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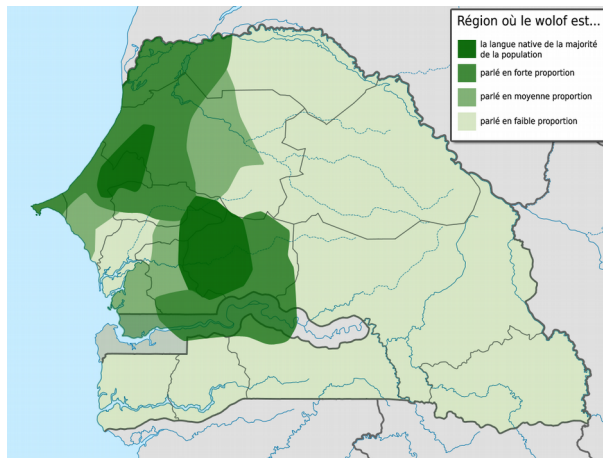
Auxiliary verb constructions in Wolof and neighboring languages

a case-study to rethink the notion of auxiliary in general linguistics

Labex EFL

Langage, Langues et Llacan
Cultures d'Afrique Noire

- **Wolof conjugation**

- Wolof verbal periphrases

- The concept « auxiliary »

- Toward a new typological approach of auxiliaries

- Wolof auxiliary constructions

- Conclusion

Wolof language

◆ Classification:
  ↳ Niger-Congo
    ↳ Atlantic

◆ Agglutinative morphology

Région où le wolof est...
- la langue native de la majorité de la population
- parlé en forte proportion
- parlé en moyenne proportion
- parlé en faible proportion

◆ Spoken in Senegambia

◆ Vehicular in Senegal

Wolof conjugation

- ◆ Based on phrasal patterns
    Predicative constructions

- ◆ Predicative Constructions ≈ Conjugations
    tense, aspect, mood, information structure

- ◆ Complex predicates

- ◆ Verb + Predicative Marker
    - ▪ Verb
        lexical meaning
    - ▪ Predicative Marker
        grammatical information + subject affix

Predicative constructions

◆ Subject Focus

*Ma-**a**   dem.*

1SG-**PM**   go

◆ Presentative

*Ma-**angi**   dem.*

1SG-**PM**   go

◆ Complement Focus

*Fii   **la**-a   dem.*

here **PM**-1SG   go

◆ Verb Focus

__Da__-ma   dem.

PM-1SG   go

◆ Perfect

*Dem   **na**-a.*

go   **PM**-1SG

◆ Future

__Dina__-a   dem.

PM-1SG   go

◆ Optative

__Na__-a   dem !

PM-1SG   go

◆ Imperative

*Dem-**al** !*

go-**IMP.2SG**

Predicative constructions

- **Negative Perfect**

  *Dem-**u**-ma.*

  go-**PRF;NEG**-1SG

- **Negative Future**

  ***Du**-ma   dem.*

  PM-1SG   go

- **Prohibitive**

  ***Bu**-ma   dem.*

  PM-1SG   go

- **Subjunctive**

  (…) ma   dem.

  1SG   go

Other verbal categories

- **Past**: suffix/clitic *-(w)oon*

  *Da-ma   dem-**oon**.*
  VFOC-1SG   go**-PST**
  'I left.'

- **Negation**: suffix *-(w)ul*   [except specific constructions]

  *Da-ma   dem-**ul**.*
  VFOC-1SG   go**-NEG**
  'I didn't leave.'

- **Imperfective**: auxiliary *di / =y*

  *Da-ma**=y**   dem.*
  VFOC-1SG**=IPFV**   go
  'I'm leaving.'

Conjugation Paradigm

	POL	PERFECTIVE		IMPERFECTIVE	
		NON-PAST	PAST	NON-PAST	PAST
SFOC	+	*maa dem*	*maa demoon*	*maa =y dem*	*maa doon dem*
	−	*maa demul*	*maa demuloon*	*maa dul dem*	*maa duloon dem*
PRST	+	*maangi dem*	*maangi demoon*	*maangi =y dem*	*maangi doon dem*
	−	*maangi baña dem*	*?maangi bañoona dem*	*?maangi =y baña dem*	*?maangi doon baña dem*
CFOC	+	*laa dem*	*laa demoon*	*laa =y dem*	*laa doon dem*
	−	*laa demul*	*laa demuloon*	*laa dul dem*	*laa duloon dem*
VFOC	+	*dama dem*	*dama demoon*	*dama =y dem*	*dama doon dem*
	−	*dama demul*	*dama demuloon*	*dama dul dem*	*dama duloon dem*
PRF	+	*dem =naa*	*demoon =naa*	*di =naa dem*	*doon =naa dem*
	−	*demuma*	*demuma =woon*	*duma dem*	*?duma =woon dem*
FUT	+	*dinaa dem*	*doon =naa dem*	*dinaa =y dem*	n/a
	−	*duma dem*	*?duma =woon dem*	*duma =y dem*	n/a
OPT	+	*naa dem*	n/a	*naa =y dem*	n/a
	−	*buma dem*	n/a	*buma =y dem*	n/a
IMP	+	*demal*	n/a	*dil dem*	n/a
	−	*bul dem*	n/a	*bul di dem*	n/a
SUBJ	+	*ma dem*	*ma demoon*	*ma =y dem*	*ma doon dem*
	−	*ma baña dem*	*ma bañoona dem*	*ma =y baña dem*	n/a

Outline

- Wolof conjugation

- **Wolof verbal periphrases**

- The concept « auxiliary »

- Toward a new typological approach of auxiliaries

- Wolof auxiliary constructions

- Conclusion

Inflectional periphrasis

◆ **Inflectional periphrasis** (Bonami 2014)
  - ▪ Multi-word construction.
  - ▪ Interacts with inflectional morphology in such a way that it is best integrated in the inflectional paradigm.

~ **Suppletive periphrasis** (Haspelmath 2000)
  - ▪ Fills a gap in the inflectional paradigm.
  - ▪ In order to create paradigm symmetry.

Wolof verbal periphrases

	POL	PERFECTIVE		IMPERFECTIVE	
		NON-PAST	PAST	NON-PAST	PAST
SFOC	+	maa dem	maa demoon	maa =y dem	maa doon dem
	−	maa demul	maa demuloon	maa dul dem	maa duloon dem
PRST	+	maangi dem	maangi demoon	maangi =y dem	maangi doon dem
	−	maangi baña dem	?maangi bañoona dem	?maangi =y baña dem	?maangi doon baña dem
CFOC	+	laa dem	laa demoon	laa =y dem	laa doon dem
	−	laa demul	laa demuloon	laa dul dem	laa duloon dem
VFOC	+	dama dem	dama demoon	dama =y dem	dama doon dem
	−	dama demul	dama demuloon	dama dul dem	dama duloon dem
PRF	+	dem =naa	demoon =naa	di =naa dem	doon =naa dem
	−	demuma	demuma =woon	duma dem	?duma =woon dem
FUT	+	dinaa dem	doon =naa dem	dinaa =y dem	n/a
	−	duma dem	?duma =woon dem	duma =y dem	n/a
OPT	+	naa dem	n/a	naa =y dem	n/a
	−	buma dem	n/a	buma =y dem	n/a
IMP	+	demal	n/a	dil dem	n/a
	−	bul dem	n/a	bul di dem	n/a
SUBJ	+	ma dem	ma demoon	ma =y dem	ma doon dem
	−	ma baña dem	ma bañoona dem	ma =y baña dem	n/a

Wolof verbal periphrases

12 periphrastic constructions:

- Sujet Focus   *maa dem*
- Presentative   *maangi dem*
- Complement Focus   *=laa dem*
- Verb Focus   *dama dem*
- Future   *dinaa dem*
- Negative Future   *duma dem*
- Optative   *naa dem*
- Prohibitive   *buma dem*
- Perfect   *dem =naa*
- Imperfective   *=y dem*
- Negative with aux. verb   *bañ=a dem*
- Clitic Past   *demuma =woon*

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Auxiliary Constructions

◆ Wolof verbal periphrases, auxiliary constructions?

◆ The concept « auxiliary »
- Problematic concept.
- No consensus in general linguistics or typology.
- Several definitions.
  - Not necessarily incompatible with each other.
  - Different according to the point of view.

What is an auxiliary?

◆ Categorial definition(s)

Auxiliaries = lexical (sub)class:

- Either a verb subclass.

▪ Most widely used definition (in most part of dictionary and reference articles).

▪ Based primarily on data from Indo-European languages.

- Or a specific lexical class.

◆ *'Universal' definition*

Auxiliary = universal category (AUX), i.e. category of the universal grammar.

▪ *Within the framework of transformational-generative grammar.*

What is an auxiliary?

◆ Functional definition

Auxiliary = predicative element which expresses one or more verbal categories (its function).

▪ But auxiliaries are not necessarily a specific lexical class.

◆ Panchronic definition

Auxiliary = element on the lexical verb–functional affix grammaticalization continuum.

▪ Proposed by Heine (1993).
▪ Dominant definition in linguistic typology (at least in the literature).

Limitations of the panchronic definition

◆ If a word is to be viewed as an auxiliary:

  ▪ Either has typical verbal features,

  ▪ Or is from the grammaticalization of a verb.

◆ Problematic for several reasons:

  ▪ Uses a diachronic criterion to define a lexical category.

    ▪ Questionable choice
      (for synchronic description and analysis).

  ▪ This criterion can only be used
    - if there are historical data, or
    - if it is possible to make reliable reconstructions.

    • For the most part of african langages,
      no data available prior to the XVIIIth century.

    • Genetic distance often very important
      ↳ cannot reconstruct reliable proto-forms.

Limitations of the panchronic definition

◆ Problematic for several reasons:

- ▪ Cannot explain the distribution of
  TAM markers in some languages

- ▪ There are languages in which TAM markers:
  - are independent words,
  - have no verbal features,
  - are in opposition,
  - share some morphosyntactic features,
- ▪ Nevertheless:
  - some come from the grammaticalization of verbs,
  - whereas others have a different origin.

Case of Mandé languages

- Predicative markers in Mandinka:
  - Closed class.
  - No verbal features.
  - Invariable.
  - Always the same slot: S **p** (O) V (X)

- **Perfective** - Origin of **yé** = adposition

  Jatóo   **ye**   *dánnóo*   *barama.*
  lion:DET   **PFV**   hunter:DET   hurt
  'The lion has hurt the hunter.'

- **Imperfective** - Origin of **ká** = verb

  Saayáa   **ka**   *mǒolu*   *kumbondi.*
  death:DET   **IPFV**   person:DET:PL   cry:CAUS
  'Death makes the people cry.'

Case of Mandé languages

◆ According to the panchronic definition:

▪ *ká* = auxiliary   *yé* ≠ auxiliary

Problematic for a synchronic analysis,
↳ separates two words belonging to the same class!

▪ If the word *ká* is not an auxiliary,
↳ then elements on the verb–TAM continuum
are not all auxiliaries.

☹ contradicts the panchronic definition!

▪ If the word *yé* is an auxiliary,
↳ then elements without any verbal origin
may also be auxiliaries

☹ contradicts the panchronic definition!

▪ These problems are not limited to Mandé languages.

songhay, atlantic, chadic, cushitic

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Typology of auxiliaries

◆ Functional definition:

Autonomous predicative element
which combines with a lexical verb
to mark a verbal category
(tense, aspect, mood, polarity, voice, etc.)

↳ Is not a lexical category, but a function.

Full Verb	Catenative Verb	Semi-auxiliary Verb	Auxiliary Verb	Predicative Marker
+ Verb				– Verb
– Auxiliary		+ Auxiliary		

Typology of auxiliaries

◆ Kinds of predicative elements:
- Full verb
  - All the morphosyntactic verbal features.
  - Fully lexical meaning.
- Catenative verb
  - All the morphosyntactic verbal features.
  - Can take specific sentential complements (subjunctive, infinitive, etc.).
  - Fully lexical meaning.
- Semi-auxiliary verb
  - All the morphosyntactic verbal features.
  - May be defective.
  - Can (or must) take specific sentential complements (subjunctive, infinitive, etc.).
  - Fully lexical meaning.
  - May express TAM categories.

Typology of auxiliaries

◆ **Kinds of predicative elements:**

- ▪ Auxiliary verb
  - ▪ Not all the morphosyntactic verbal features.
  - ▪ May be defective.
  - ▪ May present morphophonological or combinatorial idiosyncrasies.
  - ▪ Must take specific sentential complements (subjunctive, infinitive, etc.).
  - ▪ Function = mainly grammatical.
  - ▪ Integrated within the conjugation paradigm.

- ▪ Predicative marker
  - ▪ No morphosyntactic verbal feature.
  - ▪ May present morphophonological or combinatorial idiosyncrasies.
  - ▪ Combines with a finite verb.
  - ▪ Function = exclusively grammatical.
  - ▪ Integrated within the conjugation paradigm.

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Wolof auxiliaries

◆ Are Wolof verbal periphrases
auxiliary constructions?

↳ Are ancillary elements
(ie no lexematic elements) auxiliaries?

According to the panchronic definition?
Accordind to the functional definition?

Panchronic approach

	Ancillary Element	Verbal Features	Verbal Origin	
Negation with auxiliary verb	*bañ*	+	+	} **Aux**
Imperfective	*di*	+	+	
Verb Focus	*da(fa)*	±	+ (?)	} **Aux ?**
Future	*dina*	±	+	
Negative Future	*du*	±	+	
Subject Focus	*a*	−	?	} **?**
Presentative	*a ng-*	−	?	
Complement Focus	*la*	−	?	
Optative	*na*	−	?	
Prohibitive	*bu(l)*	−	?	
Perfect	*na*	−	?	
Clitic Past	*woon*	±	−	} **???**

Panchronic approach

◆ According to the panchronic definition:

- *dafa ; dina ; du* ≈ auxiliaries
- *a ; angi ; la ; na ; bul ; na* ≠ auxiliaries
    But belong to the same paradigm:
    ↳ are in opposition,
    ↳ merge with the subject marker,
    ↳ are clitics.

- *di ; dafa* = auxiliaries
    But do not belong to the same paradigm:
    ↳ **di** / ~~dafa~~ → same distribution as a verb
    ↳ **di** / ~~dafa~~ → support for past and negation affixes
    ↳ ~~di~~ / **dafa** → support for subject marker

Functional approach

- According to the functional definition:
  - All the ancillary elements are autonomous predicative elements which combine with a lexical verb to express a verbal category.
    - ↳ **All the ancillary elements = auxiliaries**
      (Verbal periphrases = auxiliary constructions)

  - These auxiliaries have different features.
    They can be placed within a typology of predicative elements.

Functional approach

Semi-auxiliary verbe

bañ
*(semi-auxiliary verb,
but has some auxiliary verb features*

Auxiliary verb

di ; (woon)
(undoubtedly auxiliary verb)

dina ; du ; dafa
*(predicative marker, but has
some auxiliary verb features)*

Predicative marker

a ; angi ; la ; na ; bul ; na
(undoubtedly predicative marker)

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Conclusion

◆ In the literature,
3 kinds of definition for "auxiliary"

   categorial, functional, panchronic

◆ Data from Wolof and other African languages

   ↳ show advantages and limitations of these definitions

◆ In a typological perspective

   ↳ favour a functional approach

     Auxiliary = autonomous predicative element which combines with a lexical verb to mark a verbal category.

◆ According to this definition:

   Wolof verbal periphrases
   = auxiliary constructions

Conclusion

- General typology of predicative elements:
  - Full verb,
  - Catenative verb,
  - Semi-auxiliary verb,
  - Auxiliary verb,
  - Predicative marker.

- Can be compared to Heine's typology
- Differ on their principles:
  - Heine's typology
    - → grammaticalization path
  - My typology
    - → synchronic criteria

Conclusion

◆ Future research directions:

- Application of this typology to other langages.
  - Mandé, Chadic, Songhay, Cushitic

- Typological study of predicative markers.
  - Are PM attested in other languages?
  - Development of a more accurate PM typology.

Thank you for your attention

Jërëjëf

References

- Anderson, Gregory D. S. 2006. *Auxiliary Verb Constructions*. Oxford: OUP.
- Bonami O. 2014. *La structure fine des paradigmes de flexion*, Vol. 1. Mémoire d'HDR. Paris: Université Paris Diderot.
- Bonami, Olivier & Pollet Samvelian. 2015. The diversity of inflectional periphrasis in Persian. *Journal of Linguistics* 51(2). 327-382.
- Brown, Dunstan, Marina Chumakina, Greville Corbett, Gergana Popova & Andrew Spencer. 2012. Defining 'periphrasis': key notions. *Morphology* 22. 233-275.
- Church, Eric. 1981. *Le système verbal du wolof*. Dakar: UCAD.
- Creissels D. & Sambou P. 2013. *Le mandinka*. Paris: Karthala.
- Diouf, Jean-Léopold. 1985. *Introduction à une étude du système verbal wolof : Relations modes, pronoms sujets et autres modalités du prédicat.* Dakar: CLAD.
- Gross, Maurice. 1999. Sur la définition d'auxiliaire du verbe. *Langages* 135. 8-21.
- Haspelmath M. 2000. Periphrasis. In G. Booij & al. (eds.), *Morphology: An International Handbook on Inflection and Word-Formation*, Vol. 1, 654-664. Berlin: Walter de Gruyter.

References

◆ Heine, Bernd. 1993. *Auxiliaries: Cognitive Forces and Grammaticalization.* Oxford: OUP.

◆ Kihm, Alain. 1999. Focus in Wolof: a study of what morphology may do to syntax. In Georges Rebuschi & Laurice Tuller (eds), *The Grammar of Focus,* 245-273. Amsterdam: John Benjamins.

◆ N'Diaye-Corréard, Geneviève. 2003. Structure des propositions et système verbal en wolof. *Sud-Langues* 3. 163-188.

◆ Robert, Stéphane. 1991. *Approche énonciative du système verbal : Le cas du wolof*. Paris: CNRS.

◆ Robert, Stéphane. 2000. Le verbe wolof ou la grammaticalisation du focus. In Bernard Caron (ed.), *Topicalisation et focalisation dans les langues africaines*, 229-267. Louvain: Peeters.

◆ Ross, John R. 1969. Auxiliaries as main verbs. Studies in Philosophical *Linguistics* 1. 77-102.

◆ Torrence, Harold. 2013. The Morphosyntax of Wolof Clefts: Structure and Movement. In Katharina Hartmann & Tonjes Veenstra (eds.), *Cleft Structures*, 187-224. Amsterdam: John Benjamins.