

Mande and Bantu comparison in Niger-Congo perspective

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State of the Art: From Westermann and Greenberg to Dimmendaal and Güldemann

- Diedrich Westermann: *Die westlichen Sudansprachen und ihre Beziehungen zum Bantu*.
- Joseph Greenberg: Niger-Congo or Congo-Kordofanian macrofamily.
- 21 century: a skeptical trend.
 - Gerrit Dimmendaal, 2011: “Mande and Ubangian are best treated as independent language families”;
 - Tom Güldemann, 2018: “unless more robust and systematic evidence is brought forward, the long-standing but vague idea that Mande is distant from the rest of Niger-Kordofanian as one of its earliest offshoots should give way to the neutral assessment that it is a family without a proven genealogical affiliation.”

Why Mande and Bantu?

- No recent contacts which could result in massive loans in the basic vocabulary. Therefore, Mande and Bantu cognates are good candidates for the common Niger-Congo stock.
- Bantu is an exemplar case in Niger-Congo. A long tradition of comparative studies, 13 457 stems in the Bantu Lexical Reconstructions (Tervuren).
- A preliminary Proto-Mande reconstruction; almost 4000 roots in Vydrin's **Comparative lexical database of Mande languages**

http://cormand.huma-num.fr/mandecom/mandecom/about_mandecom.html

Four arguments for the Mande and Bantu genetic relationship

1. A considerable number of potential Mande & Bantu cognates.
2. Phonetic correspondences between Proto-Bantu and Proto-Mande are not only regular, but also proportional.
3. In the basic vocabulary, Proto-Bantu and Proto-Mande are considerably closer to each other than contemporary Bantu and Mande languages.
4. In the basic vocabulary, the distribution of roots by their stability in the Mande family displays a strong positive correlation with their distribution in the other Niger-Congo families.

Mande and Bantu cognates

- 202 Mande roots, candidates to the cognacy with roots in other Niger-Congo families,
- of this number, 177 have potential cognates in Proto-Bantu.
- About a half of all these roots have a high reliability index.

Some P.-Bantu and P.-Mande cognates (Swadesh 100 Wordlist)

Meaning	P-Bantu	P-Mande	Meaning	P-Bantu	P-Mande	Meaning	P-Bantu	P-Mande
egg	*gí, *gídí	*yeli	ashes	*bú	*bugu	moon	*jédì	*ḡ-yaɗVɲ
mouth	*nòà, *ɲòà	*ɗɔya	belly	*bùmò	*bũ	black	*pínd	*piɲ
tongue	*dími, *dími	*ɗẽɗẽ	bird	*jònì	*yɔ̃ɗí	die	*kú	*ɗu
ear	*tɔ̀ì	*tɔle	tooth	*jínò	*yĩ	bark	*koba	*koba
water	*jìjì	*ji	sand	*cèngà	*yẽgẽ	road	*gìdà, *jìdà, *kɪɗɪ	*ɗila
lie (down)	*dáad	*ɗa	two	*bà-dí	*pe-ɗa	cold	*dìdì	*ɗẽɗẽ
nose	*jóɗò	*n-ɗuɲ	tail	*kídà	*yɯɪ, *yula	mountain, hill	*kíngá	*koɲke
root	*dì, *dìdì	*ḡ-ɗuli	say	*tì	*ɗí	blood	*gàdí, *jàdí	*joli
bite	*ɗóm	*doɓũ	eat	*dí	*diga	liver	*bàdì, bíndɪ	*ɓudɪ

Some P.-Bantu and P.-Mande cognates (outside Swadesh' list)

Meaning	P-Bantu	P-Mande	Meaning	P-Bantu	P-Mande	Meaning	P-Bantu	P-Mande
swallow	*mìd, *mìn	*bĩ	mountain-2	*tòndà	*tɔŋ	shoulder; wing	*bàbá	*gbã
blow	*pèep	*pěě	goat	*bódì	*boli	four	*nàì	*ďãďĩ
shadow	*dídí	*ďĩďĩŋ	rot	*bòd	*bɔɔ	curve	*cèng	*sega ~ *segaŋ
hold	*kúmb-at	*kũ	middle	*tí	*tɛ	spit	*tú	*tu ~ tufa
extinguish	*díim	*ďibiŋ	turtle	*kúdò	*kuda	dig	*pùk, *pùd	*põ
hiccup	*cék-	*siko	crab	*kádá	*kaa	curse	*dòg	*danga
throat	*mìdò	*bɔɔ	heel	*téndé	*tiŋdi-di	remain	*tɔ-ɔd	*to
leopard	*gòì	*gʷulɩ	scratch	*kàd	*kwaga	grandmother	*mààmá	*bãbã
stomach	*pù	*puɖu	child, fruit	*bí	*bɛɛ	shin	*píndí	*kpaleŋ
guinea fowl	*kángà	*n-kaŋka	foam	*púd(ò)	*ŋ-furu	lung	*pɔɔpɔ	*ŋ-fugufugu

How many cognates are necessary to recognize a language relationship?

- How to distinguish true cognates from random coincidences?
- Which formal criteria for the cognacy?
- Is there a generally recognized numerical threshold?
- Our 200+ potential Proto-Mande & Proto-Bantu cognates did not convince colleagues.

Genetic distance and number of cognates

- We don't know how many potential cognates are necessary to recognize a genetic relationship between two languages.
- But what we can be sure of:
- Genetically closer languages will have more (potential) cognates than genetically more distant languages.

Our expectations concerning the number of potential cognates with Proto-Bantu

- contemporary Bantu >
- Bantoid >
- Benue-Congo >
- core Niger-Congo (outside Benue-Congo: Gur, Kwa...) >
- Niger-Congo outliers (Atlantic, Mel...) >
- doubtful Niger-Congo (Mande, Ubangi, Dogon...) ≥
- unrelated languages (Germanic, Semitic, Tai-Kadai...)

Indirect comparison: Proto-Bantu and other Niger-Congo families (Swadesh' modified list)

	N of languages compared	Average cognacy % with PB
Limba	1	14
Dogon	10	11
Gur+Senufo	13	11
Kru	15	10
Kwa	16	10
Gola	1	10
Atlantic N.	15	9
Ubangi	8	9
Adamawa	27	8
Ijo	4	7
Mel	6	7
Atlantic Bak	8	6
Sua	1	6

Indirect comparison: Proto-Bantu and other Niger-Congo families (Swadesh' modified list)

	N of languages compared	Average cognacy % with PB
Mande	33	15
Limba	1	14
Dogon	10	11
Gur+Senufo	13	11
Kru	15	10
Kwa	16	10
Gola	1	10
Atlantic N.	15	9
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Why is the similarity rate with Proto-Bantu so high in Mande and Dogon?

- A hypothesis: the absence of noun classes in these families.
- In the families with noun classes (especially prefix-marked), fossilized class markers may obscure the resemblance.

- Cf. a Mel case:

**le-lem-el* 'tongue' > Proto-Mel *le-mel*;

**ko-kot-ok* 'foot' > Proto-Mel *ko-tok*.

Mande and Bantu phonetic correspondences

- The phonetic correspondences are not only regular.
- They are also proportional.

Initial consonants, BP – PM and PNC

NC	*p	*t	*c?	*k	*kp
PB : PM	*p : *p	*t : *t	*c : *t	*k : *k	*p : *kp
NC	*b	*d	*j	*g	*gb
PB : PM	*b : *b	*d : *d	*j : *j	*g : *g	*b : *gb
NC	*f		*s	*x	*xw
PB : PM	*p : *f		*c : *s	*k : *ɣ	*k : *xw
NC	*ɸ	*d	*y	*ɖ	
PB : PM	*b : *ɸ	*j : *d	*j : *ɣ	*k/*g : ɖ	
NC	*m	*n			
PB : PM	*m : *ɸ	*n : *d			
NC	*w		*y	*ɣ	
PB : PM	*b : *w		*j : *y	*g : *ɣ	
NC			*?		
PB : PM			*j : *s		

3. Proto-languages are closer to each other than contemporary languages

- Proto-Bantu: the Swadesh 100 Wordlist modified by Tilo Schadeberg. 93 notions, 123 roots.
- Proto-Mande: 41 roots (33% out of 123), potential cognates with Proto-Bantu, among these, 33 roots (27%) are highly reliable.
- 33 contemporary Mande language:
 - the average cognacy rate: 15%,
 - the maximal cognacy rate (Bambara, Lele, Maninka): 20%.

Distribution of roots by stability

- Even in the basic vocabulary, words differ in their stability.
- Stability of words can vary among the language families: word for some notions are very stable in some languages, but less stable in some others.
- In different Niger-Congo families, distribution of the roots by stability is similar.
- If compared with Mande: the most stable Niger-Congo roots are also most stable Mande roots.

The most stable Niger-Congo roots (Swadesh 100 Wordlist)

GLOSS	*PB Schadeberg	Mande	N families in Niger-Congo
tongue	*lʊ=li'mi	*dẽdẽ ~ *dẽbẽ	13
bite	*=lóm-a	*dobũ <i>eat</i>	10
drink	*=mú ~ =ɲó	*bõdĩ <i>swallow</i>	10
eat	*=li'-a	*diga	10
tooth	*i=jíno	*yĩ	10
die	*=kú-a	*ɢu <i>dead person</i>	9
eye	*i=jíco	-	9
meat1, animal2	*ɲama	-	9
root	*mu=didi	*ɲ-duli	9
water	*ma=jíɭ	*ji	9
black2	*pi	*piɲ	8
dog	*mbóa	*gbɛra	8
bark=skin	*mu=kóbá	*koba	7
belly	*i=bumo	*bũ	7
breast	*ma=béele	-	7
ground	*(pa-)nci'	*sɛɛ	7
lie (down)	*=lá-al-a	*ɗa	7
mouth1	*ka=nua	*ɗɔɣa	7
tree	ti'	-	7

Conclusions

- The Mande and Bantu genetic relationship may be regarded as proven.
- We have a pilot list of the common Niger-Congo vocabulary.
- We have a pilot reconstruction of the Proto-Niger-Congo initial consonants.