

Pius W. Akumbu (CNRS-LLACAN)
Yvonne Treis (CNRS-LLACAN)

The dog barks *wùúh* or *wúh*: A contrastive study of onomatopoeia in Babanki and Kambaata

WORD-FORMATION THEORIES VI / TYPOLOGY AND UNIVERSALS IN WORD-FORMATION V, WORKSHOP “ONOMATOPOEIA”, KOŠICE, 23-26 JUNE 2022

1. Introduction

ONOMATOPOEIA – IDEOPHONES, OURS GOALS, OUR LANGUAGES, DATA SOURCES

Onomatopoeia in ideophones

- African languages: Onomatopoeia often discussed and subsumed under (sometimes even equated with) ideophones
- But: “onomatopoeia make up only a minor portion of most well-described ideophone inventories” (Dingemanse 2018: 4)
- Implicational hierarchy of ideophones systems (Dingemanse 2012):

Sound < movement < visual patterns < other sensory perceptions < inner feelings and cognitive states

- Babanki & Kambaata: large morphosyntactically identifiable word class of ideophones with onomatopoeia as a subset
(Kambaata also has some onomat. verbs and nouns)

Goals of the paper

Comparison of Babanki and Kambaata onomatopoeic ideophones in the following domains:

- Phonological
- Tonological / accentual
- Morphological
- Syntactic features

- Case study: Animal cries

Babanki (ISO 639-3: bbk, glottocode: baba1266)

- Grassfields Bantu language of the Ring subgroup (NW Cameroon)

- /b, t, d, k, g, ʔ/
/m, n, ŋ, ŋ/
/f, v, s, z, ʃ, ʒ, ʝ/
/pf, bv, ts, dz, tʃ, dʒ/
/l, w, y*/

- /i, i, ɪ, u, e, o, ə, a/

- /L, H/

26 consonant phonemes

8 vowel phonemes

2 tonemes



*y/ = palatal approximant, cf. IPA [j]

Babanki (ISO 639-3: bbk, glottocode: baba1266)

- Grassfields Bantu language of the Ring subgroup (NW Cameroon)

• /b, t, d, **k**, g, ʔ/

• /**m**, **n**, ɲ, ŋ/

• /**f**, v, **s**, z, ʃ, ʒ, ʝ/

• /pf, bv, ts, dz, tʃ, dʒ/

• /l, w, y/

• /i, i, ɪ, u, e, o, ə, a/

• /L, H/

• Coda consonants in **orange**
NB: /k/--> [ʔ] \ __#

• CV, CGV, CVC, CGVC

26 consonant phonemes

8 vowel phonemes

2 tonemes

shapes of N and V roots



Babanki (ISO 639-3: bbk, glottocode: baba1266)

- Prefixes and suffixes on roots of major word classes, e.g.
 - Noun class affixes:
kə̀-kím ‘crap’
ndzàm-sə́ ‘axes’
 - Infinitive prefix: *ə́-kùm* ‘to touch’
 - Imperative suffix: *kùm-ə́* ‘touch!’
- Constituent order: SVO



Kambaata (ISO 639-3: ktb, glottocode: kamb1316)

- Highland East Cushitic (SW Ethiopia)
 - /b, t, d, tʃ, dʒ, k, g, ʔ/
/p', t', tʃ', k'/
/f, s, z, ʃ, h/
/m, n/
/r, r', l, l', w, y/
 - /ɜ, p, v, ɲ/
 - /a, e, i, o, u/
 - /ã, ã, ã/
 - Phonemic consonant gemination
except for: /ʔ/ and /h/ in the prosaic lexicon
 - Phonemic vowel length
- consonant phonemes
25 safely established
- 4 marginal cons. phonemes
- 5 oral vowels
- 3 marginal nasal vowels



Kambaata (ISO 639-3: ktb, glottocode: kamb1316)

- Morphological stress
- 5 open word classes: Nouns, adjectives, verbs, ideophones, interjections
- Rich morphology, e.g. system of 9 nominal cases
- Suffixing
- Consistently head-final



Data sources and earlier works

- Babanki:
 - Native speaker competence (Pius Akumbu)
 - Data checks and supplements via WhatsApp (2022)
- Kambaata:
 - Fieldwork (since 2002) (Yvonne Treis)
 - Alemu's (2016) Kambaata dictionary
 - Elicitation session guided by Lívia Körtvelyéssy's questionnaires
- Earlier works: Akumbu (2016) on ideophones
- No published earlier works on onomatopoeia or ideophones in Kambaata

2. Word class membership

ONOMATOPOEIC IDEOPHONES, ONOMATOPOEIC VERBS, ONOMATOPOEIC NOUNS

Word class membership (Babanki)

- Babanki onomatopoeia are a **subset** of the ideophone word class
- Defining criteria of ideophones (cf. Akumbu 2016) also apply to onomatopoeia
 - Phonology, e.g. unusual phonemes, violation of certain phonotactic constraints, vowel lengthening
 - Morphology: non-inflecting; repetition for emphasis
- Syntax:
 - Integration with the quotative *lá*
 - Clause-final position (only followed by question marker and negator)

Word class membership (Kambaata)

- Kambaata has a large ideophone word class (almost 1/3 of verbal concepts are expressed by ideophones)
- Defining features of ideophones:
 - Non-inflecting
 - Obligatorily accompanied by the light verbs *y*- ‘say’ and *a*’- ‘do’
- Most onomatopoeia belong to the word class of ideophones, however:
 - Most Kambaata ideophones are not sound-imitative.
 - Onomatopoeia are also found in the word classes of nouns and verbs (→ not discussed in the following).
 - *kuk:ule:s*- ‘crow (of rooster)’
 - *ka:k:e:s*- ‘cackle (of hen)’
 - *dod:ok’-íta* ‘motorbike’ (a vehicle with a two-stroke engine producing a *dok’-dok’*-sound)

3. Phonology of onomatopoeia

UNEXPECTED SOUNDS, UNUSUAL PHONOTACTICS, UNUSUAL TONES ...



Babanki onomatopoeia: Phonology

- Sounds not found in the phonemic inventory: [p] and [h]

a. *f̄ɔ́nín f̄á yì yòm t̄àvó t̄á wén lá f̄àp f̄àp ...*
bird SM Pl beat wings AM 3SG QUOT ONOMAT
'The bird flapped its wings *f̄àp f̄àp ...*'

b. *w̄àyn t̄f̄à? m̄ō lá h(y)à h(y)à ...*
child laugh 1SG QUOT ONOMAT
'The child laughed at me *h(y)à h(y)à ...*'

- Unexpected coda consonants: [b] and [k]

a. *à dz̄è? nd̄à n̄t̄s̄ó (lá) f̄ìb f̄ìb ... á*
it walk-PROG who pass QUOT ONOMAT QUES
'Who has walked past *f̄ìb f̄ìb ...*?'

b. *à f̄òm / ḡá? nd̄à lá m̄pyìk á*
it sigh / say who QUOT ONOMAT QUES
'Who has sighed *m̄pyìk*?'

Babanki onomatopoeia: Phonology

- Higher frequency of otherwise rare diphthongs and rare contour tones

a. *ɣà kù kāvú á wén lá pái?*
3SG give hand to 3SG QUOT ONOMAT
'She slapped him *pái?*'

c. *byí yì dī / gā? lá mēé?*
goat P1 cry /say QUOT ONOMAT
'The goat bleated *mēé?*'

- Vowel lengthening for emphasis

a. *ɣà bwà? nántô mfáŋ á kākí lá bwàà?*
3SG be.tired much fall on chair QUOT ONOMAT
'He became too tired and fell *bwàà?* on a chair.'

Kambaata onomatopoeia: Phonology

- Higher frequency of otherwise very rare nasal vowels

hǎ:ʔ:ã ‘bray, hee-haw (of donkey)’
hãʔ:ã ‘groan (with sudden, stabbing pain)’
hǎ: ‘open widely, gape (of mouth, of abyss)’

- Palatal nasal only in *náu* ‘meow (of cat)’
- Geminate realisation of /h/ and /ʔ/ (not attested in the prosaic lexicon), e.g.

Áyeet buhhú yee’íi?
áy-e-et **buh:ú** = ye:ʔí-i
who-M.NOM-COP3 cough = say-3M.PRF.REL-NMZ1.M.NOM
(Speaker hears a noise outside:) ‘Who has coughed (there) (lit. it is who that coughed)?’

- Word-final /h/ only attested in onomatopoeia: *wúh* ‘bark (of dog)’ and *úh* ‘sigh (of mental exhaustion)’

Kambaata onomatopoeia: Phonology

- For all members of inflecting word classes: **stress** morphologically determined, only grammatical, not lexical minimal pairs
- For non-inflecting ideophones (incl. onomatopoeia) and interjections: stress position arbitrary/lexically determined
- Near minimal stress pair (lexically determined)

hǎ̃?:ã ‘bray, hee-haw (of donkey)’

hã?:ǎ̃ ‘groan (with sudden, stabbing pain)’

- Summary Babanki vs. Kambaata:
 - Onomatopoeia with sounds (/sound combinations) that are not (or only rarely) found in the prosaic system: e.g. Babanki vowel lengthening and Kambaata nasal vowels
 - In both languages: special behaviour of the glottal fricative

4. Morphology of onomatopoeia

NON-INFLECTING WORD TYPE

Morphology of onomatopoeia

- Babanki (little morphology) & Kambaata (morphologically rich) but ideophones (incl. onomatopoeia) are non-inflecting in both languages
- Babanki: Repetition for emphasis

fāmbúm fā yì gà? fá āngàŋ lá sīká sīká ...
 mosquito SM P1 say from house QUOT ONOMAT
 ‘A mosquito buzzed *sīká sīká ...* in the house.’

- Kambaata: Iconic repetition for intermittent, recurring sound

(Makīinu zakkú láqq maramániyan fultáa) ti sīi-sīi yitáa láagat maccáta affáataa.
 tí **sīi-sīi** = y-itáa lá:g-at
 DEM.ADJ.F.NOM high.pitched.sound = say-3F.IPFV.REL sound-F.NOM
 matʃʻ:-áta af-fáa-taa
 ear-F.ACC seize-3F.IPFV.REL-F.COP2
 ‘This *sīi-sīi* sound (that is produced when a car drives in reverse) is irritating.’

5. Syntax of onomatopoeia

SYNTACTIC INTEGRATION WITH QUOTATIVE/‘SAY’

Babanki: Syntactic integration

- Integration of onomatopoeia by means of the quotative marker *lá*
- Onomatopoeia are most commonly licensed by the verb *gà?* ‘say’ + QUOT

- a. *mbví yì yèn āsáj ṅgá? lá kò kò kò ...*
chicken P1 see corn say QUOT ONOMAT
‘The chicken saw corn and cackled *kò kò kò ...*’
- b. *fājín fá gá?-à fá fākò? lá tswí tswí ...*
bird SM say-PROG from where QUOT ONOMAT
‘The bird is chirping on the tree *tswí tswí ...*’
- c. *bùfí yì dì / gá? lá myáāwú?*
cat P1 cry /say QUOT ONOMAT
‘The cat meowed *myáāwú?*’

Babanki: Syntactic integration

- Optional quotative in questions:

zù á gà?-à fá fé (lá) fyù á
snake SM say-PROG from where QUOT ONOMAT QUES
'Where is the snake hissing *fyù* from?'

- Onomatopoeia followed by question marker and 2nd element of discontinuous negation:

nàm á kó yì dì / gà? lá mòó? bwén
animal SM NEG P1 cry /say QUOT ONOMAT NEG
'The cow didn't moo *mòó?*'

Kambaata: Syntactic integration

- Integration of ideophones by means of the light verbs *y-* ‘say’ (intr.) or *a’-* ‘do’ (tr.)
- Most onomatopoeic ideophones take *y-* ‘say’, whereas *a’-* ‘do’ is rare:

a. *Adánchut nyáu yítán barcumúichch dirritóo’u.*

adán-tʃ-ut náu = **y**-ítán bartʃ’um-í:tʃ: dir:-itó:ʔu
cats-SGV-F.NOM meow = **say**-3F.IPFV.CVB chair-M.ABL go.down-3F.PFV
‘The cat, meowing, jumped down from the chair.’

b. *Híqq á’-ee-’e.*

hík’: = **áʔ**-e:-ʔe
hiccup = **do**-3M.PRF-1SG.OBJ
‘I have the hiccups (lit. (it) hiccups me).’

- Syntactic functions of ideophones (incl. onomatopoeia) = syntactic functions of verbs, i.e. as main predicate, subordinate predicate (e.g. converb, relative verb), as argument (when marked as verbal noun)

6. Case study: Animal cries

SIMILARITIES, DIFFERENCES, UNIVERSAL TENDENCIES?

Babanki				
Animal	English	Babanki	Sound	Observations
dog	bark	<i>búf</i> ‘bark’	<i>wùúf/wùúh</i>	h#
cat	meow	<i>dì</i> ‘cry’/ <i>gà?</i> ‘speak’	<i>myáāwú?</i>	
cattle	moo	<i>dì</i> ‘cry’/ <i>gà?</i> ‘speak’	<i>mòó?</i>	contour tone
sheep / goat	bleat	<i>dì</i> ‘cry’/ <i>gà?</i> ‘speak’	<i>mèé?</i>	contour tone
mouse, rat	squeak	<i>dì</i> ‘cry’/ <i>gà?</i> ‘speak’	<i>tswí tswí...</i>	repeated
rooster	crow	<i>kwóká</i> ‘cackle’ / <i>gà?</i> ‘speak’	<i>kókólíkô</i>	
hen	cackle	<i>kwóká</i> ‘cackle’ / <i>gà?</i> ‘speak’	<i>kò kò...</i>	
snake	hiss	<i>dì</i> ‘cry’/ <i>gà?</i> ‘speak’	<i>fyù</i>	V:
cricket, tiny insects	chirp	<i>tón</i> ‘whistle, blow’	<i>tfwí/dzáá</i>	V:
bee, wasp, fly	buzz	<i>dì</i> ‘cry’/ <i>gà?</i> ‘speak’	<i>fù/zù</i>	V:
mosquito	buzz	<i>dì</i> ‘cry’/ <i>gà?</i> ‘speak’	<i>fù/zù, fíká fíká...</i>	V:

Babanki: Animal cries

- Animal cries combine with different sound emission verbs (‘bark’, ‘cry’, ‘speak’, ‘whistle’ ...)

Animal		Sound + =y- 'say'	Observations
dog	bark	<i>wúh</i>	h#
cat	meow	<i>ɲáú</i>	ɲ
cattle	moo	<i>humbá:</i>	
sheep	bleat	<i>bá:ʔa</i>	'σσ
goat	bleat	<i>mé:ʔa</i>	/ʔ:/, 'σσ
donkey	bray	<i>hǎ:ʔ:ā</i>	/ʔ:/, nasal V, 'σσ
horse	snort	<i>fúr:</i>	
mouse, rat	squeak	<i>sí:-sí:</i>	repeated
hyena	howl	<i>mú:</i>	
rooster	crow	<i>ku:k:ulú:k:u</i>	... 'σσ
chicken	cackle	<i>ká:k / kutá:k / k'uk'ú</i>	(repeated)
chicks, little birds	chirp	<i>tʃ'í:-tʃ'í</i>	repeated
dove	coo	<i>ku:kú (or: gu:gú)</i>	
crow, raven	caw	<i>wá:k':-wá:k':</i>	repeated
bee(hive), beetle, fly	buzz	<i>búu</i>	

Kambaata: Animal cries

- Animal cries all combine with 'say' as light verb.
- Instead of onomatopoeic animal cries, the semantically general verb *wod-* '(of an animal) emit a sound' can be used for any animal.

Babanki			
Animal	English	Babanki	Sound
dog	bark	<i>búf</i> 'bark'	<i>wùúf/wùúh</i>
cat	meow	<i>dì</i> 'cry'/ <i>gà?</i> 'speak'	<i>myáāwú?</i>
cattle	moo	<i>dì</i> 'cry'/ <i>gà?</i> 'speak'	<i>mòó?</i>
sheep / goat	bleat	<i>dì</i> 'cry'/ <i>gà?</i> 'speak'	<i>mèé?</i>
mouse, rat	squeak	<i>dì</i> 'cry'/ <i>gà?</i> 'speak'	<i>tswí tswí...</i>
rooster	crow	<i>kwóká</i> 'cackle' / <i>gà?</i> 'speak'	<i>kókólíkô</i>
hen	cackle	<i>kwóká</i> 'cackle' / <i>gà?</i> 'speak'	<i>kò kò...</i>
snake	hiss	<i>dì</i> 'cry'/ <i>gà?</i> 'speak'	<i>fyù</i>
cricket, tiny insects	chirp	<i>tón</i> 'whistle, blow'	<i>tʃwú/dzáá</i>
bee, wasp, fly	buzz	<i>dì</i> 'cry'/ <i>gà?</i> 'speak'	<i>ʃù/zù</i>
mosquito	buzz	<i>dì</i> 'cry'/ <i>gà?</i> 'speak'	<i>ʃù/zù, ʃíká ʃíká...</i>

Kambaata		
Animal		Sound + =y- 'say'
dog	bark	<i>wúh</i>
cat	meow	<i>ɲáú</i>
cattle	moo	<i>humbá:</i>
sheep	bleat	<i>bá:?a</i>
goat	bleat	<i>mé?:a</i>
donkey	bray	<i>há?:ã</i>
horse	snort	<i>fúr:</i>
mouse, rat	squeak	<i>sí:-sí:</i>
hyena	howl	<i>mú:</i>
rooster	crow	<i>ku:k:ulú:k:u</i>
chicken	cackle	<i>ká:k: / kutá:k: / k'uk'ú</i>
chicks, little birds	chirp	<i>tʃ'í:-tʃ'í</i>
dove	coo	<i>ku:kú</i> (or: <i>gu:gú</i>)
crow, raven	caw	<i>wá:k':-wá:k':</i>
bee(hive), beetle, fly	buzz	<i>búu</i>

Inventory influenced by the environmental and cultural context

Abbreviations

1SG first person singular, 3SG third person singular, ABL ablative, ACC accusative, ADJ adjective, AM associative marker, C consonant, COP copula, CVB converb, DEM demonstrative, EMP emphasis, F feminine, G glide, H high, IDEO ideophone, IPFV imperfective, L low, M masculine, NEG negation, NMZ nominalizer, NOM nominative, O(BJ) object, ONOMAT onomatopoeia, P1 immediate past tense, PFV perfective, PL plural, PRF perfect, PROG progressive, QUES question, QUOT quotative, REL relative, S subject, SG singular, SGV singulative, SM subject marker, V vowel/verb

References

- Akumbu, Pius W. 2016. Babanki ideophones. *California Linguistic Notes* 40(1). 1–15.
- Akumbu, Pius W. & Evelyn Fogwe Chibaka. 2012. *A pedagogic grammar of Babanki – a Grassfields language of Northwest Cameroon*. Cologne: Rüdiger Köppe.
- Akumbu, Pius W., Larry M. Hyman & Roland Kießling. 2020. The segmental and tonal structure of verb inflection in Babanki. *Phonological Data and Analysis* 2. 1–33.
- Alemu Banta Atara. 2016. *Kookaata: Kambaatissa-Amaarsa-Ingiliizissa laaga doonnuta [Kambaata-Amharic-English dictionary]*. Addis Ababa: Berhanena Selam Printing.
- Childs, G.Tucker. 1988. The phonology of Kisi ideophones. *Journal of African Languages and Linguistics* 10. 165–190.
- Dingemanse, Mark. 2012. Advances in the cross-linguistic study of ideophones. *Language and Linguistics Compass* 6(10). 654–672.
- Dingemanse, Mark. 2018. Redrawing the margins of language: Lessons from research on ideophones. *Glossa: a journal of general linguistics* 3(1). 1–30. <https://doi.org/10.5334/gjgl.444>.
- Hyman, Larry M. 1980. Babanki and the Ring group. In Larry M. Hyman & Jan Voorhoeve (eds.), *Noun classes in Grassfields Bantu*, 225–258. Paris: SELAF.