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Discourse salience in Kalenjin inter-clausal syntax*

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1. Introduction. The Kalenjin languages are spoken in the Western Highlands region of Kenya, and adjacent areas of Uganda by a cattle-rearing population numbering perhaps one million total. Along with the Datooga of Tanzania and the moribund Omotik, they form the Southern Nilotic group of the Nilo-Saharan language phylum.¹ Like various languages of north-eastern Africa, the head-marked Kalenjin verb indexes a variety of argument properties, as well as a range of tense, aspect, and voice categories, etc.² Although such processes as Topicalization can move nominal arguments or adjuncts to pre-verbal position in Kalenjin languages, verbs usually appear clause-initially. While the preference for indexing salient, subcategorized animate referents within mono-clausal sentences regardless of their theta-role or grammatical relation is rather common cross-linguistically (see Anderson 1995 for a discussion), the type of referent indexing that holds between clauses in a complex Kalenjin sentence is not encountered that frequently. In Nandi and the closely related Kipsigis, when certain verbs that may take clausal complements are used in the higher clause of a complex sentence and there is an animate referent that is highly salient to the discourse in a lower clause, speakers have the option to maximize the indexing of these salient animate referents, marking them in the higher and lower clauses. In addition to Kalenjin, this 'Copying' formation is also attested in various Algonquian languages. Thus, referent indexing in inter-clausal syntax may be determined not only by the semantic or structural relations of the nominals involved, but by their high degree of discourse salience as well.

2. Copying Constructions in Kalenjin

2.1. Nandi. Nandi (Creider and Tapsubei Creider 1989) is described as a VSO language; thus, verbs are clause-initial, with nominal arguments and adjuncts generally following. In complex sentences this may result in a sequence of two verbs, each bearing an inflectional affix marking the person/number of the SUBJ, even when the SUBJs of the two verbs are co-referential.

(1)

Nandi (Creider and Tapsubei Creider 1989: 145)

á-mácé i:-ke:r (ínye:) kâ:t
[1-'want'] [2-'see'] ['you'] ['house']

'I want that you see the house'

Nandi (Hollis 1909: 112)

ingo'ngo-a-moche a-wei-ke ane, a-ñgêt korok
 [Rdpl.CONDIT-1-'want'] [1-'turn'-RFLXV] ['T'] [1-'arise'] ['first of all']

'if I wish to turn over first of all I have to get up'

Nandi (Creider and Tapsubei Creider 1989: 130)

á-mácé a:-ke:r Kiplakat
 [1-'want'] [1-'see'] ['Kiplagat']

'I want to see Kiplagat'

As stated above, when a referent in the lower clause is determined by the speaker to be particularly salient, it is possible to copy that referent into the verb form of the higher clause.

(2)

Nandi (Creider and Tapsubei Creider 1989: 145)

á-mác-í:n <ínyê:> i:ke:r <ínyê:> kâ:t
 [1-'want'-2OBJ] <'you'> [2-'see'] <'you'> ['house']

'I want you to see the house'

In Nandi, Copying-to-OBJ is possible even when the optional complementizer verb *-le* 'say' is present. The complementizer is opaque to the copying process; that is, rather than being copied onto this word, the copied element skips over it and is indexed directly in the sentence-initial verb.

(3)

Nandi (Creider and Tapsubei Creider 1989: 147)

á-mác-í:n a:-le i:ke:r kâ:t
 [1-'want'-2OBJ] [1-COMP] [2-'see'] ['house']

'I want you to see the house'

2.2. Kipsigis. In addition to Nandi, a variety of referent copying formations are also found in the Kalenjin language Kipsigis (Kipsikiis). As in Nandi, verbs are generally clause-initial in Kipsigis.

(4)

Kipsigis (Jake and Odden 1979: 134, 135, 136)

mɔcé Mù:sá à-lápát
['want'] ['Musa'] [1-'run']

'Musa wants that I run'

kà-yây Mù:sá à-tíl pè:ndɔ
[PAST-'make'] ['Musa'] [1-'cut'] ['meat']

'Musa made me cut the meat'

rî:pé Mù:sá à-tíl pè:ndɔ
['watch'] ['Musa'] [1-'cut'] ['meat']

'Musa watches me cut the meat'

As in the closely related Nandi, the person and number properties of the SUBJ are indexed on both verbs even when they are co-referential in Kipsigis as well:

(5)

Kipsigis (Jake and Odden 1979: 135)

ɔ-mɔcé à-lápát
[1-'want'] [1-'run']

'I want to run'

When the SUBJ of the lower clause exhibits a high degree of discourse salience, it may be optionally copied as the OBJ of the higher verb in Kipsigis as well.

(6)

Kipsigis (Jake and Odden 1979: 134, 135, 136)

mɔc-ɔ:n Mù:sá à-lápát
['want'-IOBJ] ['Musa'] [1-'run']

'Musa wants me to run'

kà-yây-ân Mù:sá à-tíl pè:ndɔ
[PAST-'make'-IOBJ] ['Musa'] [1-'cut'] ['meat']

'Musa made me cut the meat'

rî:p-ɔ:n Mù:sá à-tíl pè:ndɔ
 ['watch'-1OBJ] ['Musa'] [1-'cut'] ['meat']

'Musa watches me cut the meat'

In addition, a highly salient OBJ of a lower clause may also be copied as the higher verb's OBJ in Kipsigis:

(7)

Kipsigis (Jake and Odden 1979: 136-7)

mɔcé Mù:sá kɔ-tíl-án Kíplàngàt
 ['want'] ['Musa'] [3-'cut'-1OBJ] ['Kiplangat']

'Musa wants Kiplangat to cut me'

mɔc-ɔ:n Mù:sá kɔ-tíl-án Kíplàngàt
 ['want'-1OBJ] ['Musa'] [3-'cut'-1OBJ] ['Kiplangat']

'Musa wants Kiplangat to cut me'

Note that sentences with multiple applications of Copying-to-OBJ are also attested in Kipsigis; see examples in (8).

(8)

Kipsigis (Jake and Odden 1979: 137-8)

ɔ-mɔcé kɔ-yây Kíplàngàt kɔ-tíl-ín Mù:sá
 [1-'want'] [3-'make'] ['Kiplangat'] [3-'cut'-2OBJ] ['Musa']

'I want that Kiplangat make that Musa cut you'

ɔ-mɔcé kɔ-yày-ín Kíplàngàt kɔ-tíl-ín Mù:sá
 [1-'want'] [3-'make'-2OBJ] ['Kiplangat'] [3-'cut'-2OBJ] ['Musa']

'I want that Kiplangat make Musa cut you'

ɔ-mɔc-í:n kɔ-yày-ín Kíplàngàt kɔ-tíl-ín Mù:sá
 [1-'want'-2OBJ] [3-'make'-2OBJ] ['Kiplangat'] [3-'cut'-2OBJ] ['Musa']

'I want Kiplangat to make Musa cut you'

As Jake and Odden (1979) demonstrate, in these multiply embedded constructions the process seems to apply in a 'cyclic' fashion, i.e. Copying-to-OBJ must spread leftward from the most embedded clause. This is true whether the copied referent acts as the SUBJ or OBJ of the lowest clause.

(9)

Kipsigis (Jake and Odden 1979: 138)

** *ɔ-mɔc-i:n kɔ-yàŷ Kíplàŋàt kɔ-tìl-ín Mù:sá*
[1-'want'-2OBJ] [3-'make'] ['Kiplangat'] [3-'cut'-2OBJ] ['Musa']

'I want Kiplangat to make Musa cut you'

** *ɔ-mɔc-i:n kɔ-yàŷ Mù:sá i:-tìl pè:ndo*
[1-'want'-2OBJ] [3-'make'] ['Musa'] [2-'cut'] ['meat']

'I want Musa to make you cut the meat'

Note that Copying-to-OBJ is not permitted in Kipsigis when another, non-copied NP has been 'elevated' into the higher clause (or 'topicalized' in the embedded clause); this is a restriction on having two 'topics' or entities otherwise marked as particularly attention-worthy in one sentence, as immediately pre-verbal position is the favored site for overtly topicalized constituents in Kipsigis clauses, even in complex sentences:

(10)

Kipsigis (Jake and Odden 1979: 138)

***ká:yàŷ-ín Kíplàŋàt kɔ-tìl-ín*
[1.PAST-'make'-2OBJ] ['K'] [3-'cut'-2OBJ]

'I made Kiplangat cut you'

In doubly embedded sentences when the middle verb is intransitive, one encounters an interesting Copying-to-SUBJ operative (11ii), which then in turn 'feeds' Copying-to-OBJ on the highest clause (11iii):

(11)

Kipsigis (Jake and Odden 1979: 148)

i. *ká:-yàŷ kɔtèstâ kɔmàsín Kíplàŋàt*
[1.PAST-'make'] [3-'continue'] [3-'hit'-2OBJ] ['Kiplangat']

'I made Kiplangat's hitting you continue'

ii. *ká:-yàŷ ì:tèstâ kɔmàsín Kíplàŋàt*
[1.PAST-'make'] [2-'continue'] [3-'hit'-2OBJ] ['Kiplangat']

'I made Kiplangat's hitting you continue'

- iii. *ká:-yà-y-în ì:tèstâ kòmàsín Kíplàngàt*
 [1.PAST-'make'-2OBJ] [2-'continue'] [3-'hit'-2OBJ] ['Kiplangat']

'I made Kiplangat's hitting you continue'

Other intransitive verbs show copying-to-SUBJ in Kipsigis, including 'Tough'-movement type predicates. In the first example (12i), the lowest clause OBJ is copied as the SUBJ of the middle clause, while the highest predicate exhibits an interesting long-distance SUBJ-to-SUBJ copying process. Example (12ii) exhibits another long-distance Copying-to-SUBJ process, with the element copied into the highest clause functioning as the lowest clause's OBJ.³

(12)

Kipsigis (Jake and Odden 1979: 149, 150)

- i. *ì-wúy à-nyólú ì:-tìl-án*
 [2-'hard'] [1-'necessary'] [2-'cut'-1OBJ]
 'it is hard for it to be necessary for you to cut me'
- ii. *ì-nyólú kɔ-màc-án Kíplàngàt à-màs-în*
 [2-'necessary'] [3-'want'-1OBJ] ['Kiplangat'] [1-'hit'-2OBJ]
 'it is necessary that Kiplangat want me to beat you'

3. Copying-to-OBJ in Algonquian. The Algonquian languages were traditionally spoken in a vast territory in North America stretching from western Canada to the eastern United States. These languages are radically head-marking and polysynthetic, the verb consisting of a large stem-complex with incorporated nouns and adverbs and various inflectional affixes indexing referent properties and tense/aspect/mood categories. Algonquian transitive verb stems are classified according to the animacy of their subcategorized OBJ arguments. As in the Kalenjin languages, salient animate referents in the lower clause of a complex sentence can be copied and thus multiply indexed in various Algonquian languages as well.⁴

3.1. Fox (Mesquakie). The Algonquian language Fox (Mesquakie) is spoken by around 1,000 people at the Mesquakie settlement near the town of Tama, Iowa in the central US. Fox (Dahlstrom 1996-ms) is one of the most archaic Algonquian languages, often exhibiting forms nearly identical to reconstructed Proto-Algonquian (Bloomfield 1946). In Fox clauses that consist of more than just a single verb, constituent order is generally determined by such discourse-based notions as Topic and Focus (Dahlstrom 1993). While Fox transitive verbs are divided according to the animacy of their OBJ argument, verbs subcategorized for a complement clause are usually inflected as Transitive Inanimate, that is, as if the lower clause functions grammatically as an inanimate noun.⁵

(13)

Fox (Mesquakie) (Anderson forthcoming)

nenatawe:neta wi:h=we:ta:se:wiyɑ:nɪ
[1-'want'-1>0] [FUT='be.warrior'-1/aorist]

'I want to be a warrior'

eh=kehke:netama:nɪ e:h=kemo:temiwa:tehe aša:haki
[AOR='know'-inan-1>0/aor] [AOR='steal'-3PL/aor.irrealis]

[Sioux.prox.ANIM.PL]

'I realized that the Sioux must have stolen it'

However, when an animate argument of the lower clause exhibits a high degree of discourse salience, that referent may be indexed as the OBJ in the higher clause. The referent is signaled twice (once in the higher clause and once in the lower clause) and both clauses are potentially free-standing syntactically. As is the case in Kalenjin, it is therefore clear that this is not some kind of 'Raising-to-OBJ' phenomenon, but rather one of copying the referent into the higher clause. When the animate SUBJ of the lower clause is non-coreferential with the SUBJ of the higher clause, the lower clause's SUBJ is copied as the higher clause's OBJ.

(14)

Fox (Mesquakie) (Anderson forthcoming)

a:kwi=ča:h=meko aka:wa:nena:nɪnɪ wi:h=keteminawiyɑ:nɪ
['not'='so'=EMPH] ['want'-1>2/negative] [FUT='bless'-2>1/aorist]

'but I don't want you to bless me'

maneto:wa wi:h=keteminohki ine:nemenokwe:nɪ
['spirit-prox.sg.anim.] [FUT='bless'-3>2/aor] ['think.thus.of.'-3>2/interrog]

'the spirit must have intended to bless you'

wi:h=to:hki:yɑ:nɪ ketene:nemene
[FUT='wake.up.'-2/aor] [2-'want'-1>2/i.i.]

'I want you to wake up'

nekehke:nemekopi e:h=kakano:neti:hena:nɪ
[1-know-INV-X>(1)/i.i] [AOR=talk.w/-1-2/aor]

'it is known that I talked w/you'

As in the Kipsigis examples above, in some cases it is the OBJ of the lower clause that is copied as the OBJ of the higher one in Fox.⁶

(15)

Fox (Mesquakie) (Anderson forthcoming)

netaka:wa:na:wa=koh wi:h=ne:waki
[1-'want'-DIR(1>)-3/i.i.=‘you.know’] [FUT=‘see’-1>3/aorist]

‘I do want to see him’

mehto:či=meko nekehke:nema:wa wi:h=komisahiči e:h=ine:nemiči
[‘like’=EMPH] [1-‘know’-DIR-3/i.i.] [FUT=‘swallow’-3>1/aor] [AOR=‘intend’-
3>1/aor]

‘it was like I knew that he intended to swallow me’⁷

In most instances, Fox Copying-to-OBJ constructions are not obligatory, but rather an optional means of highlighting an animate referent exhibiting a high level of discourse salience. In one instance however, Copying-to-OBJ is apparently obligatory. This formation underscores both the discourse-motivated function of the Copying-to-OBJ construction as well as its non-identity with raising constructions from more familiar languages. An animate (non-subcategorized) nominal functioning as topic in the embedded clause can appear only if Copying-to-OBJ operates to index that animate participant in the higher clause as well; otherwise the sentence is ungrammatical (Dahlstrom 1993).

(16)

Fox (Mesquakie) (Anderson forthcoming)

nekehke:nemekwa ni:na e:h=pwa:wi-ke:ko:hi-ašenoniki
[1-‘know’-INV-3(>1)/i.i.] [1.TOP] [AOR=‘not’-‘anything’-‘disappear’-
inan.obv./AOR]

‘he knows as for me nothing is missing’

but **kehke:netamwa ni:na e:h=pwa:wi-ke:ko:hi-ašenoniki*
[‘know’-inan-3/i.i.]

Note also the interaction of embedded topics and copying-to-OBJ in Kipsigis mentioned in 2.2 above.

3.2. Blackfoot. Blackfoot is an Algonquian language spoken in the western parts of the US and Canada by around 9,000 people, or about 60% of the Blackfoot population. Unlike Fox (Mesquakie), Blackfoot is highly divergent within the family, exhibiting great phonological innovations and morphological re-

organizations in comparison to reconstructed Proto-Algonquian and such attested languages as Fox, Cree, or Ojibwa. However, despite the obvious differences between Blackfoot and the more central Algonquian languages, discourse salience also plays a role in the inter-clausal (morpho-)syntax of this language as well. In fact, it was in Blackfoot that the Copying-to-OBJ formations were first described (Frantz 1978).

In terms of the formal mechanisms utilized in the Copying-to-OBJ formations, Blackfoot agrees with Fox in requiring Transitive Animate inflections in the higher clause and multiple indexing of the copied referent. Similar to Kalenjin and Fox, these formations are mostly optional for Blackfoot speakers.⁸

(17)

Blackfoot (Frantz 1978: 90; 92)

nítsíksstatawa noxkówa máxka'po'takssi
[1-'want'[TA]-DIR-3] [1-'son'-3] [3-'might'-'work'-conj.]

'I want my son to work'

kítsíksstato káxkso'kaassi
[2-'want'[TA]-DIR(-1)] [2-'might'-'be.strong'-conj.]

'I want you to be strong'

Also like Fox and Kipsigis, not only lower clause SUBJ but lower clause OBJ can be copied into the higher clause in Blackfoot.

(18)

Blackfoot (Frantz 1978: 99)

kit-aíksim'sstat-o k'áxk-oxk-awaayáki-ook-oo-xsi
[2-'think'-DIR(-1)] [2-'might'-'just'-'hit'-INV-X-conj]

'I'm thinking you might get hit'

Copying-to-OBJ formations are found in other Algonquian languages as well, e.g. Plains Cree (Dahlstrom 1991: 67, 72) *nikiske:yima:w e:=no:hte-sipwe:htet* [1-'know'-DIR-(1>3)] [AOR='want'-'leave'-3/conj] 'I know that he wants to leave' and *ka:=wa:pama:t e:h=kito:we:hkwa:miyit* [AOR='see'-3>obv] [AOR='snore'-obv/conj] 'he_i saw that he_j was asleep and snoring',⁹ or Mille Lacs Ojibwa (Nichols 1980: 227) *ninantawenimik ci-maacaayaan* [1-'want'-INV] [PV-'leave'-1/conj] 'he wants me to go'.

4. Summary. The various copying processes examined in the Kalenjin and Algonquian languages above are motivated on the functional level of discourse salience. These are generally optional formations available to the speakers of particular head-marking languages to utilize the morphosyntactic machinery of the

language to maximize the indexing of highly salient referents in complex sentences. These formations copy these highly salient referents from the lower clause and index them in the verb form of the higher clause.¹⁰ Given that patients and syntactic direct objects in general disfavor animate reference (Silverstein 1976; Croft 1990), this type of referent indexing is unexpected. However, the copying processes operative in Kalenjin and Algonquian clearly demonstrate that in inter-clausal syntax, referent indexing may be motivated not only by semantic and structural relations, but by considerations of discourse salience as well.

Notes

* The following abbreviations are used in the interlinear glosses throughout this paper:

anim	animate	AOR	aorist	COMP	complement(izer)
CONDIT	conditional	conj	conjunctive	DIR	direct (theme sign)
EMPH	emphatic	FUT	future	INV	inverse (theme sign)
inan	inanimate	>	acting on	i. i.	independent indicative
OBJ	object	obv	obviative	PL	plural
prox	proximate	PV	preverb	Rdpl	reduplication
RFLXV	reflexive	sg	singular	TA	transitive animate
TOP	topic(alized)	X	unspecified	0	inanimate
1	first person	2	second person	3	third person

1 The sub-grouping of Nilo-Saharan is far from agreed upon, cf. for example the differing theories discussed in Bender (1996). In addition to Nandi and Kipsigis, Kalenjin includes the Keyo (Elgeyo), Kony (Elgon), Marakwet (Markweta), Päkot (Pokot), Sabiny (Sebei, Sabaot), Terik (Nyang'ori) and Tusen languages as well; see Tucker and Bryan (1964) for one possible subgrouping of these languages. The South Nilotic (Rottland 1982) group of languages consists of the Kalenjin cluster, the (nearly) extinct Omotik, and the Datooga of Tanzania. Other Nilotic languages include Dholuo (West Nilotic) and Karimojong (East Nilotic, cf. Vossen 1982).

2 A somewhat contrived, extreme example of this is given in Creider (1989: 40) as the untranslated *ki:-ma:-ko-kas-ta-č'in-i*: [DIST.PAST-NEG-PERF-'hear'-TLOC-DAT-PERFV].

3 Similar examples of so-called 'Super-Raising' have apparently been reported in Japanese among other languages (H. Koopman p.c. 1997). Also, various Bantu languages and Moroccan Arabic dialects are said to exhibit phenomena reminiscent of Kalenjin copying processes as well (J. Bresnan p.c. 1997, based on data discussed in dissertations by Carolyn Harford Perez (1985-Wisconsin) and Janet Wager (1983-MIT)).

4 Most of the data from this section has appeared previously in Anderson (1995, 1997).

5 For example this is obvious also in 'Tough'-Movement type formations in Fox (Dahlstrom 1996-ms). Because of this it is impossible to tell whether Copying-to-OBJ has occurred when there is an inanimate referent in the lower clause. Note, however, that inanimate nouns rarely exhibit high degrees of discourse salience in Fox, see Anderson (1997).

6 Generally, when the SUBJs of the two clauses are co-referential.

7 Note that two separate Copying-to-OBJ processes have occurred in this Fox sentence.

8 According to Frantz (1991), for some speakers of Blackfoot, Copying-to-OBJ has become obligatory with the higher verb 'want'.

9 Dahlstrom (1991:70) remarks that for some speakers of Plains Cree, Copying-to-Object formations differ from the corresponding constructions without Copying-to-OBJ by means of a quasi-evidential interpretation.

10 Sometimes the sentences also exhibit an optional 'raising' or movement of an overt pronominal into the verb phrase in the case of Kalenjin.

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