Grammatical morphemes of the Ndogo Verb phrase

1. Introduction

1.1 Ndogo

- spoken in western South Sudan
- 48,000 speakers (Ethnologue 2017)
- Niger-Congo > Ubangi > Ndogoic (Güldemann 2018:222-223)
- closest relatives **Sere**, Tagbu, Bai, **Viri**
- grammars by Ribero (1922) and Santandrea (1961)
- orthography codified by SIL. grammatical morphemes always written apart.

1.2 Corpus

- five stories from Santandrea's (1980) ethnological text collection 1638 tokens
- two stories from Tucker's fieldnotes 1414 tokens
- one story from Bungulu & Davies (not published) 489 tokens
- combined: 3541 tokens

2. Sentence Structure

default sentence:

Framesetter – Subject – TAM-Slot – [Verb (– Obj)]ⁿ – clause final Slot

(1) bindi de gi co ti ŋgele gi then monkey COME pass on hurry PFV "Then the monkey ran away." (Tucker unpubl.:301)

passive sentence:

Framesetter – a – TAM-Slot – [Verb – (Obj-)] n – clause final Slot

(2) a zì yí gi ID kill 3S PFV

"he was killed" (Santandrea 1980:885)

2. preverbal TAM-marker

2.1 ma

- 112 occurences
- **Conditional**: marking the verb and its clause as temporally/causally before another clause -> protasis
- only semantically dependent, not embedded
- (3) tiri ma gí di ti nda de nda de ma spider COND COME arrive at PL monkey PL monkey QUOT

 When Tiri arrived at the monkeys, the monkeys said: ... (Tucker unpubl.:304)
- chaining of conditional clauses possible (up to 4 in my corpus)
- (4) 6í dù ma ná ya, **INDEF** person COND shoot elephant, nda ka-o koni ma (y)í ti, PLcompanion-3S.POSS COND help 3S on, ndu zì ma i gi, 3PL COND kill thing PFV, yi **ma** Сé gurusu gbí tì-ya, 3S COND find money in tooth-elephant, ji yi ba nje nda ka no mo [...] 3S FUT share to PL companion DEM.POSS of.3S.POSS "If one shot an-elephant, if his companions helped him (about), if they killed it, if he found money for the-tusk(s), he will divide (it) among those friends of his [...]" (Santandrea 1980:855-856)

Comparison: Viri

- Viri does not have a cognate or corresponding marker
- Santandrea (1961) describes wa with the same function. Not found in corpus

Comparison: Sere

two occurences of ma in the same construction, confirming Santandrea's (1961) claim for Sere

2.2 ba

2.2.1 Infinitive/Nominalized

- 61 occurences
- as complement
- (5) рá yá taco ba yú-có gbí có а ηο ID game because INF know seek truth-word in word "pá yá is done to know the-truth about a case" (Santandrea 1980:901)
- as object
- (6) wo tala ba gi dò go nindi no gi
 2S try INF COME climb like self DEM.PROX PFV
 "you try to climb as he has done" (Santandrea 1980:886)
- as subject
- (7) **bà** dê có giì kpò kìyà gî

 INF say word COME defeat hartebeest PFV
 "Hartebeest was speechless." (Davies & Bungulu unpubl.)
- as possessor/possessee
- (8) kìyà giì zeke ŋa bà o lú kpòò
 hartebeest COME look.at kind INF jump frog for.a.while
 "Hartebeest watched Frog's way of jumping for a while" (Davies & Bungulu unpubl.)

Comparison: Sere

- 4 occurences of *ba* in the same construction (confirming Santandrea)

Comparison: Viri

- 1 occurence of INF ba

2.2.2 Future

- 26 occurences
- same form, but future meaning
- different syntax, not nominalizing clause (not dependent)
- (9) wò bà di kà ta o ngàyi
 2S FUT arrive there TEMP time which
 "When will you arrive there?" (Davies & Bungulu unpubl.)
- (10) go eno ndu **ba** pá yá taco ba để yu-có gbí oko like so 3PL FUT seek game because INF find truth-word inside between "and so they will "seek game" to find out the truth" (Santandrea 1980:885)
- Agent argument expressed as Subject in Future, in infinitive expressed as possessor or not at all
- (11)ma bia ba je nda nambe-lo ji wo 2S COND refuse INF take/give PL relative-2S.POSS to.3S gi tí me-gbolo wo ba yuku 2S FUT COME fat on ADV-big bindi wo gi cì gi 2S COME die **PFV** "If you refuse to give your-relatives to-him, you will become fat very-much; after you will die." (Santandrea 1980:886)
- future marking seems not obligatory

Comparison: Sere

- Santandrea's Future marker: na. In the corpus 2 appearances

Comparison: Viri

- Santandrea describes *ka* as future marker. In the corpus 2 appearances

2.3 ku

- 31 occurences
- progressive/continuous meaning
- (12) dele yi **ku** nyii ηgi tai doηga furthermore 3S PROG grind sesame inside kitchen "After that, he was pounding sesame in the kitchen" (Tucker unpubl.:293)
- can cooccur with conditional
- (13) *ndu ma* **ku** *gogo uwo piperi keji*3PL COND PROG fight.REDUP hot wind come
 "When they were fighting, hot wind came." (Tucker unpubl.:294)
- *ku* can appear as a full verb, as locative predication
- (14) koɗu **ku** gbí nda ɗako koɗu be.LOC inside PL man "koɗu is-found in men" (Santandrea 1980:884)

Comparison: Sere and Viri

- correllate in construction and function, but not form: *ti* (+ V.RED)
- appears 100 times (Sere) / 98 times (Viri)
- possibly cognate to Nd. ti "on"

2.4 gi "come"

- 98 occurences
- as ventive/andative?
- (15)dè gi tendi to ta ŋgelé ia ú tiri mè-kuro gi COME return REFL with hurry go wait spider ADV-in.front PFV "Monkey returned with running to go to wait (for) Tiri in front." (Tucker unpubl.:300)
- as narrative?
- glossed as NARR by Davies, Tucker also describes it as appearing in narrative contexts
- "As in many other Sudanic languages, we find the verb COME occasionally employed instead of the conjunction AND" (Santandrea 1961:115)
- (16)bindi ndu gi dé vere ji nda nambe-lo ma(a) wo giri gi after 3PL COME say lie PLrelative-2S.POSS OUOT 2S lose PFV to "After, they tell a-lie to your relatives, saying: you got lost." (Santandrea 1980:855)
- (17) ndu **gí** nje ndí-ndu daági
 3PL COME separate REFL-3PL completely
 "They scattered all." (Tucker unpubl.:302)
- all available texts are narrative. appearance in quoted speech: only 2
- (18)yi má(a) adi ka dè-có jo wo gi dи we 3S OUOT to.2S 2S who there say-word COME dig QM "he says: who told you, you dig?" (Santandrea 1980:867)
- (19) wo ma yo **gi** pa a nò
 2S QUOT 2PL COME seek ? animal
 "you say: you came to-seek game" (Santandrea 1980:867)
- can occur between ba or ma and verb
- grammaticalization status unclear

3. clause-final markers

3.1 gi

- 95 occurences
- conveys a perfective/completive meaning, even if the verb is a change-of-state
- (20) *bi* o gbaanje tiri di co no gi
 other time one spider hear word DEM.PROX PFV
 "One day Tiri heard of this issue." (Tucker unpubl.:292)
- can occur with ba and ma
- (21) dele **ba** cì **gi**also FUT die PFV
 "she, too, will die." (Santandrea 1980:886)
- (22) yé má to gi
 dawn COND dawn PFV
 "when dawn arises." (Santandrea 1980:868)
- For Santandrea (1961:102) *gi* is the past-marker, but together with *ba* in an "emphatic future tense". It can be dropped if the verb is followed by an object or an adverb, but that is considered "bad language"
- In Davies glossed as completive, here appearing much less frequent

Comparison: Sere

- no corresponding marker

Comparison: Viri

- Corresponding in function and construction: *ki*. In the corpus 14 appearances

3.2 la

- 51 occurences
- negative marker
- (23) wo ma je nambe-lo ji yí vi zì ndu zò la
 2S COND give relative-2S.POSS to.3S 3S SEQU kill 3PL eat NEG
 "if you do not give your relatives to-him, so-that he may kill them (and) eat, ..."
 (Santandrea 1980:886)

Comparison: Sere

like in Ndogo: *la*. In the corpus 15 appearances

Comparison: Viri

- like in Ndogo: *la*. In the corpus 4 appearances
- Corresponding in function and construction: *gbá*. In the corpus 14 appearances
- distribution unclear

3.3 we

- question marker
- not restricted at all
- (24) yo dé nda nò la we
 2PL find PL animal NEG QM
 "you do not find game?" (Santandrea 1980:867)

4. Paradigmaticity

- ma and ba do not occur in the same clause. the meanings of conditional and future are mutally exclusive
- *ku* only cooccurs with *ma*, but likely due to low count.
- clause-final *gi* seems to be in a paradigmatic relation with *la* NEG, even though their reported meanings do not contradict intuitively.

	la	gi (final	gi (preV)	ku	ba (INF)	ba (FUT)	ma
ma 112							
ba (FUT) 26							
ba (INF) 61							
ku 31							
gi (preV) 98							
gi (final) 95							
la 51							

- **Slot 1**: originally dependency related? Finite + *ba* grammaticalized to Future
- Slot 2: grammaticalized (?) serial verbs with more or less abstract meaning
- phrase final slot(?): aspectual? polarity?

References

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PROG: 10 + 10 + 11

ba: 22 + 29 + 16 + 1 + 3 + 16

ma:30+76+6

gipre: 35 + 29 + 34

PFV:43 + 45 + 7

NEG:17 + 27 + 7