#### **Complementation strategies in Ruuli (Bantu)**

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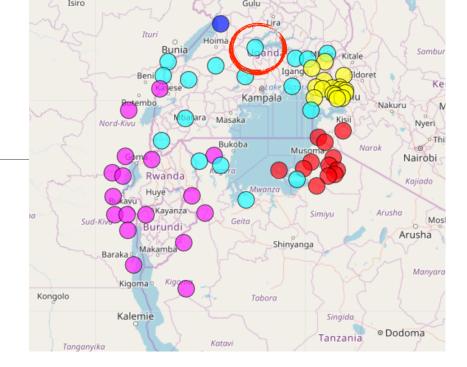
## Talk outline

- The Ruuli language and its speakers
- Complementation: some terminology
- Goals and research questions
- The corpus and annotation
- Complementation strategies in Ruuli and causes of variation

• The article draft is available on request

# The language and its speakers

- Ruuli (ISO 639-3: ruc)
- Two closely related varieties
- Other names: Luruuli/Lunyara, Luduuli, ...
- Great Lakes Bantu (Narrow Bantu, Niger-Congo) group of languages
- Previously underscribed
- Mainly in Nakasongola and Kayunga districts of central Uganda
- Up to 190,000 speakers



# The language and its speakers



• Since January 2017:

A comprehensive bilingual talking Luruuli/Lunyara-English dictionary with descriptive basic grammar for language revitalisation and enhancement of mother-tongue based education

- funding: Knowledge for Tomorrow Postdoctoral Fellowships in the Humanities in Sub Saharan Africa and North Africa (Volkswagen Foundation, 2017–2020, PI Saudah Namyalo)
- a corpus of over 200,000 words, primarily naturalistic dialogues

## **Morphosyntactic profile**

- Primarily SVO with a lot of variation
- Synthetic verbal inflectional morphology: Seven prefix slots, five suffix slots
- Obligatory subject indexing (person, number, nominal class)
- Differential object indexing
- For phonotactic reasons verb stems are often followed by the so called *final vowel* (FV) *-a*, unless there is a vowel-final suffix (not glossed later)
  - a) nje n-li-a nkodole.
    1sg 1sgS-eat-FV francolin(9)
    'I eat a francolin.'
  - b) Naye nje eisumu n-a-li-zw-ire=ku
     but 1sg spear(5) 1sgS-PST-5O-abandon-PFV=17.LOC
     'But I abandoned the spear.'

# **Complementation: some terminology**

- Syntactic definition: "certain verbs can take a clause, instead of an NP, as a core argument. This is called a complement clause." (Dixon 2006)
- **Semantic** definitions:

A biclausal syntactic constructions in which "a *notional* sentence or predication is an argument of a predicate" (Noonan 1985: 52)

"Complement relations link *two SoAs* such that one of them (the main one) entails that another one (the dependent one) is referred to" (Cristofaro 2003: 95)

→ complement clauses proper vs. complementation strategies (i.e. not complement clauses, Dixon 1995, 2006)

# **Complementation:** some terminology

- In this study *complementation strategies* is used in the semantic sense and includes both complement clauses proper and other constructions
- similar to *functional domain of complementation* in Deutscher (2000)
- similar to *complementation pattern* in Schmidtke-Bode (2014)

#### **Research questions**

- What complementation strategies are available in Ruuli?
- Do individual complement taking predicates (CTPs)/groups of CTPs have a preference for a specific strategy?
- Which semantic and structural conditions determine this preference?
- If a complement taking predicate can be used with several strategies, what determines their distribution?

#### The corpus and annotation

- A sample of over 1500 complement clauses annotated for
  - complement-taking predicate and its type
  - the form of the verb in the complement clause: finite indicative or subjunctive vs. infinitive
  - the presence of the complementizer: *nti, nga,* others
  - direct or indirect speech
  - coreference of arguments in the two clauses: same subject vs. different subject
  - illocutionary force (with utterance predicates)
  - proposition vs. state-of-affairs distinction
  - polarity of the two clauses

### **Research questions**

• What complementation strategies are available in Ruuli? (focus on object complementation only)

#### **Complement strategies in Ruuli: An overview**

- Main complement types (based on the verb form):
  - infinitive complements (o)ku- 'INF'
  - indicative complements -a 'FV' (not in the gloss) or -ire 'PFV'
  - subjunctive complements -e 'SUBJ'

#### • Complementizers

- nti
- nga
- oba
- **Position:** Object complements almost always follow the complement-taking predicate, but it is possible to let complement clauses precede or surround the verb.

### **Infinitive complements**

- Marked by the class 15 prefix *ku* and often the respective augment prefix *o*-.
- INF do not show subject indexing and do not take TAM marking
- S/A argument cannot be expressed overtly, P argument is ok:
  - a) Tu-tandik-ire [ku-lia bisolo bya bajungu].
     1plS-start-PFVINF-eat animal(8) 8.GEN European(2)
     "We have started to eat animals of Europeans (i.e. pigs)."

#### Indicative and subjunctive complement clauses

• The **indicative** obligatorily indexes S/A and optionally P arguments

Same TAM-marking as in the independent clause

b) N-lowooza [ba-ku-funa=mu kidooli].
 1sgS-think 3plS-PROG-get=LOC little
 'I think they benefit little.'

#### Indicative and subjunctive complement clauses

- The subjunctive is marked by the suffix -e, which replaces the final vowel -a of IND
   No other TAM-marking
  - c) Omwana tu-ku-taka [a-kul-e].
    child(1) 1plS-PROG-want 3sgS-grow.up-SUBJ
    'We want the child to grow up (while it is calm).'
- The form and the function (hortative, optative, modal meaning) of this suffix are similar to the cognate ones in closely related Great Lakes Bantu languages (Nurse & Muzale 1999)

#### Indicative complement, complementizer nti

- The most common complementizer *nti* optionally introduces indicative complements, but never subjunctives or infinitives
  - d) *Ti-n-ku-loleera* [*nti a-li=wo* NEG-1sgS-PROG-see COMP 3sgS-be=16.LOC

ekintue-ki-yinza[oku-bbaaki-zibu ]].thing(7)REL-7S-mayINF-be7-difficult'I don't see that there is something which may be difficult.'

#### Indicative complement, complementizer nti

• The form *nti* is also used as a quotative marker to introduce direct report without any complement taking predicates:

a) <b>Nti</b>	"Bugerere".	b)	Nti	"Mu	Banyala?"
QUOT	Bugerere		QUOT	18.LOC	Banyala
(I say) "Bugere."			'(They ask) "From Banyala?"'		
c) <i>Nti</i>	"Yee!"				
QUOT	yes				

- (I say) "Yes!"'
- *Nti* is used both with indirect reported speech and with various CTPs that do not necessarily report speech

 $\rightarrow$  another example of an item where the distinction between a quotative and a complementizer is blurred (see Güldemann 2008)

#### **Complementizers** oba

- Less frequent complementizers *oba* 'whether' and *nga* 'when, while', other marginal complementizers, e.g. *ati*
- *oba* 'whether' with IND complements expresses doubt/uncertainty towards the proposition
  - e) *Ti-maite* [*oba ki-kola*]. NEG.1SSG-know **COMP**7S-work 'I don't know whether it works.'
- *oba* is otherwise used with the meaning 'or' to coordinate two noun phrases, verbs, and other units of the same type

#### **Complementizers** nga

- Less frequent complementizers *oba* 'whether' and *nga* 'when, while', other marginal complementizers, e.g. *ati*
- nga marks complements expressing direct perception (possibly other functions), also used as a conjunction 'when, while'
  - f) *M-puura* [empewo nga e-ku-nya-kala-ku].
     1sgS-hear 9.wind COMP 9S-PROG-1sgO-pass-LOC
     'I hear the wind passing over me.'

#### **Goals and research questions**

✓ What complementation strategies are available in Ruuli?

• Do certain complement taking predicates have a preference for a specific strategy?

#### **Complement taking predicates**

- over 60 complement-taking predicates recur in the sample of 1500 complement constructions we annotated
- further complement-taking predicates were identified in the lexicon of Ruuli (10,000 items, Namyalo et al. in progress) and in elicitations, they are not included into this study
- CPTs were first grouped into 7 classes for convenience: modals, phasals, desideratives, knowledge, prop.attitude, utterance and perception predicates
- the most frequent CTPs: okukoba 'say, tell' (utterance), okutandika 'start' (phasal), okubona 'see' (perception), okwendya 'like, need, want' (desiderative, modal), ...

#### 1.00 Strategy SUBJ 0.75 -IND IND+nti proportion IND+nga 0.50 IND+oba direct report direct report+nti 0.25 -INF (NP+)REL 0.00 modal phasal' desiderative propos.attitude knowledge utterance perception Total of 1123 tokens of Predicate class

#### **Complementation strategies: frequent classes**

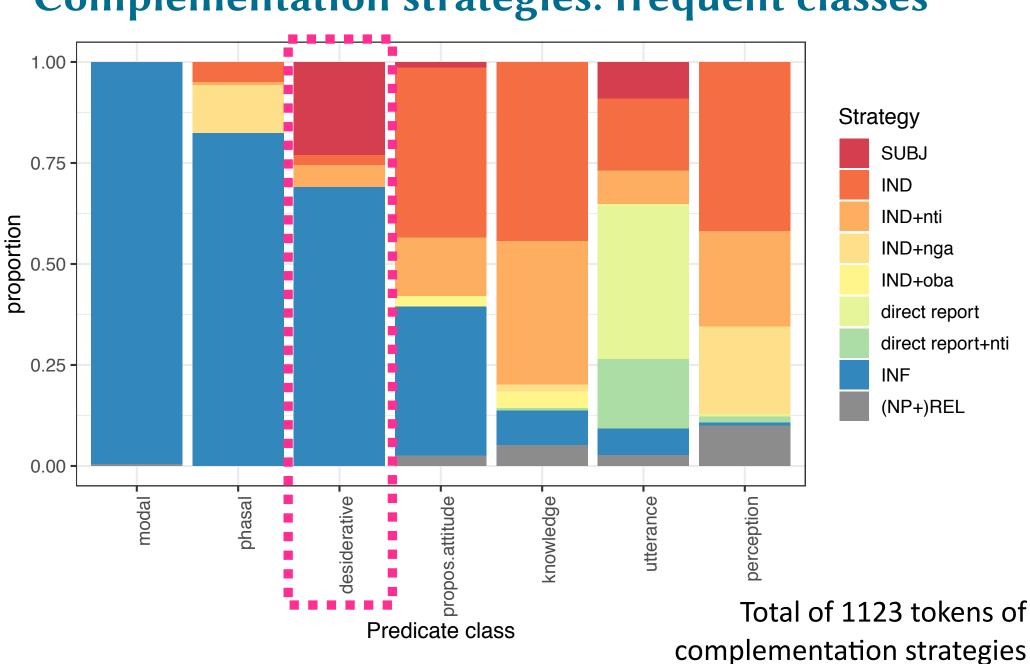
complementation strategies

#### **Goals and research questions**

- Do certain complement taking predicates have a preference for a specific strategy?
  - Some predicate classes (modals and phasals) are rather homogenous, whereas other show a lot of variation
  - The infinitive is the most widely used construction, but its frequency varies between predicate classes

#### **Goals and research questions**

- ✓ What complementation strategies are available in Ruuli?
- ✓ Do certain complement taking predicates have a preference for a specific strategy?
- Which semantic and structural conditions determine this preference?
- If a complement taking predicate can be used with several strategies, what determines their distribution?

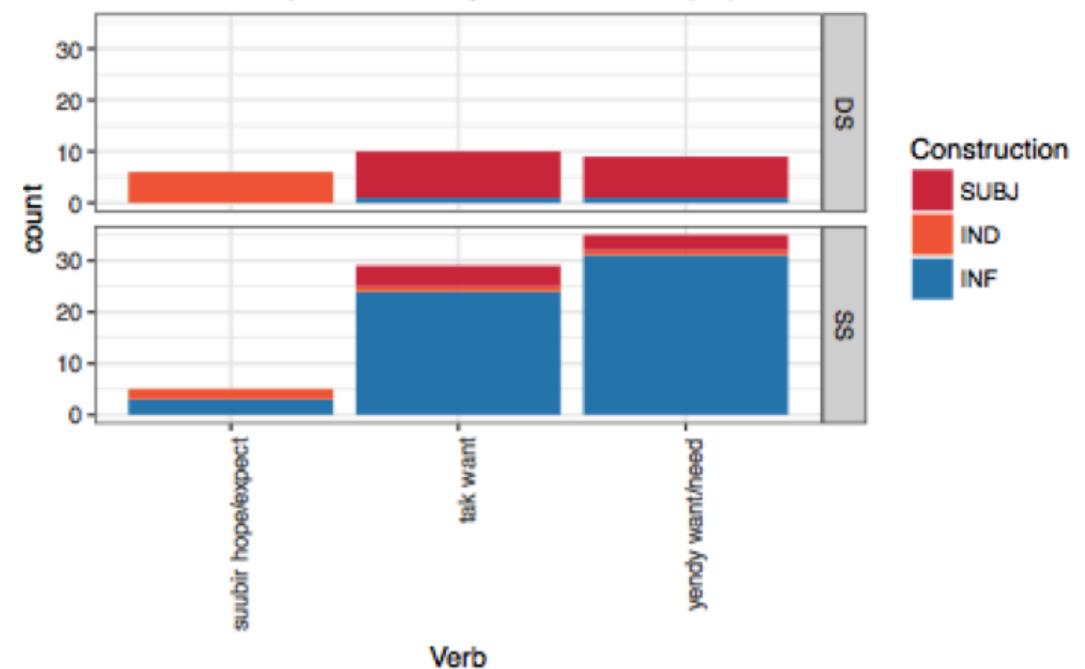


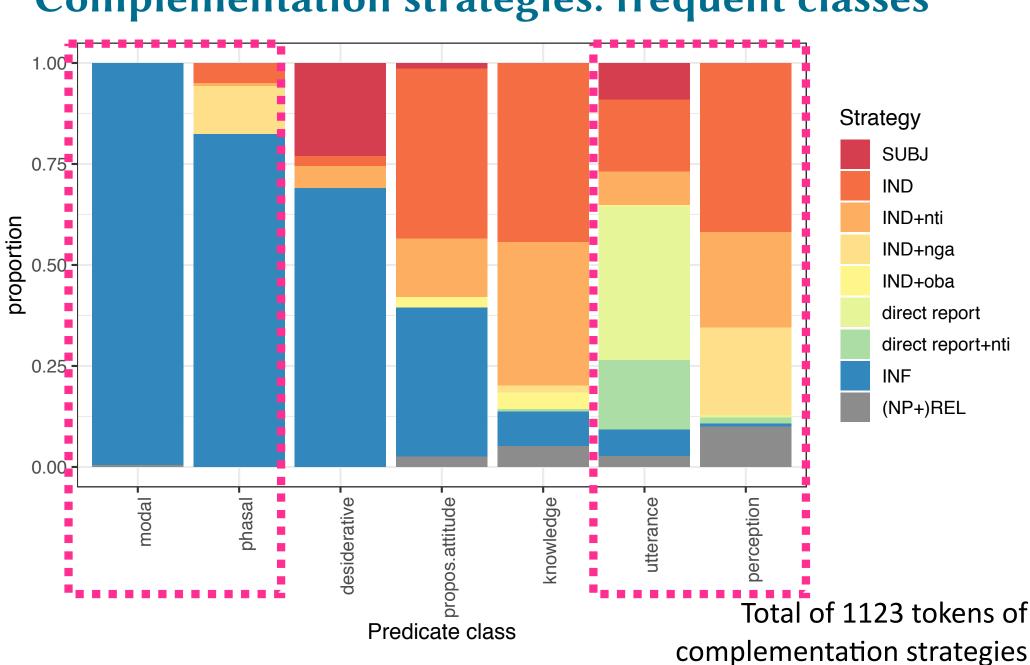
#### **Complementation strategies: frequent classes**

### The subjunctive

- Desideratives are most often used with INF and SUBJ
- The (not) sharing of participants between matrix and complement clauses matters
- Same subject a) *Tu-ku-taka* [*ku-ki-yindula*]. 1plS-PROG-want INF-7O-change 'We want to change it.'
- Different subject
  - b) Tu-ku-taka [mu-ta-e=wo elesoni...].
     1pIS-PROG-want 2pIS-introduce-SUBJ-LOClesson(9)
     'We want you to introduce a lesson.'

#### Desiderative predicates by construction (all)





#### **Complementation strategies: frequent classes**

# **Causes of variation: State-of-affairs and propositions**

- Which semantic and structural conditions determine this preference?
- A hypothesis: the contrast between states-of-affairs and proposition might play a role in the choice of complementation strategies (cf. Lyons1977; Hengeveld 1990; Dik and Hengeveld 1991; Cristofaro 2003; Boye 2012)
  - **states-of-affairs**/actions/events,
    - i.e. non-truth valued meaning units

VS.

- **propositions**, i.e. truth valued meaning units

## **Causes of variation: State-of-affairs and propositions**

- Complement contrasts (Boye 2012: 188-194; Boye & Kehayov 2016):
- a. I know [(that) he was writing a letter]. → proposition
   b. I know [how to write a letter]. → state-of-affairs
- 2. a. *I told her* [(that) he was writing a letter]. → proposition
  b. *I told her* [to write a letter]. → state-of-affairs
- 3. a. *I saw* [(that) he was writing a letter]. → proposition
  b. *I saw* [him write a letter]. → state-of-affairs

#### **Utterance predicates**

•Reported assertion (proposition) with indicative complement

- a) *o-a-kobere* [*nti byona oKanca niye a-li aiguru*]
   2sgS-PST-say **COMP** 8.all 1.god COP.1 3sgS-be above
   'You said that it is God that is above everything.'
- Reported directive (state-of-affairs) with subjunctive or infinitive complement
  - b) tu-a-a-mu-kob-ire [a-tu-weery-e=yo omusaayi]
    1plS-PST-3sgO-say-PFV 3sgS-1plO-give-SUBJ-LOC 3.blood
    'We told him to give us some blood.'

# **Perception predicates**

- Indirect perception/acquisition of knowledge (proposition) with IND
  - a) *m-puura [a-zwamu alubaawo]* 1sgS-hear3sgS-produce 11.timber
     'I hear it produces timber.'
- Direct perception (state-of-affairs) with nga-complement
  - b) *m-puura [empewo nga e-ku-n-yakala=ku]*1sgS-hear9.wind COMP 9S-PROG-1sgO-pass=LOC
    'I hear the wind passing over me.'

#### **Further generalizations**

• The absence or presence of the complementizer *nti* with indicative complements does not appear to be correlated with any semantic contrast, nor does *nti* disambiguate direct reported speech from indirect reported speech

#### Conclusions

- Complement taking predicates vary as to which complementation strategies they can be combined with
- Variation with some classes can be explained by the difference between state-of-affairs vs. propositions and by the contrast between same-subject/different-subject constructions

## Conclusions

- IND complements (optionally with *nti* and *oba*) occur in constructions where the complement is arguably **propositional**.
- INF and SUBJ generally express states-of-affairs: Non-epistemic modals as well as phasals, desideratives and directive utterance-predicates, which have been related to stateof-affairs, occur with INF and/or SUBJ and do not occur with complementizers.
- No one complement type appears to be completely polyfunctional between the two readings as is the case in some languages

(Boye 2010).

 On the other hand, there is tendency for complement-taking predicates to be polyfunctional and take more than one type of complement.

# Thank you!