Multiple Exponence in Northern Toussian
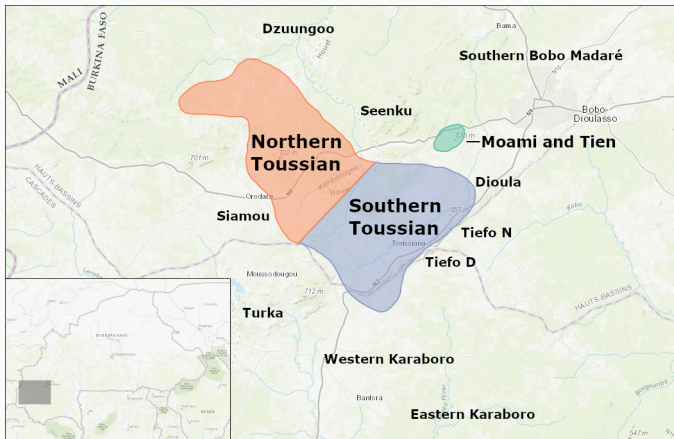
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Spoken in southwest Burkina Faso

Genetic classification debated—possibly Gur (Naden 1989, Güldemann 2018)

This talk will discuss multiple exponence of the imperfective morpheme *nà*

- The ME is a type of exuberant exponence
- The exponents are function words within an auxiliary domain (SAuxOVX word order)
- The ME appears to be derived from a copying process
- Only a small set of lexically-specified words condition the copying

Exuberant exponence

Exuberant exponence, discussed in Harris (2009), is multiple exponence where the repeating morpheme is identical, i.e.,

- it has the same phonological makeup
- it encodes the same morphosyntactic features

(1) Batsbi (Harris 2009)

tiši^n c'a   daħ
old   house(d/d).ABS PV
d-ex-**d**-o-**d**-anŏ
CM-destroy-CM-PRES-CM-EVIDI

'They are evidently tearing down the old house.'

(2) púpó nè pī nè tó nè tíō nè bú
sheep IPFV FUT IPFV again IPFV go.IPFV IPFV cheetah
wé
see

'The sheep will go see the cheetah again.'

Phenomenon

The data are of interest to the study of multiple exponence because:

- The domain of multiple exponence is larger than the word domain
- The distribution of the exponents is due to a derivational process, rather than lexical assignment.
- This is not an agreement/concord system, the feature engaging in ME is imperfective aspect.

The primary variety of Toussian I study is the Northern Toussian (NT) of Djigouera

- All data are from this variety
- My primary consultant for this variety is Karim Traoré

Word order

SAuxOVX

- The auxiliary domain contains function words which include tense, aspect, and mood (TAM) markers, polarity items, auxiliary verbs, etc.
- X includes any adjuncts not found in the auxiliary domain, including postpositional phrases, most clausal adverbs, etc.

(3) kàrímù wū á kə̀mbē̄ wé nə́nə́ŋ
    Karim EVID PST Kə̀mbē̄ see yesterday
    '(it is known that) Karim saw Kə̀mbē̄ yesterday'

This word order is a common areal feature found in the languages of the Macro-Sudan belt (Güldemann 2007, Nikitina 2011).

The language families include:

- Mande
- Songhai
- Senoufo

Auxiliary domain

Here are the elements of the auxiliary domain.

- Columns indicate linear order of auxiliaries
- Words within the same column can never co-occur

wū EVID	á PST	sá(nɔ́) COND1	rí JUSS	sə́ DUB	kə́ NEG	pɔ̄ IS	ꜛpə́ PROG	pì FUT	tó 'again'	pwó 'come'	nɛ̀ IPFV
	à COND	pə́ COND2			kə́mɛ̄ 'no longer'					kéy 'go'	
					kə̀pə́ NEG.IMP						

The Northern Toussian multiple exponence appears to be
bounded entirely by the auxiliary domain.

The imperfective morpheme will be transcribed as *nà*, though it can surface variably in certain circumstances

- As *n* and downstep in slow speech when certain auxiliaries are present
- As *nà* in slow speech otherwise
- As nasalization and downstep in fast speech

Phonetic realization

This talk will focus solely on the morphosyntactic distribution of this morpheme, and not on its phonological/phonetic properties. See my recent ACAL 2021 talk at anthonystruthersyoung.com/CV for the phonological details.

The imperfective morpheme is an element of the auxiliary
domain and can act as the sole auxiliary in the domain.

(4) púpó **nɛ̀** bú   wé
     sheep IPFV cheetah see
     'The sheep will see the cheetah'

The imperfective morpheme will always be the rightmost function word in the auxiliary domain.

(5)   a.   púpó sɔ́   nɐ̀   bú   wé
        sheep DUB IPFV cheetah see

        '(I doubt that) the sheep will see the cheetah'

      b.   púpó á   nɐ̀   bú   wé
        sheep PST IPFV cheetah see

        'The sheep was going to see the cheetah.'

      c.   púpó ꜝpɔ́   nɐ̀   bú   wé
        sheep PROG IPFV cheetah see

        'The sheep is seeing the cheetah.'

Multiple exponence with *tó* and *pī*

Multiple exponence of the IPFV morpheme occurs when the future morpheme *pī* and the word *tó* 'again'[1] are present.

(6) a. púpó **nә̀** pī **nә̀** bú wé
     sheep IPFV FUT IPFV cheetah see
     'The sheep will see the cheetah.'

  b. púpó **nә̀** tó **nә̀** bú wé
     sheep IPFV again IPFV cheetah see
     'The sheep will see the cheetah again.'

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[1]The semantics of many particles in the auxiliary domain are currently unclear. The morpheme *tó* will be glossed as 'again' until its distribution is better understood.

If both *tó* and *pī* are present, the imperfective marker will surface three times.

(7) púpó n**ὲ** pī n**ὲ** tó n**ὲ** bú wé
     sheep IPFV FUT IPFV again IPFV cheetah see
     'The sheep will see the cheetah again'

When additional TAM particles surface in the auxiliary domain
with *tó* or *pī*, there are no additional exponents.

(8) a. púpó sɔ́ **nɔ̀** pī **nɔ̀** tó **nɔ̀** bú wé
        sheep DUB IPFV FUT IPFV again IPFV cheetah see

        '(I doubt) the sheep will see the cheetah again'

  b. púpó á kɔ́ **nɔ̀** tó **nɔ̀** bú wé
      sheep PST NEG IPFV AGAIN IPFV cheetah see

      'The sheep was not going to see the cheetah again'

pī and *tó*—location in the Aux domain

wū EVID	á PST	só(nɔ́) COND1	rí JUSS	sɔ́ DUB	kɔ́ NEG	pɔ̄ IS	'pɔ́ PROG	pi FUT	tó 'again'	pwó 'come'	nɔ̀ IPFV
	à COND	pɔ́ COND2			kámē 'no longer'					kéy 'go'	
					kɔ̀pɔ́ NEG.IMP						

Conditioning factors

There appear to be certain locality effects. The particle *tó* can surface in different linear orders, occurring before or after *pī* without changing the meaning or distribution of the imperfective marker.

(9) púpó nà̰ pī nà̰ tó nà̰ bú wé
     sheep IPFV FUT IPFV again IPFV cheetah see
     'The sheep will see the cheetah again'

(10) púpó nà̰ tó nà̰ pī nà̰ bú wé
     sheep IPFV again IPFV FUT IPFV cheetah see
     'The sheep will see the cheetah again'

However, if *tó* occurs to the left of a TAM particle other than *pī*, the imperfective morpheme surfaces only once.

(11)   a.   *tó* after ꜜ*pə́*

púpó ꜜpə́ nə̀ tó nə̀ bú   wé
sheep PROG IPFV again IPFV cheetah see

'The sheep is seeing the cheetah again.'

b.   *tó* before ꜜ*pə́*

púpó tŏ   ꜜpə́ nə̀ bú   wé
sheep again PROG IPFV cheetah see

'The sheep is seeing the cheetah again.'

The multiple exponence is local

- We see additional exponents if there is a line of ME conditioning morphemes like *tó* and *pī*.
- Any interruption within that line of morphemes prevents further exponents of *nà* from occurring.

							(tó)	(tó)	(tó)		
wū EVID	á PST	sá(nɔ́) COND1	rí JUSS	sɔ́ DUB	kɔ́ NEG	pɔ̄ IS	ꜝpá PROG	pǐ FUT	pwó 'come'	nà IPFV
	à COND	pá COND2			kɔ́mɛ̄ 'no longer'				kéy 'go'	
					kàpá NEG.IMP					

Multiple exponence with auxiliary verbs

Two verbs can occur within the auxiliary domain as auxiliary verbs[2]:

- kéy 'go'
- pwó 'come'

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[2]These verbs could possibly be analyzed as a type of serial verb construction (SVC). However, NT has a different SVC construction which does not interact in the same way with the auxiliary domain. These will be called auxiliary verbs for simplicity.

Multiple exponence with auxiliary verbs

Unlike most verbs, *pwó* and *kéy* have different perfective and imperfective forms.

(12) Forms of *pwó* 'come'

    a. Perfective

        kàrímù á   pwǒ
        Karim   PST come.PFV

        'Karim came.'

    b. Imperfective

        kàrímù á   nà   pī
        Karim   PST IPFV come.IPFV[3]

        'Karim was going to come.'

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[3] The future morpheme *pī* appears to be derived from the imperfective form of *pwó* 'to come.'

Multiple exponence with auxiliary verbs

(13) Forms of *kɛý* 'go'

    a. Perfective

       kàrímù á   kěy
       Karim PST go.PFV

       'Karim went.'

    b. Imperfective

       kàrímù á   nà   tíō
       Karim PST IPFV go.IPFV

       'Karim was going to go.'

Multiple exponence with auxiliary verbs

The auxiliary verbs can mean a number of things, depending on context.

(14) a. à pwǒ[4] kə̀   tɛ̀
   3SG.HUM come 3SG.NONHUM take
   'She/he came to take it.'

  b. à mɛ̄ pwó wə̄n
   3SG.HUM EXCL come leave
   'He/she managed to leave.' (text 0182)

  c. à pɔ̄ pwó tɛ̰̀ blɛ̰́
   3sg.hum IS come settle Blɛ̰́
   'When he settled Blɛ̰́...' (0080)

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[4]The tone is LH due to grammatical tone—found on main verbs as well, there appears to be a L floating tone with intransitive verbs. It is interesting that it is found on the auxiliary verbs of transitive phrases, as seen here.

Multiple exponence with auxiliary verbs

As auxiliary verbs, these words exhibit multiple exponence—the imperfective morpheme will be found to their right.

(15) With *pwó* as auxiliary verb

    a. Perfective

        kàrímù á   pwǒ   kə̀   tὲ
        Karim PST come.PFV 3SG.NONHUM take

        'Karim came to take it.'

    b. Imperfective

        kàrímù á   nə̀ pī   nə̀ kə̀   tὲ
        Karim PST IPFV come.IPFV/FUT IPFV 3SG.NONHUM take

        'Karim was going to come take it,' or 'Karim was going to take it.'

(16) With *kéy* as auxiliary verb

    a. Perfective

        kàrímù á   kěy   kà   tɛ̀
        Karim PST go.PFV 3SG.NONHUM take

        'Karim went to take it.'

    b. Imperfective

        kàrímù á   **nɘ̀** tíō   **nɘ̀** kà   tɛ̀
        Karim PST IPFV go.IPFV IPFV 3SG.NONHUM take

        'Karim was going to go take it.'

When *tó* 'again,' *pī* FUT, and an auxiliary verb such as *tíō*
'go.IPFV' are all present, we can find four exponents of *nà*.
Auxiliary verbs are to the right of TAM markers, but left of *nà*

(17) bíbà   sá   nà   pī   nà   tó   nà   tíō   nà   kò
   Abibata DUB IPFV FUT IPFV again IPFV go.IPFV IPFV meat
   tè
   take
   '(I doubt that) Abibata will go take the meat again.'

Though it is possible to have four exponents of the imperfective marker *nà*, some of the exponents can be omitted.

(18) a. bíbà   **nà**   pī — tó   **nà**   tíō   **nà**   kò   tè
      Abibata IPFV FUT   again IPFV go.IPFV IPFV meat take
      'Abibata will go take the meat again.'

     b. bíbà   — pī **nà**   tó   **nà**   tíō   **nà**   kò   tè
      Abibata   FUT IPFV again IPFV go.IPFV IPFV meat take
      'Abibata will go take the meat again.'

Of all three variants, my consultant Karim prefers (19). Note that this varient retains locality.

(19) bíbà   — pī **nà** tó **nà** tíō **nà** kò tè
      Abibata   FUT IPFV again IPFV go.IPFV IPFV meat take
      'Abibata will go take the meat again.'

Nonetheless, several different combinations of exponents of *nà* are valid.

The optionality of the multiple exponence is not unattested, e.g.,

- Lower Jubba Maay (Paster 2006, cited in Caballero & Harris 2012)
- Gitksan (Brown n.d., cited in Caballero & Harris 2012)

Review of phenomena

The multiple exponence of the imperfective morpheme *nà* occurs when certain morphemes are present:

- The morphemes *pī* FUT and *tó* 'again'
- Auxiliary verbs
- But only when these morphemes form a direct chain to the right edge of the auxiliary domain, retaining locality.

												(tó)		(tó)		(tó)				
wū	EVID	á	PST	sá(nɔ́)	COND1	rí	JUSS	sɔ́	DUB	kɔ́	NEG	pɔ̄	IS	ꜜpɔ́	PROG	pī	FUT	pwó	'come'	nà	IPFV
		à	COND	pɔ́	COND2					kámē	'no longer'							kéy	'go'		
										kàpɔ́	NEG.IMP										

The imperfective morpheme is located underlyingly at the right edge of the auxiliary domain.

There are morphemes which copy the imperfective morpheme from the right, if it is present, and place the copy to the left. This process can be done iteratively if several copying morphemes are present.

If there is a non-copying word which intervenes between two copying morphemes, it will not copy the imperfective morpheme and the leftmost copying morpheme will not be able to copy *nà*.

We will see this process schematized with the following
sentence:

(20) púpó sə́ **nɔ̀** tó   **nɔ̀** pī **nɔ̀** bú   wé
      sheep DUB IPFV again IPFV FUT IPFV cheetah see
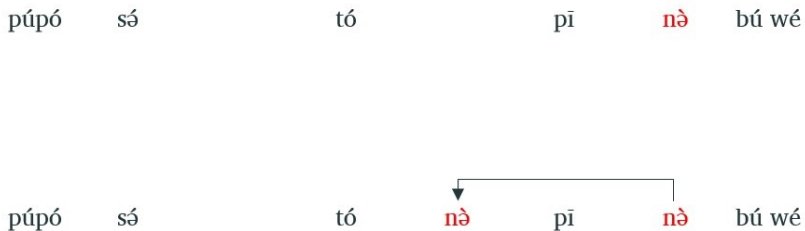   '(I doubt) the sheep will see the cheetah again.'

púpó   sɔ́   tó   pī   nə̀   bú wé

púpó   sɔ́   tó   pī   nɜ̀   bú wé

púpó   sɔ́   tó   nɜ̀   pī   nɜ̀   bú wé

The leftward iterative copying is posited to account for alternations found in (21).

(21)   a.   púpó ꜜpə́ **nə̀** tó **nə̀** bú   wé
                      sheep PROG IPFV again IPFV cheetah see
                      'The sheep is seeing the cheetah again.'

         b.   púpó tó   ꜜpə́ **nə̀** bú   wé
                      sheep again PROG IPFV cheetah see
                      'The sheep is seeing the cheetah again.'

Once all the imperfective morpheme has been copied as far as possible, certain exponents can be deleted.

This accounts for the optionality of the surface representation.

Northern Toussian exhibits a form of phrasal exuberant exponence with the imperfective morpheme *nà*.

Conclusion

The exponents occur in a direct chain from the right edge of the auxiliary domain.

This is attributable to a copying effect where certain morphemes can copy the IPFV marker iteratively

The number of exponents is variable because the copies of the imperfective morpheme are optional (though most are usually pronounced)

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