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Mande and Bantu in the Niger-Congo context



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CONTENTS

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Preface 7

1. Introduction 9
   1.1. Method 9
   1.2. The data 15
      1.2.1. Bantu 15
      1.2.2. Mande 19
      1.2.3. Other Niger-Congo 26

2. Comparison of Proto-Bantu with Proto-Mande within the limits of the Schadeberg List 28
   2.1. The Swadesh 100 Wordlist and its variants 28
   2.2. Analysis of the potential Proto-Bantu – Proto-Mande cognates 32
   2.3. Distance between contemporary Bantu and Mande languages, compared with the distance between Proto-Bantu and Proto-Mande 37

3. Proto-Bantu – Proto-Mande cognates outside the Swadesh 100 Wordlist 39

4. Toward a Proto-Niger-Congo phonological reconstruction: Proto-Bantu and Proto-Mande regular correspondences 47

5. Proto-Bantu stems from the Schadeberg List and their potential cognates in Niger-Congo families 60
   5.1. Direct and indirect comparison of the Mande basic lexicon 60
   5.2. Proto-Bantu and other Niger-Congo families: Comparison of the basic lexicon 67
   5.3. Greenberg's hypothesis 80 years later 116

6. Distribution of roots by stability 118

7. Prospects for a lexical reconstruction
of Proto-Niger-Congo 129

8. Conclusions 146

9. Materials for a Niger-Congo comparative
etymological dictionary 147
9.1. The Schadeberg List 150
9.1.1. Initial labial consonants 150
9.1.2. Initial dental consonants 159
9.1.3. Initial palatal consonants 182
9.1.4. Initial velar consonants 197
9.1.5. Initial labiovelar consonants 209
9.2. Proto-Bantu – Proto-Mande cognates
outside the Schadeberg List 211
9.2.1. Initial labial consonants 211
9.2.2. Initial dental consonants 239
9.2.3. Initial palatal consonants 268
9.2.4. Initial velar consonants 285
9.2.5. Initial labiovelar consonants. 311
9.3. Mande – Benue-Congo cognates absent
or poorly represented in Bantu 317
9.4. Mande – Niger-Congo cognates absent
or poorly represented in Benue-Congo. 331

Appendix. Languages and major sources 340
Mande family 340
Non-Mande languages and their affiliation 342

Acknowledgements 347

Abbreviations 348

References 349

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MANDE AND BANTU IN THE NIGER-CONGO CONTEXT

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Abstract: That Mande family belongs to the Niger-Congo macro-family was first proposed by Joseph Greenberg in the middle of the 20th century. Over the last two decades this affiliation has regularly been questioned, the main argument for skepticism being the well-known fact there is no trace of any noun class in Mande. Our study proves that these doubts are groundless as far as the lexicon is concerned. Our conclusion is based on the following arguments which appear to be sufficient for the establishment of a relationship between Mande and Bantu and, consequently, for the inclusion of Mande in Niger-Congo:

- In the basic vocabulary, the average cognacy rate of contemporary Mande languages with Proto-Bantu is higher than the rate for other families whose membership in the Niger-Congo macro-family is uncontested.
- In the basic vocabulary, the number of phonetic similarities actually observed far exceeds the number expected on the basis of random coincidence alone.
- In the basic vocabulary, Proto-Bantu and Proto-Mande are considerably closer to each other than contemporary Bantu and Mande languages are.
- Phonetic correspondences between Proto-Bantu and Proto-Mande are not only regular, but also proportional, which excludes the possibility that they are merely fortuitous.
- 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.

If we establish cognacy between specific Mande and Bantu roots, these roots can be regarded as candidates for membership in the Niger-Congo common lexical stock. We thus provide materials for a Proto-Niger-Congo comparative etymological dictionary: 207 common roots and their probable reflexes in contemporary languages and lower level proto-languages are proposed for future discussion by specialists.

Key words: Proto-Mande, Proto-Bantu, Proto-Niger-Congo, language reconstruction, language relationship

LE MANDÉ ET LE BANTOU DANS LE CONTEXTE NIGERO-CONGOLAIS

Résumé : Il y a trois quarts de siècle, Joseph Greenberg proposait d'inclure la famille Mandé dans la macro-famille Niger-Congo. Cependant, depuis environ deux décennies, cela est régulièrement remis en question, l'argument principal des sceptiques étant l'absence des classes nominales ou leurs traces en Mandé. Notre étude montre que ces doutes sont sans fondement, surtout pour ce qui concerne le vocabulaire. Cette conclusion s'appuie sur les arguments suivants, qui nous paraissent suffisants comme preuve de la parenté entre le Mandé et le Bantou et, par conséquence, pour l'inclusion des langues Mandé dans la macro-famille Niger-Congo :

- si on compare les vocabulaires de base, les langues mandé s'avèrent plus proches du proto-bantou que les langues des autres familles dont l'appartenance au Niger-Congo n'est pas contestée ;
- dans le vocabulaire de base, le proto-mandé et le proto-bantou s'avèrent beaucoup plus proches que les langues contemporaines appartenant aux familles mandé et bantou ;
- le nombre des formes phonétiquement proches entre le Mandé et le Bantou est sensiblement plus élevé par rapport à ce qu'on pourrait attendre pour des coïncidences fortuites entre des langues non-apparentées ;
- les correspondances phonétiques entre le proto-mandé et proto-bantou ne sont pas que régulières, elles sont en même temps proportionnelles ;
- dans le vocabulaire de base du Mandé, la distribution des racines par leur stabilité manifeste une corrélation avec celle dans les autres familles de la macro-famille Niger-Congo.

L'établissement des cognats mandé et bantou permet de considérer ces racines comme des candidats au fond commun Niger-Congo. Nous proposons aux lecteurs des matériaux pour un dictionnaire étymologique comparatif Niger-Congo comportant 207 racines et leurs probables reflexes dans les langues contemporaines et/ou les proto-langues des niveaux inférieures.

Mots-clés : proto-mandé, proto-bantou, proto-Niger-Congo, reconstruction linguistique, parenté linguistique

ЯЗЫКИ МАНДЕ И БАНТУ В НИГЕРО-КОНГОЛЕЗСКОМ КОНТЕКСТЕ

Аннотация: Включение семьи манде в нигеро-конголезскую макросемью, предложенное Джозефом Гринбергом три четверти века назад, в последние два десятилетия регулярно подвергается сомнению, при этом главным аргументом скептиков по-прежнему является отсутствие в языках манде именных классов или их следов. Наше исследование показывает, что в лексическом плане эти сомнения беспочвенны. Наш вывод основывается на следующих аргументах, которые представляются авторам достаточными для установления родства манде и банту и, соответственно, для отнесения языков манде к языкам нигер-конго:

- при сравнении базовой лексики обнаруживается более высокая степень близости между манде и прабанту, чем между прабанту и языками других семей, принадлежность которых к нигер-конго никем не оспаривается;
- сходства в базовой лексике праманде и прабанту значительно превышают таковые между современными языками манде и банту;
- количество фонетических сходств в базовом лексиконе манде и банту значительно превышает тот уровень совпадений, который ожидается для неродственных языков;
- фонетические соответствия праманде и прабанту не только регулярны, но и пропорциональны;
- в базовой лексике манде распределение корней по устойчивости демонстрирует устойчивую корреляцию с таковым в остальных языковых семьях, входящих в нигеро-конголезскую макросемью.

Выделение родственных лексических корней манде и банту позволяет рассматривать эти корни как вероятные единицы пранигеро-конголезского лексического фонда. Мы предлагаем вниманию читателей материалы к сравнительно-этимологическому словарю нигеро-конголезского праязыка, вынося на обсуждение специалистов 207 корней с их предполагаемыми рефлексами в современных языках или праязыках более низкого уровня.

Ключевые слова: праманде, прабанту, нигер-конго, языковая реконструкция, языковое родство

Preface

In this study we attempt to prove that there is a genetic relationship between the Mande family and most of the other language families of Sub-saharan Africa. Thus we come back to the hypothesis of Joseph Greenberg (1949; 1963), who postulated the existence of a Niger-Congo macro-family.[1] The need for this proof stems from the fact that of late, Greenbergian arguments in favour of the inclusion of Mande in this macro-family have often been called into question (or at least deemed insufficient to demonstrate a genetic relationship), and as a result the Mande family is considered to be genetically isolated; see, in particular, the current version of Glottolog (Hammarström et al. 2024).

In fact, this sceptical attitude is not based on any serious study: since the 1950s, no publication has appeared in which Greenberg's proposed lexical parallels between Mande and other Niger-Congo families have been checked systematically.

This being the case, what is the reason for expelling Mande from the Niger-Congo macro-family? As a matter of fact, the main motivation is the lack of tangible traces of noun classes in Mande, while the other Niger-Congo families have them – something which was by no means unknown to Greenberg himself, or indeed to his predecessor Diedrich Westermann (1927) who was also inclined to regard the Mande languages as related to other languages of Sub-saharan Africa.

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[1] In our taxonomic hierarchy, we use the following terminology: macro-family > family > group > subgroup. The term "branch" is a kind of placeholder used for intermediate groupings when necessary (in Mande, for example, it is used for a level intermediate between the groups and the family). Language isolates within Niger-Congo, such as Limba or Sua, taxonomically equivalent to families, will be referred to as "long branches". Bantu is a special case: technically speaking, it represents a subgroup in the Benue-Congo language family, but in fact the arborization of Benue-Congo involves many more hierarchical levels than there are taxonomic terms in our terminology. Taking into account the high number of Bantu languages (more than 500), and the considerable genetic depth involved (between 4000 and 6000 years), for the sake of simplicity we refer to Bantu as a "family".

With respect to the lexicon, the sceptics are wary of endorsing potential cognacy between Mande roots and lexical items in other Niger-Congo families because Greenberg and his followers did not establish regular phonetic correspondences, which are generally regarded as the only legitimate proof of a linguistic relationship.

In this study, we consider all these problems, and we attempt to show that when dealing with the establishment of language relationship, a system of regular phonetic correspondences (which, in fact, we establish here between Mande and Bantu) is just one of a set of relevant arguments, and we present those other arguments here. Conversely, we would like to emphasize that regular and convincing phonetic correspondences have not been established so far between most of the language families whose membership in the Atlantic-Congo[1] macro-family, is nonetheless never called into question by sceptics. Therefore, the allegedly strict requirement of regular phonetic correspondences is used, in reality, to hide the old typological argument based on the lack of noun classes in Mande.

Our work consists of 9 chapters. In the first chapter, we present our methodological approach and the data used in the study. Then the lexicons of Proto-Mande and Proto-Bantu are compared: §2 treats the basic lexicon (Schadeberg's list), and §3 the extended vocabulary. §4 deals with Proto-Bantu and Proto-Mande regular correspondences of initial consonants. In §5, we provide presumable cognates of Proto-Bantu forms from Schadeberg's variant of the Swadesh Wordlist with sampled languages belonging to different Niger-Congo families. In §6, the roots in Schadeberg's list are arranged according to their stability across the Niger-Congo families. In §7, we discuss prospects for the constitution of the Proto-Niger-Congo vocabulary: in particular, we present some Mande and Benue-Congo cognate roots which have no Bantu reflexes, as well as those which have reflexes in Mande and other Niger-Congo families, but appear to have none in Benue-Congo.

[1] This term is used in Glottolog for the macro-family that remains once Mande, Dogon, Ijoid and some other families are removed from Greenberg's Niger-Congo.

Our main conclusions are set out in §8. In the final chapter 9, we present comparative series, each of them corresponding to presumable Proto-Niger-Congo roots. §9.1 includes Mande and Bantu cognates belonging to the Schadeberg List, and §9.2 those outside the Schadeberg List. In §9.3 comparative series without reflexes in Bantu are given, and in §9.4 those without reflexes in Benue-Congo.

In the Appendix, we provide a list of the languages cited and the default references for each language.

1. Introduction

1.1. Method

We feel it necessary to preface this study with a comment concerning some of its methodological and theoretical postulates.

The best way to establish the external genetic ties of the Mande family would undoubtedly be to address a comparative etymological dictionary of the Niger-Congo macro-family, but such a dictionary is lacking. It would be also very effective to compare Mande with reconstructions of the proto-languages of the dozen or so families constituting the Niger-Congo macro-family, but such reconstructions are also scarce, even if a few bold attempts at lexical reconstruction have been made: Proto-Benue-Congo (de Wolf 1971), Proto-Central Gur (Manessy 1969; 1975; 1979), Proto-Ijoid (Williamson 2004), and some others.

These options being inaccessible, one can attempt a comparison of Mande with a family which incontestably belongs to Niger-Congo, well-explored from the historical comparative viewpoint, and has had no intensive contacts with Mande (at least in the known past). The only family which meets all these conditions is Bantu: there are no grounds for presuming any tangible contact between Proto-Mande and Proto-Bantu, and the Proto-Bantu reconstruction (BLR2 and BLR3, see §1.2.1) corresponds to the strict requirements of the comparative method, is recognized by experts in the field and is available in open access.

In this respect, see Williamson's (1992: 387–388) argumentation, following the same logic, for "using Bantu as a control factor" in comparative Niger-Congo studies. We assume that if we can prove the existence of a genetic relationship between Proto-Mande and Proto-Bantu (a sufficient number of candidates to cognacy found, regular phonetic correspondences established), the question of Mande's membership in Niger-Congo can be regarded as resolved.

Evidently, for such a comparison we need a lexical reconstruction of Proto-Mande. Here we can have recourse to Vydrin's (2024a) preliminary reconstruction, see in more detail §1.2.2.

Meanwhile, we do not exclude other potential means of verification of our hypothesis. In particular, it is tempting to find out if our Mande and Bantu parallels are confirmed by the data of other Niger-Congo families.

Yielding to this temptation, we have broadened the range of our comparison, which, we claim, has resulted in further proofs that Mande belongs to Niger-Congo. However, when we compare Mande with Adamawa or Gur languages, our results may appear more vulnerable from a methodological viewpoint: when we step beyond Mande-Bantu comparison proper, we can only search for look-alikes, thus coming back to Greenberg's mass comparison.

With regard to the use of less rigorous data of this kind, we must express the following consideration. We are not sure that all those who insist on a strict application of the historical comparative method and the establishment of regular phonetic correspondences have given serious thought to the theoretical foundation on which the classical method is based. Let us consider this question in more detail.

As we will show in this work, the comparative historical method implies a number of arguments for genetic relationship, allowing us to look beyond a dichotomy between regular correspondences and look-alikes which to us appears overly simplistic. The key question is: what are the factors that lead us, as adherents of the comparative historical method, to think that the existence of a system of regular phonetic correspondences proves the presence of a genetic relationship?

Why cannot such a system emerge across unrelated languages by chance? Let us assume that the answer is obvious: the likelihood of such a coincidence is so minuscule that it is easier to appeal to genetic relationship than to fortuitous coincidence. Therefore, the comparative historical method is based on statistics (even if merely intuitive). Ultimately, this method is based on the comparison of observed and expected phonemic frequencies: when the former are considerably higher than the latter, we must look for the factors explaining the statistical deviations. Such factors can be: genetic relationship; mass borrowing; typological universals, etc.

Traditionally, the attention of comparative linguists has chiefly been directed towards just one indicator of statistical anomalies, namely regular phonetic correspondences. At the same time, related languages also display other statistical anomalies, which are numerous and diverse. Our approach is based on a simple idea: why not try to use these anomalies to establish linguistic relationships – in the same way as we use regular phonetic correspondences?

If we find hundreds of languages of sub-Saharan Africa where the word for FOUR has a form similar to NAI, it is of course theoretically possible that this is the result of pure coincidence, but the statistical probability of such a coincidence is negligible. It is much more plausible that this root represents a strong isogloss, characterizing genetically related languages that we identify as belonging to the Niger-Congo macro-family. And if we estimate the likelihood of the situation where not only is FOUR designated by forms similar to NAI, but also forms for TONGUE have a shape approximating DEM or LEM, we see that coincidence can be excluded.

We can formulate this claim in an intentionally provocative way: a language which has a word for FOUR similar to NAI and a word for TONGUE similar to DEM or LEM belongs to the Niger-Congo macro-family, unless it can be proven that these forms spread across sub-Saharan Africa by means of borrowing. And we arrive at this conclusion without recourse to regular phonetic correspondences; in both cases, NAI and DEM~LEM, we are considering isolated forms.

When we see that in the Swadesh 100 Wordlist almost 10% of words in Proto-Mande and Proto-Bantu have identical initial consonants, word-internal consonants and vowels (e.g. BARK=SKIN Proto-Bantu **koba* – Proto-Mande **koba*), the probability of mere coincidence is so negligibly low that we cannot ignore the observation and must instead provide an explanation for it. If such similar forms are numerous enough, we are perfectly entitled to consider this fact as a proof of genetic relationship, and this proof is as strong as that provided by a reconstruction based on regular phonetic correspondences.[1] Here again, we obtain proof of genetic relationship without establishing regular phonetic correspondences.

It is evident that when the lexicons of different languages are compared, potential cognates may vary considerably in their reliability, and authors of comparative dictionaries often subdivide cognates into reliable and less reliable. In this study, we formalize the evaluation of the common Mande-Bantu roots and explicitly formulate six criteria of reliability: phonetic reliability, semantic consistency, distribution within Bantu, distribution within Mande, availability in Benue-Congo outside Bantu, availability in Niger-Congo outside Mande and Benue-Congo. The sum of these criteria (from 0 to 6) is what we call here the **Reliability index**.

Let us consider each criterion in more detail.

1) Phonetic reliability. In Table 1 we provide some examples of phonetically regular reliable correspondences, both trivial (ASHES, LONG, BITE/EAT, SEE, WATER, BARK) and less trivial (LIVER, GROUND, HAIR, LIE DOWN, COLD, SHIN).

[1] Andrey Shluinsky informs us that in Enets, a language of northern Russia, the form meaning ‘skin’ is also *koba* (Shluinsky 2025). Wherein lies the difference between Bantu-Mande coincidence on one hand and the Bantu-Enets state of affaires on the other? The difference is the following: if we take the pair Bantu and Enets (or Mande and Enets), any particular lexical a coincidence between them is of low probability, but naturally the existence of single instances like this across the vocabulary remains possible. Meanwhile, when we compare Bantu and Mande, we find 10 coincidences in the Swadesh 100 Wordlist alone (see Table 19), which makes mere coincidence improbable.

Table 1

Phonetically reliable potential cognates

Semantics	Proto-Bantu	Proto-Mande
liver	*bàdì	*ɓʊdɪ
ashes	*bú	*buɣu
ground	*cìdí	*sɛlɛ
hair	*cìngà	*siɣi
long	*dà	*dãa
bite/eat	*dʊ́m	*domu
lie (down)	*dáad	*ɗa
cold	*dìdì	*dɛ̃dɛ̃
see	*jén (regional)	*jɪ ~ *je
water	*jíjì	*ji
bark (of tree)	*koba	*koba
occiput	*kòtì	*kɔrɪ
die/corpse	*kú	*ɠu
belly	*pudʊ	*pudu
walk/pass	*támb	*tanbi
say	*tì	*tĩ
shin	*píndí	*kpalɛŋ

In Table 2, some examples of less obvious phonetic correspondences are given.

Table 2

Phonetically weak candidates to cognacy

Semantics	Proto-Bantu	Proto-Mande
fish	*cúí	*ŋ̀-jɔGɛ
bark (of tree)	*gʊda	*kɔrɛŋ
smoke	*jíkì	*sisi ~ *sigi
heart	*jòjò	*sɔŋ-
nose	*jʊ́dʊ̀	*ŋ̀-ɗuŋ

We should keep in mind that before a true Proto-Mande phonetic reconstruction is carried out, we can speak about regular and irregular

Mande–Bantu correspondences only very tentatively. E.g. the roots SMOKE and HEART display the same phonetic correspondence; should we consider it regular or not? See §4.

2) Semantic consistency. Apart from those cases where the lexical meanings in Bantu and Mande are identical (or very close), we also regard as reliable those semantic correspondences which have been confirmed by means of the "Homonymy & Polysemy" tool (Segerer 2022). This tool allows us to evaluate the frequency of semantic coincidences in the lexicons of African languages. If a semantic coincidence is observed only a small number of times according to this tool, we mark the cognates as semantically unreliable.

For the sake of example, let us consider semantic coincidences of the notion NOSE.

According to "Homonymy & Polysemy" (Segerer 2022), the homonymy NOSE=COLD is found in 3 languages: Bozo Sorogama (Mande) *mũũ*, Bozo Kelenga (Mande) *mũnũ*, Dza (Adamawa) *jwí*. The first two languages are closely related, and we are dealing with reflexes of the same root(s). If so, we have only two occurrences of this semantic coincidence; therefore, it is appropriate to treat it as merely fortuitous where it is found.

Let us now consider the pair of notions NOSE=LIFE which is attested in 13 languages, among others Seenku N. (Western Mande) *bùnù/bùni*, San Mayaa (Southeastern Mande) *ɲinde*, Joola Kasa (Atlantic Bak) *ɛ-ɲendu/si-*, Pepel (Atlantic Bak) *yil*, Wolof (Atlantic N.) *bakkan*, Laala (Atlantic N.) *kɔmɔɔn*, Sereer (Atlantic N.) *ɲis*, Toro So (Dogon) *kín,* Sissala (Gur) *mììsɛ̀ / mìŋsà*, Dagara (Gur) *ɲɔ́ɔ́rí*, Minyanka (Senufo) *munaa*. It is entirely implausible that all 13 instances could result from fortuitous coincidences. Therefore, we assume that the polysemy (rather than homonymy) NOSE=LIFE has been demonstrated. For this particular case of polysemy, see in detail (Pozdniakov & Segerer 2019: 238–240).

3) Distribution in Bantu. As a rule, we included in our list only those roots which appear in at least 8 Bantu zones (out of 16) and/or in 3 regions (out of 5), see in detail §1.2.1. However, we have admitted,

exceptionally, a few interesting roots represented in a more limited number of zones. Such roots are given a score of zero according to this criterion.

4) Distribution in Mande. We regard a root as reliable in the following cases: a) it is attested in both branches (Western and Southeastern),[1] or b) it appears in at least 5 groups of the Western branch (out of 9). Reflexes represented in a more limited way are marked negatively according to this criterion.

5) Availability in Benue-Congo outside Bantu. We proceed from the assumption that, if a root is not represented in Benue-Congo outside Bantu, it may be a Bantu innovation, rather than a common Niger-Congo form. However, it should be kept in mind that we do not mean to undertake a special study on the distribution of reflexes in Benue-Congo; we have referred mainly to the results of comparative studies for various Benue-Congo groups. Therefore, this criterion should be regarded as secondary.

6) Availability in other Niger-Congo families. Here again, we have not carried out a systematic search for cognates,[2] and our data, in this respect, are by no means conclusive. This is another secondary criterion.

Our "Reliability index" is the number of criteria satisfied by a cognate set (i.e. in this index, all criteria are given equal weight).

1.2. The data

1.2.1. Bantu

The Bantu languages, their internal classification and reconstruction are dealt with in numerous authoritative publications widely known even among linguists who are not Bantu experts (just to mention some

[1] However, in this case, we take a cautious approach: if we find look-alikes in only one Western and one Southeastern language, these may be fortuitous coincidences, and we mark such cases as unreliable.

[2] Among the other Niger-Congo families, the data of Atlantic languages are better represented than all others. Here we have used the unpublished comparative Atlantic database of Pozdniakov and Segerer (n.d.).

recent ones: van de Velde et al. (eds.) 2019; Bostoen et al. (eds.) 2022). A special position for Bantu among the Niger-Congo families and groups is assured by the existence of an extensive lexical reconstruction represented by the database Bantu Lexical Reconstructions, BLR2 (Coupez et al. 1998) and BLR3 (Bastin et al. 2002).[1] In our comparative study, we will use the reconstructed forms,[2] rather than the data of individual Bantu languages, and the reason for this is not only to facilitate our task, but also in order to avoid a methodological pitfall. When we compare all the languages of two language families, and one of these families comprises 564 languages, it becomes possible to find a potential cognate for nearly any word: with such a large sample, the probability of coincidence rises considerably.[3]

The use of the Proto-Bantu reconstructions (BLR2 and BLR3) drastically reduces the risk of fortuitous coincidences. However, even this restriction is insufficient. In the BLR2 electronic database in RefLex (Segerer & Flavier 2024), we find 13,457 Bantu cognate sets.[4] If we

[1] "The Bantu Lexical Reconstructions 3 database is the online successor of BLR2, available since 2002 and last updated on November 6, 2005 (Bastin et al. 2002). BLR3 mainly differs from BLR2 in terms of data representation" (Bostoen & Bastin 2016). Here and after, when we mention BLR without number, we mean BLR3.

[2] The BLR Proto-Bantu forms may differ from those suggested by other Bantuists. For example, Schadeberg (2003) suggests reconstructions with initial **l-* where BLR has **d-*. In this study, we take mainly BLR reconstructions, with the exception of the sections where Schadeberg's list is used as the point of reference. In both BLR and Schadeberg's reconstructions, we have replaced the equals sign as a morphemic boundary marker with a dash.

[3] Opponents of Greenberg often attribute this methodological flaw to him (see §8.2 for our evaluation of Greenberg's work).

[4] In Bostoen & Bastin (2016) the total number is different: "BLR2 was conceived as a working tool that had to be progressively completed and revised, taking into account corrections and suggestions by users. It contains 9,821 items, including all of Guthrie's C.S. as well as reconstructions by earlier scholars." It seems useful to quote these authors as concerns the reliability status of Bantu words, the total number being the sum of all those belonging to the following types: "0 stands for a previously proposed proto-form rejected by the editors (731 items), 1 for a well-established reconstruction having a Bantu-wide distribution

compare the Mande data with all of them, we will inevitably uncover a large number of fortuitous coincidences. It should also be noted that, according to the authors of BLR2 and BLR3, what they provide are not true reconstructed forms. Rather they are materials towards a reconstruction, including numerous local forms attested only in a small number of zones, sometimes only a single one. In what follows, we will nonetheless refer to these forms as Proto-Bantu reconstructed roots (after all, Bantu specialists themselves refer to these forms as Bantu Lexical Reconstructions). The solution we propose is to take into consideration mainly those roots which are attested in the majority of Bantu regions and/or zones.

BLR refers to the division, traditional for Bantu linguistics (Guthrie 1967), of the Bantu languages into 16 zones: ABCDEFGHJKLMNPRS. In Table 3, we show the distribution of the BLR2 Proto-Bantu words by zones. In the left column, the number of zones is indicated, and in the right column, the number of Proto-Bantu reconstructed words attested in the respective number of zones.

We assume that the threshold of 8 zones is a reasonable compromise which makes it possible to take into account the main bulk of the common Bantu lexicon (and to avoid local innovation) while, on the other hand, minimizing the number of fortuitous phonetic coincidences. This leaves us with 735 roots which were thoroughly examined. The roots whose reflexes are found in 4 to 7 zones we considered in a less systematic way.

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and thus going back to PB (290 items), 1a for a derived form whose root is a well-established PB reconstruction (514 items), 1(a) for a derived form which can itself be reconstructed to PB (20 items), 2/2a for a cluster of variable reconstructions which cover together the whole Bantu domain and have each a large distribution (17 items), 3 for a well-established regional proto-form (593 items), 3a for a derived form whose root is a well-established regional proto-form (519 items), 4 for a problematic reconstruction (1243 items), and 5 for reconstructions corresponding to a comparative series whose attestations are few and/or spatially restricted (5397 items)" (Bostoen & Bastin 2016). The number 13,457 we provide here refers to the electronic version of BLR2 integrated into Reflex.

Table 3

Distribution of reflexes of Proto-Bantu roots by Bantu zones

N zones	N words	N zones	N words	**Total**
16	35	7	214	
15	47	6	320	
14	45	5	405	
13	47	4	626	
12	55	3	1023	
11	97	2	2610	
10	97	1	2646	
9	133	–	48781	
8	179			
Total	**735**		**12722**	**13457**

In addition, BLR3 (Bastin et al. 2002) also indicates the grouping of Bantu languages into five regions: Northwestern, Northeastern, Southwestern, Southeastern, and Central (respectively, NW, NE, SW, SE, Ce), which is even more important than the distribution by zones. As a rule, we provide the distribution by regions for the Proto-Bantu forms.

There are however two situations where we also consider Proto-Bantu reconstructions whose reflexes have been found in less than 8 zones. Firstly, these are words belonging to the Swadesh 100 Wordlist. For such under-represented roots, we lower the Reliability Index (see §1.5). Secondly, it is not rare to have a root which is attested in only four or five Bantu zones, and, at the same time, in three or four Bantu regions. Such roots have been also considered.

[1] This is the number of reconstructed Proto-Bantu forms which appear in BLR without any indication concerning their distribution by zones.

1.2.2. Mande

Unlike in the case of Bantu languages, comparative historical studies of Mande languages are much less familiar to the general linguistic public. For this reason we find it necessary to present here a concise survey of the current situation in this field.

1.2.2.1. Mande comparative studies: State of the art

Mande language data have been present in comparative linguistics since Koelle (1854) and Steinthal (1867), and, quite naturally, they appear in the works of Westermann (1927), Greenberg (1949; 1970; 1963), Mukarovsky (1976) and other authors dealing with the genetic macro-classification of African languages. In all these works, data from individual Mande languages were used for macro-comparison directly, without any serious attempt to reconstruct Proto-Mande or proto-languages at lower hierarchical levels.

However, there have also been remarkable advances in the sphere of reconstruction within Mande itself.

Dwyer (1973) worked on the reconstruction of tones in Proto-Southwestern Mande, then provided a reconstruction of the Proto-Southwestern Mande initial consonants (Dwyer 1974). Later, he came up with some tentative proposals concerning a Proto-Mande phonological and morphological reconstruction (Dwyer 1987). Claire Grégoire (1988) attempted a reconstruction of the Proto-Mande labial consonants which was a breakthrough at the time of its publication, but today it requires substantial updating. By contrast, Creissels' (1979; 2004) works concerning Proto-Manding reconstruction are still valid. A major contribution to Western Mande reconstruction was Kastenholz's book (1996). He suggested 187 lexical reconstructions for the subbranch including Southwestern Mande and "Central Mande" (in his classification, Central Mande contains the Manding, Mokole, Vai-Kono, Jogo-Jeri, and Susu-Jalonke groups). Even if some details of Kastenholz's (1996) reconstruction can be questioned, it remains relevant even now. One can also mention Schreiber's (2008) comparative study of Eastern

Mande, although its value for understanding of the proto-language is questionable.[1]

As for our contribution to the field, the earliest publications (Pozdniakov 1978; 1980) represent an attempt to reconstruct the Proto-Mande initial consonants; these results need radical revision in the light of new evidence. A phonological reconstruction of Proto-Manding was proposed in Pozdnâkov & Vydrine (1986; 1988); it is still valid in its main points, although some updates are necessary. A reconstruction of the initial consonants of Proto-Southwestern Mande was carried out in Vydrine (1989) and Vydrin (2006), and those of Proto-Southern Mande are treated in Vydrine (2005) and Vydrin (2007). Some proposals concerning the type of the Proto-Mande phonological system were formulated in Vydrine (2004) and Vydrin (2006). Finally, a reconstruction of the initial consonants of Proto-Soninke-Bozo by Valentin Vydrin is close to completion.

To sum up, we now have reliable reconstructions, at least as regards initial consonants, for 4 groups (Manding, Southwestern, Soninke-Bozo, Southern) out of the 11 constituting the Mande family. It should be mentioned that one group (Bobo) is represented by one language, and two other groups (Susu-Jalonke and Vai-Kono) consist of two closely related languages each (and these languages can therefore be used directly for the reconstruction of the proto-languages of the higher level). Therefore, a very significant part of the way towards a Proto-Mande reconstruction has already been accomplished.

In November 2024, a comparative dictionary of the Mande family was posted on line (Vydrin 2024a) containing 3,939 cognate sets, about a quarter of which are potentially reconstructible for the Proto-Mande level. The dictionary is regularly updated; in the current version (December 2025), preliminary Proto-Mande reconstructions are proposed for more than 500 cognate sets.

[1] For a critical review of this publication see (Vydrin 2010).

1.2.2.2. Internal classification of the Mande family

The internal classification of Mande has a long history, discussed in detail in Vydrin (2017; 2018). Figure 1 presents the classification of Mande according to (Vydrin 2009a). The Mande family is first subdivided into two branches, Western and Southeastern; those branches are further subdivided into groups. In Figure 1, groups are provided with number indices (the first digit represents the branch, 1 for Western and 2 for Southeastern; the second digit stands for the group). The same number indices are used throughout this book to help the reader to identify the position of each language within the family.

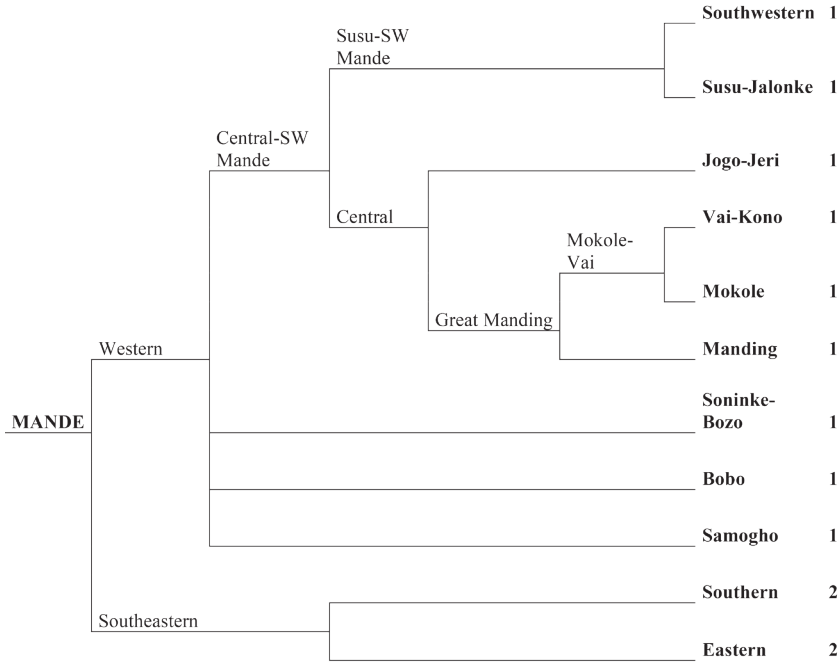

Figure 1. Mande genetic tree, according to (Vydrin 2009a)

1.2.2.3. What we know about Proto-Mande phonology

As has been mentioned elsewhere (Vydrin 2016), there is still no true phonological reconstruction for Proto-Mande. However, a certain amount of progress in this direction has been achieved thanks to studies carried out by various authors (see §1.1.4.2.1). The status of the asterisked forms that we provide in this book for Proto-Mande is a preliminary reconstruction that will need to be fleshed out in future research.

In what follows, we sum up what is known today about the Proto-Mande phonological system.

Syllable

Like many contemporary Mande languages, Proto-Mande had syllables of two types: CV and CVŋ. The syllable-final nasal element had a quasi-vocalic status. It is likely that the prosodic foot was relevant for Proto-Mande, in the same way as it is in many contemporary Mande languages (Vydrine 2010; Vydrin 2020).

Vowels

As was shown in Vydrin (2004; 2006), the vocalic system of Proto-Mande was similar to those of the contemporary Southern Mande languages Guro and Yaure: the vowels formed three series, +ATR, –ATR and nasal, and vowel harmony was present (presumably, the domain of harmony was the prosodic foot). Most probably, the syllable/foot-final *-*ŋ*[1] was neutral to vowel harmony and could combine with vowels of any series. **a* was neutral to the ATR contrast, combining with the vowels of both oral series.

[1] In line with current comparatist practice, when discussing the phonemic inventories of languages, the hyphen is used to indicate the position of a phoneme (or a sequence of phonemes) in a word. E.g. *p-* stands for a word-initial *p*, *-p* for a word-final *p*, and *-p-* for a word-internal *p*.

+ATR series		–ATR series			Nasal series[1]	
*i	*u	*ɪ	*ʊ	*ŋ	*ĩ	*ũ
*e	*o	*ɛ	*ɔ		*ẽ	*õ
	*a				*ã	

Figure 2. Proto-Mande vowels

As a working hypothesis (to be verified by means of a thorough vocalic reconstruction), it can be assumed that vowel length was phonological in Proto-Mande.

Consonants

For our preliminary reconstruction of the Proto-Mande initial consonants, see Table 25 in §1.5. Several hypotheses can be put forward concerning the consonant system.

1) **Implosives**: It is highly probable that Proto-Mande possessed implosive consonants **ɓ* and **ɗ* (besides the explosive **b* and **d*). They exist in most of the Southern Mande languages and are reliably reconstructed for Proto-Southern Mande (Vydrin 2007); their reflexes in other Mande groups can be traced too. It is possible that palatal and velar implosives **ʄ* and **ɠ* also existed: although not attested in contemporary Mande languages, they can be postulated for certain comparative series.

2) **Nasal consonants** had no phonological status in Proto-Mande (Vydrine 2004; Vydrin 2006). Implosive consonants and glides had nasal allophones [m], [n], [ɲ], [ŋ] before nasal vowels. This follows the same model as the majority of the contemporary Southern Mande languages, e.g. in Eastern Dan: /dɯ̃/ 'to come' is phonetically [nɯ̃]; /ɓɔ̃ɔ̃/ 'mouse' is phonetically [mɔ̃ɔ̃].

3) **Labiovelars** have been the subject of much debate in recent decades, and authoritative publications have pronounced against the reconstruction of labiovelars in Manding (Creissels 2004) and at deeper levels (Idiatov & van de Velde 2021). On the other hand, *kp* and *gb*

[1] Vocalic nasality is designated with an upper tilde if there is no tonal diacritic (e.g. *ã*), and with a lower tilde if a tonal diacritic is present (e.g. *á̰*).

are attested in both major branches and in most groups of the Mande family (the only exception is the Soninke-Bozo group), and some robust comparative series with labiovelars are available. We assume that they can be reconstructed in Proto-Mande (and in this book we provide some arguments in favour of this reconstruction), although this hypothesis requires further scrutiny in light of the critics' arguments.

4) **Labial voiceless consonants**: In contemporary Mande languages, the fricative *f-* is found universally, while the occlusive *p-* is absent or marginal in many languages. However, analysis of the distribution of *f-* and *p-* in those languages where they are well represented leads us to believe that both **f-* and **p-* are to be reconstructed for Proto-Mande.

5) **Palatal affricates**:[1] The voiceless palatal affricate *c* is attested in many Mande languages, but most often it results from the palatalization of *k* or *t* before front vowels or from some combinatory change of *s*. Most probably, it should not be reconstructed for Proto-Mande. However, a voiced palatal affricate **j* can be reconstructed. In some languages, Proto-Mande **j* has the reflex *z,* and in some others, it merged with the glide *y*; elsewhere, it is most often reflected by *j.*

6) **Velar fricatives** are reliably reconstructed for Proto Mande. They are regularly reflected as *x-* or *q-* in Susu-Jalonke; as *x* in Xasonka; as *x-* in Soninke and Bozo Tieyaxo and Bozo Tigemaxo, as *h-* in Bozo Kelenga, and as *k-* in the other Bozo languages. They are distinguished by their reflexes in other Mande groups: **ɣ-* is reflected as **g-* (or **ɲ-, *ŋ-* in the nasal context) in Proto-Southwestern Mande, as *k-* in Manding (other than Xasonka), and as *y-* or *w-* in Southern Mande. **ɣw-* and **xw-* are reflected as labiovelar *gb-* and *kp-* respectively in Southwestern, Southern and most other Mande groups. **x-* has the same reflexes as **ɣ-* in most Mande groups, but it seems to be continued by as **k-* in Proto-Southwestern Mande and, in most cases, in Southern Mande. When the reflexes in Susu-Jalonke, Xasonka or Soninke-Bozo indicate that

[1] According to the established orthographic convention (which stems from Westermann's International African Alphabet), palatal consonants in Mande languages (and elsewhere) are designated as follows: *y* stands for the palatal glide (IPA *j*), *c* for the voiceless affricate (IPA *ʧ*), and *j* for the voiced affricate (IPA *ʤ*).

a velar fricative should be reconstructed in Proto-Mande, but reflexes in other diagnostic groups (Southwestern, Southern) are missing, we provide a reconstruction with **X-* for an underspecified velar fricative.

It should be kept in mind that the differentiation between the three velar fricatives in Proto-Mande is not yet sufficiently clear and needs further elaboration.

Consonant alternations

Initial consonant alternation is attested in many Mande languages, and has attracted the attention of many linguists (Eberl-Elber 1937; Hintze 1948; Welmers 1950; Manessy 1964; Meeussen 1965; Bird 1971; Tomčina 1972; Hyman 1973; Dwyer 1974; Dwyer 1986; Conteh et al. 1986; Pozdniakov 1987; Grégoire 1987; Creissels 1994; Tateishi 1990; Kastenholz 1996: 100–104, 135–137; Vydrine 1989; Vydrin 2006: 99–114). Thanks to all these studies, today the mechanism of consonant alternation in Mande is largely clear. The alternation is very robust and highly grammaticalized in the Southwestern group, where its emergence can be explained by a Mel substrate, and, to a lesser degree, in Soninke, where it is probably due to Fula influence; in other groups it is more transparently motivated by the phonetic context. We have insufficient grounds to reconstruct a consonant alternation for the Proto-Mande level.

Tones

All Mande languages are tonal, and Proto-Mande was certainly tonal too. The earliest attempt in the field of Mande tonal reconstruction was Dwyer's (1973) study of tones in nominal phrases in Southwestern Mande. Some interesting ideas have been raised by Idiatov (2018), but a true reconstruction of the Proto-Mande tonal system is still a long way off. In the guise of a working hypothesis, we can assume that Proto-Mande had two level tonemes (high and low); however, it is yet too early to hypothesize on the tones of individual Proto-Mande forms.

In this book, the Proto-Mande forms are systematically provided without tonal markings, in order not to give the false impression that a tonal reconstruction is available.

1.2.3. Other Niger-Congo

In the specialist literature, one can find various opinions about the composition of the Niger-Congo macro-family, and in some recent authoritative sources (Güldemann 2018; Hammarström et al. 2024) this term is replaced with Atlantic-Congo. For clarity, we provide a list of the language families that we consider to belong to the Niger-Congo family.

At the same time, we consciously abstain from any attempt to produce a Niger-Congo genetic tree and from discussion concerning grouping of the families into bigger taxa (such as Benue-Kwa, Eastern Volta-Congo, etc.). We are well aware of the recent progress in the studies of certain Niger-Congo families (in particular, Kordofanian and Adamawa) which calls their integrity into question; however, we assume that these problems are of secondary importance for the goals of this study, and we intentionally stick to a more or less "classical" variant, which includes the following families and isolated languages:

A. Families:

1. Adamawa
2. Atlantic
3. Benue-Congo, including Bantoid languages, and Bantu among them
4. Dogon
5. Gur-Senufo[1]
6. Ijo
7. Kordofanian
8. Kru
9. Kwa
10. Mande
11. Mel
12. Ubangi-Gbaya

[1] Before the 1970s or 1980s, the Senufo languages were classified as a part of the Gur family; today, they are most often regarded as a separate language family. Even if we assume that they constitute a separate taxon, Senufo is certainly closer to Gur than to the other Niger-Congo families, and for the purpose of our study, we keep Senufo and Gur together.

B. Isolated languages in NC:
   1. Gola
   2. Limba
   3. Sua, etc.

C. Isolated languages which probably belong to Niger-Congo
   1. Bangime
   2. Laal, Mmpre, etc.

In our study, we take into account all the families and isolated languages belonging to Niger-Congo, with the exception of Kordofanian. Among the languages of group C, we take into consideration the lexical data of Bangime.

As was stated above, Bantu and Mande are the primary focus of our study; the data of other Niger-Congo families have been considered in a much less systematic way, mainly within the limits of the sources included in the RefLex database (Segerer & Flavier 2024). Meanwhile, a systematic comparison of 183 Niger-Congo languages with the Proto-Bantu basic lexicon (a version of the Swadesh 100 Wordlist modified by Schadeberg (2003)) has been carried out, see §1.2. Besides, we have systematically taken into account reconstructions of proto-languages at various levels, in particular: Proto-Akanic and Proto-Akanic-Potou (Stewart 2002), Proto-Benue-Congo (de Wolf 1971), Proto-Grassfields Bantu (Hyman 2007), Proto-Ghana-Togo-Mountain (Heine 1968), Proto-Ring (Paulin 1995), Proto-Lower-Cross (Connell 1991), Proto-Upper-Cross (Dimmendaal 1978), Proto-C-Jukun (Shimizu 1971), Proto-Jukun (Shimizu 1971), Proto-Jukun-Mb (Shimizu 1971), Proto-Wurbo (Shimizu 1971), Proto-Yukuben (Shimizu 1971), Proto-Ukaan (Abiodun 2000), Proto-Edoid (Elugbe 1987), Proto-Ijoid (Williamson 1992), Proto-Fula-Sereer (Pozdniakov 2022), and several groups within Proto-Central Gur (Manessy 1969; 1975; 1979; Naden 2015; 2024).

2. Comparison of Proto-Bantu with Proto-Mande within the limits of the Schadeberg List

2.1. The Swadesh 100 Wordlist and its variants

Our aim in this book is not to produce a lexicostatistical study establishing the temporal distance between the languages being compared, and one might say that there is no need to treat those lexemes belonging to the Swadesh 100 Wordlist differently from those lying outside it: in sub-Saharan Africa, it is unclear why we should consider a word for DOG "better" than a word for CROCODILE. Nonetheless, we have decided to use this list for the simple reason that in contemporary historical comparative linguistics, it is an entrenched point of reference, and as such, it serves as a convenient sample of the basic lexicon readily used for testing hypotheses of language relationship.

Notably, we should keep in mind that the versions of the Swadesh 100 Wordlist vary considerably. Swadesh himself modified this list only slightly. If we compare his first version (Swadesh 1955) with the version published posthumously (Swadesh 1971: 283), we find five modifications in the glosses, but not a single notion is replaced. More precisely, FAT (grease) is replaced by GREASE, MEAT (flesh) by FLESH, ROAD (path) by PATH, THOU by YOU, WARM (hot) by HOT. Slight though these modifications are, they changed the alphabetical order and thus to some extent affected scholarly practice, because the notions in the list are most often arranged alphabetically.

The list was further perturbed by numerous modifications brought in by subsequent scholars. Fairly often linguists excluded grammatical words, thus reducing the list by 6 to 8 notions (I, THOU, WE, THIS, THAT, WHO, WHAT, NOT), and sometimes other notions were introduced in their place to bring the list back up to a total of 100 items. It is not rare to see variants of the list where some lexical meanings, considered as inappropriate in some areas, are replaced with something else (most often, the items GREEN and YELLOW are among those replaced). As a result of all these changes one can find a multitude

of variants of the Swadesh 100 Wordlist in the literature, which sometimes gives rise to vivid debates and misunderstandings.

For Bantu we have opted for Schadeberg's (2003) version of the list which is for many a key reference. Schadeberg excluded six grammatical meanings (I, THOU, WE, THIS, THAT, NOT). He also excluded the notions GREEN and YELLOW and added the notion GO (which is absent in all versions of the Swadesh list which include the similar notions WALK and COME).

Thus, Schadeberg brought the Swadesh list down to 93 notions, and for these 93 notions he provided 123 roots which can be regarded as belonging to the Proto-Bantu stock. It is notable that the Swadesh list consists of notions, whereas in Schadeberg's list we find roots. For certain notions there is more than one reconstructed root, e.g. four reconstructions for BLOOD (**mv-lopa*, **ma-ɲínga*, **-gil-a*, **-gadí*), and four reconstructions for FIRE (**mv-jóto*, **mv-lılo*, **tv-jíja*, **tv-pı'-a*).

Table 4 provides a complete list of Schadeberg's Proto-Bantu reconstructions.[1]

Table 4

Proto-Bantu Schadeberg List (Schadeberg 2003)

	GLOSS	PB
1	all	*-nce
2	ashes	*mʊ-tó (-tói ?)
3	ashes	*i-bú
4	bark (of tree)	*kı-kúkú
5	bark (of tree)	*lʊ-pú
6	bark (of tree)	*i-gʊla
7	belly	*i-bumo
8	belly	*i-tʊmbo
9	big	*néne
10	bird	*ka-jʊni
11	bite	*-lóm-a
12	black	*-jil-a

[1] Henceforth, we will systematically use this version of Swadesh's list, containing 123 Proto-Bantu lexical stems as reconstructed by Schadeberg (2003); it will be referred to as the Schadeberg List. As was mentioned in §1.2.1, the Proto-Bantu forms reconstructed by Schadeberg and those given in BLR may diverge. By default, we use the BLR reconstructions; however, in §5, where the Schadeberg list is taken as the reference, we provide Schadeberg's reconstructions.

Continuation of Table 4

	GLOSS	PB
13	black	*pi
14	blood	*-gil-a
15	blood	*-gadí
16	blood	*mʊ-lopa
17	blood	*ma-ɲínga
18	bone	*i=kúpa
19	breast	*ma-béele
20	burn	*-lʊng-ʊl-a
21	burn	*-pí-a
22	cloud	*i-lʊnde
23	cold	*mʊ-didi
24	cold	*-pól-a
25	come	*-jij-a
26	die	*-kú-a
27	dog	*mbóa
28	drink	*-ɲó-a
29	dry	*-jóm-a
30	ear	*kʊ-tói
31	eat	*-lí-a
32	egg	*i-gí
33	eye	*i-jíco
34	fat	*ma-kúta
35	feather	*lʊ-cála
36	fire	*mʊ-jóto
37	fire	*tʊ-pí-a
38	fire	*tʊ-jíja
39	fire	*mʊ-lılo
40	fish	*ncúı

	GLOSS	PB
41	fly	*-gʊl-ʊk-a
42	foot, leg	*kʊ-gʊlʊ
43	full	*-jíjal-a
44	give	*-pá-a
45	go	*-gı-a
46	good	*-jijá
47	ground	*-(pa-)ncí
48	hair	*-cíti (LL?)
49	hair	*lʊ-cʊkí
50	hair	*lʊ-jʊílí (ı ~ e)
51	hand, arm	*kʊ-bóko
52	head	*mʊ-tʊ́e
53	hear	*-jígu-a
54	heart	*mʊ-tíma
55	horn	*lʊ-pémbé
56	kill	*-bʊ́l(-ag)-a
57	kill	*-jip(-ag)-a
58	knee	*i-bóngó
59	knee	*i-dúí (HL?)
60	know	*-jíjı(b-a)
61	know	*-maɲ-a
62	leaf	*i-jáni (tone)
63	lie (down)	*-lá-al-a
64	liver	*-balı
65	long	*-lai
66	louse, flea	*ndá
67	man	*mʊ-lʊ́me
68	many	*-jíngí

End of Table 4

	GLOSS	PB
69	meat	*ɲama
70	moon	*kʊ-jédi
71	mountain	*lʊ-gʊlʊ
72	mouth	*ka-nʊa
73	mouth	*mʊ-lomo
74	nail	*lʊ-jála
75	name	*i-jína
76	neck	*nkíngó
77	neck	*nkoti
78	new	*-pí-a (HH?)
79	night	*bʊ-tíkʊ (í ~ ú)
80	nose	*i-júlʊ
81	one	*-moi
82	person	*mʊ-ntʊ
83	rain	*mbúlá
84	red	*nkúla
85	red	*-tɪl-a (tone?)
86	road	*njɪla (LH?)
87	root	*mʊ-didi
88	round	*-búlʊng-a
89	round	*-kúlʊng-a
90	sand	*mʊ-céké
91	sand	*i-cenga (e ~ a)
92	say	*-tɪ
93	say	*-gɪl-a
94	say	*-gamb-a
95	see	*-bón-á (b ~ m)
96	seed	*mbút-o
97	sit	*-jikal-a
98	skin	*-kánda
99	skin	*mʊ-kóbá
100	skin	*-ngúbo
101	sleep	*tʊ-ló
102	small	*-(kée)kée
103	smoke	*mʊ-jíki (í ~ ó)
104	stand	*-jím(-al)-a
105	star	*nyényе(di)
106	stone	*i-bʊe
107	stone	*ɪ-tále
108	sun	*i-júba
109	swim, bathe	*-jóg-a
110	tail	*mʊ-kíla
111	tongue	*lʊ-límі
112	tooth	*i-jíno
113	tree	tí
114	two	*-balí (a ~ ɪ)
115	walk	*-gend-a
116	water	*ma-jíjɪ
117	water	*i-diba (HH?)
118	what	*kɪ-í
119	what	*pa-í
120	white	*-jél-a
121	white	*pe (tone?)
122	who	*n(d)ai (tone?)
123	woman	*mʊ-kádí

2.2. Analysis of the potential Proto-Bantu – Proto-Mande cognates

In Table 5, the potential Proto-Bantu and Proto-Mande cognates (within the confines of the Schadeberg List)[1] are presented. For each pair of cognates, the reliability index (see §1.1) is provided, together with data concerning the distribution of the given root in the Mande family. The roots are arranged in decreasing order of the reliability index.

Table 5

Bantu and Mande potential cognates in the Schadeberg List

#	Meaning	Proto-Bantu	Proto-Mande	Phon.	Sem.	Distrib. Bantu	Distrib. Mande	Other BC	Other NC	Reliability index	Branches Mande	Groups Mande
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
1	egg	*gí, *gìdí	*ɣeli	1	1	1	1	1	1	6	2	11
2	mouth	*nʊ̀à, *ɲʊ̀à	*ɗɔɣa	1	1	1	1	1	1	6	2	11
3	tongue	*dímì, *dímì	*ɖɛ̯ɖɛ̯	1	1	1	1	1	1	6	2	11
4	ear	*tóì	*tɔlɛ	1	1	1	1	1	1	6	2	10
5	water	*jíjì	*ji	1	1	1	1	1	1	6	2	10
6	lie (down)	*dáad	*ɗa	1	1	1	1	1	1	6	2	9
7	nose	*jódʊ̀	*ŋ-dʊ̀ŋ	1	1	1	1	1	1	6	2	9
8	small	*níìní	*ɗɛ̃	1	1	1	1	1	1	6	2	9
9	root	*dì, *dìdì	*ŋ̀-ɗuli	1	1	1	1	1	1	6	2	8

[1] Five roots included by Schadeberg in his list are, by our reliability criteria, of limited distribution in Bantu: **kíngá* ‘mountain’, **gàdí ~ *jàdí* ‘blood’, **jìjá* ‘good’, **ndai ~ *nai* ‘good’, **bàdì ~ bíndɪ* ‘liver’.

Continuation of Table 5

1	2	3	4	5	6	7	8	9	10	11	12	13
10	bite/eat	*dǿm	*doɓũ	1	1	1	1	1	1	6	2	7
11	ashes	*bú	*bugu	1	1	1	1	1	1	6	2	6
12	dog	*bóà	*gbɛra	1	1	1	1	1	1	6	2	6
13	belly	*bùmò	*bũ	1	1	1	1	1	1	6	2	4
14	bird	*jòni	*ɣɔ̃dĩ	1	1	1	1	1	1	6	1	9
15	tooth	*jínò	*yĩ	1	1	1	1	1	1	6	1	8
16	fish	*cúí	*ŋ̀-jɔGɛ		1	1	1	1	1	5	2	11
17	sand	*cèngà	*ɣɛ̃gɛ̃		1	1	1	1	1	5	2	11
18	two	*bà-dí	*pe-ɗa		1	1	1	1	1	5	2	11
19	tail	*kídà	*ɣʊlɪ, *ɣʊla	1	1	1	1	1		5	2	7
20	say	*tì	*tĩ	1	1	1	1	1		5	2	5
21	eat	*dí	*ɗiga	1	1	1		1	1	5	2	4
22	kill	*jip-	*jɛ	1	1	1	1		1	5	2	4
23	cold	*dìdì	*dɛ̃dɛ̃	1	1	1	1		1	5	2	3
24	moon	*jédì	*ŋ̀-ɣadVŋ	1	1	1	1		1	5	1	7
25	black	*pínd	*piŋ	1	1	1		1	1	5	1	5
26	die	*kú	*ɠu	1	1	1		1	1	5	1	4
27	neck	*kíngó	*kɔŋ	1	1	1		1	1	5	1	4
28	bark (of tree)	*koba	*koba	1	1	1		1	1	5	1	3
29	give	*pá	*fe	1	1	1		1	1	5	1	3
30	drink	*mú ~ ɲó ~ ŋú	*ɓɔ̃dĩ	1	1	1		1	1	5	1	2
31	go	*gì	*gʊ, *gɛ	1	1	1		1	1	5	1	2
32	ground	*cí	*sɛlɛ	1	1	1		1	1	5	1	1
33	long	*dài	*dãa	1	1	1		1	1	5	1	1

End of Table 5

1	2	3	4	5	6	7	8	9	10	11	12	13
34	road	*gìdà, *jìdà, *kɪdɪ	*ɠila	1	1	1	1			4	2	9
35	smoke	*jíkì	*sisi ~ *sigi		1	1	1		1	4	2	6
36	mountain, hill	*kíngá	*kɔŋkɛ	1	1			1	1	4	1	4
37	blood	*gàdí, *jàdí	*joli		1		1	1	1	4	1	3
38	good	*jìjá	*dɪ	1	1		1			3	2	7
39	who?	*ndai, *nai	*dɪ, *ndɪ	1	1		1			3	2	5
40	liver	*bàdì, bíndɪ	*ɓʊdì	1	1		1			3	2	3
41	all	*ncè	*seŋ	1	1	1				3	2	2
42	walk	*támb	*taŋbi	1	1	1				3	1	4

Should 42 potential cognates in a 123-item wordlist be considered a lot or a little? This question needs special consideration. The key question is whether it is possible to explain this number of look-alikes on the basis of accidental coincidence or not.

The probability of coincidence is a direct function of the frequencies of phonemes in the languages involved. Let us imagine that we compare Swadesh 100 Wordlists for two languages, and in language #1 initial labial consonants are found on 20% of words, while in language #2 the corresponding figure is 10%. If these languages are unrelated, how many words with initial labials in language #1 will correspond to words with the same meanings which also have initial labials in language #2? This question is easy to answer: if the distribution is purely random, the number of such words pairs should equal 2 (= 100 x 0.2 x 0.1).

Let us compare the frequencies of consonants in word-initial and word-internal positions in Proto-Bantu and Proto-Mande. For Proto-Bantu we have taken Schadeberg's 123-item wordlist, and for Proto-

Mande, the full list of 545 preliminary reconstructions available at this moment in Vydrin (2024a). The results are displayed in Table 6, where the consonants are grouped by place of articulation and the voice feature.

Table 6

Frequency of word-initial and word-internal consonants in Proto-Bantu and Proto-Mande

	General	PB initial	PM initial	PB internal	PM internal
1	p, f, kp, np, nf, nkp	8%	11%	3%	1%
2	t, nt	10%	10%	6%	4%
3	c, s, ns	7%	10%	1%	4%
4	k, x, xw, nk, nx	12%	17%	8%	10%
5	b, ɓ, gb, w, m, mb, ngb	13%	20%	18%	14%
6	d, ɗ, r, l, n, nd	15%	16%	45%	51%
7	j, ƴ, y, ɲ, nj	25%	8%	9%	2%
8	g, ɣ, ɠ, ng	10%	8%	9%	14%

Proceeding from the frequencies of the initial consonants, we can determine how many coincidental similarities we should expect in each group for a list of 123 words. Thus, for group 1 (voiceless labials) we should expect just one coincidence of initial consonants (123 x 0.08 x 0.11). In reality, we find two relevant pairs of words: BLACK PB **pínd*: PM **piŋ*; GIVE **pá*: **fe*.

Meanwhile, in group 6 (voiced dentals), the divergence between the numbers expected and actually found is more substantial: the expected number of coincidences among the initial consonants is 3 (123 x 0.15 x 0.16), and the actual number is 13.

For the entire list, the expected number of random coincidences of initial consonants is 15, against the actual value of 42.

Evidently, the expected number of random coincidences of both word-initial and word-internal consonants simultaneously is much lower: maximum 3 words out of 123. And if we also take into account

the vowel quality (among our 42 pairs of candidates to cognacy, 30 have vowels corresponding in terms of the backness feature), we should expect only one pair of words where coincidence would be observed in all three parameters at once (initial consonants, internal consonants and vowels). In reality, we find 10 such pairs of words, see Table 7.

Table 7

Pairs of strong candidates to cognacy in the Schadeberg List

Meaning	**Proto-Bantu**	**Proto-Mande**
bark (of tree)	*koba	*koba
bite/eat	*dóm	*doɓũ
long	*dàì	*dãa
lie (down)	*dá-ad	*ɗa
cold	*dìdì	*dɛ̃dɛ̃
egg	*gí, *gìdí	*ɣeli
road	*gìdà	*ʄila
go	*gì	*gɛ
say	*tì	*tĩ
walk	*támb	*taŋbi

This result would be entirely improbable if the languages were unrelated (and, as we have every reason to think, experienced no intensive long-term contacts).

Thus we arrive at the first (and maybe the most powerful) argument in favour of a relationship between Mande and Bantu.

Argument 1: In the basic lexicon, the number of actually observed phonetic similarities far exceeds the number expected on the basis of random coincidence alone.

To conclude this section, we provide a further 9 Proto-Bantu roots from BLR2 which have Mande correspondences, but are absent from Schadeberg's list. Among these, 4 Proto-Bantu roots, **kʊdı* 'bone', **jén* 'see', **jání* 'sun', **púpú* 'white', are of limited distribution and can be considered "regional".

Table 8

Proto-Bantu roots outside Schadeberg's list with Proto-Mande potential cognates

#	Meaning	Proto-Bantu	Proto-Mande	Phon.	Sem.	Distrib. Bantu	Distrib. Mande	Other BC	Other NC	Reliability index	Branches Mande	Groups Mande
1	mountain-2	tòndà	*tɔŋ	1	1	1	1	1	1	6	2	6
2	hand, arm	*kónò	*kɔ̀ɔ́	1	1	1		1	1	5	1	2
3	heart	*jòjò	*sɔ̀ŋ(-dɔŋ)		1	1	1	1	1	5	2	10
4	bone	*kʊdɪ	*xólɛ̀	1	1		1		1	4	2	11
5	hair	*cìngà	*síɣi, *tíɣi	1	1	1	1			4	2	9
6	white	*púpú	*púru	1	1		1	1	1	5	2	5
7	see	*jén	*jí, *jɛ́	1	1		1	1	1	5	2	8
8	sun	*jání	*yą́lɛ́	1	1			1	1	4	2	2
9	burn=hot	*báb	*waa (?)	1	1	1			1	4	2	2

2.3. Distance between contemporary Bantu and Mande languages, compared with the distance between Proto-Bantu and Proto-Mande

As shown in §5, the number of potential cognates of contemporary Mande languages with Proto-Bantu in Schadeberg's list ranges between 6% and 20%. Let us now make a comparison between Proto-Bantu and Proto-Mande, proceeding from the assumption that intermediate proto-languages must be closer to each other than contemporary languages.

We illustrate this assumption by means of data from well-explored languages. It is known that two randomly selected Indo-European languages belonging to different groups (e.g. English and Hindi, or Russian and French) have 25% to 30% of lexicon in common in the

Swadesh 100 Wordlist, and that each contemporary language retains about 50% of Proto-Indo-European roots (we set aside some well-known exceptions, such as Albanian). These numbers correspond to approximately 6000 years of separate existence. And we are not astonished by the fact that the intermediate languages (e.g. Proto-Slavonic and Proto-Romance) have a greater rate of common lexicon, and their cognates are phonetically closer to each other. So, the Proto-Slavonic form **noktis* 'night' is fully identical to the Latin genitive for NIGHT and is very close to the Proto-Indo-European form **nok^{w}ts*. This is only natural: Proto-Slavonic and Proto-Romance had much less time to accumulate divergences than the contemporary languages.

In the same way, if Proto-Bantu and Proto-Mande stem from a single more ancient proto-language, they had at least 5000 years less in which to diverge than contemporary Swahili and Bambara. Therefore, they are necessarily closer to each other in terms of linguistic content. Indeed, if this effect were not produced, this would be regarded as strong proof of the absence of a genetic relationship between Mande and Bantu.

The 42 cognates in the Schadeberg List make up a proportion of 34%, twice as high as the average cognacy rate for the contemporary Mande languages (15%, see Table 17, §5.1) and much higher than that for the individual Mande languages in our sample which have the highest cognacy rate with Proto-Bantu (Bambara and Lele, 25 roots, i.e. 20%, see Table 31, §5.2). This cognacy rate is in the same range as that seen between Proto-Bantu and some contemporary Bantu languages in our sample: Zulu 34%, Duala 31%.[1]

Here we arrive at our second argument in favour of a relationship between Mande and Bantu.

Argument 2: In the basic lexicon, Proto-Bantu and Proto-Mande are considerably closer to each other than contemporary Bantu and Mande languages are.

[1] These figures give us a preliminary idea of the potential range of the temporal distance separating Proto-Bantu and Proto-Mande (presumably, 4 to 6 millennia). However, this question lies outside the scope of this study.

3. Proto-Bantu – Proto-Mande cognates outside the Swadesh 100 Wordlist

By separating the comparative series into two sets, those belonging to the Swadesh 100 Wordlist and others, we aim to facilitate the reader's appreciation of the data, bearing in mind that contemporary comparative studies of the lexicon often concentrate on the basic lexicon. However, in the current study, this separation of the lexicon is not of primary importance, for the following reasons.

1) The constitution of the basic lexicon by Swadesh and its subsequent refinement by other scholars was meant, in particular, to separate it from the "cultural" lexicon which is more easily borrowed: it is evident that a word for EAR is less likely to be borrowed than a word for YAM.

However, in our case, we are dealing with languages for which the probability of direct borrowing is very low. In this regard, there is no difference between the notions that belong to the Swadesh list and those which do not: in both cases, if we find look-alikes in (Proto-) Mande and (Proto-)Bantu, they may be due to random coincidence or to cognacy, but not to borrowing.[1] For our purposes, therefore, the words meaning CROCODILE (**Bantu** **bámbè, *bamba* 'monitor lizard, aquatic animal, crocodile' – **Mande** **banba* 'crocodile') or GUINEA FOWL (**Bantu** **kángà* – **Mande** **ŋ-kaŋka*) are no less important than those belonging to the Swadesh list, such as FISH **Bantu** **cúí* – **Mande** **ŋ-jɔ́Gɛ*, BIRD **Bantu** **jòní* – **Mande** **ɣɔ̀ni* or DOG **Bantu** **bʊ́à* – **Mande** **gbɛ́rà*.

2) The Swadesh Wordlist is of crucial importance for glottochronology, but when we compare two proto-languages, the strict application of this method encounters numerous obstacles. First, the proto-languages

[1] Another situation is theoretically possible: a Proto-Mande root could be a loan from a Niger-Congo language other than Bantu, e.g. (Proto-)Gur or (Proto-) Atlantic. However, we proceed from the assumption that this scenario, even if it may sometimes be valid, cannot explain a significant number of similarities.

that we are comparing did not exist simultaneously. Second, the meanings assigned to the proto-forms are often the result of a tentative semantic reconstruction and therefore do not comply with the strict requirements of the glottochronological method. Third, there are often multiple synonymous proto-roots. For all these reasons, we do not intend to calculate the age of the ancestor language of Proto-Bantu and Proto-Mande (i.e. Proto-Niger-Congo); cognates displaying various semantic shifts (which can be justified on typological grounds, where Segerer's (2022) application "Homonymy & Polysemy" is particularly useful) lie within the scope of our interest.

3) Our approach to the words outside the Swadesh 100 Wordlist is even more rigorous than our approach to those on this list. If a meaning belongs to the Swadesh list (see §2.1), we take the relevant root into account even if it is represented in a small number of Bantu zones (although, in this case, we assign it a low reliability index). But for words which are not on the list, our approach is much stricter: we take into consideration only those Bantu roots which are represented in at least 8 Bantu zones (out of 16) or 3 regions. That means that out of the 13,457 reconstructions available in BLR 2 (Coupez et al. 1998), we take into consideration only 735. But these 735 well-attested Bantu roots have been examined thoroughly and systematically for their cognacy with Mande roots.

In Table 9, the 129 Mande and Bantu cognates are arranged according to their reliability index (max. 6, see §1.1), then by the number of Mande branches where the reflexes are represented (max. 2), then by the number of Mande groups (max. 11).

Table 9

Proto-Bantu and Proto-Mande cognates outside the Schadeberg List

#	Meaning	Proto-Bantu	Proto-Mande	Phon.	Sem.	Distrib. Bantu	Distrib. Mande	Other BC	Other NC	Reliability index	Branches Mande	Groups Mande
1	2	3	4	5	6	7	8	9	10	11	12	13
1	swallow	*mìd, *mìn	*ɓĩ ‘drink’	1	1	1	1	1	1	6	2	11
2	blow	*pèep	*pɛ̃ɛ̃	1	1	1	1	1	1	6	2	10
3	hold	*kúmb-at	*kũ	1	1	1	1	1	1	6	2	9
4	extinguish	*dím	*ɗĩbiŋ	1	1	1	1	1	1	6	2	8
5	hiccup	*cék-	*siko	1	1	1	1	1	1	6	2	8
6	leopard	*gòì	*ɠʊlɪ	1	1	1	1	1	1	6	2	7
7	stomach	*pù	*pudu	1	1	1	1	1	1	6	2	7
8	guinea fowl	*kángà	*ŋ-kaŋka	1	1	1	1	1	1	6	2	6
9	goat	*bódì	*ɓoli	1	1	1	1	1	1	6	2	5
10	rot	*bòd	*bɔrɔ	1	1	1	1	1	1	6	2	5
11	middle	*tí	*tɛ	1	1	1	1	1	1	6	2	4
12	turtle	*kúdò	*kuda	1	1	1	1	1	1	6	2	4
13	crab	*kádá	*kaa	1	1	1	1	1	1	6	2	3
14	heel	*téndé	*tiŋdi-di	1	1	1	1	1	1	6	2	3
15	scratch	*kàd	*kuga	1	1	1	1	1	1	6	2	3
16	child, fruit	*bí	*bɛɛ	1	1	1	1	1	1	6	2	3
17	foam	*púd(ò)	*ŋ̀-fʊrʊŋ	1	1	1	1	1	1	6	2	2
18	shoulder; wing	*bàbá	*gbã	1	1	1	1	1		6	2	2
19	four	*nài	*ɗããdĩ	1	1	1	1	1	1	6	1	9

Continuation of Table 9

1	2	3	4	5	6	7	8	9	10	11	12	13
20	curve	*cèng	*sega ~ *segaŋ	1	1	1	1	1	1	6	1	8
21	spit	*tú	*tu ~ tufa	1	1	1	1	1	1	6	1	5
22	dig	*pùk, *pùd	*pɔ̃	1	1	1	1	1	1	6	1	2
23	grand-mother	*mààmá	*ɓãɓã	1	1	1	1	1	1	6	2	9
24	shadow	*dídí	*dĩ̃dĩ̃ŋ	1	1	1	1		1	5	2	9
25	curse	*dòg	*daŋga	1	1	1	1		1	5	2	10
26	remain	*tó-ʊd	*to	1	1	1	1		1	5	2	10
27	shin	*píndí	*kpalɛŋ	1		1	1	1	1	5	2	9
28	lung	*pʊʊpʊ	*ŋ̀-fʊgʊfʊgʊ	1	1	1	1	1		5	2	8
29	yam	*kódò (regional)	*kuu	1	1		1	1	1	5	2	8
30	bat	*démà, *dímà	*dɛ̃ɓɛ̃	1	1	1	1		1	5	2	7
31	hang	*déd	*dɛŋ	1	1	1	1		1	5	2	7
32	old	*kódò	*kɔdɔ	1	1	1	1		1	5	2	7
33	refuse	*béng	*baŋ	1	1	1	1		1	5	2	7
34	sew	*còn	*sɔrɔŋ	1	1	1	1	1		5	2	7
35	snail	*kódá, *kódó	*kɔtɛ ~ *kɔtɔ	1	1	1	1	1		5	2	7
36	oil palm	*téndé	*ŋ̀-teŋ	1	1		1	1	1	5	2	6
37	day	*jící, *jíncì	*ɣĩ	1	1	1	1	1		5	2	5
38	hump	*gòngò	*gʊŋgʊ	1	1	1	1		1	5	2	5
39	throat	*kòdò	*kɔŋ	1	1	1	1	1		5	2	5
40	bow (weapon)	*táà	*toŋ	1	1	1		1	1	5	2	4
41	deny	*káan	*xɔ̃	1	1	1	1	1		5	2	4

Continuation of Table 9

1	2	3	4	5	6	7	8	9	10	11	12	13
42	spider	*tanda	*ŋ̀-taleŋ	1	1		1	1	1	5	2	4
43	urine	*cò, *cùb	*sũɓũdɛ̃	1	1	1	1		1	5	2	4
44	year	*jákà	*yĩ	1	1	1	1	1		5	2	4
45	brain	*bòngó	*bɔŋxɛŋ	1	1	1	1		1	5	2	3
46	deep	*dìk	*dùŋ	1	1		1	1	1	5	2	3
47	flour	*pùpù	*fuye	1	1		1	1	1	5	2	3
48	stranger	*gènì	*ɣɔ̃yɛ̃	1	1	1	1		1	5	2	3
49	scrape	*kòd	*kɔŋdɔ	1	1	1	1		1	5	2	2
50	pierce	*còk	*sɔɣɔ	1	1	1	1		1	5	1	8
51	snore	*gòn	*xɔrɔŋdɔ	1	1	1	1			5	1	7
52	stab, spear	*túm ‘stab’, *túm-ò ‘spear’	*taŋba ‘spear’	1	1	1	1		1	5	1	7
53	forehead	*có	*teŋge		1	1	1	1	1	5	1	6
54	wilderness	*gòndà	*gola	1	1	1	1	1		5	1	6
55	clear	*jédò	*xoleŋ	1	1	1	1		1	5	1	4
56	finish	*màd	*baŋ	1	1	1		1	1	5	1	4
57	pound	*tó	*tugu	1	1	1		1	1	5	1	4
58	raffia palm	*bádè	*ŋ̀-baŋ	1	1	1		1	1	5	1	4
59	crocodile	*bamba ‘monitor lizard, crocodile’	*baŋba	1	1	1		1	1	5	1	3
60	wood	*kónì	*kɔ̃	1	1	1		1	1	5	1	3
61	weep	*dìd	*di	1	1	1		1	1	5	1	3
62	squeeze	*kám	*XaɓṼ	1	1	1		1	1	5	1	2
63	father	*cé	*ti	1	1	1		1	1	5	1	1
64	miss (to)	*bód	*ɓuo	1	1	1		1	1	5	1	1

Continuation of Table 9

1	2	3	4	5	6	7	8	9	10	11	12	13
65	send	*tóm	*tɔŋ	1	1	1		1	1	5	1	1
66	hip	*dàmà, *nàmà	*daŋba	1	1	1		1	1	5	1	1
67	bitter	*kádì	*ɣðLã	1	1	1	1			4	2	11
68	fill	*pák	*paka	1	1	1	1			4	2	8
69	younger sibling	*dòngó	*ŋ́-dɔgɔ	1	1		1		1	4	2	8
70	become	*bá	*ɓã	1	1	1	1			4	2	7
71	descend	*jìk	*jigĩ	1	1	1	1			4	2	7
72	hundred	*kámá	*kaɓɛ̃	1	1		1		1	4	2	7
73	roll	*bídɪng	*bĩlĩ	1	1		1		1	4	2	7
74	axe	*jòndò	*jeŋde	1	1	1	1			4	2	6
75	chicken	*cócó (regional)	*tɔxɛ	1	1		1		1	4	2	6
76	ram, he-goat	*koto, *kòdò	*kɔdɔŋ	1	1		1		1	4	2	6
77	clean	*cèng	*sanVŋ	1	1	1	1			4	2	6
78	squirrel	*cíndí	*ŋ̀-kɛrɛŋ		1	1	1	1		4	2	6
79	blind	*pòkù	*põõku	1	1	1	1			4	2	5
80	debt	*dàndó	*dɔŋdɔ	1	1	1	1			4	2	5
81	learn	*jíg	*dege	1	1	1	1			4	2	5
82	side	*bádì	*bɛlɛ	1	1			1	1	4	2	5
83	chest 1	*kúbà	*kUgU	1	1	1	1			4	2	4
84	knot	*kúndò	*Xudu	1	1	1	1			4	2	4
85	rock	*gòdò	*Xudu̇	1	1		1	1		4	2	4
86	take	*tá-ʊd	*ta	1	1	1	1			4	2	4
87	bear, give birth	*bèdɪk	*ɓari	1	1	1	1			4	2	3
88	before	*bèdè	*gbɛla	1	1	1	1			4	2	3

Continuation of Table 9

1	2	3	4	5	6	7	8	9	10	11	12	13
89	bend	*pìnd	*kpiliŋ	1	1	1	1			4	2	3
90	bushland	*càká, *càngà	*sɔŋkɔ	1	1	1	1			4	2	3
91	thigh	*bèdò	*gbada	1	1	1	1			4	2	3
92	wind; cold	*pépò, *pèèpè	*pɛŋpɛŋ	1	1	1	1			4	2	3
93	bridge	*dàdò	*dala	1	1	1		1		4	2	2
94	occiput	*kòtì	*kɔrɪ	1		1		1	1	4	2	2
95	drip	*tón, *tóni	*tʊŋdV	1	1	1	1			4	2	3
96	difficult	*kód	*ɣwɛtɛ	1	1	1	1			4	1	5
97	dust	*kòngó	*ɣwãɣwã	1	1	1	1			4	1	5
98	rub	*cìng	*suusaa		1	1	1		1	4	1	5
99	cut	*tém	*tɛgɛ	1	1	1			1	4	1	4
100	shine	*jéd	*yeeleŋ	1	1	1			1	4	1	4
101	banana	*kòndè	*koŋdo	1	1	1			1	4	1	3
102	bush-knife	*pángà	*ŋ̀-paŋ	1	1	1			1	4	1	3
103	guard (to)	*dìnd	*dɛ̃dɛ̃	1	1	1			1	4	1	3
104	honey, bee	*jíkì	*yaagɛ	1	1	1			1	4	1	3
105	jaw	*bángá	*baŋga	1	1			1	1	4	1	3
106	bring up (child)	*dèd	*dãlã	1	1	1			1	4	1	2
107	draw (water)	*ték	*tɔ	1	1	1	1			4	1	2
108	dry (to)	*jàd	*ja	1	1	1		1		4	1	2
109	scatter	*cánc, *cán-	*sari	1	1	1			1	4	1	2
110	blow (with mouth)	*púd	*fuuDV	1	1	1			1	4	1	1
111	scabies, itch	*pèdè	*kpeleŋ	1	1	1			1	4	1	1

End of Table 9

1	2	3	4	5	6	7	8	9	10	11	12	13
112	shoulder blade	*pègà, *panga	*kpaŋkiŋ	1	1	1		1		4	1	1
113	war	*kóndò	*kɔwɔ	1	1	1		1		4	1	1
114	whiten	*pe	*kpɛ	1	1		1			3	1	7
115	swell	*bímb	*biŋbi	1	1	1				3	1	6
116	boil (to)	*bìd	*wudi	1	1	1				3	1	5
117	carry on the back	*bèb, *bambat	*baŋbuŋ	1	1				1	3	1	5
118	forest	*tító	*tu	1	1	1				3	1	4
119	darkness	*pìipí	*pinpi	1	1	1				3	1	3
120	stick	*tóngà	*tuŋgara	1	1			1		3	1	3
121	desire	*dìng, *díng	*dɛ̃gɛ̃	1	1	1				3	1	3
122	cheek 1	*támà	*tãɓã	1	1	1				3	1	2
123	ficus sp.	*dòmbà	*ŋ-duba-leŋ	1	1				1	3	1	2
124	millipede	*gongo	*gɔ̃gɔ̃	1	1	1				3	1	2
125	penis	*bódó	*bɔtu	1	1	1				3	1	2
126	call	*bíd	*biri	1	1	1				3	1	1
127	civet-cat	*tùngò	*togo	1	1	1				3	1	1
128	pull	*nàn	*ɗalaŋ	1	1			1		3	1	1
129	tendon	*tíngà	*tĩ	1	1	1				3	1	1

4. Toward a Proto-Niger-Congo phonological reconstruction: Proto-Bantu and Proto-Mande regular correspondences

In §2 and §3, we provided 180 potential Bantu – Mande cognates which can be regarded as reflexes of Proto-Niger-Congo forms. These potential cognates are represented in Table 10 where we provide, for each comparative series, the Proto-Bantu reconstruction (according to BLR2), the Proto-Mande preliminary reconstruction, the reconstructed initial consonants for Proto-Bantu and Proto-Mande, and in the rightmost column our proposal for the Proto-Niger-Congo reconstruction of the initial consonant. In the column "Meaning", we provide a generalized meaning of the root. The comparative series belonging to the Schadeberg List are in bold.

Table 10

Proto-Bantu and Proto-Mande cognates and probable reconstructions of the Niger-Congo initial consonants

	Meaning	**PB**	**PM**	**C- PB**	**C- PM**	**C- NC**
1	fill	*pák	*paka	p	p	*p
2	bush-knife	*pángà	*ŋ̀-paŋ	p	p	*p
3	blow	*pèep	*pɛ̃ɛ̃	p	p	*p
4	wind; cold	*pépò, *pèèpè	*pɛŋpɛŋ	p	p	*p
5	darkness	*pììpí	*pinpi	p	p	*p
6	**black**	***pínd**	***piŋ**	p	p	*p
7	blind	*pòkù	*põõku	p	p	*p
8	stomach	*pù	*pudu	p	p	*p
9	dig	*pùk, *pùd	***pɔ̃**	p	p	*p
10	**white**	***púpú** (regional)	***puru**	p	p	*p
11	side	*bádì	*bɛlɛ	b	b	*b
12	crocodile	*bamba 'monitor lizard, crocodile'	*baŋba	b	b	*b

Continuation of Table 10

	Meaning	**PB**	**PM**	**C- PB**	**C- PM**	**C- NC**
13	jaw	*bángá	*baŋga	b	b	*b
14	carry on the back	*bèb, *bambat	*baŋbuŋ	b	b	*b
15	refuse	*béng	*baŋ	b	b	*b
16	child; fruit	*bi-	*bɛɛ	b	b	*b
17	call	*bíd	*biri	b	b	*b
18	roll	*bídʊng	*bĩlĩ	b	b	*b
19	swell	*bímb	*biŋbi	b	b	*b
20	rot	*bòd	*bɔrɔ	b	b	*b
21	penis	*bódó	*bɔtu	b	b	*b
22	brain	*bòngó	*bɔŋxɛŋ	b	b	*b
23	**ashes**	***bú**	***bugu**	b	b	*b
24	**belly**	***bùmò**	***bũ**	b	b	*b
25	finish	*màd	*baŋ	m	b	*b (?)
26	raffia palm	*bádè	*ŋ̀-baŋ	b	ŋ-b	*b
27	become	*bá	*ɓã	b	ɓ	*ɓ
28	bear, give birth	*bèdɪk	*ɓari	b	ɓ	*ɓ
29	**liver**	***bàdì, bíndɪ**	***ɓʊdɪ**	b	ɓ	*ɓ
30	miss (to)	*bód	*ɓuo	b	ɓ	*ɓ
31	goat	*bódì	*ɓoli	b	ɓ	*ɓ
32	**give**	***pá**	***fe**	p	f	*f
33	blow (with mouth)	*púd	*fuuDV	p	f	*f
34	flour	*pùpù	*fuye	p	f	*f
35	lung	*pʊʊpʊ	*ŋ̀-fʊgʊfʊgʊ	p	n-f	*f
36	foam	*púd(ò)	*ŋ̀-fʊrʊŋ	p	n-f	*f

Continuation of Table 10

	Meaning	PB	PM	C- PB	C- PM	C- NC
37	**burn=hot**	***báb**	***waa (?)**	b	w	*w
38	boil (to)	*bìd	*wudi	b	w	*w
39	grandmother	*mààmá	*ɓãɓã	m	ɓ	*m
40	swallow	*mìd, *mìn	*ɓĩ ‘drink’	m	ɓ	*m
41	**drink**	***mú ~ ɲó ~ ŋó**	***ɓɔ̃dĩ**	m	ɓ	*m
42	**walk**	***támb**	***taŋbi**	t	t	*t
43	**say**	***tì**	***tĩ**	t	t	*t
44	**ear**	***tóì**	***tɔlɛ**	t	t	*t
45	bow (weapon)	*táà	*toŋ	t	t	*t
46	cheek 1	*támà	*tãɓã	t	t	*t
47	spider	*tanda	*n̩-taleŋ	t	t	*t
48	take	*tá-ʊd	*ta	t	t	*t
49	draw (water)	*ték	*tɔ́	t	t	*t
50	cut	*tém	*tɛgɛ	t	t	*t
51	heel	*téndé	*tiŋdi-di	t	t	*t
52	oil palm	*téndé	*n̩-teŋ	t	t	*t
53	middle	*tí	*tɛ	t	t	*t
54	tendon	*tíngà	*tɻ̩	t	t	*t
55	forest	*títɔ́	*tu	t	t	*t
56	pound	*tó	*tugu	t	t	*t
57	drip	*tón, *tóni	*tʊŋdV	t	t	*t
58	stick	*tóngà	*tuŋgara	t	t	*t
59	spit	*tú	*tu ~ tufa	t	t	*t
60	send	*tóm	*tɔŋ	t	t	*t
61	stab, spear	*túm ‘stab’, *túm-ò ‘spear’	*taŋba ‘spear’	t	t	*t
62	mountain-2	*tòndà	*tɔn	t	t	*t

Continuation of Table 10

	Meaning	**PB**	**PM**	**C- PB**	**C- PM**	**C- NC**
63	civet-cat	*tùngò	*togo	t	t	*t
64	remain	*tó-ʊd	*to	t	t	*t
65	**long**	***dàì**	***dãa**	d	d	*d
66	**eat**	***dí**	***diga**	d	d	*d
67	**bite**	***dóm**	***doɓũ**	d	d	*d
68	debt	*dàndó	*dɔŋdɔ	d	d	*d
69	bridge	*dàdò	*dala	d	d	*d
70	hang	*déd	*dɛŋ	d	d	*d
71	bring up (child)	*dèd	*dãlã	d	d	*d
72	weep	*dìd	*di	d	d	*d
73	deep	*dìk	*duŋ	d	d	*d
74	guard (to)	*dìnd	*dɛ̃dɛ̃	d	d	*d
75	curse	*dòg	*daŋga	d	d	*d
76	younger sibling	*dòngó	*ŋ́-dɔgɔ	d	d	*d
77	Ficus sp.	*dòmbà	*ŋ̀-duba-leŋ	d	d	*d
78	learn	*jíg	*dege	d	d	*d
79	**good**	***jìjá**	***dɪ**	j	d	*d?
80	hip	*dàmà, *nàmà	*daŋba	d/n	d	*d
81	**who?**	***ndai, *nai**	***dɪ ~ *ndɪ**	nd, n	d, nd	*n-d
82	**two**	***bà-dɪ́**	***pe-ɗa**	d	ɗ	*ɗ
83	**lie (down)**	***dáad**	***ɗa**	d	ɗ	*ɗ
84	bat	*démà, *dímà	*dɛ̃ɓɛ̃	d	ɗ	*ɗ
85	**root**	***dì, *dìdì**	***ŋ̀-ɗuli**	d	ɗ	*ɗ
86	**cold**	***dìdì**	***dɛ̃dɛ̃**	d	ɗ	*ɗ
87	shadow	*dídí	*dĩ̀dĩŋ	d	ɗ	*ɗ
88	extinguish	*dím	*ɗibiŋ	d	ɗ	*ɗ

Continuation of Table 10

	Meaning	PB	PM	C- PB	C- PM	C- NC
89	**tongue**	***dímì, *dímì**	***ɗɛ̃ɗɛ̃**	d	ɗ	*ɗ
90	desire	*dìng, *díng	*ɗɛ̃gɛ̃	d	ɗ	*ɗ
91	**nose**	***jódò**	***ŋ-ɗuŋ**	j	ɗ	*ɗ?
92	four	*nài	*ɗããɗĩ	n	ɗ	*n
93	pull	*nàn	*ɗalaŋ	n	ɗ	*n
94	**small**	***níìní**	***ɗɛ̃**	n	ɗ	*n
95	**mouth**	***nòà, *ɲòà**	***ɗɔɣa**	n	ɗ	*n
96	father	*cé	*tɪ	c	t	*c?
97	forehead	*có	*teŋge	c	t	*c?
98	chicken	*cócó (regional)	*tɔxɛ	c	t	*c?
99	**blood**	***gàdí, *jàdí**	***joli**	g/j	j	*j?*g?
100	dry (to)	*jàd	*ja	j	j	*j
101	**see**	***jén** (regional)	***jɪ ~ *jɛ̃**	j	j	*j
102	**water**	***jíjì**	***ji**	j	j	*j
103	descend	*jìk	*jigĩ	j	j	*j
104	axe	*jòndò	*jeŋde	j	j	*j
105	kill	*jip-	*jɛ	j	j	*j
106	**fish**	***cúí**	***ŋ̀-jɔGɛ**	c	ŋ-j	*j
107	**moon**	***jédì**	***ŋ̀-ɣaɗVŋ**	j	ɣ	*ʃ
108	**bird**	***jòǹì**	***ɣɔ̃ɗĩ**	j	ɣ	*ʃ
109	day	*jící, *jíncì	*ɣĩ	j	ɣ	*ʃ
110	clear	*jédò	*xoleŋ	j	x	*ʃ?
111	bushland	*càká, *càngà	*sɔŋkɔ	c	s	*s
112	scatter	*cánc, *cán-	*sari	c	s	*s
113	hiccup	*cék-	*siko	c	s	*s
114	curve	*cèng	*sega ~ *segaŋ	c	s	*s

Continuation of Table 10

	Meaning	**PB**	**PM**	**C- PB**	**C- PM**	**C- NC**
115	clean	*cèng	*sanVŋ	c	s	*s
116	**ground**	***cí**	***sɛlɛ**	c	s	*s
117	rub	*cìng	*suusaa	c	s	*s
118	**hair**	***cìngà**	***siɣi, *tiɣi**	c	s	*s
119	pierce	*còk	*sɔɣɔ	c	s	*s
120	sew	*còn	*sɔrɔŋ	c	s	*s
121	urine	*cò, *cùb	*sũɓũdɛ̃	c	s	*s
122	**all**	***ncè**	***seŋ**	nc	s	*n-s
123	year	*jákà	*yĩ	j	y	*y
124	**sun**	***jání** (regional)	***yããlɛ̃ ~ *yã**	j	y	*y
125	shine	*jéd	*yeeleŋ	j	y	*y
126	honey, bee	*jíkì	*yaagɛ	j	y	*y
127	**tooth**	***jínò**	***yĩ**	j	y	*y
128	**smoke**	***jíkì**	***sisi ~ *sigi**	j	s	*?
129	**heart**	***jòjò**	***sɔŋ(-dɔŋ)**	j	s	*?
130	squirrel	*cíndí	*ŋ̀-kɛrɛŋ	c	k	*k?
131	crab	*kádá	*kaa	k	k	*k
132	hundred	*kámá	*kaɓɛ̃	k	k	*k
133	**mountain, hill**	***kíngá**	***kɔŋkɛ**	k	k	*k
134	**neck**	***kíngó**	***kɔŋ**	k	k	*k
135	**bark (of tree)**	***koba**	***koba**	k	k	*k
136	snail	*kódá, *kódó	*kɔtɛ ~ *kɔtɔ	k	k	*k
137	old	*kódò	*kɔdɔ	k	k	*k
138	yam	*kódò (regional)	*kuu	k	k	*k

Continuation of Table 10

	Meaning	**PB**	**PM**	**C- PB**	**C- PM**	**C- NC**
139	throat	*kòdò	*kɔŋ	k	k	*k
140	banana	*kòndè	*koŋdo	k	k	*k
141	war	*kóndò	*kɔwɔ	k	k	*k
142	**hand, arm**	***kónò**	***kɔɔ**	k	k	*k
143	occiput	*kòtì	*kɔrɪ	k	k	*k
144	ram, he-goat	*koto, *kòdò	*kɔdɔŋ	k	k	*k
145	chest 1	*kúbà	*kUgU	k	k	*k
146	scrape	*kòd	*kɔŋdɔ	k	k	*k
147	turtle	*kúdò	*kuda	k	k	*k
148	hold	*kúmb-at	*kũ	k	k	*k
149	wood	*kónì	*kɔ̃	k	k	*k
150	guinea fowl	*kángà	*ŋ-kaŋka	k	ŋ-k (?)	*k
151	scratch	*kàd	*kuga	k	k	*k
152	**go**	***gì**	***gʊ, *gɛ**	g	g	*g
153	millipede	*gongo	*gɔ̃gɔ̃	g	g	*g
154	hump	*gòngò	*gʊŋgʊ (?)	g	g?	*g?
155	wilderness	*gòndà	*gola	g	g	*g
156	**road**	***gìdà, *jìdà, *kɪdɪ**	***ɠila**	g/j/k	ɠ	*ɠ
157	**die**	***kú**	***ɠu**	k	ɠ	*ɠ
158	leopard	*gòì	*ɠʊlɪ	g	ɠ	*ɠ
159	deny	*káan	*xɔ̃	k	x	*x
160	squeeze	*kám	*XaɓṼ	k	X	*x
161	bitter	*kádì	*ɣɔ̃Lã	k	ɣ	*x
162	**tail**	***kídà**	***ɣʊlɪ, *ɣʊla**	k	ɣ	*x
163	**bone**	***kʊdɪ** (regional)	***xɔlɛ**	k	ɣ	*x
164	knot	*kúndò	*Xudu	k	ɣ	*x

End of Table 10

	Meaning	**PB**	**PM**	**C- PB**	**C- PM**	**C- NC**
165	**sand**	***cèngà**	***ɣɛ̃gɛ̃**	c	ɣ	*x
166	difficult	*kód	*xwɛtɛ	k	ɣw	*xw
167	dust	*kòngó	*xwãxwã	k	ɣw	*xw
168	stranger	*gènì	*ɣõyɛ̃	g	ɣ	*ɣ
169	**egg**	***gí, *gìdí**	***ɣeli**	g	ɣ	*ɣ
170	rock	*gòdò	*Xuɗu	g	X	*ɣ
171	snore	*gòn	*xərəŋdə	g	x	*ɣ?
172	whiten	*pe	*kpɛ	p	kp	*kp
173	scabies, itch	*pèdè	*kpeleŋ	p	kp	*kp
174	shoulder blade	*pègà, *panga	*kpaŋkiŋ	p	kp	*kp
175	bend	*pìnd	*kpiliŋ	p	kp	*kp
176	shin	*píndí	*kpalɛŋ	p	kp	*kp
177	before	*bèdè	*gbɛla	b	gb	*gb
178	thigh	*bèdò	*gbada	b	gb	*gb
179	shoulder	*bègà	*gbã	b	gb	*gb
180	**dog**	***bóà**	***gbɛra**	b	gb	*gb

Now that we have the full list of cognates, we can evaluate their regularity. We must admit that the outcome of the analysis has proven remarkable in many respects. We had hoped to find some elements of regularity which might give us food for thought about the prospects of a genuine Niger-Congo reconstruction at some later stage. In reality, 174 out of 180 cognates form an elegant system of regular correspondences of initial consonants.

The starred consonants in the rightmost column cannot claim to be full-fledged Proto-Niger-Congo reconstructions, just as a true Proto-Indo-European reconstruction could not be based on the comparison of only two branches (e.g. Proto-Slavonic and Proto-Celtic). However,

they can be given the status of a preliminary reconstructions, keeping in mind that the incorporation of data from the other Niger-Congo families (and also, a more refined Proto-Mande reconstruction) will inevitably require numerous modifications.

In Table 11, we present the regular correspondences of initial consonants in the form of a chart, with indications of the numbers of comparative series for each correspondence. When two numbers appear in a cell, separated by a slash, it means that in the Proto-Mande reconstruction we have an underspecified initial consonant.

Table 11

Regular correspondences of Proto-Bantu and Proto-Mande initial consonants

NC	***p**		***t**		***c?**		***k**		***kp**	
PB : PM	*p : *p	10	*t : *t	24	*c : *t	3	*k : *k	23	*p : *kp	5
NC	***b**		***d**		***j**		***g**		***gb**	
PB : PM	*b : *b	17	*d : *d	17	*j : *j	8	*g : *g	4	*b : *gb	4
NC	***f**				***s**		***x**		***xw**	
PB : PM	*p : *f	5			*c : *s	12	*k : *ɣ	5	*k : *ɣw	2
NC	***ɓ**		***ɗ**		***ʸ**		***ʄ**			
PB : PM	*b : *ɓ	5	*d : *ɗ	9	*j : *ɣ	3/4	*k/*g : ɠ	3		
NC	***m**		***n**							
PB : PM	*m : *ɓ	4	*n : *ɗ	4						
NC	***w**				***y**		***ɣ**			
PB : PM	*b : *w	2			*j : *y	5	*g : *ɣ	2/3		
NC					***?**					
PB : PM					*j : *s	2				
Total		43		54		33/34		37/38		11

Before proceeding to comment on this chart, let us recall some points concerning Proto-Bantu and Proto-Mande consonants that were mentioned above in §1.2.

Following Meeussen (1967), most Bantuists reconstruct for Proto-Bantu a minimal consonant system including only 11 stem-initial phonemes, see Table 12.

Table 12

Proto-Bantu stem-initial consonants (Meeussen 1967)

*p	*t	*c	*k
*b	*d	*j	*g
*m	*n	*ɲ	

It should be mentioned, with relation to this reconstruction, that the reconstruction of palatal consonants is problematic:

> Meussen (1967: 83) also concedes that instead of **c* one might just as well use the symbol **s* and **z* or **y* instead of **j*. While **c* is indeed most often reflected by *s* or *ʃ* in present-day Bantu languages, the conflation of current-day *z* and *y/Ø* into **j* – a convention also adopted in Bantu Lexical Reconstructions (Bastin et al. 2002) – is not justified. Meinhof and van Warmelo (1932: 33) and Guthrie (1967: 52) did reconstruct both **j* and **y*. The reconstruction of this contrast is required. Certain stems, such as **-jòngó* 'cooking pot' …, have a stem-initial consonant in certain languages but not in others. Others, such as **-(j)átò* 'canoe' …, are always vowel-initial and should actually be reconstructed with stem-initial **y* if one wishes to respect the common Bantu CVCV noun stem template or otherwise without stem-initial consonant (Creissels 1999; Bostoen 2005: 179–198; Bulkens 2009). If one admits the existence of vowel-initial noun stems in PB, it is enough to reconstruct just **j* and not **y* (Bostoen 2019: 311).

Further on, Bostoen (2019: 312) specifies the situation of the nasal palatal consonant:

> Only a very restricted number of PB roots require the reconstruction of a palatal nasal; **-ɲàmà* 'animal' and **-ɲó-* 'drink' are two of them, but **ɲ* might result here from contact between *ni* and a following vowel at an earlier stage and thus actually represent **ny*.

The Proto-Mande system of initial consonants appears much richer, numbering 21 proto-phonemes altogether, see Table 13.

Table 13

Proto-Mande initial consonants

*p	*t		*k	*kp
*b	*d	*j	*g	*gb
*f		*s	*x	*xw[1]
*ɓ	*ɗ		*ɠ	
*w		*y	*ɣ	*ɣw

Only 7 phonemes coincide in Proto-Bantu and Proto-Mande. In Table 25 they are given against a grey background. Out of the 20 Proto-Mande initial consonants, 13 (**kp*, **gb*; **f*, **s*, **x*, **xw*; **ɓ*, **ɗ*, **ɠ*; **w*, **y*, **ɣ*, **ɣw*) are not available in the Proto-Bantu system. On the other hand, 4 Proto-Bantu consonants (**c* and all three nasal sonorants: **m*, **n*, **ɲ*) are not attested in Proto-Mande.

A hypothetical Proto-Niger-Congo system that would make it possible to derive the highly divergent Proto-Bantu and Proto-Mande systems is represented in Table 14. It includes 23 initial consonants.

Table 14

Proto-Niger-Congo initial consonants
(based on Proto-Bantu and Proto-Mande regular correspondences)

*p	*t	*c	*k	*kp
*b	*d	*j	*g	*gb
*f		*s	*x	*xw
*ɓ	*ɗ	*ƴ	*ɠ	
*m	*n			
*w		*y	*ɣ	

[1] Proto-Mande roots with initial **xw-* have no Proto-Bantu cognates.

Let us summarize the hypothetical diachronic processes which could result in the correspondences displayed in Table 11.

1) The occlusives, both voiced and unvoiced (with the lone exception of **c-*), did not change. These trivial correspondences are displayed in 99 out of the 176 series. Proto-Niger-Congo **c-* is replaced by **t-* in Proto-Mande (3 comparative series).

2) In Proto-Bantu, the labiovelars and implosives were lost. The labiovelars changed to labial consonants (9 comparative series), and the labialized velar **ɣw-* changed to a voiceless velar. The implosives changed to occlusives (20 series). Proto-Bantu **j-* had four Proto-Niger-Congo sources: **j-*, **ɗ-*, **ɣ-*, and **ʸ-*.

3) The fricatives and sonorants changed to voiced occlusives in Proto-Bantu (36 series).

4) The nasal sonorants in Proto-Niger-Congo lost their phonological status (if they ever had it: on this point see in particular Stewart (2002)) and yielded implosive consonants in Proto-Mande. As a result, the Proto-Niger-Congo nasal consonants, [m], [n], [ɲ], [ŋ], are reflected there as allophones of implosive consonants or glides before nasal vowels (Vydrine 2004; Vydrin 2006); the same situation is observed in some other Niger-Congo families (Le Saout 1973a).

These four processes are sufficient to describe the regular correspondences between Proto-Mande and Proto-Bantu. A remarkable point is that these correspondences are not only regular, but also proportional. Namely, the change from labiovelar to labial concerns both voiced and unvoiced consonants; all fricatives and sonorants change to occlusives.

In this relation, let us consider the correspondences PB **p* – PM **kp* and PB **b* – PM **gb*. We do not find a single case in our lexical database where a Proto-Mande **kp-* or **gb-* corresponds to a Proto-Bantu **k-* or **g-*.

Similar regularity (and proportionality) is found when we look for Proto-Mande correspondences to the Proto-Bantu nasal consonants. As already mentioned, nasal consonant phonemes are not reconstructed for Proto-Mande (i.e. the Proto-Mande nasal consonants do not have phonemic status), but notably, there is not a single occurrence of the

Table 15

Proto-Bantu labial consonants corresponding to Proto-Mande labiovelars

Meaning	Proto-Bantu	Proto-Mande		Meaning	Proto-Bantu	Proto-Mande
shoulder blade	*pègà, *panga	*kpaŋkiŋ		thigh	*bèdò	*gbada
whiten	*pe	*kpɛ		shoulder	*bègà	*gbã
scabies, itch	*pèdè	*kpeleŋ		before	*bèdè	*gbɛla
bend	*pìnd	*kpiliŋ		dog	*bóà	*gbɛra
shin	*píndí	*kpalɛŋ				

correspondence of a Proto-Bantu nasal consonant to a Proto-Mande voiced occlusive; only implosives are found in Proto-Mande corresponding to Proto-Bantu nasal consonants, see Table 16.

Table 16

Proto-Bantu nasal consonants corresponding to Proto-Mande implosives

Meaning	Proto-Bantu	Proto-Mande
grandmother	*mààmá	*ɓãɓã
swallow	*mìd, *mìn	*ɓĩ ‘drink’
drink	*mú ~ ɲó ~ ŋó	*ɓɔ̃dĩ ‘swallow’
four	*nài	*ɗããdĩ
small	*níìní	*dɛ̃
mouth	*nòà	*ɗɔɣa
pull	*nàn	*ɗalaŋ

This brings us to the third argument in favour of the genetic relationship between Bantu and Mande languages.

Argument 3: Phonetic correspondences between Proto-Bantu and Proto-Mande are not only regular, but also proportional, which excludes the possibility that they are merely fortuitous.

5. Proto-Bantu stems from the Schadeberg List and their potential cognates in Niger-Congo families

5.1. Direct and indirect comparison of the Mande basic lexicon

In the preceding sections, we proceeded from regular phonetic correspondences between Mande and Bantu. When dealing with other Niger-Congo families, we have no systematic reconstructions, and we have to deal instead with look-alikes.

We by no means contest the idea that individual look-alikes cannot be regarded as proof of long-range relationship. However, this does not mean that look-alikes should simply be discarded. We proceed from the idea that languages which are genetically closer normally have more look-alikes and candidates to cognacy than languages which are more distant. This is especially true for the basic lexicon, as represented by the Swadesh 100 Wordlist.

Let us imagine that we are to compare Proto-Bantu roots, within the confines of the PB Swadesh Wordlist, with roots in three languages of different kinds:

1) a contemporary Bantu language, like Swahili,
2) a contemporary language from another family belonging to Niger-Congo, e.g. Ewe,
3) a language which is obviously unrelated to Bantu (and therefore to Niger-Congo),[1] e.g. English.

Evidently, among these three languages, the rate of look-alikes (i.e. potential cognates) with Proto-Bantu will be the highest in Swahili and the lowest for English. And we can expect that languages from other Niger-Congo families will fall between these two extremes: those which are closer to Bantu will display higher rates, and those which branched off earlier will have lower rates. If the Mande languages do not belong

[1] Here we leave out of consideration hypothetical extra-distant relationships on the level of Borean, Niger-Saharan, or even Proto-Sapiens, which would imply that any language in the world is genetically related to any other language.

to the Niger-Congo macro-family, their rate will be lower than that seen for Ewe, Fula or Limba.

In this connection, we insist on the fact that we consciously disavow any attempt to establish a specific number of look-alikes necessary to identify two languages or two language families as related. The criterion we apply here is not absolute, but indirect.

In what follows, the results of a comparison of Schadeberg's 123 Proto-Bantu roots with some contemporary Bantu languages and, on the other hand, with languages from other Niger-Congo families will be represented and analysed.

Let us begin with contemporary Niger-Congo languages. We shall compare languages from each of 14 families with the basic Proto-Bantu lexicon of Schadeberg's version of the Swadesh List (123 items).

Contemporary Bantu languages and PB

To begin, let us compare Proto-Bantu with five more or less randomly selected contemporary Bantu languages, as control cases.[1] They are as follows, arranged in decreasing order of retained Proto-Bantu reflexes (the numbers of reflexes are given in brackets):

Swahili G.40 (59),
Lingala C.36 (49),
Tswana S.31 (44),
Zulu G.43B (42),
Duala A.20 (38).

As can be seen, the contemporary Bantu languages in our sample retain from 38 to 59 Proto-Bantu roots (out of 123). Taking into account inevitable mistakes in the identification of reflexes,[2] we can say that

[1] For reasons of space, we do not provide the Proto-Bantu – contemporary Bantu table. Reflexes of Proto-Bantu roots are easily accessible on line in BLR3.

[2] We expect our mistakes to result in deviations going in both directions: when we wrongly identify a form as a reflex of a proto-form, the cognacy rate rises, and when we fail to recognize a true reflex, the cognacy rate falls. Hopefully, these two types of mistakes compensate for each other, at least to some extent.

For reasons of clarity, when looking for Proto-Bantu reflexes in the contemporary Bantu languages, we did not refer to the available Bantuist comparative

the majority of Bantu languages preserve at least 40 reflexes of Proto-Bantu roots (as found in the Schadeberg List).

To put this into context, an average contemporary Indo-European language retains about 50% of the Swadesh 100 Wordlist (Burlak & Starostin 2005: 13–14) which corresponds, according to glottochronology, to a genetic depth of 6300 BP. According to this test, Proto-Bantu turns out to be appoximately as ancient as Proto-Indo-European.

This unexpected result (Bantu is commonly regarded as a relatively shallow genetic grouping) is most probably to be explained by our mistakes in the identification of cognates; one must be an expert in the comparative study of a language family to recognize all reflexes of proto-roots.[1] In our test, the existence of some mistakes in the identification of cognates does not represent a problem; evidently, we will also fail to recognize some cognates when comparing Proto-Bantu with the languages of other Niger-Congo families. If we assume that the rate of mistakes is similar in all our pairwise comparisons, we should expect that the proportion of cognates identified between Proto-Bantu and any language outside Bantu should be below 30%.

In §5.2 we provide the lists of potential cognates with Proto-Bantu found in contemporary languages belonging to various Niger-Congo families. Here we summarize our observations concerning similar forms identified between Bantu and each family.

Adamawa and PB, see Table 18

In the 28 Adamawa languages of our sample, 264 potential cognates with Proto-Bantu have been found, which yields an average number

historical literature, in order to make our results comparable with the results of comparison of Proto-Bantu with the languages belonging to the other Niger-Congo families in our sample.

[1] In this connection, the Swahili case is indicative. We began by compiling a list of cognates ourselves, and we found 50 Proto-Bantu reflexes in Swahili (i.e. about 41%). We then asked Alexander Zheltov, a specialist in Bantu languages and especially in Swahili, to verify our list, and the number of cognates rose to 59 (48%).

of 9 quasi-cognates per language. The highest cognacy rate[1] is manifested by the Tiba language, which shows 19 potential cognates (out of 123 Proto-Bantu items in Schadeberg's wordlist).

The lowest cognacy rate with Proto-Bantu is attested in Kùláál (Iro), Pere and Fali, where it ranges between 1 and 3. As mentioned above, such a low rate can be considered as indicative of the absence of any relationship with Proto-Bantu (and probably brings into question their membership in the Adamawa family).

The most stable roots are LIE DOWN, NAME, TOOTH.

Atlantic Bak and PB, see Table 19

The highest cognacy rate with Proto-Bantu is attested in Bijogo. In our sample of 10 languages, the average cognacy rate with Proto-Bantu is 11. The most stable Niger-Congo roots in Bak are KNEE, TONGUE, BITE.

Atlantic North and PB, see Table 20

Atlantic North and Proto-Bantu potential cognates (upper portion)

The average cognacy rate with Proto-Bantu is 6. The highest number of cognates is attested in Fula: 11. In particular, Fula is the only North Atlantic language which has retained the Niger-Congo root for WATER. The most stable Niger-Congo roots in North Atlantic are EYE and TONGUE.

Dogon and PB, see Table 21

The average cognacy rate with Proto-Bantu is 11. Such a high cognacy rate is unexpected, primarily because the Dogon family, like Mande, is excluded by some linguists from Niger-Congo on the grounds that most of the Dogon languages have no noun classes. The highest number of cognates is attested in Ben Tey: 17. The most stable Niger-Congo roots in Dogon are MEAT, TONGUE, TOOTH.

[1] For the sake of brevity, here and below, we refer to the "cognacy rate", although more strictly we mean the number of pairs of potential cognates (look-alikes).

Gur, Senufo and PB, see Table 22
The average cognacy rate with Proto-Bantu is 10. The highest number of potential cognates is attested in Dagaare: 12. The most stable Niger-Congo roots in Gur and Senufo are DOG, EAT, TONGUE.

Ijo and PB, see Table 23
The average cognacy rate with Proto-Bantu is 6. The highest number of potential cognates is attested in Nembe: 9. The most stable Niger-Congo roots in Ijo are BURN, MEAT/ANIMAL.

On lexical correspondences between Ijo and other Niger-Congo languages see Williamson (1971).

Kru and PB, see Table 24
The average cognacy rate with Proto-Bantu is 11. The highest number of potential cognates is attested in Bassa: 17. The most stable Niger-Congo roots in Kru are EAT, COME, EYE. Within the limits of our sample, Kru is the only Niger-Congo branch lacking reflexes of the Niger-Congo root for TONGUE.

Kwa and PB, see Table 25
The average cognacy rate with Proto-Bantu is 9. The highest number of potential cognates is attested in Ewe: 17. The most stable Niger-Congo roots in Kwa are DRINK and EAT.

Mel and PB, see Table 26
The average cognacy rate with Proto-Bantu is 7. The highest number of potential cognates is attested in Sherbro: 9. All Southern Mel languages retain more Niger-Congo roots than any Northern Mel language. The most stable Niger-Congo roots in Mel are KILL, EAT, TONGUE.

Ubangi and PB, see Table 27
The average cognacy rate with Proto-Bantu is 11. The highest number of potential cognates is attested in Dakpa and Linda: 15. The most stable Niger-Congo roots in Ubangi is SLEEP.

Isolated Niger-Congo languages and PB: Gola, Limba, Sua, see Tables 28–30
For the isolated languages, cognacy rates with Proto-Bantu are the following: Gola 12, Limba 14, Sua 6.

Mande and PB, see Table 31
In what precedes, we have obtained the cognacy rates with Proto-Bantu for ten Niger-Congo families and three Niger-Congo isolates, according to a standard method. We can now apply the same method to the Mande family in order to determine whether it belongs to Niger-Congo or not.

The average cognacy rate with Proto-Bantu is 19. The highest number of potential cognates is attested in Bambara, Maninka and Lele: 25. Both South-Eastern and Western branches display high rates of cognacy with Proto-Bantu. The most stable Niger-Congo roots in Mande are TONGUE, TWO, MOUTH, WATER.

Let us now compare the average cognacy rates for the contemporary languages of each family with Proto-Bantu, see Table 17.

As we can see, the average cognacy rate of Mande languages with Proto-Bantu is not just comparable with that of the other Niger-Congo families; it turns out to be higher than that of any other family. Mande is followed by language isolates ("long branches") Limba and Gola and then by the Dogon family, whose membership in the Niger-Congo macro-family has also been contested in recent publications.

One factor helping to generate such an elevated rate for Mande and Proto-Bantu is evident: we have a comparative etymological database for Mande, and, as we have seen above with Swahili, an expert eye sees more cognates than can be detected by a non-specialist in a given language family.

A supplementary explanation can also be suggested: the high similarity rates with Proto-Bantu for Mande and Dogon languages might be explained precisely by the absence of noun class markers in the languages of these two families, while the low rates for Atlantic and other languages probably results from the abundance of forms

Table 17

Average cognacy rates of Niger-Congo families with Proto-Bantu (on the basis of the Schadeberg List)

	Number of languages	**Average cognacy rate with PB**	
		N	**%**
Bantu	5	49	40
Mande	33	19	15
Limba	1	14	11
Gola	1	12	10
Dogon	17	11	9
Kru	17	11	9
Ubangi	8	11	9
Atlantic Bak	10	11	9
Gur+Senufo	13	10	8
Kwa	18	9	7
	Number of languages	**Average cognacy rate with PB**	
		N	**%**
Adamawa	28	9	7
Mel	8	7	6
Atlantic N.	18	6	5
Ijo	5	6	5
Sua	1	6	5
	183 languages		

with fossilized noun class markers, which make these forms etymologically opaque.

As an example of the complex phonotactic processes involved, let us consider the so-called metatheses in Mel. It is usually believed that the root **mel* 'tongue' goes back to the common Niger-Congo root **lem*, resulting from a metathesis (at Dalby's suggestion, this form has been accepted as the name of the Mel family). As was shown by Pozdniakov

(1993: 146–147), this "metathesis" is explained by the following morpho-phonological rule: if the initial consonants of a noun prefix and a root are identical, then the initial part of the root (identical with the prefix) is truncated, and the suffixed article is incorporated into the root, e.g.:

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

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

Evidently, nothing similar is possible in Mande or Dogon languages.[1]

The results of this experiment brings us to the fourth argument in favour of a relationship between Mande and Bantu.

Argument 4: In the basic lexicon, the average cognacy rate of contemporary Mande languages with Proto-Bantu is higher than the rate of other families whose membership in the Niger-Congo macrofamily is uncontested.

What should perhaps raise concern, then, is not the status of Mande, but the status of some other branches (such as Mel, Atlantic, or Sua).

5.2. Proto-Bantu and other Niger-Congo families: Comparison of the basic lexicon

In this subsection, we present the comparative data in tabular form. The tables are organized in a uniform format: the languages of the sample are arranged in descending order of the number of potential cognates with Proto-Bantu (in the Schadeberg List); for each language, the number of potential cognates with Proto-Bantu is indicated in the rightmost column for each language (if a table is split into two subtables or more, the summarizing column is provided only in the last subtable). The roots are also arranged in descending order of occurrences in the languages of the family; the numbers given in the bottom row stand for the number of languages in the sample where potential cognates with each Proto-Bantu root are attested.

[1] As can be seen from Table 37a, forms like *mel* or *meel* for 'tongue' are also attested in some Adamawa languages. On the other hand, the Mel language Kisi, which has no noun class prefixes, has retained the root *lem* for 'tongue'.

Table 18a

Adamawa and Proto-Bantu, Schadeberg List, 1/9

	lie down; sleep	name	tooth	full	stone	leaf
Proto-Bantu	*-lá-al-, *tʊ-ló	*i-jína	*i-jíno	*-jíjal-	*i-tále	*i-jáni
Tiba (Gà)	láā					
Munga Dosso	lweì	dǐjíŋ	dǐ	jɨlə̀	teì	jə̀ŋ
Moo	lǒ	dẁín	lɛ̄	jə̂ŋ	tə̀l	jə̀ŋ
Loo	ləú	lɪ́n	ləí	jí	tə́l	jə̀ŋ
Burak	ləú	lɪ̂n	lɛ̂		tə́l	jə̌ŋ
Jenjo	lwé	dzúŋ	jī	jɨlə̂		jə̀ŋ
Mak	lʌū	dǐn	ləì	jìdə́	tə́l	jə́ŋ
Maghdi	ləú	lɪ̄n	ləī	jɪ̀nî	tə́l	ɲə̀ŋ
Bolgo	léw		nìl			
Kare	ná	rìŋ				
Dza	lwéʊ́á		jī			yəŋ
Tha	ləú		jɨ̀jɨ	jí	təì	jə̀ŋ
Kyãk	ló		lɛ̄	jɨlɨ̀ŋ	tə̀l	
Samba Leko						
Dii	nə̄					
Lelau	ló		ləí	jìθə̀	tə̀l	jə̀ŋ
Koma						
Momi				yii'ika	təl	
Kam	lù					
Tupuri		rɪ̀ŋ				
Karang		riŋ				
Yi Kitulɛ		dīn		rī		
Mono		rìŋ				
Mumuye (Zing)	rōō	ríń			tārā	
Day Bouna	rʊ̄		ngìì			
Kùlɑ́ɑ́l (Iro)	tí-lɔ̀					
Pere						
Fali						
	19	13	13	11	11	10

Table 18b

Adamawa and Proto-Bantu, Schadeberg List, 2/9

	tree	kill	drink	ear	meat1; animal2	hear
Proto-Bantu	tɪ’	*-jip-	*-nyó-	*kʊ-tói	*ɲama1,2	*-jígu-
Tiba (Gà)	tí			tɛ́ɛ̄ɛ̄	yɛ̧ɛ̧m1	
Munga Dosso		ɲ̀jə̀		tswìtswì	ɲ̀jə̀m2	lì
Moo		zə̀p			ɲ̀nə̌m1	lɨ̧
Loo				twí	ɲ̀ɲ̧m1	
Burak			ɲ̀nə̌	twɛ̄	ɲ̀nə̂m1	
Jenjo	tswɛ̧	jə̀				lí
Mak			núʔú		ɲ̀nə̀m1	
Maghdi			ɲ̀ɲ̧		ɲ̀ɲ̧m1	
Bolgo	téú			tō	ɲ̀nằm1,2	lē
Kare	tìù	ʔí	nzó			
Dza		yə̀		tswí		lí
Tha			nū̱			
Kyăk		zə̀p				lî
Samba Leko	té		ɲ̀nə̄			
Dii				tɔ́g		
Lelau					ɲ̀ɲ̧m1	
Koma	tēʔē			tōlē		
Momi	te			tɔk		
Kam			núŋ			lɛ̀g
Tupuri	sɛ̄w	ʔìì-gǐ				
Karang		i	nzo			
Yi Kitulɛ	tē?		nɔ̄			
Mono		ʔi̱ì̱				
Mumuye (Zing)						
Day Bouna						
Kùláál (Iro)	téó					
Pere						
Fali						
	10	9	9	9	9	7

Table 18c

Adamawa and Proto-Bantu, Schadeberg List, 3/9

	bite	sand	tongue	dog	eye	ashes
Proto-Bantu	*-lóm-	*mʊ-céké; *i-cenga	*lʊ-lı'mi	*mbóa	*i-jíco	*i-bú
Tiba (Gà)	yɔ́m			ɓýȳ	ísā	ɓúūŋ
Munga Dosso			lɟ́jɛ̄m		nìŋ	vəù
Moo		swàzí		wìɗwà	nɟ́ŋ	
Loo						
Burak	lúm	ʃwàjwɛ̀ɛ̀				
Jenjo					nɟ́ŋ	
Mak		swàzwē				
Maghdi		ʃwɑ́ʒwəì				
Bolgo	nʊm	sɛ́wɛ́l				
Kare				váà		
Dza					nɨ́ŋ	
Tha				qìqà		
Kyãk		swǎzwī				vùk
Samba Leko	lùm					
Dii						vùù
Lelau		swàzwí				
Koma	nòm		mélē			
Momi	rɔm-		meel			
Kam			àlímíné	wó		
Tupuri			tùrùm	wãy		
Karang			rim			
Yi Kitulɛ	dùm				nɛ̄ɛ̄	bùkén
Mono						
Mumuye (Zing)						
Day Bouna			nām			
Kùlάál (Iro)						
Pere						
Fali						
	7	7	7	6	6	5

Table 18d

Adamawa and Proto-Bantu, Schadeberg List, 4/9

	knee	long	know1	fish	head	give	black1
Proto-Bantu	*i-dúı’	*-lai	*-jı’jı(b-)	*ncúı	*mʊ-tʊ’e	*-pá-	*-jil-
Tiba (Gə̀)	lúūŋ	dʃ̰ḭ̄			túū		yíríḭ̄k
Munga Dosso	dʷə̀ŋ		íbɨ̀				
Moo							
Loo				cē		fa̰	
Burak	lɔ̀k					fɔ̰(lɛ̰)	
Jenjo			jí				
Mak				seí			
Maghdi	lɔ̀k			ʃəī			
Bolgo	rúúl		jīm				
Kare		dã̰ŋ			tûl		yírì
Dza							
Tha			ǹjē				
Kyãk			í				
Samba Leko						pī	
Dii		ndɛ́ɛ́				pʊ́	
Lelau							
Koma							yíínē
Momi							
Kam							
Tupuri		dʃ̰ì-gì		cɛ̰ɛ̰̀			
Karang					tul		
Yi Kitulɛ							
Mono				cɛ̰ɛ̰̀	tŭltŭl		
Mumuye (Zing)							
Day Bouna							
Kùláál (Iro)							
Pere		lə̀ŋlə́ŋ					
Fali							yiira
	5	5	5	5	4	4	4

Table 18e

Adamawa and Proto-Bantu, Schadeberg List, 5/9

	blood	burn	come	eat	root	heart	louse
Proto-Bantu	*-gadí, *ma-gilá;	*-pɪ'-	*-jɪj-	*-lɪ'-	*mʊ-didi	*mʊ-tíma	*ndá
Tiba (Gà̱)		fɛ́		yí			lɛ́ɛ́rá
Munga Dosso						tswə̀m	
Moo	zī						
Loo			jɪ̱́		dík		
Burak			jí				
Jenjo							
Mak			jə̱́				
Maghdi			jí				
Bolgo				lī			
Kare							
Dza		fì gbá					
Tha					jì		
Kyãk	zwī						
Samba Leko		pè				tɛ́m	láágə́
Dii		pì					
Lelau	zī				dík		
Koma				līī			lɛ̄ɛ̄
Momi						temr	
Kam							
Tupuri							
Karang							
Yi Kitulɛ							
Mono							
Mumuye (Zing)	zīn				ɲīnrī		
Day Bouna							
Kùláál (Iro)				lì			
Pere							
Fali							
	4	4	4	4	4	3	3

Table 18f

Adamawa and Proto-Bantu, Schadeberg List, 6/9

	die	many	new	big	hair	bone	man
Proto-Bantu	*-kú-	*-jíngɪ’	*-pɪ’-	*néne	*-cíti; *lʊ-cʊkɪ’	*i-kúpa	*mʊ-lʊ’me
Tiba (Gà)			pɛ́ɛ̄k				ùmsá
Munga Dosso							
Moo							
Loo						kúp	lúbɨ
Burak						kúp	
Jenjo		íjàn̂ŋ					
Mak							
Maghdi							
Bolgo							
Kare	hú		fé				
Dza		íjà̰nɨ́ŋ					
Tha							
Kyãk							
Samba Leko							
Dii		zą̰ą̰ná; yɛ̃nné		nèè			
Lelau							
Koma					súkō		
Momi							
Kam					sɨrá		
Tupuri							
Karang	hu		pą				
Yi Kitulɛ							
Mono	hòn						
Mumuye (Zing)							
Day Bouna							
Kùláál (Iro)							
Pere				nánì; lèēlɛ̀			
Fali							
	3	3	3	2	2	2	2

Table 18g

Adamawa and Proto-Bantu, Schadeberg List, 7/9

	neck	night	all	bark (of tree)	know2	belly
Proto-Bantu	*nkíngó; *nkoti	*bʊ-tíkʊ	*-nce	*lʊ-pʊ’	*-many-	*i-bumo
Tiba (Gà)	kʌ̄ŋ			pūk		
Munga Dosso						
Moo			sē			
Loo						
Burak						
Jenjo						
Mak						
Maghdi						
Bolgo						
Kare						
Dza						
Tha						
Kyāk						
Samba Leko		tígə́l				
Dii						vbóō
Lelau						
Koma						
Momi		tukz / tuk				
Kam					mă	
Tupuri	kìŋ *throat*					
Karang						
Yi Kitulɛ						
Mono						
Mumuye (Zing)						
Day Bouna						
Kùlàál (Iro)						
Pere						
Fali						
	2	2	1	1	1	1

Table 18h

Adamawa and Proto-Bantu, Schadeberg List, 8/9

	good	ground	liver	cold	black2	cloud	moon
Proto-Bantu	*-jijá	*(pa-)ncɪ’	*-balɪ	*mʊ-didi	*pi	*i-lʊnde	*kʊ-jédi
Tiba (Gà)							
Munga Dosso							
Moo							
Loo							
Burak							
Jenjo							
Mak							
Maghdi							
Bolgo							
Kare							
Dza							yídì
Tha						dùlè	
Kyãk							
Samba Leko							
Dii							
Lelau							
Koma							
Momi							
Kam				dié			
Tupuri							
Karang			mbilaw				
Yi Kitulɛ							
Mono		sìì			pìì		
Mumuye (Zing)	líí						
Day Bouna							
Kùláál (Iro)							
Pere							
Fali							
	1	1	1	1	1	1	1

Table 18i

Adamawa and Proto-Bantu, Schadeberg List, 9/6

	mountain	road	stand	two	white	woman	
Proto-Bantu	*lʊ-gʊlʊ	njɪla	*-jɪ'm(-al)-	*-balɪ'	*pe	*mʊ-kádí	
Tiba (Gà̰)			jàm				20
Munga Dosso							16
Moo							14
Loo							14
Burak							14
Jenjo					fɪ̄		12
Mak		dɪ̰ɾà					12
Maghdi							12
Bolgo							11
Kare							11
Dza							10
Tha							10
Kyãk							10
Samba Leko						kên ~ kéèn, kéndō	9
Dii							9
Lelau							9
Koma							8
Momi							8
Kam							8
Tupuri							8
Karang							8
Yi Kitulɛ							7
Mono							7
Mumuye (Zing)							6
Day Bouna				dɪ̄í			5
Kùlǎál (Iro)							3
Pere	gūrɛ̀						3
Fali							1
	1	1	1	1	1	1	

Table 19a

Atlantic Bak and Proto-Bantu, Schadeberg List, 1/4

	knee	tongue	bite	eat	tooth	blood	know
Proto-Bantu	*i-dúı’	*lʊ-lı’mi	*-lóm-	*-lı’-	*i-jíno	*ma-ɲínga	*-maɲ-
Bijogo	ku-nu	nu-numɛ	num	deɲ	ka-ɲi	nɛ-ɲɛn	
Proto-Manjaku	juh/l	dɛm	dom	dɛ		ɲaak	mɛ
Pepel	jʊkʊlʊ	remtɛ	dʊm	dɛ	ɲı	ɲaak	me
Mancagne	juhul	ndemənt	dum	de	niŋ	ɲaak	me
Joola Fogny	fu-juul	fu-rerep	rʊm	rı	kɐ-ɲiiŋ		ɛ-manj
Bayot	ka-jʊ̰		ka-lom		ɔ-ɲuŋ	ɔ-ɲuą̰	
Balante Ganja	f-jùgúm	gì-dɛ̀mɛ́t	dʊm				
Joola Banjal	fu-jjul	fi-rerum	ɛ-rʊm		fi-ŋŋiŋ		
Karon	ka-jun	hi-leeluuf	lʊm	lı			ka-mɛyɛ
Balante Kentohe	f-cuhʊm	kə-demət	dʊma				
	10	9	9	6	6	5	5

Table 19b

Atlantic Bak and Proto-Bantu, Schadeberg List, 2/4

	moon	dog	fire	black	hand	nose	sand
Proto-Bantu	*kʊ-jédi	*mbóa	*mʊ-lʊlo	*-jil-	*kʊ-bóko	*i-jʊ'lʊ	*i-cenga
Bijogo		e-booʈi			kɔ-ɔkɔ		ɛ-nsɛg
Proto-Manjaku	li	bos	doo	jin	u-mbókəs		
Pepel	lɪ		rə	ji~jin			
Mancagne		buʃ	doo	jən			
Joola Fogny					ɛ-bɔkɔs		
Bayot						ɛ-jʊ̰	bʊ-sɪą̰
Balante Ganja	b-dííndɛ̀	bìtí					
Joola Banjal						e-ɲundu	
Karon							
Balante Kentohe	b-dɪndɪ						
	4	4	3	3	3	2	2

Table 19c

Atlantic Bak and Proto-Bantu, Schadeberg List, 3/4

	eye	ashes	come	fat	good	ground	kill	lie down
Proto-Bantu	*i-jíco	*i-bú	*-jij-	*ma-kúta	*-jijá	*(pa-)ncɪ’	*-bʊ’l-	*-lá-al-
Bijogo	n-ɛ / ŋ-ɛ	ka-buda		n-kidiŋ				
Proto-Manjaku					lil			
Pepel						ʂɛ		
Mancagne								
Joola Fogny							bʊj	
Bayot			ka-ɭeeɭew					
Balante Ganja	f-gít							
Joola Banjal								ɛ-raɔr
Karon								
Balante Kentohe								
	2	1	1	1	1	1	1	1

Table 19d

Atlantic Bak and Proto-Bantu, Schadeberg List, 4/4

	mouth	neck	person	root	tree	belly	
Proto-Bantu	*ka-nʊa	*nkoti	*mʊ-ntʊ	*mʊ-didi	tɪ’	*i-bumo	
Bijogo	ka-na	ŋɔ-kɔta	o-to		ŋu-te		16
Proto-Manjaku							12
Pepel							11
Mancagne							10
Joola Fogny							8
Bayot				ɔ-dɪ			8
Balante Ganja						f-mɔ̆m	7
Joola Banjal							6
Karon							5
Balante Kentohe							4
	1	1	1	1	1	1	87

Table 20a

Atlantic North and Proto-Bantu, Schadeberg List, 1/4

	eye	tongue	dog	know	tooth	burn1, hot2	skin	drink
Proto-Bantu	*i-jíco	*lʊ-lɪ'mi	*mbóa	*-maɲ-	*i-jíno	*-lʊng-	*-kánda	*-ɲó-
Fula (Maasina)	yiite-re	ɗem-	ɓoosaa-	maandoo	ɲiin-de			
Palor	ʔil		ɓʊx	mɪn			xʊn	
Konyagi	ì-nkə́r	ryə̀w̃	ì-vé					
Bedik	gí-ngʊ̀s	í-ɗém			gi-ɲángà			
Gubaher	si-jil			bʊ-min	gʊ-ril	duxun2		gʊ-rʊʊx
Laala	kɔ-ʔas		ɓuu	min		lɔx2		
Kobiana	sí-ggəh	jaarə́m		min				
Bainouk	gil				rɪ	duhun1,2		rʊʊh
Wolof		laammiɲ		mën		lukkat1		naan
Saafi			ɓuh	min		doh1	ʔun	
Biafada	(w)-gəra	bu-deema						naaŋ-
Ndut			ɓʊh				xʊn	
Basari	ɑ-ngə̀s	ɗĩw̃ù			ỹə̀ngə̆			
Tanda	a-ngəz	liw / o-diw			yinga			
Jaad				mən		roŋ1	kundaar	naaŋ
Nalu		leemb		mey			kuŋ	
Kasanga	si-gir	jaa-lumb						
Noon			ba[i]					
	14	12	9	9	8	7	6	5

Table 20b

Atlantic North and Proto-Bantu, Schadeberg List, 2/4

	egg	meat; animal	root	sleep	bite	breast	two	blood	die
Proto-Bantu	*i-gɪ’	*ɲama	*mʊ-didi	*tʊ-ló	*-lóm-	*ma-béele	*-balɪ’	*-gil-	*-kú-
Fula (Maasina)		daaba(awa)		ɗaanoo			ɗiɗi		
Palor			niil		ɗɔb				xul
Konyagi		ì-ntæ̀w				ì-ɓə̀lə́			
Bedik				u-ɗɑ̃k				ma-ʃɛ́l	
Gubaher									
Laala		ndawal1	nil		ɗɔw				
Kobiana									
Bainouk									
Wolof	nɛn								
Saafi			niir		ɗoɓ				
Biafada		(w)-nramar		daanəh-		(w)-bbəl			
Ndut			nʊl		ɗɔb				hʊl
Basari	ɛ-ɲɛ̀ŋɛ̀n					ɛ-ɓʌ̀r			
Tanda	e-yeŋen					e-bər			
Jaad									
Nalu	ɲin						bilɛ		
Kasanga									
Noon			nil						
	5	5	5	5	4	4	4	3	3

Table 20c

Atlantic North and Proto-Bantu, Schadeberg List, 3/4

	round	belly	big	nail	round2	sit	small	tail	all
Proto-Bantu	*-bʊ'lʊng-	*i-bumo	*néne	*lʊ-jála	*-kʊ'lʊng-	*-jikal-	*-(kée)kée	*mʊ-kɪ'la	*-nce
Fula (Maasina)									
Palor	mʊlon					ʃek			
Konyagi								æ̀-ncìr	céw
Bedik					gi-kɤ́r-nɤ́n		kěʃ		
Gubaher			deeni						
Laala									
Kobiana		a-bbú	-́nde	gu-ŋúru					
Bainouk								kal	
Wolof						jekki			
Saafi									
Biafada									
Ndut									
Basari									
Tanda									
Jaad	muur								
Nalu									
Casanga		a-bu		gu-ŋud					
Noon									
	3	2	2	2	2	2	2	2	1

Table 20d

Atlantic North and Proto-Bantu, Schadeberg List, 4/4

	blood2	cloud	come	dry	hair	one	water	white	
Proto-Bantu	*mʊ-lopa	*i-lʊnde	*-jij-	*-jóm-	*lʊ-cʊkɪ’	*-moi	*ma-jíjɪ	*-jél-	
Fula (Maasina)		duule			sukundu / cukuli		ndiy-am		11
Palor									9
Konyagi			ì-ʃîj					ì-ʃér	9
Bedik						dīyè			8
Gubaher	lumb								7
Laala									7
Kobiana									6
Bainouk				yimm					6
Wolof									6
Saafi									6
Biafada									6
Ndut									5
Basari									5
Tanda									5
Jaad									5
Nalu									5
Casanga									4
Noon									2
	1	1	1	1	1	1	1	1	

Table 21a

Dogon and Proto-Bantu, Schadeberg List, 1/4

	meat1, animal2	tongue	tooth	water	eye	white
Proto-Bantu	*ɲama1,2	*lʊ-lɪ'mi	*i-jíno	*ma-jíjɪ	*i-jíco	*pe
Ben Tey	nàw̃áà1	lɛ̀mdɛ́ɛ̀	ìr̃í	níì	jìré	pílɛ́
Bankan-Tey	nàmáà1	lɛ̀mbìrɛ̂	ŋìr̃ɛ́	níì	gìré	píndɛ́
Jamsay	nɔ̀w̃ɔ́1	nɛ̀nɛ́	ìr̃é		jìré	pírú
Perge Tegu	nàw̃á1	lɛ̀lɛ́	ìr̃é	níí	gìré	pírí
Yanda Dom	nàmà1	nɛ̀mdà	ìn	ínjú	gìdè	pílɛ́
Yorno-So	nàw̃á1	nɛ́nɛ́	ɛ̌n	dìí	gìrìí	pílɛ́
Nanga	nàmâ1	nɛ́ndɛ̀	ǹnɛ́	níì	gìré	pírí
Toro Tegu	nàw̃á1	lɛ̀lá	jìr̃ó	ní	jìró	pírú
Tommo-So	nàmá1	nííndɛ́	ìnú	díí	gìré	pílú
Gourou	nɔ̀w̃ɔ́1	nɛ̀nɛ́	ìr̃é	níí	gìré	
Togo-Kan	nɔ̀w̃ɔ́1	nɛ́nɛ́	ìr̃í	díí	gìré	pírí
Mombo	námà1	nɛ̀ɛ̀ndé	ínnì	míì	gírè	
Najamba	nàmáà1	nɛ̌ndɔ̀ɔ̀	ìnɔ̀ɔ́	ínjé	gìró	pílɛ̀
Ana Tiŋa	nama1	nɛmda	inn	inji	gidiye	pilɛ
Ambaleenge	nama1	ma-neende	íní		giri	
Donno-So	nɑmɑ1	nɛɛndɛ	inu	di		pilu
Tengu-Kan	nnɑuwɑ̰1	nɛnɛ	ɯni, ɯnu	dii		pɯri
	17	17	17	15	15	14

Table 21b

Dogon and Proto-Bantu, Schadeberg List, 2/4

	neck	knee	skin	drink	eat
Proto-Bantu	*nkoti	*i-dúı' (HL?)	*mʊ-kóbá	*-nyó-	*-lı'-
Ben Tey	kɔ̀rɔ́	lúkkɛ́	kòmbíì	nɔ̌	ɲɛ́
Bankan-Tey	kɔ̀rɔ́	lúkkà káŋ	kò-kòmbúù	nɔ́	ɲɛ́
Jamsay	kɔ̀rɔ́	nèŋɛ́; lúkkɛ́	kì-kɔ̌w	nɔ̀ɔ́	ɲɛ́ɛ́
Perge Tegu	kɔ̀rɔ́	nìngé; lúkkɛ́	kò-kɔ̌m		ɲɛ́ɛ́
Yanda Dom	kɔ̀lɔ̀		kómbó		
Yorno-So	kù-kɔ̀lɔ́	dɔ̀jɔ́- / dɔ̀jɔ́	kòbìlìí	nɔ̀ɔ́-	
Nanga	kɔ̀rɔ́	lúgɛ́	kò-kòmbí	nɔ̀ɔ́	
Toro Tegu	kɔ̀rɔ́	nìŋɔ́	kɔ̌w		lí
Tommo-So		dɔ̀dɔ́	kòbú	nɔ́ɔ́	ńyɛ́
Gourou	kɔ̀rɔ́	nèŋé		nɔ̀ɔ́	ɲɛ́ɛ́
Togo-Kan	kɔ̀rɔ́	nèŋèrè-kṵ́; dɔ̀ŋɔ́		nɔ̀ɔ́	ɲíí
Mombo					
Najamba			kòmĭl-ngó		
Ana Tiŋa	kɔɔ				
Ambaleenge					
Donno-So					
Tengu-Kan					
	11	10	10	8	8

Table 21c

Dogon and Proto-Bantu, Schadeberg List, 3/4

	two	come	name	breast	blood	ashes
Proto-Bantu	*-balɪ’	*-jij-	*i-jína	*ma-béele	*ma-ɲínga	*i-bú
Ben Tey		jáájɛ́	ìnìr̃íì	bíyôl		
Bankan-Tey		jáájà	ŋ̀ìnníì			
Jamsay	lɛ̌y	jáájɛ́		bííwôl		búgù powder
Perge Tegu	lɛ̌y	jáájɛ́		bíwélì		búgù powder
Yanda Dom			ín	bíyòl	jènjù	
Yorno-So	léy			béèl		
Nanga		jáájíyí; yèé		bíyôl		
Toro Tegu	lɛ̌y	jáájà				
Tommo-So	néé	jìŋɛ́				
Gourou	lɛ̌y					búgù powder
Togo-Kan						búgù powder
Mombo			íní		gèèngé	
Najamba			ínèn		gɛ̌n-gé	
Ana Tiŋa					jenji	
Ambaleenge			aìnì			
Donno-So	le					
Tengu-Kan						
	7	7	6	6	4	4

Table 21d

Dogon and Proto-Bantu, Schadeberg List, 4/4

	burn	leaf	rain	full	moon	root	
Proto-Bantu	*-lʊng-	*ɪ-jáni	*mbúlá	*-jíjal-	*kʊ-jédi	*mʊ-didi	
Ben Tey	dɔ̌	jɛ̀lɛ́ɛ̀	bɔ̀lú				17
Bankan-Tey		jɛ̀ndɛ́ɛ̀	bɔ̀ndú				15
Jamsay							14
Perge Tegu							14
Yanda Dom	dɔ̀dɔ́					dɪ̈l; dìlú	13
Yorno-So					yèé		13
Nanga			bɔ̀ndí				13
Toro Tegu	dɔ́, lɔ́gɔ́						13
Tommo-So							12
Gourou							11
Togo-Kan							11
Mombo		gɛ́ngyɛ́ɛ̀		jwɛ́ɛ́			9
Najamba							9
Ana Tiŋa							8
Ambaleenge				jwe	ma-ywɛ		7
Donno-So							6
Tengu-Kan						dụ̈dụ̈	6
	3	3	3	2	2	2	191

Table 22a

Gur+Senufo and Proto-Bantu, Schadeberg List, 1/4

	dog	eat	tongue	tooth	die	meat1; animal2	mouth	tree	drink
Proto-Bantu	*mbóa	*-lɪ’	*lʊ-lɪ’mi	*i-jíno	*-kú-	*ɲama1,2	*ka-nʊa	tɪ’	*-ɲó-
Dagaare	báá	dì		ɲínì		nàmá2	nɔ́ɔ́rè	tìɛ́	ɲú
Pana	vá	jí	dɛmɛ̀lɛ̀	yírí		nàmá1			ɲɔ́
Chakali	vaa	di		ɲɪŋ		namɪ̰a̰	nʊ̰a̰	tii	ɲʊ̰a̰
Sissala	váá	dí	nèŋdùlì	ɲìl		nàmìɛ̀	nɔ̀ɔ̀		ɲɔ̀
Nawdem	ba			ɲɪ̰n-dé	kpù	ném-gó1	nɔ́ɔ́	tì	
Mamara	pʊ̰	di	ɲile		xu			tige	
Tchourama	vaaw			ɲirə̰ə̰gu	ku		nʊ̰ɔ̰gu		
Karaboro	pʊ̰ʊ̰	di			ku				
Kolia	pʷɔ̰	li	yile					tʸige	
Kabiye			ǹzɔ̀-lɔ̀míyɛ̀				nɔ́ɔ́	tíɔ́	ɲɔ́ɔ́
Supyire		lʸî	jʷumɔ		kʷû				
Boore			dɛ̄rɛ̄mī	ɲɪ̰nū		nàmá2			
Minyanka	pwɔ̰	di	ɲire		kʷû				
	10	9	8	7	6	6	6	6	5

Table 22b

Gur+Senufo and Proto-Bantu, Schadeberg List, 2/4

	eye	kill	name	feather	white	bite	full
Proto-Bantu	*i-jíco	*-bʊ'l-	*i-jína	*lʊ-cála	*pe	*-lóm-	*-jíjal-
Dagaare							
Pana			yìré				
Chakali						dɔma	
Sissala		ɓó	yìr				
Nawdem							
Mamara	ɲii	gbo			fi̱i̱ŋɛ		
Tchourama	yísìri		yiiri			duumą̱	
Karaboro	yi̱nde	boo		syigi	figi		yi̱i̱~yi̱n
Kolia				ʃige	fi̱		ɲì
Kabiye			yíɖɛ̀			ɖɔ́m̀	
Supyire	ɲʸii	bo		ʃire			ɲî
Boore		ɓūé	yènú				
Minyanka	aɲe			aʃʸire	afige		
	5	5	5	4	4	3	3

Table 22c

Gur+Senufo and Proto-Bantu, Schadeberg List, 3/4

	root	stone	blood	bone	breast	cold	ear	give
Proto-Bantu	*mʊ-didi	*i-bʊe	*-gadí	*i-kúpa	*ma-béele	*mʊ-didi	*-tóì	*-pá-
Dagaare			zi̱i̱	kɔ́ɔ́rí	bìrí		tòòrí	
Pana		bɔ̀ré						pá
Chakali		bʊɪ						
Sissala								pá
Nawdem			ji̱-m	kɔ́w-ré	bíʔì-ré			
Mamara	nire							
Tchourama							tu̱ɔ̱gu	
Karaboro								
Kolia	nige					ɲi		
Kabiye	líḍè							
Supyire						ɲíŋɛ́		
Boore		ɓūɛ́						
Minyanka								
	3	3	2	2	2	2	2	2

Table 22d

Gur+Senufo and Proto-Bantu, Schadeberg List, 4/4

	good	many	round	seed	stone	water	lie down	long	
Proto-Bantu	*-jijá	*-jíngɪ’	*-kʊ’lʊng-	*mbʊ’t-o	*i-tále	*ma-jíjɪ	*-lá-al-	*-lai	
Dagaare				bóórɔ́					12
Pana		zɛ̰	kúrúní						11
Chakali	jɪga					nɪɪ			11
Sissala						ɲìì			11
Nawdem				bóódá	tàndé				11
Mamara		ɲɛɛ̰			taaɲɛɛ̰ *silex*				11
Tchourama								daa	9
Karaboro	yḭ								9
Kolia									9
Kabiye			kulungulu						8
Supyire									8
Boore							dɛ̄ɛ́ ~ díā		7
Minyanka									7
	2	2	2	2	2	2	1	1	

Table 23a

Ijo and Proto-Bantu, Schadeberg List, 1/2

	burn2	meat1; animal2	burn	neck	leaf	tree	all	black	cold
Proto-Bantu	*-pɪ'-	*ɲama	*-lʊng-	*nkíngó	*i-jáni	tɪ'	*-nce	*pi	*mʊ-didi
Nembe	ɔ́fírí	nàmà2	dɔ̀gí	kp̀gɔ́		tɪ̀		fíòò	
Mein	piópio	namá1,2				tín	sɛ́		odídi
Ịbanị	ɔ́fírì	námá1,2	dɔ́ɣó	kɔ̀ngɔ̀	áɲíɲá				
Okrika	ɔ́fírì	námá1,2	dɔ́kímā	kɔ̀ngɔ́	íɲáɲá				
Defaka									
	4	4	3	3	2	2	1	1	1

Table 23b

Ijo and Proto-Bantu, Schadeberg List, 2/2

	full	know	liver	mountain	person	red	seed	tooth	
Proto-Bantu	*-jíjal-	*-jɪ'jɪ	*-balɪ	*lʊ-gʊlʊ	*mʊ-ntʊ	*nkʊ'la	*mbʊ't-o	*i-jíno	
Nembe		dĩ	ɓìóyèé				ạ̀búsèì		9
Mein				ogún		kuekue			7
Ịbanị					tòmɓɔ				6
Okrika	jíjí								6
Defaka								nìạ̀	1
	1	1	1	1	1	1	1	1	

Table 24a

Kru and Proto-Bantu, Schadeberg List, 1/4

GLOSS	eat	eye	come	bone	ashes2	water	dog	die	drink
Proto-Bantu	*-lɪ'-	*i-jíco	*-jij-	*i-kúpa	*mʊ-tó	*ma-jíjɪ	*mbóa	*-kú-	*-ɲó-
Bassa	dɪ̰̄	jédɪ̰́	jī	kpá	tɪ́ɔ̰̄	ní	gbē		ná
Grebo	dí	yɛ̰̋		klȧ		nɪ̀	gbɛ̰̀	kȯ	nȧ
Kuwaa	jī		jì	kwā		nímí	bɛ̀lɛ̀		nāmū
Nyabwa	dī	yírɪ	yī	kpá	tʊ̀tɔ̄nʊ̀	nɪ̀	gbē		ná
Aïzi	li		yi		tʊtʊ	nrɪ	vɛ	kɔ	
Guéré	djréè	jrííē	jī^	kpȧ		ní	gbē		nȧ
Wobé	dī	jríɛ́^	jī	kpȧ		nɪ̰́	gbē		nȧ
Bété (Daloa)	lī	ji	jí	kwȧ	títɔ̄				
Bété (Guibéroua)	dī	yirɪ	yī	kʷá	títɔ̀			kú	
Godié	dɪ̄	yɪdí	yī		tótɔ̄			kú	
Jrwe	didɛ̀	jró		klá		nɪ̰́ɛ̰́	gbè		nɑ̰́
Néyo	lī	yí	yī		tótɔ̄		vɪ̀ɪ́	kú	
Bakwé	jī	ɲíø	jī			ní			ná
Tépo	di	yíɛ̀		klá		nɪ̀yɛ́	gbì	kó	ná
Dida (Lakota)	līlī	yī	yīlī		títɔ̄			kúlī	
Koyo	lɪ̄	yíyē	yī		tótɔ̄			kú	
Dida (Lozoua)				kwíyè	títɔ̄			kú	
	16	14	13	11	10	10	10	9	9

Table 24b

Kru and Proto-Bantu, Schadeberg List, 2/4

GLOSS	meat1; animal2	star	bite	egg	tooth	kill	mouth	know
Proto-Bantu	*ɲama	*nyényе(di)	*-lóm-	*i-gı’	*i-jíno	*-bʊ’l-	*ka-nʊa	*-jı’jı
Bassa	nīmīī2	dɛ̀nɛ̀-jù	nūmū		ɲɛ́nɛ́-			
Grebo		n̰ɛ̀ ~ n̰ɛ̀ɛ̀			ɲɛ́			
Kuwaa	nɛ̀mɛ̀2		ɲìmì					
Nyabwa	nīmī2		nūmū		ɲéné			
Aïzi		dɛɲi		ji	ɲı		nʊ̀ə́	zi
Guéré	nīmī2		nmū					
Wobé	nmī2		nmū		ɲɛ́			
Bété (Daloa)	nimɛ̄2	zɛ́ri	nímí	gʉyī				jì sɛ́
Bété (Guibéroua)	nimɛ́2	zɛ̀lī	nīmī					yì sɛ́
Godié		drè		gì		ɓʌ́lʌ́	nə̄	yì
Jrwe	dɛ́wɛ́2				ɲɛ̰́			yi
Néyo		drè		gè		ɓlá	né	
Bakwé				gì		blá		
Tépo					ɲɛ́			yì
Dida (Lakota)		zɛ̄lí				ɓálī	nē	
Koyo				gìyē		ɓlá	nɔ́	
Dida (Lozoua)				jī̀è		ɓlá	nī	
	8	8	7	7	7	6	6	6

Table 24c

Kru and Proto-Bantu, Schadeberg List, 3/4

GLOSS	blood	name	black	ashes1	full	one	all	breast	burn
Proto-Bantu	*ma-ɲínga	*i-jína	*pi	*i-bú	*-jíjal-	*-moi	*-nce	*ma-béele	*-pɪ'-
Bassa	ɲɔ̄mɔ̄ɔ̄	ɲéné	kpìì		jí		séín		
Grebo	ɲénɔ́	ɲéné̋	kpɛ̀ɛ̀		yi	dé			
Kuwaa		ɲɛ̄lɛ̄				dēe			
Nyabwa	ɲmɔ̄	ɲéné						bété	
Aïzi									
Guéré	ɲmɔ̄			bōù					
Wobé				bīu̯					
Bété (Daloa)									
Bété (Guibéroua)									
Godié									
Jrwe									
Néyo									
Bakwé			kpórō						fī
Tépo									
Dida (Lakota)									
Koyo									
Dida (Lozoua)									
	4	4	3	2	2	2	1	1	1

Table 24d

Kru and Proto-Bantu, Schadeberg List, 4/4

GLOSS	burn	cloud	fire	liver	red	root	round	stone	tree	
Proto-Bantu	*-pɪ'-	*i-lʊnde	*mʊ-lɪlo	*-balɪ	*nkʊ'la	*mʊ-didi	*-bʊ'lʊng-	*i-tále	tɪ'	
Bassa										17
Grebo					hùdü		búdúbḛ̀ nɔ́			16
Kuwaa		ní dɔ̄dɔ̄				jíí		túlé	tī	14
Nyabwa										14
Aïzi			lede							12
Guéré										11
Wobé										11
Bété (Daloa)										10
Bété (Guibéroua)										10
Godié										10
Jrwe				gbɔ̀lɛ̀						10
Néyo										10
Bakwé	fī									9
Tépo										9
Dida (Lakota)										8
Koyo										8
Dida (Lozoua)										6
	1	1	1	1	1	1	1	1	1	

Table 25a

Kwa and Proto-Bantu, Schadeberg List, 1/6

GLOSS	drink	eat	cold	know	meat1; animal2	die	eye
Proto-Bantu	*-ɲó-	*-lɪ'-	*mʊ-didi	*-jɪ'jɪ	*ɲama	*-kú-	*i-jíco
Ewe	nɔ̀		dzì		ŋáná2	kú	
Akan	-nʊ[m]	-di				wu	ɜ-nĩ
Baule	nɔ̰	dí			ñnɛ̰1,2		
Adele	ɲɔ̀n	dì	lílà	ɲí	ɛ̀nàn2	kú	
Nawuri	nūù?	jĩ	yúlí	ɲĩ			gì-nsí
Ega	nɔ̀	lì		ɲì	ɛ̄nā1,2	kù	
Agni Indenie	nɔ̰	dí			ɲ̀nà̰á̰1,2		ɲɪ̰
Tuwuli			ò-sílí			kù	
Nzéma	nɔ̰	dí			nà̰nɪ̰1,2		ɲɪ́
Logba	nɔ̀	ɖí				kù	
Ikposo Uwi		jí		yí		kú	
Gichode	nûŋ	jĩ	yúlí	ɲĩ			gì-nsí
Agni Bona	nɔ̰	dí			nà̰yɪ̰2		
Chumburung	nù?	jĩ	yʷɨ́rí	ɲĩ			
Krachi	nû?	jĭ	yúrí	jĩù?			kì-ɲísí
Attié (Memni)			ɲɪ̰ɲɪ̰		nã̰nã̰1,2		
Gonja	nù?	jì		ɲì			kì-nìʃĭ
Adioukrou							
	14	14	8	8	8	7	7

Table 25b

Kwa and Proto-Bantu, Schadeberg List, 2/6

GLOSS	full	lie down	mouth1	tooth	bite	ear	sleep
Proto-Bantu	*-jíjal-	*-lá-al-	*ka-nʊa	*i-jíno	*-lóm-	*kʊ-tói	*tʊ-ló
Ewe	dzí	drà	nù			tó	dɔ́
Akan		-da	a-nõ			a-sõ	-da
Baule	yí	lá	nw̰ã̰	jé		sú	
Adele				dì-ɲă	dòn		dɔ́
Nawuri		dãĭ	gɔ́-nɔ́	gí-ɲí	dũŋ		dãĭ
Ega							la
Agni Indenie	yí	dá	nm̰ã̰			sɷ́	
Tuwuli	yî					sɔ́-tɔ̀	
Nzéma	yí	dá					
Logba	yì						
Ikposo Uwi						ótó	
Gichode			gɔ́-nɔ́	gí-ɲí	dũŋ		
Agni Bona			nɷ̃wã̰	jéyį̰			dá
Chumburung					dũŋ		
Krachi					dũŋ		
Attié (Memni)		lā					
Gonja				kí-ɲí	dùŋ		
Adioukrou	iy			nén			
	7	7	7	7	6	6	6

Table 25c

Kwa and Proto-Bantu, Schadeberg List, 3/6

GLOSS	root	burn	say	white	hand, arm	name	stone1
Proto-Bantu	*mʊ-didi	*-pɪ'-	*-tɪ	*pe	*kʊ-bóko	*i-jína	*i-bʊe
Ewe		fʸé̱	tsì		àbɔ̃		
Akan	n-tĩnĩ *vein*		*-se			e-jĩŋ	ɔ-bʊ
Baule	õlʊ̨ĩ		sé	ùfwê			
Adele		kpín					
Nawuri							
Ega		fɪ				ìnì	
Agni Indenie							
Tuwuli		pílà				d-i̱	
Nzéma	ǹdi̱ní̱						bɔ̀lɛ̀
Logba			tɛ̀	flí			
Ikposo Uwi				fwē			
Gichode							
Agni Bona	lʊ̨ĩ						
Chumburung							kì-bú
Krachi							
Attié (Memni)	ɲí̱			fí	bɔ̄		
Gonja							
Adioukrou					àbù		
	5	4	4	4	3	3	3

Table 25d

Kwa and Proto-Bantu, Schadeberg List, 4/6

GLOSS	ashes2	big	black	bone	egg	give	ground
Proto-Bantu	*mʊ-tó	*néne	*-jil-	*i-kúpa	*i-gɪ’	*-pá-	*(pa-)ncɪ’
Ewe					àzì		
Akan	n-sõ						a-sɪ
Baule							āsyɛ̀
Adele		dɛ̀rɛ̀, lílɛ́	dín, dìyá				
Nawuri							
Ega				íkú		pwá	
Agni Indenie							
Tuwuli					lí-gé?	kpà	
Nzéma							
Logba	ntɔ́			úkú			
Ikposo Uwi							
Gichode							
Agni Bona							
Chumburung			jìjì?				
Krachi		lɛ́lɛ́					
Attié (Memni)							
Gonja							
Adioukrou							
	2	2	2	2	2	2	2

Table 25e

Kwa and Proto-Bantu, Schadeberg List, 5/6

GLOSS	head	rain	tongue	ashes	black	dog	knee
Proto-Bantu	*tóè	*mbúlá	*lʊ-lɪ’mi	*i-bú	*pi	*mbóa	*i-dúɪ’
Ewe						àvǔ	
Akan							
Baule	tí						
Adele		búrà					
Nawuri		bɔ̀lã̄ĭ					
Ega					kpīkpī		
Agni Indenie	tí						
Tuwuli							lú-dúlî
Nzéma							
Logba							
Ikposo Uwi			ílīvlí				
Gichode							
Agni Bona							
Chumburung							
Krachi							
Attié (Memni)				m̀bɔ̀			
Gonja							
Adioukrou			ánm̀				
	2	2	2	1	1	1	1

Table 25f

Kwa and Proto-Bantu, Schadeberg List, 6/6

GLOSS	mouth2	neck	new	one	red	tree	
Proto-Bantu	*mʊ-lomo	*nkoti	*-pɪ'-	*-moi	*nkʊ'la	tɪ'	
Ewe	àlɔ́mè	kɔ̀tí				àtí	17
Akan							14
Baule					ɔ̄kwlɛ̀		14
Adele							13
Nawuri							11
Ega							11
Agni Indenie							9
Tuwuli							9
Nzéma							8
Logba							8
Ikposo Uwi			fī	ɛ̀dī			8
Gichode							8
Agni Bona							7
Chumburung							7
Krachi							7
Attié (Memni)							7
Gonja							6
Adioukrou							4
	1	1	1	1	1	1	

Table 26a

Mel and Proto-Bantu, Schadeberg List, 1/2

GROUP	**GLOSS**	kill	eat	tongue	die	ear	sleep	
	Proto-Bantu	*-jip-	*-lɪ'-	*lʊ-lɪ'mi	*-kú-	*kʊ-tói	*tʊ-ló	
Mel S.	Sherbro	di	jo	limil̪ing	wu	nu̱i	lɔl	9
Mel S.	Mani	dí	yó	mèlén	wú	núí	lɔ̀l	8
Mel S.	Kisi	dìyɔ̀ɔ́	dìó	diɔ̀mùléŋ	wùó	nìléŋ	lùáŋ	7
Mel S.	Kim	jì	jó	ɲèlèŋ	wú	ɲí	lòì; lɔ́n	7
Mel S.	Bom	jì	jó	nìlɛ̀n	wu	nùì; tè	lɔ̀lɔ́; lɔn	6
Mel N.	Landuma	dif	di	dʌmera				5
Mel N.	Baga Sitemu	kɛ-dif; kɛ-lip		te-mer				5
Mel N.	Temne	dìf	dì	rə̀-mèr				5
		9	8	8	5	5	5	

Table 26b

Mel and Proto-Bantu, Schadeberg List, 2/2

GROUP	**GLOSS**	drink	star	sand	feather	cold	heart	louse, flea	
	Proto-Bantu	*-ɲó-	*nyényе(di)	*mʊ-céké	*lʊ-cála	*-pól-	*mʊ-tíma	*ndá	
Mel S.	Sherbro		le		cææ			laa	9
Mel S.	Mani		lè		cá				8
Mel S.	Kisi		lùé						7
Mel S.	Kim		léì						7
Mel S.	Bom								6
Mel N.	Landuma	mun		cəsənc					5
Mel N.	Baga Sitemu	kə-mun		kə-sənc			tim-		5
Mel N.	Temne	mùn				polpol			5
		4	4	3	2	1	1	1	

Table 27a

Ubangi and Proto-Bantu, Schadeberg List, 1/5

GLOSS	sleep	belly	cold	drink	eat	hear	tooth
Proto-Bantu	*tʊ-ló	*i-bumo	*mʊ-didi	*-ɲó-	*-lʊ'-	*-jígu-	*i-jíno
Dakpa	lò lò		əzɨ		zɨ rə	jì rə	ə̄ʒī
Linda	lō	bùdúvū	zɨ	njū	zɨ̄	jī	ə̄ʒī
Gbaya				nɔ			ɲín
Zande	rá	vū	zézéré		rí	gɪ̄à	rīndē
Banda	lu	uvu	zeze	ndjo	ze	dji	zizi
Mundu	rā	bū			zɪ̄	dzì	
Ngbaka Pendi	làlā	bū		nzó			
Sango			de	yon			
	6	5	5	5	5	5	5

Table 27b

Ubangi and Proto-Bantu, Schadeberg List, 2/5

GLOSS	bite	blood	ear	tongue	dog	eye	fish
Proto-Bantu	*-lóm-	*ma-ɲínga	*kʊ-tói	*lʊ-lɪ'mi	*mbóa	*i-jíco	*ncúɪ
Dakpa	lò	ə̄ʒī	ə́tú	tīmbī		njílà	
Linda	lō	ə̄njī	ōtū	tīmà			
Gbaya				léɓé			
Zande			tū				
Banda		djindji	utu				
Mundu	nìmà				gbōro	dzíyā	sí
Ngbaka Pendi	nɔ̄mo̱	nzɛ̱					sī
Sango					mbo		
	4	4	4	3	2	2	2

Table 27c

Ubangi and Proto-Bantu, Schadeberg List, 3/5

GLOSS	good	hair	long	person	root	stone	stone	all	ashes2	ashes1
Proto-Bantu	*-jijá	*lʊ-cʊkɪ’	*-lai	*mʊ-ntʊ	*mʊ-didi	*i-bʊe	*i-tále	*-nce	*mʊ-tó	*i-bú
Dakpa	dídìrə	sūkūmù		ōzū		bàjà		cī		
Linda		sùkūmù	dɨ	ōzū						
Gbaya	di				ɲín		tà			bùk
Zande						mbíá				
Banda										
Mundu					ádrī					
Ngbaka Pendi			lō						sùí	
Sango							tene			
	2	2	2	2	2	2	2	1	1	1

Table 27d

Ubangi and Proto-Bantu, Schadeberg List, 4/5

GLOSS	bark (of tree)	bone	breast	dry	ground	know	many	meat1; animal2
Proto-Bantu	*kɪ-kúkú	*i-kúpa	*ma-béele	*-jóm-	*(pa-)ncɪ’	*-maɲ-	*-jíngɪ’	*ɲama1,2
Dakpa								
Linda	kúcū							
Gbaya			bèr ~ bèrè	zɔm				
Zande							zíngɪ̀rɪ̀	
Banda						weŋ		
Mundu								
Ngbaka Pendi		kúa̰						
Sango					sisi			ɲama2
	1	1	1	1	1	1	1	1

Table 27e

Ubangi and Proto-Bantu, Schadeberg List, 5/5

GLOSS	moon	mouth	name	sand	say	tree	water	who	
Proto-Bantu	*kʊ-jédi	*ka-nʊa	*i-jína	*mʊ-céké	*-gamb-	tɪ’	*ma-jíjɪ	*n(d)ai	
Dakpa									16
Linda									15
Gbaya		kɔ̀-nú				tè	yì		12
Zande					gómbá			dà	11
Banda									10
Mundu				sīkì					10
Ngbaka Pendi									9
Sango	nze		yili						8
	1	1	1	1	1	1	1	1	

Isolated NC languages - Proto-Bantu

Table 28

Gola and Proto-Bantu, Schadeberg List

GLOSS	belly	cold	eat	foot, leg	full	kill	know	many	meat1, animal2	tongue	what	white	
Proto-Bantu	*i-tʊmbo	*-pól-	*-lɪ'-	*kʊ-gʊlʊ	*-jíjal-	*-jip-	*-jɪ'jɪ	*-jíngɪ'	*ɲama	*lʊ-lɪ'mi	*kɪ-í	*pe	
Gola	ké-sùa	ké-foè (fòe)	je (jɪ)	ké-gòlo	dia	jiiβa	ɲima	zíngbe	ke-numa1,2	ó-miè, ké-miè	kɨ́	pe	12

Table 29

Limba and Proto-Bantu, Schadeberg List

GLOSS	ashes	breast	burn	eye	hand, arm	heart	knee	neck	sand	seed	tongue	two	water	white	
Proto-Bantu	*mʊ-tó	*ma-béele	*-lʊng-	*i-jíco	*kʊ-bóko	*mʊ-tíma	*i-bóngó	*nkoti	*mʊ-céké	*mbʊ't-o	*lʊ-lɪ'mi	*-balɪ'	*ma-jíjɪ	*pe	
Limba	fɔ-tɔ ~ hɔ-tɔ	hu-bili	toynia / tɔgi	fo-ya ~ ho-ya	ku-ɓeki	hu-tuguma	hu-ɓuŋ	nkonci	hu-teke-ma	huta / ta-futa	fi-liŋ	bile	ma-n-di	fufe	14

Table 30

Sua and Proto-Bantu, Schadeberg List

GLOSS	ashes	cold	hear	sleep	swim, bathe	tongue	
Proto-Bantu	*mʊ-tó	*-pól-	*-jígu-	*tʊ-ló	*-jóg-	*lʊ-lɪ'mi	
Sua	irɔy	foyen	jɛy	nɔnnɔ	gɔgane	dɛmɛtɛ	6

Table 31

Mande and Proto-Bantu, Schadeberg List, 1/4

	GLOSS	tongue	two	mouth	water	lie (down)	nose	ear	egg	road
	Proto-Bantu	*lʊ-lɪ’mi	*-balɪ’	*ka-nʊa	*ma-jíjɪ	*-lá-al-	*i-jʊ’lʊ	*kʊ-tói	*i-gɪ’	*njɪla
1.6	Bambara	nɛ̀	fìla	dá	jí	dá	nú	túlo	kílí	síra
1.5	Lele	nɛ̀ɛn	fɛ̀la	dá	jí	sá	sú	tólo	káli	kíla
1.6	Maninka	nɛ̀n	fila	dá	jí	lá	nún	tólo	kíli	síla
1.5	Kakabe	nɛ̀n	fila	dá	jíí	lá	sún	tóló	kílí	kíla
1.3	Jogo	nɛ̀n-dé	fàlá	dáa	yí	sá	súŋ	tólò	yélí	cìlí
1.6	Mandinka	néŋ	fùla	dáa	jíí	láa	núŋ	túlù	kílì	síla
1.7	Bozo	ɲɛ̀ɛ́mù	péndéén	láā	jíí	ságá	múún	tálá		kɛ̀n
2.2	Dan	dɛ̰̀ɛ̰̀	plɛ̀	dĩ	yĩ	dà	yṵ̄	tő	yə̰̀ə̰̀	zḭ̄ə̰̄ə̰̄
1.4	Kono	nénɛn	fèa	dá	yíí	sá	sú	tóo	cí’i	kía
2.2	Mano	nānà	pɛ̄ilɛ̄	lé	yíí	dà	yṵ̄	tóó	ɲàà	zī
2.2	Mwan	dɛ̰̀dɛ̰̀	plɛ̄	lìì	yì	dā	yḭ̄	tlɔ̰	ylɛ̰̀	zī
1.4	Vai	nɛ̀ɛ́	fɛ̀’á	dã	jí	sá	sûŋ	tó’ò	kélí	kí’à
1.2	Jalonke	nɛ̀ŋ́	fìdín	dɛ́ɛ́	jɛ́é	sáá	ɲwɛ́ɛ́	túlí	qɛ̀lɛ́	kìráá
2.2	Guro	lɛ̰̀lɛ̰̀	fíé	lɛ̄é	yí	dā	yɛ̰̀	tɔ̰̀lɛ̰̀	yɛ̰̀lɛ̰̀	zī
1.8	Bobo	nìón	pālā	dō	ziō	dɛ̄		túrú	wɛ́ré	
1.2	Susu	nɛ́ŋní	fìrín	dɛ́	yé	sáá	ɲɔ́ɔ́	túlí	xálɛ̀	kìrá
1.3	Jeli	nɛ̀n-dí	fàla	dá	yi	sá	súŋ-gbàlà	túlu	yèli	kílí
1.7	Soninke	néenè	filli	raxa	jî	sáxú	núxúnnè	tórù	yèllê	kìllê
2.2	Tura	dɛ̰̀-ɛ̃́ɛ̃́	pɨ̈ɨ̈lɛ́	dɛ̃́	yĩ	dàà	yṵ̰ṵ́	tőlő	yə̰̀ə̰̀	záà
1.9	Dzuun	nɛ̀yn	fíí	dzú	yú			tóró		ʃì
1.1	Kpelle	néŋ	fɛ̄erɛ̄	lá	yá	láá	húŋɔ́		ɣálóŋ	
1.1	Looma	nɛ̰̀(g)	féle	dà(g)	zìɛ́	dà	sòkpà		ɣèy̰	
2.1	San	ninɛ	pāā	lɛ́		dā	ɲin	tɔrɔ	gìi	zii
1.9	Seenku	nɛ̃̀en	fĩ́	dzɔ̃̀	jɔ̃́			tóo	kʸɛ̀	
2.2	Yaure	lɛ̰̀lɛ́	flí	lé	yí	tə̀	yɛ̰̀-bɔ̃̀	tɔ̃́lɛ̃́	yɛ̰̀lɛ̰̀	sì
1.1	Mende	nɛ́ɛ́	fèlé	ndá	njă	ndá	hókpá		ngálú	
1.3	Numu	nén-dé	hira	dá	yi	sà	sṵ̰n	tólò		kílí
2.1	Bisa	nɛ̀ɛ́m	píiya	lɛ́		dà		tŏr	gyìr	zàá
2.2	Wan	lēnḭ̄	pīlɔ̄ŋ̄	lé	yí	tá	yɛ̰́			zī
2.1	Bokobaru	nénɛ	pláa	lɛ́	í	da	yḭ̄			zɛ́
1.9	Jowulu	náná-í	fúúlì	tɔ̰̀ŋ	jú			tɔ́ɔn	ɲɔ̃̄ɔn	
2.1	Kyanga	néné	fia	lɛ́	‘í		‘ḭ̄	tɔ̰nɔ		zérɛ
2.2	Gban	lɛ̰̀	fɛ̰́ḭ̄		yí	dà	yḭ̄		yə̰̀	
		33	33	32	31	29	28	27	27	26

Table 31b

Mande and Proto-Bantu, Schadeberg List, 2/4

GLOSS	fish	sand	small	bird	dog	tooth	tail	ashes	moon	bite
Proto-Bantu	*ncúı	*i-cenga	*níìní	*ka-jʊni	*mbóa	*i-jíno	*mʊ-kı'la	*i-bú	*kʊ-jédi	*-lóm-
Bambara	jégé	cɛ̀	dén	kɔ̀nɔ		ɲɪ́	kú	bùgùrí	kálo	dúmu
Lele	ɲɛ́ɛ	kɛ̀nkà	dí	kòndo		ɲín	kɔ́ɔ	bùura	kári	domu
Maninka	jɛ́ɛ	kìŋɛ́	dén	kɔ̀nɔ		ɲín	kó	bùudi	káro	dómun
Kakabe	yégé	kɛ̀ɲèkéɲé	dén	kòndì		ɲín		bùgutá	kàru	dámu
Jogo	yàɣá	ɲàgân	dé	kǫŋdìrì	gɔ̀là	ɲíŋ		bɔ̀ɣɔ̀	kái	dɔ̃(n)
Mandinka	ɲéé	kɛ̀ɲè	díŋ	kùnù		ɲíŋ		bùutu	kári	dómo
Bozo	ɲɔ́ɔ	kɛ̱ɛ̱ŋɛ̱	lén	xɔ̄nī^{n}		ɲí^{n}	hóri		xáy	
Dan	yúɤ̈ɤ̈	yɛ̋ɛ̋	dɔ̰		gbɛ̂		wēŋ̄	bɔ̈-bɔ̈		
Kono	ɲéɛ		dén-toa	kònde		ɲíŋ		bùa	káo	dɔ́ŋ
Mano		yɛ̀ɛ̱-sélé	né		gbą́		wɔ̄ŋ̄	bu̱		
Mwan		ylɛ̀	dɛ̄		gbą̀ą̄		wēē	būē		
Vai	ɲíyɛ	kɛ̀ɲɛ	dɛ̃ŋ	kòndé		ɲíŋ		ɓù'á	ká'ó	dɔ̃ŋ
Jalonke	jéqɛ́	qɛ̀ɲɛ́	díí	qɔ̀ní		ɲíŋ	qúlí			dóŋ
Guro		yɛ̱lɛ̀	lɛ́		bɛ̱lɛ̱		wōlì	vu̱ù̱		
Bobo	zē	yèɡé		yàlô	gbèɡē	ɲíní				zōn
Susu	yɛ́xè		díí	xɔ̀ní		ɲíɲí	xúlí			dǫ́
Jeli	yɛ́gɛ			kóndi		ɲin-di			káyi	dóŋ
Soninke	ɲéxè		rémmè	yèlíŋŋè			qóqqè		xásó	
Tura		kɛ̀ɛ̀	nɛ̃		gbɛ̃ɛ́		wű	bɔ̀ì		
Dzuun	jí	céncén	dzíín	kèyn	vì	ɲín	kplɑ			
Kpelle	ɲɛ́ɛ́	ŋɛ̱yā		ŋɔ̄nī	ɣílà	ɲíŋ	wóŋ		ɣálóŋ	
Looma		ɲàɣà(g)		wònì	gìlà	ɲɪ́gé	wɔ̱̀(g)		ɣalu	
San	zɔ̀	ɲɔɔ-sɔ	na-nɛ̄		jiri					
Seenku		kʸíŋè		kàllɛ̈	jəgɛ̈		kɔrā̆	bű-kā̆	kɛ̈	
Yaure		yɛ̀lɛ̀	lɛ́		plɛ̀					
Mende	ɲé	ŋàɲá		ŋɔ̀ní	ngílà		ngólí		ngálu	
Numu	yígén	ɲìngán		kǫ́ndèré		ɲìn				dóŋ
Bisa	zɔ̀		ɲí		gí`					
Wan					gbą̄-nɛ̄			ɓú		lɔ̄
Bokobaru			nī		gbɛ̨́ɛ́					
Jowulu	yéríŋ	ɲènɲ̀ŋ		ɲāą̄náą́ŋ		ɲɪ́ɪ́náą́ŋ			ɲé	
Kyanga	zɔ̨̀				gbɛ̃					
Gban	zɔ́		lɪ̋					bübú		
	24	24	23	21	18	18	17	16	16	14

Table 31c

Mande and Proto-Bantu, Schadeberg List, 3/4

GLOSS	good	root	smoke	who	cold	black	belly	die	go	liver
Proto-Bantu	*-jijá	*mʊ-didi	*mʊ-jíki	*n(d)ai	*mʊ-didi	*pi	*i-bumo	*-kú-	*-gɪ-	*-balɪ
Bambara	dí	díli	sìsi		nénɛ	fìn		sù		
Lele	dí	líílè	sìsi			fin	bú	súu		
Maninka	dí	lílin	sìsi		nénɛ	fìn		sù		
Kakabe	dí	lílí	sììsì			fìn	búú	sùu		
Jogo	díí		sìsí	dɛ́				kǔ		
Mandinka	dí-yaa	súlù	sììsìì		nénè	fiŋ				
Bozo		ʃĩĩⁿ	sìsi			pĩ				
Dan	dĩ			dē	dɛ̰dɛ̰				gó	ɓlűű
Kono	dí	súu	sìsi			fìn	bú	sùu		
Mano	lī			dēŋ	dɛ̰dɛ̰				gó	ɓúlú
Mwan		sé-né		dè	dɪ̰ɪ̰dɪ̰ɪ̰		vī		gō	
Vai		súlù	sìsí			fiŋ	ɓú	sǔ		
Jalonke				ǹdé						
Guro		sūnī		dĩ			bɔ̰		gʊ̄	ɓílí
Bobo	dīà	sùlù				fìn-dànè				
Susu				ndé						
Jeli	dia		sìgí							
Soninke						hìná				búttè
Tura					dɪ̰dɪ̰				gő	ɓűlű
Dzuun	dzi	jíí								vúnún
Kpelle				lé						
Looma				le						
San			cisa	die	nɪnɪ		bundara			
Seenku	dzə̀									bɔ̀rɔ̀n
Yaure		sɛ̰ɛ̰ĩ							kú	ɓílí
Mende										
Numu			sìsí					kùú		
Bisa			síngá		ɲèèní		búrá			
Wan		sɛ̰nɪ̰		dè	lèlè				gò	
Bokobaru				dé	yɪ̰ɪ̰				gá	
Jowulu	dì									
Kyanga				dí	nini					
Gban										
	14	14	13	13	12	10	8	8	8	8

Table 31d

Mande and Proto-Bantu, Schadeberg List, 4/4

GLOSS	neck	drink	blood	give	say	eat	all	ground	skin-bark	long	TOTAL
Proto-Bantu	*nkíngó	*-ɲó-	*-gil-; *-gadí	*-pá-	*-tɪ	*-lɪ'-	*-nce	*(pa-) ncɪ'	*mʊ-kóbá	*-lai	
Bambara			jòli								25
Lele			jìlí								25
Maninka			jèli								25
Kakabe			jèlì								24
Jogo	wùrà-kɔ̂(n)										23
Mandinka			yèlè								23
Bozo			jɔ́ɔlɔ́			dīgā	ʃĩɛ́ⁿ			lááⁿ	22
Dan		ɓɑ̰̀ŋ̃						sɛ̃́			22
Kono											22
Mano		mání					séŋ́	sɛ́lɛ́			22
Mwan		ɓi̱i̱				dɛ̀	séé				22
Vai											22
Jalonke	kɔ̀ń			fíí	tìí				kóbólé		21
Guro		mi̱ní̱									20
Bobo				pērē (?)		dìgè			kōbā		19
Susu	kɔ̀n-yí			fí					kóbólè		19
Jeli	ku				cɛ̌						18
Soninke					`tí					laata	18
Tura								sɛ́ɛ́			18
Dzuun					dzín						17
Kpelle	kɔ̄ŋ			fé							17
Looma	kɔ́(g)			fé		da-li					17
San		muni									17
Seenku	gù				tìɛɛ						16
Yaure					tɪ̱						16
Mende	kɔ̀ngá			fè							15
Numu											15
Bisa		mŏm									14
Wan											14
Bokobaru		mɔ́									13
Jowulu											12
Kyanga											11
Gban											9
	8	7	6	6	6	4	3	3	3	2	613

5.3. Greenberg's hypothesis 80 years later

In this section, we revisit Greenberg's method of mass comparison. Taking into account the fact that this method has been widely criticized, we would like to say a couple of words on this delicate question.

Firstly, we find it expedient to undertake an update of Greenberg's data, some 80 years after his pioneering publication. The abundant lexical data which was not available at that time make it possible not only to evaluate the plausibility of Greenberg's candidates to cognacy; today we can speak about forming a basis for a Niger-Congo comparative etymological dictionary, see §7 and §9.

Here we would like to address a question which may seem to many not to be very relevant today; nonetheless, we attach some importance to it. We are referring to the "rehabilitation" of Greenberg's approach to the genetic classification of languages, at least his Niger-Congo hypothesis (whatever the fate may be of his hypotheses concerning other macro-families).

Evidently, the prevailing sceptical attitude taken towards Greenberg's Niger-Congo hypothesis is often justified by a rather condescending perception of his mass comparison method, by contrast with the strict historical comparative method. In this relation, the results of our verification of Greenberg's (1970) Mande-Bantu and Mande-Benue-Congo cognates are quite impressive: out of the 28 Mande and Benue-Congo cognates postulated by Greenberg, only 5 are missing from our final list. Of these, three meanings (I, BE1, BE2) have not been included in our list not because we disagreed with the cognacy of the forms, but for other reasons (namely, personal pronouns should be considered within the context of their full paradigms; copulas are grammatical words and may be less suitable for lexical comparison in principle). Thus, out of the remaining 25 cognates proposed by Greenberg that we consider as appropriate for investigation here, we reject only 2: KNOW and PERSON (in Greenberg's book, MAN). Let us comment on these cases.

KNOW (# 28). Greenberg mentions a Proto-Bantu root **manya* and places it in relation with forms from five other Niger-Congo branches, among these the Manding forms *me, men, mina* ‘understand’. In our view, the Bambara and Maninka forms *mɛ́, mén* go back to a Proto-Mande root **ɓɛ́ ~ *ɓɔ̀lí* ‘hear’, and the meaning UNDERSTAND is a result of the semantic evolution of the latter; it is certainly not related to the meaning KNOW. As for Greenberg’s form *mina,* this may refer to the verb *mìna* in Maninka (*mìnɛ* in Bambara) ‘to catch’. This verb is fairly polysemous, but KNOW is not attested among its numerous senses. Therefore, we acknowledge no cognacy between these Mande verbs and the Proto-Bantu form (BLR **màɲ* ‘know’ 4 Regions: NW Ce NE SE, 12 Zones: ABCDEFGJLMNP).

MAN (# 32). To judge by the forms mentioned by Greenberg, the meaning is not MAN, MALE, but rather PERSON, HUMAN. For Bambara, he provides *nyi* ‘partisan de…’. However, the noun *ɲì* ‘supporter, ally’ results from the conversion and subsequent semantic evolution of the quality verb *ɲì* ‘to be good’, and there is no reason to relate it to the meaning PERSON, HUMAN. As for the two other Mande forms, Mende[1] *nu* and Kpelle *nũ* ‘human’, this root can be reconstructed for the Proto-Southwestern Mande as **núu*. Its reflexes are not attested in other Mande groups, and it may have been borrowed by Proto-Southwestern Mande from Mel. We do not include this root in our list.

If we keep in mind that Greenberg’s study was caried out almost 80 years ago (if we count from his (1949) publication), with very limited Mande data in comparison with what we have today (and the same can also be said for the Benue-Congo evidence), we have to recognize that Greenberg’s result was outstanding. After 80 years, with the benefit of an immensely richer lexical database, we have confirmed almost all of his cognates.

[1] Greenberg erroneously spells the name of this language as “Mande”.

6. Distribution of roots by stability

As was shown by Sergey Starostin (2007), even in the basic lexicon, words differ in terms of their stability. Some tend to be replaced relatively easily, while others display remarkable stability in daughter languages. It was subsequently demonstrated that the stability index of words/notions varies across language families: some words from the basic list are very stable in some language families and much less stable in others (Pozdniakov 2014).

Analysis of the potential cognates between Proto-Bantu and the languages of different Niger-Congo families (see the tables in §5) shows that the roots from Schadeberg's list can be arranged according to their stability: more stable roots have reflexes in a greater number of families, see Table 32.

Table 32

Niger-Congo roots arranged in order of stability, Schadeberg List

GLOSS	*PB Schadeberg	Adamawa	Atl. Bak	Atl. N.	Dogon	Gur-Senufo	Ijo	Kru	Kwa	Mel	Ubangi	Sua	Gola	Limba	Mande	
tongue	*lʊ-límí	1	1	1	1	1	1		1	1	1	1	1	1	1	13
bite	*-lóm-a	1	1	1		1	1	1	1		1			1	1	10
drink	*-ɲó-a	1		1	1	1		1	1	1	1	1			1	10
eat	*-lí-a	1	1		1	1		1	1	1	1		1		1	10
tooth	*i-jíno	1	1	1	1	1	1	1	1		1				1	10
die	*-kú-a	1	1	1		1		1	1	1	1				1	9
eye	*i-jíco	1	1	1	1	1		1	1		1			1		9
meat, animal	*ɲama	1		1	1	1	1	1	1		1		1			9
root	*mʊ-didi	1	1	1	1	1		1	1		1				1	9
water	*ma-jíjɪ		1	1	1	1		1	1		1			1	1	9
black2	*pi	1			1	1	1	1	1	1					1	8
dog	*mbóa	1	1	1		1		1	1		1				1	8
bark-skin	*mʊ-kóbá		1	1	1			1			1			1	1	7
belly	*i-bumo	1	1	1		1			1		1				1	7
breast	*ma-béele			1	1	1		1	1		1			1		7
ground	*(pa-)ncí	1	1			1	1		1		1				1	7

Continuation of Table 32

GLOSS	*PB Schadeberg	Adamawa	Atl. Bak	Atl. N.	Dogon	Gur-Senufo	Ijo	Kru	Kwa	Mel	Ubangi	Sua	Gola	Limba	Mande	
lie (down)	*-lá-al-a	1	1	1		1			1		1				1	7
mouth1	*ka-nʊa		1			1		1	1	1	1				1	7
tree	*tí	1	1			1	1	1	1		1					7
all	*-nce	1		1			1	1			1				1	6
ashes	*mʊ-tó (-tói ?)	1						1	1		1	1		1		6
ashes	*i-bú		1		1			1	1		1				1	6
cold	*mʊ-didi	1				1	1		1		1				1	6
ear	*kʊ-tói	1				1			1	1	1				1	6
egg	*i-gí		1	1		1		1	1						1	6
full	*-jíjal-a	1				1	1	1	1				1			6
good	*-jijá	1	1			1		1			1				1	6
moon	*kʊ-jédi	1	1				1		1		1				1	6
name	*i-jína	1			1	1		1	1		1					6
sand	*i-cenga (e ~ a)	1	1	1		1					1				1	6
two	*-balí (a ~ ɪ)	1		1	1	1								1	1	6
bird	*ka-jʊni	1	1			1					1				1	5
blood	*ma-gilá	1		1		1		1							1	5

Continuation of Table 32

GLOSS	*PB Schadeberg	Adamawa	Atl. Bak	Atl. N.	Dogon	Gur-Senufo	Ijo	Kru	Kwa	Mel	Ubangi	Sua	Gola	Limba	Mande	
bone	*i-kúpa	1				1		1	1		1					5
come	*-jij-a	1	1	1	1			1								5
give	*-pá-a	1				1		1	1						1	5
know	*-jíjɪ(b-a)	1					1	1	1				1			5
liver	*-balɪ	1					1	1		1					1	5
sand	*mʊ-céké	1	1							1	1			1		5
sleep	*tʊ-ló			1					1	1	1	1				5
stone	*i-bʊe	1				1		1	1		1					5
white	*pe				1	1			1				1	1		5
blood	*ma-ɲínga		1		1			1			1					4
burn	*-lʊng-ʊl-a			1	1		1							1		4
burn	*-pí-a	1					1	1	1							4
fish	*ncúɪ	1		1							1				1	4
kill	*-bʊ́l(-ag)-a	1	1			1		1								4
know	*-maɲ-a	1	1	1							1					4
long	*-lai	1				1					1				1	4
many	*-jíngí	1				1					1		1			4

Continuation of Table 32

GLOSS	*PB Schadeberg	Adamawa	Atl. Bak	Atl. N.	Dogon	Gur-Senufo	Ijo	Kru	Kwa	Mel	Ubangi	Sua	Gola	Limba	Mande	
neck	*nkoti		1		1				1					1		4
neck	*nkíngó	1					1		1						1	4
say	*-tɪ					1		1	1						1	4
big	*néne	1		1					1							3
black1	*-jil-a	1	1						1							3
cloud	*i-lʊnde	1		1				1								3
cold	*-pól-a									1		1	1			3
hear	*-jígu-a	1									1	1				3
heart	*mʊ-tíma	1								1				1		3
kill	*-jip-	1								1			1			3
knee	*i-dúí		1		1				1							3
leaf	*i-jáni	1			1		1									3
nose	*i-júlʊ		1						1						1	3
one	*-moi			1				1	1							3
person	*mʊ-ntʊ		1				1				1					3
red	*nkʊ́la						1	1	1							3
road	*njʊla	1		1											1	3

Continuation of Table 32

GLOSS	*PB Schadeberg	Adamawa	Atl. Bak	Atl. N.	Dogon	Gur-Senufo	Ijo	Kru	Kwa	Mel	Ubangi	Sua	Gola	Limba	Mande	
seed	*mbʊ́t-o					1	1							1		3
stone	*i-tále					1			1		1					3
bark (of tree)	*kɪ-kúkú										1			1		2
bark (of tree)	*lʊ-pʊ́	1									1					2
dry	*-jóm-a			1							1					2
feather	*lʊ-cála					1				1						2
fire	*mʊ-lɪlo		1					1								2
hair	*lʊ-cʊkí			1							1					2
hand, arm	*kʊ-bóko								1					1		2
head	*mʊ-tʊ́e	1							1							2
knee	*i-bóngó	1												1		2
louse, flea	*ndá	1								1						2
mountain	*lʊ-gʊlʊ	1					1									2
new	*-pí-a	1							1							2
rain	*mbúlá				1				1							2
round	*-bʊ́lʊng-a			1				1								2
round2	*-kʊ́lʊng-a			1		1										2

Continuation of Table 32

GLOSS	*PB Schadeberg	Adamawa	Atl. Bak	Atl. N.	Dogon	Gur-Senufo	Ijo	Kru	Kwa	Mel	Ubangi	Sua	Gola	Limba	Mande	
small	*-(kée)kée			1								1				2
smoke	*mʊ-jíki (í ~ ó)									1					1	2
star	*nyénye(di)							1		1						2
swim, bathe	*-jóg-a		1									1				2
tail	*mʊ-kíla			1											1	2
white	*-jél-a	1		1												2
who	*n(d)ai										1				1	2
bark (of tree)	*i-gʊla										1					1
belly	*i-tʊmbo												1			1
blood	*mʊ-lopa			1												1
fat	*ma-kúta		1													1
foot, leg	*kʊ-gʊlʊ												1			1
go	*-gɪ-a														1	1
hair	*-cíti	1														1
man	*mʊ-lʊ́me	1														1
mouth2	*mʊ-lomo								1							1
nail	*lʊ-jála			1												1

Continuation of Table 32

GLOSS	*PB Schadeberg	Adamawa	Atl. Bak	Atl. N.	Dogon	Gur-Senufo	Ijo	Kru	Kwa	Mel	Ubangi	Sua	Gola	Limba	Mande	
night	*bʊ-tíkʊ (í ~ ú)	1														1
say	*-gamb-a										1					1
sit	*-jikal-a			1												1
skin	*-kánda			1												1
stand	*-jím(-al)-a	1														1
what	*kɪ-í												1			1
woman	*mʊ-kádí	1														1
blood	*-gil-a; *-gadí															0
fire	*mʊ-jóto															0
fire	*tʊ-pí-a															0
fire	*tʊ-jíja															0
fly	*-gʊl-ʊk-a															0
hair	*lʊ-jʊíkí (ɪ ~ e)															0
horn	*lʊ-pémbé															0
red	*-tɪl-a															0
say	*-gɪl-a															0
See	*-bón-á (b ~ m)															0

End of Table 32

GLOSS	*PB Schadeberg	Adamawa	Atl. Bak	Atl. N.	Dogon	Gur-Senufo	Ijo	Kru	Kwa	Mel	Ubangi	Sua	Gola	Limba	Mande	
skin	*-ngʊ́bo															0
sun	*i-jʊ́ba															0
walk	*-gend-a															0
water	*i-diba															0
what	*pa-í															0
		61	34	39	22	40	21	39	48	18	47	8	13	17	38	442

If we consider the distribution of the Mande reflexes in this table, we see that the most stable Niger-Congo roots turn to be the most stable in the Mande family too: out of the 19 highest ranking roots (which are attested in 7 Niger-Congo families out of 14), 15 have reflexes in Mande.

Table 33

The 19 most stable Niger-Congo roots and their reflexes in Mande

GLOSS	*PB Schadeberg	PMande	No. of NC familes
tongue	*lʊ-límі	*dɛ̃dɛ̃ ~ *dɛ̃ɓɛ̃	13
bite	*-lóm-a	*doɓũ ‘eat’	10
drink	*-ɲó-a	*ɓɔ̃dĩ ‘swallow’	10
eat	*-lí-a	*diga	10
tooth	*i-jíno	*yĩ	10
die	*-kú-a	*ɗu ‘dead person’	9
eye	*i-jíco	–	9
meat1, animal2	*ɲama	–	9
root	*mʊ-didi	*ŋ̀-ɗuli	9
water	*ma-jíjɪ	*ji	9
black2	*pi	*piŋ	8
dog	*mbóa	*gbɛra	8
bark=skin	*mʊ-kóbá	*koba	7
belly	*i-bumo	*bũ	7
breast	*ma-béele	–	7
ground	*(pa-)ncí	*sɛlɛ	7
lie (down)	*-lá-al-a	*ɗa	7
mouth1	*ka-nʊa	*ɗɔɣa	7
tree	*tí	–	7

This can be stated differently. Out of Schadeberg's 123 roots, 109 have reflexes in other Niger-Congo families (and 14 have none). If we arrange these 109 roots in order of stability (see Table 32) and split the list into two halves, it turns out that 32 roots represented in Mande appear in the first half of the list, and only 6 roots are in the second half. Hence the fifth argument in favour of Mande belonging to Niger-Congo.

Argument 5: In the basic lexicon, 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.

If the Mande languages were not related to Niger-Congo, and the lexical similarities observed were merely accidental coincidences, one would expect those similarities to be distributed at random over Table 33.

7. Prospects for a lexical reconstruction of Proto-Niger-Congo

If the Mande family belongs to the Niger-Congo macro-family (and the evidence we provide above is supportive of this hypothesis), we must envisage the situation where a reflex of a Niger-Congo root was retained in Mande but lost (or almost lost) in Bantu. And indeed, we can point to numerous reliable Mande roots which have cognates in other Niger-Congo branches but not in Bantu, see Table 34.

The most natural interpretation of this situation is that a Bantu innovation has resulted in the loss of a Benue-Congo (and, consequently, Niger-Congo) root. This scenario becomes even more probable if reflexes of the root can be traced in other Niger-Congo families.

A nice example is provided by the Niger-Congo root TEN **po* ~ **pu*. It is broadly represented in Mande and other Niger-Congo families, see §9.2.2, but is entirely absent from Bantu, where it was ousted by an innovation **kómì* attested in all 16 Bantu zones. We assume that this innovation occurred already at the Bantoid level (for example, a reflex of this root has been found in the Wide Grassfields language Momo: *ɣum*), where, however, the Niger-Congo root **po* ~ **pu* is also represented, e.g. Yemne-Kimbi *o-fu*, Tivoid *puɛ* (Pozdniakov 2018: 68, 115). Outside the Bantoid branch, reflexes of **kómì* are lacking.

When we put together the 180 Proto-Mande and Proto-Bantu comparative series and the 27 series which contain no (or very few) Bantu reflexes, we obtain 207 roots which can be regarded as a basis for a Proto-Niger-Congo core lexicon. This may be the most important outcome of our study.

The full list of these roots is provided in Table 35. As in the other summary tables, the notions belonging to the Schadeberg List are given in bold.

Table 34

Presumable Niger-Congo roots lacking (or weakly represented) in Bantu

	Absent in Bantu	**Proto-Mande**
1	ten	*pu
2	thing	*pɛ̃
3	throw	*pidi
4	grass	*biŋ
5	yam	*ɓɔlɛ
6	love	*dia
7	cow	*dĩɠã
8	burn	*dõxeŋ
9	**tooth 2**	*sɔ̃
10	**eye** (Swadesh 100)	*ɣã
11	compound, yard	*kwaŋ
12	boat	*gɔɔ
13	cheek 2	*xɛŋtɛŋ ~ *xɛŋkɛŋ
14	hunger	*Xɔŋgɔ
15	**knee** (Swadesh 100)	*Xuduŋ
16	mat	*kpanga
17	baboon	*ŋ̀-gbɔŋ-ku
18	throat 1	*ɓɔrɔ
	Absent in Benue-Congo	**Proto-Mande**
1	fonio	*ŋ̀-peŋdiŋ
2	**one** (Swadesh 100)	*dʊ
3	pain	*dũɓĩ
4	chest 2	*ɗisi
5	elbow	*dɔ̃xɔ̃
6	strength	*sɛŋbɛ
7	cat 1	*yããlee
8	cat 2	*ŋ̀-jakũɓã
9	**louse** (Swadesh 100)	*ŋ̀-karaŋ-gba

Table 35

Distribution of the reflexes of potential Niger-Congo roots by families

#	Meaning	P.Bantu	P.Mande	BC	Adamawa	Atlantic	Dogon	Gur	Ijo	Kru	Kwa	Mel	Senufo	Ubangi	Gola	Limba	Sua	Bangime	SUM
1	**all**	***ncè**	***seŋ**	*absent*															*absent*
2	**ashes**	***bú**	***bugu**	+	+	+				+				+					**4**
3	axe	*jòndò	*jeŋde	*absent*				+											**1**
4	baboon	*absent*	*ŋ̀-gbɔŋ-ku	+		+		+	+		+		+	+	+			+	**8**
5	banana	*kòndè	*koŋdo	*absent*	+	+						+		+					**4**
6	**bark (of tree)**	***koba**	***koba**	+		+	+			+				+		+			**5**
7	bat	*démà, *dímà	*ɗɛ̃ɓṼ	*absent*		+		+											**2**
8	bear, give birth	*bèdık	*ɓari	*absent*															*absent*
9	become	*bá	*ɓã	*absent*															*absent*
10	before	*bèdè	*gbɛla	+															*absent*
11	**belly**	***bùmò**	***bũ**	+	+	+		+			+			+					**5**
12	bend	*pìnd	*kpiliŋ	+				+											**1**
13	**bird**	***jòni**	***ɣɔ̃ɗĩ**	+	+	+		+						+					**4**
14	**bite**	***dóm**	***doɓũ**	+	+	+		+	+		+			+		+			**7**
15	bitter	*kádì	*ɣɔ̃Lã	*absent*															*absent*
16	**black**	***pínd**	***piŋ**	+	+		+	+		+		+						+	**6**

Continuation of Table 35

#	Meaning	P.Bantu	P.Mande	BC	Adamawa	Atlantic	Dogon	Gur	Ijo	Kru	Kwa	Mel	Senufo	Ubangi	Gola	Limba	Sua	Bangime	SUM
17	blind	*pòkù	*põõku	*absent*															*absent*
18	**blood**	***gàdí, *jàdí**	***joli**	+		+				+									**2**
19	blow	*pèep	*pɛ̃ɛ̃	+	+		+	+	+	+		+		+					**7**
20	blow (with mouth)	*púd	*fuuDV	+	+	+		+			+	+	+						**6**
21	boat	*absent*	*gɔɔ	+						+					+				**2**
22	boil (to)	*bìd	*wuɗi	*absent*															*absent*
23	**bone**	***kʊdɪ** (regional)	***ɣɔlɛ**	+	+	+		+		+	+								**5**
24	bow (weapon)	*táà	*toŋ	+	+	+	+	+			+				+				**6**
25	brain	*bòngó	*bɔŋxɛŋ	*absent*	+		+				+			+		+			**5**
26	bridge	*dàdò	*dala	+															*absent*
27	bring up (child)	*dèd	*dãlã	*absent*		+													**1**
28	burn	*absent*	*ɗõxeŋ	+					+										**1**
29	**burn-hot**	***báb**	***waa (?)**	*absent*	+	+		+						+		+			**5**
30	bush-knife	*pángà	*ŋ̀-paŋ	+		+					+								**2**
31	bushland	*càká, *càngà	*sɔŋkɔ	*absent*															*absent*

Continuation of Table 35

#	Meaning	P.Bantu	P.Mande	BC	Adamawa	Atlantic	Dogon	Gur	Ijo	Kru	Kwa	Mel	Senufo	Ubangi	Gola	Limba	Sua	Bangime	SUM
32	call	*bíd	*biri	+															*absent*
33	carry on the back	*bèb, *bambat	*baŋbuŋ	*absent*		+	+	+				+							**4**
34	cat 1	*absent*	*yããlee	*absent*		+						+				+			**3**
35	cat 2	*absent*	*ŋ̀-jakũ̀bã	*absent*		+					+								**2**
36	cheek 1	*támà	*tãbã	+				+											**1**
37	cheek 2	*absent*	*xɛŋtɛŋ ~ *xɛŋkɛŋ	+															*absent*
38	chest 1	*kúbà	*kUgU	*absent*						+									**1**
39	chest 2	*absent*	*dîsi	*absent*		+				+				+				+	**4**
40	chicken	*cócó (regional)	*tɔxɛ	+		+		+				+			+	+	+	+	**7**
41	child; fruit	*bí-	*ɓɛɛ	+	+	+		+			+			+					**5**
42	civet-cat	*tùngò	*togo	*absent*		+													**1**
43	clean	*cèng	*sanVŋ	*absent*															*absent*
44	clear	*jédò	*xoleŋ	*absent*							+	+							**2**
45	**cold**	***dìdì**	***ɗɛ̃ɗɛ̃**	*absent*		+					+								**2**
46	compound, yard	*absent*	*kwaŋ	+															*absent*

Continuation of Table 35

#	Meaning	P.Bantu	P.Mande	BC	Adamawa	Atlantic	Dogon	Gur	Ijo	Kru	Kwa	Mel	Senufo	Ubangi	Gola	Limba	Sua	Bangime	SUM
47	cow	*absent*	*dĩgã	+	+	+	+	+			+		+					+	**7**
48	crab	*kádá	*kaa	+	+	+				+		+		+		+			**6**
49	crocodile	*bamba ‘monitor lizard, crocodile’	*baŋba	+															*absent*
50	curse	*dòg	*daŋga	*absent*		+	+	+				+	+			+			**6**
51	carve	*cèng	*sega ~ *segaŋ	+		+	+	+	+		+	+	+						**7**
52	cut	*tém	*tɛgɛ	*absent*	+	+		+			+	+				+			**6**
53	darkness	*pììpí	*pinpi	*absent*															*absent*
54	day	*jící, *jíncì	*ɣĩ	+				+		+									**2**
55	debt	*dàndó	*dɔŋdɔ	*absent*		+										+			**2**
56	deep	*dìk	*duŋ	+		+					+			+					**3**
57	deny	*káan	*kɔ̃	+								+							**1**
58	descend	*jìk	*jigĩ	*absent*			+	+		+									**3**
59	desire	*dìng, *díng	*dɛ̃gɛ̃	*absent*															*absent*
60	**die**	***kú**	***ɠu**	+	+	+		+		+	+	+	+	+					**8**
61	difficult	*kód	*ɣwɛtɛ	+	+				+										**2**

Continuation of Table 35

#	Meaning	P.Bantu	P.Mande	BC	Adamawa	Atlantic	Dogon	Gur	Ijo	Kru	Kwa	Mel	Senufo	Ubangi	Gola	Limba	Sua	Bangime	SUM
62	dig	*pùk, *pùd	***pɔ̃**	+	+	+					+								**3**
63	**dog**	***bóà**	***gbɛra**	+	+	+		+			+	+							**5**
64	draw (water)	*ték	*tɔ	+		+							+	+					**3**
65	**drink**	***mú ~ ɲó ~ ŋó**	***ɓɔ̃dĩ** ‘swallow’	+	+		+	+			+	+		+			+		**7**
66	drip	*tón, *tóni	*tʊŋdV	*absent*															*absent*
67	dry (to)	*jàd	*ja	+															*absent*
68	dust	*kòngó	*ɣwãɣwã	*absent*															*absent*
69	**ear**	***tóì**	***tɔlɛ**	+	+			+			+			+					**4**
70	**eat**	***dí**	***diga**	+	+	+		+		+	+	+	+	+	+				**9**
71	**egg**	***gí, *gìdí**	***ɣeli**	+		+		+		+	+								**4**
72	elbow	*absent*	*dɔ̃xɔ̃	*absent*	+	+		+						+					**4**
73	extinguish	*dím	*ɗibiŋ	+	+	+		+			+	+				+			**6**
74	**eye**	*absent*	***ɣã**	+	+	+		+		+			+						**5**
75	father	*cé	*ti	+	+	+		+			+								**4**
76	ficus sp.	*dòmbà	*ŋ̀-duba-leŋ	*absent*	+	+		+						+					**4**
77	fill	*pák	*paka	*absent*								+							**1**
78	finish	*màd	*baŋ	+	+	+	+	+		+	+	+							**7**

Continuation of Table 35

#	Meaning	P.Bantu	P.Mande	BC	Adamawa	Atlantic	Dogon	Gur	Ijo	Kru	Kwa	Mel	Senufo	Ubangi	Gola	Limba	Sua	Bangime	SUM
79	**fish**	***cúí**	***ŋ̀-jɔGɛ**	+		+													**1**
80	flour	*pùpù	*fuye	+	+	+	+		+	+	+	+		+					**8**
81	foam	*púd(ò)	*ŋ̀-fʊrʊŋ	+	+	+	+	+			+	+			+	+		+	**9**
82	fonio	*absent*	*ŋ̀-peŋdiŋ	*absent*		+		+		+	+	+							**5**
83	forehead	*có	*teŋge	+		+		+						+				+	**4**
84	forest	*tító	*tu	*absent*									+						**1**
85	four	*nài	*dããdĩ	+	+	+	+	+	+	+	+			+	+	+	+	+	**12**
86	**give**	***pá**	***fe**	+				+		+				+					**3**
87	**go**	***gì**	***gʊ ~ *gɛ**	+		+			+										**2**
88	goat	*bódì	*ɓoli	+	+	+	+	+		+	+	+						+	**8**
89	**good**	***jìjá**	***dɪ**	*absent*		+				+									**2**
90	grandmother	*mààmá	*ɓãɓã	+		+		+				+			+		+		**5**
91	grass	*absent*	*biŋ	+															*absent*
92	**ground**	***cí**	***sɛlɛ**	+	+			+	+		+								**4**
93	guard (to)	*dìnd	*dɛ̌dɛ̌	*absent*		+	+	+											**3**
94	guinea fowl	*kángà	*ŋ̀-kaŋka	+	+	+	+	+		+	+		+	+					**8**
95	**hair**	***cìngà**	***siɣi ~ *tiɣi**	*absent*															*absent*
96	**hand, arm**	***kónò**	***kɔɔ**	+		+				+				+					**3**

Continuation of Table 35

#	Meaning	P.Bantu	P.Mande	BC	Adamawa	Atlantic	Dogon	Gur	Ijo	Kru	Kwa	Mel	Senufo	Ubangi	Gola	Limba	Sua	Bangime	SUM
97	hang	*déd	*dɛŋ	*absent*	+	+					+								**3**
98	**heart**	***jòjò**	***sɔŋ(-dɔŋ)**	+		+						+	+						**3**
99	heel	*téndé	*tiŋdi-di	+	+	+						+							**3**
100	hiccup	*cék-	*siko	+	+	+			+	+	+			+		+			**7**
101	hip	*dàmà, *nàmà	*daŋba	+		+						+							**2**
102	hold	*kúmb-at	*kũ	+			+	+											**2**
103	honey, bee	*jíkì	*yaagɛ	*absent*		+	+												**2**
104	hump	*gòngò	*gʊŋgʊ	*absent*		+	+	+											**3**
105	hundred	*kámá	*kaɓɛ̃	*absent*	+	+	+					+		+		+	+		**7**
106	hunger	*absent*	*Xɔŋgɔ	+	+	+	+						+	+					**5**
107	jaw	*bángá	*baŋga	+	+				+			+		+					**4**
108	**kill**	***jip**	***jɛ**	*absent*	+							+			+				**3**
109	**knee**	*absent*	***Xuduŋ**	+															*absent*
110	knot	*kúndò	*Xudu	*absent*															*absent*
111	learn	*jíg	*dege	*absent*															*absent*
112	leopard	*gòì	*ɠʊlɩ	+	+			+		+	+								**4**
113	**lie (down)**	***dáad**	***ɗa**	+	+	+					+			+					**4**
114	**liver**	***bàdì, bíndɩ**	***ɓʊdɩ**	*absent*								+							**1**

Continuation of Table 35

#	Meaning	P.Bantu	P.Mande	BC	Adamawa	Atlantic	Dogon	Gur	Ijo	Kru	Kwa	Mel	Senufo	Ubangi	Gola	Limba	Sua	Bangime	SUM
115	**long**	***dàì**	***dãã**	+	+			+						+					**3**
116	**louse**	*absent*	***ŋ̀-karaŋ-gba**	*absent*		+		+				+							**3**
117	love	*absent*	*dia	+		+			+			+							**3**
118	lung	*pʊʊpʊ	*ŋ̀-fʊgʊfʊgʊ	+				+							+				**2**
119	mat	*absent*	*kpanga	+															*absent*
120	middle	*tí	*tɛ	+		+		+				+			+				**4**
121	millipede	*gongo	*gɔ̃gɔ̃	*absent*															*absent*
122	miss (to)	*bód	*ɓuo	+	+	+		+								+			**4**
123	**moon**	***jédì**	***ŋ̀-ɣadⱯŋ**	*absent*					+		+								**2**
124	**mountain-1, hill**	***kíngá**	***kɔŋkɛ**	+	+	+	+										+		**4**
125	**mountain-2**	***tòndà**	*tɔŋ	+		+	+	+	+	+	+	+			+				**8**
126	**mouth**	***nòà, *ɲòà**	***ɗɔɣa**	+	+	+	+	+		+		+	+	+				+	**9**
127	**neck**	***kíngó**	***kɔŋ**	+					+		+								**2**
128	**nose**	***jódò**	***ŋ̀-ɗuŋ**	+		+					+								**2**
129	occiput	*kòtì	*kɔrɪ	+		+	+		+		+					+			**5**
130	oil palm	*téndé	*ŋ̀-teŋ	+		+		+			+								**3**
131	old	*kódò	*kɔdɔ	*absent*		+						+							**2**

Continuation of Table 35

#	Meaning	P.Bantu	P.Mande	BC	Adamawa	Atlantic	Dogon	Gur	Ijo	Kru	Kwa	Mel	Senufo	Ubangi	Gola	Limba	Sua	Bangime	SUM
132	**one**	*absent*	***dʊ**	*absent*	+	+		+		+		+							**5**
133	pain	*absent*	*dũɓĩ	*absent*		+	+	+											**3**
134	penis	*bódó	*bɔtu	+															*absent*
135	pierce	*còk	*sɔɣɔ	+			+	+			+	+		+					**5**
136	pound	*tó	*tugu	+	+	+		+				+		+	+				**6**
137	pull	*nàn	*ɗalaŋ	*absent*	+							+							**2**
138	raffia palm	*bádè	*ŋ̀-baŋ	+	+	+		+			+	+		+					**6**
139	ram, he-goat	*koto, *kòdò	*kɔdɔŋ	+		+										+			**2**
140	refuse	*béng	*baŋ	*absent*		+					+			+		+	+		**5**
141	remain	*tó-ʊd	*to	+						+									**1**
142	**road**	***gìdà, *jìdà, *kɪdɪ**	***ɠila**	*absent*		+													**1**
143	rock	*gòdò	*Xuɗu	+	+			+						+					**3**
144	roll	*bídʊng	*bĩlĩ	*absent*	+		+	+										+	**4**
145	**root**	***dì, *dìdì**	***ŋ̀-ɗuli**	+	+	+					+		+	+				+	**6**
146	rot	*bòd	*bɔrɔ	+	+	+	+	+	+		+	+		+					**8**
147	rub	*cìng	*suusaa	+				+	+		+			+		+			**5**
148	**sand**	***cèngà**	***ɣɛ̃gɛ̃**	+	+	+		+						+					**4**

Continuation of Table 35

#	Meaning	P.Bantu	P.Mande	BC	Adamawa	Atlantic	Dogon	Gur	Ijo	Kru	Kwa	Mel	Senufo	Ubangi	Gola	Limba	Sua	Bangime	SUM
149	**say**	***tì**	***tī**	+				+		+	+								**3**
150	scabies, itch	*pèdè	*kpeleŋ	*absent*						+	+								**2**
151	scatter	*cánc, *cán-	*sari	*absent*	+		+	+				+							**4**
152	scrape	*kòd	*kɔŋdɔ	*absent*					+	+		+							**3**
153	scratch	*kàd, *pád	*kuga	+	+			+			+				+				**4**
154	**see**	***jén** (regional)	***jɪ ~ *jẽ**	+		+	+	+					+						**4**
155	send	*tóm	*tɔŋ	+	+			+			+	+	+	+	+				**7**
156	sew	*còn	*sɔrɔŋ	+															*absent*
157	shadow	*dídí	*dĩ̀ĩdĩ̀ŋ	*absent*							+								**1**
158	shin	*píndí	*kpalɛŋ	+		+		+				+							**3**
159	shine	*jéd	*yeeleŋ	*absent*		+						+							**2**
160	shoulder, wing	*bègà	*gbã	+		+		+	+	+	+	+							**6**
161	shoulder blade	*pègà, *panga	*kpaŋkiŋ	+				+											**1**
162	side	*bádì	*bɛlɛ	*absent*	+	+	+												**3**
163	**small**	***níǐní**	***dɛ̃**	+		+	+			+		+		+					**5**
164	**smoke**	***jíkì**	***sisi ~ *sigi**	*absent*	+							+							**2**

Continuation of Table 35

#	Meaning	P.Bantu	P.Mande	BC	Adamawa	Atlantic	Dogon	Gur	Ijo	Kru	Kwa	Mel	Senufo	Ubangi	Gola	Limba	Sua	Bangime	SUM
165	snail	*kódá, *kódó	*kɔtɛ ~ *kɔtɔ	+							+								1
166	snore	*gòn	*ɣɔrɔŋdɔ	*absent*	+		+		+		+					+			5
167	stab, spear	*túm 'stab', *túm-ò 'spear'	*taŋba 'spear'	*absent*		+							+			+			3
168	spider	*tanda	*ŋ̀-taleŋ	+			+											+	2
169	spit	*tú	*tu ~ tufa	+	+	+	+	+			+	+			+	+		+	9
170	squeeze	*kám	*XaɓṼ	+	+	+	+	+											4
171	squirrel	*cíndí	*ŋ̀-kɛrɛŋ	+														+	1
172	stick	*tóngà	*tuŋgara	+															*absent*
173	stomach	*pù	*pudu	+	+	+	+	+	+		+	+	+			+	+		10
174	stranger	*gèní	*ɣðyɛ̃	*absent*		+													1
175	strength	*absent*	*sɛŋbɛ	*absent*		+	+	+				+				+	+		6
176	**sun**	***jání** (regional)	***yããlɛ̃**	+		+	+							+					3
177	swallow	*mìd, *mìn	*ɓĩ 'drink'	+		+	+		+		+	+			+		+	+	8
178	swell	*bímb	*biŋbi	*absent*															*absent*
179	**tail**	***kídà**	***ɣʊlɪ, *ɣʊla**	+															*absent*
180	take	*tá-ʊd	*ta	*absent*															*absent*

Continuation of Table 35

#	Meaning	P.Bantu	P.Mande	BC	Adamawa	Atlantic	Dogon	Gur	Ijo	Kru	Kwa	Mel	Senufo	Ubangi	Gola	Limba	Sua	Bangime	SUM
181	ten	*absent*	*pu	+		+		+		+		+		+					**5**
182	tendon	*tíngà	*tĩ	*absent*															*absent*
183	thigh	*bèdò	*gbada	*absent*															*absent*
184	thing	*absent*	*pɛ̃	+	+	+													**2**
185	throat-1	*absent*	*ɓɔrɔ	+						+	+	+							**3**
186	throat-2	*kòdò	*kɔŋ	+	+	+													**2**
187	throw	*absent*	*pidi	+	+				+					+					**3**
188	**tongue**	***dímì, *dímì**	***dɛ̃dɛ̃**	+	+	+	+	+	+		+	+		+	+	+	+		**11**
189	**tooth**	***jínò**	***yĩ**	+		+		+			+			+					**4**
190	**tooth 2**	***còngà**	*sɔ̃	+	+	+						+		+					**4**
191	turtle	*kúdò	*kuda	+	+	+		+		+		+		+					**6**
192	**two**	***bà-dí**	***pe-ɗa**	*absent*				+											**1**
193	urine	*cò, *cùb	*sũɓũdɛ̃	+		+	+	+	+		+			+	+				**7**
194	**walk**	***támb**	***taŋbi**	*absent*															*absent*
195	war	*kóndò	*kɔwɔ	+			+												**1**
196	**water**	***jíjì**	***ji**	+		+	+	+		+	+			+		+			**7**
197	weep	*dìd	*di	**BC**	+	+													**2**

End of Table 35

#	Meaning	P.Bantu	P.Mande	BC	Adamawa	Atlantic	Dogon	Gur	Ijo	Kru	Kwa	Mel	Senufo	Ubangi	Gola	Limba	Sua	Bangime	SUM
198	**white**	***púpú** (regional)	***puru**	+	+	+	+	+	+	+	+	+			+	+			**10**
199	whiten	*pe	*kpɛ	*absent*				+			+								**2**
200	**who?**	***ndai, *nai**	***dɪ ~ *ndɪ**	*absent*															*absent*
201	wilderness	*gòndà	*gola	+															*absent*
202	wind; cold	*pépò, *pèèpè	*pɛŋpɛŋ	+						+							+		**2**
203	wood	*kónì	*kɔ̃	+	+	+													**2**
204	yam	*absent*	*ɓɔlɛ	+	+	+					+						+		**4**
205	yam	*kódò	*kuu	+	+		+	+			+	+						+	**6**
206	year	*jákà	*yĩ	+									+						**1**
207	younger sibling	*dòngó	*ŋ́-dɔgɔ	*absent*		+	+												**2**
Total					**77**	**114**	**50**	**87**	**28**	**42**	**69**	**63**	**20**	**54**	**20**	**28**	**13**	**17**	

In Table 35, besides Proto-Mande, Proto-Bantu and Benue-Congo, we also show the distribution of reflexes of each root in the Niger-Congo families outside Mande and Benue-Congo. The number of reflexes (out of the total number of 207 roots) in each of these families and isolated languages is as follows: Adamawa 77, Atlantic 114, Dogon 50, Gur 87, Ijo 28, Kru 42, Kwa 69, Mel 63, Senufo 20, Ubangi 54, Gola 20, Limba 28, Sua 13. In Bangime, whose affiliation is uncertain, we find 17 potential reflexes.

Before we proceed to an analysis of the summarizing Table 35, we would like to insist on the fact that the number of reflexes in each family is by no means indicative of its genetic distance from Mande and/or Bantu. It is rather indicative of the number of languages in the family, the availability of lexical reconstructions for the family's proto-language, and finally, the competence of the authors of this book. Thus the considerable number of reflexes shown by Adamawa (77) is determined by the large number of languages in this highly divergent family. Similarly, the impressive figure for Gur (87) is explained primarily by the availability of numerous reliable reconstructions by Manessy (1969; 1975; 1979). And if the Atlantic family has the highest number of potential reflexes (114), this is explained by the existence of an Atlantic etymological database (Pozdniakov & Segerer Ms.), the result of long-term work.

Let us make some generalizations concerning the data represented in Table 35.

If we consider the distribution of the reflexes of the common Proto-Mande and Proto-Bantu roots, we find that out of the 51 roots of the Schadeberg List, 14 roots are not attested in Benue-Congo outside Bantu (not even in de Wolf's (1971) Proto-Benue-Congo lexical reconstructions). Out of the total number of 180 Mande-Bantu roots, 65 are not attested in Benue-Congo outside Bantu (and for this reason, their reliability index has been lowered). And in our full list of the potential Niger-Congo lexicon (207 roots), there are 74 roots which are not attested in Benue-Congo outside Bantu.

Let us also consider the distribution of the reflexes in the Niger-Congo families outside Mande and Benue-Congo (14 families, including

the isolated languages and the unclassified Bangime). Out of 207 roots, 34 are not represented there at all; 27 have reflexes in only one family, and 58 roots are represented in two families. In Table 36, we mention the roots which are represented in the majority of Niger-Congo families (outside Mande and Benue-Congo; the notions belonging to the Schadeberg List are in bold).

Table 36

Potential Niger-Congo roots represented in 6 or more families outside Mande and Benue-Congo

Number of NC families	Meanings	Number of roots
12	FOUR	1
11	**TONGUE**	1
10	STOMACH, **WHITE**	2
9	**EAT**, FOAM, **MOUTH**, SPIT	4
8	BABOON, **DIE**, FLOUR, GOAT, GUINEA FOWL, **MOUNTAIN-2**, ROT, SWALLOW	8
7	**BITE**, BLOW, CHICKEN, COW, CURVE, **DRINK**, FINISH, HICCUP, HUNDRED, SEND, URINE, **WATER**	12
6	**BLACK**, BLOW (WITH MOUTH), BOW, CRAB, CURSE, CUT, EXTINGUISH, POUND, RAFFIA PALM, **ROOT**, SHOULDER/WING, STRENGTH, TURTLE, YAM	14

The 40 roots mentioned in Table 35 can be regarded as the most stable in Niger-Congo. Of these, 10 belong to the Schadeberg List (they are represented in bold).

If we take only the most reliable Mande and Bantu comparative series (those with a reliability index of 6 or 5), they reach a total number of 103. We hope that these roots will be considered and discussed by specialists. Even if some of the roots may ultimately be discarded, the main bulk of our comparative lexicon will remain and serve as the starting point for collective study on the reconstruction of the Niger-Congo lexicon.

8. Conclusions

By way of conclusion, let us resume our five arguments which, taken together, irrefutably prove that a genetic relationship exists between Bantu and Mande and, therefore, that the Mande family belongs to the Niger-Congo macro-family.

Argument 1. In the basic lexicon, the number of actually observed phonetic similarities far exceeds the number expected on the basis of random coincidence alone.

Argument 2. In the basic lexicon, Proto-Bantu and Proto-Mande are considerably closer to each other than contemporary Bantu and Mande languages are.

Argument 3. Phonetic correspondences between Proto-Bantu and Proto-Mande are not only regular, but also proportional, which excludes the possibility that they are merely fortuitous.

Argument 4. In the basic lexicon, 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.

Argument 5. In the basic lexicon, the average cognacy rate of contemporary Mande languages with Proto-Bantu is higher than the rate of other families whose membership in the Niger-Congo macro-family is uncontested.

The initial aim of our study was to verify the hypothesis that there exists a relationship between the Mande family and Bantu (and, consequently, that Mande belongs to the Niger-Congo macro-family). However, the inherent logic of this study forced us to go beyond this goal. It has resulted in a by-product: a pilot list of 207 common Niger-Congo roots arranged according to their representation in the families of this macro-family. This list can serve as a basis for a collaborative effort among specialists of various Niger-Congo families to work towards a Proto-Niger-Congo reconstruction.

9. Materials for a Niger-Congo comparative etymological dictionary

In this section, cognate sets are presented, each corresponding to a hypothetical Niger-Congo root. Firstly, we provide presumed Mande and Bantu cognates belonging to the Schadeberg List (§9.1), followed by potential cognates lying outside this list (§9.2). In these sections, the roots are grouped into five blocks according to the initial consonant in Proto-Mande (and, according to our tentative pre-reconstruction in Proto-Niger-Congo): labial, dental, palatal, velar, labiovelar. Within each block, they are given in alphabetical order of the English glosses. In §9.3, cognate sets are given which have no (or very few) reflexes in Bantu languages, and in §9.4, those with no reflexes in the Benue-Congo family.

All the presumable reflexes of a single Proto-Niger-Congo root (i.e. a cognate set) form an entry. The structure of an entry is the same in all subsections. Within an entry, names of language families and groups are given in small capitals, while names of languages are in bold.

After the language name, a reference to a source is given in brackets, if this is not a major source. If no source is indicated, it equals a reference to the default one cited in the Appendix. For example, in the entry MOUNTAIN, the paragraph for the Soninke-Bozo group of Mande is presented as follows:

1.7 Soninke-Bozo **Soninke** túngúrò *termite hill*; **Tigemaxo** tonboro *rise in the ground*; **Sorogama** (Creissels 1992) tõnboro *termite hill*

This means that the Soninke form has been drawn from the major source for Soninke, namely (Creissels 2016), and the Tigemaxo form comes from the major source for Bozo Tigemaxo, namely (Heath 2024a), while the Bozo Sorogama form does not come from the major source for this variety (Daget et al. 1953) but from a secondary source (Creissels 1992).

Sometimes, multiple morphological forms of a lexeme are given, separated by a slash. Most often these are the singular and plural forms

of a noun, e.g.: BELLY **Balant** f-mɔ̌m / ŋ-mɔ̌m. For verbs they may be, for example, perfective and imperfective variants of a stem. Free or dialectal variants of a lexeme are separated with a tilde or a comma, e.g.: **Limba** buy ~ bu *fire*; **Jenaama Jenne** pííⁿ, pìiⁿ *black*.

The semantics is provided after the word, in italics. However, if the meaning of a word in an individual language coincides with the generic meaning (i.e. semantic code) of an entry, it is not indicated. For example, the paragraph for the Southwestern group of Mande in the entry FISH is presented as follows:

1.1 Southwestern **Mende** ɲé; **Loko** ɲeɛ; **Bandi** ɲè; **Zialo** ɲè; **Kpelle S.** ɲɛ̨́ɛ, ɲɛ̄ɛ; **Kpelle N.** ɲéé *catfish*

This presentation means that the meaning of the relevant items in Mende, Loko, Bandi, Zialo and Southern Kpelle is ‘fish’ (the same as the generic meaning of the entry).

Every entry begins with a generic meaning (aka semantic code) preceded by @ (for the sake of navigation in the electronic version of the document). An entry includes seven sections. Section 4 (Mande data) is present in every entry; other sections may be lacking.

Section 1: The generic meaning (aka semantic code) of the root; Bantu and Mande reconstructions; Reliability index.

The generic meaning is a simplified representation of the semantics of the presumed Proto-Niger-Congo form. The Proto-Bantu reconstructions are borrowed from BLR (Bastin et al. 2002) (and they may therefore diverge sometimes from Schadeberg’s reconstructions mentioned in §1.2.1 and §5; the Mande reconstructions are from Vydrin (2024a); for some reservations, see §1.2.2). Our method of calculating the Reliability index is explained in §1.1.

Section 2: Proto-Bantu reconstructions (the root and, if relevant, derived forms) and their distribution by regions (NE, NW, SE, SW, Ce) and by zones. The zones are encoded by capital letters, following the Bantuist tradition. In §1.1.6 (dealing with the Schadeberg List), we also present Schadeberg’s (2003) reconstruction and his data on the

distribution of the reflexes by zones, where lower case letters indicate zones with unexplained phonological or morphological deviations.

Section 3: Other Benue-Congo. Here, potential cognates from Benue-Congo languages (and proto-languages) outside Bantu are provided. The Eastern Benue-Congo and Western Benue-Congo branches (henceforth: Benue-Congo E. and Benue-Congo W.) and isolated Benue-Congo branches are represented in separate paragraphs.

Section 4: Mande. Unlike in Bantu, where we provide reconstructions only, in Mande we display all the reflexes found in contemporary languages. Thus the information on the reflexes of the proto-root in Mande is practically exhaustive. Our main source for the Mande languages is the Comparative lexical database of Mande languages (Vydrin 2024a). We have also broadly used RefLex (Segerer & Flavier 2024), which greatly facilitated our work at the initial stage of the Mande-Bantu comparison and allowed us to fill some lacunae in the Mande data.

Each language group starts with a new paragraph and is provided with a number: 1.1 Southwestern, 1.2 Susu-Jalonke, 1.3 Jogo-Jeri, 1.4 Vai-Kono, 1.5 Mokole, 1.6 Manding, 1.7 Soninke-Bozo, 1.8 Bobo, 1.9 Samogho; 2.1 Eastern, 2.2 Southern (see §1.1.4.2.2 for a Mande genetic tree where these numbers are also indicated).

Section 5: Other Niger-Congo (i.e. other than Benue-Congo and Mande). Language data in this zone are collected mainly via RefLex (Segerer & Flavier 2024). Besides, comparative publications such as (Williamson 1992; Stewart 2002; Pozdniakov 2022) and some others (mentioned in the Appendix or in the dictionary) have also been explored.

Each language family is presented in its own paragraph. There are two exceptions to this rule (in both cases, owing to the abundance of data available, in comparison with the other families): the Atlantic family, where two branches, Northern and Bak, are given in separate paragraphs, and the Mel family, where the Southern and the Northern branches have been separated.

The Niger-Congo families are given in alphabetical order: Adamawa, Atlantic Bak, Atlantic N., Dogon, Gur, Ijo, Kru, Kwa, Mel N., Mel S., Senufo, Ubangi. That is, we are not going to hypothesize on the genetic distance between the various Niger-Congo families (even if there are cases where relative proximity is more or less evident); this is a question that we do not address in this book.

Stewart's Proto-Potou-Tano and Protou-Akanic reconstructions are given within the Kwa paragraph. His Proto-Potou-Akanic-Bantu reconstructions are given in Comments (Section 7).

Genetically isolated languages within Niger-Congo are given after the families. In the present work, data from the following Niger-Congo isolated languages are considered: Gola, Limba, Sua, see (Pozdniakov & Segerer 2024) for argumentation concerning their exclusion from the Atlantic family.

Section 6: Isolated languages whose membership in Niger-Congo is not proven. In our study, this section is represented by Bangime (Hantgan 2012).

Section 7: Comments of various kinds.

9.1. The Schadeberg List

9.1.1. Initial labial consonants

9.1.1.1. Bantu *p- : Mande *p-

@Black: Bantu *pínd, *pi, *pìip – **Mande** *piŋ. Reliability index: 5/6 (limited distribution in Mande).

PROTO-BANTU *pínd, Regions 3: NW SW Ce; Zones 5: ABCDH; *pi *black; darkness, blackness*, Regions 5: NW SW Ce NE SE; Zones 10: BCFJKLMNPS; derivation: *pìip MNS, Schadeberg *i-piipí BFJKLMnPS

OTHER BENUE-CONGO

Benue-Congo E.: Bantoid Grassfields **Proto-Grassfields** *fǴn, **Proto-Ring** *pínɔ̀; Jukunoid **Proto-Jukun-Mb** *pèT; Kainji **Bassa** kpè, kpɛ̀, kpìì; Platoid **Hasha** ɸīɸīnīk

MANDE *piŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
			+	+	+	+	+			

1.4 Vai-Kono **Vai** fíŋ; **Kono SL** fin

1.5 Mokole **Kakabe** fin; **Mogofin** fíŋè; **Lele** fin; **Koranko** fi̱

1.6 Manding **Proto-Manding** *pìn; **Mandinka** fiŋ; **Maninka Nyo-kolo** fìŋ; **Xasonka** fìn; **Bambara** fi̱; **Jula Kong** fi̱; **Koya** fìmán; **Marka-Dafing** pí̱

1.7 Soninke-Bozo **Proto-Soninke-Bozo** *pìn; **Soninke** hìná *blacken*; **Tieyaxo** pi̱; **Tigemaxo** fíìⁿ; **Tiema-Cewe** pi̱i̱, **Jenaama Cliffs** pīīⁿ; **Jenaama Jenne** pííⁿ, pììⁿ

1.8 Bobo **Bobo S.** fìndànè *be dark, be cloudy*

OTHER NIGER-CONGO potential parallels:

Adamawa **Kulaal** píp, **Mono** pìì / pìì-rɛ́

Dogon **Jamsay** pínè *kohl*; **Najamba** pínà *kohl*

Gur **Kabiye** kpiḍi̱ / kpiḍi̱ii *black (intens.)*

Ijo **Nembe** fíòò

Kru **Godie** kpè, **Bakwe** kpórō, **Bassa** kpìì, **Grebo** kpɛ̱̀ɛ̱̀

Kwa **Ega** kpīkpī

Mel S. **Kisi** pììmìá; S**herbro** pit; **Kim** pìtá

Isolated Bangime pínè *kohl*

Comments: Greenberg suggested the cognacy of Jula *fi* (our data: Jula-Kong *fi̱*) and Soninke *bibi* (evidently, *bìnnê* 'black; opaque, sombre' is meant; in the available Soninke dictionaries, there is no form for 'black' similar to *bibi*). Soninke *binné* can be compared with such forms for 'black' as Proto-Upper-Cross (< Benue-Congo) **bínà*, Proto-Central Gur **bid, *bin*, Boore (< Gur) *bíīná*, Sua *bin* and many others (some of these forms were mentioned by Greenberg). In Mande, a couple of probable cognates of Soninke *binné* are attested: Bozo-Tieyaxo *binda* 'grow cloudy' and Jôwulu *mīnī* 'black'.

@White Bantu *púpú – **Mande** *puru. Reliability index: 5/6 (limited distribution in Bantu).

PROTO-BANTU *púpú, Region 1: NW; Zones 2: BC

OTHER BENUE-CONGO

BENUE-CONGO E.: Cross Upper **Proto-Upper-Cross** *podi; Kainji **Bassa** púɖú; **Bassa** púú

BENUE-CONGO W.: Defoid **Yoruba** fṵ̄fṵ̄; W. Edoid **Proto-Edo** *pọ̀a

MANDE *púru

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+			+				+	+	+	+

1.1 Southwestern **Proto-Southwestern** *puru; **Mende** (Koelle 1854) puru-mɔ̀ *white person*; **Loko** (Vydrin's field data) húlu-ẉɔ; **Bandi** (Koelle 1854) puuruu-moi̯ *white person*

1.4 Vai-Kono **Vai** zèè-púù *albino* (?)

1.8 Bobo **Bobo** furu

1.9 Samogho **Jowulu** fɔ́; **Dzuun** fyé; **Kpan** ɸẅɛɛy; **Duun** fiɔ-ma

2.1 Eastern **San S.** fu; **San Matya** fu; **San Mayaa** fun; **Bisa Lebir** fú; **Bokobaru** pura *white; pure,* púu *whiten, light up*; **Boko** pu *light up,* pú-a *white, full*; **Kyanga** fu; **Shanga** húú

2.2 Southern **Proto-Southern** *púlú; **Dan Gwɛɛtaa** pűű; **Goo** pűű; **Tura** pűű; **Mano** púlú; **Guro** fúú *clear; white*; **Yaure** fű-vű; **Mwan** pú; **Wan** pú; **Gban** fő *snow white*; **Beng** púú; **Ngen** púú

OTHER NIGER-CONGO potential parallels:

Adamawa **Kare** pùí

Atlantic N. Nyun-Buy **Kasanga** pund; **Kobiana** pund; Tenda-Jaad-Biafada **Bedik** púɗ; Fula-Sereer **Fula** furroo; **Sereer** (Greffier-Ezzano 1960) fur *white (intens.)*; Nalu-Baga Fore-Pukur **Baga Fore** pul; **Pukur** ú-fúr-lɛ̀ *clear; white*

Dogon **Jamsay** púrúgú *dirty white*; **Mombo** púrúdú *dirty white*

Gur **Proto-Central** *po, *pon; **Proto-Oti-Volta** *pe; **Boore** pùnɛ̰̀; **Kabiye** póyí *white (intens.)*

Ijo **Nembe** pɔ̀ɔ̀pɔ́

KRU **Bakwe** pólɔ̄; **Godie** pɔ̄ɔ̀

KWA **Proto-Ghana-Togo-Mountain** *pú; **Attié** fú ~ fʷɔ̀ ~ fʷœ́; **Chumburung** fùfùrɪ̄

MEL S. **Sherbro** pu *white (intens.)*

ISOLATED NC **Gola** fua; **Limba** fufe ~ fufu *pale, white*

Comments: Greenberg compares this Mande root with Tiv (< Benue-Congo) pupu, but does not mention the corresponding Bantu forms which are attested (although with limited distribution) in BLR3.

9.1.1.2. Bantu *b- : Mande *b-

@Ashes: Bantu *bú **– Mande** *bugu. Reliability index: 6/6.

PROTO-BANTU *bú, Regions 5: NW SW Ce NE SE; zones 13: ACDEFGJKLMPRS *soil, ashes, dust*

OTHER BENUE-CONGO PROTO-BENUE-CONGO *bubu *dust*

BENUE-CONGO E.: BANTOID EKOID **Abanyom** è-búbú *dust*; BANTOID GRASSFIELDS **Proto-Grassfields** *bÚˋ, **Limbum** bvɪ̄; BANTOID GRASSFIELDS KOM **Kom** ābvʊ̀ˋ; BANTOID GRASSFIELDS RING **Proto-Ring** *búdè *dust*; CROSS UPPER **Proto-Upper-Cross** *bó *dust, sand*; JUKUNOID **Proto-Jukun** búŋ *sand*

BENUE-CONGO W.: EDOID **Proto-Edo** *ɓu *sand*

MANDE *bugu

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Sonin-ke-Bozo	Bobo	Samo-gho	Eastern	Southern
		+	+	+	+			+		+

1.3 JOGO-JERI **Jogo** bòɣò; **Jeri** bùgu; **Jalkunan** bòʔò

1.4 VAI-KONO **Vai** ɓù'á; **Kono SL** bùa, buwa

1.5 MOKOLE **Kakabe** bùgutá; **Mogofin** bùgùtá; **Lele** bùura, bùuya *dust*; **Koranko** bùura

1.6 MANDING **Mandinka** bùutu, bùuti; **Maninka Nyokolo** búɣùtì; **Xasonka** bùguti *dust*; **Maninka Kita** bùkùtí; **Maninka-Mori** bùudi, bùuri *dust, powder*; **Bambara** bùgùrí *dust*; **Jula Kong** bùgùrìbúgúrí *dust*; **Koro** búgúlī; **Koya** bɣùlí

1.9 Samogho **Seenku N.** bűkàn; **Seenku S.** bű-kə̰̀

2.2 Southern **Proto-SM** *bṵ̀ì *dust*; **Dan Gwɛɛtaa** bɔ̀-bì *dust*; **Goo** bùò *dust*; **Tura** bʊ̀ì *dust*; **Mano** bṵ̀ *powder, flour*; **Guro** vṵ̀ṵ̀ *dust, powder*; **Mwan** būē *dust*; **Gban** bübú, büú *dust*; **Wan** ɓú *dust; powder; flour*; **Beng** bùbù *dust*

OTHER NIGER-CONGO potential parallels:

Adamawa **Yi Kitulɛ** bùkén; **Tiba (Gə̀)** ɓúūŋ; **Dii** vùù; **Kyãk** vùk

Atlantic N. Tenda-Jaad-Biafada **Basari** ɛ-ɓɔ̀kʷə̀r ɓɔ̀kʷ *dust*; **Pen** ɛ-ɓukʌrɓok *dust*

Kru **Godie** ɓàɓùú *dust*

Ubangi **Proto-Gbaya** *bùk, *bòk

Comments: A “Homonymy & Polysemy” (Segerer 2022) search shows that the semantic variability ‘ashes’ ~ ‘dust’ observed in the reflexes of this root is a widespread synchronic polysemy attested in many languages belonging to different families.

@Belly: Bantu *bùmò *abdomen; pregnancy* – **Mande** *bũ. Reliability index: 6/6.

PROTO-BANTU *bùmò, Regions 3: NW SW Ce; Zones 7: ABHKLMR *abdomen; pregnancy*; *bìmò KR *abdomen*

OTHER BENUE-CONGO Proto-Benue-Congo *bumu, BENUE-CONGO E.: Bantoid S.: **Proto-Grassfields** *bỦm

BENUE-CONGO W.: Idomoid **Eloyi** ùbù / ìbù

MANDE *bũ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
			+	+					+	+

1.4 Vai-Kono **Vai** ɓú *abdomen, stomach*; **Kono SL** bú

1.5 Mokole **Kakabe** búú; **Mogofin** búú; **Lele** bú; **Koranko** búu

2.1 Eastern **San S.** bundara *stomach*; **Bisa Lebir** búrá, nɔ́bʊ́rá *stomach*

2.2 Southern **Goo** bɔ̀ŋ̀ *stomach*; **Guro** bə̰̄ *stomach*; **Yaure** pə̰̄ *stomach*; **Mwan** vī *stomach*; **Ngen** vḭ̄ *stomach*

OTHER NIGER-CONGO:
Adamawa **Day Bouna** búr; **Pere** búūrɛ̀ *stomach*
Atlantic Bak Balant **Balant** f-mɔ̌m / ŋ-mɔ̌m
Atlantic N. Wolof **Wolof** but-it *gut*; Nyun-Buy **Kobiana** a-bbu; **Kasanga** a-bu / ga-bu
Gur **Boore** ɓòó
Kwa **Attié** bɔ̀ *stomach*; **Ewe** βùdɔ̀ *stomach*; **Logba** ùvú
Ubangi **Baka** mbù *stomach*; **Mundu** bū ~ būbū

Comments:
1) The Eastern Mande forms (San, Bisa) may belong to another cognate set; cf. the Adamawa forms.
2) Greenberg mentions **Bute** (< Benue-Congo) *bur* and compares it, in particular, with **Bambara** (< Mande) *furu* and **Susu** (< Mande) *furi*; we consider the latter forms as reflexes of the root for STOMACH, see Chapter 3.

9.1.1.3. Bantu *p- : Mande *f-

@Give Bantu *pá, *páan – **Mande** *fe. Reliability index: 5/6 (in Mande both the distribution and the phonetic forms are questionable).

PROTO-BANTU *pá, Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGHJKLMNPRS, derivation: *páan, Regions 4: SW Ce NE SE; Zones 5: HJKLS

OTHER BENUE-CONGO
BENUE-CONGO E.: Bantoid **Proto-Grassfields** *f'á, **Limbum** fá

MANDE *fe

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+						+			

1.1 Southwestern **Mende** fè; **Loko** fe; **Bandi** fè; **Zialo** fè(g); **Looma** fé, fɛ́(g); **Kpelle S.** fé, **Kpelle N.** hʷé
1.2 Susu-Jalonke **Susu** fí; **Jalonke** fíí
1.8 Bobo **Bobo** pērē (?)

OTHER NIGER-CONGO potential parallels:
Adamawa **Loo** fa̰, **Burak** fɔ̰(lɛ̰), **Dii** pó
Gur **Proto-Central** *pa, *pan; **Proto-Oti-Volta** *pa; **Miyove** pí-pà; **Pana** pá, **Sissala** pá
Kru **Bakwe** pá
Kwa **Tuwuli** kpà, **Ega** pwá
Ubangi **Mba-Dongo-Ko** pá-è

Comments:
1) This Mande – Bantu (and Mande – other Niger-Congo) cognacy was not mentioned by Greenberg.
2) The cognacy of the Bobo form is questionable.

9.1.1.4. Bantu *b- : Mande *ɓ-

@Liver Bantu *bàdì, *bíndɪ *liver; heart* – **Mande** *ɓʊdɪ. Reliability index: 3/6 (limited distribution in Bantu, not represented in Benue-Congo outside Bantu).

PROTO-BANTU *bàdì, Regions 2: NW SW; Zones 4: ABCK *liver; heart*; *bíndɪ, Regions 2: Ce SE; Zones 2: NS

MANDE *ɓʊdɪ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
						+		+		+

1.7 Soninke-Bozo **Soninke** búttè *liver; emotion, anger; faithfulness, courage*
1.9 Samogho **Seenku N.** bɔ̀rɔ̀n / bɔ̀nè; **Seenku S.** brɔ̰; **Kpan** bu̱i; **Dzuun** vúnún; **Duun Kai** bu̱u̱; **Duun Bananso** bu̱
2.2 Southern **Proto-Southern** *ɓúlí; **Dan Gwɛɛtaa** ɓlűű; **Goo** ɓűlű; **Tura** ɓűlű; **Mano** ɓúlú; **Guro** ɓílí, ɓílí; **Yaure** ɓílí; **Beng** blɔ̃ŋ̃; **Ngen** bɔ̃lɔ̃ŋ̃

OTHER NIGER-CONGO potential parallels:
Ijo **Nembe** ɓìóyèé
Kru **Jrwe** gbɔ̀lɛ̀
Mel S. **Mani** gbɔ̀l

9.1.1.5. Bantu *m- : Mande *ɓ-

@Drink: Bantu *mú ~ ɲó ~ ŋó – **Mande** *ɓɔ̃dĩ *swallow*. Reliability index: 5/6.

Proto-Bantu *mú ~ ɲó ~ ŋó, Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGHJKLMNPRS

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Grassfields **Proto-Grassfields** *nú(a); Cross Lower **Proto-Lower-Cross** *ŋʷóŋ; Cross Upper **Obolo** ŋʷɔ̂; **Limbum** nó

BENUE-CONGO W.: Defoid **Yoruba** mū

MANDE *ɓɔ̃dĩ *swallow*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
									+	+

2.1 **San** mui; **Matya** muni; **Mayaa** moni; **Bisa** mŏm; **Bokobaru** mɔ́

2.2 **Dan** ɓa̰ŋ̰; **Goo** ɓɛ̰́ĩ́; **Mano** mání; **Guro** mi̱ní̱; **Mwan** ɓìì̱.

OTHER NIGER-CONGO

Adamawa **Yi Kitulɛ** nɔ̄; **Burak** ɲɔ̌; **Kam** núŋ; **Pana** ɲɔ́; **Samba Leko** ɲə̄; **Tha** nū̱; **Mak** núʔú; **Maghdi** ɲo̱

Atlantic North **Bainouk** ruuh; **Gubaher** gu-ruux; **Wolof** naan; **Jaad** naaŋ; **Biafada** naaŋ-

Dogon **Tommo-So** nɔ́ɔ́; **Yorno-So** nɔ̀ɔ́- / nɔ̀ɔ́; **Ben Tey** nɔ̌; **Jamsay** nɔ̀ɔ́; **Bankan-Tey** nɔ́

Gur **Proto-Oti-Volta** *ɲu; **Kabiye** ɲɔ́ʊ; **Curama** ɲu̱ɣ̱; **Pana** ɲó; **Chakali** ɲu̱ɣ̱; **Sissala** ɲɔ̀; **Dagaare** ɲú

Kru **Bakwe** ná, **Gere-Wobe-Bassa-Tepo** nȧ; **Grebo** nȧ; **Jrwe** ná̱; **Nyabwa** ná

Kwa **Proto-Potou-Akanic** *-nĩ̃; **Proto-Akanic** *-nõ̃; **Baule** nɔ̰́; **Agni** nɔ̰́; **Nzema** nɔ̰́; **Proto-Ghana-Togo-Mountain** *nùìà ~ *ɲùà; **Logba** nɔ̀; **Chumburung-Gonja** nùʔ; **Krachi** nũ̀ʔ; **Nawuri** nūùʔ; **Adele** ɲɔ̀n; **Gichode** nũ̀ŋ; *Ega* nɔ̀

Mel N. **Temne** mʊn; **Landuma** mun

Ubangi **Proto-Gbaya** *nɔ́; **Gbaya** nɔ; **Banda** ndjo; **Linda** njū; **Sango** yon; **Ngbaka Pendi** nzó
Isolated NC **Sua** mumu.

Comments:

1) For both Proto-Bantu and Proto-Mande, two roots can be reconstructed, similar in form and close in meaning, DRINK and SWALLOW. The problem is that in Bantu, the root for DRINK is U-vocalized (BLR3: **mú ~ *ŋʊ́ ~ *ɲó*, for reflexes in other Niger-Congo families, see above), and the root for SWALLOW is I-vocalized (Proto-Bantu **mìd ~ *mìn ~ *mèn ~ *mèd*; for reflexes in other families, see §9.1.5). In Mande, we observe the inverse: a MU-root (our tentative reconstruction is **bɔ́dĩ́*, its reflexes being represented only in the Southeastern branch) for 'swallow', and a MI-root (presumably **bɪ́*) for 'drink' (the only exception is the Southwestern group, where the reflexes of this root express the meaning EAT, see §9.1.5, SWALLOW). Notably, in "Homonymy & Polysemy" (Segerer 2022), the polysemy DRINK – SWALLOW is attested in 6 languages: outside Mande, it is also found in Ubangi, Kru and Bantu C languages. We are forced to postulate a semantic inversion in Mande: *SWALLOW > DRINK / EAT (Southwestern group), and *DRINK > SWALLOW (in the Southeastern branch; in the languages of the Western branch, this meaning is expressed by various innovative roots).
2) For DRINK Greenberg mentions reflexes of this root in Bantu (with a reference to Meinhof), other Benue-Congo (Duala *nyɔ*), Gur, Kwa, Adamawa, but not elsewhere.
3) Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu **-nĩ*.

9.1.1.6. Bantu *b- : Mande *w-

@Burn; hot: **Bantu** *báb, *báb-ʊd *singe, burn; cauterize; singe the hair* – **Mande** *waa (?) *hot*. Reliability index: 4/6 (very limited distribution in Mande and in Benue-Congo outside Bantu; a semantic shift).

PROTO-BANTU *báb, Regions 5: NW SW Ce NE SE; Zones 7: AHJLMRS, *singe, burn; cauterize; singe the hair; carve sp.*,

derivation: *báb-ʊd, Regions 5: NW SW Ce NE SE; Zones 12: CDFHJKLMNPRS *singe, burn; cauterize; singe the hair*

MANDE *waa (?) *hot*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
						+			+	

1.7 Soninke-Bozo **Jenaama-Korondugu S.** waa *hot*
2.1 Eastern **Bokobaru** wąa *hot*

OTHER NIGER-CONGO potential parallels:
Adamawa **Pere** vēē *fire*
Atlantic N. Tenda-Jaad-Biafada **Jaad** baw *burn*
Gur **Boore** vɛ̀ ~ và *cook*
Ubangi **Proto-Gbaya** *wèè *fire;* **Mundu** wà *fire*
Isolated NC **Limba** buy ~ bu *fire*

Comments: A "Homonymy & Polysemy" (Segerer 2022) search shows that the polysemy BURN – HOT is widely attested in Africa (thus legitimizing the Bantu-Mande semantic discrepancy), e.g.: Manjaku (< Atlantic Bak) *yek* 'burn, hot', Joola Kwaatay (< Atlantic Bak) *kəsufu* 'be hot, make burn'; Paloor (< Atlantic North) *tam* 'hot, burn'; Temne (< Mel) *fəy* 'burn, be hot', Attié (< Kwa) *tɔ̄* 'burn, hot'; Eton (Bantu A71) *jóŋ* 'burn, hot'; Duru (< Adamawa) *màʔ* 'burn, be very hot'; Sidamo (< Cushitic) *giir* 'burn, be hot (food)', etc.

9.1.2. Initial dental consonants

9.1.2.1. Bantu *t- : Mande *t-

@Ear: Bantu *tóì – **Mande** *tɔlɛ. Reliability index: 6/6.

PROTO-BANTU *tóì, Regions 5: NW SW Ce NE SE; Zones 15: ABCDEFGHJKLMNPR

OTHER BENUE-CONGO Proto-Benue-Congo *tuŋi
BENUE-CONGO E.: Bantoid Ekoid **Abanyom** ɔ̀-tôŋ / à-; Bantoid Grassfields **Limbum** tùʔ; Bantoid Grassfields Kom **Kom** ātúŋlə́; Bantoid Grassfields **Proto-Grassfields** *túN-li, Ring **Proto-Ring** *túndè; Cross Lower **Proto-Lower-Cross** *ú-toŋ / a-; Cross Upper

Obolo útɔ̀ŋ; **Proto-Upper-Cross** *ttóŋì; JUKUNOID **Proto-Jukun** *tóŋ; PLATOID **Sambe** (kū)tûn; PLATOID **Hasha** ì-tù / tù-tú

BENUE-CONGO W.: EDOID **Urhobo** ó̩ɾ́ɔ́; IDOMOID **Eloyi** kɔ̄lù / álù

BENUE-CONGO ISOLATED: **Proto-Ukaan** *òrògV

MANDE *tɔlɛ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+	+	+	+	+	+	+	+	+	+

1.2 SUSU-JALONKE **Susu** túlí; **Susu Solima** (Koelle 1854) tula; **Jalonke** túlí

1.3 JOGO-JERI **Jogo** (Braconnier n.d.) tólò; **Jeli** túlu, tíli; **Jalkunan** tól; **Numu** tólò

1.4 VAI-KONO **Vai** tó'ò, (Koelle 1854) turo; **Kono SL** tóo

1.5 MOKOLE **Kakabe** tóló; **Mogofin** tólé; **Lele** tólo; **Koranko** tólo

1.6 MANDING **Proto-Manding** *tólo; **Mandinka** túlù; **Maninka Nyokolo** tùlù; **Xasonka** túlú; **Maninka Kita** túlú; **Maninka-Mori** tólo; **Bambara** túló; **Jula Kong** tóró; **Koro** tóró; **Koya** tró; **Marka-Dafing** tòo

1.7 SONINKE-BOZO **Soninke** tárò, tórù; **Tieyaxo** tolo *handle (of a tool)*; **Tigemaxo** tálá; **Kelenga** tálá; **Tiema-Cewe** tara; **Jenaama Cliffs** túwɔ́-lɛ̄wⁿ; **Jenaama Jenne** túwɔ́

1.8 BOBO **Bobo** túrú, pl. tárá

1.9 SAMOGHO **Jowulu** tɔ́ɔ́n; **Seenku N.** tòo; **Seenku S.** tóo; **Dzuun** tóró; **Kpan** too; **Duun Sieu** tolɑ; **Duun Kai** too; **Duun Bananso** too; **Banka** tolɑ; **Kpen** tóó

2.1 EASTERN **San S.** too; **San Matya** tɔrɔ; **San Mayaa** tʊrʊ; **Bisa Lebir** tŏr; **Kyanga** tn̰ɔ; **Shanga** toola

2.2 SOUTHERN **Proto-Southern** *tɔ́lɛ́ŋ; **Dan Gwɛɛtaa** tő; **Goo** tőő; **Tura** tőlő; **Mano** tóó; **Guro** tl̰l̰̄; **Yaure** tɔ̃l̰̄; **Mwan** tl̰̩; **Beng** tlóŋ̩; **Ngen** tlóŋ̩; **Gbin** toora

OTHER NIGER-CONGO potential parallels:

ADAMAWA **Yingilum** tʷuu; **Bolgo** tō / tōī; **Koma** tōlē / tōʔō; **Momi** tɔk / tɔ'; **Samba Leko** túŋ; **Pere** tógò; **Dza** tswí; **Loo** twí; **Burak** twē; **Tiba** tœ̄œ̄; **Dii** tɔ́g

Gur **Proto-Oti-Volta** *tʊ; **Miyove** kù-tù / à-tù; **Churama** tu̱ɔ̱gu / tɔ̱nna̱; **Dagaare** tòòrí

Kwa **Proto-Potou-Akanic** *tõ; **Proto-Akanic** *sõ; **Baule** sú; **Proto-Gbe** *tó; **Ewe** tó; **Proto-Ghana-Togo-Mountain** *kù-túè / à-; **Ikposo** ótó ~ átó; **Tuwuli** sɔ́-tɔ̀

Mel S. **Sherbro** nu̱i; **Mani** núí; **Bom** núí; **Kim** ɲí; **Kisi** nìléŋ

Ubangi **Dakpa** ə́tú; **Banda** utu; **Linda** ōtū; **Zande** tū

Comments: Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu **tõ*. It is one of the most robust Proto-Niger-Congo roots.

@Mountain-2 Bantu *tòndà – **Mande** *tɔŋ. Reliability index: 6/6.

PROTO-BANTU *tòndà *mountain*, Regions 4: SW Ce NE SE; Zones 8: HJKPMNRS *heap; hump; hill*; *tʊmba, Regions 4: SW Ce NE SE; Zones 5: HJLNS *heap; mountain*

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Grassfields **Limbum** rtùù, tū *top*; Kainji **Bassa** tōɖ̄ō

MANDE *tɔŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
					+	+	+	+	+	+

1.6 Manding **Mandinka** tùŋ *termite hill*; **Maninka Nyokolo** túŋ *termite hill*; **Xasonka** tùŋ *termite hill*; **Maninka Kita** tún *termite hill*; **Maninka-Mori** tòn *pile, heap; termite hill*; **Bambara** tɔ̀ *pile, heap*, ntɔ̀ *termite hill*; **Jula Kong** tɔ̀ *termite hill*

1.7 Soninke-Bozo **Soninke** túngúrò *termite hill*; **Tigemaxo** tonboro *rise in the ground*; **Sorogama** (Creissels 1992) tõnboro *termite hill*

1.8 Bobo **Bobo** tòndíbí *rock*; tòndɔ́gɔ́ *rock*

1.9 Samogho **Jowulu** tɔ̀ŋ *mountain, hill*; **Seenku N.** tűnnɔ̋ *mountain*

2.1 Eastern **San Mayaa** tontooni

2.2 Southern **Dan Gwɛɛtaa** tɔ̀ *mountain*; **Goo** tɔ̀ɔ̀ *mountain*; **Tura** tɔ̀ɔ̀ *mountain*; **Mano** tɔ̀ŋ̀ *mountain*; **Beng** tɔ̄ŋ̄ *termite hill*

OTHER NIGER-CONGO potential parallels:
Atlantic Bak Manjak **Manjak** ntɔnda
Atlantic N. Wolof **Wolof** tund; Nyun-Buy **Kobiana** u-ntunda *valley*; Tenda-Jaad-Biafada **Basari** e-tə́nd; **Bapen** ɛ-tʌnd / mɔ-sʌnd; Fula-Sereer **Fula** tulde / tule; Cangin **Palor** təngəl; **Noon** tʌngəl; **Laala** (Williams & Williams 1993) tundəʔ *mountain*; **Saafi** tangɔ *mountain*; Nalu-Baga Fore-Pukur **Nalu** tərɔŋ *mountain*; **Baga Fore** ɔ́rónk / ɔ́rónk-èl *mountain, hill*
Dogon **Jamsay** tɔ́rɔ́ *mountain sp.*
Gur **Proto-Oti-Volta** *ta *mountain*
Ijo **Ibani** tóndó *hill*; **Nembe** tụ̀dù
Kru **Dida** tùtùkʷō / tùtùkʷī *mountain, hill*
Kwa **Proto-Ghana-Togo-Mountain** *tŭ *mountain*
Mel N. **Baga koba** ta-roŋ; **Landuma** tərɔŋ *mountain*
Mel S. **Kisi** tùlló / tùltáŋ *top*; **Sherbro** rɔng *mountain*
Isolated NC **Gola** ótóòl *mountain*

@Say Bantu *tì *say; quote* – **Mande** *tĩ. Reliability index: 5/6 (limited distribution in Benue-Congo outside Bantu).

PROTO-BANTU *tì, Regions 5: NW SW Ce NE SE; Zones 10: CEGHJMNPRS *say; quote*

OTHER BENUE-CONGO
BENUE-CONGO E.: Jukunoid **Proto-Wurbo** *tsɛ̰; Kainji **Bassa** cɛ̰̃

MANDE *tĩ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+	+				+		+		+

1.2 Susu-Jalonke **Jalonke** tìí
1.3 Jogo-Jeri **Jeli** tɛ̀; **Jalkunan** cɛ̌
1.7 Soninke-Bozo **Soninke** `tí
1.9 Samogho **Seenku N.** tìɛɛ *speak*; **Dzuun** dzín; **Duun** dɨ̰
2.2 South Mande **Yaure** tɨ̰ *word, talk*

OTHER NIGER-CONGO potential parallels:
Gur **Proto-Oti-Volta** *sɪe / *sɪo, **Kabiye** se; **Sissala** sɛ́
Kru **Bakwe** cɛ̄ mɛ̄ *say, speak*; **Godie** cī
Kwa **Proto-Potou-Akanic** *-te; **Proto-Akanic** *-se; **Proto-Gbe** *tsi; **Logba** tɛ̀

Comments:
1) Greenberg relates Proto-Bantu **ti* 'to say' with reflexes *ta, tɔ* in other families; he mentions no Mande reflexes.
2) Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu **tɪ*.

@Walk Bantu támb *walk, travel* – **Mande** *taŋbi *pass.* Reliability index: 3/6 (limited distribution in Mande; limited distribution in Benue-Congo outside Bantu; limited distribution in other Niger-Congo).

PROTO-BANTU *támb, Regions 3: NW Ce NE; Zones 6: ADEGJL *walk, travel*; *támb-ʊd, Regions 4: NW SW NE SE; Zones 4: CHJP *walk, travel*; *támb-ʊk, Zones: EJKL *walk, travel*

MANDE *taŋbi *pass*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+				+	+	+				

1.1 Southwestern **Proto-Southwestern** *tɔ̀vɛ̌ŋ; **Mende** tèwé ~ tèé *pass, surpass*; **Loko** (Vydrin's data) tee(ŋ) *pass*; **Bandi** tɔ̀vè *pass, surpass; send*; **Zialo** tɔ̀vè *pass (time); cross*; **Looma** tèßè *pass, surpass; send*; **Kpelle S.** tɛ̄ɛ̄ *pass by; surpass; go around; excel; send; give*; **Kpelle N.** tɛ̀ɣɛ̌ *pass by; surpass; go around; send; give*
1.5 Mokole **Kakabe** tànbì *pass; surpass; do without; leave behind*; **Mogofin** tánbì *pass*
1.6 Manding **Proto-Manding** *tànbi; **Mandinka** tàmbi *pass*; **Maninka Nyokolo** támbì *pass*; **Xasonka** tánbì *pass*; **Maninka Kita** tànbí *pass*; **Maninka-Mori** tàmin, tànbi *pass*; **Bambara** tèmɛ *pass*; **Jula Kong** tɛ̰bɛ́ *pass*; **Koro** tɛ́mɛ́ *pass*; **Koya** tìmɪ́n *pass*
1.7 Soninke-Bozo **Tigemaxo** téé *cross, go across*; **Kelenga** tóó *cross (road, river); jump over*; **Jenaama Cliffs** tēwⁿ *cross (road, river);*

jump over; put up against; **Jenaama Jenne** té *cross (road, river); jump over; put up against*

Comments: A search in "Homonymy & Polysemy" (Segerer 2022) provides only 5 cases of the polysemy WALK – PASS.

9.1.2.2. Bantu *d- : Mande *d-

@Bite Bantu *dóm – **Mande** *doɓũ *chew, eat.* Reliability index: 6/6.

PROTO-BANTU *dóm, Regions 4: NW Ce NE SE; Zones 10: ABEFGJMNPS, derivation: *dóm-at, Zones: CR

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Ekoid **Abanyom** lôm; Bantoid Grassfields **Proto-Grassfields** *lúm, **Limbum** lúú; **Kom** lōm; **Proto-Ring** *dɔ́mù; Cross Lower **Proto-Lower-Cross** *lóm; Cross Upper **Obolo** lóm; **Proto-Upper-Cross** *dómà; Jukunoid **Proto-Jukun** *dʷàm; **Jibe** zòm; Kainji **Bassa** nūmū

BENUE-CONGO W.: W. Edoid **Urhobo** ọ̀ɓò

BENUE-CONGO isolated: **Proto-Ukaan** *yɔ́mV

MANDE *doɓũ *chew, eat*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+	+	+	+	+		+			+

1.2 Susu-Jalonke **Susu** dǫ́ *eat*; **Jalonke** dóŋ *eat*

1.3 Jogo-Jeri **Jogo** (Braconnier n.d.) dǒ(n) *chew*; **Jeri** dóŋ *chew*; **Jalkunan** dɔ̀ní *eat (meat)*; **Numu** dóŋ, dóní *eat, chew*

1.4 Vai-Kono **Vai** dɔ̃ŋ *eat*; **Kono SL** dóŋ, dauŋ *eat*

1.5 Mokole **Kakabe** dámu *eat; surpass*; **Mogofin** dómɔ́ *eat*; **Lele** dɔ́n, don, domu *eat*; **Koranko** dón *eat*

1.6 Manding **Mandinka** dómo *eat*; **Maninka Nyokolo** dòmò *eat*; **Xasonka** dómó *eat*; **Maninka Kita** dómú *eat*; **Maninka-Mori** dómun, dámun, dáwun *eat*; **Bambara** dǫ́, dúmu *eat*; **Jula Kong** dómú *eat*; **Koya** dwɔ́n *eat*

1.8 Bobo **Bobo S.** zōn *eat; spend (money)*

2.2 Southern **Wan** lɔ̄ *eat*

OTHER NIGER-CONGO potential parallels:
ADAMAWA **Bolgo** nʊm; **Burak** lúm; **Day Bouna** ním; **Yingilum** numtɛ̄; **Koma** nòm; **Samba Leko** lùm; **Yi Kitulɛ** dùm; **Tiba (Gà)** yɔ́m
ATLANTIC BAK BALANT **Balant** dʊm; BIJOGO **Bijogo** num; JOOLA **Bayot** bə-lom; **Joola Kujamutay** ɛ-rʊm; MANJAK **Manjak** (Buis 1990) rʊm
ATLANTIC N. CANGIN **Palor** ɗob; **Ndut** ɗɔb; **Laala** ɗɔw; **Saafi** ɗoɓ
GUR **Proto-Central** *dum; **Proto-Oti-Volta** *dʊm; **Kabiye** ɖʊ́m̀; **Pana** dèm; **Tchourama** duumą; **Chakali** dʊma
IJO **Ibani** ónwí
KRU **Bete** nɨ́mɨ́, **Kuwaa** ɲìmì; **Guéré** nmū; **Wobé** nmū; **Bassa** nūmū; **Nyabwa** nūmū
KWA **Proto-Ghana-Togo-Mountain** *lúmà; **Chumburung-Krachi-Nawuri-Gichode** dūŋ; **Adele** dòn
UBANGI **Mba-Dongo-Ko** lɔ́mɔ́-è; **Mundu** nìmà ~ ɲìmà
ISOLATED NC **Limba** tɔma *eat*

Comments: A search in "Homonymy & Polysemy" (Segerer 2022) shows the polysemy BITE – EAT in 28 languages, CHEW – EAT in 25 languages, and CHEW – BITE in 9 languages.

@Eat: Bantu *dí – **Mande** *diga. Reliability index: 5/6 (limited distribution in Mande).

PROTO-BANTU *dí, Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGHJKLMNPRS

OTHER BENUE-CONGO
BENUE-CONGO E.: BANTOID GRASSFIELDS **Proto-Grassfields** *lÍa, EKOID **Abanyom** lî; CROSS LOWER **Proto-Lower-Cross** *líá; CROSS UPPER **Proto-Upper-Cross** *já; **Obolo** ryê; JUKUNOID **Proto-Jukun** *dʸi; **Jibe** jì; KAINJI **Bassa** ɖī
BENUE-CONGO W.: EDOID **Urhobo** rè; **Proto-Edo** *dhɪ; IDOMOID **Eloyi** rí
BENUE-CONGO ISOLATED: **Proto-Ukaan** *yé

MANDE *diga

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+						+	+			+

1.1 Southwestern **Looma Weima** (Vydrin 1987) da-li *eat (arch.)*
1.7 Soninke-Bozo **Tieyaxo** jyɛ; **Tigemaxo** jáá, jíá; **Kelenga** jáá; **Tiema-Cewe** diɛ; **Jenaama Cliffs** dīgā; **Jenaama Jenne** díyá
1.8 Bobo **Bobo** dìgè *eat much and indiscriminately*
2.2 Southern **Mwan** ɗe

OTHER NIGER-CONGO potential parallels:
Adamawa **Samba Leko** lí; **Kulaal** lì; **Bolgo** lī; **Koma** līī, **Tiba** yí
Atlantic Bak Bijogo **Bijogo** ria *take; eat*; Joola **Joola Kujamutay** fʊ-rɪ, **Karon** lɪ;
Manjak **Proto-Manjak** dɛ; **Manjak** Buis 1990 rɛ; **Mankagne** de; **Pepel** dɛ
Dogon **Toro Tegu** lí / lé; **Perge Tegu** ɲéé; **Tommo-So** ńyé; **Ben Tey** ɲé; **Jamsay** ɲéé; **Bankan-Tey** ɲé
Gur **Proto-Central** *di; **Proto-Oti-Volta** *dɪ; **Boore** dí ~ dú; **Pana** jí; **Karaboro-Sissala** di; **Dagaare** dì
Kru **Aizi** li; **Bete** lī; **Bakwe** jī; **Dida** līlī; **Godie** lī; **Kuwaa** jī; **Wobe** dī; **Bassa** ɖī; **Grebo** dí; **Koyo** lī; **Nyabwa** dī
Kwa **Proto-Akanic** *-di; **Baule** dí; **Nzema** dí; **Proto-Ghana-Togo-Mountain** *lĭ; **Chumburung** j̀ì, **Nawuri** j̀ì; **Ikposo** jí; **Logba** ɖí; **Adele** dì; **Gichode** j̀ī; **Ega** lì
Mel N. **Temne** di; **Landuma** di
Mel S. **Kisi** dìó, **Mani** dìó, **Sherbro** jo
Senufo **Mamara** di~li; **Supyire** lʸî
Ubangi **Banda** ze, **Linda** z̀ī; **Mundu** zī; **Zande** rí
Isolated NC **Gola** je (jɪ)

@Good Bantu *jìjá – **Mande** *dɪ. Reliability index: 3/6 (limited distribution outside Mande).

PROTO-BANTU *jìjá, Regions 3: SW Ce NE; Zones 5: EFHJL

MANDE *dɪ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
		+	+	+	+		+	+		+

1.3 Jogo-Jeri **Jogo** (Braconnier n.d.) díí; **Jeli** dia *be good; make good*
1.4 Vai-Kono **Kono SL** dí
1.5 Mokole **Kakabe** dí *pleasant, good; sharp; easy*; **Lele** dí; **Koranko** dí
1.6 Manding **Proto-Manding** *dí; **Mandinka** dí-yaa *be pleasant*; **Maninka Nyokolo** dìì; **Xasonka** dí; **Maninka-Mori** dí; **Bambara** dí; **Jula Kong** dí; **Koro** dí
1.8 Bobo **Bobo** dīà *be nice, pleasant; be in peace*
1.9 Samogho **Jowulu** (Carlson 1993) dì; **Seenku N.** dzə̀ *be good, pleasant*; **Dzuun** dzi; **Kpan** zii
2.2 Southern **Proto-SM** *dī; **Dan Gwɛɛtaa** dī *good, nice; beauty*; **Goo** dù; **Mano** lī *grow beautiful; be friends, reconcile; be a success*

OTHER NIGER-CONGO potential parallels:
Adamawa **Mumuye (Zing)** líí
Atlantic Bak **Proto-Manjak** lil
Atlantic N. Nyun-Buy **Nyun** li
Gur **Chakali** jɪga, **Karaboro** yi̱i̱
Kru **Wobe** díí *be sweet*
Ubangi **Dakpa** dídìrə̀, **Gbaya** di

@Long Bantu *dàì *long*, *far, long ago* – **Mande** *dãa *far, distant*. Reliability index: 5/6 (limited distribution in Mande).

PROTO-BANTU *dàì, Regions 5: NW SW Ce NE SE; Zones 12: BCDEGHJKLMRS *long*, *far, long ago*

OTHER BENUE-CONGO
BENUE-CONGO E.: Bantoid **Proto-Grassfields** *d+àp

MANDE *dãa *far, distant*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
						+				

1.7 Soninke-Bozo **Soninke** laata/laate *distant, far away*; **Tigemaxo** láán *distant, far away*; **Kelenga** lán *distant, far away*; **Tiema-Cewe** laa; **Jenaama Cliffs** dāān *distant, far away*; **Jenaama Jenne** dààn *distant, far away*

OTHER NIGER-CONGO potential parallels:
Adamawa **Pere** lə́ŋlə́ŋ; **Kare** dă̰ŋ; **Tiba** dɪ́ɪ̰̃
Gur **Churama** daa
Ubangi **Linda** dì, **Ngbaka Pendi** lō
Comments:
1) Greenberg provides correspondences of the Proto-Bantu root in all families except Atlantic and Mande.
2) The semantics of the Soninke-Bozo forms lies within the range of the semantic zone of the Bantu root, and we think that their cognacy is quite plausible.

@Who Bantu *ndai, *nai – **Mande** *dɪ, *ndɪ. Reliability index: 3/6 (limited distribution outside Mande).

PROTO-BANTU *ndai, Regions 3: NW NE; Zones 3: CGJ; *nai, Zone: J

MANDE *dɪ, *ndɪ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+							+	+

1.1 Southwestern **Proto-Southwestern** *dé; **Bandi** lɛ́ì *who, which*; **Looma** le *which*; **Kpelle S.** lé *what*; **Kpelle N.** lé *what, how, which*
1.2 Susu-Jalonke **Susu** ndé; **Jalonke** ǹdé
1.3 Jogo-Jeri **Jogo** (Braconnier) dɛ́ *sentence-final interrogative particle*
2.1 Eastern **San S.** die; **San Mayaa** da; **Boko** dé; **Bokobaru** dé; **Busa** di; **Kyanga** dí
2.2 Southern **Dan** dē; **Goo** dèè; **Mano** dēŋ; **Guro** dĭ; **Mwan** dè; **Wan** dè, dèè; **Beng** dé; **Ngen** dɛ́.

OTHER NIGER-CONGO potential parallels:
Ubangi **Zande** dà

Comments: It is difficult to reconstruct a reliable Proto-Niger-Congo form for this meaning, because the forms in individual languages usually include noun class markers.

9.1.2.3. Bantu *d- : Mande *ɗ-

@Cold Bantu *dìdì, *dìdid *become cold; shiver*, *dìdim *be cold; tremble* – **Mande** *ɗɛ̃dɛ̃. Reliability index: 5/6 (the reflexes are poorly represented in Benue-Congo outside Bantu).

PROTO-BANTU *dìdì, Regions 3: NW SW Ce; Zones 4: BCHN; *dìd-id, Regions 4: SW Ce NE SE; Zones 5: GMNRS *become cold; shiver*; *dìd-im, Regions 5: NW SW Ce NE SE; Zones 9: CEFGHMNRS *be cold; tremble*

MANDE *ɗɛ̃dɛ̃

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
					+				+	+

1.6 Manding **Proto-Manding** *nénɛ; **Mandinka** nénè; **Maninka Nyo-kolo** nènè; **Xasonka** néné; **Maninka Kita** néné; **Maninka-Mori** nénɛ; **Bambara** nénɛ; **Jula Kong** nénɛ; **Koya** nénɛ; **Marka-Dafing** nèɛ

2.1 Eastern **San S.** nɛŋ; **San Matya** ninɛ; **San Mayaa** nɯnɯ; **Bisa-Lebir** ɲèèní; **Boko** nĩní *grow cold*; **Bokobaru** yíi̱; **Kyanga** nini

2.2 Southern **Proto-Southern** *dɛ̰dɛ̰; **Dan Gwɛɛtaa** dɛ̰dɛ̰ *cold, fever*; **Goo** dɪ̰dɪ̰; **Tura** dɪ̰dɪ̰; **Mano** dɛ̰dɛ̰; **Mwan** dɪ̰i̱dɪ̰i̱; **Wan** lèlè, lrè; **Beng** nɛ̰nɛ̰; **Ngen** ɲɛ̰ɲɛ̰

OTHER NIGER-CONGO potential parallels:

Adamawa **Kam** dié

Atlantic Bak Balant **Balant** dèlá *cold (n)*

Ijo **Mein** odídi

Kwa **Proto-Potou-Akanic** *-ĨũĨũ; **Proto-Akanic** *-ĨũĨũ; **Chumburung** yʷɨ́rí; **Krachi** yúrí; **Nawuri** yúlí; **Ewe** dzì; **Adele** lílà; **Tuwuli** ò-sílí; **Attié (Memni)** ɲɪ̰ɲɪ́; **Gicode** yúlí

Senufo **Senufo Kolia** ɲi; **Supyire** ɲíŋɛ́

Ubangi **Dakpa** ə̀zɨ̀; **Banda** zeze; **Linda** zɨ; **Mundu** zī; **Zande** zézéré

Comments:

1) This root, although quite robust, was not mentioned by Greenberg.
2) Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu **-l̃ũl̃ũ*.
3) A polysemy COLD – SHADOW cannot be excluded at the Proto-Niger-Congo level, see the cognate set SHADOW.

@Lie (down) Bantu *dáad *lie down, sleep; spend night* – **Mande** *ɗa. Reliability index: 6/6.

PROTO-BANTU *dáad, Regions 5: NW SW Ce NE SE; Zones 15: ABCDEFGHJKLMNRS *lie down, sleep; spend the night*

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Ekoid **Abanyom** lâl *sleep*; Cross Lower **Proto-Lower-Cross** *ná; Cross Upper **Obolo** láák *sleep*; Jukunoid **Proto-Jukun** *na, *da *sleep*; Platoid **Sambe** rá *sleep*

MANDE *ɗa

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+		+	+	+			+	+

1.1 Southwestern **Proto-Southwestern** *dá; **Mende** ndá/la *lie down, lay down, make, build*; **Loko** ndá/la; **Bandi** ndà/la *lie down; believe; lay down; put*; **Zialo** dà *lie, put*; **Looma** dà/la *lie down; appear; believe; lay down, put; perform*; **Kpelle S.** láá/naa *lie down; believe*; *set, put, place, lay*; **Kpelle N.** láá/naa *lie down; believe; set, put, place, lay*

1.2 Susu-Jalonke **Susu** sáá *lie down; lay down, put*; **Jalonke** sáá *put; lay out, spread*

1.3 Jogo-Jeri **Jogo** sá; **Jeli** sá; **Jalkunan** sɛ̀ɛ́; **Numu** sà

1.4 Vai-Kono **Vai** sá; **Kono SL** sá

1.5 Mokole **Kakabe** lá; **Mogofin** sá; **Lele** sá, sà; **Koranko** sá

1.6 Manding **Proto-Mandeing** *dã́; **Mandinka** láá; **Maninka Nyokolo** làà; **Xasonka** lá; **Maninka Kita** lá; **Maninka-Mori** lá; **Bambara** dá; **Jula Kong** lá *lay down*; **Koro** lá; **Koya** lá *lay down*

1.7 Soninke-Bozo **Soninke** sáxú *lie; put*; **Tigemaxo** saa; **Kelenga** ságá; **Tiema-Cewe** caa; **Jenaama Cliffs** sāgā; **Jenaama Jenne** sáá *lie down, go to bed; be sure, be confident*

1.8 Bobo **Bobo** dɛ̄ (?) *put, lay down*

2.1 Eastern **San S.** dā *put*; **San Matya** da *put*; **San Mayaa** da *put*; **Bisa Lebir** dà *put*; **Bokobaru** da *put*

2.2 Southern **Proto-Southern** *dà; **Dan Gwɛɛtaa** dà *rise; land; enter; lift; attach; wear (clothes)*; **Goo** dàà *enter; climb, mount*; **Tura** dàà *lie down; enter; come*; **Mano** dà *fall; drop, put; add*; **Guro** dā *come; fall (rain)*; **Yaure** tà *come*; **Gban** dà *put, place*; **Mwan** dā *come from*; **Wan** tá *put*; **Beng** dà *come; lay (egg); sing (song)*

OTHER NIGER-CONGO potential parallels:

Adamawa **Moo** lǒ; **Loo-Burak** ləú; **Tiba** láā *sleep*; **Mak** lʌū

Atlantic Bak **Joola Banjal** ɛ-raɔr

Atlantic N. Tenda-Jaad-Biafada **Basari** a-lâk / ɗâk, a-lâkél / ɔ-ɗâkél *dream*; **Tanda** daki, dakel *dream*; **Bedik** u-ɗāk / ɗɔ̄kú *lie; sleep*, u-ɗɤ̄kʌ̀ɗ *dream*; **Bapen** mo-ɗak; **Konyagi** ì-ɗǽk *lie; sleep,* ì-ɗǽkǽry *dream*; **Jaad** (Ducos 1971) dạk *lay down*; **Biafada** (Wilson p.c.) dahan-; Fula-Sereer **Proto-Fula-Sereer** *ɗaan *sleep*

Gur **Proto-Central** *do ~ *de *sleep*; **Proto-Oti-Volta** *da *sleep*; *do / *do: / *don / *do:n; **Boore** dā ~ dūmā *lie; sleep*, dāādá *lying down; sleep (n.)*

Kwa **Proto-Potou-Akanic** *ɗa; **Proto-Akanic** *da; **Baule** lá; **Nzema** dá; **Nawuri** dāĩ; **Ewe** drà; **Attié** lā *sleep*; **Ikposo** lɛ̀ *sleep*

Ubangi **Mundu** rā ~ rārā *sleep*

Comments:

1) In Greenberg's book, this root appears as SLEEP, and he mentions no Mande reflexes which look appropriate.
2) Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu **ɗa*.
3) In some Niger-Congo families, roots for LIE (DOWN) coincide with thouse representing the meaning SLEEP (which is also represented in the Swadesh 100 Wordlist). And sometimes, the roots differ in the vowel, along the lines of *DA 'lie (down)' ~

*DO ‘sleep’. We do not attempt to separate these roots, taking into account the fact that for Mande-Bantu comparision this question seems to be irrelevant.

@Nose Bantu *jódò, *jídò, *jíndò – **Mande** *ŋ-dụŋ. Reliability index: 6/6.

PROTO-BANTU *jódò, Regions 4: NW SW Ce NE; Zones 11: ABCDEFHJKLR, *jíndò, Zones: FJ *nose, nostril*

OTHER BENUE-CONGO Proto-Benue-Congo *zua

BENUE-CONGO E.: Bantoid Grassfields **Proto-Grassfields** *L(u)Í`, Kom **Kom** āʒű; Cross Upper **Proto-Upper-Cross** *jòná; Platoid **Hasha** ì-yōŋ / yù-yōŋ

MANDE *ŋ-dụŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+	+			+	+

1.1 Southwestern **Proto-Southwestern** *sÚŋ-kpá; **Mende** hókpá; **Loko** (Kimball) hòkpá; **Bandi** sòkpáì; **Zialo** sòkpà; **Looma** sòkpà, sòkpo, sɛkpa; **Kpelle S.** (Westermann & Melzian 1930) sū̱ā, sú̱a; **Kpelle N.** húŋɔ́

1.2 Susu-Jalonke **Susu** ɲɔ́ɔ́, ɲɔ́ɛ́; **Jalonke** ɲwɛ́ɛ́

1.3 Jogo-Jeri **Jogo** súŋ, súngbá *bridge of nose;* **Jeli** súŋ-gbàlà; **Jalkunan** sú̱; **Numu** sù̱n

1.4 Vai-Kono **Vai** sûŋ; **Kono SL** sú̱

1.5 Mokole **Kakabe** sún; **Mogofin** súŋɛ̀; **Lele** sú̱; **Koranko** sú̱

1.6 Manding **Mandinka** núŋ; **Maninka Nyokolo** nùŋ; **Xasonka** nún; **Maninka Kita** nún; **Maninka-Mori** nún; **Bambara** nú̱; **Jula Kong** nú̱; **Koro** núwⁿ; **Koya** nú̱n

1.7 Soninke-Bozo **Soninke** núxúnnè *nose*, suune, suuɲe *snivel, nasal mucus*; **Tigemaxo** múúⁿ; **Kelenga** (Creissels 1992) múnú; **Tiema-Cewe** mu̱u̱; **Jenaama Cliffs** mūū; **Jenaama Jenne** múúⁿ

2.1 Eastern **San S.** ɲin; **San Matya** ɲini; **San Mayaa** ɲinde; **Bokobaru** yí̱; **Boko** ní; **Kyanga** ‘í̱; **Shanga** ɟí

2.2 Southern **Proto-Southern** *yu̱ɛ̱; **Dan Gwɛɛtaa** yū; **Goo** yu̱-wɛ̋ɛ̋; **Tura** yū̱ú; **Mano** yū; **Guro** yɛ̄; **Yaure** yɛ̱-ɓö; **Mwan** yɪ̄; **Gban** yɪ̱́; **Wan** yɛ́; **Beng** yɪ́ɛ́; **Ngen** yɪ́ŋ

OTHER NIGER-CONGO potential parallels:

Atlantic Bak Joola **Bayot** jʊ̱; **Joola Kujamutay** e-ɲindu; **Joola Kasa** ɛ-ɲendu / si-; **Joola Banjal** e-ɲundu

Comments: This root is missing from Greenberg's list.

@Root Bantu *dì *root, fibre*, *dìdì *root, fibre*, jìdì – **Mande** *ŋ̀-ɗuli. Reliability index: 6/6.

BANTU Proto-Bantu *dì, Regions 5: NW SW Ce NE SE; Zones 12: ACDEFGHJKLRS *root, fibre*; *dìdì, Regions 2: Ce NE; Zones 3: GJM *root, fibre*; *jìdì, Regions 3: NW SW Ce; Zones 5: ACDHK

OTHER BENUE-CONGO

BENUE-CONGO E.: Jukunoid **Proto-Central-Jukunoid** *dén; Edoid **Proto-Edoid** *U-niə ~*-nhiə / A *vein*; Cross Upper **Proto-Upper-Cross** *diŋa *hair, root, vein*, *ní *vein, blood*

MANDE *ŋ̀-ɗuli

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
			+	+	+	+	+	+	+	+

1.4 Vai-Kono **Vai** (Klingenheben & Kastenholz 2019) súlù; **Kono** súu

1.5 Mokole **Kakabe** lílí; **Mɔgɔfin** líílè; **Lele** súlu; **Koranko** súlu

1.6 Manding **Proto-Manding** *ŋ-ɗúli; **Mandinka** súlù; **Maninka Nyokolo** sulu; **Khassonké** líllí; **Maninka Kita** lílí; **Maninka Mori** lílin; **Bambara** dílí *root, nerve, sinew*; **Dioula (Kong)** líĺ̨; **Koro** líl̨íwⁿ; **Koyaga** lílín; **Marka-Dafing** lwìilwìi

1.7 Soninke-Bozo **Tegemaxo** ʃĩĩⁿ; **Kelenga** dírí; **Jenaama Jenne** dílìⁿ, dírìⁿ

1.8 Bobo **Bobo S.** sùlù

1.9 Samogho **Dzuun** jíí; **Kpan** ɣii; **Duun** gii; **Banka** ji-ra; **Kpen** gɔ́ɔ̀-gíì

2.1 Eastern **Boko** zi̱ná; **Busa** zi̱ní
2.2 Southern **Proto-SM** *sì-ni̱; **Goo** síí; **Guro** sūnī; **Yaure** sɛ̰̄ɛ̰́; **Mwan** sé-né, sɛ̰́-né; **Wan** sɛ̰̄n̄; **Beng** nɪ̰̄ŋ̄

OTHER NIGER-CONGO potential parallels:
Adamawa **Loo** dík, **Mumuye** ɲīnrī, **Tha** jì, **Lelau** dík
Atlantic Bak Joola **Bayot** ɔdu *aerial root of a mangrove*
Atlantic N. Wolof **Wolof** rɛɛn *root, tubercle*; Cangin **Ndut** nil; **Palor** (Williams & Williams 1993) nil; **Safen** niɾ; **Laala** (Williams & Williams 1993) nil; **Noon** nil
Dogon **Yanda Dom** dǐl ~ dìlú
Gur **Kabiye** líɖè / lìlá
Kru **Kuwaa** jíí
Kwa **Proto-Ghana-Togo-Mountain** *ò-lúì / ì-; **Attié** ɲí̱; **Baule** ɔ̃lɥĩ̱; **Nzema** ǹdì̱ní̱; **Chumburung** lɔ̄ŋ
Senufo **Mamara** niriŋɛ, nire, niŋɛ
Ubangi **Proto-Gbaya** *l̰ín; **Gbaya** ɲín; **Mundu** ádrī
Isolated Bangime ʒíìn

Comments: This root is not mentioned by Greenberg.

@Tongue Bantu *dímì *tongue; language; flame*, *dímì, *dímè – **Mande** *dɛ̃dɛ̃ ~ *dɛ̃bɛ̃. Reliability index: 6/6 (one of the stablest Niger-Congo roots).

PROTO-BANTU *dímì, Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGHJKLMNPRS *tongue; language; flame*, *dímì, Regions 5: NW SW Ce NE SE; Zones 8: BCDEFGRS, *dímè, Regions 3: NW Ce NE; Zones 5: AEGLN

OTHER BENUE-CONGO Proto-Benue-Congo *lemi
BENUE-CONGO E.: Bantoid Ekoid **Abanyom** lɨ́-rêbê / ń-[d]; Bantoid Grassfields **Limbum** rlīī; Bantoid Grassfields **Proto-Grassfields** *lím`; Kom **Kom** īlémíə; Bantoid Grassfields Ring **Proto-Ring** *dɔ́mì; Cross Lower **Proto-Lower-Cross** *ɛ́-lɛ́mɛ̀ / a-; Cross Upper **Obolo** álɔ́m; Jukunoid **Proto-Jukun** *déma; **Jibe** námá; Platoid **Hasha** ì-rīm / rí-rīm

BENUE-CONGO W.: Defoid **Yoruba** èdè; Edoid **Urhobo** èrèβè; **Proto-Edo** *U-dhamhı / A-

MANDE *dɛ̃dɛ̃ ~ *dɛ̃bɛ̃

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+	+	+	+	+	+

1.1 Southwestern **Proto-Southwestern** *néɛŋ; **Mende** néé, néhé; **Loko** nɛ̨ɛ̨; **Bandi** nèè(ŋ); **Zialo** nè(g); **Looma** nɛ̀(g); **Kpelle S.** néŋ; **Kpelle N.** néŋ

1.2 Susu-Jalonke **Susu** néɲí; **Susu Solima** (Koelle 1854) lɛnna; **Jalonke** nèɲ́

1.3 Jogo-Jeri **Jogo** (Kastenholz 1997) nèn-dé, (Braconnier n.d.) lélê(n); **Jeli** (Kastenholz 2001) nèn-dí; **Jalkunan** níní̱; **Numu** nén-dé

1.4 Vai-Kono **Vai** (Klingenheben & Kastenholz 2019) nèé; **Kono SL** nénɛn

1.5 Mokole **Kakabe** nèn, nén; **Mogofin** néŋè; **Lele** nèɛn ~ ɲìn ~ nén; **Koranko** némɛ

1.6 Manding **Proto-Manding** *nèn; **Mandinka** néŋ; **Maninka Nyo-kolo** nèŋ; **Xasonka** nèn; **Maninka Kita** nèn; **Maninka-Mori** nèn; **Bambara** nɛ̀; **Jula Kong** nɛ̀

1.7 Soninke-Bozo **Soninke** néenè; **Tigemaxo** ɲèémù; **Kelenga** nɛ̂ⁿ; **Tiema-Cewe** nɛ̨, ɲɛ̨; **Jenaama Cliffs** ɲèléwⁿ; **Jenaama Jenne** nìyérɛ̀ⁿ

1.8 Bobo **Bobo** nìón

1.9 Samogho **Jowulu** (Carlson 1993) náná-í, néné-í; **Seenku N.** nɛ̀en; **Seenku S.** níi; **Dzuun** nèyn; **Kpan** nɛ̨ɛ̨ɥ; **Duun Sieu** nɛɛnɑ; **Duun Bananso** nɛ; **Banka** nɛɛnɑ; **Kpen** néǹ

2.1 Eastern **San Matya** ninɛ; **San Mayaa** lɛlɛnɪ; **Bisa Lebir** nèém; **Bokobaru** néné; **Boko** (Koelle 1854) ninɛ; **Busa** néné; **Kyanga** néné

2.2 Southern **Proto-Southern** *dɛ̨dɛ̨; **Dan Gwɛɛtaa** dɛ̨̀ɛ̨̀; **Goo** dɛ̨̀ɛ̨̀; **Tura** dɛ̨̀-ɛ̃́ɛ̃́; **Mano** nānà; **Guro** lɛ̨̄lɛ̨̄; **Yaure** lɛ̀lɛ́; **Mwan** dɛ̨̀dɛ̨̀, dlɛ́/dlɛ̨; **Wan** lēnɛ̨̄; **Gban** lɛ̨̀; **Beng** nɑ̀nɑ́ŋ́; **Ngen** nɪ́nɪ́-báŋ́

OTHER NIGER-CONGO potential parallels:
ADAMAWA **Samba Leko** mél; **Pere** míīlɛ̀
ATLANTIC BAK BALANT **Balant** gì-dɛ̀mét / dɛ̀mét; BIJOGO **Bijogo** nu-numɛ / n-numɛ ~ ɲu-numɛ; MANJAK **Manjak** (Buis 1990) pəndiaməntʂ ~ pɛndiaməntʂ / indiaməntʂ
ATLANTIC N. NYUN-BUY **Wolof** làmmiɲ; **Nyun** bʊ-lɛmɛs; TENDA-JAAD-BIAFADA **Bedik** í-ɗɛ́m; **Konyagi** ryə̀w̃ / wæ̀-ryə̀w̃; **Jaad** pə-deemɛ; **Biafada** (Wilson p.c.) bu-deema / maa-d.; FULA-SEREER **Proto-Fula-Sereer** ɗɛ̀(le)m; CANGIN **Palor** pe-reem; **Ndut** pɛ-rɛɛm; **Laala** p-riim; NALU-BAGA FORE-PUKUR **Nalu** leemb; **Pukur** ɛ-lʊm̄
DOGON **Jamsay** nɛ̀né; **Mombo** nɛ̀ɛ̀ndé; **Najamba** nɛ̌ndɔ̀ɔ̀ / nɛ̌ndɛ̀ɛ̀
GUR **Kurumfe-Gurunsi** *dɛɗm; **Proto-Oti-Volta** *lɪm / *lam; **Boore** dɛ̄rɛ̄mī / dɛ̄rɛ̄mā; **Miyove** tì-lémbí / à-lémbí; **Pana** dɛmɛ̀lɛ̀ / dɛmɛ̀lɛ̀yà
IJO **Ibani** ɓélé; **Nembe** ɓɛ̀lɛ̀ɔ̀
KWA **Proto-Ghana-Togo-Mountain** *kì-níé-bí / bì-; **Ikposo** ílīvlí
MEL N. **Temne** rəmer / nəmer ~ ʈəmer (?); **Landuma** dʌmera
MEL S. **Kisi** dìɔ̀mùléŋ; **Sherbro** limiliŋ
SENUFO **Mamara** ɲile; **Senufo Kolia** yile; **Minyanka** ɲire / ɲirle; **Supyire** jʷumɔ
UBANGI **Proto-Gbaya** *léɓé, *lémbè
ISOLATED NC **Gola** ó-miè, ké-miè; **Limba** fi-liŋ / ta-fi-liŋ ta; **Sua** dɛmɛtɛ / mdɛmɛtɛ

Comments: This root appears in Greenberg's list, but he does not mention the highly reliable Mande reflexes.

@Two Bantu *bàdí (< **bà-dí?) – **Mande** *pela, *peɗa (< **pè-ɗV). Reliability index: 5/6.

PROTO-BANTU *bàdí, Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGHJKLMNPRS

OTHER BENUE-CONGO
BENUE-CONGO E.: BANTOID GRASSFIELDS **Proto-Grassfields** *(í-)bà(l)ˊ

MANDE *pèlá, *pèɗǎ (< **pè-ɗǎ)

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+	+	+	+	+	+

1.1 Southwestern **Proto-Southwestern** *fèerÉ; **Mende** fèlé; **Loko** fele, fee; **Bandi** féle; **Zialo** fèlè(g); **Looma** féle; **Kpelle S.** fēerɛ̄; **Kpelle N.** hvèèlɛ̌, hvèèlɛ́

1.2 Susu-Jalonke **Susu** fìrín; **Jalonke** fidín

1.3 Jogo-Jeri **Proto-Jogo-Jeri** *fàlá; **Jogo** (Braconnier n.d.) fàlá; **Jeli** fàla; **Jalkunan** flā/fīlà; **Numu** hira ~ fla

1.4 Vai-Kono **Vai** fè'á; **Kono SL** fèa

1.5 Mokole **Kakabe** fila; **Mogofin** fílà; **Lele** fɛ̀la; **Koranko** fèla, fila

1.6 Manding **Proto-Manding** *fila; **Mandinka** fùla; **Maninka Nyo-kolo** fùla; **Xasonka** fùla; **Maninka Kita** hùla; **Maninka-Mori** fila; **Bambara** fila; **Jula Kong** fila, fùla

1.7 Soninke-Bozo **Proto-Soninke-Bozo** *pínde; **Soninke** filli/filló; **Tigemaxo** péndéén ~ féndéén; **Kelenga** fíénú; **Tiema-Cewe** pẽde; **Jenaama Cliffs** pēndē; **Jenaama Jenne** péné ~ péndé

1.8 Bobo **Bobo** pɔ̄lā

1.9 Samogho **Jowulu** fúúlì; **Banka** figi; **Seenku N.** fí; **Dzuun** fíí; **Duun** fi'i; **Kpan** fii; **Kpen** fígì

2.1 Eastern **San S.** pāā; **San Matya** pra; **San Mayaa** fʊrá; **Bisa Lebir** píiya; **Bisa Barka** (Schreiber 2008) hē:ra; **Boko** pla; **Busa** pla; **Bokobaru** pláa; **Kyanga** fia; **Shanga** hwaa

2.2 Southern **Proto-Southern** *pìì-lāŋ; **Dan Gwɛɛtaa** plɛ̀, pɛ̏ɛ̏dɔ̄; **Dan Kla** plɛ̀, pɛ̏ɛ̏dɔ̀; **Goo** pɛ̏ɛ̏lɔ́; **Tura** pɪ̏ɪ̀lɛ́; **Mano** pɛ̄ilɛ̄, pèìlɛ̄; **Guro** fié; **Yaure** flí, fílɪ̋; **Gban** fɛ̰̀ɪ̰̀; **Mwan** plɛ̄; **Wan** pīlɔ̄ŋ̄; **Beng** plāŋ̄; **Gbin** paa

OTHER NIGER-CONGO potential parallels:

Adamawa **Day Bouna** dīí

Atlantic N. **Proto-Fula-Sereer** ɗi

Dogon **Yorno-So** léy, **Jamsay** lɛ̌y, **Perge Tegu** lěy

Gur **Gurunsi – Oti-Volta** *ɗe; **Proto-Oti-Volta** *le

Isolated NC **Limba** bile

Comments: Our hypothesis on the origin of this word in Niger-Congo was presented in Pozdniakov (2018: 258–260), where numerous forms from different Niger-Congo families are provided. In brief, this number was originally a plural of the number ONE, **ko-di/de* (**ko-* being the noun class 1 marker), and its form was **ba-di/de* (**be-* being the noun class 2 marker). Notably, if this hypothesis is accepted, the present item could be considered as a trace of a noun class marker in Mande.

9.1.2.4. Bantu *n- : Mande *ɗ-

@Mouth Bantu *nʊ̀à *mouth, lip*, ɲùà *mouth, lip, beak*, mʊ̀à *mouth, lip, beak* – **Mande** *ɗɔ̃ya. Reliability index: 6/6.

PROTO-BANTU *nʊ̀à *mouth, lip*, Regions 5: NW SW Ce NE SE; Zones 11: BCDEJHKLMRS; *ɲʊ̀à *mouth, lip, beak* Regions 4: NW Ce NE SE; Zones 7: ABCDEGP

OTHER BENUE-CONGO Proto-Benue-Congo *nuŋa

BENUE-CONGO E.: Jukunoid **Proto-Ring** *dúɔ̀; Edoid **Proto-Edoid** *E-nuᵊ / I; Cross Upper **Proto-Lower-Cross** *í-núà; **Proto-Ukaan** *ɔ̀ŋʷǫ́; Jukunoid **Jibe** lú ~ nú

BENUE-CONGO W.: **Yoruba** ẽnū

BENUE-CONGO isolated: **Proto-Ukaan** *ɔ̀ŋʷǫ́

MANDE *ɗɔ̃ya

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+	+	+	+	+	+

1.1 Southwestern **Proto-Southwestern** *dáŋ; **Mende** ndá; **Loko** nda; **Bandi** ndà; **Zialo** dà; **Looma** dà ~ da(g); **Kpelle S.** lá; **Kpelle N.** láa

1.2 Susu-Jalonke **Susu** dɛ́; **Jalonke** dɛ́ɛ́

1.3 Jogo-Jeri **Proto-Jogo-Jeri** *dáá; **Jogo** (Braconnier n.d.) dáa; **Jeli** dá; **Jalkunan** dāā; **Numu** dá *mouth; lid; edge, boundary*

1.4 Vai-Kono **Vai** dã́ *mouth; opening; entrance; edge*; **Kono SL** dá

1.5 Mokole **Kakabe** dá; **Mogofin** dá; **Lele** dá; **Koranko** dá

1.6 Manding **Proto-Manding** *dá; **Mandinka** dáa; **Maninka Nyokolo** dáa; **Xasonka** dá; **Maninka Kita** dá; **Maninka-Mori** dá; **Bambara** dá; **Jula Kong** dá

1.7 Soninke-Bozo **Proto-Soninke-Bozo** *ɗɔ̀xà; **Soninke** raxa/ráqqé *mouth; opening, entrance; border, coast; edge*; **Tigemaxo** láā *n mouth; opening; border; pp to, from*; **Kelenga** lágà, lógó *mouth; doorway, entrance; edge, rim (of well, container, etc.)*; **Tiema-Cewe** laa; **Jenaama Cliffs** lāgū, lɔ̄gū *mouth; bank, edge (of water)*; **Jenaama Jenne** dɔ́ɔ́, dáá *mouth; doorway, entrance; edge, rim (of well, container, etc.)*

1.8 Bobo **Bobo** dō, pl. dā *mouth; opening; border; edge (of a blade); number*

1.9 Samogho **Jowulu** tn̰ŋ *mouth, edge*; **Banka** jigạ; **Seenku N.** dzò *mouth, border*; **Dzuun** dzíí, dzú *mouth; number; price*; **Kpan** dii; **Kpen** digi

2.1 Eastern **Proto-Eastern** *lɛ́; **San S.** lɛ́ *mouth; opening; border, surface; number*; **Bisa Lebir** lɛ́ *mouth, lips*; **Bisa Barka** (Schreiber 2008) lɛ́; **Boko** lɛ́ *mouth; opening; edge, extremity; number*; **Busa** lɛ́; **Bokobaru** lɛ́; **Kyanga** lɛ́; **Shanga** lɛ́

2.2 Southern **Proto-Southern** *ɗɛ̃; **Dan Gwɛɛtaa** dĩ *mouth; orifice, opening*; **Dan Kla** lĩ; **Goo** ɗĩɗɛ̃; **Tura** ɗɛ̃; ɗĩɛ̃ (arch.) *rn extremity, border; surface; pp on, upon*; **Mano** lé *rn mouth; door; edge; work position; surface; pp on*; **Guro** lēé; **Yaure** lé *mouth (inner part)*; **Gban** lű; **Mwan** lìì; **Wan** lé *border, edge*; **Beng** yé *mouth, edge, end*; **Gbin** li

OTHER NIGER-CONGO potential parallels:

Atlantic Bak **Bijogo** ka-na / ŋa-na

Gur **Proto-Central** *nan, *no; **Proto-Oti-Volta** *no; **Miyove** ń-nɔ́ɔ̀ / í-nɔ́ɔ̀; **Gurunsi > Kabiye** nɔ́ɔ́ / nɔ́sì; **Pana** ɲé

Kru **Aizi** nu̱ə̀; **Dida** nē / nī; **Godie** nē / nī; **Bakwe** nɔ̄-kɔ̄lɔ́; **Koyo** nə́; **Neyo** né

Kwa **Proto-Akanic** *-nɔ̃; **Baule** nw̰ã̰; **Nawuri** gɔ́-nɔ́; **Ewe** nù; **Proto-Ghana-Togo-Mountain** *ò-núí/ì-; **Gichode** gɔ́-nɔ́

Mel S. **Kim** áɲá

Senufo **Supyire** ɲʷɔgɔ/ɲʷɔya; **Mamara** ɲu
Ubangi **Jibe** lú ~ nú; **Gbaya** kɔ̀-nú
Isolated Bangime nóɔ́

@Small Bantu *níìní – **Mande** *dɛ̃ *child, small*. Reliability index: 6/6.

PROTO-BANTU *níìní, *níò, Regions 4: NW SW Ce NE; Zones 6: CEHKMR

OTHER BENUE-CONGO

BENUE-CONGO E.: **Proto-Jukun-Mbembe-Wurbo** dĩ; **Proto-Lower-Cross** ó-jɛ́n / ɛ- *child*

BENUE-CONGO isolated: **Proto-Ukaan** *ònɪ̨ *child*

MANDE *dɛ̃ *child, small*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+	+	+	+	+	+		+	+	

1.2 Susu-Jalonke **Susu** díí, díídìì *child; small, young*; **Jalonke** díí, díídìì *child*

1.3 Jogo-Jeri **Jogo** (Braconnier n.d.; Kastenholz 1997) dé *child, fruit, grain, seed*; **Jeri** dí *child*; **Jalkunan** dí *child*

1.4 Vai-Kono **Vai** dɛ̃ŋ *child; young*; **Kono SL** dén-toa *child*

1.5 Mokole **Kakabe** dén *child, fruit*; **Mogofin** déŋ-è *child*; **Lele** dí; **Koranko** dɛ́ *child*

1.6 Manding **Proto-Manding** *dɛ́; **Mandinka** díŋ *child, fruit*, -ndiŋ *diminutive suffix*; **Xasonka** díŋ *child, fruit; fructify*; **Maninka Kita** dín *child*; **Maninka-Mori** dén *child, fruit*; -nin, -nɛn *diminutive suffix*; **Bambara** dén *child, fruit; fructify*, -nin *diminutive suffix*; **Jula Kong** dén *child, fruit, grain*

1.7 Soninke-Bozo **Soninke** reN/rémmè, leN/lémmè *(one's) child, fruit,* remmu ~ lemmu *fructify*; **Tieyaxo** juɔn *son, daughter*; **Tigemaxo** jɔ́ɔ́ⁿ, júóⁿ *child*; **Kelenga** léⁿ *child; bear fruit*; **Jenaama Cliffs** dyɛ̄wⁿ, jɛ̄wⁿ, pl. dɛ̄m-bɛ̄ *child, fruit*; **Jenaama Jenne** díyáwⁿ *child*

1.9 Samogho **Banka** di-na *child, seed, fruit*; **Duun** dɪ̨ *child*; **Dzuun** dzíín *child*; **Kpen** dzɪ̨ɪ̨ *child*

2.1 Eastern **Proto-Eastern** (Schreiber 2008) *nɐ̰ *child*; **San S.** (Schreiber 2008) na-nɛ̄ *child*; **Bisa Lebir** ɲí *child*; **Bisa Barka** (Schreiber 2008) ní; **Boko** nɛ́ *child*; **Busa** ní *child*; **Bokobaru** nī

2.2 Southern **Proto-Southern** *dɛ̰ *child, diminutive suffix*; **Dan E.** dɑ̰ *child, diminutive suffix*; **Goo** dɑ̰ *child*; **Tura** nɛ́, pl. nɑ̋ò, nɑ̋òbò *child*; **Mano** né, pl. nɔ́ɔ̀; né-fú, pl. nɔ́ɔ̀-bē *child, person*; **Guro** lɛ̰, pl. lṵ̰-lṵ̰, lɛ̰-lṵ̰ *child, baby*; **Yaure** lɛ̰ *child*; **Mwan** dɛ̰ *child*; **Gban** lɪ̰ *child*; **Beng** lɛ́ŋ́ *child, offspring*; **Gbin** lɛ *child*

OTHER NIGER-CONGO potential parallels:

Atlantic Bak Joola **Joola Kwaatay** aɲɪ *child*; **Bayot** jɪ *baby, child, son*, jiɲi *small child*

Atlantic N. Cangin **Proto-Cangin** *yɪn; Nalu-Baga Fore-Pukur **Nalu** ɲeel, **Pukur** ɲìnʌ̀rʌ̀l. It is also possible that the Mande root *dɛ̰ *child, small* is related to another northern Atlantic root: Proto-Atlantic N. *dim *give birth, produce*; **Proto-Fula-Sereer** *Dim *give birth*; Tenda-Biafada **Konyagi** ì-də̃w̃ *fructify, be productive*; **Biafada** (w)-nrəma / ma-nrəma *fruit*; Nyun-Buy **Nyun Gubaher** bʊ-diim *fruit, family*; Wolof **Wolof** dɔɔm B *child, fruit, key, pill, pawn*; Cangin **Noon** kə-lim *give birth*; **Palor** lim *give birth, be the source of*

Dogon **Jamsay** jɪ̀ɪ̀lɛ́; **Koro** déwⁿ *child*; dè-ní; **Mombo** dééjé *very young and small (animal, person)*

Kru **Bakwe** jɪa *be thin or small*

Mel S. **Kisi** lèndè *young; vice, second, small, baby*

Ubangi **Mundu** yɛ̀ ~ ɪ̄yɛ̀ *descendant, child, member*

Comments:

1) For Mande, the direction of semantic evolution CHILD > DIMINUTIVE SUFFIX seems preferable, see in particular (Nikitina 2019). However, an earlier semantic shift SMALL > CHILD cannot be excluded.
2) BLR3 admits that the Proto-Bantu form might result from reduplication. The roots **níìní, *níò* are absent from Schadeberg's reconstruction.

9.1.3. Initial palatal consonants

9.1.3.1. Bantu *j- : Mande *j-

@Blood Bantu *gàdí, *jàdí – **Mande** *joli. Reliability index: 4/6 (questionable phonetic correspondences; limited distribution in Bantu).

PROTO-BANTU *gàdí, Regions 3: Ce NE SE; Zones 5: FMNPS (Schadeberg also BCHJKLR); *jàdí, Regions 3: Ce NE SE; Zones 3: DEP; *gìdá, Regions 3: NW SW Ce; Zones 7: ABCDHKL (Schadeberg gives all other zones)

OTHER BENUE-CONGO

BENUE-CONGO W.: Edoid **Proto-Edo** *U-ɟɪ ~ ɟɪa / A

MANDE *joli

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
				+	+	+				

1.5 Mokole **Kakabe** jèlì; **Lele** jìlí; **Koranko** yèle

1.6 Manding **Mandinka** yèlè; **Maninka Nyokolo** yélù; **Xasonka** jélú; **Maninka Kita** jòlì; **Maninka-Mori** jèli; **Bambara** jòli; **Jula Kong** jòrí; **Marka-Dafing** yúru

1.7 Soninke-Bozo **Tigemaxo** jɔ́ɔlɔ́, júɔlə; **Kelenga** jéerè; (Creissels 1992) jérì; **Tiema-Cewe** jooro; **Sorogama** (Creissels 1992) jolo

OTHER NIGER-CONGO potential parallels:

Adamawa **Moo** zī, **Mumuye (Zing)** zīn, **Kyãk** zwī, **Lelau** zī

Atlantic N.: Tenda-Jaad-Biafada **Bedik** ma-ʃɛ̀l; Fula-Sereer **Proto-Fula-Sereer** *yɛ̀l, **Sereer** yal l; Nalu-Baga Fore-Pukur **Baga Fore** yél / cì-yél; **Pukur** yɛlã

Gur **Dagaare** zi̱i̱, **Nawdem** ji̱-m

Kru **Dida** dòlū; **Godie** dōlū

@Fish Bantu *cúí – **Mande** *ŋ̀-jɔGɛ. Reliability index: 5/6 (questionable phonetic correspondences).

PROTO-BANTU *cúí, Regions 4: NW SW Ce NE; Zones 12: ABCDEGHJKLMR; *cúé, Regions 2: NW Ce; Zones 2: BM

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Grassfields **Proto-Grassfields** *sÚˋ, Ring **Proto-Ring** *tùá; Cross Lower **Proto-Lower-Cross** *é-ják / i-

MANDE *ŋ̀-jɔGɛ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+	+	+	+	+	+

1.1 Southwestern **Mende** ɲé; **Loko** ɲeɛ; **Bandi** ɲè; **Zialo** ɲè; **Kpelle S.** ɲɛ́ɛ, ɲɛ̄ɛ; **Kpelle N.** ɲɛ́ɛ *catfish*

1.2 Susu-Jalonke **Susu** yéxè; **Jalonke** jéqé

1.3 Jogo-Jeri **Jogo** yàɣá, (Braconnier n.d.) yégé(n); **Jeli** yégɛ, (Kastenholz 2001) yéga(n); **Jalkunan** yíʔé; **Numu** yígén

1.4 Vai-Kono **Vai** ɲíé, (Klingenheben & Kastenholz 2019) ɲíyé; **Kono SL** ɲéɛ

1.5 Mokole **Kakabe** yégé; **Mogofin** yégé; **Lele** ɲɛ́ɛ; **Koranko** yégɛ

1.6 Manding **Proto-Manding** *ŋ-jégɛ; **Mandinka** ɲéé, yéé; **Maninka Nyokolo** yèɣè; **Xasonka** ɲégé; **Maninka Kita** yéké; **Maninka-Mori** jɛ́ɛ; **Bambara** jégé; **Jula Kong** yígɛ́; **Koro** yégé; **Koya** yɣé; **Koya** jɣé; **Marka-Dafing** yìé

1.7 Soninke-Bozo **Soninke** ɲéxè; **Tigemaxo** ɲɔ́ɔ, ɲúɔ; **Kelenga** (Creissels 1992) ɲɔ́ŋɔ; **Tiema-Cewe** ɲǫǫ; **Jenaama Cliffs** yɔ̄gɔ̄, yūwɔ̄; **Jenaama Jenne** yúwɔ

1.8 Bobo **Bobo** zē, pl. zēnón

1.9 Samogho **Jowulu** yérı̨ŋ; **Dzuun** jí; **Kpan** ʒee; **Duun Sieu** ʒi; **Duun Kai** ʒi; **Duun Bananso** ʒi; **Banka** ji-dinɑ; **Kpen** gi

2.1 Eastern **San S.** zɔ̀; **Bisa Lebir** zɔ̀; **Kyanga** zɔ̨̀; **Shanga** zǫ́ɔ

2.2 Southern **Dan Gwɛɛtaa** yúɤ̈ɤ̈; **Goo** yűú; **Gban** zǫ́; **Beng** zı̨ŋ́; **Ngen** zùmá

OTHER NIGER-CONGO potential parallels:

Adamawa **Mono** cɛ̨̀ɛ̨̀ / cɛ̨̀ɛ̨̀-rɛ́; **Loo** cē;**Tupuri** cɛ̨̄ɛ̨̀; **Mak** seí; **Maghdi** ʃəī

Atlantic N. Wolof **Wolof** jën W; Cangin **Palor** jen; **Laala** jən

Ubangi **Mundu** sí; **Ngbaka Pendi** sī

Comments: A very robust root: Greenberg provides its reflexes for all six of his Niger-Congo branches. In Mande, it appears in all 11 groups.

@Kill Bantu *jip- – **Mande** *jɛ. Reliability index: 5/6

PROTO-BANTU *-jip-, Regions 5: NW SW Ce NE SE; Zones 8: DFKLMNPS

MANDE *jɛ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
							+	+	+	+

1.8 Bobo **Bobo S.** yɛ̀ *fit together, fit smth. into smth.*; **Sogorama** sorõ *join up, connect*

1.9 Samogho **Dzuun** žɛ́ *vt beat*

2.1 Eastern **Proto-Eastern** *jɛ̄; **San S.** (Schreiber 2008) dí *vt beat, kill*; San N. (Schreiber 2008) djɛ́ *vt beat;* **Bisa Lebir** zɛ́ *vt kill; beat; beat (butter); play (balaphone); ply; pick (fruits); swim ("beat water")*; **Bisa Barka** zè *vt beat*; **Boko** dɛ́ *vt kill; bother, ache*; **Busa** dɛ *vt kill; bother; convulse*; **Bokobaru** dɛ *vt kill; bother*; **Kyanga** dɛ; **Shanga** de

2.2 Southern **Dan E.** zʌ̄ *vt kill; strike, beat; play (drum); throw; pronounce (speech)*; **Dan W.** zʌ̄ *vt kill; strike, beat; play (drum); throw; pronounce (speech)*; **Dan Kla** zè *vt kill; strike, beat; play (drum); throw; pronounce (speech)*; **Goo** zʌ̀; **Tura** zɛ́ *vt kill; treat (wound); effectuate (sleep; speech); pawn; hunt (animals, insects)*; **Mano** zɛ̄ *vt kill; plough; extract (rubber); play (instrument)*; **Guro** jɛ̄ *vt kill; cut, reap, mow*; **Yaure** tɛ̀ *vt kill; perform*; **Gban** zɛ̀; **Mwan** dɛ̄; **Wan** té *vt kill; beat, strike*; **Beng** dɛ̄ *vt kill; perform*; **Gbin** dɛ

OTHER NIGER-CONGO potential parallels:
Adamawa **Munga Dosso** jə̀; **Jenjo** jə; **Mono** ʔṵ̀
Mel **Sherbro** di; **Kim** jì; **Landuma-Temne** dif
Isolated NC **Gola** jiiβa

@See Bantu *jén – **Mande** *jɪ ~ *je. Reliability index: 5/6 (limited distribution in Bantu).

PROTO-BANTU *jén, Regions 2: NW SW; Zones 4: ABCH

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Ekoid **Abanyom** yên; Bantoid Grassfields *yÉn; **Limbum** yé; Bantoid Grassfields **Proto-Grassfields** Kom **Kom** ɥɛ̄n; Cross Upper **Proto-Upper-Cross** *yén; Jukunoid **Proto-C-Jukun** *di; Kainji **Bassa** jé

MANDE *jɪ ~ *je ~ *jeŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
		+	+	+	+		+	+	+	+

1.3 Jogo-Jeri **Jogo** jí; **Jeri** jí; **Jalkunan** jí

1.4 Vai-Kono **Vai** jé; **Kono SL** yén

1.5 Mokole **Kakabe** yén; **Mogofin** yèn; **Lele** yén; **Koranko** yɛ́

1.6 Manding **Proto-Manding** *jé, *jɛ́; **Mandinka** jé; **Maninka Nyo-kolo** jè; **Xasonka** jé; **Maninka Kita** yé; **Maninka-Mori** yé, yén; **Bambara** yé; **Jula Kong** yé; **Koro** yé; **Koya** yé, jé

1.8 Bobo **Bobo** zà *see, find, obtain,* zɛ̀ *be visible*

1.9 Samogho **Jowulu** jā; **Dzuun** jáa; **Duun Sieu** jɑo; **Duun Kai** ja; **Banka** jɑ

2.1 Eastern **Proto-Eastern** *yí; **San S.** yɛ̄/yii *see; find; have*; **San Matya** ye; **San Mayaa** ye; **Bisa Lebir** yí; **Boko** e; **Bokobaru** e; **Busa** e

2.2 Southern **Proto-Southern** *yì; **Dan-Gwɛɛtaa** yɜ̄; **Dan-Kla** yɛ̀; **Goo** yɛ̀; **Tura** yé; **Guro** yī; **Yaure** yì; **Gban** yè *exist; find, gain*; **Mwan** yɛ̄/yé; **Wan** é; **Beng** yè, yɛ̄; **Ngen** yè

OTHER NIGER-CONGO potential parallels:

Atlantic N. Tenda-Jaad-Biafada **Jaad** jeen

Dogon **Jamsay** ɛ́ɛ́; **Najamba** yɛ́ / yɛ̀

Gur **Gurunsi – Oti-Volta** *ni, *ne, *ɲa

Senufo **Supyire** ɲʸɛ

Isolated Bangime yiya

Comments: In Bantu, reflexes of this root appear only in the western zones. On the other hand, it is well represented in other Benue-Congo groups, and also in other Niger-Congo families.

@Water Bantu *jíjì – **Mande** *ji. Reliability index: 6/6.

PROTO-BANTU *jíjì, Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGHJKLMNPRS

OTHER BENUE-CONGO Proto-Benue-Congo *izi, *ni

BENUE-CONGO E.: Cross Upper **Proto-Upper-Cross** *nì; Kainji **Bassa** ní; Platoid **Sambe** àrì

MANDE *ji

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+	+	+	+	+	+

1.1 Southwestern **Proto-Southwestern** *jía; **Mende** njă; **Loko** njă; **Bandi** njà; **Zialo** já; **Looma** zìɛ́, zíá; **Kpelle S.** yá; **Kpelle N.** yá

1.2 Susu-Jalonke **Susu** yé; **Jalonke** jéé

1.3 Jogo-Jeri **Jogo** yí; **Jeli** yi; **Jalkunan** yí; **Numu** yi

1.4 Vai-Kono **Vai** jí; **Kono SL** yíí

1.5 Mokole **Kakabe** jíí; **Mogofin** jé; **Lele** jí, yí; **Koranko** yí

1.6 Manding **Proto-Manding** *jí; **Mandinka** jíí; **Maninka Nyokolo** jìì; **Xasonka** jí; **Maninka Kita** jí; **Maninka-Mori** jí; **Bambara** jí; **Jula Kong** jyé ~ jí; **Koro** jé; **Marka-Dafing** zìé

1.7 Soninke-Bozo **Soninke** jî ~ jíi; **Tigemaxo** jíí; **Kelenga** júú; **Tiema-Cewe** jii; **Jenaama Cliffs** jīī; **Jenaama Jenne** jíí

1.8 Bobo **Bobo S.** ziō/zō

1.9 Samogho **Jowulu** (Carlson 1993) jú; **Seenku N.** jő; **Dzuun** yú; **Kpan** žo; **Duun** žo; **Banka** žo; **Kpen** jó

2.1 Eastern **Bokobaru** í; **Boko** (Koelle 1854) ii; **Kyanga** ‘í; **Shanga** ‘íí

2.2 Southern **Dan Gwɛɛtaa** yǐ; **Goo** yǐ; **Tura** yǐ; **Mano** yíí; **Guro** yí; **Yaure** yí; **Mwan** yì; **Wan** yí; **Gban** yǐ; **Beng** yí; **Ngen** yí

OTHER NIGER-CONGO potential parallels:
Atlantic Bak Joola **Bayot** dɪa
Atlantic N. Fula-Sereer **Fula** ndiyam / diyeele ~ diʔeele
Dogon **Mombo** míì; **Tommo So** díí; **Jamsay** níí; **Toro Tegu** ní; **Najamba** ínjé / ínjé; **Bankan-Tey** níì
Gur **Proto-Oti-Volta** *ɲa; **Miyove** mí-nì; **Chakali** nɪɪ / nɪɪta; **Sissala** ɲìì / ɲììrì
Kru **Aizi** nrɪ; **Bakwe** ní; **Kuwaa** nímí; **Guere** ní; **Wobe** n̰í; **Tepo** niyḛ́; **Jrwe** n̰íḛ́
Kwa **Proto-Potou-Akanic** *ju; **Proto-Akanic** *cu
Ubangi **Proto-Gbaya** *l̩ì; **Gbaya** yì
Isolated NC **Limba** ma-n-di

Comments:
1) Greenberg does not mention this root, even though it ranges among the most robust roots in Niger-Congo, including Mande.
2) Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu **ʃu*.

9.1.3.2. Bantu *c- : Mande *s-

@All Bantu *ncè – **Mande** *seŋ. Reliability index: 3/6 (reflexes are poorly represented in Mande; limited distribution outside Bantu and Mande).

PROTO-BANTU *ncè, Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGHJKLMNPRS

MANDE *seŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
						+				+

1.7 Soninke-Bozo **Tigemaxo** ʃíɛ̀ⁿ; **Tiema-Cewe** sĩã
2.2 Southern **Proto-SM** *séŋ; **Mano** séŋ́; **Mwan** séé *absolutely (intensifier to 'all')*; **Beng** sē; **Ngen** sēē

OTHER NIGER-CONGO potential parallels:
Adamawa **Moo** sē
Atlantic North **Konyagi** céw

IJO **Mein** sé
KRU **Bassa** séín
UBANGI **Dakpa** cī

Comments: The cognacy may have been blurred in many languages by the presence of noun class markers.

@Ground Bantu *cí *ground; country; underneath* – **Mande** *sɛlɛ. Reliability index: 5/6 (limited distribution in Mande).

PROTO-BANTU *cí *ground; country; underneath*, Regions 5: NW SW Ce NE SE; Zones 14: ABCDEFGHJKLMPR; cìdí *earth, soil*, Zones: LM

OTHER BENUE-CONGO PROTO-BENUE-CONGO *tie
BENUE-CONGO E.: BANTOID GRASSFIELDS **Proto-Grassfields** *sé, KOM **Kom** ə̄nsē; **Limbum** nsī; PROTO-RING *tíɔ̀; EDOID **Urhobo** ʃì

MANDE *sɛlɛ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
										+

2.2 SOUTHERN **Proto-Southern** *sɛ́lɛ́; **Dan Gwɛɛtaa** sɛ̃́, sɛ̃́ɛ̃́ *earth, soil; country, region*; **Goo** sɛ̃́ɛ̃́; **Tura** sɛ́ɛ́ *earth, soil; country, region; world*; **Mano** sɛ́lɛ́ *region, country; ground; floor; region; village*

OTHER NIGER-CONGO potential parallels:
ADAMAWA **Kare** sísìrì **Tupuri** sírì, **Mono** sìì
ATLANTIC BAK **Pepel** ʂɛ
GUR **Gurunsi – Oti-Volta** *tan / *tɪn; **Pana** cɛ̰i̯ / cɛ̰i̯yà *on the ground*
IJO **Ịbanị** sé *country*
KWA **Proto-Potou-Akanic** *-tɪ; **Proto-Akanic** *-sɪ; NYO **Agni** (Hérault 1983) àsìɛ́; **Nawuri** (Snider 1989) gà-sáĩ *land*
UBANGI **Sango** sisi

Comments: Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu *cɪ.

@Hair Bantu *cìngà – **Mande** *siɣi ~ *tiɣi. Reliability index: 4/6 (not represented outside Bantu and Mande).

PROTO-BANTU *cìngà, Regions 5: NW SW Ce NE SE; Zones 10: ABCFGHKLRS *string; hair (on body)*; *cítí, Regions 5: NW SW Ce NE SE; Zones 7: AJLMNRS *hair*; *càkò, Regions 2: Ce NE; Zones 2: JM; *cítì, Regions 5: NW SW Ce NE SE; Zones 7: AJLMNRS; *còkí, Regions 3: NW SW Ce; Zones 7: ABCHKLR

MANDE *siɣi ~ *tiɣi

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+	+	+	+	+	+	+	+		+

1.2 Susu-Jalonke **Susu** xu̱-sɛ́xɛ̀; **Jalonke** qùn-sɛ́qɛ̀

1.3 Jogo-Jeri **Jogo** wútìgí, (Braconnier n.d.) tín *fur, feather*; **Jeli** tɪ̨́, cɪ̨́ *fur, feather*; **Jalkunan** wù-tígí *hair on head*, cīī(n) *body hair*; **Numu** tigi *hair,* tɪ̨́n *body hair, feather*

1.4 Vai-Kono **Vai** kùndíì *hair, bodyhair, feather*; **Kono SL** kùndíi

1.5 Mokole **Kakabe** kùnsígí *hair,* tí *feather*; **Mogofin** kúnsígè; **Lele** kuntii *hair*, sí *body hair*

1.6 Manding **Mandinka** tíí *hair, fur, feather*; **Maninka Nyokolo** kúntìŋà; **Xasonka** kúnsínà *hair,* ti *fur, feather*; **Maninka Kita** sí; **Bambara** ku̱sigi *hair*, síí *body hair, fur, feather*; **Jula Kong** ku̱sigi, ku̱sigisye, ʃé, syé; **Koro** ʃé *hair, feather*; **Koya** ʃé; **Marka-Dafing** tì *hair; feather*

1.7 Soninke-Bozo **Soninke** yìn-tí/-e *hair, fur, feather*; **Tigemaxo** tíí^{n} *hair, fur, feather*; **Kelenga** tú^{n}; **Tiema Cewe** tii *feather*; **Jenaama Cliffs** tīī *hair, body hair, feather*; **Jenaama Jenne** tíí

1.8 Bobo **Bobo** ŋwòn sógó

1.9 Samogho **Jowulu** ŋūnīnshɪ́ŋ; **Seenku N.** kònsùgì, kònsùgìi; **Seenku S.** kɔ̨̄n-sugùi

2.2 Southern **Dan Gwɛɛtaa** sē *pubic hair*

Comments: It is unclear if the forms with initial *t-* and *s-* in Mande languages represent reflexes of one and the same proto-form or if these are two different proto-roots. Besides, it is unclear whether

sigi ~ *tigi* ‘hair’ and *si* ~ *ti* ‘fur, feather’ in Mande are related through derivation or are simply different stems. Note that in Bantu, a phonetically close form for FEATHER is also attested: **tèngá* 3 regions: NW Ce SE; 5 zones: CLNPS.

9.1.3.3. Bantu *j- : Mande *ɣ-

@Bird: Bantu *jònì – **Mande** *ɣɔ̃dĩ. Reliability index: 6/6.

PROTO-BANTU *jònì, Regions 5: NW SW Ce NE SE; Zones 15: ABCDEFGHJKLMNPS, *nòdì, Regions 2: NW Ce; Zones: 4 ABCD, *nʊ́ʊnɪ, Zone J

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Grassfields **Proto-Grassfields** *nÙn´; Ring **Proto-Ring** *núnì; Cross Lower **Proto-Lower-Cross** *í-nùŋén; Cross Upper **Proto-Upper-Cross** *nɔ̀ná; Jukunoid **Proto-Yukuben** *nùŋ

MANDE *ɣɔ̃dĩ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+	+	+	+		

1.1 Southwestern **Proto-Southwestern** *ŋɔ̀ní; **Mende** ŋɔ̀ní; **Loko** wɔ̃i, (Koelle 1854) ŋoolɪ̰ɪ̰a̰; **Bandi** w̃ɔ̀nɪ́ɪ; **Zialo** wɔ̰̀nì; **Looma** wɔ̀nì; **Kpelle S.** ŋɔ̄nī, (Westermann & Melzian 1930) ŋwɛ́ní, ŋwɔ́ni; **Kpelle N.** ŋʷɛ̀nĭ

1.2 Susu-Jalonke **Susu** xɔ̀ní; **Jalonke** qɔ̀ní

1.3 Jogo-Jeri **Jogo** kɒ̰ŋdìrì; **Jeri** kóndi; **Numu** kɒ́ndèré; **Jalkunan** kɔ̰̀

1.4 Vai-Kono **Vai** kòndé; **Kono SL** kònde

1.5 Mokole **Kakabe** kòndì; **Mogofin** kóndéŋè; **Lele** kòndo, kùndo; **Koranko** kɔ̀ndɛ̰

1.6 Manding **Proto-Manding** *xɔ̀nɔ; **Mandinka** kùnù; **Maninka Nyokolo** kónò; **Xasonka** xónò; **Maninka Kita** kònò; **Maninka-Mori** kɔ̀nɔ; **Bambara** kɔ̀nɔ; **Jula Kong** kònɔ; **Koro** kɔ̀rɔ̰; **Koya** krɔ̰́

1.7 Soninke-Bozo **Proto-Soninke-Bozo** *xɔ̀líŋ; **Soninke** yèlíŋŋè; **Tigemaxo** xɔ̄nīⁿ; **Kelenga** hɔ̀nɔ̀ⁿ; **Jenaama Jenne** kɔ̀nì, kwànì; **Jenaama Cliffs** kɔ̀nù; **Tiema-Cewe** kǫ̀do
1.8 Bobo **Bobo S.** yàlô, pl. yàlâ ~ yàlālá
1.9 Samogho **Jowulu** ɲāā̰náā̰ŋ; **Seenku N.** kàllɛ̀ / kàllɛ̀; **Seenku S.** kàn; **Dzuun** kɛ̀yn; **Duun Sieu** kǫ̰ne; **Duun Kai** kǫ̰ni; **Duun Bananso** kɑ; **Banka** kɑnɑ; **Kpen** kàń

OTHER NIGER-CONGO potential parallels:
Adamawa **Samba Leko** nú; **Pere** núū
Atlantic Bak Joola **Bayot** eno
gur **Kurumfe-Gurunsi** *ye; **Proto-Oti-Volta** *nin, *non
Ubangi **Proto-Gbaya** *nɔ́í

Comments: For the Atlantic family Greenberg provides a form that is not available in our data: **Badyara Jaad** *(u)noune*.

@Moon Bantu *jédì *moon, month* – **Mande** *ŋ̀-ɣadVŋ. Reliability index: 5/6 (not found in Benue-Congo outside Bantu).

PROTO-BANTU *jédì, Regions 5: NW SW Ce NE SE; Zones 15: ACDEFGHJKLMNPRS *moon, month*

MANDE *ŋ̀-ɣadVŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+		+	+	+	+	+		+		

1.1 Southwestern **Proto-Southwestern** *ŋ̀-gáluŋ; **Mende** ngálu *moon, month*; **Loko** ngáú; **Bandi** ngàlù(ŋ) *moon, month*; **Zialo** gàlù(g); **Looma** àlù(g); **Looma Gizima** (Vydrin 1987) ɣalu; **Kpelle N.** ɲáníŋ *moon, month*; **Kpelle S.** ɣálóŋ, (Welmers 1962) ŋáloŋ *moon, month*
1.3 Jogo-Jeri **Jogo** (Braconnier n.d.) kái; **Jeri** (Kastenholz 2001) káyi
1.4 Vai-Kono **Vai** ká'ó *moon, month*; **Kono** káo
1.5 Mokole **Kakabe** kàru; **Mogofin** káré *moon, month, menses*; **Lele N.** kári; **Lele S.** káyi; **Koranko** kéri, kári *moon, month*
1.6 Manding **Proto-Manding** *xádV *moon, month*; **Mandinka** kári; **Xasonka** xáru; **Maninka Kita** káru; **Maninka-Mori** káro; **Bambara** kálo; **Jula Kong** kári; **Jula Odienne** kàro; **Mau** káā̰

1.7 Soninke-Bozo **Soninke** xásó *moon, month, menstruation*; **Tieyaxo** xay; **Tigemaxo** xáy *moon, month*; **Kelenga** háyò *moon, month*; **Tiema-Cewe** kayi; **Jenaama Cliffs** kēw, kūūū *moon, month, menstruation*; **Jenaama Jenne** kóó *moon, month*

1.9 Samogho **Jowulu** ɲé (?); **Seenku N.** kɛ̀, pl. kɛ̀

OTHER NIGER-CONGO potential parallels:

Adamawa **Dza** yídì

Atlantic Bak **Balant kentohe** b-dɪndɪ

Ijo **Nkọrọ** àkàlú; **Ịbanị** akalú; **Kalaḅarị** àkàlú; **Kịrịkẹ** àkàlú; **Ekpetiama** àkàlú; **Kolokuma** àkàlú; **Gbanraịn** àkàlú; **Oruma** àkàlú

Kwa **Proto-Potou-Akanic** *-ɯɛnĩ; **Proto-Akanic** *-ɛɛnĩ

Ubangi **Proto-Gbaya** zè, **Sango** nze

Comments:

1) Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu ***-ɯ̃ɛ̃lĩ***.
2) The Proto-Bantu and Proto-Potou-Akanic roots are very close phonetically or even homonymous with the roots for CLEAR, see §9.2.3.4. It is likely that in Proto-Niger-Congo the words for WHITE and MOON were related through derivation, the notion of shining/brightness serving as the semantic link (cf. **Proto-Bantu** ***jéd*** 'shine; be clear. be ripe; be favourable').

9.1.3.4. Bantu *j- : Mande *y-

@Sun Bantu *jáni – **Mande** *yããlɛ̃ ~ *yã. Reliability index: 4/6 (limited distribution in both Bantu and Mande).

PROTO-BANTU *jáni, Regions 2: NW Ce; Zones 4: ABCD.

OTHER BENUE-CONGO Proto-Benue-Congo *z(wa)na

BENUE-CONGO E. Cross Lower **Proto-Lower-Cross** *é-jè *sunshine*; Cross Upper **Proto-Upper-Cross** *yánì *spread in the sun to dry*

MANDE *yããlɛ̃ ~ *yã

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+									+

1.2 Susu-Jalonke **Susu** yáŋ-í *daylight; daytime*

2.2 Southern **Proto-Southern** *yɛ́lɛ̰́; **Dan E.** yɑ̰́ŋ̰́; **Dan Kla** yɛ́ɛ̰́; **Goo** yɑ̃́ɑ̃́; **Tura** yɑ̃́ɑ̃́; **Mano** yɛ́lɛ́; **Guro** yīlí; **Yaure** yì-dɛ́; **Mwan** yrè-té (from té *fire*); **Wan** yɛ̄-té (from té *fire*); **Gban** yé-vě; **Beng** yī-gbíé; **Ngen** yì-pú (from pú *white*)

OTHER NIGER-CONGO potential parallels:

Atlantic Bak Joola **Joola Kasa** ka-yaŋ *be pure, clean*; **Joola Kwaatay** mayaŋ *light, brightness*

Atlantic N. Nyun-Buy **Nyun** (Anonyme 1996) yaŋ *it is shining, clear*, (Cobbinah 2013) bajaaŋi *light area*; Tenda-Jaad-Biafada **Basari** a-ỹèg *shine; burn; be astringent*; Nalu-Baga Fore-Pukur **Nalu** yaŋen *light*

Dogon **Jamsay** yáynɛ́rɛ̀ *light, illumination*

Ubangi **Mundu** zɛ̄ngà light

Comments: The root **jáni*, being attested only in four western Bantu zones, may seem marginal, the main stems for 'sun' in Bantu being **jóbà* (5 regions; 16 zones) and **tángó ~ tángóá* (3 regions; 7 zones). However, derivates from this root appear everywhere in Bantu (and in BLR3 they are marked as "main"): **ján-ık*, 5 regions: NW SW Ce NE SE; 14 zones: ABCFGHJKLMNPRS 'spread to dry in the sun; spread out'; **ján-ʊd*, 4 regions: NW SW Ce NE; 7 zones: CEFHJLM 'withdraw something from the sun'; **ján-ʊk*, 4 regions: NW SW Ce NE; 5 zones: CEHJL 'be away from the sun'; **ján-am*, 3 regions: SW Ce NE; 3 zones: HJL 'dry in the sun; be spread out'.

@Tooth Bantu *jínò – **Mande** *yĩ. Reliability index: 6/6.

PROTO-BANTU *jínò, Regions 5: NW SW Ce NE SE; Zones 15: ABCDEFGHJKLMNPS

OTHER BENUE-CONGO Proto-Benue-Congo *nini, *nino

BENUE-CONGO E.: Jukunoid **Proto-Jukun** *gʸín; Kainji **Bassa** ɲɛ́nɛ́-ɓò; Platoid **Sambe** ɲínâ

BENUE-CONGO W.: Idomoid **Gwari** ɲíknâ

MANDE *yĩ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+	+		+		

1.1 Southwestern **Looma** ɲi̱gé, (Sadler 2006) gíi̱; **Kpelle S.** ɲíŋ; **Kpelle N.** ɲíŋ

1.2 Susu-Jalonke **Susu** ɲíɲí; **Jalonke** ɲíŋ

1.3 Jogo-Jeri **Jogo** ɲíŋ; **Jeli** ɲin-di; **Jalkunan** ɲi̱; **Numu** ɲìn

1.4 Vai-Kono **Vai** ɲíŋ *tooth, tusk*; **Kono SL** ɲín

1.5 Mokole **Kakabe** ɲín; **Mogofin** ɲíŋè; **Lele** ɲín ~ ɲii; **Koranko** ɲi̱i̱

1.6 Manding **Mandinka** ɲíŋ; **Maninka Nyokolo** ɲìŋ; **Xasonka** ɲín; **Maninka Kita** ɲín; **Maninka-Mori** ɲín; **Bambara** ɲi̱; **Jula Kong** ɲi̱; **Koro** ɲíwⁿ; **Koya** ɲi̱n

1.7 Soninke-Bozo **Tigemaxo** ɲímíⁿ; **Kelenga** ɲíⁿ; **Jenaama (Cliffs)** ɲīīⁿ; **Jenaama Jenne** ɲíí

1.8 Bobo **Bobo S.** ɲíní

1.9 Samogho **Jowulu** ɲi̱íɲá̱ŋ; **Dzuun** ɲín; **Kpan** ɲi̱i̱; **Duun Sieu** ɲinɑ; **Duun Kai** ɲi; **Banka** ɲi̱nɑ; **Kpen** ɲín-dè

OTHER NIGER-CONGO potential parallels:

Adamawa **Bolgo** nìl / nìì; **Day Bouna** ngìì; **Munga Dosso** dĩ; **Dza** jī; **Tha** jɨ̀jɨ̀

Atlantic Bak **Bijogo** ka-ɲi / ŋa-ɲi; **Mancagne** niŋ; **Pepel** ɲɪ; **Bayot** ɔ-ɲɪŋ; **Joola Kujamutay** kə-ɲiiŋ

Atlantic N. **Bainouk** rɪ; **Gubaher** gʊ-ril Fula-Sereer **Proto-Fula-Sereer** *ɲiɲ

Dogon **Mombo** ínnì; **Yanda Dom** ìn; **Yorno-So** ěn; **Ben Tey** ìří; **Jamsay** ìřé; **Toro Tegu** jìřó; **Bankan-Tey** ŋìřé

Gur **Proto-Oti-Volta** *nin; **Boore** ɲi̱nū / ɲīą̱; **Pana** yírí / yíríyà; **Miyove** tì-ní ~ kù-ní / a-ní; **Churama** ɲirᵩ̱ᵩ̱gu / ɲiran̰ɲą̱; **Chakali** ɲɪŋ / ɲɪŋa; **Sissala** ɲìl / ɲìlà; **Dagaare** ɲínì

Ijo **Defaka** nìą̱

Kru **Aizi** ɲɪ, **Wobe-Tepo** ɲé; **Grebo** ɲė; **Jrwe** ɲɛ́; **Nyabwa** ɲéné

Kwa **Proto-Ghana-Togo-Mountain** *lì-níà / à-; **Gonja** kí-ɲí; **Nawuri** gí-ɲí; **Adioukrou** nɛ́n; **Gichode** gí-ɲí

Ubangi **Proto-Gbaya** *ɲín; **Gbaya** ɲín; **Dakpa-Linda** ə̄ʒī; **Banda** zizi; **Zande** rīndē

9.1.3.5. Bantu *j- : Mande *s-

@Heart **Bantu** *jòjò *life, spirit; heart* – **Mande** *sɔŋ(-dɔŋ). Reliability index: 5/6 (questionable phonetic correspondences).

PROTO-BANTU *jòjò, Regions 4: SW Ce NE SE; Zones 10: EFGJHKLMNS *life, spirit; heart*

OTHER BENUE-CONGO

BENUE-CONGO E.: Platoid **Hasha** à-nzɔ̀r / zú-nzɔ̀r

MANDE *sɔŋ(-dɔŋ)

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+	+		+	+	+

1.1 **Kpelle S.** sɔ̄ŋ *behaviour; action, deed; guilt, blame, fault*; **Kpelle N.** hɔ̀ŋ̌ *character; default, fault; guilt, blame*

1.2 Susu-Jalonke **Susu** sɔn-yi *character; mentality; nature, instinct*, sɔ̀dóɲì *heart*; **Jalonke** sɔ́ń *character*, sòndóŋ̀ *heart*

1.3 Jogo-Jeri **Jogo** sɔ́ŋ, (Braconnier n.d.) sɔ̀(n); **Jalkunan** sɔ̀; **Numu** sɔ́n

1.4 Vai-Kono **Kono SL** sònsòn

1.5 Mokole **Kakabe** sɔn; **Mogofin** sòndóŋɛ̀; **Koranko** sɔ̀, sɔ̀ *heart; character; conscience*

1.6 Manding **Mandinka** sùndìŋ, sùndùŋ; **Maninka Nyokolo** sóŋ; **Xasonka** sòn *heart,* **Xasonka** sóndónmè *heart (as container of emotions, of will)*; **Maninka Kita** sòn; **Maninka-Mori** sɔn *heart; character; vice*, sɔ́ndɔmɛ, sɔ́lɔmɛ, sɔ́lɔmi, sɔ́lɔmin *heart (as container of emotions, of will); soul*; **Bambara** sɔ̀; **Jula Kong** sɔ̀; **Koro** sɔ̀ẃⁿ; **Koya** sɔ́ń

1.7 Soninke-Bozo **Soninke** sòndòmmê; **Tigemaxo** sɔnɔn *soul*; **Tiema Cewe** (Daget et al. 1953) sõndo *soul*; **Sorogama** (Daget et al. 1953) sõndo *soul*

1.9 Samogho **Jowulu** sɔ̀ŋ; **Seenku N.** sɔ̃̀, pl. swɛ̀n; **Seenku S.** sɔ́ɔn; **Dzuun** sɔ̀n; **Kpan** sɔ̰̀; **Duun Sieu** sonɑ; **Duun Kai** sono; **Duun Bananso** sono; **Banka** sonɑ; **Kpen** sɔ̰̀ŋ

2.1 Eastern **Boko** sɔ̰̀; **Bokobaru** sʷɛ̰̀ *heart; centre*

2.2 Southern **Dan Gwɛɛtaa** sɔ̀ŋ̀ *behaviour*; **Mwan** sɔ̄ŋ̄

OTHER NIGER-CONGO potential parallels:

Atlantic N. Tenda-Jaad-Biafada **Basari** ɛ-njɔ́w̃ *soul; pith*; **Jaad** du; Nalu-Baga Fore-Pukur **Baga Fore** sóndùn / cì-sóndùn

Mel N. **Landuma** sundu

Senufo **Mamara** zɔ; **Supyire** `zò / `zòmii

Comments: This root is missing from Greenberg's list.

@Smoke Bantu *jíkì – **Mande** *sisi ~ *sigi. Reliability index: 4/6 (absent from Benue-Congo outside Bantu; questionable phonetic correspondences).

PROTO-BANTU *jíkì, Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGHJKLMNPRS, *jókì, Regions 4: NW Ce NE SE; Zones 8: AEFGJMNP

OTHER BENUE-CONGO

BENUE-CONGO E.: Grassfields **Proto-Grassfields** *lík`

MANDE *sisi ~ *sigi

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
		+	+	+	+	+			+	

1.3 Jogo-Jeri **Jogo** sìsí; **Jeli** sìgí, (Kastenholz 2001) sìgu, sùgu; **Jalkunan** sìgìsígí; **Numu** sìsí

1.4 Vai-Kono **Vai** sìsí; **Kono SL** sìsi

1.5 Mokole **Kakabe** sììsì; **Mogofin** sììsé; **Lele** sìsi, sísí; **Koranko** sìsi

1.6 Manding **Mandinka** sììsìì; **Maninka Nyokolo** síísìì; **Xasonka** síísì; **Maninka Kita** sìsí; **Maninka-Mori** sìsi; **Bambara** sìsí; **Jula Kong** sìsí; **Koro** sìsì; **Koya** sìsí

1.7 Soninke-Bozo **Kelenga** (Creissels 1992) sìsi (< Manding?)

2.1 Eastern **San Matya** cisa; **Bisa Lebir** síngá, síŋŋə́

OTHER NIGER-CONGO potential parallels:
Mel S. **Sherbro** sɛ́gɛ́lì

Comments: Absent from Greenberg's list.

9.1.4. Initial velar consonants

9.1.4.1. Bantu *k- : Mande *k-

@Bark (of tree) Bantu *koba *skin, strap, girdle* – **Mande** *koba *bark*. Reliability index: 5/6 (limited distribution in Mande).

PROTO-BANTU *kóbá, Regions 5: NW SW Ce NE SE; Zones 15: ABCDEFGJKLMNPRS *skin, strap, girdle*

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Grassfields **Proto-Grassfields** *kùb`; **Limbum** kùb-cī; Jukunoid **Jibe** hʷów *skin*; Kainji **Bassa** kū *skin*; Platoid **Hasha** ī-kū / kú-kū *skin*

MANDE *koba

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+			+			+			

1.2 Susu-Jalonke **Susu** (Willits Ms.) kóbólè, (Lacan 1942) kobele; **Jalonke** kóbólé

1.5 Mokole **Mogofin** kóbólé *skin*

1.8 Bobo **Bobo S.** kōbā *bark, scales, shell*

OTHER NIGER-CONGO potential parallels:

Atlantic Bak Joola **Joola Kujamutay** ka-kʊb; **Mancagne** ka-huub;

Atlantic N. Nyun-Buy **Nyun** gʊ-kʊb / ha-kʊb; Tenda-Jaad-Biafada **Basari** ɑ-kɔ̀p; **Bedik** ɓa-kɔ̄p *scale*; **Konyagi** và̀-kù6; **Jaad** ka-ŋubɛ; Fula-Sereer **Proto-Fula-Sereer** *xoɓ; Cangin **Saafi** ʔop; Nalu-Baga Fore-Pukur **Nalu** koble *piece of bark*

Dogon **Yanda Dom** kómbó; **Tommo-So** kòbú; **Yorno-So** kòbìlií; **Ben Tey** kòmbíì; **Jamsay** kì-kŏw

Kru **Godie** kpɔ̄kpā / kpɔ̄kpɔ̄

Ubangi **Mundu** kɔ̄ ~ kɔ̄lɔ̄ ~ kɔ̄nɔ̄ *skin, bark*
Isolated NC **Limba** kuwa

Comments:

1) The Mogofin form is most probably a Susu loan.
2) To be mentioned are some Bantu forms for SKIN with initial voiced velar: **PROTO-BANTU** *gɔ̀bɔ̀. 3 regions: NW Ce SE; 4 zones: AMNS (Schadeberg AdEfGHkLMNPS). Also of interest are the following Eastern Benue-Congo forms: Bantoid Grassfields Ring **Proto-Ring** *gúɔ̀; **Limbum** ngùb. The latter forms look similar to the Mande root *wɔ̰̀bɔ *bark,* whose reflexes are attested in four groups of the Western Mandebranch: 1.2 Susu-Jalonke **Susu** (Anonyme n.d.) wonbi *strip the bark from*; 1.4 Vai-Kono **Kono SL** wómbɔ; 1.5 Mokole **Kakabe** wɔ́nbɔ́; **Mogofin** wónbó, wònbo *peel (verb)*; **Koranko** (Vydrin's data) kɔ̃-wɔnbɛ; 1.6 Manding **Mandinka** wònbo, hònbo *bark; empty shell*; **Xasonka** ŋòmo *bark; scab (of a sore)*; **Maninka-Mori** wɔ̀nbɔ *dry bark torn off from the tree*; **Bambara** ŋɔ̀mɔ *bark, scab (of a sore)*; **Koya** wɔ̀má, wɔ̀mɔ́; 1.7 Soninke-Bozo **Jenaama Cliffs** wógō *scale (of snake, fish), tree bark*; **Jenaama Jenne** gópò, gófò *shell (of tortoise, nut, egg); scale (of snake, fish); tree bark*. However, this would-be Niger-Congo cognacy is not supported by the evidence from other families.
3) The semantic shift SKIN – BARK presents no problem for cognacy: a search with "Homonymy & Polysemy" (Segerer 2022) reveals that this polysemy is found in 202 African lexicographical sources.

@Hand, arm **Bantu** *kónò *forearm; arm; hand; leg; hoof* – **Mande** *kɔɔ. Reliability index: 5/6 (limited distribution in Mande).

PROTO-BANTU *kónò, Regions 4: SW Ce NE SE; Zones 10: EFGJKLMNPS *forearm; arm; hand; leg; hoof*

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid **Proto-Grassfields** *kóN; **Proto-Ring** *kɔ́ìn *arm*

MANDE *kɔɔ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
									+	+

2.1 Eastern **San S.** gɔn; **Bisa Lebir** wɔ̀́ *arm*; **Bisa Barka** (Schreiber 2008) wó; **Boko** ɔ́; **Bokobaru** ɔ; **Kyanga** ɔ; **Shanga** ɔ̀ɔ̀

2.2 Southern **Dan Gwɛɛtaa** kɔ̃̀; **Goo** kɔ̀ɔ̀; **Tura** kɔ̀ɔ̀; **Mano** kɔ̀; **Mwan** kɔ̀ɔ̀; **Gban** kɔ̰́; **Wan** ɔ̃ *arm*; **Beng** wɔ̃ *hand, arm*; **Ngen** wɔ̃ŋ̃; **Gbin** wo

OTHER NIGER-CONGO potential parallels:
Atlantic N. Tenda-Jaad-Biafada **Bedik** ɛ-kɔ̀nd
Kru **Dida** kɔ̃
Ubangi **Proto-Gbaya** *kɔ̰́

Comments: This root is missing from Greenberg's list.

@Mountain Bantu *kíngá, *kíga – **Mande** *kɔŋkɛ. Reliability index: 4/6 (limited distribution in Bantu and Mande).

PROTO-BANTU *kíngá, Regions 2: NW Ce; Zones 4: BCLM, *kíga, Regions 2: NW NE; Zones 2: CJ

OTHER BENUE-CONGO
BENUE-CONGO E.: Bantoid Grassfields **Proto-Grassfields** *kóŋ; Jukunoid **Proto-Jukun** *kùn; **Jibe** kúnì

MANDE *kɔŋkɛ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
		+	+	+	+					

1.3 Jogo-Jeri **Jalkunan** kùgù, kùkù *stone*

1.4 Vai-Kono **Vai** kɔŋ́, kɔ̰́ *hill*; **Kono SL** kɔngɔ, (Manyeh 1983) kɔngɔ̀ *hill*

1.5 Mokole **Kakabe** kɔnkɛ; **Mogofin** kɔnké; **Lele** kɔngɔ *mountain, hill*; **Koranko** kɔnkɔ *mountain, hill*

1.6 Manding **Mandinka** kònkò *hill*; **Maninka Nyokolo** kónkò *mountain, hill*; **Maninka Kita** kòngo *hill*; **Maninka-Mori** kɔ̀nkɛ́; **Jula Kong** kǫ́gólíkṵ́ *hill*

OTHER NIGER-CONGO potential parallels:
Adamawa **Yi Kitulɛ** kòn / kónní
Atlantic Bak Manjak **Mancagne** p-nkuŋ / i- *mountain, hill*
Atlantic N. Tenda-Jaad-Biafada **Konyagi** ì-kùŋə́ / wæ̀-xùŋə́ *hill*; **Jaad** pakankənə *hill*, (Wilson 2007) konko (< Mandinka?) *hill*; **Biafada** konko *hill* (< Mandinka?)
Dogon **Najamba** kóngóó / kóngéé
Isolated NC **Sua** kɔngɛ / ikɔngɛ *mountain, hill*

@Neck **Bantu** *kíngó *neck, nape, voice*, *kíingò *neck* – **Mande** *kɔŋ. Reliability index: 5/6 (limited distribution in Mande).

PROTO-BANTU *kíngó *neck, nape, voice*, Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGHJKLMNPRS, *kíingò *neck*

OTHER BENUE-CONGO
BENUE-CONGO E.: Bantoid N. **Tiba** (Williamson 1992) kuŋa; Bantoid S. Ekoid N. ɲ-kɔ́ŋ

MANDE *kɔŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+						+		

1.1 Southwestern **Proto-Southwestern** *kɔ̀ŋ́; **Mende** kɔngá *back of the head, occiput; back of a knife blade*; **Loko** (Koelle 1854) kɔnga; **Bandi** kɔngà(ŋ) *back of the head*; **Looma** kɔ́(g); **Kpelle N.** kɔ̀ŋ̌ *neck, collar*; **Kpelle S.** kɔ̄ŋ *neck; throat; top; roof-top*
1.2 Susu-Jalonke **Susu** kɔ̀n-yí; **Jalonke** kɔ̀ń
1.3 Jogo-Jeri **Jogo** (Braconnier n.d.) wùrà-kɔ̂(n); **Jeli** ku
1.9 Samogho **Seenku N.** gù, pl. guì

OTHER NIGER-CONGO potential parallels:
Adamawa **Tupuri** kìŋ *throat*; **Tiba** kɔ̄ŋ

Ijo **Proto-Ijo** (Williamson 1992) *kọ̀gɔ̀; **Nembe** kọ̀gɔ́; **Ibani** kɔ̀ngɔ̀; **Okrika** kɔ̀ngɔ́

Kwa **Akan** (Williamson 1992) ɛ-kɔ́ŋ

Comments: Williamson (1992) reconstructs the Proto-Atlantic-Congo form **kɔ̃gɔ*.

9.1.4.2. Bantu *g- : Mande *g-

@Go Bantu *gì – **Mande** *gʊ, *gɛ. Reliability index: 5/6 (limited distribution in Mande).

PROTO-BANTU *gì, Regions 5: NW SW Ce NE SE; Zones 15: ABCDEFHJKLMNPRS

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Grassfields Ring **Proto-Ring** *gɔ̀í; Ekoid F. (Williamson 1992) jěn; **Tiv** (Williamson 1992) dzèndè; **Mbè** (Williamson 1992) kèn; **Londo** (Williamson 1992) kènd-

BENUE-CONGO W.: **Proto-Igboid** (Williamson 1992) gĩẽ; **Proto-Idomoid** (Williamson 1992) yè; Nupoid **Gade** (Williamson 1992) gẽ

MANDE *gʊ́ ~ *gɛ́

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
									+	+

2.1 Eastern **Bokobaru** gá; **Boko** gɛ́ *go away*

2.2 Southern **Proto-Southern** *gʊ́; **Dan Gwɛɛtaa** gó *go away*; **Goo** gọ́; **Tura** gő *leave, go away*; **Mano** gó *leave, come from*; **Guro** gʊ̄ *go; evade, flee*; **Yaure** kʊ́; **Mwan** gō; **Wan** gò *leave*; **Beng** gú *disappear*

Comments:

1) Recall that the meaning GO is absent from the standard Swadesh 100 Wordlist (it was added by Schadeberg).
2) Williamson (1992) reconstructs Proto-Atlantic-Congo **gɛ́dí ~ *'kɛ́dí*.

9.1.4.3. Bantu *k- : Mande *x-

@Bone Bantu *kʊdɪ – **Mande** *xɔtɛ. Reliability index: 4/6 (reflexes are poorly represented in Bantu and Benue-Congo).

PROTO-BANTU *kʊdɪ, Regions 2: NW SW; Zones 5: ABCHK

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Grassfields **Proto-Grassfields** *kúi(n)´
BENUE-CONGO isolated: **Proto-Ukaan** *òɣʷó

MANDE *xɔtɛ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+	+	+	+	+	+

1.1 Southwestern **Proto-Southwestern** *kálɛ́ŋ; **Mende** kálɛ́ *bone; seed; pip (of fruit)*; **Loko** káɛ́ *bone; seed*; **Bandi** kàalɛ́-í; **Zialo** gò(g); **Looma** kàè, kai(g), kai; **Kpelle S.** káo; **Kpelle N.** kɔ́ú
1.2 Susu-Jalonke **Susu** xɔ́rì; **Jalonke** qɔ́rì
1.3 Jogo-Jeri **Proto-Jogo-Jeli:** *yélì; **Jogo** yélí, yélé; **Jeri** (Kastenholz 2001) yélì; **Jalkunan** yál
1.4 Vai-Kono **Vai** kú'ú; **Kono SL** kúu
1.5 Mokole **Proto-Mokole:** *kólo; **Kakabe** kóló; **Mogofin** kólé; **Lele** kólo; **Koranko** kólo
1.6 Manding **Proto-Manding** *xólo; **Mandinka** kúlù; **Maninka Nyo-kolo** kùlù; **Xasonka** xúlu; **Maninka-Mori** kólo; **Bambara** kólo; **Jula Kong** kóró; **Koya** kró
1.7 Soninke-Bozo **Soninke** qóttè; **Tigemaxo** xɔ́ɔ̃ⁿ; (Creissels 1992) xõõ; **Kelenga** húɔ́ⁿ; (Creissels 1992) hwɔ́; **Tiema-Cewe** kǫǫ; **Jenaama Cliffs** kūwɔ̄ⁿ; **Jenaama Jenne** kúⁿwɔ́
1.8 Bobo **Bobo S.** wɔ̄nón, pl. wɔ̄ī *elephant bone*
1.9 Samogho **Proto-Samogho:** *xɔ́; **Jowulu** wɔ́; **Seenku N.** kɔ, pl. kʷɛ́; **Seenku S.** kɔ́; **Dzuun** xɔ́; **Kpan** xɔ; **Duun Sieu** xʷɔ; **Duun Kai** kʷɔ; **Duun Bananso** kʷɔ; **Banka** kʷõã; **Kpen** kùwɔ́
2.1 Eastern **San S.** we; **San Matya** yɛrɛ; **San Mayaa** wɛrɛ; **Bisa Lebir** yàá; **Bisa Barka** yir; **Boko** wɛ́ *grain; eye*; **Bokobaru** wɛ́ɛ́ *eye; grain, seed*; **Kyanga** wɛ́lɛ́ *eye*

2.2 Southern **Proto-Southern** *wo̱lɛ̱́; **Goo** wɛ̋ɛ̋; **Tura** wɛ̋ɛ̋; **Mano** wélé; **Guro** wólé; **Yaure** wélé; **Gban** wlĭ, wlɪ̱́; **Beng** wlé; **Ngen** wɛ̄lé

OTHER NIGER-CONGO potential parallels:
Adamawa **Tupuri** hṵ́
Atlantic Bak Balant **Balant** f-hóòl / g-hóòl; Joola **Joola Kujamutay** kɔɔl; **Bayot** kʊʊ
Atlantic N. Nalu-Baga Fore-Pukur **Nalu** hool
Gur **Pana** kòó / kòóyà
Kru **Bakwe** kóó
Kwa **Proto-Ghana-Togo-Mountain** *lì-kúpá / à-

@Sand Bantu *cèngà, *céké – **Mande** *ɣɛ̃gɛ̃. Reliability index: 5/6 (an irregular phonetic correspondence).

PROTO-BANTU *cèngà, Regions 4: NW SW Ce NE; Zones 10: BCDFHKJLMN (Schadeberg aBCDeFgHJKLMNprs) *sand; sandy ground*; *càngà, Regions 3: Ce NE SE; Zones 6: EGLMNP; *kenga, Zones: NP; *céké, Regions 5: NW SW Ce NE SE; Zones 11: ACDHJKLMNRS *sand; grain*; *cèngè, Regions 3: NW SW Ce; Zones 3: CHL; cégé, Regions 3: NW Ce NE; Zones 5: ABCDJ *grains; sand*

OTHER BENUE-CONGO
BENUE-CONGO E.: Bantoid Grassfields Kom **Kom** ə̄saìnsaîn; Cross Upper **Obolo** ácyááŋ; Platoid **Sambe** yùʃĩn
BENUE-CONGO W.: W. Idomoid **Eloyi** ɔ̀jɛ̀
BENUE-CONGO isolated: **Proto-Ukaan** *ɔ̀ʃɛ̰̀n

MANDE *ɣɛ̃gɛ̃

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+	+	+	+	+	+

1.1 Southwestern **Mende** ŋàɲá; **Loko** (Koelle 1854) ŋɛ̨lɛ ~ ŋɛ̨ɛ̨, (Kimball) ɲèà; **Bandi** ŋìỹèí; **Zialo** ŋéyé; **Looma** ɲàɣà(g); **Kpelle S.** ŋɛ̰̄yā, ŋā̰yā; **Kpelle N.** ɲèɛ̆
1.2 Susu-Jalonke **Jalonke** qɛ̀ɲé

1.3 Jogo-Jeri **Jogo** (Braconnier n.d.) ɲàgân; **Jalkunan** ɲàʔà̰; **Numu** ɲìngán
1.4 Vai-Kono **Vai** kɛ̀ɲé
1.5 Mokole **Kakabe** kɛ̀ɲɛ̀kɛ́ɲé; **Lele** cèeka, keeka, kènkà; **Koranko** cɛ̀ncɛ̀n, kɛ̀nkɛ̀n
1.6 Manding **Proto-Manding** *kɛ̀ɲɛ, *kɛ̀ɲɛkɛɲɛ; **Mandinka** kɛ̀ɲè, kɛ̀ɲɛ̀kɛ́ɲè; **Maninka Nyokolo** kɛ́ɲè; **Xasonka** kɛ́ɲè; **Maninka Kita** kɛ̀ɲe; **Maninka-Mori** kɪ̀ɲɛ́, tɪ̀ɲɛ́, cɪ̀ɲɛ́; **Bambara** cɛ̰̀, cɛ̰̀cɛ́; **Jula Kong** kɛ̰̀gɛ́; **Koro** cɛ̆ⁿ, cɛ̄ⁿ-ɲɛ́ẃⁿ; **Koya** cɛ̰́
1.7 Soninke-Bozo **Kelenga** kɛ̰ɛ̰ɲɛ̰ (< Manding); **Tiema-Cewe** kɛ̰ɛ̰ɲɛ̰ (< Manding)
1.8 Bobo **Bobo S.** yɛ̀gé
1.9 Samogho **Jowulu** ɲɛ̀nɪ̀ŋ; **Seenku N.** kʸíɲɛ̀; **Seenku S.** céɲêe; **Dzuun** céncén; **Kpan** ʃɛ̰ʃɛ̰; **Duun Sieu** ʃɛ̰ndɪ̰; **Duun Kai** ʃɛ̰nɪ̰; **Duun Bananso** ʃɪɛ̰di; **Banka** cɛ̰cɛ̰
2.1 Eastern **San S.** ɲɔɔ-sɔ
2.2 Southern **Proto-Southern** *yɛ́lɛ̰̀; **Dan Gwɛɛtaa** yɛ̰̋ɛ̰̋; **Goo** yɛ̰̋ɛ̰̋; **Tura** kɛ̰̀ɛ̰̀ (< Manding?); **Mano** yɛ̰̀ɛ̰̄-sɛ́lɛ́; **Guro** yɛ̰̄lɛ̰̀; **Yaure** yɛ̰̀lɛ̰̀; **Mwan** ylɛ̰̀

OTHER NIGER-CONGO potential parallels:
Adamawa **Pere** sɪ́ɪ̰̄ɪ̄; **Bolgo** séwɛ́l; **Kyãk** swɑ̆zwī; **Burak** ʃwàjwɛ̰̀ɛ̰̄
Atlantic Bak Joola **Bayot** ku-siɑ̰
Atlantic N. Nyun-Buy **Nyun** di-kiɲaaɲ
Gur **Kabiye** kɛ̀ɛ̀ŋ̀à
Ubangi **Mundu** sīkì

@Tail Bantu *kídà – **Mande** *ɣʊlɪ ~ *ɣʊla. Reliability index: 5/6 (poorly represented in Niger-Congo outside Benue-Congo and Mande).

PROTO-BANTU *kídà, Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGHJKLMNPRS

OTHER BENUE-CONGO Proto-Benue-Congo *kila
BENUE-CONGO E.: Bantoid Grassfields Ring **Proto-Ring** *kɔ́nì; Cross Upper **Proto-Upper-Cross** *kkénà, *kkéŋ; Jukunoid **Proto-Jukun** *kín

MANDE *ɣʋlɪ ~ *ɣʋla

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+			+	+	+		+		+

1.1 Southwestern **Proto-Southwestern** *gólí; **Mende** ngólí; **Bandi** ngò(ŋ); **Zialo** gò(g); **Looma** wɔ̀(g); **Kpelle S.** wóŋ; **Kpelle N.** wóŋ
1.2 Susu-Jalonke **Susu** xúlí; **Jalonke** qúlí
1.5 Mokole **Lele** kɔ́ɔ; **Koranko** kú
1.6 Manding **Xasonka** xú; **Maninka Kita** kú; **Maninka-Mori** kó; **Bambara** kú; **Jula Kong** kó, kwó; **Koro** kó-kárá *tail (of snake, scorpion)*; **Koya** hwó
1.7 Soninke-Bozo **Soninke** qóqqè; **Kelenga** (Creissels 1992) hóri
1.9 Samogho **Seenku N.** kúrà ~ kúrwà, pl. kűrɛ̀; **Seenku S.** kɔrɑ̃́, pl. kɔrɛ̃́; **Dzuun** kplɑ; **Duun Sieu** kplɑ; **Duun Kai** klɑ; **Duun Bananso** kurɑ; **Banka** kplɑ-nɑ
2.2 Southern **Proto-Southern** *wɔ́lɩ̰; **Dan Gwɛɛtaa** wēŋ̄; **Goo** wéŋ́; **Tura** wĭĭ́; **Mano** wōŋ̄; **Guro** wōlì, wɔ̀lì; **Mwan** wēē

OTHER NIGER-CONGO potential parallels:
Atlantic North **Bainouk** kal; **Konyagi** æ̀-ncìr / væ̀-ncìr

9.1.4.4. Bantu *g- ~ *k : Mande *ɠ-

@Die Bantu *kú *die, death, dead person* – **Mande** *ɠu *dead person*. Reliability index: 5/6 (limited distribution in Mande).

PROTO-BANTU *kú, Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGHJKLMNPRS *die, death, dead person*; *kúé, Regions 4: SW Ce NE SE; Zones 6: GHLMPR *dead person*

OTHER BENUE-CONGO
BENUE-CONGO E.: Bantoid Ekoid **Abanyom** kpô; Bantoid Grassfields **Proto-Grassfields** *kÚ(a), **Limbum** kʷí; Bantoid Grassfields Kom **Kom** kfʊ̄; Bantoid Grassfields Ring **Proto-Ring** *kúɔ̀ *death*; Cross Lower **Proto-Lower-Cross** *kpá; Cross Upper **Obolo** kʷù; **Proto-Upper-Cross** *kʷá; Jukunoid **Proto-Jukun** *kʷu; Platoid **Sambe** kwìkwī *die,* kwī *death*; **Hasha** kʷē

BENUE-CONGO W.: Defoid **Yoruba** kú; Edoid **Urhobo** ɣwù; **Proto-Edo** *ghu; Idomoid **Gwari** fʸí
BENUE-CONGO isolated: **Proto-Ukaan** *ɣʷó

MANDE *ʃù *dead person, corpse*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
		+	+	+	+					

1.3 Jogo-Jeri **Jogo** kŭ *corpse*; **Jalkunan** kù *corpse*; **Numu** kùú *corpse*
1.4 Vai-Kono **Vai** sŭ *corpse*; **Kono SL** sùu *corpse*
1.5 Mokole **Kakabe** sùu *corpse*; **Lele** súu *corpse*
1.6 Manding **Maninka Kita** sù *corpse*; **Maninka-Mori** sù *corpse*; **Bambara** sù *corpse*; **Jula Kong** sù *corpse*; **Koya** sù´ *corpse*

OTHER NIGER-CONGO potential parallels:
Adamawa **Kare** hú; **Mono** hòn; **Kararng** hu
Atlantic Bak Bijogo **Bijogo** kpɛ
Atlantic North Cangin **Ndut** hʊl; **Palor** xul; Fula-Sereer **Sereer** xon
Gur **Proto-Central** *ku *kill*; **Gurunsi – Oti-Volta** *kpu *kill*; **Boore** hí ~ húrū; **Miyove** pí-kpí; **Churama** ku; **Karaboro** ku; **Nawdem** kpù
Kru **Aizi** kɔ; **Bakwe** kú *corpse*; **Dida** kú *corpse*; **Godie** kú; **Bete** kú; **Tepo** kó; **Grebo** kó; **Koyo** kú
Kwa **Proto-Potou-Akanic** *kwu; **Proto-Akanic** *wu; **Proto-Ghana-Togo-Mountain** *kúí; **Proto-Gbe** *kú; **Ewe** kú; **Attié** wú ~ wuɔ̀ ~ wucé; **Chumburung** wũ; **Ikposo** kú; **Logba** kù; **Adele** kú; **Tuwuli** kù; **Ega** kù
Mel N. **Baga Koba** i-fi / a- *corpse*; **Temne** fi; **Landuma** fi
Mel S. **Kim** wú; **Kisi** wùó; **Sherbro-Bom** wu; **Mani-Kim** wú
Senufo **Mamara** xu; **Supyire** kʷû, **Minyanka** kʷû

Comments:
1) One would expect initial *k-* in Vai-Kono and Mokole languages, rather than *s-*.

2) Greenberg mentions the following Mande look-alikes: (1.3. Jogo-Jeri) **Numu, Ligbi, Huela** *kpã* 'kill'. In our opinion, the KU-forms for CORPSE are better candidates for cognacy with the Bantu root in question.
3) Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu **k^{w}u*.
4) According to our preliminary reconstruction, initial *f-* in Northern Mel may regularly correspond to Proto-Niger-Congo *kw-.
5) A search with "Homonymy & Polysemy" (Segerer 2022) finds 9 languages with polysemy DIE – DEAD, therefore the semantic difference between Bantu and Mande can be considered acceptable.

@Road Bantu *gìdà *path*, *jìdà *path*, *kıdı *path* – **Mande** *ɠila. Reliability index: 4/6 (limited distribution in Benue-Congo outside Bantu and in other Niger-Congo families).

PROTO-BANTU *jìdá, Regions 4: NW SW Ce NE; Zones 12: ABCDEFGHJLMR *path*; *jìdà, Regions 5: NW SW Ce NE SE; Zones 13: BCEFGJKLMNPRS *path*; *kıdı, Regions 2: NW SW; Zones 3: ABK *path*; *kòdá, Regions 2: NW Ce; Zones 3: CLM *path, track*; *cíndà, Regions 3: NW SW Ce; Zones 3: CHL *path, track*; *gìdà, Regions 3: NW SW Ce; Zones 4: BCDK *path*

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid **Proto-Grassfields** *jɪ̀(l)`

MANDE *ɠila

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+	+	+	+	+	+		+	+	+

1.2 Susu-Jalonke **Susu** kìrá; **Jalonke** kìráá
1.3 Jogo-Jeri **Jogo** cìlí; **Jeli** kíli, kúlu; **Numu** kílí
1.4 Vai-Kono **Vai** kí'à; **Kono SL** cía ~ kía
1.5 Mokole **Kakabe** kíla; **Mogofin** kílà; **Lele** kíla, cíla, kela; **Koranko** kéla, kíla
1.6 Manding **Mandinka** síla; **Maninka Nyokolo** sìla; **Xasonka** síla; **Maninka Kita** síla; **Maninka-Mori** síla; **Bambara** síra; **Jula Kong** síra-dɛ̰; **Marka-Dafing** sìrà

1.7 Soninke-Bozo **Soninke** kìllê; **Kelenga** kèⁿ
1.9 Samogho **Dzuun** ʃi; **Duun Kai** ʃirɑ; **Kpan** še; **Banka** ʃiã; **Kpen** sé
2.1 Eastern **San S.** zii; **San Matya** zɛrɛ; **San Mayaa** zɛrɛ; **Bisa Lebir** zàá, záa; **Boko** zɛ́; **Bokobaru** zɛ́; **Busa** zɛ́; **Kyanga** zɛ́rɛ; **Shanga** zɛ́ɛ
2.2 Southern **Proto-Southern** *zìláŋ; **Dan Gwɛɛtaa** zi̱ã̱ã̱; **Dan Kla** zi̱à̱ǹ; **Goo** zíá; **Tura** záà; **Mano** zī; **Guro** zī; **Yaure** sì; **Mwan** zī; **Wan** zī; **Beng** zrë; **Gbin** zɛ

OTHER NIGER-CONGO potential parallels:
Adamawa **Mak** dɟ̱rà
Atlantic N. Tenda-Jaad-Biafada **Konyagi** kælú / wæ̀-kælú *way*; Nalu-Baga Fore-Pukur **Pukur** kér

9.1.4.5. Bantu *g- : Mande *ɣ-

@Egg Bantu *gí, *gìdí – **Mande** *ɣeli. Reliability index: 6/6.

PROTO-BANTU *gí, Regions 5: NW SW Ce NE SE; Zones 15: ABCDEFHJKLMNPRS; *gìdí, Regions 3: NW SW Ce; Zones 4: BCDK; *gé, Regions 2: NW SW; Zones 3: ABH; *géjí, Zones: BC

OTHER BENUE-CONGO Proto-Benue-Congo *kiŋ
BENUE-CONGO E.: Bantoid Ekoid **Abanyom** é-jĭ / á-; Cross Lower **Proto-Lower-Cross** *ŋ́-kíɛ̀ŋ; Cross Upper **Proto-Upper-Cross** *kkèŋ́; Jukunoid **Proto-Jukun** *kʸì; **Jibe** kè
BENUE-CONGO W.: Edoid **Proto-Edo** *dhI-ki̱ə / A

MANDE *ɣeli

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+	+	+	+	+	+

1.1 Southwestern **Proto-Southwestern** *ŋ-gálU(ŋ); **Mende** ngálú; **Loko** (Koelle 1854) ngau ~ ngalu; **Bandi** ngàlùi; **Zialo** gàlù; **Looma** ɣèy̰, (Sadler 2006) kaĩ, kai; **Kpelle S.** ɣálóŋ; **Kpelle N.** ɲáníŋ́
1.2 Susu-Jalonke **Susu** xɛ́lɛ̀, xálɛ̀; **Jalonke** qɛ̀lɛ́
1.3 Jogo-Jeri **Jogo** yélí, (Braconnier n.d.) yélé; **Jeli** yèli, (Kastenholz 2001) yélì, yɛ́lì; **Jalkunan** yál

1.4 Vai-Kono **Vai** ké'í, (Klingenheben & Kastenholz 2019) kélí; **Kono SL** cí'i, (Koelle 1854) kili
1.5 Mokole **Kakabe** kílí; **Mogofin** kélé; **Lele** káli; **Koranko** kíli
1.6 Manding **Mandinka** kílì; **Maninka Nyokolo** kìlì; **Xasonka** kílì; **Maninka Kita** kílí; **Maninka-Mori** kíli; **Bambara** kílí; **Jula Kong** kìrí; **Koro** kírí; **Koya** krí
1.7 Soninke-Bozo **Soninke** yèllê
1.8 Bobo **Bobo S.** wɛ́ré / wɛ́rɛ́
1.9 Samogho **Jowulu** ɲɔ̄ɔ̄n; **Seenku N.** kʸɛ̀ / kʸɛ́; **Seenku S.** cɛ̋ɛ
2.1 Eastern **Proto-Eastern** *gìrì; **San S.** gìi; **San Matya** jiri; **San Mayaa** guru; **Bisa Lebir** gyìr; **Shanga** gye
2.2 Southern **Proto-Southern** *yə̀lɛ̰̀; **Dan Gwɛɛtaa** yə̰̀ə̰̀; **Goo** yə̀ə̀; **Tura** yə̀ə̀; **Mano** ɲàà; **Guro** yɛ̰̄lɛ̰̄; **Yaure** yɛ̰̀lɛ̰̀; **Mwan** ylɛ̰̄; **Gban** yə̰̄

OTHER NIGER-CONGO potential parallels:
Atlantic Bak Manjak **Manjak** (Buis 1990) pə-jɛnj / m-jɛnj
Atlantic N.: Tenda-Jaad **Basari** ɛ-ɲɛ̀ŋɛ̀n, Fula-Sereer **Sereer** gin l / kin a...ak
Gur **Proto-Oti-Volta** *je, **Dagaare** jɛ́lì
Kru **Aizi** ji; **Bakwe** gì; **Godie** gì; **Dida** jī; **Neyo** gè
Kwa **Tuwuli** lí-gé?; **Proto-Gbe** *àzɨ̰̀; **Ewe** àzì

Comments: This root is missing from Greenberg's list. It is very robust in Mande. Our list of reflexes in other Niger-Congo families is far from exhaustive.

9.1.5. Initial labiovelar consonants

9.1.5.1. Bantu *b- : Mande *gb-

@Dog Bantu *bóà – **Mande** *gbɛra. Reliability index: 6/6.

PROTO-BANTU *bóà, Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGHJKLMNPRS

OTHER BENUE-CONGO
BENUE-CONGO E.: Bantoid Grassfields **Proto-Grassfields** *bÚà; Kom **Kom** ə̄bú; Ring **Proto-Ring** *búà; Cross Lower **Proto-**

Lower-Cross *é-búá / i-; Cross Upper **Obolo** íbó; **Proto-Upper-Cross** *byá; Jukunoid **Proto-Jukun** *bu; **Jibe** báy; Kainji **Bassa** gbē; Platoid **Hasha** àwá / áwà; BENUE-CONGO W.: W. Edoid **Proto-Edo** *A-bhʊa / I-

MANDE *gbɛra

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+		+					+	+	+	+

1.1 Southwestern **Proto-Southwestern** *gírà; **Mende** ngílà; **Loko** (Koelle 1854) ngila; (Dwyer 1973) njíâ; **Bandi** (Heydorn 1940; Heydorn 1941) ngia; **Zialo** gìlà; **Looma** gìlà; **Kpelle S.** ɣílà; **Kpelle N.** yírê

1.3 Jogo-Jeri **Jogo** gɔ̀là

1.8 Bobo **Bobo** gbɛ̀gē, pl. gbɛ̀gī

1.9 Samogho **Seenku N.** dyìgè, dyígè; **Seenku S.** jəgɛ̀, pl. jəgè; **Dzuun** vì; **Kpan** ɓii; **Duun Sieu** vie; **Duun Kai** vʒe; **Duun Bananso** vie; **Banka** viɑ; **Kpen** byêw

2.1 Eastern **Proto-Eastern** (Schreiber 2008) *gwa̰(-li); **San S.** gin; **San Matya** jiri; **San Mayaa** jini; **Bisa Lebir** gɪ̀, gɪ̰̀, gyɛ̰̀; **Boko-baru** gbɛ̰́; **Boko** gbɛ̰; **Kyanga** gbɛ̰; **Shanga** gɛ̰̀

2.2 Southern **Proto-Southern** *gbɛ́la̰; **Dan Gwɛɛtaa** gbɛ̰̂; **Goo** gbɛ̰̋ɛ̰́; **Tura** gbɛ̰̋ɛ̰́; **Mano** gbá̰; **Guro** bɛ̰lɛ̰̄; **Yaure** plɛ̰; **Mwan** gba̰ā̰; **Wan** gbā̰-nɛ̄; **Beng** jɛ̄ŋ̰̄; **Ngen** jɛ̄ŋ̰

OTHER NIGER-CONGO potential parallels:

Adamawa **Kam** wó; **Tupuri** wãy; **Kare** váà; **Tiba** ɓýȳ; **Tha** ɥìɥà

Atlantic Bak: **Bijogo** e-booʈi / i-booʈi; **Proto-Manjaku** bos; **Mankagne** buʃ

Atlantic N.: Tenda-Jaad-Biafada **Konyagi** ì-vé / wæ̀-ɓé; Fula-Sereer **Proto-Fula-Sereer** *ɓox ~ *ɓos; Cangin **Palor** ɓʊx; **Ndut** ɓʊh; **Laala** ɓuu; Nalu-Baga Fore-Pukur **Nalu** buh *bark (as dog)*

Gur **Proto-Central** *ɓa; **Proto-Oti-Volta** *ba / *bo / *bu; **Pana** vá / váyà; **Churama** vaaw / vamba ~ vana̰a̰ba, **Pana** vá / váyà; **Chakali** vaa / vasa; **Dagaare** báá; **Nawdem** ba

Kru **Aizi** vɛ; **Kuwaa** bɛ̀lɛ̀; **Guere-Wobe-Bassa** gbē; **Tepo** gbì; **Grebo** gbɛ̰̀; **Jiwe** gbè; **Neyo** vìí;**Nyabwa** gbē

Kwa **Proto-Gbe** *àvṵ́; **Ewe** àvǔ; **Logba** àgbɛ́ / mgbɛ́

Mel N. **Landuma** ʌway

Senufo **Mamara** pṵ; **Senufo Kolia** pʷɔ̰; **Minyanka** pɔ̰ ~ pwɔ̰

Ubangi **Sango** mbo; **Mundu** gbōrō ~ bōrō

Comments: Greenberg mentions Benue-Congo, Gur, Kwa and Adamawa forms; he is unaware the relevant forms in Mande, Atlantic and Mel.

9.2. Proto-Bantu – Proto-Mande cognates outside the Schadeberg List

9.2.1. Initial labial consonants

9.2.1.1. Bantu *p- : Mande *p-

@Blind Bantu *pòkù *blind person* – **Mande** *põõku. Reliability index: 4/6 (not represented outside Bantu and Mande).

PROTO-BANTU *pòkù, Regions 5: NW SW Ce NE SE; Zones 13: ABCDFGHJLMNRS *blind person*

MANDE *põõku

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
		+			+	+	+			+

1.3 Jogo-Jeri **Jogo** fùgú *blind person*; **Jalkunan** fūgū *blind person*

1.6 manding **Mandinka** fìnkì *blindness; go blind*; 1.6 Manding **Maninka Nyokolo** fínkì; **Xasonka** fíyon-ya *grow blind*; **Maninka-Mori** fúyen; **Bambara** fiyẽ

1.7 Soninke-Bozo **Soninke** (Galtier & Dantioko 1979) finki *go blind*; **Tigemaxo** fíéwù *blind person*; **Kelenga** fíéⁿ *blind person*; **Jenaama Cliffs** pùwògù *blind person*; **Jenaama Jenne** pùwògù *blind person*

1.8 Bobo **Bobo S.** fùgò *go blind*

2.2 Southern **Dan Kla** fíőŋ̃

@Blow Bantu *pèep *blow (as wind); winnow; smoke (tobacco); breathe*, *pép *blow (as wind); fly; winnow* – Mande *pɛ̃ɛ̃. Reliability index: 6/6.

PROTO-BANTU *pèep Regions 5: NW SW Ce NE SE; Zones 12: ABCDEGHKLMNS *blow (as wind); winnow; smoke (tobacco); breathe*, *pép Zones 7: ABJKLRS, *blow (as wind); fly; winnow*

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Grassfields **Proto-Grassfields** *fép; Kom **Kom** fʊə̄f *blow (with mouth)*; Kainji **Bassa** fɛ̀è *breath*

BENUE-CONGO W.: Defoid **Yoruba** fɛ́; Nupoid **Gwari** pʸī-āsê *blow (with mouth)*

MANDE *pɛ̃ɛ̃

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+		+	+	+	+

1.1 Southwestern **Proto-Southwestern** *fɛ́; **Mende** fɛ́ *blow; steal from someone*; **Loko** (Meussen n.d.) fɛ́; **Bandi** ngà-fɛ́ *winnow, fan*; **Zialo** gà-fɛ̀ *winnow*; **Looma** fɛ̀; **Kpelle N.** hvɛ́ɛ́; **Kpelle S.** fɛɛ *blow; fan; inflate; play (wind instrument)*

1.2 Susu-Jalonke **Susu** fè, fé; **Jalonke** fɛ́ɛ́

1.3 Jogo-Jeri **Jogo** fiɛ *blow (horn)*; **Jalkunan** fiɛ́

1.4 Vai-Kono **Vai** fɛ́ *blow on, blow away; winnow*; **Kono** (Manyeh 1983) fɛ́ *blow air*

1.5 Mokole **Kakabe** fɛ́; **Mogofin** fé; **Lele** fɛ́ *blow; winnow*; **Koranko** fɛ́ɛ́

1.6 Manding **Mandinka** fɛ́ɛ́ *blow; winnow*; **Maninka Nyokolo** fɛ̀ɛ̀ *blow; winnow*; **Xasonka** fè *winnow*; **Maninka-Mori** fɛ́; **Bambara** fyɛ́ *winnow; blow (nose); play (wind instrument); smoke out (bee-hive)*; **Jula Kong** fiyɛ́ *blow; fan*; **Koro** fyɛ́ *blow on; inflate*; **Koya** fjɛ́

1.8 Bobo **Bobo S.** pèn *blow; play (musical instrument)*; pìū *blow (on the fire)*

1.9 Samogho **Jowulu** fyé; **Seenku N.** fɛ́; **Seenku S.** fíɛ nɛ́ *blow off (e.g. peanut skins); blow on (e.g. fire); blow (horn, whistle, flute)*; **Dzuun** (Hochstetler 1996) fʸɛ; **Duun Zantigila** fiɛ; **Duun Sieu** fiɛ; **Duun Kai** fiɛ; **Duun Bananso** fiɛ

2.1 Eastern **San S.** pi̱ɛ̱ pɛ (pi̱ɛ̱ pii); **San Matya** pɛ; **San Mayaa** pɛ; **Bisa Lebir** pé; **Boko** pɛ; **Busa** pé; **Bokobaru** pé

2.2 Southern **Dan E.** pìɤ̀ *blow; winnow*; **Dan Kla** pìi; **Tura** pìè *blow (horn); winnow; sort*; **Mano** pìè *fan, wave; blow, wind, play (musical instrument)*; **Guro** fɛ̄ɛ̄ *winnow; blow (with mouth)*; **Mwan** pɛ́ɛ̱́ *blow; blow through; smoke out*; **Wan** fɛ́, fɛ̱́; **Gban** fɛ̀ *winnow*; **Beng** pɛ́ *blow; fan (fire)*; **Ngen** pɛ́

OTHER NIGER-CONGO potential parallels:

Adamawa **Day Bouna** píí; **Kare** fè; **Samba Leko** pèb

Dogon **Jamsay** píwɛ́ *blow into (intestine, with air or water)*; **Mombo** péé-péé kání *blow lightly*

Gur **Boore** pè ~ pà *blow, fan*; **Churama** fiir

Ijo **Ibani** fié *blow (of wind)*

Kru **Godie** pɷ́pɔ̄

Mel N. **Temne** fɛŋ *blow; play on*

Ubangi **Mundu** fɛ̄

@Bush-knife Bantu *pángà – **Mande** *ŋ̀-paŋ *sabre, sword*. Reliability index: 4/6 (limited distribution in Mande and in other Niger-Congo families).

PROTO-BANTU *pángà, Regions 3: Ce NE SE; Zones 8: EGJLMNPS *bush-knife*

MANDE *ŋ̀-paŋ *sabre, sword*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+			+	+					

1.2 Susu-Jalonke **Susu** fàn-fóré, fàn-fúré *sword*; **Jalonke** silan-fan *sabre*

1.5 Mokole **Kakabe** fàn *long knife, sword*; **Lele** fàn *sabre*

1.6 Manding **Mandinka** fàŋ *machete*; **Xasonka** fàn *sabre*; **Maninka Kita** hàn; **Maninka-Mori** fàn *sword*; **Bambara** npa̰ *sword*

OTHER NIGER-CONGO potential parallels:

Atlantic N. Tenda-Jaad-Biafada **Basari** ɑ-mbʌ̀n *wooden sabre*; **Konyagi** æ̀-mpə̀nk / væ̀-mpə̀nk *wooden sabre*; **Jaad** fan *sabre, sword*

Kwa **Chumburung** kì-pã̀ŋ *cutlass*

@Darkness Bantu *pìipí *darkness, blackness* – **Mande** *pinpi. Reliability index: 3/6 (limited distribution in Mande, absent from other Niger-Congo families).

PROTO-BANTU *pìipí Regions 5: NW SW Ce NE SE; Zones 8: BFJKLMPS *darkness, blackness*

MANDE *pinpi

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
			+	+		+				

1.4 Vai-Kono **Kono** pìmbi

1.5 Mokole **Kakabe** pìnpì *darkness; night*; **Lele** pìnpi, pìnbi *night*; **Koranko** pìnpi

1.7 Soninke-Bozo **Tieyaxo** pḭpa̰; **Tigemaxo** fĩmbāāⁿ

@Dig Bantu *pùk, *pùd – Mande *pɔ̃. Reliability index: 6/6.

PROTO-BANTU *pùk Regions 5: NW SW Ce NE SE; Zones 13: ACDEFGJKLMNPS *dig up, fling up (earth)*, *pùd Regions 3: NW SW Ce; Zones 4: AKLR *dig*

OTHER BENUE-CONGO

BENUE-CONGO E.: Jukunoid **Proto-C-Jukun** *fù *dig (a hole)*

MANDE *pɔ̃

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
									+	+

2.1 Eastern **San S.** fo̱ (foɛ̱); **San Matya** fo̱; **San Mayaa** fʊn; **Bisa Lebir** fɔ́

2.2 Southern **Dan E.** pǫ̱́; **Dan W.** pǫ̱́; **Goo** pǫ̱̋; **Tura** pǫ̱̋; **Mano** fòō; **Guro** fū̱ā̱ *dig; scratch*

OTHER NIGER-CONGO potential parallels:
Adamawa **Day Bouna** pɔ̄r
Atlantic Bak Balant **Balant Ganja** fur
Kwa **Proto-Potou-Akanic** *ɸũĨũ; **Proto-Akanic** *pũĨũ

Comments: Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu **ɸĩŋku*.

@Fill Bantu *pák *fill up, pack up*, *pákɪd *fill up, load* – **Mande** *paka. Reliability index: 4/6 (absent from Benue-Congo outside Bantu, poorly represented in other Niger-Congo families).

PROTO-BANTU *pák Regions 5: NW SW Ce NE SE; Zones 13: CEFGHJKLMNPRS (BLR3) *fill up; pack up;* *pákɪd, Zones 4: EGJN *fill up, load*

MANDE *paka

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
			+	+	+	+	+	+	+	+

1.4 Vai-Kono **Vai** fá; **Kono** fá

1.5 Mokole **Kakabe** fá *fill; be full, be sated*; **Mogofin** fá *fill; sate*; **Lele** fá; **Koranko** fá *vi become full, sated; vt fill*

1.6 Manding **Mandinka** fáá *fill; be full, be sated*; **Maninka Nyokolo** (Meyer 1983) faa; **Xasonka** fà; **Maninka Kita** há; **Maninka-Mori** fá *vi become full; satisfy one's hunger; vt fill; satiate; impregnate; carry out (one's duties); vr eat one's fill*; **Bambara** fá *vi become full; satisfy one's hunger; vt fill; satiate; impregnate; carry out (one's duties); vr eat one's fill*; **Jula Kong** fá; **Koro** fá *fill; load (baggage, wares)*; **Koya** fá; **Marka-Dafing** pà

1.7 Soninke-Bozo **Soninke** hágá ~ fágá *fill; sate*; **Tieyaxo** paxã; **Tigemaxo** fáxáán; **Kelenga** fágí; **Jenaama Cliffs** pàgà; **Jenaama Jenne** páán

1.8 Bobo **Bobo S.** pāgā *vi become full, fill up; be fulfilled; help; vt fill; finish, terminate*
1.9 Samogho **Seenku N.** fə̀gà; **Seenku S.** fəgā́ nɛ́
2.1 Eastern **San S.** pã; **San Matya** pa̰; **San Mayaa** pan; **Bisa Lebir** pá *vi swell; vt help; vr make an effort,* pà *full*; **Boko** pā́; **Busa** pá; **Bokobaru** pá; **Kyanga** fà *vt fill; vi be full, be fulfilled*; **Shanga** hwa *vt fill; vi be full, be fulfilled*
2.2 Southern **Proto-Southern** *pá ~ *pá̰; **Dan E.** pā; **Dan W.** pā; **Dan Kla** lɛ́-pà; **Goo** pà; **Tura** pá *fill; draw (water)*; **Mano** pā *fill; surprise, be surprised*; **Guro** fā̰ ~ fɔ̰ā̰ *fill; swell; increase*; **Yaure** fà; **Mwan** pá; **Wan** pá; **Beng** pā

OTHER NIGER-CONGO potential parallels:
Mel S. **Kisi** pìɔ́ɔ́ *be full, lumpy, or swollen*; **Kim** pɛ́í *fill*; **Sherbro** pəə *be full*; **Bom** pɛ̀ ~ pɛ̀ìyá *full*; **Mani** pɛ̀ *be full*

@Stomach Bantu *pù *stomach*, *pudʊ *belly* – **Mande** *pudu *intestines.* Reliability index: 6/6 (a semantic shift).

PROTO-BANTU *pù *stomach*, Regions 5: NW SW Ce NE SE; Zones 10: AEGJKLMNRS; pudʊ, Zones LM

OTHER BENUE-CONGO
BENUE-CONGO E.: Cross Upper **Proto-Upper-Cross** *pódì *belly*; Jukunoid **Proto-C-Jukun** *pu *belly*

MANDE *pudu *intestines*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+		+	+	+				+

1.1 Southwestern **Proto-Southwestern** *pùrû; **Mende** pùlû *intestines, entrails, gut*; **Loko** (Vydrin's field data) pùlû *intestines, entrails, gut*; **Bandi** pùlù *bowels, intestines*; **Looma** púlu *intestines; hunger*; **Kpelle S.** pūru *hunger*; **Kpelle N.** pùlŭ *hunger, need, desire*
1.2 Susu-Jalonke **Susu** fùrí; **Jalonke** fùrí
1.3 Jogo-Jeri **Jogo** (Kastenholz 1997) fùrú; **Numu** fúrú
1.5 Mokole **Koranko** fùru *lungs*

1.6 Manding **Proto-Manding** *fùdu or *pùdu; **Mandinka** kóno-futu; **Maninka-Mori** fùdu, fùru; **Bambara** fùrú *stomach, belly; pulp (of fruit), pith (of stem)*
1.7 Soninke-Bozo *fɔ̀rɔ̀ **Tigemaxo** fɔ́rɔ̀ *intestines*; **Kelenga** fùrù *stomach, rumen*; **Tiema-Cewe** pɔrɔ; **Jenaama Cliffs** pɔ̀lɔ̀ *intestines*; **Jenaama Jenne** fɔ̀rɔ̀ *intestines*
2.2 Southern **Beng** plù *paunch*; **Ngen** pòlò *abdomen*

OTHER NIGER-CONGO potential parallels:
Adamawa **Yi Kitulɛ** fùr / fũní *belly*
Atlantic N. Fula-Sereer **Proto-Fula-Sereer** *Pʊd ~ *Pʊr *bowels*; Nalu-Baga Fore-Pukur **Pukur** púr *belly*
Dogon **Jamsay** pùró *belly*
Gur **Proto-Oti-Volta** *pʊ: *belly*; **Pana** pòó / pòóyà *belly*
Ijo **Nembe** fùró *belly*
Kwa **Proto-Potou-Akanic** *ɸu; **Proto-Akanic** *pu; **Proto-Ghana-Togo-Mountain** *kà-pòò / kù-
Mel N. **Temne** æ-putu / ɛ-putu *large intestine*
Mel S. **Kisi** pùléí / pùlóŋ *belly*
Senufo **Mamara** furi *belly*
Isolated NC **Limba** fɔle / tɔle ta *abdomen, belly, bowels*; **Sua** butu / ibutu *intestine*

Comments:
1) The semantic shift STOMACH, BELLY – INTESTINES corresponds to a regular polysemy pattern. A search with "Homonymy & Polysemy" (Segerer 2022) finds 21 languages where the polysemy INTESTINES – BELLY is attested, and 11 languages with the polysemy INTESTINES – STOMACH.
2) Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu **ɸu*.

@Wind, cold **Bantu** *pépò *cold, wind*, pèèpè *wind* – **Mande** *pɛŋpɛŋ. Reliability index: 5/6 (limited distribution outside Bantu and Mande).

PROTO-BANTU BLR3 *pépò *wind, cold* Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGJKLMNPRS; pèèpè *wind* Zones 7: ABCDHPR

OTHER BENUE-CONGO Proto-Benue-Congo *pepod
BENUE-CONGO W.: Nupoid **Gwari** fūí *cold*, fū *become cold*
BENUE-CONGO E.: Bantoid **Proto-Grassfields** *fùfùad

MANDE *pɛŋpɛŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+		+							+	

1.1 Southwestern **Mende** fɛ̀fɛ́ *wind, breeze*; **Bandi** fɛ̀fɛ̀ng-í, pl. fɛ̀fɛ̀ng-ítìì *air, wind*; **Zialo** fɛ̀fɛ̀
1.3 Jogo-Jeri **Jalkunan** fyɛ̀ɛ̀
2.1 Eastern **Bisa Lebir** pɛ̀pɛ̀ɛ̀r, pìpɛ̀ɛ̀r

OTHER NIGER-CONGO potential parallels:
Kru **Bassa** pɛ̄ɛ̀ *be cold*
Isolated NC **Sua** foyen *cold*

Comments:
1) As can be seen in the "Homonymy & Polysemy" (Segerer 2022) tool, the polysemy WIND – COLD is well represented in Africa; it is found in dozens of Niger-Congo, Chadic and Cushitic languages.
2) This root could potentially be included in the Swadesh 100 Wordlist.

9.2.1.2. Bantu *b- : Mande *b-

@Brain Bantu *bòngó – **Mande** *bɔŋxɛŋ. Reliability index: 5/6 (absent from Benue-Congo outside Bantu).

PROTO-BANTU *bòngó, Regions 4: NW Ce NE SE; Zones 7: ABGLMNP

MANDE *bɔŋxɛŋ (?)

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+			+						+

1.2 Susu-Jalonke **Susu** bɛ́xɛ́; **Jalonke** bènqɛ̀ŋ
1.5 Mokole **Mogofin** bènkɛ́ŋɛ̀ (< Susu?)
2.2 Southern **Mwan** bɔ̰̀ (?) *brain; marrow*

OTHER NIGER-CONGO potential parallels:
Adamawa **Day Bouna** mbɔ̄gɔ̄ ɲíí; **Kare** kòɓóŋ
Dogon **Mombo** bógè / kòò bógè
Kwa **Chumburung** ḿ-bɔ̄ŋ
Ubangi Gbaya **Proto-Gbaya** mbòngɔ́
Isolated NC **Limba** ma-buku, ma-ɓenkɔ (< Susu)

@Call Bantu *bíd *call, announce; tell* – **Mande** *biri. Reliability index: 3/6 (poor representation in Mande and absence in other Niger-Congo families).

PROTO-BANTU *bíd, Regions 4: NW SW Ce NE; Zones 9: ABCEFHKLM *call, announce; tell*

OTHER BENUE-CONGO
BENUE-CONGO E.: Jukunoid **Proto-Jukun** *b^{w}aT

MANDE *biri

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
									+	

2.1 Eastern **San Matya** bəri; **San Mayaa** buri; **Bisa Lebir** bĭr

@Carry on the back (child) Bantu *bèb *carry a child*, *bambat *carry on shoulder* – **Mande** *baŋbuŋ. Reliability index: 3/6 (limited distribution in Bantu and in other Niger-Congo families).

PROTO-BANTU *bèb, Regions 2: NE SE; Zones 2: GS *carry a child*, *bambat, Zone: R *carry on shoulder*

MANDE *baŋbuŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+			+	+	+	+			

1.2 Susu-Jalonke **Susu** bə̀bá; **Jalonke** bàmbú
1.5 Mokole **Kakabe** bànba, bànbu

1.6 Manding **Mandinka** bàmbù ~ bàmpù; **Maninka Nyokolo** bámpùŋ; **Xasonka** bánbù; **Maninka-Mori** bànbu ~ bànba; **Bambara** bàmũ; **Jula Kong** bạ̀ba
1.7 Soninke-Bozo **Soninke** bàmbú; **Tigemaxo** bɛ́mbɛ̀; **Kelenga** bɔ́mbɔ̀; **Jenaama Cliffs** bɔ̀ⁿpɔ̀ⁿ; **Jenaama Jenne** bɔ̀ⁿpɔ́ⁿ
1.8 Bobo **Bobo S.** bàmū

OTHER NIGER-CONGO potential parallels:
Atlantic Bak Manjak **Manjak** bamb
Atlantic N. Nyun-Buy **Nyun** bʊ-bamb *carry on the back (a child); protect*; Tenda-Jaad-Biafada **Bedik** ga-mbɔ̀mb *cloth to tie a child on the back*; Fula-Sereer **Fula** bammba; Nalu-Baga Fore-Pukur **Nalu** bambraa *baby sling*
Dogon **Jamsay** bámbɛ́; **Mombo** bámbyéè; **Najamba** màmbí-yɛ́ *hold or carry (baby) on one's side*
Gur **Boore** bàābá ~ bàābáā
Mel N. **Temne** bamba
Mel S. **Kim** gbím

@Child, fruit; give birth Bantu *bí-ad *bear (child), give birth to* – **Mande** *bɛɛ *child; fruit.* Reliability index: 6/6

PROTO-BANTU *bí-ad, Regions 5: NW SW Ce NE SE; Zones 11: ABDEFGJMNRS, *bear (child), give birth to*

OTHER BENUE-CONGO
Benue-Congo E.: Bantoid Grassfields **Proto-Grassfields** *bÍ

MANDE *ɓɛɛ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
				+					+	+

1.5 Mokole **Lele** bíi *son*
2.1 Eastern **Boko** bɛ *fruit, tuber;* **Busa** bɛ *tuber*; **Bokobaru** bɛɛ *fruit; tuber*
2.2 Southern **Dan E.** ɓɛ̄ *fruit; oblong object*; **Dan W.** ɓɛ̄ *fruit; oblong object*; **Dan Kla** ɓɛ̀ *fruit, tuber, ear (of sorghum)*; **Mano** ɓɛ̄ɛ̄ *fruit*;

Guro ɓɛ̄ɛ̄ *fruit*; **Mwan** ɓɛ̄ *grain; unit*; **Beng** bɛ̄ŋ̄ *fruit*; **Ngen** bɛ́ŋ̀ *fruit*

OTHER NIGER-CONGO:

Adamawa **Yi Kitulɛ** bʷé / bʷésón *child*; **Tupuri** wè- < *wə̏lɛ̄ child*

Atlantic Bak Balant **Balante Ganja** f-mbî / ŋ-mbî *grain; unit*; Bijogo **Bijogo** ɔ-ngbya / ya-ngbya *child*; Joola **Bayot** ka-bɪa *germinate*

Atlantic N. Tenda-Jaad-Biafada **Jaad** nə-mbe *child*; **Biafada** nə-mbe / ba-nə-mbe *one's own children*; Fula-Sereer **Proto-Fula-Sereer** *ɓi *child; fruit*

Gur **Proto-Central** *bi; **Pana** bìí / bàmbása ~ bìó *child*; **Churama** bíɛ́w / byanaa̰a̰ba *son*

Kwa **Proto-Ghana-Togo-Mountain** *lì-bìí / à- *fruit*, *ò-bí / bà- *small child*; **Attié** bì *child*

Ubangi Gbaya **Proto-Gbaya** *bé-kòò *grandchild*

@Crocodile Bantu *bámbè *monitor lizard; iguana; crocodile*, *bamba *aquatic animal; crocodile* – **Mande** *baŋba. Reliability index: 5/6 (limited distribution in Mande).

PROTO-BANTU *bámbè, Regions 3: NW SW Ce; Zones 4: BCHL *monitor lizard; iguana; crocodile*, *bamba, Regions 4: NW SW NE; Zones 4: CEGH *aquatic animal; crocodile*

OTHER BENUE-CONGO Proto-Benue-Congo *wame

MANDE *baŋba

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
		+		+	+					

1.3 Jogo-Jeri **Jogo** (Braconnier n.d.) bànbâ

1.5 Mokole **Kakabe** bànba; **Mogofin** bànba; **Lele** bànba; **Koranko** bànba

1.6 Manding **Mandinka** bàmbà; **Maninka Nyokolo** bámbà; **Maninka Kita** bànbá; **Maninka-Mori** bànba; **Bambara** bàma; **Jula Kong** ba̰a̰ba; **Koro** bāmbă; **Koya** bàmá

@Finish Bantu *màd, *màn – **Mande** *Baŋ. Reliability index: 5/6 (limited distribution in Mande).

PROTO-BANTU *màd, Regions 5: NW SW Ce NE SE; Zones 11: ABCDFGJMNPR, *màn, Regions 3: NW SW Ce; Zones 8: ABCHKLMR

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Ekoid **Abanyom** màl; Bantoid Grassfields Ring **Proto-Ring** *màí; Jukunoid **Jibe** vɔ̀n

MANDE *Baŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+		+	+	+					

1.2 Susu-Jalonke **Susu** báán *n limit, end*

1.4 Vai-Kono **Vai** ɓáŋ; **Kono** bán

1.5 Mokole **Kakabe** bán; **Mogofin** bàn; **Lele** bą́; **Koranko** bą̀

1.6 Manding **Mandinka** bàŋ *finish; die; destroy*; **Maninka Nyokolo** bàŋ *finish, end; die*; **Xasonka** bán; **Maninka Kita** bán; **Maninka-Mori** bán *finish, end; disappear*; **Bambara** bą́ *finish, put an end to, terminate*; **Jula Kong** bą́ *finish, end; die*; **Koro** bà; **Koya** ban

OTHER NIGER-CONGO potential parallels:

Adamawa **Samba Leko** bɛ́ ~ bɛ́d

Atlantic Bak Joola **Bayot** ka-βan; **Joola Banjal** ɛ-ban; **Joola Kasa** ka-banen; **Jóola Kujamutay** ban; Manjak **Manjak** ba; **Mancagne** ba

Atlantic N. Tenda-Jaad-Biafada **Jaad** ban

Dogon **Najamba** bàndí-gí-y / bàndì-gì-yè *end up (in a situation), end up (doing smth.)*

Gur **Boore** véní ~ vénią̰; **Pana** bę̰

Kru **Bakwe** bıa

Kwa **Attié** gbę̰

Mel N. **Temne** gbanti

@Jaw Bantu *bángá – **Mande** *baŋga *cheek.* Reliability index: 4/6 (limited distribution in both Bantu and Mande).

PROTO-BANTU *bángá, Regions 4: NW SW Ce NE; Zones 6: BCDHJL

OTHER BENUE-CONGO Proto-Benue-Congo *banga

BENUE-CONGO E.: Bantoid Grassfields Kom **Kom** āgʊə̂ʔ *cheek, jaw*; Bantoid Grassfields Ring **Proto-Ring** *bók *cheek, jaw*; Cross Lower **Proto-Lower-Cross** *ɛ-bɛ́k / a-, *m̀-báŋ *chin*; Cross Upper **Obolo** ùgá; **Proto-Upper-Cross** *bémà *chin, jaw*; Cross Upper **Proto-Upper-Cross** *gba *jaw*

BENUE-CONGO W.: Defoid **Yoruba** àgbə̀ *chin*; Edoid **Urhobo** égbà (ɔhwà)

MANDE *baŋga *cheek*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+			+						

1.1 Southwestern **Mende** bángá *cheek*

1.2 Susu-Jalonke **Susu** bə̀gáŋ-ì

1.5 Mokole **Mogofin** báŋɛ́ *cheek*

OTHER NIGER-CONGO potential parallels:

Adamawa **Samba Leko** gbâŋ

Ijo **Ibani** mgbà

Mel S. **Kim** gbàgbág *chin*

Ubangi **Linda** bángà *jaw, lower jaw; cheek*; **Mbandja** bàgá *chin*

Comments: In Mande, there is also another root for 'cheek' with reflexes of the type *gban, gben* which can be compared with the Samba Leko, Ibani and Kim forms.

@Penis Bantu *bódó – **Mande** *bɔtu. Reliability index: 3/6 (limited distribution in Mande and Benue-Congo outside Bantu; absent from other Niger-Congo families).

PROTO-BANTU *bódó, Regions 4: SW Ce NE SE; Zones 9: DFGHJLNPS *penis*, *bià, Zones: AJH *testicle, penis*

OTHER BENUE-CONGO
BENUE-CONGO E.: Jukunoid **Proto-C-Jukun** *vʸit

MANDE *bɔtu

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+			+							

1.1 Southwestern **Mende** mbùlɔ́ *penis; taproot*; **Kpelle S.** ɓɔ̄rī
1.4 Vai-Kono **Vai** (Klingenheben & Kastenholz 2019) ɓòlò-féŋ (?), ɓɔ̀tú

@**Raffia palm** **Bantu** *bádè *palm tree; midrib of palm-frond; leaf of palm* – **Mande** *ŋ̀-baŋ. Reliability index: 5/6 (limited distribution in Mande).

PROTO-BANTU *bádè, Regions 5: NW SW Ce NE SE; Zones 8: BEGKLMPR *palm tree; midrib of palm-frond; leaf of palm*

OTHER BENUE-CONGO Proto-Benue-Congo *wade *leaf*
BENUE-CONGO E.: Bantoid Ekoid **Abanyom** ɔ̀-bî *palm tree*; Bantoid Grassfields Ring **Proto-Ring** *bàŋ *palm tree*

MANDE *ŋ̀-baŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
		+	+	+	+					

1.3 Jogo-Jeri **Jalkunan** bàŋ-kṳ̀ *palm sp. on riverbanks (Raphia mambillensis)*
1.4 Vai-Kono **Vai** ɓàŋ *piassava palm*
1.5 Mokole **Kakabe** bàngáŋá; **Koranko** bą̀
1.6 Manding **Mandinka** bàŋ *raffia palm; wine*; **Maninka Nyokolo** báŋ; **Xasonka** bàŋ; **Maninka-Mori** bàn; **Bambara** bą̀, nbą̀

OTHER NIGER-CONGO potential parallels:
Adamawa **Pere** bàlíī *palm tree (sp.)*
Atlantic N. Tenda-Jaad-Biafada **Jaad** ban
Gur **Boore** bą̀

Kwa **Proto-Ghana-Togo-Mountain** *kù-báné / à- *oil palm*; **Attié** bā̰; **Chumburung** ká-bə̄ŋ *oil palm*
Mel N. **Temne** a-gbale / ɛ-gbale *oil palm (for wine only), very high*; **Landuma** ʌgbela *oil palm*
Ubangi Gbaya **Proto-Gbaya** *báŋá *oil palm*

@Refuse Bantu *béng *dislike; refuse* – **Mande** *baŋ. Reliability index: 5/6 (not represented in Benue-Congo outside Bantu).

PROTO-BANTU *béng, Regions 4: NW Ce NE SE; Zones 9: CDGJLMNPS *dislike; refuse*

MANDE *baŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
		+	+	+	+	+			+	+

1.3 Jogo-Jeri **Jogo** gbà̰; **Jeri** gbà̰
1.4 Vai-Kono **Vai** (Klingenheben & Kastenholz 2019) ɓàŋ *refuse, disagree*; **Kono** bàn
1.5 Mokole **Lele** ban; **Koranko** bà̰
1.6 Manding **Mandinka** bàŋ; **Maninka Nyokolo** báŋ; **Xasonka** bàn; **Maninka Kita** bàn; **Maninka-Mori** bàn *refuse; abandon; decline*; **Bambara** bà̰ *refuse; abandon; decline*; **Jula Kong** bà̰; **Koya** ban
1.7 Soninke-Bozo **Tigemaxo** bai *stop doing smth.; divorce*
2.1 Eastern **San Matya** ba̰
2.2 Southern **Beng** bàŋ́ (< Manding?)

OTHER NIGER-CONGO potential parallels:
Atlantic N. Wolof **Wolof** baŋ *refuse, resist*; Tenda-Jaad-Biafada **Bedik** u-ɓàŋ / ɓàŋegú *prohibit*; **Basari** ɛ-ɓáŋ *prohibit*; **Konyagi** ì-ɓǽŋ *prohibit*; **Jaad** baŋ *protect; prohibit access to a magic place*; Fula-Sereer **Proto-Fula-Sereer** *baŋ; Nalu-Baga Fore-Pukur **Nalu** mayen *protect, defend*
Kwa **Attié** bī ~ bì ~ bʸɛ̄
Ubangi Gbaya **Proto-Gbaya** *bɛ́

Isolated NC **Limba** baŋina ~ baŋinie *decline, refuse, deny, forsake, object, oppose, recant, reject, withstand, abjure*; **Sua** gbay *refuse; negate*

@Roll Bantu *bídɪng *turn, round off* – **Mande** *bĩlĩ. Reliability index: 4/6 (limited distribution in Bantu and other Benue-Congo branches).

PROTO-BANTU *bídɪng, Zones: CGJ *turn, round off*

MANDE *bĩlĩ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+			+	+	+	+		+	+

1.2 Susu-Jalonke **Susu** bílį *go around*
1.5 Mokole **Kakabe** mílín *roll up, coil; wrap oneself up*
1.6 Manding **Mandinka** bídíbídì *roll on the ground*; **Xasonka** bírígíntín; **Maninka-Mori** bírinkiti *writhe;* **Bambara** bìnimíni *vi roll on the earth; vt roll smth. on the earth; vr writhe (in agony)*; **Koro** bíríndí *roll along*; **Koya** bríní
1.7 Soninke-Bozo **Soninke** bírímbírì ~ bílímbílì; **Tigemaxo** bélém-bélé^{n} *spin; go in circles*; **Kelenga** mínímíní *spin; go in circles*
1.8 Bobo **Bobo S.** pìlèmīlē/pèlèmēlē
2.1 Eastern **San S.** birikɜ̃ɜ̃ (birikəĩ); **San Matya** bini
2.2 Southern **Mwan** bīī *turn, roll, twist*

OTHER NIGER-CONGO potential parallels:
Adamawa **Day Bouna** ɓīrì *roll (mat); wrap*
Dogon **Jamsay** bìné; **Mombo** bíndí bíndé; **Najamba** bìndí / bìndè *turn over (earth in field, with hoe, hold rainwater or weed around peanut plants)*
Gur **Proto-Oti-Volta** *bil, **Boore** bīrí ~ bīríō *roll, wrap; turn*; **Churama** binɜ̃ɜ̃
Isolated Bangime bíríngà *roll on the ground*

@Rot Bantu *bòd *be rotten* – **Mande** *bɔrɔ. Reliability index: 6/6.
PROTO-BANTU *bòd, Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGHJKLMNPRS *be rotten*

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Ekoid **Abanyom** bɔ̀l *be rotten*

MANDE *bɔrɔ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+		+	+					+	+

1.2 Susu-Jalonke **Susu** bɔ̀rɔ̀ *rot, spoil*

1.4 Vai-Kono **Vai** ɓúá *decay*

1.5 Mokole **Mogofin** bórɔ̀ *be rotten*

2.1 Eastern **San S.** (Schreiber 2008) buǫ; **Bisa Lebir** vǫ̰

2.2 Southern **Proto-Southern** *bǫ́ ~ *bǫ̀lǫ́; **Dan E.** bű; **Dan Kla** bű; **Dan W.** bú; **Goo** bűű; **Tura** bűű; **Mano** vúú; **Guro** vǭ; **Mwan** bǭ; **Wan** bǭ; **Gban** ßlǫ̀; **Beng** vǭ *rot; be ugly;* **Ngen** vǭ *be rotten*

OTHER NIGER-CONGO potential parallels:

Adamawa **Pere** bū̱nō *it is rotten*; **Samba Leko** ŵ̱ɔ̄n; **Tupuri** bùù-gǐ

Atlantic Bak Joola **Jóola Kujamutay** ɛpʊt *stink*, mapʊt *rotten food*; **Joola Kwaatay** kafʊtʊ *stink*

Atlantic N. Nyun-Buy **Nyun** (Cobbinah 2013) bʊri; Tenda-Jaad-Biafada **Bedik** u-búr / búrú *be rotten*; **Basari** a-wə̀r *rot; be stupid*; **Konyagi** ì-bə̀l / wə̀-wə̀l ~ wə̀-yə̀l *decay*; **Jaad** pər *be rotten*; **Biafada** bwəl-; Fula-Sereer **Sereer** (Greffier 1960) fot *be rotten*

Dogon **Jamsay** pɔ́ɔ́nɔ́

Gur **Boore** pū̱ ~ pū̱nā; **Kabiye** puda *decay*

Ijo **Ibani** ɓɔ̀rɔ́ *be rotten*

Kwa **Proto-Ghana-Togo-Mountain** *bú *be rotten*; **Logba** bù *rotten*

Mel S. **Kim** pùt *rotten*; **Sherbro** put *be completely rotten*

Ubangi Gbaya **Proto-Gbaya** *mbɔ́r

@Side **Bantu** *bádì, *bàdù *side of body; rib; side* – **Mande** *bɛlɛ. Reliability index: 4/6 (poorly represented outside Bantu and Mande).

PROTO-BANTU *bádì, Regions 4: SW Ce NE SE; Zones 7: EJKLMNP *side*, *bàdù, Regions 5: NW SW Ce NE SE; Zones 10: ADEFGJLMNP *side of body; rib; side*

MANDE *bɛlɛ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+				+	+	+			+

1.2 Susu-Jalonke **Susu** Anonyme n.d. bìrí *side, nearby; toward*
1.6 Manding **Bambara** bère, bèri *side, flank (rare)*
1.7 Soninke-Bozo **Tigemaxo** bɛlɛ *side, border*; **Kelenga** (Smeltzer & Smeltzer 1995) bɛlɛɛ, (Heath 2023) bɛ̀lɛ̀ *entire side (of a person); edge (of a body of water)*
1.8 Bobo **Bobo S.** bárá ~ bárέ / bàrá *near; toward*
2.2 Southern **Beng** blɛ̄`

OTHER NIGER-CONGO potential parallels:
Adamawa Duru **Pere** bālɛ̀
Atlantic N. Fula-Sereer **Proto-Fula-Sereer** *(B)Wan ~ *(B)Waŋ
Dogon **Jamsay** béné, **Mombo** béndélέ

@Swell **Bantu** *bímb – **Mande** *biŋbi. Reliability index: 3/6 (limited distribution in Mande; absent outside Bantu and Mande).

PROTO-BANTU *bímb, Regions 5: NW SW Ce NE SE; Zones 15: ABCDEFGHJKLMNPS *swell*; *bímbà, Zones: CFHJ *swelling, abscess*; *bímbò, Zones: GHKM

MANDE *biŋbi

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+				+	+				

1.2 Susu-Jalonke **Susu** bi̱bi̱ *swell; fill stomach*; **Jalonke** bìnbín *be swollen*
1.6 Manding **Maninka Nyokolo** (Meyer 1983) binbi *vi be unripe; adj unripe; n colic*; **Maninka-Mori** bìnbi *vi suffer from flatulence; vt inflict flatulence on; vr drive oneself to flatulence; n flatulence; adj with a swollen belly*
1.7 Soninke-Bozo **Tieyaxo** bini *vr ache (of stomach)*

9.2.1.3. Bantu *p- : Mande *f-

@Blow (with mouth) Bantu *púd – **Mande** *fuuDV. Reliability index: 4/6 (limited distribution in Benue-Congo outside Bantu and in Mande).

PROTO-BANTU *púd, Regions 5: NW SW Ce NE SE; Zones 6: BCHMRS

OTHER BENUE-CONGO Abanyom fúlî

MANDE *fuuDV

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
						+				

1.7 Soninke-Bozo *fùuDV; **Soninke** fùuté *blow; play an instrument*; **Tieyaxo** fulu *blow on*; **Tigemaxo** fúlù *blow on*; **Kelenga** fúúlà *blow on*; **Tiema Cewe** pulu; **Jenaama Cliffs** pùù *blow on; inflate*; **Jenaama Jenne** fùù *blow on*

OTHER NIGER-CONGO potential parallels:
Adamawa Mbum **Tupuri** fùl-gì
Atlantic BAK: Joola **Bayot** ka-fɔrɛŋ; **Manjak Pepel** furę
Atlantic N. Tenda-Jaad-Biafada **Jaad** fuur; **Biafada** fuul-
Gur **Proto-Central** *fu
Kwa **Proto-Potou-Akanic** *pu, **Proto-Akanic** *fu; **Chumburung** fɔ̀rɪ̄
Mel S. **Kisi** fùùlàá *blow on a fire*
Senufo **Mamara** fɔ̀

Comments: Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu *-*pulu*.

@Flour Bantu *pùpù – **Mande** *fuye 'dust, powder'. Reliability index: 5/6 (limited distribution in Bantu).

PROTO-BANTU *pùpù, Zones: CHJ *flour*

OTHER BENUE-CONGO
BENUE-CONGO E.: Cross Upper **Obolo** ḿfúùŋ *dust*; Kainji **Bassa** púū *dusty*

MANDE *fuye

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+										+

1.1 Southwestern **Proto-Southwestern** *fùfílèŋ *dust*; **Mende** fùfúlè *dust*; **Bandi** fùfulé(ŋ) *dust*; **Zialo** fùfule(g) *dust*; **Looma** fùfùlì(g) ~ fifili(g) *dust*

2.2 Southern **Proto-Southern** *fúyè; **Guro** fúè, fúyè *talc, powder (cosmetic)*; **Beng** fúè *powder*

OTHER NIGER-CONGO potential parallels:

Adamawa **Day Bouna** pùtú *dust*; **Tupuri** pùù-gì *dirty with dust*

Atlantic Bak Joola **Joola Banjal** ga-pɔr *dust*; **Joola Gusilay** gapɔt *dust*; **Joola Kasa** ɛ-for *powder, flour*; **Jóola Kujamutay** ɛpɔr *powder, flour,* kapɔr *dust*; **Joola Kwaatay** hafɔɔr *dust*; Manjak **Manjak** (Wilson 2007) ifuur *flour*; **Mancagne** ufoor *gunpowder*; **Pepel** fɔr *flour*

Atlantic N. Tenda-Jaad-Biafada **Jaad** forto *dust*; **Biafada** gu-mpoo *flour*; Cangin **Palor** pud *powder*; **Saafi** (Pouye 2015) puɗ *powder*; Atlantic N. Nalu-Baga Fore-Pukur **Nalu** fuda *dust*

Dogon **Jamsay** púúdù *powder (e.g. chemical)*; **Mombo** púrúdyéè *be or become covered with dirt or dust (e.g. after farming)*

Ijo **Ibani** fɔ̄ɔ̄ *ashes; dust*

Kru **Bakwe** fʊ́fʊ́ʊ̄ *powder*; pʊ́ *powder*; **Dida** pùpʊ̀ɓī *dust*

Kwa **Attié** fùfù *flour*

Mel S. **Sherbro** ipul *flour made of new, not quite dry rice which has been dried near the fire and later ground*

Ubangi Gbaya **Proto-Gbaya** *fùù *flour*; **Mba-Dongo-Ko** púpù-kɔ́ / púpù-zɔ́ *dust*

Comments:

1) The South Mande forms can be alternatively regarded as reflexes of another Proto-Mande root: DUST **fuŋka*.
2) The admissibility of the semantic convergence FLOUR – POWDER – DUST is confirmed by the evidence obtained by means of "Homo-

nymy & Polysemy" (Segerer 2022): the polysemy FLOUR – POWDER is attested in 53 languages, and the polysemy FLOUR – DUST in 4, in particular in Kpelle and Nalu.

@Foam Bantu *púd(ò), *pódù – **Mande** *ŋ̀-fʊrʊŋ. Reliability index: 6/6.

PROTO-BANTU *púd, Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGHJKLMNPRS (BLR3) *froth over (swell up, boil up)*, *púdò, Regions 5: NW SW Ce NE SE; Zones 13: ABCDEFHJKLMPS *foam*

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Ekoid **Abanyom** fûl *bubble*; Platoid **Hasha** fər *boil (v)*

BC isolated: Ukaan **Proto-Ukaan** *àfùrùgV; **Iigau** àfùrùk

MANDE *ŋ̀-fʊrʊŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
						+				+

1.7 Soninke-Bozo **Tieyaxo** fuoro *vt wash with soap*; **Tigemaxo** fóóró *foam, become frothy*; **Kelenga** fóóró-jùù *froth, foam*; **Jenaama Cliffs** púlā *froth, foam*; **Jenaama Jenne** fúlàⁿ *froth, foam*

2.2 Southern **Proto-Southern** *ŋ̀-fʊ́lʊ́ŋ; **Dan E.** vűű́; **Dan W.** vúú; **Goo** fṵ̀ṵ́; **Tura** fʊ̀ʊ̀, fòù; **Beng** flóŋ́

OTHER NIGER-CONGO potential parallels:

Adamawa **Day Bouna** hùlú; **Kare** fúrà *foam; flowering*

Atlantic N. Wolof **Wolof** fuur *froth over; swell*

Dogon **Jamsay** pútò *froth, foam (on tea)*

Gur **Kabiye** hùlùú; **Churama** puul *boil*

Kwa **Proto-Potou-Akanic** *pulu; **Proto-Akanic** *fulu

Mel N. **Temne** kə-foţ *foam, scum;* **Temne** futɛ *vt boil up*

Isolated NC **Gola** éfɔu (fɔ́ù); **Limba** fuluna *boil (liquids)*

Isolated Bangime púréè *cream, creamy froth (on milk)*

Comments: Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu *-*pulu*.

@Lung Bantu *pʊʊpʊ – **Mande** *ŋ̀-fʊgʊ(-fʊgʊ). Reliability index: 5/6 (poorly represented in the Niger-Congo branches outside Benue-Congo and Mande).

PROTO-BANTU *pʊʊpʊ, Regions 4: NW SW Ce NE; Zones 4: CFHM, *pʊ̀apʊa, Zones: LM, *papu, Zones: EG, *pàpʊ́, Zones: NS, *papua, Zones: GM, *pàpá, Zone: J

OTHER BENUE-CONGO Proto-Benue-Congo *pupu

MANDE *ŋ̀-fʊgʊ(-fʊgʊ)

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+		+	+		+	+		+	+	+

1.1 Southwestern **Proto-Southwestern** *ŋ̀-fɔ̀gɔ̀; Mende vɔ̀vɔ̀; Kpelle N. hvɔ́ɔ̀

1.3 Jogo-Jeri **Jogo** fɔgɔfɔgɔ

1.4 Vai-Kono **Vai** vɔ̀ɔ̀vɔ̀ɔ̀

1.6 Manding **Mandinka** húkunhùkun; **Maninka-Mori** fɔɔfɔɔ; **Bambara** fógõfɔ̀gõ; **Jula Kong** fɔgo̰fɔgo̰ ~ fɔgɔ̀fɔgo̰; **Koro** fɔgɔ̀-fɔgɔ́; **Koya** fɣɔ̀fɣɔ́

1.7 Soninke-Bozo **Kelenga** fógóⁿ-vɔ̀gɔ̂ⁿ

1.9 Samogho **Duun** fufu; **Dzuun** fɔ̀ɔfɔ́ɔ

2.1 Eastern **San Matya** fufugu; **San Mayaa** fufugu; **Bisa Lebir** fəfər ~ fʊ̀fʊ̀r; **Bisa Barka** fofo

2.2 Southern **Proto-Southern** *ŋ̀-fʊ̀gʊ́; **Dan E.** fʊ̀ʊ̀-dɔ̰ *tuberculosis*; **Dan W.** vɔ̄ŋ̄; **Dan Kla** fɔ̀ɔ̀; **Tura** fʊ̀ʊ̀; **Guro** fʊ̄ʊ̀; **Yaure** fʊ̀ʊ̋; **Mwan** fɔ̀ɔfɔ́ɔ; **Beng** fɔkɔ́

OTHER NIGER-CONGO potential parallels:
Gur **Gurunsi – Oti-Volta** *fu
Isolate NC **Gola** é-vɔ̀ɔvɔ̀ɔ (< Mende?)

9.2.1.4. Bantu *b- : Mande *ɓ-

@Bear, give birth: Bantu *bèdɪk – **Mande** *ɓari. Reliability index: 4/6 (not represented outside Bantu and Mande).

PROTO-BANTU *bèdɪk, Zones 8: GKLMNPRS

MANDE *ɓari

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+	+								+

1.2 Susu-Jalonke **Susu** bárí; **Jalonke** bárí
1.3 Jogo-Jeri **Jogo** (Braconnier n.d.) bólí
2.2 Southern **Guro** (Le Saout 1979) ɓélí

@Become **Bantu** *bá *dwell, be, become* – **Mande** *ɓã *behave, act, do; happen*. Reliability index: 4/6 (missing outside Bantu and Mande).

PROTO-BANTU *bá, Regions 5: NW SW Ce NE SE; Zones 10: ABCGHJMNPS *dwell, be, become*

MANDE *ɓã *behave, act, do; happen*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+			+	+	+

1.1 Southwestern **Bandi** mba/wa *be*; **Kpelle S.** ɓā (< ɓé + ā?) *be*
1.2 Susu-Jalonke **Susu** rá-bà *do*; **Yalunka** ra-ba *do*
1.3 Jogo-Jeri **Jogo** (Braconnier n.d.) má *do*; **Jeri** má *happen; be; make; say*
1.4 Vai-Kono **Vai** má *vi act, perform; vt act on smb.; vt do, accomplish*
1.5 Mokole **Kakabe** má; **Mogofin** má
1.6 Manding **Mandinka** màa *vi behave, act; n state of mind, behaviour towards others*
1.9 Samogho **Jowulu** mą́ *do*; **Seenku N.** bà/bàné *do*
2.1 Eastern **San S.** baa (biɛ) *be, become*; **Bisa Lebir** bá; **Bisa Barka** ba *vi become; vt do, produce; chase, hunt*
2.2 Southern **Dan E.** ɓą́ *vi appear, occupy place; cover (smth. – ɓà); penetrate (of cold; smb. – gú); be hidden; fall (of night, twilight); hurt (of a wound, cold, etc.; smb., smth – ká), burn (of sun, fire; smb., smth. – ká); irritate; afflict (smb. – ká); go too far (behave*

egregiously); slide (in smearing –- pĭɤ); take unawares (smb. – ɓà); pounce (on – tà); vt place; wrap (smth., with – ɓà); hide; observe (fast)

@Goat Bantu *bódì – **Mande** *ɓoli. Reliability index: 6/6.

PROTO-BANTU *bódì Regions 4: NW Ce NE SE; Zones 13: ABCDEFGJLMNPS

OTHER BENUE-CONGO Proto-Benue-Congo *bwoni

BENUE-CONGO E.: Bantoid Grassfields **Proto-Grassfields** *bÚÌ, Jukunoid **Proto-C-Jukun** bín; Cross Lower **Proto-Lower-Cross** *é-bót / i-; Cross Upper **Proto-Upper-Cross** *bón

MANDE *ɓoli

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+					+			+	+	+

1.1 Southwestern **Proto-Southwestern** *ɓÒlĭ; **Looma** bóli, (Prost 1967) ɓoli; **Kpelle S.** ɓōlī; **Kpelle N.** ɓòlŭ, ɓòlĭ

1.6 Manding **Bambara** bálibali (?) *Sahelian sheep*

1.9 Samogho **Seenku N.** bì, pl. bĭ̀ì

2.1 Eastern **Bisa Lebir** bɔ̰̀ɔ̰́nsá; **Bisa Barka** (Schreiber 2008) bir, pl. burɔ; **Boko** blē; **Busa** blè; **Bokobaru** blè

2.2 Southern **Proto-Southwestern** *ɓòlí; **Dan W.** ɓô; **Dan E.** ɓò; **Goo** ɓùù; **Tura** ɓúú; **Mano** ɓò; **Gouro** ɓōlī; **Yaure** ɓò; **Mwan** ɓōō; **Wan** ɓólì; **Gban** bù

OTHER NIGER-CONGO potential parallels:

Adamawa **Tupuri** ɓéé; **Yingilum** viú; **Samba Leko** və̄

Atlantic BAK Joola **Bayot** ɛ-βɪra; **Bijogo** e-we / i-we

Atlantic N. Wolof **Wolof** bəy; Tenda-Jaad-Biafada **Bedik** gɛ-mbɔ́; **Proto-Fula-Sereer** *mbe

Dogon **Jamsay** bèrú

Gur **Proto-Central** *bu; **Proto-Oti-Volta** *bʊː / *bʊd; **Boore** vīō / vīōrā; **Pana** bu̱ú̱ / bu̱ú̱yà

Kru **Bassa** wīḍī̱
Kwa **Attié** m̀bɛ̀ɛ̂
Mel N. **Temne** w-irr; **Landuma** wir
Isolated Bangime bíìn

@Miss (to) Bantu *bód *lack; be lacking; be lost* – **Mande** *ɓuo. Reliability index: 5/6 (limited distribution in Mande).

PROTO-BANTU *bód, Regions 2: Ce NE; Zones 7: DEGJLMN *lack; be lacking; be lost*; *bódʊ, Zones: DJLM *lack; be lacking; be lost*

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Grassfields **Limbum** búú *lack*; Ring **Proto-Ring** *bóà *lack*

MANDE *ɓuo

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
										+

2.2 Southern **Mano** ɓúó *miss, fail*; **Guro** ɓūù *fail, miss, be late*; **Mwan** ɓùè *fail*

OTHER NIGER-CONGO potential parallels:

Adamawa **Day Bouna** bór *miss, lack*

Atlantic Bak Manjak **Manjak** (Wilson 2007) bour *fail*; **Pepel** wɔrɪ *fail*

Atlantic N. Wolof **Wolof** (Fal et al. 1990) wɔr *fail; betray*; Fula-Sereer **Fula** (Bah 2009) wortugol *fail, miss*

Gur **Boore** búrúū ~ búrúō *fail, miss*

Isolated NC **Limba** buturia *pass over, miss*

9.2.1.5. Bantu *m- : Mande *ɓ-

@Grandmother Bantu *mààmá *mother, grandmother, maternal aunt/uncle (my –)* – **Mande** *ɓãɓã. Reliability index: 6/6.

PROTO-BANTU *mààmá, Regions 5: NW SW Ce NE SE; Zones 11: ABCFHJKLMRS *mother, grandmother, maternal aunt/uncle (my –)*

OTHER BENUE-CONGO Proto-Benue-Congo *mama *mother*
MANDE *ɓãɓã

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+	+	+			+

1.1 Southwestern **Proto-Southwestern** *màmă *grandmother*; **Mende** màmá; **Bandi** màmá; **Zialo** màmà; **Looma** màmà ~ mama(g); **Kpelle N.** màă; **Kpelle S.** māā ~ mama
1.2 Susu-Jalonke **Susu** màmá; **Jalonke** mààmáà
1.3 Jogo-Jeri **Jalkunan** màmą̀ níį̀
1.4 Vai-Kono **Vai** màmá; **Kono (**Manyeh 1983) màmà *grandparent*
1.5 Mokole **Kakabe** mààmà; **Mogofin** máámà; **Lele** màma ~ mámá; **Koranko** máma
1.6 Manding **Mandinka** mààmà ~ mààmàà ~ màmà ~ màmmà *grandparent*; **Maninka Nyokolo** mámà *grandparent*; **Xasonka** mámà *grandparent; ancestor*; **Maninka Kita** màmá; **Maninka-Mori** màmaren *grandchild*; **Bambara** màma; **Koro** māmă; **Koya** màmá
1.7 Soninke-Bozo **Soninke** máama *grandmother; grandparent*
1.8 Bobo **Bobo S.** màmā *grandparent*
2.2 Southern **Mano** màā *grandmother; mother-in-law; wife's older sister; old lady*

OTHER NIGER-CONGO potential parallels:
Atlantic Bak Balant **Balant Fora** (Wilson 2007) maama / bə *grandfather*; **Balant Ganja** màám / ŋ-màám *grandparent; ancestor*, (N'diaye-Corréard 1970) māàmāà *grandparent*; **Balant Kentohe** (Doneux et al. 1984) maama *ancestor*; Manjak **Mancagne** maama *mother, grandmother*
Atlantic N. Wolof **Wolof** maam *grandparent; ancestor*; Nyun-Buy **Kasanga** maam / ja *grandfather*; **Kobiana** maam / ja *grandfather*; **Nyun** (Cobbinah 2013) maamam *grandparent*; Tenda-Jaad-Biafada **Jaad** maamɛ *grandparent, grandchild*; Fula-Sereer **Proto-Fula-Sereer** *maam *grandparent; ancestor*; Nalu-Baga Fore-Pukur **Pukur** mamadixã *grandchild*; **Nalu** maama

Gur **Boore** māá-dɛ́ / māá-dɛ́(nā) *ancestor*, màmànì / màmàníná *grandchild*
Mel N. **Landuma** məma *grandparent; mother-in-law, father-in-law*
Mel S. **Kisi** màmá *grandmother, old woman*; **Mani** mámá *grandfather's sister, grandmother's sister, term of respect for old woman*
Isolated NC **Gola** ómāma; **Sua** mamma / mamɔmma *grandparent*

@Swallow Bantu *mìn ~ *mèn – **Mande** *ɓĩ 'drink'. Reliability index: 6/6.

Proto-Bantu *mìd, *mìn, (*mèn, *mèd), Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGHJKLMNPRS

OTHER BENUE-CONGO

BENUE-CONGO E.: Grassfields **Proto-Grassfields** *mǏ(l), Cross Lower **Proto-Lower-Cross** *mɛ̀n; Cross Upper **Obolo** mĕn; **Proto-Upper-Cross** *mèn; Jukunoid **Proto-Jukun** *mèn
BENUE-CONGO W.: Defoid **Yoruba** mi; W. Idomoid **Gwari** mī
BC isolated: **Proto-Ukaan** *mɻ́

MANDE *ɓĩ *drink, eat*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+	+	+	+	+	+

1.1 Southwestern **Proto-Southwestern** *mĭ *eat*; **Mende** mɛ́ *eat*; **Loko** mɛ́ *eat*; **Bandi** mɛ̀ *eat;* **Zialo** mɛ̃, mɛ *eat*; **Looma** mìi, mì, mɛ *eat*; **Kpelle S.** mīī *eat*; **Kpelle N.** mɛ̀ɛ̆ *eat*
1.2 Susu-Jalonke **Susu** mɻ́ *drink*; **Jalonke** mìŋ́ *drink*
1.3 Jogo-Jeri **Jogo** (Braconnier) mĕn *drink*; **Jeli** mɛ̀(n)/mɛnɛ *drink*; **Jalkunan** mĭɻ̃ *drink*; **Numu** méŋ/méné *drink, smoke*
1.4 Vai-Kono **Vai** mĭ *drink*; **Kono SL** mìn *drink*
1.5 Mokole **Kakabe** mìn *drink*; **Mogofin** mín *drink*; **Lele** mìn *drink*; **Koranko** mɻ́ *drink*
1.6 Manding **Mandinka** mìŋ *drink*; **Maninka Nyokolo** míŋ *drink*; **Xasonka** mìn *drink*; **Maninka Kita** mìn *drink*; **Maninka-Mori** mìn *drink*; **Bambara** mɻ́ *drink*; **Koro** mì *drink*; **Koya** mɻ́ń *drink*

1.7 Soninke-Bozo **Soninke** mìní *drink*; **Kelenga** mɛ̂ⁿ *drink*; **Tiema-Cewe** mɛ̰ *drink*; **Tigemaxo** mɛ̂ⁿ *drink*; **Jenaama Cliffs** mèwⁿ *drink*; **Jenaama Jenne** mèⁿ *drink*

1.8 Bobo **Bobo** mènɛ̄ *drink*

1.9 Samogho **Jowulu** mwūnù *drink*; **Seenku N.** mì *drink*; **Seenku S.** mənɪ̰̂ nɛ̀ *drink*; **Seenku S.** mɪ̰̀ nɛ́ *drink*; **Dzuun** mɪ̰̀ *drink*; **Kpan** mɪ̰̀ɪ̰̀-mɑ *drink*; **Duun Sieu** mɪ̰̀ *drink*; **Duun Kai** mɪ̰̀ *drink*; **Duun Bananso** mɪ̰̀ *drink*; **Banka** mɪ̰̀ *drink*

2.1 Eastern **San S.** mi(i) *drink*; **San Matya** mi *drink*; **San Mayaa** mi *drink*; **Bisa Lebir** mì *drink*; **Boko** mi *drink*; **Bokobaru** mi *drink*; **Kyanga** mi *drink*; **Shanga** mi *drink*

2.2 Southern **Proto-Southern** *ɓɪ́lɪ̰̀; **Dan Gwɛɛtaa** ɓʊ̰̄ *drink*; **Dan Kla** ɓa̰ŋ *drink, suck, swallow;* **Goo** ɓɪ̰́ *drink*; **Tura** *ɓɪ́lɪ̰̀ *drink*; **Mano** mī *drink*; **Guro** ɓɪ̰́lɪ́ *drink*; **Yaure** ɓɪ̰̀lɪ̀; *drink* **Mwan** ɓɪ̰̄ *drink*; **Beng** mīn *drink*; **Ngen** mɪ́ *drink*

OTHER NIGER-CONGO

Atlantic Bak **Joola Kwaatay** ka-mɛrʊ; **Joola Kujaamutay** ɛ-mɛr; **Bayot** ka-mɛl

Dogon **Mombo** mííndɛ̀; **Najamba** mìné

Ijo **Ibani** mɛ̀ní; **Nembe** mìní

Kwa **Proto-Potou-Akanic** *mĩ; **Proto-Akanic** *mĩ; **Chumburung** mɛ̀ʔ; **Logba** mɛ́

Mel N. **Temne** mɛr / mir; **Landuma** mer

Mel S. **Kisi** mìòlɔ̀ɔ́; **Sherbro** min

Isolated **Gola** mĩa; **Sua** ŋmin

Isolated Bangime mírná

Comments:

1) See comments on the root DRINK in §9.1.1.5.

2) Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu **mĩ*.

9.2.1.6. Bantu *b- : Mande *w-

@Boil (to) Bantu *bìd *boil, be cooked* – **Mande** *wudɪ̂. Reliability index: 3/6 (not found outside Bantu and Mande; limited distribution in Mande).

PROTO-BANTU *bìd, Regions 4: SW Ce NE SE; Zones 11: EFGHJKLMNPS, *boil, be cooked*, *bíd, Regions 2: NW Ce; Zones 4: ABCL *boil up*

MANDE *wuri

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
		+	+	+	+	+				

1.3 Jogo-Jeri **Jogo** Braconnier wúlú
1.4 Vai-Kono **Vai** wú'ì *vi, vt boil; heat in the fire; paddle (a canoe),* (Klingenheben & Kastenholz 2019) wúlì; **Kono** wíi
1.5 Mokole **Koranko** wúli
1.6 Manding **Mandinka** wúri, wúru; **Maninka Nyokolo** wùrì; **Xasonka** wúrí; **Maninka-Mori** wùri, wìri; **Bambara** wúli, wíli; **Jula Kong** wírí ~ wúrí; **Koya** wrí
1.7 Soninke-Bozo **Soninke** wàrí; **Soninke W.** (Smeltzer & Smeltzer 2001) wòri

9.2.2. Initial dental consonants

9.2.2.1. Bantu *t- : Mande *t-

@Bow (weapon) Bantu *táà – **Mande** *toŋ. Reliability index: 5/6 (limited distribution and irregular phonetic correspondences in Mande).

PROTO-BANTU *táà, Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGHJKLMNRS *bow,* *táà, Regions 5: NW SW Ce NE SE; Zones 12: ABCDEGJKLMRS *war; army*

OTHER BENUE-CONGO Proto-Benue-Congo *tas *bow (weapon)*, *ta *war, quarrel*

BENUE-CONGO E.: Bantoid Ekoid **Abanyom** bɨ-tá / ɲ *war*; Bantoid Grassfields **Limbum** tá *vt shoot*; Jukunoid **Proto-Jukun** *ta *bow (weapon)*; **Jibe** tàù *bow (weapon)*; Platoid **Hasha** ì-t^{w}à / tú-t^{w}à *bow (weapon)*

BENUE-CONGO W.: Nupoid **Gwari** táyí *bow (weapon)*

MANDE *toŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
		+			+			+		+

1.3 Jogo-Jeri **Jalkunan** tǫ́ *arrow, bow*
1.6 Manding **Maninka-Mori** tón *quiver*; **Bambara** tǫ́ *quiver; huntsman's pouch*; **Jula Kong** tǫ́ *bow, arrow*
1.9 Samogho **Seenku N.** tsɔ́ / tsɔ̋ɛ̋ *bow (weapon)*
2.2 Southern **Dan Kla** tʊ̋ŋ̋ *quiver* (< Manding?)

OTHER NIGER-CONGO potential parallels:
Adamawa **Pere** tāblàbò *bow (weapon)*, tābò *bow (weapon)*; **Samba Leko** tāb-té *bow; bamboo*
Atlantic N. Tenda-Jaad-Biafada **Basari** ɑ-tŏmb *bow (weapon)*
Dogon **Jamsay** tą́ą́ *shoot (smth./smb.)*; **Mombo** tǫ́ǫ́ *bow, arrow*
Gur **Proto-Central** *to, *ta, *tom; **Proto-Oti-Volta** *ta / *tam / *to; **Boore** téɛ̄ / téɛ̄rē; **Kabiye** tɔ̀ɔ̀ / tɔ́ŋ́; **Miyove** pì-tɛ́bɛ́ / á-tɛ́bɛ́
Kwa **Proto-Potou-Akanic** *ta; **Proto-Akanic** *ta; **Proto-Ghana-Togo-Mountain** *kù-tàá / à-; *tàá *shoot*; **Chumburung** kì-tá
Isolated NC **Gola** taa *shoot (arrow); pierce*

Comments:
1) In "Homonymy & Polysemy" (Segerer 2022), the polysemy ARROW – BOW is attested for 19 languages from various language families, including those belonging to Niger-Congo.
2) Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu **fa*.

@Cheek 1 Bantu *támà – **Mande** *tãɓã. Reliability index: 3/6 (limited distribution in Mande; missing in the Niger-Congo families outside Benue-Congo and Mande).

PROTO-BANTU *támà, Regions 5: NW SW Ce NE SE; Zones 15: ABCDFGHJKLMNPRS

OTHER BENUE-CONGO Proto-Benue-Congo *tama *cheek*

MANDE *tãɓã

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
					+	+				

1.6 Manding **Mandinka** táma *side of face*; **Maninka Nyokolo** tàmà; **Xasonka** táma; **Maninka-Mori** tàman *temple*; **Bambara** tàma ~ tàmã *side of face (temple and cheek)*

1.7 Soninke-Bozo **Tieyaxo** taa; **Tigemaxo** táã *side, large part of*; **Kelenga** tàmàŋ *side of face (temple and cheek)*

OTHER NIGER-CONGO potential parallels:
Gur **Proto-Oti-Volta** *tan; **Churama** tạngbərə̱ə̱gu

@Civet-cat Bantu *tùngò – **Mande** *togo. Reliability index: 3/6 (not found outside Bantu and Mande; limited distribution in Mande).

PROTO-BANTU *tùngò, Regions 4: SW Ce NE SE; Zones 9: EFGHLMNPS *civet-cat: Viverra civetta*

MANDE *togo

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
										+

2.2 Southern **Mwan** tōkō *mongoose; civet*; **Wan** tōgō *long-snouted mongoose*

OTHER NIGER-CONGO potential parallels: Adamawa **Kare** tɛ̱ɔ̱

@Cut Bantu *tém, *téen, *tèet – **Mande** *tɛgɛ. Reliability index: 4/6 (limited distribution in Mande; absent in Benue-Congo outside Bantu).

PROTO-BANTU *tém, Regions 5: NW SW Ce NE SE; Zones 12: ABEFGJKLMNPS *cut, cut down*, *téen, Zones: ADS, *tééni, Zones: GJM, *ténd ACHJLMN, *tín ABCDEFGHPS, *tèet BCHKLMR, *tét CLM

MANDE *tɛgɛ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
			+	+	+			+		

1.4 Vai-Kono **Vai** tìɛ́ *cut, cut in two, cut off*; **Kono** tɛ̀ɛ, (Manyeh 1983) tɛ̀

1.5 Mokole **Kakabe** tɛ̀gɛ̀; **Mogofin** tɛ́gɛ̀ *cut; clear (ground)*; **Lele** tɛ̀ɛ

1.6 Manding **Proto-Manding** *tɛ̀gɛ; **Mandinka** tɛ̀e *cut; cross*; **Maninka Nyokolo** téɣè; **Xasonka** tégè; **Maninka Kita** tɛ̀ke; **Maninka-Mori** tɛ̀ɛ *cut; cross*; **Bambara** tìgɛ *cut*; *cross*; **Jula Kong** tìgɛ́ *cut; cross*; **Koro** tɛ̀gɛ̀ *cut, cut off, block (road); cross (road, river)*; *tell (a lie); attach (woman's wrap)*; **Koya** tɣɛ̀ˊ

1.9 Samogho **Seenku N.** tʸìgɛ̃ *cut into pieces*

OTHER NIGER-CONGO potential parallels:

Adamawa **Kare** té

Atlantic Bak Joola **Joola Kujamutay** ɛtɪŋ

Gur **Gurunsi – Oti-Volta** *se; **Boore** té ~ tá *cut, curve*

Kwa **Proto-Potou-Akanic** *tenĩ; **Proto-Akanic** *senĩ; **Chumburung** tĩŋ

Mel S. **Kisi** tìŋɔ̀ɔ́ *gather, fetch, bring, collect, cut, break (wood)*

Comments: Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu **tĩnĩ*.

@Draw (water) Bantu *ték ~ *tóg – **Mande** *tɔ. Reliability index: 4/6 (limited distribution outside Bantu).

PROTO-BANTU *ték Regions 5: NW SW Ce NE SE; Zones 11: ABEGHKLMNPR *draw (water),* *tóg ABCDL *bale out (water); draw (water)*

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Grassfields **Limbum** túʔ *draw (water), fetch (water)*; Cross Upper **Proto-Upper-Cross** *ttáŋà *take out, draw (water)*

MANDE *tɔ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
									+	+

2.1 Eastern **Boko** tɔ *draw, fetch (water)*
2.2 Southern **Dan E.** tɔ́; **Dan W.** tɔ́; **Guro** tɔ́; **Yaure** tɔ́; **Mwan** tɔ́; **Wan** tu̱ŋ; **Beng** tɔ́ *draw (water); pick up*

OTHER NIGER-CONGO potential parallels:
Atlantic N.: Nalu-Baga Fore-Purur **Nalu** θik
Senufo **Mamara** takogo / taxogo *drawing water*
Ubangi **Mbandja** tù

@Drip: Bantu *tón, *tóni CEFGJLMP – **Mande** *tʊŋdV. Reliability index: 4/6.

PROTO-BANTU *tón, *tóni, Regions: 5: NW SW Ce NE SE Zones: 11: ABCEFGHJLMP; drip; rain; speckle, be speckled

MANDE *tʊŋdV

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
					+	+				+

1.6 Manding **Proto-Manding** *tóndi; **Mandinka** tóndi, tódi *vi drop, drip; n drop*; **Xasonka** tóndi; **Maninka-Mori** tónde, tóne *vi drip, drop; vt cause to drip; n dot, point (in writing)*; **Bambara** tóni; **Bambara Cendugu** tónti *vi drop, drip; vt drop, cause to drip*
1.7 Soninke-Bozo **Proto-Soninke-Bozo** *tondi; **Soninke** (Smeltzer & Smeltzer 2001) tolli; **Tieyaxo** tori *vi drip, drain*
2.2 Southern **Proto-Southern** *tʊ̀ʊ́; **Guro** tʊ̄ʊ́ *vt drip, vi drop, seep*; **Gban** (Le Saout 1973b) tŏ *n drop*; **Beng** tɔ̄-lá *vt pour by drops*

@Forest Bantu *tító – **Mande** *tu. Reliability index: 3/6 (limited distribution in Mande; not represented outside Mande and Bantu).

PROTO-BANTU *tító, Regions 5: NW SW Ce NE SE *forest, thicket*; Zones 10: BEGHJKMNPR; *to, Zones: HKL *forest, thicket*

MANDE *tu

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
				+	+		+	+		

1.5 Mokole **Kakabe** túú
1.6 Manding **Maninka Kita** tú; **Maninka-Mori** tú; **Bambara** tú; **Jula Kong** tú; **Koro** tú; **Koya** tú
1.8 Soninke-Bozo **Sorogama** (Daget et al. 1953) tuó, tugó *grove; cemetery*
1.9 Samogho **Seenku N.** tsú; **Seenku S.** tsű-nɛ́

OTHER NIGER-CONGO potential parallels:
Senufo Supyire cʷû

@Heel Bantu *téndé *heel; foot, leg* – **Mande** *tiŋdi-di. Reliability index: 6/6.

PROTO-BANTU *téndé, Regions 4: SW Ce NE SE; Zones 7: ELMNRPS *heel; foot; leg,* *tíndí, Regions 2: NW Ce; Zones 4: ABCD *heel*

OTHER BENUE-CONGO
BENUE-CONGO E.: Bantoid Grassfields Ring **Proto-Ring** *tìŋ́

MANDE *tiŋdi-di

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
				+	+					+

1.5 Mokole **Lele** tindiri
1.6 Manding **Maninka-Mori** tíntidin *fleshy part (heel, flesh of the buttocks, etc.)*; **Bambara** tíntìri *fleshy part (heel, flesh of the buttocks, etc.)*
2.2 Southern **Dan E.** tíŋ́ *heel, hoof*; **Goo** gɛ̀ɛ̀-tílí

OTHER NIGER-CONGO potential parallels:
Adamawa **Pere** kìnkínɛ̀; **Yi Kitulɛ** tíkìn / tīkīnī
Atlantic Bak Bijogo **Bijogo** ni-gigino / n-gigino

Atlantic N. Tenda-Jaad-Biafada **Jaad** tinkilin; **Biafada** (w)-tenje; Fula-Sereer **Fula** (Bah 2009) teddudi
Mel S. **Kisi** tíndííyé *heel, ankle*

@Middle Bantu *tí *inside* – **Mande** *tɛ. Reliability index: 6/6.

PROTO-BANTU *tí *inside*, Regions 5: NW SW Ce NE SE; Zones 12: ABEFHJKLMNRS, *tíù, Zones 2: AC *inside*

OTHER BENUE-CONGO
BENUE-CONGO E.: Bantoid Grassfields Ring **Proto-Ring** *téíŋà *inside*; Cross Upper **Proto-Upper-Cross** *teŋ *heart, inside*

MANDE *tɛ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
			+	+	+					+

1.4 Vai-Kono **Vai** tɛ́ *middle; interval, space between; between, among*; **Kono** téɛ *middle, centre*; (Manyeh 1983) tɛ̀ *between, in the middle*
1.5 Mokole **Kakabe** téèmà *in the middle of*; **Mogofin** témà *between, among; in the centre*; **Lele** tɛ́ *waist*
1.6 Manding **Mandinka** téé *middle; waist, loins*; **Maninka Nyokolo** tèè *between*; **Xasonka** tè *n middle; waist; relations between people; difference; pp between*; **Maninka Kita** té *middle; waist*; **Maninka-Mori** tɛ́ *between, among*; **Bambara** cɛ́ *n middle, centre; interval, distance; difference; waist; relations between people; pp between; among*; **Jula Kong** tyɛ́ ~ cɛ́ *middle; between*
2.2 Southern **Tura** tɛ̋ŋ *centre, middle*

OTHER NIGER-CONGO potential parallels:
Atlantic N. Tenda-Jaad-Biafada **Jaad** teemɛ *middle*
Gur **Proto-Oti-Volta** *s_1u / *s_1i
Mel S. **Kisi** téèŋ *among, between, in the middle or centre of*
Isolated NC **Gola** tɛɛ *between*

@Oil palm Bantu *téndé – **Mande** *ŋ̀-teŋ. Reliability index: 5/6 (limited distribution in Bantu).

PROTO-BANTU *téndé, Regions 3: NW SW NE; Zones 3: AGH

OTHER BENUE-CONGO Proto-Benue-Congo *tende *palm tree*
BENUE-CONGO E.: Bantoid Grassfields **Limbum** rtēē *palm tree*, Proto-Lower-Cross (Connell 1998) *ú-tén *young oil palm*, Proto-Ogoni (Connell 1998) *-té *mature oil palm*, Proto-Delta (Connell 1998) *-tén,
BENUE-CONGO W.: Edoid **Urhobo** órìɛ́ *palm tree*

MANDE *ŋ̀-teŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+	+		+	+	+			+	

1.2 Susu-Jalonke **Jalonke** tèŋ́
1.3 Jogo-Jeri **Jogo** tìɪ̀ŋ gbá, tɛ̀nɲaŋì *palm needle*; **Jalkunan** tèŋ-kíí ~ tèŋ-kʊ̀
1.5 Mokole **Kakabe** tèn *oil palm; palm worm*
1.6 Manding **Mandinka** tèŋ; **Maninka Nyokolo** téŋ; **Xasonka** tèn; **Maninka-Mori** tèn, tìn; **Bambara** ntɛ̀
1.7 Soninke-Bozo **Tigemaxo** téèⁿ; **Kelenga** ndêⁿ; **Jenaama Cliffs** tèẃⁿ; **Jenaama Jenne** tèèⁿ
2.1 Eastern **San S.** tĕn *date palm*

OTHER NIGER-CONGO potential parallels:
Atlantic N. Tenda-Jaad-Biafada **Jaad** tentəlu *palm oil*
Gur **Boore** tēé / tēérā; **Miyove** pí-tènétà *palm wine*
Kwa **Gã** (Connell 1998) tèŋ
Comments: According to Connell (1998: 335), this root may be the oldest for OIL PALM: it "goes back to Proto-Mande-Congo (i.e. Niger-Congo excluding Kordofanian)".

@Pound (to) Bantu *tó *stamp, pound; bite* – Mande *tugu. Reliability index: 5/6 (limited distribution in Mande).

PROTO-BANTU *tó, Regions 5: NW SW Ce NE SE; Zones 14: ABCDEGHKLMNPRS *stamp; pound; bite*, *tʊ̀ʊt, BDHJLMPR *knock; pound*, *tóang, Zones: CFGHJP *pound*

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Grassfields **Proto-Grassfields** *cÚk; Ring **Proto-Ring** *túkò *pound, cure*; Platoid **Hasha** ì-tù wōk / tú-tú wōk *pestle*

MANDE *tugu

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
			+	+	+		+			

1.4 Vai-Kono **Vai** tù'ú *hit, beat, pound (in mortar)*; **Kono** (Manyeh 1983) tù

1.5 Mokole **Kakabe** tùgù *vi run into, bump into; vt pound*; **Mogofin** túgù; **Lele** tù; **Koranko** tùgu, tùu

1.6 Manding **Mandinka** tùù; **Maninka Nyokolo** túɣù; **Xasonka** túgù

1.8 Bobo **Bobo S.** tùgò *grind, pound*

OTHER NIGER-CONGO potential parallels:

Adamawa **Kulaal** tʊ́ʊ́ *pestle*

Atlantic N. Fula-Sereer **Proto-Fula-Sereer** *sox *grind, pound*

Gur **Kurumfe-Gurunsi** *to; **Proto-Oti-Volta** *to *pound*, *ton / *ten / *tin *pestle*

Mel N. **Baga sitemu** cɔ; **Temne** ʈɔ *pound (rice)*

Mel S. **Kisi** cùó *beat, pound in a mortar with a pestle; beat up, thrash; throw or knock down;* **Sherbro** ʈu *pound rice*

Ubangi Gbaya **Proto-Gbaya** *tó; Ubangi **Mundu** tò

Isolated NC **Gola** jwa

@**Remain** **Bantu** *tʊ́-ʊd *put down (a load); remain; dwell; rest; be quiet* – **Mande** *to. Reliability index: 5/6 (limited distribution outside BC and Mande).

PROTO-BANTU *tʊ́-ʊd, Regions 5: NW SW Ce NE SE; Zones 14: BCEFGHJKLMNPRS *put down (a load); remain; dwell; rest; be quiet,* *tʊ-am, Zone: K *be seated*

OTHER BENUE-CONGO

BENUE-CONGO E.: Cross Lower **Proto-Lower-Cross** *dóŋ *dwell*

MANDE *to

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+	+		+	+	+

1.1 Southwestern **Mende** ló *remain; want, desire*; **Bandi** ló *remain; stay; stand*
1.2 Susu-Jalonke **Susu** lú (?) *remain; stay; allow; seem; happen*; **Jalonke** lúú (?)
1.3 Jogo-Jeri **Jogo** tó *remain; leave*; **Jeri** tú
1.4 Vai-Kono **Vai** tŏ *stay; leave*, (Klingenheben & Kastenholz 2019) tó *stay, remain; stay behind; be away (somewhere), be absent; be lacking*; **Kono** tó *stay, stay behind, remain*
1.5 Mokole **Kakabe** tó *stay, remain*; **Mogofin** tó; **Lele** tó; **Koranko** tó
1.6 Manding **Mandinka** tú *vi stay, remain; continue (to – la); die; vt leave, abandon;* **Maninka Nyokolo** tù *remain; leave, abandon*; **Xasonka** tú *vi stay, remain; continue (to – la); vt leave, abandon; cause; perish;* **Maninka Kita** tú; **Maninka-Mori** tó *vi remain; continue; stay; perish; last long; vt leave, abandon; maintain; let; retain, make stay; cause*; **Bambara** tó *vi remain; continue (to – inf., lá); stay; perish (from, in – dɔ́); last long; vt leave, abandon; leave untouched; maintain; allow to continue, let; retain, make stay (in – lá); happen in smb.'s presence; cause*; **Jula Kong** twó *remain; continue*; **Koro** tó *stay, remain*; **Koya** tó *remain; leave*
1.7 Soninke-Bozo **Soninke** tóxó *vi remain; continue to; perish; vt abandon, leave*
1.9 Samogho **Seenku N.** tɔ̀; **Dzuun** tó
2.1 Eastern **Bisa Lebir** tó *leave; allow; renounce, abandon the idea of*
2.2 Southern **Dan E.** tó *remain; leave, abandon*; **Dan W.** tó *remain; leave, abandon*; **Goo** tó; **Tura** tő *vi remain; continue; be; become; vt leave, let remain; make, transform*; **Mano** tó *vi stay, last; become free; vt leave; avoid eating (the totem); liberate*; **Yaure** túí *leave*; **Mwan** tó *leave; let*; **Gban** tő *leave; forget*; **Beng** túà *vi leave; vt abandon, leave; divorce; make, compel*; **Ngen** túá *leave*

OTHER NIGER-CONGO potential parallels:
Kru **Bete** tʊ́ʊ, **Bakwe** tɪ̄ɔ̄

@Send Bantu *tóm – **Mande** *tɔŋ. Reliability index: 5/6 (limited distribution in Mande).

PROTO-BANTU *tóm, Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGHJKLMNPS *send,* *tóm-ɪk, Zones: LM *work*

OTHER BENUE-CONGO Proto-Benue-Congo *tomo *work*
BENUE-CONGO E.: Bantoid Ekoid **Abanyom** lɨ̀-tôm / ǹ *work*; Bantoid Grassfields Kom **Kom** tōm *send*; Bantoid Grassfields Ring **Proto-Ring** *túmò *send*; Cross Lower **Proto-Lower-Cross** *ú-tóm *work (n.)*; **Anaang** ú-tóm *work (n.)*; Cross Upper **Proto-Upper-Cross** *tóm *send,* *tomo *work*; Jukunoid **Proto-Jukun** *tom *farm, work,* tom *send*; **Jibe** sóm *work (verb)*
BENUE-CONGO W.: Nupoid **Gwari** tnútnû *work*

MANDE *tɔŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+										

1.1 Southwestern **Mende** tò *follow; send*; **Loko** tò(ŋ) *vi follow; vt send*; **Kpelle N.** tɔ̌ɔ *send, commission*

OTHER NIGER-CONGO potential parallels:
Adamawa **Kulaal** tóm *send,* tómò (kò) / túmè (kì) *work*; Adamawa **Pere** tòm *message*, tǫ̀nō *he has worked, he has sent*; **Samba Leko** tùm *send,* tùm tùʔ *work much*; **Yi Kitulɛ** túm *send*
Gur **Proto-Central** tum *work (n)*; **Kabiye** tóm̀ *work*
Kwa **Proto-Potou-Akanic** *tõ̃ʊ́; **Proto-Akanic** *sõ̃ʊ́; **Logba** ùtrɔ̀mè *work*; **Agni** jùmą̂ *work*; **Chumburung** sũŋ *send (someone)*
Mel N. **Temne** som *send*; **Landuma** som *send (for a commission)*
Senufo **Mamara** tũ *send*; **Supyire** tun *send on an errand, send with a message*
Ubangi Gbaya **Proto-Gbaya** *tómbí ~ *tóm *send,* *tòm *news, message*, *tòm *work*

Isolated NC **Gola** tombo *scratch, till the land; work*

Comments:

1) According to "Homonymy & Polysemy" (Segerer 2022), the polysemy SEND – WORK is attested for 44 languages from various language families.
2) Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu **tõṽó*.

@Spider Bantu *tanda- – **Mande** *ŋ̀-taleŋ. Reliability index: 5/6 (limited distribution in Bantu).

PROTO-BANTU *tanda-, Regions 3: NW Ce NE; Zones 5: AGLMN *spider; spider's web*, tándè, Regions 2: Ce SE; Zones 4: DLMS

OTHER BENUE-CONGO

BENUE-CONGO E.: Jukunoid **Proto-C-Jukun** *ta; Platoid **Hasha** tārādāŋ

MANDE *ŋ̀-taleŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
					+	+		+		+

1.6 Manding **Mandinka** táálìŋ; tààlìŋ; **Maninka-Mori** tálen, tálon; **Bambara** ntàlẽ; **Jula Kong** tálɛ̰́; **Koro** tálɛ́w̰; **Koya** tálén

1.7 Soninke-Bozo **Kelenga** ndálèⁿ; **Jenaama Cliffs** tāālī; **Jenaama Jenne** táálɛ́ⁿ, táárɛ́ⁿ

1.9 Samogho **Dzuun** dààlón; **Duun Sieu** dɑdɑni; **Duun Zantigila** dɑni; **Jowulu** dɔ̀ɔ̀lɪ̀ŋ

2.2 Southern **Guro** kōlò-tɔ̰́lɛ̰́, kōlò-tɛ̰́lɛ̰́

OTHER NIGER-CONGO potential parallels:

Dogon **Mombo** tándé *wind (cotton thread) in shuttle of loom*

Isolated Bangime táárɛ̀

@Spit Bantu *tú – Mande *tu ~ tufa. Reliability index: 6/6.

PROTO-BANTU *tú, Regions 5; NW SW Ce NE SE; Zones 13: ABCDEFGJKLMRS, *tú-ɪd, Zones: ABCDEJLMS, *tú-ij JKMR

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Grassfields **Proto-Grassfields** *tÚ, Ring **Proto-Ring** *túɔ̀; Cross Upper **Proto-Upper-Cross** *tú

BENUE-CONGO W.: Defoid **Yoruba** tū

MANDE *tu ~ tufa

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+				+	+	+	+		

1.2 Susu-Jalonke **Jalonke** túfú

1.6 Manding **Mandinka** túpì; **Bambara** tú; **Jula Kong** tú; **Koya** tú

1.7 Soninke-Bozo **Soninke** (Diagana 2013; Smeltzer & Smeltzer 2001) tufa; **Tigemaxo** tūū; **Kelenga** túú; **Tiema Cewe** tuba; **Jenaama Cliffs** tūù; **Jenaama Jenne** túù

1.8 Bobo **Bobo S.** tìbɛ̄

1.9 Samogho **Duun Sieu** tu

OTHER NIGER-CONGO potential parallels:

Adamawa **Tupuri** tùf-gì

Atlantic Bak Manjak **Manjak** tuj; **Pepel** tʊbʊj

Atlantic N. Tenda-Jaad-Biafada **Bedik** ga-tɔ̄tɔ̄ *spittle*; **Basari** ɓɑ-tɔ́, wæ̀-tó *spittle, saliva*; **Konyagi** *spittle, saliva*; **Jaad** mato *spittle, saliva*; Fula-Sereer **Proto-Fula-Sereer** *Tuƭ

Dogon **Jamsay** tɔ́ɔ́

Gur **Gurunsi – Oti-Volta** *tu; **Churama** tɔ

Kwa **Proto-Ghana-Togo-Mountain** *túɸà; **Ikposo** tú útə́

Mel S. **Sherbro** ʈu ilat

Isolated NC **Gola** tula; **Limba** tuta *spit, wean (child)*; **Sua** gtu

Isolated Bangime túɟúrù

@Stab, spear Bantu *túm ‘stab’, *túm-ò ‘spear’ – Mande *taŋba ‘spear’. Reliability index: 5/6 (missing in the Benue-Congo branches outside Bantu).

PROTO-BANTU *túm ‘stab’, Regions: 4: NW Ce NE SE Zones: 12: ABCDEFGJLMNS; *túm-ò ‘spear’, Regions 3: Ce NE SE; Zones 8: DEGJLMNS, *túmɔ̀, Regions 3: Ce NE SE; Zones 5: EGJLS

MANDE *taŋba

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+	+	+	+	+	+		+		

1.2 Susu-Jalonke **Susu** tə̀bɛ́ *arrow; spear*; **Jalonke** tàmbá *spear*
1.3 Jogo-Jeri **Jeri** tama *spear*; **Jalkunan** tàmə̀ *spear*
1.4 Vai-Kono **Vai** tàmɓá *spear*; **Kono** tàmba *spear*
1.5 Mokole **Mogofin** tànbá *javelin*; **Lele** tànba *spear*; **Koranko** tànba *spear*
1.6 Manding **Mandinka** tàmbà *spear, dagger*; **Maninka Nyokolo** támbà *spear*; **Xasonka** tánbà *spear*; **Maninka Kita** tànbá *spear*; **Maninka-Mori** tànba *spear*; **Bambara** tàmá *spear*; **Jula Kong** tə̀bá *spear*; **Koro** tāmàẃⁿ *spear*; **Koya** tàmá *spear*
1.7 Soninke-Bozo **Soninke** tàmmê *spear*; **Tigemaxo** (Smeltzer & Smeltzer 1995) tə̀ə̀ *spear*; **Kelenga** támà *two-pronged spear (for war)*; **Tiema Cewe** taa *spear*; **Jenaama Jenne** tààⁿ *spear*
1.9 Samogho **Jowulu** tə̀mā *spear*; **Duun Zantigila** tɑmɑ *spear*; **Duun Sieu** tãnfə̃ *spear*; **Duun Kai** tɑmɑ, tãũfɑ *spear*; **Duun Bananso** tãnfã *spear*; **Kpen** tãmɑzĩ *spear*

OTHER NIGER-CONGO potential parallels:
Atlantic N. Tenda-Jaad-Biafada **Jaad** tamba *spear*
Senufo **Mamara** tãmã *spear, harpoon*
Isolated NC **Limba** tamba muru *spear* (< Manding)

@Stick (piece of wood) Bantu *tóngà *heavy stick, cudgel* – **Mande** *tuŋgara. Reliability index: 3/6 (limited distribution in Mande, Bantu and in other Benue-Congo branches; absent elsewhere in Niger-Congo?).

PROTO-BANTU *tóngà, Regions 4: NW SW Ce SE; Zones 6: AMNPRS *heavy stick, cudgel*

OTHER BENUE-CONGO Proto-Benue-Congo *tanga *stick, whip*
BENUE-CONGO E.: Bantoid Grassfields Ring **Proto-Ring** *tòá

MANDE *tuŋgara

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
				+	+	+				

1.5 Mokole **Mogofin** túngàrè
1.6 Manding **Bambara** tàngara *staff of a noble*
1.7 Soninke-Bozo **Tigemaxo** tangara *staff*; **Kelenga** táŋánám-bérè *walking stick*; **Jenaama Cliffs** tàŋgárà *walking stick*

@Take **Bantu** *tá-ʊd *pick up, take, receive, carry, pick, gather, make, choose, marry* – **Mande** *ta. Reliability index: 4/6 (not found outside Bantu and Mande).

PROTO-BANTU *tá-ʊd, Regions 5: NW SW Ce NE SE; Zones 12: ABCDFGHJLMNS *pick up, take, receive, carry, pick, gather, make, choose, marry*

MANDE *ta

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
				+	+		+		+	

1.5 Mokole **Kakabe** tà
1.6 Manding **Mandinka** tàà; **Maninka Nyokolo** táà; **Xasonka** tà; **Maninka Kita** tà; **Maninka-Mori** tà; **Bambara** tà; **Jula Kong** tà; **Koro** tà; **Koro** tà
1.8 Bobo **Bobo S.** tɔ̀ (?) *receive, accept, collect (tax)*
2.1 Eastern **Bisa Lebir** tá

@Tendon **Bantu** *tíngà *tendon, vein; bow-string* – **Mande** *tĩ. Reliability index: 3/6 (not found outside Bantu and Mande; limited distribution in Mande).

PROTO-BANTU *tíngà, Regions 5: NW SW Ce NE SE; Zones 9: AEHJMNPRS *tendon, vein; bow-string*

MANDE *tĩ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
									+	

2.1 Eastern **Boko** kĩi *tendon; ligament; sinew*, (Koelle 1854) tị *vein*; **Busa** tĩ *tendon; ligament; sinew*; **Bokobaru** tịi *tendon; ligament; sinew*

9.2.2.2. Bantu *d- : Mande *d-

@Bridge Bantu *dàdò – **Mande** *dala *liana bridge*. Reliability index: 4/6 (limited distribution in Mande; not attested in other Niger-Congo families).

PROTO-BANTU *dàdò, Regions 5: NW SW Ce NE SE; Zones 11: BCEGHJKLMNP

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid **Proto-Grassfields** *dàl`, **Proto-Ring** *dúà

MANDE *dala *liana bridge*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+										+

1.1 Southwestern **Proto-Southwestern** *dɗàà *liana bridge*; **Mende** ndàà *hammock bridge*; **Looma** (Sadler 2006) zaa *liana bridge*; **Kpelle N.** làà *liana bridge*; **Kpelle S.** lāā *liana bridge*

2.2 Southern **Dan E.** dlɑ̃ *liana bridge*; **Dan W.** dlá *liana bridge*; **Dan Kla** dlɑ̃́ɑ̃́ ~ dlàá *liana bridge*

Comments: The Dan forms may be old Kpelle loans.

@Bring up (child) Bantu *dèd *bring up; hold on knees; bear (child)* – **Mande** *dãlã. Reliability index: 4/6 (limited distribution in Mande; not found in Benue-Congo outside Bantu).

PROTO-BANTU *dèd, Regions 5: NW SW Ce NE SE; Zones 14: BCEFGHJKLMNPRS *bring up; hold on knees; bear (child)*

MANDE *dãlã

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
									+	+

2.1 Eastern **San S.** doro/doree *educate; advise; tame*; **San Mayaa** lele *educate*

2.2 Southern **Dan E.** dlɑ̰ɑ̰ *teach, learn*; **Dan W.** dɑ̀ɑ̰ *teach, learn*; **Goo** dàà *teach, learn*; **Tura** dɔ̀ɔ̀ *teach, learn*; **Mano** mɛ́-dɑ́ *teach*; **Guro** dɑ̃nɑ̃ɑ̰ *learn*; **Yaure** tɑ̃rɑ́-lá *learn*; **Mwan** dɑ̃ɑ̰ *teach*; **Wan** dìnà *teach*; **Beng** dɔ́dɔ̀ *learn*

OTHER NIGER-CONGO potential parallels:
Atlantic N. Fula-Sereer **Proto-Fula-Sereer** *duɗ

@Curse Bantu *dòg *bewitch; curse* – **Mande** *daŋga. Reliability index: 5/6 (not attested in Benue-Congo outside Bantu).

PROTO-BANTU *dòg, Regions 5: NW SW Ce NE SE; Zones 13: ABCEFGHKLMPRS *bewitch; curse*, *dògì, Zones: BCDEFJKLMRS *witchcraft*, *dògá, Zones: CHL *witchcraft*, *dògò, BCFHJS *witchcraft*, *dògì, CGJLM *witch*, *dògì, JHK *witch*

MANDE *daŋga

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+	+	+		+	+

1.1 Southwestern **Mende** lángá *n curse; fighting, disturbance, unruly behaviour; vi be boisterous, be uproarious*

1.2 Susu-Jalonke **Susu** dɑ́kà; **Jalonke** dánká

1.3 Jogo-Jeri **Jeri** dáŋga

1.4 Vai-Kono **Vai** dɑ̃́ŋgá *madness; mock imitation of insanity*

1.5 Mokole **Kakabe** dánka *damnation*; **Mogofin** dánká; **Lele** dángà

1.6 Manding **Mandinka** dánkà; **Maninka Nyokolo** dànkà; **Xasonka** dángá; **Maninka-Mori** dánka; **Bambara** dɑ́ga; **Koro** dángá; **Koya** dáŋá

1.7 Soninke-Bozo **Soninke** lángá; **Tigemaxo** daŋŋa; **Kelenga** lááŋgá; **Jenaama Cliffs** dāŋā; **Jenaama Jenne** dɛ́ŋɛ́ *n curse*, dáŋá *vt curse*
1.8 Bobo **Bobo S.** dāngā ~ dāŋā
2.1 Eastern **San Mayaa** danga
2.2 Southern **Dan E.** ɗáŋ̋; **Dan Kla** lá̋ŋ̋; **Dan W.** ɗáŋ́gá; **Tura** ɗáŋ̋gá̋, ɗáŋ̋á̋; **Mano** náŋá ~ náá; **Guro** (Benoist 1977) dą̄ką́; **Wan** dą̱ŋą̱ *curse; misfortune*

OTHER NIGER-CONGO potential parallels:
Atlantic Bak Balant **Balant Ganja** danga; Joola **Karon** ka-tanka
Atlantic N. Wolof **Wolof** (Fal et al. 1990) dəkk *challenge*; Nyun-Buy **Kasanga** bog-danka; **Nyun** (Cobbinah 2013) bʊdanka; Tenda-Jaad-Biafada **Tanda** langa; **Bedik** u-ɗángà; **Basari** a-lʊ̀ngʊ́l / ɗʊ̀ngʊ́l; **Jaad** dankaŋ; **Biafada** dangi; Fula-Sereer **Sereer** naq n / naq k *sorcery, magic*; Cangin **Laala** nax *sorcerer, medicine man*; Nalu-Baga Fore-Pukur **Nalu** dankah
Dogon **Jamsay** dùgó *cast*; **Najamba** dùgí / dùgè *cast*
Gur **Boore** dáā'á ~ dáā'áā *curse; bewitch*
Mel N. **Temne** ranka; **Landuma** dʌnkʌ
Mel S. **Kisi** dángáá *rudeness, disrespect, loud and boisterous behaviour, obstreperousness, insulting someone, exalting oneself, pride; curse*; **Sherbro** ranka
Senufo **Mamara** daŋ̰
Isolated NC **Limba** danka / dankeŋ ba *curse; hook*

@Debt Bantu *dàndó *debt; fault; affair; penalty* – **Mande** *dɔŋdɔ. Reliability index: 4/6 (not attested outside Bantu and Mande).

PROTO-BANTU *dàndó, Regions 4: SW Ce NE SE; Zones 9: EFHKLMNPS *debt; fault; affair; penalty*, *dànd-ʊd, Zones: EL *claim debt*

MANDE *dɔŋdɔ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+			+	+					+

1.1 Southwestern **Mende** ndɔ́ndɔ́ *borrow; lend*; **Bandi** ndɔ̀ndɔ́ *borrow, buy or sell on credit*
1.2 Susu-Jalonke **Susu** dòní *vt loan out; borrow; n credit, debt*; **Jalonke** dòní *borrow, lend*
1.5 Mokole **Kakabe** dóntó; **Mogofin** dɔ́ntɛ́; **Lele** dóndò *loan*
1.6 Manding **Mandinka** dónto *lend, borrow*; **Xasonka** dónto *lend, borrow*; **Maninka Kita** dónto *lend*; **Maninka-Mori** dɔ́ndɔ *lend, borrow; debt, short-term loan*; **Bambara** dɔ́nɔ *lend, borrow; debt, short-term loan*
2.2 Southern **Dan Kla** dɔ̰; **Guro** dɔ̰ɲɔ́; **Mwan** dɔ̰dɔ̰; **Gban** dɔ̰̀

OTHER NIGER-CONGO potential parallels:
Atlantic N.: Tenda-Jaad-Biafada **Bedik** dɔ̀ŋdɔ̀ŋ
Isolated NC **Limba** dɔntɔ

@Deep Bantu *dìk *be deep; sink; set (sun)* – **Mande** *duŋ. Reliability index: 5/6 (limited distribution in Bantu).

PROTO-BANTU *dìk, Regions 4: NW Ce NE SE; Zones 6: CEJLMS *be deep; sink; set (sun)*

OTHER BENUE-CONGO
BENUE-CONGO E.: Cross Upper **Obolo** dɔ̀k; **Proto-Upper-Cross** *dòŋè; Jukunoid **Proto-Jukun** *dùŋ

MANDE *duŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
					+			+		+

1.6 Manding **Maninka Kita** dùn; **Maninka-Mori** dùn; **Bambara** dɔ̰̀ *deep; pool, deep water*; **Jula Kong** dɔ̰̀ *deep; pool, deep water*; **Koya** dɔ̰̀ń
1.9 Samogho **Seenku S.** jɔ̰̀; **Dzuun** tsún
2.2 Southern **Mwan** dùń, dɔ̰̀; **Wan** dùŋ, zùŋ *depth*

OTHER NIGER-CONGO potential parallels:
Atlantic N. Fula-Sereer **Proto-Fula-Sereer** *lʌnɢ; Nalu-Baga Fore-Pukur **Pukur** lòx; **Nalu** luunk *be deep, have depth*

Kwa **Ikposo** lōɣō *be deep*
Ubangi Gbaya **Proto-Gbaya** *ɗŭk *be deep*

@Ficus thonningii Bantu *dòmbà *ficus sp.* – **Mande** *ŋ̀-duba-leŋ. Reliability index: 3/6 (limited distribution in BC and Mande).

PROTO-BANTU *dòmbà, Regions 2: Ce NE; Zones 3: DJL *ficus sp.*

MANDE *ŋ̀-duba-leŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
					+	+				

1.6 Manding **Mandinka** dúwáálìŋ *tree sp.*; **Maninka-Mori** dúbalen; **Bambara** dúbàlɛ̃ ~ ndúbàlɛ̃
1.7 Soninke-Bozo **Soninke** (Smeltzer & Smeltzer 2001) duwanliŋe *"blessed tree"*; **Tigemaxo** júálɛ́ŋ *fig tree (sp.)*; **Kelenga** ndúbàlɛ̂ŋ *fig tree (sp.)*; **Jenaama Jenne** dúbàlè *fig tree (sp.)*

OTHER NIGER-CONGO potential parallels:
Adamawa **Tupuri** dùɓūlɓūlà *fig tree (sp.)*
Atlantic N. Wolof **Wolof** doobali *Ficus vogelii (flore)*; Fula-Sereer **Proto-Fula-Sereer** *ndubale *ficus (sp.)*
Gur **Boore** dúbálɛ̄ / dúbáléná
Ubangi **Linda** dūbàlé *plant (sp.)*
Comments: Recent borrowings among families cannot be ruled out.

@Guard (to) Bantu *dìnd *watch over; wait; desire* – **Mande** *dɛ̌dɛ̌. Reliability index: 4/6 (limited distribution in Mande; not attested in Benue-Congo outside Bantu).

PROTO-BANTU *dìnd, Regions 5: NW SW Ce NE SE; Zones 9: BCGHJMNPS, *watch over; wait; desire*, *dìnd-ɪd, Zones: CDFJMNPS *wait; watch; desire*

MANDE *dɛ̌dɛ̌

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+					+		+			

1.1 Southwestern **Mende** nɛ́ɛ́, nɛ́hɛ́; **Kpelle N.** (Leger 1975) neneŋ *observe, watch, spy out*
1.6 Manding **Bambara** dɛ̨́dɛ̨ *shepherd, guard, look after*
1.8 Bobo **Bobo S.** nè *guard, look after; shepherd*

OTHER NIGER-CONGO potential parallels:
Atlantic N. Tenda-Jaad-Biafada **Bedik** o-dɛ̃́né *keep the rest*, ɔ-rénè / dénègú *guard, defend*
Dogon **Jamsay** dèèné *keep (smth.) for oneself*
Gur **Boore** dídī ~ dídīō *to shepherd; administrate, direct*

@Hang Bantu *déd *swing; float; glide; hang; be light* – **Mande** *dɛŋ. Reliability index: 5/6 (not found in Benue-Congo outside Bantu).

PROTO-BANTU *déd, Regions 5: NW SW Ce NE SE; Zones 8: CEFGHLMS, *swing; float; glide; hang; be light*

MANDE *dɛŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
			+	+	+	+		+	+	+

1.4 Vai-Kono **Vai** dɛ̃́ŋ
1.5 Mokole **Lele** dɛ́n
1.6 Manding **Mandinka** dɛ́ŋ; **Bambara** dɛ̨́; **Mau** ɗyɛ́ŋ
1.7 Soninke-Bozo **Sorogama** dɛŋge
1.9 Samogho **Dzuun** dèyn
2.1 Eastern **San Mayaa** danga
2.2 Southern **Beng** zɛ̄ *hang down; lean; slip down*

OTHER NIGER-CONGO potential parallels:
Adamawa Bua **Kùlɑ́ál (Iro)** tɛ́ɛ́; Waja-Jen **Yi Kitulɛ** tɛ̃̌ / tɛ̀bɔ̄; Fali **Yingilum** tɛ̂lɪ́
Atlantic Bak **Bijogo-Kagbaaga** ɔ-tɛ / ya-tɛ; **Mancagne** ʃin; **Manjaku Bok** sin; **Pepel** aʂin
Kwa Nyo **Proto-Potou-Akanic** *dɛnɪ̃; **Proto-Akanic** *cɛnɪ̃

Comments: Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu **dɛ̃lɪ̃*.

@Learn Bantu *jíg *learn; imitate* – **Mande** *dege. Reliability index: 4/6 (not attested outside Bantu and Mande).

PROTO-BANTU *jíg, Regions 3: NW Ce NE; Zones 8: ABCEFGJM *learn; imitate*

MANDE *dege

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
			+	+	+	+			+	

1.4 Vai-Kono **Vai** nìí *taste, test; learn by repeated imitation*
1.5 Mokole **Kakabe** dègèn *learn, teach*; **Mogofin** dègén
1.6 Manding **Mandinka** nìkiŋ, nìŋ; **Xasonka** dígì; **Maninka-Mori** dèyi ~ déyi *imitate; learn, teach*; **Bambara** dège *learn, teach; imitate;* **Jula Kong** dège
1.7 Soninke-Bozo **Kelenga** dégè *instruct, train*
2.1 Eastern **San Matya** jije

@Thigh Bantu *dàmà ~ *nàmà *limb: arm; leg; thigh* – **Mande** *daŋba. Reliability index: 5/6 (limited distribution in Mande).

PROTO-BANTU *nàmà, *dàmà, Regions 4: NW SW Ce NE; Zones 8: ABCEHLMR *limb: arm; leg; thigh*

OTHER BENUE-CONGO
BENUE-CONGO E.: **Proto-Benue-Congo** *nama

MANDE *daŋba

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+									

1.2 Susu-Jalonke **Susu** (Lacan 1942) danba; **Jalonke** dànbá

OTHER NIGER-CONGO potential parallels:
Atlantic N. Cangin **Proto-Cangin** (Pozdniakov Ms.) *ramb
Mel S. **Kim** làpè; **Kisi** dɛ́wɔ́ɔ́ / dɛ́wɛ́láŋ *pelvis, hip*

@Weep Bantu *dìd *weep; shout; wail* – **Mande** *di. Reliability index: 5/6 (limited distribution in Mande).

PROTO-BANTU *dìd, Regions 5: NW SW Ce NE SE; Zones 14: ABCEFGHJKLMPRS *weep; shout; wail*

OTHER BENUE-CONGO

BENUE-CONGO E.: Ring **Proto-Ring** *dèí; **Babanki** *dì; **Kom** dzɨ̀

MANDE *di

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
		+	+	+						

1.3 Jogo-Jeri **Jogo** Braconnier dǐ; **Jeri** dì; **Numu** dìɔ̀, dùyɔ̀, dìrɛ̀

1.4 Vai-Kono **Vai** dì; **Kono** dí

1.5 Mokole **Kakabe** dí *vi cry, weep; moo, bleat*; **Mogofin** dì; **Lele** díi; **Koranko** dí

OTHER NIGER-CONGO potential parallels:

Adamawa **Kare** ré

Atlantic Bak Balant **Balante Ganja** ruj

@Younger sibling Bantu *dòngó *brother* – **Mande** *ŋ́-dɔgɔ. Reliability index: 4/6 (limited distribution in Bantu, absent from the Benue-Congo outside Bantu).

PROTO-BANTU *dòngó, Zones: LNPS *brother*, *do, Zone: F *little, small*, *dodo, EG *little, small*

MANDE *ŋ́-dɔgɔ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+		+	+	+	+	+		+		+

1.1 Southwestern (Kastenholz 1996) *ń-dégè; **Mende** ndéwè, (Dwyer 1973) ndéwé *sibling, cousin*; **Loko** ndégé *sibling*; **Bandi** ndèɣè; **Zialo** dèɣè; **Looma** dèɣè; **Kpelle N.** léɣê; **Kpelle S.** léɣè

1.3 Jogo-Jeri **Jogo** dɔ̀ɣɔ̀ *younger brother*, (Braconnier n.d.) dɔ́gɔ̀ *young, small*; **Jeri** dɔ́gà *young, small*; **Jalkunan** dɔ́ʔɔ́ *younger brother*

1.4 Vai-Kono **Vai** ɗɔ̃ɔ̀ *be small, narrow*, (Kastenholz 1996) ɗɔ̃ɔ́, ɗɔ̃wɔ *young*; **Kono** dɔ́ɔ *young, small*, (Koelle 1854) dooɛ *younger brother*

1.5 Mokole **Kakabe** dɔ́gɔ́ *younger sibling; small*; **Mogofin** dɔ́gɛ̀; **Lele** dɔ́ɔ *younger sibling; small*; **Koranko** dóo, dɔ́gɔ *young, small*

1.6 Manding **Proto-Manding** *dɔ́xɔ; **Mandinka** dóo, dóko; **Maninka Nyokolo** dòɣò *younger; small*; **Xasonka** dóxó *younger sibling; small*; **Maninka Kita** dókó *younger sibling; small*; **Maninka-Mori** dɔ́ɔ *younger sibling; small, few*; **Bambara** dɔ́gɔ́ *younger sibling; small, few, rare; young*; **Jula Kong** dɔ́gɔ́ *small, young*; **Koro** dɔ̀gɔ́; **Koya** nɔ́n *small*

1.7 Soninke-Bozo **Soninke** lòxó *be small; humiliate; disrespect*, lòxá *be small, few*, lòxê *small, few*; **Tigemaxo** lóólòⁿ *younger sibling*; **Kelenga** lógólò *younger sibling*; **Jenaama Cliffs** dùgòⁿ *younger sibling*; **Jenaama Jenne** dùgòⁿ, dùgò *younger sibling*

1.9 Samogho **Seenku N.** dìgà *young*

2.2 Southern **Tura** ɗɔ̃ɔ̀; **Mano** lɛ̄kɛ̀ *younger sibling; younger paternal aunt; nephew (for a woman)*

OTHER NIGER-CONGO potential parallels:

Atlantic N. Nyun-Buy **Nyun** (Anonyme 1996) doon *sibling of the same sex*; Tenda-Jaad-Biafada **Bedik** ndɔ̄hɔ̀; **Jaad** doo ~ ndoo

Dogon **Jamsay** dáɣá *young*

9.2.2.3. Bantu *d- : Mande *ɗ-

@Bat Bantu *démà – **Mande** *ɗɛ̃ɓṼ. Reliability index: 5/6 (not found in Benue-Congo outside Bantu).

PROTO-BANTU *démà, Regions 4: NW Ce NE SE; Zones 6: ABCGNP *bat (sp.)*, *dímà, Regions 4: NW SW Ce SE; Zones 8: ABCDLMRS

MANDE *ɗɛ̃ɓṼ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+			+	+			+	+	+	+

1.1 Southwestern **Proto-Southwestern** *dɛfuŋ, **Mende** ndɛ́vɛ́, (Koelle 1854) ndɛfɛ; **Loko** (Spears 1971) ndɛ́hɛ́(ŋ); **Bandi** ndɛ́hɛ́(ŋ), (Koelle 1854) ndɛfeĩ; **Zialo** dɛ́vɛ́; **Looma** (Heydorn 1971) dɛßa(g), (Koelle 1854) defu; **Looma Woi-Balagha** kúkú-dɛ́vɛ̀; **Kpelle N.** lɛ̀bŭ, lɔ̀ŭ; **Kpelle S.** lɔ̃fū, (Westermann & Melzian 1930) ɗɔ̃fú ~ ɗɛ̃fú ~ ɗɛfɛ
1.4 Vai-Kono **Vai** lɛ̀'ɛ̀
1.5 Mokole **Mogofin** lìbílìbè
1.8 Bobo **Bobo S.** dɛ̃mēn *large bat*
1.9 Samogho **Dzuun** (Hochstetler 1996) debɛy
2.1 Eastern **Boko** (Koelle 1854) lévu̱u̱
2.2 Southern **Proto-Southern** *dɛ̰̀ì; **Dan E.** dɛ̰̀ɛ̰̀; **Dan W.** dɛ̰̂ɛ̰̂; **Tura** là̰ì; **Mano** lɛ̀ì; **Gban** lɛ̃̀

OTHER NIGER-CONGO potential parallels:
Atlantic N. Fula-Sereer **Sereer** ɗeem a...al / ɗeem a...ak *flying fox (a large bat)*
Gur **Gurunsi – Oti-Volta** *ɗyam, *ɗyim, *ɗyum *bat, bird*

@Desire: Bantu *dìng, *díng *search for; desire; watch for* – **Mande** *dɛ̃gɛ̃. Reliability index: 3/6.

PROTO-BANTU *dìng, *díng, Regions: 5: NW SW Ce NE SE, Zones: 10: ABCHJLMNPS *search for; desire; watch for*

MANDE *dɛ̃gɛ̃

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+					+	+				

1.1 Southwestern **Kpelle S.** níà
1.6 Manding **Proto-Manding** *nège; **Xasonka** nège; **Kagoro** nìgí; **Maninka-Mori** nàyi, nèyi, nèyi; **Bambara** nège *wish, desire, passion for*
1.7 Soninke-Bozo **Soninke** *nege; **Tieyaxo** nige; **Kelenga** nègè *n wish, what one wants*; **Sorogama** (Daget et al. 1953) nege

@Extinguish **Bantu** *dím *be extinguished; extinguish; get lost* – **Mande** *ɗibiŋ. Reliability index: 6/6.

PROTO-BANTU *dím, Regions 5: NW SW Ce NE SE; Zones 15: ABCEFGHJKLMNPRS *be extinguished; extinguish; get lost*, *dími, Zones: CJLM *extinguish,* *dímb, Zones: ABCJL *deceive; get lost; cause to get lost*

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Ekoid **Abanyom** lɨ́mî; Bantoid Grassfields Kom **Kom** lōmsə́; Bantoid Grassfields Ring **Proto-Ring** *dímɔ̀; Cross Lower **Proto-Lower-Cross** *nímɛ́; Cross Upper **Obolo** nííŋ *put off, quench*; Cross Upper **Proto-Upper-Cross** *dímà; Jukunoid **Proto-Jukun** *dim; Platoid **Sambe** rīmā

MANDE *ɗibiŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+		+	+	+	+		+		+	+

1.1 Southwestern **Proto-Southwestern** *dífÉŋ; **Mende** ndúfé; **Looma** diβi(g) ~ diɓi ~ difɛ(g); **Kpelle N.** lúɣúŋ́ ~ lííŋ́; **Kpelle S.** lííŋ ~ líìŋ, (Westermann & Melzian 1930) libiŋ

1.3 Jogo-Jeri **Jogo** díéŋ *quench, extinguish*; **Jalkunan** dìbí

1.4 Vai-Kono **Vai** (Kastenholz 1996) ɗŭfé; **Kono** dífɛn

1.5 Mokole **Kakabe** dúfen *go out (fire); kill; sleep; cease*; **Koranko** dúfɛ̰, dífɛ̰

1.6 Manding **Mandinka** dìbèŋ ~ dùbèŋ; **Maninka Nyokolo** dìbéŋ; **Maninka-Mori** dúfa; **Bambara** dúfa ~ dúga ~ dúgã

1.8 Bobo **Bobo S.** dībē

2.1 Eastern **San S.** nimi (nimi); **San Mayaa** lepi; **Bisa Barka** lihi

2.2 Southern **Dan E.** dūū́ *go out (fire); stall (car)*; **Dan Kla** lŭ́ŭ́; **Goo** ɗíí; **Mano** lópí; **Guro** lílî; **Yaure** ɗílí; **Mwan** dìì

OTHER NIGER-CONGO potential parallels:

Adamawa **Yi Kitulɛ** dùm *quench, extinguish*

Atlantic Bak Bijogo **Bijogo** num *extinguish; plant; bite*

Atlantic N. Tenda-Jaad-Biafada **Basari** a-lɔ́mî / dɔ̃mî; Nalu-Baga Fore-Pukur **Nalu** lemben *extinguish, quench*
Gur **Kabiye** ɖém̀; **Pana** dímésé; **Churama** dĩĩmã
Kwa **Proto-Potou-Akanic** *ɗumũ; **Proto-Akanic** *dumũ; **Chumburung** dũŋ
Mel N. **Temne** dimsi *erase, extinguish*; **Landuma** dim
Mel S. **Sherbro** rim *be destroyed; be in ruins; be extinguished*
Isolated NC **Limba** domina *extinguish, put out, stop (as motion of a top, or as the beating of a drum)*

Comments: Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu **-dũ̃ʊ̃ũ̃*.

@Shadow Bantu *dídí – **Mande** *dĩĩdĩŋ. Reliability index: 5/6.

PROTO-BANTU *dídí, *dúdí, Regions 5: NW SW Ce NE SE; Zones 8: ACEGKMNS

MANDE *dĩĩdĩŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+			+	+	+

1.1 Southwestern **Proto-Southwestern** *nìiníŋ̀; **Mende** nɛ̀nɛ̀ *shadow; picture; photograph*; **Loko** nɛ́i̯(ŋ); **Bandi** nììnì(ŋ) *shade, shadow; make a shade*; **Looma** nìnì(g); **Looma Gizima** (Vydrin 1987) ninɛ(g); **Kpelle N.** nìníŋ *shadow, shade, protection*; **Kpelle S.** nīnîŋ
1.2 Susu-Jalonke **Susu** nííní *shade; umbrella*; **Yalunka** ninin
1.3 Jogo-Jeri **Jogo** síléŋ; **Jalkunan** súl *shade*
1.4 Vai-Kono **Vai** (Klingenheben & Kastenholz 2019) súléŋ *shade, shadow; silhouette; photography, picture; soul*; **Kono** (Kastenholz 1996) nínin
1.5 Mokole **Lele S.** nìnín; **Koranko** níni
1.6 Manding **Mandinka** nìinii *shadow, image*; **Xasonka** nìini *shadow, image*
1.9 Samogho **Dzuun** ɲɛyn *silhouette*

2.1 Eastern **Busa** nini *shadow, reflection; spirit*; Bokobaru ninii; Kyanga nani, nanii shadow, reflection; ghost, spirit

2.2 Southern **Mano** nììníì, nìní; **Guro** lēlī *shadow; soul (of a living being), ghost (of a dead person)*; **Wan** léŋlēlì; **Beng** nn̰ɪ̄n̰ɪ̄ŋ̰, nɪ́ŋ̰ *soul (of a living person, of an animal)*, (Gottlieb & Lynne Murphy 1995) nēnēŋ *shadow; spirit; soul (of a living person)*

OTHER NIGER-CONGO potential parallels:
Kwa **Proto-Potou-Akanic** *-l̃ũl̃ũ; **Proto-Akanic** *-l̃ũl̃ũ

Comments:
1) Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu **l̃ũl̃ũ*.
2) A polysemy COLD – SHADOW cannot be excluded at the Proto-Niger-Congo level, see the cognate set COLD.

9.2.2.4. Bantu *n- : Mande *ɗ-

@Four Bantu *nàì – **Mande** *ɗããdĩ. Reliability index: 6/6.

PROTO-BANTU *nàì, Regions 5: NW SW Ce NE SE; Zones 15: ABCDEFGHJKLMNPS, *nàjí, Zones: ABL

OTHER BENUE-CONGO
BENUE-CONGO E.: Bantoid Ekoid **Abanyom** bí-nî; Cross Lower **Proto-Lower-Cross** *ìnìàŋ; Cross Upper **Obolo** ínî; **Proto-Upper-Cross** *nàŋì ~ này; Kainji **Bassa** hɪ̰̄ɪ̰̄ŋ̰ē; **Hasha** ànìŋ; **Sambe** kànè
BENUE-CONGO W.: Edoid **Urhobo** énè; **Proto-Edo** *niə; Nupoid **Gwari** ǹŋi
BC isolated Ukaan **Proto-Ukaan** *nɑ́hɪ́

MANDE *ɗããdĩ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+	+	+	+		

1.1 Southwestern **Proto-Southwestern** *nɑ́ɑ́nì; **Mende** nɑ́ɑ́nì; **Loko** naai, (Meeussen Ms.) náy(ŋ), (Spears 1971) nɑ́á; **Bandi** nàaní; **Zialo** nɑ́ɑní(g); **Looma** nɑ́ɑ́nɪ̀; **Kpelle N.** nɑ́ɑ́ŋ; **Kpelle S.** nɑ́ɑŋ

1.2 Susu-Jalonke **Susu** nɑ́ɑ́nì; **Jalonke** nɑ́ɑ́ní

1.3 Jogo-Jeri **Jogo** náanì; **Jeri** nàani; **Jalkunan** nāānī
1.4 Vai-Kono **Vai** náánì; **Kono** náani
1.5 Mokole **Kakabe** náání; **Mogofin** náánì; **Lele** náani ~ nànní, nani
1.6 Manding **Mandinka** náánì; **Maninka Nyokolo** nàànì; **Xasonka** náánì; **Maninka Kita** nání; **Maninka-Mori** náanin; **Bambara** náání; **Jula Kong** náání; **Koro** náání; **Koya** nání ~ nán̰in
1.7 Soninke-Bozo **Soninke** nàxàtó *four*, nàxàtá *do four times*; **Tigemaxo** náárànⁿ ~ nárànⁿ; **Kelenga** náánà; **Tiema Cewe** naara; **Jenaama Cliffs** nàtàwⁿ ~ nàràwⁿ; **Jenaama Jenne** nàtà(w)ⁿ
1.8 Bobo **Bobo S.** nàà
1.9 Samogho **Duun Zantigila** nɑɑ; **Duun Sieu** nɑɑle; **Duun Kai** nɑɑi; **Duun Bananso** nɑ̰ɑ̰i; **Dzuun** nààlén; **Kpen** naai

OTHER NIGER-CONGO potential parallels:
Adamawa **Kare** nɛ̀ŋ; **Tupuri** nàà; **Yingilum** náàn
Atlantic N. Wolof **Wolof** ɲɛnt; Tenda-Jaad-Biafada **Bedik** ná / lá; **Basari** nɑ̀x; **Konyagi** l̰æ̀x / næ̀x / næ̀x; **Biafada** nnihi / nnihi / nihi; Fula-Sereer **Proto-Fula-Sereer** *nai; Cangin **Proto-Cangin** (Pozdniakov 2018: 232) *nik-Vl̰; Nalu-Baga Fore-Pukur **Pukur** í-nà; **Nalu** biinaaŋ
Dogon **Jamsay** nǎỹ
Gur **Proto-Central** *na; **Proto-Oti-Volta** *na: / nasi (?); **Boore** náá; **Miyove** ń-nà; **Churama** nnə̃ə̃
Ijo **Ibani** íní
Kru **Dida** mɔ̀ɔ̃nā
Kwa **Proto-Potou-Akanic** *-nã; **Proto-Akanic** *-nã; **Proto-Ghana-Togo-Mountain** *ìnâ; **Ikposo** ènā; **Logba** ìná; **Chumburung** à-ná
Ubangi Gbaya **Proto-Gbaya** *nár(á); **Linda** vɔ̀nā *four, fourth*; **Mba-Dongo-Ko** ánà
Isolated NC **Gola** tínáà; **Limba** binaŋ; **Sua** mnaan

Isolated Bangime néɛ̀

Comments:
1) Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu *-*nã*.
2) For a detailed analysis of this root, see (Pozdniakov 2018).

@Pull Bantu *nàn *pull, stretch* – **Mande** *ɗalaŋ. Reliability index: 3/6 (limited distribution in Bantu and in Mande; not represented in Benue-Congo outside Bantu)

PROTO-BANTU *nàn, Regions 4: NW SW Ce NE; Zones 6: CDHJKL *pull, stretch*

MANDE *ɗalaŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+										

1.1 Southwestern **Proto-Southwestern** *dáláŋ; **Mende** ndálá *draw, pull, sketch*; **Loko** ndaa; **Bandi** ndàlá *draw, pull haul*; **Zialo** dala(g) *draw, pull*; **Kpelle N.** yálá (?)

OTHER NIGER-CONGO potential parallels:

Adamawa **Kare** nàà *pull out*

Mel S. **Kisi** nànɔ́ɔ́ *pull (in), suck, drag, draw or haul water; tear one's hair out*; **Sherbro** nan *draw, pull, drag*; **Kim** nán *pull, drag*

9.2.3. Initial palatal consonants

9.2.3.1. Bantu *c- : Mande *t-

@Chicken Bantu *cócó – **Mande** *tɔxɛ. Reliability index: 4/6 (limited distribution in Bantu and in Benue-Congo outside Bantu).

PROTO-BANTU *cócó, Zones: BCH, *cócóá KLR, *cógé J *chicken, young hen*

OTHER BENUE-CONGO

BENUE-CONGO E.: Kainji **Bassa** sòò

MANDE *tɔxɛ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+					+		+

1.1 Southwestern **Proto-Southwestern** *téé; **Mende** té; **Loko** téɛ; **Bandi** tèé; **Zialo** téɛ; **Looma** téɛ; **Kpelle N.** téɛ; **Kpelle S.** téɛ

1.2 Susu-Jalonke **Susu** tɔ̀xé, tɔ̀xɔ́-é; **Jalonke** tɔ̀qéɛ̀
1.3 Jogo-Jeri **Jogo** (Braconnier n.d.) tɔ̀gɔ̂; **Jeri** (Kastenholz 1997) tɔ́gɔ; **Jalkunan** (Kastenholz 1997) tega; **Numu** tùgɔ́
1.4 Vai-Kono **Vai** tìɛ̀, (Klingenheben & Kastenholz 2019) tíyɛ̀; **Kono** tɛ̀ɛ̀
1.9 Samogho **Seenku N.** tégɛ̀
2.2 Southern **Dan E.** tɔ̃; **Dan Kla** tɔ̃; **Dan W.** tɔ̂; **Goo** tòò; **Tura** tòò; **Mano** tɔ̀ɔ̀

OTHER NIGER-CONGO potential parallels:
Atlantic Bak Bijogo **Bijogo** sɔɔka / kɔ-sɔɔka *guinea fowl*
Atlantic N. Tenda-Jaad-Biafada **Basari** ɛ-cə́kòrè *stone partridge*
Gur **Kabiye** súù / súŋ̀ *guinea fowl*; **Pana** sùú / sùúyà *guinea fowl*
Mel N. **Temne** a-ʈɔkɔ / ɛ-ʈɔkɔ
Mel S. **Kim** sɔ̀g; **Kisi** sɔ̀ɔ́ / sɔ̀ɔ̀wá; **Sherbro** sɔk
Isolated NC **Gola** ótɔɔ (tɔ̄ɔ̄); **Limba** fɔtɔ; **Sua** tɔk / toogon

Isolated Bangime súɥìɛ̀

@Father Bantu *cé *his father* – **Mande** *ti. Reliability index: 5/6 (limited distribution in Mande).
PROTO-BANTU *cé, Regions 5: NW SW Ce NE SE; Zones 13: ACDEFGHJKMNRS *his father*

OTHER BENUE-CONGO
BENUE-CONGO E.: Bantoid Ekoid **Abanyom** ń-sɔ́; **Proto-Lower-Cross** è-tɛ́ / a-; **Proto-Upper-Cross** ttɛ́; **Obolo-Andoni** ǹtɛ́; Jukunoid **Jibe** ʃà / ʃéyì

MANDE *ti

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
										+

2.2 Southern **Guro** tí *father; adult man*; **Yaure** tĩ́; **Mwan** ti *uncle (mother's brother)*

OTHER NIGER-CONGO potential parallels:
Adamawa Bua **Kùlɑ́ɑ́l (Iro)** téé; Waja-Jen **Yi Kitulɛ** tɛ̃́ / tèbɔ̄; Fali **Yingilum** tɛ̂ʌ́í

Atlantic Bak **Bijogo-Kagbaaga** ɔ-tɛ / ya-tɛ; **Mancagne** ʃĩn; **Manjaku Bok** sin; **Pepel** aʂin
Gur **Proto-Oti-Volta** *te
Kwa **Proto-Potou-Akanic** *tɪ; **Proto-Akanic** *sɪ; **Chumburung** sí
Comments: Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu *-*cɪ*.

@Forehead Bantu *cìó *face, front*, *tíò *forehead; face*, *cènì *forehead; face* – Mande *teŋge. Reliability index: 5/6 (phonetic correspondences are not very reliable).

PROTO-BANTU *cìó, Zones: ACEJ, *cìó, Zones: DFJ, *có, Regions 5: NW SW NE SE; Zones 7: ABCHJKS, *tíò, Regions 3: Ce NE SE; Zones 8: GEFJLNPS *forehead; face*, *cènì LM *forehead; face*, *jícò JL *face*

OTHER BENUE-CONGO Proto-Benue-Congo *su *forehead; face,* *tini *forehead*

BENUE-CONGO E.: Cross Lower **Proto-Lower-Cross** *í-só éŋèn *face*; Jukunoid **Jibe** ìzō *face, eye*

MANDE *teŋge

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+	+		+	+	+		+		

1.2 Susu-Jalonke **Susu** tígí; **Jalonke** tígí
1.3 Jogo-Jeri **Jogo** cìgí; **Numu** kyígi
1.5 Mokole **Koranko** téla
1.6 Manding **Maninka-Mori** tín ~ tén; **Bambara** tɛ́; **Jula Kong** tɛ́; **Koro** téná ~ téwⁿ; **Mau** céŋ
1.7 Soninke-Bozo **Soninke** táŋŋè; **Tigemaxo** tééŋé-xɛ́ɛ́; **Kelenga** téⁿ; **Jenaama Cliffs** tègèɲcííⁿ; **Jenaama Jenne** tégé
1.9 Samogho **Dzuun** tén; **Duun** te

OTHER NIGER-CONGO potential parallels:
Atlantic N**. Fula** tiinde / tiiɗe
Gur **Gurunsi – Oti-Volta** *ti, *tu; **Proto-Oti-Volta** *tin / *tun
Ubangi **Mba-dongo-ko** sīē-kó / sīē-tó *face, forehead*
Isolated Bangime tege *front, face*, tiyen *front (in front)*

9.2.3.2. Bantu *j- : Mande *j-

@Axe **Bantu** *jɔ̀ndɔ̀ *hammer; anvil; axe; iron* – **Mande** *jeŋde. Reliability index: 4/6 (the root is well represented in Bantu and Mande, but not attested outside these families).

PROTO-BANTU *jɔ̀ndɔ̀, Regions 5: NW SW Ce NE SE; Zones 15: ABCDEGHJKLMNPRS *hammer; anvil; axe; iron*

MANDE *jeŋde

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
		+	+	+	+	+			+	

1.3 Jogo-Jeri **Jogo** jéndé
1.4 Vai-Kono **Kono** yénde
1.5 Mokole **Kakabe** jéndé *axe (small axe to cut young tree stems)*; **Koranko** yénde
1.6 Manding **Maninka Nyokolo** yèndè; **Xasonka** ɲéndé ~ ŋéndé; **Maninka Kita** yèndé; **Maninka-Mori** jénde *small ceremonial axe; war axe*; **Bambara** jélé; **Jula Kong** jẹ́dé; **Koro** jéné; **Koya** jéné
1.7 Soninke-Bozo **Soninke** yídè *axe, hatchet*
2.1 Eastern **San S.** zìn *big axe*; **San Matya** zẹde *big axe*; **Bisa Lebir** zɛ̀nní

OTHER NIGER-CONGO potential parallels:
Gur **Gurunsi – Oti-Volta** *ɗad; **Pana** zìná / zìnáyà

@Descend **Bantu** *jìk – **Mande** *jigĩ. Reliability index: 4/6 (limited distribution outside Bantu and Mande).

PROTO-BANTU *jìk, Regions 3: Ce NE SE; Zones 9: DEFGJLMNS *come (or go) down*, *jìk-ɪd, Zones: JLM

MANDE *jigĩ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+		+	+	+	+		+			+

1.1 Southwestern **Proto-Southwestern** *jèí ~ *jèíŋ; **Mende** njèí/yei *vi descend, go down; vt lower, let down; descend (from); help smb. to take a load off his head*; **Loko** njei/yei; **Bandi** njéi/yei *vi descend, go down; vt pull down, lower*; **Zialo** jey/yey; **Looma** (Vydrin 1987) zii/yii; **Kpelle N.** yɛ̀ɛ̌ *vi go down, descend; vt bring down, lower, let down*; **Kpelle S.** yēŋ *vi go down, descend; vt bring down, lower, let down*

1.3 Jogo-Jeri **Jogo** (Kastenholz 1997) jùgó(n); **Jeri** jɔ́gɔ̃́ (Kastenholz 1997) jògó(n)

1.4 Vai-Kono **Vai** jì'í *go down, get down, run down, stream out, swell up (as a boil); put down*

1.5 Mokole **Kakabe** jìgì; **Mogofin** jìgí; **Lele** yii; **Koranko** yìgi

1.6 Manding **Mandinka** jìì *descend; stop working; stop, put up; bear (child)*; **Maninka Nyokolo** jíɣì; **Xasonka** jígì; **Maninka Kita** jìkì; **Maninka-Mori** jìi *vi descend; stop working; stop; bear (child); vt lower; help smb. to lower a load; stop (work, classes)*; **Bambara** jìgī *descend; stop working; stop; bear (child)*; **Jula Kong** jígi *descend; give birth*; **Koro** jígí *take (baggage, wares) down, unload*; **Koya** jɣì´

1.8 Bobo **Bobo S.** zī

2.2 Southern **Proto-Southern** *zi̱-lá; **Tura** zí̱-nā́ *descend; fall (of rain)*; **Guro** zu̱ *descend; spin*; **Mwan** zī-nà; **Wan** zì-à *descend; put*; **Gban** zì

OTHER NIGER-CONGO potential parallels:
Dogon **Mombo** sígé
Gur **Proto-Oti-Volta** *s_1i
Kru **Bakwe** cíē

@Dry (to) Bantu *jàd *vt spread*, *jánd *vi, vt spread; increase*, *jànj *vt spread* – **Mande** *ja. Reliability index: 4/6 (limited distribution in Mande, outside Mande and outside Bantu).

PROTO-BANTU *jàd, Regions 5: NW SW Ce NE SE; Zones 14: ABCEFHJKLMNRS *vt spread*, *ján-ɪk, Regions 5: NW SW Ce NE SE; Zones 16: ABCFGHJKLMNPRS *spread, dry in the sun;*

spread out, *ján-am, Zones: HJL *spread, dry in the sun; spread out*

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Grassfields **Proto-Grassfields** *yán; Cross Upper **Proto-Upper-Cross** *yánì *spread in the sun to dry*

MANDE *ja

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
				+	+					

1.5 Mokole **Kakabe** njà ~ jà *dry, become dry*, jáárɛ *to dry*

1.6 Manding **Mandinka** jàà *to dry; grow thin*; **Maninka Nyokolo** jáà *to dry*; **Xasonka** já *v dry; dry up; become constipated (of stomach); become callous; empty; warm oneself; n drought*; **Maninka Kita** jà *to dry*; **Maninka-Mori** jà *dry; dry up; grow hard; become slim, meagre; grow numb; ladle out (to empty); make numb; vr do seriously*; **Bambara** jà *dry up*; **Jula Kong** jà *dry up; grow thin*; **Koro** já *become skinny, dry; dry off; solidify; smoke*; **Koya** jà´ *dry up*

Comments: In "Homonymy & Polysemy" (Segerer 2022), the polysemy DRY – SPREAD is found in 5 languages, which makes plausible the affinity of verbs with these meanings.

9.2.3.3. Bantu *c- : Mande *s-

@Bushland Bantu *càká, *càngà – **Mande** *sɔŋkɔ. Reliability index: 4/6 (not attested outside Bantu and Mande).

PROTO-BANTU *càká, Regions 3: SW Ce NE; Zones 8: EFGHJLMN *thicket; bush country*, *càngà, Zones: HLN *bush country*, *cángó PS *bush country; country*

MANDE *sɔŋkɔ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
						+	+		+	

1.7 Soninke-Bozo **Kelenga** sɔ́ŋɔ́ *forest*; **Jenaama Cliffs** sɔ̃ŋɔ̃ⁿ; **Jenaama Jenne** sɔ́ŋɔ́
1.8 Bobo **Bobo S.** sòkōbā, sòkɔ̄gō *wilderness*
2.1 Eastern **San Mayaa** sangantanı *remote wilderness*

@Carve (to) Bantu *cèng – **Mande** *sega ~ *segaŋ. Reliability index: 6/6.

PROTO-BANTU *cèng *cut spp.*, Regions 5: NW SW Ce NE SE; Zones 11: ACEFGHLMNPS

OTHER BENUE-CONGO

BENUE-CONGO E.: Cross Upper **Obolo** sék *cut into tiny pieces*; Edoid **Arę** (Williamson 1992) cherɔ-i (?) *cut*

MANDE *sega ~ *segaŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+		+	+	+	+		

1.1 Southwestern **Proto-Southwestern** *sàgaŋ ~ *sága; **Mende** háwá *cut up; cut (grass); butcher*; **Loko** haga *cut*; **Bandi** sàɣa *to tear*; **Zialo** sàɣà(g) *vt cut, hurt; vi cut oneself;* **Looma** sáɣa ~ sáɣa(g) *cut; scratch; draw (water)*; **Kpelle N.** hàɣǎ *carve; scratch; wound; draw (water), take away (a part)*; **Kpelle S.** sāɣā ~ sāyā ~ sāa *cut; hurt, injure; chop, hew, carve; cast (iron)*
1.2 Susu-Jalonke **Susu** sègɛ́ *cut (wood)*; **Jalonke** sègé *cut*
1.3 Jogo-Jeri **Jogo** (Kastenholz 1996) sègé *cut*
1.4 Vai-Kono **Vai** síɛ́
1.6 Manding **Mandinka** sèe, sèyi *cut with blade*; **Maninka Nyokolo** séɣè *cut; clear (ground)*; **Xasonka** ségè *fell, cut down*; **Maninka-Mori** sá *carve (wood); scratch, hoe*
1.7 Soninke-Bozo **Soninke** (Galtier & Dantioko 1979; Smeltzer & Smeltzer 2001) saga *cut; sculpt; clear (land); slash, gash*; **Tieyaxo** saga *cut; put on (belt)*
1.8 Bobo **Bobo S.** sāgā
1.9 Samogho **Duun Bananso** ʃiɛ *cut*

OTHER NIGER-CONGO potential parallels:
Atlantic Bak Balant **Balant Ganja** f-sòòɡá / g-sòòɡá *bamboo stalk*
Atlantic N. Nalu-Baga Fore-Pukur **Nalu** cɛɛnk *cut (once)*
Dogon **Jamsay** séŋé *cut up (meat, large fruit) into small pieces,* céŋéɛ̃́é *shave the edges of the beard of (smb., leaving a goatee, a moustache, and/or a thin strip from sideburns to chin);* **Mombo** kéngé *cut up finely, dice (meat, onions)*; **Najamba** tíngɔ́ɔ́ / tíngéé *part, fraction of an object (half, third, etc.)*
Gur **Kabiye** sɛkɛlʊʊ / sɛkɛlıŋ *slice, piece*
Ijo **Proto-Ijo** (Williamson 1992) *sɛ̰gì ~ *sɛ̰gí *slice*; **Ibani** séngí *slice or split (e.g. cooked yams)*
Kwa **Ikposo** cúkū; **Chumburung** kɨ-tĩŋ *piece*
Mel N. **Temne** ʈen *carve, cut up*
Mel S. **Kisi** sòòŋàá *cut, chop off*; **Sherbro** sık *piece; slice,* sɔng *cut up meat; to skin; undress*
Senufo **Supyire** cʸɛga / cʸeya ~ kʸeya *part*

Comments: Williamson (1992: 389) reconstructs Proto-Atlantic-Congo **cɛ̰k-*.

@Clean: Bantu *cèng– **Mande** *sanVŋ. Reliability index: 4/6.

PROTO-BANTU *cèng, Regions: 4: NW Ce NE SE Zones: 8: ABCJLNPS *sift; strain; clean*

MANDE *sanVŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+		+		+	+				+

1.1 Southwestern **Mende** *séɲá* (?) *id. clean, clear*
1.2 Susu-Jalonke **Susu** sɛ́níyɛ́n; **Jalonke** sáníyáá
1.4 Vai-Kono **Vai** zɛ́nɛ́ *vi be clean, shining*
1.6 Manding **Proto-Manding** *sÉnI(n); **Mandinka** sénuŋ *adj clean, pure; holy*; **Xasonka** senu *adj clean, pure; holy*; **Maninka Kita** sánu *vq be clear*; **Maninka-Mori** sánin *vq be clean, be pure*; **Bambara** sáni *vq be clean, be pure*; **Jula Kong** sánú

1.7 Soninke-Bozo **Proto-Soninke-Bozo** *sánV; **Soninke** sénni/è *adj clean, pure*; **Tieyaxo** sanaama *vi be clean; n cleanness*; **Tigemaxo** sánáámá-ná; **Tiema-Cewe** (Daget et al. 1953) sanuga; **Sorogama** (Daget et al. 1953) saniga
2.2 Southern **Beng** sa̰ŋ̰

@Hiccup **Bantu** *cék- *sob; hiccup* – **Mande** *siko. Reliability index: 6/6.

PROTO-BANTU *cék-um, Zones: BCF, *cék-ud FJ, *cék-ò AL, *cíkò CH *sob; hiccup*, *cèk-ú CDJ, *tíkò LMS

OTHER BENUE-CONGO
BENUE-CONGO E.: Bantoid Grassfields Kom **Kom** ānsəʔà, səʔà
BENUE-CONGO W.: Defoid **Yoruba** èsúkè ~ èsúkèé

MANDE *siko

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+		+		+		+	+	+	+

1.1 Southwestern **Mende** sìjó
1.2 Susu-Jalonke **Susu** sìkón; **Jalonke** sèqúŋ *v hiccup*
1.4 Vai-Kono **Vai** síkòsíkò, (Klingenhebey & Kastenholz 2019) síyósíyò
1.6 Manding **Mandinka** síkoji ~ hìkóji; **Maninka Nyokolo** sìkò; **Maninka-Mori** sìko
1.8 Bobo **Bobo S.** sɛ́gélà ~ sɛ́gélù *n hiccup,* sɛ̄gēlā *v hiccup*
1.9 Samogho **Seenku S.** səgí-səgḯ nɛ̃́
2.1 Eastern **Bisa Lebir** zókò; **Bokobaru** siko
2.2 Southern **Dan E.** kpɤ̃-sɪ̰̀a̰; **Mano** síkósíkó; **Guro** sɪ̰́ɪ̰̀

OTHER NIGER-CONGO potential parallels:
Adamawa **Day Bouna** súgú
Atlantic Bak Manjak **Manjak** sɪkaj; **Mancagne** uʂikaj
Atlantic N. Tenda-Jaad-Biafada **Jaad** sikoj; Cangin **Palor** səgij
Ijo **Ibani** síkɔ́
Kru **Bakwe** síkàsə́; **Dida** sɔ̄kòsōkyó; **Godie** ségèsé
Kwa **Chumburung** kà-síkóʔ

Ubangi **Mundu** zíkīdī
Isolated NC **Limba** nseekɔ ~ nsikɔ

@**Pierce** **Bantu** *còk *poke in; put in; prick with a point; hide* – **Mande** *sɔɣɔ. Reliability index: 5/6 (limited distribution in Benue-Congo outside Bantu).

PROTO-BANTU *còk, Regions 5: NW SW Ce NE SE; Zones 10: AFHJKLMNRS *poke in; put in; prick with a point; hide*

OTHER BENUE-CONGO

Benue-Congo E.: Cross Upper **Obolo** tɔ̌k *bite, pick*

MANDE *sɔɣɔ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+		+	+	+	+	+	+		

1.1 Southwestern **Looma** sɔɔ; **Kpelle N.** hɔ̀ɔ̌ *hit, strike*; **Kpelle S.** sɔ̄ɔ̄ *pierce; hit; hurt, injure*
1.2 Susu-Jalonke **Susu** sɔ̀xɔ́ *sting, prick, pierce*; **Jalonke** sɔ̀qɔ́
1.4 Vai-Kono **Vai** sɔ̀ɔ́ *hit (with something thrown), prick*; **Kono** sɔ̀ɔ
1.5 Mokole **Kakabe** sɔ̀gɔ̀ *pierce, prick, sting*; **Mogofin** sɔ́gɔ̀; **Koranko** sɔ̀gɔ, sɔ̀ɔ
1.6 Manding **Proto-Manding** *sɔ̀xɔ; **Mandinka** sɔ̀ɔ̀ *pierce; prick; penetrate; bore, tap (tree); stab; tattoo; harvest (peanuts)*; **Maninka Nyokolo** sɔ́ɣɔ̀; **Xasonka** sɔ̀xo *pierce; burst, snap; begin; n hole*; **Maninka Kita** sɔ̀kɔ̀; **Maninka-Mori** sɔ̀ɔ *vt pierce, prick, transfix; bore, perforate; stab; lock (door); embroider; go through; vi begin*; **Bambara** sɔ̀gɔ *pierce, prick, transfix; bore, perforate; vaccinate; dig out (burrow); lock (door); embroider; knit*; **Koro** sɔ̀gɔ̀ *jab (smb, smth.) with pointed object*
1.7 Soninke-Bozo **Soninke** sɔ̀xɔ́ *embroider; lock (door); tattoo*; **Tigemaxo** sɔxɔ-di *extract, pull out*
1.8 Bobo **Bobo S.** sɔ̀gɛ̄ *lock, latch, bolt; button up*
1.9 Samogho **Duun Sieu** sɔ; **Duun Kai** ʃɔ; **Duun Bananso** ʃʷɔ; **Dzuun** tsɔ̀

OTHER NIGER-CONGO potential parallels:
Dogon **Jamsay** sɔ́ɣɔ́ *peck off a little bit of*
Gur **Gurunsi – Oti-Volta** *so(g) *hide* (cf. Proto-Bantu meanings); **Boore** có ~ cūá; **Kabiye** cùyúù *pick (with a beak); pick (fruits) with a pole*
Kwa **Attié** tsɔ̄ *pick; bite; prick*; **Logba** sú
Mel N. **Temne** sɔ
Mel S. **Kisi** cùkàá *prick, as a thorn might; poke, jab with a sharp instrument, pierce, stab, stick*
Ubangi Gbaya **Proto-Gbaya** *tók *pierce, prick*; **Mbandja** sù

@Rub Bantu *cìng *rub, smear*, *cóc- *flay; rub* – Mande *suusaa. Reliability index: 4/6 (the phonetic correspondences are not very reliable. Not attested in Benue-Congo outside Bantu).

PROTO-BANTU *cìng, Regions 5: NW SW Ce NE SE; Zones 11: BDEFGJKLMNS *rub, smear,* *cìng-ʊd, Zones: ACDMN *rub, smear*, *cìig, Zone: J *rub, smear*, *cóc-ʊd, Zones: JLM *flay; rub*, *cìic, Zone: J *rub smoothly, caress*

OTHER BENUE-CONGO
BENUE-CONGO E.: Bantoid **Tiv** (Williamson 1992) ʃìyè *anoint, smear*; **Esimbi** (Williamson 1992) siŋgi *wipe, rub, clean*; **Proto-Mbam-Nkam** (Williamson 1992) cɨ́k-; Platoid **Kpan** (Williamson 1992) cèù-ŋá (?); Cross-Delta **Oḍual** (Williamson 1992) siɣə *rub (oil on body)*
BENUE-CONGO W.: Igboid **Igbo** (Williamson 1992) cʰì *smear, rub*; Defoid **Yoruba** èsúkè ~ èsúkèé

MANDE *suusaa

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+			+	+	+	+			

1.2 Susu-Jalonke **Jalonke** sùùsáá
1.5 Mokole **Kakabe** sùusa *smear*
1.6 Manding **Mandinka** sùusaa *rub; card*; **Maninka Nyokolo** súúsàà; **Xasonka** súúsà *wipe; rub*; **Maninka Kita** sùsá; **Maninka-**

Mori sùsá, sòsá *wipe, rub*; **Bambara** sùsa *wipe, rub; rinse*; **Koya** sìsá

1.7 Soninke-Bozo **Soninke** sùusá *wipe, clean, brush*

1.8 Bobo **Bobo S.** sìsɔ̄ *rub, wipe*

OTHER NIGER-CONGO potential parallels:

Gur **Boore** cɩ̰'á ~ cɩ̰'áā *rub, polish; fragmentate; wipe out*

Ijo **Proto-Ijo** (Williamson 1992) *sìkìrí; **Nembe** sìgìrí

Kwa Tano **Akan** (Williamson 1992) -c^{w}iw

Ubangi Gbaya **Proto-Gbaya** *⌊íŋ

Isolated NC **Limba** sekisekiŋ *besmear, rub a house with earth*

Comments: Williamson (1992: 390) reconstructs Proto-Atlantic-Congo **-cĩk-*.

@Scatter Bantu *cánc, *cán – Mande *sari. Reliability index: 4/6 (not attested in Benue-Congo outside Bantu; limited distribution in Mande).

PROTO-BANTU *cánc, Regions 3: SW Ce NE; Zones 4: HJLM *scatter*, *cán (+ suffix), Zones: CKLMR

MANDE *sari

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
					+	+				

1.6 Manding **Mandinka** sári *scatter; throw; sow, broadcast; whitewash*; **Xasonka** sári *scatter; throw; sow, broadcast*; **Maninka-Mori** sári *scatter; throw; sow, broadcast*; **Bambara** sérí *scatter; throw; sow, broadcast*

1.7 Soninke-Bozo **Tigemaxo** sárí *cast (fishing net); swat, lash out (with hand)*; **Kelenga** sárí *cast (fishing net); dump, toss (garbage)*; **Jenaama Jenne** sátì *sow by tossing (rice or fonio seeds)*; **Sorogama** sari *throw, scatter*

OTHER NIGER-CONGO potential parallels:

Adamawa **Kare** sàá, sàsùà; **Samba Leko** sā

Dogon **Jamsay** sáȳá; **Mombo** sáyé *break up*; **Najamba** sán / sànè, sáná-m / sànà-mè
Gur **Boore** sɛ́'à ~ sɛ́'àrā *divide; scatter*; **Pana** sa̰a̰sè *scatter; broadcast, sow*
Mel S. **Kim** seen; **Sherbro** se̱yni *disperse; be scattered*

@Sew Bantu *còn – Mande *sɔrɔŋ. Reliability index: 5/6 (not attested outside Benue-Congo and Mande).

PROTO-BANTU *còn, Regions 4: NW Ce NE SE; Zones 8: CFGJLMPS, *cón, Zones: CJLM

OTHER BENUE-CONGO
BENUE-CONGO W.: Edoid **Proto-Edo** *cʊ

MANDE *sɔrɔŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+			+	+			+	+

1.1 Southwestern **Proto-Southwestern** *sólóŋ; **Mende** hɔ́ɔ́; **Loko** (Vydrin's field data) hɔ́ɔ́(ŋ); **Bandi** sɔ̀lɔ́(ŋ); **Zialo** sɔlɔ; **Looma** sólɔ́(g); **Kpelle N.** hólɔ́ɔ́ŋ́; **Kpelle S.** sólɔ́
1.2 Susu-Jalonke **Susu** sɔ́rɔ̀n *insert, push in*; **Jalonke** sɔ̀rɔ́ń (?) *fall vertically*
1.3 Jogo-Jeri **Jogo** sɔ̀lé; **Jalkunan** sɔ̀lí; 1.4 Vai-Kono **Vai** sɔ́'ɔ́
1.6 Manding **Maninka-Mori** sɔ́rɔn *vt drive into, thrust into; sew with (a thread); n embroidery*
1.7 Soninke-Bozo **Tigemaxo** soro *fit together, fit smth. into smth.*; **Sogorama** sorõ *join up, connect*
2.1 Eastern **San Matya** sɔnɛ
2.2 Southern **Mano** sɔ́lɔ́ (< Kpelle?)

@Urine Bantu *cò, *cùb – **Mande** *sũɓũdɛ̃. Reliability index: 5/6 (missing in Benue-Congo outside Bantu).

PROTO-BANTU *cò, Regions 3: SW Ce NE; Zones 7: DFJKLMR, *cùbà, Zones: BH *urine*, *cùb BJFHM, *cùb-ad DFJ, *cɔ́k-ɔd LM *urinate*

OTHER BENUE-CONGO

BENUE-CONGO E.: Cross Upper **Obolo** sɔ̃k ánááŋ ~ sɔ́k ánááŋ *urinate*

MANDE *sũɓũdɛ̃

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
				+	+			+	+	

1.5 Mokole **Kakabe** súmání; **Mogofin** súmúné́; **Koranko** súna

1.6 Manding **Mandinka** súmúnàà *urinate, urine*; sùrumaa; **Xasonka** súmúná ~ sùnuma *urinate, urine*; **Maninka Kita** súkuna; **Maninka-Mori** súuna; **Bambara** súgunɛ ~ súmã; **Koya** súmá

1.9 Samogho **Jowulu** sm̃ūnù

2.1 Eastern **Bisa Lebir** sómbó *urine, urinate*

OTHER NIGER-CONGO potential parallels:

Atlantic Bak Joola **Bayot** mʊ-sa̰ *urinate*

Atlantic N. Wolof **Wolof** saw *urinate*; Tenda-Jaad-Biafada **Konyagi** ì-cæ̃w̃ *urinate;* **Jaad** (Ducos 1971) saa *urinate*; **Biafada** sah- *urinate*; Fula-Sereer **Fula** soofa *urinate*; Cangin **Palor** soʔ *urinate*; **Ndut** sɔɔh *urinate*; **Noon** sɔɔk *urinate*; **Laala** sɔɔq *urinate*; **Saafi** (Mbodj 1983) sook *urinate*; Nalu-Baga Fore-Pukur **Pukur** a-sò

Dogon **Jamsay** sṵ́ṵ́ *urinate*

Gur **Boore** sḭ́sīā̰

Ijo **Ibani** sá *urinate*; **Nembe** sa̰ *urinate*

Kwa **Proto-Ghana-Togo-Mountain** *tsú; **Logba** sùsú *urinate*

Ubangi Gbaya **Proto-Gbaya** *sɔ̰ *urinate, defecate*

Isolated NC **Gola** másùa

9.2.3.4. Bantu *j- : Mande *ɣ- ~ *x-

@Clear Bantu *jédò *white; whiteness; clear ground* – **Mande** *xoleŋ. Reliability index: 5/6 (not found in Benue-Congo outside Bantu).

PROTO-BANTU *jédò *white, whiteness; clear ground*, Regions NW SW Ce NE 5; Zones 6: CDEGHJ

MANDE *xoleŋ *white*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+					+	+		+		

1.1 Southwestern **Proto-Southwestern** *kòlěŋ *white*; **Mende** kòlé *adj white; clean; clear (ground); vt clean (rice)*; **Loko** (Kimball) kùè *white*; **Bandi** kòlè *vq be white, be clear; vt clean*; **Zialo** kólé(g) *white*; **Looma** kólé *white*; (Sadler 1951; Vydrin 1987) kwéle(g) *white*; **Kpelle N.** kwèlě *white*; **Kpelle S.** kōlē *white*

1.6 Manding **Proto-Manding** *xóyi *white*; **Mandinka** kóyi *adj white; clear; vi be white; be clear; be prudent; be safe; be fair*; **Maninka Nyokolo** koyi *vi be white; be clear, be sure; adj white, clear*; **Xasonka** xóyi *vq be white; be certain; adj white; vi become white; become clean (morally); vt whiten; make clean (morally)*

1.7 Soninke-Bozo **Proto-Soninke-Bozo** *xúlVŋ *white*; **Soninke** xúllé *white, clear, pure,* xúra(ŋ) *be white, be clear, be pure*; **Tieyaxo** xon *white*; **Tigemaxo** xóóⁿ *white, light-coloured*; **Kelenga** hóŋ-ɔ̂ *white, light-coloured*; **Tiema-Cewe** ko; **Jenaama Cliffs** kūwōⁿ *white, light-coloured; clean; clear (field)*; **Jenaama Jenne** kúwóⁿ, kùwòⁿ *white, light-coloured; clean; clear (field)*

1.9 Samogho **Banka** xuɛ *white*; **Seenku N.** kàn, pl. kèn (?) *white*

OTHER NIGER-CONGO potential parallels:
Kwa **Proto-Potou-Akanic** *-ɯɛnĩ *white*; **Proto-Akanic** *-ɛɛnĩ *white*
Mel S. **Kim** huli *white*

Comments:

1) Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu *-*ũɸ̃ɛ̃l̃ĩ* ‘white’.
2) The Proto-Bantu and Proto-Potou-Acanic roots are homonymous with the roots for MOON. In Proto-Niger-Congo the words for WHITE and MOON were probably related through derivation, the notion of shining, brightness serving as the semantic link (cf. **Proto-Bantu** **jéd* ‘shine; be clear. be ripe; be favourable’).
3) This root could potentially be included in the Swadesh 100 Wordlist.

@Day Bantu *jící, *jíncì – **Mande** *ɣĩ. Reliability index: 5/6 (not attested outside Benue-Congo and Mande).

PROTO-BANTU *jící, Regions 5: NW SW Ce NE SE; Zones 11: ACDGHJLMNPS *day, daytime*; *jíncì, Regions 4: SW Ce NE SE; Zones 6: EFJKMP

OTHER BENUE-CONGO
BENUE-CONGO E.: Cross Upper **Proto-Upper-Cross** *di *day, sunshine*

MANDE *ɣĩ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+	+					+	+		+

1.2 Susu-Jalonke **Susu** xìí; **Yalunka** xii
1.3 Jogo-Jeri **Jogo** ɲí; (Braconnier n.d.) ɲìí; **Numu** ɲì
1.8 Bobo **Bobo S.** nyì
1.9 Samogho **Seenku S.** jɛ̀e nɛ̀ *be day*
2.2 Southern **Dan E.** yī; **Dan W.** yī; **Tura** yì *day (in some names of holidays)*; **Guro** yī; **Yaure** yì; **Mwan** yī; **Gban** yì

OTHER NIGER-CONGO potential parallels:
Gur **Gurunsi – Oti-Volta** *dy̌in *today*
Kru **Dida (Lakota)** ylī / ylī

9.2.3.5. Bantu *j- : Mande *y-

@Honey, bee Bantu *jíkì – **Mande** *yaagɛ. Reliability index: 4/6 (limited distribution in Mande; not attested in Benue-Congo outside Bantu).

PROTO-BANTU *jíkì, Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGHJKLMNPRS *bee*; *honey*

OTHER BENUE-CONGO Proto-Benue-Congo *zag
BENUE-CONGO E.: Bantoid **Proto-Grassfields** *yú´ ~ *jú´ *bee*

MANDE *yaagɛ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
						+	+	+		

1.7 Soninke-Bozo **Soninke** yáagè *honey*
1.8 Bobo **Bobo S.** yí, pl. yégé *bee, honey*
1.9 Samogho **Seenku S.** ɲṵ̋i̯ *honey*

OTHER NIGER-CONGO potential parallels:
Atlantic N. Tenda-Jaad-Biafada **Jaad** yunkumani *swarm of bees*
Dogon **Jamsay** yŭŋ *honey*

@Shine Bantu *jéd *shine; be clear; be ripe* – **Mande** *yeeleŋ. Reliability index: 4/6 (limited distribution in Mande; the root is not attested in Benue-Congo outside Bantu).

PROTO-BANTU *jéd, Regions 5: NW SW Ce NE SE; Zones 10: BCDFGJLNRS *shine; be clear; be ripe*

MANDE *yeeleŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+				+	+		+		

1.2 Susu-Jalonke **Susu** (Touré 1994) yílén *shine (v), shine (n)*; **Jalonke** jílè
1.6 Manding **Xasonka** yélen; **Maninka-Mori** yélen; **Bambara** yéelẽ
1.7 Soninke-Bozo **Tigemaxo** yéréⁿ *n light, illumination*; **Kelenga** yéérèⁿ *n light, illumination*; **Jenaama Jenne** yíyélé, yíyéléⁿ *n light, illumination*
1.9 Samogho **Seenku N.** nyìŋè *vi shine, glow*

OTHER NIGER-CONGO potential parallels:
Atlantic N. Fula-Sereer **Proto-Fula-Sereer** *ɗel *shine*, *jal *shine; n light (moon)*
Mel S. **Temne** yel yel *shine (as stars)*

@Year Bantu *jákà *year; cultivation season; harvest* – **Mande** *yĩ. Reliability index: 5/6 (the phonetic correspondences are not very reliable; not found outside Benue-Congo and Mande).

PROTO-BANTU *jákà, Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGHJKLMNPRS *year; cultivation season; harvest*

OTHER BENUE-CONGO Proto-Benue-Congo *zag
BENUE-CONGO E.: Jukunoid **Proto-Jukun** *gi

MANDE *yĩ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+	+				+		+	+	

1.2 Susu-Jalonke **Susu** ɲɛ́; **Jalonke** ɲɛ́ɛ́
1.3 Jogo-Jeri **Jogo** ɲɛ́ɛ́; **Jeri** ɲiɛ; **Numu** ɲé
1.7 Soninke-Bozo **Tigemaxo** jn̰ŋ̰; **Kelenga** jíŋ; **Jenaama Cliffs** jɪ̰; **Jenaama Jenne** jɪ̰ɪ̰
1.9 Samogho **Duun Kai** jii; **Duun Sieu** jigi; **Duun Zantigila** jigɑ̰; **Dzuun** jíí; **Kpen** jii
2.1 Eastern **Bokobaru** zii *next year*

OTHER NIGER-CONGO potential parallels:
Senoufo **Supyire** yyee / yyèe; **Mamara** yee

9.2.4. Initial velar consonants

9.2.4.1. Bantu *k- : Mande *k-

@Banana Bantu *kòndè – **Mande** *koŋdo. Reliability index: 4/6 (limited distribution in Mande; not attested in Benue-Congo outside Bantu).

PROTO-BANTU *kòndè Regions 4: NW SW Ce NE; Zones 11: ABCDFHKLNMR, *kòndò, Regions 4: NW SW NE; Zones 6: ABCGHK

MANDE *koŋdo

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+								

1.1 Southwestern **Mende** kòndé *maiden plantain*
1.2 Susu-Jalonke **Susu** kɔ̰tɔ̰bólɔ̰ŋ-í *plantain banana*

1.3 Jogo-Jeri **Jogo** kɔdú

OTHER NIGER-CONGO potential parallels:
Adamawa **Kare** kɔ̀ndɔ̀ŋ; **Samba Leko** kɔ̀ntɔ̀ŋ
Atlantic N. Fula-Sereer **Fula** (Tourneux & Daïrou 1998) kondoŋ / kondoŋje *plantain banana*
Mel S. **Kisi** kóndówálíó / kóndówálìé *banana sp.*
Ubangi Gbaya **Proto-Gbaya** *kɔ̀ndì, *kɔ̀nì

@Chest 1 Bantu *kúbà – **Mande** *kUgU. Reliability index: 4/6 (not attested outside Bantu and Mande).

PROTO-BANTU *kúbà, Regions 3: Ce NE SE; Zones 8: DFGJMNPS

MANDE *kUgU

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
		+			+				+	+

1.3 Jogo-Jeri **Jôwulu** kúŋ
1.6 Manding **Maninka-Mori** kɔ́ɔ *surface of chest*; **Bambara** kɔ́gɔ; **Mau** (Creissels 1982) kɔ́ɔ́ *back part of the chest*
2.1 Eastern **Boko** kù; **Busa** kù *chest (animal)*; **Bokobaru** kù
2.2 Southern **Dan E.** kùù *chest (surface; of human, animal, bird)*; **Yaure** kùgù

OTHER NIGER-CONGO potential parallels:
Kru **Godie** kúkúbíé

@Crab Bantu *kádá – **Mande** *kaa. Reliability index: 6/6.

PROTO-BANTU *kádá, Regions 5: NW SW Ce NE SE; Zones 11: ABDGHJKLMPS

OTHER BENUE-CONGO Proto-Benue-Congo *kala
BENUE-CONGO E.: Bantoid Ekoid **Abanyom** è-kál / bɨ̀-; Bantoid Grassfields **Limbum** káá; Cross Upper **Obolo** úká; **Proto-Upper-Cross** *kánì; Jukunoid **Proto-Jukun** *kaŋ; Kainji **Bassa** ká

MANDE *kaa

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
			+						+	+

1.4 Vai-Kono **Vai** kààwò, (Klingenheben & Kastenholz 2019) kááwó'ò ~ kàwòlò

2.1 Eastern **Boko** kā́; **Bokobaru** ká

2.2 Southern **Dan E.** kā; **Dan W.** kāâ; **Goo** káá; **Tura** káà; **Mano** kāā; **Guro** (Grégoire 1975) kā-lùò; **Mwan** kààɗṓŋ́; **Wan** kālòŋ; **Gban** klá

OTHER NIGER-CONGO potential parallels:

Adamawa **Pere** kālī; **Samba Leko** kálə̀

Atlantic Bak Bijogo **Bijogo** ka-kɛtɛ / ŋa-kɛtɛ *crab sp.*

Atlantic N. Wolof **Wolof** (Fal et al. 1990) kɔti; Tenda-Jaad-Biafada **Bedik** ga-ŋàr-ŋàr; **Basari** è-kə́r-kèl; Fula-Sereer **Fula** (Tourneux & Daïrou 1998) ngarkewal / ngarkeeje

Kru **Bakwe** káā, kálɔ̄; **Wobe** (Marchese 1979) kā́; **Gere** (Marchese 1979) ká; **Niabwa** (Marchese 1979) ká; **Jrewe** (Marchese 1979) ká; **Tepo** (Marchese 1979) ká

Mel N. **Temne** a-kara / ɛ-kara

Ubangi Gbaya **Proto-Gbaya** *kál̩á

Isolated NC **Limba** kekeri

@Guinea fowl **Bantu** *kángà – **Mande** *ŋ̀-kaŋka. Reliability index: 6/6.

PROTO-BANTU *kángà, Regions 5: NW SW Ce NE SE; Zones 16: ABCDEFGHJKLMNPRS

OTHER BENUE-CONGO Proto-Benue-Congo *kanga

BENUE-CONGO E.: Bantoid Ekoid **Abanyom** ǹ-kɔ̌g / ɔ̀- *fowl*; Bantoid Grassfields **Limbum** síínjì *bushfowl*; Cross Upper **Proto-Upper-Cross** *kɔ́n; Jukunoid **Proto-Jukun** *kúǹ *fowl*; **Jibe** ásòyì

MANDE *ŋ̀-kaŋka

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+					+	+	+	+	+

1.2 Susu-Jalonke **Susu** (Touré 1994) kánké; **Jalonke** kánké
1.7 Soninke-Bozo **Soninke** kènnê
1.8 Bobo **Bobo S.** kàgà, pl. kègè
1.9 Samogo **Duun** kạ, kạna; **Dzuun** kàn
2.1 Eastern **Proto-Eastern** (Schreiber 2008) *gaN; **San S.** gà; **San N.** (Schreiber 2008) gã; **Bisa Lebir** gạ̀; **Bisa Barka** (Schreiber 2008) gà; **Boko** gạ̀; **Busa** gạ̀; **Bokobaru** gạ̀
2.2 Southern **Proto-Southern** *gạ̀gè; **Dan E.** gạ̃ã̀; **Dan W.** gã̀; **Dan Kla** gã̀; **Goo** gạ̀ạ̀; **Tura** gạ̀ạ̀; **Mano** gạ̀ạ̀; **Guro** gɛ̀ɛ́, jɛ̀ɛ́; **Mwan** gãŋglē; **Wan** gàŋgè *partridge*; **Gban** gã̀; **Beng** jɛ̃́; **Ngen** gạ̀ŋ̀

OTHER NIGER-CONGO potential parallels:
Adamawa **Tupuri** kāgē *chicken*
Atlantic Bak Joola **Joola Kujamutay** fʊ-sɪŋa; Manjak **Manjak** (Buis 1990) uncaŋ
Atlantic N. Tenda-Jaad-Biafada **Basari** ɛ-càngʷís; **Konyagi** sì-nkôŋ *chicken sp.*; Nalu-Baga Fore-Pukur **Nalu** sɛɛŋ
Dogon **Jamsay** káŋářá *coo or squawk lightly*
Gur **Proto-Oti-Volta** *kpan; **Miyove** ì-cá / ì-cá *chicken*
Kru **Godie** tíŋɔ̄ / tíŋī
Kwa **Chumburung** ʃ̃ãŋ
Senufo **Supyire** ŋ̀kùgùrò / ŋ̀kùgùre *chicken*
Ubangi **Linda** ngònjá *bird (guinea fowl sp.)*

@Hold Bantu *kómb-at – **Mande** *kũ. Reliability index: 6/6.

PROTO-BANTU *kómb-at, Zones: GFLMNS, *kúmb-at, Regions 4: SW Ce NE SE; Zones 10: EFGJLMNPRS *hold in the arms; hold in the hand*

OTHER BENUE-CONGO
BENUE-CONGO E.: Bantoid Grassfields Ring **Proto-Ring** *kúé

MANDE *kũ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+		+	+	+	+		+	+	+

1.1 Southwestern **Mende** kú *vi be able; get the better of*
1.2 Susu-Jalonke **Susu** rá-là-xún *catch (a falling object)*
1.4 Vai-Kono **Vai** kúŋ *be able; grow (in size)*
1.5 Mokole **Kakabe** kùn *fit; be good for*
1.6 Manding **Proto-Manding** kún *fit*; **Mandinka** kúŋ *fit; find place; submit, obey*; **Xasonka** kùŋ *fit in, go in; be endurable; dare*; **Maninka-Mori** kún *vi fit in, go in; fill completely; vt contain, include; stand, put up with; overcome*; **Bambara** kṵ *vi fit in, go in; fill completely with one's body; catch up; vt contain, include; stand, put up with; overcome (a difficulty, etc.)*
1.7 Soninke-Bozo **Tigemaxo** kúⁿ *catch; (fire) ignite; hold; detect (odour); (water) reach up to*; **Kelenga** kúⁿ *catch; (fire) ignite; hold; detect (odour); (water) reach up to*; **Jenaama Cliffs** kūūⁿ *catch*; **Jenaama Jenne** kúⁿ *catch, hold, grip; occupy (a place); (fire) ignite*
1.9 Samogho **Jowulu** kùn/kūn/künë *catch*; **Dzuun** kún *catch*; **Duun Zantigila** kṵ; **Duun Kai** kṵ; **Duun Bananso** kṵ; **Kpen** kṵṵmɑ
2.1 Eastern **San S.** kṵ (kṵi̯) *catch; receive (guest)*; **Boko** kṵ̀ *catch*; **Busa** kṵ̄ *catch*; **Bokobaru** kṵ́ *vt seize, trap, catch; vi be necessary*; **Kyanga** kṵ̄ *vt catch, seize, hold, control; vi befit, be appropriate*; **Shanga** kṵ́ *vt catch, keep, hold; look after; infect, affect; vi befit, be appropriate*
2.2 Southern **Proto-Southern** *kṵ́ *catch*; **Dan E.** kṵ́ *vt catch, get hold of; bite, sting; vi burn (of fire)*; **Dan W.** kṵ́ *catch;* **Dan Kla** kṵ́ *catch*; **Goo** kṵ̃́ *catch*; **Tura** kṵ̃́ *catch*; **Mano** kṵ́ *catch; warm up (conflict); treat*; **Guro** kṵ́ *catch*; **Yaure** kṵ́ *catch*; **Mwan** kṵ́ *catch*; **Wan** kṵ́ *catch*; **Beng** kṵ́ *catch; hold; infect; photograph; treat well*; **Ngen** kṵ́ *catch*

OTHER NIGER-CONGO potential parallels:
Dogon **Jamsay** kúmó *hold, hold on to,* **Najamba** kúmbí-y / kùmbì-yè *hold, hold on to*; **Mombo** kúmmì *grip (stick, small object) in one's clenched hand*
Gur **Proto-Oti-Volta** *ku *catch*

@Hundred **Bantu** *kámá *hundred; ten* – **Mande** *kaɓɛ̃. Reliability index: 4/6 (limited distribution in Bantu and in other Benue-Congo branches).

PROTO-BANTU *kámá, Regions 3: NW SW Ce; Zones 6: ABCDHL *hundred; ten*

MANDE *kaɓɛ̃

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+		+	+	+	+				+

1.1 Southwestern **Loko** kɛmɛ(ŋ); **Kpelle N.** (Leger 1975) keme *ten thousand*; **Kpelle S.** (Westermann & Melzian 1930) kɛmɛ
1.2 Susu-Jalonke **Susu** kɛ̀mɛ́; **Jalonke** kɛ̀mɛ́
1.4 Vai-Kono **Kono** cɛ́mɛ ~ kɛ́mɛ
1.5 Mokole **Kakabe** kɛ̀mɛ̀; **Mogofin** kɛ́mɛ̀; **Lele** kɛ̀mɛ ~ cɛmɛ
1.6 Manding **Mandinka** kɛ̀mɛ̀; **Maninka Nyokolo** kɛ́mɛ̀; **Xasonka** kɛ́mɛ̀; **Maninka Kita** kɛ̀mɛ̀; **Maninka-Mori** kɛ̀mɛ ~ cɛ̀mɛ; **Bambara** kɛ̀mɛ́; **Koro** kɛ́mɛ̀; **Koya** kɛ̀mɛ́
1.7 Soninke-Bozo **Soninke** kàmé; **Tigemaxo** kɛ̀mɛ́; **Kelenga** kɛ̀mɛ́
2.2 Southern **Dan E.** kʌ̄ŋ̄; **Dan Kla** kʌ̀ʌ̋ŋ́, kʌ̋ŋ́; **Dan W.** kʌ̀ŋ̄, kʌ̀ᷠŋ̄; **Tura** kᷠa̰ᷠḭᷠ; **Mwan** kɛ̰ᷠɓɛ̰ᷠ; **Wan** cɛ̀mɛ̰ᷠ, kɛ̀mɛ̰ᷠ

OTHER NIGER-CONGO potential parallels:
Adamawa **Pere** tɛ̄mɛ̄rɛ̄
Atlantic Bak Balant **Balant Ganja** gɛ̀mɛ́ / g-gɛ̀mɛ́; **Bayot** tɛmɛ; Joola **Joola Kujamutay** cɛmɛ
Atlantic N. Wolof **Wolof** teemeer; Nyun-Buy **Nyun** kɛmɛ; **Bedik** kɛ́mɛ́; **Basari** kɛ́mɛ̀; **Konyagi** kèmɛ; **Jaad** keme; Tenda-Jaad-

Biafada **Biafada** keme; Fula-Sereer **Fula** (Tourneux & Daïrou 1998) teemerre / teemeɗɗe; **Sereer** teemed
Dogon **Jamsay** téémdérè; **Najamba** téémèndérè
Mel N. **Temne** k-ɛmɛ / ţ-ɛmɛ; **Landuma** kɛmɛ
Mel S. **Kisi** kémè; **Mani** kèmè
Ubangi **Mbandja** kámá
Isolated NC **Limba** keme; Sua **Sua** kɛmɛ

@Occiput Bantu *kòtì *neck; nape of neck; occiput* – **Mande** *kɔrɩ *occiput*. Reliability index: 4/6 (limited distribution in Mande).

PROTO-BANTU *kòtì, Regions 5: NW SW Ce NE SE; Zones 15: ABCDEGHJKLMNPRS *neck; nape of neck; occiput*

OTHER BENUE-CONGO

BENUE-CONGO E.: Cross Upper **Proto-Upper-Cross** *kòdá *neck*

MANDE *kɔrɩ *occiput*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
						+			+	

1.7 Soninke-Bozo **Tigemaxo** kɔli *occiput*; **Kelenga** kɔ̀lî *occipital bone*
2.1 Eastern **Bisa Lebir** kórè, kórè, kwérè *occiput*; **Bokobaru** kòto (?) *throat*

OTHER NIGER-CONGO potential parallels:

Atlantic Bak Bijogo **Bijogo** ŋɔ-kɔta / mɔ-kɔta ~ n-kɔta; **Bayot** ɛkɔndɔ; **Joola Banjal** ɛ-xɔndɔr; **Joola Gusilay** ɛ-kɔndɔr / sɪ-kɔndɔr; **Joola Kasa** ɛ-kondor / si-; **Joola Kujamutay** ɛkɔndɔɔr
Atlantic N. Nyun-Buy **Nyun** kʊntʊk / kʊntʊk-ɔŋ *bump, protuberance, protrusion, back of the neck*; Fula-Sereer **Proto-Fula-Sereer** *KWaɗ *neck, throat*; Cangin **Laala** xɔn *throat*
Dogon **Jamsay** kòrɔ́
Ijo **Ibani** kɔ̀ngɔ̀; **Nembe** kɔ̨gɔ́
Kwa **Proto-Potou-Akanic** *ɓɔnĩ; **Proto-Akanic** *kɔnĩ
Isolated NC **Limba** nkonci *neck, throat*

Comments: Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu **kə̃ntɪ*.

@Old Bantu *kódò *adult; senior; elder; principal; big; old; mature*, *kódó *old age; big size, largeness; birthright*, *kòt *be old* – **Mande** *kɔdɔ. Reliability index: 5 / 6 (not attested in Benue-Congo outside Bantu).

PROTO-BANTU *kódó, Regions 5: NW SW Ce NE SE; Zones 11: ABCEFGJLMRS *adult; senior; elder; principal; big; old; mature,* *kódó, Zones: EFGJLMNPRS *old age; big size, largeness; birthright*, *kódò, Zones: EGHMNP *grandparent; female ancestor; family,* *kòt, Zones: DFJLMN *be old*

MANDE *kɔdɔ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+		+	+	+	+				+	+

1.1 Southwestern **Mende** kpó-kóló *grow old; very old person*; **Loko** kuro *old*; **Bandi** kpò-kólo(ŋ) *make old; old person*; **Looma** kpá-kólo(g) *elderly person*
1.3 Jogo-Jeri **Numu** kòrá
1.4 Vai-Kono **Vai** kɔ́’ɔ́, (Klingenheben & Kastenholz 2019) kɔ́lɔ́
1.5 Mokole **Kakabe** kɔ̀tɔ̀ *elder sibling*; **Mogofin** kɔ̀tɔ́ *elder brother*; 1.5 Mokole **Lele** kɔ̀rɔ, kɔye *elder sibling; old*
1.6 Manding **Mandinka** kòto, kòtoo *old, former; grow old; elder sibling*; **Xasonka** xòto *grow old; elder sibling*; **Maninka Kita** kòdo *grow old; elder sibling*; **Maninka Mori** kɔ̀dɔ *grow old; elder sibling*; **Bambara** kɔ̀rɔ *old, aged, ancient; elder*; **Jula Kong** kɔ̀rɔ́ *elder*; **Koro** kɔ̀ɔ̀rɔ́ *elder sibling*
2.1 Eastern **San S.** (Platiel 1974) kɔ̄rɔ̀
2.2 Southern **Dan W.** klɤ̀ɤ̀; **Mano** kòlò; **Guro** kɔ̄ā, kʊ̄ā (?)

OTHER NIGER-CONGO potential parallels:
Atlantic Bak Bijogo **Bijogo** ɔ-nkɔtɛ *elder sibling*

Atlantic N. Nyun-Buy **Nyun** (Cobbinah 2013) hɔɔt *tattered, old*; Tenda-Jaad-Biafada **Bedik** kɔ̄tɔ *elder sibling*; **Jaad** koto *elder*; Fula-Sereer **Fula** (Bah 2009) kotoo *elder brother*
Mel N. **Temne** kɔtɔ *brother*

@Ram, he-goat Bantu *koto, *kòdò – **Mande** *kɔdɔŋ. Reliability index: 4/6 (limited distribution in Bantu and in Benue-Congo in general).

PROTO-BANTU *koto, Regions 1: NE; Zones 3: EFG *he-goat*, *kòdò, Zones: FG

OTHER BENUE-CONGO
BENUE-CONGO W.: Defoid **Yoruba** àgùtẹ̀ ~ àgụ̀tẹ̀ *ram*

MANDE *kɔdɔŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+	+		+	+			+	+	

1.2 Susu-Jalonke **Susu** kɔ̀tɔ́ŋ-ì; **Jalonke** konton *male*
1.3 Jogo-Jeri **Jogo** báa kɔrɔ̨ŋ *he-goat*
1.5 Mokole **Mogofin** saaka kontoŋɛ *ram*; **Lele** bakɔɛn *he-goat*
1.6 Manding **Mandinka** kotoŋ; **Maninka Nyokolo** báákòtòŋ *he-goat*; **Maninka-Mori** kɔdɔn *male (of goat and some other animals)*; **Bambara** kɔrɔ, kɔrɔ̃ *male (of goat and some other animals)*; **Jula Kong** bàkɔ̀rɔ̀nɩ́ *he-goat*
1.9 Samogho **Seenku S.** bö-kɔ̌ɔ *he-goat*, səgä-kɔrɛ̂ / səgä-kɔrɛ̋ *ram*
2.1 Eastern **Bisa Lebir** kóró *ram*; **Boko** (Koelle 1854) káro *ram*

OTHER NIGER-CONGO potential parallels:
Atlantic Bak Balant **Balant Ganja** gɔ̀tɔ́ŋ / g-gɔ̀tɔ́ŋ *ram*
Atlantic N. **Bedik** hóndóŋ *ram*; **Basari** xóndó *ram*; **Konyagi** xòtô̱ / wæ̀-xòtô̱ *he-goat*; **Jaad** koton *he-goat*; **Jaad** (Ducos 1971) kotɔ̨ *ram*
Isolated NC **Limba** hu-konto

@Scrape Bantu *kòd – **Mande** *kɔŋdɔ. Reliability index: 4/6 (not attested outside Bantu and Mande).

PROTO-BANTU *kòd, Regions 5: NW SW Ce NE SE; Zones 10: BCEFGJKLNS; *kòd-ʊd, Zones: BEHKLMR, *kòd-ʊt EHL *scrape; rub*

MANDE *kɔŋdɔ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
					+				+	

1.6 Manding **Mandinka** kóórà *scrape, rake*; **Bambara** kòóró *drag, rake*; **Koro** kórówó *scour, scrape; scratch (with fingernails or claws)*

2.1 Eastern **San Mayaa** kɔndɔ *rake*

OTHER NIGER-CONGO potential parallels:
Ijo **Ibani** kɔ́rɔ́ *chip; scrape*, **Nembe** kòròríì
Kru **Dida** kɔ̄lʊ̀lī
Mel S. **Kisi** kòòndàá *scrape off or away*

@Scratch Bantu *kàd – **Mande** *kuga. Reliability index: 6/6.

PROTO-BANTU *kàd, Regions 3: SW Ce NE; Zones 6: DEHJLM

OTHER BENUE-CONGO
BENUE-CONGO E.: Bantoid Grassfields **Limbum** kʷàà *scrape*; Cross Upper **Obolo** kʷâ *scratch, scale off*, kʷát
BENUE-CONGO W.: Defoid **Yoruba** hā, hɔ̄, hṵ́ ~ yṵ́

MANDE *kuga

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
						+		+		+

1.7 Soninke-Bozo **Soninke** (Diagana 2013; Smeltzer & Smeltzer 2001) kágà; **Tiema Cewe** kia; **Jenaama Cliffs** kāgā *v scratch,* kágɛ̄ *n itch*; **Jenaama Jenne** kàgàà *n itch, itchy rash*; **Jenaama-Debo** (Daget et al. 1953; Smeltzer & Smeltzer 1995) kaga

1.9 Samogho **Jowulu** káán; **Dzuun** (Hochstetler 1996) kpɑɑ; **Duun Sieu** kpɑ; **Duun Kai** kʷɑ; **Duun Bananso** kʷɑ

2.2 Southern **Proto-Southern** *kù̱gá̱; **Dan E.** kāà; **Dan Kla** kāà; **Dan W.** kàâ; **Tura** káà; **Mano** kànā, kɔ̀ɔ̄ *scratch oneself*; **Guro** kɔ̄ɔ̄; **Mwan** káá *itch; scratch*; **Wan** kāgā; **Gban** kú̱á̱ *scratch; remove by scratching*; **Beng** kɔ́kɔ̀

OTHER NIGER-CONGO potential parallels:
Adamawa **Kare** kpá̱ *scratch oneself*; **Yi Kitulɛ** kʷà *scrape*
Gur **Boore** ʔá
Kwa **Proto-Ghana-Togo-Mountain** *kwàlí; **Attié** kʸā
Isolated NC **Gola** ɦwa̱na

@Snail Bantu *kódá, *kódó – **Mande** *kɔtɛ ~ *kɔtɔ. Reliability index: 5/6 (not attested outside Benue-Congo and Mande).

PROTO-BANTU *kódá, Regions 4: NW SW Ce NE; Zones 8: ABCDEGHM *snail sp.*, *kódó, Zones: ABC

OTHER BENUE-CONGO
BENUE-CONGO E.: Cross Lower **Proto-Lower-Cross** *é-kúòŋ / i-; Cross Upper **Proto-Upper-Cross** *kɔ́dò *snail, rope*

MANDE *kɔtɛ ~ *kɔtɔ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+			+		+	+		+	+	+

1.1 Southwestern **Proto-Southwestern** *kòlêŋ; **Mende** kòlê; **Loko** (Meeussen Ms.) kùe; **Bandi** kòole; **Zialo** kɔ̨dɛ-su-kole; **Looma** kóé; **Kpelle N.** kwèléŋ; **Kpelle S.** kōlēŋ ~ kɔ̄lēŋ

1.4 Vai-Kono **Vai** kèè'é; **Kono** cète

1.6 Manding **Maninka-Mori** kɔtɛ, kɔtɔ *small snail sp.; snail shell*; **Bambara** kɔtɛ ~ kwɔtɛ ~ kwètɛ ~ kètɛ *snail; snail shell; top, whirligig*

1.7 Soninke-Bozo **Tigemaxo** kórɔ̀; **Kelenga** kɔtɛ̀; **Sorogama** (Daget et al. 1953) kɔtee

1.9 Samogho **Dzuun** kɔ̀tɔ́
2.1 Eastern **Boko** kòlő; **Bokobaru** kɔ̀ntɔ̃
2.2 Southern **Guro** kɔ̰̀lɛ̰̀kɔ̰́lɛ̰́

OTHER NIGER-CONGO potential parallels:
Kwa **Chumburung** kòntó

@Squirrel Bantu *cíndí, *kʉndɪ – **Mande** *ŋ̀-kɛrɛŋ. Reliability index: 4/6 (not attested outside Benue-Congo and Mande).

PROTO-BANTU *cíndí, Regions 5: NW SW Ce NE SE; Zones 9: ABCDGJLRS *squirrel: Funisciurus lemniscatus (isabella)*, *kʉndɪ *squirrel*, *kìʊ C *flying squirrel: Anomaluridae*

OTHER BENUE-CONGO
BENUE-CONGO E.: **Limbum** sìì, Bantoid Grassfields Ring **Proto-Ring** *kàdà *ground squirrel*

MANDE *ŋ̀-kɛrɛŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+		+	+	+	+					+

1.1 Southwestern **Proto-Southwestern** *ŋ̀-kèlɛ-kulo *ground squirrel*; **Mende** kèíkùlò ~ kàíkùlò *ground squirrel*; **Bandi** gèlè-kùlò *ground squirrel*; **Zialo** kèlèkùlò *ground squirrel*; **Looma** kɛlɛ-ko *ground squirrel*
1.3 Jogo-Jeri **Jogo** cɪ́i̱n; **Jalkunan** cɛ̰̀ *ground squirrel (Xerus erythropus)*
1.4 Vai-Kono **Vai** kɛ̀ɛ̀kù'ò, (Klingenheben & Kastenholz 2019) kɛ́ɛ́kúlò *ground squirrel*
1.5 Mokole **Kakabe** kɛ̀rɛ̀n
1.6 Manding **Proto-Manding** *ŋ̀-kɛ̀rɛn; **Mandinka** kɛ̀rɛ̀ŋ *squirrel, ground squirrel*; **Maninka Nyokolo** kérɛ̀ŋ *squirrel, ground squirrel*; **Xasonka** kèreŋ *ground squirrel*; **Maninka Kita** kɛ̀rɛ̀n; **Maninka-Mori** kɛ̀rɛn; **Bambara** nkɛ̀lɛ̃ *ground squirrel*; **Jula Kong** gɛ̀rɛ-ní; **Koro** kɛ̃rɛ̃-nɪ̀ŵ *ground squirrel*

2.2 Southern **Guro** kīlí ~ kílí *ground squirrel*

Isolated Bangime síín *striped ground squirrel (terrestrial)*

@Throat-2 Bantu kòdò – **Mande** *kɔŋ. Reliability index: 5/6 (not attested outside Benue-Congo and Mande).

PROTO-BANTU *kòdò, Zones: GJS, *kòdò-mìdò, Regions 3: Ce NE SE; Zones 5: FLMNP *throat; gullet*

OTHER BENUE-CONGO Proto-Benue-Congo *kodoŋ *throat, voice*

MANDE *kɔŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+						+	+	

1.1 Southwestern **Proto-Southwestern** *kɔ̀ŋ́; **Mende** kòngá *back of the head, occiput; back of a knife blade*; **Loko** (Koelle 1854) kɔnga *neck*; **Bandi** kɔ̀n-gà(ŋ) *back of the head*; **Looma** kɔ́(g) *neck,* kɔ́-dá *throat*; **Kpelle N.** kɔ̀ŋ̌ *neck, collar*; **Kpelle S.** kɔ̄ŋ *neck, throat; top; rooftop*

1.2 Susu-Jalonke **Susu** kɔ̀n-yí *neck*; **Jalonke** kɔ̀ń *neck*

1.3 Jogo-Jeri **Jogo** wùrà-kɔ̂(n) *neck*; **Jeri** ku *neck*

1.9 Samogho **Seenku N.** gù *neck*

2.1 Eastern **Bokobaru** kòto *throat*

OTHER NIGER-CONGO potential parallels:

Adamawa Mbum **Kare** kûŋ

Atlantic Bak Joola **Joola Banjal** ɛ-xɔndɔr neck; **Gusilay** ɛkɔndɔr neck; **Kasa** kondor neck; **Bayot** ɛ-kɔndɔ neck

Atlantic N. Cangin **Laala** hɔn (< Proto-Cangin *xɔn swallow), Fula-Sereer **Fula** (Sweetman 1981) kondondol

@Turtle Bantu *kúdò – **Mande** *kuda. Reliability index: 6/6.

PROTO-BANTU *kúdò, Regions 4: NW SW Ce NE; Zones 5: BHJKN, *kúdòè, Zones: JLM, *kúdù, Regions 5: NW SW Ce NE SE; Zones 9: ABCDEHJRS, *kúdù EHL

OTHER BENUE-CONGO Proto-Benue-Congo *kulu

BENUE-CONGO E.: Bantoid Ekoid **Abanyom** ǹ-kúl / ɔ̀-; Cross Lower **Proto-Lower-Cross** *ú-kút / ŋ-; Cross Upper **Proto-Upper-Cross** *kʷún; Jukunoid **Jibe** ákūnì

MANDE *kuda

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+				+			+		+

1.2 Susu-Jalonke **Susu** kùrɛ́ *turtle; bicycle*; **Jalonke** kùrá

1.6 Manding **Mandinka** kùtà ~ kùtù; **Maninka Nyokolo** kútà; **Xasonka** kútà *small turtle*; **Bambara** kùla, kùta *small turtle*

1.9 Samogho **Jowulu** kwú

2.2 Southern **Mano** kúò; **Guro** kúlî; **Yaure** kűlű; **Mwan** kúdɛ̀; **Beng** kòú

OTHER NIGER-CONGO potential parallels:

Adamawa **Kare** ngùlúm; **Pere** kúūlɛ̀; **Samba Leko** kìlə́; **Yi Kitulɛ** kū / kūtī; **Yingilum** kù̱nú

Atlantic Bak Balant **Balant** (Wilson 2007) kur *water turtle*

Atlantic N. Tenda-Jaad-Biafada **Biafada** (w)-kuda / maa-huda; Nalu-Baga Fore-Pukur **Pukur** kʷɔ́l

Gur **Kurumfe – Oti-Volta** *kud

Kru **Dida** kwlā́; **Krumen-Tepo** kwlá; **Bete Daloa** kʊlà; **Godie** kwǎ̀là; **Koyo** kólā

Mel N. **Temne** a-konto / ɛ-konto *tortoise shell (the whole, upper and lower)*

Ubangi **Linda** kúlé *turtle sp.*; **Mundu** kùndā

@War Bantu *kóndò – **Mande** *kɔwɔ. Reliability index: 4/6 (limited distribution in Mande; poorly attested outside Benue-Congo and Mande).

PROTO-BANTU *kóndò, Regions 4: SW Ce NE SE; Zones 8: EGKLMNPS

OTHER BENUE-CONGO Proto-Benue-Congo *kondu *war, quarrel*
BENUE-CONGO E.: Cross Lower **Proto-Lower-Cross** *é-kóŋ / a-

MANDE *kɔwɔ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+										

1.1 Southwestern **Proto-Southwestern** *kɔ́wɔ́; **Mende** kɔ́ *war, fight; play; to fight*; **Loko** kɔ́ *war, fight; to fight*; **Bandi** kɔ̀; **Zialo** kɔ́ *war, fight; to fight*; **Looma** kɔ̀ɔ, kɔ̀wɔ *war, fight*; **Kpelle N.** kɔ́ *fight, quarrel*; **Kpelle S.** kɔ́ *war, fight; to fight*

OTHER NIGER-CONGO potential parallels:
Dogon **Najamba** kɔ̀mbɛ́-ngó / kɔ̀mbɛ́; **Jamsay** kɔ̀mɔ́

@Wood Bantu *kónì *firewood*, *kóì *firewood* – Mande *kɔ̃. Reliability index: 5/6 (limited distribution in Mande).

PROTO-BANTU *kónì, Regions 5: NW SW Ce NE SE; Zones 14: ABCDEGHKLMNPRS *firewood*, *kònì, Zone: J, *kóì, Regions 4: NW NE SE; Zones 6: BCEFJP *firewood*

OTHER BENUE-CONGO Proto-Benue-Congo *kwoni *firewood*, *kwon *tree*
BENUE-CONGO E.: Bantoid Ekoid **Abanyom** è-kón / ŋ *firewood*; Jukunoid **Proto-Jukun** *kun *tree*; Platoid **Hasha** ī-kōn kàrà / kú-kōn kàrà *firewood*

MANDE *kɔ̃

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
			+	+				+		

1.4 Vai-Kono **Vai** kɔ̌ŋ *tree, stick, wood*; **Kono** kɔ̰ *tree, stick*
1.5 Mokole **Lele** kɔn, kwɔn ~ kòɛ́ń; *wood (fuel, timber)*; **Koranko** kɔ̰ *tree*
1.9 Samogho **Dzuun** (Hochstetler 1996) kɔ *stick*; **Duun Sieu** kɔ *stick*

OTHER NIGER-CONGO potential parallels:
Adamawa **Tupuri** kōò *tree*
Atlantic Bak Manjak **Manjak** ko *tree*; **Mancagne** ko *tree*

@**Yam** **Bantu** *kòá, kódò – **Mande** *kuu. Reliability index: 5/6 (limited distribution in Bantu).

PROTO-BANTU *kódò, Zones: ADJ *yam*, *kòá ABEH *yam sp.*

OTHER BENUE-CONGO Proto-Benue-Congo *kod
BENUE-CONGO E.: Bantoid Grassfields Ring **Proto-Ring** *kókìŋ *cocoyam*, *kài; Cross Upper **Obolo** úkʷá; Jukunoid **Proto-Jukun** *kít
BENUE-CONGO W.: Defoid **Yoruba** ākɔ̄ɔ̄ʃū *yam sp.*

MANDE *kuu

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+	+	+	+	+	+			+	+

1.2 Susu-Jalonke **Susu** kúù *yam (sp.)*
1.3 Jogo-Jeri **Jogo** wúó, (Braconnier n.d.) wó; **Jeri** wú; **Numu** wó
1.4 Vai-Kono **Vai** kóó *wild yam*, (Klingenheben & Kastenholz 2019) kówó *yam sp.*; **Kono** (Koelle 1854) kuu
1.5 Mokole **Kakabe** kúú; **Lele** kú
1.6 Manding **Mandinka** kúú-ɲámbì; **Xasonka** kú; **Maninka-Mori** kú *yam; tuber, bulb*; **Bambara** kú *yam; tuber, bulb*; **Jula Kong** kú; **Koro** kú; **Koya** hú
1.7 Soninke-Bozo **Gadsaga** (Koelle 1854) kuu
2.1 Eastern **San S.** kuu *yam; sweet potato*
2.2 Southern **Dan E.** kűù; **Dan W.** kú

OTHER NIGER-CONGO potential parallels:
Adamawa **Pere** kūānū *yam (sp.)*
Atlantic N. Tenda-Jaad-Biafada **Konyagi** ù-nkwàv / vù-nkwàv
Dogon **Jamsay** kúù; **Mombo** kúúbá / kụ̀ụ̀ bállà; **Najamba** kùù-nìí
Gur **Boore** ʼúū / ʼūó *yam; cassava*; **Pana** kú / kúyà

Kwa **Logba** ágù *yam plant which fruits at the top of the plant*; **Chumburung** kú-jó

Mel N. **Temne** a-ku *yam* (< Manding); **Landuma** ku *yam (sp.)*

Isolated Bangime kúù bùɥé *wild yam*, kúù ʃíjɔ́ *white yam*

9.2.4.2. Bantu *g- : Mande *g-

@Hump Bantu *gòngò *back, backbone; hump* – **Mande** *gʊŋgʊ? Reliability index: 5/6 (not attested in Benue-Congo outside Bantu).

PROTO-BANTU *gòngò, Regions 5: NW SW Ce NE SE; Zones 15: ABCDEFGHJKLMNPR *back, backbone*, Zones 2: LM *hump*; *gònjò C, *jònjó J

MANDE *gʊŋgʊ?

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
		+			+	+			+	+

1.3 Jogo-Jeri **Jogo** jìgá *hump (of hunchback)*, jìká *hump (of cow)*; **Jalkunan** jègì

1.6 Manding **Maninka-Mori** jùnku, jònko *hump of a camel*; **Bambara** jʊ̀kũ, jɔ̀kɔ̃ *hump (of an animal)*

1.7 Soninke-Bozo **Soninke** jùngô *hump (of animal); angle, curve*

2.1 Eastern **San S.** gũũ; **Bisa Lebir** kɔ̀ɔ́, kɔ̀ɔ́; **Bokobaru** kɔ̃ɔ *hump (of cow or camel)*

2.2 Southern **Guro** kɔ́nɔ́; **Mwan** kɔ̄ŋ̄gɔ̄ ~ kɔ̄ŋ̄ɔ̄;

OTHER NIGER-CONGO potential parallels:

Atlantic Bak Joola **Joola Banjal** bu-goŋ; Manjak **Manjak** gung; **Mancagne** gun; *hunchback*; **Pepel** ŋɔŋ

Atlantic N. Wolof **Wolof** jegen *hump of an animal*; Fula-Sereer **Proto-Fula-Sereer** *ƴong ~ *Jong; Cangin **Laala** jəgən *hump of a cow, a camel*; Nalu-Baga Fore-Pukur **Nalu** cuunk-ut *bump, protuberance*

Dogon **Jamsay** jûŋ *hump of an animal*; **Najamba** jóngɔ̀ɔ̀ / jóngɛ̀ɛ̀ *hump of an animal*; **Tommo-So** jóngɔ́ *hump of an animal*; **Bankan-Tey** jóngɔ̀, zùngá *hump (of animal)*

Gur **Churama** guugu / gonŋą

Comments: Cf. a similar form in **Zarma** (Songhay) *zùnkú* ‘hump of an animal’.

@Millipede Bantu *gongo – **Mande** *gɔ̃gɔ̃. Reliability index: 3/6 (limited distribution in Mande; not found outside Bantu and Mande).

PROTO-BANTU *gongo, Zones: DH, *góngòdó, Regions 5: NW SW Ce NE SE; Zones 10: CEFGHJMNRS, *góngoda DJLR, *jòngòdà L, *ɲodogoto J

MANDE *gɔ̃gɔ̃

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+			+							

1.1 Southwestern **Kpelle N. (Yomou)** ɲɔ̀ŋɔ́
1.4 Vai-Kono **Vai** kɔ̀ŋɔ̀

@Wilderness Bantu *gòndà *forest, garden, luxuriant vegetation* – **Mande** *gola. Reliability index: 5/6 (not attested in Niger-Congo outside Benue-Congo and Mande).

PROTO-BANTU *gòndà, Regions 5: NW SW Ce NE SE; Zones 12: ABCDEFGKMNPR *forest, garden, luxuriant vegetation*

OTHER BENUE-CONGO

BENUE-CONGO E.: Jukunoid **Proto-Jukun** *gʸu

MANDE *gola

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+		+	+	+		+			

1.1 Southwestern **Mende** ngòlâ; **Loko** ngora, (Meeussen Ms.) ngòlá; **Bandi** ngòláì; **Zialo** gòòlà; **Looma** (Sadler 2006; Heydorn 1971) guya, goya; **Kpelle N.** wèlâ, wèlê; **Kpelle S.** wōlâ
1.2 Susu-Jalonke **Susu** wúlá *wilderness*; **Jalonke** wúláá *wilderness*

1.4 Vai-Kono **Vai** wó'á
1.5 Mokole **Kakabe** wúla *wilderness*; **Mogofin** wúula *wilderness*; **Lele** wɔ̀la; **Koranko** wúla *wilderness*
1.6 Manding **Proto-Manding** *wúla *wilderness*; **Mandinka** wúla *wilderness*; wúla *wilderness*; **Maninka Kita** wúla *wilderness*; **Maninka-Mori** wúla *wilderness*; **Bambara** wúla *wilderness*
1.8 Soninke-Bozo **Soninke** gùnné *wilderness, bush; foreign country*

9.2.4.3. Bantu *k- : Mande *x-/*ɣw-

@Bitter: Bantu *kádì – **Mande** *ɣɔ̃Lã. Reliability index: 4/6 (not attested outside Bantu and Mande).

PROTO-BANTU *kádì, Regions: 5: NW SW Ce NE SE; Zones 8: DFGJLMNS *bitter, sour; sharp; fierce*

MANDE *ɣɔ̃Lã

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+	+	+	+	+	+

1.1 Southwestern **Proto-Southwestern** *ŋwána; **Mende** ŋɔ́nà, ŋɔ́à *vi be bitter; be ugly*; **Bandi** ŋàlá; **Looma** (Sadler 1951) ŋana(g), ŋala(g), wa̱la(g), wana(g), ŋɔnɔ(g); **Looma Woi-Balagha** (Vydrin 1987) a̱ŋaa; **Kpelle S.** ŋwáná *adj bitter; angry; n gall bladder; poison, venom of a snake*; **Kpelle N.** ŋwáná *adj bitter; n bile; venom of a snake*
1.2 Susu-Jalonke **Susu** (Touré 1994) xɔ́nɔ́; **Jalonke** qɔ́nɛ̀
1.3 Jogo-Jeri **Jogo** (Kastenholz 1996) ŋú(n); **Jeli** (Kastenholz 2001) ŋúŋ
1.4 Vai-Kono **Vai** kóná; **Kono SL** (Kastenholz 1996) kóna
1.5 Mokole **Kakabe** kúna; **Lele** kóna *n bile,* kune *vq be bitter*
1.6 Manding **Proto-Manding** *xúnan; **Mandinka** kúnaŋ; **Jaxanka** kuna; **Xasonka** xúna *vq be bitter; n poison*; **Maninka Kita** kúna; **Maninka-Mori** kúnan, kúna; **Bambara** kúnã, kúna *vq be bitter, acrid; be unpleasant; be hurting, be burning (of sun); be niggardly; be envious (of eyes); (rare) be doubtful*

2.2 Southern **Proto-Southern** *yo̱la̱; **Mano** yo̱o̱; **Guro** ya̱la̱le̱; **Yaure** ya̱ya̱; **Mwan** ye̱e̱/yi̱e̱

@Deny Bantu *káan *deny, refuse* – **Mande** *xɔ̃ *refuse*. Reliability index: 5/6 (not attested outside Benue-Congo and Mande).

PROTO-BANTU *káan, Regions 3: Ce NE SE; Zones 8: EFGLMNPS *deny, refuse*

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Grassfields Ring **Proto-Ring** *kàní *to swear (deny, refuse)*; **Limbum** káán *deny, refuse*

MANDE *xɔ̃ *refuse*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
					+			+	+	+

1.6 Manding **Mandinka** kóŋ *loathe, hate*; **Xasonka** xón *refuse to give smth.; protect from*; **Maninka-Mori** kɔ́n *prohibit; break off; hate; give up (a habit)*; **Bambara** ko̱ *prohibit; isolate; dismiss*

1.9 Samogho **Seenku S.** kṵi̱ nɛ̃ *deny*

2.1 Eastern **Bisa Lebir** ka̱a̱ *refuse*

2.2 Southern **Dan E.** kɔ̃ *refuse*; **Goo** kòò *refuse*; **Mano** kɛ́í *refuse*

OTHER NIGER-CONGO potential parallels:

Mel S. **Sherbro** kənklɛni

@Difficult Bantu *kód *be strong; be hard; be difficult* – **Mande** *ɣwɛtɛ *strong, hard, difficult*. Reliability index: 4/6 (limited distribution outside Bantu and Mande).

PROTO-BANTU *kód, Regions 4: SW Ce NE SE; Zones 8: DGHLMNRS *be strong; be hard; be difficult*

OTHER BENUE-CONGO

BENUE-CONGO E.: Cross Upper **Proto-Upper-Cross** *kpoDe (?) *strong, hard*

MANDE *ɣwɛtɛ *strong, hard, difficult*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+	+	+	+	+	+				+

1.2 Susu-Jalonke **Susu** xɔ̀rɔ̀xɔ́ *be hard, difficult; suffer*; **Jalonke** qɔ́rɛ́qɛ̀, qɔ́rɔ́qɔ́ *be hard, difficult*

1.3 Jogo-Jeri **Jeri** kpɛ̰ (?) *vi get tired; n tiredness*

1.4 Vai-Kono **Vai** kpɛ̀’ɛ́ *be difficult, severe, hard; be hard (not soft); be strong; be expensive (price)*

1.5 Mokole **Kakabe** gbɛ̀lɛ, bɛ̀lɛ; **Lele** kpɛlɛ *be hard*

1.6 Manding **Mandinka** kòlèŋ; **Maninka Nyokolo** kólè; **Xasonka** xólé; **Maninka Kita** géle *be hard (not soft)*; **Maninka-Mori** gbɛ̀lɛn *be difficult; be hard (not soft); be expensive (price)*; **Bambara** gwɛ̀lɛ̃ *be difficult, hard (not soft), robust; be in crisis (country); be prudish (woman), brave, resonant (voice), expensive*

1.7 Soninke-Bozo **Soninke** qótò *be/become hard, difficult, heavy; overcome*, qótè *hard, difficult, heavy*; **Tigemaxo** xɔ́rɔ́ŋ *difficult, expensive; stingy*; **Kelenga** hɔ́rɔ́-ɔ́ *difficult, expensive*; **Tiema Cewe** koro

2.2 Southern **Proto-Southern** *gbɛlɛ; **Dan E.** gbɛ̋ɛ̋ *adj difficult (work, time); dangerous; strong (a drink), hot (sun), bright (light); strong vigorous (person); hard, tight; important*; **Dan W.** gbéê *adj difficult; dangerous; hard, solid; strong; important; vt compel*; **Dan Kla** gbɛ̋ɛ̋ *adj strong; hard (character); high (price); very bad*; **Goo** gbɛ̋ɛ̋ *adj strong*; **Wan** kpālɛ́ *adj difficult; hard, solid*; **Beng** glë

OTHER NIGER-CONGO potential parallels:

Adamawa Mbum Tupuri gäälí

Ijo **Proto-Ijo** (Williamson 1992) kòrɔ̀ *be/become strong, hard*

Comments: Williamson (1992: 396) reconstructs Proto-Atlantic-Congo *-*kɔdɔ* ‘be/become strong, hard’.

@Dust Bantu *kòngó *fog; dust* – **Mande** *ɣwãɣwã *dust in the air*. Reliability index: 4/6 (not attested outside Bantu and Mande).

PROTO-BANTU *kòngó, Regions 4: SW Ce NE SE; Zones 9: DEGJKLMNS *fog; dust*, *kòngógó, Zones: EFGJ, *kùùkù DJ *dust*

MANDE *ɣwãɣwã *dust in the air*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+	+		+	+			+		

1.2 Susu-Jalonke **Jalonke** qɔ̀nqɔ́ŋ̀; **Yalunka** gbangban
1.3 Jogo-Jeri **Jeri** gbángbaŋ
1.5 Mokole **Kakabe** gbàngban; **Lele** kpankpan; **Koranko** gbə̀gbə̀
1.6 Manding **Mandinka** kánkàŋ *dust in the air*; **Maninka Nyokolo** kànkàŋ *dust in the air*; **Xasonka** xánxán *dust in the air*; **Maninka Kita** kánkán; **Maninka-Mori** gbàngban *dust in the air*; **Bambara** gɔ́ngɔ̃, gángã, gwángwã *dust in the air*; **Jula Kong** kpə́gbə́ ~ gbə́gbə́
1.9 Samogho **Jôwulu** kpánkpə̃ŋ; **Dzuun** kpánkpán; **Duun Zantigila** kpɛ̰kpɛ̰nɑ; **Duun Sieu** pɑŋʷɑ; **Duun Kai** pʷɑ̰ŋʷɑ̰; **Duun Bananso** pɑ̰ŋpʷɑ̰; **Kpen** kpə́gbə̀

@Knot Bantu *kúndò – **Mande** *Xudu. Reliability index: 4/6 (not attested outside Bantu and Mande).

PROTO-BANTU *kúndò, Regions 3: Ce NE SE; Zones 8: DEGJMNPS *knot*, Zones 1: J *fist, knock*

MANDE *Xudu *knot, fist*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+			+	+				+	

1.2 Susu-Jalonke **Jalonke** qùtú
1.5 Mokole **Kakabe** kùdù *fist, knot, ball*
1.6 Manding **Mandinka** kùtu *form a knot, ball*; **Maninka Nyokolo** kútù *ball, bump, knot, cyst*; **Xasonka** xùtu *spherical object, ball*; **Maninka-Mori** kùdu *ball, projection, lump; cyst; pimple, bump;*

clod (of earth); piece; knot; articulation; ear (of a cereal); tuber; spasm; **Bambara** kùru *ball, lump, block; cyst; pimple, bump; piece; knot; articulation; anxiety; goal (in football)*

2.1 Eastern **San Mayaa** kuro *knot; articulation*

@Squeeze **Bantu** *kám *squeeze; wring* – **Mande** *xaɓṼ *to milk; pinch*. Reliability index: 5/6 (limited distribution in Mande).

PROTO-BANTU *kám, Regions 5: NW SW Ce NE SE; Zones 15: BCDEFGHJKLMNPRS *squeeze; wring*, *kám-ʊd, Zones: BCFGHJKLNRS

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Ekoid **Abanyom** kâm; Bantoid Grassfields **Limbum** káá; Bantoid Grassfields Kom **Kom** kām; Bantoid Grassfields Ring **Proto-Ring** *kámì; Jukunoid **Proto-Jukun** *kam *squeeze, wring*

MANDE *xaɓṼ *to milk; pinch*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
						+	+			

1.7 Soninke-Bozo **Soninke** qámú *to milk*, qámí *be milked*

1.8 Bobo **Bobo S.** kāmɛ̄ *pinch*

OTHER NIGER-CONGO potential parallels:

Adamawa **Day Bouna** hām *catch; pinch; steal*; **Yi Kitulɛ** yām

Atlantic N. Nyun-Buy **Kobiana** (Merrill 2017) waam *squeeze (fruit)*; Tenda-Jaad-Biafada **Bedik** u-hám / kómú *squeeze, to milk*; **Bapen** ɛ-kam ɛd i-ɣeʃ *to milk*; **Basari** a-xɑ̀w̃ *to milk, twist*; **Konyagi** ì-kæ̀w̃ *to milk, press, squeeze*; **Fula** (Bah 2009) haamugol *wring, press strongly*

Dogon **Jamsay** kɔ́w̃ɔ́ *press out (oil, from fruit pits or nuts, in several stages)*; **Mombo** kámmì *press out (oil, from fruit pits or nuts, in several stages)*; **Najamba** kám / kàmè *press out (oil, from fruit pits or nuts, in several stages)*; **Nanga** kámá *squeeze (e.g. arm) with one's hand*; **Tommo-So** kámá *press out (oil, from fruit pits or*

nuts, in several stages); **Bankan-Tey** kámá *squeeze, mash (smth. soft)*

Gur **Pana** kám *to press*

9.2.4.4. Bantu *g- ~ *k : Mande *ɡ-

@Leopard Bantu *gòì – **Mande** *ɡʊ̀lɪ. Reliability index: 6/6.

PROTO-BANTU *gòì, Regions 5: NW SW Ce NE SE; Zones 12: ABCDEHJKMNRS

OTHER BENUE-CONGO Proto-Benue-Congo *kpoŋi

BENUE-CONGO E.: Bantoid Grassfields **Proto-Grassfields** *g(w)è`; Ekoid **Abanyom** ǹ-gbɛ̀ / ɔ̀-; Cross Lower **Proto-Lower-Cross** *é-kpè / i-; Cross Upper **Obolo** égbè-ìkìkò; **Proto-Upper-Cross** *kpè; Jukunoid **Proto-Jukun** *kù

BENUE-CONGO W.: Edoid **Proto-Edo** *E-kpɛ̰ / I

MANDE *ɡʊ̀lɪ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+		+	+	+	+				+	+

1.1 Southwestern **Proto-Southwestern** *kwɔ́lí; **Mende** kɔ́lí *leopard; greed, meanness, be mean, refuse to give*; **Loko** kɔ́í; **Bandi** kɔ̀lîì; **Zialo** kɔ̀lì; **Looma** kòì; **Kpelle N.** kwɛ́lí; **Kpelle S.** kɔ́lí, (Westermann & Melzian 1930) kwɛ́lí ~ kwɔ́lí

1.3 Jogo-Jeri **Jogo** kɔl, (Braconnier n.d.) kɔ́lé, kóló

1.4 Vai-Kono **Vai** kó'í, (Klingenheben & Kastenholz 2019) kɔ́lí; **Kono** kúí, (Koelle 1854) kuli

1.5 Mokole **Kakabe** kólo; **Koranko** kúlu

1.6 Manding **Mandinka** sóli; **Maninka-Mori** sóli

2.1 Eastern **San S.** goe

2.2 Southern **Proto-Southern** *gʊ́lɛ̀; **Dan E.** gɔ̃́; **Dan Kla** gɔ̃́; **Dan W.** gɔ́ɔ̂; **Tura** gɔ̃́; **Mano** gɔ́; **Guro** gɔ̄lí-zàlá

OTHER NIGER-CONGO potential parallels:

Adamawa **Samba Leko** gə̄

Gur **Gurunsi – Oti-Volta** *gbin *lion; leopard*; **Kabiye** kpóù / kpóŋ̀
Kru **Bakwe** gbè
Kwa **Ikposo** ɛ̄kpɔ̄

9.2.4.5. Bantu *g- : Mande *ɣ-

@Rock **Bantu** *gòdò *hill; heap, antheap* – **Mande** *Xudu̍ *stone, mountain, elevation*. Reliability index: 4/6 (limited distribution in Bantu and in other Niger-Congo branches).

PROTO-BANTU *gòdò, Regions 4: NW SW Ce NE; Zones 6: BDFJLR *hill*, Zones 8: FGJKLMNS *heap, antheap*

OTHER BENUE-CONGO

BENUE-CONGO E.: Platoid **Sambe** gʒ̄ *mountain*; **Hasha** ì-gón tē / gú-gón tē *hill*

MANDE *Xudu̍ *stone, mountain, elevation*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
				+	+	+			+	

1.5 Mokole **Kakabe** kùru *stone*; **Mogofin** kùrú *stone; pile*; **Lele** kùru, kùyi *stone;* **Koranko** kùru *stone*

1.6 Manding **Xasonka** kúrù *mountain, hill, stone*; **Maninka Kita** kùrù *mountain, hill, stone*; **Maninka-Mori** kùru *mountain, hill, stone*; **Bambara** kùlú *mountain, hill, stone*; **Jula Kong** kùrú *mountain*; **Koya** krù´ *rock, stone; mountain*

1.7 Soninke-Bozo **Tigemaxo** xúrù *bulge, elevation, projection, protrusion, outcrop; small island in river*; **Kelenga** hùrù *island in river*; **Jenaama Cliffs** kùlù

2.1 Eastern **San S.** kɔlɔ *stone, gravel*; **Bokobaru** gòro *ridge*

OTHER NIGER-CONGO potential parallels:

Adamawa **Pere** gūrɛ̀ *mountain*
Gur Gurunsi **Pana** kúrú / kúrúyà hill
Ubangi Banda **Mbanja** kòtò hill

Comments: This root could potentially be included in the Swadesh 100 Wordlist.

@Snore Bantu *gòn *snore; sleep; lie down* – **Mande** *ɣɔrəŋdɔ. Reliability index: 5/6 (not attested in Benue-Congo outside Bantu).

PROTO-BANTU *gòn, Regions 4: SW Ce NE SE; Zones 12: DFGHJKLMNRPS *snore; sleep; lie down*

MANDE *ɣɔrəŋdɔ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+	+				

1.1 Southwestern **Proto-Southwestern** *kòrəndíŋ̀; **Mende** kɔ̀ndî; **Bandi** (Koelle 1854) gurəndɔɔ; **Kpelle N.** kɔ̀nɔ́ɔ̀ŋ ~ kɔ̀nɔ̌; **Kpelle S.** kɔ̰̄lɛ̂ *snore; crow*
1.2 Susu-Jalonke **Susu** xùrùndún *snore; roar*
1.3 Jeri gɔ̀rɔndɔ
1.4 Vai-Kono **Kono** ŋɔ̀ɔndi
1.5 Mokole **Koranko** kìrindi
1.6 Manding **Mandinka** kòrondo, kòronda; **Xasonka** xìrindi; **Maninka-Mori** kɔ̀rɔndɔ; **Bambara** gɔ̀rɔntɔ, gɔ̀rɔndɔ *snore; bellow*; **Jula Kong** gɔ̀rɔ̰̀dí; **Koro** gɔ́rɔ́ndɔ̀gɔ̀
1.7 Soninke-Bozo **Soninke** xiirindi; **Tigemaxo** xóróndò; **Kelenga** gɔ́rɔ́ndɔ̀ (< Bambara?); **Jenaama Jenne** gɔ̀rɔ̀ⁿtɔ́ (< Bambara?)

OTHER NIGER-CONGO potential parallels:
Adamawa Mbum **Tupuri** hòngòr-gɛ̀
Dogon **Jamsay** gɔ̀lɔ̀rɔ́, **Mombo** gɔ́rɔ́ndɔ́
Ijo **Nembe** ɔ̰̀gɔ̀rí
Kwa Nyo **Chumburung** kpɔ̀ɔ̀rí
Isolated NC **Limba** ŋongɔri

Comments: This root is probably onomatopoeic in origin.

@Stranger Bantu *gènì – **Mande** *ɣɔ̃yɛ̃. Reliability index: 5/6 (not attested in Benue-Congo outside Bantu).

PROTO-BANTU *gènì, Regions 5: NW SW Ce NE SE; Zones 12: ACDEFGJLMPRS *stranger; visitor*, *jèŋ̀ì BC, *gèndà CFHJLM *traveller; stranger*

OTHER BENUE-CONGO
BENUE-CONGO E.: Bantoid Grassfields **Proto-Grassfields** *gèn`
MANDE *ɣɔ̃yɛ̃

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+								+	

1.1 Southwestern **Looma** wɛ̀ɛ̀ ~ wɔ̀ị; **Kpelle N.** ŋʷéá; **Kpelle S.** ŋɔ̄yâ, ŋɔ́yā
1.2 Susu-Jalonke **Susu** xɔ́ɲé; **Jalonke** qɔ́ɲé
2.1 Eastern **San Mayaa** guli

OTHER NIGER-CONGO potential parallels:
Atlantic N. Fula-Sereer **Sereer** genar *be a stranger; be host; to host*, kenar o...ox / genar w *host, stranger*

9.2.5. Initial labiovelar consonants

9.2.5.1. Bantu *p- : Mande *kp-

@Bend Bantu *pìnd *fold; hem; plait* – **Mande** *kpiliŋ *bend, twist*. Reliability index: 4/6 (limited distribution outside Bantu and Mande).

PROTO-BANTU *pìnd, Regions 5: NW SW Ce NE SE; Zones 12: ABEFGHKLNPRS *fold; hem; plait*, *pèt EGJLMNRS *vt bend, fold*, *pút ABHR *vt bend, fold; wrap up*, *pút-ɪk BGHNR *vt bend, fold; wrap up*, *pɪn FJ *fold up*, *pìng JNS *interlace; plait*, *pìat LM *make rope by twisting*

OTHER BENUE-CONGO
BENUE-CONGO W.: Edoid **Urhobo** kpìr̩ì *fold*
MANDE *kpiliŋ *bend, twist*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+							+			+

1.1 Southwestern **Proto-Southwestern** *kpílíŋ; **Mende** kpíní *twist*; **Loko** kpị(ŋ) *twist*; **Bandi** kpèli *spin*; **Looma** kpílí(g) *bend; twist*;

Looma (Sadler 2006) kpíinɛ̀(g) *bend; twist*; **Kpelle N.** kpíníŋ *bend, ply*; **Kpelle S.** kpíníŋ ~ kpénéŋ *wrap; fold; curl up; sling; twist; roll; turn; bend; upset, be nauseated (stomach)*

1.8 Bobo **Bobo S.** kpìlē *bend, twist*

2.2 Southern **Proto-Southern** *kpi̱lì̱; **Tura** kpìì *vi bend oneself backwards; vt bend backwards*; **Mano** gbī̱lī̱ *bow, lower oneself; take up arms* (< Kpelle?); **Guro** pī̱lī̱ *vi bend down; vt fold, ply*

OTHER NIGER-CONGO potential parallels:

Gur Gurunsi **Pana** pílí *to fold; to roll up; to form a fist*, Cerma-Curama **Curama** pigɪ *fold or refold*

@Scabies **Bantu** *pèdè *the itch; scabies; bug* – **Mande** *kpeleŋ *itch*. Reliability index: 4/6 (not found in Benue-Congo outside Bantu; limited distribution in Mande).

PROTO-BANTU *pèdè, Regions 4: SW Ce NE SE; Zones 10: EFGHJLMNPS *n itch; scabies; bug*

MANDE *kpeleŋ *itch*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+										

1.1 Southwestern **Proto-Southwestern** *kpélẹ́ŋ; **Mende** kpélé *n itch, local skin irritation*; **Looma Vekema** (Vydrin 1987) kpele *vi itch*; **Looma Weima** (Vydrin 1987) kpeli(g) *vi itch*

OTHER NIGER-CONGO potential parallels:

Kru **Bassa** pèɖè *the itch; scabies; bug*

Kwa **Proto-Potou-Akanic** *pĩ̃lĩ̃; **Proto-Akanic** *fĩ̃lĩ̃; **Attié** kèlé

Comments: Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu **pĩ̃lĩ̃*.

@Shin **Bantu** *píndí *shin; leg; bone* – **Mande** *kpalɛŋ ~ *xwalɛŋ. Reliability index: 5/6 (a semantic shift).

PROTO-BANTU *pàdí, Regions 4: NW SW Ce NE; Zones 4: CGNR *foot*; *píndí, Regions 4: NW SW Ce NE; Zones 10: ABCDEGHKMR *shin; leg; calf; bone*

OTHER BENUE-CONGO Proto-Benue-Congo *kpel *leg*

BENUE-CONGO E.: Bantoid Grassfields **Proto-Grassfields** *fǴn *leg, tibia*; **Limbum** nfīī *leg*; Bantoid Grassfields Kom **Kom** ɔ̄fwén *leg*; Cross Lower **Proto-Lower-Cross** *í-kpát / ŋ- *foot*; Cross Upper **Proto-Upper-Cross** *kpàd *foot*; Jukunoid **Proto-Jukun** *pwàn *leg*

MANDE *kpalɛŋ ~ *xwalɛŋ

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+	+	+	+	+	+	+	+			+

1.1 Southwestern **Proto-Southwestern** *kpèlêŋ; **Zialo** kpelekaso *leg*; **Kpelle S.** kpêleŋ *knee,* Westermann & Melzian 1930 kpele, kpeleŋ *shinbone*; **Kpelle N.** kpèléè *front part of leg*

1.2 Susu-Jalonke **Susu** bèléŋì, xɛleŋi *shin*; **Jalonke** qèléŋ *shin*

1.3 Jogo-Jeri **Jalkunan** kpɛ́nɛ́ *shin*

1.4 Vai-Kono **Vai** kpɛ̀'èŋ *shinbone*

1.5 Mokole **Kakabe** gbèlèn *shin*; **Mogofin** bèléŋè *shin*

1.6 Manding **Mandinka** kèlèŋ, kùlèŋ *shin*; **Xasonka** xoleŋ *calf of leg*; **Maninka-Mori** gbèlɛn *shin*; **Bambara** gèlɛ̨, gènɛ̨ *shin*; **Jula Kong** gbènɛ̨́kárá *shin*; **Koya** gbrèń *shin*

1.7 Soninke-Bozo **Soninke** káránkárè *shin* (?)

1.8 Bobo **Bobo** kpānòn, pl. kpānà *shin, calf of leg*

2.2 Southern **Proto-Southern** *kpálèŋ; **Dan Gwɛɛtaa** kplàà *shin*; **Mwan** kpá̱á̱ *shin*; **Wan** kplɛ́ŋ *shin*

OTHER NIGER-CONGO potential parallels:

Atlantic Bak: Manjak **Manjak** mpend *hand*

Atlantic N. Nyun-Buy **Kasanga** tɛ-ped / jɛ-fɛd *leg*; Tenda-Jaad-Biafada **Konyagi** ì-fǽry / wǽ-pǽry *foot*

Gur **Proto-Oti-Volta** *kpe *thigh*

Mel S. **Kisi** pèlèí / pèlŏŋ *foot, leg*

Comments: This root could potentially be included in the Swadesh 100 Wordlist.

@Shoulder **Bantu** *pègà, *panga *shoulder, shoulder blade* – **Mande** *kpaŋkiŋ. Reliability index: 4/6 (limited distribution in Mande and in other Niger-Congo families, outside Bantu).

PROTO-BANTU *pègà, Regions 2: NW Ce; Zones 6: BCDLMN, *panga, Zones: CRS *shoulder, shoulder blade*

OTHER BENUE-CONGO **Proto-Benue-Congo** *penga *shoulder*
BENUE-CONGO E.: GRASSFIELDS **Proto-Grassfields** *mbèk(-a?), JUKUNOID **Proto-Jukun** *fʷà *shoulder*

MANDE *kpaŋkiŋ *shoulder*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+										

1.1 SOUTHWESTERN **Proto-Southwestern** *kpàŋkîŋ *shoulder*; **Mende** kpàkî *shoulder and upper arm*; **Loko** kpàkî; **Bandi** kpàkí(ŋ) *shoulder and upper arm*; **Zialo** kpàkì(g); **Looma** kpákí(g) *shoulder*; **Kpelle S.** kpa̰a̰ī *arm*

OTHER NIGER-CONGO potential parallels:
GUR **Proto-Oti-Volta** *kpan *hand*

@Whiten **Bantu** *pe – **Mande** *kpɛ *white*. Reliability index: 3/6 (limited distribution outside Mande).

PROTO-BANTU *pe, Regions 3: NW SW Ce; Zones 3: CHL *white*

OTHER BENUE-CONGO BENUE-CONGO E. BANTOID GRASSFIELDS **Limbum** fɪ́fɪ́b *white*; **Kom** fə̄f *be white*

MANDE *kpɛ *white*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
	+	+	+	+	+		+	+		

1.2 SUSU-JALONKE **Susu** (Touré 1994) ì-gbɛ́ɛ́ *examine, look carefully*
1.3 JOGO-JERI **Jogo** (Braconnier n.d.) kpɛ́ *white*; **Jeri** kpɛ́ *white*; **Jalkunan** kpɛ̄ɛ̄, kpɛ̀ɛ́ *turn white*, kpɛ̌ *whiten (smth.), make (smth.) white*; **Numu** kpɛ́ *white*

1.4 Vai-Kono **Vai** kpɛ́ *white*; **Kono** gbɛ́ *white*
1.5 Mokole **Kakabe** gbɛ́, bɛ́ *white*; **Mogofin** bé *white*; **Lele** gbɛ́, kpɛ́ *white*; **Koranko** gbɛ́, gbé *white*
1.6 Manding **Maninka Kita** gé *white*; **Maninka-Mori** gbɛ́ *white; clear; whiten*; dɔ́-gbɛ́ *examine, look carefully*; **Bambara** jé *white*; **Jula Kong** gbɛ́ *white*
1.8 Bobo **Bobo S.** lā-gbɛ̄ *consult (fetish)*
1.9 Samogho **Kpen** kpɛ̰́ *white*

OTHER NIGER-CONGO potential parallels:
Gur **Proto-Oti-Volta** *pe *white*
Kwa **Attié** fí *white*; **Ikposo** fwē *white*

Comments: This root could potentially be included in the Swadesh 100 Wordlist.

9.2.5.2. Bantu *b- : Mande *gb-

@**Before** **Bantu** *bèdè, *bèdì *front; before* – **Mande** *gbɛla. Reliability index: 4/6 (absent from Benue-Congo outside Bantu and from other Niger-Congo families).

PROTO-BANTU *bèdè, *bèdì, Regions 3: Ce NE SE; Zones 7: DEFGJMS *front; before*

OTHER BENUE-CONGO
BENUE-CONGO W.: Edoid **Urhobo** vèr̩è

MANDE *gbɛla

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+								+		+

1.1 Southwestern **Kpelle N.** gbɛ̀à ~ gbɛ́â *before; firstly*
1.9 Samogho **Seenku N.** gbɛ̀lé *before; firstly*
2.2 Southern **Dan** gblʌ́ʌ̈ *front part of body*

@ **Shoulder; wing** **Bantu** *bàbá *wing* – **Mande** *gbã *shoulder, wing*. Reliability index: 6/6.

PROTO-BANTU *bàbá ~ *bàb, Regions 4: SW Ce NE SE; Zones 7: DGJKMRS

OTHER BENUE-CONGO Proto-Benue-Congo *babaŋ

BENUE-CONGO E.: Bantoid Grassfields **Proto-Grassfields** *bàb`-li *wing*; **Limbum** bvī; Bantoid **Limbum** bàb; Cross Upper **Proto-Lower-Cross** ú-bâ / m-; **Proto-Upper-Cross** *bób

MANDE *gbã *shoulder, wing*

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
		+								+

1.3 Jogo-Jeri **Jogo** gbą́aŋ *shoulder*; **Jalkunan** gbáą́ *shoulder*

2.2 Southern **Proto-SM** *gbɛ̰́ ~ *gbą̀; **Dan Gwɛɛtaa** gbą̄ *shoulder, wing*; **Dan Kla** gbą̀ *shoulder, wing*; **Goo** gbą́ *shoulder*; **Tura** gbą́ *shoulder; arm; wing*; **Mano** gbą̄ *wing*, gbą̄là *shoulder*; **Guro** bɛ̄-lā-pá, bɛ̄-à-pá *shoulder*; **Mwan** gbɛ̄-lōŋ *wing*; **Wan** gbɛ̀ŋ̀ *wing, shoulder*; **Beng** bàŋ̀-lū̀ *shoulder*, bàŋ̀-cɛ́ŋ́ *wing*

OTHER NIGER-CONGO potential parallels:

Atlantic Bak Joola **Joola Kwaatay** ebend; Bijogo **Bijogo** kɔ-bay / ŋa-bay *wing*

Atlantic N. Tenda-Jaad-Biafada **Basari** ɑ-mbɑ̀f *wing*; **Bedik** ga-mbáf *wing*; **Konyagi** æ-mpæ̀w̃ / væ-mpæ̀w̃ *wing*; **Badiaranke** ma-mpaafo *wing*; Nyun-Buy **Guñaamolo** gu-bəər / hə-bəər *wing*; **Gubaher** gʊ-bəər; **Kobiana** gu-waan / ŋa *wing*

Gur **Gurunsi – Oti-Volta** *ɓa(n) *hand, shoulder*

Ijo **Ịbanị** pàmbà; **Nembe** pą̀bá *wing*

Kru **Bassa** pìɔ̀-kpà *wing*

Kwa **Chumburung** kí-bámbāŋ; **Logba** ò-búmbà *wing*

Mel N. **Landuma** kə-bafta *wing*

Comments: A search with "Homonymy & Polysemy" (Segerer 2022) finds 35 languages where the polysemy SHOULDER – WING is attested.

@Thigh Bantu *bèdò, *bèdè – **Mande** *gbada. Reliability index: 4/6 (not found outside Bantu and Mande).

PROTO-BANTU *bèdò, Regions 4: NW SW Ce NE; Zones 10: ABCEGHJKLM, *bèdè, Zones: ABC

MANDE *gbada

SWM	Susu-Jalonke	Jogo-Jeri	Vai-Kono	Mo-kole	Man-ding	Soninke-Bozo	Bobo	Samo-gho	Eastern	Southern
+									+	+

1.1 Southwestern **Proto-Southwestern** *kpárá; **Mende** kpála; **Loko** (Kimball) kpárá ~ kpálá; **Bandi** kpàlà; **Zialo** kpálá; **Looma** kpàlà; **Kpelle N.** kpálá *buttock, bottom; base, foundation; reason, grounds*; **Kpelle S.** kpárá *buttock; bottom*

2.1 Eastern **Boko** gbā̋ *foot, leg*; **Bokobaru** gbáda

2.2 Southern **Dan E.** gbą̋ *foot and leg; thigh*; **Dan W.** gbą́ *foot and leg; thigh*; **Goo** gbą̋ą̋; **Tura** gbą̋ą̋, gbą̋; **Mano** gbą́ą́; **Guro** bòlò; **Mwan** gbòɗò; **Wan** gblä̀; **Beng** gbá

9.3. Mande – Benue-Congo cognates absent or poorly represented in Bantu

@Baboon

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid **Tiv** (Williamson 1992) à-bàgù *red monkey*; **Kaka** (Williamson 1992) m-bu *monkey*; Ekoid A (Williamson 1992) m-pŏg *monkey*, Ekoid N (Williamson 1992) m̀-bɔ̌ɔg *monkey*; **Proto-Upper-Cross** *ppókà *monkey*; Low Cross **Anaang** (Williamson 1992) é-bɔ̀k *monkey*

BENUE-CONGO W.: Idomoid **Proto-Idomoid** (Williamson 1992) ɔ̀-bàgwù *red monkey*; Edoid **Ivie** (Williamson 1992) o-vhe *monkey*; Nupoid **Nupe** (Williamson 1992) e-be *monkey*; **Kakanda** (Williamson 1992) bāgwù *monkey*; Defoid **Yoruba** (Williamson 1992) ɔ̀-bɔ *monkey*; **Igala** (Williamson 1992) ɔ̀-bàgwù *patas monkey*

MANDE *ŋ̀-gbɔŋ-ku

1.1 Southwestern **Proto-Southwestern** *ŋ̀-gbɔŋ; **Bandi** gbɔ́(ŋ) ~ gbɔ̀(ŋ) *red patas monkey*; **Kpelle N.** gbo͘o͘; **Kpelle N. Gbali** gbɔ́ŋ̀

1.2 Susu-Jalonke **Susu** gòoxí; **Jalonke** gòòqí; **Yalunka** gboxu

1.3 Jogo-Jeri **Jogo** (Braconnier n.d.) gbɔ̌(n); **Numu** gbɔ̀n

1.4 Vai-Kono **Vai** kpɔ̀ŋ *monkey*

1.5 Mokole **Kakabe** gɔɔki, gwéki, bɔɔki (< Susu-Jalonke?); **Lele** kpo͘wɛ; **Koranko** gbo͘, gbo͘

1.6 Manding **Proto-Manding** *ŋ̀-gwÒn; **Mandinka** kòŋ *baboon, chimpanzee*; **Xasonka** gòn; **Maninka Kita** gòn; **Maninka-Mori** gbɔ̀n, gbòn; **Bambara** ngɔ̀n, gòn; **Jula Kong** gbɔ̀n

1.9 Samogho **Dzuun** gɔ̀n

2.1 Eastern **Boko** gbāũ; **Busa** gbākṳ̀; **Bokobaru** gbākṳ̀

OTHER NIGER-CONGO:

Adamawa **Samba Leko** gbɔ̂ŋ

Atlantic Bak Balant **Balant Ganja** gɔ̀ɔ́ŋ / g-gɔ̀ɔ́ŋ; Joola **Joola Kasa** ɛ-gon / si- *small red monkey dwelling in mango trees*; **Joola Kujamutay** egoŋ; Manjak **Manjak** nkoŋ; **Manjak** (Buis 1990) ugɔŋ, (Wilson 2007) ukoũ *monkey*; **Mancagne** ukon *monkey*

Atlantic N. Wolof **Wolof** gɔŋ; Nyun-Buy **Kasanga** (Doneux Ms.) gooŋ / gooŋa; **Nyun** (Cobbinah 2013) goŋ *chimpanzee*; **Nyun** goŋ / goŋ-oŋ; Fula-Sereer **Sereer** (Greffier 1960) gog *big red monkey*, gong fan / kong k *baboon*; Cangin **Palor** goŋ *little monkey with a long tail*

Gur **Gurunsi – Oti-Volta** *kpad *baboon, monkey*

Ijo **Proto-Ijoid** (Williamson 1992) *ɓʊ̀kɔ̀

Kwa **Logba** ògbómí / ògbómíwɔ̀ *monkey*

Senufo **Mamara** gboŋo͘

Ubangi Gbaya **Proto-Gbaya** *kòŋ *monkey sp.*; **Mba-Dongo-Ko** gōmē-ngō / gōmē-ɲō *pavian*

Isolated NC **Gola** ógàngɛ, ógànge *pavian*

Isolated Bangime gúmbè *gorilla (Cercopithecus aethiops Vigot), baboon*

Comments: Williamson (1992) reconstructs for Proto-Atlantic-Congo **bɔ̀kɔ̀* or **pɔ̀kɔ̀* 'monkey'.

@Boat

OTHER BENUE-CONGO

BENUE-CONGO E.: Kainji **Bassa** hwɔ̃ *canoe*

BENUE-CONGO W.: Defoid **Yoruba** ɔ̃kɔ̀-ɔ̃jú-ɔ̃mī; Edoid **Urhobo** òkɔ̀

MANDE *gɔɔ

2.1 Eastern **Boko** gó *boat, vehicle; mortar*; **Busa** gó *through, canoe; plain; train; mortar*; **Shanga** góó *canoe, boat*

2.2 Southern **Dan E.** gɔ̄ *dugout canoe; car*; **Dan Kla** gɔ̀; **Goo** góó *car*; **Tura** góɔ̀ *vehicle*; **Mano** gɔ̄ɔ̄; **Mwan** kóŋ́; **Wan** gòŋ̀

OTHER NIGER-CONGO:

Kru **Aizi** gu

Isolated NC **Gola** ógɔ̀

@Burn

OTHER BENUE-CONGO

BENUE-CONGO E.: Bantoid Ekoid A (Williamson 1992) rɔ̌i; Ekoid F. (Williamson 1992) rigi; **Tiv** (Williamson 1992) yèɣ

BENUE-CONGO W.: **Proto-Yoruboid** (Williamson 1992) *jó; **Nupe** (Williamson 1992) dī; **Ebira** (Williamson 1992) rí

MANDE *dɔ̃xeŋ

1.1 Southwestern **Kpelle N.** léŋ *vi burn, shine; gleam, glow; vt turn on (light)*; **Kpelle S.** léŋ *vi burn, catch (fire); vt set on fire; n flame; glitter*

1.2 Susu-Jalonke **Susu** déxé *burn; illuminate*

1.3 Jogo-Jeri **Jogo** (Braconnier n.d.) dɔ̌(n)

1.7 Soninke-Bozo **Proto-Soninke-Bozo** *ɗò̱geŋ; **Soninke** (Smeltzer & Smeltzer 2001) lege *be lit*; **Tigemaxo** lúmɛ́ⁿ *kindle*; **Kelenga** dúmɛ́ *catch fire, be on fire*; **Jenaama Jenne** dúⁿ *vt burn*, dúmɛ́ *vi catch fire*

1.9 Samogho **Banka** ju; **Seenku N.** dyòn *vt burn, set fire on*; **Duun** zu; **Dzuun** dzú; **Kpan** zuu-ma

OTHER NIGER-CONGO:
Ijo **Proto-Ijoid** (Williamson 1992) *dɔ̰́kì

Comments: Williamson (1992) reconstructs Proto-Atlantic-Congo **dɔ̰́kɪ*.

@Cheek 2

OTHER BENUE-CONGO Proto-Benue-Congo *kwenge

MANDE *xɛŋtɛŋ ~ *xɛŋkɛŋ
1.2 Susu-Jalonke **Susu** kènkén-yì *chin*; **Jalonke** kɛ̀ǹkɛ́ǹ *chin*
1.5 Mokole **Kakabe** kènkè
1.6 Manding **Mandinka** kènteŋ, cènteŋ; **Xasonka** xènteŋ; **Maninka-Mori** kènkɛn; **Bambara** kènkẽ, nkènkẽ *inner part of cheek*
1.7 Soninke-Bozo **Soninke** (Smeltzer & Smeltzer 2001) xenten-qeemu, (Diagana 2013) xéntén-qémù *mumps*
2.1 Eastern **Boko** gɛ̃ɛ̃; **Busa** kɛ̰́; **Bokobaru** kɛ̰̃ɛ̰́

Comments: This root is not reliable, being absent outside Benue-Congo and Mande.

@Compound, yard

OTHER BENUE-CONGO Proto-Benue-Congo *kwan *compound; farm*

MANDE *kwaŋ
1.1 Southwestern **Kpelle S.** kwāa *area, place; farmland*
2.2 Southern **Dan E.** kwã̰ŋ̰̃-dɛ̃̀ ~ kwæ̰̃æ̰̃ŋ̰̃-dɛ̃̀ ~ kwɛ̰̃ŋ̰̃-dɛ̃̀ *compound*; **Dan W.** kwǽæ̰̃ *compound; area, district*

@Cow

OTHER BENUE-CONGO Proto-Benue-Congo *nak
BENUE-CONGO E.: Bantoid Grassfields **Proto-Grassfields** *nàk´, **Limbum** nàʔ; Ring **Babungo** ɲàà ndáʷ; Kom **Chamba** nàà; Cross Lower **Proto-Lower-Cross** *é-nàŋ / i-; Jukunoid **Proto-Jukun** *ndaK; **Jibe** náy *cattle, cow*
BENUE-CONGO W.: Nupoid **Gwari** nakʷó
BC isolated: Ukaan **Proto-Ukaan** *ɛ̀nɑ́

MANDE *dĩ̀ɡ̃à

1.1 Southwestern **Proto-Southwestern** *nìnkă; **Mende** nìkă; **Loko** (Dwyer 1973) nìkă; **Bandi** (Dwyer 1973) nìkă; **Zialo** nínká; **Looma** níkɛ́, nika; **Kpelle N.** nìŋɛ̌; **Kpelle S.** nīŋā *cow, cattle*

1.2 Susu-Jalonke **Susu** nìngé; **Jalonke** nìngé

1.4 Vai-Kono **Vai** nìí; **Kono** nìŋgé

1.5 Mokole **Kakabe** nìngi; **Mogofin** nìngé; **Lele** ɲìsí, nìsi; **Koranko** nìŋki

1.6 Manding **Mandinka** nìisì ~ nìnsì; **Maninka Nyokolo** (Meyer 1983) ɲinsi; **Xasonka** ɲìnsi; **Maninka Kita** mìsì; **Maninka-Mori** nìsi ~ nìnsi; **Bambara** mìsi; **Jula Kong** mìsí; **Koro** nìsì; **Koya** nìsí; **Worodugu** ndìsi

1.7 Soninke-Bozo **Soninke** nâ ~ nàa-; **Tigemaxo** náà; **Kelenga** nàà; **Jenaama Cliffs** nàà; **Jenaama Jenne** nàà

1.8 Bobo **Bobo S.** nyàngà; nyàn (in compounds)

1.9 Samogho **Jôwulu** nāàn; **Seenku N.** nìgì / nìgì; **Seenku S.** nìgì / nìgì; **Dzuun** nìì; **Duun Zantigila** negɑ; **Duun Sieu** nɑgɑ; **Duun Kai** neʔe; **Duun Bananso** neʔe; **Kpen** nɛ̀gɛ̀

OTHER NIGER-CONGO:

Adamawa **Yingilum** nə́yə̀; **Kare** nài *animal, meat;* **Samba Leko** nà; **Pere** nàgò

Atlantic N. Wolof **Wolof** nag; Tenda-Jaad-Biafada **Biafada** nnaga / ge-n.; Fula-Sereer **Proto-Fula-Sereer** *naak; Nalu-Baga Fore-Pukur **Pukur** ɑ-nɑ̀; **Nalu** nak *meat*

Dogon **Jamsay** nàŋá; **Mombo** náà; **Najamba** nɛ̀ɛ́ / nàwóó

Gur **Proto-Central** *na, *nag; **Boore** nàā / nàānà; **Kabiye** nɔ́ / náŋ̀; **Miyove** ì-nàà / ì-náà

Kwa **Proto-Ghana-Togo-Mountain** *kì-nâ / bì- *meat*

Mel S. **Kim** nàà; **Sherbro** na *cow; cattle*

Senufo **Mamara** nɪ̰ɪ̰ŋɛ̰

Isolated Bangime nàà

Comments: If we accept de Wolf's (1971) Proto-Benue-Congo reconstruction **nak* 'cow', we have to assume that in Proto-Bantu

it was replaced by another root, **gòmbè* (BLR3: Regions: 5, Zones: 14 ‘cattle’). In the meantime, it was retained in Mande where it is very well represented in the Western branch, and also in Atlantic, Gur, Senufo, Kwa, Mel, Dogon and Bangime. It can undoubtedly be reconstructed for Proto-Niger-Congo.

@Eye

OTHER BENUE-CONGO

Benue-Congo E. **Proto-Lower-Cross** é-ɲɛ̀n / a-, **Proto-Upper-Cross** jènà; Platoid **Hasha** ī-yí / yì-yí

Benue-Congo W. Nupoid **Gwari** ōɳé

MANDE *ɣã

1.1 Southwestern **Proto-Southwestern** *gá(-suŋ) *the extended form including a postposed locative element became “standard” for ‘eye’, and the shorter form became specialized in the meaning of ‘surface’, ‘before, on’*; **Mende** ngá *n edge; pp on,* ngâ-mà, ngâ-ù *n eye; face; pp before the eyes of, in the presence of*; **Loko** ngà-ú/a-u (Kimball; Meeussen Ms.) *eye, face*; **Bandi** ngà(ŋ) *pp on, on the surface of*, ngàa-ɲù *eye, face*; **Zialo** gàa-zù *eye, face*; **Looma** ga *n surface, pp on*, gaa-zu *n eye, eyes, face*; **Kpelle N.** ɲɛ̀ *n eye; face, front side; pp before, in front of; on, upon*; **Kpelle S.** ŋé-í *n eye, eyes; face; appearance; pp in front of*

1.2 Susu-Jalonke **Susu** yáá, (Lacan 1942) ɲa *eye; time (instance of a recurring action)*; **Jalonke** jáá; **Yalunka** yɛɛ

1.3 Jogo-Jeri **Jogo** (Sapozhnikova Ms.) ɲáa; **Jeri** ɲá *eye, means*; **Numu** ŋáá *face; appearance*, ŋáá-dé *eye*

1.4 Vai-Kono **Vai** já; **Kono** yá/já *(after a nasal)*

1.5 Mokole **Kakabe** ɲáa; **Mogofin** ɲáa; **Lele** yáa/jáa; **Koranko** yá

1.6 Manding **Proto-Manding** *ɲá; **Mandinka** ɲáa *eye; manner, way (of doing); time (instance of a recurring action); reason; chance*; **Maninka Nyokolo** ɲáa *n eye; way (of doing); contents; pp before*; **Xasonka** ɲà, (Koité-Herschel 1981) ɲáa *n eye; manner, way (of doing); colour; time (instance of a recurring action); contents, size (as a measure); pp before*; **Maninka Kita** ɲá *eye; way (of doing)*;

Maninka-Mori ɲá *n eye; face; front side; surface, side; manner, way (of doing); mesh (of net); spring (water); time (instance of a recurring action); contents, size (as a measure); pp before (both temporal and locative senses)*; **Bambara** ɲɛ́ *n eye; face; front side; surface, side; page; aspect, colour; manner, way (of doing); motivation; mesh (of net); grain (of cereal); time (instance of a recurring action); contents, size (as a measure); pp before (both temporal and locative senses)*; **Jula Kong** ɲá, ɲɛ́ *eye; face; way*; **Koro** ɲá *face, eye*; **Koya** ɲá-dén

1.7 Soninke-Bozo **Soninke** yáa-xa/yáa-xè *eye; aspect; surface*; **Tieyaxo** ɲa; **Tigemaxo** ɲáá *eye, time, contents*; **Kelenga** ɲáŋá; **Jenaama Cliffs** ɲɔ̄gɔ̄-lɛ̄wⁿ; **Jenaama Jenne** ɲɔ́ɔ́ⁿ

1.8 Bobo **Bobo** ɲónō̲, pl. ɲínà

1.9 Samogho **Jowulu** (Carlson 1993) ɲà-nɛ́í, pl. ɲà-ná-ní; **Seenku N.** dyűnǐ, pl. dyűnì; **Duun** ja'a-di; **Dzuun** jáá; **Kpan** jaa-zi̲; **Kpen** jáàn

2.1 Eastern **San S.** yíí

2.2 Southern **Dan E.** yą̄-gā *eye, colour*; **Dan W.** yą́(-gā) *eye, colour*; **Dan Kla** yą́(-gā) *eye, colour*; **Tura** *yą̋*; **Mano** yɛ̀ɛ̄ *eye, face*; **Guro** yʊ̄ɛ́; **Yaure** yùɛ́; **Gban** wą̄; **Mwan** yrɛ̀ (< *yā-ɓɛ̄lɛ́?) *eye*, yą̀ *contents (of a container); blow, shot*; **Beng** yɔ-wlɛ́; **Gbin** yo

OTHER NIGER-CONGO:

Adamawa **Tupuri** nɛ̀nē; **Kare** nûn; **Yi Kitulɛ** nēē / nūyī

Atlantic BAK **Bijogo** n-ɛ / ŋ-ɛ

Gur **Proto-Central** *yi *face*

Kru **Bakwe** ɲíǿ; **Dida (Lakota)** yī / yí

Senufo **Mamara** ɲii; **Supyire** ɲʸii / ɲʸii; **Minyanka** ɲa, ɲe / ɲi

Comments: For Benue-Congo Greenberg gives only Efik *enyin*.

@Grass

PROTO-BANTU *bìngò J *grass: Graminaceae: Pennisetum* (in one zone only, see comments to CAT 2)

OTHER BENUE-CONGO

BENUE-CONGO E.: Jukunoid **Proto-C-Jukun** *bín; **Jibe** bʸínú

MANDE *biŋ
1.1 Southwestern **Looma Vekema** (Vydrin 1987) bi̱(g) *grass, grass cover; tuft; tuft of trees*
1.3 Jogo-Jeri **Jogo** bíŋ *weeds*
1.4 Vai-Kono **Vai** ɓí'íŋ *grass, weeds*, (Klingenheben & Kastenholz 2019) ɓíŋ *grass, weed*; **Kono** bíin
1.5 Mokole **Kakabe** bín *grass, straw*; **Mogofin** (Polinder et al. 2009) bíŋ-è *straw*; **Lele** bín; **Koranko** bi̱i̱
1.6 Manding **Proto-Manding** *bín; **Mandinka** bíŋ; **Maninka Nyokolo** bìŋ; **Xasonka** bín; **Maninka Kita** bín; **Maninka-Mori** bín *n grass; vi become densely overgrown with grass*; **Bambara** bi̱; **Koro** bíwⁿ; **Koya** bi̱n
1.8 Bobo **Bobo S.** bîn *green, unripe, uncooked*
1.9 Samogho **Seenku N.** bùn *grass, straw*; **Duun** bũ; **Dzuun** vún

@Hunger

OTHER BENUE-CONGO
BENUE-CONGO E.: Cross Lower **Proto-Lower-Cross** *à-káŋ; Cross Upper **Proto-Upper-Cross** *kʷaŋ

MANDE *Xɔŋgɔ
1.3 Jogo-Jeri **Jogo** (Braconnier n.d.) kògó; **Jalkunan** kòʔò; **Numu** kògò
1.4 Vai-Kono **Vai** kɔ́ŋɔ́ ~ kɔ̰́ɔ̰́; **Kono** kɔ́ngɔ
1.5 Mokole **Kakabe** kɔ́nkɔ́ *hunger; be hungry*; **Mogofin** kɔ́nkɔ̀ *hunger; be hungry*; **Lele** kɔ́ngɔ; **Koranko** kɔ̰́kɔ́
1.6 Manding **Proto-Manding** *xɔ́nxɔ; **Mandinka** kónkò *hunger; be hungry*; **Maninka Nyokolo** kònkò; **Xasonka** xónxó; **Maninka Kita** kónkó; **Bambara** kɔ̰́gɔ́; **Jula Kong** kɔ̰́gɔ́; **Koro** kɔ̄ngɔ̄; **Koya** kɔ́ŋɔ́
1.7 Soninke-Bozo **Tigemaxo** xɔ́ɔ́ŋɔ́; **Kelenga** hɔ́ŋɔ́; **Tiema Cewe** kɔ̰ɔ̰ŋɔ̰

OTHER NIGER-CONGO:
Adamawa **Tupuri** kɔ̄ŋnɛ̄
Atlantic N. Nyun-Buy **Nyun** (Cobbinah 2013) kuug; Fula-Sereer **Proto-Fula-Sereer** *xeex ~ xeeg

Dogon **Mombo** kúgɔ́; **Najamba** gààgó / gààgé
Senufo **Mamara** xuugo
Ubangi **Mbandja** gògò

@Knee

OTHER BENUE-CONGO Proto-Benue-Congo *kudu

MANDE *Xuduŋ
1.6 Manding **Maninka-Mori** kùnbeden-kúdu, gbèlɛn-kúdu; **Bambara** kúnbere-kuru
1.7 Soninke-Bozo **Soninke** xúrúngí/xurungo
1.9 Samogho **Dzuun** kúnún; **Duun Zantigila** kn̰na; **Duun Sieu** kn̰nna; **Duun Kai** kn̰; **Kpan** kn̰i̱
2.1 Eastern **Bisa Lebir** (Schreiber 2008) gáŋ-kurù

@Love

PROTO-BANTU *dìg-ɪd, Zone 1: J

OTHER BENUE-CONGO
BENUE-CONGO E.: Bantoid Grassfields Ring **Proto-Ring** *díá *want / like*; Jukunoid *dog *want*

MANDE *dia
1.4 Vai-Kono **Vai** lía *like, enjoy, love*
1.8 Bobo **Bobo S.** dìān *will, agree*
2.2 Southern **Dan E.** dĭ̃á *pleasure; love*; **Tura** dĭ̃á *pleasure*

OTHER NIGER-CONGO:
Atlantic Bak Bijogo **Bijogo** dik(ak) *like, love*
Atlantic N. Tenda-Jaad-Biafada **Biafada** dukk-; Nalu-Baga Fore-Pukur **Nalu** lak *want?*
Ijo **Ịbanị** dɔɣó *seek; want*; **Nembe** dìgì mǹ̰díì *companionship; friendship; acquaintanceship; love*
Mel N. **Landuma** lʌk *make smb. want to; provoke the desire to*

Comments:
1) The form *díya* ‘pleasure; good taste; love’ in Bambara (and similar forms in other Manding languages) is derived from a quality verb

dí ‘be pleasant, be good’; we do not consider it as a reflex of the proto-form **día*.

2) On the roots attested only in the Bantu zone J, see comment to CAT 2.

@Mat

OTHER BENUE-CONGO Proto-Benue-Congo *kpanga

MANDE *kpanga

1.4 Vai-Kono **Vai** kpàŋà *mat of piassava bark slats tied together, often rolled as a window shade*

2.1 Eastern **San Mayaa** pankalanı; **Bokobaru** kpaakpaa *swamp palm mat*

@Tooth 2

PROTO-BANTU *còngà, *còngá, Regions 1: NW, Zones 2: AB

OTHER BENUE-CONGO Proto-Benue-Congo *sana

BENUE-CONGO E.: Bantoid Grassfields Ring **Limbum** rsòŋ; **Proto-Ring** *túŋɔ̀; **Babanki** (Pius Akumbu p.c.) ə̀-sóŋ; **Kom** ī-sɔ́ŋ̄; **Proto-Upper-Cross** *ttáǹ

MANDE *sɔ́(-ka)

1.7 Soninke-Bozo **Tieyaxo** suɔn *iron nail*

2.1 Eastern **Proto-Eastern** *sɔ́(-ka); **San S.** sɔ́, (Schreiber 2008) sɔ́; **Matya** sɔɔnɛ; **Mayaa** sɔ; **Bisa Lebir** sɔ́; **Bisa Barka** (Schreiber 2008) sɔ̄; **Boko** swaā; **Busa** sákà; **Bokobaru** swáà; **Kyanga** sɔ̃; **Shanga** sɔ́ɔ

2.2 Southern **Proto-Southern** *sɔ́(-wɛlɛ); **Dan E.** sɔ̋; **Dan W.** sɔ́; **Dan Kla** sɔ̌ *tooth; tusk (of elephant)*; **Goo** sŏŏ(-wɛ̋ɛ̋) **Tura** sŏŏ; **Mano** sɔ́ɔ́; **Gouro** sʊ́é; **Yaure** sʊé; **Mwan** sɔ́; **Wan** sɔ̄ŋ̄; **Gban** sɛ̋ *tooth; tusk (of elephant)*; **Beng** sɔ́; **Ngen** sɔ́ŋ

OTHER NIGER-CONGO:

Adamawa **Tupuri** sàŋ

Atlantic N. Tenda-Jaad-Biafada **Basari** ɓa-caŋ *tooth of wisdom*; **Bedik** mɯ-sʊ́ŋà *molar*

Mel S. **Kim** cáŋ; **Sherbro** cang
Ubangi **Mundu** tsɛ́kɛ̄

@Ten

OTHER BENUE-CONGO BENUE-CONGO E.: Bantoid Yemne-Kimbi *o-fu; Tivoid *puɛ (Pozdniakov 2018: 68; 115)

MANDE *pu

1.1 Southwestern **Mende** pŭ; **Loko** ka-puu, (Kimball) pùù(ŋ); **Bandi** púù; **Zialo** púú; **Looma** pù, pù-gɔ; **Kpelle S.** pūu; **Kpelle N.** pòǔ

1.2 Susu-Jalonke **Susu** fú; **Jalonke** fùú

1.5 Mokole **Mogofin** bí *multiplicand 10;* **Kakabe** bíi *multiplicand 10;* **Lele** bì *multiplicand 10;* **Koranko** bí *multiplicand 10;*

1.6 Manding **Maninka Nyokolo** bii *multiplicand 10;* **Xasonka** bí *multiplicand 10;* **Maninka-Mori** bî *multiplicand 10;* **Bambara** bî *multiplicand 10*

1.8 Bobo **Bobo** fūn

2.1 Eastern **San S.** (Schreiber 2008) fʊ̀; **Matya** fu; **Mayaa** bun; **Bisa Lebir** bù; **Bisa Barka** (Schreiber 2008) bʊ

2.2 Southern **Proto-Southern** *bù; **Tura** bùù; **Mano** vu̱; **Gouro** vū; **Mwan** vū; **Gban** ßù; **Beng** bū; **Ngen** bū

OTHER NIGER-CONGO

Atlantic N. Wolof **Wolof** fukk; Tenda-Jaad-Biafada **Basari** fox / pox / pux; **Bedik** ma-fú / pó; **Konyagi** ì-pə̀xw; **Jaad** pa-ppo; **Biafada** ba-ppo

Gur **Kurumfe-Gurunsi** *fi; **Miyove** kɛ̀-fì / à-fɛ̀; **Pana** fó

Kru **Bakwe** pʊ̀

Mel N. **Landuma** pu

Ubangi **Proto-Gbaya** *ɓú; **Mbandja** ɓúfú

Comments: For further details, see (Pozdniakov 2018: 67–68, 224–226, 289–292).

@Thing

BENUE-CONGO

BENUE-CONGO E.: Cross Upper **Proto-Upper-Cross** *pén

BENUE-CONGO Isolated: Ukaan **Proto-Ukaan** *ɔ̀fí *something*

MANDE *pɛ̃

1.2 Susu-Jalonke **Susu** fé *matter, problem*; **Jalonke** féé *matter, problem*

1.4 Vai-Kono **Vai** féŋ *thing, object; possession, belongings; private parts*; **Kono** fén

1.5 Mokole **Kakabe** fén *thing; something; whatever; nothing*; **Mogofin** féŋɛ̀; **Lele** fin, fín, fen; **Koranko** fɛ́

1.6 Manding **Mandinka** féŋ; **Maninka Nyokolo** fèŋ; **Xasonka** fén; **Maninka Kita** hén; **Maninka-Mori** fén; **Bambara** fɛ́; **Jula Kong** fɛ́

1.7 Soninke-Bozo **Soninke** fí *matter, fact, event*

1.9 Samogho **Jôwulu** fĩŋ; **Seenku N.** fɛ́n ~ fɛ̃ ~ fɛ̀ɛ̃̀

2.2 Southern **Proto-Southern** *pɛ̀; **Dan E.** pɑ̄; **Dan W.** pɑ̄; **Dan Kla** pɑ̀; **Mano** pɛ̄, pl. pɔ̄ *thing; monster*; **Guro** fɛ̄; **Yaure** fɛ̀; **Mwan** pɛ̄

OTHER NIGER-CONGO:

Adamawa **Kare** fɛ̨; **Tupuri** fèn

Atlantic N. Fula-Sereer **Proto-Fula-Sereer** *fi

@Throat-1

OTHER BENUE-CONGO Proto-Benue-Congo *mado *throat, voice*

BENUE-CONGO E.: Bantoid Grassfields Ring **Proto-Ring** *mɔ́ìŋ *neck, throat*

MANDE *ɓɔrɔ *neck, throat*

1.1 Southwestern **Proto-Southwestern** *bóró *neck, throat*; **Mende** mbóló *neck*; **Loko** mbóró *neck, throat*; **Bandi** mbòló *neck, throat*, (Koelle 1854) mburo *throat*; **Zialo** bóló *neck*

1.2 Susu-Jalonke **Susu** woroŋi *throat*

1.6 Manding **Maninka-Mori** kán-woro-fe *oesophagus*; **Bambara** kán-woro-fɛ *oesophagus*

1.7 Soninke-Bozo **Jenaama Cliffs** bòndò *neck*; **Jenaama Jenne** bònò *neck*
1.9 Samogho **Duun** voo *neck*; **Dzuun** bɔ́lɔ́ *throat; language*; **Kpan** vo *neck*; **Banka** vwa̰ *neck*
2.1 Eastern **San S.** bɔ́lɔ́ *throat; language*
2.2 Southern **Proto-Southern** *ɓɔ̀lɔ̀ *neck*; **Dan E.** ɓɔ̄ *neck*; **Dan W.** ɓɔ̄ *neck*; **Dan Kla** ɓɔ̃́ *neck*; **Guro** ɓɔ̄lɔ̄ *neck, throat*; **Yaure** ɓɔ̀lɔ̀ *neck*; **Mwan** ɓlɔ̄ *throat*

OTHER NIGER-CONGO potential parallels:
Kru **Krumen Tepo** plù *neck*; **Jrewe** plù *neck*; **Gere** blṵ *neck*; **Grebo** plō´ *neck*; **Wobe** plṵ *neck*; **Niabwa** bùlù *neck*; **Bete Gagnoa** bùlṵ̃ *neck*; **Bete Daloa** blṵ̃ *neck*
Kwa **Proto-Potou-Akanic** *-mĩ̀lĩ̀; **Proto-Akanic** *-mĩ̀lĩ̀
Mel N. **Baga Koba** bolo *neck*; **Sherbro** gbolo *throat*
Mel S. **Kisi** bɔlɔ *neck*

Comments:
1) Stewart (2002) reconstructs Proto-Potou-Akanic-Bantu *-*mĩ̀lĩ̀*.
2) This root could potentially be included in the Swadesh 100 Wordlist.

@Throw

OTHER BENUE-CONGO
BENUE-CONGO E.: Bantoid **Tiv** (Williamson 1992) pùrùɣ *to fly*; **Esimbi** (Williamson 1992) o-vĩ *to fly*
BENUE-CONGO W.: **Proto-Yoruboid** (Williamson 1992) *fò *to fly*; **Nupe** (Williamson 1992) fù *to fly*; **Gade** (Williamson 1992) furu *to fly*; **Ebira** (Williamson 1992) rí *to fly*; **Proto-Igboid** (Williamson 1992) fe *to fly*; **Proto-Jukunoid** (Williamson 1992) pen *fly, jump*; **Proto-Upper-Cross** pe *fly, jump*; **Proto-Cross-Delta** (Wolff 1969) *pel *jump*; Edoid **Proto-Edo** *pi

MANDE *pidi
1.1 Southwestern **Proto-Southwestern** *pìlĭ(ŋ); **Mende** pìlî *vt throw; fire (gun); vi rush into, throw oneself*; **Loko** pilɛ, (Meeussen Ms.) pìré *fly; throw, jump*; **Bandi** pìlí *throw; throw away*; **Zialo** pílí(g)

jump, throw; **Looma** píli(g) *jump, throw; tell (tales)*; **Kpelle N.** pìlĭ *vt throw; sow; lose; vi run away*; **Kpelle S.** pīlī *jump, throw*

1.2 Susu-Jalonke **Susu** fílì *spill (inadvertently)*

1.3 Jogo-Jeri **Jogo** (Braconnier n.d.) fínín *fly up, take off*; **Jeri** fili

1.4 Vai-Kono **Vai** fi'í *throw; throw away; accuse of; give (loan); produce (sound)*

1.5 Mokole **Kakabe** lafíli; **Koranko** fìli *throw away,* láfìli *throw*

1.6 Manding **Proto-Manding** *pìli; **Xasonka** fìli; **Maninka Kita** hìli; **Maninka-Mori** fìlí *vt throw; shoot (arrow); throw away; vr rush, throw oneself*; **Bambara** fili *vt throw; shoot (arrow); throw away; vr rush, throw oneself*; **Jula Kong** firi; **Marka-Dafing** piri

1.7 Soninke-Bozo **Soninke** piite ~ fitta; **Tieyaxo** pidi *vt throw; loose; vi spill, spread,* **Tigemaxo** fídì *dump, toss (liquid, garbage); defeat*; **Kelenga** féè *dump out (liquid)*; **Jenaama Cliffs** pìì *pour out (liquid, grains)*; **Jenaama Jenne** pìì *pour out (liquid, grain), spill*

1.8 Bobo **Bobo S.** firē *spray (water with one's mouth)*

1.9 Samogho **Seenku N.** fì; **Duun** fili; **Dzuun** fírí

2.1 Eastern **San S.** párɛ̄ (Schreiber 2008) *v spring, jump*; **San N.** pára *v spring, jump*; **Bisa Lebir** pĭr |pìrí| *fly*; **Bisa Barka** (Schreiber 2008) pīd-lɛ *fly*

2.2 Southern **Beng** pɛ̀lōŋ̄ *fly*

OTHER NIGER-CONGO:

Adamawa **Kulaal** lákkì-pɛ̀ *put aside; throw*

Ijo **Proto-Ijoid** (Williamson 1992) *fo̰ĩ *fly*

Mel S. **Kim** pìy

Ubangi Gbaya **Proto-Gbaya** *pḭ

Comments:

1) Williamson (1992) reconstructs Proto-Atlantic-Congo root ***pòlĩ*** 'to fly'.
2) Mande seems to possess reflexes of two roots similar in form, THROW, JUMP and FLY, JUMP. In some languages (e.g. Southwestern Mande) they have merged; in some others (e.g. Bozo subgroup) they remain distinct.

@Yam

OTHER BENUE-CONGO

BENUE-CONGO E.: Cross Lower **Proto-Lower-Cross** *bɛ̀dɛ̀ *water yam*

MANDE *ɓɔlɛ

1.1 Southwestern **Proto-Southwestern** *bólé; **Mende** mbòlé; **Loko** (Kimball) mbúé; **Bandi** (Koelle 1854) mbulei; **Zialo** bòlè; **Looma** bòè ~ bue; **Kpelle N.** ɓɛ́lɛ́

1.3 Jogo-Jeri **Jalkunan** bɛ́ʔrɛ́

2.2 Southern **Dan E.** ɓɤ̌ *wild yam*; **Dan** (Koelle 1854) blɛ; **Mano** ɓɛ́lɛ́

OTHER NIGER-CONGO:

Adamawa **Day Bouna** mbētēlē *a cultivated tuber (yam sp.?)*

Atlantic Bak Balant **Balante Ganja** m-ngbɔ́θ / ngbɔ́θ

Kwa **Attié** bòtúʃɛ̀ *wild yams*

Isolated NC **Sua** biite / mbiite

9.4. Mande – Niger-Congo cognates absent (or marginal) in Benue-Congo

@Cat 1

PROTO-BANTU *ɲáu, Zones CE

MANDE *yããlee

1.1 Southwestern **Proto-Southwestern** *ɲàaléè; **Mende** mă-ɲàlê ~ mă-ɲàlô; **Loko** (Koelle 1854) ɲaale; **Bandi** ma-ɲaale; **Zialo** ɲáálé; **Looma** ɲálé ~ ɲálí; **Kpelle N.** ɲààlèè; **Kpelle S.** (Westermann & Melzian 1930) ɲàlè

1.2 Susu-Jalonke **Susu** ɲààrí; **Jalonke** ɲààrí

1.4 Vai-Kono **Vai** máɲà'é, (Koelle 1854) mą̱ą̱-ɲą̱ą̱le; **Kono** (Koelle 1854) maaɲaale

1.5 Mokole **Kakabe** ɲààrì; **Mogofin** ɲààré; **Lele** ɲaaru

1.6 Manding **Mandinka** (Koelle 1854) ɲaari; **Maninka Nyokolo** ɲáárì; **Xasonka** ɲáárù; **Maninka Kita** ɲàrí; **Maninka-Mori** ɲàari, ɲàre; **Bambara** ɲàri-wara *African wild cat*

OTHER NIGER-CONGO:

Atlantic Bak Joola **Joola Banjal** ɛ-ɲarʊ *monkey*; **Joola Kasa** ɛ-ɲara / si- *monkey*; **Joola Kujamutay** ɛɲarʊ *monkey*

Atlantic N. Tenda-Jaad-Biafada **Basari** i-ỹàrɔ́; **Konyagi** ỹàrô; Fula-Sereer **Fula** (Bah 2009) ɲaariiru; Nalu-Baga Fore-Pukur **Baga Koba** a-ɲari; **Baga Fore** ŋárì / ŋárɨ́-ŋìl

Mel N. **Temne** a-yari / ma-yari

Mel S. **Kisi** ɲààyòó / ɲààyìá; **Kim** yài; **Sherbro** yay; **Bom** yai

Isolated NC **Limba** ɲari

@Cat 2

PROTO-BANTU *jangʊa Zone J

MANDE *ɲ̀-jakṹbã

1.1 Southwestern **Mende** ɲàngómà *eclipse*

1.3 Jogo-Jeri **Jeri** jàkuma, (Kastenholz 2001) yàkuma

1.4 Vai-Kono **Kono** ɲànguma

1.5 Mokole **Lele** ɲànkuma ~ ɲangoma

1.6 Manding **Proto-Manding** *ŋ̀-jàkuma; **Mandinka** ɲànkúmà; **Maninka Nyokolo** ɲánkùmà; **Maninka Kita** jànkúmá; **Maninka-Mori** jàkuma ~ ɲàkuman; **Bambara** jàkuma; **Jula Kong** jàkumạ; **Koro** jākwà̰; **Koya** jɔhwá̰

1.7 Soninke-Bozo **Soninke** ɲùnqùmmê; **Kelenga** jàkúmà

1.8 Bobo **Bobo S.** zàkúmà, pl. zàkúmɛ̀

1.9 Samogho **Seenku S.** jɔ̀ŋwa̰̋ / jɔ̀ŋwɛ̋; **Dzuun** jɔnkwɛ̀yn

2.2 Southern **Proto-Southern** *jàù̯bá; **Dan E.** yū̯bā̰a̰-dɅ̰ ~ yū̯a̰̋ ~ yɔ̄a̰̋; **Dan Kla** yà̰ŋ̀bɔ̀-lɅ́; **Goo** ya̰̋bà̰; **Tura** yà̰bà̰; **Guro** zà̰wò-lɛ́; **Gban** ya̰̋ù̯; **Beng** ɲíā̰ŋ̀

OTHER NIGER-CONGO:

Atlantic Bak Bijogo **Bijogo** ɛ-aguma / kɔ-aguma *monkey sp.*; Atlantic Bak Joola **Joola Kujamutay** ɛjangɔɔn

Atlantic N. Tenda-Jaad-Biafada **Bedik** ɲàngúmà; **Basari** ỹàngʌ́mà; **Konyagi** yænkə́w̃à / wæ-ʃænkə́w̃à; **Jaad** jankuma

Kwa **Chumburung** ʧ́ánkíná *green monkey*

Comments:

1) This trisyllabic root is attested by BLR3 in only one Bantu zone, J. This zone is special; if a root found in Atlantic and/or Mande languages has a limited distribution in Bantu, it is often found in zone J. This may be a mere coincidence; however, we can hypothesize that the languages of zone J systematically retain archaic vocabulary. The same can be also said about the roots for GRASS, LOVE, PAIN and some others.
2) The meaning 'eclipse' in Mende is motivated by a popular belief that eclipses result from the capture of the moon by a cat.

@Chest 2

MANDE *ɗisi

1.2 Susu-Jalonke **Susu** síísí

1.3 Jogo-Jeri **Jogo** sísí

1.5 Mokole **Kakabe** síisi; **Lele** sisi; **Koranko** sísi

1.6 Manding **Mandinka** sísì; **Maninka Nyokolo** sìsì; **Maninka-Mori** sísi, dísi; **Bambara** dísi

1.7 Soninke-Bozo **Kelenga** dísí

OTHER NIGER-CONGO:

Atlantic Bak Joola **Joola Fogny** bu-sus; **Jóola Kujam** bu-sus; **Joola Kwaatay** bʊ-sʊs; **Keeraak** bu-sis-əb

Atlantic N. Nalu-Baga Fore-Pukur **Pukur** i-cú

Kru **Dida** cīclí

Ubangi **Mba-Dongo-Ko** sìsì-kɔ́ / sìsì-zɔ́

Isolated Bangime súɥɛ̀ *breast*

@Elbow

MANDE *dɔ̃xɔ̃

1.1 Southwestern **Mende** nɔ̀kɔ̂; **Loko** (Koelle 1854) nɔkɔ

1.2 Susu-Jalonke **Susu** nɔ̀ngɔ́n; **Jalonke** nɔ̀nqɔ́ŋ

1.4 Vai-Kono **Vai** nɔ̀ɔ́ *inside of the elbow*; **Kono** nóngɔn

1.5 Mokole **Kakabe** nùngan

1.6 Manding **Proto-Manding** *nɔ̀nxɔn; **Mandinka** nònkòŋ; **Maninka Nyokolo** nónkòŋ; **Xasonka** nónxòn *elbow; cubit*; **Maninka Kita** nònkón; **Maninka-Mori** nɔ̀nkɔn *cubit (from elbow to the fingertips); angle*; **Bambara** nɔ̀nkɔ̃ ~ nɔ̀nkɔn-kuru *elbow; corner, angle*; **Bambara** nɔ̰gɔ̰kúrú; **Jula Kong** nɔ̀ngɔn; **Koro** nɔ̀ŋɔ̀-ŋùúⁿ

1.9 Samogho **Dzuun** nɔ̀nkɔ́n; **Duun Zantigila** nɔ̃nkã̀; **Duun Sieu** nɔ̃ŋŋɔ̃; **Duun Kai** nɔ̃ŋŋɔ̃; **Duun Bananso** nonkɔ̃; **Kpen** nɔ̀ŋgɔ́ɔ̀

OTHER NIGER-CONGO:

Adamawa **Tupuri** dɔ̃ŋdɔ̃ŋ dɔ̄ɔ̄

Atlantic N. Wolof **Wolof** dəng-dəng; Tenda-Jaad-Biafada **Bedik** nòngòm *cubit*; Fula-Sereer **Sereer** (Greffier 1960) nongond, noonong o...ol / noonong a...ak *elbow, cubit*

Gur **Boore** nú-’ó’ónú / nú-’ó’ūá; **Kabiye** núngólóŋá / núngólóńzì ~ núngóóńzì

Mel S. **Kisi** dùŋ-ndó; **Kim** dùndù, nɔ̀kò; **Sherbro** nukaa

Ubangi **Linda** dɨ́ngɨ́; **Mbandja** dūgū nɛ́

@Fonio (Digitaria.exilis)

MANDE *ŋ̀-peŋdiŋ

1.1 Southwestern **Proto-Southwestern** *ŋ-péndíŋ; **Mende** póté; **Loko** (Vydrin’s field data) péndí ~ pénî *sort of millet*; **Zialo** pɔ̰̀dè(g); **Looma** pode(g); **Kpelle N.** ɓíniŋ, ɓéneŋ, míniŋ

1.2 Susu-Jalonke **Susu** fúndén-yí; **Jalonke** fúndéń

1.5 Mokole **Kakabe** fóndo; **Lele** fóndé; **Koranko** fónu, fóni

1.6 Manding **Mandinka** fíndi; **Xasonka** fúndi; **Maninka-Mori** fánin, fónin; **Bambara** fíni; **Mau** fwééŋ´

1.7 Soninke-Bozo **Soninke** (Diagana 2013) fuŋanŋe ~ fuŋanŋo; **Tieyaxo** fuɔn; **Tigemaxo** fɔ̄ɔ̄ⁿ ~ fūɔ̄ⁿ; **Kelenga** fúɔ̀ⁿ; **Tiema Cewe** (Daget et al. 1953) pɔ̃; **Jenaama Cliffs** pùwɔ́ⁿ; **Jenaama Jenne** fùûⁿ

1.8 Bobo **Bobo** fɛ̰̀, pl. fà̰

1.9 Samogho **Dzuun** fíí, fíídzín

2.1 Eastern **San S.** pí; **Bisa Lebir** fɔ́-ya *millet (small and white)*

2.2 Southern **Proto-Southern** *péní; **Dan Kla** pɤ̋ŋ̋; **Gouro** fi̱lî; **Mwan** fli̱ ~ flíŋ; **Wan** fɛ̄ŋ́

OTHER NIGER-CONGO

Atlantic N. Wolof **Wolof** fini; Tenda-Jaad-Biafada **Basari** funyán; Fula-Sereer **Fula** fonyo; **Manjaku** findi; **Balanta** fénhe

Gur **Kurumfe** peŋfe, pl. peŋi; **Nawdm** figm

Kru **Wobe** pohim

Kwa **Anufo** ǹfôni

Mel N. **Kisi** kpendo; **Bullom** peni

Comments:

1) Cf. also Songhay *fingi*.
2) The root for FONIO and the history of domestication of this crop has been examined in several publications, in particular, (Vydrine 2002; Blench 2016; Hantgan 2024). The dating suggested for this domestication by historians ranges from about 5000 years ago (Purseglove 1985: 142–144) to much more recent dates. The Inner Niger Delta (contemporary Central Mali) is usually mentioned as the place where fonio was domesticated. The fact that this root is extremely widespread in the Mande family (9 out of 11 groups) speaks in favour of the early domestication of fonio; it is quite probable that speakers of Proto-Mande (between 5000 and 5500 years ago) were acquainted with it. Taking into account that most of the non-Mande languages where reflexes of this root are found are in contact with Mande, we can hypothesize that most of them borrowed this word from Mande languages.

@Louse

OTHER BENUE-CONGO

BENUE-CONGO W.: Nupoid **Gwari** kʷōròkʷōta

MANDE *ŋ̀-karaŋ-gba ~ *ŋ̀-xaraŋ-gba

1.1 Southwestern **Proto-Southwestern** *kárangba ~ *káragba; **Mende** kárángbá *body louse*; **Bandi** (Vydrin's field data) kàlaɓá *insect that eats clothing*; **Zialo** kàlàkpà *body louse*; **Looma** (Vydrin 1987) kalaɓa; **Kpelle N.** kàlàà ~ kɛ̀làà *body louse*

1.2 Susu-Jalonke **Susu** (Anonyme n.d.) karangbɛ, (Touré 1994) kàràgbɛ́ *body louse*; **Jalonke** qàràngá *body louse*
1.3 Jogo-Jeri **Jeri** kàrangba
1.5 Mokole **Kakabe** kàràn *body louse;* kàràngbáa *head louse*; **Mogofin** kàráŋɛ̀ *body louse;* **Lele** kàingbá; **Koranko** kàrangba
1.6 Manding **Proto-Manding** *ŋ̀-xàrangba; **Mandinka** kàrànkà *body louse*; **Maninka Nyokolo** káránkà *body louse*; **Xasonka** xáránxà; **Maninka-Mori** kàrangba *body louse*; **Bambara** nkàranga *body louse*; **Jula Kong** kàrangba *body louse*; **Koya** kràgbá *body louse*
1.8 Bobo **Bobo S.** kpàngbà
1.9 Samogho **Jowulu** kpärĩŋgä; **Dzuun** kpɛ̀yngbɛ; **Kpen** kpàŋgbà
2.1 Eastern **San S.** kɔrɔnkiɛn; **San Mayaa** kɔrɔnkwɛ
2.2 Southern **Proto-Southern** *ŋ̀-kàlàŋ-gbá; **Dan E.** kɛ̀fá *body louse*; **Dan Kla** kã̰ŋ̃gbá, kãŋ̃gbá *body louse*; **Tura** kãäɓ́ã́; **Mano** kàlá *flea, louse*; **Mwan** klàgbà *body louse, bug*; **Gban** glãgbã́, glãã́, gbã̰ *louse; bug; flea*

OTHER NIGER-CONGO:

Atlantic Bak Balant **Balante Ganja** ngàrŋá / gì-ngàrŋá *body louse*; Joola **Joola Kujamutay** baranga
Atlantic N. Nyun-Buy **Kobiana** ja-korngu / -a; **Nyun** a-karanga / tı-karanga; Tenda-Jaad-Biafada **Bedik** kārāngá *body louse*; **Basari** ɛ-kɑ̀ráŋgɑ́ *crab louse*; **Bapen** ɛ-karanga / mo-; **Konyagi** æ̀-kærɔ̀nká / væ̀-kærɔ̀nká *crab louse*; **Jaad** parankɛ; **Biafada** gungaranga / bwa-g.; Fula-Sereer **Fula** (Bah 2009) karanwii; Nalu-Baga Fore-Pukur **Pukur** cèlángá
Gur **Pana** kʷìrínkʷè / kʷìrínkʷèyà; **Churama** kɪrə̰mgbaalw / kɪrə̰mgbaalaaba
Mel N. **Temne** k-ar / ţ-ar *head louse*; **Landuma** cəraŋgan

Comments: In Benue-Congo, the root is almost entirely missing, the Gwari form being the only reflex we could find. By contrast, it is well represented in West Africa, appearing in both Mande branches, both Atlantic branches, Gur and Mel. This distribution may result from ancient borrowings between the families; however, the

probability is high that here we have a further Proto-Niger-Congo root belonging to the Swadesh 100 Wordlist.

@One

MANDE *dʊ

1.3 Jogo-Jeri **Proto-Jogo-Jeri** *do; **Jogo** (Braconnier n.d.) do *indefinite marker*; **Jeli** do *indefinite pronoun*; **Jalkunan** duri/duru; **Numu** dò *some, certain*

1.4 Vai-Kono **Vai** dɔ̃ndɔ́; **Kono SL** dɔ́ndɔ́

1.5 Mokole **Proto-Mokole** *dɔ́ndɔ̀; **Kakabe** dó *certain, one; someone*; **Mogofin** dɔ́ndɔ̀; **Koranko** dó *certain, one*

1.6 Manding **Proto-Manding** *dɔ́; **Mandinka** dóo *a, certain (indefinite pronoun); something; another*; **Maninka Nyokolo** doo *a, certain (indefinite pronoun)*; **Xasonka** dó *a, certain (indefinite pronoun); something; another (with tonal article)*; **Maninka Kita** dó *certain*; **Maninka-Mori** dó *certain (indefinite pronoun)*; **Bambara** dɔ́ *certain (indefinite pronoun), something*; **Jula Kong** dɔ́ *one, certain, another*

2.1 Eastern **Boko** do; **Busa** do; **Bokobaru** do; **Kyanga** duu; **Shanga** dòò

2.2 Southern **Proto-Southern** *dū; **Dan Gwɛɛtaa** dō; **Dan Kla** dò; **Goo** dǫ́; **Tura** dó; **Mano** dōó; **Guro** dū; **Yaure** tṹ ~ tù ~ tṵ̀; **Gban** dò; **Mwan** dō; **Wan** dō; **Beng** dō

OTHER NIGER-CONGO:

Adamawa Fali-Yingilum (Pozdniakov 2018: 150) *lo?, Bua (Pozdniakov 2018: 154) *do

Atlantic BAK Proto-Atlantic Bak (Pozdniakov 2018: 249) *don

Atlantic N. Nyun-Buy **Proto-Nyun-Buy** (Pozdniakov 2018: 233) *duk; **Proto-Cangin** (Pozdniakov 2018: 231) *no

Gur **Proto-Central** (Pozdniakov 2018: 203) *do, **Proto-Lobi-Dyan** (Pozdniakov 2018: 203) *dò, **Proto-Viemo** (Pozdniakov 2018: 203) *dun

Kru **Proto-Kru** (Pozdniakov 2018: 140) *do

Mel **Proto-Mel** (Pozdniakov 2018: 231) *lɛ/lɔ?

Comments: For a detailed analysis of this root, together with four other roots for ONE, see (Pozdniakov 2018).

@Pain

PROTO-BANTU *dómɪ J

MANDE *dũɓĩ

1.3 Jogo-Jeri **Jeri** díbe(n) *ache*; **Jalkunan** dímɻ̀

1.4 Vai-Kono **Kono** dímɛ

1.5 Mokole **Kakabe** dúmɛ; **Mogofin** dùmɛ̀; **Lele** dúmɛ́; **Koranko** dími, dúmu

1.6 Manding **Proto-Manding** *dímin; **Mandinka** dímìŋ *n wound; vt cause pain*; **Xasonka** dímín *n pain; vi become angry; vt cause pain (about a body part)*; **Maninka Kita** dímin; **Maninka-Mori** dímin *n pain; vi become angry; vt cause pain (about a body part); anger*; **Bambara** dímɻ̀ *suffering, pain*; **Koya** dímɻ̀n

1.7 Soninke-Bozo **Soninke** dímínnà *anger, spite*

OTHER NIGER-CONGO:

Atlantic N. Tenda-Jaad-Biafada **Jaad** dimi

Dogon **Jamsay** dìmɛ̀-[tòr-ú] *headache with throbbing pain in the forehead*

Gur **Boore** dímí ~ dímíą̀ *make suffer; be shuttered*; **Kabiye** nìmíyòò *vi struggle; writhe in pain*

Comments: See comments to the root CAT 2.

@Strength

MANDE *sɛŋbɛ

1.1 Southwestern **Mende** sémbɛ́ *vi be big; grow big; grow, grow up; n largeness, large size; strength, force*

1.2 Susu-Jalonke **Susu** sɛ́nbɛ́ *force, strength; vigour; might*

1.4 Vai-Kono **Vai** (Klingenheben & Kastenholz 2019) sɛ́mɓɛ́ *power, force; success, influence, authority*

1.5 Mokole **Mogofin** sɛ́nbɛ́; **Koranko** sɛ́nbɛ́

1.6 Manding **Mandinka** sémbè; **Maninka Nyokolo** sèmbè *be/become strong*; **Maninka Kita** sènbé; **Maninka-Mori** sénbɛ *strength, vitality; power*; **Bambara** sémé

1.7 Soninke-Bozo **Soninke** sémbè; **Tigemaxo** sémbéⁿ; **Jenaama Cliffs** sémbɛ̄; **Jenaama Jenne** sémpéⁿ

1.8 Bobo **Bobo S.** sèbé

OTHER NIGER-CONGO:

Atlantic Bak Balant **Balante Ganja** sémbé / g-sémbé; Joola **Joola Gusilay** sembɛ *strong;* **Joola Kasa** ɛ-sembɛ / si- *force, power; authority*; **Joola Kujamutay** sembɛ ~ ɛsembɛ; **Joola Kwaatay** sɛmbɛ

Atlantic N. Nyun-Buy **Nyun** sɛmbɛ; Tenda-Jaad-Biafada **Jaad** sembee; **Biafada** sembe; Fula-Sereer **Fula** (Bah 2009) semmbe

Dogon **Mombo** sémbé; **Najamba** sémbé; **Nanga** sémé *dig grooves in logs on top of well (through long use)*; **Tommo-So** sémbé

Gur **Boore** sèɓé

Mel N. **Landuma** sɛnbɛ

Mel S. **Mani** sèmbè

Isolated NC **Limba** sembe *power, ability, authority, dominion, force, effect, faculty, grandeur, importance, influence, jurisdiction, might, privilege, strength*; **Sua** sɛmbɛ

Appendix. Languages and major sources

Mande family

Bambara (Dumestre 2011)
Bandi (Grossmann et al. 1991)
Banka (Hochstetler 1996)
Beng (Paperno Ms.)
Bisa Barka (Prost 1950)
Bisa Lebir (Vanhoudt 1999)
Bobo S. (Le Bris & Prost 1981)
Bokobaru (Jones 2004)
Dan E. (Vydrin 2021)
Dan Kla (Makeeva Ms.)
Dan W. (Erman & Loh 2008)
Duun Bananso (Hochstetler 1996)
Duun Kai (Hochstetler 1996)
Duun Sieu (Hochstetler 1996)
Dzuun (Solomiac et al. 1998)
Gban (Fedotov Ms.)
Gbin (Paperno 2008)
Goo (Aplonova 2020)
Guro (Kuznetsova & Kuznetsova 2021)
Jalkunan (Heath 2017)
Jalonke (Creissels 2010)
Jenaama-Cliffs (Heath 2024b)
Jenaama-Korondugu N. (Smeltzer & Smeltzer 1995)
Jenaama-Korondugu S. (Smeltzer & Smeltzer 1995)
Jenaama Jenne (Heath 2024c)
Jeli (Tröbs 1998)
Jogo (Williams 2019)
Jowulu (Djilla et al. 2004)
Jula Kong (Sangaré 1984)
Kakabe (Vydrina 2015)

Kelenga (Heath 2023)
Kono Guinea (Konoshenko 2017)
Kono Sierra Leone (Lessau & Kastenholz 1989)
Koranko (Kastenholz 1987)
Koro (Heath & Tioté 2019)
Koyaga (Creissels 1988)
Kpan (Hochstetler 1996)
Kpelle N. (Konoshenko 2019)
Kpelle S. (Leidenfrost & McKay 2007)
Kpen (Zwernemann 1996)
Kyanga (Jones 2017a)
Lele (Vydrin 2009b)
Loko (Innes 1964)
Looma (Mishchenko Ms.)
Mandinka (Creissels 2012)
Maninka Kita (Creissels 2009)
Maninka Nyokolo (Creissels 2013)
Maninka-Mori (Vydrin 2024b)
Mano (Khachaturyan et al. 2022)
Marka-Dafing (Traore 1978)
Mende (Innes 1969)
Mogofin (Polinder et al. 2009)
Mwan (Perekhvalskaya & Yegbé 2018)
Ngen (Korol Ms.)
Numu (Persson & Persson 1976)
San Matya (Morris & Sama et al. 2011)
San Mayaa (Morris & Koussoubé et al. 2011)
San S. (Anonyme 2003)
Seenku N. (Prost 1971)
Seenku S. (McPherson 2020)
Shanga (Jones 2017b)
Soninke (Creissels 2016)
Sorogama (Daget et al. 1953)
Susu (Anonyme 2004)

Tiema-Cewe (Smeltzer & Smeltzer 1995)
Tieyaxo (Anonyme 1982)
Tigemaxo (Heath 2024a)
Tura (Idiatov Ms.)
Vai (Welmers & Kandakai 1974)
Wan (Nikitina Ms.)
Xasonka (Tveit & Dansoko 1993)
Yaure (Kushnir Ms.)
Zialo (Babaev 2011)

Non-Mande languages and their affiliation

Adamawa, Bolgo (Kastenholz 2017)
Adamawa, Day Bouna (Nougayrol 1980)
Adamawa, Kare (Lim 1997)
Adamawa, Koma (Dieu & Perrois 2016)
Adamawa, Kulaal (Pairault 1969)
Adamawa, Pere (Raen 1985)
Adamawa, Samba Leko (Fabre 2001)
Adamawa, Tupuri (Ruelland 1988)
Adamawa, Yi Kitulɛ (Blench et al. 2012)
Adamawa, Yingilum (Kraft (ed.) 1982)
Atlantic Bak Balant, Balant (Creissels & Biaye 2016)
Atlantic Bak, Bijogo (Segerer 2002)
Atlantic Bak Joola, Bayot (Diagne 2009)
Atlantic Bak Joola, Joola Banjal (Bassène 2006)
Atlantic Bak Joola, Joola Fogni (Weiss 1939)
Atlantic Bak Joola, Joola Gusilay (Sapir Ms.)
Atlantic Bak Joola, Joola Kasa (Wintz 1909)
Atlantic Bak Joola, Joola Keerak (Segerer 2011)
Atlantic Bak Joola, Joola Kujamutay (Sapir 1970)
Atlantic Bak Joola, Joola Kwaatay (Payne 1992)
Atlantic Bak Joola, Karon (Sambou 2007)
Atlantic Bak Manjak, Mancagne (Trifkovic 1969)

Atlantic Bak Manjak, Manjak (Doneux 1975)
Atlantic Bak Manjak, Pepel (Wilson 2007)
Atlantic N. Cangin, Laala (Pichl 1981)
Atlantic N. Cangin, Ndut (Doneux Ms.)
Atlantic N. Cangin, Noon (Williams & Williams 1993)
Atlantic N. Cangin, Palor (d'Alton 1987)
Atlantic N. Cangin, Saafi (Williams & Williams 1993)
Atlantic N. Fula-Sereer, Fula (Seydou 2014)
Atlantic N. Fula-Sereer, Proto-Fula-Sereer (Pozdniakov 2022)
Atlantic N. Fula-Sereer, Sereer (Crétois 1973)
Atlantic N. Nalu-Baga Fore-Pukur, Baga Fore (Mbulungish) (Golovko 2014)
Atlantic N. Nalu-Baga Fore-Pukur, Nalu (Seidel 2013)
Atlantic N. Nalu-Baga Fore-Pukur, Pukur (Ferry Ms.)
Atlantic N. Nyun-Buy, Kasanga (Wilson 2007)
Atlantic N. Nyun-Buy, Kobiana (Wilson 2007)
Atlantic N. Nyun-Buy, Nyun (Bao Diop 2013)
Atlantic N. Tenda-Jaad-Biafada, Bapen (Ferry 2006)
Atlantic N. Tenda-Jaad-Biafada, Basari (Ferry 1991)
Atlantic N. Tenda-Jaad-Biafada, Bedik (Ferry 1991)
Atlantic N. Tenda-Jaad-Biafada, Biafada (Wilson 2007)
Atlantic N. Tenda-Jaad-Biafada, Jaad (Meyer 2001)
Atlantic N. Tenda-Jaad-Biafada, Konyagi (Santos 1996)
Atlantic N. Tenda-Jaad-Biafada, Tanda (Wilson 2007)
Atlantic N. Wolof, Wolof (Diouf 2003)
BENUE-CONGO E. Proto-Bantu, BLR2 (Coupez et al. 1998)
BENUE-CONGO E. Proto-Benue-Congo (de Wolf 1971)
BENUE-CONGO E. Bantoid Ekoid, Abanyom (Crabb 1965)
BENUE-CONGO E. Bantoid, Chamba (Boyd & Sa'ad 2010)
BENUE-CONGO E. Bantoid Grassfields, Proto-Grassfields (Hyman 2007)
BENUE-CONGO E. Bantoid Grassfields, Limbum (Fransen 1995)
BENUE-CONGO E. Bantoid Grassfields Kom, Kom (Paulin 1995)
BENUE-CONGO E. Bantoid Grassfields Ring, Babungo (Schaub 2018)

BENUE-CONGO E. Bantoid Grassfields Ring, Proto-Ring (Paulin 1995)
BENUE-CONGO E. Bantoid Grassfields Ring, Babanki (Akumbu 2026)
BENUE-CONGO E. Cross Lower, Proto-Lower-Cross (Connell 1991)
BENUE-CONGO E. Cross Upper, Obolo (Rowland Oke 2003)
BENUE-CONGO E. Cross Upper, Proto-Upper-Cross (Dimmendaal 1978)
BENUE-CONGO E. Jukunoid, Jibe (Dinslage & Storch 2000)
BENUE-CONGO E. Jukunoid, Proto-C-Jukun (Shimizu 1971)
BENUE-CONGO E. Jukunoid, Proto-Jukun (Shimizu 1971)
BENUE-CONGO E. Jukunoid, Proto-Jukun-Mb (Shimizu 1971)
BENUE-CONGO E. Jukunoid, Proto-Wurbo (Shimizu 1971)
BENUE-CONGO E. Jukunoid, Proto-Yukuben (Shimizu 1971)
BENUE-CONGO E. Kainji, Bassa (Slager et al. Ms.)
BENUE-CONGO E. Platoid, Hasha (Blench 2012)
BENUE-CONGO E. Platoid, Sambe (Blench 2010)
BENUE-CONGO isolated Ukaan, Proto-Ukaan (Abiodun 2000)
BENUE-CONGO W. Defoid, Yoruba (Sachnine 1997)
BENUE-CONGO W. Edoid, Proto-Edoid (Elugbe 1987)
BENUE-CONGO W. Edoid, Urhobo (Ukere 2005)
BENUE-CONGO W. Idomoid, Eloyi (Mackay 1964)
BENUE-CONGO W. Nupoid, Gwari (Hyman & Magaji 1970)
Dogon, Bankan-Tey (Heath 2013a)
Dogon, Jamsay (Heath 2013b)
Dogon, Mombo (Prokhorov 2013)
Dogon, Najamba (Heath 2013c)
Dogon, Togo-Kan (Heath 2013d)
Dogon, Tommo-So (McPherson 2013)
Gur, Boore (de Rasilly 2012)
Gur, Churama (Suggett & Suggett 2003)
Gur, Kabiye (Marmor 1999)
Gur, Miyove (Rongier 1996)
Gur, Pana (Beyer 2006)
Gur, Proto-Central (Manessy 1979)
Gur, Proto-Gurunsi (Manessy 1969)

Gur, Proto-Oti-Volta (Manessy 1975)
Ijo, Ibani (Green et al. 2005)
Ijo, Nembe (Kaliai 2008)
Isolated, Bangime (Hantgan 2012)
Isolated Niger-Congo Gola (Westermann 1921)
Isolated Niger-Congo Limba (Clarke 2022)
Isolated Niger-Congo Sua (Segerer 1998)
Kru, Bakwe (Leidenfrost 2008)
Kru, Dida (Guéhoun 1993)
Kru, Godie (Godé 2006)
Kru, Tepo (Marchese 1984)
Kwa, Adele (Rongier 1988)
Kwa, Agni (Adouakou 2005)
Kwa, Akan (Stewart 2002)
Kwa, Attié (Kouadio N'Guessan 1996)
Kwa, Chumburung (Snider 1989)
Kwa, Ewe (Rongier 2003)
Kwa, Gichode (Snider 1989)
Kwa, Ikposo (Soubrier 2013)
Kwa, Logba (Dorvlo 2008)
Kwa, Proto-Akanic-Potou (Stewart 2002)
Kwa, Proto-Akanic (Stewart 2002)
Kwa, Proto-Ghana-Togo-Mountain (Heine 1968)
Mel N., Baga Koba (Houis 1953)
Mel N., Baga Sitemu (Ganong 1998)
Mel N., Landuma (Rogers & Bryant 2012)
Mel N., Temne (Thomas 1916)
Mel S. Bom (Childs 2012a)
Mel S., Kim (Childs 2012b)
Mel S., Kisi (Childs 2000)
Mel S., Sherbro (Pichl 1967)
Senufo, Mamara (Anonyme 2009)
Senufo, Supyire (Carlson 1994)
Ubangi, Baka (Brisson & Boursier 1979)

Ubangi, Linda (Cloarec-Heiss 1996)
Ubangi, Mba-Dongo-Ko (Pasch 1987)
Ubangi, Mbandja (Tingbo 1971)
Ubangi, Mundu (Vallaeys 1991)
Ubangi Gbaya, Proto-Gbaya (Moñino 1995)

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Abbreviations

adj	–	adjective
BC	–	Benue-Congo
Ce	–	central
E.	–	East, eastern
n	–	noun
N.	–	North, northern
NC	–	Niger-Congo
NE	–	North-East, north-eastern
NW	–	North-West, north-western
PB	–	Proto-Bantu
PM	–	Proto-Mande
PNC	–	Proto-Niger-Congo
pp	–	postposition
rn	–	relational noun
S.	–	South, southern
SE	–	South-East, south-eastern
SW	–	South-West, south-western
v	–	verb
vi	–	intransitive verb
vq	–	qualitative verb
vr	–	reflexive verb
vt	–	transitive verb
W.	–	West, western

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