

Cushitic influence on East African cattle vocabulary: male animals¹

Maarten Mous (Leiden University) & Nina van der Vlugt (Ghent University)

Abstract

Various cattle terms in East African Bantu languages are Cushitic in origin. Prominent examples are *ndama* ‘calf’ and *maziwa* ‘milk’ in Swahili and in many other Bantu languages of East Africa. We intend to trace Cushitic cattle terminology in Bantu languages: to determine when and where these words entered the predecessors of the current Bantu language groups, but also in order to trace the further spread from Bantu language to another by checking which later developments were regular and irregular (sign for cross Bantu borrowing). In this we ultimately seek to trace the Bantu expansion within East Africa. Moreover, we hope to recover cultural change. In this article we present the first results on distinctive terms for male domestic animals. We show that East African Bantu languages innovated terms for male domestic animals and an important source was from South Cushitic partly before this group of languages entered Tanzania suggesting East of Lake Nyanza as area of contact where the arriving Bantu groups met settled Cushitic communities. We suggest that the innovation of words for precisely male domestic animals points to Bantu innovation on breeding as cultural practice under Cushitic influence.

1. Introduction

We discuss six roots for male domestic animals that East African Bantu languages borrowed from Cushitic and Nilotic. The animals that we discuss are male goats (section 2), sheep (sections 3 and 4) and male cattle (section 5). In section 6 we provide some general observations.

2. He-goat GULATA

This root GULATA and variations thereof in numerous EA Bantu languages is a Cushitic - Nilotic loan. Bantu forms are mostly: **ngulati** or **ngulata** ‘he-goat’. The most likely source is from Proto Tanzanian Cushitic (=Proto West-Rift-South-Cushitic), (1).

- (1) Proto Tanzanian Cushitic ***gwereta** ~ ***gwereti** (m) ‘he-goat’ (Kiessling and Mous 2003:129-130)

¹ Acknowledgements to be added.

on the basis of

IRAQW	gurta
GORWAA	gurtu
ALAGWA	gurutu-moo
BURUNGE	gwereti

This particular root in Tanzanian Cushitic is a retention from proto-Cushitic because there are wider Cushitic cognates, (2).²

(2) Wider Cushitic cognates of *gwereta³

Highland East Cushitic	korb+eesa ‘goat’ (Hudson 1989)
Burji	kola ‘castrated ram’
Proto East Cushitic	* kol (Sasse 1979) based on:
Rendille	kelex ‘castrated he-goat’
Dasanach	kolli ‘he-goat’
Arbore	k’oll ‘cattle, wealth’ (Hayward 1984:379)
Elmolo	kor-at ‘goat’ (Heine 1980:207)
Yaaku	kolleḥ ‘mature castrated goat’
Gawwada	qol-e (pl) ‘livestock in general (goats included)’
Diraytata	k’ol-d’a ‘goats, general’

An intriguing complication is that there is a similar Proto-Nilotic root *k-waRɔ (Dimmendaal 1983:43). Assuming that proto East-Cushitic is much older than proto Nilotic, we suggest transfer from proto East-Cushitic to proto Nilotic.

The presence of the root in Nilotic is crucial in its further history because it provides the source for the final syllable **ta** or **ti** in proto Tanzanian Cushitic. Proto South Nilotic has **-ita** as a singulative nominal suffix, and crucially, also in connection to this particular root, as shown by Rottland (1982:357-358).

(3) Proto South Nilotic cognate roots⁴

Proto Kalenjin ***kwɛR** ‘billy goat’

Common Datooga:

Isamjeega-Datooga: **gwaray-da** ‘he-goat’

² There is another potential Cushitic link in the reconstructed pEastCushitic *ʔorg ‘billy goat’ (Sasse 1979) with the proto East-OmoTana cognate *agor ‘billy-goat’. We consider this a separate root as is evident from the competing forms in East-OmoTana: **kélek:í** ‘mature castrated goat’ in Rendille and **qayl** ‘colt’ in Somali and cognate with proto East Cushitic *kol.

³ See Blench (1999: 60) for possible wider Afroasiatic and Nilo-Saharan cognates.

⁴ The root is also present in Eastern Nilotic: Maasai **-kérr** ‘wether-goat’, Toposa **-koro** ‘billy-goat’, Turkana **kɔrɔ** ‘he-goat’ (Dimmendaal 1983: 250), but also Mursi-Surmic **kólogól** ‘young bullock’ which begs the question if the root is older in Nilo-Saharan.

Rotigenga-Datooga: **qulai-da** ‘he-goat’

Barabaiga-Datooga: **qwéráy-da** ‘he-goat’

Tanzanian Cushitic must have borrowed it from South Nilotic to account for the final syllable of ***gwere.ta**. This also supports the Tanzanian reconstruction of the first consonant as a rounded velar.

The next puzzle is the variation in the final vowel. The Burunge form ends in **ti** while the shape of the word in the rest of Tanzanian Cushitic ends in **-ta** (or **-tu**). If Tanzanian Cushitic borrowed from South Nilotic, regardless of which level of transfer (proto South Nilotic, proto Kalenjin, proto Datooga), the final vowel must have originally been **a**. Hence the change to **ti** was a later development. Intriguingly. Some Bantu languages have final **i** while others have final **a**. Bantu zone F languages have final **i** except for **a** in Nyaturu, Rangi and Mbugwe.

The variation in the final vowel cannot be motivated by restrictions or reinterpretations in the receiving Bantu languages. Therefore, we posit that the shape of the final vowel in the various attestations in Bantu languages are an indication for different sources and paths of transfer.

The most likely source for the variation in final **a** or **i** is reinterpretation within South Cushitic. The original ending in **ta** in the transferred item in South Cushitic entered an earlier Bantu language. This final **ta** was re-interpreted within South Cushitic as the feminine gender suffix **ti** (versus masculine **ku**). These gender suffixes lost productivity in Tanzanian Cushitic and in this instance the originally feminine suffix **ti** is reinterpreted as part of the root, and as a consequence, the gender of the root could have become masculine following the strong male semantics. This variation was present in proto Tanzanian Cushitic, i.e., in the later stages of South Cushitic. A form with final **i** found its way into proto Takama (zone F) Bantu. On the other hand, the original proto South Cushitic form in **a** found its way at an earlier stage into the Bantu language that gave rise to Chaga and Seuta Bantu.

Philippon (2013:91-92) has already pointed out that the different shapes in the Bantu languages make it likely that there were separate borrowings. He reports on the variation in from by providing the different shapes of the virtual reconstruction °-guda(à)ta, °-godata, °-gudiàti, °-gudaati, °-gudati, all ‘whether’ and Chaga °-gudęta ‘ox’ [with dental ɟ only found in loan-words]. We suggest here that the differences in final vowels are indeed primarily due to different borrowing events and like him assume a number of Bantu to Bantu transfers. The deviant form in Sukuma-Nyamwezi °-gudiàti is still to be accounted for. Masele (2001:370) already hinted that the **i** versus **a** final vowel was “most probably depending on the route the word took”.

Dialectal differentiation in Masele’s lexical overview shows the complexity of transfers when we take dialects into account: The unmotivated and unique sporadic innovation of **ly** in

ngùlyààti is limited to KimunaSukuuma, JinaKiiya-Sukuma and GinaNtuzu.⁵ The innovation did not reach all off Nyamwezi as two Nyamwezi dialects Kikonongo F22e and SiGalaganzi F33d have l and not ly in ngùlààti. Nyilamba and one of the Rimi dialects show the intrusion of deviant root **mpahi**. This root is common in the shape **empaya** in Ugandan Bantu languages, such as Toro, Kiga, Nkore, Nyoro, and in Haya and Kerewe in Tanzania.⁶

The Rimi/Nyaturu dialects GiAhi F32b **ngùàrà** and Ghinamuninyanyi F32c **ngwààra** show regular sound changes $t > \text{ɟ} \sim t'$ and l ($< *d$) to zero Masele (2001:116; Masele and Nurse 2003:125). The fact that this lexical went through the regular sound changes suggests an early transfer. The patch work type of distribution of the ly innovation and the intrusion of a root PAHI show subsequent later horizontal spreads among the Bantu languages.

The final **i** in Gogo (Bantu G11) must have been due to influence from neighbouring Burunge. The final **i** in Luguru in turn should be due to influence from Gogo. There are two languages in the Mbeya corridor, Safwa and Malela (small part of M20), that have a final **i**. We suggest that these are instances of transfer from a Takama (zone F) Bantu source; possibly through Sumbwa **ngùlààti**.

Kamba has **ngulata** ‘he-goat’ and this seems to be the only Central Kenyan language that has this root: it must have borrowed it from nearby Taveta/Chasu-Pare.

A number of Bantu languages have added an initial nasal to the root for the membership of class 9/10. It is not common for Bantu languages to add noun class prefixes to borrowed nouns (Mous 2019:364–368). However, we do see such class 9/10 nasal additions in other borrowed words for domestic animals. Most likely, this is a sign of a long life of this root within East African Bantu and sign of a later paradigmatic noun class shift to 9/10. Moreover, the semantics strongly favours class 9/10 assignment. In addition, it may be an indication of further “horizontal spread” from one Bantu language with an added nasal in the root. As a case in point, in the Chaga languages the regular reflex of **gu** would be **fu** for the first root syllable but not after a nasal. Hence Chaga either adapted the loan in the shape guleta in class9 with an added nasal or it must have borrowed the word from another Bantu language which already had an initial nasal.

⁵ Masele 2001:238: “GinaNtuzu occupies a middle position in that it behaves like KimunaSukuma in some respects and like JinaKiiya in others”. He reclassifies it as a Sukuma dialect, see footnote 49 on p.382: “F22c in Guthrie is Kiiya which does not belong in F22. It was shifted to F21 as F21c JinaKiiya. In addition F22b KiDakama joined the F21 group because of its linguistic affinity, leaving F22a, F22d and F22e as the core KiNyamweezi dialects.”

⁶ Kidakama-Nyamwezi has ìtùlàángé which we take to be a loan from neighbouring but not closely related Kilongo which has èntùlààgè presumably with metathesis which may have been a way of lexical creativity typical for argots as this the smith’s language. It is not likely to be a separate root because there are no similar words for ‘he-goat’ elsewhere in East Africa.

⁷ In KiRimi, the voiceless flap represented as [R] is a regular reflex of PB *t in many words, although it often occurs in free variation with /t/ (See Olson (1964:13) on the allophonic nature of [R]) (Masele 2001: 358).

- (4) The attestations for this root in East African Bantu with meaning ‘he-goat’
- Bantu zone F
- | | |
|--------------------------|--|
| Sukuma/Ntuzu | ngulyati LLL
(Palatalization is irregular and only in this root) |
| Nyamwezi | nygulyati ⁸ |
| [SiGalaganza, Kikonongo] | ngulati |
| Sumbwa | ngulati |
| Nyilamba, Nyihanzu | ngulaati LLL |
| Rimi-Nyaturu | nguata (with regular loss of l) |
| Langi | ngolaata (u or o) LLL |
| Mbugwe | ngulata LLL |
- CHAGA and wider area
- | | |
|---------|--|
| Machame | ngoleta~nguleta~ngululeta ‘castrated ox or ram’ |
| Mochi | nguleta ‘castrated ox’ |
| Chasu | ngulata ‘castrated ram’ |
| Kamba | ngulata |
- RUVU including Seuta
- | | |
|-----------|--|
| Luguru | vulati ⁹ |
| Nguungulu | vulata |
| Kagulu | di-fulata 5 (Petzell 2015: 69) |
| Zigua | vulata ‘ |
| Shambaa | fulata (the consonant is regular) |
| Bondei | vuata (regular within Seuta) |
| Gogo | ivulati ‘goat’ Rugemalira (2009) |
- Mbeya-Corridor Zone M
- Only in these two languages, not in the rest of Corridor Bantu. Could these be transfers from Gogo?
- | | |
|--------|--------------------------------------|
| Malila | vulisi ‘he-goat’ |
| Safwa | ivulisi ‘he-goat’) <*i-guliti |

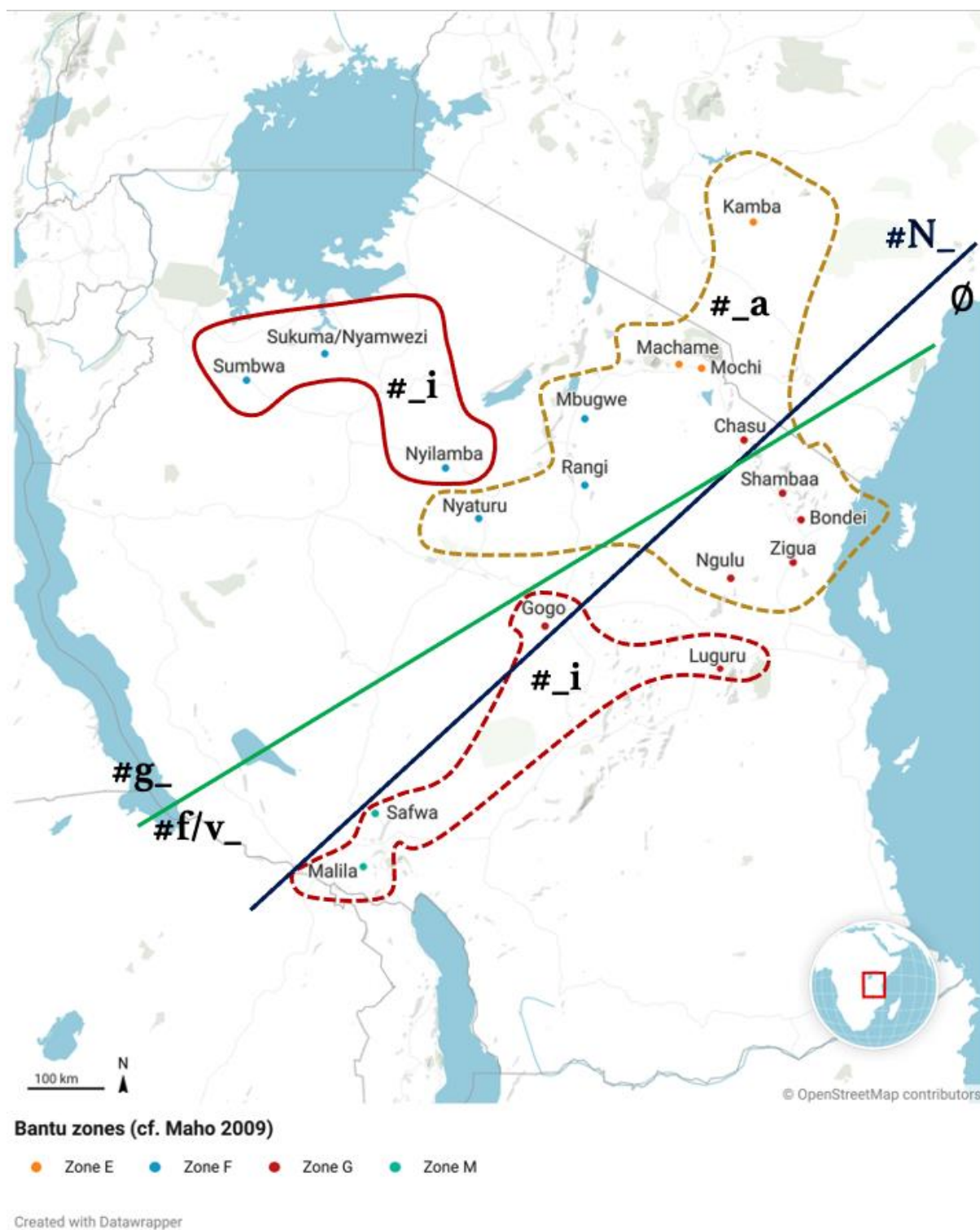
We did not find any reflexes in Northeast Coastal Bantu Pokomo, Sabaki; Pare and Tuveta use a different root, **nhtenge**.

The distribution of these Bantu loans is visualised in Figure 1

⁸ TLS has **ngulyaati** for ‘he-goat’ in Nyamwezi; Maganga and Schadeberg (1992:269) report **ngulyaati** (LLLL) (9/10) (~5/6). It is not recorded for F22a Kinyanyeembe in Masele (2001).

⁹ The regular reflex of **ti** is **si** in Luguru and therefore this must be a later loan.

Figure 1: Map of GULATA cognates in EA Bantu



The root is reported in Sandawe as **gwartha** ‘billy-goat’ (Ehret & Ehret 2012: 34). This is a loan from a Tanzanian Cushitic language, probably proto Tanzanian Cushitic given the labialisation of the first consonant. The South Cushitic language Kw’adza has various forms which is likely to be due to the fact that the language (now extinct) was in flux already at the time of the earliest data collection. The two forms are **?afulatu** and **gulata** ‘he-goat’ (Ehret

2022:1,18). The first one is likely to be from Gogo **ivuláti** ‘he-goat’; Gogo is the language that Kw’adza shifted to. The other root, **gulata** ‘he-goat’ is cognate with proto Tanzanian Cushitic.

Aasax, another extinct Cushitic language has **’oforo-k** ‘he-goat’ and **’efere-t** ‘goat’, for both Ehret (1980) is the source, and the variation is likely due to the fact that the language was in its last stages during data collection; later, too late, Petrollino and Mous (2010) notes **hoora** ‘goat’ (and **agga** ‘goat’ or ‘meat’ which is likely ‘food’ from ***ƣag** ‘to eat’). None of these forms are related to **gulata**, unless perhaps from a Bantu source that had undergone the **g>v** should change; Aasax was in contact with Nduu.

Further afield we find this root in the Ugandan Kuliak languages as proto Kuliak ***kol** ‘billy-goat’ which we assume to be an independent early transfer from a Nilotic source.¹⁰ It is also present in Hamar (Omoti, South Ethiopia) as **qulí** ‘goat’ (Petrollino 2016:14) which is likely to be borrowed from an East Cushitic source given its geographical position. These are independent contact events that do not involve the addition of the third syllable.

The proposed scenario is one of a transfer from East Cushitic into Nilotic. Tanzanian (South) Cushitic acquired it later from South Nilotic with the final **ta** singulative reinterpreted as part of the stem. Within South Cushitic the final syllable was reinterpreted as a gender suffix **ti** giving rise to two variants varying in their final vowel, **a** or **i**. Both forms spread at different times and places into earlier Bantu languages. The further development within Ruvu and Seuta Bantu of **g > v/f** is a regular internal Bantu development for these groups and confirms that the borrowing must be relatively old given the presence of these sound shifts and of the distribution of the root. Hinnebush (1981:25,31,) discusses the spirantisation ***G > v / _ ɥ** in North-East Coastal Bantu, a higher level than Greater-Ruvu, and later loss of voicing in Kaguru, and Seuta (Hinnebush 1981: 103, 109).

The proto-South-Cushitic form varied between **gulaata** and **gulaati**. Both forms are the source of early transfer into two different early-stage Bantu languages. The one with final /a/ ***gulaata** underwent the regular sound changes of the Ruvu languages and hence entered pre-proto-Ruvu before this change to **v>f** happened which is an innovation at Great Ruvu level (Hinnebush 1981) and borrowed it with the usual borrowing scenario into a class that has a zero or V prefix.

The zone F languages, which cannot be shown to form a group, developed an initial nasal on the form in /i/, either as an extraordinary loan-adaptation into a class system that pressured domestic animals to be in 9/10 or as a later development. All languages Bantu languages in the Tanzanian Rift Valley with this root have it prenasalised. But quite a few of the current attestations can be shown to be recent borrowings from another Bantu source. A language like Langi currently has three allomorphs of the class 9 prefix; a homorganic prenasalisation before voiced stops, **ɲ** before vowels and zero elsewhere (Dunham 2005:88). Recent

¹⁰ Based on its presence in all three Kuliak languages: Ik **kɔl(é-)** ‘wether-goat’, Nyang’i **kɔl** or **koro** ‘billy-goat’, Soo **kol** ‘billy-goat’.

borrowings in class 9 have the zero prefix even before voiced stops. An early transfer into one or several Bantu languages in the area must have added the nasal. Since zone F as a whole is not a group, we have to assume horizontal Bantu to Bantu spread; into Kimbu and into Nyiramba-Nyisanzu. If Langi is indeed part of Langi/Chaga/Dawida/Saghala clade as proposed by Nurse (2023). There is an additional issue: The Chaga languages have /e/ in the penultimate syllable. One explanation is that this /e/ is the result of the sequence /a-ita/ with the addition of the South Nilotic singulative. Datooga has **ay** in the penultimate syllable. Possibly the transfer into Langi/Chaga clade came from Datooga rather than from Tanzanian Cushitic, and Langi later assimilated /e/ to /a/.

It is a contingent area that has final /i/ and prenasalised: The Sukuma, Nyamwezi, Sumbwa, group, Nyilamba-Nyihanzu, and Kimbu. The final syllable has /i/ in neighbouring Gogo and next to Gogo in Luguru. We suggest that this is a chain influence from either Burunge or Kimbu which both neighbour Gogo and have final /i/.

We have argued elsewhere that there was intense contact between proto South Cushitic and proto Kalenjin (Mous & Rapold to appear) and between proto OmoTana East Cushitic and proto Nilotic. The transfer of the root for ‘he-goat’ from an East Cushitic source to proto Nilotic was part of the latter contact period, while the borrowing of proto South Cushitic from a South Nilotic source was part of the former contact period and took place in Kenya before the entry of South Cushitic into Tanzania. It is also roughly in the same period that that the root was transferred into the Bantu language that developed the instances of the root ending in **a**. The variant in **i** entered into the ancestor of zone F Bantu in Northern Tanzania in a later stage.

There is a reconstructed PB word for ‘he-goat’, ***pòngó** LH 9/10 ‘goat, he-goat’ (BLR3-2609) attested in zones G, K, L, M, N, and S, and in Tanzanian Bantu languages with the meaning ‘he-goat’ in Bena, Bungu, Hehe, Kinga, Kisi, Lambya, Manda, Matengo, Mpoto, Mwera, Ndali, Ndari, Ngoni, Nyakyusa, Pangwa, Sangu, Wanji, Wungu¹¹. The root is probably an Eastern Bantu innovation based on PB ***pòngò** ‘bushbuck’ (BLR3-6810) attested in zones A F G J. The zone-F Bantu languages have this root in the meaning ‘bushbuck’ (de Lima Santiago 2020:450-451). It seems that EA Bantu languages felt a need for a specific term for the male goat. One strand of EA Bantu languages used the existing word for ‘bushbuck’ for the meaning of ‘he-goat’ and the other strand borrowed a word from neighbouring Cushitic languages.

3. Ram TULUME

We propose that this root **tulume** is an internal East African Bantu innovation that is not Cushitic in origin contrary to the claim in Ehret (1998:325) who posits the origin in a South Cushitic root ***tud-** plus a ***-Vm-** noun suffix. There is no such suffix in South Cushitic and the evidence for such a root is very weak. In fact, the only evidence is Kw’adza **tulungayo**

¹¹ They all have a separate general word for ‘goat’ of the **mbuzi** or **mene** shape.

‘ram’. However, data on Kw’adza were collected when the language was already in flux, are not reliable. One word from an unreliable source is too little to posit Cushitic origin.

A root of the shape TULUME for ‘ram’ is present in a limited number of East African Bantu languages.

- (5) East African Bantu attestations of TULUME ‘ram’
- SEUTA
 Zigula: **ndóròmè** ‘ram’
 Shambaa: **dólòmé** ‘he-goat’¹²
 South-Pare: **idorome**, ndorome (TLS) Not in Mreta (2008)
- F30/TAKAMA
 Nyaturu: **ntulee** ‘ram’
 NE Coastal Bantu
 Giryama **turume** ‘ram’
- MARA Bantu
 Nata: **andome** ‘he-goat’; **eki-rome** ‘male goat-kid’ (Kisigiro nd)
- LUYIA
 Bukusu: **eendurume** (tone B) ‘he-goat’ (Marlo 2023)

Our suggestion is that this root is an internal Bantu development and a compound of which the second element is **dume** ‘male’, similar to the Jita compound **i-koko-rome** for ‘rooster’ (TLS); **iing’a índúme** ‘bull = male cow’; **omu-ndurume** < **ndugu-rume** ‘brother (said by girl)’ (Kagaya 2005). The first element should then have a shape like *tu, or *tuCV with loss of C2 and V2. A candidate would be ***túgì** ‘domesticated animal, meat’ (BLR3-5243) + **dume** assuming d>r, and g>0, both common Bantu historical processes. However, this root is only attested in the Northwest Bantu area in zone A. The noun is derived from the verb ***túg** ‘rear, domesticate’ (BLR3-5242) which has a much wider distribution, A C D G J S, hence it does have some presence in East Bantu. Another less satisfactory candidate is the root **ndolo** for ‘donkey’ or ‘zebra’ in zone F. Finally, another line of thought is to see the root **ndurume** as a contraction of **ndugu+rume** ‘male sibling’ as it is in Jita (Kagaya 2005). There is a parallel of a semantic link between human child and goat/sheep child in the Cushitic root ***dagina** which is used in the Bantu languages of the wider Chaga area for ‘kid of sheep/goat’. Nata uses **andome** / a male one/ for the ‘he-goat’ with /r/ as initial root consonants as it appears in the ‘male goat kid’, **eki-rome** and in **nyoko rome** ‘maternal uncle = male mother’.

4. Ram KIRUK

The South Nilotic root for ‘bull’, Proto Kalenjin ***kiruk** (Rottland 1982: 347 - in all Kalenjin varieties) was transferred into Kuliak, following a suggestion by Terrill Schrock (p.c.). Schrock argues that Ik **cúruk^a** ‘bull’ is cognate with **kik** ‘bull’ in Soo, and related to South Nilotic attestations such as Datooga **jirug** ‘ox’ -**giriki** ‘bull’ in Logooli and **kirg-it** ‘bull’ in

¹² The HLH tone pattern is uncommon within Shambaa - Philippson p.c.

Nandi and that it transferred into Mara-Bantu languages in the meaning of ‘ram’. Ehret (1998:194; 317) reports the Bantu loan (**h**)**iili** ‘bull, ox’ in Luhya to originate in this root.

- (6) South Nilotic KIRUK ‘bull’ (Rottland 1982: 347,485)

PK *kiruk

CD jirug-da

- (7) East African Bantu attestations of KIRUK ‘ram’

Ikoma: -gúruki ‘ram’

Suba-Simbiti -yúruki ‘ram’

Ikizu kuruki ‘ram

5. Bull JEKU / YAKAMBA / JAO

Under this heading we discuss three different roots that are Cushitic in origin and wide-spread in East African Bantu.

- (8) Three loan roots for ‘bull’ in EA Bantu

***jeku** from proto Tanzanian Cushitic ***yakwaa** (n) ‘cattle’

***jao** from proto Tanzanian Cushitic ***awu** (m) ‘bull’
or from proto Khoe ***kx’áò** ‘male’

***yakamba** form proto Tanzanian Cushitic ***yaqamba** (m) ‘big leading bull’

***kamba(ku)**

The situation of borrowed words for ‘bull’ in East African Bantu languages is a confusing one and we hope to bring some light by differentiating between the first two Cushitic roots as sources. For example, Nurse (1979:514) combines the South Cushitic roots that we separate “Iraqw **awu**, Burunge **awu** ‘bull’, Dahalo ja:go ‘cow’” and remarks “Many of these are not cognate, and seem to imply at least 2 different sources”. In various East African Bantu languages the phoneme /k/ is historically lost and without the intervening velar the two roots are virtually indistinguishable. Taking horizontal Bantu-Bantu spread into account it becomes difficult to determine which root is at the origin of a Bantu term as the absence of an intervocalic /k/ could point to such Bantu>Bantu spread. Scenario’s in which only the first root transferred into Bantu languages go a long way. The difference in the final vowel can easily be attributed to differences in interpretation of [ɔ] from a 7-vowel Bantu language. We offer the option of different sources as an alternative.

The first item is more or less limited to South Cushitic within Cushitic, but it is attested as **já:go** ‘cow’; **ja:gu** ‘cattle’ in Dahalo (Ehret, Elderkin, Nurse 1989). We assume that the terms are cognate and go back to the common ancestor of Dahalo and Tanzanian Cushitic. Languages near Dahalo have a similar root but referring solely to the male animal, while in the Cushitic languages it is the most general term and not restricted to male animals.

- (9) Tanzanian Cushitic source (Kiessling and Mous 2003):
***yakwaa ~ *hikwaa** (n) ‘cattle’
 IR hikwaa
 GO yikwaa ~ hikwaa
 AL yaawáa
 BU yakway

The receiving Bantu languages use it all for a male cow, sometimes the young one, sometimes the old one. Several Bantu languages have formed a compound by adding the root *ana* ‘child’, but the meaning ‘young’ is not restricted to those. The semantic specialisation to the male animal happened in the transfer into Bantu and suggests that the Cushitic to Bantu transfer happened only once. A second indication for this is that the first vowel oscillates between **a** and **i** in Tanzanian Cushitic but is always **e** in Bantu. Ehret (1998: 327) has proposed such a borrowing into proto-Kati **jeku, *-jiku* ‘ox’. The Bantu roots have an initial stop **j** rather than the glide **y**. Given the initial voiced palatal in Dahalo, we assume that the pre-Tanzanian Cushitic source had a voiced initial palatal too.

- (10) EA Bantu attestations of JEKU

CHAGA+:

Gweno **ndzekwáná** ‘gros taureau’; **ndzàyù** (GP)

Chasu/Pare: **njekú** ‘taureau’ (Gonja)

njeyu (Shighatini) (Gérard Philippson p.c. 15.10.2023)

njekwáná ‘taureau’ (Mbagá).

njekwáná ‘steer, old bull’ Mreta (2008:62)

Mbugu: **jèkwànà** (9/10) ‘ox’¹³

SEUTA-RUVU:

Shambaa **njékú**¹⁴ ‘taurillon, bull-calf’ or ‘bullock’ (next to **nkámábákú**)

Zigula **njeku**

Ngulu **jeku** ‘bull’

Gogo **nzêku** ‘ox’ next to **nghambako** ‘bull’ (Rugemalira 2005)

Swahili **njeku** ‘undersized bull’

F30

Mbugwe **njaikó** 9/10 ‘bull’

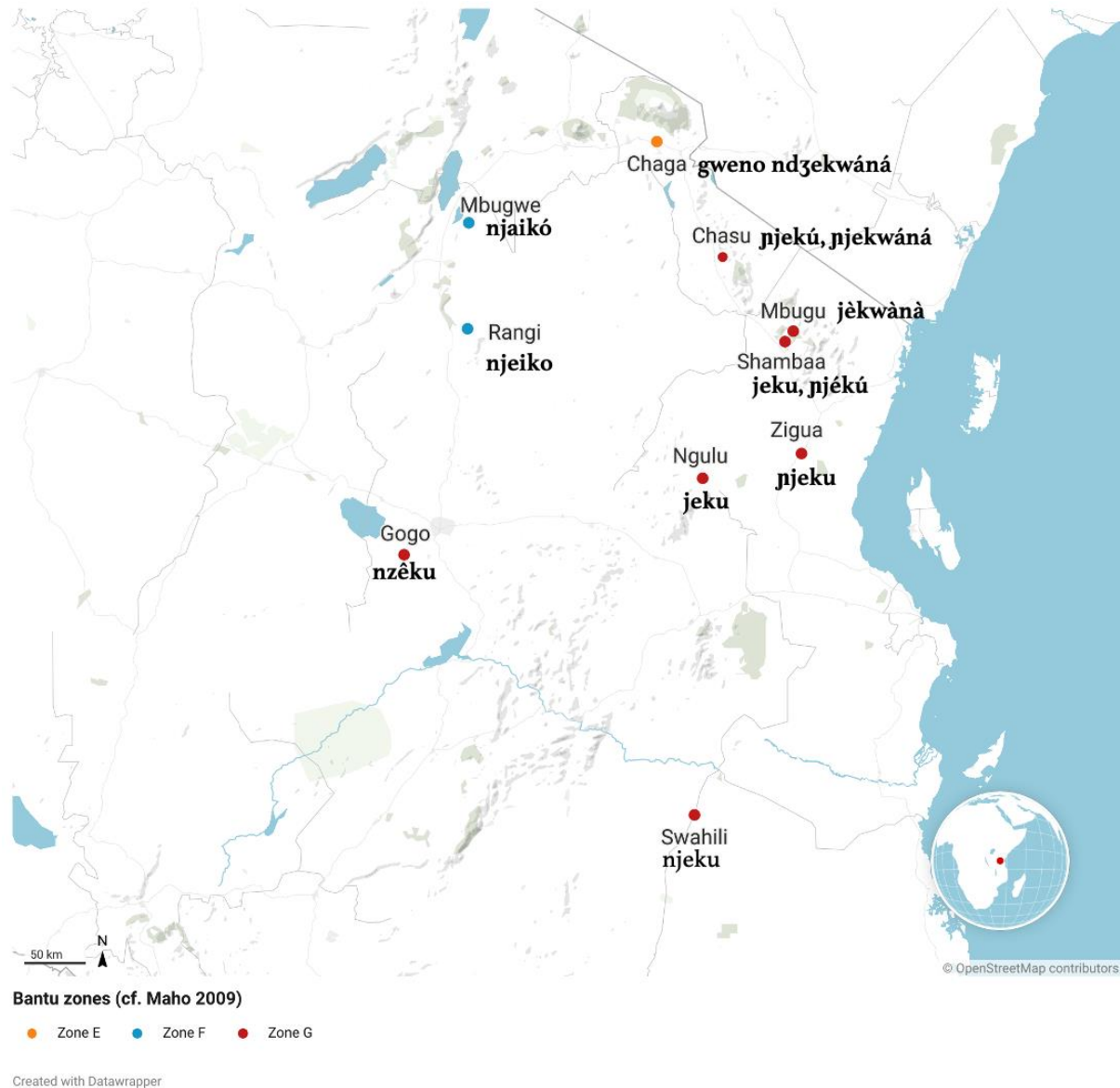
Langi **njeiko**

The distribution of these EA Bantu attestations of JEKU is presented in Figure 2.

¹³ Both in Inner and Normal Mbugu (Mous 2003:262) from Chasu.

¹⁴ HL tonal type.

Figure 2: Map of EA Bantu loans JEKU



The second transferred root is the Tanzanian Cushitic root *ʔawu (m) ‘bull’ transferred into East African Bantu in words similar to **jao** ‘bull’. This Tanzanian Cushitic root does have links to other Cushitic languages and must be a retention given the proto East Cushitic cognate *ʔawr ‘big male animal, the loss of non-initial r is regular in the history of Tanzanian Cushitic (Kiessling and Mous 2003: 65). This borrowing was discussed in Nurse & Rottland (1992: 201), Ehret (1998:329,330), and Nurse (1979:514).¹⁵

¹⁵ A similar root exists in Kalahari Khoe with words for ‘bull’ like *kx’ào*; proto Khoe **kx’ao* ‘male’ Vossen (1997: 465) and Standard Namibian Khoekhoe *ʔáo* ‘man; husband’ (Ed Elderkin and Bonny Sands p.c. 15.10.2023) but without a link in Sandawe we prefer the proposal of a transfer from Cushitic.

(11) Tanzanian Cushitic source (Kiessling and Mous 2003:65)

***ʔawu** (m) ‘bull’

IR ʔawu

GO ʔawu

AL ʔawu

BU ʔawu

The receiving Bantu languages all put the word in class 9/10 and added a prefix **nji-** 9a, which is reduced in some languages. This addition is needed to allow for the initial palatal, whether pre-nasalised or not. There is no indication for an initial palatal in Cushitic.

The root is also transferred from an East Cushitic source, probably Proto-West Omo-Tana into Proto-South Nilotic but this is a different development which does include final **r** or a reflex thereof.

(12) EA Bantu attestations of JAO ‘bull’

Chaga+

Siha, Rwa, Ng’uni, Mashami: **ɟau**

Kiwoso **tɟau**

Kahe **ndzau**

Dawida, Saghala **ndzàù** ‘taureau, bull’

Asu/Pare **nzàò** ‘taureau, mâle d’animal’

Sabaki

Giryama **ndzao** ‘bull’

Thagichu

Kamba **nzao** (next to **ndɛwa**)

Tharaka **ndyau** (next to **nd:ɛ:ywa**)

Sonjo/Temi **njao** ‘bull’

The distribution of these roots is given in Figure 3.

Figure 3: EA Bantu attestations of JAO



The third root, **yaqamba** ‘bull’ is limited to Tanzanian Cushitic and not yet attested elsewhere in Cushitic. Within Tanzanian Cushitic, this root has the connotations of a big bull, the leader of the herd, and it is used metaphorically for a strong male leader. The root is widespread in Bantu, cf. Ehret (1998:325).

There is considerable variation in the related words in the various Bantu languages to the extent that there seems to be a separate root involved, **kamba(ku)** ‘bull’. Nyaturu, for example, has both roots in different meanings, **nkhembako** ‘ram’ and **njaghamba** ‘bull’. However, we argue that all forms go back to the Tanzanian Cushitic root ***yaqamba**. The

fact that Rangi has **kabaku** with the semantic associations of Cushitic **yaqamba** while the rest of F30 has **njayamba** suggests that this is indeed one and the same root.

All transfers into Bantu of this variant **kamba(ku)** of the root contain the final **ku** rendering the root tri-syllabic where Bantu noun roots are rarely tri-syllabic. This suggests that the donor language had a final syllable/suffix **ku**. A candidate is an early Tanzanian pre-Proto WestRift Cushitic source that had the final **-ku** masculine gender marker as is still the case in Kw'adza.

Sandawe has **k'ambà** 'bull'. This could be a loan from Cushitic with loss of the initial syllable **ya**. The ejective **k'** in Sandawe corresponds regularly in loans to the ejective uvular **q** in Tanzanian Cushitic.

The root is widely spread but most likely at different times. An early spread of **yakamba-ku** while deleting the initial syllable into Sandawe and a number of Bantu languages. A later transfer of the **yaqamba** root into Hadza, **yaggamba** 'male human or animal' (Miller 2023), and the Bantu zone F20-30 languages of Northern Central Tanzania, but early enough to develop an additional class 9/10 nasal.

The **yaqamba** transfer has **g** or **y** in the Bantu languages corresponding to the Cushitic uvular ejective. Since Bantu languages do not have uvular sounds, nor ejectives, this adaptation to velar makes sense. Within Tanzanian Cushitic the fricative is commonly part of an affricate realisation of **q**. The initial consonant is voiced due to the initial nasal in Bantu and the second velar is mostly voiced as well, inter-vocalically.

- (13) EA Bantu attestations of YAKAMBA/KAMBAKU 'bull'
- | | |
|----------------------------|---|
| <u>zone F</u> | |
| Nyilamba: | nzágá(a)mba HHL |
| Nyaturu: | njayamba |
| Nyamwezi | nzagáámba. ' LHHL.h (9/10) and i-/ma-yagáámba |
| Sukuma | nzágamba (also yagambá) |
| Rangi | nkabaku ~ kaba(n)ko ¹⁶ |
| <u>Thagichu:</u> | |
| Sonjo | njaxamba 'male' (Nurse & Rottland 1992: 202) |
| Kikuyu | njámba (with loss of intervocalic velar voiced |
| stop/fricative) | |
| E50 | *n-cám̀bà 'male' (Nurse & Rottland 1992: 202) |
| <u>Northeast Coastal:</u> | |
| Giryama | ndzagamba |
| Ruvu | |
| Gogo | kambaaku ~ nghambako 'bull' (Rugemalira 2009) |
| <u>Southern Highlands:</u> | ili-kambaku (Nurse & Park 1988:109) |
| Hehe | ili-kambaako ; also root for 'male' |

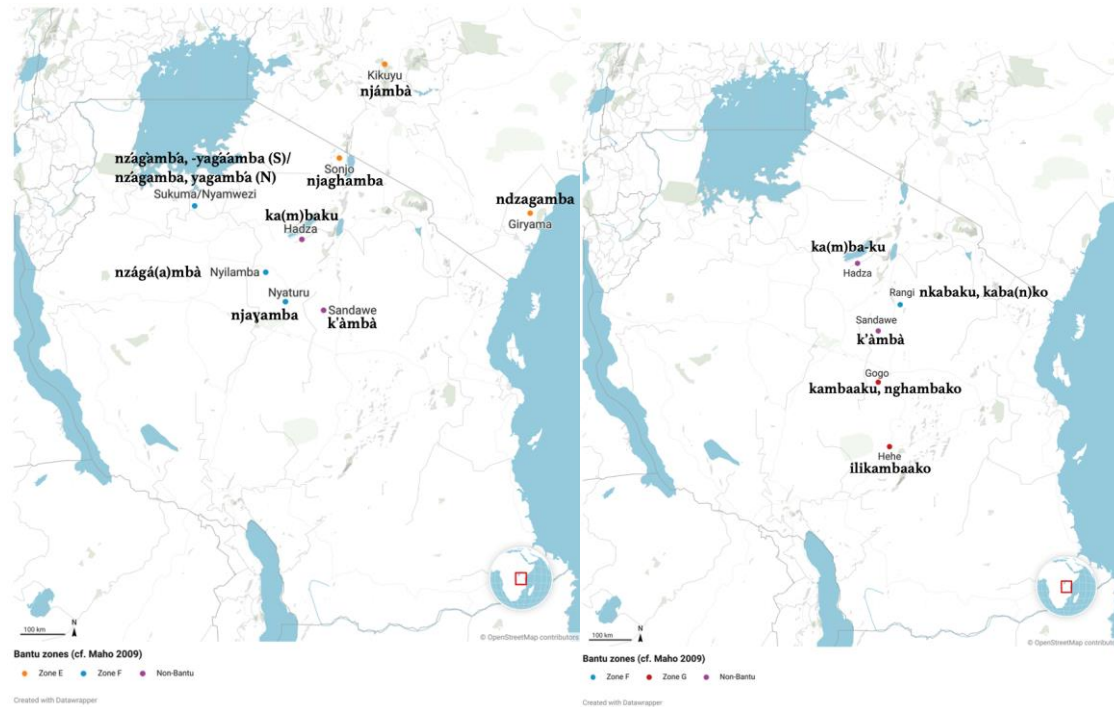
¹⁶ Symbolically used for a war-leader, a knowledgeable man.

Nyakyusa-Ndali
Nyika

in-kambaku (Nurse & Park 1988:109)
-kambaku (Nurse & Park 1988:109)

The attestations of YAKAMBA and those of KAMBAKU are presented in two maps of Figure 4.

Figure 4: Distribution EA Bantu YAKAMBA (left) and KAMBAKU (right)



6. Bantu lexical innovation of male domestic animals

There is a recurrent innovation in East African Bantu languages for a MALE domestic animal. Either by borrowing from early-Tanzanian Cushitic source or by internal development. This observation is probably valid for the earlier stage of Proto Interlacustrine Bantu. Schoenbrun (1997) has reconstructed two words for male domestic animals but both are innovations, one a borrowing and the second a semantic specialisation:

- (14) Innovations of male domestic animals in proto Interlacustrine Bantu
(Schoenbrun (1997:51,63)
44 bull Proto-East Nyanza *-**gani** from Kuliak ***gail**
8 bull ProtoKivu ***pwizi** from older Bantu root *-**puidi** ‘male animal’ (not necessarily domestic)

Tanzanian Cushitic languages have separate male terms for all domestic animals. EA Bantu languages in general tend to show innovations of male domestic animals. Let us speculate on why. One line of thought is that specific male terms became important because breeding became important. Another possibility is the development of trade in which male animals

were more prominent. But also there is the factor that male animals figure more prominently in rituals. And finally, the specific meaning of ‘leading bull’ possibly suggests new herding practices?

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