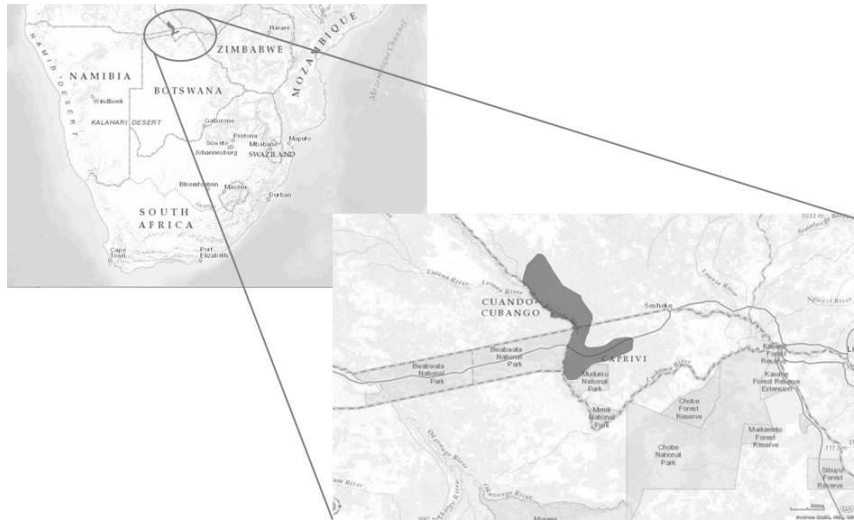


Tone and vowel length in Fwe (Bantu, K402)

Hilde Gunnink - hilde.gunnink@ugent.be - Ghent University

47th Annual Conference on African Linguistics - University of California, Berkeley - March 23-26, 2016

Fwe (Bantu, K402)



- +- 20.000 speakers
- spoken in Zambia and Namibia
- part of Bantu Botatwe (Bostoen 2009, de Luna 2010)

Segmental phonology

- five vowels: /i/, /ε/, /a/, /ɔ/, /u/
- contrastive vowel length

- (1) **kù-kô-r-à** vs. **kù-kô:r-à**
 'to irritate' 'to cough'
- (2) **kù-kû-r-à** vs. **kù-kû:r-à**
 'to grow' 'to shift'

Vowel length

Lengthened vowels occur before NC:

- (3) **kù-sù.nd-a** vs. **kù-sù:n-à**
 'to show' 'to love'

Lengthened vowels occur after (C)w:

- (4) **kù-zwâ:t-à** 'to dress'
kù-wâ:n-à 'to find'

Lengthened vowels occur in /sa/, /za/:

- (5) **mù-sâ:** 'thief'
kù-βûz-à: 'to ask'

Lengthened vowels occur in bimorphemic verb stems:

- (6) **kù-tfj:r-à**
 cf. **kù-tfj-òr-à**
 INF-break-REV-FV
 'to break (tr.)'

Vowel length is not predictable in all cases: some long vowels are reflexes of roots reconstructed with a long vowel for Proto-Bantu.

- (7) **kù-râ:r-à** 'to sleep'
 cf. *dáad- 'lie down; sleep'
- (8) **kù-rê:t-à** 'to give birth'
 cf. *déet- 'to bring'
- (9) **kù-kâ:n-à** 'to refuse'
 cf. *káan- 'deny, refuse'
- (10) **bù-rê:** 'length'
 cf. *dài 'long'

Vowel length ≠ vowel sequences

- long vowel: one syllable, two moras
 - one long vowel
 - either phonological or from PB long vowels
 - only tones are F, H and L
- vowel sequence: two syllables, two moras
 - can be two identical or two different vowels
 - result of loss of intervocalic consonant
 - HL, LH, LL, FL and HH are allowed

Vowel sequences

Vowel sequences can consist of two identical or two different vowels:

- (11) **kù-zyónàur-à** 'destroy', **mà-sikíò** 'earrings'
- (12) **kù-βòòr-à** 'to return', **ndàànò** 'message'

Vowel sequences are often separated by an optional epenthetic glide or /h/

- (13) **kù-βòòr-à** ~ **kù-βòhòr-à** 'to return'
nshòò ~ **nshòwò** 'catfish'
-fwîi ~ **-fwîyi** 'short'

There are no restrictions on the kind of tonal patterns found on vowel sequences.

- (14) HL: **mvúú** 'hippopotamus'
 LH: **tù-àmbàùr-à** 'We discuss'

LL: **mbàò** ‘bird sp.’
 FL: **n-jùò** ‘house’
 HH: **ntáúró** ‘veil’

Vowel sequences are often the result of loss of intervocalic consonant.

- (15) **n-jùò** ‘house’, cf. *-jògò ‘house’
n-júù ‘peas’, cf. *-jògú ‘groundnut’
-fwíí ‘short’ cf. *-kúpí ‘short’
mvúú ‘hippopotamus’, cf. *-gùbó ‘hippopotamus’

Prosodic lengthening

The penultimate mora of a phrase-final word is lengthened.

- (16) **kú-kà-r-à** **há-nshì**
 INF-sit-FV NP₁₆-down
 ‘to sit down’
kú-kà:r-à
 INF-sit-FV
 ‘to sit’
- (17) **ndì-yàshìmis-à:**
 SC_{15G}-sneeze-FV
 ‘I sneeze.’
- (18) **sibbwê:**
 ‘jackal’

Prosodic lengthening may coincide with phonological lengthening.

- (19) **ndì-zyí:mb-à** ‘I sing.’

Tone in Fwe

Fwe has two tones, H and ø, realized as H, L, F or ^lH.

- (20) **cì-βàtànà** ‘predator’
 (21) **è-n-kândà** ‘valley’
 (22) **kù-kúβàz-à** ‘to hurt’
 (23) **βú-c'ényà** ‘small’

Tone assignment

1. Lexical tones
2. Grammatical tones
3. Melodic tones
 - pattern 1: melodic H on the last mora of the verb
 - pattern 2: melodic H on the second mora of the verb stem
 - pattern 3: melodic H on the subject concord
4. Tone rules
 1. Meeussen’s Rule
 2. H > F
 3. H retraction

4. Downstep
5. H spread

1. Meeussen’s Rule: HH > HL

- (24) /-ánà/ diminutive suffix + /cì-shàmú/ ‘tree’
cì-shàmú-ánà ‘small tree’
- (25) /kù-círìr-à/ ‘to follow’ + ^o/-βá-/ object concord class 2
kù-βá-círìr-à ‘to follow them’

HHH > HLL

- (26) /c-á-zyúr-i/
 SC₇-PST-fill-PST
c-á-zyúr-ì ‘It has filled up.’
- (27) /ndà-zí-βón-i/
 SC_{15G}-PST-OC₈-see-PST
nd-à-zí-βón-ì ‘I have seen them.’
- (28) /ngúyá-ánà/
 baboon-DIM
ngúyá-ànà ‘small baboon’

Meeussen’s Rule only affects high tones on adjacent moras

- (29) /mà-téèndé ángù/
 NP₆-leg POSS_{15G}
mà-téèndé ^lángù ‘my legs’

2. H retraction: LH > HL

- (30) **n-shúkí** **z-àkwé**
 NP₁₀-hair CON₁₀-POSS_{3SG}
 ‘her hair’
n-shúkì
 NP₁₀-hair
 ‘hair’
- (31) **ndì-shàk-á** **mà-yí**
 SC_{15G}-want-FV NP₆-egg
 ‘I want eggs.’
ndì-shák-à
 SC_{15G}-want-FV
 ‘I want.’

- only at the end of a clause

- not the same as high tone shift/anticipation as found in other Bantu Botatwe languages
- shift to preceding mora, not preceding syllable:
°mà-yí > **mà-yí** ‘eggs’
- first Meeussen’s Rule, then H retraction: HH sequence that is the result of H retraction is not subject to Meeussen’s Rule

3. H > F

(32) **tɛ̀ndè** **ly-ònkɛ̀**
leg CON₅-one
‘one leg’

tɛ̀ndè
‘leg’

(33) **mà-zyákà** **ònshɛ̀**
NP₆-snake CON₆.all
‘all the snakes’

ma-zyákà
NP₆-snake
‘snakes’

- only at the end of a clause
- related to prosodic lengthening, but:
- does not affect retracted H

mù-ndárɛ̀ (/mù-ndàré/) ‘maize’
m-búfú (/m-búfú/) ‘bream’

4. Downstep: HH > H¹H [v̄v̄]

Downstep across word boundaries:

(34) **n-shúkí** **z¹ù-mù-kɛ̀ntù**
NP₁₀-hair CON₁₀-NP₁-woman
‘the hair of the woman’

(35) **kù-híβ** **ʼɛ̀-ŋòmbè**
INF-steal AUG₁₀-cattle
‘to steal cattle’

(36) **ndi-kwèsí** **m¹ù-kw¹ámɛ̀**
SC_{15G}-have NP₁-man
‘I have a husband.’

Downstep within the word:

(37) **nd-à-zyúβ-ì** **nd-à-zí-zy¹úβ-ì**
SC_{15G}-PST-peel-PST SC_{15G}-PST-OC₈-peel-PST
‘I’ve peeled.’ ‘I’ve peeled them.’

(38) **m¹ù-kwámɛ̀** **w-āngù**
NP₁-man CON₁-POSS_{15G}
‘my husband’

m¹ù-kw¹ámɛ̀
NP₁-man
‘a man’

(39) **mbò-ndí-t¹ék-ɛ̀**
FUT-SC_{15G}-fetch-FUT
‘I will fetch.’

Progressive downstep:

(40) **ò-zyú** **m¹ù-kw¹ámɛ̀**
AUG₁-DEM₁ NP₁-man
‘this man’

(41) **ní-nd-à-á-z¹ík** **ʼó-kù**
PST-SC_{15G}-PST-OC₆-hide AUG₁₇-DEM₁₇
‘I’ve hidden them there.’

(42) **nà-dáns¹ík-ì** **nyàmà**
SC₁.PST-drop-PST meat
‘He dropped the meat.’

Downstep does not apply to falling tones:

(43) **nd-à-dám-ì**
SC_{15G}-PST-beat-PST
‘I’ve beaten.’

nd-à-βá-dám-ì
SC_{15G}-PST-OC₂-beat-PST
‘I’ve beaten them.’

(44) **nd-à-sâ:nz-ì**
SC_{15G}-PST-wash-PST
‘I’ve washed.’

nd-à-zí-sâ:nz-ì
SC_{15G}-PST-OC₁₀-wash-PST
‘I’ve washed them.’

***nd-à-zí-s¹ánz-ì**

(45) **mbò-bá-ry-ɛ̀**
FUT-SC₂-eat-FUT
‘They will eat.’

***mbò-βá-ry-ʼɛ̀**:

Downstep applies to H's on adjacent syllables, even when separated by a low-toned mora

(46) /mà-téèndé ángù/ 'my legs'
 mà-téèndé ángù 'my legs'

Downstep	Meeussen's Rule
HH > H ¹ H	HH > HL
progressive	progressive
applies across word boundaries	does not apply across word boundaries
applies to H's on adjacent syllables	applies only to H's on adjacent moras
applies after H retraction	applies before H retraction
phonetic	phonological

Downstep and floating L

- downstep frequently analyzed as floating/delinked L
- this analysis works for Fwe, but an analysis of downstep as a mere phonetic process is simpler

5. H spread: LLL...H > HHH...H

(47) /kù-shàk-àhàr-á/
 kù-shàk-áhàr-à
 SC₁₇-want-NEUT-FV
 'It is important.'

(48) /ndì-shèsh-étè/
 ndì-shésh-ètè
 SC_{15G}-marry-STAT
 'I am married.'

(49) /ndì-bùtúk-àng-á/
 ndì-bútúk-àng-à
 SC_{15G}-run-HAB-FV
 'I usually run.'

Overview

- Obligatory Contour Principle: Meeussen's Rule, Downstep, (High Tone Spread)
- Clause-final processes: H retraction, H > F
- The importance of vowel lengthening:
 - moras are relevant for Meeussen's Rule, H > F, H retraction (as well as melodic tone assignment!)
 - prosodic lengthening is relevant for H > F

References

Bostoën, K. (2009). Shango and Fwe as a part of Bantu Botatwe: A diachronic phonological approach. In A. Ojo & L. Moshi (Eds.), Selected proceedings of the 39th annual conference on African linguistics (pp. 110–130). Sommerville, MA: Cascadia Proceedings Project.

de Luna, K. (2010). Classifying Botatwe: M.60 and K.40 languages and the settlement chronology of south central Africa. *Africana Linguistica*, 16, 65–96.

Glosses

AUG	augment	INF	infinitive	PST	past
CON	connective	HAB	habitual	POSS	possessive pronoun
DIM	diminutive	NEUT	neuter	REV	reversive
FUT	future	NP	noun class prefix	SC	subject concord
FV	final vowel	OC	object concord	STAT	stative