

Pseudoclefts are a source of sluices and fragments in Wolof*

Martina Martinović

University of Florida

1. Introduction

Much recent work on syntactic identity conditions on ellipsis shows that sluicing must not be sensitive to (at least) the syntactic differences between non-copular and copular *wh*-questions, allowing the latter to be the source of a sluice (a.o. Potsdam 2007, Rodrigues et al. 2009, van Craenenbroeck 2010, Barros 2014, Gribanova & Manetta 2016). This paper adds to this research by showing that one type of sluices in the Niger-Congo language Wolof derive from pseudoclefts, which I already proposed for Wolof fragment answers in previous work (Martinović 2013a, 2015a). Sluices and fragments are here shown to be derived in the same way in Wolof.

2. Wh-movement in Wolof

All finite indicative clauses in Wolof have an overt complementizer (Dunigan 1994, Martinović 2015a). *Wh*-questions come in two forms (Dunigan 1994, Torrence 2005, 2012, Martinović 2013a, 2015a, 2017), the difference between them being the form of the complementizer, which surfaces as either *(l)a* or *CM-u* (CM = class marker), and the overtness of the *wh*-phrase in Spec,CP (Martinović 2017). Another important characteristic of Wolof clauses is that if the subject is pronominal, it is a clitic incorporated into C.

The first type of question, in (1), has an overt *wh*-word in Spec,CP, and the complementizer exhibits a subject/non-subject asymmetry, surfacing as *a* in local subject extraction, and as *la* when any other element is extracted. I refer to these constructions as *la-questions*.

(1) *(L)a*-question

- a. Kan_i a t_i gis xale yi?
who_i C_{Wh} t_i see child the.PL

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“Who saw the children?”

- b. Kan_j **la=∅** gis t_j?
 who_j C_{Wh}=3SG see t_i
 “Who did s/he see?”

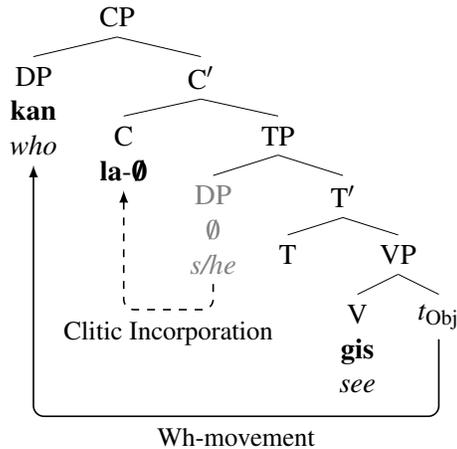
The second question type, *CM-u-question*, has a null *wh*-word in Spec,CP, and a complementizer which agrees in φ -features with the null *wh*-word, shown in (2). If the subject in non-subject question is a 3SG clitic, as in (2b), with this complementizer variant it is overt, surfacing as **mu**. This particular point is relevant for determining the source of the sluice.

(2) *CM-u-question*

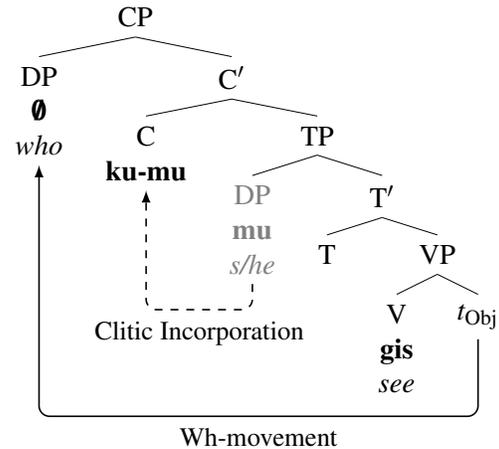
- a. ∅ **K-u** t_{Sbj} gis xale yi?
 who CM-C_{Wh} t_{Sbj} see child the.PL
 “Who saw the children?”
- b. ∅ **Ku=mu** gis t_{Obj}?
 who CM-C_{Wh}=3SG see t_{Obj}
 “Who did s/he see?”

The syntax of both *wh*-question constructions is identical (Martinović 2015a, 2017), shown in the trees in (3) and (4). *Wh*-movement is a syntactic process, whereas I assume that Clitic Incorporation occurs at PF.

(3) *la-question*



(4) *CM-u-question*



The two relevant morphosyntactic properties that will help us identify the constructions that are the source of sluices and fragments are the *a/la*-asymmetry in (*l*)*a*-questions, and the form of the incorporated subject clitic in *CM-u*-questions.

3. Sluicing

3.1 Background

Already Ross (1969), and more recently Merchant (2001) in his influential volume on ellipsis, proposed that the syntax of a sluicing construction is identical to the syntax of *wh*-movement, followed by ellipsis of a clause-sized constituent (TP), as in (5).

- (5) Someone may like Deep Space Nine, but I can't imagine [_{CP} who_i [_{TP} ~~*t_i may like Deep Space Nine*~~]].

In this paper I address two questions that arise from the literature on sluicing. First, it has been convincingly argued that, due to the various types of movements that allow a *wh*-phrase to evacuate the subsequently elided constituent, and different mechanisms that exist cross-linguistically to achieve non-pronunciation, we should be able to find many types of sluicing-like constructions¹ derived from a variety of input structures (van Craenenbroeck & Lipták 2013, Gribanova & Manetta 2016). A lot of evidence has been presented to support this claim, from a variety of languages such as Russian, Romanian, Hungarian, Malagasy, Turkish, Japanese, Chinese, English, Polish, Spanish, Brazilian Portuguese.² Straight-forward morphosyntactic evidence from Wolof supports claims that structures other than *wh*-questions can be the input to the derivation of sluicing-like constructions.

The second question that arises from the literature has to do with the availability of various constructions in one language as inputs to the derivation of sluicing-like constructions. For example, van Craenenbroeck (2010) argues that all instances of sluicing in a language are derived from a full *wh*-question, but a short cleft (which does not involve clausal ellipsis) is available as Last Resort when the *wh*-question is not well-formed. This paper shows that sluicing-like constructions from well-formed questions in Wolof can be derived from pseudoclefts. Sluicing from regular *wh*-questions is possibly available as well, but this issue requires further study.

3.2 Sluicing-like constructions in Wolof

As we saw, Wolof has two variants of *wh*-questions which differ in the surface properties of their CP-layers. These two variants are available in sluicing as well, shown in (6)-(7). First, note that the complementizer is overt in these types of sluices.³ The example (6) illustrates sluicing from a (*l*)*a*-construction. (6a) shows a non-sluiced clause, which contains an ob-

¹Following Gribanova & Manetta (2016), I use the term *sluicing-like constructions* as a cover-term to refer to any kind of a construction that resembles sluicing structures, without committing to a particular derivation.

²Barros 2014, van Craenenbroeck 2010, van Craenenbroeck & Lipták 2006, Fukaya & Hoji 1999, Grebenyova 2006, 2007, Hiraiwa & Ishihara 2002, Hoyt & Teodorescu 2004, 2012, Kizu 1997, Kuwabara 1996, Merchant 1998, Nishiyama et al. 1996, Potsdam 2007, Paul & Potsdam 2012, Wang Adams & Tomioka 2012.

³Contra Merchant's 2001 Sluicing-COMP Generalization; for other counterexamples see e.g. van Craenenbroeck & Lipták 2006.

ject *wh*-word, and the complementizer can surface only as *la*, as expected in non-subject extraction. Surprisingly, in a sluice, as in (6b), the complementizer can surface either as *a* or *la*. This is true regardless of the grammatical category of the extracted phrase. If the sluice were derived from the structure in (6a), this would not be possible.

- (6) *Sluice with (l)a*⁴
 Jigéen yi jënd-na-ñu dara...
 woman the.PL buy-C_V-3PL things
 “The women bought something...”
- a. waye xam-u(l)-∅-ma lan {**la/*a**} ñu jënd.
 but know-NEG-C_V-1SG what C_{Wh} 3PL buy
 “but I don’t know what they bought.”
- b. waye xam-u(l)-∅-ma lan {**la/a**}.
 but know-NEG-C_V-1SG what C_{Wh}/C_{Wh}
 “ but I don’t know what.”

It was mentioned that the subject clitic is incorporated into C in Wolof. In (6b), no clitic surfaces in sluicing, which does not really tell us anything – it could, for example, be absent altogether, having been sluiced before incorporation. Sluices from CM-*u* constructions, illustrated in (7), show us that this is not the case. In the non-sluiced question in (7a), if the subject is pronominal, it surfaces in the same number as the subject of the antecedent sentence, in this case in 3rd plural. In sluices, the subject clitic is always in 3rd singular, shown in (7b), regardless of the person and number of the antecedent subject. Again, if the sluice were derived from the clause in (7a), the φ -features of the subject clitic should match those of the subject in the antecedent clause.

- (7) *Sluice with CM-u*
- Jigéen yi jënd-na-ñu dara...
 woman the.PL buy-C_V-3PL things
 “The women bought something...”
- a. waye xam-u(l)-∅-ma lu-**ñu** jënd.
 but know-NEG-C_V-3PL C_{Wh}-3PL buy
 “but I don’t know what they bought.”
- b. waye xam-u(l)-∅-ma lu-**mu/*ñu**.
 but know-NEG-C_V-1SG C_{Wh}-3SG/3PL
 “ but I don’t know what.”

The reason why we only ever see a subject clitic in sluices from CM-*u*-structures is because the subject clitic in sluices is always 3rd person singular, and that clitic happens to be phonologically null in *la*-constructions (see (1b)). It is therefore not observable there.

⁴C_V is a different type of a complementizer, which occurs in non-extraction clauses.

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To summarize, Wolof sluices have the following properties. First, they have overt complementizers. There is no subject/non-subject asymmetry with *(l)a* in sluicing, and sluices have a number-mismatched 3SG subject clitic with *CM-u*.

Before moving on, it is important to mention that sluices in Wolof can also surface as only *wh*-words, without a complementizer. It is possible that these sluices are derived by regular sluicing (*wh*-movement followed by TP-ellipsis), but more research is needed to confirm this assumption.

In the following section, I show that pseudoclefts in Wolof have the same properties as sluices with overt complementizers: the lack of the *a/la*-asymmetry, and a number-mismatched 3rd person incorporated clitic.

4. Pseudoclefts

Pseudoclefts are a type of copular sentences, consisting of a *wh*-clause that contains a variable, and a DP that exhaustively identifies the value of the variable (Higgins 1979, Akmajian 1979, Blom & Daalder 1977). In Wolof, the *wh*-clause in pseudoclefts is a free relative (Caponigro & Heller 2007). Pseudoclefts (and other clauses with nominal predicates) are *A'*-movement constructions in Wolof (Martinović 2013b, 2015a,b): the exhaustively focused DP is located in Spec,CP, and the *wh*-clause is left-dislocated. There is no overt verbal copula. In Wolof, unlike in English, the order of the *wh*-clause and the exhaustified DP is fixed.⁵ (8) illustrates Wolof pseudoclefts with the complementizer *(l)a*.

(8) *Pseudocleft sentences with (l)a*

- a. [FR Ki damm siis bi] [DP kan] **la/a**.
[FR C_{FR} break chair the.SG] [DP who] C_{Wh}/C_{Wh}
“Who is (the one) who broke the chair?”
- b. [FR Li xale yi damm] [DP lan] **la/a**.
[FR C_{FR} child the.PL break] [DP what] C_{Wh}/C_{Wh}
“What is (the thing) that the children broke?”

These examples show that the complementizer surfaces either as *la* or *a*, regardless of the grammatical relation of the element in Spec,CP. This is the same phenomenon we encounter in sluices.

Pseudoclefts with the complementizer *CM-u* also show the same property as in sluices, shown in (9): the incorporated subject clitic is number-mismatched, always surfacing as 3rd singular, regardless of the number of the subject in the antecedent free relative.

(9) *Pseudocleft sentence with CM-u*

- [FR Li-ñu damm] [DP \emptyset] lu-**mu**?
[FR C_{FR}-3PL break] [DP what] C_{Wh}-3SG

⁵An interesting property of this clause-type in English is that the position of the two constituents is reversible around the copula: *What the children broke is the chair./The chair is what the children broke.*

“What is (the thing) that they broke?”

These examples suggest that sluices are derived from pseudoclefts. In fact, speakers consider non-sluiced pseudocleft counterparts of sluices, as in (10), completely natural.

(10) *Non-sluiced pseudoclefts are natural instead of sluices*

- a. Jënd-na-ñu dara, waye xam-u(l)-Ø-ma **li-ñu jënd lan la/a**.
 buy-C_V-3PL things but know-NEG-C_V-1SG C_{FR}-3PL buy what C_{Wh}
 “They bought something, but I don’t know what is (the thing) that they bought.”
- b. Jënd-na-ñu dara, waye xam-u(l)-Ø-ma **li-ñu jënd lu-mu**.
 buy-C_V-3PL things but know-NEG-C_V-1SG C_{FR}-3PL buy C_{Wh}-3SG
 “They bought something, but I don’t know what is (the thing) that they bought.”

Before considering the derivation of these types of sluices, there is another construction that has been argued to be derived via sluicing. Merchant (2004) convincingly shows that fragments are also derived from full sentential structures. He proposes that the fragment moves to a left-peripheral position (similar to the movement of the *wh*-phrase in sluicing), with the clause itself elided. There is evidence that this leftward movement has the properties of focus-related movement (Brunetti 2003, Arregi 2010). Wolof examples support this analysis, as the fragment can surface with the complementizer (*la*), meaning that it A’-moved to its specifier. The existence of the derivational link between sluices and fragments is confirmed by the form of the complementizer, which can again surface either as *a* or *la*, regardless of the grammatical relation of the fragment, as exemplified in (11) and (12).⁶

(11) *Subject fragment*

- a. Kan a gis Musaa?
 who C_{Wh} see Moussa
 “Who saw Moussa?”
- b. Xale yi {**la/a**}.
 child the.PL C_{Wh}/C_{Wh}
 “The children.”

(12) *Object fragment*

- a. Kan la Musaa gis?
 who C_{Wh} Moussa see
 “Who did Moussa see?”
- b. Xale yi {**la/a**}.
 child the.PL C_{Wh}/C_{Wh}
 “The children.”

I have presented straightforward morphosyntactic evidence that one type of sluices and fragment answers in Wolof are not derived by TP-ellipsis in *wh*-questions, but from pseudocleft constructions. In the next section, I propose an analysis.

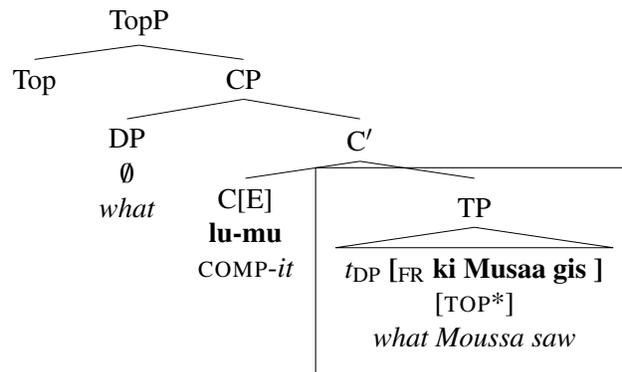
⁶Fragment answers only surface with the complementizer variant (*la*), because CM-*u* has to have a null Spec,CP, and only a *wh*-word can be null in Wolof (for an analysis of this phenomenon, see Martinović 2017).

5. Derivation of sluices and fragments

Wolof pseudoclefts consist of a left-dislocated free relative, and an exhaustively focused DP in Spec,CP of the *wh*-movement complementizers (*l*)*a*/CM-*u*. The sluicing-like constructions we discussed in this paper consist of the DP in Spec,CP and the complementizer with an incorporated subject clitic; the free relative is omitted. These structures are therefore pseudoclefts with an unpronounced free relative.

There are two possible approaches to the derivation of pseudoclefts with an unpronounced free relative. The first possibility is for the free relative to be deleted before topicalization. I adopt a Salvation by Deletion analysis along the lines of Fox & Lasnik 2003, Kennedy & Merchant 2000. The free relative carries a feature which requires it to be topicalized (call it [TOP*]). Failure to topicalize the free relative means that [TOP*] is not checked, and the structure crashes at PF. In pseudoclefts, C can come with an [E] feature (Merchant 2001), which triggers the deletion of its complement, i.e. TP-ellipsis. Just in case TP-ellipsis applies, failure to topicalize the free relative does not lead to a crash at PF, as the structure with the unchecked feature is deleted (in other words, ellipsis bleeds movement). This renders it interpretable at PF. The pseudocleft construction is presented in (13).⁷

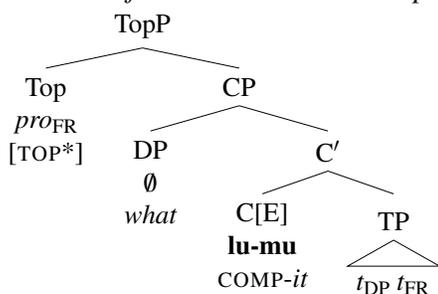
(13) *Pseudocleft construction with TP-ellipsis*



Another option is for the free relative to be topicalized, thus satisfying the [TOP*] feature, but to be phonologically null, which would be akin to the phenomenon of Topic Drop. Topic Drop is known from languages such as Chinese and German (Huang 1984, Cardinaletti 1990). In Chinese, nominals can be null in topic position across discourse under identity with a topic in a preceding sentence. In German subjects, objects or adjuncts that have moved to the first position in the sentence can be omitted if linked to an antecedent in the immediately preceding discourse. The element in the topic position is then a *pro*. This is shown in (14).

More research is needed to choose one analysis over the other.

⁷The details of the internal structure of the TP in the pseudocleft is not relevant for our purposes, so I abstract away from it here.

(14) *Pseudocleft construction with Topic Drop*

6. Conclusion

This short paper presented conclusive morphosyntactic evidence that one type of sluices and fragment answers in Wolof are pseudoclefts with an unpronounced free relative. These sluicing-like constructions, just as pseudoclefts, exhibit the absence of the subject/non-subject asymmetry found in regular *wh*-movement, and have a number mismatched 3SG subject pronoun.

Future research will investigate whether sluicing from *wh*-questions is available in Wolof, and if so, whether there are differences in which constructions allow what type of sluicing (e.g. whether there are differences between arguments and adjuncts). This should also inform the analysis of sluicing-like constructions that are derived from pseudoclefts.

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