

# Chapter 5

## The relevance of Bantoid for the reconstruction of Proto-Bantu verbal extensions

Roger M. Blench

Kay Williamson Educational Foundation

In this chapter the relevance of Bantoid for the reconstruction of verbal extensions in Proto-Bantu (PB) is assessed. The Bantoid or Wide Bantu languages are a body of some 150–200 languages positioned geographically between Nigeria and Cameroon. They do not form a genetic subgroup, but all are in some way related to Narrow Bantu, i.e. Bantu as referentially classified by Guthrie (1948; 1967–71), more closely than other branches within Benue-Congo. The most well-known subgroups are Dakoid, Mambiloid, Tivoid, Beoid, Grassfields, and Mbe-Ekoid. The chapter discusses the characteristics of verbal extensions in Bantoid and their possible relation to extensions attested in Narrow Bantu on the one hand, and in other branches of Benue-Congo on the other hand. Based on a review of the literature on verbal extensions in the various branches of Bantoid and on case studies of individual languages, the chapter concludes that a rich system similar to Narrow Bantu can be reconstructed for Proto-Grassfields, while in other Bantoid subgroups, it is now lost or much reduced. Only the causative *-si* is attested in a substantial number of subgroups. Some Bantoid extensions show significant segmental similarities to certain extensions in Narrow Bantu zone A languages, which have never been reconstructed for PB. It is argued that these extensions shared between the highest branches of the Bantu family tree warrant a revision of PB verb derivation suffixes.

### 1 Introduction

The Bantoid languages are a body of some 150–200 languages positioned geographically between Nigeria and Cameroon. There is no evidence they form a



genetic subgroup, although they are all in some way related to Narrow Bantu more closely than to the rest of Benue-Congo. The most well-known Bantoid subgroups are Dakoid, Mambiloid, Tivoid, Beboid, Grassfields and Ekoid. Bendi, formerly classified as Cross River, may also be Bantoid. Jarawan is sometimes claimed to be Narrow Bantu instead of Bantoid (or Wide Bantu). The division between (Narrow) Bantu and Bantoid used in this chapter considers that (Narrow) Bantu consists of the subgroups as defined in the referential classification of Guthrie (1967–71).

Both (Narrow) Bantu and Bantoid are characterised by systems of nominal affixes and alliterative concord, although these are highly eroded in some languages. However, Bantoid noun morphology is not that of classic Bantu, despite its prefixes being often ascribed the same class numbers in a somewhat misleading way. Bantoid does not represent a genetic group, although the languages are related. It is simply a cover term for those subgroups which split away from Benue-Congo before the genesis of Narrow Bantu (Blench 2015). Even the division between Bantu and Bantoid is now often questioned, as some authors have observed that much of Bantu A, with its highly reduced noun classes, would perhaps be better treated as Bantoid.

Apart from noun classes, one of the characteristic features ascribed to Proto-Bantu (PB) is its system of verbal extensions (Schadeberg 2003). These are (V)(C)V elements which are (usually) suffixed to the verb stem, and in some languages can be stacked in complex strings. They can transform the semantics and syntax of the verb, marking number, directionality, or reflexivity and bring about other changes, as well as denote some types of aspectual marking. Verbal extension morphology can almost certainly be traced back considerably further in Niger-Congo (e.g. Voeltz 1977; Trithart 1983; Hyman 2007; 2014). Such suffixes are present in some form in many Niger-Congo branches, though not in Mande, some branches of Kordofanian, Dogon and Ijò. Ijò, intriguingly, does have a small repertoire of verbal extensions synchronically, but these show no segmental cognacy with other branches of Niger-Congo (Kay Williamson, p.c.). Whether these should be reconstructed to Proto-Niger-Congo depends on what internal structure is claimed for the phylum. Similarly, the state of scholarship is not such that we can easily assert that particular segmental features can be reconstructed. Hyman (2014) discusses the uneven distribution of verbal extensions in the different branches of Niger-Congo and the extent to which they reflect those found in Bantu.

In any event, it is reasonable to assume that several of the extensions reconstructed for PB go back to Proto-Benue-Congo. Benue-Congo is of considerable importance, because some languages exhibit features which resurface in Bantu,



but which are only attested in fragmentary form or not at all in Bantoid. In most branches of Benue-Congo these have become unproductive, becoming incorporated in roots. Nowhere in Bantoid are these systems wholly functional, but their former presence can be detected from the presence of “frozen” morphemes. Hyman (2017a) addresses this issue in what he terms *from syntheticity to analyticity* and discusses the way in “which [Bantoid] languages compensate for the loss of valence-adding extensions, e.g. the applicative, which has multiple functions in Common Bantu”. He identifies periphrasis, unmarked double objects, adpositions and nominal constructions as strategies for dealing with the loss of verbal extensions. Table 1, adapted from Hyman (2017a: Table 3), summarises the sort of contrasts which can be expected.

Table 1: Canonical Bantu compared with Bantoid (Hyman 2017a: Table 3)

Feature	Canonical Bantu	Bantoid
phonology	minimum word = 2 syllables	maximum stem = mostly 2~3 syllables
morphology	highly synthetic, agglutinative	less so, gradual move towards analyticity
verb extensions	many, mostly marking valence	few, mostly marking aspect
unmarked objects	multiple	at most two, ultimate limitation to one per verb
object marking	head marking on verb	various prepositions and/or serial verbs
ditransitive verbs	a few (* <i>pá</i> ‘give’)	few or none

The concern of this chapter is primarily with identifying the trail of evidence that links segmental evidence for existing or former extensions in Bantoid with those in Bantu. Although a standard list of proposed reconstructed verbal extensions exists for PB, comparative data from Guthrie’s zone A and closely related Bantoid languages provide only limited support for the proposed forms.

The definition of extensions varies from author to author, and in the maximal interpretation it is any suffix on a verb, including tense/aspect markers. In

the Bantoid region, many languages have verbs with unproductive suffixes that have no assignable meaning. The hypothesis is that these are the traces of now fossilised extensions, although this claim would need to be supported by the semantics of synchronic verb forms. Note that in some languages, changes in meaning similar to those brought about by extensions occur through tonal change. It seems reasonable to include these in a list of extensions (Hyman 2017b). In certain languages, such as Vute, innovative extension-like suffixes originate in Serial Verb Constructions. Over time, these forms may be lexicalised to merge with the set of authentic extensions. Productive extensions are those for which there is evidence that they have an assignable semantics and can be suffixed to roots as part of the derivational process in speech.

The verbal extensions of PB have generated a considerable literature. The first discussions of these go back to Meinhof (1899; 1910) and the *Bantu Grammatical Reconstructions* of Meeussen (1967). The literature on this is summarised in Schadeberg (2003: 72) whose list of proposed reconstructions, reproduced in Table 2, is still the most widely cited (see also Schadeberg & Bostoen 2019: 173).

Table 2: Proto-Bantu verbal extensions

Proto-Bantu	Semantics
*-i/-ici	causative
*-id	applicative
*-ik	impositive
*-ik	neuter
*-am	positional, stative
*-an	associative, reciprocal
*-a(n)g	repetitive
*-al	extensive
*-at	tentative, contactive
*-ɔ/*-ibɔ	passive
*-ɔl/-ɔk	reversive

This system is relatively rich and has the potential for stacking. In certain Bantu languages, up to four extensions can be added to the stem to generate very specific subsets of meaning. The analytic question is the extent to which these can be linked to extensions attested for Bantoid, or further back, for Benue-Congo. Since Bantoid is a key element in understanding the genesis of Bantu verbal extensions, this chapter summarises the presence or absence, morphology and semantics of extensions in the Bantoid languages. Hyman (2018) has

reviewed verb extensions in some Bantoid branches with a view to reconstruction, although the coverage is far from comprehensive. Hyman (2018: 176) divides these into three classes: (1) productive extensions; (2) unproductive extensions often restricted to post-radical position or specific combinations; and (3) frozen, mostly unidentifiable -VC- expansions. He also suggests lists of allomorphs of the forms cited in Table 2.

Since extensions preserved in some branches strongly resemble Bantu, this chapter also considers briefly the relationship of Bantoid to Benue-Congo (§2). Overall, Bantoid languages are poorly documented, so in §2.3 time is given to discussing the question of internal classification and data sources. The ancestry of the characteristic extensions in Bantoid can be traced in Benue-Congo languages as discussed in §3.1. Existing information about the presence or absence of extensions in the established branches of Bantoid is summarised in §3.2. Case studies of synchronic extensions are presented in §3.3 which includes a section on Bantu zone A languages. The conclusion summarises the evidence presented and considers this evidence for the historical origin of attested Bantu extensions.

## 2 Classification of Bantoid

### 2.1 Bantoid (Wide Bantu) vs. (Narrow) Bantu opposition

Sigismund Koelle (1854) and Wilhelm Bleek (1862–69) noted that many languages of West Africa also showed noun classes marked by prefixes, and Bleek went so far as to include a “West-African” division in the family he named Bantu. According to Jungraithmayr & Möhlig (1983), the term “Bantoid” was introduced by Krause (1895), but it seems to have been subsequently forgotten. It re-appears in Guthrie (1948; 1967–71) to describe what he called “transitional” languages, replacing the vague term “Semi-Bantu”, which goes back to Johnston (1919–22). The modern sense of the term Bantoid to refer to Bantu-like languages of the Nigerian-Cameroon borderland may have first appeared in Jacquot & Richardson (1956). This includes summary sketches of Nyang, Ekoid, Tikar and Grassfields languages, although the volume as a whole also incorporates material on Narrow Bantu and a variety of Adamawa and Ubangian languages so it is rather unspecific.

Despite the discussion in Johnston (1919–22) and Guthrie (1967–71) of the place of Bantoid languages with apparent correspondences to Bantu, it was Greenberg (1963, 1974) who first emphasised the issue of genetic classification as opposed to typology. He treated Bantu as one branch of Benue-Congo, i.e. the adjacent languages of southern and eastern Nigeria and Cameroon. He says:

“the Bantu languages are simply a subgroup of an already established genetic subfamily of Western Sudanic [i.e. Niger-Congo, broadly speaking]” (Greenberg 1963: 32). Figure 1 shows Greenberg’s classification.

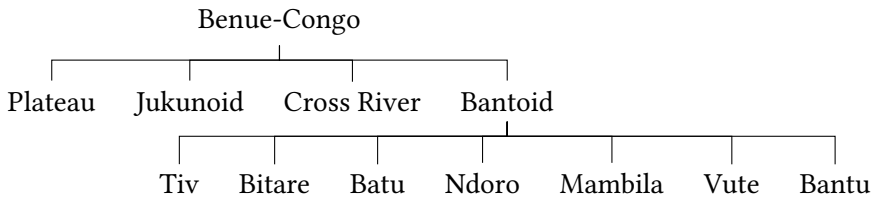


Figure 1: Greenberg’s (1963) situating of Bantu

Greenberg (1963: 35) also clearly stated that “supposedly transitional languages are really Bantu”. In other words, many languages lacking some features typical of Bantu are nonetheless related to it. This approach to Bantu was refreshing and made historical sense in a way that Guthrie’s views never had. But since the 1960s, data has gradually accumulated on the vast and complex array of languages in the “Bantu borderland”, i.e. the region between southern Cameroon (where Guthrie’s Bantu begins) and eastern Nigeria. The next step in the evolution of our understanding of Bantoid was the formation of the Grassfields Working Group in the early 1970s. Many of these findings were summarised in overview articles from this period, including Hedinger (1989) and Watters & Leroy (1989a,b).

Bantoid and Bantu represent nested subsets of Benue-Congo, a large and complex group of languages, whose exact membership remains disputed. Originating with Westermann’s (1927) *Benue-Cross-Fluss*, it took shape in Greenberg (1963), Williamson (1971) and de Wolf (1971). The name “Benue-Congo” was introduced by Greenberg (1963) who proposed a division into four branches: Plateau, Jukunoid, Cross River, and Bantoid. For a period in the 1980s and 1990s, it was considered that all the languages in the former “Eastern Kwa”, i.e. Yoruboid, Igboïd, Nupoid etc. were part of Benue-Congo, i.e. Western Benue-Congo. However, the evidence for this was never published and, in my view, it seems easier to revert to Benue-Congo as in Greenberg’s original, with the potential addition of Ukaan, a small cluster of languages spoken south-west of the Niger-Benue confluence. Ukaan has alternating prefixes (i.e. those which change on a predictable basis), marking number and concord, as well as some segmental cognates, hence its likely affiliation with Benue-Congo, but its exact position remains to be determined. With this in mind, Figure 2 provides a schematic representation of my current understanding of the sub-classification of Benue-Congo languages as the result of numerous years of research on many of those languages.

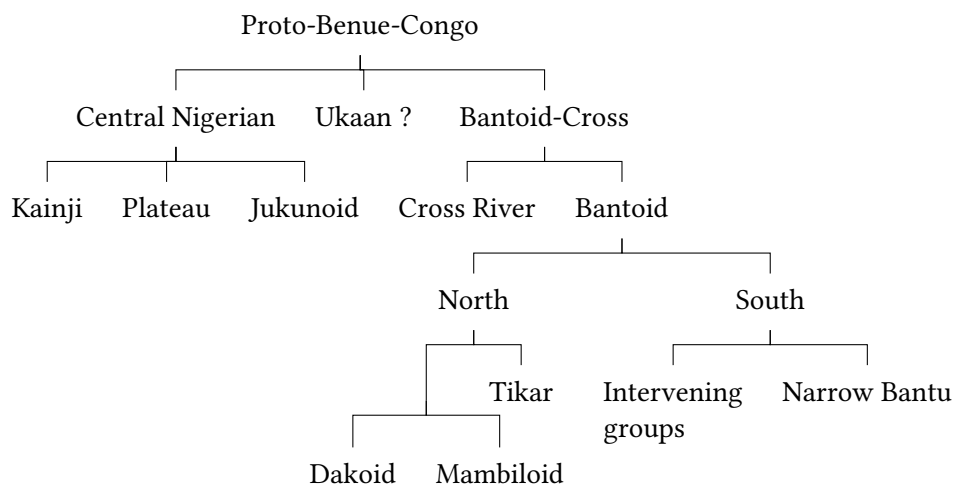


Figure 2: Revised sub-classification of Benue-Congo languages

It is emphasised strongly that no claim is made for Bantoid as a genetic group; it is rather a referential term covering all languages with a discernible relationship to Narrow Bantu. Bendi, previously considered part of Cross River, has been shifted to Bantoid, a change of affiliation proposed by Blench (2001).

## 2.2 Membership of Bantoid

Although (Narrow) Bantu has been treated as a genetic unity since the middle of the nineteenth century, it is unlikely there is any distinctive boundary between Bantu and the languages related to it. As Bostoen & Van de Velde (2019) note, no lexical or morphological isoglosses have been identified that clearly demarcate Bantu from its closest relatives. Figure 2 shows the subgroups that “stand between” Bantoid-Cross and Narrow Bantu. The languages represented are very numerous (150 ~ 200) and also highly diverse morphologically. New languages are likely to be discovered and more work in historical reconstruction will improve our understanding of how these languages relate to one another. This section lists the major Bantoid subgroups as presently understood. Most of these groups are uncontroversial, although the genealogical validity of poorly documented isolate branches, such as Buru, which may either be Tivoid or an independent branch, need more study. A more complete list of the languages which Bantoid includes is given in the Ethnologue (Eberhard et al. 2022) and Glottolog (Hammarström et al. 2021). In the absence of more in-depth historical-linguistic

research, I assume that individual groups split away from a common stem, and developed their own characteristics. The order in which this took place remains controversial, and will take considerable further work to resolve in a satisfying manner.

One particular aspect of Figure 2 requires further consideration, namely the division of Bantoid into North and South. Dakoid, Mambiloid and Tikar represent language groups with either no noun classes, or relics of a divergent system, as in Tikar. I believe that these three should be classified together as “North Bantoid”. However, the lack of data for some languages and convincing reconstructions of their historical morphology makes this at best a speculative hypothesis. The other side is “South Bantoid”, which is not a discrete branch in itself, but just a convenient cover term for Narrow Bantu and its closest relatives that do not belong to Dakoid, Mambiloid and Tikar. A proposal for the stepwise branching of different “Southern Bantoid” subgroups is presented in Figure 3. Narrow Bantu is depicted here conventionally as a separate subgroup, although several lexicon-based classifications, such as Piron (1997; 1998), Grollemund et al. (2015) and Grollemund et al. (2018), point out that it is genealogically not discrete from Grassfields and Jarawan Bantu.

Table 3 lists the major subgroups of Bantoid following the order in which I believe them to have diverged from Benue-Congo.

It is important to flag some caveats. Not all authors agree that Dakoid is Bantoid (e.g. Boyd 1994; 1997) and the placing of Ndoro in Mambiloid remains doubtful. Bendi has long been treated as Cross River following Greenberg (1963) and Williamson (1989), but without good evidence. The data on Furu is too uncertain to be sure whether it has been correctly classified; a Jukunoid affiliation is possible. Jeff Good and his colleagues have argued convincingly that Beboïd is not a unity, and even that the languages within Yemne-Kimbi (= formerly West Beboïd) may not constitute a genetic group (Good et al. 2011). Ambele and Menchum are treated as co-ordinate with Grassfields, but the evidence remains sketchy. Momo has been split up into Momo proper and South-West Grassfields. The evidence for the placing of Jarawan, treated in previous texts as Bantoid, remains controversial. Lexically, it is more closely related to Narrow Bantu languages, perhaps Guthrie’s A60 group (cf. Piron 1997; Grollemund et al. 2015), but the loss of both verbal and nominal morphology makes its integration into Narrow Bantu uncertain.<sup>1</sup> An alternative interpretation could be that this loss is a later areal feature.

---

<sup>1</sup>A striking disagreement over the classification of Jarawan Bantu was aired at the First Bantoid Conference held in Hamburg in March 2022. Contrary to the present author’s claim of an A60 affiliation, Van de Velde & Idiatov (2022) argued for A80-A90, while Jeffrey Wills and Rebecca Grollemund (p.c.) assign Jarawan to Bantoid. Clearly this argument has some way to go.

## 5 Reconstruction of Proto-Bantu verbal extensions with Bantoid

Table 3: Major subgroups of Bantoid

Group	Country	Location	Representative language(s)
Dakoid	NGA	around Ganye	Daka, Taram, Tiba
Mambiloid	NGA/CMR	around Gembu	Mambila, Kwanja, Vute, Ndoro
Tikar	CMR	NE of Foumban	(three dialects)
Bendi	NGA	around Ogoja	Bokyi, Bekwara, Alege
Tivoid	NGA/CMR	around Obudu	Tiv, Iyive, Ugara
Buru	NGA	Buru	Buru
Furu	NGA/CMR	Furu Awa	Furu
East Beboïd	CMR	around Nkambe	Noone, <sup>a</sup> Ncane
Yemne-Kimbi	CMR	NE Grassfields	Fungom, Mundabli
Nyang	CMR	Mamfe	Kenyang
Ekoid	NGA/CMR	Mamfe	Ejagham, Etung
Mbe	NGA	Ogoja	Mbe
Ambele	CMR	Grassfields	Ambele
Menchum	CMR	Grassfields	Menchum
Grassfields	CMR		
• Ndemli	CMR	Nkam, Littoral region	Ndemli
• Ring	CMR	Grassfields	
– Centre	CMR	Grassfields	Babanki, Kom, Mmen, Oku
– East	CMR	Grassfields	Lamnso?
– South	CMR	Grassfields	Bamunka
– West	CMR	Grassfields	Aghem, Isu
• Momo	CMR	Grassfields	Moghamo
• South-West	CMR	Grassfields	Manta
• Eastern	CMR	Grassfields	
–Bamileke	CMR	Grassfields	Bamileke, Ngiemboon, Ngomba
–Ngemba	CMR	Grassfields	Bafut, Mankon, Ngemba
–Nkambe	CMR	Grassfields	Limbum, Mfumte, Yamba
Jarawan	NGA/CMR	East-Central Nigeria	Jar, Mbula-Bwazza, Mama
Bantu zone A	CMR	Southern Cameroon	Akoose A15C

<sup>a</sup>This language name is spelt in various ways (Noni, Nooni) in bibliographic references and even within the Noone community.

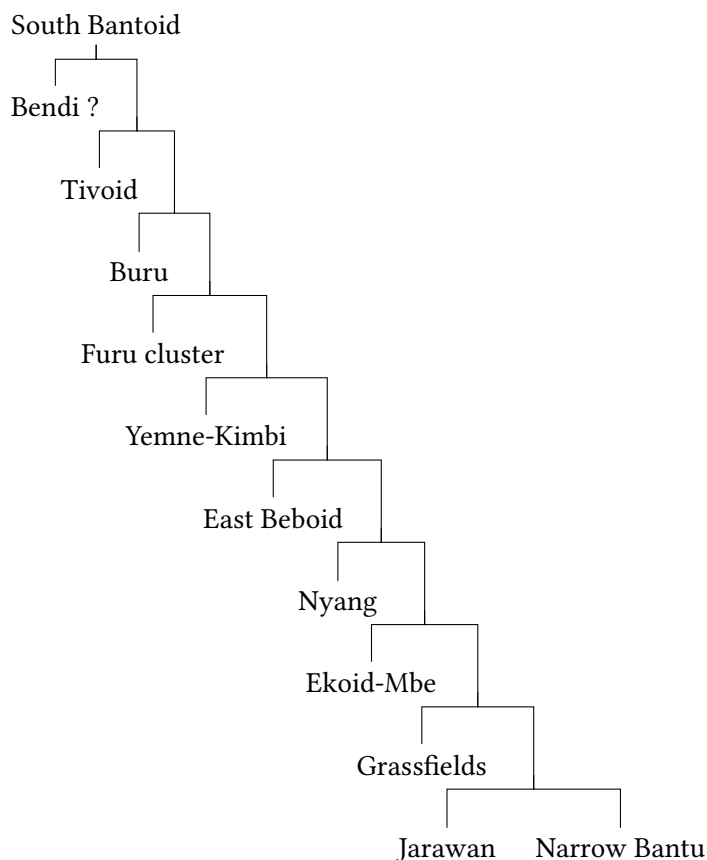


Figure 3: Proposal for the stepwise divergence of Bantoid languages

Common to this body of work is that the classifications were presented with limited justification. This is perhaps unsurprising as the number of languages is very large and many were poorly known, then and still today. Piron (1997) and Bastin & Piron (1999) represent classifications of Bantoid using lexicostatistics. The PhD thesis of Grollemund (2012) applies more recent statistical techniques to basic vocabulary for the classification of Bantu and Bantoid, but its focus is on Narrow Bantu with a random sample of South Bantoid languages. Blench (2015) is the only overview of all families which, in my view, can be assigned to Bantoid.<sup>2</sup>

<sup>2</sup>Overviews of the major Bantoid branches, together with wordlists of isolates such as Buru, and arguments for their coherence, can be found on the relevant page of my website: <http://www.rogerblench.info/Language/Niger-Congo/Bantoid/BantdOP.htm>.



## 5 Reconstruction of Proto-Bantu verbal extensions with Bantoid

Maps of the main Bantoid groups are provided in the relevant sections below. These are in the main based on those available on the relevant Wikipedia pages which are in turn redrawn from the Ethnologue. However, where errors were spotted, for example in the Beoid and Dakoid maps, these have been redrawn to reflect current understanding. Tivoid is shown in Figure 4, together with the unclassified Esimbi and Buru.

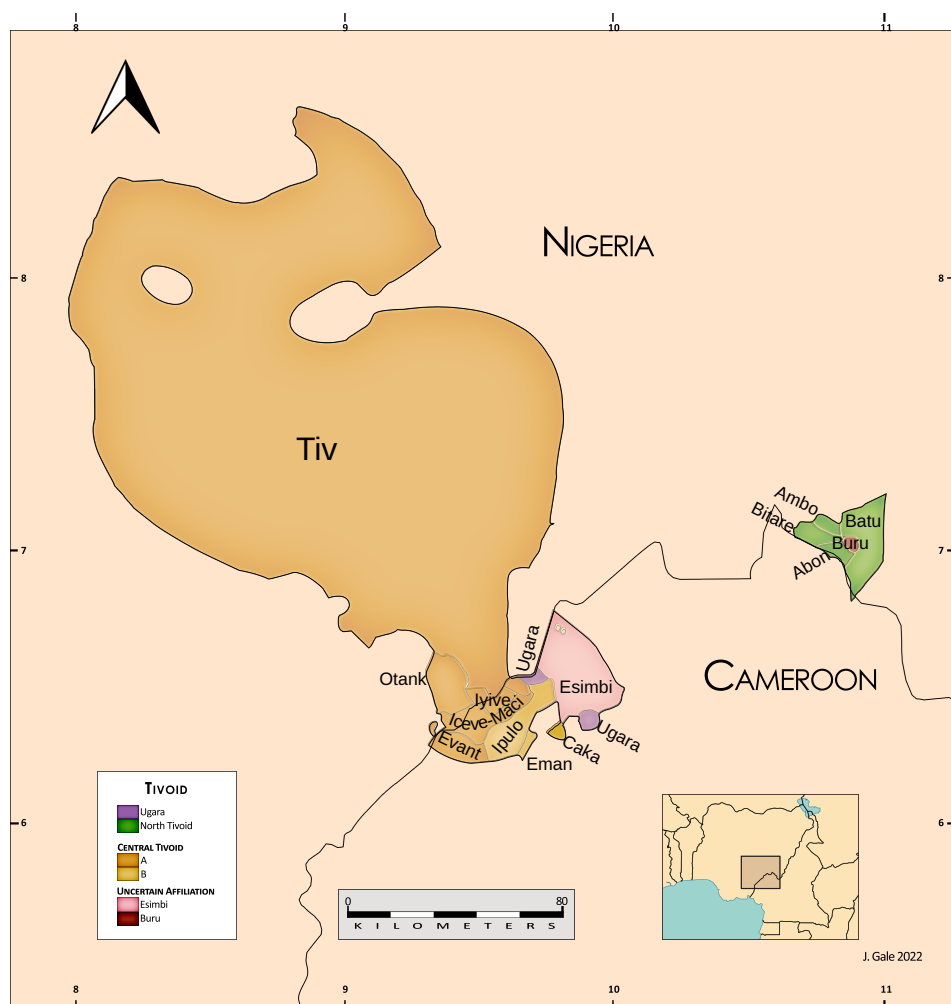


Figure 4: Map of the Tivoid languages, together with Esimbi and Buru

A feature of the Bantoid area is intensive borrowing, both between closely related languages and between different branches of Bantoid. Bantoid languages are largely found in an area of high density settlement, linked by complex trade networks and long noted for extensive multilingualism. Warnier (1979) analysed this in respect of another grammatical feature, viz. noun classes, noting their extensive borrowing and consequent morphological re-analysis. More recently, Di Carlo et al. (2018), Di Carlo et al. (2019) and Di Carlo et al. (2020) have reviewed multilingualism in Africa in general, but also focused on the Lower Fungom area of the Grassfields, where the details of language interaction can be analysed at the micro-level. This type of multilingualism, which involves borrowing grammatical features as well as vocabulary, goes a long way to explaining why verbal extensions in Bantoid do not form tidy patterns.

### 2.3 Overview of the data sources

The descriptive data required to characterise Bantoid languages in ways which would satisfy historical linguists and typologists is not available for many branches. The literature on many subgroups is sparse, to say the least, and many important sources are unpublished. Because so much of the material has focused on an ultimate goal of orthography and literacy, phonology and noun classes remain much better understood than, for example, verbal extensions.

There are two key caches of unpublished and mainly electronic data, the files of SIL International – which incorporates much of the data collected for ALCAM, the *Linguistic Atlas of Cameroon* (Dieu & Renaud 1983) – and the student dissertations supervised at the University of Yaoundé I. Part of the legacy material is available on the SIL Cameroon website (<https://www.silcam.org/>) although much material, especially fieldwork lexicons, remain in the hands of its members.<sup>3</sup> Wycliffe Nigeria has recently undertaken surveys of the Bantoid languages on the Nigerian side of the border, resolving numerous queries about the extent and classification of particular branches.<sup>4</sup> Jeff Good has facilitated the scanning of University of Yaoundé I theses in linguistics up to 2006, and these are now available electronically.

---

<sup>3</sup>Thanks to Robert Hedinger for making this material available.

<sup>4</sup>Materials from Nigeria created by SIL survey staff are available on personal application.

### 3 Bantoid verbal extensions

#### 3.1 Verbal extensions in Benue-Congo

To assess the time depth of possible verb extensions in Bantoid, their historical origin can be explored within Benue-Congo. However, much of Benue-Congo, including Plateau, Jukunoid and Cross River, retains only traces of a verbal-extension system. Only the Kainji languages in north-west Nigeria have elaborate Bantu-like systems, analysed in McGill (2009) for the Cicipu language, part of the Kambari cluster, and in Mort (2012) for tiCind, a Kamuku language. Cicipu (McGill 2009: 227ff.) has the extensions listed in Table 4; the labels are copied from the author.

We cannot reconstruct forms for extensions in Proto-Kainji, due to the limited number of grammatical descriptions (though see Paterson 2019), and it is therefore not possible to discriminate between older segmental patterns and those which may be innovative.

Extensions have either disappeared or been reduced to unproductive segments in most branches of Kainji, Plateau, Jukunoid and Cross River. However, it is possible to infer likely extensions from synchronic verb forms. Table 5 lists three recurrent suffixes identified in the lexicon of Tarok (Plateau).

However, these are unproductive today and do not clearly resemble any of those reconstructed for Bantu. Nonetheless, their fragmentary survival leads to the conclusion that a system of verbal extensions has to be reconstructed back to the level of Proto-Benue-Congo, and must therefore have been present in early Bantoid. However, their segmental forms can no longer be identified.

Table 4: Verbal extensions in Cicipu (McGill 2009)

Segment	Interpretation
-is- ~ -sV	causative, intensive
-wA	valence-increasing, anti-causative, separative
-nA	ventive
-nu	resultative, intensifier, de-intensifier
-il	pluractional <sup>a</sup>

<sup>a</sup>Although suffixed after the root, it can be followed by tense/aspect markers and then another extension.

Table 5: Fossilised verbal extensions in Tarok

Segment	Interpretation
- <i>fɪ</i>	singulative, do something once
- <i>dar</i>	do something completely, intensively
- <i>ri/-li</i>	unassigned

### 3.2 Synchronic distribution of verbal extensions in Bantoid

A primary question in analysing Bantoid verbal extensions is accounting for their absence in some branches, especially in those more remote from Narrow Bantu, where they have disappeared without leaving obvious segmental traces. Table 6 summarises the situation for the different Bantoid subgroups identified in the literature. It should be emphasised that there are no specific publications on extensions in many of them. Those marked functional have been identified in the literature as in active use, whereas inferred suffixes are those which I have extracted from lexical data. The claim for their presence or absence has to be based on inferences from the lexicon or incidental data. Some of the more diverse subgroups, such as Mambiloid, may include languages with no remaining extensions and those where they are evidently present. Key references are given for individual languages.

Hyman (2018) is a survey of Bantoid verb extensions which includes Grassfields, Mbe (Ekoid), Tikar, Noone, Kemezong (Beboid) and Vute (Mambiloid) in his comparative tables. To throw light on the ancestry of Bantu verbal extensions we must create a basic tabulation of the presence of extensions in individual Bantoid branches, although some may eventually be discarded as not relevant to Bantu.

### 3.3 Case studies

#### 3.3.1 Dakoid: Sama Mum

The Dakoid languages represent one of the least-described subgroups of Bantoid and were previously classified as Adamawa by Greenberg, presumably because of their cultural relationship with the Samba Leko. They are spoken in eastern Nigeria around the Shebshi mountains, see Figure 5.

There are no specific publications on extensions, so these must be inferred from lexical data. The main resource is a dictionary of Sama Mum or Samba Daka,

## 5 Reconstruction of Proto-Bantu verbal extensions with Bantoid

Table 6: Identifying verbal extensions in major subgroups of Bantoid

Group	Verbal extensions		Language	Reference
	Functional	Inferred		
Dakoid		✓	Daka	Boyd & Sa'ad (2010)
Mambiloid	✓	—	Nizaa	Kjelsvik (2002: 19ff.)
Mambiloid	✓	—	Vute	Thwing (2006)
Tikar	✓	—	Tikar	Stanley (1991)
Bendi	—	—	Bekwara	Stanford (1967)
Tivoid	—	—	Tiv	Arnott (1958)
Buru	?	—	Buru	Koops (s.d.)
Furu	?	—	Furu	Breton (1993), Kießling (2007)
East Beoid	✓		Noone	Hyman (1981)
East Beoid	✓		Mungong <sup>a</sup>	Boutwell (2014)
East Beoid	✓		Nchane	Boutwell (2020)
Yemne-Kimbi	—	—	Mundabli	Voll (2017)
Nyang	—	—	Denya/Kenyang	Unpublished lexicons
Ekoid	—	—	Ejagham	Watters (1981)
Mbe	✓	—	Mbe	Bámgbósé (1967)
Ambele	?	?	Ambele	Nganganu (2001)
Menchum	?	?	Befang	Gueche Fotso (2004)
Grassfields				
•Ndemli	✓		Ndemli <sup>b</sup>	Ndedje (2013)
•Ring	✓		Lamnso?	Grebe & Siiyaatan (2015) <sup>c</sup>
•Momo	✓		Meta'	Spreda (1995), Hyman (2018)
•South-West	?	?	Manta	Ayotte & Ayotte (2003)
•Eastern				
– Bamileke	✓	—	Ngiemboon	Lonfo & Anderson (2014) <sup>d</sup>
– Ngemba	✓		Bambili	Ayuninjam (1998)
– Nkambe	—	—	Mfumte	McLean (2014)
Jarawan	✓	✓		Van de Velde & Idiatov (2022)
Bantu zone A	✓	✓	Akoose A15C	Hedinger (1992; 2008)

<sup>a</sup>However, the verbal extensions for Mungong consist only of a multiple action extension and an extremely rare causative in *-si*.

<sup>b</sup>Although Ngoran (1999: 73) states that “[i]n this language, we have been unable to uncover any vestiges of suffixal extensions”, they are identified in Ndedje (2013).

<sup>c</sup>See Table 15 in §3.3.7.

<sup>d</sup>See Table 14 in §3.3.6.

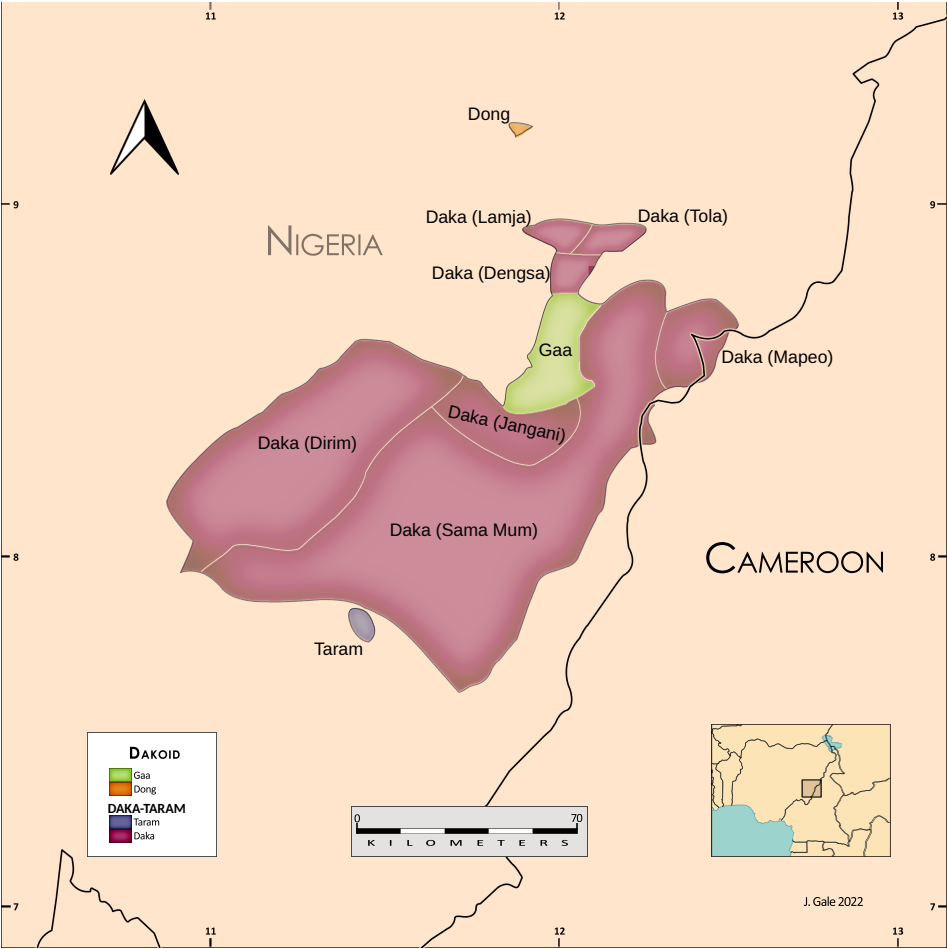


Figure 5: Map of the Dakoid languages

which has a list of the semantic categories of verbal derivations in the introduction, but without any information on their segmental form (Boyd & Sa'ad 2010). I therefore had to infer the extensions and their semantics from the dictionary entries. I have given an example of each verb with these extensions, but for two categories listed in the text, no examples are apparent. The proposed extensions are shown in Table 7.

Table 7: Sama Mum verbal extensions (inferred from Boyd & Sa'ad 2010)

Segment	Interpretation	Example
-kì, -sì	pluractional	<i>bāl-kì</i> 'move many things about', <i>bīp-sì</i> 'twist many'
-sì	causative	<i>bāā-sì</i> 'recall'
-rì	causative II	<i>bōb-rì</i> 'spot, stain'
-èn, -sèn, -kèn, -mèn	resultative I, II	<i>bāl-èn</i> 'move about', <i>dāk-sèn</i> 'be walking stealthily', <i>būū-kèn</i> 'be inhaled', <i>bān-mèn</i> 'be farmed'
-kèn, -sèn	reciprocal	<i>bān-kèn</i> 'farm for each other'
?	applicative	not listed in text
	diminutive	only one case known

Since the authors do not always mark their lexical examples, it is not always clear where some segments are to be found. A striking aspect of Sama Mum is the allomorphy of /s/ and /k/ and the absence of extensions indicating motion, which is characteristic of other branches of Bantoid. The CVn structures which characterise Sama Mum recur in several Bantoid branches and Akoose A15C, which argues either for a genetic connection or the repeated fusing of two extensions (see Bostoen & Guérois (2022 [this volume])).

### 3.3.2 Mambiloid

The Mambiloid languages are a very internally diverse family spoken in Nigeria and north-west Cameroon (Blench 1993). Figure 6 shows their approximate distribution.

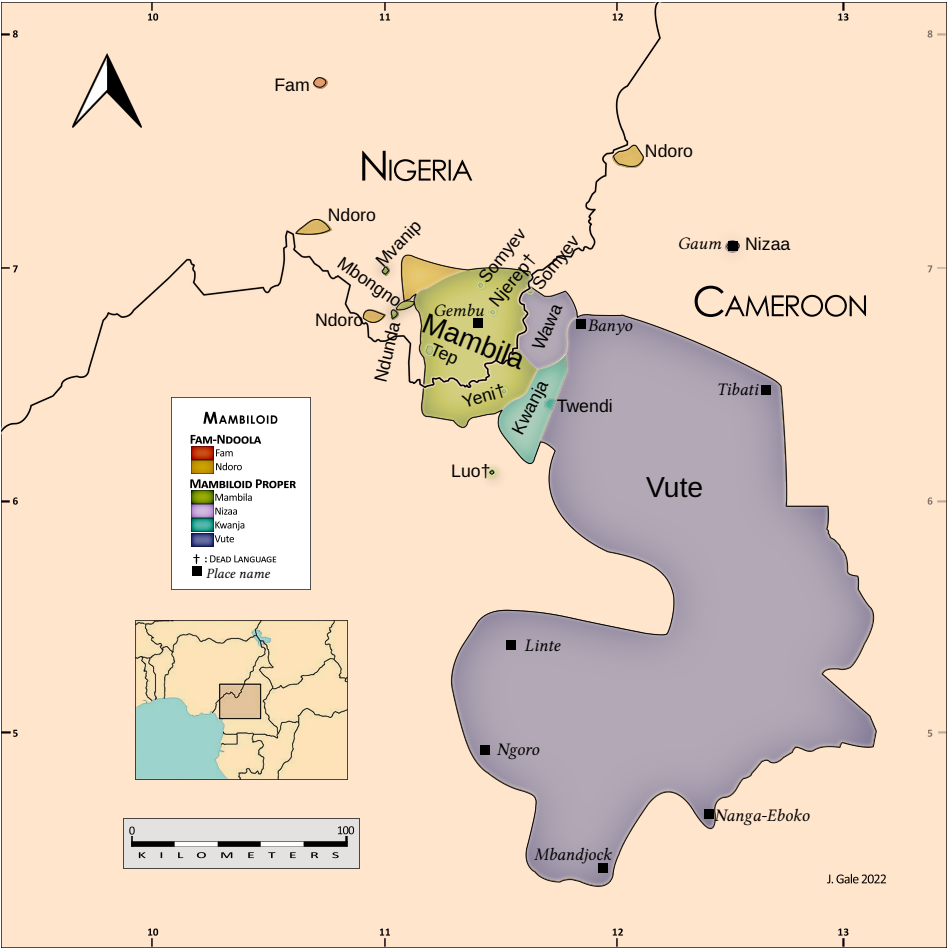


Figure 6: Map of the Mambiloid languages



## 3.3.2.1 Nizaa

The Nizaa language preserves verbal morphology far better than some other languages in the group, in contrast to Mambila itself, which has lost virtually all nominal and verbal morphology. The main summary of verbal extensions in Nizaa is Kjelsvik (2002: 18). Table 8 outlines the forms she identifies, although she does not provide examples for the directional.

Table 8: Nizaa verbal extensions (Kjelsvik 2002: 18)

Function	Segment	Interpretation	Example
Number marking	-r suffix, vowel lowering	verbal plurality	<i>ki</i> ‘cut once’, <i>kir</i> ‘cut many times’, <i>njúb</i> ‘strike once’, <i>njwáb</i> ‘strike many times’
Directional	-a	‘illative’, motion into an enclosure	
	-ri	‘allative’, motion towards a location, often the deictic centre of the sentence [perhaps corresponds to Bantu applicative]	
	-wa	‘distantive’, motion away from a location, or from the deictic centre [perhaps corresponds to Bantu separative]	
	-sa	‘down’, motion towards a lower location	
Completive	-ki	‘totality’	<i>kibkirá</i> ‘wean’, <i>kagkirá</i> ‘attach’

Kjelsvik (2002) notes that stacking of up to three suffixes is allowed, highly unusual for Bantoid.

### 3.3.2.2 Vute

Vute, also part of the Mambiloid group, is spoken in north-west Cameroon around Banyo (Guarisma 1978). The only published description of Vute verbal extensions is Thwing (1987), but Thwing (2006) can be downloaded and provides a more complete overview. Vute has either developed or retained a rich repertoire of extensions, in contrast to other languages in its group. It is notable because, like Nizaa, it allows strings of up to four suffixes on the verb root (Thwing 2006: 28). Thwing (2006: 29) summarises the extensions and these are presented in Table 9.

Thwing (2006) also includes a long list of adverbial extensions, which are omitted here. One of these, *-kí* for ‘completely’, resembles Nizaa *-ki* marking ‘totality’. She also notes “phasal” extensions, essentially marking inceptive and completive, both of which have transparent etymologies. The benefactive *-nà* and the directionals are undoubtedly innovative, as Thwing (2006) proposes language-internal etymologies for them. She calls the last three ‘additive/conjoining extensions’, which function to join two clauses or sentences.

Note also that, although Nizaa and Vute are related, there are no clear segmental cognates between the extensions identified for the two languages. It is possible that Nizaa *-sa* and Vute *-sé/-só*, both meaning ‘downwards’, are cognate. However, they could equally be independently innovated, possibly from a cognate language-internal source, such as the reflex of PB *\*cí* ‘ground; country; underneath’ (BLR 562) (Bastin et al. 2002). This suggests that even within an identified genetic group there must be significant innovation.

### 3.3.3 Tikar

The Tikar language is spoken on the Tikar Plain in the Adamawa Province of Cameroon (Hagège 1969).<sup>5</sup> In her lengthy grammar of Tikar, Stanley (1991: 355–384) treats verbal extensions under derivation. Table 10 is extracted from the FLeX database of Tikar (Jackson 1988) as well as the PhD thesis of Stanley (1991). Tikar extensions are characterised by very extensive allomorphy.

Note that although Blench (2015) has classified Dakoid, Mambiloid and Tikar in a putative North Bantoid grouping based on lexical and phonological correspondences (see also Figure 2), verbal extensions provide little or no evidence to support this.

---

<sup>5</sup>For an indication of where this language is spoken *vis-à-vis* the other Bantoid languages, see the note at Figure 11.

## 5 Reconstruction of Proto-Bantu verbal extensions with Bantoid

Table 9: Vute verbal extensions (Thwing 2006: 29)

Function	Segment	Comment
Causative	-tì	could also be interpreted as a transitivity marker; e.g. 'become black' → 'blacken'
Valence change	-lì	can either raise or lower valence depending on verb root
Valence raising	verb root vowel lengthening / -hì	e.g. 'be lost' → 'lose', also 'bite' → 'bite many times'
Valence lowering	change in the quality of the root vowel	
Benefactive (?)	-nà	indirect object marker; innovative from the verb 'give'
Modal	-ná	cohortative or imperative plural form of the verb
Directional	-wò -sò -tè(è) -wú -sé/-só -hó -lé	towards centre of reference away from centre of reference around centre of reference up, upwards down, downwards out (often combined with -sò) in, into
Participant additive	-bwe	adds a participant to an event
Sequential events	-cé	
Simultaneous events	-cè	

Table 10: Tikar verbal extensions (Jackson 1988; Stanley 1991)

Segment	Interpretation
(N)s~zi	causative
-li, -ni, -mi	reflexive/intransitive; nearly bleached of meaning
-ì, -bì, -mì, -nì, -lì	allative; marks action in the direction of the speaker The initial consonant is determined by the final consonant of the verb stem.
-ḍ, -bḍ, -mḍ, -nḍ, -lḍ	ablative; marks action away from the speaker. The initial consonant is determined by the final of the verb stem, infixd where final stem consonant is alveolar.
-ɔ? plus reduplication of final stem consonant, -lɔ?, -nɔ?	iterative ~ <i>répétitif</i>
-(k)a?, -ŋga, -a, [-sa?, -na?, laʔ-] <sup>a</sup>	iterative ~ <i>répétitif</i>
-kì	habitual; suffixed to previous extensions
-ti, -ndi	denotes physical action on an object especially with hands ~ <i>alteratif</i> ; some semantics not identifiable

<sup>a</sup>These forms in square brackets are rare in the data.

### 3.3.4 East Beoid: Noone, Mungong and Nchane

The Beoid languages are spoken in the northern Grassfields of Cameroon, with an extension into Nigeria (Hamm et al. 2002). They are conventionally divided into East and West, although Jeff Good (p.c.) has argued that West Beoid cannot be shown to be a coherent genetic group. He uses the label ‘Yemne-Kimbi’ for West Beoid. Figure 7 shows the distribution of the Beoid languages.<sup>6</sup>

<sup>6</sup>Thanks to Jeff Good for assistance in updating the Beoid map with recent community-preferred names.

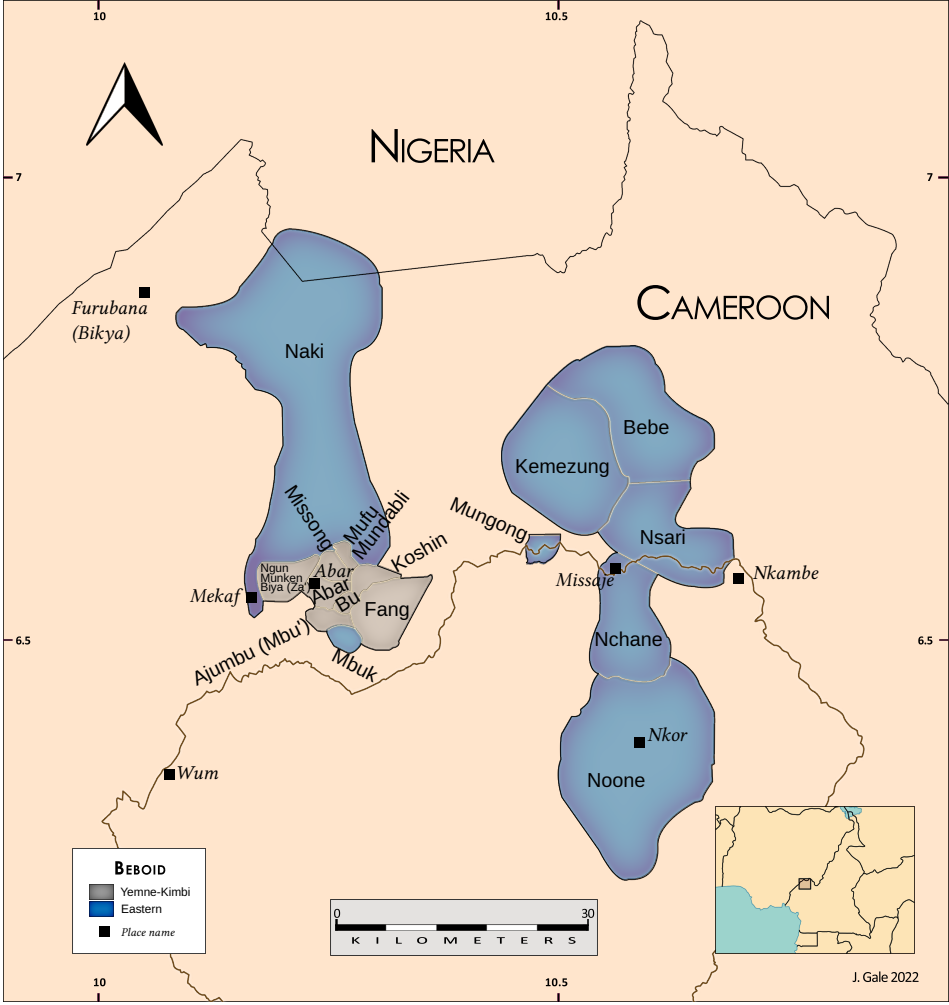


Figure 7: Map of the Beboïd languages

Noone is an East Beboid language, first described in Hyman (1981). Table 11 summarises the extensions listed for Noone. Whether ‘reduplication’ should be considered an extension is doubtful.

Table 11: Noone verbal extensions (Hyman 1981)

Category	Segment	Interpretation
Aspectual	<i>-ce</i>	attenuative
	<i>-ye</i>	distributive
	<i>-ken</i>	iterative
	<i>-ten</i>	bifurcative
	<i>-RED(uplicated)</i>	frequentative
Relational	<i>-se</i>	causative
	<i>-ke</i>	transitive
	<i>-m</i>	positional
	<i>-n</i>	reciprocal

The aspectuals form quite a restricted set and it is problematic to link these segments with other Bantoid branches. However, some of the relational suffixes are clearly cognate with those in PB (cf. Table 2), for example the positional *-m* (PB \*-*am*) and the reciprocal *-n* (PB \*-*an*). The causative *-se* is similar to the forms occurring across Bantoid.

However, Mungong, also East Beboid and described in Boutwell (2014), is quite different in that the extensions of Noone are absent, and only one inferred extension *-fa* is identified, a plural or iterative.

Nchane, also East Beboid and described in Boutwell (2020), is still more surprising, since the typically suffixed elements have become preverbal. For example, the iterative *ká-* precedes the verb; judging from form and meaning, it is perhaps cognate with the Noone suffix *-ken*. Boutwell (2020) identifies a durative and sequential marker *tú*, a resultative *mɔ* and a habitual *tɔ* in addition to other TA marking. Nchane also has a wide range of postverbal adverbials, but these do not function like usual extensions. As with Mambiloid, East Beboid seems to be very diverse internally, with considerable innovation in individual languages.

### 3.3.5 Mbe and Ekoid

Mbe is a single language, related to Ekoid, spoken on the Cross River in south-east Nigeria. Figure 8 shows the location of Mbe and the Ekoid languages.

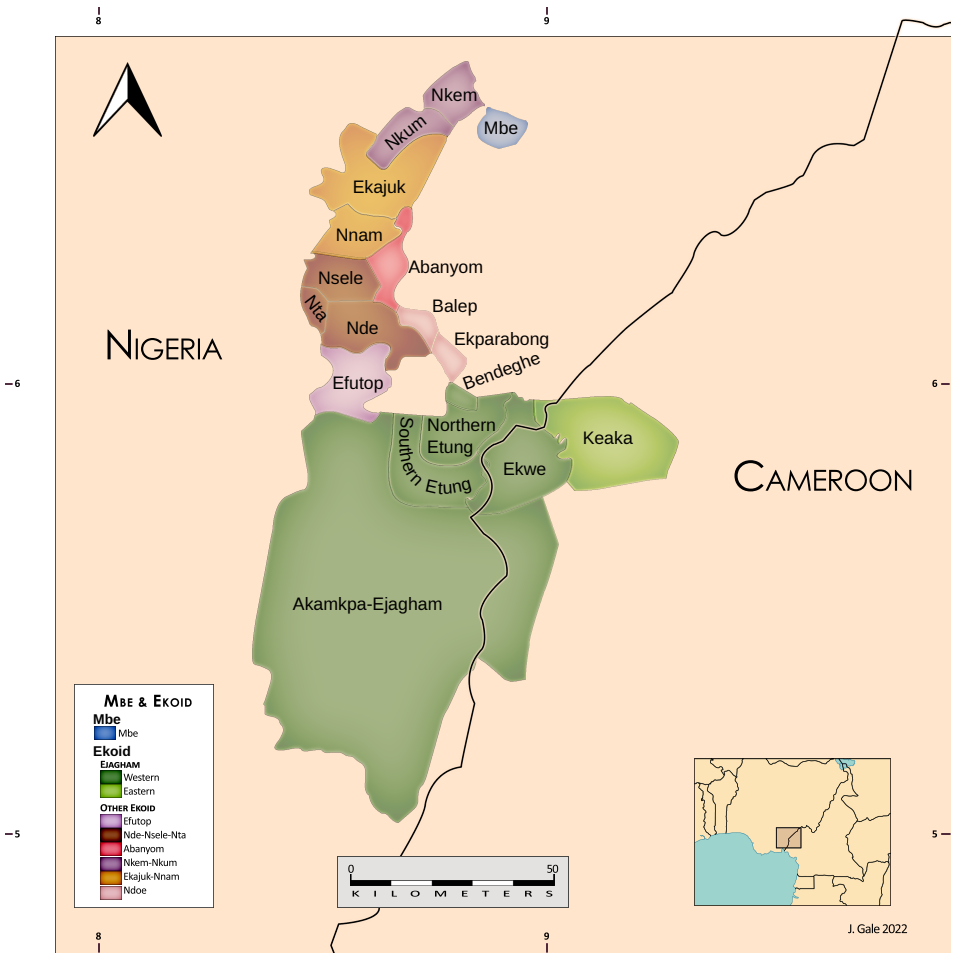


Figure 8: Map of Mbe and the Ekoid languages

In contrast to Ekoid, Mbe seems to have a significant repertoire of verbal extensions (Gerhardt 1978, Blench 2013). The main source for Mbe is Bámgbóšé (1967) whose paper describes the morphology of Mbe verbs in some detail but gives little or nothing on the interpretation of the forms listed. However, it is clear that almost all verbal extensions in Mbe involve either valence change or plurality (both marking plural subjects and multiple and iterative action). Reduplication is a common strategy and is sometimes combined with the extended forms. Mbe permits multiple plurals on individual verb roots (Bámgbóšé 1967). Hyman (2018: Table 5) lists only *-li*, *-ri* as separative and intransitive, but clearly the Mbe system is richer than this. Table 12 shows the main Mbe extensions, together with my inferences as to their interpretation.

Table 12: Mbe verbal extensions (Bámgbóšé 1967)

Number	Operation	Segment	Interpretation
	Transitiviser	<i>-ô</i> , <i>-î</i>	
	Transitiviser	falling tone	
Plural	Ubiquitiser	<i>-nî</i>	do something all over the place
Plural	Reversive (?)	<i>-lî</i>	‘close’ → ‘open’ etc.
Plural	Intensifier	<i>-rî</i>	
Plural		<i>-î</i>	
Plural	Complete reduplication		
Plural	Reduplication of first syllable		

An unpublished dictionary of Mbe, by Pohlig (s.d.), lists forms from which other unproductive extensions can be inferred; see Table 13.

The ubiquitous *-lí* and *-rí* are presumably allomorphs of *-nî*.

### 3.3.6 Eastern Grassfields: Ngiemboon and Yemba

Grassfields languages are spoken in Cameroon, with a few isolated communities in Nigeria. They constitute a large and complex group, divided into Wide and Narrow Grassfields; see Figure 9. Momo and South-West within Wider Grassfields remain extremely poorly known and the internal configuration of Grassfields is yet to be demonstrated convincingly.

Ngiemboon is spoken in the Grassfields of Cameroon and is a Grassfields language in the Western Bamileke subgroup. Ngiemboon no longer has a productive



5 Reconstruction of Proto-Bantu verbal extensions with Bantoid

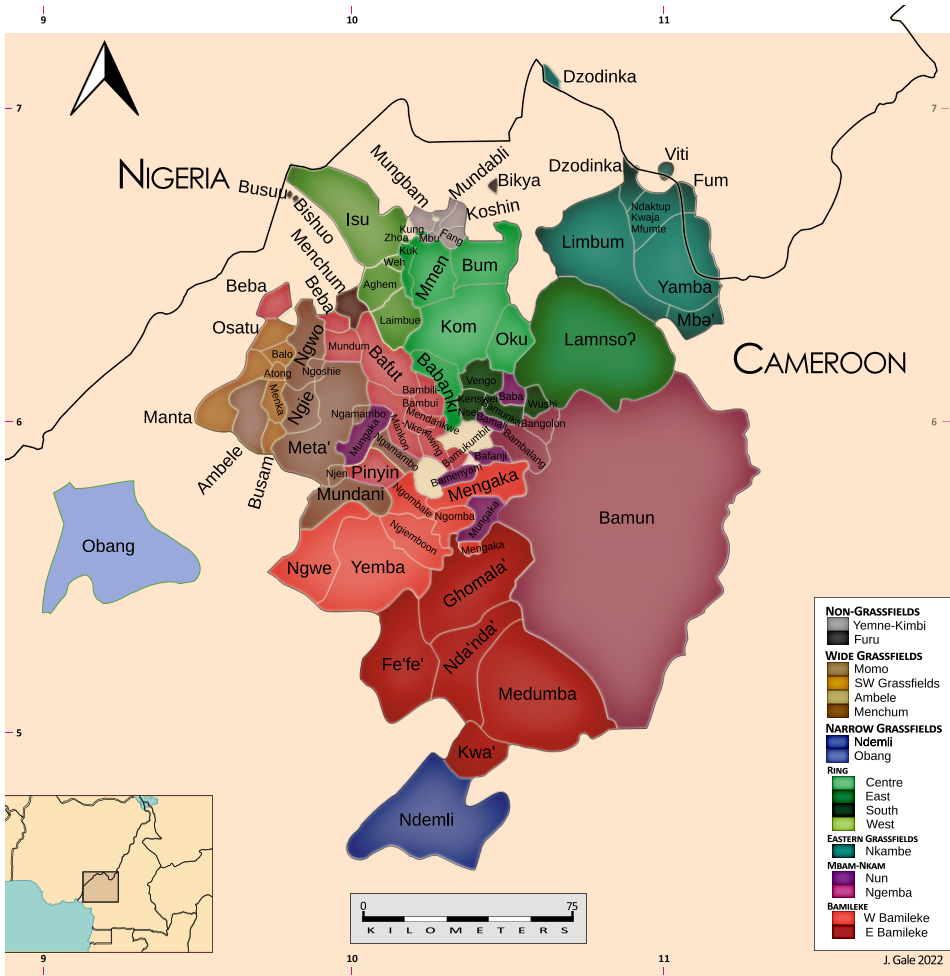


Figure 9: Map of the Grassfields languages

Table 13: Mbe verbal extensions (inferred from Pohlig s.d.)

Operation	Segment	Example
Detransitiviser	-ló ~ -ró	<i>fuéló</i> ‘be brushed off’, <i>duéló</i> ‘become deep’, <i>sháro</i> ‘come to resemble’
Ubiquitiser (‘do x all over the place’)	-lí ~ -rí	<i>shébrí</i> ‘cut into pieces’, <i>shárí</i> ‘scatter things’, <i>yéblí</i> ‘turn over’
Stativiser	-nú	<i>nénú</i> ‘be happy’, <i>lénú</i> ‘reside in a place’, <i>rénú</i> ‘be almost enough’

system of extensions, but the numerous pairs and triplets of verb roots plus (C)V segments show that a rich system must have existed in the recent past. An early sketch of its extensions is contained in Mba & Djiafeua (2003). However, a very large lexical database exists, published as a dictionary (Lonfo & Anderson 2014). Table 14 shows the likely extensions which can be extracted from that database, together with their proposed interpretations (Blench & Martin 2010). Included are segments which appear to be present segmentally but have no obvious semantics.

It is very difficult to map any of these clearly to other attested Bantoid evidence, and the extensive potential meaning-sets suggests that Ngiemboon has undergone extensive mergers and reanalysis.

Harro (1989) and Mbanji et al. (2007) describe the extremely limited extension system of Yemba, another Bamileke language in the same subgroup as Ngiemboon. There are just two segmental extensions, *-tí* and *-ní*: *-tí* is a pluralising extension marking distributive and iterative; *-ní* is more opaque, but there are examples of stativising, reciprocal marking. Surprisingly, these do not resemble other documented Grassfields languages. Mankon as described by Leroy (2007: 225–232) has examples of several extensions, e.g. *-ni* (detransitiviser, often reflexive, comparable with Tikar *-ni*), *-ki* (detransitiviser, iterative, comparable with Tikar *-ki*), *-ti* (diminutiviser, also found in A60 languages) and *-si* (causative).

### 3.3.7 Ring: Lamnso?

Lamnso? is a Ring language spoken in the Grassfields of Cameroon; see Figure 9. An extensive dictionary of Lamnso? has been published (Grebe & Siiyaatan 2015) and from the associated fieldwork database it is possible to infer plausible verbal

## 5 Reconstruction of Proto-Bantu verbal extensions with Bantoid

Table 14: Evidence for verbal extensions in Ngiemboon (Blench & Martin 2010)

Candidate segment	Plausibility	Semantics
-a	conclusive	valence-changing
-bE	evidence inconclusive; some cases clearly final -e	highly varied, perhaps intensification?
-e	conclusive	valence-changing
-le	present but rare	reversive, reflexive
-me	no conclusive evidence for a -me verb extension	all examples valence-changing final -e
-ηV	limited evidence for a valence-changing final -ηv	valence-changing
-ɔ	inconclusive	
-tE	conclusive	iterative, reversion, reciprocal, plurative, cessive, intensive, valence-changing
vowel doubling	conclusive	reversive, reflexive, cessive, valence-changing
tone reversal	conclusive	valence-changing, reversion, iterative, intensive

extensions. Table 15 summarises all the probable extensions in Lamnso? with their meanings. For almost all extensions, there are words that do not ‘fit’ either because the simplex form of the verb is missing or because the semantics do not lend themselves to any unambiguous analysis.

These verbal extensions for Lamnso? do not resemble those for Ngiemboon (Table 14), the language assumedly more closely related to Lamnso?, but there are striking similarities with Akoose A15C (for which, see Table 18 in §3.3.9 below).

Table 15: Lamnso? verbal extensions (inferred from Grebe &amp; Siiyaatan 2015)

Form	Subset	Semantics
CVC	-kir	distributive, plural subject, iterative, continuous action, reflexive
	-nen	reciprocal, plural subject, valence-changing
	-nin	reciprocal, excessive
	-sin	completive
	-tir	paucal, diminutive
	-tin	plural subject, completive, valence-changing, intensification
	-rin	resultative
CV	-si	completive, causative
	-ri	multiple action
	-ti	multiple action, action creating plural objects, intensification
	-fi	process
	-ne	intensification [greater speed, intensity of behaviour]
	-vi	reductive
VC	-Vm	inchoative, inceptive
	-Vy	completive
	-Vr	causative
	-Vn	isiautonomic [i.e. indicating self-initiated action]
V	-V	extensive

### 3.3.8 Jarawan Bantu

The Jarawan Bantu languages are spoken in scattered communities in eastern and central Nigeria and formerly also in northern Cameroon (Rueck et al. 2007). Figure 10 shows the distribution of Jarawan Bantu. Maddieson & Williamson (1975) remains the only overview of Jarawan Bantu. Many languages have very few speakers, and those recorded in Cameroon in the early twentieth century have apparently become extinct. The extinct Jarawan Bantu languages of northern Cameroon (Dieu & Renaud 1983) are marked with the symbol † in Figure 10.<sup>7</sup>

<sup>7</sup>We do not know when these became extinct, but when the region was surveyed for the *Linguistic Atlas of Cameroon* in the 1970s (Dieu et al. 1976; Dieu & Renaud 1983), no more speakers could be found.

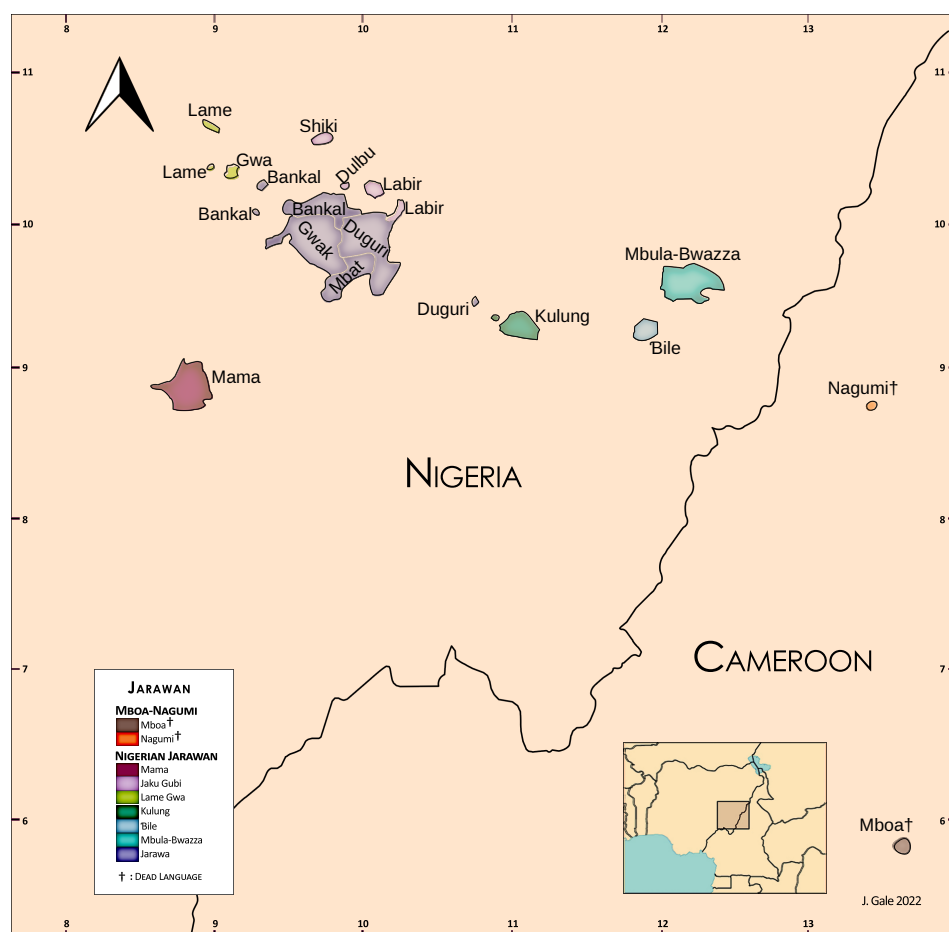


Figure 10: Map of the Jarawan Bantu languages

Jarawan Bantu remains poorly described, with no complete grammar of any individual language. The first published analysis of verbal extensions in Jarawan Bantu is Gerhardt (1988), who points out that the remaining ones are generally interpreted as perfectives; see Table 16. Otherwise, Jarawan Bantu has lost, along with the loss of noun classes, all the usual functions of extensions, including iteratives and plurals, as well as valence-changing extensions.

However, a fresh field study of Mbula (Van de Velde & Idiatov 2022) has revealed a more complex picture. Table 17 shows the verbal extensions of Mbula.

These Mbula verbal extensions align Jarawan Bantu more obviously with the other Bantoid branches described here, but do not clearly establish its nearest genetic neighbours.

Table 16: Jarawan Bantu verbal extensions (Gerhardt 1988)

Segment	Interpretation
stem-vowel lengthened, with occasional inserted glottal	intensifier
stem-vowel lengthened, final vowel neutralised to -a	perfective
-m ~ -Vm ~ -mV (where V is commonly -a)	perfective

Table 17: Mbula verbal extensions (Van de Velde &amp; Idiatov 2022)

Segment	Extension
-sə	causative
-k <sup>H</sup>	applicative
-ki	pluractional
*jĩ-	petrified: reflexive
*-ɪd	petrified: applicative

### 3.3.9 Bantu: Akoose and Mbonge Oroko

Akoose A15C is a Narrow Bantu language spoken in south-west Cameroon. One might expect its extensions to be close to the forms which have been attributed to those reconstructed for PB given its membership of Narrow Bantu. Since this is not the case, then either Akoose has been significantly transformed by borrowing or has undergone idiosyncratic local development. Akoose verbal extensions have been described in detail by Hedinger (1992; 2008) and are summarised in Table 18.

This should be compared with the proposed PB extensions set out in Table 2. If s→t, then the causative might be cognate. There are very limited correspondences between the synchronic extensions in Akoose and the PB reconstructed forms and it is notable that Akoose shows more resemblances with Lamnso? (Table 15) and Noone (Table 11), particularly the prevalence of CVN forms, and parallels such as the reciprocal in (n)-Vn, which is part of the PB reconstructed set.

Perplexingly, a study of the Mbonge dialect A121 of Oroko A101 reveals a system quite different from Akoose, despite the fact that both languages are rather close lexically. In some cases, Oroko extensions match the forms reconstructed for PB more closely (Friesen 2002). Table 19, adapted from Friesen (2002: Table 7),

Table 18: Akoose verbal extensions (Hedinger 1992; 2008)

Form	Segment	Interpretation
V(C)	<i>-ed/t</i>	causative
	<i>-ɛn/n</i>	instrumental, reciprocal, comitative
	<i>-e/-<sup>2</sup>/-d</i>	applicative
	<i>-ɛl</i>	unexplained
CVC	<i>-led</i>	unexplained
	<i>-lɛn</i>	unexplained
	<i>-med</i>	unexplained
	<i>-ned</i>	instrumental, comitative, applicative
	<i>-nɛn</i>	unexplained
	<i>-ted</i>	applicative, causative
	<i>-tɛn</i>	instrumental, reciprocal, comitative
	<i>-sɛn</i>	unexplained
	<i>-gɛn</i>	unexplained

shows the extensions identified in Mbonge Oroko compared with those in PB proposed by Meeussen (1967) and Schadeberg (2003). Friesen adds four extensions for which she can identify no parallel.

In the case of extensions like *-isele*, certain combinations of extensions can become fused with specific functions. Narrow Bantu has many examples of verbs with frozen expansions, some of which indeed look like existing extensions (cf. Bostoen & Guérois (2022 [this volume])). Akoose and Oroko are expected to be close to one another, but they only have a small number of resemblances in terms of extensions except for the reciprocal, applicative and instrumental. This is unlikely to be a consequence of weak description as both publications are the result of long-term study.

## 4 Discussion and conclusion

The use of verbal extensions was evidently a feature of early Niger-Congo (Voeltz 1977; Hyman 2014) and they remained part of the morphological system at the time of the diversification of Benue-Congo, as strongly suggested by the evidence from West Kainji—see the debate on this topic between Güldemann (2011) and Hyman (2011). The remarkable verbal extensions in the Katloid languages

Table 19: Mbonge Oroko verbal extensions (Friesen 2002: Table 7)

Mbonge	Description	Meeussen	Schadeberg	Proto-Bantu label
<i>-isε</i>	causative – default	<i>-ɪc-</i>	<i>-ici-</i>	causative
<i>-elε</i>	causative – indirect agent	<i>-ud-</i>	<i>-ɔd-</i>	separative transitive
<i>-isεlε</i>	causative – indirect effector			
<i>-ε</i>	causative – lexicalised	<i>-ɨ/-ik-</i>	<i>-i/-ɪk-</i>	causative/impositive transitive
<i>-eε</i>	applicative	<i>-id-</i>	<i>-ɪl-</i>	applicative
—	—	<i>-ik-</i>	<i>-ɪk-</i>	impositive
<i>-eε</i>	anti-causative	<i>-ik-</i>	<i>-ɪk-</i>	neuter
<i>-am</i>	stative	<i>-am-</i>	<i>-am-</i>	stative
<i>-an</i>	instrument, accompaniment	<i>-an-</i>	<i>-an-</i>	reciprocal
<i>-εn</i> with <i>a-</i>	reciprocal			
—	—	<i>-ad-</i>	<i>-al-</i>	(function unidentified)
—	—	<i>-at-</i>	<i>-at-</i>	contactive
<i>-o</i>	inversive	<i>-uk-</i>	<i>-ɔk-</i>	separative intransitive
<i>-ab</i>	passive			passive (cf. Bostoen & Guérois (2022 [this volume]))
<b>Additional Mbonge extensions</b>				
<i>-ε</i> (with <i>a-</i> )	reflexive	<i>-ik-</i>	<i>-ɪk-</i>	neuter
<i>-εn</i>	intensity			PB <i>*-an?</i> (cf. Bostoen et al. 2015)
<i>-i</i>	lexicalised			
<i>-εl</i>	lexicalised			



in Kordofanian (e.g. Hellwig 2013: Table 4) illustrate the importance of this morphosyntactic feature at an earlier stage of Niger-Congo (see also Hyman 2020). However, verbal extensions are now preserved only in fragmentary form in individual Plateau and Cross River languages and have largely disappeared in many branches of Bantoid. Few studies have analysed verbal extensions specifically, but where substantial lexicons exist their former presence can sometimes be inferred. The outcomes of this loss remain to be more fully explored, but clearly an expansion of the verbal auxiliary system, verb serialisation and adverbs are typical replacement strategies (see also Hyman 2017a). Kießling (2004) and Kießling & Wung (2011) have written about the evolution of verb serialisation in Ring languages, which has essentially replaced functional verbal extensions.

Where languages preserve extensions, many are very restricted (i.e. they only occur on a few verbs, as in Yemba, Nizaa, Vute or Mungong). Only some Eastern Grassfields languages have complex, if now unproductive, systems. From the point of view of historical reconstruction, there are few correspondences even within Grassfields, as a comparison of Table 14 and Table 15 makes plain. Languages such as Ngiemboon and Lamnso? would be expected to be more closely related to one another than to Narrow Bantu, but this is not apparent from the data. This is not to say that more conservative languages such as Mankon (Leroy 2007) do not preserve more elements that correspond to elements outside Grassfields. Comparison with Bantu (Table 2) is hardly more illuminating. As Hyman (2018) observes: “[t]he forms or functions of the extensions may not correspond to those in Narrow Bantu”. Indeed the only extension which is clearly preserved from the remoter branches of Bantoid is the causative in *-si*, which is also widespread in Niger-Congo. The degree to which the other extensions are cognate is contentious, and will not be resolved until group level reconstructions are available.

Another major difference with Narrow Bantu is the rareness of stacked extensions. Given the productive nature of this process in Bantu, it is perhaps surprising that hardly any Bantoid languages, except Vute and Nizaa, can be demonstrated to permit strings of extensions. Other languages exhibit strong maximality constraints. It is plausible to suggest that the *-CVN* forms which are attested in Dakoid, Grassfields and Beboïd represent two originally distinct extensions now fused, or reanalysis of the final C of the root, but this has yet to be actually demonstrated. An important element in the loss of extensions, is the imposition of a maximum size constraint on stems (root + suffix) which leaves little room for two extensions except for the fused *-CVN* forms.

Despite this lack of obvious cognates, there are strong similarities in semantics. Valence change, iteratives, plural, reciprocal, reflexive, and instrumental are

often present, which suggests that concepts are transmitted, in the absence of (easy to establish) inherited segments. Given the relative conservatism of noun class prefixes, this variability is quite surprising. To explain it, we must invoke metatypy, the notion that ideas are conserved more than segments, that verbal plurality, iteratives, directionals and transitivisers effectively need to find expression but are constantly re-encoded, perhaps because of continuing segment merger and subsequent splitting. Ngiemboon represents this situation, where some extensions with a consistent segmental form encompass a whole variety of semantics. Such systems are very dynamic and probably change on a generational scale, while the underlying parameters are conserved. Semantic similarities are, of course, in the eye of the beholder; the extent to which the meanings can be bleached and repurposed varies from one researcher to another.

The comparison between Akoose A15C (cf. Table 18) and the proposed reconstructed forms for Proto-Bantu (PB, cf. Table 2) reveals a significant analytic problem. Akoose presumably represents Bantu shortly after the split from Bantoid and, as such, its extensions should either resemble those reconstructed for PB or there should be evidence from fossil morphology of a wholesale replacement process. Akoose forms manifestly do not resemble the proposed PB forms, whether semantics or segments are considered. Akoose is similar to Lamnso? in terms of its -CVN segments, although the difficulties of assigning meaning to many of these makes semantic matches more difficult. The explanation for this is unknown; either Akoose has come under areal influence from Grassfields or possibly parallel developments have led to convergent surface forms. Oroko A101 (Table 19) has more similarities to PB, but is also quite different from Akoose.

The proposed verbal extensions of PB are reconstructed forms. In other words, they would ideally be supported by lengthy data tables and sound correspondences to account for the synchronic forms, especially for zone A languages. It is more likely they represent a synthesis of forms evident from inspection of a range of languages across Bantu, which would not necessarily reflect the forms of PB. Akoose shows that Bantu retained significant segmental matches with languages outside Bantu, in Grassfields, and perhaps also with Dakoid, which is far from Ring, making contact-induced change unlikely (Table 7). This suggests that at the very least the repertoire of extensions in PB should be extended. Some Bantu extensions can plausibly be traced outside Narrow Bantu, as suggested in Table 20.

The similarities between Dakoid, Beboid and Grassfield's Ring are striking, since Dakoid is quite geographically remote from the others and contact is a less plausible explanation. Indeed, the relative distances between the different Bantoid groups discussed in this chapter may best be appreciated from the synthesis map shown in Figure 11.

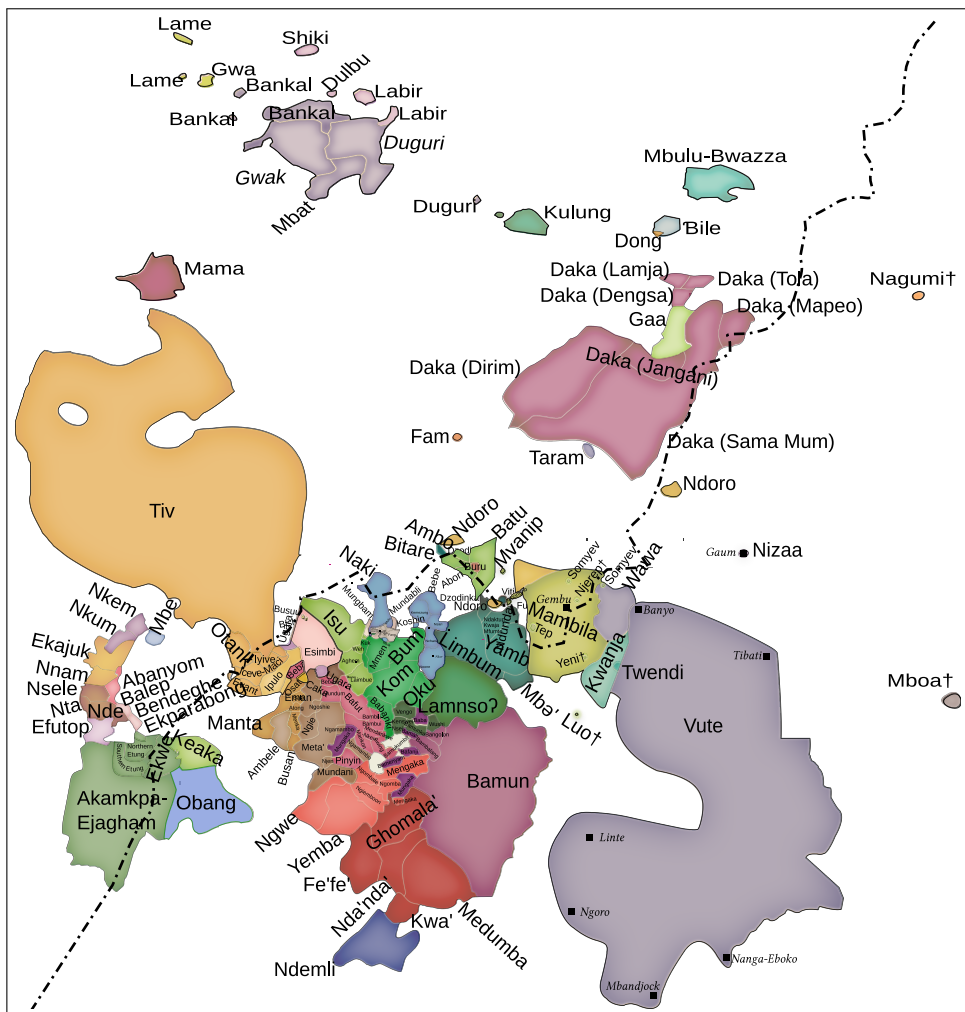
Table 20: Proposed cognates of Proto-Bantu verbal extensions outside Narrow Bantu

Family	Language	Form	Semantics	Proto-Bantu
Kordofanian	Tima	<i>-ik</i>	productive causative suffix functions as a neutro-passive marker	*-ik
Kainji	Cicipu	<i>-sV</i>	causative	*-i/-ici
Dakoid	Sama Mum	<i>-sì</i>	causative	*-i/-ici
Dakoid	Sama Mum	<i>-(k)èn,</i> <i>-(s)èn</i>	reciprocal	*-an
East Beoid	Noone	<i>-m</i>	positional	*-am
East Beoid	Noone	<i>-n</i>	reciprocal	*-an
East Beoid	Noone	<i>-se</i>	causative	*-i/-ici
Jarawan	Mbula	<i>-sə</i>	causative	*-i/-ici
Ring	Lamnso?	<i>-nen</i>	reciprocal	*-an

Longer term, however, a major review of the evidence for Bantu, focusing on zone A languages, is required, conforming to the principles of the Comparative Method.

## Acknowledgements

I would like to take this opportunity to thank SIL members in both Nigeria and Cameroon, who have always been willing to share material and to observe that our knowledge of Bantoid would be markedly impoverished without their contributions. Special thanks to Robert Hedinger and Stephen C. Anderson for sharing documents and assisting with field trips in Cameroon, and Luther Hon and Michael J. Rueck from the SIL Survey Team in Jos, Nigeria. My thanks also go to the reviewers for picking up errors and omissions in earlier versions. Thank you also to the editors, especially Koen Bostoen and Gilles-Maurice de Schryver, for financing the maps found in this chapter.



All the languages of the Bantoid groups discussed in this chapter are shown, except for Tikar, spoken on the Tikar Plain, which lies to the east of the Ring language Lamnso?.

Figure 11: Synthesis map of the Bantoid language groups

## References

- Arnott, D. W. 1958. The classification of verbs in Tiv. *Bulletin of the School of Oriental and African Studies* 21(1). 111–133.
- Ayotte, Michael & Charlene Ayotte. 2003. *Sociolinguistic language survey of Ngwe: Fontem, Alou, and Wabane subdivisions, Lebalem division, South West province* (SIL Electronic Survey Reports 4). Yaoundé: SIL Cameroon.
- Ayuninjam, Funwi F. 1998. *A reference grammar of Mbili*. Lanham, MD: University Press of America.
- Bámgbòsé, Ayò. 1967. Verbal classes in Mbe. *Afrika und Übersee: Sprachen, Kulturen* 50(3). 173–193.
- Bastin, Yvonne, André Coupez, Evariste Mumba & Thilo C. Schadeberg (eds.). 2002. *Bantu lexical reconstructions 3 / Reconstructions lexicales bantoues 3*. Tervuren: Royal Museum for Central Africa. <http://www.africamuseum.be/collections/browsecollections/humansciences/blr>.
- Bastin, Yvonne & Pascale Piron. 1999. Classifications lexicostatistiques : bantou, bantou et bantöide (de l'intérêt des « groupes flottants »). In Jean-Marie Hombert & Larry M. Hyman (eds.), *Bantu historical linguistics: Theoretical and empirical perspectives* (CSLI Lecture Notes 99), 149–163. Stanford, CA: Center for the Study of Language & Information.
- Bleek, Wilhelm H. I. 1862–69. *A comparative grammar of South African languages*. London: Trübner & Co.
- Blench, Roger M. 1993. An outline classification of the Mambiloid languages. *Journal of West African Languages* 23(1). 105–118.
- Blench, Roger M. 2001. *The Bendi languages: More lost Bantu languages?* Paper presented at the Benue-Congo Workshop, 32nd Annual Conference on African Linguistics, Berkeley, 26–27 March 2001.
- Blench, Roger M. 2013. *Ekoid: Bantoid languages of the Nigeria-Cameroun borderland*. Unpublished ms. Jos: Kay Williamson Educational Foundation.
- Blench, Roger M. 2015. The Bantoid languages. In *Oxford handbooks online*. DOI: 10.1093/oxfordhb/9780199935345.013.17.
- Blench, Roger M. & Marieke Martin. 2010. *Ngiemboon verbal extensions: A new analysis*. Unpublished ms. Jos: Kay Williamson Educational Foundation.
- Bostoen, Koen, Sebastian Dom & Guillaume Segerer. 2015. The antipassive in Bantu. *Linguistics, An Interdisciplinary Journal of the Language Sciences* 53(4). 731–772.
- Bostoen, Koen & Rozenn Guérois. 2022. Reconstructing suffixal phrasemes in Bantu verbal derivation. In Koen Bostoen, Gilles-Maurice de Schryver, Rozenn

- Guérois & Sara Pacchiarotti (eds.), *On reconstructing Proto-Bantu grammar*, 343–383. Berlin: Language Science Press. DOI: 10.5281/zenodo.7575829.
- Bostoen, Koen & Mark Van de Velde. 2019. Introduction. In Mark Van de Velde, Koen Bostoen, Derek Nurse & Gérard Philippson (eds.), *The Bantu languages*, 2nd edn. (Routledge Language Family Series), 1–13. Milton Park, Abingdon: Routledge.
- Boutwell, Richard Lee. 2014. *A sketch grammar of the Mungong language*. Yaoundé: SIL Cameroon.
- Boutwell, Richard Lee. 2020. *A grammar of Nchane: A Bantoid (Beboid) language of Cameroon*. Leiden: Leiden University. (Doctoral dissertation).
- Boyd, Raymond. 1994. *Historical perspectives on Chamba Daka* (Westafrikanische Studien 6). Cologne: Rüdiger Köppe.
- Boyd, Raymond. 1997. Chamba Daka and Bantoid: A further look at Chamba Daka classification. *Journal of West African Languages* 26(2). 29–43.
- Boyd, Raymond & Isa Sa’ad. 2010. *A Chamba – English dictionary*. Lagos: Malt-house Press.
- Breton, Roland. 1993. Is there a Furu language group? An investigation on the Cameroon-Nigeria border. *Journal of West African Languages* 23(2). 97–118.
- de Wolf, Paul P. 1971. *The noun class system of Proto-Benue-Congo* (Janua Linguarum. Series Practica 167). The Hague: Mouton.
- Di Carlo, Pierpaolo, Angiachi Demetris Esene Agwara & Rachel Ojong Diba. 2020. Multilingualism and the heteroglossia of ideologies in lower Fungom (Cameroon): Use and attitudes. *Sociolinguistic Studies* 14(3). 321–345.
- Di Carlo, Pierpaolo, Jeff Good, Ling Bian, Yujia Pan & Penghang Liu. 2018. Socio-spatial networks, multilingualism, and language use in a rural African context. In Paolo Fogliaroni, Andrea Ballatore & Eliseo Clementini (eds.), *Proceedings of Workshops and Posters at the 13th International Conference on Spatial Information Theory (COSIT 2017)* (Lecture Notes in Geoinformation and Cartography), 35–39. Cham: Springer.
- Di Carlo, Pierpaolo, Jeff Good & Rachel Ojong Diba. 2019. Multilingualism in rural Africa. In *Oxford research encyclopedia of linguistics*. DOI: 10.1093/acrefore/9780199384655.013.227.
- Dieu, Michel & Patrick Renaud. 1983. *Situation linguistique en Afrique centrale : inventaire préliminaire : le Cameroun* (Atlas linguistique de l’Afrique centrale; Atlas linguistique du Cameroun). Paris; Yaoundé: ACCT; CERDOTOLA & DGRST.
- Dieu, Michel, Patrick Renaud & Michka Sachnine. 1976. L’atlas linguistique du Cameroun. *Bulletin de l’ALCAM* 1. 1–32.

- Eberhard, David M., Gary F. Simons & Charles D. Fennig (eds.). 2022. *Ethnologue: Languages of the world*. 25th edn. Dallas, TX: SIL International.
- Friesen, Lisa. 2002. *Valence change and Oroko verb morphology (Mbonge dialect)*. Grand Forks, ND: University of North Dakota. (MA thesis).
- Gerhardt, Ludwig. 1978. Die Beziehungen des Mbe (Cross River State, Nigeria) zum Bantu. *Afrika und Übersee: Sprachen, Kulturen* 61(3–4). 229–241.
- Gerhardt, Ludwig. 1988. A note on verbal extensions in Jarawan Bantu. *Journal of West African Languages* 18(2). 3–8.
- Good, Jeff, Jesse Lovegren, Jean Patrick Mve, Carine Nganguép Tchiemouo, Rebecca M. Voll & Pierpaolo Di Carlo. 2011. The languages of the Lower Fungom region of Cameroon: Grammatical overview. *Africana Linguistica* 17. 101–164.
- Grebe, Karl H. & Patrick Siyaatan. 2015. *Lamnso' – English dictionary / Ɔwà' nsàv* (Kay Williamson Educational Foundation – African Languages Monographs 8). Yaoundé; Cologne: Cameroon Association for Bible Translation & Literacy; Rüdiger Köppe.
- Greenberg, Joseph H. 1963. *The languages of Africa* (Indiana University Research Center in Anthropology, Folklore and Linguistics 25). Bloomington, IN; The Hague: Indiana University; Mouton.
- Grollemund, Rebecca. 2012. *Nouvelles approches en classification : application aux langues bantu du nord-ouest*. Lyon: Université Lumière – Lyon 2. (Doctoral dissertation).
- Grollemund, Rebecca, Simon Branford, Koen Bostoen, Andrew Meade, Chris Venditti & Mark Pagel. 2015. Bantu expansion shows that habitat alters the route and pace of human dispersals. *Proceedings of the National Academy of Sciences of the United States of America* 112(43). 13296–13301.
- Grollemund, Rebecca, Jean-Marie Hombert & Simon Branford. 2018. A phylogenetic study of North-Western Bantu and South Bantoid languages. In Rajend Mesthrie & David Bradley (eds.), *The dynamics of language: Plenary and focus lectures from the 20th International Congress of Linguists*, 120–133. Cape Town: UCT Press.
- Guarisma, Gladys. 1978. *Etudes vouté (langue bantoïde du Cameroun) : phonologie et alphabet pratique, synthématique, lexique vouté – français* (Société d'études linguistiques et anthropologiques de France 66–67). Paris: SELAF.
- Gueche Fotso, Hugues Carlos. 2004. *Noun morphology of Befang*. Yaoundé: University of Yaoundé I. (MA thesis).
- Güldemann, Tom. 2011. Proto-Bantu and Proto-Niger-Congo: Macro-area typology and linguistic reconstruction. In Osamu Hieda, Christa König & Hiroshi Nakagawa (eds.), *Geographical typology and linguistic areas: With special refer-*

- ence to Africa* (Tokyo University of Foreign Studies, Studies in Linguistics 2), 109–141. Amsterdam: John Benjamins.
- Guthrie, Malcolm. 1948. *The classification of the Bantu languages* (Handbook of African Languages). London: Oxford University Press (for the International African Institute).
- Guthrie, Malcolm. 1967–71. *Comparative Bantu: An introduction to the comparative linguistics and prehistory of the Bantu languages* (4 volumes). Farnborough: Gregg International.
- Hagège, Claude. 1969. *Esquisse linguistique du tikar (Cameroun)* (Société d'études linguistiques et anthropologiques de France 11). Paris: SELAF.
- Hamm, Cameron, Ferdinand Assako a Tiati, Jason Diller & Kari Jordan-Diller. 2002. *A rapid appraisal survey of Western Beoid languages (Menchum division, Northwest province)* (SIL Electronic Survey Reports 14). Yaoundé: SIL International.
- Hammarström, Harald, Robert Forkel, Martin Haspelmath & Sebastian Bank (eds.). 2021. *Glottolog 4.5*. Leipzig: Max Planck Institute for Evolutionary Anthropology. <https://glottolog.org/>.
- Harro, Gretchen. 1989. Les extensions verbales en yemba (bamiléké-dschang). In Daniel Barreteau & Robert Hedinger (eds.), *Descriptions de langues camerounaises* (DELAN : Description systématique des langues nationales), 239–269. Paris: SIL & ACCT & ORSTOM.
- Hedinger, Robert. 1989. Northern Bantoid. In John T. Bendor-Samuel & Rhonda L. Hartell (eds.), *The Niger-Congo languages: A classification and description of Africa's largest language family*, 421–429. Lanham, MD: University Press of America.
- Hedinger, Robert. 1992. Verbal extensions in Akɔɔse: Their form, meaning and valency changes. *Afrika und Übersee: Sprachen, Kulturen* 75(2). 227–251.
- Hedinger, Robert. 2008. *A grammar of Akɔɔse: A Northwest Bantu language* (SIL International Publications in Linguistics 143). Dallas, TX: SIL International.
- Hellwig, Birgit. 2013. Verbal morphology in Katla. In Thilo C. Schadeberg & Roger M. Blench (eds.), *Nuba Mountain language studies*, 237–250. Cologne: Rüdiger Köppe.
- Hyman, Larry M. 1981. *Noni grammatical structure: With special reference to verb morphology* (Southern California Occasional Papers in Linguistics 9). Los Angeles, CA: Department of Linguistics, University of Southern California.
- Hyman, Larry M. 2007. Niger-Congo verb extensions: Overview and discussion. In Doris L. Payne & Jaime Peña (eds.), *Selected proceedings of the 37th Annual Conference on African Linguistics*, 149–163. Somerville, MA: Cascadilla Press.



- Hyman, Larry M. 2011. The Macro-Sudan Belt and Niger-Congo reconstruction. *Language Dynamics and Change* 1(1). 3–49.
- Hyman, Larry M. 2014. Reconstructing the Niger-Congo verb extension paradigm: What's cognate, copied or renewed? In Martine Robbeets & Walter Bisang (eds.), *Paradigm change: In the Transeurasian languages and beyond* (Studies in Language Companion Series 161), 103–126. Amsterdam: John Benjamins.
- Hyman, Larry M. 2017a. Multiple argument marking in Bantoid: From syntheticity to analyticity. In Walter Bisang & Andrej Malchukov (eds.), *Unity and diversity in grammaticalization scenarios* (Studies in Diversity Linguistics 16), 67–95. Berlin: Language Science Press. DOI: 10.5281/zenodo.823230.
- Hyman, Larry M. 2017b. On reconstructing tone in Proto-Niger-Congo. In Valentin F. Vydrin & Anastasia V. Lyakhovich (eds.), *В жёлтой жаркой африке... к 50-летию александра желтова / in the hot yellow Africa... in honor of Alexander Zheltov on the occasion of his 50th birthday*, 175–191. Saint Petersburg: Nestor-Istoria.
- Hyman, Larry M. 2018. Common Bantoid verb extensions. In John R. Watters (ed.), *East Benue-Congo: Nouns, pronouns, and verbs* (Niger-Congo Comparative Studies 1), 173–198. Berlin: Language Science Press. DOI: 10.5281/zenodo.1314327.
- Hyman, Larry M. 2020. A note on Nuba Mountain verb extensions. *Faits de langues* 51(1). 29–36.
- Jackson, Ellen W. 1988. *Lexique français – tikar*. Unpublished ms. Yaoundé: SIL Cameroon.
- Jacquot, André & Irvine Richardson. 1956. Report of the western team: Atlantic coast to Oubangui. In Malcolm Guthrie & Archibald N. Tucker (eds.), *Linguistic survey of the Northern Bantu borderland*, vol. 1, 9–62. London: Oxford University Press (for the International African Institute).
- Johnston, Harry H. 1919–22. *A comparative study of the Bantu and Semi-Bantu languages, Volumes I & II*. Oxford: Clarendon Press.
- Jungraithmayr, Herrmann & Wilhelm J. G. Möhlig. 1983. *Lexikon der Afrikanistik: Afrikanische Sprachen und ihre Erforschung*. Berlin: Dietrich Reimer.
- Kießling, Roland. 2004. “The giraffes burst throw emerge climb pass through the roof of the hut”: Verbal serialisation in the West Ring languages (Isu, Weh, Aghem). In Akinbiyi Akinlabi & Oluseye Adesola (eds.), *Proceedings of the 4th World Congress of African Linguistics, New Brunswick 2003*, 225–235. Cologne: Rüdiger Köppe.
- Kießling, Roland. 2007. Furu lexical data. Unpublished ms.

- Kießling, Roland & Bong M. Wung. 2011. *Verbal serialisation in Isu (West-Ring): A Grassfields language of Cameroon* (Grammatische Analysen afrikanischer Sprachen 39). Cologne: Rüdiger Köppe.
- Kjelsvik, Bjørghild. 2002. *Verb chains in Nizaa*. Oslo: University of Oslo. (MA thesis).
- Koelle, Sigismund W. 1854. *Polyglotta Africana, or a comparative vocabulary of nearly three hundred words and phrases in more than one hundred distinct African languages*. London: Church Missionary House.
- Koops, Robert. s.d. Buru wordlist. Unpublished ms.
- Krause, Gottlieb A. 1895. Die Stellung des Temne innerhalb der Bantusprachen. *Zeitschrift für afrikanische, ozeanische und ostasiatische Sprachen: mit besonderer Berücksichtigung der deutschen Kolonien* 1. 250–267.
- Leroy, Jacqueline. 2007. *Le mankon: Langue bantoue des Grassfields (Province Nord-Ouest du Cameroun)* (Société d'études linguistiques et anthropologiques de France 437). Paris: Peeters.
- Lonfo, Etienne & Stephen C. Anderson. 2014. *Dictionnaire ngiemboon – français – anglais / Ngiemboon – French – English dictionary / tyè'tendù Ngiemboon – Felansé – Ngilisé* (Kay Williamson Educational Foundation – African Languages Monographs 7). Cologne: Rüdiger Köppe.
- Maddieson, Ian & Kay Williamson. 1975. Jarawan Bantu. *African Languages / Langues Africaines* 1. 124–163.
- Mba, Gabriel & Prosper Djiafeua. 2003. Les extensions verbales en ngiemboon. In Daniel F. Idiata & Gabriel Mba (eds.), *Studies on voice through verbal extensions in nine Bantu languages spoken in Cameroon, Gabon, DRC and Rwanda* (LINCOM Studies in African Linguistics 57), 113–166. Munich: LINCOM Europa.
- Mbanji, Bawe E., Albert A. Tsomejio, Ann Wester & Mary Annett. 2007. *Anu ŋkūŋfák: aŋwa'ne wɔ tswí-ázi'ne / L'histoire de Kande : livre de l'apprenant / Kande's story: Comité Oeucumenique de Suivi et de la Traduction de la Bible en Yémba*.
- McGill, Stuart. 2009. *Gender and person agreement in Cicipu discourse*. London: School of Oriental & African Studies, University of London. (Doctoral dissertation).
- McLean, Greg L. 2014. *A sketch grammar of the Central Mfumte language*. Yaoundé: SIL Cameroon.
- Meeussen, Achiel Emiel. 1967. Bantu grammatical reconstructions. *Africana Linguistica* 3. 79–121.
- Meinhof, Carl. 1899. *Grundriß einer Lautlehre der Bantusprachen, nebst Anleitung zur Aufnahme von Bantusprachen. Anhang: Verzeichnis von Bantuwortstämmen*

- (Abhandlungen für die Kunde des Morgenlandes 11(2)). Leipzig: F.A. Brockhaus.
- Meinhof, Carl. 1910. *Grundriß einer Lautlehre der Bantusprachen, nebst Anleitung zur Aufnahme von Bantusprachen. Anhang: Verzeichnis von Bantuwortstämmen*. 2nd revised edition. Berlin: Dietrich Reimer (Ernst Vohsen).
- Mort, Katherine. 2012. *Kamuku grammar outline*. Unpublished ms. Orlando, FL: Wycliffe Bible Translators.
- Ndedje, René. 2013. *Phonologie, morphologie, syntaxe et classification du ndemli*. Yaoundé: University of Yaoundé I. (Doctoral dissertation).
- Nganganu, Kenfac Lucy. 2001. *The phonology of Ambele*. Yaoundé: University of Yaoundé I. (MA thesis).
- Ngoran, Loveline Lenaka. 1999. *A sketch outline of the phonology of Ndemli*. Yaoundé: University of Yaoundé I. (MA thesis).
- Paterson, Rebecca Dow Smith. 2019. *Nominalization and predication in Ut-ma'in*. Eugene, OR: University of Oregon. (Doctoral dissertation).
- Piron, Pascale. 1997. *Classification interne du groupe bantoïde* (LINCOM Studies in African Linguistics 11–12). Munich: LINCOM Europa.
- Piron, Pascale. 1998. The internal classification of the Bantoid language group, with special focus on the relations between Bantu, Southern Bantoid and Northern Bantoid languages. In Ian Maddieson & Thomas J. Hinnebusch (eds.), *Language history and linguistic description in Africa. Selected papers of the Twenty-Sixth Annual Conference on African Linguistics, held March 23–25, 1995, in Santa Monica, California* (Trends in African Linguistics 2), 65–74. Trenton, NJ; Asmara: Africa World Press.
- Pohlig, James N. s.d. Mbe dictionary. Unpublished ms.
- Rueck, Michael J., Zachariah Yoder & Katarína Hannelova. 2007. Sociolinguistic survey of the Mbula, Tambo, Bakopi, Gwamba, Bwazza, Kulung and Bille people, of Adamawa and Taraba States, Nigeria. Unpublished ms. Jos.
- Schadeberg, Thilo C. 2003. Derivation. In Derek Nurse & Gérard Philippson (eds.), *The Bantu languages* (Language Family Series 4), 71–89. London: Routledge.
- Schadeberg, Thilo C. & Koen Bostoen. 2019. Word formation. In Mark Van de Velde, Koen Bostoen, Derek Nurse & Gérard Philippson (eds.), *The Bantu Languages*, 2nd edn. (Routledge Language Family Series), 172–203. Milton Park, Abingdon: Routledge.
- Spreda, Klaus W. 1995. *Drafts and notes towards a sketch grammar of Meta'*. Yaoundé: SIL Cameroon.
- Stanford, Ronald. 1967. *The Bekwarra language of Nigeria: A grammatical description*. London: School of Oriental & African Studies, University of London. (Doctoral dissertation).

- Stanley, Carol. 1991. *Description phonologique et morpho-syntaxique de la langue tikaar (parlée au Cameroun)*. Paris: Université Sorbonne Nouvelle – Paris 3. (Doctoral dissertation).
- Thwing, Rhonda. 1987. *The Vute noun phrase and the relationship between Vute and Bantu*. Arlington, TX: University of Texas at Arlington. (MA thesis).
- Thwing, Rhonda. 2006. *Verb extensions in Vute*. Yaoundé: SIL International.
- Trithart, Mary Lee. 1983. *The applied suffix and transitivity: A historical study in Bantu*. Los Angeles, CA: University of California at Los Angeles. (Doctoral dissertation).
- Van de Velde, Mark & Dmitry Idiatov. 2022. A first analysis of Mbula. Paper presented at the First Bantoid Conference, Hamburg, 24–26 March 2022.
- Voeltz, Erhard F. K. 1977. *Proto Niger-Congo verb extensions*. Los Angeles, CA: University of California at Los Angeles. (Doctoral dissertation).
- Voll, Rebecca Maria. 2017. *A grammar of Mundabli: A Bantoid (Yemne-Kimbi) language of Cameroon*. Leiden: Leiden University. (Doctoral dissertation).
- Warnier, Jean-Pierre. 1979. Noun-classes, lexical stocks, multilingualism, and the history of the Cameroon Grassfields. *Language in Society* 8(3). 409–423.
- Watters, John R. 1981. *A phonology and morphology of Ejagham, with notes on dialect variation*. Los Angeles, CA: University of California at Los Angeles. (Doctoral dissertation).
- Watters, John R. & Jacqueline Leroy. 1989a. Bantoid overview. In John T. Bendor-Samuel & Rhonda L. Hartell (eds.), *The Niger-Congo languages: A classification and description of Africa's largest language family*, 401–429. Lanham, MD: University Press of America.
- Watters, John R. & Jacqueline Leroy. 1989b. Southern Bantoid. In John T. Bendor-Samuel & Rhonda L. Hartell (eds.), *The Niger-Congo languages: A classification and description of Africa's largest language family*, 430–449. Lanham, MD: University Press of America.
- Westermann, Diedrich. 1927. *Die westlichen Sudansprachen und ihre Beziehungen zum Bantu* (Mitteilungen des Seminars für Orientalische Sprachen an der Friedrich Wilhelms-Universität zu Berlin 29). Berlin: de Gruyter.
- Williamson, Kay. 1971. The Benue-Congo languages & Ijò. In Thomas A. Sebeok (ed.), *Linguistics in Sub-Saharan Africa* (Current Trends in Linguistics 7), 245–306. The Hague: Mouton.
- Williamson, Kay. 1989. Benue-Congo overview. In John T. Bendor-Samuel & Rhonda L. Hartell (eds.), *The Niger-Congo languages: A classification and description of Africa's largest language family*, 246–274. Lanham, MD: University Press of America.