

# A comparative study on Bantu grammatical tone

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## Overview on Bantu

The Bantu languages

Verbal morphology

General Bantu tonology

## Database

## Kuria vs. Bakweri vs. Chichewa

Kuria

Bakweri

Chichewa

Comparison

## Conclusion

# The Bantu languages

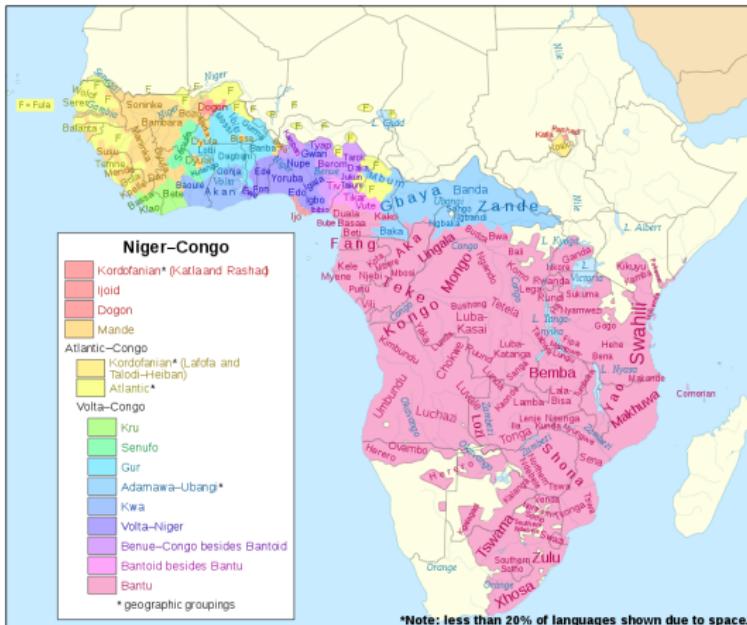


Figure: A map of Niger-Congo languages

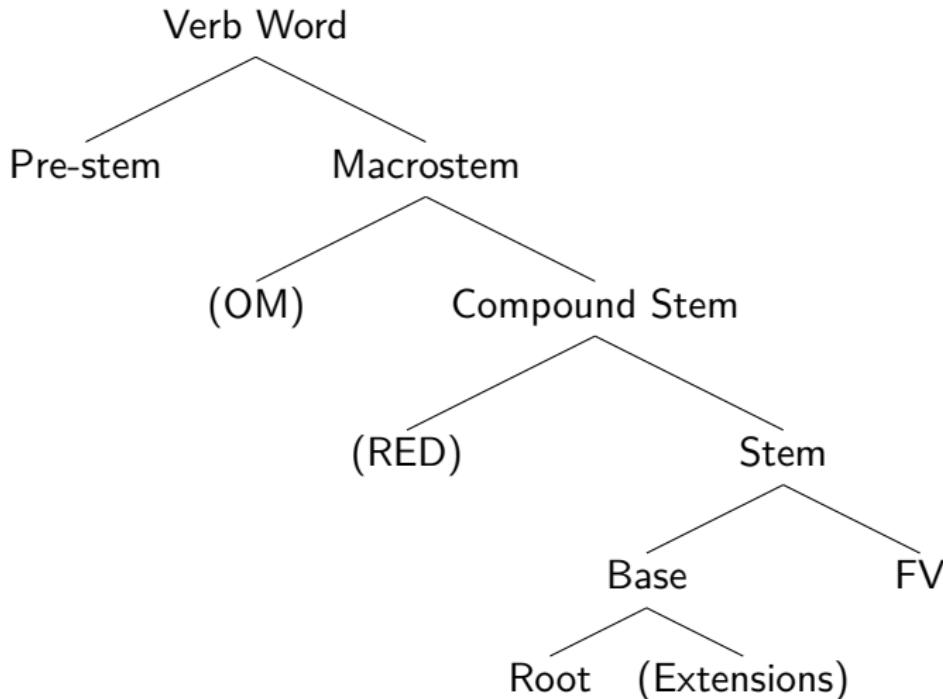
- ▶ contrastive vowel length
- ▶ open syllables (N)CV, NV, V
- ▶ 97% exhibit tone
- ▶ agglutinating morphology
- ▶ verb incorporates most information and can stand alone is a sentence

(1) **Haya** a ba-tá-ka-mu-kóm-e-il-é mu  
 REL SM.3PL-PF-OM.3SG.M-tie-APP-PF-PF LOC

'they who have not tied him up there'  
 (Hyman & Byarushengo, 2010:60)

## Verbal morphology

(2)



adapted by Marlo (2013:140)

## General Bantu tonology

- ▶ two-tone system
- ▶ significant asymmetry between H and L tones, H tones being more dominant, leading to a H vs. toneless or  $\phi$  distribution
- ▶ underlying verb H tones are limited to where they may surface

(3) **Cilungu** tú-kú-mu-sópolól-a  
/tú-ku-mu-sópolol-a/  
SUBJ-PRS PROG-OBJ-untie-Fv  
'We are untying him/her'

(Bickmore, 2007:157)

- ▶ mobile H tone: across Bantu languages similar operations hold:
    - ▶ spreading/shifting (usually rightward)
    - ▶ non-finality
    - ▶ OCP motivated rules, such as meussen's rule, pleauiting, lowering of adjacent Hs

(4) **Jita** a. aa-ma-gá-lyá                    's/he ate them (class6)'  
                   /aa-má-gá-lyá/  
                   SUBJ-PST-OBJ-eat

(Downing, 2011:2733)

What is grammatical tone?

Rolle's 2018 definition:

"Tonological operations which are not part of the general phonological system and are only licensed by specific grammatical conditions"

## Database

- ▶ 7 languages
- ▶ tempus, aspect, mood, polarity (TAMP)
- ▶ where does grammatical tone surface?
- ▶ what is the tonal specification for grammatical tone?
- ▶ Is there blocking of general Bantu tone rules for grammatical tone?
- ▶ Is grammatical tone more dominance than the stem tone?

## Kuria vs. Bakweri vs. Chichewa- Language properties

	Kuria	Bakweri	Chichewa
TBU	Tanzania	Cameroon	Malawi
	predictable	conservative	conservative
	$\phi$	H vs. L	H vs. $\phi$
	mora	mora	syllable
contrastive tone on	NA	1	penult

# Kuria

- (5) a. n-to-o-hóótóótér-a  
FOC-1PL-**Pst**-reassure-FV  
'We have reassured'
- b. n-to-oka-hoótóótéréy-a  
FOC-1PL-**PstProg**-reassure-PFV-FV  
'We have been reassuring'
- c. n-to-re-hootóótér-a  
FOC-1PL-**Fut**-reassure-FV  
'We will reassure'
- d. to-re-hootooótér-a  
1PL-**Incept**-reassure-FV  
'We are about to reassure'

(Marlo, 2014: 252)

# Kuria

- ▶ left edge compatible for mora1+2 patterns
- ▶ mora 3+4 patterns counting from the left edge
- ▶ only H tones
- ▶ spreading rightward
- ▶ non-finality

# Bakweri

## **future tense:**

(6) SUBJ-ROOT\TNS-Fv

- a. H na-zóow-a 'I will shave'
- b. L na-*zozav*-a 'I will be washed'
- c. H na-lâ 'I will eat'

(Marlo & Odden, 2014:298)

## **recent perfective & imperative:**

(7) SUBJ-ROOT\TNS-Fv

- a. H na-fáñj-î 'I finished'
- b. L na-*língán*-î 'I've already liked'
- c. H na-vâ 'marry!'
- d. L na-va<sup>LHL</sup> 'devide!'

(Marlo & Odden, 2014: 305)

## Bakweri

- ▶ left and right edge preferences
- ▶ contrastive verb tone is never overwritten
- ▶ spreading leftward
- ▶ no non-finality

## Chichewa

### recent past /na-/ & past habitual /nká-/

- (8) a. L ndi-na-fótókooz-a 'they explained (recently)'  
b. H ndi-na-thámááng-a 'we ran (recently)'  
SUBJ-RSNTPST-ROOT-Fv

(Downing & Mtenje, 2017:148)

- (9) a. L a-nká-fotokóoz-a 'I used to explain'  
b. H ndi-nká-thamáang-a 'I used to run'  
SUBJ-PST.HABIT-ROOT-Fv

(Downing & Mtenje, 2017:154)

## Chichewa

- ▶ left and right preferences for first and penult syllable
- ▶ strong preference for penult position, which neutralizes verb tone contrast
- ▶ non-finality (final vowel is never targeted)
- ▶ tone doubling may be blocked

# Comparison

Language	TAMP	Edge	Target1	tone	sur- face- ing	spread- ing
Kuria	past	left	1	H	H	Y
Kuria	past prog	left	2	H	H	Y
Kuria	rem fut	left	3	H	H	Y
Kuria	inceptive	left	4	H	H	Y
Bakweri	future	left	2	L	L/HL	no
Bakweri	recent perf, im- perative	right	final	HL	HL/LHL	Y
Chichewa	recent past	left	1	H	H	Y
Chichewa	past habit	right	penult	H	H	blocked

## Conclusion

- ▶ edge preferences are not as strict for grammatical tone as for underlying verb tone
- ▶ general preferences for first, second, penult and final TBU as targets for GT
- ▶ some languages behave dominant (Chichewa) toward underlying verb tones, neutralizing verb tone contrast  
some languages behave non-dominant, adding to verb tone contrast
- ▶ grammatical H tone are more prominent, however L tones are also frequent
- ▶ spreading, non-finality, and OCP motivated rules can be blocked from applying, depending on the TAMP

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fig1: A Map of Niger-Congo Languages; commons.wikimedia.org, 21  
March 2019, [https://commons.wikimedia.org/wiki/File:Map\\_of\\_the\\_Niger – Congo\\_languages.svg](https://commons.wikimedia.org/wiki/File:Map_of_the_Niger – Congo_languages.svg)