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The relevance of Cushitic for the linguistic history of East Africa

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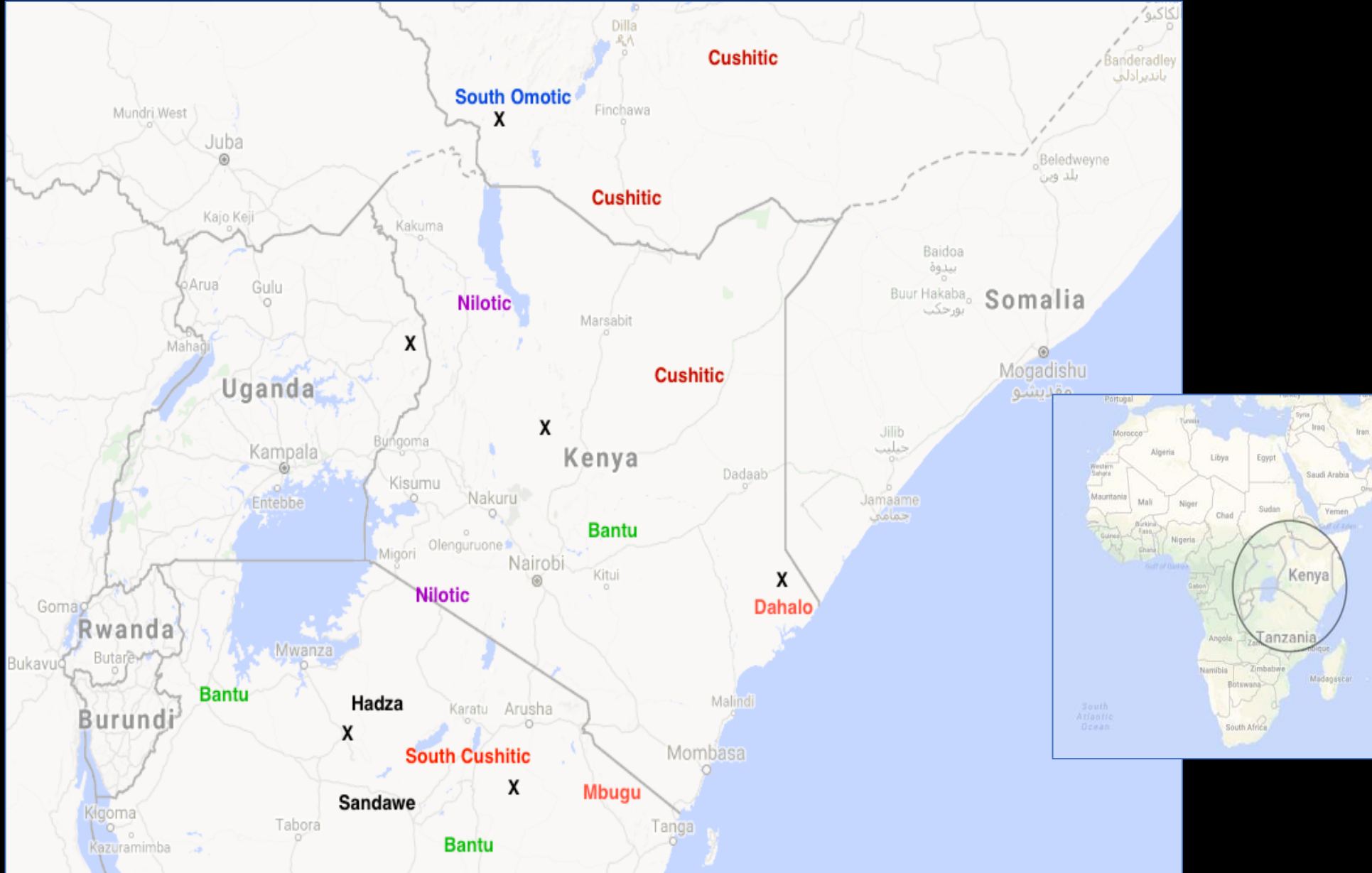
Content

- Introduction
- Cushitic pluratives and a link between Tanzanian Cushitic and East Cushitic
- Pre-Oromo link to Tanzanian Cushitic
- Tanzanian Cushitic present earlier
- Other results Past, Present and Future



Introduction

Linguistic landscape of East Africa

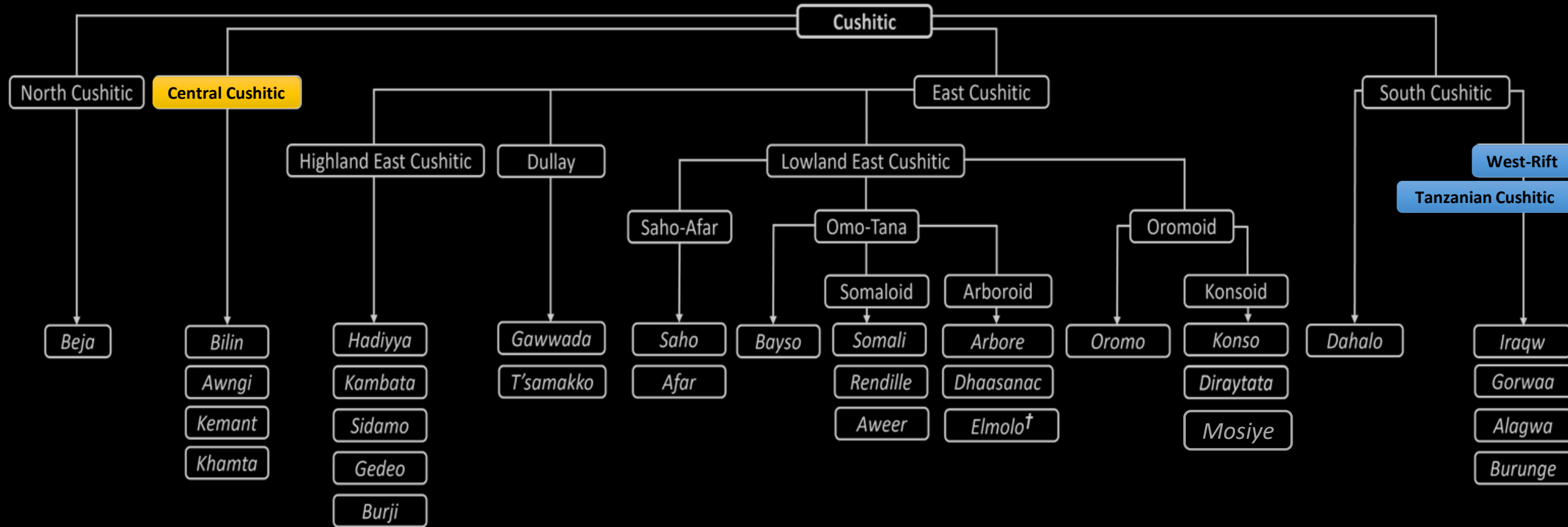


Linguistic history of East Africa project

- Reach new state-of-the-art of EA linguistic history and AFTER the project discuss that with relevant other disciplines.
- Establish lexical and phonological reconstruction of Cushitic
- Re-examine the lexical influence of Cushitic on Bantu languages and what it tells us about cultural changes and in subsistence
- Details of the history of the big migrations into East Africa
Today we discuss: Several Cushitic movements into East Africa
- Reconstruct histories of contact
- Examine possibilities of unearthing earlier language families
- We are just over 2,5 years into a 4-year project

Cushitic pluratives and a link between Tanzanian Cushitic and East Cushitic

The Cushitic languages included in this study



Kiessling & Mous, 2003

Inventory of Cushitic plurative suffixes

Beja	Burji	Kambaat: Mosiye	Gawwad: Ts'amakc	Hadiyya	Rendille	Konso	Diraytata	Gedeo	Bayso	Dasenech	Elmolo	Oromo	Sidaama	Saho-Afa	Iraqw	Agaw	Arbore	Aweer	Somali	Dahalo	Gorwaa	Alagwa	Burunge		
-a (> -ya /- -yyee/yya)	-Cáta	-Ca	-addé, -idd- addé-e	-a	-aC	-a	-a	-Ca	-VVC	-a	-a	-á	-a	-a, (> -wa / -a	-a, aa	-a	-nyí	-aC	-a	-a/-á /-aa	-a	-a/-aa			
2	-Vn(n)V (-n -annu	-yya	-ámme	-inn-e	-uwa, -uwn	-(V)nnye	-Caa	-Ca	-eeyye	-V-CC-o	-(C)u	-ay-ne	-iyye, -eyyi	-Ca	-VC	-ay	-uu, -w	-Ca	-ny-oobi	-aay	-aCa, -uCa	-aCu	-aCaa	-aCa	
3		-aakkáta	-wwe	-Ce	-ann-e	-aʔa	-e	-ayaa	-yya (-iyya, -ùwa	-allo	-to (-tu)	-ay (-y)	-owan, -o	-eeyye	-wa	-iyaʔ	-iw, -d-iw	-ay	-Ci	-aan-yo, -c	-aCi, -aCCi	-<ee>-aCu	-aCu	-aCu	
4			-addá	-áane	-n-e	-eʔe	-Ce	-iyyaa	-awwaa	-omma	-aal	-am/-aam	-ey	-ata (-taʔ)	-uwa/-ba/ -oowa, -uv	-aawe	-aat-än	-té	-t-oobi	-iya (-ya ?)	-udda	-iyoo	-ayoo	-<ee>_a	
5						-oʔo	-o / -yó	-wwaa	-adá	-e	-laal	-im, -mu	-ma	-oota, -ota	-adda/-udc	-ta	-ʔi	-t, -Vt, -tV	-mmé	-yaami	-yāw	-addi	-ay, -áy	-aawee	-yayu
6						-o	C ₁ V ₁ C ₂ -	-daa	-adfa	-VCa/e	-ool	-C-V	-e	-eeti	-óta	-it	-aʔ	-t-ay	-mé (-má	-ti/-ti	-daa	-uuta, -utt	-náy	-(a)aʔi	-awee
7								-dda	-amma	-anna	-le	-i	-C-V	-C-ee, -ee	-te	-t-it	-du	-t-an, -t-ur	-má	-i/-i	-doo, -too	-uté	-iyaʔ	-aCaʔu	-aʔee
8								-alla	-an-a	-allo	-li	-onu/-anu	-no, -ne ar	-an, -aan	-Vma	-ut (?)	-maʔ	-t-ik	-omá	-yalúè	-ami (< *-a	-atti	-aawee	-adu	-aʔi / -aʔiir
9								-ala, -alla	-oole	-eel	-u (-o ?)	-nu	-oo	-re, -ri	-ot, -oota	-eemo/<ee-i	-aʔame (*-i)yaali (-i	-eti, -ti	-to	-aʔi, -aʔ(!)	-dii	-eeʔi			
10								-ile	-l	-s	-o	-oolee, -oc	-anna/-án	-it-te, -it-ti	-eeri/<ee>-an	-mó	-či/-ği (-fi)	-iin	-Cama	-aaCiʔi	-eema	-aCi			
11									-d3olaal, -d3ool	-u	-lee	-o	-ut-te, uut	-e	-an-t	-é	C ₁ V-	-an	-ma, -me, -	-(a)du	-eemi	-aru/-iru			
12												C ₁ V ₁ C ₂ -	-V(I)IV: -all	-ti	-o	-la, -li, -l-äi	-n	-bi	-aan	-Cemu	-eemaʔ	-eemoo	-mee		
13													-V(I)IV: -ull	-a-	-u	-k-än	-to-nó	-t-oo-bi	-o/-yo	-e	-(a)maʔ	-eeraa	-ʔami		
14														angw	-ka	-ó	-b-ti	-oyin (-oy-	-aCCE, -aC	-eemoo/<-	-eeri	-eemo			
15																	C ₁ V ₁ C ₂ -mé	-b-či/-ği (-	-Co	-i	-eeri	-ee	-ara		
16																		-oobi	-yal-o	-ni	-ee	-a(a)Cee	-eera		
17																		-oob-ti	-yaa; -yaa	-o	-aCee	<ee>_i	-eeri		
18																		-oob-či/-	-bo	-u	-i	-inaa	-aCeeri		
19																		-iin	-aǧǧu, -agg	-oo	-oo	-ee			
20																				-uka, -uke,	-u, -ú, -u!	-<ee>_oo	-aCee		
21																					-aangw	-u	-i		
22																							-<ee>_i		
23																							-o		
24																							-<ee>_o		
26																							-u		

Types of plurative suffixation

PLV form	Example			
	Language	SGV	PLV	Gloss
Vowel-Based suffix VB	Diraytata	<i>laf-to</i>	<i>laf-a</i>	'bone'
a vowel -V				
Consonant-Based suffix CB	Bayso	<i>lef</i>	<i>lef-aal</i>	'bone'
vowels and a consonant -V(V)C(C)-V(V)				
Reduplication RD	Rendille	<i>laf</i>	<i>láf-áf</i>	'bone'
reduplication or gemination of the last syllable/consonant	Boni	<i>laf</i>	<i>laf-f-ə</i>	'bone'

Reconstructed plurative suffixes

Cushitic

*-a(a), *-(V)C-(V), (*-w-, *-y-, *-m-, *-n-, *-t-, *-l-)

North Cushitic (Beja)

*-a

Central Cushitic (Agaw)

*-a (+CB)

East Cushitic

*-a, *-aC-aa, *-aww-aa, *-ayy-a, *-aam-a, *-aan-a, *-at-a, (*-eeti), *-all-o

Tanzanian Cushitic

*-aa,
*-aC-aa,
*-aaww-ee,
*-ay (Coll.),
eem-aa,
*-eem-oo,
*-an (Adj.),
*-oo,
*-u!,
*-ee,
*-i,
(*-en),
*-eeri,
*-aC-ee,
*-aC-u

Highland East Cushitic

*-a (coll.),
*-C-a,
*-uw-a,
*-eeyy-e,
Vmm-a,
*-ann-a,
*-at-a,
*-all-o,
*-o

Lowland East Cushitic

*-a, *-aww-aa, *-ayy-a, *-aam-a, *-aan-a, *-at-a

Dullay

*-aan-e,
*-add-e

Oromoid

*-a, *-aww-aa,
*-ayy-a, *-aan-a,
*-at-a

Konsoid

*-a,
*-C-aa,
*-ayy-a,
*-add-aa

Omo-Tana

*-aan-o, *-aC-aa, *-ayy-a, *-aam-a,
*-all-o (Proto-Eastern-OT), *-oo, *-
e,

Arboroid

*-a,
*-aww-aa, *-ay,
*-aam-a,
*-an-o,
*-o, *-u, *-e

Somaloid

*-aC,
*-ay-V,
*-aan,
*-eti,
*-yaal-o, *-o

Hypothesis: Proto-Cushitic

Independent pluralization strategies

- suffix *-a(a)
- Reduplication/gemination

PL doubling for reinforcement

- *-(V)C-a(a)
- *-C-C-a(a)

6-Consonant-Based forms?

- *-y-, *-w-, *-t-, *-m-, *-n-, *-l-

Hypothesis: CB renovation

Retention

*RD + (*VB)	→ RD+VB
*VB	→ VB

Renovation

***6-CB moribund** → (utilized *RD mechanism) +(VB) → renovated CB

- accounts for possible Afroasiatic links (cognates)
- accounts for the synchronic variation in the number of PLVs
- the *6-CB limits the revivable CB suffixes utilizing the RD mechanism
- NC Beja lack of reduplication PLV blocked the CB renovation
- the shared TC and EC CB renovations suggests shared history

(Tanzanian) South Cushitic links to East Cushitic

- Kießling's (2001) diagnostic PLV isomorphs (Proto Omo-Tana from Corbett & Hayward (1987))

Proto Omo-Tana POT	Proto Tanzanian Cushitic
*-Ca(a)	*-aCa
*-oo	*-oo
*-u	*-u
*-e	*-ee
*-aani	*-an (ADJ PL)

- They have no parallels in Agaw or in Beja
- Are they POT/PEC innovation or PC retentions?

Tanzanian Cushitic links to East Cushitic

Cushitic

*-a(a), *-(V)C-(V), (*-w-, *-y-, *-m-, *-n-, *-t-, *-l-)

North Cushitic (Beja)

*-a

Central Cushitic (Agaw)

*-a (+CB)

East Cushitic EC

*-a, *-aC-aa, *-aww-aa, *-ayy-a, *-aam-a, *-aan-a, *-at-a, (*-eeti), *-all-o

Tanzanian Cushitic TC

*-aa,
*-aC-aa,
*-aaww-ee,
*-ay (Coll.),
*-eem-aa,
*-eem-oo,
*-an (Adj.),
*-oo,
*-u!,
*-ee,
*-aC-ee,
*-aC-u,
(*-en),
*-eeri,
*-j

Highland East Cushitic

*-a (coll.),
*-C-a,
*-uw-a,
*-eeyy-e,
Vmm-a,
*-ann-a,
*-at-a,
*-all-o,
*-o

Lowland East Cushitic

*-a, *-aww-aa, *-ayy-a, *-aam-a, *-aan-a, *-at-a

Dullay

*-aan-e,
*-add-e

Oromoid

*-a, *-aww-aa, *-ayy-a, *-aan-a, *-at-a

Konsoid

*-a,
*-C-aa,
*-ayy-a,
*-add-aa

Omo-Tana OT

*-aan-o, *-aC-aa, *-ayy-a, *-aam-a, *-all-o (Proto-Eastern-OT), *-oo, *-e,

Arboroid A

*-a,
*-aww-aa,
*-ay,
*-aam-a,
*-an-o, *-o,
*-u, *-e

Somaloid

*-aC,
*-ay-V,
*-aan,
*-eti, *-yaal-o, *-o

*A+TC

*-u

*OT+TC

*-o,
*-e

*EC+TC

*-a(a),
*-aC-aa,
*-aww-aa,
*-ayy-a,
*-aam-a,
*-aan-a

Tanzanian Cushitic links to East Cushitic

Cushitic

*-a(a), *(V)C-(V), (*-y-, *-w-, *-t-, *-m-, *-n-, *-l-)

North
Cushitic
(Beja)

*-a

Central
Cushitic
(Agaw)

*-a, (+CB)

East Cushitic EC

*-a, *-aC-aa, *-aww-aa, *-ayy-a, *-aam-a

Lowland East Cushitic

*-a, *-aC-aa, *-aww-aa, *-ayy-a, *-aam-a, *-aan-a

Highland East Cushitic

*-a (coll.),
*-C-a, *-
uw-a, *-
eeyy-e, *-
Vmm-a,
*-ann-a

Dullay

Oromoid

*-a

Omo-Tana OT

*-aC-aa, *-oo, *-e

Konsoid

*-a,
*-C-aa

Arboroid A

*-a,
*-u,

Somaloid

*-aC,
*-o

*A+TC

*-u

* OT+TC

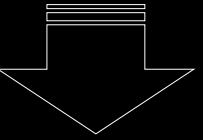
*-o,
*-e

* EC+TC

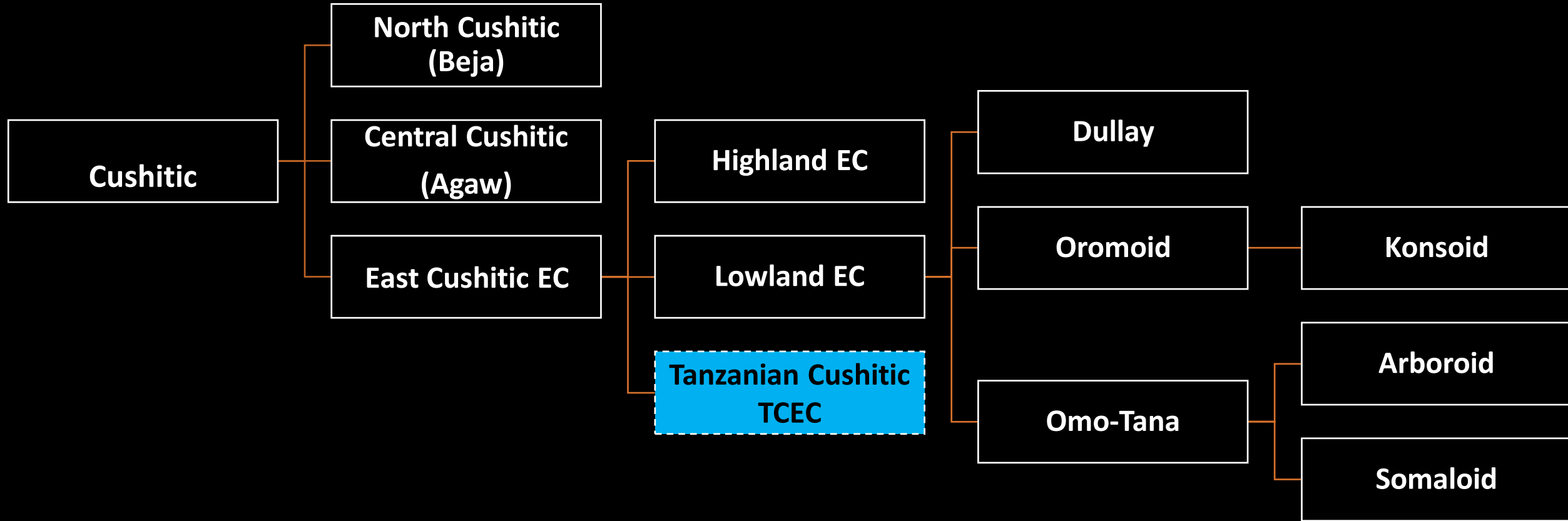
*-aww-aa,
*-ayy-a,
*-aam-a,
*-aan-a

Tanzanian Cushitic TC

*-aaww-ee,
*-ay (Coll.),
*-eem-aa,
*-eem-oo,
*-an (Adj.),
*-oo,
*-u!,
*-ee



Revised Cushitic subgrouping based on PLV evidence



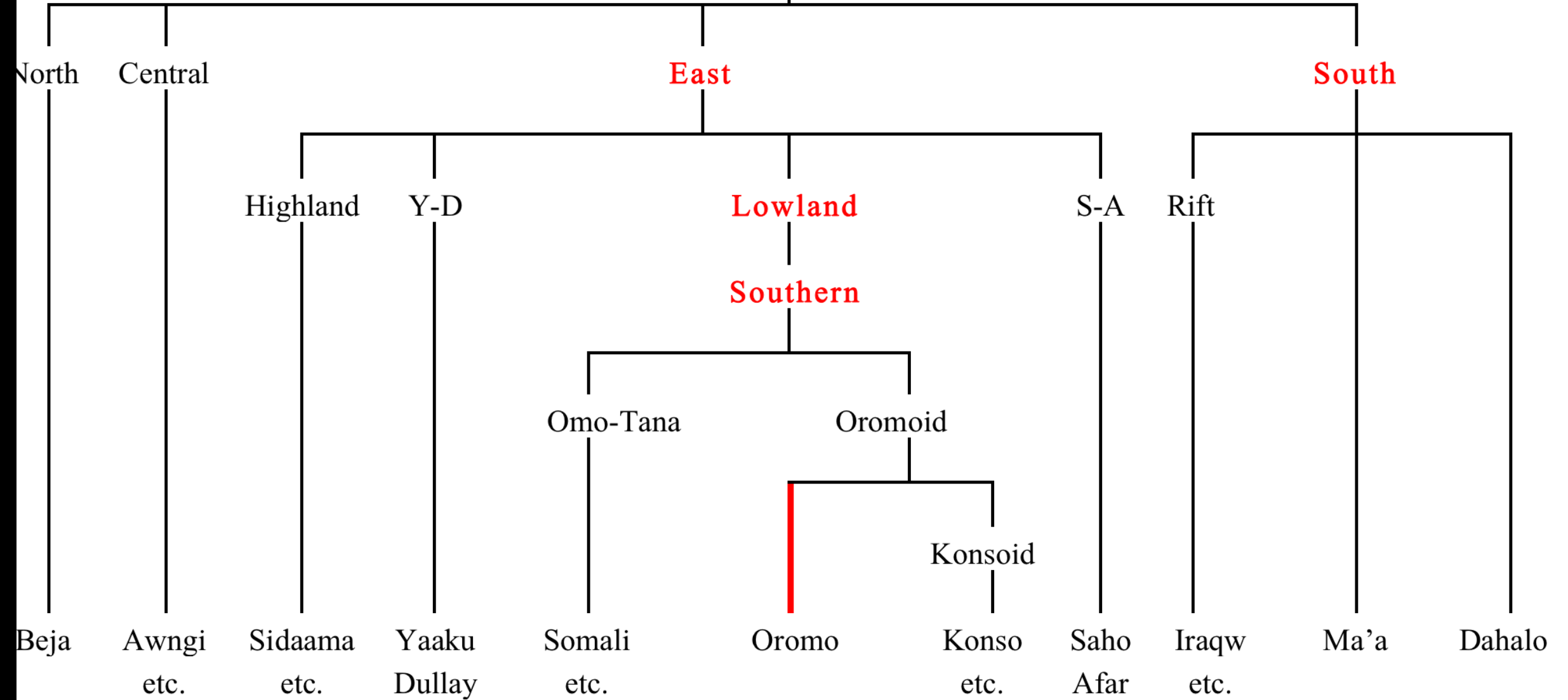
Pre-Oromo link to Tanzanian Cushitic

Historical implications of Tanzanian Cushitic

‡

P-TanzC *4 : P-EastC *1

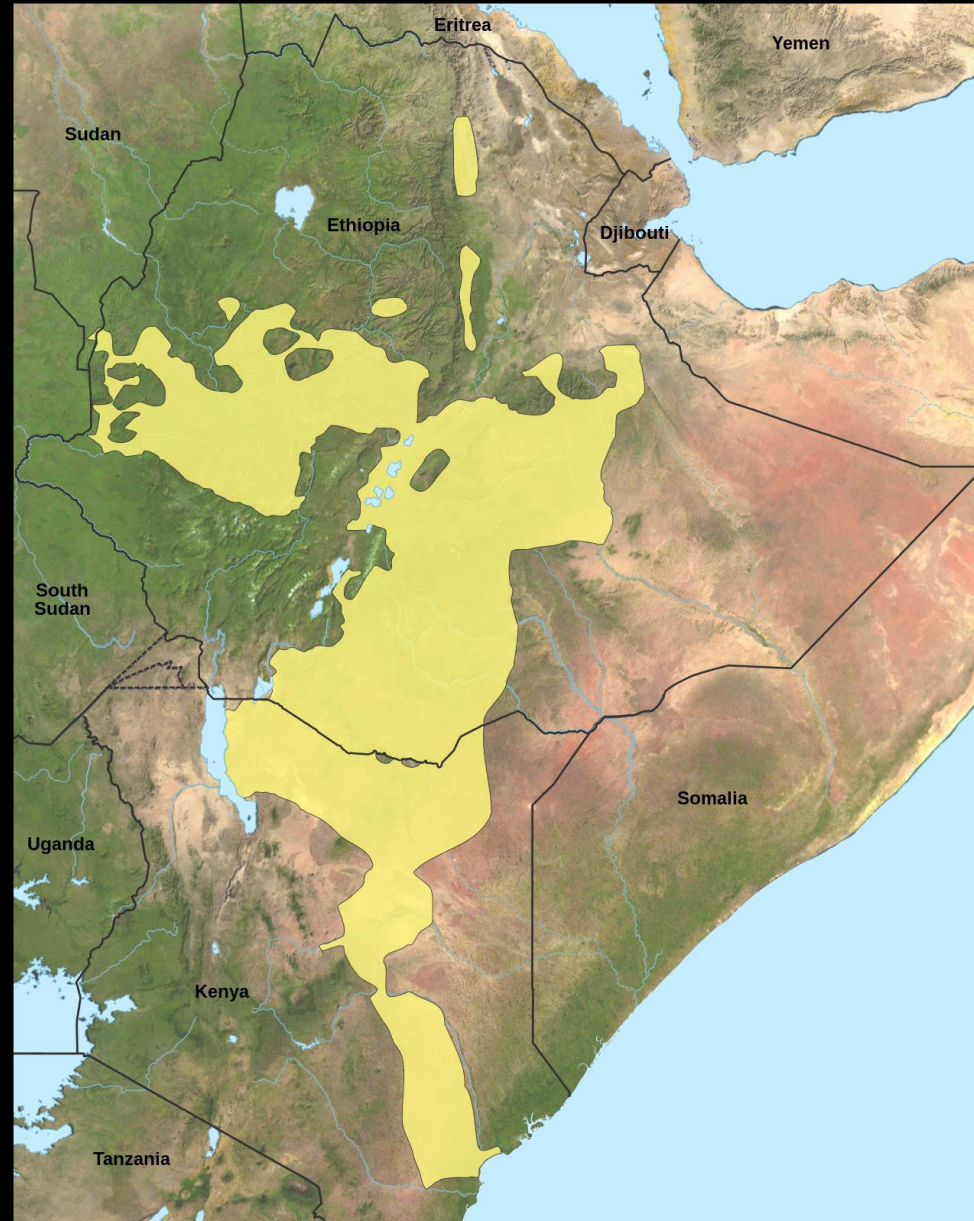
Cushitic



Proposals

1. Some P-TanzC *† are secondary
2. These are linked to Pre-Oromo

Oromo



P-TanzC *ɸaʔ 'to love, like, want'

: Oromo ɟa:l- 'to love' < P-EastC *geɸl- '*id.*'

P-EastC > Oromo

P-EastC *geɸl-

geʔl- ɸ > ʔ

ɟeʔl- palatalisation **g** > **ɟ** / ___ {i, e}

ɟaʔl- lowering **e** > **a** / [most contexts]

Or. ɟa:l- ʔ > V: / { _ C, C _ }

P-EastC > Pre-Oromo > P-TanzC

P-EASTC

*geɾI-
geʔI-
ɟeʔI-
ɟaʔI-

ɟaʔI-

branching-off / transfer to P-TanzC

ɬaʔI-

ɟ > ɬ

ɬaʔ-

non-initial I > ∅

Conclusions

Some P-TanzC *d < P-EastC *g

via Pre-Oromo

Relative chronology

(x) $e > a$

(y) $? > V:$

What if Tanzanian Cushitic is Oromoid?

- Instead of 4000 BP less than 400 BP
- Place and period of lexical transfer into Bantu languages changes
- Extensive differentiation of Tanzanian Cushitic in little time

Tanzanian Cushitic present earlier

Evidence that Tanzanian Cushitic is earlier

- Proto-Tanzanian-Cushitic words that can shown to be Cushitic retentions but did not undergo Oromoid innovations

Old words-1

Proto Tanzanian Cushitic *daangw (m) ‘elephant’

IR daangw

GO daw

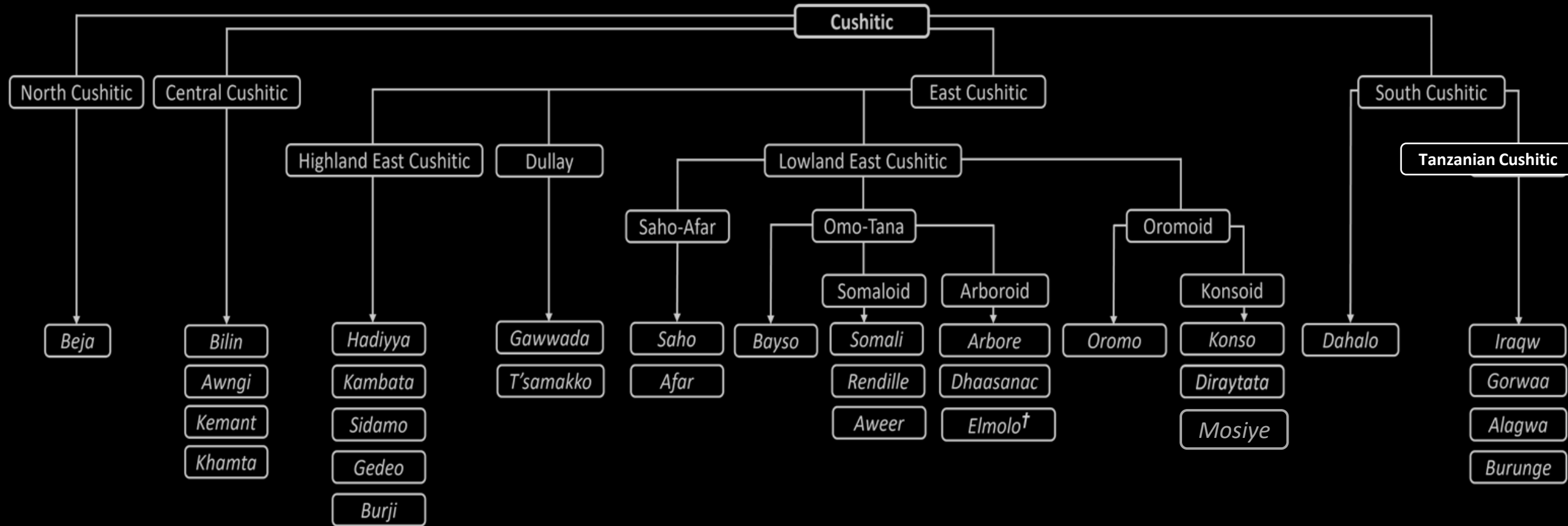
AL daw

BU daw

Cushitic cognates:

- Somali **dagon** id., Proto-Highland-East-Cushitic ***dzaane** id.; Proto-North-Agaw ***zan-a** ‘elephant’.
- Different root: Oromoid: Oromo **arpa**; Konso **arpa**; Dullay: Gawwada **arap**; Tsamakko **araf-ko**;
- NB: Omotic parallels: Aari **dangór**, Karo **dongwar**, Hamer **dongur**, Wolaytta **dangarsa**.

The Cushitic languages included in this study



Old words-2

Proto Tanzanian Cushitic: ^{PNWR}*ʕeetl (v) ‘be unripe’

IR ʕeetl (adj) ‘fresh, raw’

GO ʕeetl (adj) ‘unripe’

AL ʕeetl (v) ‘be unripe, be raw’

- Cushitic cognates: Arbore heedd'í ‘raw’, Afar ʕeed' ‘be raw’, Somali ʕayd'iin ‘unripe’.
- Different: Oromo d'eed'ii ‘raw’; Konso: orkooma ‘unripe’; Gawwada ʔarkum-k-o ‘unripe fruit’; Tsamakko laxx.
- Good cognate set with in Cushitic including Tanzanian Cushitic but excluding Oromo (and Dullay).

and many more

Bonny Sands and Mauro Tosco proposed last week a Dullay (peripheral East Cushitic) presence in the Tanzanian Rift Valley based on cognates between Hadza and Dullay

Explains? odd semantic shift in numbers

Number	*Agaw	*Tz Cushitic	*East-Cushitic
2	*läŋa/laŋa	*tsada	*lam(m)
3	*säɣ ^w a/səɣ ^w a	*tam	*saddeḥ
4	*sä3a	≈ *ts'igaḥa	≠ *'afur

Scenario

Tz Cushitic had something like **sägya** '4'
and came into contact with East Cushitic speakers using something like
seddeḥ '3'

The two forms amalgamated to TzCushitic **tsigaḥa** '4' (with final **ḥ**)

And shifted the East Cushitic word for '2' to mean '3'.

A new word for '2' was coined (*tsada from tsat 'to cut, split'?)

Conclusions

- Pre-Oromo influence on an existing Cushitic speaking population in Central Tanzania.
- No memory of that in oral history
- No non-linguistic indications (yet)
- Not one but THREE Cushitic migrations into Tanzania;
- or the bluntness of Ockham's razor.

Other results Past, Present and Future

Other results

- Paper on contact-induced retention of lateral fricatives and lateral ejective affricates in Tanzanian Cushitic (Also in Hadza, Sandawe, **Kuliak**, ~~South-Nile~~); and contact-induced introduction in Davida-Bantu.
- Rangi and Mbugwe (Bantu) are reconstitutions of different Bantu languages belonging to different clans
- Aasa and Kw'adza do not form a unit, and Kw'adza is in Tanzanian Cushitic (Iris Kruijsdijk)
- There is considerable contact between Kuliak (Uganda, isolated family) and Tanzanian Cushitic and Sandawe
- The Cushitic influence on Taita Bantu languages does not warrant posing two (or 3) former Cushitic languages but one (Sophie Mulder)

Other on-going

- Is morphosynactic innovation in Mbugwe and Rangi shared or parallel? (Giorgia Zantei)
- What is contact-induced change in kinship terminology in the Tanzanian Rift Valley (Marta Cestari)
- Can the lexical density in certain domains in languages by hunters provide an indication whether they are impoverished herders of hunters who shifted language (Dominique Loviscach)
- ...
- Reconstruction of lexical transfer of Cushitic into (groups of) Bantu languages (Christian and Maarten)

Thank you!



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Discussion

The hypothesis of PLV vowels change (Cushitic regressive assimilation rule)

V > a / _ *Ca(a)

reduplication RD	*V-	C		Rendille kàr-ár 'dog'
	[RD/EPENTHETIC V]	[RD C]		
stacking RD + *-a	*V-	C-	-a	Alagwa kwar-ar-aa 'year'
	[RD/EPENTHETIC V]	[RD C]	[-*a]	
regressive assimilation	*a-	C-	-a	Oromo hol-aata 'sheep'
	[assimilated *-a]	[RD C]	[-*a]	
boundary shift & reinterpretation of RD	*a-, i-, e-, u-, o-	C-	-a	Oromo hol-oota 'sheep'
	[-*a, FRONT, BACK V]	[RD C]	[-*a]	
final V marks gender, case, etc.	*a-, i-, e-, u-, o-	C-	*-a, -i, -e, -u, -o	Somali koob-eti 'glass'
	[-*a, FRONT, BACK V]	[RD C]	[-*a, FRONT, BACK V]	
consonant changes, e.g., lenition	*a-, i-, e-, u-, o-	C-	*-a, -i, -e, -u, -o	Gawwada ₇ ʕíll-idde 'cowskin'

Alternative hypothesis

Proto-Cushitic	→	Cushitic languages
*RD	→	RD
*VB	→	VB
*RD+*VB	→	RD+VB

Hypothesis 1	Hypothesis 2	Hypothesis 3 (1+2)
6-archaic Forms *CB *-y-, *-w-, *-t-, *-m-, *-n-, *-l-	*VB + *RD → CB	*6-CB(moribund) → *RD+(VB) → CB (renovated)