

# Документация языка натиоро: к проблеме вариативного порядка СЛОВ

Documentation of the Natioro  
language: towards the problem of  
variable word order

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# Natioro language

- Natioro (Samu Kuneé) < Gur < Niger-Congo
- 4000 – 5500 speakers
- Contacts with Senoufo and Dioula (< Mande)



# Documentation of Natioro

- 2018 – 2020, Burkina Faso
- In sum, 3 months of fieldwork
- Dictionary (~ 1 500 items)
- Corpus (~ 35 min, different genres: dialogues, instructions, narratives about traditions, tales and riddles)

# Basic features

- Tonal language (3 levels)
- Nominal classification: classifiers can (and must) be deleted in some contexts:
  1.  $\bar{s}i\bar{s}i-\bar{a}$  ‘rice.cake-CL’  
 $\bar{s}i\acute{s}i\ \bar{f}\bar{o}$ : ‘white rice cake’
  2.  $k\grave{a}\bar{f}\bar{e}\acute{n}-w\grave{a}$  ‘donkey-CL’  
 $k\grave{a}\bar{f}\bar{e}\acute{n}\ \bar{k}a\bar{a}b\grave{a}$  ‘one donkey’

# Focus of the talk

- SVO in Perfective/SOV in Imperfective:

1.  $n\bar{a}^n$                        $c\bar{e}r\bar{e}$                        ${}^L t\bar{a}^n - w\bar{a}$   
1SG                      throw.PFV                      stone-CL

‘I threw a stone’.

2.  $n\bar{a} - m\bar{i}$                        $t\bar{a}^n - w\bar{a}$                        $c\bar{e}r\bar{e} - w^n$   
1SG-ACC                      stone-CL                      throw-IPFV

‘I am throwing stones’.

- DO marking:

3.  $p\bar{o}^n - w\bar{a}$                        $t\bar{a}$                        ${}^L n\bar{a} - m\bar{i}$   
dog-CL                      bite.PFV                      1SG-ACC

‘A/the dog bit me’.

# Imperfective pattern

Resultative forms:

1. **nā-mí**      pīlá = ká  
1SG-ACC      soft = RES
2. **\*nā**      pīlá = ká  
1SG      soft = RES

‘I am tired’.

# Full clausal structure (IPFV-type)

**S – (AUX) – O – V**

- The AUX slot can be filled with TAM markers which are compatible with Imperfective and Resultative forms

1. ʔnĩ      nā<sup>n</sup>      tó      cè:nè-w<sup>n</sup>  
yesterday 1SG      PST      hunt-IPFV  
'Yesterday I was hunting'.

# No elements in S – AUX/PFV sequences

- No elements can intervene between the subject and the verb:

## AUX SENTENCES

1. a.  $\bar{s}\bar{a}\bar{n}\bar{i}$                        $\bar{n}\bar{a}$ - $\bar{m}\bar{i}$                        $\bar{l}\bar{o}^n$                        $\bar{s}\bar{w}\bar{e}$  = :
- tomorrow                      1SG-ACC                      FUT                      go.NMLZ
- $\bar{p}\bar{o}$  $\bar{l}\bar{i}\bar{s}\bar{i}$  = `                       $\bar{t}\bar{o}$
- police                      DAT
- b. \* $\bar{n}\bar{a}$ - $\bar{m}\bar{i}$                        $\bar{s}\bar{a}\bar{n}\bar{i}$                        $\bar{l}\bar{o}^n$                        $\bar{s}\bar{w}\bar{e}$  = :
- 1SG-ACC                      tomorrow                      FUT                      go.NMLZ
- $\bar{p}\bar{o}$  $\bar{l}\bar{i}\bar{s}\bar{i}$  = `                       $\bar{t}\bar{o}$
- police                      DAT
- ‘Tomorrow I will go to the police’.

# No elements in S – AUX/PFV sequences

## PFV SENTENCES

1. a.     $n\bar{a}$          $\eta\bar{a}:n\bar{a}$                  $\text{ʔ}\eta\bar{i}$                  $b\bar{a}:b\bar{a}$      $k\bar{a}w\bar{a}^H$   
          1SG        buy.PFV                yesterday            sheep    meat
- b.     $*n\bar{a}$          $\text{ʔ}\eta\bar{i}$                  $\eta\bar{a}:n\bar{a}$                  $b\bar{a}:b\bar{a}$      $k\bar{a}w\bar{a}^H$   
          1SG        yesterday            buy.PFV            sheep    meat

‘Yesterday I bought some sheep meat’.

# Clausal structure

S – (AUX) – [O – V]

GENERALIZATION:

- All elements expressing tense meanings occupy the AUX slot
- All elements expressing aspect meanings are suffixed to the verbal form
- PFV is incompatible with PST:

1. \*mádū tó wǒlǒ  
M. PST lie.PFV  
Int.: ‘Madou laid down’.

# Clausal structure

**S – (AUX) – [O – V]**

GENERALIZATION:

- All elements expressing tense meanings occupy the AUX slot
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**S – TP – [VP] – AspP**

# No coordination of PFV and IPFV-patterned predications

1. mādāmú yí à wóó  
M. stand.PFV CRD say.PFV

‘Madamou stood up and said...’ [corpus]

2. \*mádū pâ à tòònìṅ = gā  
M. come.PFV.MED CRD sit = RES

Int.: ‘Madou came and is sitting’.

3. mādū kíníṅ = gá [à wóṵṵ]  
M. lay = RES CRD sleep.PFV

‘Madou laid down and got asleep’.

# Hypothesis:

- **ALL** OV-structures are predications of the same syntactic type which is different from TP
- Nominal predications?
- Verb in such structures cannot assign accusative case to internal arguments  
=> (Pseudo-)incorporation?

# Nominal predications?

1) The same Past marking in nominal predications:

1. t̄ndìngá            siátá    t̄s            nā        cwá  
before                S.        PST        1SG      wife

‘Sata was my wife before’.

2) Accusative marking is preserved in constructions with nominalizations:

2. ní                    mā        pìnē  
1SG.ACC              2SG      eat.NMLZ

‘I want to eat’.

[corpus]

# (Pseudo)incorporation?

- In compounds, nominal stems can occur both with and without classifiers:

1.  $by\bar{e}^n-w\bar{a}$  ‘rope-CL’  
 $by\bar{e}^n-w\bar{a}$   $k\bar{u}ŋgwá$  ‘tip of the rope’  
 $by\bar{e}^n$   $k\bar{u}ŋgwá$  ‘tip of the rope’

- Cases where stems occur without classifiers were attested in Imperfective clauses:

2.  $\bar{a}$   $t\bar{a}^n$   $n\grave{e}-\bar{w}^n$   
3sg beer drink-IPFV  
‘He is drinking beer’ ( $t\bar{a}^n-w\bar{a}$  ‘beer’).

# (Pseudo)incorporation?

Accusative cannot be assigned in Imperfectives:

## DITRANSITIVE CONSTRUCTIONS

1. má            kɔ̄<sup>n</sup>            nā-mí            pōrō  
2SG.ACC    give.PFV        1SG-ACC        something  
‘You gave me a small gift’.
2. má            [nā/\*nā-mí    kɔ̄<sup>n</sup> `]            pōrō  
2SG.ACC    1SG/1SG-ACC    give.IPFV        something  
kpɛ̄ = `:      pá  
day            all  
‘You give me small gifts every day’.

# (Pseudo)incorporation?

Verb and direct object can be interrupted in Perfective but not in Imperfective:

- 1) **mádū**      **dībī**                      **à**      **fāṅá**    swá-bòndà  
M.            shut.PFV                      COM    force    house-door.POSS  
‘Madu shut the door with force’.
- 2) **mádū**            swá-bòndà                      **dìbì-ḡ<sup>n</sup>**                      **à**      **fāṅá**  
M.            house-door.POSS                      shut-IPFV                      COM    force  
‘Madu shut the door with force’.
- 3) **\*mádū**            swá-bòndà                      **à**      **fāṅá**    **dìbì-ḡ<sup>n</sup>**  
M.            house-door.POSS                      COM    force    shut-IPFV  
Int.: ‘Madu shuts the door with force’.

# (Pseudo)incorporation?

Wh-movement:

1. **pè**            **mádū** **wésé**            **yà?**  
thing            M.            break.PFV            Q  
‘What did Madou break?’
2. \***pè** **siātā**    **sō-w<sup>n</sup>**            **kwā = : tō**            **yā?**  
S.    thing    sell-IPFV            market DAT            Q  
‘#What sells Sata at the market?’
3. **ūspmà**        **fīnà = : nā-mí**            **\*(wā)** **bīlā = ká?**  
clothes        what    1SG-ACC            DEM    put.on = RES  
‘What kind of shirt did I wear?’

# Accusative subject problem

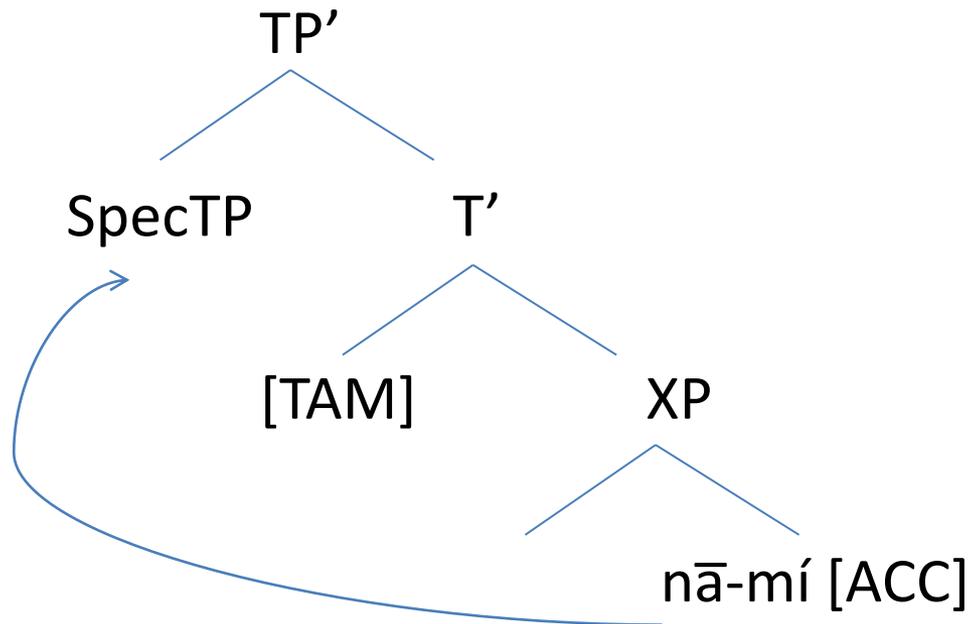
- Let us suppose that accusative (in Imperfective-type clauses) and nominative (in Perfective ones) are assigned by the same head XP
- In this case, it is hard to explain why the same head assigns two different cases depending on the TAM form of the verb
- A more elegant explanation is needed

# Accusative NP raising?

- - Null subject parameter
- **General rule:**  
Fill the subject position with a non-zero NP obligatorily. If there is no good candidate, just fill it with something.
- No zero subject sentences are possible in Natoro, even in pro-drop/ellipsis contexts:
  1. {Q: Has Madou come?}  
*\*pâ*  
come.PFV  
Int.: ‘He has come’.

# Accusative NP raising?

- Proposal: in Imperfective-type clauses, the accusative is assigned first, and then the accusative-marked NP is moved to the subject position



# Accusative NP raising?

- Under this approach, the DO (= pseudoincorporated) phrase does not receive any case
- Then the external argument is assigned the accusative case, since it cannot receive any other case marking
- According to the non-null subject requirement, the only accessible NP is promoted to the subject position

# Accusative case assignment

- [Wood 2017]

**Accusative Subject Generalization (ASG):** *Accusative subjects in Icelandic are never thematic arguments of morphologically intransitive verbs*

- “Accusative is assigned to a DP as dependent case, when that DP is c-commanded by a higher nominative or accusative DP” [ibid.: 250]
- The cases are computed on the basis of hierarchical relations between DPs (see also [Mc Fadden 2004]):
  - a. [*Case Domain* . . . DP<sub>Unmarked</sub> . . . DP<sub>Unmarked</sub> . . . ]  
DP c-commands DP from an A-position →
  - b. [*Case Domain* . . . DP-CASE1 . . . DP-CASE2 . . . ] =
  - c. [*Case Domain* . . . DP-NOM . . . DP-ACC . . . ]

# Accusative case assignment

- Under this approach, accusative subjects must receive case from DPs c-commanding them (even if they are zero pronouns, like in Icelandic)
- However, there are no such DPs in Natioro Imperfective clauses

# Accusative case assignment

- Accusative is assigned by vP [Chomsky 1989; 1991; 1995]
- If this is so, accusative can be assigned only to the external argument
- What is the head assigning the Accusative?

# Alternative explanation?

- For some reasons, accusative case needs to be assigned first in all clauses
- Most Perfective clauses have two arguments, so both nominative and accusative can be assigned
- **PROBLEM:** If the verb has a single argument, it is predicted that the accusative case is assigned first  
=> verbs with a single argument must assign the accusative case to it
- A possible solution could be postulation of a mechanism which would prevent assignment of accusative

# Middle voice forms

- In Natoro, there are middle voice forms which operate only on Perfective forms
- They are marked by tone-lowering (usually accompanied by prolongation of the final vowel)
- Middle voice forms do not have external arguments in their argument structure since they cannot be expressed overtly:
  1.  $mádū \quad dī = \grave{}$   $(*à \quad zàkî)$   
M.  $kill.PFV = MED \text{ COM} \quad Z.$   
'Madou kil
- Samue (Wara) language: no middle voice and no accusative marking in Imperfective [Ouattara 2015]

# Middle voice forms

## +agent, -theme:

1. mādū      cā = ̀:ⁿ  
M.            lie.PFV = MED  
‘Madou lied’.

## +agent, ±theme:

2. mādū      sùmà = :  
M.            know.PFV = MED  
‘Madou knows something’

## -agent, +theme:

3. bā:bā      lālī = ̀:  
sheep      drip = MED  
‘The sheep got lost’.

# Middle voice forms

- Only two arguments (S and O) are subject to middle voice alternation. Any other NPs/PPs are not.

1.  $\bar{n}\bar{a}^n$        $\bar{k}\bar{a}\bar{n}\bar{i}$        $\bar{n}\bar{a}$        $\bar{m}\bar{o}\bar{t}\bar{o}$        $\bar{s}\bar{i}\bar{a}\bar{t}\bar{a}$        $\bar{t}\bar{o}$   
1SG      show.PFV      1SG      bike      S.      DAT

‘I showed my bike to Sata’.

2.  $^*s\bar{i}\bar{a}\bar{t}\bar{a}$        $\bar{k}\bar{a}\bar{n}\bar{i} = \bar{\text{`}}$        $\bar{n}\bar{a}$        $\bar{m}\bar{o}\bar{t}\bar{o}$   
S.      show = MED      1SG      bike

Int.: ‘Sata was shown my bike’.

# Middle voice forms

- Middle voice forms do not have external arguments in their argument structure since they cannot be expressed overtly:

1. mādū      dī = ̀:      (\*à      zàkî)

M.              kill.PFV = MED COM      Z.

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# Conclusion

- Perfective and Imperfective clauses in Natioero follow different patterns of case assignment
- If they cannot be reduced to each other, an explanation is needed why the accusative is assigned to the external argument (without any other argument which would occupy the higher position)
- If cases are assigned in a uniform way, then for some reasons accusative must be assigned first and marked are clauses which cannot assign accusative