

## Chapter 4 Clefts

### 4.1 Introduction

In Chapter 2 on the *u*-construction, it was noted that the *u*-construction is the only way to form matrix *wh*-questions with the set of silent *wh*-words. Clefts are the canonical means of forming *wh*-questions with the *an*-forms. Thus, understanding clefts will further complete our understanding of Wolof *wh*-question formation. There are three basic types of clefts in Wolof:

- |   |                            |
|---|----------------------------|
| (1) a. <u>xale yi</u> <b>a</b> lekk gato bi <sup>1</sup><br>child the.pl <i>a</i> eat    cake the<br>"it's the children who ate the cake"   | subject cleft <sup>2</sup> |
| b. (xale yi) <u>ñu</u> <b>a</b> lekk gato bi<br>child the.pl 3pl <i>a</i> eat    cake the<br>"the children it's them who ate the cake"  | subject cleft              |
| c. <u>gato bi</u> l- <b>a</b> xale yi lekk<br>cake the xpl- <i>a</i> child the eat<br>"it's the cake that the children ate"   | non-subject cleft          |
| d. (xale yi) <u>gato bi</u> l- <b>a</b> -ñu    lekk<br>child the.pl cake the xpl- <i>a</i> -3pl eat<br>"(the children,) it's the cake that they ate"                                  | non-subject cleft          |
| e. <u>ca lekkool ba</u> l- <b>a</b> -ñu    lekk-e gato bi<br>P school the.dist xpl- <i>a</i> -3pl eat-loc cake the<br>"it's at the school there that they ate the cake"               | non-subject cleft          |
| f. <u>n.u gaaw-e</u> l- <b>a</b> -ñu    lekk-e    gato bi<br>cl. <i>u</i> fast-mann xpl- <i>a</i> -3pl eat-mann cake the<br>"quickly is how they ate the cake"                        | non-subject cleft          |
| g. (xale yi) <u>da-ño-<b>o</b></u> lekk gato bi<br>child the.pl do-3pl- <i>a</i> eat    cake the<br>"(the children) they did eat the cake"<br>"eat the cake is what the children did" | verb cleft                 |

Typologically, Wolof clefts (and those in the other Senegambian languages) are interesting because they vary morphosyntactically depending on what item is clefted. In

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<sup>1</sup> To avoid confusion, I depart from orthographic conventions and write *-a-* separately from the clefted subject, although these do form a phonological constituent.

<sup>2</sup> I will translate these as English clefts for the most part, unless it yields a very unnatural English sentence.

the subject cleft ((1)a,b), the clefted subject, as well as the subject marker, immediately precede *-a-*. In the non-subject cleft ((1)c,d,e,f), an invariant *-l-* (which I will analyze as an expletive) immediately precedes *-a-*. The clefted constituent, *gato bi*, precedes the expletive. Whether the subject is a full DP or a subject clitic, it follows *-a-*, in contrast to the subject cleft. In the verb cleft, a dummy verb, *def* 'do' has been clefted. Herein I concentrate on the description and analysis of the subject and non-subject clefts, bringing in verb clefts for exposition. The clefts in (1) are related to copular constructions:

- (2) a. *xale yi nàppkat-a* *a-copula*  
 child the.pl fisherman-*a*  
 "the children are fishermen"
- b. *xale yi nàppkat l-a-ñu* *l-copula*  
 child the.pl fisherman xpl-*a-3pl*  
 "the children, they're fishermen"

Clefts are important to the discussion of *u/i/a*. This is because some types of clefts contain an *-a-*. The question is whether the *-a-* that appears in clefts is the same as the *-a-* that appears in determiners, relative clauses, and adjectival relative clauses. This is all the more important as the clause type that follows *-a-* in clefts has the same characteristics as that in relative clauses (as we can deduce from the position of the clitics and a TP-internal subject, for example). The goals of this chapter are both analytical and descriptive. I will argue that the *-a-* that appears in clefts, "cleft-*a*", is not the same as the complementizer/determiner *-a-* that appears in the periphery of the other constructions analyzed up to this point. I will present arguments that the *-a*'s that appears in the *a-copula*, the *l-copula*, and in clefts are the same: a raising predicate similar to English *be* or *seem*. 4.2 *General Properties of Clefts in Wolof* provides an introduction to clefts while 4.3 *A'-properties of clefts* introduces support for the notion that movement is involved in the derivation of clefts. 4.4 *The Cleft Periphery* is descriptive and presents the subject marking and hierarchy of the left periphery of cleft clauses. 4.5.1 *Introduction*

to Copulas and 4.5.2 *The Topic/Focus Articulation of the a- and l-Copulas* introduce the basic properties of the (relevant) copulas, including the topic/ focus structures present. Sections 4.5.3 *The Lower Fields in the a- and l-Copulas* and 4.6 *The Derivation of Clefts* constitute the analytical "meat" of this chapter. In these sections I present arguments that –a- is a raising predicate, that the l- that appears in non-subject clefts is an expletive and present the analysis of subject and non-subject clefts.

#### 4.2 General Properties of Clefts in Wolof

Cleft clauses in Wolof are associated with the expression of focus and to Wh question formation:

- |   |                           |
|---|---------------------------|
| (3) a. sàcc-na-ñu cin li<br>steal- <i>na</i> -3pl pot the<br>"they stole the pot"   | neutral <i>na</i> -clause |
| b. ñan (ñu) o sàcc cin li<br>who.pl 3pl a steal pot the<br>"who(pl) is it that stole the pot?"  | subject cleft             |
| c. xale yi a sàcc cin li<br>child the.pl a steal pot the<br>"it's the children who stole the pot"   | answer to (3)b            |
| d. xale yi (l-a)<br>child the.pl xpl- <i>a</i><br>"(it's) the children"   | answer to (3)b            |
| e. cin li l-a-ñu sàcc (d-u tééré bi)<br>pot the xpl- <i>a</i> -3pl steal <i>di</i> -neg book the<br>"the pot is what they stole"<br>"it's the pot that they stole (not the book)" | non-subject cleft         |
| f. ceebujën mu a saf kaani!<br>fish.rice 3sg a taste.like pepper<br>"it's fishrice which is hot!"<br>"fishrice indeed is hot"   | subject cleft             |

(3)b shows a subject cleft being used to question a wh-subject. Canonically, this is the only way to ask a subject wh-question with an –*an* form. (3)c could be used alone to indicate emphasis on *the children*, or it could be used to indicate contrastive focus

(Robert 1991)).<sup>3</sup> Two potential answers to (3)b, in (3)c and (3)d, differ in clause type. (3)c is a subject cleft, while (3)d is a non-subject cleft, with focus on *xale yi* "the children". (3)e shows a non-wh non-subject being clefted. (3)f is a case of a subject cleft being used in as an exclamative or emphatic. In both clefts, the focused item precedes – *a-*. In the subject cleft, either a subject marker ( *ñu* in (3)b), or DP immediately precede – *a-* (*xale yi* in (3)c). In a non-subject cleft, *l-* always immediately precedes –*a-*.

Several syntactic categories can be clefted in Wolof

- |  |               |
|--|---------------|
| (4) a. <i>xale bi l-a-a gis</i><br>child the xpl- <i>a</i> -1sg see<br>"it's the child that I saw"                           | DP            |
| b. <i>ca lekkool ba l-a-a gis-e Isaa</i><br>P school the xpl- <i>a</i> -1sg see-loc isaa<br>"it's at school that I saw Isaa" | PP (locative) |
| c. <i>suub simis bi l-a-a *(def)<sup>4</sup></i><br>dye shirt the xpl- <i>a</i> -1sg do<br>"dye the shirt is what I did"     | VP            |
| d. <i>suub l-a-a *(def) simis bi</i><br>dye xpl- <i>a</i> -1sg do shirt the<br>"dying is what I did to the shirt"            | VP (remnant)  |

Genitives and locative prepositions can, but do not have to, be pied piped:

- |   |
|---|
| (5) a. [ <sub>DP</sub> <i>xaj-u Isaa</i> ] <i>l-a-ñu sàcc</i><br>dog- <i>u</i> isaa xpl- <i>a</i> -3pl steal<br>"it's Isaa's dog that they stole"                     |
| b. <i>Isaa<sub>i</sub> l-a-ñu sàcc</i> [ <sub>DP</sub> <i>xaj-*(am<sub>i</sub>)</i> ]<br>isaa xpl- <i>a</i> -3pl steal dog-3sg<br>"it's Isaa that they stole his dog" |
| c. [ <sub>PP</sub> ( <i>ca kër gë</i> ) ] <i>l-a-a gis-é Isaa</i><br>P.dist house the.dist xpl- <i>a</i> -1sg see-loc isaa<br>"it is at the house that I saw Isaa"    |

<sup>3</sup> The pragmatic function of clefting is often not clear. I note that impressionistically, at least in written texts, clefting is far more common in Wolof than in English.

<sup>4</sup> The obligatoriness of the presence of a resumptive verb appears to be dialect dependent:

(i) <i>fecc l-a-a d-aan</i>	✓Gambia (WEC International 1992)
dance xpl- <i>a</i> -1sg <i>di-hab.past</i>	*St. Louis
"dance is what I used to do"	

Other prepositions cannot be pied piped. For example, the preposition *ak* alternates with the applied suffix and optionally marks instrumentals:

- (6) a. wax-na-a \*(ak) Isaa P  
 speak-*na*-1sg P isaa  
 "I spoke to Isaa"
- b. togg-na-a ceebujën \*(ak) kuddu g.ë instrumental P  
 cook-*na*-1sg rice.fish P spoon the.dist  
 "I cooked fishrice with the spoon there"

However, under A'-extraction, the applied preposition must be suppressed, while the instrumental is marginally possible, but strongly dispreferred (the instrumental suffix, *-e-*, is obligatory under A'-extraction):

- (7) a. \*ak Isaa l-a-a wax-(al)  
 P isaa xpl-*a*-1sg speak-appl  
 "it's to Isaa that I spoke"
- b. (??ak) cin lë l-a-a togg-\*(e) ceebujën  
 P pot the.dist xpl-*a*-1sg cook-instr rice.fish  
 "it's with the pot that I cooked fishrice"

Wolof also allows for heavy pied piping with focus and wh-phrases. Thus, a clefted item in an embedded clause can pied pipe the clause into the matrix.

- (8) a. [<sub>CP</sub> **lan l-a-ñu jënd**]<sub>i</sub> l-a Bintë foog **t<sub>i</sub>** CP pied piping  
 what xpl-*a*-3pl buy xpl-*a* binta think  
 "what does Binta think that they bought?"  
 (lit. "what is it that they bought that it is that Binta thinks?")
- b. **lan<sub>i</sub>** l-a Bintë foog [<sub>CP</sub> **ne t<sub>i</sub> l-a-ñu jënd t<sub>i</sub>** ] CP stranding  
 what xpl-*a* binta think *ne* xpl-*a*-3pl buy  
 "what does Binta think that they bought?"  
 (lit. "what is it that Binta thinks that it is that they bought?")

There is speaker variation in whether the subordinator *ne*, which is related to the verb *say* (see Koopman 1984 for general discussion), can be present and/or pied piped. The subordinator *ne* cannot be pied piped ((9)a), although for some speakers it can be stranded ((9)b):

- (9) a. \*[**ne** lan l-a-ñu jënd ]<sub>k</sub> l-a Bintë foog t<sub>k</sub> \*pied piping  
 ne what xpl-a-3pl buy xpl-a binta think  
 "that it's what that they bought is it that Binta thinks?"
- b. %[lan l-a-ñu jënd ]<sub>k</sub> l-a Bintë foog **ne** t<sub>k</sub> ✓stranding  
 what xpl-a-3pl buy xpl-a binta think ne  
 "what does Binta think that they bought?"

The obligatoriness of complementizer pied piping is dependent upon the complementizer itself. Recall that *ndax* is a yes/no question particle in both matrix and embedded clauses and that it can occur either on the left or right edge of a matrix clause, but only on the left edge of an embedded clause (1.6.11.1 *Complementizers*). This complementizer cannot be stranded:

- (10) a. fätte-na-ñu **ndax** Abdu dem-na  
 forget-na-3pl whether abdu leave-na  
 "they have forgotten whether Abdu left"
- b. **ndax** [ Abdu dem-na ]<sub>k</sub> l-a-ñu fätte t<sub>k</sub>  
 whether/Q abdu leave-na xpl-a-3pl forget  
 "have they forgotten THAT ABDU LEFT?" matrix construal
- c. [**ndax** [Abdu dem-na ] ]<sub>k</sub> l-a-ñu fätte t<sub>k</sub>  
 whether abdu leave-na xpl-a-3pl forget  
 "whether Abdu left is what they have forgotten" embedded construal
- d. [[Abdu dem-na] l-a-ñu fätte t<sub>k</sub> ] **ndax**  
 abdu leave-na xpl-a-3pl forget Q  
 "have they forgotten THAT ABDU LEFT?" matrix construal  
 \*"whether Abdu left is what they have forgotten" \*embedded construal

The example in (10)b shows that *ndax* can be pied piped with the embedded CP. The crucial contrast is between (10)c and (10)d. In (10)c embedded construal of *ndax* is possible. The bracketing shows that *ndax* is part of the CP that is clefted. However, in (10)d, where *ndax* occurs on the right edge, only a matrix construal is possible. This indicates that when *ndax* occurs on the right edge it is never part of the clefted CP. If *ndax* could be stranded, embedded construal for (10)d should be possible, contrary to fact.

Clefting contrasts with relativization, in which nothing bigger than an unembedded DP can be pied-piped:

- (11)a. Isaa foog-na (ne) [suub-na-nu simis bi ] neutral *na*-CP  
 isaa think-*na* *ne* dye-*na*-1pl shirt the  
 "Isaa thinks that we dyed the shirt"
- b. [suub-na-nu simis bi] l-a Isaa foog CP clefting  
 dye-*na*-1pl shirt the xpl-*a* isaa think  
 "that we dyed the shirt is what Isaa thinks"
- c. [k-u lekk gato bi] l-a-ñu foog silent wh + CP pied piping  
 cl-*u* eat cake the xpl-*a*-3pl think  
 "who ate the cake, do they think?"
- d. [simis bi l-a-a suub]<sub>m</sub> nga foog **t<sub>m</sub>** clefting + CP pied piping  
 shirt the xpl-*a*-1sg dye xpl-*a*.2sg think  
 "that I dyed THE SHIRT is what you think"
- e. [<sub>DP</sub> simis<sub>i</sub> b.i nga foog ne **t<sub>i</sub>** l-a-a suub **t<sub>i</sub>**] relative clause  
 shirt cl.*i* 2sg think *ne* xpl-*a*-1sg dye  
 "the shirt that you think I dyed"
- f. \* [<sub>DP</sub> simis l-a-a suub]<sub>m</sub> b.i nga foog **t<sub>m</sub>** relative + CP pied piping  
 shirt xpl-*a*-1sg dye cl.*i* 2sg think

(11)b shows that a neutral *na*-clause can be pied pied, while (11)c shows the same for a clause whose C is *-u-*. In (11)d, *simis bi* 'the shirt' is clefted in a clause which is itself clefted. (11)e gives the grammatical form of relativization from an embedded clause. The lower clause is a cleft, while the complementizer in the higher clause is *-i-* (or *u/a*). In comparing (11)d to (11)f, it can be seen that CP pied piping is permissible under clefting, but not under relativization. Similar distributions obtain in genitives:

- (12)a. yàmbaa u góór gi  
 marijuana *u* man the  
 "the man's marijuana"
- b. \*[yàmbaa u góór] g.i ñu sàcc  
 marijuana *u* man cl.*i* 3pl steal  
 "the man whose marijuana they stole"
- c. [góór<sub>i</sub>] g.i ñu sàcc yàmba-am<sub>i</sub>  
 man cl.*i* 3pl steal marijuana-3sg  
 "the man whose marijuana they stole"



clause which has undergone movement from a case position. The movement of the operator is responsible for the A'-movement characteristics:

(15) it's **Bill<sub>i</sub>** [<sub>CP</sub> **OP<sub>i</sub>** that I think **t<sub>i</sub>** you saw **t<sub>i</sub>** ]

While this analysis predicts that clefts will display movement diagnostics, it also predicts that the clefted item, *Bill*, should not be able to reconstruct into the embedded CP for the simple reason that it is never in the embedded CP. Examination of the A'-properties of the cleft will show that the clefted item can reconstruct into CP, thus supporting a promotion analysis of clefting.

#### 4.3.1 Island sensitivity

At the outset, note that clefting is unbounded and, as will be seen, shows the hallmarks of an A'-movement construction:

(16) **kan<sub>i</sub>** l-a taalibe bi foog ne **t<sub>i</sub>** l-a-a wax ne  
 who xpl-a student the think *ne* xpl-a-1sg say *ne*  
**t<sub>i</sub>** l-a sa yaay gēm ne **t<sub>i</sub>** l-a-ñu bëgg **t<sub>i</sub>**  
 xpl-a your mother believe *ne* xpl-a-3pl love  
 “who does the student think that I said that your mother believes that they love?”  
 (lit. “who is it that the student thinks that it is that I said that it is that your mother believes that it is that they love?”)

Clefting in Wolof is sensitive to both strong and weak islands:

#### Adjunct Island

(17) a. xale bi dem-na [laata Bintë togg-al Móódu **laax**]  
 child the leave-neutral before bintë cook-ben moodu laax  
 “the child left before Binta cooked Moodu laax”  
 b. \***l.an<sub>i</sub>** l-a xale b-i dem [laata Bintë togg-al Móódu *t<sub>i</sub>*]  
 cl.an l-a child cl-def go before binte cook-ben moodu  
 “what did the child go before Binte cooked Moodu?”

#### Complex NP

(18) a. gis-na-a [góór g.i dóór xale bi]  
 see-na-1sg man cl.i hit child the  
 “I saw the man who hit the child”

- b. \*[xale bi]<sub>i</sub> l-a-a      gis góór [g-i dóór t<sub>i</sub>]  
 child the xpl-a-1sg see man cl-i hit  
 “it’s the child that I saw the man who hit”

### Coordinate Structure

- (19) a. \***l.an**<sub>i</sub> l-a-ñu      jend a-y      nen ak t<sub>i</sub> <sup>5</sup>  
 cl.an xpl-a-3pl buy indef-cl egg and  
 “what did they buy eggs and?”

### Wh Island

- (20) a. \***l.an**<sub>i</sub> l-a Dudu xam ndax t<sub>i</sub> l-a-a jënd  
 cl.an l-a dudú know whether l-a-1sg buy  
 “what does Dudu know whether I bought?”
- b. xam-na-a      **l.an** l-a-ñu      jox jigéén ji  
 know-na-1sg cl.an xpl-a-3pl give woman the  
 “I know what they gave the woman”
- c. \*jigéén ji l-a-a      xam **l.an** l-a-ñu      jox  
 woman the xpl-a-1sg know cl.an xpl-a-3pl give  
 “it’s the woman that I know what they gave”

Typically, both weak and strong island violations can be saved by the insertion of resumptive pronouns(, in boldface in the examples below). However, these will not be dealt with here and I leave them for future discussion:

- (21) a. [xale bi ]<sub>i</sub> l-a-a      gis [góór [g.i **ko**<sub>i</sub> dóór t<sub>i</sub> ]]      relative clause  
 child the xpl-a-1sg see man cl.i 3sg hit  
 “it’s the child<sub>i</sub> that I saw the man who hit him<sub>i</sub>”
- b. jigéén ji<sub>i</sub> l-a-a      xam lan l-a-ñu-**ko**<sub>i</sub> jox      wh-island  
 woman the xpl-a-1sg know what xpl-a-3pl give  
 “it’s the woman that I know what they gave”

In 2.5.1.3 *A Wolof-specific Movement Diagnostic: Prepositional Applicatives*, I used the distribution of the applied morpheme, *-al*, as a diagnostic for A’-movement. When an applied object wh is clefted, the applied suffix is required on the verb. This means that the derivation of clefts involves A’-movement:

<sup>5</sup> The order of the conjuncts has no effect on the grammaticality.

- (22) **k.an** l-a jàngalekat yi daje-\*(**el**)  
 cl.an xpl-a teacher the meet-appl  
 “who is it that the teachers met?”

Strong crossover, which results from A'-movement, can be detected:

- (23) \***kan<sub>i</sub>** l-a-Ø<sub>i</sub> bëgg SCO  
 who xpl-a-3sg love  
 "who<sub>i</sub> does he<sub>i</sub> love?"

Further evidence for A'-movement comes from the interaction of clefting and a Wolof-specific island. In the simple case, if a wh word is in a neutral *na*-clause ((24)a), it can only be interpreted as an echo question ((24)b).<sup>6</sup> A wh word cannot be clefted out of a neutral clause leaving only a gap. Instead, a resumptive clitic must be present ((24)c).

In that case, the question can be interpreted as non-echo:

- (24) a. lekk-nga guro neutral clause  
 eat-*na*.2sg kola.nut  
 “you ate a kola nut”
- b. lekk-nga **lan** neutral clause  
 eat-*na*.2sg what  
 “you ate what?”  
 \*what did you eat? echo question only
- c. **lan** l-a Sàmba wax ne [ xale yi sàcc-na-ñu-\*(**ko**) ]  
 what xpl-a samba say that child the.pl steal-*na*-3pl-3sg  
 “what is it that Samba said that the children stole it?” real question

In (24)c, where the underlined string is a neutral clause, when a resumptive clitic is present in the embedded neutral clause, a non-echo question results. The absence of a resumptive clitic yields ungrammaticality. In other words, simple neutral clauses are islands for extraction. It is therefore significant that clefting cannot occur across a neutral clause:

<sup>6</sup>In the presence of an affix like *agum* 'already', a non-echo wh-question can be licensed in a neutral clause. The wh-word does not occur on the left edge. However, *agum* also triggers tense-subject agreement reordering and licenses a(n agreeing) postverbal subject (otherwise not possible). As these clauses are not well-studied, I leave them here for future research.

(25) [cleft [neutral [cleft ]]]  
 \***lan<sub>i</sub>** l-a Sàmba wax ne [Bintë foog-**na**-(**ko**) ne [**t<sub>i</sub>** l-a xale yi sàcc **t<sub>i</sub>**]]  
 what xpl-*a* samba say that binta think-*na*-3sg that xpl-*a* child the steal  
 “what did Samba say that Binta thinks that the children stole?”

(26) [cleft [cleft [cleft ]]]  
**lan<sub>i</sub>** l-a Sàmba wax ne [**t<sub>i</sub>** l-a Bintë foog ne [**t<sub>i</sub>** l-a xale yi sàcc **t<sub>i</sub>**]]  
 what xpl-*a* samba say that xpl-*a* binta think that xpl-*a* child the steal  
 “what did Samba say that Binta thinks that the children stole?”

Note that the presence or absence of the clitic in the intermediate neutral clause does not affect the grammaticality of (25). (26) shows that if the intermediate clause is a cleft, the wh can move successive cyclically through it. These facts fall out if the intervening neutral clause blocks successive cyclic movement of the Wh word. Under a base generation analysis, in which the clefted item binds an empty category, it is not clear why (25) should be bad. The criterion that a clitic be present has been satisfied and a resumptive clitic cannot occur with a cleft clause (see below).<sup>7</sup>

The island sensitivity, obligatory presence of the applied suffix, the presence of strong crossover, and the interaction of islands and cyclicity all point to the conclusion that clefting in Wolof involves A'-movement. However, these data do not tell us *what* has undergone movement. Determining this is the goal of the next section.

#### 4.3.2 Reconstruction Effects

Reconstruction effects are manifested in several ways. All of these support the idea that the clefted item begins inside of TP and is promoted to its surface position.

Idiom chunks can be clefted (Vergnaud 1974):

<sup>7</sup> An intervening subject cleft, for example, also blocks cleft formation:

(i) [cleft [subject cleft [cleft ]]]  
 \***xale yi<sub>i</sub>** l-a Bintë wax ne [Isaa mo-o foog ne [**t<sub>i</sub>** l-a-a dóór **t<sub>i</sub>** ]]  
 child the xpl-*a* binta say that isaa 3sg-*a* think *ne* xpl-*a*-1sg hit  
 “it’s the child that Binta said that it’s Isaa who thinks that I hit”

Note that if (i) contained a wh-word instead of *xale yi* ‘the children’, it would still be ungrammatical.

- (27) a. s-a jaan mu o wàcc subject cleft  
 P-2sg snake 3sg a descend  
 “your have finished your work”  
 (lit. “it is your snake that has descended”)
- b. tééré l-a-a def Senegaal non-subject cleft  
 book xpl-a-1sg do senegal  
 “I do believe in Senegal”  
 (lit. “it's a book that I do Senegal”)

The fact that idiom chunks can be clefted follows straightforwardly from a promotion analysis. The idiom is a type of lexical item and is a constituent merged together, with subsequent raising of some subpart, e.g. [*s-a jaan*] to the cleft position.

A second case of reconstruction involves negative polarity items:

- (28) a. \*togg-na-a **dara**  
 cook-na-1sg anything  
 “I cooked anything”
- b. togg-u-ma **dara**  
 cook-neg-1sg anything  
 “I did not cook anything”
- c. togg-na-a **l-enn**  
 cook-na-1sg cl-1  
 “I cooked something”

Comparing (28)a and b, it can be seen that *dara* is an NPI.<sup>8</sup> In order to get the simple existentially quantified reading, a distinct form, *lenn*, is used ((28)c). What is relevant for us is that *dara* can be clefted:

- (29) a. **dara** l-a-a togg-\*(**ul**)  
 anything xpl-a-1sg cook-neg  
 “it's anything that I didn't cook”  
 “I didn't cook ANYTHING”
- b. **dara** nga foog ne l-a-a togg-\*(**ul**)  
 anything 2sg.xpl.a think ne xpl-a-1sg cook-neg  
 “it's anything that you think I didn't cook”  
 “You think that I didn't cook ANYTHING”

<sup>8</sup> I note here that in some dialects, for example, the Dakar variety, the word *dara* is ambiguous between an NPI and a simple existentially quantified indefinite meaning *something*. In that dialect, (28)a could mean, “I cooked something”. However, the force of the argument is retained because in the Dakar dialect, for example, the indefinite *dara* can still reconstruct under the scope of negation. The difference then is whether *only* the NPI interpretation is possible.

The grammaticality of NPI clefting is mysterious under a base generation approach, since in (29)b, for example, the NPI appears quite far from the negation that licenses it. Under a promotion approach, this distribution is unsurprising: the clefted NPI originates in the embedded clause with its licensing negation, and subsequently moves into the matrix clause.

Clefts display reconstruction effects for Principle A and Principle C of the Binding Theory. Many West African languages lack a *self* reflexive pronoun. Instead, a collocation involving a body part, typically *head*, is used, with a genitive pronoun:

- (30) **dóór-na-a sa-ma bopp**  
 hit-*na*-1sg P-1sg head  
 "I hit myself" reflexive  
 "I hit my head" literal

(30) could be uttered in a situation in which I punched myself in the stomach. That is, it is interpreted like a reflexive if c-commanded by a local antecedent. However, the literal interpretation is also possible. The reflexive interpretation is unavailable if there is no appropriate antecedent:

- (31) \***sa-ma bopp-a** dóór Móódu  
 P-1sg head-*a* hit moodu  
 "my head hit Moodu"  
 \*"(I) myself hit Moodu"

Under clefting, the reflexive interpretation is possible:

- (32) [sa-ma bopp] l-a-ñu foog ne l-a-a dóór  
 P-1sg head xpl-*a*-3pl think *ne* xpl-*a*-1sg hit  
 "it's myself that they think that I hit" ✓ reflexive  
 "it's my head that they think that I hit" ✓ literal

Reconstruction also takes place for Principle C, as strong crossover is observed:

- (33) a. \***isaa<sub>i</sub>** l-a-a foog ne **t<sub>i</sub>** l-a-Ø<sub>i</sub> bëgg **t<sub>i</sub>**  
 isaa xpl-*a*-1sg think *ne* xpl-*a*-3sg love  
 "it's Isaa<sub>i</sub> that I think that he<sub>i</sub> loves"  
 (i.e. "Isaa has the property that I think that Isaa loves Isaa")

- b. \***kan**<sub>i</sub> l-a xale yi wax ne **t**<sub>i</sub> l-a-Ø<sub>i</sub> bəgg **t**<sub>i</sub>  
 who xpl-a child the.pl say ne xpl-a-3sg love  
 “who<sub>i</sub> is it that the children say that he<sub>i</sub> loves?”  
 (i.e. “which person has the property that the children said that person  
 loves himself?”)

Additional reconstruction effects are also observed in the distribution of tense marking.

In Wolof, a verb like *bəgg* ‘want’ typically takes a subjunctive clause complement:<sup>9</sup>

- (34) bəgg-ně-ñu Gàllaay jàng taalif bi  
 want-na-3pl gallaay read poem the  
 “they want Gallaay to read the poem”

Subjunctive clauses have the restriction that they cannot carry tense unless the higher verb carries overt tense marking:

- (35) a. bəgg-\*(**óón**)-ně-ñu Gàllaay jàng-oon taalif bi<sup>10</sup>  
 want-past-na-3pl gallaay read-past poem the  
 “they had wanted Gallaay to read the poem”  
 b. bəgg-**óón**-ně-ñu Gàllaay jàng taalif bi  
 want-past-na-3pl gallaay read poem the  
 “they had wanted Gallaay to read the poem”

The examples show that the dependency goes one-way. If the subjunctive clause has past tense, then the higher clause must have a past tense. But, if the higher clause has past tense, then the subjunctive clause may or may not have it. If the embedded clause is clefted, the same restriction holds:

- (36) [Gàllaay jàng-oon taalif bi] l-a-ñu bəgg-\*(**óón**)  
 gallaay read-past poem the xpl-a-3pl want-past  
 “that Gallaay read the poem is what they wanted”

In other words, the subjunctive clause acts as if it were embedded under *bəgg* ‘want’.

That overt past tense is required on *bəgg* follows if the embedded subjunctive clause has

<sup>9</sup>Along with other verbs of desire, command, etc. See 1.6.7 *Clause Types and Verb Movement*.

<sup>10</sup>In terms of interpretation, if tense is marked only on the matrix verb, then it has a meaning like English, future in the past. If neither clause has past tense, because *bəgg* is a stative verb, the embedded clause is interpreted as future with respect to the present. However, if tense is marked in both the matrix and the embedded clause, then the embedded clause is interpreted as either future in the past or past shifted (“at some point in the past, they had wanted that Gallaay had (already) read the poem before that point in time”).

been raised from its underlying complement position. Under a base generation approach to clefting, this is mysterious. It is clear that the requirement on tense in the higher clause is not generally applicable:

- (37) [Gàllaay jàng-**oon** taalif bi ] l-a-ñu **wax-(oon)**  
 gallaay read-past poem the xpl-a-3pl say-past  
 “that Gallaay read the poem is what they said”

If tense marking is absent in the subjunctive clause, then it is optional in the *bëgg* clause:

- (38) [Gàllaay jàng taalif bi ] l-a-ñu **bëgg-(óón)**  
 gallaay read poem the xpl-a-3pl want-past  
 “that Gallaay read the poem is what they want/ed”

This is exactly the same distribution as when the subjunctive is overtly embedded under *bëgg*.

Finally, two facts concerning VP clefting can be explained if the VP has moved from inside of TP. A definite DP can be stranded when VP raises, as (4)d attests, but an indefinite cannot:

- (39) a. [<sub>VP</sub> suub simis] l-a-a-y def [V + ndef DP] clefted  
 dye shirt xpl-a-1sg-di do  
 “dye shirts is what I do”
- b. \*<sub>VP</sub> suub t<sub>i</sub> ] l-a-a-y def **simis<sub>i</sub>** \*ndef DP stranded by itself  
 dye xpl-a-1sg-di do shirt  
 “dye is what I do to shirts”
- c. simis l-a-a-y suub ndef DP clefted  
 shirt xpl-a-1sg-di dye  
 “it's a shirt that I will dye”
- d. ëllëk l-a-a-y suub **simis** ndef DP not clefted  
 tomorrow xpl-a-1sg-di dye shirt  
 “it's tomorrow that I'll dye a shirt”

In fact, VP clefting looks like the so-called VP remnant topicalization construction attested in Continental Germanic (Müller 1998, among others). (39)c shows that an indefinite DP can be clefted by itself and (39)d shows, that an indefinite DP need not be clefted. Crosslinguistically, indefinite DPs seem to occur lower in the clause than

definites DPs, which can scramble (Diesing 1992). The fact that the indefinite DP in (39)a must be fronted with VP follows because an indefinite cannot raise high enough to escape the clefted VP. Otherwise, it is mysterious why the indefinite cannot be generated low, as in (39)d.

Under VP clefting, non-subject clitics can be fronted with VP or remain inside of TP:

- (40) a. [<sub>VP</sub> **suub-léén** ] l-a-a        def  
          dye-3pl        xpl-a-1sg do  
          "dye them is what I did"
- b. [<sub>VP</sub> **suub** ] l-a-a-**léén**        def  
          dye        xpl-a-1sg-3pl do  
          "it's dying that I did to them"
- c. \*<sub>[XP</sub> **simis-léén**] l-a-a-y        suub-ël  
          shirt-3pl        xpl-a-1sg-di dye-ben  
          "it's a shirt for them that I will dye"

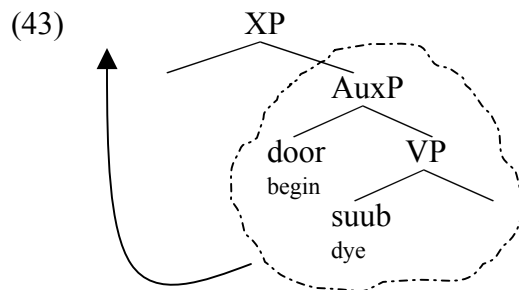
The distribution of clitics follows if the clitic is merged as an argument in the object  $\theta$ -position (following the verb). When the VP is clefted, it can carry the clitic along with it ((40)a) or the clitic can move out of VP first ((40)b). The examples in (40)c show that it is not merely the presence of a clefted item that permits the clitic to appear in the clefted phrase. This is consistent with the restrictions on VP clefting when multiple verbs are present:

- (41) a. simis yi        l-a-a        door a suub  
          shirt the.pl xpl-a-1sg begin a dye  
          "it's the shirts that I began to dye"
- b. [<sub>suub-léén</sub>] l-a-a        door a \*(def)  
          dye-3pl        xpl-a-1sg begin a do  
          "dye them is what I began to do"
- c. [<sub>door-leen suub</sub>] l-a-a        \*(def)  
          begin-3pl dye xpl-a-1sg do  
          "begin to dye them is what I did"

It can be seen in (41)b and c that the lower verb *suub* ‘dye’ and both the lexical verb and auxiliary *door* ‘begin’ can be clefted. However, the higher verb cannot be clefted by itself, even if the resumptive is present ((42)b):

- (42) a. \***door** l-a-a-leen      **def** a suub  
           begin xpl-a-1sg-3pl do    a dye
- b. **door** l-a-a            \*(**def**)  
           begin xpl-a-1sg    do  
           "begin is what I did"

(42)b shows that *door* ‘begin’ can be clefted with the dummy verb present. The contrast between (41)c and (42)a follows if the auxiliary and lexical verb are contained within a single constituent and it is this XP that fronts. Therefore, the auxiliary pied pipes the (lower) lexical verb:



Under a base generation analysis, there is no obvious reason why *door* ‘begin’ could not be base generated in the cleft position in(42)a.

#### 4.3.3 Further A'-Properties

To complete the basic description of the A'-properties of clefts, I here briefly discuss several aspects of these constructions. This will better situate Wolof in the typological context and therefore facilitate crosslinguistic comparison.

If a *wh* and a non-*wh* focused item are present, the non-*wh* focus must appear in the cleft position. Thus, there is no in situ focus for non-*wh* DPs:



The lack of superiority effects is consistent with the *an*-forms being *which* phrases, which, crosslinguistically do not display superiority effects (Pesetsky 1987). Consider the contrast below:

- (48) a. \*what did who read?  
 b. which book did which boy read?

Indeed, an object from a lower clause can be clefted over a matrix Wh subject (I adjust the glossing here to make clear that these are *which*-phrases):

- (49) a. **tééré bi<sub>i</sub>** l-a **k.an** foog ne **t<sub>i</sub>** l-a-a jënd **t<sub>i</sub>**  
 book the xpl-a cl.*which* think *ne* xpl-a-1sg buy  
 “it’s the book that which one thinks that it is that I bought?”  
 (i.e. “which one is it that thinks that I bought THE BOOK?”)
- b. **l.an<sub>i</sub>** l-a **k.an** foog ne **t<sub>i</sub>** l-a-a jënd **t<sub>i</sub>**  
 cl.*which* xpl-a cl.*which* think *ne* xpl-a-1sg buy  
 “it’s which one that which one thinks that it is that I bought?”  
 (i.e. which is it that which one thinks that I bought?)”

#### 4.3.4 Summary

In this section, evidence has been presented showing first, that clefting in Wolof involves A'-movement and promotion. This is based on the fact that clefting is island sensitive (to both weak and strong islands), displays strong crossover, and is subject to language-specific movement constraints (the applied suffix/preposition alternation). The reconstruction facts (NPI reconstruction, idiom chunks, subjunctive tense licensing, and VP clefting) provide strong support for the idea that the focused item in a cleft originates TP-internally. Thus, Wolof clefts do not involve binding of a silent operator. These conclusions are consistent with the cyclicity facts, which indicate that the clefted item undergoes typical A'-movement.

#### 4.4 Inside Cleft Clauses

In analyzing clefts, I first concentrate on the region around *-a-* and the region preceding the clefted DP. This is because, as will be shown, the subject and non-subject

clefts have these structures in common. In this section, I first look at subject marking. This is because subject marking varies according to what has been focused. I then establish a basic hierarchy for the topic and focus articulations of the clause.

#### 4.4.1 Subject Marking in Clefts

The subject markers in the subject and non-subject clefts differ in morphological form and linear position with respect to *-a-*. In the subject cleft, the subject markers precede *-a-*. In the non-subject cleft, the subject markers follow *-a-*:

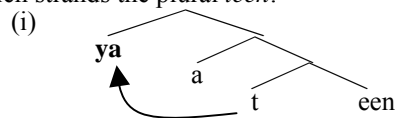
- (50) a. **ma** a lekk gato bi  
 1sg *a* eat cake the  
 “it's I who ate the cake”
- b. gato bi l-a-**a** lekk  
 cake the xpl-*a*-1sg eat  
 “it's the cake that I ate”

The surface forms of the subject markers in the subject cleft are decomposable into a weak pronoun plus *-a-*:

#### (51) Subject Markers in Subject Cleft

	Surface Form	Decomposed Form		
1sg	maa	ma	+	a
2sg	yaa	ya	+	a
3sg	moo	mu	+	a
1pl	noo	nu	+	a
2pl	yeena	ya +een	+	a
	yaaleen	ya	+	a + leen <sup>11</sup>
3pl	ño	ñu	+	a

<sup>11</sup> Note that this form seems to split person and number, suggesting head movement of the pronoun *ya* to *a*, which strands the plural *leen*:





The second person subject pronouns are preceded not by an *l-*, but by an *ng-*, suggesting that the second person *-ng* has incorporated into *-a-*.<sup>13</sup> The 3sg subject marker is silent. Non-subject clitics immediately follow *-a-* in a subject cleft, and follow the subject clitic, if present, in the non-subject cleft.<sup>14</sup>

- (53) a. no o **ko** jox xale yi  
 1pl *a* it give child the  
 “it’s us who gave it to the children”
- b. xale yi l-a-**nu-ko** jox  
 child the xpl-*a*-1pl it give  
 “it’s the children that we gave it to”

A subject cleft therefore minimally consists of a subject marker or DP subject followed by *-a-* and TP. If present, non-subject clitics immediately follow *-a-*:

<sup>13</sup> The non-subject focus construction seems to be very closely related morphologically to the “neutral” *na* clauses. The subject markers for these clause types are identical. One difference is that the *l-* complex in the non-subject cleft precedes the verb, while in *na* clauses, the *-na-* always follows the verb

- (i) lekk-**na**-ñu yàpp wi  
 eat-*na*-3pl meat the  
 “they have eaten the meat”
- (ii) yàpp wi l-**a**-ñu lekk  
 meat the xpl-*a*-3pl eat  
 “it’s the meat that they have eaten”

Tellingly, where the non-subject focus has *l-*, the neutral has *n-*:

(iii) Subject Markers in Neutral Clauses

	Full Form	Decomposed Form
1sg	naa/nama	n + a + a/ma
2sg	nga	ng + a
3sg	na	n + a + ∅
1pl	nanu	n + a + nu
2pl	ngeen	ng + a + een
3pl	nañu	n + a + ñu

Recall that neutral clauses are those in which no particular element in a clause is in focus. Along these lines, note that several C<sup>0</sup>-like items in Wolof have an initial nasal or prenasalized stop, *n-/nd-* (Thanks to Hilda Koopman for first bringing this up to me.):

- (iv) **ne** ‘that’ (homophonous with the verb ‘say’)  
 (v) **ndax/ndaxte** ‘because’  
 (vi) **mbaa** ‘question particle’, ‘whether (Gambian dialect)’  
 (vii) **ndaw** ‘exclamative particle’  
 (viii) **ndem** ‘since’  
 etc...

See Torrence 2000 for an analysis of verb movement in *na-* clauses.

<sup>14</sup> See Zribi-Hertz and Diagne 2002 for an analysis of clitic placement in Wolof.

- (54) a. ñu a ko-fa togg-al gato bi  
 3pl a 3sg-loc cook-ben cake the  
 “it's them who cooked the cake for him there”
- b. xale yi a ko-fa togg-al gato bi  
 child the.pl a 3sg-loc cook-ben cake the  
 “it's the children who cooked the cake for him there”

Turning now to the status of the *l-* found in the *l*-copula and the non-subject cleft, recall that one copula has an *l-*, while the other does not:

- (55) a. Maryam jàngalekat-**a** *a*-copula  
 maryam teacher-*a*  
 “Maryam is a teacher”
- b. Maryam jàngalekat **l-a** *l*-copula  
 maryam teacher *l-a*  
 “Maryam is a teacher”

Observation of the distribution of *l-* suggests that *l-* is an expletive that occurs with a CP. Based on this, I will later argue that the *l*-copula contains a CP complement, whereas the *a*-copula does not. There are three sets of facts which suggest that *l-* is an expletive.

First, *l-* is in complementary distribution with subject markers in subject clefts:

- (56) \*ñu l-a lekk gato bi  
 3pl xpl-*a* eat cake the  
 “it's them who ate the cake”

This shows that *l-* is a pronominal element.

Second, the *li*-class is one of the default non-human noun classes in Wolof.<sup>15</sup> The *li*-class forms are used, for example, when the class of an object is not known, typical for *it*:

- (57) l-ii l-an l-a?  
 cl-this cl-an xpl-*a*  
 “what is this?”

This makes it likely that *l-* is equivalent to an expletive, like *it*. If *l-* is an expletive, this is what we expect. Note that in non-subject clefts (and in the *l*-copula) it is always *l-* that appears, irrespective of the class of the NP/DP which precedes it. This is especially

<sup>15</sup> The *bi*-class is also a default class, which is used for new words, collapsed noun classes, for example.

telling in cases where Wolof has a dedicated semantic class. For example, the default human class is the *ki*-class:

- (58) a. nit      **k-oo-k-u** **l-a-a**      dóór  
           person cl-oo-cl-u xpl-a-1sg hit  
           “it’s the aforementioned person that I hit”
- b. \*nit      **k-oo-k-u** **k-a-a**      dóór  
           person cl-oo-cl-u cl-a-1sg hit  
           “it’s the aforementioned person that I hit”

(58)b shows that the *l-* is invariable. Thus, the *l-* is probably not a form of agreement or a pronoun linked in some way to the clefted element.

Third, *l-* appears in the left periphery of certain clauses; in particular, those where there is plausibly no  $\theta$ -role available for “*l*” (or the noun for which it is the spellout of agreement). This is the case with some types of sentential subjects, which are factive nominalizations (“the fact that...”):

- (59) [l.i mu dem ] bett-na-ma  
       cl.i 3sg leave surprise-na-1sg  
       “that he left surprised me”

The subject clause in cases like (59) has the form of a definite relative clause, but uses the *l*-class (akin to “it surprised me that he left”). However, the point is that it is the *li*-class that is used. Thus, I conclude that *l-* is an expletive subject clitic like *it* in English. that the *l-* that appears in the *l*-copula is an expletive. The positional complementary distribution between the expletive and subject markers follows straightforwardly if the subject marker and expletive occupy the same pre-*a* position.

#### 4.4.2 The Cleft Periphery

The subject marker and DP in (54)a and b can co-occur:

- (60) xale yi      ñu a ko-fa togg-al gato bi  
       child the.pl 3pl a 3sg-loc cook-ben cake the  
       “the children, it’s them who cooked the cake for him there”



- (65) a. gato bi l-a-\*(**ñu**)-fa togg-al Isaa  
 cake the xpl-a-3pl-loc cook-ben isaa  
 “it's the cake that they cooked for Isaa there”
- b. gato bi l-a-\*(**ñu**)-fa **xale yi** togg-al Isaa  
 cake the xpl-a-3pl-loc child the.pl cook-ben isaa  
 “it's the cake that the children cooked for Isaa there”

Contrasting (65)a with (65)b shows that the subject marker *ñu* “3pl” and lexical DP subject *xale yi* “the children” are in complementary distribution (following *-a-*). (65)b shows that the non-subject clitics precede the DP subject, as in relative clauses and the *u*-construction.

Strong pronouns cannot appear “low” in the lexical DP subject position following *-a-*. Instead, a subject marker is obligatory and the strong pronoun occurs in the left periphery, in a topic position, as in subject clefts:<sup>17</sup>

- (66) a. \*coof bi l-a **ñoom** togg non-subject cleft  
 seabass the xpl-a 3pl<sub>strong</sub> cook  
 “it’s the seabass that they cooked”
- b. **ñoom** coof bi l-a-**ñu** togg non-subject cleft  
 3pl<sub>strong</sub> seabass the xpl-a-3pl cook  
 “them it’s the seabass that they cooked”

As in the subject cleft, there are topic and wh positions that precede the focus:

- (67) xale yi ñoom an-a lan l-a-\*(ñu)-fa togg-al Isaa  
 child the.pl 3pl wh-? what xpl-a-3pl-loc cook-ben isaa  
 “the children, them, what is it that they cooked for Isaa there?”

<sup>17</sup> The only exception I know of to this is clitic doubled non-subjects (See Chapter 1 Appendix 1 *Clitic Doubling*):

- (i) démb l-a-a-**ko** gis **moom**-xale bi  
 yesterday xpl-a-1sg-3sg see 3sg<sub>ind</sub>-child the  
 “it is yesterday that I saw him he the child”

The strong pronoun and the DP following it are pronounced to the naked ear as a single phonological unit. I take right peripheral strong pronouns as resulting from T-praising:

- (ii) démb l-ě-ñu gis Isaa **ñoom** (ñepp)  
 yesterday xpl-a-3pl see isaa 3pl<sub>ind</sub> all  
 “it is yesterday that they saw Isaa, they (all)”

In (67), when the lexical DP, *xale yi*, occurs as a topic, it is obligatorily resumed by a subject clitic, *ñu*. The wh-particle *an-a* immediately precedes the wh-word. This yields the following ordering in a non-subject cleft:

Top1 > Top2 > wh > focus > *l* > *a* > [Cl<sub>O</sub>-Cl<sub>Loc</sub> S V O]

Putting the subject and non-subject clefts together yields:

(68) Ordering of Topic/Focus in Clefts

- a. subject cleft: Top2 > Top1 > wh > focus > **SM** > *a* [ Cl<sub>O</sub>-Cl<sub>Loc</sub> V O]  
 b. non-subject cleft: Top2 > Top1 > wh > focus > ***l*** > *a* [SM-Cl<sub>O</sub>-Cl<sub>Loc</sub> V O]

(68) shows that *-a-* is preceded by a subject marker (or DP subject) in the subject cleft and by an expletive in a non-subject cleft.

The ordering in (68) fits in with the lack of multiple wh-fronting in a single clause:

- (69) a. **ñan** ñu a foog ne **lan** l-a-a togg matrix wh-question  
 who.pl 3sg *a* think *ne* what xpl-*a*-1sg cook  
 "who(pl) is it that think that I cooked what?"
- b. **lan<sub>i</sub>** l-a **ñan** foog ne **t<sub>i</sub>** l-a-a togg **t<sub>i</sub>** matrix wh-question  
 what xpl-*a* who.pl think *ne* xpl-*a*-1sg cook  
 "what is it that who(pl) think that I cooked?"
- c. **#ñan lan<sub>i</sub>** l-a-ñu foog ne **t<sub>i</sub>** l-a-a togg **t<sub>i</sub>** echo only  
 who.pl what xpl-*a*-1pl think *ne* xpl-*a*-1sg cook  
 "it's who(pl) that think that I cooked what?"
- d. **lan<sub>i</sub>** l-a Isaa wax **kan** ne **t<sub>i</sub>** l-a-a togg **t<sub>i</sub>** matrix wh-question  
 what xpl-*a* isaa tell who *ne* xpl-*a*-1sg cook  
 "what is it that Isaa told who that I cooked?"

In (69)a, there are two wh-words and two clefts, yielding a matrix wh-question. In (69)b, *lan* "what" has been clefted into the matrix clause, but the wh-subject is in the low TP-internal subject position. When the matrix wh-subject does occur in the left periphery along with a clefted wh-word ((69)c), only an echo question interpretation is possible. It is significant that it is *ñan* "who (plural)", that has the echo reading, not *lan* "what". This is consistent with the presence of a topic position higher than the wh-position in the left periphery of clefts. That is, the echo reading plausibly results from *ñan* occupying some

type of topic position. Finally, (69)b and (69)d pattern together in showing that an embedded *wh* can front over a matrix *wh*, subject or not, as long as that *wh* is not in the left periphery.

The left periphery of clefts can also contain tense and aspectual heads. These are distributed among even higher topic positions:<sup>18</sup>

- (70) a. *poon l-a-ñu tox-ul woon* non-subject cleft  
 tobacco xpl-a-3pl smoke-neg past  
 "it's tobacco that they didn't smoke"
- b. **d-u** *woon poon l-a-ñu tox* non-subject cleft  
*di-neg past tobacco xpl-a-3pl smoke*  
 "it's not tobacco that they smoked (it was something else)"  
 "they didn't smoke TOBACCO"<sup>19</sup>
- c. *mu a tox-ul woon poon* subject cleft  
 3sg a smoke-neg past tobacco  
 "it's not him who smoked tobacco"
- d. **d-u woon** *moom mu a tox poon* subject cleft  
*di-neg past 3sg<sub>strong</sub> 3sg a smoke tobacco*  
 "it's not him who smoked tobacco"

I will assume that *d-u* instantiates a "Neg2" head, while the leftmost tense *-oon* occupies the head of "TP2". It is possible for *d-u* and a lower affixal negation to surface. It is plausible that the dummy auxiliary *di* is inserted to support the negation:<sup>20</sup>

- (71) **d-u** *Isaa l-a-ñu gis-ul*  
*di-neg isaa xpl-a-3pl see-neg*  
 "it's not Isaa that they didn't see (it was someone else)"

Thus, in the absence of the higher negation, the auxiliary is ungrammatical:

<sup>18</sup> The "higher" tense and negation heads have several puzzling properties. I briefly discuss some of these in Appendix 1 *The Particle d-u*.

<sup>19</sup> For Gambian Wolof, Dunigan 1994 reports that examples like (70)a are ungrammatical (Section 1.3.1). In order to negate a cleft clause only the (70)b option is possible.

<sup>20</sup> For some reason, both tense positions cannot be filled:

- (i) \***d-u woon** *xale bi l-a-a gis-óón*  
*di-neg past child the xpl-a-1sg see-past*  
 "it wasn't the child that I saw"

(72) \***di-na** xale bi l-a-a gis  
 di-na child the xpl-a-1sg see  
 “it’s the child that I saw”

However, if the auxiliary *d-oon*, is present, then the affirmative is fine, although slightly degraded. The negative shows no degradation:

(73) a. ?di-na **d-oon** xale bi l-a-a-y gis  
 di-na di-past child the xpl-a-1sg-di see  
 “it will be the case that it’s the child I will see”

b. d-u **d-oon** xale bi l-a-a-y gis  
 di-neg di-past child the xpl-a-1sg-di see  
 “it won’t be the case that it’s the child that I will hit”

Topics can precede and follow the left peripheral tense and negation:

(74) a. xale yi d-u woon Isaa l-a-ñu dóór non-subject cleft  
 child the.pl di-neg past isaa xpl-a-3pl hit  
 “as for the children, it wasn’t Isaa that they hit”

b. xale yi d-u ñoom ñu a lekk gato bi subject cleft  
 child the.p di-neg 3pl<sub>strong</sub> 3pl a eat cake the  
 “the children, it's not them, that they ate the cake”

Putting together what we have seen so far, the left peripheries of subject and non-subject clefts have the following hierarchical orders:

#### (75) Ordering in Clefts

a. Subject Cleft: Top3 > Neg2 > TP2 > Top2 > Top1 > wh > foc > SM > **a** [ Clt<sub>O</sub>-Clt<sub>Loc</sub> V O ]  
 b. Non-Subject Cleft: Top3 > Neg2 > TP2 > Top2 > Top1 > wh > foc > *l* > **a** [ SM-Clt<sub>O</sub>-Clt<sub>Loc</sub> V O ]

To summarize, the space above *-a-* contains Tense, Negation, Topic, and Focus, structures. In other words, the region *higher* than *-a-* contains the full set of clausal functional heads. In the next section, it will be seen that the region *lower* than *-a-* in the two clefts differ markedly.

## 4.5 Predicate Nominals

### 4.5.1 Introduction

It was pointed out earlier that both the subject and non-subject clefts are morphologically related to the *a-* and *l-*copulas:



b. Móódu mer-na moodu angry-neutral “Moodu is angry”	Adjectival Predicate
c. Móódu mu a y jàngalekat moodu 3sg a di teacher “Moodu is a teacher”	Nominal Predicate
d. Móódu mu a y jàngalekat bi moodu 3sg a di teacher the “Moodu is the teacher”	Nominal Predicate
e. jàngalekat-a teacher-a “it’s a teacher”	Nominal Predicate
f. k.u y jàngalekat? cl.u di teacher “who is a teacher?”	Nominal Predicate

Each of the copular constructions in (78) contains distinct morphology, which varies according to the predicate type. For example, the locative in (78)a, *mu-ng-i*, is a polymorphemic string, combining with a locative PP. The adjectival predicate behaves like a verbal predicate (and is plausibly of the form [[A] V]), as noted in 3.8 *Adjectival Relatives*. Predicate nominals come in a variety of forms. The predicate nominal in (78)e seems only to have a bare NP and the by now familiar, *-a-*. A sentence like (78)e can be used to answer a question like, “who is it?” Finally, the wh question in (78)f lacks *-a-*, but the complementizer *-u-* is present, a silent subject, and the auxiliary *di*(~ y).

A perusal of a fuller range of the nominal copular forms in Wolof in Appendix 2 *Predicate Nominal Copulas* reveals that the paradigms differ according to focus, tense, polarity, etc. In addition, linear order permutations of these types depend on such factors as the definiteness of the predicate. Slightly expanding the paradigm in (78) reveals that many of the copulas do have a common core:

- (79) Subject argument cleft
- a. *gallaay-a \*(y) jàngalekat* NP/DP-*a*-di Pred  
*gallaay-a di teacher*  
 “it’s Gallaay who is a teacher”
- Subject argument cleft
- b. *Gàllaay mu a \*(y) jàngalekat* NP/DP SA-*a di* Pred  
*gallaay 3sg a di teacher*  
 “it’s Gallaay who is a teacher”
- Subject argument cleft
- c. *Gàllaay mu a (y) kàccoor* NP/DP SA-*a (di)* Pred  
*gallaay 3sg a di rascal*  
 “a rascal is what Gallaay is”
- Predicate argument cleft
- d. *Gàllaay daf-a \*(y) jàngalekat* NP/DP daf-*a*-di Pred  
*gallaay do-a di teacher*  
 “a teacher is what Gallaay is”
- Negative
- e. *Gàllaay d-u jàngalekat* NP/DP di-neg Pred  
*gallaay di-neg teacher*  
 “Gallaay is not a teacher”
- Subject argument cleft
- f. *jàngalekat bi a \*(y) Gàllaay* Pred-*a*-di NP/DP  
*teacher the a di gallaay*  
 “the teacher is Gallaay”
- Contrastive focus copula
- g. *Gàllaay di jàngalekat* NP/DP di Pred  
*gallaay di teacher*  
 “Gallaay is a TEACHER (not something else)”

In most of the copular forms above, for example, an *-a-* and *di* are present. However, as (79)e,g suggest *-a-* is not the copula itself, since it is absent in those cases. In most of the cases in (79), the predicate follows the subject. Note that (79)b and c have a subject pronoun, *mo* (= *mu*), while none of the others do.

#### 4.5.2 The Topic/Focus Articulation of the *a-* and *l-*copulas

Besides predicate nominal constructions, both the *a*-copula and the *l*-copula are used in presentative copular constructions.<sup>22</sup>

- |   |                               |
|---|-------------------------------|
| (80)a. Maryam- <i>a</i><br>maryam- <i>a</i><br>“it’s Maryam”                                      | Presentative <i>a</i> -copula |
| b. Maryam <i>l</i> - <i>a</i><br>maryam xpl- <i>a</i><br>“it’s Maryam”                            | Presentative <i>l</i> -copula |
| c. Maryam jàngalekat- <i>a</i><br>maryam teacher- <i>a</i><br>“Maryam is a teacher”               | Predicative <i>a</i> -copula  |
| d. Maryam jàngalekat <i>l</i> - <i>a</i><br>maryam teacher xpl- <i>a</i><br>“Maryam is a teacher” | Predicative <i>l</i> -copula  |

The *a-* and *l-*copulas (and a cleft) can be used to answer wh (cleft) questions:

- |  |          |
|--|----------|
| (81)a. kan <b>a</b> lekk gato bi<br>who <i>a</i> eat cake the<br>"who is it that ate the cake?"      | question |
| b. Gàllaay <b>a</b><br>gallaay <i>a</i><br>"it's Gallaay"  | answer   |
| c. Gàllaay <b>l-a</b><br>gallaay xpl- <i>a</i><br>"it's Gallaay"                                     | answer   |
| d. Gàllaay <b>a</b> lekk gato bi<br>gallaay <i>a</i> eat cake the<br>"it's Gallaay who ate the cake" | answer   |

The topic/focus structures higher than *-a-* and *-l-a-* seem to be very similar. For example, both copulas occur in presentational wh questions:

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<sup>22</sup> One form, often called “presentative” in the literature, is also used in presentative constructions, but also occurs in progressives:

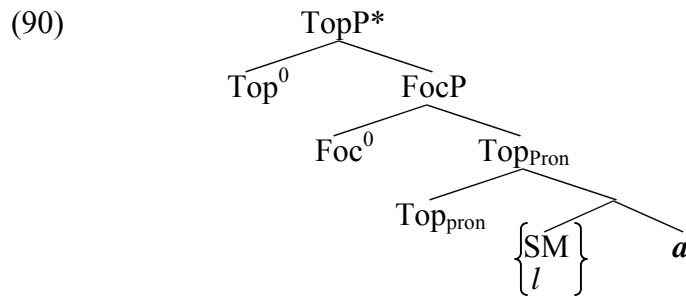
(i) Móódó-óngi n-ii  
moodu-prog cl-dem<sub>prox</sub>  
“here’s Moodu”

These seem to have a locative flavor, thus, I exclude them from discussion here.









Abstracting away from the (in)definiteness issue, the ordering of the topic/focus articulations within both copulas is:

- (91) a. top > foc > top<sub>pron</sub>      -a-      a-copula  
       b. top > foc >                    l- > -a-      l-copula

These match up closely with the left periphery of the subject and non-subject clefts:

- (92) a. top2 > top1 > wh > foc > SM > a      subject cleft  
       b. top2 > top1 > wh > foc > l > a      non-subject cleft

The difference is that in the *l*-copula the *l*- immediately precedes *-a-* while in the *a*-copula it is the focused item. The orders in (91) and (92) correspond very closely to part of the functional hierarchy proposed in Rizzi 1997, 2002.

#### 4.5.3 The Lower Fields in the *a*- and *l*-copulas

While the topic/focus articulations of the two types of copulas are very similar, the lower structures are somewhat different. Using the functional heads available in each copular construction as a gauge of size suggests that the structure embedded by *-a-* in the *a*-copula is smaller than the structure embedded by *-a-* in the *l*-copula. This can be seen by looking at the functional elements that occur in the structure. Consider first the basic clause structure in Wolof in (93) (based on Torrence 2000/2003) and how functional heads are instantiated in the *l*- and *a*-copulas. (AgrSP hosts the subject markers):



- b. Gallaay l-a **kon** *l-copula + conditional*  
 gallaay xpl-a cond  
 "it must be Gallaay"

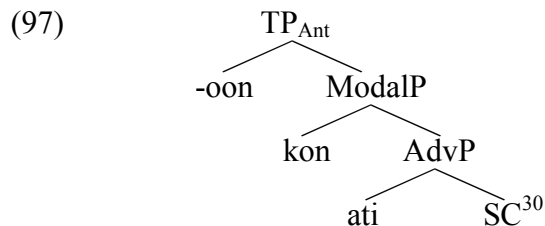
As the translations indicate, these are interpreted as some variety of epistemic modal.<sup>28</sup>

Torrence 2000/2003 argued on the basis of verbal complexes and the distribution of negation, that *kon* can merge low in TP, in fact, lower than (anterior) past tense, *-oon*. In Cinque 1999 epistemic and alethic modals merge (much) higher in the structure than anterior past tense. *kon* may correspond more closely to an obligation (must/need) modal, which is merged lower.

Both the *l-* and *a-*copulas can occur with past tense:

- (96)a. Sidi a **woon** *a-copula + past*<sup>29</sup>  
 sidi a past  
 "it was Sidi"
- b. Sidi l-a **woon** *l-copula + past*  
 sidi xpl-a past  
 it was Sidi"

Thus, both the *a-* and *l-*copulas contain at least the following structure:



The *a-* and *l-*copulas differ however, regarding the higher functional projections (NegP and AgrSP). In a nutshell, the *a-*copula is systematically smaller than the *l-*copula. The affixal negative marker, *-ul-*, cannot occur in the *a-*copula, but it does occur in the *l-*copula (with an obligatory dummy auxiliary, *di*):

<sup>28</sup> Neither a precise syntactic nor semantic characterization of the modal *kon* can be given at this time.

<sup>29</sup> Past tense *-oon* and conditional do not co-occur in either the *l-* or *a-*copula. However, they do so in clefts.

<sup>30</sup> I assume, following Stowell 1981, that nominal predication is instantiated through a small class (SC).



Their non-occurrence in the *a*-copula follows because the *a*-copula does not contain functional heads as high as or higher than (affixal) negation.

Finally, the *a*-copula and *l*-copulas differ in the possibility of stranding material to the right of *-a-*. The *l*-copula allows a relative clause to be stranded to the right of *-a-*, but, the *a*-copula does not:

- (100) a. Senegaal [rééw [m.u ma neex lool]] l-a *l*-copula + RC pied piping  
 senegal country cl.u 1sg be.pleasing very xpl-a  
 “Senegal is a country I like a lot”
- b. Senegaal [rééw [m.u ma neex lool]]-ë *a*-copula + RC pied piping  
 senegal country cl.u 1sg be.pleasing very-a  
 “Senegal is a country I like a lot”
- c. Senegaal [rééw<sub>i</sub>] l-a [m.u ma neex lool]<sub>i</sub> *l*-copula + RC stranding  
 senegal country xpl-a cl.u 1sg be.pleasing very  
 “Senegal is a country I like a lot”
- d. \*Senegaal [rééw]-ë [m.u ma neex lool] \**a*-copula + RC stranding  
 senegal country-a cl.u 1sg be.pleasing very  
 “Senegal is a country I like a lot”

The examples show that a relative clause modifier can be pied piped ((100)a) or stranded ((100)c), so that it follows *-a-* (Incidentally, that fact that the relative clause can be stranded in this position provides further evidence that the XP to the left of *l-a* has moved to that position from lower down.) With the *a*-copula, the relative clause must be pied piped ((100)b), as stranding is not possible ((100)d). Stranding is only possible if there is a position available for something to be stranded in. For the data above, this indicates that there is a stranding position in the *l*-copula, but there is no such position in the *a*-copula. That is, the *a*-copula is "smaller" than the *l*-copula.

Drawing together these strands, I conclude that in the *a*-copula, *-a-* combines with a small part of the clausal structure, no bigger than TP<sub>ant</sub>, while in the *l*-copula, *-a-* selects for at least AgrSP:





(107) a. Gàllaay a woon  
 gallaay a past  
 "it was Gallaay"

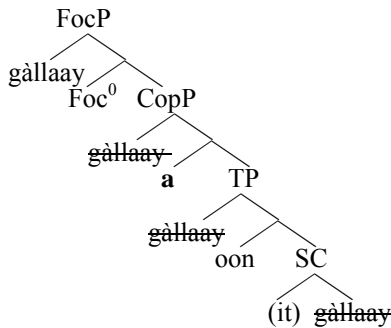
*a*-copula

b. Gàllaay l-a woon  
 gallaay xpl-*a* past  
 "it'was Gallaay"

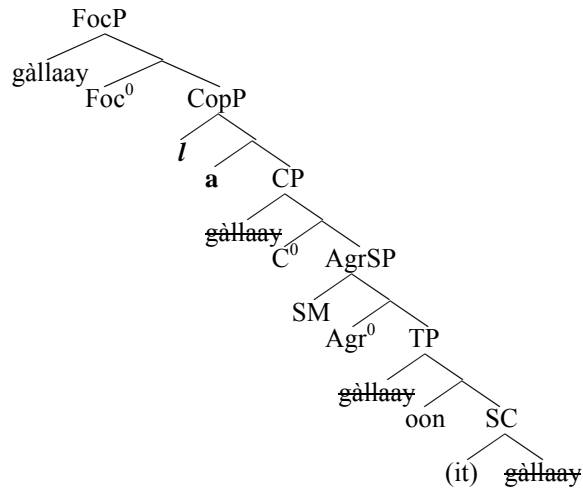
*l*-copula

will proceed as follows:

c. *a*-copula (= (107)a)



d. *l*-copula (= (107)b)



In the *a*-copula, the (predicate) nominal *gàllaay* undergoes predicate inversion to SpecTP (à la Moro 1997). It then raises to SpecCopP. This is essentially raising to subject, and therefore A-movement, since *-a-* is a raising predicate. From SpecCopP, *gàllaay* undergoes A'-movement to SpecFocP. In the *l*-copula, the predicate raises from its base position to SpecTP; again an instance of predicate inversion. The nominal predicate then moves to SpecCP. Movement out of SpecCP is A'-movement. Thus, *gàllaay* is predicted to be ineligible for movement to SpecCopP because this is an A-position. Instead, *gàllaay* raises directly to SpecFocP. Given that *-a-* must have a subject, the expletive *l-* is inserted.

#### 4.6 The Derivation of Clefts

Now that the basic copular structures have been established, we are in a position to look at the clefts they are related to. As we will see, subject clefts, like the *a*-copula, involve a necessary step of A-movement, while non-subject clefts, like the *l*-copula, involve obligatory A'-movement. Consider first differences between the *a*-copula and subject clefts:

- (108) a. golo mu a sàcc-**ul** woon gato bi subject cleft  
 monkey 3sg *a* steal-neg past cake the  
 "it's not a monkey that stole the cake"
- b. \*golo **mu** a **wul** woon *a*-copula  
 monkey 3sg *a* neg past  
 "it wasn't a monkey"

Contrasting (108)a and (108)b it can be seen that the subject cleft clause, unlike the *a*-copula, can contain negation (*-ul*) and the subject markers (*ñu*). This means that in the subject cleft, *-a-* selects for an AgrSP. Recall that there is no expletive present in a subject cleft, nor can there be:

- (109) \*golo yi **l-a-ñu** sàcc-*ul* woon gato bi \*subject cleft + xpl  
 monkey the.pl xpl-*a*-3pl steal-neg past cake the  
 "it's not the monkeys that stole the cake"

That subject clefting occurs only in the absence of the expletive means that subject clefting does not involve the presence of a CP. Instead, subject clefts involve raising to subject.

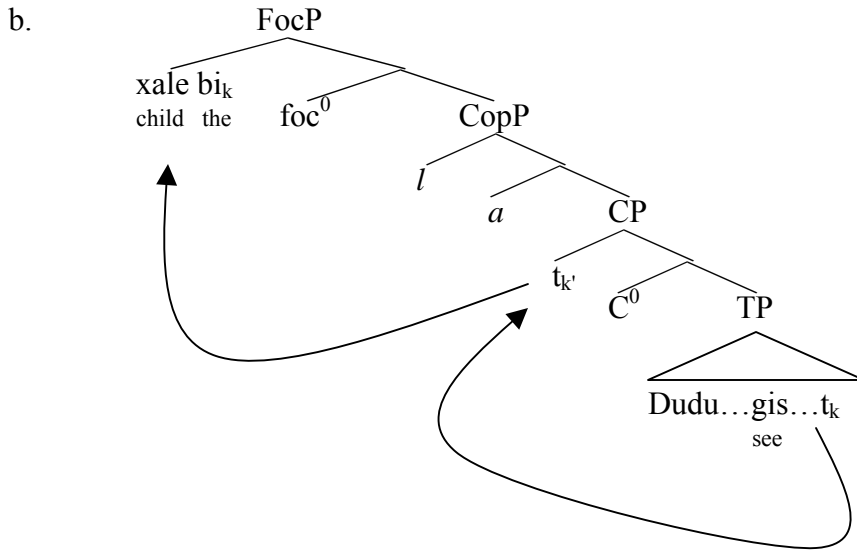
Consider next the non-subject clefts and *l*-copula:

- (110) a. golo yi gato bi **l-a-ñu** sàcc-**ul** woon non-subject cleft  
 monkey the.pl cake the xpl-*a*-3pl steal-neg past  
 "the monkeys, it's the cake that they did not steal"
- b. golo **l-a-ñu** **d-oon-ul** *l*-copula  
 monkey xpl-*a*-3pl *di*-past-neg  
 "a monkey is not what they are"

The non-subject cleft in (110)a looks very much like the *l*-copula in (110)b in that it contains negation, the expletive, and subject markers, all in the same relative linear

positions. That is, the *-a-* in the non-subject cleft, like the *-a-* in the *l-*copula, selects for a full CP structure. For a non-subject cleft, this translates into a surface structure like:

- (111) a. *xale bi l-a Dudu gis*  
 child the *xpl-a* dudu see  
 "it's the child that Dudu saw"

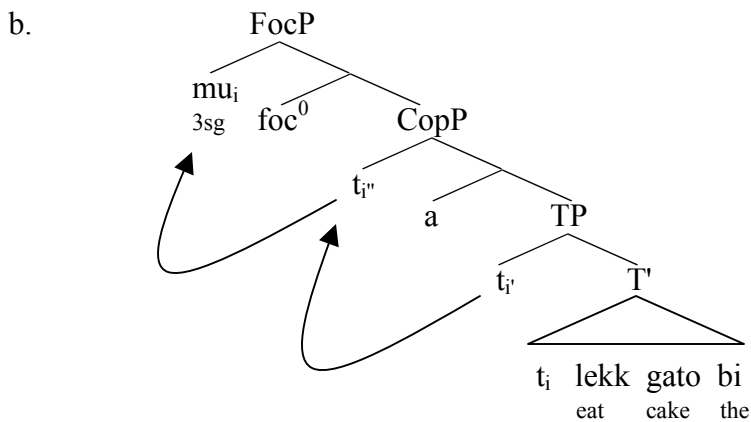


The tree above incorporates the conclusions that were established earlier in the discussion. The first was that the presence of the expletive, *l-*, corresponds to the presence of a full CP structure. It was also shown that a clefted constituent undergoes movement from its base position to its surface position. For the clefted non-subject, *xale bi* "the child", in (111) this entails movement out of CP using SpecCP as an escape hatch; that is, A'-movement. Third, it was argued that the specifier associated with the head of CopP is an A-position and that *-a-* has an EPP feature. This behavior is what we expect of a raising predicate. Thus, *-a-* needs a nominal expression in its specifier (at some point in the derivation). This yields a straightforward explanation of why the expletive appears when a non-subject is clefted. Given that a non-subject undergoes A'-extraction

(out of a CP), it cannot then occupy an A-position, such as the specifier of CopP. The EPP feature of *-a-* is satisfied by the insertion of the expletive *l-*.

Turning now to the subject cleft, recall from the discussion of the *a*-copula and subject clefts that in the *a*-copula, *-a-* occurs with a "small" TP, while in the subject cleft, *-a-* occurs with a "big" TP. What these have in common is the presence of a TP, not a CP. This means that the structural difference between subject clefts and non-subject clefts is the absence versus the presence of a CP. That is, subject clefting is preceded by raising out of a TP, not a CP. Thus, (112)a is derived as in (112)b:

- (112) a. *mu a lekk gato bi*  
 3sg *a* eat cake the  
 "it's him who ate the cake"



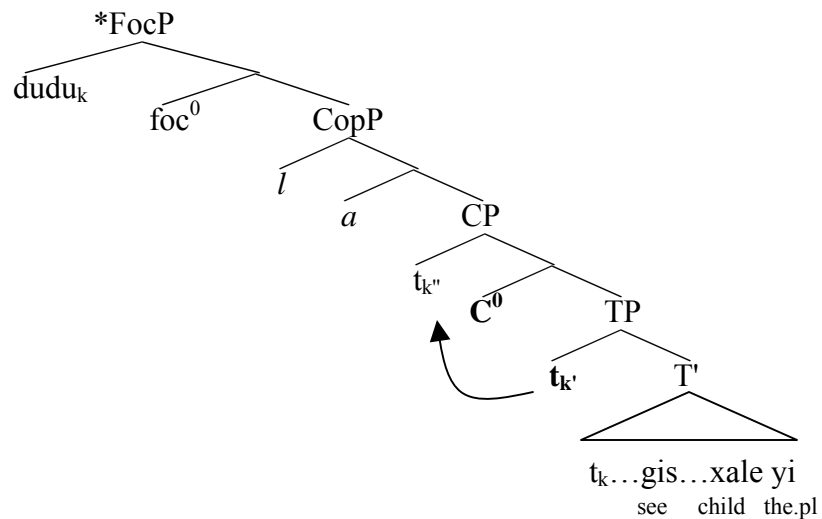
Movement of the subject, *mu* '3sg', from SpecTP to SpecCopP is an instance of A-movement because *-a-* is a raising predicate.

It was shown earlier that a clefted subject cannot occur with an expletive, but it was not explained why this was so:

- (113) \**Dudu l-a gis xale yi*  
 dudu xpl-*a* see child the.pl  
 "it's Dudu who saw the children"

According to what we have established, cases like (113) would have the following structure:

(114) Subject Extraction from CP

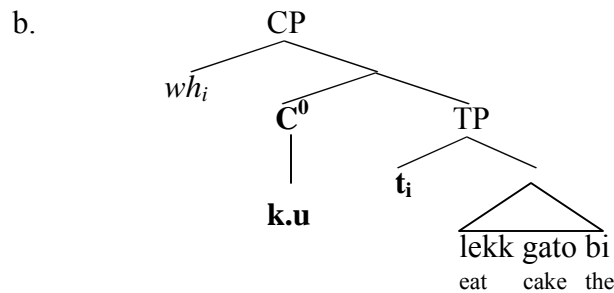


In the derivation in (114), the subject is extracted from SpecTP and moves to SpecCP. This makes movement to SpecCopP impossible, as it is an A-position. Thus, the expletive will must be present. However, movement from SpecTP to SpecCP leaves a trace,  $t_k$ , in SpecTP following  $C^0$ . This yields a *that-t* violation. Put differently, we know that the presence of the expletive corresponds to the presence of a CP. Subject clefting does not occur out of a CP because this will led to a *that-t* violation because the subject will extract from SpecTP. In the grammatical case of subject extraction, (112), the subject trace in SpecTP,  $t_i$ , does not trigger a *that-t* violation because there is no  $C^0$ . This is interestingly similar to the pattern of clefting in French:

- (115) a. qui est-ce qui a embrassé Jean                      bare wh  
           who is-it that.agr has hugged jean                subject  
           "who is it that hugged Jean?"
- b. \*quelle homme est-ce qui a embrassé Jean            which-wh  
           which man is-it that.agr has hugged jean           subject  
           "which man hugged Jean?"
- c. quelle homme est-ce que Marie a embrassé            which-wh  
           which man is-it that marie has hugged                object  
           "which man is it that Marie hugged?"

(115)a shows that clefting of a bare *wh* subject is fine, while clefting of a *which*-phrase subject is ungrammatical, as pointed out to me by Philippe Schlenker.<sup>31</sup> Taken together, these suggest that, from a crosslinguistic perspective, the analysis I have presented here is incomplete. This is because even though French has a way of overcoming a *that-t* effect (*que* → *qui*), clefting of a *which* *wh*-subject is ungrammatical. Recall though that Wolof is like French in having an agreeing complementizer, *-u-*, which can be used in subject extraction:

(116) a. *wh<sub>i</sub> k.u t<sub>i</sub> lekk gato bi*  
           cl.u eat cake the  
           "who ate the cake?"



The movement of the subject *wh*, *wh<sub>i</sub>*, in (116) should trigger a *that-t* violation too because the subject trace, *t<sub>i</sub>*, bears the same structural relation complementizer *-u-* as the subject trace to *C<sup>0</sup>* in (114). However, *-u-* is an agreeing complementizer, unlike the silent *C<sup>0</sup>* that occurs in a non-subject cleft. In addition, subject *an*-forms, which are *which* phrases, can extract from a CP headed by *-u-*:

(117) [*gën (góór)<sub>k</sub> l-a-ñu foog ne* [<sub>CP</sub> *t<sub>k</sub> [g.u* [<sub>TP</sub> *t<sub>k</sub> sàcc gato bi*]]]]  
           cl.which man xpl-a-3pl think cl.u steal cake the  
           "which (man) do they think stole the cake?"

In Wolof, the presence of a *C<sup>0</sup>* that agrees, *-u-*, does not trigger a *that-t* effect when a subject is extracted. When a *C<sup>0</sup>* is present that does not agree, as in clefts, *that-t* effects

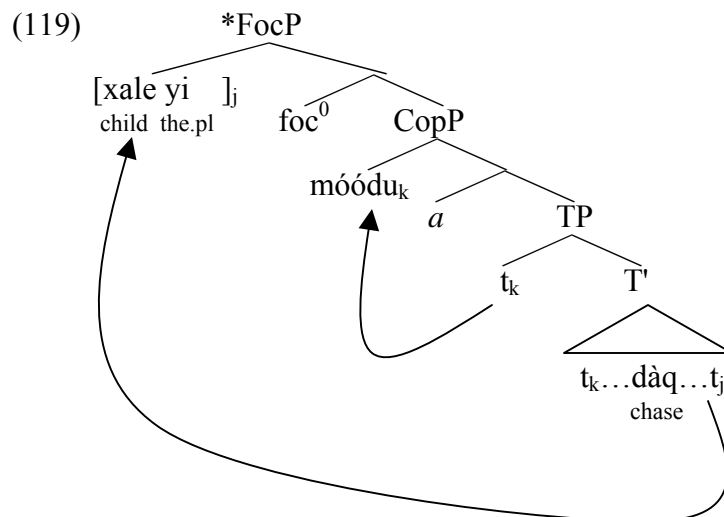
<sup>31</sup> (115)a, b are reported independently in Munaro and Pollock 2005.

emerge. However, similar reasoning cannot apply to French, since it has *que* → *qui*, an agreeing complementizer, but phrasal subject *wh*-clefting is excluded. (115)c shows that the subject/object asymmetry we find in Wolof is present in French too because a non-subject *which*-phrase in French can be clefted. The analogy to Wolof is even stronger given that the *an*-forms are *which*-phrases. It is not clear how to account for these asymmetries in either language.

The problem that arises now is how to block non-subject extraction from TP, as in:

- (118) \**xale yi Móódu a dàq*  
 child the.pl moodu a chase  
 "it's the children that Moodu chased"

This would be derived by:



In (119), the subject raises to SpecTP and then to the specifier of CopP. This satisfies the EPP property of *-a-*. When the focus head merges, it attracts the non-subject, *xale yi* "the children". I currently have no way of blocking this derivation. It cannot be that SpecCopP acts an escape hatch for reaching SpecFocusP because we know that in the non-subject cleft, the expletive *l-* occupies SpecCopP. This would therefore block non-subjects from being focused with the expletive, contrary to fact. One way of

approaching this problem is to think of the absence of a CP in subject clefting as a marked or last resort option, while the CP is the default option. That is, if a CP can be used it is and in fact, we saw that for the *u*-construction a CP headed by *-u-* is used to extract subjects and non-subjects. With clefting for a non-subject, there is no problem with A'-movement out of CP because the non-subject does not extract from SpecTP and therefore no *that-t* effect will emerge. With subject extraction from a cleft, the marked, TP option must be used, because extraction from CP will yield a *that-t* violation. That is, there is simply no other way to extract a subject from a cleft.

#### 4.7 Summary

In this chapter, several analytical points have been made. I have argued that the *-a-* that appears in clefts is different from the  $C^0/D^0$  *-a-* that appears in relative clauses. Instead I have claimed that cleft-*a* is a raising predicate. Cleft-*a* appears with an expletive, while  $C^0/D^0$ -*a* does not.  $C^0/D^0$ -*a* obligatorily agrees in class with the A'-extracted element in its specifier. Cleft-*a* never agrees in class with the A'-extracted element. Cleft-*a* occurs with an expletive, while  $C^0/D^0$ -*a* does not. Finally,  $C^0/D^0$ -*a* does not display any subject/object asymmetries related to what can occur in its specifier. That is, both subjects and non-subjects can occupy its specifier. I have shown, using the distribution of topics, foci, tense, and negation, that cleft-*a* projects a TP and CP system. Cleft-*a*, like English raising verbs takes either a TP-like or CP complement. It was also seen that the presence of a CP positively correlates with the presence of the expletive *l-*. Subject clefting proceeds in two steps. The subject first undergoes a step of A-movement, followed by A'-movement. Non-subject clefting occurs in a single step of A'-movement. While I have provided an account for the basic data, there is much that remains for future research. This is because the morphosyntactic properties of the various copular paradigms in Appendix 2 *Wolof Copular Paradigms* have simply not been investigated. The prospects for progress are good because in Wolof there is a great deal of overt morphology which can be used to probe the syntactic structure and derivations.

Appendix 1 The particle *d-u*

Here I present some other properties of the high negative particle *d-u*. I lay out the data, but no attempt will be made to develop an analysis at this time. The higher negation, *d-u*, cannot occur when a Wh is clefted. This holds for both types of clefts:

- (120) a. **kan** mo-o dem-**ul** clefted wh subject + low negation  
 who 3sg-*a* leave-neg  
 “it’s who that did not leave?”
- b. \***d-u** **kan** mo-o dem clefted wh subject + high negation  
 di-neg who 3sg-*a* leave  
 “it’s not who that left?” (echo only)
- c. **Isaa** mo-o dem-**ul** clefted non-wh subject + low negation  
 isaa 3sg-*a* leave-neg  
 “it’s Isaa that did not leave”  
 “it’s Isaa who did not leave”
- d. **d-u** **Isaa** mo-o dem clefted non-wh subject + high negation  
 di-neg isaa 3sg-*a* leave  
 “it’s not Isaa that left”

The *du* negative also occurs with other clause types, but only as a question particle, yielding an interpretation like an English negative tag question:

- (121) a. gis-ně-ñu Joob neutral clause  
 see-*na*-3pl joob  
 “they saw Joob”
- b. **d-u** gis-ně-ñu Joob *du* + neutral clause  
 di-neg see-*na*-3pl joob  
 “they saw Joob, didn’t they?”  
 \*”they did not see Joob”
- c. waaw, gis-ně-ñu-kó expected answer to (121)b  
 yes see-*na*-3pl-3sg  
 “yes, they saw him”

A topic may precede or follow *du*. If the topic follows *du* then the clause can only be interpreted as a question. If the topic precedes, *du*, then the clause may be interpreted as a statement or a question:

- (122) a. xale yi Ayda l-a-ñu jox mbott mi  
 child the.pl ayda xpl-a-3pl give frog the  
 “as for the kids, it’s Ayda that they gave the frog to”
- b. **d-u** Ayda l-a xale yi jox mbott mi  
 di-neg ayda xpl-a child the.pl give frog the  
 “it’s not Ayda that the kids gave the frog to”  
 “it’s Ayda that the kids gave the frog to, right?”
- c. **d-u** xale yi Ayda l-a-ñu jox mbott mi  
 di-neg child the.pl ayda xpl-a-3pl give frog the  
 “as for the kids, it’s Ayda that they gave the frog to, right?”  
 \*”as for the kids, it’s not Ayda that they gave the frog to”
- d. xale yi **d-u** Ayda l-a-ñu jox mbott mi  
 child the.pl di-neg ayda xpl-a-3pl give frog the  
 “as for the kids, it’s not Ayda that they gave the frog to”  
 “as for the kids, it’s Ayda that they gave the frog to, right?”

The same pattern is found with subject clefts:

- (123) a. xaj bi, ya-a-ko gis TOP foc  
 dog the 2sg-a-3sg see  
 “as for the dog, it’s you that saw it”
- b. **d-u** ya-a gis xaj bi du foc  
 di-neg 2sg-a see dog the  
 “it’s not you that saw the dog”
- c. **d-u** xaj bi, ya-a-ko gis du TOP  
 di-neg dog the 2sg-a-3sg see  
 “as for the dog, you saw it, right?”  
 \*”as for the dog, it’s not you that saw it”

However, a left dislocated subject *does not* act as a topic and trigger an obligatory question interpretation:

- (124) a. **d-u** jigéen ñi ño-o gis xaj bi  
 di-neg woman the.pl 3pl-a see dog the  
 “as for the women, it’s not them that saw the dog”  
 “as for the women, it’s not them that saw the dog, right?”

## Appendix 2 *Nominal Copula Paradigms*

		Present	Past	Future
Bare Copula	Affirmative	<b>DP-a</b> góór-ë man-a “it’s a man”	<b>DP-a woon</b> góór-ë woon man-a past “it was a man”	*
	Negative	*	*	*
Predicate <i>a</i> -Copula	Affirmative	<b>DP-a di Pred</b> [xale y-e]-e-y beykat child cl-def-a-di farmer “the children are farmers”	<b>DP-a d-oon Pred</b> [xale y-e]-e d-oon N child cl-def-a di-past N “the children were Ns”	<b>DP-a-y d-oon-(i) Pred</b> [xale y-e]-e-y d-oon-i N child cl-def-a-di di-past-dir N “it’s the children who will be Ns”
	Negative	<b>DP-a d-ul Pred</b> [xale y-e]-e d-ul N child cl-def-a di-neg N “it’s the children who aren’t Ns”	<b>DP-a d-ul woon N</b> [xale y-e]-e d-ul woon N child cl-def-a di-neg past N “it’s the children who were Ns”	<b>DP-a-y d-oon-ul Pred</b> [xale y-e]-e-y d-oon-ul N child cl-def-a-di di-past-neg N “it’s the children who won’t be Ns”
Subject Copula	Affirmative	<b>DP SA-a di Pred</b> xale yi ño-o-y N child the 3pl-a-di N “it’s the children who are Ns”	<b>DP SA-a d-oon Pred</b> xale yi ño-o d-oon N child the 3pl-a di-past N “it’s the children who were Ns”	<b>DP SA-a-y di Pred</b> xale yi ño-o-y d-oon N child the 3pl-a-di di-past N “it’s the children who will be Ns”

		<b>Present</b>	<b>Past</b>	<b>Future</b>
Non-Subject Copula	Affirmative	<b>(1) DP Pred l-a-SA (d-oon)</b> xale yi N l-a-ñu (d-oon) child the N xpl-a-3pl di-past “the children are Ns”  <b>(2) Pred l-a DP d-oon</b> N l-a xale yi d-oon N xpl-a child the di-past “the children are Ns”	<b>(1) DP N l-a-SA woon</b> xale yi N l-a-ñu woon children the N xpl-a-3pl past “the children were Ns”  <b>(2) N l-a DP d-oon-oon</b> N l-a xale yi d-oon-oon N xpl-a child the di-past-past “the children were Ns”	<b>(1) DP Pred l-a-SA di d-oon</b> xale yi N l-a-ñu-y d-oon child the N xpl-a-3pl-di di-past “the children will be Ns”  <b>(2) Pred l-a DP di d-oon</b> N l-a xale yi di di-oon N xpl-a child the di di-past “the children will be Ns”
	Negative	<b>DP Pred l-a-SA d-oon-ul</b> xale yi N l-a-ñu d-oon-ul child the N xpl-a-3pl di-past-neg “the children are not Ns”	<b>DP N l-a-ñu d-oon-ul woon</b> xale yi N l-a-ñu d-oon-ul woon child the N xpl-a-3pl di-past-neg past “the children were not Ns”	<b>DP N l-a-SA di d-oon-ul</b> xale yi N l-a-ñu-y d-oon-ul child the N xpl-a-3pl-di di-past-neg “the children won’t be Ns”
Predicate Focus	Affirmative	<b>DP def-SA-a di Pred</b> xale yi da-ño-o-y N child the do-3pl-a-di N “it’s Ns that the children are”	<b>DP def-SA-a d-oon Pred</b> xale yi da-ño-o d-oon N child the do-3pl-a di-past N “it’s Ns that the children were”	<b>DP def-a-SA di di Pred</b> xale yi da-ño-o-y di N child the do-3pl-a-di di N “it’s Ns that the children will be”
	Negative	<b>DP def-SA-a d-ul Pred</b> xale yi da-ño-o di-ul N child the do-3pl-a di-neg N “it’s Ns that the children aren’t”	<b>DP def-SA-a d-ul woon Pred</b> xale yi da-ño-o d-ul woon N child the do-3pl-a di-neg past N “its Ns that the children weren’t”	<b>DP def-SA-a d-ul Pred</b> xale yi da-ño-o d-ul N child the do-3pl-a di-neg N “it’s Ns that the children won’t be”
Neutral	Affirmative	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
	Negative	<b>DP d-u-SA Pred</b> xale yi d-u-ñu N child the di-neg-3pl N “the children are not Ns”	<b>DP d-u-SA woon Pred</b> xale yi d-u-ñu woon N children the di-neg-3pl past N “the children were not Ns”	<b>DP di-neg-SA di Pred</b> xale yi d-u-ñu-y N child the di-neg-3pl-di N “the children will not be Ns”



