

Clausal nominalization in Wolof

By

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Abstract

Wolof uses various strategies to express clausal nominalization i.e. genitive nominalization (GN), relative clause nominalization (RC nominalization) and headless relative clause nominalization. This dissertation provides a description of these nominalization processes with a special focus on GNs and RC nominalizations. RC nominalization is a very productive nominalization process in the language and can occur with almost all types of verbs. In addition, a verb can undergo RC nominalization even when it has different derivational suffixes attached to it. As for GN, it is an argument-reducing nominalization strategy and is less productive as there are various restrictions about the type of verbs it can be built from. The RC nominal can have an event, factive and manner interpretation whereas the GN nominal can have a generic, event and factive interpretation. This dissertation also provides a comparison of this type of nominalization with similar nominalization types found in related African languages like Ewe, Fon, Gungbe, Krio and Yoruba. Finally, this dissertation also shows how Wolof nominalization types fits within the typology of nominalization.

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List of Abbreviations

1SG: first person singular
AGR: agreement
AL: allative
AN: action nominalizer
BEN: benefactive
CAUS: causative
CL: noun class marker
COMP: complementizer
COMP_{DEF}: definite complementizer
COMP_{DEF-DIS}: definite distal complementizer /COMP_{IND}
CL: indefinite complementizer noun class marker
FIN: finiteness marker
GEN: genitive
NEG: negation marker
NOM: nominalizer
PST: past tense marker
REL: relative pronoun
IL: illative
REC recipro
REL: relative pronoun
PRND :pretenditive
REV: reversive
RFM: reflexive marker
INSTR: instrumental
OBJ: objective
3SG_{ACC}: third person accusative
3SG_{NOM}: third person nominative

Chapter 1: Introduction

1.1 Introduction

This dissertation examines the different morphosyntactic processes involved in Wolof clausal nominalization. Nominalization refers to “turning something into a noun” (Comrie and Thompson 1985:334). Genetti et al (2008) go deeper by referring to nominalization as a process “by which non-nominal elements become grammatical nominals”.(Genetti et al 2008:2).

Examples of the kinds of Wolof nominals that are of interest in this dissertation are presented in (1) :

- (1) a. Musaa bind na téeré b-i
Musaa write FIN book CL-the
“Musaa wrote the book”
- b. Musaa ànd na ci [m- bind -u -m téeré b -i] Genitive
Musaa agrees FIN with NOM- write- GEN-CL book CL-the
“Musaa agrees with the writing of the book”
- c.[bind b-i [Musaa bind téeré b-i]] bett na ma Relative Clause
write CL-the Musaa write book CL-the surprise FIN 1SG
“Musaa’s writing of the book surprised me”
- d.[l-i [Musaa bind téeré b-i]] bett na ma Headless Relative Clause
CL-the Musaa write book CL-the surprise FIN 1SG
“The fact that Musaa wrote the book surprised me”

(1)b-d show clausal nominalizations that are marked with brackets around them. (1)b provides a typical SVO sentence that is nominalized in (1)b-d. (1)b is an example of genitive nominal, (1)c is an example of a relative clause nominal whereas (1)d is an example of headless relative clause nominalization. I discuss the various syntactic and semantic differences of each. Even though all

the three nominalization processes in (1) are discussed, genitive nominalization and relative clause nominalization are the main focus of this dissertation.

Clausal nominalizations are very complex in nature; indeed they seem to occur with some types of arguments generally associated with the presence of a verb. This dissertation is a contribution to the study of nominalization in general and to the study of clausal nominalization in particular; in addition, the dissertation sheds light on this syntactic aspect of Wolof that has not been paid attention to. Indeed, previous research on Wolof nominalizations focused on simple nominalization patterns, that is, the description of morphological strategies involved in deriving simple nouns from verbs and also the different nominal affixes in the language. In addition, most research on nominalization has been conducted on Indo-European languages. This dissertation also contributes to the area of clausal nominalization by examining cross-linguistic similarities and differences not only in African languages related to Wolof but also in other languages spoken around the world. In summary, this dissertation is not only a contribution to the study of the morphosyntax of clausal nominalization in general but it is also a contribution to the syntax of Wolof and the typology of nominalization in general.

This dissertation is organized as follows: chapter 2 provides a background on Wolof in general through a description of general linguistic aspects of the language with respect to word order, clause type, determiner phrase (DP) structure and an overview of simple nominalization patterns in Wolof. Chapter 2 discusses different properties of genitive nominal , Chapter 3 deals with relative clause nominalization. Chapter 3 provides a comparison of the structure and properties of the relative clause nominals and the genitive nominals. Chapter 4 examines Wolof nominalization within the typology of nominalization in general. This is followed by a conclusion that summarizes the dissertation.

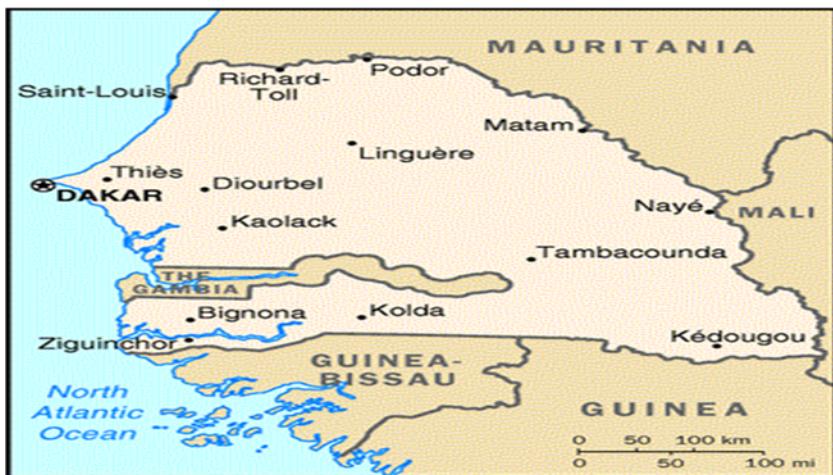
1.2 Background on Wolof

Wolof belongs to the West-Atlantic subgroup of the Niger-Congo family (Greenberg (1970)). It is mainly spoken in Senegal but also in The Gambia and in neighboring countries like Mali and Mauritania.

According to Lewis (2009) the number of Wolof speakers is estimated at 3,976,500 speakers among which 12,000 are in neighboring Mauritania. According to Ethnologue, Wolof is spoken by over 90% of the population. A difference can be noticed between rural Wolof and urban Wolof with the latter being a simplified version of the former. Since 1975, a standard Wolof orthography has been in use. Wolof is mainly spoken in Saint-Louis (Walo and Gadiol)¹, Louga (Ndiambour and Djolof), Thiès (Cayor), Diourbel (Baol), Kaolack (Saloum), Dakar and the Gambia (Diallo (1983), Dramé (2012). This shown in the following map of Senegal.

¹ The words in bracket refer to the names of the former kingdoms that were found in those areas (Sauvageot (1965))

Map² 1: Senegal and its regions.



The different geographical distribution of the Wolof language accounts for its different dialects.

Some of these dialects, according to Dramé (2012,) include but are not limited to, the faana-faana dialect spoken in the Saloum area, the Lebu dialect spoken in Ouakam, Dakar and the Dakar Wolof spoken in the urban areas of Dakar. Even though there are different dialects of Wolof, speakers of different dialects can generally understand each other, and intelligibility is rarely affected (Torrence (2005)). Although Dakar Wolof is usually referred to as standard, Torrence advises caution when using the word “standard” with respect to Wolof. This is because Wolof remains a language not commonly used in writing. It is however used in the media (radio and TV). The Wolof spoken in urban areas is often characterized by the use of French-Wolof code-switching. Wolof is not generally taught in school, French being the language used in education. Wolof is however used in adult literacy programs, for these reasons Wolof textbooks generally target adults in those programs.

² From : <http://goafrica.about.com/library/bl.mapfacts.senegal.htm>

Some of the data used throughout this dissertation has been gathered from native speakers of Wolof that speak an urban version. However, I have primarily data based on my knowledge of the language as a native speaker of Wolof that grew up in the city of Thiès, Senegal. The location of this city is shown in the previous map.

The Wolof used in this dissertation can be characterized as being urban Wolof; however the reader should not expect to find one characteristic of urban Wolof which consists of using French words from time to time in sentence. I have decided not to add any French words throughout the examples used in this dissertation.

The next sections provide linguistic information about the language with respect to word order, DP structure (noun class, agreement, internal DP structure etc.). Finally, verbal morphology and nominal morphology are discussed.

1.2.1 Word order

The basic word order of Wolof is Subject-Verb-Object (SVO):

- (2) a. Awa gis na Daba
Awa see FIN.3SG Daba
“Awa has seen Daba”
- b. xale y-i lekk na-ñu ceeb
children CL-the eat FIN-3 PL rice
“The children have eaten some rice”

Wolof is a pro-drop language; the subjects of the verbs can be dropped leaving a grammatical sentence. This can be seen in (3) below.

- (3) a. gis na-a Daba
 see FIN-1SG Daba
 “I have seen Daba”
- b. gis nga Daba
 see FIN.2SG Daba
 “you have seen Daba”
- c. gis na Daba
 see FIN.3SG Daba
 “he/she has seen Daba”
- d. gis na-nu Daba
 see FIN-1PL Daba
 “We have seen Daba”
- e. gis ngeen Daba
 see FIN.2PL Daba
 “you_{PL} has seen Daba”
- f. lekk na-ñu ceeb
 eat FIN -3PL rice
 “They have eaten some rice”

These sentences in (3) are like the ones in (2) except that the overt subjects are missing; nevertheless they are grammatical.

1.2.2 Wolof DPs

1.2.2.1 Noun class

Wolof is a noun class language; there are thirteen noun classes including two plural ones. Nouns do not occur with synchronic noun class prefixes or suffixes. Instead, noun class membership is expressed on other elements in the DP, such as articles and demonstratives (Greenberg (1963), Seck (1997), Tamba, Torrence, Zimmerman (2012)). Consider Table 1, which gives the noun classes below (adapted from Torrence (2005:21-22)):

Table 1. The Noun Classes of Wolof

NP	Translation	Class Name
ceeb b-i	“the rice”	b-class
góór g-i	“the man”	g-class
ngelaw l-i	“the pot”	l-class
jigéén j-i	“the woman”	j-class
xaal w-i	“the watermelon”	w-class
ndaw s-i	“the lady”	s-class
ndox m-i	“the water”	m-class
nit k-i	“the person”	k-class
xale y-i	“the children”	y-class (plural)
góór ñ-i	“the men”	ñ-class (plural)
f-oo-f-u f-an (locative)	“aforementioned place” “where”?	f-class
n-oo-n-u (manner)	“aforementioned way”	n-class
c-oo-c-u (prepositional)	“in/at/on aforementioned place”	c- c/s-class

The noun class is marked with a morpheme that co-occurs with different morphemes according to definiteness for instance. This is shown in the next section. Nouns class membership is based on factors such as morphology, semantics and phonology (Sy (2003)).

1.2.2.2 Agreement

Wolof determiners do not have simple equivalents of English *a* and *the*. The template in (4) reveals that definite determiners follow the noun, while the indefinite determiners precede the noun.

- (4) a. Noun CL-i singular/plural definite
 b. Noun CL-a singular/plural definite
 c. a/u-CL Noun singular/plural indefinite

The template provided in (4)a, (4)b and (4)c are illustrated in (5), (6) and (7) respectively. In Wolof, the definite marker can be used to encode both familiarity and uniqueness based on the pragmatic context.

- (5) Musaa gis na xaj b-i / y-i definite article
 Musaa saw FIN.3SG dog CL_{SG}-the/ CL_{PL}-the
 “Musaa saw the dog/the dogs”

The second definite marker in Wolof, *-a* , is related to familiarity ; it is used in a context where the speaker wants to specify an entity mentioned a long time ago.

- (6) xale b-a / y-a
 person CLSG-a/ CLPL-a
 "the child" /"the children" ("the child/children mentioned before "(lit.))

Unlike the definite determiners, the indefinite determiners precede the noun. Indefinite DPs can be formed through the use of the bound determiner *a-* followed by a noun class marker that varies based on the noun being used.

- (7) Xadi gis na-Ø **a-b/a-y** sàcc
Xadi see FIN-3SG a-CL/a-CL thief
“Xadi saw a thief/thiefs”

1.2.2.3 Wolof internal DP structure

Torrence (2008) describes various factors that can affect the linear order of DPs. Those factors are related but not limited to, numerals, quantifiers, pronominal vs non-pronominal possessors etc.

(8) below from Torrence (2008) shows the linear order of elements within Wolof DPs.

- (8) a. juróóm-i xaj y -u réy y-i
five -AGR dog CL-u big CL-the
“The five big dogs”
- b. juróóm -i xaj y-u réy y-ii
five -AGR dog CL-u big CL-these
“These five big dogs”

This linear order thus follows the template Num>Agr>N>Adj>D/Dem that is the numeral is followed by the number agreement then by the noun, which is followed by the adjective *yú réy* “that is big”(lit.). Finally the definite determiner appears at “the right edge of the DP” (Torrence 2008: 5).

1.2.3 Wolof clause structure

Wolof has a large number of distinctive clause types. The following data adapted from Torrence (2005) gives a subset of Wolof clause types³. They encode things like focus, non focus, subject emphasis, negation etc.

- *Na* Clause: The entire clause is new information. No subconstituent is in focus.

- (9) xale y -i lekk na-ñu gato bi
child CL-the eat- FIN -3PL cake the
“the children ate the cake”

- Negative: No emphasis on anything. Negative of *na*-clause.

- (10) xale yi lekk-u-ñu gato b-i
child the.pl eat-NEG-3PL cake CL-the
“the children did not eat the cake”

- Subject Cleft : Subject in focus

- (11) xale yi a lekk gato b-i
child the.pl FOC eat cake CL-the
“it’s the children who ate the cake”

- Non-Subject Cleft⁴ :Non-Subject in focus

- (12) gato b -i l-a xale y-i lekk
cake CL-the EXP-FOC child CL-the eat
“it’s the cake that the children ate”

- Verb focus: Emphasis is on the action or state described by the verb

- (13) xale y-i da-ñu lekk gato b-i
child CL-the FOC -3PL eat cake CL-the
“the children ate the cake”

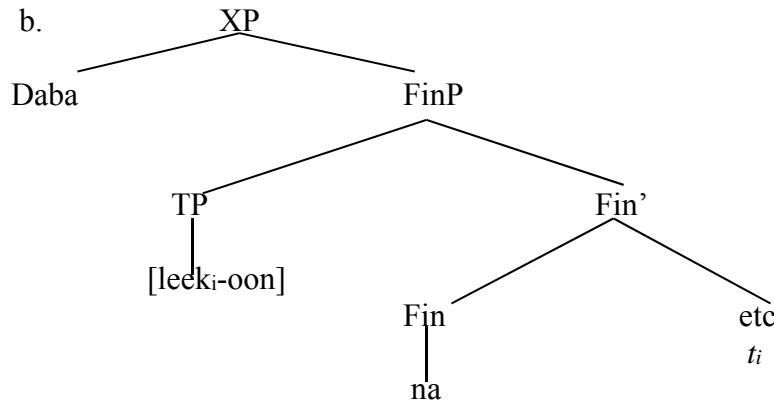
The *Na-* clause in (9) is particularly relevant for this dissertation since almost all the examples used are from this clause type. I follow Zribi-Hertz and Diagne (2002) and Torrence

³ Note that this list is far from being exhaustive. Torrence (2005) gives more than fifteen clause types in Wolof:

⁴ The non-subject cleft, like the subject cleft, has two different negative forms. I have not included these forms here.

(2003, 2005) and analyze *na* as a finiteness marker in the left periphery of the clause. Torrence (2005) and Koopman (2006) analyze *na*-clauses as involving VP and TP remnant movement into the left periphery, specifically the specifier of *na* which heads FinP (Rizzi (1997)). Thus for a sentence like (14)a below Torrence proposes a structure as in (14)b.

- (14) a. Daba lekk-oon na
 Daba eat –PST FIN
 “Daba ate”



Torrence argues that the derivation above implies not only head movement but a XP movement; in this case TP moves to the specifier of FinP.

1.2.4 Wolof verb morphology

Wolof has very rich verb morphology (Diallo (1981), Ka (1994), Nouguier-Voisin (2002)). Apart from a few exceptions, verbal affixes in Wolof are suffixes, most of them being derivational as shown in the following⁵:

⁵ Adapted from Torrence (2005:45-46)

In (15) b-c the derivational suffixes *-i*, *-si* respectively change the basic meaning of the verb. As can be seen from the examples above, the meaning of the verb *sàcc* “steal” is no longer limited to the action of stealing. In a language like English such readings are obtained by adding more elements in the sentence as shown in the translation equivalents provided above. In (15)e the verb meaning changes with the reduplication of the verb root and also with the attachment of the pretensive suffix *-lu*. In (15)f, with the use of an instrumental suffix, the presence of the preposition *ak* “with” is optional; this suffix is a valency-increasing suffix. In (15)h when the reversive suffix is added to the verb root, it undergoes morphological modification. Indeed, the verb changes from a C₁V₁C₂ template to a C₁V₂C₂C₂ so the V changes and C₂ is doubled in such conditions. Some of these verbal suffixes are used in clausal nominalization as discussed in the next two chapters.

1.2.5 Other nominalization processes

In this section, I review several nominalization strategies used in Wolof. These strategies are done through various procedures which are affixation, conversion, compounding, consonant mutation and reduplication (Ka (1994), N’diaye (2003)). These processes are all productive. Each of these processes is discussed in the following subsections.

1.2.5.1 Affixation

Affixation in Wolof mainly consists in suffixation, it is a very productive nominalization pattern that creates instrumental, stative, agentive and objective nominalizations to name but a few.

In (16)a, the suffix *-ukaay* attaches to an action verb whereas (16)b shows that *aay* attaches to stative verbs. This can be substantiated in (17).

- (17) a. *raxas -aay
wash -STAT

b. *njool- ukaay
be tall INSTR

(17)a and (17)b are ungrammatical because the action verb *raxas* “wash” occurs with a suffix that refers to a state whereas the stative verb *njool* “be tall” occurs with an instrumental suffix.

The next examples show agentive and objective suffixes.

The suffixes *-kat* (18)a and *-it* ((18)b), they select for agentive verbs and action verbs respectively. (19)a is ungrammatical because the suffix *-it* is incompatible with this verb since its presence is supposed to yield a meaning that refers to the result of an action. (19)b is ungrammatical because the meaning of the verb, *xam* “know” cannot be associated with an action.

- (19) a.* wóy-it
sing- OBJ

- b. *xam-kat
know-AG

The suffixes *-ukaay*, *-aay* and *-kat* are very productive whereas the suffix *-it* is less productive.

1.2.5.2 Conversion

In Wolof, conversion is a very productive process. There are two types of conversion in Wolof. Conversion can involve a change in the word category or a change in the word meaning. (20) provides examples of conversion that involves a change in word category.

- (20) a. lekk “to eat”
eat
- b. lekk b-i “the food”
eat CL-the
- c. naan “drink”
drink
- d. a-b naan “a drink”
a-CL drink

In (20) the verbs have changed to a noun without any morphological change taking place, the only piece of evidence of that change being the presence of a noun class (e.g *b* on the accompanying determiner). Thus, (20)a contrasts with (20)b whereas (20)c contrasts with (20)d.

It is my assumption that the derivation is from verb to noun. The second type of conversion involves a change in the word meaning through the use of a different noun class.

- (21) a. saxaar **s-** “smoke”
smoke
- (22) b. saxaar **g-** “train”
train
- c. ndaw **I-** “virginity”
small
- d. ndaw **s-** “woman”
small

In (21) the use of different noun classes triggers the formation of a new word with a different meaning. This type of conversion is rather idiosyncratic; it is not productive at all.

1.2.5.3 Compounding

Another common nominalization process is compounding (Ka (1981), Dialo (1985)); it involves various word pairings that generally result in opaque meanings. In the following examples, I discuss four types of compounds in Wolof.

First, there are verb-verb compounds that are formed by combining two verbs to create a noun as shown in (23)a-d.

- (23) a. fègg-jaay “second-hand clothes/shoes”
shake-sell
- b. dóor-dàqe “hide and seek game ”
hit- chase
- c. dox-daje “place where people met”
walk-meet
- d. taw-féex “happiness”
rain-be fresh

As can be seen from these examples, a noun can be created by pairing two verbs. This results in an opaque meaning.

Second, there are compounds that are created by combining two nouns as shown in the following examples.

- (24) a. góor- jígéen “ tranvestite”

man-woman

- b. gaynde-géej “shark”
lion sea
- c. borom-kér “host”
owner house
- d. mbaam-àll “warthog”
pig-forest

The examples in (24)a-d show that when two nouns are combined another noun, an transparent meaning is obtained.

Third, some compounds are also formed by pairing a noun and a verb to form a noun. As with the compounds mentioned above, the derived word is a noun with an opaque meaning.

- (25) a. bëgg-suukér “sugar ant”
like-sugar
- b. mëq-dóom “old style rifle”
eat ash
- c. romb-jaan “type of mat”
pass- snake
- d. bëkk-néeg “servant”
share-room

(25)a-d look like they are formed from an underlying syntactic structure as they are formed from a verb and what looks like an object (Comrie and Thompson (1985)). Indeed these compounds seem to have a VP like structure.

Finally, some compounds combine a noun with a following verb; the meaning of the resulting noun is not always semantically predictable.

- (26) a. tamaate färsi “(slicing) tomatoes”
 tomato stuff
- b. kaani xeeñ “habanero pepper”
 pepper smell
- c. bët set “dawn”
 eye be clean
- d. cere siim “type of couscous dish”
 couscous sauce

The examples of compounds provided above do not show evidence of a head rule in Wolof.

Wolof compounds do not seem to follow a “Right Hand Head Rule” or a “Left Hand Head Rule”.

1.2.5.4 Consonant Mutation

Another nominalization pattern involves consonant mutation or the combination of both affixation and consonant mutation. It is a morphological process that is also found in languages closely related to Wolof , Pulaar and Sereer (McLaughlin (2000)). Consonant mutation refers to the fact that the initial sound of a word varies based on whether it is a noun or a verb (Ndiaye (1995)). The alternations follow the paradigm below:

- (27) a. f → p
 b. b → mb
 c. d → nd
 d. g → ng
 e. j → nj
 f. s → c
 g. h → k

h. $x \rightarrow q$

The consonant mutation types in (27)a-f are very productive compared to (27)g-h. Some examples of derivation are provided in (28).

- (28) a. **b**añ “hate”
hate
- b. **m**-bañ “hatred/enemy”
NOM-hatred
- c. **j**àng “study”
study
- d. **n**-jàng “education”
NOM-education
- e. gëm “belief”
believe
- f. **n**-gëm “belief”
NOM-believe

(28)b (28)d and (28)f are derived from (28)a (28)c and (28)e respectively, the consonant mutation involves a change of word category as the verbs change to nouns. More examples are provided in (29).

- (29) a. fecc “dance”
dance
- b. pecc “dance”
NOM.dance
- c. sàcc “steal”
steal
- d. càcc “stealing”
NOM.steal

1.2.5.5 Reduplication

Reduplication in Wolof can be simple or complex (Tamba (2005)). Simple reduplication refers to reduplications where the total word is repeated without anything else being added to the word as shown in (30).

- (30) a. lakk “burn”
burn
- b. lakk lakk (N) “a burn”
burn burn
- c. bëgg “love/like”
love/like
- d. bëgg bëgg “wish/desire”
like like

e. dagg “cut”
cut

e. dagg dagg “cut (wound)”
cut cut

(30) demonstrates the deverbal process involved in nominalization and that the resulting noun is not always semantically predictable. This deverbal process mainly involves creating a resultative nominal from a verb. One piece of evidence that the derived noun must denote a result state, is that the resultative form can be obtained with verbs that have some reflexive morphology (31)a-c (see Tamba (2009)).

(31) a. gaañ “hurt” (transitive)
hurt

b. gaañ-**u** “be hurt”
hurt -REFL

c. gaañ-**u** gaañ-**u** “a wound”
hurt -REFL hurt -REFL

d. *gaañ gaañ Intended: “a wound”
hurt hurt

Semantically it can be argued that in both (30) and (31)b, the event already took place; for instance in (31)b the “hurting” event must have already taken place and as result there is a *gaañu gaañu* “wound”. Without the reflexive/ resultative marker *-u* it is impossible to have such a reduplicated compound as the ungrammaticality of (31)d shows. Another example is provided below.

(32) a. yàq “destroy”
destroy

- b. **yàqu** **yàqu** “what is destroyed”
 destroy –REFL destroy –REFL
- c. ***yàq** **yàq** Intended: “what is destroyed”
 destroy destroy

(31)b and (32)b are examples of complex reduplication; the latter involves the total reduplication of a word combined with other morphological processes. Other examples of complex reduplication are provided below.

- (33) a. **fas** “knot”
 knot
- b. **pas** **pas** “détermination”
 knot knot
- c. **guy** : “ baobab tree”
 baobab
- d. **nguy** **nguy-aan** “ small baobab tree ”
- e. **nelaw** “ sleep”
 sleep
- f. **nelaw** **nelawlu** “ to pretend to sleep”
 sleep sleep

In (33)a the reduplicated word has to undergo consonant mutation first, a similar situation is true for (33)b but in the latter a suffix is added too. As for (33)c it shows a reduplicated word that appear with a suffix without any other morphological processes. All the examples in (33)a-c involve creating a new word without a change in grammatical category. This situation is different from the one noted in (30) and (31) where nouns were created from verbs.

Of all the nominal suffixes discussed so far, only two can occur in the clausal nominal of interest in this dissertation. They are the consonant mutation (found with genitive nominalization) and the conversion (found with relative clause nominalization). For reasons that need to be discussed, the other nominal patterns (affixation, compounding and reduplication) cannot appear in clausal nominalizations.

Chapter 2: Genitive Nominalization in Wolof

2. 1 Introduction

In this chapter, I describe a type of clausal nominalization in Wolof I call “genitive nominalization” (GN). The reason why this nominalization is called “genitive nominalization” is explained in Section 2.4. An example of GN process is provided in (1) and (2).

- (1) a. Musaa **jaay** na gerte g -i
Musaa sell FIN peanut CL-the
“Musaa sold the peanuts”
- b. [**n-** jaay -u -m gerte g-i] dox -ul ren
NOM sell -GEN -CL peanut CL-the work -NEG this year
“the selling of peanuts does not work / is not successful this year”
- (2) a. Faatu **sàcc** na dàll y -i
Faatu steal FIN shoe CL-the
“Faatu stole the shoes”
- b. [**càcc** -u -m dàll y -i] bett na ko
NOM.steal -GEN -CL shoe CL-the surprise FIN him
“the stealing of the shoes surprised him”

This nominalization process involves the addition of morphological elements on the verb. In both (1)b and (2)b a series of morphological processes (i.e. suffixation, consonant mutation) have occurred; this is discussed in more detail in Section 2.4.

This chapter is divided into four sections; Section 2.2 examines how GN works with various types of regular verbs but also with verbs involving some morphology. Section 2.3 discusses the nominal character of the nominalized verb by investigating how it patterns within Wolof determiner system. Section 2.4 sheds light on the internal morphology of the nominalized verb through an overview of the morphemes involved in this construction; this section also discusses the position of arguments in GN. Finally Section 2.5 discusses the range of meanings that can be conveyed with this type of nominalization. Section 2.6 concludes this chapter.

2.2 The nominalized verb

In this section I show some properties of the nominalized verb within the GN with regard to various types of verbs. Throughout this section a nominalized verb either undergoes conversion (no nominal morphology) or with some initial consonant mutation.

GNs can occur in various types of verbs (transitive, intransitive for instance) and also in contexts where the nominalized verb already bears complex morphology. (3) and (4) show some examples of unaccusative verbs that are nominalized.

- (3) a. rééw m -i judd na Unaccusative
 country CL-the be born FIN
 “the country is born”

b. n- judd -u -m rééw¹
 NOM- be born -GEN-CL country
 “the birth of a country”

(4) a. bunt b -i tēj -u na Unaccusative
 door CL-the close -RFM FIN
 “the door is closed”

b. tēj -u -u -m bunt m-i
 close- RFM -GEN-CL door CL-the
 “the door’s being closed”

In (3) a simple unaccusative verb is used as opposed to (4) where a complex unaccusative verb, illustrated by the addition of the suffix *-u*, is used. The result is grammatical in both cases.

Interestingly in speech, without any context, the translation of (4)b would be ambiguous between “the closing of the door” and “the door’s being closed”. This is due to the coalescence of the two

¹ Examples (3)b, (26)b, (26)b and (27)b (27) are taken from the following source: <http://www.phmovement.org/sites/www.phmovement.org/files/phm-pch-wolof.pdf>

same vowels –u, the reflexive marker and the genitive marker respectively. Wolof speakers would just pronounce one of them. In (5) and (6) unergative verbs are used.

- | | |
|---|------------|
| (5) a. Awa fecc na
Awa dance FIN
“Awa danced”

b. pecc -u -m Awa
NOM.dance –GEN –CL Awa
“the dancing of Awa” | Unergative |
| (6) a. Awa ree na
Awa laugh FIN
“Awa laughed”

b. ree -u -m Awa
laugh –GEN –CL Awa
“the laughing of Awa” | Unergative |

(5) and (6) show that unergative verbs can undergo genitive nominalization. Examples of transitive verbs are provided in (7) and (8).

- | | |
|--|------------|
| (7) a. Musaa jaay na gerte g -i
Musaa sell FIN peanut CL-the
“Musaa sold the peanuts”

b. n- jaay -u -m gerte g-i dox -ul ren
NOM sell –GEN -CL peanut CL-the work –NEG this year
“the selling of peanuts does not work / is not successful this year” | Transitive |
| (8) a. Musaa lekk na ceeb b -i
Musaa eat FIN rice CL-the
“Musaa ate the rice”

b. lekk -u -m ceeb b-i
eat–GEN -CL rice CL-the
“the eating of rice” | Transitive |

In the next examples, nominalized ditransitive verbs are shown; in (9) one of the arguments is a benefactive and in (10) one of the arguments is a locative argument. Note that the position

when the benefactive follows the verb is more productive than the other position when the theme follows the verb.

- (9) a. Awa **mey** na Ayda xaalis
 Awa give FIN Ayda money
 “Awa gave Ayda some money” Ditransitive

b. Awa **mey** na xaalis Ayda
 Awa give FIN money Ayda
 “Awa gave some money to Ayda” Ditransitive

c.?? **mey-u** **-m** Ayda xaalis
 give -GEN -CL Ayda money
 “The giving of Ayda some money”

d.?? **mey-u** **-m** xaalis Ayda
 give -GEN -CL money Ayda
 “The giving of some money to Ayda”

(10) a. Awa **teg** na xaalis b -i ci kaw taabal j -i
 Awa put FIN money CL-the on top table CL-the
 “Awa put the money on the table” Ditransitive

b. Awa **teg** na ci kaw taabal j -i xaalis b -i
 Awa put FIN on top table CL-the money CL-the
 “Awa put on the table the money” Ditransitive

c. **teg-u** **-m** xaalis b -i ci kaw taabal j -i
 put -GEN -CL money CL-the on top table CL-the
 “ The putting of the money on the table”

d.?? **teg-u** **-m** ci kaw taabal j -i xaalis b -i
 put -GEN -CL money on top table CL-the CL-the
 “ The putting of the money on the table”

(9) shows that a ditransitive like *jox* “give” is not the best candidate for nominalization; the result of the nominalization process is different from the one of the transitive verb in (7) and (8) for instance. Even when the two post verbal arguments positions are changed in (9)b and (9)c, the result is the same. On the other hand, with a ditransitive verb that adds a locative argument

through a preposition phrase, *teg* “put” in this case, the nominalization process works. More examples of nominalized ditransitive verbs are provided below.

- | | |
|--|--|
| <p>(11) a. Awa yónni na Ayda Dakaar
 Awa send FIN Ayda Dakaar
 “Awa sent Ayda to Dakaar”</p> <p>b. Awa yónni na Dakaar Ayda
 Awa send FIN Dakaar Ayda
 “Awa sent Ayda to Dakaar”</p> <p>c.?? yónni-u -m Ayda Dakaar
 send –GEN -CL Ayda Dakaar
 “The sending of Ayda Dakaar”</p> <p>d.?? yónni-u -m Dakaar Ayda
 send –GEN -CL Dakaar Ayda
 “The sending of Ayda to Dakaar”</p> | Ditransitive
Ditransitive
Ditransitive
Ditransitive |
| <p>(12) a. Awa won na Ayda xaalis
 Awa show FIN Ayda money
 “Awa showed Ayda some money”</p> <p>b. Awa won na xaalis Ayda
 Awa show FIN money Ayda
 “Awa showed some money to Ayda”</p> <p>c.?? n -won -u -m Ayda xaalis
 NOM-show –GEN -CL Ayda money
 “The showing of Ayda some money”</p> <p>d.?? n- won -u -m xaalis Ayda
 NOM-show –GEN -CL money Ayda
 “The showing of some money to Ayda”</p> | Ditransitive
Ditransitive
Ditransitive
Ditransitive |

In what follows, I try to nominalize various types of experiencer verbs using experiencers from Becher (2003) in (13) through (18).

- (13) a. Awa **tiit** na Experiencer
 Awa be scared FIN
 “Awa is scared”

- b. ??**tiit** -u -m Awa
 be scared -GEN -CL Awa
 “Awa’s being scared”

- (14) a. Awa **xam** na Ayda Experiencer
 Awa know FIN Ayda
 “Awa knows Ayda”

- b. ***xam** -u -m Ayda
 know -GEN -CL Ayda
 “Awa’s knowing Ayda”

In (13) the experiencer verb *tiit* “be afraid” denotes an emotional mental state whereas in (14) the experiencer verb denotes a non-emotional mental state. In (13)b the existence of the noun *tiitaange* “fright” probably blocks the formation of a nominalized verb in this way.

- (15) a. **tiit** -aange -u Awa Experiencer
 be scared -NOM -GEN Awa
 “Awa’s fright”

More nominalized experiencer verbs are provided below with the verb *waaru* “be overwhelmed” and the verb *jaaxle* “be worried”.

- (16) a. Awa **waar-u** na Experiencer
 Awa overwhelm--RFM FIN
 “Awa is overwhelmed”

- b. ***waar** -u -u -m Ayda
 overwhelm-RFM -GEN -CL Ayda
 “Awa’s being overwhelmed”

- (17) a. Awa **jaaxle** na Experiencer
 Awa be worried FIN
 “Awa is worried”
- b. ??**jaaxle** -u -m Awa
 be worried -GEN -CL Awa
 “Awa’s being worried”

(16) and (17) pattern differently; the nominalization of the verb in (16) is ungrammatical whereas the one in (17) is marginal.

There are other types of complex experiencers in Wolof built with either the verb *am* “have” or another stative verb followed by a noun denoting some type of feeling. This is shown in (18) and (19).

- (18) a. Awa **am** na **naqar** Experiencer
 Awa have FIN sorrow
 “Awa is pained”
- b. *am -u -m naqar Awa
 have -GEN -CL sorrow Awa
 “Awa’s being hurt/ pained” (targeted)
- c. *am -u -m Awa naqar
 have -GEN -CL Awa sorrow Awa
 “Awa being hurt/ pained” (targeted)
- d. *am naqar-u -m Awa
 have sorrow -GEN -CL Awa
 “Awa being hurt/ pained” (targeted)

In (18) the expression *am naqar* “have sorrow” is used and the resultant nominalizations in (18)b through (18)d are ungrammatical. The grammaticality is not affected by changing the position of arguments. A similar situation can be observed in (19) with the expression *dal xel* “be settled” which is built from the verb *dal* “be settled” and the noun *xel* “mind”.

- (19) a. Awa **dal** **xel** na Experiencer
 Awa mind be settled FIN
 “Awa is calm/relieved”

b. ?? **dal** -**u** -**m** **xel** Awa
 be settled -GEN -CL mind Awa
 “Awa’s being calm/relieved”

c. ***dal** Awa **xel** -**u** -**m**
 be settled Awa mind -GEN -CL
 “Awa’s being calm/relieved”

d. ***dal** **xel** -**u** -**m** Awa
 be settled mind -GEN -CL Awa
 “Awa’s being calm/relieved”

In (19) the predicate is formed by using the verb *dal xel* “be settled” a genitive nominal can be derived ((19)b) according to some speakers but the nominal sounds marginal to many speakers. from it as shows. The ungrammaticality of (19)c is not surprising as the experiencer “Awa” breaks the idiomatic expression. In (19)d, even with the genitive marker and the noun class following the noun *xel* “mind” a genitive nominal cannot be formed.

As shown in (13) through (18) it is generally not the norm to derive genitive nominals from statives/experiencers, whether it is due to grammaticality or pragmatics is something that is beyond the scope of this dissertation. Note however, that using the relative clause nominal construction discussed in the previous chapter might be an option for the speaker in cases like these. This is discussed in the next chapter.

Apart from these complex experiencer verbs, Wolof has some complex statives that are metaphorical in meaning; they are formed using a stative verb and a noun as shown in (20)b and (20)c.

- (20) a. Awa **gudd** na **tànk**
Awa be long FIN foot
“Awa is always going out”
- b.* gudd -u -m tànk Awa
be long -GEN -CL foot Awa
“Awa’s always going out”
- c.* gudd tànk-u -m Awa
be long foot -GEN -CL Awa
“Awa’s always going out”

Forming a nominal from such an idiomatic expression is not possible as shown by the ungrammaticality of (20)b and (20)c.

Some simple stative verbs in Wolof are translated in English as adjectives. They behave like verbs in that they can occur with tense and negation markers, for instance, as shown in (21)b and (22) with the use of negation and past tense respectively.

- (21) a. Awa **njool** na Adjective
Awa be tall FIN
“Awa is tall”
- b. Awa **njool** -ul Adjective +Negation
Awa be tall-NEG
“Awa is not tall”

- (22) a. Awa **rafet** na Adjective
 Awa be pretty FIN
 “Awa is pretty”
- b. Awa **rafet -oon** na Adjective +Past tense
 Awa be pretty-PST FIN
 “Awa was pretty”

Since adjective –like stative predicates discussed in(21) and (22) behave like regular verbs, they can be expected to occur in a genitive nominal constructions. However as (23) shows, this is impossible.

- (23) a. Awa **njool** na
 Awa be tall FIN
 “Awa is tall”
- b. ***njool-u -m** Awa jaaxal na ma
 be tall- GEN –CL Awa surprise FIN 1SG
 “Awa’s being tall”

- (24) a. Awa **rafet** na
 Awa be pretty FIN
 “Awa is pretty”
- b.***rafet-u -m** Awa
 be pretty- GEN –CL Awa
 “Awa’s being pretty”

The ungrammaticality of (23) might be due to the fact that there is an independent nominalization that refers to the “state of being X” in Wolof. This is shown in (25).

- (25) a. **njool-aay -u (* -m)** Awa jaaxal na ma
 be tall-NOM -GEN (* -CL) Awa surprise FIN 1SG
 “Awa’s height surprise me ””
- b. **rafet -aay -u (* -m)** Awa
 be pretty-NOM -GEN (* -CL) Awa
 “Awa’s being pretty””

In (25), adjectives are nominalized with the attachment of the suffix *-aay*. This suffix only appears with the nominalization of adjective-like stative verbs. Interestingly, the genitive suffix is used in this construction; however the noun class marker found in genitive nominalization so far cannot be used.

In what follows, I target the nominalization of verbs with valency-increasing suffixes and valency-decreasing suffixes. There are two types of valency-increasing suffixes in Wolof. On one hand, there are valency-increasing suffixes like the causative suffix *-al* that turns one-argument predicates into two-argument predicates. On the other hand, there are valency-increasing suffixes like the benefactive *-al* that involve turning two-argument verbs into three-argument ones. This is followed with the nominalization predicated bearing a valency-decreasing like the suffixes *-lu* and *e*. Finally, verbs carrying grammatical suffixes like the negation marker *-u* or the past tense marker *-oon* are nominalized.

In (26)a the verb *sore* “be far” has the valency-increasing causative suffix *-al* attached to it; when it is nominalized, it results in (26)b.

- (26) a. Ami **sore -al** na n- jur-am direct causative
 Ami be far –CAUS FIN NOM- birth-3SGPOSS
 “Ami spaced the births (of her children)”
- b. core -al -u -m n- jur y-i baax na
 NOM.be far –CAUS -GEN -CL NOM- be born CL-the good FIN
 “Family planning” (lit.: the spacing of the births)
- (27) a. Musaa **wadd -al** na mango b-i
 Musaa fall - CAUS FIN mango CL-the
 “Musaa dropped the mango”

- b. fekke na **wadd -al -u -m** mango b-i
 attend FIN fall -CAUS -GEN -CL mango CL-the
 “He attended the dropping of the mango”

In (26)b the nominalization process targets a verb that already appears with the causative suffix; the verb *sore* “be far” attaches to the causative suffix *-al*, which changes its meaning to “increase the distance”. Then in the nominalization process, the initial consonant of the new word changes from *s* to *c*. A similar process is found in (27)b with the verb *wadd* “fall”. The only difference being that in this case, the nominalized verb does not involve consonant mutation. (28) and (29) follow the same pattern; they include nominalized forms of verbs with the causative suffix *-al*.

- (28) a. Musaa **réér -al** na xaalis b-i
 Musaa lose - CAUS FIN money CL-the
 “Musaa lost the money ”
- b. **réér -al -u -m** xaalis b-i bett na ma
 lose -CAUS -GEN -CL money CL-the surprise FIN 1SG
 “The losing of the money surprised me”

- (29) a. Musaa **seey -al** na galaas g-i
 Musaa melt - CAUS FIN ice CL-the
 “Musaa melted the ice ”
- b. fekke na **seey -al -u -m** galaas g-i
 attend FIN melt -CAUS -GEN -CL ice CL-the
 “He witnessed the melting of the ice”

These examples show that verb carrying the direct causative suffix *-al* can be successfully nominalized.

In what follows, I test the result of genitive nominalization when a two-argument verb carries a valency-increasing suffix. Contrary to the causative suffix, a verb carrying the benefactive suffix

-al cannot be nominalized; the difference between (30)a and(30)b is that in the former the benefactive follows the verb whereas in the latter the theme follows the verb. Both sentences are grammatical in Wolof even though many native speakers of Wolof would utter (30)a.

- (30) a. Musaa jaay **-al** na Awa dàll y -i
 Musaa sell-BEN FIN Awa shoes CL-the
 “Musaa sold Awa the shoes ”
- b. Musaa jaay **-al** na dàll y -i Awa
 Musaa sell-BEN FIN shoes CL-the Awa
 “Musaa sold the shoes for Awa”
- c. * n- jaay **-al** -u -m Awa dàll y -i
 NOM- sell-BEN -GEN -CL Awa shoes CL-the
 “The selling of the shoes for Awa” (intended)
- d. * n- jaay **-al** -u -m dàll y -i Awa
 NOM- sell-BEN -GEN -CL shoes CL-the Awa
 “The selling of the shoes for Awa” (intended)
- e. * n- jaay -u -m **-al** dàll y -i Awa
 NOM- sell -GEN -CL -BEN shoes CL-the Awa
 “The selling of the shoes for Awa” (intended)

(30) shows that a nominalized verb cannot involve a benefactive suffix as the resulting nominal would be ungrammatical as shown with (30)c and (30)d. (30)e shows that the position of the benefactive suffix does have an impact on grammaticality. This is similar to the ditransitive verb case in (9) since even switching the arguments of the nominalized verb would not make a difference. More examples of nominalizations when the benefactive suffix is involved, are shown in (31) and (32).

- (31) a. Kumba ubbi **-al** na Awa bunt b -i
 Kumba open-BEN FIN Awa door CL-the
 “Kumba opened Awa the door ”

- b. Kumba ubbi **-al** na bunt b -i Awa
 Kumba open-BEN FIN door CL-the Awa
 “Kumba opened the door for Awa”
- c. *ubbi **-al** -u -m Awa bunt b -i
 open-BEN –GEN -CL Awa door CL-the
 “The opening of the door for Awa” (intended)
- d. * ubbi **-al** -u -m bunt b -i Awa
 open-BEN –GEN -CL door CL-the Awa
 “The opening of the door for Awa” (intended)

- (32) a. Zeyna raxas **-al** na Awa bool b -i
 Zeyna clean-BEN FIN Awa bowl CL-the
 “Zeyna cleaned Awa the bowl ”
- b. Zeyna raxas **-al** na bool b -i Awa
 Zeyna clean-BEN FIN bowl CL-the Awa
 “Zeyna cleaned the bowl for Awa”
- c. *raxas **-al** -u -m Awa bool b -i
 clean-BEN –GEN -CL Awa bowl CL-the
 “The cleaning of the bowl for Awa” (intended)
- d. * raxas **-al** -u -m bool b -i Awa
 clean-BEN –GEN -CL bowl CL-the Awa
 “The cleaning of the bowl for Awa” (intended)

In (33) another valency-increasing suffix i.e. the instrumental suffix *-e* is used along with the addition of the argument *caabi* “key”.

- (33) a. Faatu ubbi-e na bunt b -i (ak) caabi
 Faatu open-INST FIN door CL-the (with)e key
 “Faatu opened the door with a key”
- b. * **ubbi -ee** -m bunt b -i (ak) caabi
 open –INST.GEN -CL door CL-the (with)e key
 “The opening of the door with a key”
- (34) a. Faatu lekk-e na ceeb b -i (ak) loxo
 Faatu eat-INST FIN rice CL-the (with) hand
 “Faatu ate the rice with a hand”

- b.* **lekk -ee -m** ceeb b -i (ak) loxo
 eat –INST.GEN -CL rice CL-the (with) hand
 “The eating of the rice with hand”

- (35) a. Faatu togg-e na ceeb b -i (ak) diwtiir
 Faatu cook-INST FIN rice CL-the (with) palm oil
 “Faatu cooked the rice with palm oil”
- b.* **togg -ee -m** ceeb b -i (ak) diwtiir
 cook –INST.GEN -CL rice CL-the (with) palm oil
 “The cooking of the rice with palm oil”

When the nominalized verb involves an instrument suffix, it cannot be successfully nominalized as the ungrammaticality of (33), (34) and (35) show.

A similar situation can be observed in (36)b with the indirect causative suffix *-loo*. Again the result is ungrammatical as illustrated in the following examples.

- (36) a. Faatu bind-**loo** na Awa tééré
 Faatu write-CAUS FIN Awa book
 “Faatu made Awa write a book”
- b. *bind -**loo** -u -m Awa tééré
 write-CAUS –GEN -CL Awa book
 “The making of Awa to write a book”

- (37) a. Faatu togg-**loo** na Umi ceeb
 Faatu cook-CAUS FIN Umi rice
 “Faatu made Umi cook rice”
- b. *togg -**loo** -u -m Umi ceeb
 cook-CAUS –GEN -CL Umi rice
 “The making of Umi to cook rice”

- (38) a. Samba naan-**loo** na Ayda ndox
 Samba drink-CAUS FIN Ayda water
 “Samba made Ayda drink some water”
- b. *naan -**loo** -u -m Ayda ndox
 drink-CAUS –GEN -CL Ayda water
 “The making of Ayda to drink some water”

So far it looks like a verb can only undergo genitive nominalization if the valency-increasing suffix it carries, transforms the verb from an one-argument verb to a two-argument one. This is the case of the direct causative *-al*. On the other hand, when a suffix has to increase the verb valency to three arguments it cannot be nominalized.

So far only the valency-increasing suffixes have been used. In the next examples, valency-decreasing suffixes are used. Wolof has two valency-decreasing suffixes, *-lu* and *-e*. When a verb appears with *-lu*, it shows that the action is not performed by the causer at subject position; however the causee is not referred to in the clause. Consider (39).

- (39) a. Faatu bind-**loo** na Awa tééré
Faatu write-CAUS FIN Awa book
“Faatu made Awa write a book”
- b. Faatu bind-**lu** (*Awa) na tééré
Faatu write-CAUS Awa FIN book
“Faatu made someone write a book”

In (39)a the causative *-loo* brings another argument. *Awa* is the cause of the action of writing; On the other hand, in (39)b, the entity initiating the action of writing i.e. the causee does not appear in the sentence. The only relevant information is that someone else, not *Faatu* was asked to perform the action of writing. Building a genitive nominal from (39)b is not possible as 0 shows.

- (40) a. Daba bind-**lu** na tééré
Daba write-CAUS FIN book
“Daba made someone write a book”
- b. *m -bind -**lu** -u -m tééré

NOM-write-CAUS -GEN -CL book
 “The making of someone to write a book”

- (41) a. Faatu togg-**lu** na yaasa
 Faatu cook-CAUS FIN yaasa
 “Faatu made someone cook yaasa”
- b. *togg -**lu** -u -m yaasa
 cook -CAUS -GEN -CL yaasa
 “”The making of someone to cook yaasa”
- (42) a. Demba fóót-**lu** na yééré y -i
 Demba wash-CAUS FIN clothes CL-the
 “Demba made someone wash the clothes”
- b. * póót -**lu** -u -m yééré y -i
 NOM.wash -CAUS -GEN -CL clothes CL-the
 “”The making of someone to wash the clothes”

A similar situation can be noted with the valency-decreasing suffix *-e*; it changes a verb natural valency.

- (43) a. Faatu dóór na Awa
 Faatu hit FIN Awa
 “Faatu hit Awa”
- b. Faatu dóór-e na (*Awa)
 Faatu hit -OBJ FIN Awa
 “Faatu hit someone”
- c. *dóór-e -u -m Faatu
 hit -OBJ -GEN -CL Faatu
 “Faatu’s hitting of someone”
- d. *dóór-e -u -m
 hit -OBJ -GEN -CL
 “The hitting of X”

In (43)c, building a genitive nominal is not possible when there is no internal argument; even when the agent *Faatu* is positioned after the nominalized verb. (43)d shows that a genitive nominal cannot be formed when there are no verbal arguments. (44) follows a similar pattern.

- (44) a. xaj b -i mátt na Awa
 dog CL-the bite FIN Awa
 "The dog bit Awa"
- b. xaj b -i mátt -e na (*Awa)
 dog CL-the bit -OBJ FIN Awa
 "Faatu bit someone"
- c. *mátt -e -u -m Faatu
 bit -OBJ -GEN -CL Faatu
 "Faatu's biting of someone"
- d. *mátt -e -u -m
 bit -OBJ -GEN -CL
 "The biting of X"

In what follows, grammatical affixes like the negation marker *-u* and the past tense *-oon* are used in the nominalized verb.

- (45) a. Musaa jaay **-ul** dàll y -i
 Musaa sell-NEG shoes CL-the
 "Musaa has not sold the shoes"
- b. *n- jaay **-ul** -u -m dàll y -i
 NOM- sell-NEG -GEN -CL shoes CL-the
 "The non-selling of the shoes"
- (46) a. Musaa **jaay -oon** na dàll y -i
 Musaa sell-PST FIN shoes CL-the
 "Musaa did not sell the shoes"
- b. *n- **jaay -oon -u -m** dàll y -i
 NOM- sell-PST -GEN -CL shoes CL-the
 "The selling of the shoes"

When a verb carries a negation or a verbal suffix, it cannot be transformed into a GN as the ungrammaticality of (45) and (46) shows. More examples are provided below.

- (47) a. Musaa sàcc **-ul** ginaar y -i

Musaa sell-NEG chicken CL-the
“Musaa has not stolen the chicken”

- b. *càcc -ul -u -m ginaar y -i
NOM.sell-NEG -GEN -CL chicken CL-the
“The non-stealing of the chicken”

(48) a. Musaa **xool -oon** na xale y -i
Musaa look-PST FIN children CL-the
“Musaa did not look at the children”

- b. * **xool -oon -u -m** xale y -i
look-PST -GEN -CL children CL-the
“The looking at the children”

The differences in grammaticality of the Wolof affixes in genitive nominalization show that the presence of some valency-increasing suffixes as well valency-decreasing suffixes block the formation of genitive nominal from a verb. This is also the case for ditransitive verbs and stative verbs. Moreover the negation marker and the past tense block a verb from being nominalized in the same way. On the other hand, transitive, unergative and unaccusative can be used in this type of nominalization. This is also the case for valency-increasing suffixes that only add one argument.

The next examples target the nominalization of verbs in clauses involving temporal and manner adverbs in (49) and (50) respectively.

(49) a. Musaa jaay na dàll y -i **démb**
Musaa sell FIN shoes CL-the yesterday
“Musaa sold the shoes yesterday”

b. Musaa jaay na **démb** dàll y -i
Musaa sell FIN yesterday shoes CL-the
“Musaa sold the shoes yesterday”

c. **n- jaay -u -m** dàll y -i **démb** bett na ma
NOM- sell -GEN -CL shoes CL-the yesterday surprise FIN 1SG

“the selling of the shoes yesterday surprised me.”

- d. **n- jaay -u -m démb dàll y -i bett na ma**
NOM- sell -GEN -CL yesterday shoes CL-the surprise FIN 1SG
“the selling of the shoes yesterday surprised me.”

(50) a. Musaa dóór na miir b -i **nànk**
Musaa hit FIN wall CL-the slowly
“Musaa hit the wall slowly”

b. Musaa dóór na **nànk** miir b -i
Musaa hit FIN slowly wall CL-the
“Musaa hit the wall slowly”

c. ??dóór -u -m miir m -i **nànk** yee -wu ko
hit -GEN -CL wall CL-the slowly wake up -NEG 3SG
“the hitting of the wall slowly didn’t wake him up”

d. ??dóór -u -m **nànk** miir m -i yee -wu ko
hit -GEN -CL slowly wall CL-the wake up -NEG 3SG
“the hitting of the wall slowly didn’t wake him up”

When the temporal adverb *démb* “yesterday” in (49)b is used in a clausal nominalization, it yields a grammatical sentence. However when a manner adverb like *nànk* “slowly” is used as in (50)b the result is different; the clause is not accepted by many native speakers. In both (49) and (50) changing the order of the complements does not have an effect on grammaticality. The fact that an adverb like *démb* “yesterday” can occur in this clause shows that there is a VP layer inside this nominalized clause. For this type of nominalization Alexiadou (2001) has argued using English and Russian, that there is a VP layer that makes adverbial modification possible.

In the following, genitive nominalization is used with some words in Wolof referred to as ideophones. They are defined by Doke (1935) as a “a vivid representation of an idea in sound...a word, often onomatopoeic, which describes a predicate, qualificative or adverb in respect to

manner, colour, sound, smell, action, state or intensity” (Doke 1935:118)”. Torrence (2013) characterizes them as some type of adverbs adding emphasis, intensity, manner or extent (Torrence (2013: 145)). In Wolof, the ideophones of interest can either occur with the verb *ne* “say” as in (51) and (52) or with a verb directly related to their meaning as in (52) and (53).

- (51) a. Ayda **ne na mbapp**
 Ayda say FIN IDEO
 “Ayda fell in an abrupt manner”
- b.* **ne -u -m mbapp** Ayda
 say -GEN -CL IDEO Ayda
 “Ayda’s falling abruptly”
- c. ***ne mbapp -u -m** Ayda
 say IDEO -GEN -CL Ayda
 “Ayda’s falling abruptly”

In (51)a, the ideophone *mbapp* relates to a specific manner of falling even though the verb “fall” is not there. A genitive nominalization cannot be formed with the expression *ne mbapp* “fall abruptly”; adding the genitive suffix after the word *ne* or the word *mbapp* does not have an impact on grammaticality as (51)b and (51)c show. (52) follows a similar pattern with a different ideophone i.e. *ne faax* “to sit in a relaxed way”.

- (52) a. Ayda ne na **faax**
 Ayda say FIN IDEO
 “Ayda sat in a relaxed way”
- b.* **ne -u -m faax** Ayda
 say -GEN -CL IDEO Ayda
 “Ayda’s sitting in a relaxed way”
- c. ***ne faax -u -m** Ayda
 say IDEO -GEN -CL Ayda
 “Ayda sitting in a relaxed way”

In the previous examples, the ideophones occur with the verb *ne* “say”, however there are other contexts where they occur with other types of verbs. In (53) through (54), the ideophones are formed using a verb related to the meaning of the ideophone.

- (53) a. Ayda **daan -u** na **mbapp**
 Ayda fall RFM FIN IDEO
 “Ayda fell abruptly”
- b. ??**daan -u -u -m mbapp** Ayda
 fall -RFM -GEN -CL IDEO Ayda
 “Ayda’s falling abruptly”
- c. ??**daan -u -u -m** Ayda **mbapp**
 fall -RFM -GEN -CL Ayda IDEO
 “Ayda’s falling abruptly”
- d. ***daan -u Ayda mbapp -u -m**
 fall -RFM Ayda IDEO -GEN -CL
 “Ayda’s falling abruptly”

The ideophone *mbapp* in (53) is used with the verb *daanu* “fall”; in (53)b when the verb is nominalized the resulting nominals in (53)b and (53)c is ungrammatical. The difference between (53)b and (53)c is that in (53)c *Ayda* is inserted between the verb and its ideophone. This does not seem to have an impact on grammaticality. (53)c shows that it is not grammatical to have the genitive suffix after the ideophone. (54) below shows a same pattern with the sequence *toog faax* “sit in a relaxed way.”

- (54) a. Ayda **toog** na **faax**
 Ayda sit RFM FIN IDEO
 “Ayda sat in a relaxed way”

- b. **toog -u -m faax** Ayda
 sit -GEN -CL IDEO Ayda
 “Ayda’s sitting in a relaxed way”
- c. ??**toog -u -m** Ayda **faax**
 sit -GEN -CL Ayda IDEO
 “Ayda’s sitting in a relaxed way”
- d. ***toog** Ayda **faax -u -m**
 sit Ayda IDEO -GEN -CL
 “Ayda’s sitting in a relaxed way”

Apart from these processes, genitive nominalization can also target complex verb sequences as in (55) and (56) where two verbs are used in each example.

- (55) a. Awa **mën na jàng** tééré b-i
 Awa can FIN read book CL-the
 “Awa can read the book”
- b. *Awa **mën -u -m jàng** tééré b-i
 Awa can -GEN -CL read book CL-the
 “Awa’s ability to read the book”
- c. ***mën -u -m jàng** tééré b-i Awa
 can -GEN -CL read book CL-the Awa
 “Awa’s ability to read the book”
- d. *Awa **mën jàng -u -m** tééré b-i
 Awa can read -GEN -CL book CL-the
 “Awa’s ability to read the book”
- e. ***mën jàng -u -m** tééré b-i Awa
 can read -GEN -CL book CL-the Awa
 “Awa’s ability to read the book”

- (56) a. **bëgg nga jàng** tééré b-i
 want FIN read book CL-the
 “You want to read the book”

- b. *Awa **bëgg -u -m** jàng tééré b-i
 Awa want -GEN -CL read book CL-the
 “Awa’s wanting to read the book”
- c. ***bëgg -u -m** jàng tééré b-i Awa
 want -GEN -CL read book CL-the Awa
 “Awa’s wanting to read the book”
- d. * Awa **bëgg jàng -u -m** tééré b-i
 Awa want - read GEN -CL book CL-the
 “Awa’s wanting to read the book”
- e. ***bëgg jàng -u -m** tééré b-i Awa
 want - read GEN -CL book CL-the Awa
 “Awa’s wanting to read the book”

Genitive nominalization cannot be formed with the presence of two verb sequences, the position of the genitive suffix ((55)b, (55)d and (56)b, (56)d) as well as the different position of the subject “Awa” ((55)c, (55)e and (56)c, (56)e) does not have an effect on grammaticality. In the next set of examples I try to form genitive nominal from three verb sequences.

- (57) a. Awa bëgg na jéém-a jàng tééré b-i
 want want FIN try -a read book CL-the
 “Awa wants to try to read the book”
- b. *Awa bëgg -u -m jéém-a jàng tééré b-i
 Awa want -GEN -CL try -a read book CL-the
 “Awa’s wanting to try to read the book”
- c. * Awa bëgg jéém-u -m jàng tééré b-i
 Awa want try -GEN -CL read book CL-the
 “Awa’s want to try to read the book”
- d . *Awa bëgg jéém-a jàng-u -m tééré b-i
 Awa want try -a read -GEN -CL book CL-the
 “Awa’s wanting to try to read the book”

Just like with the two-verb sequences in (55) and (56), the three-verb sequences in (57)b-d show that only the first verb cannot be nominalized as shown by the ungrammaticality of (57)b, (57)c

and (57)d. In all these examples I have let the subject in its original position, however even when the subject position is changed, the sentences would still be ungrammatical.

In this section various patterns of genitive nominalization with respect to different verb types are shown. These different patterns are summarized in the conclusion of this chapter (Section 2.6).

2.3 The nominal character of the GN

In this section, I investigate the nominal character of the GN; more specifically I examine the behavior of the GN with Wolof determiners for the purpose of understanding how DP-like it is. I have already covered Wolof internal DP structure in Chapter 1 (subsection: 1.2.2.3 Wolof internal DP structure).

2.3.1 The determiner system of Wolof

In this section I discuss different properties of Wolof determiners with respect to genitive nominalization.

2.3.1.1 Definite determiners

Wolof has two definite articles all agreeing in class with the NP that follows the noun.

- (58) a. xale b-i
child CL-the
“the child”
- b. xale b-a
child CL-the
“the child (previously mentioned)”

The first definite article, *CL-i* can encode proximity in space, time, or conversation (roughly, ‘the x mentioned recently’), as in (58)a. The second definite article, *cl-a*, encodes distance in space,

time, or conversation (roughly, ‘the x mentioned a while ago’), as in (58)b. Definite determiners equivalent to English “the” are used in (59).

- (59) a. [m- bind -u -m tééré] **m-i**
 NOM-write -GEN -CL book CL –the
 “the writing of the book”
 * “the writing of a book”
- b. m- bind -u -m [tééré] **b-i**
 NOM-write -GEN -CL book CL –the
 “the writing of the book”
 * “the writing of a book”
- c. *[m- bind -u -m [tééré] **b-i**] **m-i**
 NOM-write -GEN -CL book CL –the CL –the
 “the writing of the book”

Two different noun classes *m-* and *-b* are used in (59)a and (59)b respectively. The meanings of two sentences are the same though. Since determiners occur postnominally, there is no place for the occurrence of two definite determiners (like in the English translation of (59)a). For this reason either the determiner for the noun *tééré* “book” (which is *bi*) or the determiner of the GN *mbindum tééré* “writing of the book” can be used². Indeed using both would be ungrammatical as (59)c shows. In (59)b and (59)c the nominalized noun *mbind* “writing” and as well as the internal object *tééré* “book” are interpreted as definite even though there is only one definite determiner. As far as I know, it is up to the speaker to decide which noun class to use based on what they want to emphasize. A similar situation holds when the definite determiner *-a* is used. Remember that this determiner is used to refer to something that was mentioned previously in the discourse.

² Thanks to my friend Elhadji Dieye that provided his insight on this.

- (60) a. [m- bind -u -m tééré] **m-a**
 NOM-write -GEN -CL book CL -the
 “the writing of the book” (the event was mentioned previously)
- b. m- bind -u -m [tééré] **b-a**
 NOM-write -GEN -CL book CL -the
 “the writing of the book” (the book was previously mentioned.)

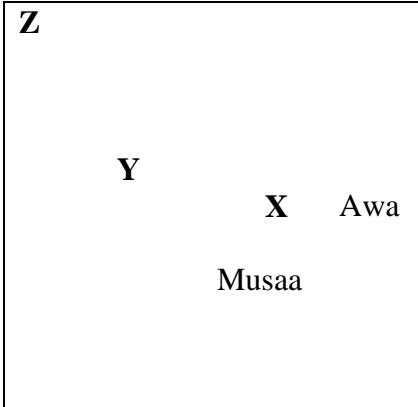
2.3.1.2 Demonstratives

Before showing the behavior of genitive nominals with respect to demonstratives, an introduction of Wolof demonstratives must be provided as Wolof have several demonstratives. Five of them are discussed in (61) and (62).

- (61) a. xale **b-ii**
 child CL-this
 “this child” (near the interlocutor)
- b. xale **b-ee**
 child CL-that
 “that child” (a bit far from the interlocutors)
- c. xale **b- ale**
 child CL-that
 “that child over there”(farther from the interlocutors)

To better account for the distribution of the determiners, the following schema (adapted from Dixon (2003:80)) is used.

Figure 1: *ii-* and *-ee* demonstratives



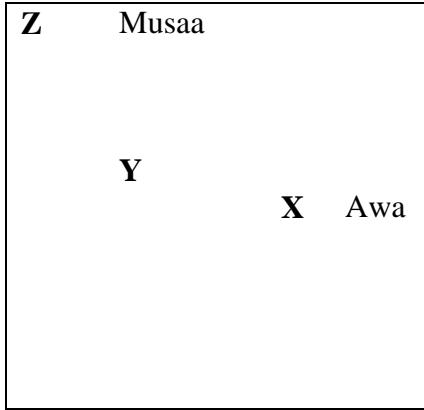
Suppose there is a context where Musaa and Awa are the interlocutors and they are talking about a child as in Figure 1. If Musaa wants to be specific that he is talking about X, he will use (61)a. Note that X is close to both interlocutors. On the other hand if Musaa wants to specify that he is not talking about X but about Y, he will use (61)b. (61)c can be used in a context where there is only one possible referent which is far from both the interlocutors as Z in Figure 1 shows.

The demonstratives in (61)a-c can also be used to encode uniqueness and “visibility” (Dixon (2003:90)). Here “visibility” refers to the fact that the interlocutors can see the referent. Apart from the ones discussed above, Wolof has other types of demonstratives that can be used to encode familiarity.

- (62) a. xale **b-oo -b-u**
child CL-*oo*-CL-*u*
“that child over there” / “that specific child mentioned before”
- b. xale **b-oo-b-ee**
child CL-*oo*-CL- **this**
“that child over there” / “that specific child mentioned before”

As (62) illustrates, these demonstratives are morphologically very complex; the meaning of some morphemes being unclear. (62)a can be used when the visibility condition is met, however it can also be used in discourse to refer to a referent previously mentioned. (62)a indicates that the referent is far from the speaker but near the hearer as represented in Figure 2.

Figure 2: complex demonstratives



The main difference between (62)a and (62)b is that (62)b cannot encode visibility. Both sentences in (62) can be used in a discourse context when the interlocutors know about the referent or when the referent was previously mentioned. In Figure 2, Z is closer to the speaker (Awa) and closer to Musaa; this makes it semantically inappropriate to use any of the sentences in (61)a-c.

In the following examples, the demonstratives discussed above are used with the genitive nominal construction.

- (63) a. m- bind -u -m tééré] **m-ii**
 NOM-write -GEN –CL book CL –this
 “this writing of the book”
- b. [m- bind -u -m tééré] **m-ee**
 NOM-write -GEN –CL book CL –that
 “that writing of the book”
- c. [m- bind -u -m tééré] **m-ale**
 NOM-write -GEN –CL book CL –that
 “that writing of the book over there”
- d. [m- bind -u -m tééré] **m-oo-m-u**
 NOM-write -GEN –CL book CL-*oo*-CL-*u*
 “the writing of the book there”

(63)a-c are grammatical if the speaker points to different ongoing events; that is when for instance different persons are involved in different events of writing. Note that it is not easy to find the right contexts to produce these utterances. The speaker in such a case can point at different locations based on how far from her the event is taking place. In (63)a, the ongoing event the is close to both interlocutors. (63)b refers to a case where for instance, there are two ongoing events of book-writing with the speaker pointing at one farther than the other one. In (63)c describes a similar situation. In all cases in (63)a-c, the demonstratives encode visibility. (63)c and (63)d can also be used provided the right contexts are provided. In (63)c the speaker can either be referring to an event that occurred in the past or to an event taking place closer to the interlocutor.

2.3.1.3 Indefinite determiners

Contrary to definite determiners, indefinite determiners cannot occur with genitive nominals as

(65) illustrates. Unlike the definiteness marker, the indefiniteness marker precedes the head noun. Indefiniteness can be formed through the use of the bound morpheme *a-* followed by a noun class marker that varies based on the noun being used. I refer to this determiner as *a-cl* (*a-*noun class).

- (64) a. Xadi gis na **a-b** sàcc
Xadi see FIN a-CL thief
“Xadi saw a thief”
- b. Xadi gis na **a-w** fas
Xadi see FIN a-CL horse
“Xadi saw a horse”
- c. Xadi gis na \emptyset sàcc
Xadi see FIN \emptyset thief
“Xadi saw a thief”
- d. Xadi gis na **b-enn** sàcc
Xadi see FIN CL-one thief
“Xadi saw a thief”

(64)a and (64)b shows the use of the indefinite determiner *a-cl* with different nouns; note the presence of different noun class markers depending on the head noun. Indefiniteness can also be conveyed by the absence of an overt determiner as (64)c shows. So, \emptyset can be equivalent to *a-cl*. Apart from bare nouns, indefiniteness can be conveyed by the numeral *benn* “one”. The numeral one is bimorphemic (*cl-enn*). This numeral can occur in the same context described (64)a with a similar interpretation.

To sum up, in indefinite singular contexts *benn* “one”, “a-class” and \emptyset can be interpreted the same way in many contexts. Genitive nominals are used with indefinite determiners in (65).

- (65) a. ***a-m** n- jaay-u -m gerte
 a -CL NOM-sell -GEN -CL peanut
 “a selling of peanuts”
- b. ***b-enn** n- jaay-u -m gerte
 CL-one NOM-sell -GEN -CL peanut
 “a selling of peanuts”
- c. ***Ø** n- jaay-u -m gerte
 Ø NOM-sell -GEN -CL peanut
 “a selling of peanuts”

The indefinite determiners *am* “a-noun class”, *benn* “one” cannot be used in (65)a and (65)b. The same situation is true for (65)c.

2.3.1.4 Quantifiers

This subsection targets three types of quantifiers with respect to genitive nominal. Before using them with genitive nominal constuctions, properties of each of them are discussed.

The first universal quantifier is *CL –épp* which is bimorphemic, consisting of a noun class marker followed by the morpheme *–épp* (*CL–épp*). This quantifier must occur before the noun. Consider the following:

- (66) a. b- épp xale b -u nekk-oon ci néeg b -i dem na
 CL-every child CL-REL be -PST in room CL-the leave FIN
 “every child that was in the room left”
- b. * b- épp xale dem na
 CL-every child leave FIN
 “every child left” (intended)

In (66)a-b the universal quantifier occurs before the noun. An interesting fact about this type of universal quantifier is that it can only modify a given noun in a specified context. In (66)a for

instance, the context in which the utterance *xale* “child” is produced has to be said (see the underlined relative clause). This explains the ungrammaticality of (66)b.

The next universal quantifier I discuss has the form of a relative clause. It is formed through the combination of a noun class, a complementizer (Torrence (2005)) and the verb *nekk* “exist/be”. The following template is used for this quantifier: *CL -u nekk*. Torrence argues that *CL-u* is an agreeing complementizer. This construction is similar to the ones found in relative clauses contexts. Compare (67)a and (67)b.

- (67) a. xale [**b -u** reew] lekk na ceeb
 child CL-COMP rude eat FIN rice
 “A rude child ate rice”
 (lit.:“A child that is rude, ate rice”)
- b. xale [**b -u** nekk] lekk na ceeb
 child CL-COMP be eat FIN rice
 “Each child ate rice”

In (67)a, the relative clause [*b-u reew*] “that is rude” modifies the noun *xale* “child” describes a property of the child whereas in (67)b the relative clause [*b-u nekk*] “who exists” behaves like a quantifier. Indeed (67)b describes a situation where any child in a given context has that property that s/he ate rice.

Like the other quantifiers described so far, the last universal quantifier of interest is bimorphemic as it results from the combination of a plural noun class marker *-y* and the morpheme *-ëpp*. There is no monomorphemic word equivalent to the English “all” in Wolof. This quantifier follows this template : *N(CL –Det) CL* meaning that a noun can occur with either a NP ((68)a) or an DP ((68)b). (68)c shows that the universal quantifier cannot occur to the left of the noun. In (68) the quantifier is used with a count noun.

- (68) a. xale **y- ëpp**
 child CL-all
 “all children”
- b. xale y-i / y-ii/ **y- ëpp**
 child CL-the CL-this cl-all
 “all the /these children”
- c. ***y- ëpp** xale
 cl-all child
 “all the children”

(68)a is a context where the quantifier occurs with a NP whereas (68)b shows that the universal quantifier can co-occur with the definite article or demonstrative. To the best of my knowledge, most Wolof speakers fail to pronounce the definite article in this context. However, based on the context, the interlocutor can always perceive the appropriate form (“all N” or “all the N”) intended by the speaker. In the following, mass nouns are used with the universal quantifier.

- (69) a. ndox *(m-i) **y- ëpp**³
 water CL-the CL-all
 “all the water” / (the water in its entirety)
- b. ceeb *(b-i) **y- ëpp**
 rice CL-i CL-all
 “ all the rice” (the rice in its entirety)

In (69), when the plural universal quantifier occurs with a mass noun, the definite article of the latter has to be present. In both (69)a-b the domain of the quantifier is a mass noun. On the other hand, when the mass noun is pluralized, a different meaning is obtained as illustrated in (70).

³ Some speakers would use a construction like : N –cl-épp, saying “ndox m-épp, instead of ndox mi y-épp”.

- (70) a. ndox (y-i) **y- ëpp**
 water CL-the CL-all
 “all (the) kind of waters”
 (Literally, “all (the waters)’’)
- b. ceeb (y-i) **y- ëpp**
 rice CL-the CL-all
 “ all (the)kind of rices”
 (Literally, “all (the rices)’’)

In (70)a-b when the quantifier immediately follows the noun, the only possible meaning conveyed is the one that relates to different types of water or rice respectively, as in other languages.

In (71) the three universal quantifiers discussed in this section are used with genitive nominals.

- (71) a.* m- bind -u -m tééré **y-ëpp**
 NOM-write -GEN –CL book CL-all
 “all the writings of the book”
- b. m- bind -u -m tééré **m-i y-ëpp**
 NOM-write -GEN –CL book CL –the CL-all
 “all the writing of the book”
- c. ??**b-épp** n- jaay-u -m gerte
 CL-every NOM-sell -GEN -CL peanut
 “every selling of peanuts”
- d. ??m- bind -u -m tééré **m-u nekk**
 NOM-write -GEN –CL book CL –REL be
 “every writing of the book”

The difference of grammaticality between (71)a and (71)b suggests that the genitive nominal is a mass noun. It is however unclear whether genitive nominal can occur with the other universal quantifiers as shown in (71)c and (71)d.

2.3.1.5 Numerals

Tamba et al (2012) dealing with Wolof numerals argue that they occur without any signs of relativization, and unlike attributive (adjectival) relative clauses, numerals precede the noun.

The different structural positions of numerals and adjectival relative clauses are illustrated again in (72).

- (72) a. b-enn xale
CL- one child
“one child”
- b. ñett i xale
3 PL.AGR child
“three children”

As shown in (72)a-b, the form of the head noun does not change in the presence of a (plural) numeral. Instead, numerals higher than ‘1’ are followed by an *i* morpheme when they occur with a noun. Tamba et al analyze this *i* as a marker of plural agreement because it appears with non-singular nouns and the *i* itself is the vowel equivalent of *y-*, the default plural noun class marker in the language. That vowel appears with the following numerals.

- (73) a. *ñett -i n- jaay-u -m gerte
three -PL.AGR NOM- sell -GEN -CL peanut
“three sellings of peanuts”
- b. *ñaar -i n- jaay-u -m gerte
two - PL.AGR NOM-sell -GEN -CL peanut
“two sellings of peanuts”

Using these numerals with genitive nominals is ungrammatical as shown in (73); this suggests that the genitive nominal has some properties of a mass noun.

In the next section, the internal morphology of the genitive nominal is examined; since GN triggers the creation of a complex word, the different morphological components of the nominal are investigated.

2.4 Internal morphology of the genitive nominalization

In this section, I discuss the various morphemes involved in the nominalized verb. These morphemes are related to consonant mutation, genitivization and noun class. They are discussed in turn in the next subsections. Finally the last subsection sheds light on the positions of arguments in GN.

2.4.1 Consonant mutation on the derived noun

As mentioned in Chapter 1, consonant mutation is a morphological process found in Wolof and in languages closely related languages like Pulaar and Sereer (McLaughlin 1992). For Ndiaye (1995), consonant mutation refers to the fact that the initial sound of a word varies based on whether it is a noun or a verb. With GN constructions, consonant mutation is mandatory as shown in (74).

- (74) Musaa ànd na ci [*^(m)-bind-u-m tééré b-i]
Musaa agrees FIN with NOM- write- GEN-CL book CL-the
“Musaa agrees with the writing of the book”

(74) is ungrammatical⁴ without initial consonant mutation; this shows the major role consonant mutation has in GN.

2.4.2 The genitive suffix **-u** in GNs

The use of the expression “genitive nominalization” arises from the similarity of this form of nominalization to typical genitive constructions in Wolof. Compare (75)a-b to (64)c.

- (75) a. Musaa gis na muus-**u** -(m)Awa
Musaa see FIN cat-GEN – CL Awa
“Musaa saw Awa’s cat”
- b. Musaa gis na nopp-**u** -(b) Awa
Musaa see FIN ear-GEN -CL Awa
“Musaa saw Awa’s ear”
- c. n- jaay -**u** -m gerte g-i
NOM sell -GEN -CL peanut CL-the
“the selling of the peanuts”

(75)a and (75)b show that a clausal nominalization formation in Wolof is similar to the formation of a typical genitive shown in (75). A similar morphological order (Noun-Genitive-Noun class) can be observed in both (75) and (75)a-b. The noun class following the genitive suffix is optional. These examples show that genitives can be formed with inalienable and alienable possessions in (75)a and (75)b respectively.

The suffix **-u** found with typical genitives can also be found in genitive nominals. It seems to have a role similar to English *of* in similar contexts. In English, the preposition *of* occurs in a context of nominalization associated with accusative case. Baker and Vinokurova (2009) argues that in the absence of a verb, the nominal has lost its verbal features and cannot assign case

⁴ Some urban Wolof speakers are not sensitive to the presence/absence of consonant mutation.

hence. For this reason, the presence of the preposition *of* is necessary as its role is to assign case to the internal argument. Baker and Vinokurova claim that in (76)a the presence of a DP like “the finding” blocks the marking of the object with accusative case hence (76)a is ungrammatical because the object cannot get case. In contrast (76)b is grammatical because the presence of the preposition *of* allows the object “the wallet” to get accusative case.

(76) a.*the finding the wallet

b. The finding of the wallet

As far as Wolof GNs are concerned, I argue that *-u* though being a suffix plays a role similar to the one of the English preposition *of*. Its presence is mandatory in a genitive nominal. This is shown in (77).

(77) a. Musaa **jaay** na gerte g-i
 Musaa sell FIN peanut CL-the
 “Musaa sold the peanuts ”

b. **n-** **jaay** m-i
 NOM- sell CL-the
 “the merchandise” / “the selling”

c. ***n-** **jaay** m-i gerte g-i
 NOM sell CL-the peanut CL-the
 “the selling the peanuts”

d. **n-** **jaay -u -m** gerte g-i
 NOM sell -GEN -CL peanut CL-the
 “the selling of the peanuts”

In (77)a the verb has been nominalized in (77)b and does not take genitive morphology; however with a genitive nominal, the suffix *-u* must be attached to the derived noun. Its absence in (77)c

accounts for the ungrammaticality of the clause. (77)d provides the correct derivation with the suffix *-u* attached to the nominal.

2.4.3 The noun class marker and its position within GN

As mentioned in Chapter 1, the indefinite determiners precede the noun. Definite determiners are marked with the morpheme *-i* or *-a* suffixed to the noun class whereas indefinite DPs can be formed through the use of the morpheme *a-* before the noun class marker.

The remainder of this subsection discusses the position of the noun class marker that follow the genitive suffix *-u* in a GN construction.

- (78) a. Musaa jaay na gerte g-i
Musaa sell FIN peanut CL-the
“Musaa sold the peanuts”
- b. n- jaay m-i
NOM- sell CL-the
“the merchandise”
- c. n- jaay -u **-m** gerte g-i
NOM sell -GEN -CL peanut CL-the
“the selling of the peanuts”

In (78)a the verb *jaay* “sell” is used, it does not appear with added morphology, in contrast in (78)b the same verb has been nominalized. This category change from a verb to a noun accounts for the presence of a consonant mutation in this case. In addition, a noun class marker *m-* appears after the noun. As noun class markers occur with nouns, I argue that this is evidence that the word *njaay* “selling” has some nominal features. In (78)c the verb still has nominal features, the nominalizing suffix as well as the noun class marker are present. However, compared to

(78)b, not only is the noun class in a different position but also it does not appear with the determiner *-i*, the presence of the latter in this context being ungrammatical as shown in (79)a.

- (79) a. *n- jaay -u m-i gerte g-i
 NOM sell GEN CL-the peanut CL-the
 “the selling of the peanuts”

- b. *n- jaay m-i -u gerte g-i
 NOM sell CL-the GEN peanut CL-the
 “the selling of the peanuts”

Even when the noun class appears closer to the noun, there is still ungrammaticality. At this point my assumption is that this might be due to the presence of the genitive suffix *-u* in this context.

In the next subsection the position of arguments in GN is discussed; this is relevant because the typical SVO word order is not always found in GN.

2.4.4 Position of arguments in the GN

2.4.4.1 Position of arguments with a pronominal DP subject

In Wolof, typical genitives as well as genitive nominals can co-occur with pronoun possessors; this is illustrated in (81) with the word *xaj* “dog”.

- (80) a. sama xaj “my dog”
 1SGPOSS dog

- b. sa xaj “your dog”
 2SGPOSS dog

- c. xaj -am “his/her dog”
 dog -3SGPOSS

- (81) a. sama -y xaj “my dogs”
 1SGPOSS -PL dog

- b. sa -y xaj “your dogs”
 2SGPOSS -PL dog

- c. a-y xaj -am “his/her dogs”
 a-PL dog -3SGPOSS

- | | |
|--|--|
| d. sunu xaj “our dog”
1PL _{POSS} dog | d. sunu -y xaj “our dogs”
1PL _{POSS} dog |
| e. seen xaj “your dog”
2PL _{POSS} dog | e. seen -i xaj “your dogs”
2PL _{POSS} -PL dog |
| f. seen xaj “their dog”
3PL _{POSS} dog | f. seen -i xaj “their dogs”
3PL _{POSS} -PL dog |

Grammatical information related to number is not marked on the noun but on the pronoun possessor. (81)a-f are examples of singular pronoun possessors used with the noun *xaj* “dog”; their plural counterparts are used in (81)a-f. In (81)a-f, the plural marker in (81)a-c has an allomorph which is *i*-.

These examples show that pronoun possessors occur prenominally except for the third person singular in (81)c which not only occurs postnominally, but also is affixed to the noun. In a similar way, genitive nominals can also be used with pronoun possessors as illustrated in (82).

- (82) a. sama n- jaay-u -m gerte
1SG_{POSS} NOM- sell -GEN-CL peanut
“my selling of peanuts”
- b. sa n- jaay-u -m gerte
2SG_{POSS} NOM- sell -GEN-CL peanut
“your selling of peanuts”
- c. n- jaay-u -m gerte -am
NOM- sell -GEN-CL peanut -3SG_{POSS}
“his/her selling of peanuts”
- d. sunu n- jaay-u -m gerte
1PL_{POSS} NOM- sell -GEN-CL peanut
“our selling of peanuts (s)”
- e. seen n- jaay-u -m gerte
2PL_{POSS} NOM- sell -GEN-CL peanut
“your selling of peanuts”

- f. seen n- jaay-u -m gerte
 3PL_{POSS} NOM- sell -GEN-CL peanut
 “their selling of peanuts”

The examples in (82) show that the pronoun possessors appear in the same position as the ones in (81). The only notable difference is that the third person pronoun, because it is in a different position, yields ambiguity as shown with the different bracketings in (83).

- (83) a. n- jaay-u -m [gerte -am]
 NOM- sell -GEN-CL peanut -3SG_{POSS}
 ‘his_k/her_k selling of his_j/her_j peanuts’
- b. [n- jaay-u -m gerte -am]
 NOM- sell -GEN-CL peanut -3SG_{POSS}
 ‘his/her selling of peanuts’
- c. * n- jaay-u -m -am gerte
 NOM- sell -GEN-CL -3SG_{POSS} peanut
 ‘his/her selling of peanuts’

In (83)a, the person doing the selling of the peanuts is different from the one doing the selling as shown in the translation. In contrast, in (83)b the focus is on the entire action of peanut-selling. (83)c shows the third person pronoun possessor marker cannot occur with the nominalized word *njaay* “selling” in this case. The plural counterparts of (82) are presented in (84).

- (84) a. sama -y n- jaay-u -m gerte
 1SG_{POSS} -PL NOM- sell -GEN-CL peanut
 ‘my selling of peanuts’
- b. sa -y n- jaay-u -m gerte
 2SG_{POSS} -PL NOM- sell -GEN-CL peanut

“your selling of peanuts”

- c. a-y n- jaay-u -m gerte -am
a- PL NOM- sell -GEN-CL peanut -3SG_{POSS}
“his/her sellings of peanuts”
- d. sunu -y n- jaay-u -m gerte
1PL_{POSS} -PL NOM- sell -GEN-CL peanut
“our selling of peanuts (s)”
- e. seen -i n- jaay-u -m gerte
2PL_{POSS} -PL NOM- sell -GEN-CL peanut
“your selling of peanuts”
- f. seen -i n- jaay-u -m gerte
3PL_{POSS} -PL NOM- sell -GEN-CL peanut
“their selling of peanuts”

2.4.4.2 Position of overt DP subjects

Here I show that in Wolof there are various constraints related to the co-occurrence of different types of arguments with respect to the nominalized verb. In (85) different types of subjects are used: proper name, non-proper names R-expressions and indefinite DPs.

- (85)
- a. Awa/ xale b -i / a –b xale bind na téeré b -i
Awa/ child CL-the / a-CL child write FIN book CL-the
“Awa/the child/ a child wrote the book”
 - b. *Awa/ xale b -i / a –b xale **m- bind -u -m téeré b-i**
Awa/ child CL-the / a-CL child **NOM-** write- GEN-CL book CL-the
“Awa’s/the child’s/ a child’s writing of the book”
 - c. *Awa/ xale b -i / a –b xale **m- bind -u -m**
Awa/ child CL-the / a-CL child **NOM-** write- GEN-CL
“Awa’s/the child’s/ a child’s writing” (intended)
 - d. **m- bind -u -m** Awa/ xale b -i / a –b xale
NOM- write- GEN-CL Awa/ child CL-the / a-CL child
“Awa’s/the child’s/ a child’s writing”

- e. sama m- bind -u -m tééré b-i
 1SGPOSS NOM- write -GEN-CL book CL-the
 “my writing of the book”

(85)a shows a typical Wolof sentence without any nominalized verb. This sentence has two overt DPs as subject and object of the verb *bind* “write”. In (85)b the verb has been nominalized, which makes the presence of an overt DP subject ungrammatical. In (85)c, the sentence is ungrammatical without the object *tééré bi* “the book”. The meaning in (85)c can only be conveyed like in (85)d where the subject of writing occurs after the noun *mbind* “writing” even though Wolof is a SVO language. In contrast, a pronominal DP subject may appear before the GN along with an overt DP object, as shown in (85)e . To sum up, a pronoun possessor can occur as a DP subject with a genitive nominalization whereas, an overt DP possessor is banned from a similar position. In English the overt DP subjects like “Awa”, *xale bi* “the child”, *ab xale* “a child” can be in subject position, that is, before the noun *mbind* “writing” as shown in the translation of (85)d. Similar constraints can be observed when a pronoun is to appear as the object of a GN.

2.4.4.3 Position of object pronouns

Genitive nominalization allows the presence of an overt DP object but does not allow a pronoun object to appear in the same context. Full DP subjects cannot appear inside GNs but pronominal subjects can; in contrast, full DP objects can appear inside GNs but full DP objects can't. Consider (86)a-e.

- (86) a. Musaa jaay na xar m -i
 Musaa sell FIN sheep CL-the
 “Musaa sold the sheep”

- b. Musaa jaay na ko
 Musaa sell FIN 3SG
 “Musaa sold it ”
- c. *Musaa n- jaay-u -m ko
 Musaa NOM sell -GEN-CL 3SG
 “Musaa’s selling of it ”
- d. * n- jaay-u -m ko
 NOM sell -GEN-CL 3SG
 “the selling of it ”
- e. *sama n- jaay-u -m ko
 1SGPOSS NOM sell -GEN-CL 3SG
 “My selling of it ”
- f. sama m- jaay -u -m xar m-i
 1SGPOSS NOM- sell -GEN-CL sheep CL-the
 “my selling of the sheep ”

(86) a is a typical Wolof clause from which (86)b is derived, the difference between the two clauses being that in (86)b the object *xar mi* “the sheep” has been replaced with the object pronoun *ko* “it” (the same pronoun also refers to “him” and “her”). Building a GN from (86)b is impossible in Wolof as illustrated by (86)c and (86)d; the presence of a pronominal subject DP does not bring any changes with grammaticality as (86)e shows. When a full DP object is present, (86)f is ungrammatical. (87) below describes the same subject-object asymmetry with regard to GN with the use of a different verb *fóón* “kiss” and a different pronoun *la* “second person singular”.

- (87) a. Musaa fóón na Awa
 Musaa kiss FIN Awa
 “Musaa kissed of Awa ”
- b. Musaa fóón na la
 Musaa kiss FIN 2SG
 “Musaa kissed you ”
- c. *Musaa fóón-u -m la
 Musaa kiss -GEN-CL 2SG
 “Musaa’s kissing of you ”
- d. * fóón-u -m la
 kiss -GEN-CL 2SG
 “the kissing of you ”
- e. *sa fóón-u -m la
 1SGPOSS kiss -GEN-CL 2SG
 “My kissing of you ”
- f. sa fóón -u -m Awa
 1SGPOSS kiss -GEN-CL Awa
 “your kissing of Awa ”

The next section examines the different semantic meanings that can arise with the use of the GN.

2.5 Interpretation of GNs

GNs in Wolof generally can have a generic, a factive or an eventive reading. This is substantiated below.

2.5.1 Genericity

GNs can have a generic reading, that is, they can refer to non-specific contexts or general contexts.

- (88) a. njaay-u-m galaas am -ul xaalis
 sell-GEN-CL ice have -NEG xaalis
 “The selling of ice is not productive”
- b. dox -u -m ñaaxtu am -ul njëriñ
 walk-GEN-CL complain have-NEG usefulness
 “Protest marches generally do not work”

In (88)a and (88)b the nominalized expressions refer to events that are believed to be true in any context. In (88)a for instance, there is no specific event of ice-selling being referred to. This is evidence that the lack of a determiner within the GNs yields a generic reading.

- (89) a. njaay-u-m galaas **m-i** am -ul xaalis
 sell-GEN-CL ice CL-the have -NEG xaalis
 “The selling of ice is not productive” (a specific selling)
- b. dox -u -m ñaaxtu **m-i** am -ul njëriñ
 walk-GEN-CL complain CL-the have-NEG usefulness
 “The protest march has not worked”

(89) provides evidence that with the presence of the definite determiners a generic reading cannot be yielded.

2.5.2 Factive reading

The factive interpretation can be assessed with the use of a factive verb as the main verb in the following sentence. This is discussed more extensively in chapter 3; factive verbs only occur with factive clauses; factive clauses refer to a presupposition the speaker has about the truth of an assertion (K&K (1971), Melvold (1991)). (90) provides examples of GNs used as subjects ((90)a and (90)c) and complements of factive verbs ((90)b).

- (90) a. n- jaay-u-m galaas y -i ci benn fan **bett** na ma
 NOM-sell-GEN-CL ice CL-the P one day surprise FIN me
 “the selling of the ice in one day, surprised me”
- b. Awa **réccu** na m- bind -u -m tééré m -i
 Awa regret FIN NOM- write-GEN -CL book CL-the
 “Awa regrets the writing of the book”
- c. paj -u -m xale m -i **jaaxal** na ma
 NOM.cure -GEN -CL child CL-the worry me
 “the curing of the child worried me”

The fact that sentences in (90)a-c are grammatical is evidence that the GNs in these examples are actually factive clauses; this is because factive clauses are only compatible with factive verbs. If the assertion of presupposition is true, the ungrammaticality of (92)a-c can easily be accounted for. Further, the truth of the assertion in each of these sentences cannot be denied; I illustrate this by trying to cancel the truth of the assertion in (90)b in (91).

- (91) *Awa **réccu** na m- bind -u -m tééré m -i waaye bind -ul tééré b -i
 Awa regret FIN NOM- write-GEN -CL book CL-the but write -NEG.3PL book CL-the
 “Awa regrets the writing of the book but she did not was not write the book ”

In (91) it must be the case that the book was already written for that fact to be regretted; the sentence does not make sense if Awa regrets something that actually did not happen. Hence the ungrammaticality of (91).

If GNs in Wolof have a factive interpretation, they should be expected not to be able with non-factive verbs; as non-factive verbs are incompatible with factive clauses. In (92)a-c non-factive verbs are used and the results are as expected.

- (92) a. * **jàpp** na-a ne n- jaay -u -m galaas y -i
 assume FIN-1SG that NOM- sell -GEN -CL ice CL-the
 “I assumed that the selling of the ice”
- b. * **mën** **na am** m- bind -u -m tééré m -i
 be able FIN have NOM- write-GEN -CL book CL-the
 “Awa’s writing the book is likely/ possible”
- c. * **xëy** **na** n- jënd -u -m dàll y-i
 may be FIN NOM- buy -GEN -CL shoe CL-the
 “May be the selling of the shoes”

In (92)a-c, the factive clauses appear with non-factive verbs *jàpp* “assume”, *mën na am* “may be” *xëy na* “be possible” in (92)a, (92)b and (92)c respectively; the result is ungrammatical.

Next, the fact that the GN can have an eventive reading associated with it, is substantiated.

2.5.3 Eventive reading

Apart from the generic and factive interpretations discussed above, the GN can also have an eventive reading since it can be modified by adverbs and some ideophones that relate to a manner. Consider (93).

- (93) a. **yàq-** u -m kér g -i **yaxeet**
 destroy-GEN-CL house CL-the IDEO
 “The destruction of the house completely”
- b. **ubbi-** u -m bunt b -i **faax**
 open-GEN-CL door CL-the IDEO
 “The opening of the door widely”
- b. **ubbi-** u -m bunt b -i **nànk**
 open-GEN-CL door CL-the slowly
 “The opening of the door slowly”

The fact that these GNs can allow adverbial modification show that they can have an eventive interpretation. Discussing eventivity within some nominals in English, Grimshaw (1990) posits two different types of nominal. On the one hand, there are nouns denoting “complex event nominal, (CEN)” which have argument structure. On the other hand, there are nouns denoting simple events like results nominals (RN) that do not have argument structure. Grimshaw argues that in English these two types of nominals can have the same form yet they have different argument structures. She further argues that there are some ambiguous properties of some nominals that cause them to behave differently based on the contexts. She uses English to illustrate her point.

(94) a. the examination/exam was long/on the table

b. the examination/*exam of the patients took a long time/*was on the table.

In (94)a the two nouns “examination” and “exam” have a result reading, as such they represent concrete entities in the real world that can for instance be pointed at or described as being “long”.

In (94)b the noun “examination” no longer has the result interpretation but an eventive reading; note that the presence of the *of*-phrase in this sentence is mandatory.

In Wolof, like in English, a nominal can have a different argument structure resulting in either a complex event or a result interpretation as shown in (95).

- (95) a. n- jaay m-i
 NOM- sell CL-the
 “the merchandise”/* “the selling”
- b. n- jaay m-i ngi ci kaw taabal j -i
 NOM- sell CL-the PROG P on table CL-the
 “the merchandise/ *the selling is on the table”
- c. teg -al n- jaay m-i fii
 put -IMP NOM- sell CL-the here
 “Put the merchandise here”

When the noun *njaay* “selling” is used in its result interpretation, it can be translated as “merchandise” ((95)a) and it also can be used in contexts where it refers to concrete entities ((95)b and (95)c); only concrete entities can literally be put somewhere.

However, when the nominalized verb *njaay* “merchandise” occurs along a genitive suffix and an internal argument, it has an eventive reading; in that way it can no longer refer to a concrete object and cannot be pointed at or moved. This explains the ungrammaticality of (96)b and (96)c.

- (96) a. n- jaay-u -m gerte
 NOM- sell -GEN -CL peanut
 “the selling of peanuts”/* “the merchandise”
- b.* n- jaay-u -m gerte ngi ci kaw taabal j -i
 NOM-sell -GEN -CL peanut PROG P on table CL-the
 “the selling of peanuts is on the table” (intended)
- c. *teg -al n- jaay-u -m gerte fii
 put -IMP NOM- sell -GEN -CL peanut here
 “Put the selling of peanuts here”

Wolof also has deverbal nominals that have a result reading; these nominals come with a specific morphology showing their status of result nominals.

- (97) a. dagg -**it**
 cut -OBJ
 “the cut” (a part obtained from cutting)
- b. wecc -**it**
 change -OBJ
 “change” (obtained after breaking a bill)
- c. wacc -**it**
 vomit -OBJ
 “vomit” (from vomit)

All these nominals above carry the suffix *-it*. The meaning of these nouns refers to the result of an action. For instance, *daggit* results from the action verb “cut”; the noun *daggit* “cut” can only be formed after the action of cutting has taken place. When these types of result nouns are compared to genitive nominals, major differences at the eventive level can be noted.

- (98) a. Awa dagg na yàpp w-i
 Awa cut FIN meat CL-the
 “Awa cut the meat”
- b. dagg-it -u (g) yàpp w-i
 cut -OBJ-GEN (CL) meat CL-the
 “The cut of the meat”
- c. *dagg yàpp w-i
 cut meat CL-the
 “the cut from the meat” (intended)

In (98)b the nominal *dagg* “cut” with a result meaning can only refer to a concrete entity, a piece of meat that was cut from a bigger one. (98)c shows that the genitive marker as well as the noun class marker following it must be there for the construction to be grammatical. In (99) the result nominal is compared to its complex nominal counterpart.

- (99) a. dagg -u -m yàpp w -i
 cut -GEN -CL meat CL-the
 “the cutting of the meat”

b. *dagg-it -u (m) yàpp w -i
 cut -OBJ-GEN (CL) meat CL-the
 “the cutting of the meat” (with this reading)

In (99)a the nominal *dagg* ‘‘cutting’’ has an eventive reading when used in a context of a genitive nominal; on the other hand the result nominal *daggit* ‘‘cut’’ can be used in a similar construction as (99)b illustrates.

So far I have discussed differences between result nominals like *daggit* “cut” and GNs; this discussion has shown that GNs, not result nominals, can have an eventive reading.

Grimshaw also addresses more differences between event nominals and result nominals with respect to how they behave within the determiner system.

Grimshaw provides further evidence of the difference between a CENs and result nominal through how they behave within the determiner system. This is shown in (93) with the noun “assignment”.

- (100)a. They studied the/an/one/that assignment. Grimshaw (1990:54)

b. They observed the/*an/*one/*that assignment.

c. The/*an/*one assignment of the problem too early in the course always causes problems.

When “assignment” does not have an eventive reading as in (100)a, it can occur with the definite determiner “the”, the indefinite determiner “a”, the numeral “one” and demonstratives (“that” in this case). On the other hand, when “assignment” is associated with an event, like in (100)b-c, it

can only occur with the definite determiner. These claims are tested for Wolof in (101) and (102).

- | | |
|---|--------|
| (101)a. *fekke na-ñu a-m/benn n- jaay-u -m gerte
witness FIN-3PL a-CL/one NOM-sell -GEN -CL peanut
“They witnessed a selling of peanuts” | CEN |
| b. gis na-ñu a-m/?benn n- jaay
see FIN-3PL a-CL/? one NOM-sell
“They saw a/one piece of merchandise” | Result |
| c. gis na-ñu a-m/ benn dagg-it
see FIN-3PL a-CL/one cut-OBJ
“They saw one cut piece” | Result |

As expected, nominals with a complex event cannot occur with the indefinite determiner and the numeral “one” as the ungrammaticality of (101)a shows. (101)b and (101)c also confirm Grimshaw claims as the same grammatical elements can occur with result nominals. The only issue that arises is the fact that (101)b sounds awkward with the numeral “one”; my assumption is that this is due to the noun *njaay* “merchandise” being related to a mass noun.

Demonstratives pattern differently. In Wolof, demonstratives can only appear with nominals lacking argument structure whereas the definite determiner can occur with both as (102) illustrates.

- | |
|--|
| (102)a. m- bind -u -m tééré m-i /* m-ee
NOM-write -GEN -CL book CL -the/ CL-that
“the/*that writing of the book” |
| b. m- bind m -i / m-ee
NOM-write CL -the/ CL-that
“the/that writing” |

In (102)a the GN can occur with a definite determiner but not with a demonstrative; in contrast in (95)b a demonstrative can appear with nominal with a result reading.

In addition to these differences, Grimshaw argues that nominals with argument structure do not pluralize, contrary to their counterparts that lack argument structure as shown in (103) from Grimshaw (1990:54).

(103)a. The assignments were long

b. * The assignments of the problems took a long time

This is confirmed by the Wolof data in (104) as the use of the plural is grammatical with the non eventive nominals in (104)a-b but ungrammatical in (104)c.

(104)a. m- bind y -i gudd na-ñu
NOM- write CL -the long FIN-3PL
“the writings were long”

b. dagg -it y -i gudd na-ñu
cut-OBJ CL-the long FIN-3PL
“the cuts were long”

c. *m- bind -u -m tééré y-i jél na-ñu fukk weer
NOM-write -GEN -CL books CL -the take FIN-3PL ten months
“the writings of the books took ten months”

In this section I have shown that the genitive nominal can be interpreted in different ways based on the context. They can have a generic, factive or eventive reading based on the context. I have only discussed the possible interpretations to the best of my knowledge. This is why a manner interpretation, for example, is not discussed, since it is not possible with GN.

2.6 Conclusion

In this chapter I have discussed various properties of genitive nominalization in Wolof. This type of nominalization is interesting for various reasons. I have shown that it cannot be used when some verbal affixes are attached to the target verb. For instance when the direct causative *-al* is attached to the verb, GN can be formed, however when other verbal suffixes like the benefactive *-al*, the causatives *-loo* and *-lu*, inflectional suffixes *-oon* and *-u* are used the genitive nominalization is not possible. When the target verb has more than two arguments, it seems that forming a GN becomes ungrammatical; this is the case when a verb carries valency-increasing suffixes that change a two argument verb to a three-argument one. In addition, valency-decreasing suffixes also seem to trigger ungrammaticality. Apart from this, genitive nominalization is not very productive since many verbs cannot be used in this construction. This is the case of some experiencer verbs and some stative verbs for instance. I have also provided evidence that based on the context, GNs can be interpreted as factive, eventive and generic. Finally, I have showed that there is a subject-object asymmetry regarding GNs; an external argument cannot be used in this type of nominalization even though a pronominal DP can be used. Apart from this, an internal argument in a GN cannot be a pronoun, only an overt DP.

Chapter 3: Relative clause nominalization

3.1 Introduction

This chapter discusses a type of nominal I refer to as “relative clause” nominal (RC nominal) because of its structural similarity with a typical Wolof relative clause. (1)b shows the structure of a typical Wolof relative clause whereas (2)a and (2)b show the structure of an RC nominal. Throughout this chapter, different noun classes are used.

- (1) a. Musaa bind na téeré b -i
Musaa write FIN book CL-the
“Musaa wrote the book”
- b. [téeré]_i b -i Musaa bind _{t_i} Relative Clause (RC)
book CL-COMP Musaa write
“the book that Musaa wrote”
- (2) a. [**bind** b -i] [Musaa **bind** téeré b-i]] bett na ma RC nominal
write CL - COMP Musaa write book CL-the surprise FIN 1SG
“Musaa’s writing the book surprised me”
- b. [l -i] [Musaa **bind** téeré b-i]] bett na ma RC nominal
CL - COMP Musaa write book CL-the surprise FIN 1SG
“Musaa’s writing the book surprised me”

The relativized expression in (1)b leaves a gap in the main clause whereas in (2)a it leaves a full copy in its original position. In (2)b there is a headless relative clause; only the noun class *l-* is present along with the complementizer. This noun class is used in Wolof to refer to “thing”, “object”, “stuff” etc.

The RC nominals can occur in various environments within a sentence. For example, they can occur as the subject, object and object of preposition. This is shown in (3)a, (3)b, (3)c.

- (3) a. [sàcc b -i Musaa sàcc ginaar g -i] bett na ma Subject
steal CL - COMP Musaa steal chicken CL-the surprise FIN 1SG
“Musaa’s stealing the chicken surprised me”
“ The fact that Musaa stole the chicken surprised me”
- b. Musaa réccu na [sàcc b -i mu sàcc ginaar g -i] Object
Musaa regret FIN steal CL - COMP 3SG steal chicken CL-the
“ The fact that Musaa regretted stealing the chicken”
- c. Musaa waaru na ci [sàcc b -i mu sàcc ginaar g -i]
Musaa surprise FIN about steal CL - COMP 3SG steal chicken CL-the
“Musaa is surprised/ overwhelmed by the fact that he stole the chicken”

Something noteworthy though is the fact that the examples in (3) include matrix verbs with experiencer predicates. This suggests that the RC nominals are actually factive in these contexts described. This is substantiated in Section 3.3.2.

- (4) Musaa dégg na [dóór b -i Awa dóór xale g -i]
Musaa hear FIN hit CL - COMP Awa hit child CL-the
“Musaa heard Awa’s hitting the child”
* “Musaa heard the fact that Awa hit the child”

The translation of (4) is infelicitous if it refers to a fact, but grammatical if it refers to an event. This is expected as we do not hear a “fact”. This is discussed later.

In this chapter, I show various properties of RC nominals in Wolof. This chapter is organized as follows; section 3.2 provides a background on RC nominals by comparing them to typical relative clauses and discussing their distribution. Section 3.3 discusses the nominal as well as the verbal properties of the RC nominals. Section 3.4 explains the meaning of factivity, discusses the reason RC nominals are related to factive clauses. The interpretation of RC nominals in different

contexts is provided in this section. Section 3.5 gives a cross-linguistic comparison of factive clauses in languages genetically related to Wolof. Section 3.6 discusses differences and/or similarities between genitive nominals and RC nominals. Section 3.7 concludes this chapter.

3.2 Background on RC nominals

In this section I provide evidence that the process involved in this type of nominalization is similar to the process found in the derivation of relative clause in Wolof. I show various similarities between them. I also show how RC nominalization works with different types of verbs. I mainly focus the discussion on headed relative clauses; however I also refer to headless relative clauses when relevant.

3.2.1 RC nominals and Relative clauses

Various similarities between the typical relative clause and the RC nominal construction have been discussed in Torrence (2005), Torrence and Tamba (2013). Wolof has head-initial relative clauses, as shown in (5). Wolof determiners are relevant to the discussion of relative clauses because homophonous forms appear in relative clauses (Torrence (2005), Tamba and Torrence (2013)).

mi- noun class

- (5) a. (u-**m**) muus **m-u** Awa gis *u*-Relative Clause
a-CL cat CL-COMP Awa see
“a cat that Awa saw”

- b. muus **m-i** Awa gis (**m-i**)
cat CL-COMP awa see CL-the
“the cat here that Awa saw”

i-Relative Clause

- c. muus **m-a** Awa gis (**m-a**)
cat CL-COMP awa see CL-the
“the cat there that Awa saw”

a-Relative Clause

The presence of different types of complementizers *-u* in (5)a , *-i* in (5)b, *-a* in (5)c gives various semantic information. For this reason, the presence of the definite article is not necessary (Torrence (2005)) as the complementizer carries information related to definiteness. Thus (5)a refers to an definite noun, (5)b to an indefinite one whereas (5)c refers to a definite noun that was mentioned a long time ago. The underlined relative complementizers agree in class with the head noun.

- (6) a. (u-b) xaj **b-u** Awa gis *u*-Relative Clause
a-CL dog CL-COMP awa see
“a dog that Awa saw”
- b. xaj **b-i** Awa gis (**b-i**) *i*-Relative Clause
dog CL-COMP awa see CL-the
“the dog here that Awa saw”
- c. xaj **b-a** Awa gis (**b-a**) *a*-Relative Clause
dog CL-COMP awa see CL-the
“the dog there that Awa saw”

Given the presence of an overt determiner and a CP (headed by the relative complementizer), Torrence (2005) argues for an analysis along the lines of Kayne (1994), with Wolof relative clauses being composed of a D + CP complement. In addition, Torrence argues that some Wolof headed relative clauses contain a “relative” TP, in which non-subject clitics (and subject markers) immediately follow the relative complementizer and precede a DP subject:

- (7) a. (u-b) xaj **b-u** **leen** Awa jaay *u*-Relative Clause
a-CL dog CL-COMP 3PL awa see
“a dog that Awa bought for them”
- b. xaj **b-i** **leen** Awa jaay (**b-i**) *i*-Relative Clause
dog CL-COMP 3PL Awa see-BEN CL-the
“the dog here that Awa bought for them”

- c. xaj **b-a** **leen** Awa jaay (b-a) *a*-Relative Clause
 dog CL-COMP 3PL Awa buy CL-the
 “the dog there that Awa bought for them”

Relative clauses have a distinct set of subject markers, which vary according to which relative complementizer is present:

- (8) a. tééré **b-i/a** **nga/*a** jàng /*a*-Relative C + *ngaz*_{SG}
 book CL-COMP 2SG read
 “the book here/there that you read”
- b. tééré **b-u** **a/*nga** jàng *u*-Relative Clause + *a*_{SG}
 book CL-COMP 2SG read
 “a book that you read”

Overall, the subject markers for *i*- and *a*-relatives are identical. As **Table 2** shows, *u*-relatives have a slightly different set of subject markers. Templates for Wolof headed relative clauses are given in (9)a-c.

Table 2: Relative Clause Subject Markers

Clause Type	1SG	2SG	3SG	1PL	2PL	3PL
<i>i/a</i> -Relative	ma	nga	mu	nu	ngeen	ñu
<i>u</i> -Relative	ma	a	Ø/mu	nu	ngeen/aleen	ñu

- (9) a. NP CL- C^i_{COMP} Cl_{ts}-Cl_{to}-Cl_{Loc} S_{DP} V O (CL-*i*) *i*-Relative
 b. NP CL- C^a_{COMP} Cl_{ts}-Cl_{to}-Cl_{Loc} S_{DP} V O (CL-*a*) *a*-Relative
 c. (*u/a*-CL) NP CL- C^u_{COMP} Cl_{ts}-Cl_{to}-Cl_{Loc} S_{DP} V O (*u*-CL) *u*-Relative

In arguing that RC nominals are a type of relative clause, the following four factors are taken into account.

First, the same set of left peripheral class-agreeing complementizers that occur in headed relative clauses, *CL-i/u/a*, occur on the left edge of the *l-* RC nominals:

- li*-Factive
- (10) a. [l-i mu dàq Sàmba] jaaxal-na-ma. $i = C_{REL}$
 CL-COMP 3SG chase samba surprise-FIN-1SG
 “That he chased Samba surprised me.”
- b. [l-a mu dàq-oон Sàmba] jaaxal-na-ma. $a = C_{REL}$
 CL-COMP 3SG chase-PAST samba surprise-FIN-1SG
 “That he chased Samba (long ago) surprised me.”
- c. [l-u mu dàq Sàmba] jaaxal-na-ma. $u = C_{REL}$
 CL-COMP 3SG chase samba surprise-FIN-1SG
 “That fact that he chased Samba (at some point) surprised me”

Second, all three relative complementizers occur on the left edge of the verbal RC nominals:

- Verbal RC nominal
- (11) a. réccu na [dàq b-i mu dàq Sàmba] $i = C_{REL}$
 regret FIN chase CL-COMP 3SG chase samba
 “He regrets that he chased Samba”
 “He regrets the way that he chased Samba”
- b. réccu na [dàq b-a mu dàq(-oon) Sàmba] $a = C_{REL}$
 regret FIN chase CL-COMP 3SG chase-PAST samba
 “He regrets that he chased Samba (long ago).”
- c. réccu na [dàq b-u mu dàq Sàmba] $u = C_{REL}$
 regret 3SG chase CL-COMP 3SG chase samba
 “He regrets (some event when) he chased Samba.”

Third, both RC nominal constructions seem to involve a *relative* TP, in which the non-subject clitics (and subject markers) both immediately follow the relative complementizer and precede DP subjects.

- (12) a. [l-i/u/a leen Awa jox Sàmba] jaaxal na ma *li*- RC nominal
 CL-COMP 3PL awa give samba surprise FIN 1SG
 “The fact that Awa gave them to Samba surprised me.”

- b. [jox b-i/u/a **leen** Awa jox Sàmba] jaaxal na ma Verbal RC nominal
 give CL-COMP 3PL awa give samba surprise FIN 1SG
 “The fact that Awa gave them to Samba surprised me.”

Fourth, the same sets of subject markers occur in headed relative clauses and both RC nominal types:

- (13) a. l-i/a **nga/*a** jàng tééré b-i *li/a-* RC nominal + *nga_{2SG}*
 CL-COMP 2SG read book CL-COMP
 “the fact that you read the book”
- b. **l-u** **a/*nga** jàng tééré b-i *lu-* RC nominal + *a_{2SG}*
 CL-COMP 2SG read book CL-COMP
 “Some event of your reading the book”
- c. jàng b-i/a **nga/*a** jàng tééré b-i *bi/a* Verbal RC nominal + *nga_{2SG}*
 read CL-COMP 2SG read book CL-COMP
 “the fact that you read the book”
- d. jàng b-u **a/*nga** jàng tééré b-i *bu* Verbal RC nominal + *a_{2SG}*
 read CL-COMP 2SG read book CL-COMP
 “some event of your reading the book”

Templatically, headed relative clauses and the factives are almost identical:

- (14) a.NP CL-*u/i/a* Cl_{ts}-Cl_{to}-Cl_{Loc} S_{DP} V O Headed Relative Clause
 b. V *b-u/i/a* Cl_{ts}-Cl_{to}-Cl_{Loc} S_{DP} V O Verbal Relative
 c. Ø *l-u/i/a* Cl_{ts}-Cl_{to}-Cl_{Loc} S_{DP} V O Verbal Relative

Given these similarities, it can be concluded that both the *l-* RC nominal and the verbal RC nominal are actually types of relative clauses.

In the next section I use various types of verbs, simple or with some morphology in RC nominalization.

3.2.2 Predicate types in RC nominals

In this subsection I show that there are no restrictions about the type of verbs that can occur in a factive construction. Indeed, intransitive (unergative and unaccusative) and transitive verbs can be used in this nominalization process.

- (15) a. Ayda nelaw na unergative
 Ayda sleep FIN
 “Ayda slept”

- b. nelaw b-i Ayda nelaw
 dance CL-COMP Ayda pray
“Ayda’s sleeping”
“The fact that Ayda slept”

- (16) a. Ayda julli na unergative
 Ayda pray FIN
 “Ayda prayed”

- b. julli b-i Ayda julli
 dance CL-COMP Ayda pray
 “Ayda’s praying”
 “The fact that Ayda prayed”

(15) and (16) show that an RC nominal can be built from unergative verbs, the verb *nelaw* “sleep” and *julli* “pray” in this case.

In the same way, (17) and (18) show that unaccusative verbs can also be used in a similar context.

- (17) a. galas g-i **sey** na unaccusative
 ice CL-the melt FIN
 “the ice melted”

- b. **seey** b-i galas g-i seey
melt CL- COMP ice CL-the melt
“the melting of the ice”
“the fact that the ice melted”

- (18) a. galas g-i **bax** na unaccusative
water CL-the boil FIN
“the water boiled”

c. **bax** b-i galas g-i **bax**
boil CL- COMP water CL-the boil
“the boiling of the water”
“the fact that the water boiled”

Apart from this, experiencer verbs of different kinds can also be used as in (19) through (24). In (19) through (22), simple experiencer verbs are used. (19) and (20) involve object-oriented experiencer verbs. With this type of experiencer verb, the object is emotionally affected.

- (19) a. Awa **neex** na Musaa Object-oriented experiencer verb
 Awa please FIN Musaa
 “Musaa likes Awa”

b. **neex** b-i Awa neex Musaa
 please CL- COMP Awa please Musaa
 “Musaa’s liking Awa”
 “The fact that Musaa likes Awa”

(20) a. Nabu **jaaxal** na Xadi Object-oriented experiencer verb
 Nabu worry.CAUS FIN Xadi
 “Nabu worries Xadi”

b. **jaaxal** b-i Nabu jaaxal Xadi
 worry CL- COMP Nabu worry.CAUS Xadi
 “Nabu’s worrying Xadi”
 “The fact that Nabu worries Xadi”

In (21) and (22) subject-oriented experiencer verbs are used. When such a verb is used the subject of the sentence is experiencing an emotional change of state.

- | | |
|---|------------------------------|
| <p>(21) a. Awa tiit na
 Awa be scared FIN
 “Awa is scared”</p> <p>b. tiit b-i Awa tiit
 be scared CL- COMP Awa be scared
 “Awa’s being scared”
 “The fact that Awa is scared”</p> | Subject-oriented experiencer |
| <p>(22) a. Aji waar -u na
 Aji be overwhelmed -RFM FIN
 “Aji is overwhelmed”</p> <p>b. waar -u b-i Aji waар -u
 be overwhelmed -RFM CL- COMP Aji be overwhelmed -RFM
 “Aji’s being overwhelmed”
 “The fact that Aji is overwhelmed”</p> | Subject-oriented experiencer |

As seen in (19), (20), (21) and (22), an RC nominal can be built with object-oriented experiencer verbs and subject-oriented experiencer verbs.

A similar thing can be said with complex experiencers in (23) and (24).

- | | |
|--|------------------------|
| <p>(23) a. Awa am na naqar
 Awa have FIN sorrow
 “Awa is pained”</p> <p>b. am b-i Awa am naqar
 have CL- COMP Awa have sorrow
 “Awa’s being pained”
 “The fact that Awa is pained”</p> <p>c. am naqar b-i Awa am naqar
 have sorrow CL- COMP Awa have sorrow
 “Awa’s being pained”
 “The fact that Awa is pained”</p> | <i>am</i> -experiencer |
|--|------------------------|

In (23) the experiencer is complex because it involves a verb and a noun, interestingly the RC nominal can be built either by fronting the verb only as in (23)b or by fronting the verb and the noun as in (23)c. The same can be observed in (24) with the complex experiencer predicate *dal xel* “have sorrow”.

- (24) a. Awa **dal** na **xel** Experiencer
 Awa be settled FIN mind
 “Awa is calm/relieved”
- b. **dal** b-i Awa **dal** **xel**
 be settled CL- COMP Awa be settled mind
 “Awa’s being calmed”
 “The fact that Awa is calmed”
- c. **dal** **xel** b-i Awa **dal** **xel**
 be settled mind CL- COMP Awa be settled mind
 “Awa’s being calmed”
 “The fact that Awa is calmed”

So far, different types of experiencer verbs, simple or complex, have successfully been used to build RC nominals.

The RC nominal can also occur with transitive verbs. This is illustrated in (25)a-c and (26)a-c.

- (25) a. Musaa **sàcc** na **ginaar** g -i Transitive
 Musaa steal FIN chicken CL-the
 “Musaa stole the chicken”
- b. **sàcc** b -i Musaa **sàcc** **ginaar** g -i
 steal CL - COMP Musaa steal chicken CL-the
 “Musaa’s stealing the chicken”
 “The fact that Musaa stole the chicken”

- c. **sàcc ginaar** b -i Musaa **sàcc ginaar** g -i
 steal chicken CL - COMP Musaa steal chicken CL-the
 “Musaa’s stealing the chicken”
 “The fact that Musaa stole the chicken”

In (25)a only the verb is fronted as expected based on the previous examples. In contrast in (25)c, the verb is fronted along with its internal argument. (26) follows the same pattern with the verb *togg* “cook”.

- (26) a. Musaa **togg** na **reer** b -i Transitive
 Musaa cook FIN dinner CL-the
 “Musaa cooked the dinner”
- b. **togg** b -i Musaa **togg reer** g -i Transitive
 cook CL - COMP Musaa cook dinner CL-the
 “Musaa’s cooking the dinner”
 “The fact that Musaa stole the dinner”
- c. **togg reer** b -i Musaa **togg reer** g -i Transitive
 cook dinner CL - COMP Musaa cook dinner CL-the
 “Musaa’s cooking the dinner”
 “The fact that Musaa stole the dinner”

The RC nominal can also be formed with double object verbs like *jox* “give”, *teg* “put”, *mey* “offer”; examples are provided in (27) and (29).

- (27) a. Awa **jox** na Ayda xaalis Ditransitive
 Awa give FIN Ayda money
 “Awa gave Ayda some money”

The ditransitive verb *jox* “give” follows the same pattern as the transitive ones as seen in (27)b through (27)d. Even though *jox* “give” is a double-object verb, only the direct object *xaalis* can be fronted along with it as shown in (27)d. However the indirect object “Ayda” cannot be fronted with the verb; this is shown in (27)e. In the same way, the two arguments cannot be fronted along with the verb ((27)f). (28) follows a similar pattern with the ditransitive verb *mey* “offer”.

- c. **mey b -i** Awa mey Ayda saag
 offer CL -COMP Awa offer Ayda bag
 “Awa’s offering Ayda a bag”
 “The fact that Awa offered Ayda a bag”
- d. **mey saag b -i** Awa mey Ayda saag
 offer bag CL -COMP Awa offer Ayda bag
 “Awa’s offering Ayda a bag”
 “The fact that Awa offered Ayda a bag”
- e. ***mey Ayda b -i** Awa mey Ayda saag
 offer Ayda CL -COMP Awa offer Ayda bag
 “Awa’s offering Ayda a bag”
 “The fact that Awa offered Ayda a bag”
- f.* **mey Ayda saag b -i** Awa mey Ayda saag
 offer Ayda bag CL -COMP Awa offer Ayda bag
 “Awa’s offering Ayda a bag”
 “The fact that Awa offered Ayda a bag”

(29) is an example of another verb that takes two arguments, the difference being that this verb which is *teg* “put” has one argument that must occur with a preposition.

- (29) a. Ayda **teg na xaalis ci taabal j -i** Ditransitive
 Ayda put FIN money on table CL-the
 “Ayda put the money on the table”
- b. Ayda **teg na ci taabal j -I xaalis** Ditransitive
 Ayda put FIN on table CL-the money
 “Ayda put on the table the money”
- c. **teg b -i** Ayda teg xaalis ci taabal j -i
 put CL -COMP Ayda put money on table CL-the
 “Ayda’s putting the money on the table”
 “The fact that Ayda put the money on the table”
- d. **teg xaalis b -i** Ayda teg xaalis ci taabal j -i
 put money CL -COMP Ayda put FIN money on table CL-the
 “Ayda’s putting the money on the table”

“The fact that Ayda put the money on the table”

- e. * **teg ci taabal j-i b -i** Ayda teg xaalis ci taabal j-i
put on table CL-the CL -COMP Ayda put money on table CL-the
“Ayda’s putting the money on the table”
“The fact that Ayda put the money on the table”
- f. * **teg xaalis ci taabal j-i b -i** Ayda teg xaalis ci taabal j-i
put money on table CL-the CL -COMP Ayda put money on table CL-the
“Ayda’s putting the money on the table”
“The fact that Ayda put the money on the table”

In what follows, I show that stative verbs can occur in the RC nominal construction, these types of stative verbs are translated in English as adjectives.

- (30) a. Awa **njool** na
Awa be tall FIN
“Awa is tall”
- b. **njool** b -i Awa njool
be tall CL -COMP Awa be tall
“Awa’s being tall”
“The fact that Awa is tall”
- (31) a. Awa **rafet** na
Awa be pretty FIN
“Awa is pretty”
- b. **rafet** b -i Awa rafet
be pretty CL -COMP Awa be pretty
“Awa’s being pretty”
“The fact that Awa is pretty”

(30) and (31) show that stative verbs like *njool* “be tall” and *rafet* “be pretty” can occur in this construction successfully; (32) provides another example of stative verb.

- (32) a. néég b -i **yaatu** na
room CL-the be large FIN
“The room is large”
- b. **yaatu** b -i néég b -i yaatu
be large CL -COMP room CL-the be large
“The room’s being large”

“The fact that the room is large”

In (33) and (35) verb sequences are used in this construction, first with two-verb sequences in (33) then with three-verb sequences in (35). The verb sequences in (33) and (34) involve the use of a main verb *jàng* “read” along with a modal *mĕn* “can”.

- (33) a. Awa **mĕn** na **jàng** tééré b-i
Awa can FIN read book CL-the
“Awa can read the book”
- b. **mĕn** b -i Awa mĕn jàng tééré b-i
can CL -COMP Awa can read book CL-the
“Awa’s being able to read the book”
“The fact that Awa is able to read the book”
- c. **mĕn jàng** b -i Awa mĕn jàng tééré b-i
can read CL -COMP Awa can read book CL-the
“Awa’s being able to read the book”
“The fact that Awa is able to read the book”
- d. **mĕn jàng tééré** b -i Awa mĕn jàng tééré b-i
can read book CL -COMP Awa can read book CL-the
“Awa’s being able to read the book”
“The fact that Awa is able to read the book”

In (33), one verb can be nominalized as in (33)b, in addition, two verbs can be nominalized as (33)c shows. Even when the verb internal argument is fronted, the nominalization process still works. A similar nominalization process can be observed in (34) below with the modal *nar* “intend” and the verb *jaay* “sell”.

- (34) a. Awa **nar** na **jaay** xaj b-i
Awa intend FIN sell dog CL-the
“Awa intends to sell the dog”
- b. **nar** b -i Awa nar jaay xajb-i
intend CL -COMP Awa intend sell dog CL-the
“Awa’s intending to sell the dog”
“The fact that Awa intends to sell the dog”

- c. **nar jaay b -i** Awa nar jaay xajb-i
intend sell CL -COMP Awa intend sell dog CL-the
“Awa’s intending to sell the dog”
“The fact that Awa is able to sell the dog”
- d. **nar jaay xaj b -i** Awa nar jaay xaj b-i
intend sell dog CL -COMP Awa intend sell dog CL-the
“Awa’s intending to sell the dog”
“The fact that Awa intends to sell the dog”

In the following, clauses including three verb sequences, are nominalized; in (35) and (36). As can be seen in the example, the result is different from the one of the two-verb sequences in (34).

- (35) a. Awa **mën na jéém jäng** tééré b-i
Awa can FIN try read book CL-the
“Awa can to try to read the book”
- b. **mën b -i** Awa mën jéém jäng tééré b-i
can CL -COMP Awa can try read book CL-the
“Awa’s being able to try read the book”
“The fact that Awa is able to try to read the book”
- c. ***mën jéém b -i** Awa mën jéém jäng tééré b-i
can try CL -COMP Awa can try read book CL-the
“Awa’s being able to try read the book”
“The fact that Awa is able to try to read the book”
- d. ***mën jéém jäng b -i** Awa mën jéém jäng tééré b-i
can try read CL -COMP Awa can try read book CL-the
“Awa’s being able to try read the book”
“The fact that Awa is able to try to read the book”

The three-verb sequences only allow the nominalization of the first verb as in (35)b; in contrast when two verbs or three verbs are fronted, it results in ungrammaticality as in (35)c and (35)d.

- (36) a. Awa **war** na bëgg lekk
 Awa should FIN like eat
 “Awa should to like to eat”
- b. **war** b -i Awa war bëgg lekk
 should CL -COMP Awa should like eat
 “Awa’s wanting to like eat”
 “The fact that Awa should like to eat”
- c. ***war bëgg** b -i Awa war bëgg lekk
 should like CL -COMP Awa should like eat
 “Awa’s wanting to like eat”
 “The fact that Awa should like to eat”
- d. ***war bëgg lekk** b -i Awa war bëgg lekk
 should like eat CL -COMP Awa should like eat
 “Awa’s wanting to like eat”
 “The fact that Awa should like to eat”

In (37) through (39), ideophones are used. Ideophones have already been defined in the previous chapter. In (37)a the ideophone *faax* “in a relaxed way”, is used with the verb *ne* “say” and in (37)b it is used with the verb *toog* “sit”.

- (37) a. Ayda **ne** na **faax**
 Ayda say FIN IDEO
 “Ayda sat in a relaxed way”
- b. Ayda **toog** na **faax**
 Ayda sit RFM FIN IDEO
 “Ayda sat in a relaxed way”

(37)a is nominalized in (38)a and (38)b whereas (37)b is nominalized in (39)a and (39)b.

- (38) a. * **ne** b -i Ayda ne faax
 say CL -COMP Ayda say IDEO
 “Ayda sitting in a relaxed way”
- b. ??**ne faax** b -i Ayda ne faax
 say IDEO CL -COMP Ayda say IDEO
 “Ayda sitting in a relaxed way”

When the verb *ne* “say” is fronted, the sentence is ungrammatical as in (38)a, whereas when the verb *ne* “say” along with the ideophone is fronted as in (38)b, the resulting RC nominal is marginal. This is different from the case when the verb *toog* “sit” instead of *ne* “say” is present as in (39).

- (39) a. **toog b -i** Ayda toog faax
sit CL -COMP Ayda sit IDEO
“Ayda sitting in a relaxed way”
- b. **toog faax b -i** Ayda toog faax
sit IDEO CL -COMP Ayda sit IDEO
“Ayda sitting in a relaxed way”

Both (39)a and (39)b are grammatical even though some native speakers, myself included, prefer (39)a.

So far, I have shown that the RC nominal can be built from various types of verbs; it can be formed with transitive and intransitive (unergative and unaccusative) and also with different types of experiencer verbs. In addition, ditransitive verbs can be nominalized by themselves but also with the presence of a direct object; however when an indirect object is present along with the verb, the nominalization is not possible. I have also shown that three-verb sequences are not good candidates for RC nominalization and also that ideophones can be used to build RC nominals when a verb related to its meaning is used.

In the next subsection, I build RC nominals from verbs that have some derivational or inflectional suffixes attached to them.

3.2.3 Verbal suffixes in RC nominals

Just like with the genitive nominal in the previous chapter, here I use valency-increasing suffixes as well as valency-decreasing ones. I also use inflectional suffixes that provide information related to tense and negation. First, I start with a valency-increasing suffix like *-al*; this suffix changes one-argument verb into a two-argument one.

- (40) a. Musaa **wadd -al** na mango b-i
 Musaa fall -CAUS FIN mango CL-the
 “Musaa dropped the mango”
- b. [**wadd-al** b-i [Musaa wadd-al mango b-i] bett na ma
 fall-CAUS CL-the Musaa fall-CAUS mango CL-the surprise FIN 1sg
 “Musaa’s dropping of the mango surprised me”
- c. [**wadd-al** mango b-i [Musaa wadd-al mango b-i] bett na ma
 fall-CAUS mango CL-the Musaa fall-CAUS mango CL-the surprise FIN 1sg
 “Musaa’s dropping of the mango surprised me”]

In (40) with the presence of the causative suffix, the verb can still be nominalized, by itself in (40)b or along with its internal argument in (40)c. (41) follows a similar pattern.

- (41) a. Musaa **bax -al** na mango b-i
 Musaa boil -CAUS FIN mango CL-the
 “Musaa boiled the mango”
- b. [**bax-al** b-i Musaa bax-al mango b-i] bett na ma
 boil-CAUS CL-the Musaa boil-CAUS mango CL-the surprise FIN 1SG
 “Musaa’s boiling of the mango surprised me”
- c. [**bax-al** mango b-i Musaa bax-al mango b-i] bett na ma
 boil-CAUS mango CL-the Musaa boil-CAUS mango CL-the surprise FIN 1SG
 “Musaa’s boiling of the mango surprised me”

(44) through (42) involve valency-increasing suffixes that add third argument to a two-argument verb. (42) involves the use of the causative suffix *-loo* that adds a third argument, a causer.

- (42) a. Faatu bind-**loo** na Awa tééré
Faatu write-CAUS FIN Awa book
“Faatu made Awa write a book”
- b. **bind-loo** b-i Faatu bind-**loo** Awa tééré
write-CAUS CL- COMP Faatu write-CAUS Awa book
“Faatu’s making Awa write a book”
- c. **bind-loo** tééré b-i Faatu bind-**loo** Awa tééré
write-CAUS book CL- COMP Faatu write-CAUS Awa book
“Faatu’s making Awa write a book”
- d. ***bind-loo** Awa b-i Faatu bind-**loo** Awa tééré
write-CAUS book CL- COMP Faatu write-CAUS Awa book
“Faatu’s making Awa write a book”
- e. ??**bind-loo** Awa tééré b-i Faatu bind-**loo** Awa tééré
write-CAUS Awa book CL- COMP Faatu write-CAUS Awa book
“Faatu’s making Awa write a book”

In (42) the causative suffix *-loo* is attached to the verb; it is still possible to nominalize the verb or the verb and the internal argument *tééré* “book” as shown in (42)b and (42)c. In (42)d, the verb is moved along with the causee “Awa”, and the sentence is ungrammatical. This shows that in the case of a two-object verbs, copying the direct object is preferred over copying an indirect object. Also when the third argument is added to the relativized verb, the sentence is marginal as shown in (42)e. A similar situation is described in (43) with the verb *naan* “drink”.

- (43) a. Faatu naan-**loo** na Awa meew
 Faatu drink-CAUS FIN Awa milk
 “Faatu made Awa drink some milk”
- b. **naan-loo** b-i Faatu naan-**loo** Awa meew
 drink-CAUS CL- COMP Faatu drink-CAUS Awa milk
 “Faatu’s making Awa drink some milk”
- c. **naan-loo** **meew** b-i Faatu naan-**loo** Awa meew
 drink-CAUS milk CL- COMP Faatu drink-CAUS Awa milk
 “Faatu’s making Awa drink some milk”
- d. ***naan-loo** **Awa** b-i Faatu naan-**loo** Awa meew
 drink-CAUS Awa CL- COMP Faatu drink-CAUS Awa milk
 “Faatu’s making Awa drink some milk”
- e. ??**naan-loo** **Awa** **meew** b-i Faatu naan-**loo** Awa meew
 drink-CAUS Awa milk CL- COMP Faatu drink-CAUS Awa milk
 “Faatu’s making Awa drink some milk”

The benefactive suffix *-al* in (44) patterns like the causative suffix *-loo*, this suffix also increases a verb valency in the same way.

- (44) a. Musaa jaay-**al** na Awa dàll y-i
 Musaa sell-BEN FIN Awa shoes CL-the
 “Musaa sold Awa the shoes”
- b. **jaay-al** b-i Musaa jaay-al Awa dàll y-i bett na ma
 sell- BEN CL- COMP Musaa sell- BEN Awa shoes CL-the surprise FIN 1SG
 “Musaa’s selling the shoes for Awa surprised me”
- c. **jaay-al** **dàll** b-i Musaa jaay-al Awa dàll y-i bett na ma
 sell- BEN shoes CL- COMP Musaa sell- BEN Awa shoes CL-the surprise FIN 1SG
 “Musaa’s selling the shoes for Awa surprised me”
- d. ***jaay-al** **Awa** b-i Musaa jaay-al Awa dàll y-i bett na ma
 sell- BEN Awa CL- COMP Musaa sell- BEN Awa shoes CL-the surprise FIN 1SG
 “Musaa’s selling the shoes for Awa surprised me”
- e. ?? **jaay-al** **Awa** **dàll** b-i Musaa jaay-al Awa dàll y-i
 sell- BEN Awa shoes CL- COMP Musaa sell- BEN Awa shoes CL-the
 “Musaa’s selling the shoes for Awa surprised me”

In (45), the addition of the instrument suffix *-e*, which is a velency-increasing suffix, yields different.

- (45) a. Faatu ubbi-e na bunt b -i (ak) caabi
 Faatu open-INST FIN door CL-the (with)e key
 “Faatu opened the door with a key”
- b.* **ubbi-e** b-i Faatu ubbi-e bunt b -i (ak) caabi
 open-INST CL- COMP Faatu open-INST door CL-the (with)e key
 “Faatu’s opening the door with a key”
- c.***ubbi-e bunt b-i** Faatu ubbi-e bunt b -i (ak) caabi
 open-INST door CL- COMP Faatu open-INST door CL-the (with)e key
 “Faatu’s opening the door with a key”

For unclear reasons when the instrument suffix *-e* attaches to a verb, the resulting nominalization seems ungrammatical even when the verb is nominalized with its internal argument as (45)b and (45)c show. More examples of nominalized verbs with this suffix are shown in (46) and (47).

- (46) a. Ami togg-e na ceeb b -i (ak) diwtiir
 Ami cook-INST FIN rice CL-the (with)e palm oil
 “Ami cooked the rice with a palm oil”
- b.* **togg-e** b-i Ami togg-e ceeb b -i (ak) diwtiir
 cook-INST CL- COMP Ami cook-INST rice CL-the (with)e palm oil
 “Ami’s cooking the rice with a palm oil”
- c.***togg-e ceeb b-i** Ami togg-e ceeb b -i (ak) diwtiir
 cook-INST rice CL- COMP Ami cook-INST rice CL-the (with)e palm oil
 “Ami’s cooking the rice with a palm oil”
- (47) a. Daba lekk-e na ceeb b -i (ak) loxo
 Daba eat-INST FIN rice CL-the (with)e hand
 “Daba ate the rice with her hand”

b.* **lekk-e** b-i Daba lekk-e ceeb b -i (ak) loxo
eat-INST CL- COMP Daba eat-INST rice CL-the (with)e hand
“Daba’s eating the rice with her hand”

c.***lekk-e** **ceeb** b-i Daba lekk-e ceeb b -i (ak) loxo
eat-INST rice CL- COMP Daba eat-INST rice CL-the (with)e hand
“Daba’s eating the rice with her hand”

The next examples target valency-decreasing suffixes like *-lu* and *-e*. With *-lu* the agent of the action described by the verb is missing, whereas with *-e* the patient undergoing the action is missing.

- (48) a. Faatu bind-**lu** na tééré
Faatu write-CAUS FIN book
“Faatu made someone write a book”
- b. **bind-lu** b-i Faatu bind-lu tééré
write-CAUS CL- COMP Faatu write-CAUS book
“Faatu’s making someone write a book”
- c. **bind-lu** **tééré** b-i Faatu bind-lu tééré
write-CAUS book CL- COMP Faatu write-CAUS book
“Faatu’s making someone write a book”

(48)b and (48)c show that a verb bearing the impersonal causative *-lu* can be nominalized successfully even when the internal argument follows it.

Another valency-decreasing suffix, i.e. the objective *-e*, patterns in a way similar to the causative *-lu*. This is illustrated in (49) and (50).

- (49) a. Faatu **dóór** na Awa
Faatu hit FIN Awa
“Faatu hit Awa”
- b. Faatu dóór-**e** na
Faatu hit-OBJ FIN
“Faatu hit someone”

- c. **dóór-e** b-i Faatu dóór-e
hit-OBJ CL-COMP Faatu hit-OBJ
“Faatu’s hitting someone”

- (50) a. Ami **màtt** na Awa
Ami bite FIN Awa
“Ami bit Awa”
- b. Ami **màtt-e** na
Ami bite-OBJ FIN
“Ami bit someone”
- c. **màtt-e** b-i Ami **màtt-e**
bite -OBJ CL-COMP Ami bite-OBJ
“Ami’s bitting someone”

Finally, in (51) and (52) nominalization is done when a verb carries inflectional affixes related to negation in (51) and past tense in (52).

- (51) a. Musaa jaay **-ul** dàll y -i
Musaa sell-NEG shoes CL-the
“Musaa did not sell the shoes”
- b. *[**jaay-ul** b -i [Musaa jaay-**ul** dàll y-i]] bett na ma
sell-NEG CL- COMP Musaa sell-NEG shoes CL-the surprise FIN 1SG
“Musaa’s not selling the shoes surprised me”
- (52) a. Musaa **jaay -oon** na dàll y -i
Musaa sell-PST FIN shoes CL-the
“Musaa did not sell the shoes”
- b. *[**jaay-oon** b-i [Musaa jaay-**oon** dàll y-i]] bett na ma
sell-PST CL- COMP Musaa sell-PST shoes CL-the surprise FIN 1SG
“Musaa’s not selling the shoes surprised me”
- c.*[**jaay-oon** dàll b-i [Musaa jaay-**oon** dàll y-i]] bett na ma
sell-PST shoes CL- COMP Musaa sell-PST shoes CL-the surprise FIN 1SG
“Musaa’s not selling the shoes surprised me”

(51) and (52) show that inflectional affixes cannot be used in this type of nominalization.

To sum up, I have shown in this section that RC nominalization is very productive in Wolof; it allows a wide range of verbs and complex verbs to be nominalized.

3.3 Nominal and verbal properties within the RC nominal

In this section, I show that RC nominals have verbal features as well as nominal features. First I discuss verbal and nominal features of the nominalized verb, then I show that the nominalized clause has some nominal and verbal features as well.

3.3.1 Verbal Properties of the relativized verb

The relativized verb has verbal properties, as revealed by the fact that it can appear with suffixes, e.g., the allative suffix *-i* in (53)b, the causative suffix in (54)b and an anticausative suffix in (55)b.

- (53) a. **seet-i** nga Faatu
visit-AL FIN Faatu
“You went to visit Faatu”

- b. [**seet-i** b-i nga **seet-i** Faatu] metti na ma
visit-AL CL-COMP 2SG visit-AL Faatu hurt FIN 1SG
“I dislike the fact that you went to visit Faatu”

- (54) a. Musaa wadd **-al** na mango b-i
Musaa fall -CAUS FIN mango CL-the
“Musaa dropped the mango”

- b. [wadd **-al** b -i Musaa wadd **-al** mango b-i] bett na ma
fall-CAUS CL-COMP Musaa fall -CAUS mango CL-the surprise FIN 1SG
“Musaa’s dropping of the mango surprised me”
“The fact that Musaa dropped the mango, surprised me”

- (55) a. bunt b -i ubbi **-ku** na

door CL—the open -RFM FIN
“the door opened”

b.[ubbi **-ku** b -i bunt b -i ubbi **-ku**] bett na ma
open -RFM CL -COMP door CL—the open -RFM surprise FIN 1SG
“the door’s opening surprised me”
“the fact that the door opened, surprised me”

In Wolof, verbal suffixes only attach to verbs, not to nouns, as illustrated in (56); this suffix only attaches to verbs, not to nouns.

- (56) a.[bind-**i** b **-i** Musaa bind -i tééré b-i] bett na ma
write-AL CL -COMP Musaa write -AL book CL—the surprise FIN 1SG
“Musaa’s going to write the book surprised me”
- b.*[**mbind** **-i** b **-i** Musaa bind -i tééré b-i] bett na ma
NOM.write-AL CL -COMP Musaa write -AL book CL—the surprise FIN 1SG
“Musaa’s going to write the book surprised me”

When the relativized verb occurs with some nominal features (consonant mutation in this case), the verbal suffix *-i* cannot attach to it as the ungrammaticality of (56)b shows. Another piece of evidence that the relativized verb has some verbal features is that it can appear with ideophones ; ideophones only occur with verbs as (57) illustrates.

- (57) a. Ayda daan-u na **mbàpp**
Aydafall -RFM FIN IDEO
“Ayda fell in an abrupt manner”
- b. Faatu toog na **faax**
sit sit FIN IDEO
“Fatu sat in a very relaxed way”

- c. Awa tēj na bunt b-i **ràpp**
 close FIN door CL-the IDEO
 “Awa closed the door tight”

When a verb occurs with one of these ideophones it can be relativized along with the verb, this shows that the fronted verb has retained some of its verbal features as (58) illustrates.

- (58) a. [toog **faax** b -i] [Musaa toog **faax**]] bett na ma
 sit relaxed CL - COMP Musaa sit relaxed surprise FIN 1SG
 “Musaa’s relaxed sitting surprised me”
- b. [tēj **ràpp** b -i] [Musaa tēj **ràpp** bunt b -i]] bett na ma
 close tight CL - COMP Musaa close tight door CL - COMP surprise FIN 1SG
 “Musaa’s closing the door tight surprised me”

A more thorough discussion of these ideophones used in this context was provided earlier (examples (37) through (38)).

In this subsection, I have shown that the relativized verb has some verbal properties because it can occur with some verbal suffixes and occur with other elements like ideophones canonically associated with verbs. Interestingly some verbal suffixes (negation and past tense markers) cannot appear with the relativized verb despite these verbal features. This was shown in Section 2 and repeated here in (59) with negation in (59)a and past tense in (59)b.

- (59) a.*[**jaay-ul** b -i [Musaa jaay-**ul** dàll y-i]] bett na ma
 sell-NEG CL- COMP Musaa sell-NEG shoes CL-the surprise FIN 1SG
 “Musaa’s not selling the shoes surprised me”
- b.*[**jaay-oon** dàll b-i [Musaa jaay-**oon** dàll y-i]] bett na ma
 sell-PST shoes CL- COMP Musaa sell-PST shoes CL-the surprise FIN 1SG
 “Musaa’s not selling the shoes surprised me”

The next subsection discusses different nominal properties of the relativized verb.

3.3.2 Nominal Properties of the relativized verb

It can be argued that the relativized verb has the structure of a NP since it can be modified by an adjective ((60)a). Moreover it can occur with a noun class marker, *b-* in this case. Noun classes only occur with nouns as their names imply.

- (60) a. xaj **b-i**
 dog CL-the
- b.[dóór **b -i** saf b-i nga dóór Faatu] metti na ma RC
 hit CL -COMP painful CL-the 2SG hi Faatu hurt FIN 1SG
 “I dislike that you hit Faatu in a painful way ”

In (60)a the noun class *b-* appears with a typical noun *xaj* “dog”; a similar noun class occur with the relativized verb *dóór* “hit”.

- (61) a. màtt **b -i** saf b-i Musaa màtt Faatu
 bite CL -COMP painful CL-the Musaa bite Faatu
 “Musaa’s painful bite ”
- b. dóór **b -i** metti b-i Musaa dóór Faatu
 hit CL -COMP tough CL-the Musaa hit Faatu
 “Musaa’s tough hit ”

Apart from this, the relativized verb can occur with a plural marker((62)a), numerals ((62)b) and demonstratives in (62)b.

- (62) a. [mbej **y** -i nga mbej Faatu] metti na ma
slap CL.PL - COMP 2SG slap Faatu hurt FIN 1SG
“I dislike the fact that you slapped Faatu three times”
- b. [**nett** mbej **y** -i nga mbej Faatu] metti na ma
three slap CL.PL - COMP 2SG slap Faatu hurt FIN 1SG
“I dislike the fact that you slapped Faatu three times”
- c. [mbej- **b-ii** nga mbej Faatu] metti na ma
slap CL- COMP.DEM 2SG slap Faatu hurt FIN 1SG
“I dislike this slapping of Faatu ”

The fact that these determiners can occur with the relativized verb provides further evidence that the verb has acquired some nominal features through this nominalization process.

3.3.3 Verbal Properties of the relative clause

Like the relativized verb, the RC nominal also has some verbal properties; indeed it can occur with some elements only found when a verb is present. Chomsky (1970) argues that there is a type of nominal (gerundives) in English that has verbal properties because it can contain aspect. This is illustrated in (63) with the presence of the auxiliary “have” followed by a participial verb which, in English is linked to the perfect aspect.

- (63) John’s having criticized the book

In Wolof, RC nominals show the presence of a VP in various respects. In (64)a and (64)b the imperfective aspect marker *di* and *doon* can occur.

- (64) a. [bind b -i Musaa **di** bind téeré b -i] bett na ma
write CL-COMP Musaa IMPF write book CL-the surprise FIN 1SG
“Musaa’s writing of the book (in the present), surprised me”
- b. [bind b -i Musaa **doon** bind téeré b -i] bett na ma
write CL-COMP Musaa IMPF.PST write book CL-the surprise FIN 1SG
“Musaa’s writing of the book (in the past), surprised me”

The fact that these imperfective markers can occur in this construction is evidence that there is an underlying VP present in the derivation of structures like (64) a-b.

Apart from Chomsky, Grimshaw (1990) argues that the fact that there are verbal properties in this type of nominal is due to its eventive nature. To substantiate her argument, she gives the following example.

- (65) John’s examination of the patients took a long time. (Grimshaw (1990: (4)b))

In (65), the expression “take a long time” is only compatible with the presence of aspect in “John’s examination of the patients”.

Alexiadou (2001) uses Greek to argue that the fact that some adverbs can occur with nominals is evidence that they have verbal properties. This is because the presence of an adverb is syntactically conditioned since the presence of adverbs presupposes the presence of internal arguments.

- (66) a. i katastrofi tis polis olosheros (Alexiadou (2001: p47))
 the destruction the city-GEN completely
 “The destruction of the city completely”
- b. i katastrofi ton egrafon ktes (Alexiadou (2001: p48))
 the destruction the documents-GEN yesterday
 “the destruction of the documents yesterday”

In (66), the presence of the adverbs *olosheros* “completely” and *ktes* “yesterday” is evidence that there is a VP at some level of the syntactic derivation of these nouns. Similar adverbs can occur in Wolof RC nominals as in (67)a and (67)b.

- (67) a. ubbi b -i Musaa ubbi bunt b -i **nànk**
 open CL-COMP Musaa open door CL-the slowly
 “Musaa’s opening of the door slowly”
- b. ubbi b -i Musaa ubbi bunt b -i **démb**
 open CL-COMP Musaa open door CL-the yesterday
 “Musaa’s opening of the door yesterday”

3.3.4 Nominal properties of the relative clause

One nominal property of the relative clause is that it can appear as a complement of a preposition ((68)).

- (68) a. Musaa ànd na **ci** [seet-i b -i nga seet-i Faatu]
 Musaa agree FIN with visit-AL CL -COMP 2SG visit-AL Faatu
 “I dislike the fact that you went to visit Faatu”

- b. man waaru na-a **ci** [lekk b -i nga lekk ceeb]
 1SG surprise FIN-1SG with eat CL -COMP 2SG eat rice
 “I am surprised by the fact that you ate rice”

In addition to this the RC nominal can be substituted with a pronoun, *loolu* “that” in this case.

This is shown in (69) a-b. (70) shows that the RC nominal can be in an adjunct.

- (69) a. Musaa ànd na ci seet-i b -i nga seet-i Faatu
 Musaa agree FIN with visit-AL CL -COMP 2SG visit-AL Faatu
 “I dislike the fact that you went to visit Faatu”

- b. man waaru na-a **ci loolu**
 me surprised FIN-1SG with that
 “I am surprised by that”

- (70) Musaa mer na ndax lekk b -i nga lekk ceeb
 Musaa be mad FIN because eat CL -COMP 2SG eat rice
 “Musaa is mad because you ate some rice”

3.4 The interpretation of relative clause nominals in Wolof

This section demonstrates that RC nominals can have a wide range of meanings associated with them i.e. factive, manner and eventive meanings.

3.4.1 Factivity

RC nominals in Wolof can have a factive interpretation; indeed they occur in environments where factive clauses are expected. Before showing factivity in Wolof, I explain the concept of “factivity” in general using English. To define factivity, Kiparsky and Kiparsky (1971) put forth

two syntactic paradigms regarding factive and non-factive predicates in English. Both types of predicates take a sentence as a subject. Some examples of these predicates are the following, Kiparsky and Kiparsky (1971:345).

Factive	Non-factive
significant	likely
odd	happens
tragic	sure
exciting	possible
etc.	etc.

K&K argue that when used in a sentence, the two types of predicates might look similar on the surface even though there are many differences between them as shown in (71) from Kiparsky and Kiparsky (K&K).

- (71) a. It is significant that he has been found guilty. Factive (K&K (1971:345))
- b. It is likely that he has been found guilty. Non-factive (K&K (1971:345))

K&K use various tests to show that there are significant syntactic differences between them. First, only factive predicates allow the noun *fact* along with a *that*-clause or a gerund to replace the simple *that*-clause. This accounts for the differences in grammaticality between (72) and (73).

- (72) a. The fact that the dog barked during the night is significant/ bothers me¹

¹ Examples (72) and (73) are taken from K&K (1971:346).

- b. The fact of the dog's barking during the night is significant/ bothers me
- (73) a. *The fact that the dog barked during the night is likely/ seems to me.
 b. *The fact of the dog's barking during the night is likely/ seems to me.

K&K also show that factive and non-factive predicates can be differentiated semantically with respect to presupposition. Factive predicates are predicates like “know” and “regret” that presuppose the truth of the sentential complement following them. Consider (74) adapted from K&K.

- (74) a. I regret that it is raining (> It is raining) K&K (1971:15b)
 b. I suppose that it is raining (*> It is raining)) K&K (1971:17a)

In (74)a the presence of the factive predicate “regret” presupposes that the following proposition is necessarily true. Such a presupposition is not generated in (74)b with a non-factive verb like “suppose”. This is further illustrated in (75) from Melvold (1991: 98).

- (75) a. John claims that he offended Mary Melvold (1991: (1)a)
 b. John regrets that he offended Mary Melvold (1991: (1)b)

According to Melvold, in (75)a, the truth-value of the matrix clause <John claims> is independent of the truth-value of its complement <he (John) offended Mary>. This is because with the verb “claim”, the speaker has the possibility to affirm, deny, plead ignorance of, or be

indifferent to the truth or falsehood of the embedded proposition (Melvold 1991: 98). For this reason, this sentence can be finished in any of the ways shown in (76).

- (76) John claims that he offended Mary Melvold (1991: (2a-d))
- a. ...and in fact he did.
 - b. ... but in fact he didn't.
 - c. ... but I don't know whether he did or not.
 - d. ... but frankly, I don't care whether he did or not.

On the other hand the matrix predicate in (75)b is a factive; Melvold argues that the verb “regret” is a representation of a “relation which the speaker believes to hold between a particular person and an event which the speaker presupposes to have occurred.” (Melvold (1991: 98)). This explains the discrepancies noted between (76) and (77).

- (77) John regrets that he offended Mary Melvold (1991: (3)a-d)
- a. ?...and in fact he did.
 - b. *... but in fact he didn't.
 - c. *... but I don't know whether he did or not.
 - d. *... but frankly, I don't care whether he did or not.

Since the verb “regret” represents a presupposition about a specific event, the truth of the embedded clause cannot be denied or doubted.

The following are examples of Wolof non-factive predicates in (78)a-b and (80)a-b; factive predicates examples are provided in (83).

- (78) a. jàpp na-a [ne Awa dem na]
 assume FIN-1SG that Awa leave FIN
 “I assume that Awa left”
- b.*jàpp na-a [ne dem b-i Awa dem]
 assume FIN-1SG that leave CL-COMP Awa left
 *“I assume the fact that Awa left ”
 * “I assume that Awa's leaving”

In (78), the predicate *jàpp* “assume” is semantically incompatible with a factive clause as shown by the ungrammaticality of (78)b whereas in (78)a the sentence is fine as the following proposition is not necessarily true. For this reason it can be denied as (79) shows.

- (79) jàpp na-a [ne Awa dem na] waaye dem -ul
 assume FIN-1SG that Awa leave FIN but go -NEG
 “I assumed that Awa left but she didn’t”

A similar situation is found in (80)a-c with the non-factive predicate *mën am* “be likely/be possible”. Apart from this, the speaker can express doubt about the proposition in the embedded clause as (80)c shows.

- (80) a. mën na [am Awa dem na]
 be able FIN have Awa leave FIN
 “It is likely/ possible that Awa left”
- b. *mën na am [dem b-i Awa dem]
 be able FIN have leave CL-COMP Awa leave
 “It is likely/ possible the fact that Awa left”
- c. mën na [am Awa dem na] waaye wóóru ma
 be able FIN have Awa leave FIN but be sure 1SG
 “It is likely/ possible that Awa left but I am not sure about that”

Other examples of non-factive verbs are provided in (81) and (82).

- (81) a. xëy na [Awa dem na]
 may be FIN Awa leave FIN
 “May be Awa left”
- b. *xëy na [dem b-i Awa dem]
 may be FIN leave CL-COMP Awa leave

* “may be the fact that Awa left”

- c. xëy na [Awa dem na] waaye wóóru ma
may be FIN Awa leave FIN but be sure 1SG
“may be Awa left but I am not sure about that”

In (81), the non-factive verb *xëy* “may be” can be used with a non-factive clause ((81)a) but not with a factive clause. Hence, (81)b is ungrammatical. Since *xëy* “may be” is a non-factive verb, the proposition following it can be doubted without it resulting in a contradiction as (81)c shows. (82) describes a situation similar to (81) with the verb *gëm* “believe”; the same restrictions apply.

- (82) a. gëm na [Awa dem na]
believe FIN Awa leave FIN
“I believe Awa left”
- b. * gëm na [dem b-i Awa dem]
believe have leave CL-COMP Awa leave
* “I believe the fact that Awa left”
- c. gëm na [Awa dem na] waaye dem -ul
believe FIN Awa leave FIN but go -NEG
“ I believed Awa left but actually she did not”

(81) and (82) are non-factive verbs; just like (78) and (80) they cannot be completed with factive clauses. In addition, with all these examples the proposition in the embedded clause can be denied or doubted.

When a factive predicate is used instead of a non-factive one, there is a different situation as illustrated in (83) where the verb *réccu* “regret” is actually compatible with a factive clause ((83)).

- (83) a. *réccu nga naan diw tiir
 regret 2SG drink palm oil
 “you regret drinking palm oil”
- b. réccu nga [naan b-i nga naan diw tiir]
 regret 2SG drink CL-COMP 2SG drink palm oil
 “You regret the fact that you drank the palm oil.”

In the example above, the factive predicate *réccu* “regret” belongs to a category of verbs referred to as “experiencer” or “emotive” verbs (K&K); these predicates select for factive clauses. Melvold argues that factive verbs can refer to mental states in two different ways: emotional attitudes or cognitive states. In Wolof this can be illustrated by factive verbs like *bett* “surprise”, *jaaxal* “amaze/surprise, worry”, *waaru* “worry”, *neex* “be good”, *tiit* “be scared” etc. that can all be used as factive verbs. Some examples are provided below with *bett* “surprise”, *jaaxal* “amaze/surprise, worry”. As the examples show, these predicates must be used with factive clauses.

- (84) a. [sàcc b -i Musaa sàcc ginaar g -i] **bett** na ma
 steal CL - COMP Musaa steal chicken CL-the surprise FIN 1SG
 “Musaa’s stealing the chicken surprised me”
 “The fact that Musaa stole the chicken surprised me”
- b. * [Musaa sàcc ginaar g -i] **bett** na ma
 Musaa steal chicken CL-the surprise FIN 1SG
- c. *[sàcc b -i nga sàcc xaalis] **bett** na ma waaye sàcc-oo xaalis
 steal CL - COMP 2sg steal money surprise FIN 1SG but steal-NEG money
 “you stealing the chicken surprised me but you did not steal the chicken”
 “The fact that Musaa stole the chicken surprised me you did not steal the chicken”

In (84)a the factive verb *bett* “surprise” is compatible with a factive clause, as expected; however it is incompatible with a non-factive clause as the ungrammaticality of (84)b shows. Finally in (84)c the proposition of the embedded clause that had a factive verb cannot be negated or denied as (84)c shows. A similar situation holds for (85)a-c with the verb *jaaxal* “surprise”.

- (85) a. [sàcc b -i mu sàcc xaalis] **jaaxal** na ma
 steal CL - COMP 3SG steal money CL-the surprise FIN 1SG
 “his stealing of money surprised me”
- b. *Musaa sàcc ginaar g -i **jaaxal** na ma
 Musaa steal chicken CL-the surprise FIN 1SG
- c. *[sàcc b -i mu sàcc xaalis] **jaaxal** na ma waaye sàcc-ul xaalis
 steal CL - COMP 3SG steal money surprise FIN 1SG but steal-NEG money
 “his stealing of money surprised me but he did not steal some money”

In this section, I have provided evidence that there are semantic differences between predicates that can help explain the nature of the proposition that follows or precedes them. I have shown that Wolof factive or non-factive predicates behave similar to their English counterparts (K&K (1971), Melvold (1991)). I have shown that Wolof factive predicates are incompatible with non-factive clauses whereas non-factive predicates are incompatible with factive clauses.

3.4.2 Other interpretations of relative clause nominals

RC nominals in Wolof can have other interpretations beyond factive. They can also relate to a manner, or an event reading.

- (86) a. [dëbb b -i Musaa dëbb gerte g-i] bett na ma
 pound CL - COMP Musaa pound peanut CL-the surprise FIN 1SG
 “Musaa’s pounding the peanut surprised me” **event**
 “The way Musa pounded the peanut surprised me” **manner**
 “The fact that Musa pounded the peanut surprised me” **fact**
- b. [dagg b -i Musaa dagg jën wi -i] bett na ma
 cut CL - COMP Musaa cut fish CL-the surprise FIN 1SG
 “Musaa’s cutting the fish surprised me” **event**
 “The way Musa cut the fish surprised me” **manner**
 “The fact that Musa cut the fish surprised me” **fact**

(86)a can refer to the actual event of “peanut cutting” as the relativized verb related to the actual event. Finally a factive reading can also be generated. (86)b follows the same pattern with the verb *dagg* “cut”.

Basically, differences in interpretation can be related to different contexts.

- (87) [yuuxu b-i Faatu yuuxu] tiit -al na Awa
 scream CL-COMP Faatu scream scare-CAUS FIN Awa
 “Faatu’s screaming woke up Awa”

In (87), an event is implied by the clausal nominalizations; indeed, there is an event that “caused” Awa to be scared. In (88), RC nominals are used along some ideophones that can be interpreted as adverbs as mentioned in Chapter 2.

- (88) a. yàq b -i Kumba yàq kér g-i **yaxeet**
 destroy CL-COMP Kumba destroy house CL-the IDEO
 “Kumba’s destroying the house completely”
- b. ubbi b -i Kumba ubbi bunt b-i **faax**
 open CL-COMP Kumba open door CL-the IDEO
 “Kumba’s opening the door widely”

In (88)a and (88)b the ideophones are used to modify the RC nominals. The eventive nature of some RC nominalizations can further be tested with the use of event adverbs like *jekki jekki* “all of a sudden”.

- (89) [yuuxu b-i Faatu **jekki jekki** yuuxu] tiit -al na Awa
 scream CL-COMP Faatu suddenly scream scare-CAUS FIN Awa
 “Faatu’s screaming suddenly woke up Awa”
- (90) [jóg b -i Kumba **jekki jekki** jóg] yee na Awa
 get up CL-COMP Kumba suddenly get up wake up FIN Awa
 “Kumba’s getting up suddenly woke Awa up”

Another way to test the eventive nature of RC nominalization is through the use of the word *nekk* “be”. When used in this context, it can be interpreted as progressive (“be doing”).

- (91) [dóór b -i nga nekk di dóór] Awa metti na ma
 hit CL -COMP you be IMPF hit Awa hurt FIN 1SG
 “The hitting that you are hitting Awa, hurts me”

The examples provided above give clear evidence that the RC nominals in Wolof can be interpreted as eventive as they can pass various tests about eventivity.

Apart from this, the RC nominal can also have a manner interpretation; however it should be noted that this form of interpretation heavily relies on the discourse context. Indeed two requirements need to be met; first, the verb meaning must infer the use of an instrument to perform an action, second the context is needed to help differentiate between an eventive, factive or manner reading. Some examples of verbs that could be used in such contexts are: *dëbb* “cut”, *dagg* “cut”, *ley* “sift” etc.

This section has shed light on the range of interpretations that can be associated with RC nominals. RC nominals generally have factive and eventive meanings; however, they can also have a manner interpretation when the meaning of the nominalized verb involves the use of an instrument to perform an action.

3.5 Relative Clause Nominals : A Crosslinguistic comparison

Nominalization patterns similar to the RC nominal described above for Wolof are also found in some African languages of the Niger Congo language family like Fon, Yoruba, Gungbe and Krio (Bamgbose (1975), (1982), Collins (1994), Aboh (2005). In this section I show similarities and /or differences between these languages and Wolof.

Collins (1994) analyzes RC nominals and relative constructions in several Kwa languages. The first set of sentences comes from Fon; it is mainly spoken in Benin, but also in Togo and Southwest Nigeria.

- (92) a. [xo dee Bayi xo Kofi o] vε nu mi (Collins (1994(4)))
hit which Bayi hit Kofi def bothers to me
“The fact that Bayi hit Kofi bothers me.”
- b. [Kofi dee Bayi xo o] vε nu mi (Collins (1994 (5)))
Kofi which Bayi hit def brothers to me
“The fact that Bayi hit Kofi bothers me.”

Fon has a structure similar to Wolof as shown in (92)a; the relativized verb leaves a copy in its original position and there is no nominal morphology on the relativized verb. Apart from this, the

as in (92)b. Such a construction is non-existent in Wolof.

- (93) [tééré]_i b-i Musaa bind *ti*
 book CL-COMP Musaa write
 “the book that Musaa wrote”
 **“the fact that Musaa wrote the book”

In Wolof when an internal argument is fronted in this way it can only be interpreted as a relative clause, it cannot be interpreted as a factive clause. This is one difference between Fon and Wolof. Collins argues that RC nominals syntactically behave like relative clauses. This similarity is illustrated in (94) by the way they behave with respect to extraction for instance. (94) provides examples of an embedded clause and a relative clause in (94)a and (94)b respectively.

Fon

Collins shows that it is possible to extract the relative operator from an embedded clause ((95)a). but it is impossible to extract the relative operator from a relative clause-type factive construction the ungrammaticality of (95)b.

- (95) a. Kofi dee Papa mɔ dɔ Bayi xo o vivi nu mi Collins (1994: (21))
 Kofi which Papa saw that Bayi hit DEF sweet to me
 “The fact that Papa saw that Bayi hit Kofi pleases meet”
- b.* Kofi dee Papa mɔ mɛ dee xo o vivi nu mi Collins (1994: (22))
 Kofi which Papa saw person which hit DEF sweet to me
 “The fact that Papa saw who hit Kofi pleases meet”

Torrence (2005) argues that headed/typical relative clauses and RC nominals display similar properties with respect to extraction. I show extraction with respect to typical relative clauses first. It is not possible to relativize out of a relative clause:

- (96) a. tééré b-i jigéén j-i jox **xale** y-i
 book CL-COMP woman CL-the give child CL.PL-the
 ‘the book that the woman gave to the children’
- b. ***xale** y-i [tééréj b-i [jigéén j -i jox]]
 child CL-COMP book CL-CL-COMP woman CL-the give
 ‘the children that the book that the woman gave’

Apart from this, Wh-extraction out of a relative clause is also impossible as the ungrammaticality of (97) shows.

- (97) a. Jàng-nga tééré [b-i Awa jox Sàmba]
 read-2SG book CL-COMP Awa give Samba
 “You read the book that Awa gave to Samba”
- b. ***Kan** nga jàng tééré [b-i Awa jox _]
 who 2SG read book CL-CL-COMP Awa give
 Intended: ‘Who did you read the book that Awa gave to?’

Similarly, wh-extraction or relativization out of the RC nominal is impossible (use of *i/u/a* has no effect on the grammaticality.) If RC nominalization is in fact a form of relativization, the result of these extraction patterns in (98) is expected.

- (98) a. réccu-nga naan [b-i nga naan diwtiir g-i].
 regret-2SG drink CL-C_{REL} 2SG drink palm.oil CL-the
 ‘You regret that you drank the palm oil.’

b. ***lan** nga réccu naan [b-i nga naan __] *Wh-Extraction
 what 2SG regret drink CL-C_{REL} 2SG drink
 Intended: ‘What do you regret the fact that you drank?’

c. ***diwtiir** g-i nga réccu naan [b-i nga naan] *Relativization
 palm.oil CL-C_{REL} 2SG regret drink CL-C_{REL} 2SG drink
 Intended: ‘the palm oil that you regret the fact that you drank’

As was concluded for headed relative clauses, the impossibility of extraction suggests that both factive constructions and relative clauses in Wolof involve A'- movement. The structures of the RC nominal and the typical relative clause can be summarized in (99) with these templates:

- (99) a. Relative clause nominalization: VerbCL C° [TP SVO]
 b. Typical Object Relative clause: NounCL C° [TP SV]

So far it can be concluded that Fon and Wolof display similar properties with respect to relative clauses and RC nominals (factive in Collins (1994)).

Yoruba, another Kwa language also has a nominalization process similar to RC nominals in Wolof.

(100) provides examples of factive clauses in Yoruba, a language mainly spoken in Nigeria.

- (100)a. iwé tí mo rà dára (Bamgbose (1975: (1)))
 book that I buy good
 “The book that I bought is good”
 “The fact that I bought a book is good”
- b. **ríra** tí mo **rà** iwé dára (Bamgbose (1975: (2)))
 buying that I buy book good
 “The fact that I bought a book is good”
- c. kíàkíà tí mo rà iwé dára (Bamgbose (1975 (3)))
 Painfully that I buy book good
 “Painfully that I buy book good”
 “The fact that I bought a book painfully is good”

The first thing to notice is that in Yoruba the typical relative clause in (100)a can also have a factive reading, this reading is non-existent in Wolof relative clauses as shown in (100).

- (101)[tééré] i b-i Musaa bind ti
 book CL-COMP Musaa write
 “the book that Musaa wrote”
 *“the fact that Musaa wrote the book”

Apart from the fact that the Yoruba structure in (100)b is similar to the one in Wolof RC nominals described so far. However, one difference between Yoruba and Wolof is that in Yoruba the nominalized element *ríra* “buying”, which is fronted, has to occur with agentive nominalization morphology as shown in (100)b unlike Wolof. So in Yoruba, (100)a and (100)b can have the same meaning. Apart from this, (100)c has a structure where the manner adverb *kíàkíà* “painfully” is fronted, this is not possible in Wolof. Also possible in Yoruba, but not in Wolof are the manner readings (102)a and (102)b.

- (102)a. **ríra** tí mo **rà** ìwé dára (Bamgbose (1975:(20)))
 buying that I buy book good
 “The manner in which I bought a book is good”

- b. **kíakíà** tí mo **rà** ìwé dára (Bamgbose (1975 (21)))
 book that I buy book good
 “The way in which that I bought a book painfully is good”

(102)a and (102)b shows that in addition to a factive interpretation, a manner interpretation is also possible; Bamgbose adds that (102)a and (102)b have variants in (103)a and (103)b respectively.

- (103)a. **bí** mo **še rà** ìwé dára (Bamgbose (1975:(22)))
 “The manner in which I bought a book is good”
- b. **bí** mo **še rà** ìwé **kíakíà** dára (Bamgbose (1975:(23)))
 “The way in which I bought a book is good”

(103)a and (103)b are manner nominalizations headed by **bí** “manner, way” in Yoruba. Interestingly, Wolof has a similar nominalization pattern as shown below.

- (104) [n -i] [Musaa bind-*(**e**) téeré b-i]] bett na ma
 CL - COMP Musaa write-INST book CL-the surprise FIN 1SG
 “The way in which Musaa wrote the book surprised me”

In Wolof, the presence of the manner noun class *n-* along with the suffix *-e* on the verb yields the manner reading. In Yoruba, the main verb does not undergo any morphological change. Another

similarity between Yoruba and Wolof is that both languages have a type of headless RC nominal. This is illustrated in (105)a for Yoruba and (105)b for Wolof.

- (105)a. pé mo rà iwé dára (Bamgbose (1975:(13a)))
 that I buy book good
 “The fact that I bought a book is good”

b. [I -i] [Musaa bind téeré b-i]] bett na ma RC nominal
 CL - COMP Musaa write book CL-the surprise FIN 1SG
 “Musaa’s writing the book surprised me”

In Yoruba the presence of *pé* “that” at the beginning of the sentence gives the factive interpretation whereas in Wolof the presence of the “object/thing” noun class *l-* provides a similar interpretation.

In what follows, I compare Wolof RC nominalization to a similar nominalization process found in Krio. This language is an English-based creole mainly spoken in Sierra Leone. Consider (106) through (108) below.

- (106)a. dì **mán** wé bìn kám nà mì pàdí (Nylander (1984 (15a)))
 The man REL PAST come be my friend
 “The man who came was my friend”

b. dì **búk** wé à bìn báy bìn diyà (Nylander (1984 (15b)))
 The book REL I PAST buy PAST dear
 “The book that I bought was dear”

Typical relative clauses in Krio are as in (106)a and (106)b where *mán* “man” and *búk* “book” are relativized. Though Krio has some English influence, it has RC nominals of the type found in Wolof as (107) shows.

- (107)[dì **álá** wé ì bìn **álá**] bìn wék ɔlmán (Nylander (1984 (16)))
the shout REL he PAST shout PAST awake everyone
“The shouting (shouts) awoke everyone”

In (107), notice the repetition of the relativized element *álá* “shout” in the matrix clause; this is exactly like Wolof. In addition to this, an RC nominal in Krio has an interpretation similar to Wolof. In (108)a and (108)b a factive interpretation as well as an event interpretation can be generated.

- (108)a. [dì **álá** wé ì bìn **álá**] bìn mék ɔlmán veks (Nylander (1984 (17a)))
the shout REL he PAST shout PAST make everyone angry
(i) “his shoutings (shouts) angered everyone”
(ii)“the fact that he shouted angered everyone”
- b. [dì tíf wé John bìn tíf dì kɔpɔ] bìn mék à šém (Nylander (1984 (17b)))
the steal REL John PAST steal the money PAST make I be ashamed
(i) “John’s stealing the money made me ashamed”
(ii)“the fact that John stole the money made me ashamed”

RC nominal constructions in Krio provide further evidence that this language has been influenced by other languages spoken in West Africa as this RC nominalization is non-existent in English from which the creole is based.

Finally Gungbe (Aboh (2005)), spoken mainly in Benin, patterns like Wolof and Fon in that nominalization in this language involves fronting the nominalized verb while leaving a copy in its original position. In addition in Gungbe there is no nominal morphology on the fronted nominalized verb unlike in Yoruba.

- (109)a. àgásá lɔ lε [dɛ mí wlé] vε na Kófi²
crab DET NUM that[Rel] 1PL catch hurt for Kofi

² Aboh (2005:274)

“The fact that we caught the crabs hurt Kofi”

- b. wlé [de mí wlé àgásá lɔ lε] ve na Kófi
catch that[_{Rel}] 1PL catch crab DET NUM hurt for Kofi
“The fact that we CAUGHT the crabs hurt Kofi”

Apart from this Gungbe has a structure found in Yoruba and Fon but not in Wolof, that is, a factive meaning can be generated even when an internal argument is fronted in (109)a. A similar construction is also found in Fon, Yoruba and Gungbe but not in Wolof; in Wolof an internal argument can only be fronted in a typical relative clause construction.

In this section, I have shown that RC nominalization is a nominalization process found in languages genetically related to Wolof i.e. Fon, Yoruba, and Gungbe. This discussion has also included a creole language, Krio, that can be assumed to have been built from similar language families since it uses a similar nominalization process.

3.6 RC nominal and genitive nominal: A comparison

So far it seems that RC nominals belong to a mixed category. The latter is related to “constructions in which a single word heads a phrase which is syntactically hybrid of two different category types” (Bresnan (1997: 2)).

With relative clause nominalizations, the relativized word cannot undergo initial consonant mutation³.

³ In the Wolof dialect I speak, I do not allow consonant mutation on the relativized verb. Some urban Wolof speakers allow consonant mutation in such environments. This is not surprising; as mentioned above, in Yoruba a similar structure involves noun morphology on the verb.

- (110) a. [**b**ind b -i] [Musaa bind téeré b-i]] bett na ma
 write CL - COMP Musaa write book CL-the surprise FIN 1SG
 “Musaa’s writing the book surprised me”
- b.*[**m**bind b-i] [Musaa bind téeré b-i]] bett na ma
 write CL- COMP Musaa write book CL-the surprise FIN 1SG
 “Musaa’s writing the book surprised me”

The fact that the initial consonant of the word *bind* “write” undergoes consonant mutation accounts for the ungrammaticality of (110)b, it can be hypothesized that since the derived noun is already nominalized, it cannot be nominalized again using consonant mutation⁴. In other words the derived noun cannot undergo consonant mutation because double nominalization is not possible.

Compare this structure to genitive nominalizations where the same word must undergo consonant mutation as illustrated in (111).

- (111) a. Musaa ànd na ci [**m-bind-u-m** téeré b-i]
 Musaa agrees FIN with NOM- write- GEN-CL book CL-the
 “Musaa agrees with the writing of the book”
- b.* Musaa ànd na ci [**bind-u-m** téeré b-i]
 Musaa agrees FIN with write- GEN-CL book CL-the
 “Musaa agrees with the writing of the book”

Table 3: summarizes the syntactic differences between the two types of nominal.

⁴ Thanks to Dr Kandybowicz that brought this to my attention.

Table 3: A comparison of verb types in GN and RC nominalization

Nominals Verb types	Relative Clause nominals	Genitive nominals
Unaccusative	Yes	Yes
Unergative	Yes	Yes
Simple Experiencer	Yes	??
<i>Am</i> -experiencer	Yes	NO
Complex experiencer	Yes	Yes (if the genitive marker is on the verb)
Transitive	Yes	Yes
Ditransitive	Yes	NO
Adjective/stative	Yes	NO
Ideophones	Yes (when the main verb is fronted)	NO

This table basically shows that RC nominal are more productive than GNs in terms of the type of verbs they can occur with. This conclusion is certainly in line with Chomsky (1970), who argued that among the two types of English nominals, i.e, derived nominals and gerundives, the latter are more productive. In this respect, as far productivity is concerned, Wolof RC nominals behave like gerundives in English whereas the GNs in Wolof seem to behave like English derived nominals.

A similar conclusion can be drawn if Table 4 is taken into account. This table shows differences between the two nominals with respect to the types of suffixes that can occur on the verb in the nominalization process. Interestingly though, neither nominals can occur with inflectional affixes related to past tense and negation.

Table 4: Verbal suffixes in RC nominals vs Genitive nominals

Nominals	Relative Clause nominals	Genitive nominals
Verbal suffixes		
One argument valency-increasing	YES	YES
One-argument valency-increasing(two-arguments verbs changing to three- argument ones)	YES	NO
Negation	NO	NO
Past tense	NO	NO

3.7 Conclusion

In this chapter, I have dealt with relative clause nominals in Wolof. I have shown that they are like typical relative clauses in their structure. I have also shown that the relativized verb as well as the entire RC nominal belong to a mixed category as they appear to have both verbal and nominal properties. I have also presented evidence that RC nominals are factive clauses by using various tests of factivity from K&K (1971) and Melvold (1991). In Wolof, these types of factive clauses can have various interpretations based on the context in which they are used. They can be interpreted as event, manner or fact. A crosslinguistic comparison section has been an opportunity to compare RC nominals in Wolof with similar constructions found in related languages like Fon, Yoruba and Gungbe. I have also provided a comparison between the RC nominal and the GN.

Chapter 4 : Wolof within the typology of nominalization

4.1 Action Nominals in Koptjevskaja-Tamm (KT)

In this chapter, I show how nominalization within Wolof fits in the typology of nominalization. I use some crosslinguistic generalizations about nominalization mainly from Koptjevskaja-Tamm (1993).

In her typological study of nominalization, Koptjevskaja-Tamm (KT) uses a database of seventy languages from different families. She mainly focuses on the type of nominalization she calls “Action Nominal Construction” (ANC). The latter, according to KT form a hybrid class of word as they occupy an intermediate position between verbs and nouns. She also refers to them as “non typical nouns” since contrary to typical nouns, they refer to events. For this reason, they combine semantic features of both verb and nouns. In this respect, languages vary as to whether they treat ANCs as being closer to verbs than to nouns. KT main goal in this typological study is to compare how languages vary in the way ANCs are formed. In order to understand that crosslinguistic variation, KT looks at how languages determine syntactic relations between a finite verb and its arguments in a finite clause as opposed to an ANC head noun and its dependents. In the next subsection I show how KT explains the different syntactic relations in a traditional finite clause as compared to ANCs .

4.1.1 Syntactic relations in clauses

KT points out three ways of signaling syntactic relations; the first one is through head-marking, that is the head of a construction is marked through agreement in a clause or possessive affixes in a noun phrase.

A second way of signaling syntactic relations is through dependent-marking; in this case the arguments of a verb or a noun in an action nominal construction are morphologically marked in a way that shows their syntactic relations to the head; this is the case in a language like Arabic that uses case-marking on the arguments of the verb (for instance nominative case on an agent and accusative case on a patient).

Finally, KT argues that word order is another way of determining syntactic relations; for instance a “more or less fixed word order” between a verb or a noun and their arguments.

To illustrate her point she gives the example of Russian.

- | | |
|---|------------------|
| (1) a. Mal'čik razmyšlja-et (o prirod-e)
boy.NOM meditate-PRES.3SG (about nature-LOC)
“The boy is meditating (about the nature)” | KT (1993: (1.6)) |
| b. Aleksandr zavoeva-l Egipet
Alexander.NOM conquered-PAST.PERF Egypt.ACC
“Alexander conquered Egypt” | KT (1993: (1.8)) |

(1)a and (1)b shows that Russian uses dependent-marking as a way of signaling relations between verbs and their arguments. In Russian, subjects take the nominative case whereas objects take the accusative case. This makes Russian a language that follows the nominative-accusative pattern. Apart from this, head-marking is also another strategy used; in (1)a the finite verb agrees with its subject in person in the present tense. Finally KT mentions that word order is free in Russian,

which is not surprising considering the fact that arguments of verbs in Russian are case-marked.

In short, in Russian all three ways of signalling relations between a head and its arguments are used as far as finite clauses are concerned; this is shown in (1). However with ANCs only dependent-marking is used.

- (2) a. Aleksandr zavoeva -l Egipet KT (1993: (1.8))
Alexander.NOM conquered-PAST.PERF Egypt.ACC
“Alexander conquered Egypt”
- b. zavoeva -nija Egipt -a (Aleksandr-om) (adapted from KT (1993: 1.6))
conquer -AN Egypt -GEN (Alexander-INSTR)
“the conquest of Egypt (by Alexander)”
- c. [zavoeva-nie Aleksandr-a] izmenlo žizn’ Egipt-a
conquer -AN Aleksandr-GEN changed life.ACC Egypt-GEN
“Alexander’s conquest changed the life of Egypt”

(2)b and (2)c are ANCs derived from (2)a; in (2)b the head of the nominal has the action nominal marker, the direct object has genitive case whereas the subject has instrument case.

When only one argument is present, it takes the genitive case, as (2)c shows. This shows that the type of dependent-marking is different in ANCs when compared to finite clauses. Head-marking is not found in ANCs; in contrast word order is a way of signalling syntactic relations since action nominals precede their arguments as shown in (2)b and (2)c. Also the order of the arguments is free even though subjects tend to precede objects (KT (1993: 9)). KT then concludes that in Russian ANCs are syntactically closer to noun phrases.

In the next section I discuss syntactic relations between a head and its arguments in a finite clause as opposed to an ANC in Wolof. Although I discuss both types of Wolof nominal, GNs and RC nominal, I mainly focus on genitive nominals.

4.1.2 Syntactic relations in Wolof clauses

Wolof is a language that does not show case morphologically on the nouns, the only time case is shown is with the presence of pronouns.

- (3) a. xale y-i lekk na ñu mango
child CL-the eat FIN 3PL mango
“the children ate the mango”
- b. gis na ñu xale y-i
see FIN 3PL child CL-the
“they saw the children”

In (3)a there is no morphological marking on the subject or object of the verb. In (3)b the DP object does not have any morphological marking. This shows that overt DP arguments in Wolof are not case marked. However when pronominal DPs are present, the situation is different as (4) shows.

- (4) a. moom dóór na Ayda
3SG_{NOM} hit FIN Ayda
“s/he hit Ayda”
- b. Xadi dóór na **ko** /*moom
Xadi hit FIN 3SG_{ACC}/3SG_{NOM}
“Xadi hit him/her”
- c. Ayda lekk na ak **Xadi**
Ayda eat FIN with Xadi
“Ayda ate with Xadi”
- d. Ayda lekk na ak **moom** /*ko
Ayda eat FIN with 3SG_{NOM}/3SG_{ACC}
“Ayda ate with him/her”
- ,,

(4)a shows that the pronominal DP subject has nominative case; it cannot occur in object position as in (4)b the prounoun object carries accusative case; it cannot be substituted with the

subject pronoun in (4)b. (4)c shows that there is still no case marking when an overt DP is complement of a preposition, *ak* “with” in this case. However, when the object pronoun is the complement of a preposition , the pronoun bearing nominative case is used as in (4)d.

As KT (1993) points out, languages vary as to how syntactic relations are signaled in verbal clauses as opposed to nominal clauses. Examples (5)a-g actually illustrate this point.

- (5) a. Ayda lekk na mango
Ayda eat FIN mango
“Ayda ate a mango”
- b. lekk -u -m mango
eat -GEN-CL mango
“The eating of mangoes”
- c.*Ayda lekk-u -m mango
Ayda eat -GEN-CL mango
“Ayda’s eating the mangoes”
- d.* lekk -u -m Ayda mango
eat -GEN-CL Ayda mango
“Ayda’s eating the mangoes”
- e. lekk -u -m mango Ayda
eat -GEN-CL mango Ayda
“Ayda’s eating the mangoes”
- f*lekk -u -m ko/moom
eat -GEN-CL him/her
“The eating of it”
- g. lekk -u -m Ayda
eat -GEN-CL Ayda
“Ayda’s eating (something)”

(5)a is a typical finite clause in Wolof with no morphological marker on the verb and its arguments. In contrast in (5)b when the verb *lekk* “eat” is nominalized, there is some morphology on it, the genitive suffix *-u* . Also the subject cannot be present as shown by the ungrammaticality

of (5)c; changing its position does not seem to have an effect as (5)d and (5)e show. In addition (5)f shows that a direct object pronoun cannot appear in a nominalization of this type. Finally in (5)g when only one argument is present, the subject in this case, it appears in object position. For a situation like this Koptjevskaja-Tamm has argued using Russian, that crosslinguistically if only one argument is present it takes the role of the direct object. She gives the example of Russian where if only one argument is present the opposition between subjects and objects is neutralized as the single argument take the genitive case (Koptjevskaja-Tamm (1993:9)). Normally in Russian when the two arguments are present, it is the subject or possessor that takes the genitive case. This shows that there is a difference in dependent-marking strategy in Russian in verbal clauses versus nominal clauses. In Wolof since case is not shown on the noun, I would not argue for the same strategy, however, the fact that pronouns bearing accusative case are banned in nominal clauses might be evidence that accusative case is not available in Wolof ANCs. This will need further investigation that is beyond the scope of this chapter.

Apart from a dependent-marking strategy, a head-marking strategy is another way to show syntactic relations between a verb or nominalized verb, and its argument (Koptjevskaja-Tamm (1993:7)). Based on the examples presented so far, it can be argued that such a strategy is used in Wolof as the verb in finite clauses appears along with some agreement that gives some information about its subject.

- (6) a. (yaw) lekk **nga** mango
_{2SGNOM} YOU eat FIN mango
“You ate a mango”
- b. (yeen) lekk **ngeen** mango
_{2PLNOM} eat FIN mango
“You_{pl} ate a mango”

In (6)a and (6)b the subject markers *nga* and *ngeen* respectively, follow the verb; as mentioned in Torrence (2005, 2013), there are other contexts where these markers would precede the verb. This type of agreement is not affixed to the verb but appear as an independent form, in this case following the verb. (7) shows that head-marking on the verb and the noun in (7)a and (7)b respectively.

- (7) a. (yaw) bind **nga** tééré
 $\begin{array}{l} 2SG_{NOM} \\ \text{write FIN book} \end{array}$
“you wrote a book”
- b. (yeen) sa m- bind **-u -m** tééré
 $\begin{array}{l} 2PL_{NOM} \quad 2SG_{POSS} \\ \text{NOM- write -GEN-CL book} \end{array}$
“your writing of the book”

The last strategy to signal syntactic relations as mentioned by Koptjevskaja-Tamm has to do with the position of the head arguments. This is because some languages allow a different word order in verbal clauses vs nominal clauses whereas for other languages the word order remains the same. In this respect Wolof uses a SVO order in verbal clauses; in nominal clauses, genitive nominal in this case, even though the subject is not present, the object remains in its canonical position. Interestingly when the subject appears as the single argument of the nominal it takes that position.

- (8) a. Ayda lekk na mango
Ayda eat FIN mango
“Ayda ate a mango”
- b. Ayda lekk na
Ayda eat FIN
“Ayda ate”

- c. lekk-u -m mango
eat -GEN-CL mango
“The eating of mangoes”
- d. lekk-u -m Ayda
eat -GEN-CL Ayda
“Ayda’s eating”
- e. *Ayda lekk-u -m
Ayda eat -GEN-CL
“Ayda’s eating”

(8)a and (8)b involve the verb *lekk* “eat” that can be used as a transitive verb ((8)a) or an intransitive verb ((8)b) that only includes the external argument of the verb. In (8)c when the verb is nominalized, the object stays in the same position; however when only the external argument of the verb is involved, *Ayda* in this case, its position changes from a prenominal one as in (8)a and (8)b to a postnominal one as in (8)d. It cannot stay in its original position as shown by the ungrammaticality of (8)e. Word order is the same in genitive nominals if a pronominal DP is used as a subject.

- (9) a. (yaw) bind **nga** tééré
2SG_{NOM} write FIN book
“you wrote a book”
- b. sa m- bind **-u** **-m** tééré
2SG_{POSS} NOM- write -GEN-CL book
“your writing of the book”

In (9)a and (9)b the word order remains the same even though in (9)a the head of the clause is a verb whereas in (9)b the head is a noun. Interestingly if a subject must really be present, it can be added indirectly to the nominal clause. This is the case in the following:

- (10) a. Awa bind na tééré
 Awa write FIN book
 “Awa wrote a book”
- b.*Awa m- bind -u -m tééré b-i
 Awa NOM- write- GEN-CL book CL-the
 “Awa’s writing the book”
- c. m- bind -u -m tééré m-u Awa¹
 NOM- write- GEN-CL book CL-GEN Awa
 “Awa’s writing the book”

I have shown that there are various ways of signalling syntactic relations between the head and its arguments in Wolof; head-marking, dependent-marking (with pronouns) and word order. In Wolof, head-marking and word order are the main strategies used to determine syntactic relations. The strategies used in genitive nominals are different from the ones used in typical clauses. Indeed, in genitive nominals, the head genitivizes whereas an external argument cannot occur in its canonical position. In the same way, direct objects are banned from genitive nominals.

In the next section, I discuss the types of nominalization discussed in KT (1993) then I show which type Wolof nominalizations belong to.

4.2 Types of nominalization

To compare nominalization crosslinguistically, KT classifies them into several types. She identifies seven types of nominalization; they are listed below with examples for each. In the

¹ This form is really marginal. Only few speakers were able to produce. I would never say this.

following S is used to refer to the single argument of an intransitive verb or AN; A to the agent of a transitive verb and P to the patient of a transitive verb. The nominalizations from KT (1993:61) are presented below.

- Sentential type (SENT): all the arguments in ANCs retain their sentential dependent-marking. This is illustrated by the following example from classical Arabic.

(11)	'ağibtu	min	[darb- in	Zayd-un	'Amr-an]	(KT (1993:280))
	wonder:PRF.1SG	of	beat:AN-GEN	Zayd-NOM	'Amr-ACC	
	"I wonder at Zeid's beating Amr"					

In Arabic nominal constructions, the A and the P still follow the nominative-accusative pattern.

- Possessive-Accusative type (POSS-ACC) – the S and the A in ANCs genitivize, while the P retains the sentential dependent-marking. This is illustrated with Amharic which is a typical nominative-accusative case language but in the nominalization process, the A genitivizes and the P keeps the accusative case as illustrated in (12).

(12)	ya-pitär	bet-u-n	mä-srat		(KT (1993:284))
	GEN-Peter	house-DEF-ACC	AN-build		
	"Peter's	building	the house"		

- Ergative-Possessive type (ERG-POSS): the P and S in ANCs genitivize, while the A gets another dependent-marking. Within this type it is, perhaps, reasonable to distinguish between (a) the Sentential-Possessive subtype (SENT-POSS), in which the A retains its

sentential marking, and (b) the Oblique-Possessive subtype (OBL-POSS), in which the A turns up as an oblique.

(13) and (14) are examples of ERG-POSS type nominalization in the SENT-POSS subtype and the OBL-POSS subtype in Classical Arabic and French respectively.

(13) safat-hum [rīħ-u l-fanā? -i (KT (1993:289))
 sweep:PRF.3SG:OB.3PL wind-NOM.CONSTR the-annihilation-GEN
 “The wind of annihilation swept them away..”

(14) la destruction de Carthage par les Romains (KT (1993:289))
 the destroy:AN of Carthage by the Romans
 “The destruction of Carthage by the Romans”

- Nominal type (NOMN): all the arguments in the ANCs assimilate to dependents in non-derived NPs. Here it is also possible to distinguish between (a) the Double-Possessive subtype (DBL-POSS) and (b) the Possessive-Adnominal subtype (POSS-ADN), in which both the S and the A genitivize, while the P gets the same dependent-marking as some oblique.

This is illustrated in (15) and (16) from Estonian (DBL-POSS) and Icelandic (POSS-ADN) respectively.

(15) Peetr-i maja-de ehita-mine (KT (1993:294))
 Peter-GEN house-GEN.PL build-AN
 “Peter’s building of houses”

(16) dràp-ið veiðmannanna á birninum (KT (1993:297))
 kill:AN-DEF hunter:DEF:GEN.PL on bear:DEF:DAT.SG
 “the killing of the bear by the hunters”

- Mixed type (MIX): the S genitivizes, the A turns up as an oblique NP (perhaps in the same form as the Agent in passive clauses), while the P retains its sentential dependent-marking.

This is shown in the Maori example in (17).

(17) te pa-nga i te kupenga e te	(KT (1993:143))
ART throw-AN ACC ART net AGT ART	
“the throwing of the net by the man”	

- Incorporating type (INC): the P forms part of the complex AN, the S retains its sentential dependent-marking or genitivizes, while the A is either similar to the S or turns up as an oblique NP.

The following example is from Hungarian.

(18) Péter ujság -olvas-ás-a	(KT (1993:298))
Peter newspaper -read-AN-3SG.POSS	
“Peter’s reading the newspaper”	

- Relative type (REL): the S and P genitivize or, at least, appear as adnominal dependents, while the A is expressed within the relative clause.

As example of the REL type, KT uses Hausa, an Afro-asiatic language spoken in West Africa (mainly in Niger and Nigeria). Hausa is an SVO language and verbs are not inflected for tense, mood or aspect.

(19) a. ya karfi kudi	
3M.PRFV take money	
“He took money”	

- b. karb-a-n kudi [ya yi]
take-AN-of money 3M.PRFV do
“His taking of money”

(19)a is a typical clause in Hausa; (19)b shows an example of a REL type nominalization in Hausa. In this example when the verb nominalizes it is relativized along with the object *kudi* “money”; what is noteworthy in this case is that the verb *yi* “do” is used inside the relative clause to refer to the action described by the relativized verb. KT thus concludes that in English constructions of the form “X’s V-ing of Y” correspond to constructions like “V-ing of Y that X did” in Hausa (KT (1993:192)).

4.2.1 Wolof nominalization types

As far as Wolof is concerned, the REL type can be used to describe RC nominalization. However the copying strategy found in a language like Wolof is not found in the types identified by KT. Unlike Hausa, Wolof does not use the verb “do” in a relative clause but uses a copy of the relativized verb. Also in Wolof the object of the verb can appear with the relativized verb, but optionally as shown in Chapter 3. This is similar to the nominal morphology on the relativized verb which is also optional. Finally the nominalized verb does not genitivize in Wolof but does so in Hausa. This shows another interesting property of Wolof nominalization in typology. Interestingly, even though this REL strategy is not found in the seventy languages used in the KT’s study this strategy is very productive in Wolof and other genetically related languages like Yoruba and Gungbe (cf. Chapter 3). KT discusses Kwa but does not mention the REL type in those languages.

As far as Wolof genitive nominals are concerned, it is hard to determine the category where they fall because of the strategy used. In the sample used by KT, only one language i.e. Chukchee, behaves like Wolof. For this reason KT points out that a special type should be created for this nominalization type that is, Argument-reducing type (ARG-RED). Even though KT mentions Chukchee as an example of language using this strategy, she warns the reader that she does not have enough data on Chuckchee for a deep analysis of this nominalization pattern in this language. In languages using this nominalization strategy, the nominalized transitive verb cannot appear with both arguments at the same time as shown in the next section.

4.2.2 Argument-reducing (ARG-RED)

4.2.2.1 ARG-RED in Russian

This type of construction that constrains the appearance of an argument is referred to as argument-reducing strategy ((KT (1993)). KT describes three different situations regarding the reduction of arguments in ANCs.

In the first case, “the semantic argument a_i of X (or any action nominal) can never be expressed, at least if some other semantic argument, a_j , is to be expressed” (KT (1993:13)).

- (20) a. raboči-e napolnjaj -ut bassejn vod-oj Russian
worker-PL.NOM fill -PRES.3PL swimming pool.ACC water-INSTR
“The workers are filling the swimming pool with water”

- b. napoln-enie bassejn -a vod-oj
fill -AN swimming pool-GEN water-INSTR
“The filling of the swimming pool with water”

- c. napoln -enie bassejn -a raboči-mi
fill -AN swimming pool-GEN worker-INSTR.PL
“The filling of the swimming pool by the workers”

In (20)b, derived from (20)a, the missing argument is the agent (*raboči* “worker”) whereas in (20)c the instrument *vodoj* “water” is missing. Having these two arguments at the same time is impossible in Russian.

In the second case of argument reducing, “the action nominal X is used in such a way that the semantic argument a_i cannot be expressed in this particular situation” (Koptjevskaja-Tamm (1993:14)).

In the third case, the semantic argument of the action nominal X could in principle be expressed in the given sentence, but is omitted in accordance with the communicative goal of the sentence (KT (1993:15)). She argues that this case is the most commonly used across languages, in this situation, the context makes it irrelevant to use a semantic argument.

4.2.2.2 ARG-RED in Wolof GN

GN constructions in Wolof seem to follow the first case of argument-reducing discussed by KT because the two arguments of the derived nouns cannot be expressed at the same time. Compare (21)a, (21)b and (21)c.

- (21) a. m- bind-u-m Awa
NOM- write- GEN-CL Awa
“Awa’s writing ”
- b. m- bind-u-m téeré b-i
NOM- write- GEN-CL book CL-the
“the writing of the book ”
- c. *Awa m- bind -u -m téeré b-i
Awa NOM- write- GEN-CL book CL-the
“Awa’s writing of the book”

In Chapter 2 some constraints related to the position of arguments in GN were discussed. I have shown that in Wolof there are various constraints related to the co-occurrence of different types of arguments with respect to the nominalized verb. For instance the agent of a transitive verb cannot normally occur in GN. This is summarized in (22).

- (22) a. Awa bind na tééré b-i
Awa write FIN book CL-the
“Awa wrote the book”
- b. *Awa m- bind -u -m tééré b-i
Awa NOM- write- GEN-CL book CL-the
“Awa’s writing of the book”
- c. *Awa m- bind -u -m
Awa NOM- write- GEN-CL
“Awa’s writing” (intended)
- d. m- bind -u -m Awa
NOM- write- GEN-CL Awa
“Awa’s writing”
- e. sama m- bind -u -m tééré b-i
1SGPOSS NOM- write -GEN-CL book CL-the
“my writing of the book”

(22)a shows a typical Wolof sentence without any nominalized verb. This sentence has two overt DPs as subject and object of the verb *bind* “write”. In (22)b the verb has been nominalized, which makes the presence of an overt DP subject ungrammatical. The sentence is still ungrammatical in (22)c. The meaning in (22)c can only be conveyed like in (22)d where the subject of writing *Awa* has to occur after the noun *mbind* “writing” even though Wolof is a SVO language. In contrast, with the presence of a pronominal DP subject along with an overt DP object, the sentence is grammatical as shown in (22)e . In summary, a pronoun possessor can occur as a DP subject with

a genitive nominalization whereas, an overt DP possessor is banned from a similar position. In English the overt DP subject Awa can be in subject position, that is, before the noun mbind “writing” as shown in the translation of (22)d.

For KT, a language that resorts to argument-reducing for any of the reasons mentioned above might have another way of expressing all arguments. This is true for Wolof as there is another nominalization strategy (discussed in chapter 3) that allows the expressing of all arguments.

This type of nominalization (in (23)) was referred to as RC nominalization.

- (23) a. [bind b -i Awa bind téeré b-i] bett na ma
write CL - COMP Awa write book CL-the surprise FIN 1SG
“Awa’s writing the book surprised me”
- b. [bind b -i **ko** Awa bind] bett na ma
write CL - COMP 3SG_{ACC} Awa write surprise FIN 1SG
“Awa’s writing **it** surprised me”

In (23)a both the subject and the object are present. This construction, which I call Relative clause nominalization, is very productive in the language and always include all the arguments contrary to (21)b and (21)c. In (23)b, the object can appear without any problem.

4.3 Summary

In this chapter, I have applied KT’s typological classification of nominalization languages. KT’s sample included 70 languages. The choice of her sample was typologically, not genetically determined, in other words to be included in the sample a given language had to have “interesting properties” with regard to nominalization. Even though she admits languages in her sample are genetically uneven, she attempted to classify them typologically based on seven nominalization types. She also added an eighth one that was uncommon in the sample, ARG-RED. Interestingly

this nominalization type seems to be the type of one of Wolof nominalization strategies i.e genitive nominals. Another nominalization type she discusses, the REL type, is also found in Wolof even though its form is different from the one described by KT. That nominalization strategy is an isolated case in her sample; however I have shown in Chapter 3 that this is a common nominalization pattern found in languages genetically related to Wolof (i.e. Yoruba, Gungbe, Ewe).

I have also shown that there are differences between ways of signalling syntactic relations in finite clauses vs nominal clauses. KT points out an interesting pattern regarding ways of signalling syntactic relations in nominals, that is languages are not expected to signal relations between an action nominal and its arguments through syntactic means if they are not used in finite clauses, nor in NPs. This turns out to be true for Wolof ; indeed the two types of nominalization patterns of interest in this dissertation are found in typical NPs. They are genitivization (for the genitive nominals) and relativization (for RC nominals).

5. General conclusion

In this dissertation, I have targeted the description of clausal nominalizations in Wolof. I have dealt with three types of nominalization patterns in Wolof i.e genitive nominalizations, relative clause nominalizations and headless relative clause nominalizations. Throughout this dissertation, I have mainly focused on genitive nominalizations and relative clause nominalizations. Regarding genitive nominalizations (GNs), I have shown that they are syntactically special as they do not allow the cooccurrence of a transitive verb with two arguments. Typologically, this seems to be unusual as mentioned by KT (1993); in her typological survey of seventy languages, only one seemed to behave this way. Many of the other languages allow for instance an agent of a transitive verb not to occur along with a nominalized verb, but this is optional. Apart from this, in case there is only one argument, patient or agent, its position has to be the one of the direct object in a finite clause. This is something also found in a language like Russian. I have also provided evidence that object pronouns are not allowed to occur in this type of nominalization; it is my assumption that this is probably due to the status of these pronouns. Indeed, the object pronouns in Wolof are clitics and clitics are weak pronouns. This “weakness” might account for why they are banned in nominalizations. Semantically, I have shown that GNs can have various meanings, they can have a generic, factive and eventive meaning. However a manner reading is not allowed. In contrast all these readings in addition to a manner reading is available with RC nominals; however the manner reading seems to be restricted to contexts when the nominalized verb meaning involves an instrument. The GNs are not as productive as the RC nominals; which is not surprising since the RC nominals allow the presence of all the nominalized verb arguments. For this reason, the speaker might be tempted to use this nominalization more often. RC nominals are syntactically like typical

relative clauses in the language, the nominalized verb is fronted but repeated in its original position. Also, not only can the nominalized verb be fronted along with a wide range of verbal suffixes but it can also be fronted along with its internal argument. Interestingly, in this respect, both GNs and RC nominals have in common the fact that they cannot occur with grammatical negation and past tense markers. I have also discussed how Wolof fits within the typology of nominalization in general through reference to the typological study of KT (1993).

Finally, this study provides a comparison between nominalization strategies found in African languages genetically related to Wolof i.e., Yoruba, Gungbe, Ewe and Fon. All these languages have some type RC nominals; I have shown that these languages an RC nominal can be formed even one an internal argument is relativized. Such a strategy is nonexistent in Wolof as in Wolof an internal argument can only be moved when a typical relative clause is involved.

The present study has provided an introduction to clausal nominalization that I hope, will generate more works in this area of Wolof syntax. It would be interesting for instance, to pursue this study further by doing a syntactic analysis of the two nominalization patterns. This would shed more light on their internal differences.

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