

The syntax of copular constructions in Mauritian

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Paper Outline:

- ⇒ Definitions/Background Information about the language structure & development of the copula.
- ⇒ Data
- ⇒ Summary of the previous analyses.
- ⇒ Proposed Analysis for MC.
- ⇒ Conclusion.

1 Introduction

1.
 - **Copulas** are words used to indicate the relation between a subject and a predicate nominal or adjective. (Schachter 1985)
 - Is a main verb vs helping verbs Ex: English, French
 - In many languages, the copula is absent in certain constructions. Ex: in some creole languages, AAVE, Russian, Hebrew
2. In Mauritian Creole (MC), the copula, *ete*, is constrained to appear in extraction contexts, *viz.* only in interrogatives, relatives, exclamatives, topicalisations for instance, but never in declaratives.

1.1 Preliminaries

- MC is a French-based Creole and is an SVO language.
- Verbal system - most verbs have a long and a short form.
- Tense, aspect are marked by TAM markers (*ti* 'PST', *pou* 'IRR', *pe* 'PROG', *inn* 'PERF').

1.2 Historical Background

"(...)Le créole en est resté à cette proposition embryonnaire. Le concept de l'existence sans attribut est trop haute pour lui, il ne s'élève jamais jusqu'à ces abstractions. Le verbe substantif, essentiel, le verbe "être" n'existe pas en créole."

((...) Creole has remained at the level of the embryonic proposition. The concept of existence without attribute is way to high for him, he never rises to these abstractions. The substantive verb, which is essential, the verb 'to be' doesn't exist in Creole.)

Baissac 1880, P 32.

1. A form *ete/te* can be found in old texts where it is a tense marker:

(1) Moy napa ete batte ça blanc la. (1779: Chaudenson 1981)

(2) Quequ'fois cabrit moi te manze. (Chrestien 1831)

Contemporary form : *ti-* past marker which appears with verbs except in the cases studied in this presentation vs *ete*, which is a lexical verb (\neq auxiliary).

(3) Kot Zan ti ale?
where John PST go
'Where did John go?'

(4) Kot zan (*ete) ale?

2. According to Baker & Syea 1991 [2], *ete* as a copula is a 19th century innovation.

3. Schachter's Generalization (1985): There is a distinction between *copulas* and *predicators* (and emphasis and existential markers). **Predicators** are used to mark predicate nominals when there is no overt subject.

- MC's *se*: Predicator?

(5) (Se) tifi la ki pa'nn vini.
It girl DEF REL NEG.PERF come
'It is the girl who didn't come.'

(6) a. tifi la (*se) profeser.
girl DEF it teacher
'The girl is a teacher.'

b. tifi la, se enn profeser.
girl DEF it DET teacher
'The girl, she is a teacher.'

4. We thus consider that *se* is a pronoun. A further argument to support this is that it can be negated and can combine with TAM markers.

2 The data

2.1 Verbless copular sentences

MC has an absent copula in declaratives whether the predicate is adjectival, prepositional or nominal, may it be in the past, present or future and whether the predicate is negated or not as exemplified in (7)-(9).

(7) a. Zan (*ete) (enn) profeser.
John COP a teacher
'John is a teacher.'

b. Zan (*ete) dan lakour.
John COP PREP garden
'John is in the garden.'

c. Zan (*ete) malad.
John COP sick
'John is sick.'

(8) a. Zan pa (*ete) (enn) profeser.
John NEG COP (a) teacher
'John is a teacher.'

- b. Zan pa (*ete) dan lakour.
 John NEG COP PREP garden
 'John is in the garden.'
- c. Zan pa (*ete) malad.
 John COP sick
 'John is sick.'
- (9) a. Zan ti (*ete) (enn) profesor.
 John PST COP (a) teacher
 'John is a teacher.'
- b. Zan ti/pu (*ete) dan lakour.
 John PST/IRR COP PREP garden
 'John is in the garden.'
- c. Zan ti/pu (*ete) malad.
 John PST/IRR COP sick
 'John is sick.'

Note that with the irrealis marker *pu*, the verb *vinn* is needed, with the (a) examples

- (10) Zan pu (*ete) vinn (enn) profesor.
 John IRR COP become (a) teacher
 Lit. 'John will become a teacher.'

Similar to AAVE (Bender 2001 [3]), these verbless sentences behave as finite clauses. They can be embedded and coordinated with verbal clauses:

- (11) a. Mo krwar/panse Zan (enn) profesor.
 1SG believe/think John (a) teacher
 'I believe/think that John is a teacher.'
- b. Mo krwar/panse Zan dan lakour.
 1SG believe/think John PREP garden
 'I believe/think that John is the garden.'
- c. Mo krwar/panse Zan malad.
 1SG believe/think John sick
 'I believe/think that John is sick.'
- (12) Mo pe ale e Zan pa kontan.
 1SG PROG go and John NEG happy
 'I'm leaving and John is not happy.'

This is also true when the embedded clause or second conjunct is negated, or when TAM markers are present.

2.2 Distribution of the copula *ete*

The lexical form *ete* appears in extraction contexts: in direct (13) and indirect interrogatives (14), in topicalisations (15), in relatives clauses (16), clefts (17) and exclamatives¹ (18) (which is not accepted by all speakers).

¹Syea [16] discusses such data, but does not include exclamatives.

- (13) Ki tifi la *(ete)?
 what girl DEF COP
 'What is the girl?'
- (14) mo pa kone ki tifi la *(ete)
 1SG NEG know what girl DEF COP
 'I don't know what this girl is.'
- (15) en voler zan *(ete)
 A thief John COP
 A thief John is.
- (16) Sa madam ar ki li *(ete) la
 DEM woman with REL 3SG COP
 'The woman with whom he is.'
- (17) pares ki li *(ete)
 lazy COMP 3SG COP
 'It is lazy that he is.'
- (18) %ala enn bon dokter li *(ete) la!
 DEIC a good doctor 3SG COP DEIC
 'What a good doctor he is!'

That the predicate is extracted is shown by the fact that we can have a long distance dependency as in (19).

- (19) kisannla topanse tifi la *(ete)?
 who 2SG think girl DEF COP
 'Who do you think this girl is?'

It is predicate extraction which triggers the lexical realization of the copula. In interrogatives with an in-situ *wh*-word (20), or with a *wh*-subject, the copula is impossible (21) even if the subject is extracted. It is also impossible if only a complement of the predicate is extracted (23). The same applies in relative clauses where the subject is relativized (24) and in exclamatives with no extraction (25).

- (20) a. Zan *(ete) kote?
 John COP where
 'John is where?'
- b. Tifi la *(ete) ki manier?
 girl DEF COP how way
 'The girl is how?'
- (21) kisannla *(ete) malad?
 who COP sick
 'Who is sick?'
- (22) kisannla topanse ki *(ete) malad?
 who 2SG think that COP sick
 'Who do you think is sick?'
- (23) kont kisannla Zan *(ete) ankoler?
 against who John COP angry
 Lit. 'Against whom John is angry?'

(24) Sa madam ki (*ete) malad...
 the woman REL COP sick
 The woman who is sick...

(25) %Ala Zan (*ete) zoli la!
 DEIC John (COP) beautiful DEIC
 'How beautiful John is!'

Finally, when a locative or manner predicate is extracted, the lexical copula appears to be optional in interrogatives:

(26) Kot Zan (ete)?
 where John COP
 'Where is John?'

(27) Ki manier madam la (ete)?
 how way woman DEF COP
 'How is the woman?'

(28) Komie liv la (ete)?
 how book DEF COP
 'How much is the book?'

(29) Dan lakour, Zan *(ete)
 PREP garden, John COP
 'In the garden, John is.'

The data can be summarized in the table below.

	impossible ete	optional ete	obligatory ete
Declaratives	no extraction	-	topicalisation: loc.pred
Interrogatives	wh-subj/in-situ	wh-loc/manner	wh-pred.
Relatives	subj.rel.	-	pred.rel loc.rel
Exclamatives	no extraction	-	wh-pred

Notice that *ete* is not necessarily in final position. It can be followed by various PPs or adverbial modifiers.

(31) Ki Zan *(ete) dan sa lekol la?
 what John COP PREP DEM school DEF
 'What is John in this school?'

(32) Kot Zan (ete) zordi?
 where John COP today
 'Where is John today?'

We thus analyze *ete* as a head selecting for a gap predicative complement.

3 Proposed analyses

In HPSG, two main types of analysis have been proposed for verbless clauses: a construction-based approach (as in Sag & Wasow 1999 and Ginzburg et Sag 2000) and a lexicalist approach, based on a phonologically null copula form (as Bender 2001, Borsley 2004 and Müller 2006). We argue here in favor of the former.

3.1 Null copula

1. Borsley 2004:

- He posits that only head-filler phrases can have a null head and that the verb *be* can have a phonologically null form.
- In correlative-comparatives, the copula can be omitted if its complement are fronted.

(33) the more intelligent the students (are), the better the marks (are).

- The analysis provided by Borsley does not account for the facts in MC. In (31) above, if the complement is fronted, the copula is still obligatory.

(34) Dan sa lekol la, ki Zan *(ete)?
PREP DEM school DEF what Zan COP
In this school, what is John?

2. Müller 2006:

- In his account, an empty copula is needed in order to save the clause type determination in German.
- Economy purposes: prevents the type hierarchy to have multiple phrase-structure rules.
- Problem: no lexical entry given for the empty copula in the analysis.

3. Bender 2001:

- Postulates as well an empty copula for AAVE which is treated as one of the inflected forms of *be*.
- In the case of AAVE, this lexical rule is needed to account for long distance dependencies where the copula is omitted.
- As seen above and in (36) below, (translated from AAVE), *ete* is obligatory.

(35) How old you think his baby \emptyset ?

(36) Ki laz to krwar so tibaba *(ete)?
how age 2SG think 3SG.POSS DP.baby COP
'How old you think his baby is.'

4. Syea 1997 (Principles & Parameters):

- Proposes two forms of the copula, a weak form (which is null) and a strong form (which is *ete*).
- Syea's Generalization- "the copula has the weak form in the environment of a following overt constituent and the strong form in the environment of a following trace".
- Analysis based on the ECP: traces must be properly governed (assuming the null copula cannot be a proper governor). In his analysis, head-government requirement applies at PF, while antecedent-government requirement applies at LF, since the copula (being semantically void) does not exist at LF.

3.2 Against a null copula

- Our main argument against a null copula analysis is based on the distribution of weak pronouns, the negation and TAM markers.
- Weak forms of the 1st and 2nd personal pronouns (*mo* and *to*) can appear in verbless copular sentences but not in case of an extraction, unlike strong forms *mwa* and *twa*:

(37) To dan lakour
 2SG PREP garden
 'You are in the garden.'

(38) Kot to *(ete)?
 where 2SG COP
 'Where are you?'

(39) Kot twa?
 Where 2SG.OBJ
 'Where are you?'

- If a null copula is involved in (37), and legitimates the weak form of the pronoun, then it should also be allowed in (38) (since the null copula is compatible with an extracted locative with an NP subject as in (26))
- If we analyze weak pronouns as proclitics (looking for a phonological host to their right), then (38) is bad with an empty copula.
- same behavior with the negation *pa* and the TAM markers *ti*, *pu*.

(40) Kot Zan ti *(ete)?
 where John PST COP
 'Where was John?'

(41) Kot Zan pa *(ete)?
 where John NEG COP
 'Where wasn't John?'

- Optionality of the MC copula \neq the optionality in AAVE, German and comparative-correlative in English.
- We analyze the negator as a modifier and TAM markers as raising verbs. Without *ete*, TAM markers and the negator *pa* would miss their complements. we thus say that they subcategorize for a canonical complement (which can be a finite VP or a predicative XP).

4 An HPSG Analysis

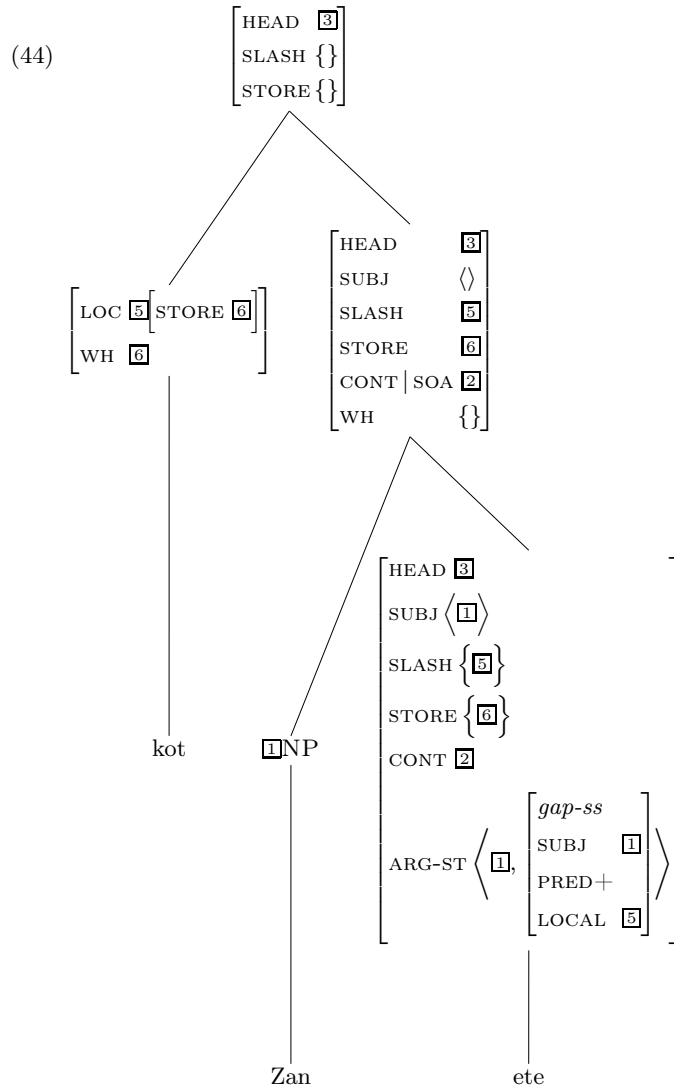
4.1 Lexical entries for *ete* and *ti*

- We analyze the copula as a raising verb which is constrained to take a predicative complement of the type *gap*.
- A TAM marker like *ti*, on the other hand, is constrained to take a finite VP or predicative complement of the type *canonical*.

(42) $\left\langle \text{ete}, \left[\text{ARG-ST} \left\langle \boxed{\square}, \left[\begin{array}{l} \text{gap} \\ \text{PRED} + \\ \text{SUBJ} \end{array} \right] \left\langle \boxed{\square} \right\rangle \right\rangle \right] \right\rangle$

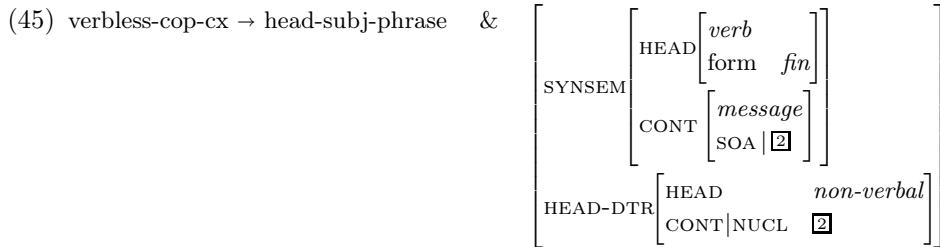
(43) $\left\langle \text{ti}, \left[\text{ARG-ST} \left\langle \boxed{\square}, \left[\begin{array}{l} \text{canon} \\ \text{Pred} + \\ \text{Subj} \end{array} \right] \left\langle \boxed{\square} \right\rangle \right\rangle \right] \right\rangle$

- When the locative (or manner and so forth) complements are analyzed as [PRED +], they can be extracted and the copula thus surfaces. This is illustrated in (44) below.



4.2 Our analysis of verbless clauses

- Following (Sag & Wasow 1999), we can handle verbless copular clauses with a specific construction, with a non verbal head, which is a subtype of head-subject phrases.



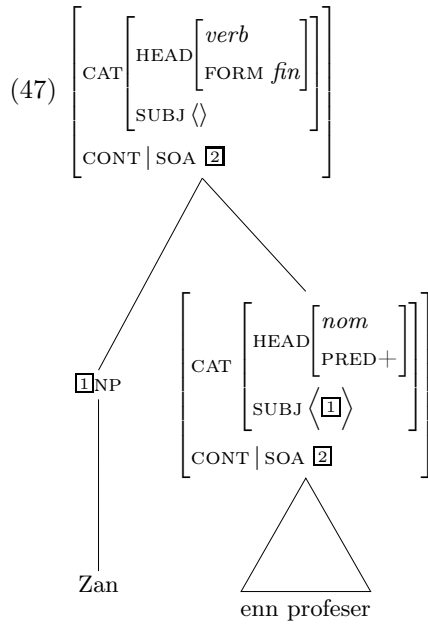
- This construction inherits from the head-subject phrase, which ensures that the subject is appropriate for the head.

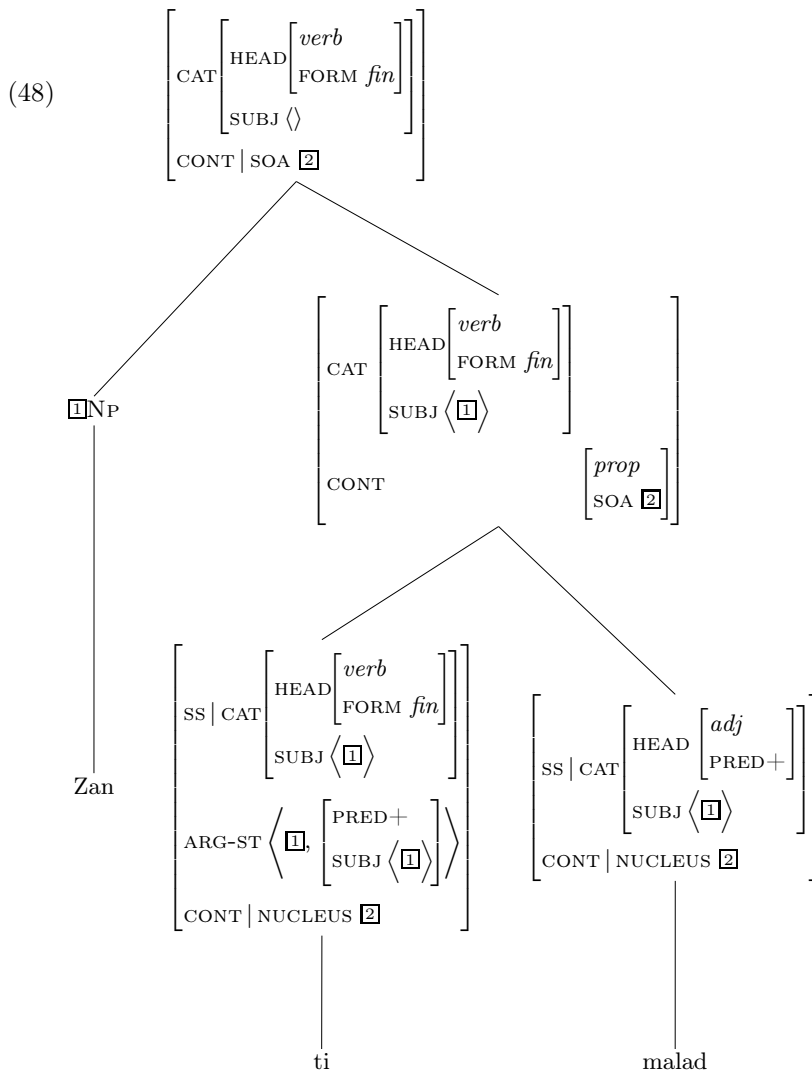
- MC, unlike French, does not generally permit subject inversion. We thus have a precedence rule that forces the subject to precede the (non-verbal) head.

(46)

HEAD-SUBJ-PHR \rightarrow NON-HD-DTR precedes $\left[\left[\text{PRED } + \right] \vee \left[\text{FORM } \textit{fin} \right] \right]$

- The constraint only applies to verbal or predicative head daughters.





- We analyze locative and manner *wh*-predicates as ambiguous in this respect (they are underspecified for the PRED feature). If they are [PRED -], they can be analyzed as heads and can precede the subject, and this is how we analyze examples (26) and (27) above without the copula.
- That *kot* is not extracted in (26) (without *ete*) is shown by the fact that we don't have a long distance dependency without *ete* as illustrated in (36) and below:

(49) Kot to panse zan *(ete)?
 where 2SG think John COP
 'Where do you think John is?'

5 Conclusion

- We have argued against a null copula for Mauritian verbless copular clauses, and in favor of a construction-based analysis.
- The peculiar distribution of the lexical copula *ete* and the TAM markers in copular clauses also provide some support for a lexicalist theory of extraction, as advocated by Bouma & al 2001.

- A more precise analysis of the semantics of the construction, as well as an extension to comparative clauses (which can also appear with or without the copula) still need to be provided.

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