The Noun Phrase in Gyeli

Nadine Borchardt, Humboldt-Universität zu Berlin November 29, 2011

1 Preliminaries

Note that transcriptions are based on IPA and not on common Bantu orthography.

1.1 Location of the "Gyeli noun phrase" within the dissertation-A description of Gyeli

+ Preliminary structure of the thesis

- 1. Introduction
- 2. Phonology and tonology
- 3. Nouns and the noun phrase
- 4. Verbs and the verb phrase
- 5. TAM
- 6. Clause types
- 7. Texts
- 8. Lexicon

+ The project

DoBeS, the project, the team, distribution of work, the first year

1.2 Basic information on Gyeli





- ISO 639-3: gyi

- "Pygmy" hunter-gatherers in southern Cameroon and Equatorial Guinea (4000-5000 speakers scattered in a vast area)

- Bantu A80 (Niger-Congo, Atlantic-Congo, Volta-Congo, Benue-Congo, Bantoid, Southern, Narrow Bantu, Northwest, A, Makaa-Njem (A.80))

- controversial status: language (Ethnologue) vs. dialect (Bahuchet in prep.) - Gyeli also known under the names Bagyeli, Bakola, Bajelli, Bako, Bogyel, Likoya, Babinga...

- contact with farming communities of other Bantu languages (Basaa, Kwasio, Bulu, Fang, Ewondo, Bakoko, Yasa)

- different varieties of Gyeli depending on contact language

- endangered language because of change of subsistence

- variety of my dissertation spoken in the Bulu region

- data: mostly own fieldwork, previous work by Renaud (1976) concentrates on variety in contact with Mvoumbo speakers and on phonology + morphology; there are significant differences between the two varieties/descriptions in terms of lexicon, phonology and morphology

1.3 Basic phonology

+ Consonant inventory

	Bilabial	Labiodental	Alveolar	Palatal	Velar	Glottal
Nasal	m		n	n	ŋ	
Plosive	p, b		t, d		k, g	?
Implosives	[6 > b]		[d > d]			
Prenasalized stops	(mp), mb		nt, nd		ŋk, ŋg	
Prenasalized fricatives			(ns), nz			
Fricatives	$[\beta > b]$	f, v	s, z		$[\gamma > g]$	
Affricates	pf, bv		t∫, dʒ			
Trill			[r > d]			
Lateral approximants			1			
Semi-vowels	W			j		

Table 1: Gyeli phoneme inventory

- in [x > y] brackets: x is supposedly allophone of y

- in () brackets: unclear status as to phonemic status or consonant cluster

- labialized consonants: k^w , g^w , f^w

- palatalized consonants: p^j , b^j , d^j , k^j , g^j , m^j , n^j , nd^j , ηg^j

+ Vowel inventory

- 7 vowels: Ngué Um (2011) reports 7 vowels /i, u, e, o, ε , \mathfrak{d} , \mathfrak{d} for the Basaa variety and Renaud the same for the Mvoumbo variety, but there might be even 9 including /1, \mathfrak{d} /

- nasal counterparts for each oral vowel, supposedly because of loss of nasal coda

- vowel length: long vowels attested for at least /i:, u:, o:, ϵ :, o:, a:/, but not (yet) for /i:, u:, e:/; long vowels seem at least sometimes to be the result of the omission of intervocalic

consonants

- no vowel harmony attested so far

+ Tone

- two level tones L and H dù oven vs. dú lie
- a rising HL and a falling LH tone sâ thing; lè-wă twin
- lexical tone, grammatical tone expected in TAM system
- tonal processes: H tone spreading and downstep

+ Syllable structure (of nouns)

- most frequent in nouns are bisyllabic roots, then monosyllabic ones, nouns with 3 syllables occur sometimes, those with 4 or 5 are very rare and constitute reduplications and/or borrowings

- mostly open syllables
- consonant clusters or labialized/palatalized consonants as onset
- only nasal coda

+ Open questions

- Are there really implosives? If so, are they phonemic or variants?
- How to analyze prenasalized/labialized/palatalized consonants? Are they phonemic?
- How to analyze the vowel system? 7 or 9 vowels? Vowel harmony?

2 The Gyeli noun phrase

2.1 Elements of the noun phrase

+ Noun

- the Gyeli noun consists of a root which may or may not take a prefix as in lè-kà
áclanvs. Ø-tídíanimal

+ Demonstratives

- two sets of demonstratives: proximal and distal
- proximal and distal demonstratives differ in tone and/or vowel length
- proximal demonstratives: singular classes have a falling HL, plural classes a H
- distal demonstratives: all H, all long vowels

- Ngué Um (2011) reports anaphoric demonstratives for the Kola variety in the Basaa area, so there may also be anaphoric demonstratives in the Gyeli variety in the Bulu region, but I haven't come across them yet

	proximal	distal
1	nû	núú
2	bá	báá
3	ŵ	wóó
4	mí	míí
5	lê	léé
6	má	máá
7	jê	jéé
8	bé	béé
9	pî	níí
14	bê	béé

Table 2: Gyeli demonstratives

- if the noun is modified by a demonstrative only, the demonstrative obligatorily follows the noun as in (1)

- (1) a. m-ùrì nû 1nc-man DEM.PROX.1 'this man'
 - b. m-ùrì núú
 1nc-man DEM.DIST.1
 'that man'

+ Possessive pronouns

- possessive pronouns in Gyeli have the roots as in Table 3 and take an agreement prefix (see also Table 6)

- classes 1 + 9 show a different tonal pattern than the other classes

	Singular	Plural	cl. 1	+ 9	other	classes
1	-ã	-isi	$-\hat{\tilde{a}}$	-ìsí	$-\hat{ ilde{a}}$	-ísí
2	-Э	-inɛ	-ô-	-ìné	-ĉ-	-íné
3	-8	-awo	-ê	-àwź	-é	-áwó

 Table 3: Basic possessive paradigm

- cl. 1 + 3: first high front vowel in 1. + 2. Pl changes to high back vowel (wúsí, wúné in AGR cl. 3 vs. mísí, míné in AGR cl. 6) after the semi-vowel /w/

- if the noun is modified by a possessive only, the possessive obligatorily follows the noun as in (2)

- (2) a. só w- \hat{a} friend.1 1-1SG.POSS 'my friend'
 - b. bà-s
ź b- $\hat{\tilde{a}}$
2nc-friend 2-1SG.POSS
'my friends'

+ Numerals

- high variability among Gyeli speakers in terms of counting skills (depending on whether Bagyeli have been to school or not)

- Gyeli numerals very similar to Mabi (Kwasio) numerals \rightarrow borrowing or genealogical relation?

	Gyeli	Mabi
'1'	wúrừ	wúrè
'2'	bíbáà	bá
'3'	bíláálè	bilá
'4'	bínẫ	biná
'5'	bitánè	bítán
' 6'	ntùś	ntùś
'7'	mpúèré	mbúèré
'8'	làmbì	làmbì
·9'	rèbvùá	rèbvùá
'10'	lèwúmò	wúm

Table 4: Enumeratives in Gyeli and Mabi

- Gyeli numerals '2' - '5' are modifiers and agree with the noun

- '10', '100' and '1000' are nouns and belong to different genders: '10' to 5/6, '100' to 7/8 and '1000' to 1/2

- status of '1' and '6' - '9' is unclear, they are probably not nouns, anyway they don't take agreement perfixes

- higher numerals are constructed by addition and multiplication

- addition is expressed by coordination (nominal-numeral COM numeral)

- multiplication is expressed by a N + MOD noun phrase (see Table 5)

	Addition		Multiplication
'11'	lè-wúmò ná wúrữ	'20'	mà-wúmò má-báà
'12'	lè-wúmò ná bí-báà	'30'	mà-wúm ờ má-láál è
'13'	lè-wúmò ná bí-láálè	'40'	mà-wúmò má-nấ
'14'	lè-wúm ờ ná bí-nẫ	'50'	mà-wúmò má-tánè
'15'	lè-wúmò ná bí-tánè	<i>`</i> 60'	mà-wúmò ntùó
'16'	lè-wúmò ná ntùó	'70'	mà-wúmò mbúèré
'17'	lè-wúmò ná mpúèré	'80'	mà-wúmò lòmbì
'18'	lè-wúmò ná lòmbì	' 90'	mà-wúmò rèbvùá
'19'	lè-wúmò nárèbvùá	'100'	bwújà
		'200'	bì-bwújà bí-báà
		'1000'	tódjíni
		'2000'	bà-tódjíni bá-báà

Table 5: Gyeli complex numerals

- when quantifying a noun, simplex (monomorphemic) numerals form either a noun phrase with the quantified noun (modifier numerals as in (3)) or enter a N + N construction (nominal numerals as in (4))

(3) a. số wúrề (4) a. lè-wúmò lí bà	oà-só
friend.1 one 5nc-ten 5:CON 2n	nc-friend
'one friend' 'ten friend'	
b. bà-sź bá-báà b. bwújà (yá) l	bà-sź
2nc-friend 2-two hundred.7 7:CON 2	2nc-friend
'two friends' 'hundred friends'	

- complex numerals:

- if the complex numeral is a multiplication noun phrase, the quantified noun precedes the NP as in (5a)
- if the complex numeral is a coordinated noun phrase expressing addition, the quantified noun is R_2 and the nominal numeral R_1 in a N + N construction while the modifier numeral agrees with R_2 as in (5b)
- a complex numeral including multiplication and addition is expressed via a coordination whose two conjuncts constitute NPs (N + MOD): the first conjunct comprises the multiplication NP with the nominal numeral, the second conjunct includes the quantified noun which is modified by the numeral modifier as in (5c)
- (5) a. b-ùdì mà-wúmò má-báá 2nc-person 6nc-ten 6-two '20 people'

- b. lè-wúmò lí b-ùdì ná bá-báà
 5nc-ten 5:CON 2nc-person COM 2-two
 '12 people'
- c. mà-wúmò má-báà ná b-ùdì bá-báà
 6nc-ten 6-two COM 2nc-person 2-two
 '22 people'

+ Adjectives?

- probably there is no 'adjective' category

- best candidates for 'adjectives' (good, bad, big, small) behave a bit nouny, but are not quite like the other nouns

- some come with a plural form (but not all)
- sometimes followed by an element which could be a connective
- they cannot be modified by demonstratives or possessives
- (6) a. só wà mpá / biwò friend.1 1:CON? good / bad 'good/bad friend'
 - b. bà-só bá mp[↓]á / biwò 2nc-friend 2:CON? good / bad
 'good/bad friends'

- reversiveness of mpá

- (7) a. mpá yá ndàwó goodness?.7 7:CON? house.9
 'good house/goodness of the house'
 - b. mà-mpá má ndàwó
 6nc-goodness? 6:CON? house.9
 'good houses'
- semantic change in reversing biwò
 - (8) a. m-wánò wà biwò Inc-child 1:CON? bad
 'bad child (character)'
 - b. (wè) biwò m-wánò
 PRST bad 1nc-child
 'ugly child'

 c. *biwò CON m-wánò bad CON 1nc-child
 'bad/ugly child'

- predicative use

- (9) a. m-ùrì nû \mathbf{n} mp⁴á 1nc-person DEM.PROX.1 3Sg? good 'this person is good'
 - b. m-ùrì nû à biwò
 1nc-person DEM.PROX.1 3Sg? ugly/bad
 'this person is ugly/*bad'

2.2 Gender/agreement system

- agreement targets are: possessive pronouns, demonstratives, non-nominal numerals, quantifiers, connective markers, relative markers? and verbs

- ten agreement classes form seven genders (see Table 6 and Figure 1)

- agreement class 14 is only established by a tonal difference from class 8 in the proximal demonstrative

	noun class prefix	agreement prefix (posses-	example
		sives)	
1	N or Ø	w- + special tone pattern	mùdẫ wê his wife
2	bà-	b-	bùdẫ bé <i>his wives</i>
3	Ν	W-	nlô wé <i>his head</i>
4	mì- or mìn?	mì-/m ^j -	mìnlô m ^j é <i>his heads</i>
5	lè-	1-	lèmáá lé his cheek
6	mà-	m-	màmáá mé his cheeks
7	mostly \emptyset , sometimes N	j-	siŋgi jé his cat
8	bì-	bì-/b ^j -	bisiŋgi b ^j é his cats
9	Ν	p- + special tone pattern	púlê pê <i>his body</i>
14	synchronically no prefix,	bì-/b ^j -	bwálè b ^j é <i>his pirogue</i>
	but all roots start with /b/		
	or /v/		

Table 6: Noun class and agreement prefixes



Figure 1: Gyeli gender system

- some genders have more members than others (1/2 and 7/8 bigger than 9/6 or minor genders such as 7/6 or 14/6)

- plural is always over tly marked on the noun \rightarrow loss of class 10 and its replacement by class 6

Gender	Size	Semantic tendencies
1/2	120/511	many humans, some animals, lots of loan words
3/4	65/511	many body parts, some humans, animals, a few plants, tools
5/6	83/511	body parts, animals, plants, tools
7/8	131/511	body parts, animals, plants, clothes, tools, loan words
9/6	30/511	no discernible pattern
7/6	12/511	no discernible pattern
14/6	5/511	fire, night, sun, medicine, boat

Table 7: Size and semantics of Gyeli genders

- problem to affiliate initial nasals in the singular to either the noun class prefix or the nominal root:

 \rightarrow Where does the nasal belong to? Is it a noun class prefix or part of the root? If it is a noun class prefix, is it frozen in the plural? Or do I have different types of nouns, namely those where the nasal is a noun class prefix and does not appear in the plural and those where the nasal is part of the root and does show up in the plural?

- argument for nasal belonging to the nominal root: if the nasal occurs in the plural form, then it might be part of the root

- argument for nasal prefixes: nasals often constitute a TBU and therefore are probably not part of the nominal root, their occurrence in the plural can be explained as frozen prefixes

- 1/2: jiẩ, bàpẩ mother,s; ndzó?>>, bàndzó?>> elephant,s but ntì, bà-tì in-law,s; ndzíbí, bà-dzíbí thief/ves
- 3/4: nlô, mìnlô head,s; nkù, mìnkù hole,s but nsùné, mì-sùné calf,ves; nvèwò, mì-vèwò breath
- 7/8: ndzí, bìndzí place,s but àwó, bì-làwó branch,es

2.3 Connective constructions

- connective construction: dependency relation between two nominal constituents: HEAD (R_1) - RELATOR (REL[glossed CON]) - DEPENDENT (R_2) (See Van de Velde forth.)

- canonical CON is an overt relator which agrees in an agreement prefix with R_1 and has, as in Proto-Banu, the canonical root -a with a tone that is harmonic with preceding prefix (Meeussen 1967)

AGR class	Connective
1	wà
2	bá
3	wá
4	mí
5	lé
6	má
7	já
8	bí
9	рà
14	bí / βí

Table 8: Gyeli connectives

- How do I analyze the structure of Gyeli connectives elegantly? Do I assume an underlying stem with some variation in classes 4, 5, 8 and 14? Or do I have to say that a potential stem is totally opaque synchronically?

- special case: if R_2 is a personal name, the connective takes a fixed form $\eta g \dot{a}$ for all agreement classes without being modified when R_1 is singular; if R_1 is plural, $\eta g \dot{a}$ takes a plural prefix

(10) a. m-pòmbó ŋgá nadine 1nc-face CON PN 'Nadine's face'

- b. bà-mpòmbó bá-ŋgá nadine
 2nc-face 2-CON PN
 'Nadine's faces'
- (11) a. n-kwèć ŋgá nadine 3nc-basket CON PN 'Nadine's basket'
 - b. mì-nkwèć mí-ŋgá nadine 4nc-basket 4-CON PN
 'Nadine's baskets'

- connective optionality: sometimes the use of the CON marker is optional; speakers have clear judgments about the contexts when CON can be omitted, but the rules for CON optionality are unclear to me, so I tested several hypotheses

- Note: connectives in brackets indicate their optionality while those without brackets are obligatory

- CON optionality conditioned by number morphology? More often, plural connectives are optional while their singular counterpart is obligatory; however, in (12) the singular CON is optional as well

- (12) a. n-sínó (wá) má-ká 3nc-color 3:CON 6nc-leaf 'color of leaves'
 - b. mì-nsínó (mí) má-ká 4nc-color 4-CON 6nc-leaf 'colors of leaves'

- CON optionality conditioned by gender or agreement class morphology? Does connective optionality depend on the gender/noun class of R_1 or R_2 ?

 \rightarrow no, because changing the noun class of R1 (13) and R2 (14) gives both obligatory and optional CON

(13)	a. só (wà) ŋ̀gjɛ̂́ friend.1 1:CON stranger.1	(14)	a.	só (wà) ŋ̀gjɛ̂́ friend.1 1:CON stranger.1
	'friend of the stranger'			'friend of the stranger'
	 b. ndzì pà ỳgjÊ path.9 9:CON stranger.1 'path of the stranger' 		b.	só wà 'n-kwànò friend.1 1:CON 3nc-honey 'friend of honey'

- it also dosen't depend on whether R_1 and R_2 belong to the same noun class or not:

- (15) a. só wà kùsì friend.1 1:CON parrot.1 'friend of the parrot'
 - b. số (wà) siŋgì friend.1 1:CON cat.7 'friend of the cat'

- CON optionality conditioned by tonal pattern?

- hypothesis: if the H tone of the CON spreads to the otherwise L prefix of R_2 , the tonal process might mark the dependency relation and an overt connective marker is not necessary as in (16)

- (16) a. ǹ-lô wá tíd↓í
 3nc-head 3:CON animal.1
 'the head of the animal'
 - b. mì-n-lô (mí) bá-tíd[↓]í
 4nc-head 4-CON 2nc-animal
 'the heads of the animals'

- (17) falsifies the tonal hypothesis because in (17a), there is no H spreading, but the use of CON is still optional while in (17b) there is H spreading, but the CON is still obligatory

- (17) a. m-páà (wà) n-làmbó 1nc-president 1:CON 3nc-country 'president of the country'
 - b. bá-páà bá ń-làmbó
 2nc-president 2.CON 3nc-country
 'presidents of the country'

- CON optionality conditioned by phonological environment? \rightarrow tendency: monosyllabic R₂ require CON as in (18) compared to (19); however, there are exceptions as in (13a)

(18)	a.	só wà n-tí friend. 1:CON 1nc-in.law	(19)	a.	só (wà) bà-tí friend.1 1:CON 2nc-in.law
		'the friend of the in-law'			'the friend of the in-laws'
	b.	bà-só bá ń-tí 2nc-friend 2:CON 1nc-in.law		b.	bà-só (bá) bá-tí 2nc-friend 2:CON 2nc-in.law
		'the friends of the in-law'			'friends of the in-laws'

- CON optionality conditioned by semantics of R_1 and R_2 ?

 \rightarrow there must be something to it because all nominal numerals in R₁ position have an optional CON even though they belong to different noun classes

- however, other semantic patterns (e.g. human, animacy, plants, etc.) are less clear and there are always counterexamples

 \rightarrow CON optionality conditioned by a complex set of phonological and semantic rules?

2.4 Order of modifiers in the NP

- if only one modifier in the NP, then modifier follows noun

- if two or more modifiers in the NP, things get more complicated

- I look at NPs with two modifiers; modifiers comprise: POSS, DEM, NUM + 'ADJ' and their combinability and position

- NP with two modifiers (excluding numerals) as in Table 9:

- if the noun is in the initial position, the order of two following modifiers is free \rightarrow no modifier seems to be more bound to the noun than others

- maximally one slot before the head noun \rightarrow noun cannot occur at final position

N	POSS	DEM	Ν	DEM	'ADJ'	N	POSS	'ADJ'
mwànź	$w\hat{ ilde{a}}$	nû	mwànź	nû	wa mpá	mwànź	wâ	wa mpá
mwànź	nû	wấ	mwànź	wa mpá	nû	mwànź	wa mpá	wấ
nû	mwànź	$w\hat{\tilde{a}}$	wa mpá	mwànź	nû	wa mpá	mwànź	wâ
$ $ w $\hat{\tilde{a}}$	mwànź	nû	nû	mwànź	wa mpá	wâ	mwànź	wa mpá
* nû	$w\hat{\tilde{a}}$	mwànź	* wa mpá	\hat{nu}	mwànź	* wa mpá	$w\hat{ ilde{a}}$	mwànź
$ * w\hat{\tilde{a}}$	nû	mwànź	* nû	wa mpá	mwànź	* wấ	wa mpá	mwànź
'this	my	child'	'this	good	child'	'my	good	child'

Table 9: NP with two modifiers (excluding numerals)

- NP with two modifiers including numerals as in Table 10:

- less restrictions and clear rules for modifier order

 \rightarrow What does it say about the morphosyntactic properties of the NUM wúrề *one*?

 \rightarrow need to check with NUM that takes an agreement marker

N	DEM	NUM	N	POSS	NUM	N	NUM	'ADJ'
mwànź	nû	wúrữ	mwànź	$w\hat{\tilde{a}}$	wúrữ	mwànź	wúrừ	wa mpá
mwànź	wúrầ	nû	mwànź	wúrầ	wấ	mwànź	wa mpá	wúrằ
nû	mwànź	wúrữ	wúrữ	mwànź	$w\hat{\tilde{a}}$	* wúrữ	wa mpá	mwànź
nû	wúrầ	mwànź	wúrữ	$w\hat{\tilde{a}}$	mwànź	wúrữ	mwànź	wa mpá
? wúrữ	mwànź	nû	wâ	mwànź	wúrữ	wa mpá	mwànź	wúrữ
? wúrữ	nû	mwànź	wâ	wúrữ	mwànź	wa mpá	wúrữ	mwànź
'this	one	child'	'my	one	child'	'one	good	child'

Table 10: NP with two modifiers (including numerals)

- even more complex with three 'modifiers' in the NP since 'rules' for two modifiers don't hold for three modifiers (N POSS DEM 'ADJ')

- free order of modifiers following the noun as in (20)
- only one slot before the head noun as in (21)

- (20) a. wa mpá m-wànó wấ nû
 ? good 1nc-child 1-1SG.POSS DEM.PROX.1
 'this my good child'
 - b. *wa mpá m-wànó nû wấ
 ? good 1nc-child DEM.PROX.1 1-1SG.POSS
 'this my good child'
- (21) nû wấ m-wànó wa mpá DEM.PROX.1 1-1SG.POSS 1nc-child ? good 'this my good child'

2.5 The status of basic color terms

- What part of speech are basic color terms in Gyeli? - while new color innovations in Gyeli are all nouns, the traditional basic color terms have different morphosyntactic properties (see Table 11)

Gyeli color	POS	English correspondence	
ná vyůvyů / (nsinó wá) ná vyů		'black'	
(nsìnź wá) ná mbàmbàlà		'white'	
$\mathbf{n}\mathbf{\acute{a}}$ bibi / (nsinź wá) $\mathbf{n}\mathbf{\acute{a}}$ bi	?	'red'	
ná yêy è / (nsìnź wá) ná yê	?	'kind of white' (lost color)	
ná pfûpfù / (nsinź wá) ná pfû		'kind of white'(changed color)	
mpùlé / (nsìnó wá mpùlé)	noun	'yellow' (type of tree with yellow bark)	
máká / (nsìn ź wá máká / léká / ká)		'green' (leaves)	

Table 11: Gyeli color terms

- What is **ná**?

- they are not nouns since they don't trigger agreement and don't have a plural form

- they are not verbs (but are probably derived from verbs) since ná is not a subject agreement marker

- they are not adjectives or any other modifier agreeing with the noun since they don't take any agreement marker

- (22) dʒìjó ná bìbí chair.7 ? red
 'the red chair' or 'the chair is red'
- (23) Mvoumbo
 - a. á bibi tèbèdi? red table.?'the red table'

b. tèbèdì ná bìbì table.? ? red
'the table is red'

other occurrences of ná:

- COM marker (see e.g. complex addition numerals)
- máná morning \rightarrow ná máná tomorrow, until tomorrow
- kùyú evening \rightarrow ná kùyú yesterday

Concluding remarks and discussion

- Noun class prefixes
- Morphosyntactic status of 'adjectives'
- Connective optionality
- Modifier order in the NP
- Part of speech of basic color terms and status of ná
- Suggestions on glossing

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