

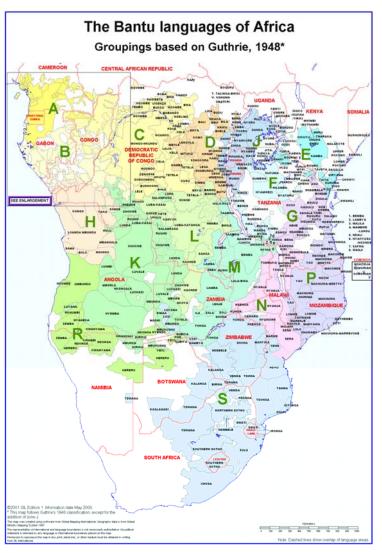


# WHY RELATIVE VERBS AGREE WITH THEIR HEAD NOUN IN MANY BANTU LANGUAGES

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- 550 languoids (Glottolog.org)
- referential classification: "Guthrie numbers"
- rich morphology
- great for the diachronic study of syntax
- this talk: provide a historical explanation for a typologically unusual phenomenon involving agreement in relative clause constructions





In many Bantu languages, the same verbal morpheme (called *Initial*) is used to index the subject of the verb in non-relative verbs and to index the head noun of the relative clause in relative verb forms,

a situation "in need of explanation" (e.g. Henderson 2007).





- (1) Luvale; K14; Angola, Zambia (Horton 1949: 21, 177)
- a. mu-tu w-a-mwangana a-mbata-nga ci-teli (...)
   1-person PP<sub>1</sub>-CON-chief IN<sub>1</sub>.PST-carry-PST 7-load
   'The chief's person carried the load.'
- b. vi-ze [mw-a-va-han-a mw-ata va-kw-etu]

  8-DEM FUT-IN<sub>1</sub>-OM<sub>2</sub>-give-FV 1-master PP<sub>2</sub>-PP<sub>15</sub>-1PL.POSS

  'those (things) which the master will give to our fellows'





- (2) Orungu; B11; Gabon (Van de Velde & Ambouroue 2017)
- a. ó⁴ŋwánt àgòlín ó⁴g ábà

ó⁺ŋw-ántò à-à-gòl-in-î

ó-gà á-bà

1-woman IN<sub>1</sub>-RPST-buy-APPL-RPST 1-chief 6-mango

'The woman bought the mangoes for the chief.'

b. ábà [mágòlìn ó¹ŋwánt ¹ógà]

á-bà má-à-gòl-in-ì

ó⁺ŋw-ántò ó-gà

6-mango IN<sub>6</sub>-REL.RPST-buy-APPL-RPST 1-woman 1-chief

'the mangoes [that the woman bought for the chief]'





Simplified slot-filler model of Proto-Bantu verb structure (Meeussen 1967)

$$\frac{\text{PreIN} + \text{IN} + \text{PostIN} + \text{TA} + [\text{OM} + [[\text{root} + \text{ext}] + \text{FIN}]] + \text{postFIN}}{(1)}$$

$$(1) \quad (1) \quad (n) \quad (n) \quad 1 \quad (n) \quad 1 \quad (1)$$

IN = Initial morpheme also glossed as SM (subject marker)





The diachronic scenario that leads to agreement of a relative verb with its head noun consists of three simple steps:

- 1) Emergence of a relativiser of demonstrative origin, agreeing with the head noun;
- 2) Morphological integration of the relativiser into the relative verb as a Pre-initial;
- 3) Formal reduction of the Pre-initial Initial sequence





### Evidence for this scenario:

- 1) correlation between the paradigm of agreement markers used in Initial position and the type of agreement;
- 2) every step is attested;
- 3) many other aspects of relative clause structure are explained, including:
  - 1) correlations between word order and type of agreement;
  - 2) absence of 1<sup>st</sup> and 2<sup>nd</sup> person agreement markers



#### PARADIGM OF AGREEMENT MARKERS



The Initial can be a occupied by a Verbal Prefix (VP) or by a Pronominal Prefix (PP) in relative verb forms (cf. Meinhof 1948)

The Proto-Bantu noun class system as reconstructed by Meeussen (1967: 97)

|    | NP  | EP        | PP  | VP     | OP  |
|----|-----|-----------|-----|--------|-----|
| 1  | mò- | (ò?)      | jò- | ó-, á- | mò- |
| 2  | bà- | bá-       | bá- | bá-    | bá- |
| 3  | mò- | (ó?)      | gó- | gó-    | gó- |
| 4  | mè- | (é-?)     | gé- | gé-    | gé- |
| 5  | ì-  | dé-       | dé- | dé-    | dé- |
| 6  | mà- | (á-?)     | gá- | gá-    | gá- |
| 7  | kè- | ké-       | ké- | ké-    | ké- |
| 8  | bì- | bí-       | bí- | bí-    | bí- |
| 9  | n-  | (è-)      | jè- | jé-    | jé- |
| 10 | n-  | <b>1-</b> | jí- | jí-    | jí- |
| 11 | dò- | dó-       | dó- | dó-    | dó- |

. . .



#### PARADIGM OF AGREEMENT MARKERS



Nsuka Nkutsi's (1982) comparative work on Bantu relative clauses allowed me to find a correlation between the type of agreement and the paradigm of agreement markers:

IF the relative verb agrees with its subject, THEN the Initial is always a VP

If the relative verb agrees with its head noun, its Initial is often a PP

The "PP" is a reflex of a demonstrative, i.e. of a relative linker.





Step 1: a demonstrative linker appears (perhaps originally a nominalizer)

NP [RelCl]  $\rightarrow$  NP<sub>i</sub> LNK<sub>AGi</sub> [RelCl]







(3) Haya; JE22; Tanzania (Duranti 1977: 121)
e-mótoka éy' ó-mu-sháíja y-a-gúla
AU-9car 9REL.DEM AU-1-man IN<sub>1</sub>-PST1-buy
'the car that the man has bought'





Step 1: a demonstrative linker appears (perhaps originally a nominalizer)

NP [RelCl]

 $\rightarrow$  NP<sub>i</sub> LNK<sub>AGi</sub> [RelCl]

Step 2: if Subj is postverbal, the LNK is integrated into the verb

 $NP_i LNK_{AGi} [RelCl] \rightarrow NP_i [PP_i-VP_j-RelV SUBJ_j...]$ 







- (4) Shona; S10; Zimbabwe (Demuth and Harford 1999)

  Mbatya dza-v-aka-son-era va-kadzi mwenga

  10.clothes REL<sub>10</sub>-VP<sub>2</sub>-PST-sow-APP 2-women bride

  'the clothes which the women sowed for the bride'
- (5) Lega; D25; DRC (cited via Nsuka-Nkutsi 1982)

  mă-zι [ma-tύ-¹kákúbulá]

  'the water [that we will pour]'





Step 1: a demonstrative linker appears (perhaps originally a nominalizer)

NP [RelCl]

 $\rightarrow$  NP<sub>i</sub> LNK<sub>AGi</sub> [RelCl]

Step 2: if Subj is postverbal, the LNK is integrated into the verb

 $NP_i LNK_{AG_i} [RelCl]$   $\rightarrow$   $NP_i [PP_i-VP_i-RelV SUBJ_i...]$ 

Step 3: Initial CV-CV- is reduced to CV-

- If the PP- goes, we end up with well-behaved subject indexation.
- If the VP- goes, we arrive at the pattern that needed explanation.

 $NP_i [PP_i-VP_i-RelV SUBJ_i...] \rightarrow NP_i [PP_i-RelV SUBJ...]$ 





Ongoing reduction of the PP-VP- succession is shown at work in Lunda, where VP- is on its way to being pushed out.

It survived where the VP is 1<sup>st</sup> or 2<sup>nd</sup> person or class 1 (the only VP with a V- shape) and was lost elsewhere.





- (6) Lunda; L52; Zambia, Angola (Kawasha 2003)
  - a. chitwámu chinálanda

chi-twámu chí-ni-a-landa

7-chair REL<sub>7</sub>-IN<sub>1SG</sub>-PST-buy-FV

'the chair that I bought'

b. wúta waténtékelíyi Womba hakadidi

wúta wu-a-a-tentek-el-i-yi Womba ha-kadidi

14.gun REL<sub>14</sub>-IN<sub>1</sub>-PST-put-RP-FV-3SG Womba LOC-bed

'the gun that Womba had put on the bed'





c. kazémba kazátíshilíwu antu

ka-zémba ki-a-zat-ish-il-i-wu

a-ntu

REL<sub>12</sub>-PST-work-CAUS-RP-FV-3PL 2-people 12-axe

'the axe that the people used'







There is a strong tendency that:

IF the relative verb agrees with its head noun in non-subject relatives, THEN its subject is post verbal

Obviously because this is the easiest way in which relativisers can be integrated into the relative verb, and NOT because both are symptoms of some "underlying" property of Bantu relative clauses

By the way, there are a few exceptions, which are easy to explain.





In many (most/all?) Bantu languages in which relative verbs agree with the head noun, they do not allow 1<sup>st</sup> and 2<sup>nd</sup> person agreement markers:

(7) Orungu; B11; Gabon (Van de Velde & Ambouroue 2011)
 myé yî¹kó¹kó nè ŋkòlò
 I IN<sub>9</sub>-am.called CMP Nkolo
 'I, who am called Nkolo'

This is now easy to explain as due to the demonstrative origin of these agreement markers.





# Advantages of this diachronic explanation:

- made up of widely attested, "trivial" changes
- none of which is goal-oriented / claimed to be functionally motivated
- all phases are attested
- the different logically possible outcomes at every juncture in the evolution are also all attested





- Many logically independent aspects of relative clauses are explained:
  - agreement of the Rel verb with head noun
  - the existence of both PP and VP in the Initial slot of Bantu relative verbs
  - the absence of 1<sup>st</sup> and 2<sup>nd</sup> person agreement on relative verbs in many Bantu languages
  - the link between the agreement controller and the position of the subject, and the directionality of this link (IF agreement with head noun THEN usually postverbal subject)