A SYNTACTIC ACCOUNT FOR ZERO DENOMINAL AND DEVERBAL VERBS IN WOLOF

Mamarame SECK

<u>mamarame.seck@ucad.edu.sn</u> Université Cheikh Anta Diop de Dakar (Sénégal)

Abstract: Denominal verbs are verbs formed from nouns by means of various word-formation processes. A deverbal is a word (usually a noun or an adjective) that is derived from a verb. This article aims to investigate denominals and deverbals in Wolof. Wolof denominals are formed without adding a new morpheme. This phenomenon, like what found in English, is known as zero denominal e.g., suukër meew mi "to sugar the milk." As for Wolof deverbals, they are formed by adding a new morpheme, -al, to the root verb or adjectival verbs., e.g., weexal miir bi 'to whiten the wall'. To account for these phenomena, I use Clark and Clark (1979), Embick (1997), and Miller (2006) models.

This article will contribute to the knowledge about Wolof grammar, particularly, the morphology and syntax of denominals and deverbals in the Wolof language.

Keywords: Wolof, denominal, deverbal.

Introduction

Denominals and deverbals exist in many languages including Wolof. In English, denominal verbs are verbs formed sometimes with an addition of a morpheme and sometimes without. In the latter case, one speaks zero denominals, e.g., to *phone* someone. Similarly, an adjective can be converted into a verb sometimes by adding a derivative affix, e.g., in *flatten*, *whiten*, sometimes without adding an affix, e.g., *clear*. The same processes exist in Wolof, e.g., *ñuul* 'dark' versus *ñuulal* 'darken'.

In this article, I aim at looking into Wolof denominals and deverbals and accounting syntactically to their formation by using Clark and Clark (1979), Embick (1997), and Miller models (2006). Wolof deverbal verbs are like English deadjectivals because Wolof is considered as not having pure adjectives, but verbal adjectives, e.g. weex 'to be white'.

This first section of this article will be an overview of Wolof morphology and its components, namely reduplication, affixation, and compounding. The second will look at Wolof denominals. In the third section we will attempt to syntactically account for Wolof denominals and deverbals (from adjectival verbs).

1. An overview of Wolof morphology

Wolof is an African language that belongs to the Northern branch of the West Atlantic subgroup of the Niger-Congo family. Wolof has a rich morphology which includes consonant mutation, reduplication, compounding, and affixation.

1.1 Consonant mutation

Wolof is a consonant mutating language (McLaughlin, 2004). Mutation affects word-initial stops in verbs and nouns. There is a correspondence between two homorganic segments such as f/p, b/mb, d/nd, etc. Note that Wolof has prenasalized voiced consonants such as mb, nd, nj. The combination of a nasal sound and with voiced consonant results in a fusion and not two separate sounds. Below are examples of consonant mutation:

(1)	
V	N
a. fo 'play'.	p o 'game'
b. s uub 'dye'	c uub 'dyed cloth'
c. b okk 'have in common'	mbokk 'relative'
d. d aje 'meet'	ndaje 'meeting'
e. jar 'cost'	nj ariñ 'worth, use'
f. b ëgg 'like, want'	mbëggéel 'love, affection'
	(McLaughlin, 2004)

1.2. Reduplication

Reduplication can be partial or total. Partial reduplication involves a reduplication of only part of the word while total reduplication involves the copying of the entire base to derive a new word. Wolof has a total reduplication process regarding nouns and verbs, that is, a noun or verb can be entirely repeated and affixed to the same noun or verb to create a new word with a different meaning. The following are examples of total reduplication in Wolof:

(2)			
xam	'to know'	xam-xam	'knowledge'
tàng	'hot'	tàng-tàng	'heat or figuratively 'right away"
kër	'house'	kër-kër¹	'intense activity'
waalo	'Waalo region'	waalo-waa	lo 'someone from the Waalo region'

1.3. Compound words

lei

Wolof compounds are sometimes *endocentric* meaning the semantic head of the compound is within the compound itself. An example of endocentric is *kër doktoor* laterally 'doctor's house' to refer to the hospital. Indeed, the head of the compound, *kër*, is on the left; and *kër doktoor* is a type of building where a doctor works, namely a hospital. Wolof

¹ Note that reduplicated words can be affixed, e.g. kër-këri 'to struggle to get something done'; bawol-bawole look like something or someone from Bawol'.

compounds can also be *exocentric* meaning the semantic head of the compound is not within the compound but outside the latter. An example of exocentric compound is *borom-bopp*, literally 'owner of a head', because the actual meaning 'ear pain' is not overtly present in the compound.

- 1.3.1 Exocentric compounds: these are mostly composed by verb + noun.
- Verb + Noun

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(4)
tàng-xol 'someone who gets angry very quickly'

(tang 'hot' + xol 'heart')

xonq-nopp 'a white person'

(xonq 'red' + nopp 'ear')

bëgg-suukër 'name of an ant that stays around sugar'

(bëgg 'like' + suukër 'sugar'

neex-deret: 'an easygoing person'

(neex 'good' deret 'blood')
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- 1.3.2 Endocentric compounds: These are mostly composed by noun + noun.
- Noun + Noun

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(5)
kër-doktoor 'hospital'
(kër 'house' doktoor 'doctor')
ñambi-suukër 'sugar cane'
(manioc 'manioc' + suukër 'sugar')
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Note that the head of the compound is on the left.

1.4. Affixation

The most common type of affixation in Wolof is suffixation. Among Wolof suffixes are the causative, reflexive, and reciprocal suffixes.

- a) Causative suffixes. They can be expressed by -e, -al and -loo.
- -e suffix. It is restricted to intransitive verb and expresses causative on spatial words as in the following:

(6)
génn'to go out' génne 'to take out'
tassar'to beapart' tasaare² 'to make part'
wàcc'to go down' wàcce 'to take down'

-al **suffix.** It is restricted to intransitive verbs, and expresses causative but is more productive that -e:

² Note that tassar is an ideophone and tasaare a verb. There is compensation lengthening of the vowel 'a' after the degemination of 'ss' in the ideophone.

jub'to be stretch' baax 'to be good'

jubal 'to make stretch' baaxal 'to improve' rafetal 'to make beautiful'

rafet 'to be beautiful' weex 'to be white'

weexal 'to whiten'

-lu suffix. It is added to an active verb but does not create a new argument. The subject of the derived verb is a Causer while the object is Theme. Let us consider the example below:

(8)

woo 'to call' woo**lu** 'to make(someone) call someone' woo naa sama xarit call 1sg perf my friend 'I called my friend'

woolu 'to make someone call someone else'

woolu naa sama xarit call-lu 1Sg perf my friend "I made(someone) call my friend"

-loo suffix. The particularity of this causative morpheme is that it adds a Causer, and the subject of the preexistent verb becomes object. In the example below, the stem verb is "jàng" "to study" and the derived verb is jàng**loo** "to make someone study":

(9) Musa jàng na téeré**em** Musa read 3sg book-poss 'Musa read his book'

Jàng**loo**naa Musa téeréem Read-loo 1sg Musa book-poss 'I made Musa read his book'

b) Reflexive **u**-suffix. The suffix –u, added to a stem, carries a reflexive meaning. For instance, the verb *raxas* 'to wash', when followed by suffix –u, become reflexive 'raxas**u**', 'to wash one's hands.'

(10)

raxas 'to wash' raxas u 'to wash one's hand'

seet 'to look for' seetu 'to look at oneself into the mirror'

sang 'to wash'. sang**u** 'to shower' wat 'to shave' wat**u** 'to cutone's hair'

c) *Collective suffixes*: Suffixes *-andoo*, *-aale*, *-oo* and *-e* mean that the action is done by more than one person. These suffixes carry a collective meaning.

(11)

-aale suffix: nekk 'to be' nekkaale 'to be in concubine.'
-andoo suffix: jàng 'to study' jàngandoo 'to study together'

-00 suffix: wor 'to betray' wor**oo** 'to be against each other, to become enemies.'
e suffix: gis 'to see' gis**e** 'to see each other.'
laale 'to fight against each other' (used in sports generally)

d) Reciprocal -ante. Here the action is done by two people but reciprocally.

(12)
rey 'to kill' rey**ante** 'to kill each other (in a battle)'
jéggal 'to forgive' jéggal**ante** 'to forgive each other'

e) Benefactive -al/-1. This -al needs to be differentiated from causative -al. With benefactive -al, the action is done on behalf of someone. When the verb ends with a consonant, the suffix is -al but when it ends in a vowel, the suffix is just -l. In the case of a monosyllabic verb ending with a vowel, 'w' is inserted between the verb and -al. Example: ji 'to plant' vs jiwal 'to plant (something) for someone'. The two forms of the suffix, -al and -l, are then said to be in complementary distribution.

(13)
jàng 'to read/learn'
jàngal 'to teach'
xam 'to know'
ubbi 'to open'
seeti 'to go see/find someone or something' seetil 'to go see someone or something on behalf of
someone else'

2. Denominals in Wolof

Like English and other languages, Wolof also has denominal verbs. Denominal verbs are verbs which come from nouns to which a suffix or prefix can be attached but not always. When no suffix was attached, one talks about zero derivation or zero verbs. As far as we know there are no denominals with a prefix in Wolof. Rather, there are denominal verbs with a suffix, which can be divided into two groups: reflexive or instrumental denominals and causative denominals.

2.1 Instrumental denominals

These are denominals made up of a noun and suffix -u. The suffix -u carries the meaning of 'means' or 'tools' a person uses to do something as in the examples below:

(14)
tànk 'foot' tànk**u** 'to use one's feet to go somewhere.'
carax 'sandals' carax**u** 'to wear sandals to go somewhere'
mbubb 'a type of clothe' mbubbu 'to get dressed with a mbubb'

These denominals need to be differentiated from deverbal reflexive verbs such as *raxas-u* 'to wash one's hands', *sëlm-u* 'to was hone's face' with which they share the same suffix –u. The latter entails that the action is done to the person herself while the former means that the person uses a specific tool to accomplish her action.

2.2 Causative denominals

These are nouns followed by causative suffix to become causative verbs. As we have seen it earlier, Wolof causative suffixes are -al, -e, -lu, -loo. Wolof denominals can be divided into four types according to the suffix. We have -al denominals, -e denominals, -lu denominals, and -loo denominals.

2.2.1-*e* causative denominal. When attached to an intransitive verb, -*e* creates a new argument position to the structure.

(15)
reer 'to eat dinner' reere 'to eat something for dinner'
damay reer.
'I PROG eat dinner' I PROG eat dinner couscous
'I am eating dinner' I am having couscous for dinner'

fóot 'to washclothes' fóote 'to make use of something to wash clothes' damay foot damay fóote. saabu bi
I-PROG wash I-PROG wash soap the
'I am washing (my clothes)' 'I am making use of the soap to wash'

2.2.2 -al causative denominals. Also restricted to intransitive verbs, it creates a new argument position.

(16)
Taar 'beauty' taaral 'to beautify'
aj 'pilgrimage (to Mecca)'. ajal 'to pay or make a trip to Mecca on behalf of someone for a pilgrimage'
dëj 'funerals' dëjal 'to finance someone's funerals'
jëmm 'body' jëmmal 'to embody'

2.2.3. -lu causative denominals. Unlike -al and -e, the suffix -lu does not add new argument. It carries the meaning of 'an attempt to accomplish something'. The subject of the derived verb is a Causer while the object is a Theme. Let us consider the examples below:

(17)
bëgg-bëgg 'desire' bëgg-bëgg**lu** 'to attempt to make oneself like something' sama bëgg-bëgg mooy jàng Wolof
my desire BE-PERF to lean Wolof
'My desire is to study Wolof'

Musa dafay bëgg-bëgg**lu** jàng Wolof Musa 3rd Sg. Imperf desire-lu learn Wolof 'Musa attempts to make himself like studying Wolof'

góor 'man' góor-góor**lu** 'to try one's best' góor dafay. liggéey
Man 3rd Sg. Imperf. work
'A man works'

damay. góor-góor**lu** ci sama liggéey Be 1st Sg PERF try one's best at my work 'I am trying my best at (my)work.'

Note that there are both a total reduplication and suffixation going on in beggbegglu and góór-góórlu. Other examples of *-lu* causative denominals:

(18)
yar 'education' yar**lu** 'to make someone be educated on behalf of someone else'
móol 'brick' móol**lu.** 'to make someone make bricks (for oneself)'
leer. 'light' leer**lu** 'to make something clear'
ataaya 'tea' ataaya**lu** 'to make someone make tea'

2.2.4. -loo causative denominals. The particularity of this causal morpheme is that it also adds a Causer, and the subject of the preexistent verb becomes object. In the example below, the stem verb is "jàng" "to learn" and the derived verb is jàngloo "to make someone learn":

(19)
yar 'good education' yar**loo** 'to make someone in charge of educating someone else' sama doom amul yar
my child have-NEG a good education
'my child doesn't have good education'

damay yar**loo** Musa sama doom I BE-PERF educate-loo Musa my child 'I make Musa in charge of my child's education.'

Other examples:

(20)
gént 'dream' gént**loo** 'to make someone dream'
ligéey 'to work' liggéey**loo** 'to make someone work'

2.3. Zero denominal verbs

Zero denominals are verbs that do not undergo modification from the noun. In Wolof, these verbs can fall into the categories made up by Clark and Clark. Such categories are based on the thematic roles of the base noun.

a) LOCATION [put object in X]

(21) mbuus: plastic bag mbuus cere ji 'to put the couscous in plastic bags'

b) LOCATUM [put X in/on object]

(22)
kaani: 'spices' kaani ceeb bi 'to add spices to the rice' xorom 'salt' xorom yàpp wi 'to salt the meat' suukër 'sugar' suukër meew mi 'to sugar the milk'

limong or lingom 'lime' limong jën wi. 'to add lime to the fish'' tamaate 'tomato' tamaate ceeb bi 'to add tomato to the rice' daqqar 'tamarind' daqqar soos bi 'to add tamarind to the sauce'

c) INTRUMENT [utilize X to affect object]

(23)
kerezi: crazy glue kerezi taabal ji 'to put crazy glue on the broken table (to fix it)'
diw 'oil' 'cream' diw masin bi 'to oil the not working engine'
puudër 'powder' puudër xale bi 'to powder the child'

d) GOAL [turn X into noun]

(24)
dank 'ball' dank ban bi 'to turn the argil into balls'
móol 'brick' móol suuf si 'to turn the sand into bricks'

3. Syntactic account of Wolof zero verbs

In this section, we aim at syntactically accounting for Wolof denominal zero verbs as it has been done by Embick (2004b), Harley (2005), and Miller (2006) on English denominals and deadjectivals. Wolof does not have pure adjectives, but adjectival verbs. Wolof adjectival verbs can be suffixed to derive other verbs referred to as deverbals. Our goal is, using Embick, (2004b), Harley (2005) and Miller (2006) to account for Wolof zero denominals and deverbal verbs.

3.1 Deadjectival transitive verbs:

Let us recall Embick's (2004b; 365f.) account for English deadjectivals e.g., *flatten* as in the diagram below:

I flatten the screen.

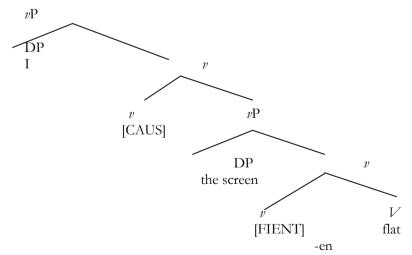
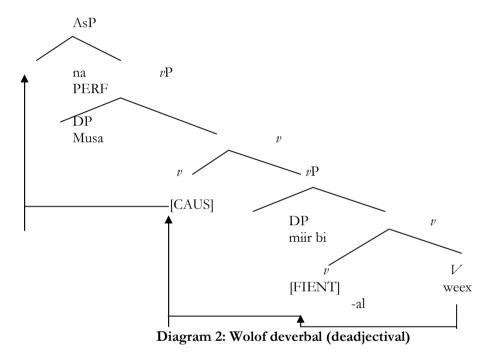


Diagram 1: English deadjectival

The same formalization can be applied to Wolof sentence containing deverbal verbs (from adjectival verbs). Wolof has imperfective and perfective aspect which are marked respectively by the suffix –y attached to the verb or the word *na* following the verb. These aspects markers do not affect the argument structure. So, I generate them at the top of the tree so that the verb will incorporate them later.

(25) musa weexal na miir bi 'Musa whitens the wall'



The root verb *weex* 'to be white' incorporates [FIENT] to pick the causal morpheme –al and incorporate CAUS to become causative and then the perfective marker *na* to finally become perfective.

3.2. Goal zero denominal verbs

Let us now account for Wolof goal zero denominals:

(26) damay dank suuf si 'I ball-shape the sand'

This sentence can be rephrased as "I cause the sand to get to be in balls."

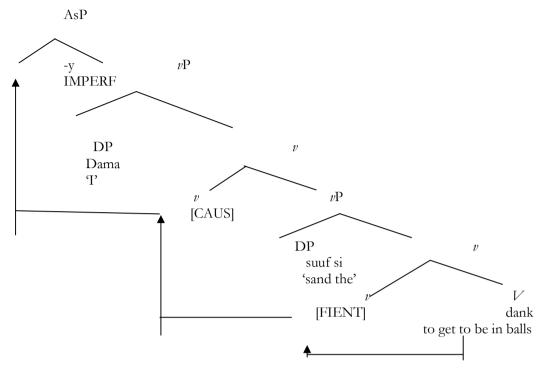


Diagram 3: Wolof goal zero denominal

3.3 Instrumental zero verbs

My account of Wolof instrument verbs is inspired by Miller (2006)'s account with the difference that in Wolof there is no place for an adjectival phrase and there is a null preposition. The aspectual phrase will be at a higher position; the verb will move to that position later to become perfective.

(27) Musa kerezy na taabalji Musa Crazy glue PERF table the 'Musa Crazy glued the table'

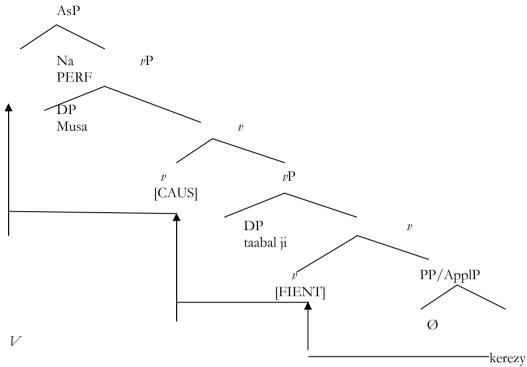


Diagram 4: Wolof instrument zero denominal

Conclusion

In this article I attempted to provide a syntactic account for deverbals and zero denominals in Wolof. To do so, I presented first the characteristics of Wolof morphology regarding verb suffixation. Then, I applied Clark and Clark's categorization to Wolof zero denominals and deverbals. Finally, I syntactically accounted for these verbs using various previous accounts. Further study will address issues such as telicity in Wolof verbs and how it interacts with the morphology.

REFERENCES

CLARK, Eve V. & HERBERT, H. Clark, (1979), "When nouns surface as verbs", in "Language", 55 (4), pp. 767-811.

EMBICK, David, (1997), Voice and the Interfaces of Syntax, Doctoral Dissertation, University of Pennsylvania.

EMBICK, David, (2004), "On the Structure of Resultative Participles in English", in "Linguistic Inquiry", Vol. 35. No.3, The MIT Press, pp. 355-392.

MCLAUGHLIN, Fiona, (2004), "Is there an adjective class in Wolof?", in "Adjective classes: A cross-linguistic typology", 1, pp. 242-262.

MILLER, Gary, (2006), Latin Suffixal Derivatives in English and Their Indo-European Ancestry, Oxford, Oxford University Press.