

3 Linguistic contact and areality as an alternative explanation for assumed genealogical relationships

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3.1 Introduction

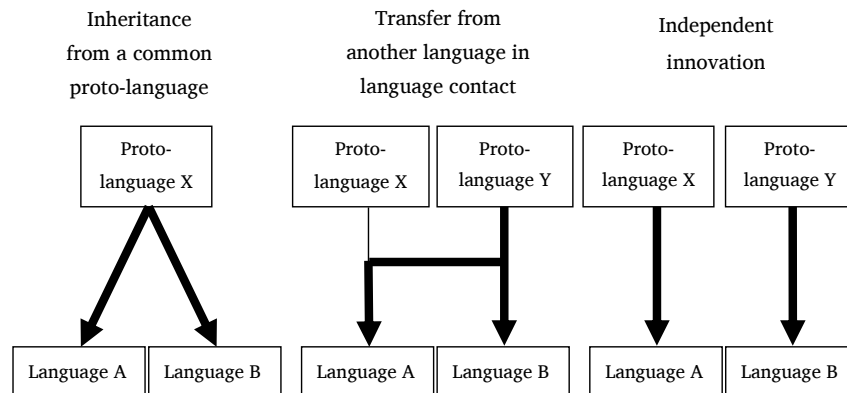


Figure 1: Major scenarios that lead to shared linguistic features among languages

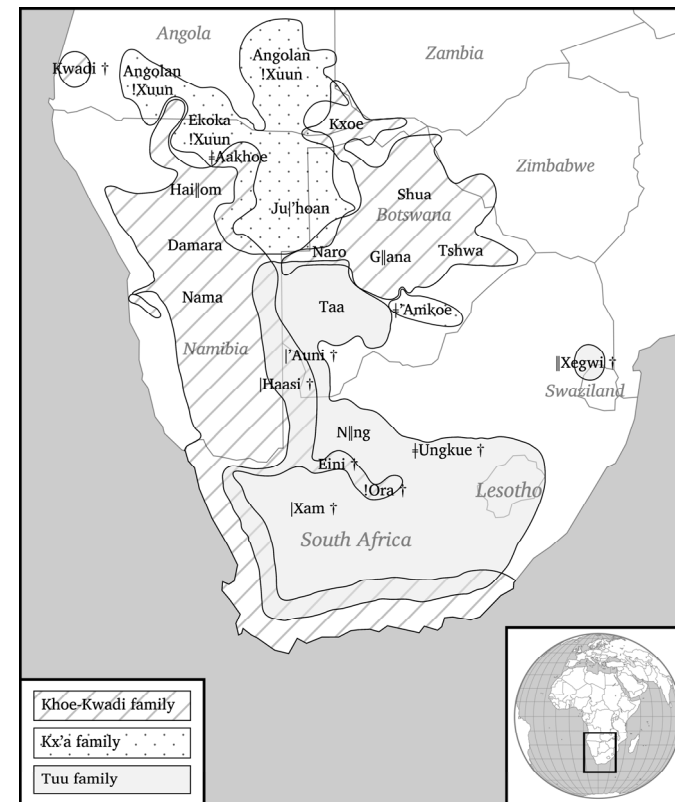
- + explanation of shared linguistic features in terms of inheritance and genealogical language assignment are still the default~principal classification approach
- > contact research often only involved as a "corrective" as soon as genealogical models appear untenable
- !!! however, to the extent that concrete isoglosses exist (which is not always the case in Africanist frameworks) and are specific enough to count as historically induced, both inheritance and contact should be investigated on an equal footing and be assessed on the basis of the type of evidence
- + the larger the geographical and temporal scope the more likely is the possibility to misinterpret evidence (cf., e.g., Nichols (2010) on the relationship between large contact-mediated areas and assumed deep-time families)
- > macro-areal research does not replace but rather supplements genealogical classification within a wider agenda of historical linguistics, pace Blench (2013: 49)
- > dedicated effort to investigate whether isoglosses involved in controversial genealogical hypotheses can be interpreted alternatively as the outcome of language contact

3.2 "Southern African Khoisan" vs. Kalahari Basin

3.2.1 Greenberg's concept and genealogical evidence

No.	Unit	No. of languages	Geographic location
U1	Tuu	7	southern Kalahari Basin
U2	Kx'a	2	northern Kalahari Basin
U3	Khoe-Kwadi	12	entire Kalahari Basin

Table 1: Basic classificatory units in the southern portion of the Khoisan domain



Map 1: The indigenous lineages of the Kalahari Basin

- + Greenberg (1959, 1963) himself with ambiguous assessment of "Southern African Khoisan" as both a family and a contact area

- + Güldemann (2008): all 30 grammatical comparisons flawed by various factors:
- inaccurate or at least doubtful data and their sloppy handling
 - disregard of principles of comparative reconstruction and diachronic typology
 - no control for coincidental resemblances and borrowing across different families
 - insufficient representation of the individual groups in the comparative series

Lineages involved	Number of comparisons
5	3
4	1
3	11
2	13
1	2 (Khoe-internal)

Table 2: Greenberg's comparative grammatical data across the 5 distinct lineages

- + lexical comparisons for "Southern African Khoisan" largely based on problematic database by Bleek (1956) without any isogloss list, let alone linguistic discussion:

Somewhere near half of the Hottentot [= Khoekhoe] vocabulary has obvious cognates in either Northern Bushman [= Ju branch of Kx'a] languages, Southern Bushman [= Tuu] languages, or both. These related forms are so numerous that there is no need to reproduce them here. Greenberg (1963: 68)

(1)	'person'		(Greenberg 1963: 80)
Hadza	<i>akwiti</i> 'woman'		
	<i>akwiako</i> 'daughter'		
	<i>akwibi</i> 'young ones'		
Khoekhoe (Khoe)	<i>khoi</i>	=	[k ^h oe]
!Xuun (Ju)	<i>!ku</i>	=	[! ^x ūū]
Xam (!Ui)	<i>!kwi, !ku</i>	=	[!ui], [!uu]

3.2.2 Language contact in the Kalahari Basin

- + extensive evidence for a considerable amount of language contact across the 3 lineages in the Kalahari Basin with 3 different patterns (cf. Güldemann 2006, 2008; Güldemann and Loughnane 2012)
- > areal concept capable of replacing the "South African Khoisan" hypothesis
- > also supported by new incipient accruals of the contact area: parts of southern Bantu, peripheral Afrikaans

- a) recent and/or ongoing localized borrowing between individual language pairs or in smaller "Sprachbund"-like settings
- b) multiple borrowing from pastoral Khoe-Kwadi into foraging groups at least across the western half of the Kalahari Basin
- c) transfer from forager substrates into different stages and subgroups of Khoe-Kwadi, distributed widely due to subsequent Khoe expansion: Kx'a substrate in Proto-Khoe (Güldemann 2004, 2019), Tuu substrate in Proto-Khoekhoe (Güldemann 2002, 2006)

- + Güldemann and Loughnane (2012): analysis of isoglosses in the lexical domain of body part and related vocabulary: exhaustive language coverage, group reconstructions

a) Table 3

b) Table 4 + example (2)

c) examples (3)-(5)

(PKaK = Proto-Kalahari Khoe, PK = Proto-Khoe, PKx = Proto-Kx'a, PT = Proto-Taa)

English	G ui (Khoe-Kwadi)	‡Hoan (Kx'a)	East Taa (Tuu)
hand	<i>ts^héū</i> < PKaK	<i>sīū</i>	-
forearm	<i>ghúmā</i> < PK	<i>ghúmā</i>	-
arm	<i> 'úā</i> < PK	<i> 'dā n ē</i> 'upper _'	-
elbow 1	<i>‡hune</i> < PKaK	<i>‡hóné</i> < PKx	<i>g‡qhúli</i>
elbow 2	<i>‡xobi</i>	<i>‡xúbí</i>	<i>‡xúbu-xù /nàn</i> < PT
chest	-	<i>ghâmā</i>	<i>!Gāma</i>
root of tree	<i>!qx'dí</i>	<i>!q'ai-!q'ai qa</i> 'roots'	<i>!kx'ai</i>
cheek	<i>n úbi</i>	<i>n úǃǃí</i>	<i> núbi</i> < PT
front	-	<i>n‡hhāā</i>	<i>‡hāā</i> 'to be in _' < PT
lip, beak	<i>ts'úw̃</i> < PK	<i>(d)zú'ám̃</i>	<i>dzúm</i>
suck	<i> úm̃</i> < PK	<i> ám̃</i> 'suck breast'	
breath	<i> húū</i> 'to breathe'	<i> hōèn</i>	<i> qhō'ā</i>
bark (of tree)	<i>gúrē</i> < PKaK	<i>gūrē</i>	<i>gúle</i> 'dry _'
to skin	<i> áá</i> < PKaK	<i> àà</i> 'turning _ inside out'	-
to cover 1	<i>!'am</i>	<i>!'am</i>	<i>n!a'm</i> ' _ with branch'
to cover 2	<i>ǃíbu</i>	<i>ǃíbu</i>	-
to point	<i> hāā</i>	<i>kí hāā ?</i> < PKx	<i> qhāā kM</i>
tears	<i>‡xál-ts^háā</i>	<i>tsxānē</i>	<i>dtshàle</i>
lick	<i>ǃíní</i>	<i>dǃmí</i>	-
to defecate	-	<i>qa'e</i>	<i>qá'i</i> < PT
wound	<i>c^húū</i> < PK	<i>tyūi</i>	<i>thúa</i>

Table 3: Body-related isoglosses in the Central Kalahari between G|ui, ‡Hoan, and Taa

English	Khoekhoe	!Ui
claw/ fingernail/ toenail	* oro- < PK	N ng: <i> qoro-si</i> , Xam: <i> uru</i>
forearm	North Khoekhoe: <i>†haan-b</i>	N ng: <i>†'haan-si</i>
heel	North Khoekhoe: <i>n!oan-s</i>	N ng: <i>n!oa-si</i>
jaw	*n!ani-	N ng: <i>n!ali-ke</i>
chin	*!ann- < PK	N ng: <i>g!ann ~ g!any</i>
(to be) red	* kx'aba	N ng: <i> kx'aba</i>
soul	* 'um-s	N ng: <i> 'um-si</i>
bark (of tree)	* kx'uun- < PK	N ng: <i> kx'uun-si</i>
eye brow	* aun-s	N ng: <i>g aun-si</i>
throat	*dom- < PK	N ng: <i>dyum</i> , Xam: <i>dom</i>
left (hand)	* 'are	N ng: <i> 'are</i> , Xam: <i> 'are</i>
lung	*soV- < PK	Xam: <i>soo</i>
wound	*thui- < PK	Xam: <i>t(h)ui</i>

Table 4: Body-related isoglosses in the Cape by borrowing from Khoekhoe into !Ui

(2) 'wound'

Proto-Khoe	*thui (cf. Proto-Khoe-Kwadi *thũ '(to have) pain')
Kx'a	†Hoan <i>ty(h)ùì</i>
	Ekoka !Xuun <i>t'húí</i> (+ <i>/hàbi</i> 'wound' < Proto-Ju * hhabi)
Tuu	Xam <i>thui</i>
	East !Xoon <i>thú-a-tê</i> 'pox, sores' (+ <i>/òho</i> 'wound' < Proto-Taa *(g) oho)

(3) 'claw'/'fingernail'/'toenail'

Proto-Kx'a	*!o'(r)o ~ *!u'(r)u
Proto-Khoe	* ado ~ * odo
Tuu	Xam <i> uru</i>
	N ng <i> qoro-si</i>
Taa	East !Xoon <i> qûle</i> 'hoof'

(4) 'elbow'

Proto-Kx'a	*†honV ~ *†hunV (cf. †Hoan <i>†hóné</i> , Proto-Ju *†huni + *!huru)
Proto-Kalahari Khoe	*†huni
Tuu	Taa
	West !Xoon <i>g†húní</i> ; East !Xoon <i>g†qhúli</i> (East Taa <i>†xubi-xu n/ann</i>)

(5) 'beard'

Proto-Tuu	*n um
Proto-Khoekhoe	*n um-bi

- + various cases of grammatical (presumably shift-induced) contact interference with strong effects of restructuring in Khoe languages, e.g., pronoun borrowing of Pre-Khoekhoe
- > exclusive base *sii < Proto-Tuu 1st person exclusive *si
- > 3rd person base *||'aĩ < !Ui 3rd person intensifier 'self, own' ||'aĩ

Person	Common gender	Feminine gender	Masculine gender	Number
1st	*tV			Singular
2nd		*sa	*tsa	
3rd		*si	*bi	
1st	*khom	*m	*m	Dual
2nd	*khodo	*do	*do	
3rd	*khoda	*da	*da	
1st	*tae	*sae	*!ae	Plural
2nd	*tao	*sao	*!ao	
3rd	*ni	*di	*!u(a)	

Table 5: The reconstructed PGN system of Proto-Khoe (Güldemann 2004)

Person	Common gender	Feminine gender	Masculine gender	Number
1st	<i>tií -ta</i>			Singular
2nd		<i>saá -s</i>	<i>saá -ts</i>	
3rd		<i> 'ũ -s</i>	<i> 'ũ -p</i>	
1st Exclusive	<i>sií -m̃</i>	<i>sií -m̃</i>	<i>sií -kx̃m̃</i>	Dual
1st Inclusive	<i>saá -m̃</i>	<i>saá -m̃</i>	<i>saá -kx̃m̃</i>	
2nd	<i>saá -rò</i>	<i>saá -rò</i>	<i>saá -kx̃ò</i>	
3rd	<i> 'ũ -rà</i>	<i> 'ũ -rà</i>	<i> 'ũ -kx̃à</i>	Plural
1st Exclusive	<i>sií -tà</i>	<i>sií -se</i>	<i>sií -ke</i>	
1st Inclusive	<i>saá -tà</i>	<i>saá -se</i>	<i>saá -ke</i>	
2nd	<i>saá -tù</i>	<i>saá -so</i>	<i>saá -ko</i>	
3rd	<i> 'ũ -ñ</i>	<i> 'ũ -tì</i>	<i> 'ũ -ku</i>	

Table 6: Independent pronouns of Standard Khoekhoe (Güldemann 2004)

- (6) *ti-ta* *a* *||ēi-ta* (*||ēi* = *||'ũ* < *||'aĩ])
 1S-1S.SBJ COP COREF-1S
 Ich bin es [selbst]. [It's ME/myself] Khoekhoe (Khoe-Kwadi)

- (7) *i* *se* *||ē:i* *i* *||a* *||k"oen* (*||ē:i* = *||'aĩ*)
 1P.I IRR self 1P.I go look
 that we might ourselves go and look. |Xam (Tuu)

3.3 Nilo-Saharan

3.3.1 Greenberg's concept and its areal profile

- + evidence for genealogical unity highly problematic and hard to define (cf. Lecture 1)
- + inventory of genealogical concept turns out to correlate in my macro-areal profile of Africa to a large extent with the geography of the Central Transition sphere IV (and its accretion zones!) that separates III from V and VI (cf. Lecture 2)
- > its nature of a set of 22 units (mostly small lineages or even isolated languages, half of them virtually restricted to the two accretion zones 2 and 3) can be conceived of alternatively as the result of accumulation/sedimentation of linguistic remnants exempt today from both spread and convergence dynamics in adjacent macro-areas

No.	Lineage	No. of languages	Macro-areal affiliation
U20	Kadu	6	3 Nuba Mountains
U21	Kuliak	3	IVb East Sudan-Gregory Rift
U22	Central Sudanic	65	Macro-Sudan
U23	Songhay	10	(IVa Sahel)
U24	Kunama	1	2 Ethiopian escarpment-Rift valley
U25	Shabo	1	3 Ethiopian escarpment-Rift valley
U26	Furan	2	(IVa Sahel)
U27	Saharan	10	(IVa Sahel)
U28	Maban	10	(IVa Sahel)
U29	Taman	4	(IVa Sahel)
U30	Nyimang	2	3 Nuba Mountains
U31	Nara	1	2 Ethiopian escarpment-Rift valley
U32	Meroitic	1	Middle Nile
U33	Nubian	13	(IVa Sahel)
U34	Dajuic	7	IVa Sahel, 3 Nuba Mountains
U35	Temeinic	2	3 Nuba Mountains
U36	Nilotic	51	IVb East Sudan-Gregory Rift
U37	Surmic	10	2 Ethiopian escarpment-Rift valley
U38	Jebel (2)	4	2 Ethiopian escarpment-Rift valley
U39	Berta	1	2 Ethiopian escarpment-Rift valley
U40	Koman (2)	4	2 Ethiopian escarpment-Rift valley
U41	Baga	?3	2 Ethiopian escarpment-Rift valley
	Total	~200	

Note: (n) = Number of potentially separate subgroups; Frame = Common East Sudanic

Table 7: Basic classificatory units in the Nilo-Saharan domain

3.3.2 "East Sudanic" vs. northern East Sudan-Gregory Rift contact area

- + published evidence supporting genealogical concept scanty and/or methodologically not robust (cf. Lecture 1)
- + early idea goes back to Westermann (1912: 36-44) and more substantially Murray (1920) regarding lexical similarities between Nubian and Nilotic > Greenberg (1950)
- > concrete evidence reiterated in published form: 'cattle'-word suppletion (Greenberg 1950, Ehret 1983, Dimmendaal 2007, 2011); simple root arguably shared elsewhere!

Family	(Proto)-language	Singular	Plural	Source(s)
Nyimang	Proto-Nyimang	.(m)bVr	.(m)bVr	Bender (2000c: 107, 118)
Nara	Nara	<i>ar</i>	<i>aré</i>	Reinisch (1874: 105)
Meroitic	Meroitic	? <i>dime</i>	?	Rilly (2010: 120)
Taman	Proto-Taman	.tEE	.tE(-)	Edgar (1991d: 218)
Nubian	Proto-Nubian	.tEE	.tE(-)	Rilly (2010: 521–522)
Dajuic	Proto-Dajuic	* <i>tepe</i>	* <i>take</i>	Thelwall (1981b: 139)
Temeinic	Proto-Temeinic	.-Tɛŋ	.kV-ŤUk	cf. Blench (n.d.)
Nilotic	Proto-Nilotic*	* <i>ɖɛŋ</i>	* <i>ɖok</i>	Dimmendaal (1988: 36)
Surmic	Majang*	<i>taŋ</i>	<i>tɔgi</i>	Joswig (2011: 12)
	Proto-Southwest	* <i>taŋ(a)</i>	.tiin	Moges (2001: 318, 327, 364)
	Proto-Southeast	* <i>bi</i>	.bio	Dimmendaal and Last (1998)
	Proto-Surmic	? .taŋ	?	-
Jebel	Gaam*	<i>tɔɔ</i>	<i>tɔgg</i>	Stirtz (2011: 101)
	Proto-'Non-Gaam'	.mɔ	.mɔ	cf. Bender (1997a: 208)

Notes: Frames = Northern vs. southern clusters, **Seemingly valid reflex of suppletion**

Table 8: Forms for 'cow/cattle' across East Sudanic

- + major typological split of head-final northern vs. head-initial southern cluster
- > Dimmendaal (2007: 56–65): elaborate explanation in terms of an almost complete shift in the south from a purportedly inherited head-final profile to a head-initial profile
- while possible as such within diachronic typology, it ceases to be necessary under a genealogically agnostic approach
- if any recent typological change in the south, adaptation of Southeast Surmic languages to head-final Chad-Ethiopia profile through contact with languages of the OMOTIC pool
- + alternative explanation for isoglosses across East Sudanic, to the extent that they are real: ancient areal contact at the boundary between Chad-Ethiopia (V) and East Sudan Gregory Rift (IVb); possibly in connection with the desertification of the Sahara and, given the widespread form for 'cattle', the subsequent spread of pastoralism

3.4 Niger-Congo

3.4.1 Niger-Congo and Nilo-Saharan

- + since Gregersen (1972), recurrent invocation of a super-family comprising Niger-Kordofanian and Niger-Congo
- hypothesis already questionable regarding the status of Nilo-Saharan itself (see above) but some isoglosses are nevertheless historically significant
- Blench (1995): particular role accorded to Central Sudanic within Nilo-Saharan, based first of all on the typological features ATR vowel harmony and labial-velar consonants (superficial lexical resemblances and alleged reflexes of Niger-Kordofanian noun class affixes for liquid/mass in Nilo-Saharan cannot be viewed as robust historical signals)

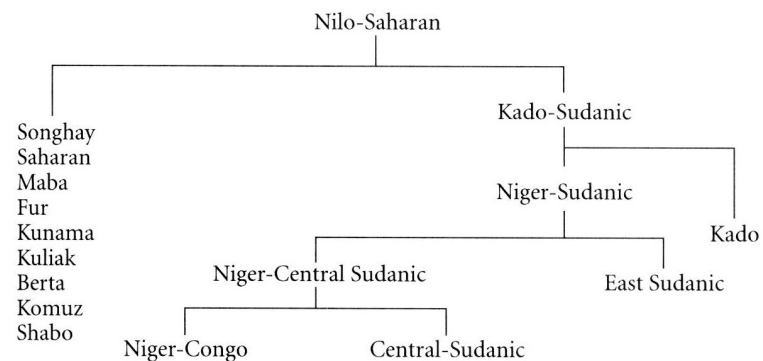


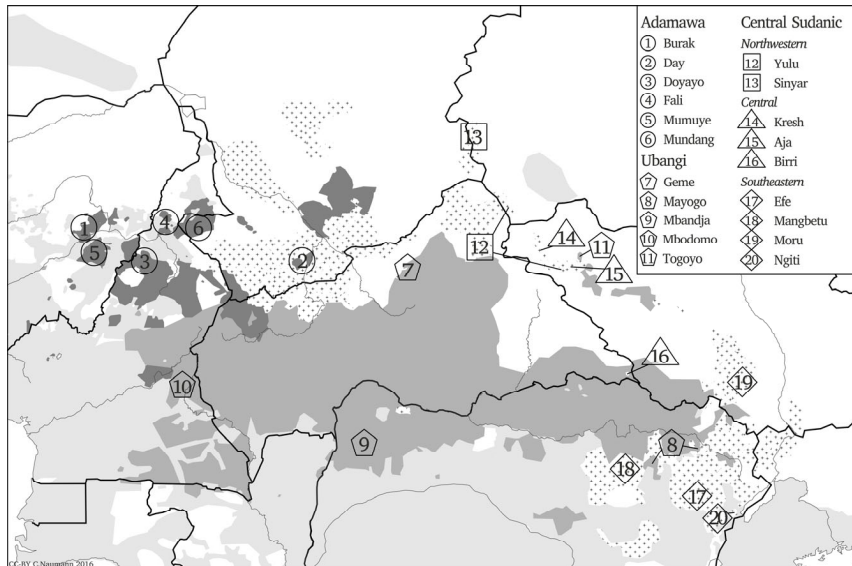
Figure 2: Genealogical tree of Nilo-Saharan and Niger-Congo after Blench (1995)

- + Macro-Sudan Belt as a viable alternative explanation for isoglosses in **areal** terms
- > growing evidence for a contact subarea in the eastern half of the Macro Sudan with particularly strong affinities between Ubangi pool and Central Sudanic family
- prefigured by Tucker's (1940) purely areal concept of "Eastern Sudanic" comprising what Greenberg (1963) came to call **Eastern** (= Ubangi) and Central **Sudanic**
- phonological area: overall commonalities (cf. Thomas 1972) + marked features like labial flaps (Olson and Hajek 2003) and interior vowels (Rolle, Lionnet and Faytak forthc.)
- partly "unareal" syntax: absence of macro-areal O-V-X (Güldemann 2008)
- Güldemann (2017): synchronically shared alliterative *m/m* canon in singular pronouns in eastern Niger-Congo and Central Sudanic (Table 9, Map 2)
- > also ancient historical isogloss of both lineages - possible reconstruction (Table 10)
- > evidence of later contact-induced change in both Ubangi and Central Sudanic toward a non-inherited vowel canon that is more similar to that in the other lineage with possible contact partners in the vicinity (Table 11)

Language	Family/Highest-order family		S	P	Source
1 Burak	Bikwin-Jen in ADAMAWA/ Niger-Congo	1	<i>mi</i>	<i>gbo</i>	Jungraithmayr (1968/9: 171, 203)
		2	<i>mo</i>	<i>ya</i>	
2 Day	Isolate in ADAMAWA/ Niger-Congo	1	<i>-mà</i>	<i>-ɲā</i>	Nougayrol (1979: 167)
		2	<i>-mɔ̄</i>	<i>-mɔ̄</i>	
3 Doyayo	Samba-Duru in ADAMAWA/ Niger-Congo	1	<i>-mi</i>	<i>-wε</i>	Wiering and Wiering (1994: 74)
		2	<i>-mɔ̄</i>	<i>-nε</i>	
4 Fali	Isolate in ADAMAWA/ Niger-Congo	1	<i>mì</i>	<i>òtò</i>	Kramer (2014: 156)
		2	<i>mù</i>	<i>ùnù</i>	
5 Mumuye	Mumuyic in ADAMAWA/ Niger-Congo	1	<i>mí-</i>	<i>wó-</i>	Shimizu (1983: 58)
		2	<i>mó-</i>	<i>nó-</i>	
6 Mundang	Kebi-Benue in ADAMAWA/ Niger-Congo	1	<i>mè</i>	<i>rù</i>	Elders (2000: 157)
		2	<i>mò</i>	<i>wì</i>	
7 Geme	Zandic in UBANGI/ Niger-Congo	1	<i>mì</i>	<i>hàáɲ</i>	Boyd and Nougayrol (1988: 71)
		2	<i>mò</i>	<i>hèhè</i>	
8 Mayogo	Mundu-Baka in UBANGI/ Niger-Congo	1	<i>ma</i>	<i>ya</i>	Sawka (2001: 22)
		2	<i>mu</i>	<i>yi</i>	
9 Mbandja	Bandaic in UBANGI/ Niger-Congo	1	<i>mè</i>	<i>ʔā</i>	Tingbo (1978: 82)
		2	<i>ma</i>	<i>ɲā</i>	
10 Mbodomo	Gbayaic in UBANGI/ Niger-Congo	1	<i>mí</i>	<i>éle</i>	Boyd (1997: 66)
		2	<i>mé</i>	<i>éné</i>	
11 Togoyo	RAGA in UBANGI/ Niger-Congo	1	<i>mi</i>	<i>ye</i>	Santandrea (1969: 103)
		2	<i>mo</i>	<i>ni(i)</i>	
12 Yulu	Bongo-Bagirmi/ Central Sudanic	1	<i>mà</i>	<i>máà</i>	Boyeldieu (1987: 195)
		2	<i>kìn</i>	<i>jíkè</i>	
16 Birri	Isolate/ Central Sudanic	1	<i>má</i>	<i>maà</i>	Santandrea (1966: 201-2)
		2	<i>mú</i>	<i>muù</i>	
17 Efe	Mangbutu-Efe in MORU-M./ Central Sudanic	1	<i>mū</i>	<i>àmū</i>	Vorbichler (1979: 437), Demolin (1988: 78)
		2	<i>(i)mí</i>	<i>àmì</i>	
18 Mangbetu	Mangbetu-Asua in MORU-M./ Central Sudanic	1	<i>ímá</i>	<i>àmà</i>	Demolin (1992, app. 2: 25, 49, 32, 53)
		2	<i>ímí</i>	<i>àmì</i>	
19 Moru	Moru-Madi in MORU-M./ Central Sudanic	1	<i>má</i>	<i>mà</i>	Kilpatrick (2006: 271)
		2	<i>mí</i>	<i>mì</i>	
20 Ngiti	Lenduic in MORU-M./ Central Sudanic	1	<i>ma</i>	<i>mà</i>	Kutsch-Lojenga (1994: 192)
		2	<i>nyí</i>	<i>nyì</i>	

Note: No. = key to Map 2, CAPS = genealogical pool, **Bold** = form involved in set-contrast and/or alliteration

Table 9: Speech-act participant pronouns in the eastern Macro-Sudan belt



Note: dotted = Central Sudanic, dark grey = ADAMAWA, intermediate grey = UBANGI, light grey = all other Niger-Congo, white = all other languages or uninhabited

Map 2: Eastern Macro-Sudan belt and distribution of sample languages of Table 8

Family	1S	2S	1P	2P
Niger-Congo	.mV ^{front}	.mV ^{back}	.TV ^{close}	.NV ^{close}
Central Sudanic	*(V).ma	*(V).mi	*^(V).ma	*^(V).mi
Shared canon	mV ^A	mV ^B	-	-

Table 10: Compared pronoun paradigms of early Niger-Congo and Central Sudanic

Language (group)	1S	2S	Source
Niger-Congo reconstruction	.mV ^{front}	.mV ^{back}	cf. Table 10
Day	Adamawa	-mà	Nougayrol (1979: 167)
Proto-Mundu-Baka	Ubangi	*mā	Winkhart (2015: 66)
Birri	Central	má	Santandrea (1966: 201-2)
Aja	Central	(m)u.mu	Santandrea (1976: 93)
Kresh	Central	.a.mu	Santandrea (1976: 93)
Central Sudanic reconstruction	*(V).ma	*(V).mi	cf. Table 10

Note: **Bold** = (possibly) diverges from inherited form, Arrow = direction of change

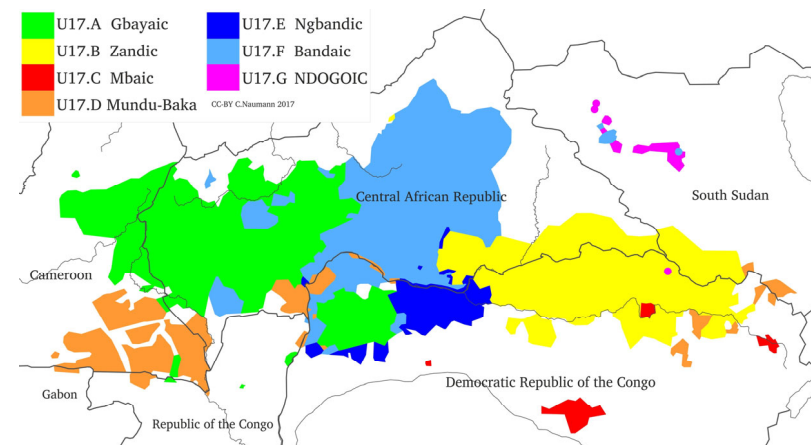
Table 11: Pronoun vowel canons that (may) deviate from the relevant proto-pattern

3.4.2 "Ubangi" vs. Eastern Macro-Sudan Belt

- + since Greenberg's (1963) establishment of "Eastern", considerable classificatory dynamics
- specialists explicitly separate some groups from Ubangi (cf. Moñino (1995) on the position of Gbayaic) and doubt its general coherence (cf. Moñino 1988: 18)
- in line with the general picture in the Eastern Macro-Sudan Belt, Greenberg's Ubangi may be a **genealogical pool** whose genuinely shared isoglosses are contact-induced
- according to work in progress, a more likely real family is smaller and involves a hotbed of diversity in the modern South Sudan that is virtually undocumented and endangered

Greenberg (1963a)	Samarin (1971)	Bennett (1983)	Boyd (1989a)	Güldemann (in prep.)
1 Gbaya, ...	Gbaya, ...	Gbaya	Gbaya	Gbayaic
3 Ngbandi, ...	Ngbandi, ...	Sango-Ngbandi	Ngbandi	Ngbandic
6 Ndogo, ...	Ndogo, ...	Ndogo, ...	Sere	Ndogoic (narrow)
				Feroge-Mangaya
				Indri
				Togoyo
5 Bwaka, ...	Ngbaka-Ma'bo, ...	Mundu-Gbanziri	Ngbaka	Mundu-Baka
2 Banda	Banda	Banda	Banda	Bandaic
8 Mondunga, ...	Mondunga, ...	Mba-Mondunga	Mba	Mbaic
7 Amadi, ...	Amadi, ...	Ma		
4 Zande, ...	Zande, ...	Zande-Pambia	Zande	Zandic

Table 12: The history of subclassification of Ubangi



Map 3: The classificatory units of Ubangi

3.4.3 "Kwa" vs. Central Macro-Sudan Belt

+ Kwa as an early genealogical concept changing considerably in its constituency:

a) early - Westermann (1927), taken over by Greenberg (1963): driven by isolating typology

b) late - from Bennett and Sterk (1977) onwards: driven by lexicon, partly morphology

(I) Western (Old) Kwa + Eastern (Old) Kwa vs. (Old) Benue-Congo

(II) (New) Kwa vs. Western (New) Benue-Congo + Eastern (New) Benue-Congo

+ still unresolved classificatory problem despite serious work since the 1960s ("Benue-Congo Working Group") and renewed recent efforts (cf. Kropp-Dakubu's (2012) historical work on (New) Kwa)

> Güldemann (2018b): neutral treatment as Benue-Kwa **pool**

+ major common denominators across Kwa are typological criteria defining it often negatively against the Niger-Congo canon (cf. Westermann and Bryan 1952: 90-4)

- structural parallelisms as innovative areal signature (cf., e.g., Dimmendaal (2001: 382-7) on serial verb constructions)

- includes lineages like Ijoid and Kru which are genealogically distant or even controversial

- evidence for structurally "simplifying" language change across the Gulf-of-Guinea Coast in terms of "becoming Kwa-like" - Williamson (1985), Hyman (2004), Good (2012)

- intensive cultural and linguistic past contact attested (cf., e.g., Armstrong (1964) on shared detailed lexicon related to divination cult across Yoruboid, Idomoid, Igboïd, and Gbe

+ alternative hypothesis: emergence of the Kwa structural type is an areal phenomenon independent of the genealogical status of the languages affected

- Kwa group traces geographically the (former) West African forest belt from the Cameroon-Nigeria border westward into Ivory Coast and Liberia

- incoming Niger-Congo languages immigrated from the northern savannah and entered contact settings leading to substrate-induced erosion of inherited morphology, possibly also influenced by phonotactic patterns in the Pre-Niger-Congo languages

> McWhorter (2016): "radical analyticity" is the

result of acquisition by adults resident in the areas those languages are now spoken in that a branch of earlier Niger-Congo moved to

- process occurred presumably multiple times independently so that classificatory controversy about the relevant Niger-Congo languages is unsurprising

- "contagious" character of the process confirmed by historically new areal accruals:

a) Gulf-of-Guinea creole family (Güldemann and Hagemeyer 2015, in press)

b) English-based West African creoles

3.4.4 Ijoid and Niger-Congo

+ Ijoid (Ijo complex + Defaka) as a small family in the remnant area of the Niger delta

- firmly assigned to Niger-Congo based on lexicon (e.g. Williamson 1971, 1979, 1988, 1992)

- at the same time, typologically very dissimilar from all purportedly related geographical neighbors: e.g., consistently head-final, unrelated pronoun system involving a tripartite sex-based gender scheme, no trace of noun classes and verb extensions
> major classificatory assignment from a subgroup of (Old) Kwa to a very early split-off

+ lexical isoglosses are doubtful, given their profile and the assumed historical status of Ijoid in the higher-order group

- isoglosses lack full regularity and/or are too similar for separation age > Table 13

- Ijoid reconstructions steered by external classification rather than internal data > Table 14

C1	Meaning	Bantu	Ijo
t~t	'three'	<i>tátù</i>	<i>tárú</i>
	'platform'	<i>tádà</i>	<i>tàndà</i>
	'war, bow'	<i>tá</i>	<i>tèè</i> 'shoot'
c~s	'five'	<i>cáánò</i>	<i>sóhóǝ</i>
	'cut'	- <i>cèng</i> -	<i>sèngí</i> , <i>séngí</i> 'slice'
	'choose'	- <i>càd</i> -	<i>sèlè</i>
n~n	'animal, meat'	- <i>yàmà</i> ~ <i>nàmà</i>	<i>námá</i>
	'four'	- <i>nèè</i>	- <i>né</i>
	'eight'	- <i>náánà</i>	<i>níyínà</i>

Table 13: Proposed cognates between Bantu and Ijo (after Williamson 1971: 282)

Meaning	Proto-Ijo	Defaka	Proto-Ijoid	Niger-Congo
arm, hand	* <i>bara</i>	<i>káa</i>	* <i>káa</i>	PWS *-ka, Igbo <i>áká</i>
bag	* <i>akpa</i>	-	* <i>akpa</i>	PWS *-kua(l), Igbo <i>àkpà</i>
belly, stomach	* <i>furou</i>	<i>itɔ</i>	* <i>furou</i>	PWS *-pu, BLR * <i>pudɔ</i>
black, become	* <i>kurukuru</i>	<i>bire</i>	* <i>ḡire</i>	PWS *-bì-

Note: PWS = Proto-West Sudanic (Westermann 1927)

Table 14: Selected Proto-Ijoid reconstructions (after Williamson 2004)

+ alternative hypothesis: Ijoid is an isolate lineage indigenous in the Niger Delta that has become marginalized by the spread of genuine Niger-Congo groups

> heavy borrowing from Benue-Kwa in Ijoid (?even lower numerals from 3 upwards)

> substrate influence from Ijoid into Benue-Kwa (partly simplifying toward "Kwa" profile)

3.5 Outlook

+ Dimmendaal (2001: 358):

The genetic classification of African languages has a long and partially turbulent history. Whereas our understanding of specific linguistic areas on the continent has improved considerably over the past decades, the increased knowledge in most cases has resulted in confirmation of hypotheses on their genetic links as formulated by Greenberg (1963).

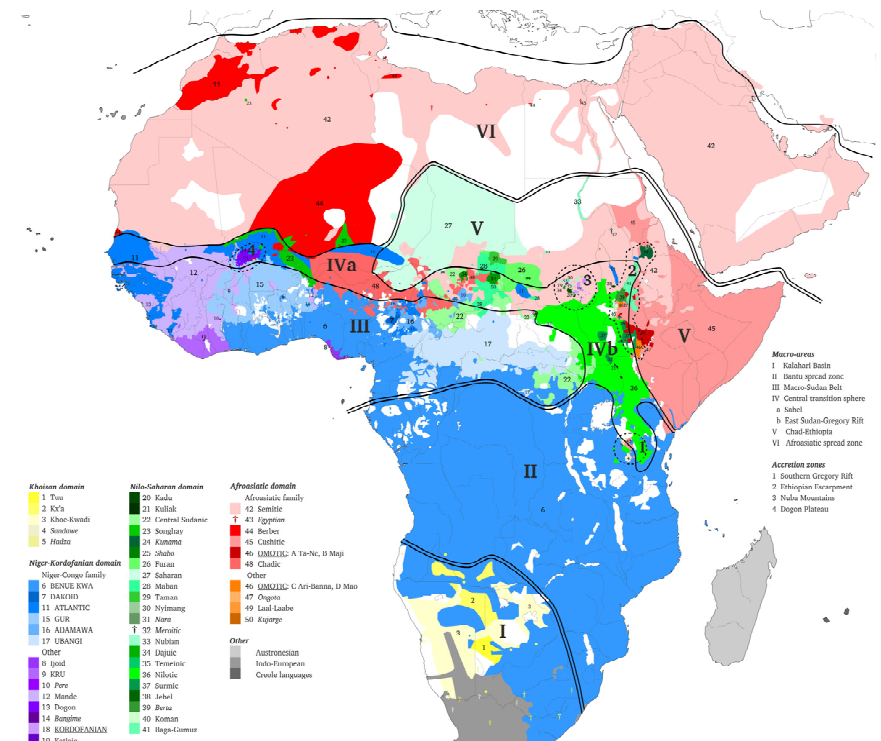
- > pace Dimmendaal, areal configurations have been misleading and potentially still obscure the genealogical classification of African languages
- > large-scale areal patterns can and should inform the historical assessment of languages in conjunction with classical methods of comparative reconstruction

For references see:

Güldemann, Tom. 2018a. Areal linguistics beyond contact, and linguistic areas of Afrabia. In Güldemann, 448-545.

Güldemann, Tom. 2018b. Historical linguistics and genealogical language classification in Africa. In Güldemann, 58-444.

Güldemann, Tom (ed.). 2018. The languages and linguistics of Africa. The World of Linguistics 11. Berlin: Mouton de Gruyter.



Map 4: Basic classificatory units, genealogical relations and macro-areal profile in Africa