

'Well, we'll see if you cannot give it to him!'   (BEJ_MV_NARR_18_Adam_devil_090-091)

19. *naːt hoːk biːdʔiːneːk*
    naː-t   *hoːk*   ***bi=i-dʔiː-na=eːk***
    thing-INDF.F.ACC   2SG.DAT   NEG.OPT=3-do\OPT-PL(V1)=if
    allaːjoːda gʷirjamni nijad
    alla=joː=da   *gʷiri-am-ni*   *nijad*
    God=1SG.GEN=DIR   complain-REFL.PASS-FUT.PL   say\IPFV.1PL
    'If they cannot do anything to you, we are going to complain to my God'
                                                                    (BEJ_MV_NARR_08_drunkard_068-070)

20. *whawaːd irezgoːk jhariw*
    w-hawaːd   *i-rezg=oːk*   ***iː-hariw***
    DEF.SG.M-night   DEF.M-job=2SG.M.ACC   FUT-look_for
    biddiːneːk oːmbʔeː naːt
    bi=t-diː-na=eːk   *oː-mbʔeː*   *naː-t*
    NEG.OPT=2-say\OPT-PL=if   DEF.SG.M.ACC-day   thing-INDF.F.ACC
             V1.IRG
    kitimirina
    ki=ti-miri-na
    NEG.IPFV=2-find\PFV-PL
    'If you (PL) cannot look for your (SG, sic) livelihood at night, you (PL) won't find
    anything during the day.'   (BEJ_MV_NARR_18_Adam_devil_030-033)

3.5   PARTICIPANT-INTERNAL MODALITIES IN INDEPENDENT CLAUSES

Beja has no modal verbs such as 'can', 'may', 'must' or 'need', if one excepts the recent loan
from Arabic *agdir / adgir* 'can'. Participant-internal modalities are usually retrievable only
from the context. We already saw that in relative and completive clauses (Sections 3.2 &
3.3) the Negative Optative brings a modal value of capacity. The data of the pilot corpus
show usages of the Optative Negative, rare but unrecognized so far, in exclamatory
independent utterances, for the expression of capacity as well as of necessity, which both
pertain to the domain of participant-internal modalities, and are not directive ones as the
Imperative, the Prohibitive and the Optative.[15]

For the internal-participant modality of capacity,[16] the Optative Negative is used alone (as
for the optative value in dependent clauses).

21. *kak meːk hasamaːbi bani ʔaːdam han*
    kak   *meːk*   *hasam-a-b-i*   *bani*   *ʔaːdam*   *han*
    how   donkey   pass_by-NMLZ-INDF.M.ACC-COP.3SG   son   Adam   also
    biːhassejt
    bi=i-hass-ej-t
    NEG.OPT=3SG.M-pass(V2)-OPT-COORD
    'How a donkey could have threaded its way through it? A human being cannot even
    pass! And…'   (BEJ_MV_NARR_05_eritrea_174)

For the internal-participant modality of necessity, and auxiliary verb is added, namely the
verb *ak* 'be', here in the Perfect form.

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[15] Which AUWERA et al. (1998), as HENGEVELD (2004), consider as belonging to the domain of illocutionary type
rather than of modality.
[16] Which AUWERA et al. (1998: 82) prefer to call participant-internal possibility.

22. *ja iraːnaj oːjhaːm ʈabʔa*
    ja   iraːnaj   oː-jhaːm   ʈabʔ-a
    VOC   gosh   DEF.SG.M.ACC-leopard   hit\INT-IMP.SG.M
    baːkʷinhaːj akaːbuːjt
    ba = a-kʷinh-aːj   **ak-a-b-u-***it*
    NEG.OPT = 1SG-shout(V2)-OPT   be-NMLZ-INDF.M.ACC-COP.1SG-COORD
    'Gosh! Hit the leopard! I don't need to shout at you! And…'

                                                              (BEJ_MV_NARR_15_leopard_068-070)

4. CONCLUSION

Table 5 provides a summary of the various semantic and syntactic functions of the Optative Negative form in the Sinkat contemporary data.

	Optative	Capacity	Necessity	Intention	Volition
Independent clause	+	+	+ (with *ak* 'be')	–	–
Relative clause	–	+	–	–	–
Completive clause	–	+	–	–	–
Conditional clause	–	+	–	–	–
Future tense	–	+	–	+	+

Table 5: Optative Negative semantics and syntax

The different uses of the Optative Negative form show a cline of modal values, be it synchronic or diachronic, whose directionality is not easy to grasp yet in order to draw its semantic map, and is open for further study. Still, one can already notice that all these values fall within the domain of participant-internal modality. [17] The Future tense with the auxiliary *di* 'say'[18] has intentional and volitional modal values (MORIN 1995; VANHOVE forth.) which are linked to the semantic field of the verb 'say' in Beja, which includes the intention and volition domains as well as the quotative domain. In my opinion, these two modal values also belong to the domain of internal-participant modality, just as the other modal values of optative, capacity and necessity, because they correspond to the characterization provided by AUWERA et al. (1998: 80): "[internal-participant modality] refers to a kind of possibility or necessity internal to a participant engaged in a state of affairs." Tentatively, the semantic map of the Optative Negative (with no arrows yet, thus the position of the different values has to considered as arbitrary) may look as in Figure 1 below.

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[17] I depart from AUWERA et al. (1998) who explicitly exclude volition and optative from the domains of the participant-internal modality (as well as participant-external and epistemic modalities). The Beja data makes me tend to refuse such restrictions, hence their inclusion in the tentative semantic map.

[18] Called "Permissive" by APPLEYARD, following HUDSON. What they call "Future" is in fact more precisely a "Potential" (see HAMID-AHMED et al. 2004) without speaker's or participant's involvement.
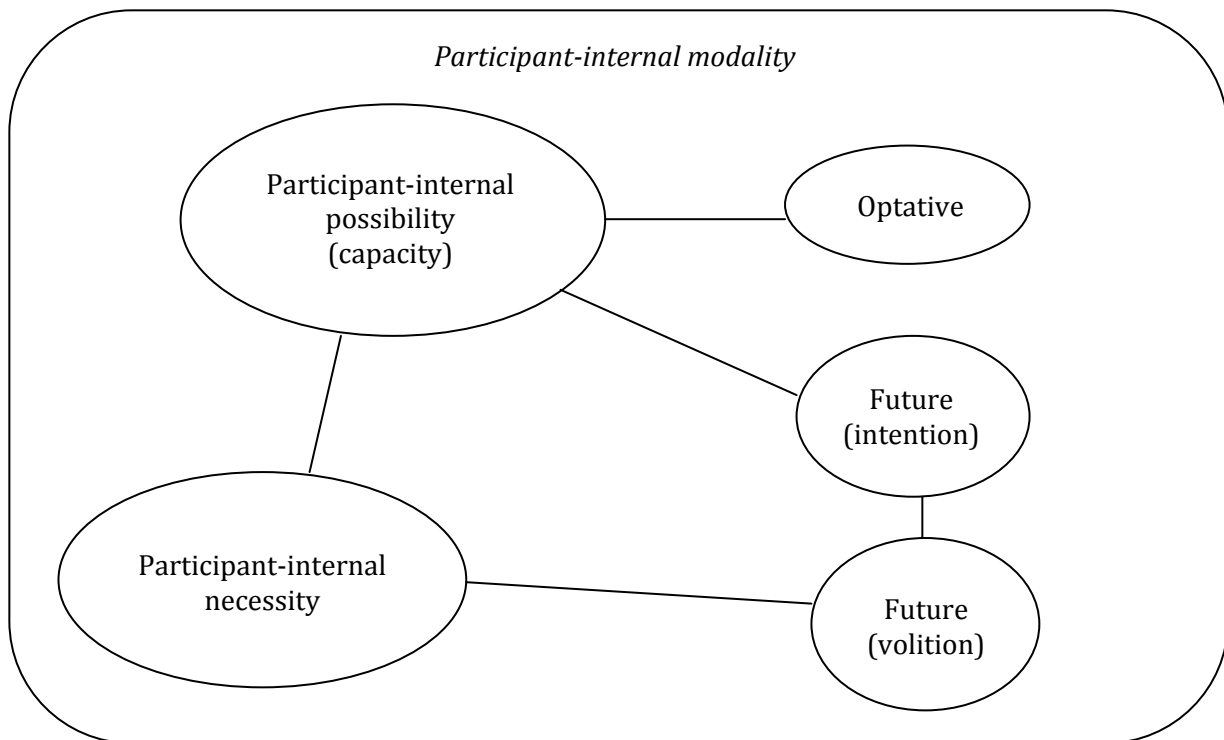
Figure 1: Tentative semantic map of the Optative Negative

ABBREVIATIONS

1, 1st person	GEN, genitive	OPT, Optative
2, 2nd person	IMP, Imperative	PASS, passive
3, 3rd person	INDF, indefinite	PFV, Perfective
ABL, ablative	INT, intensive	PL, plural
ACC, accusative	INTSF, intensifier	PRO, pronoun
ANT, anteriority	IPFV, imperfective	PROX, proximal
C, consonant	IRG, irregular	REFL, reflexive
COORD, coordination	LOC, locative	REL, relative
COP, copula	M, masculine	S, subject
CVB, converb	mono, monosyllabic	SG, singular
DAT, dative	NAR, Narrative	TAM, tense, aspect, mood
DEF, definite	NEG, negative	V, verb
DIR, directional	NMLZ, nominalizer	V1, verb class 1
F, feminine	NOM, nominative	V2, verb class 2
FUT, Future	O, object	VOC, vocative

REFERENCES

ALMKVIST, Herman. 1881-85. *Die Bischari-Sprache Tuu-Beḍaawie in Nordost-Afrika. Vol. 1-3*. Upsala: Kaiserliche Akademie der Wissenschaften.

APPLEYARD, David. 2007. Beja morphology. In Kaye, Alan S. (ed.), *Morphologies of Asia and Africa*. Winona Lake (Indiana): Eisenbrauns, 447-480.

AUWERA, Johan van der & Vladimir A. PLUNGIAN. 1998. Modality's semantic map. *Linguistic Typology* 2: 79-124.

COHEN, David. 1988. Bédja. In Cohen, David & J. Perrot (eds.), *Les Langues dans le Monde Ancien et Moderne. Langues chamito-sémitiques*. Paris : Editions du CNRS: 270-277.

DAHL, Östen. 1984. Sketch of the TMA system of Beja. In Dahl, Östen & D. Kós-Dienes (eds.), *Selected working papers from the tense-mood-aspect project*. Stockholm, Institute of Linguistics, University of Stockholm: 92-99.

HAMID AHMED, Mohamed-Tahir & Martine VANHOVE. 2004. Contrastive negation in Beja: the auxiliary verb *rib*. *Afrika und Übersee* 85 (2002): 81-98.

HENGEVELD, Kees. 2004. Illocution, mood, and modality. In Booij, Geert, C. Lehmann & J. Mugdan (eds.), *Morphology: A handbook on inflection and word formation*, Vol. 2. Berlin: Mouton de Gruyter, 1190-1202.

HUDSON, Richard A. 1974. A Structural Sketch of Beja. *African Languages Studies* 15, 111-142.

HUDSON, Richard A. 1976. Beja. In Bender, Lionel (ed.), *The Non-Semitic Languages of Ethiopia*. East Lansing, Michigan, African Studies Center, Southern Illinois University: 97-132.

MORIN, Didier. 1995. *"Des paroles douces comme la soie". Introduction aux contes dans l'aire couchitique (bedja, afar, saho, somali)*. Paris: Peeters.

MUNZINGER, W. 1864. *Ostafrikanische Studien*. Basel.

REINISCH, Leo. 1893-94. *Die Beḍauye -Sprache in Nordost-Afrika*, vol I-III. Wien: Sitzungs berichte der Kais. Akademie der Wissenschaften in Wien L, Band CXXVIII.

ROPER, E.M. 1928. *Tu Beḍawiɛ. An Elementary Handbook for the Use of Sudan Government Officials*. Hertford: Stephen Austin.

VANHOVE, Martine. Forth. A Grammatical Sketch of Beja. *http://corpafroas.tge-adonis.fr/ Home.html*.

VANHOVE, Martine. Forth. Roots and patterns in Beja (Cushitic): The issue of language contact with Arabic. In Thomas Stolz, Martine Vanhove, Aina Urdze and Hitomi Otsuka (eds.), *Proceedings of the International Symposium Morphologies in Contact held at Bremen University, October 1-3, 2009*. Berlin: Akademie Verlag.