

Tense and Aspect in Gyeli (Bantu A80)

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Gyeli language

- Bantu A80
- 'Pygmy' hunter-gatherers (PHGs)
- 4000-5000 speakers dispersed over an area of 12.500 km²
- speakers change their traditional way of life (more sedentary, more farming, less hunting)
- speakers shift to neighboring languages of farmers
- different dialects corresponding with different contact languages
- intense contact with neighboring languages

Chapter 4: Verbs and the verb phrase

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Gyeli promises to make a contribution to our understanding of variation in Bantu grammatical systems.

('Pygmy') hunter-gatherer societies have attracted much interest because they are culturally and genetically distinct---it remains to be seen if this corresponds to linguistic differences also.

- There is a general feeling that PHG languages have less elaborate, 'simpler' structures than Bantu farmer languages.
- My recent results from the last months indicate that this is true for some parts of the grammar, namely in the minimality of the tense system.

Tense in typical Bantu languages

Bantu languages are notable for their multiple time divisions
(Nurse 2008: 22)

- distinction in terms of temporal proximity/distance
- 2-3 past tenses
- 1 or no future distinction, or 2-3 future distinctions

Expression of tenses

- inflectional morphology (verbal affixes)

Examples of tense expression in Bantu

- (1) Shona (S10) (Nurse 2008: 81)

nd-a-dy-á

1S-PST1-eat-FV

'I ate (earlier today).'

- (2) Nkoya (L62) (Nurse 2008: 29)

w-a-mu-shíng-ile

3S-PST3-3S.OM-look-PST3

'She looked (PST3) for him.'

Tense in Gyeli

Tense in Gyeli is marked by means of

- tone on the pronominal subject marker (SM) (and the verb stem) and
- vowel lengthening of the SM

The Gyeli verb structure

Slot		Radical	Prefinal	Post-final
Function		Root	valence change	participant, NEG, clause type (?)

Slot	Pre-initial	Initial	Post-initial	Pre-radical	Radical	Prefinal	Final	Post-final
Function	TAM, NEG, clause type	Subject concord	TAM, NEG, clause type	Object concord	Root	TAM, valence change	TAM	participant, NEG, clause type

The Gyeli verb stem

Gyeli verb stems have one, two, or three syllables

Possible tonal patterns on Gyeli verb stems

σ	H L
$\sigma \sigma$	H L L L
$\sigma \sigma \sigma$	H L L L L L

The Gyeli verb stem

Diachrony

- Diachronically, verb stems were monosyllabic.
- Additional syllables come from verbal extensions (synchronically or diachronically).
- Extension morphemes are L, or often analyzed as toneless.

The Gyeli subject marker

The pronominal SM in Gyeli is optional if the tense is clear from the context

(3) Gyeli (A801)

m-wánɔ̀ (á) ké ndtáwɔ̀
1-child (3S.PRES) go 9.house

'A/the child goes home.'

The Gyeli subject marker in comparison with Swahili

(4) Gyeli (A801)

m-wánò (á) ké ndtáwò
1-child (3S.PRES) go 9.house

'A/the child goes home.'

(5) Swahili (G42)

m-toto a-na-kwenda nyumba-ni
1-child 3S-PRES-go 9.house-LOC

'A/the child goes home.'

Gyeli has four tenses

Tense	Example	Gloss
PRES	<i>á dè</i>	's/he eats'
PST1 (recent)	<i>à dé</i>	's/he ate (recently)'
PST2 (remote)	<i>àà dé</i>	's/he ate (a long time ago)'
FUT	<i>àà dè</i>	's/he will eat'

Tenses in different verb stems

Tense	σ 'eat'	$\sigma\sigma$ 'buy'	$\sigma\sigma\sigma$ 'send'
PRES	<i>á dè</i>	<i>á gyàgà</i>	<i>á lúmèlè</i>
PST1	<i>à dé</i>	<i>à gyàgá</i>	<i>à lúmélé</i>
PST2	<i>áà dé</i>	<i>áà gyàgá</i>	<i>áà lúmélé</i>
FUT	<i>àà dè</i>	<i>àà gyàgà</i>	<i>áá lúmèlè</i>

Generalizations on Gyeli tense expressions: PRESENT

Tense	Expression
PRES	H SM + default tonal pattern on verb stem

á dè 's/he eats'
á gyàgà 's/he buys'
á lúmèlè 's/he sends'

Generalizations on Gyeli tense expressions: PAST1

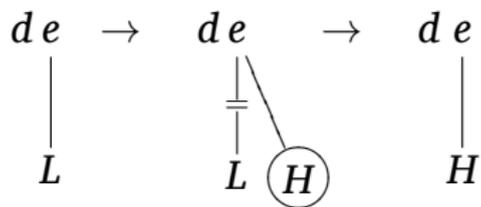
Tense	Expression
PST1 (recent)	L SM + H on the last syllable(s) of verb stem

à *dé* 's/he ate'

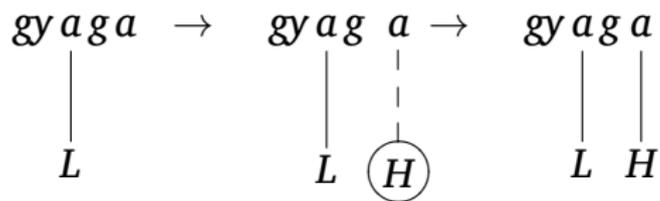
à *gyàgá* 's/he bought'

à *lúmélé* 's/he sent'

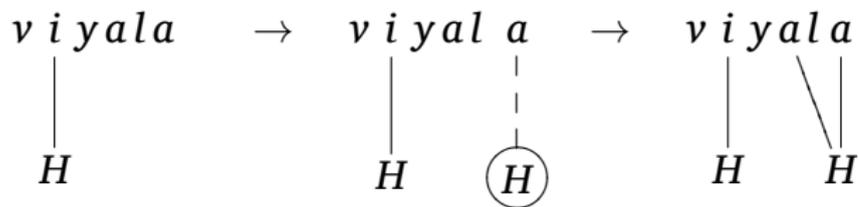
Past tense: Monosyllabic stem, *dè* 'eat'



Past tense: Bisyllabic stem, *gyàgà* 'buy'



Past tense: Trisyllabic stem, *víyàlà* 'touch'



Generalizations on Gyeli tense expressions: PAST2

Tense	Expression
PST2 (remote)	vowel lengthening of SM with H L pattern + H on the last syllable(s) of verb stem

áà dé 's/he ate'

áà gyàgá 's/he bought'

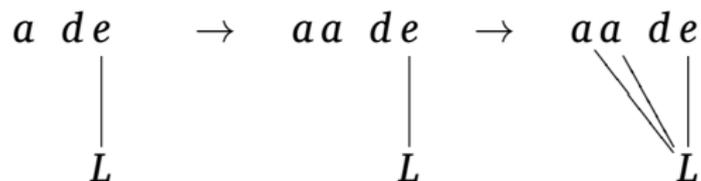
áà lúmélé 's/he sent'

Generalizations on Gyeli tense expressions: FUTURE

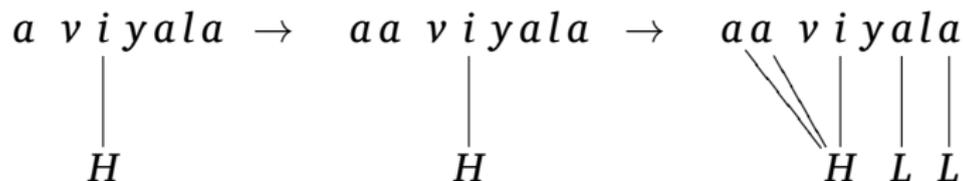
Tense	Expression
FUT	vowel lengthening of SM, while vowel receives its tonal specification from first tone of verb stem + default tonal pattern on verb stem

àà dè 's/he eats'
àà gyàgà 's/he buys'
áá lúmèlè 's/he sends'

Future tense: Monosyllabic stem, *dè* 'eat'



Future tense: Trisyllabic stem, High tone, *víyàlà* 'touch'



Generalizations on Gyeli tense expressions

- SMs have fixed tonal patterns in PRES (H) and PST1 (L) and PST2 (H L), while the lengthened FUT SM receives its tonal specification from the first tone of the verb stem
- PST is generally expressed by a floating H that attaches to the right of the verb stem (and spreads across toneless TBUs of extension morphemes)

Interaction with syntactic tone

If any other argument follows the verb, a floating H attaches to the right of the verb stem (and on otherwise L noun class prefixes)

- (6) a. á dè
 3S.PRES eat
 'S/he eats.'
- b. á dé bé-déwò
 3S.PRES eat 8-food
 'S/he eats food.'
- c. á dé dèè
 3S.PRES eat now
 'S/he eats now.'

Generalizations on Gyeli tense expressions

→ Even though the tonal pattern of the verb stem changes in certain tenses, it is really the SM that carries tense information since the verb stem tones may be subject to changes induced by syntactic tone.

Gyeli and Mabi tenses in comparison

Tense	Gyeli	Mabi	Gloss
PRES	<i>á dè</i>	<i>nyé dì</i>	's/he eats'
PST1 (recent)	<i>à dé</i>	<i>nyè ndí</i>	's/he ate (recently)'
PST2 (remote)	<i>áà dé</i>	<i>nyè mí ndí</i>	's/he ate (a long time ago)'
FUT	<i>àà dè</i>	<i>nyàà dì</i>	's/he will eat'

→ Mabi uses much more inflectional morphology in tense expression than Gyeli

Further neighboring/related languages in comparison

Tense	Basaa (A43)	Nen (A44)	Ewondo (A72a)	Makaa (A83)	Koozime (A84)
PST4		le			
PST3	´	ka	-ngá-		
PST2	pî	ná H	-á-	a	á
PST1	N´	nó	\emptyset	ámè	\emptyset (tones)
PRES	´N	\emptyset	-ayi-	\emptyset	\emptyset (tones)
FUT1	(k)â -	étàse	-n-	e	ó
FUT2	-a-	ndo...	-ngá-	bá	
		ak			
FUT3		H ɲo			
FUT4		nă			

Neighboring languages in comparison

- use of tone in tense expression is widely employed
- however, neighboring and related languages use much more inflectional morphology in tense expression than Gyeli
- contributes to the discussion whether HG languages are structurally reduced

Definition of aspect

grammaticalized expression of internal temporal constituency

Aspect in typical Bantu languages

Shared aspectual categories (Nurse 2008: 24)

- perfective
- imperfective
- progressive
- habitual
- persistive
- anterior (perfect)

Expression of aspect

Aspect in Bantu is typically encoded to the right of tense by

- inflection (bound) or
- compound constructions (periphrastic)

Examples of aspect expression in Bantu: inflection I

Aspect markers occur most often at FV slot, as exemplified by Nurse (2008: 131) with Kamba (E55)

- (7) a. a-∅-tony-**a**
3S-∅-be.able-FV
'S/he is able.'
- b. n-ũ-∅-semb-**eete**
FOC-3S-∅-run-ANT
'S/he has been running.'
- c. n-ũ-∅-koot-**ie**
FOC-3S-∅-pull-PFV
'S/he pulled.' (ie > *-ire)
- d. n-ũ-∅-koot-**aa**
FOC-3S-∅-pull-IPFV
'S/he always pulls.' (aa > *-aga)

Examples of aspect expression in Bantu: inflection II

Also quite commonly, aspect is expressed at the pre-stem TA slot as in Mbuun (B87), Nurse (2008: 131)

- (8) a. ba- \emptyset -dia
3P- \emptyset -eat
'They eat/are eating.'
- b. ba-**ye**-dia
3P-PRG-eat
'They are eating.'
- c. ba-**wu**-toma
3P-HAB-cry
'They cry (regularly).'
- d. ba-**be**-toma
3P-ITR-cry
'They are crying again.'

Examples of aspect expression in Bantu: periphrastic I

'In verbs [...] which include a present component, it is usual for there to be just a single verb, whereas when a reference to past or future is included, the use of compound constructions is more common.' (Nurse 2008: 131)

Examples of aspect expression in Bantu: periphrastic II

- (9) Swahili (Nurse 2008: 132)
- a. tu-**li**-kuwa tu-**me**-imba
1P-PST-be 1P-ANT-sing
'We had sung.'
 - b. tu-**li**-kuwa tu-**ki**-imba
1P-PST-be 1P-SIT-sing
'We were singing, used to sing.'
 - c. tu-**ta**-kuwa tu-**me**-imba
1P-FUT-be 1P-ANT-sing
'We will have sung.'
 - d. tu-**ka**-kuwa tu-**na**-imba
1P-NAR-be 1P-PROG-sing
'And we were singing.'

Aspect in Gyeli

Aspect in Gyeli is characterized by

- very little grammaticalized aspectual marking
 - progressive *nzí*
 - inchoative *long LH SM*
 - anterior?
- many periphrastic constructions (with (semi-)auxiliaries)
 - (general) perfective *bwàá* 'have'
 - recent perfective *lɔ́* 'come'
 - completive *sílè* 'finish'
 - prospective *mwáà* 'have'
 - habitual *verb stem repetition*

PROGRESSIVE *nzí*

Progressive PROG

- 'represents a situation in progress at and around reference time' Nurse (2008: 139)
- 'common subtype of imperfective' → Since unmarked verb form seems to carry an imperfective meaning as default and since *nzí* seems to emphasize an action in progress, I prefer to refer to it as PROG
- The status of *nzí* is not entirely clear. It is not an obvious verb like the marking in periphrastic aspectual constructions. In the meantime, I call it a particle.

PROGRESSIVE *nzí*

- (10) a. *mé* *dè*
1S.PRES eat
'I eat. (imperfective)'
- b. *mé* ***nzí*** *dè*
1S.PRES PROG eat
'I'm eating.'
- c. *mè* ***nzí*** *wúmbè ná* *b-wánò b-áá*
1S.PST1 PROG want QUOT 2-child 2-POSS.1S
bá bwámò mpù mí-ntáŋgáné, bè-kúdé bí
2 receive like 4-white.person 8-skin 8:CON
mpâ
good
'I wanted my children to receive like the white
people, good skin.'

INCHOATIVE *long SM with L H tonal pattern*

INCHOATIVE INCH

- refers to a period of time shortly after the beginning of an action or state
- differs from the prospective aspect that refers to the time immediately before the beginning of an action or state

(11) a. á gyì
 3S.PRES cry
 'She cries. (imperfective)'

b. àá gyì
 3S.INCH cry
 'She has started to cry, is at the beginning of
 crying. (Elle se met á pleurer, elle pleure déjà.)'

Anterior? *long final V on verb with H L pattern, alternating with -m̀ suffix* → 'already'

- There is an alternating pattern denoting 'already'.
- Either, the 'already' meaning is expressed by a long final vowel with a H L pattern (12a)
- or by a suffix -m̀ (12b)
- It seems to be lexically specified which verb uses which construction.

- (12) a. m̀ déè
1S.PST1 eat.ANT?
'I ate already.'
- b. m̀ lǎǎ-m̀
1S.PST1 pass-ANT?
'I passed already.'

Anterior? *long final V on verb with H L pattern, alternating with -m̀ suffix* → 'already'

-m̀ in neighboring languages

- In Mabi, this aspect is systematically and solely expressed by the suffix *-m̀* while the vowel lengthening strategy is not employed.
- Gyeli seems to have borrowed this suffix for only certain verbs, but not as a paradigm/productively.
- It is typical that Gyeli changes a Kwasio final vowel [a] → [ɔ] which seems to be rather an innovation than a retention (Duke p.c.)

Anterior? long final *V* on verb with *H L* pattern, alternating with *-m̀* suffix → 'already'

-m̀ in neighboring languages

- Nurse (2008: 156) suggests that shapes such as [ma] are derived from **-mala* 'finish' and labels this aspect as 'Anterior' (at least for Londo, A11)

(13) Gyeli

*m̀è dé-m̀è
1S.PST1 eat-ANT?

'I ate already.'

(14) Mabi (Kwasio)

m̀è n-dí-m̀à
1S PST1-eat-ANT?

'I ate already.'

(15) Londo (A11)

a-m̀á-saká
3S-ANT-seek

'She has sought.'

PERFECTIVE

- problems with terminology: perfective vs. anterior/perfect (Nurse 2008)
 - PERFECTIVE: 'representing a situation as complete, [...] without regard to its internal structure' (Nurse 2008: 134)
 - ANTERIOR/PERFECT denotes the 'continuing present relevance of a previous situation' (Comrie 1976: 52)
- → Gyeli seems to combine both characteristics, but makes a distinction in terms of how close the reference point is to the action/event
- → distinction between
 - (general) PERFECTIVE (PFV)
 - RECENT PERFECTIVE (R.PFV)

PERFECTIVE *bwàá* 'have'

- represents a situation as complete, without regard to its internal structure
- has continuing relevance to the present/reference point
- the reference point is temporally unspecified
- → the action has been completed, but no reference is made to which point in time

(16) a. *mè bwàá dè*
1S.PST1 PFV eat
'I have eaten.'

b. *mè bwàá wè tʃíyè lè-kélè dé*
1S.PST1 PFV 2S cut 5-speech today
'I have cut you the word today. [I don't allow you to speak.]'

RECENT PERFECTIVE *lɔ* 'come'

- represents a situation as complete, without regard to its internal structure
- has continuing relevance to the present/reference point
- the reference point is temporally close to the action/event
- → the action has just been completed

- (17) a. *yà lɔ fwálà nà mɛ lɔ lɔwò*
1P.PST1 R.PFV end COM 1S.PST1 R.PFV speak
'We have (just) finished and I have (just) spoken.'
- b. *áh, gyí wɛ lɔ njì gyésò?*
EXCL what 2S.PST1 R.PFV come look.for
'Ah, what have you (just) come to look for?'

COMPLETIVE *sílè* 'finish'

- Bybee (1994: 54, 57, 318) distinguishes separate completive category: 'do something thoroughly and to completion', e.g. *eat up*
- Nurse (2008: 154) subsumes completive under 'anterior' category
- In Gyeli distinct category from anterior since the completive has a distinct formal expression and distinct semantics.

COMPLETIVE *sílè* 'finish'

Semantics

completion in terms of the extent of the action

- (18) mé nzí kè nà vúlè lè-wúrû nà
 1S.PRES come go COM take.away 5-one COM
 mé tálè **sílè** nyùlè
 1S.PRES begin COMPL drink

'I go and take down one [palm tree] and start to drink
 (it) up (= make palm wine out of it).'

COMPLETIVE *sílè* 'finish'

Semantics

interesting effects for plural events; completion in terms of distributivity (the event distributes over the different participants)

- (19) a. *bà-gyèlì bà-só bá sílè bígkè*
 2-Gyeli 2-other 3P COMPL grow
 'The other Bagyeli have all already grown.
 [obtained some wealth]'
- b. *bà sílè kè → *à sílè kè*
 3P.PST1 COMPL go → 3S.PST1 COMPL go
 'They have all left. → *He has all left.'

PROSPECTIVE *mwáà* 'have' → 'be about to'

PROSPECTIVE PROSP

- represents a situation immediately before the start of an action
- only used in PRES tense

- (20) a. *mé mwáà bínǵélé nkwè*
1S.PRES PROSP lift 3.basket
'I'm about to lift the basket.'
- b. *á mwáà dè*
3S.PRES PROSP eat
'He is about to eat.'

HABITUAL → *repetition of verb stem*

HABITUAL HAB

- 'situation [...] characteristic of an extended period of time'
Comrie (1976: 27)
- semantically linked to persistive as in (21b) (and repetitive?)

- (21) a. mé **gyámbò gyámbó** bé-déwò
1S.PRES prepare prepare 8-food
'I usually, regularly prepare food.'
- b. mèn nzí bé mèn nzí **gyámbò**
1S.PST1 PROG be 1S.PST1 PROG prepare
gyámbò à nzí gyímbò
prepare 3S.PST1 PROG dance
'While I was preparing [food], he was dancing.'

Aspect schema

PROSP	INCH	PROG	COMPL	R.PFV	ANT	PFV
→	○	ACTION	○	←	←	←

Tense framing with *bè* 'be'

Gyeli uses the auxiliary *bè* 'be' for temporal framing referring to past or future, especially with aspects such as the inchoative which are only marked by a specific tone pattern. This tense framing is, however, used with any other tense or aspect.

Tense framing with *bè* 'be'

While the unmarked simple use of the inchoative refers to the present tense, reference to past or future must be temporally framed with the auxiliary *bè* 'be'.

- (22) a. *àá gyì*
3S.INCH cry
'She has started to cry.'
- b. *à bé àá gyì nà kùgúù*
3S.PST1 be 3S.INCH cry SIM 7.evening
'She had started to cry yesterday.'
- c. *àà bè àá gyì nà ménó*
3S.FUT be 3S.INCH cry SIM 7.morning
'She will have started to cry tomorrow.'

Combinations of aspectual marking

Gyeli easily combines various (periphrastic) aspect markers as well as other semi-auxiliaries that are very frequent such as *kè* 'go' with an allocative function or *táàlè* 'begin'.

Combinations of aspectual marking

- The main verb always appears at the end of a verb sequence.
- In a sequence of (aspectual) verbs, it's the first aspectual verb that is inflected for tense, not the following or the main verb.
- The progressive marker *nzí* is closest to the main verb.

(23) *yóò mè ló nzí gyésò sá yí dè*
so 1S.PST1 R.PFV PROG search 7.thing 7:CON eat
'So I have just been looking for something to eat.'

Combinations of aspectual marking

- A change in the order of verbs may change its meaning.

- (24) a. bá tálè sílè kè
 3P.PRES begin COMPL go
 'They go first [then we will follow them].'
- b. bá sílè tálè kè
 3P.PRES COMPL begin go
 'They all go first [waiting for everyone to leave].'

Combinations of aspectual marking

- Or a change in the order of verbs may not obviously change its meaning. (Or the speakers did not recognize the subtle meaning difference.)

- (25) a. à bwàá tálé kè sílè
 3S.PST1 PFV begin go finish
 'He had first left to finish.'
- b. à tálé bwàá kè sílè
 3P.PRES begin PFV go finish
 'He had first left to finish.'

Different syntactic constructions

An alternative to verb sequences are embedded clauses as in (26). Their meaning is, however, slightly different.

- (26) a. á tálè dè
 3S.PRES begin eat
 'He starts by eating.'
- b. á tálè á dè
 3S.PRES begin 3S.PRES eat
 'He starts to eat.'

Aspect in related languages?

difficult to compare

- uneven information in grammars
- terminology comparable?

Wrapping up

- Tense
 - average number of tense distinctions (4) for Bantu
 - fewer tense distinctions than many languages of the area
 - minimal system in terms of inflectional morphology
 - the SM mainly carries tense information
- Aspect
 - so far 8 aspect distinctions
 - precise about point of time in relation to action (about to start, just started, just finished)

Conclusion

In both tense and aspect expression, there is a general preference for analytic syntax. Instead of stacking morphemes

- tonal melodies
- larger syntactic (periphrastic) structures

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