### Inverted Copular Sentences in Bambara

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Introduction

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Bambara (a Niger-Congo language from the Mande family) exhibits a multi-copula system that comprises four copulas:

- **1 ká** is used in predicational sentences:
  - (1)Búuru ká kálan. bread COP warm 'The bread is warm.'
- **b** ε is used in locative and existential sentences:
  - (2)Umu bá bέ só kána. Oumou mother COP house in 'Oumou's mother is in the house.'
  - (3) Cèw bé yèn mùsow fána. man.pl COP there woman.pl also 'There are men but also women.'



## Bambara copular system

- **1 dòn** is used in presentational / identificational sentences
  - (4) M'bá dòn. 1sg.mother COP 'It is my mother.' / 'Here is my mother.'
- 2 yé is used in equative sentences (Pustet 2003, Vydrin 2003)
  - (5)nìn yé námása yé this COP banana COP 'This is a banana.' (Pustet 2003:23)
  - (6)Jékabaarà fúrabulù yé náani yé. Jekabaara leaf COP four COP 'Jekabaara has four pages' (lit. Jekabaara's pages are four)

### Goals of the presentation

Address the syntax and semantics of yé...yé sentences:

- What is the nature of yé...yé copular sentences?
- What are the structural properties of these sentences and what does it tell us about the yé copula?
- What is the grammatical status of the two occurrences of yé?

## Two occurrences of vé

Two occurrences of the 'copula' yé (Pustet 2003)

(7) nìn yé námása yé this COP banana COP 'This is a banana.' (Pustet 2003:23)

## Equative analysis

The apparent symmetry in yé..yé copular sentences has led to the common view that they are equative sentences (Vydrin 2003, 2020, Pustet 2003, a.o.).

We reject this analysis.

### A typology of copular sentences: Higgins (1979)

- i. PREDICATIONAL sentences: express a predication relation between a subject and a predicate
  - (8) John is happy/tall/american. This virus is annoying.
- ii. IDENTIFICATIONAL sentences: express an identification; the subject is usually a deictic expression
  - (9)This is a banana. This is Mr Johnson.

# Higgins' typology (1979)

- iii. SPECIFICATIONAL sentences:
  express a relationship between a 'superscriptional' subject
  phrase (which introduces a variable) and the predicate which
  provides a value for the variable.
  - (10) What I like about him is his tie. What he said is 'no more virus'.
- iv. IDENTITY sentences, also called "equatives" express an identity relationship between two referential expressions
  - (11) Clark Kent is Superman. Superman is Clark Kent.

### Interpretational problem

The meaning of yé...yé sentences is not that of an identity between two referential expressions.

Not a single example in the literature can rightly be qualified as equative/identity:

### Interpretational problem

#### some are identificational sentences:

(12)nìn yé námása yé this vé banana vé 'This is a banana.' (Pustet 2003:23)

#### others are predicational sentences:

- (13)Fanta Kulibali yé muso h'akilima yé fanta kulibali YE woman intelligent YE 'Fanta Kulibali is an intelligent woman' (Vydrin 2003)
- (14)Hawa yé kalanden yé Hawa YE student YE 'Hawa is a student.'

#### Plural

the second term (N2) cannot be pluralized when the first term (N1) is plural: N1 yé N2 yé

- (15)Hawa yé kalanden yé Hawa YE student YE 'Hawa is a student.'
- (16)Né ní Hawa yé kàlànden(\*.w) yé 1sg and Hawa YE student(.pl) YE 'I and Hawa are the students.'

#### Interim conclusion

- $\rightarrow$  yé..yé sentences are not equatives; they do not express an identity relation between two referential expressions
  - N2 is not a referential DP
  - N2 patterns with predicates rather than DPs
  - (verbal and non verbal) predicates are never marked for plural in Bambara.

## *yé1* as a copula

Copulas in Bambara have a positive and a negative form:

(17) ká > mán  $b\epsilon/d\delta n/v\epsilon > t\epsilon$ 

Only the first yé is subject to this change in a **negative context**:

- (18)À nyέkisε **yé** bílènman 3sg eye COP red.Nom-state yé 'His eye is red.'
- Á nyέkisε **tέ** bílènman (19)vé. 3sg eye COP.NEG red.Nom-state yé 'His eye is not red.'
- $\rightarrow$  Issue: what is the nature of yé2?

#### Inversion

yé...yé sentences allow for inversion; cf., Predicate Inversion, Moro (1997)

- (20)né yé kalanden yé 1sg COP student yé 'Lam a student'
- (21)kalanden vé né vé student COP 1sg vé 'The student is me'

N1 yé N2 yé

Topic - Focus structures

N2 vé N1 vé

# yé1 as a copula in inverted sentences

#### $y\acute{e}_{COP}$ remains in a fixed position

- (22) né **té** kalanden yé. 1sg COP-NEG student yé 'I am not a student.'
- (23) kalanden **té** né yé. student COP-NEG 1sg yé 'The student isn't me.'

### Inversion

Inversion

The possibility of inversion is a surprising fact given the (very) strict word-order properties of Bambara:

- (24)S-Part-O-V-(X)
- (25)Fanta bé jége nyímina súgu kána Fanta PROG fish eat market in 'Fanta is eating fish at the market.'

...but it is not so surprising considering the properties of copular sentences cross linguistically.

Inverse copular sentences in syntax and semantics

#### Inversion

Copular inversion is a well-known phenomenon in the literature on copular sentences. This phenomenon has never been described in Bambara.

(26)John is the best candidate. The best candidate is John.

#### Inversion

Moro (1997): canonical and inverse copular sentences are derived from the same underlying small clause (SC):

Topic - Focus structures

- (27)John; is [SC] t; the best candidate = raising of the subject
- (28)The best candidate<sub>i</sub> is [SC] John  $t_i$ = raising of the predicate (Predicate Inversion)

#### NB: inversion is \*not\* Predicate Inversion:

- Inversion, but never of a predicate
- cf. predicational sentences: \*Blue is the table similarly in Bambara: \*Kálan ká búuru lit. warm is bread (1)
- this cannot be a mere accident!

Inverse copular sentences in syntax and semantics

#### Inversion

We accept three types of expressions:

- entities (type e)
- predicates (type et)
- individual concepts (type se); Romero (2005)

Across languages, 'inversable' expressions are individual concepts (English, French, Bambara, Malagasy, Wolof, ...; Roy (in prep.))

(29) A good example is China. My best friend is John. The president of Guinea is Alpha Condé. The captain of the team is John.

### Analyzing inverted copular sentences

Inverted sentences are **specificational sentences** (Higgins 1979; Declerck 1988; Heycock 1994; Mikkelsen 2005, 2006)

- the pre-copular constituent provides a variable (individual concept)
  - (e.g., the best candidate);
  - → the *variable* constitutes shared background information;
  - $\rightarrow$  the subject of a specificational sentence is a Topic
- the post-copular constituent provides a *value* for the variable (e.g., John)
  - $\rightarrow$  the value constitutes new information
  - $\rightarrow$  the post-copular expression is a Focus

Inverse copular sentences in syntax and semantics

## Specificational sentences

Specificational sentences are **Topic-Focus** structures.

- Question-Answer congruence (Halliday 1967; Heycock 1994)
   The constituent in the answer that corresponds to the wh-phrase in the question is the Focus
  - (30) Who is your best friend?A: John is my best friend. (canonical)A': My best friend is John. (inverse)
  - (31) Who is John?A: John is my best friend. (canonical)A': #My best friend is John. (inverse)

Conclusion: In inverse copular sentences the second member is necessarily new information focus.

### **Analysis**

- Hypothesis:
  - Bambara yé..yé sentences are **Topic-Focus** structures, both in the canonical and in the inverse orders.
  - (32)TOPIC yé COP FOCUS yé

### Questions

In English, the two questions (Who is your best friend? and Who is John?) correspond in actuality to four distinct possibilities:

(33) I wonder who John is [who]
I wonder who is John
I wonder who your best friend is [who]
I wonder who is your best friend

Four questions are available in Bambara.

## Bambara questions

#### Bambara is a wh- in-situ language

- (34) **Jón** yé jègè nyími? who PAST fish eat 'Who ate the fish?'
- (35) Cynthia yé **mùn** dùn kúnǔn? cynthia PAST what eat yesterday 'What did Cynthia eat yesterday?'

### Question-Answer test

# $|\mathsf{Q} = \mathsf{N1}$ yé jón yé? | o canonical order

- (36) Moussa yé jón yé? Moussa COP who yé 'Who is Moussa?'
- (37) Moussa yé n'térifari yé. Moussa COP 1sg.best-friend yé 'Moussa is my best friend.' → and \*not\*: N'térifari yé Moussa yé.
- (38) Moussa yé Lajine nyémàa yé.
   Moussa COP Guinea president yé
   'Moussa is the president of Guinea.'
   → and \*not\*: Lajine nyémàa yé Moussa yé.

### Question-Answer test

Q = N2 yé jón yé?  $\rightarrow$  inverse order

- (39)I térifari yé jón yé? 2sg best-friend COP who yé 'Who is your best friend?' (context: I know that you have a best friend, choice from a set of individuals)
- (40)N'térifari yé Moussa yé. 1sg.best-friend COP Moussa yé 'My best friend is Moussa.' → and \*not\*: Moussa yé n'térifari yé.
- (41)Lajine nyémàa vé Moussa vé. Guinea president COP Moussa vé 'The president of Guinea is Moussa.' →and \*not\*: Moussa yé Lajine nyέmàa yé.

#### Conclusion

In  $\alpha$  yé $\alpha$  yé $\alpha$  yé $\beta$  yé sentences

- $\alpha$  constitutes the shared background information;
- $\beta$  constitutes the new information (focus).
  - $\rightarrow$  the constituent that provides new information in the answer is in the same position as the wh-element in the question.

*yé..yé sentences* are **Topic yé**<sub>COP</sub> **Focus yé** structures

### More on Bambara questions

Bambara allows for 2 additional possible questions where *jón* appears in sentence initial position:

$$Q=$$
 Jón yé  $\beta$  yé?

 $\rightarrow$  issue: since Bambara does not have wh-movement, in these cases the wh-expression  $j\acute{s}n$  realizes  $\alpha$ , i.e. the topic, rather than  $\beta$ , the focus.

We will address the two cases separately.

#### Case 1

- Q= Jón yé N2 yé? (42)Jón vé i térifari vé? who COP 2sg best-friend yé 'Who is your best friend?' (context: I don't know if you have a best friend or not. I want to know the existence of a best friend together with his/her identity)
  - In this context the focus is not only on the identity of 'who' but also the existence or not of a best friend.
  - N2 is part of the new information focus.
  - importantly, the answer has to be in canonical order
    - (43)Moussa vé n'térifari yé. Moussa COP 1sg.best-friend yé 'Moussa is my best friend.' → and \*not\*: N'térifari yé Moussa yé.

#### Case 2

(44)Jón yé Moussa yé? who COP Moussa yé 'Who is Moussa?'

Q= Jón vé N1 vé?

- interpretational constraints: Moussa is known by the speaker and the hearer; it is not part of the new information;
- the question conveys an additional depreciative meaning (insult); cf. 'Who does Moussa think he is?'
- again, the answer has to be in canonical order:
  - (45)Moussa vé Lajine nyémàa vé. Moussa COP Guinea president vé 'Moussa is the president of Guinea.' → and \*not\*: Lajine nyémàa yé Moussa yé.



#### Case 2

- This result is not contradictory with our claim that  $\beta$  is new information focus considering the form of the answer (canonical order)
- We would need to explain how the wh-element can appear in sentence initial position given that Bambara does not have wh- movement. This issue concerns the formation of questions and remains open for future research.

#### Conclusion

All *yé...yé* sentences, independently of whether they are in canonical or inverse order, are Topic-Focus structures.

Analysis; following up on Roy and Shlonsky (2019):

- (46) [PredP Moussaj n'térifarij]
- (47) [Moussa<sub>j</sub> SUBJ [ $_{AspP/TP}$  yé [ $_{FocP}$  n'térifari; [ $_{PredP}$  t $_{j}$  t $_{i}$ ]]]]  $\rightarrow$  canonical order
- (48) [n'térifari; SUBJ [ $_{AspP/TP}$  yé [ $_{FocP}$  Moussa; [ $_{PredP}$  t; t;]]]]  $\rightarrow$  inverse order

# Analyzing yé2

What is the nature of the second occurrence of yé?

- we have already discarded the analysis if yé2 as a copula
- common alternative view: yé2 as a postposition (Vydrin 2003, 2020, Dumestre 2003)
- however, no empirical evidence beyond apparent homophony with postposition yé (but homophony within functional items is rampant in Bambara.)
- semantically, we note the absence of similarity between yé2 and the postposition (beneficiary, comitative, instrumental, etc...).

# Analyzing *yé2*

Instead, we propose to analyze  $y \neq 2$ , which accompanies  $\beta$ , precisely as a marker of new information focus. Recall that Bambara is a head final language:

- $[\alpha_i \text{ SUBJ } [A_{SpP/TP} \mathbf{y} \mathbf{\acute{e}}_{COP} [F_{ocP} \beta_i | \mathbf{y} \mathbf{\acute{e}}_{FOC_{new}} | [P_{redP} \mathbf{t}_i \mathbf{t}_i]]]]$ (49)
- Moussa yé<sub>COP</sub> n'térifari yé . (50)N'térifari yé<sub>COP</sub> Moussa yé.

#### Conclusions

- Yé...yé sentences are not equatives; instead they are asymmetrical Topic-Focus structures.
- yé1 is a copula
- yé2 is a marker of new information focus
- Bambara, like many other unrelated languages, has a strategy for forming inversed copular sentences; the same strategy is also used for forming non-predicational sentences in the canonical order.

Thank you! Ábarika! Merci!

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