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Retracing labial-velar consonants in Mbum (Adamawa): Between genetic transmission and language contact

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Retracing labial-velar consonants in Mbum (Adamawa): Between genetic transmission and language contact

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Abstract

Labial-velar consonants, which are typologically rather rare in the languages of the world, have been used for both genealogical and areal classification purposes. The claim that their occurrence mainly signals areal contact (e.g. Güldemann 2008), has been criticized by scholars (cf. Cahill 2017, Childs 2017) who point out a possible genealogical development in multiple language families of Africa. In this paper, we analyze contemporary and historical data on Mbum varieties from the Adamawa plateau in Cameroon and closely related languages of the Kebi-Benue family to approach the question whether labial-velars are transmitted merely through contact in these languages or warrant a genealogical explanation. The bottom-up approach leads to an interpretation of the current distribution of labial-velars that has both elements in it: There are arguments for reconstructing labial-velars for the Proto-Kebi-Benue level, but certain specifics of their geographical distribution also hint at a contact explanation.

Keywords: labial-velars, areal vs. genealogical distribution, Mbum, Kebi-Benue family

1 Introduction

Labial-velar consonants (LV hereafter) have attracted attention from Africanists for a long time. As such double articulated units are rare in phoneme systems on a global scale, their striking abundance in Sub-Saharan Africa has long been recognized. Their occurrence or absence has been used for both genealogical and areal classification purposes. The claim that they are a major diagnostic feature for areal contact on a large scale (Güldemann 2008, Clements & Rialland

2008) has recently been criticized by scholars who argue for their genealogical development in more than one of the major language families of the continent (Cahill 2017, Childs 2017) and thus taking up earlier hypotheses (Greenberg 1983, Manessy 1979). Using a very large database and generalized additive modelling, a strong counter-argument has been made by Idiatov and Van de Velde (2021), stating that LV are mostly a substrate feature and cannot be reconstructed for the languages that currently have them in their sound inventory.

In this paper we take a closer look at the distribution of labial-velar consonants on a micro level. By analysing contemporary and historical data on Mbum varieties from the Adamawa Plateau in Cameroon and closely related languages of the Kébi-Bénoué family, we look at possible ways to explain the current distribution of LV and take both genealogical and contact explanations into account. In the case of Mbum, the micro level approach entails a lexical data base extending over more than a century and allows to explore possibly related historical speech-group events that may have contributed to the spread of these phonemes.

To that end we start in section 2 with a brief account of labial-velar consonants in Africa and recall the theoretical positions taken to explain their occurrence in a wide variety of languages. In section 3, we present the data on LV occurrences in Mbum and related languages of the Kébi-Bénoué family that partly stem from older sources. In section 4, we try to make sense of the sometimes contradictory data in looking at historical accounts of the related speech groups. The findings of the paper are summarized in section 5, outlining the more general conclusions that can be drawn from our data.

2 Labial-velars as areal and genealogical features

Labial-velar consonants are characterized by a close to simultaneous double articulation on the velum and on the lips. Since the release at the velum is a few milliseconds earlier than at the lips (Cahill 2018: 152), a more appropriate label would be ‘velar-labials’. They are considered a single phonetic unit and come in three different flavours: the voiced and unvoiced stops $[\widehat{g}b]$ and $[\widehat{k}p]$, as well as the nasal variant $[\widehat{\eta}m]$. Besides, there are the closely related velar stops, where the labial component is analyzed as a secondary articulation. They are either noted as $[k^w/g^w]$ or $[kw/gw]$ and are often understood as

an intermediate developmental step between the double articulation and the plain stop.

The occurrence of LV as phonemes is often considered an African phenomenon with just a few exceptions in New Guinea (Maddieson 2013). Their frequent occurrence and distribution pattern across several language families in central Sub-Saharan Africa in combination with the supposed scarcity outside of Africa made LV a strong candidate for a diagnostic criterion concerning the contact-induced and geographically defined Macro-Sudan belt (MSB) (Güldemann 2008: 157) as well as the Sudanic belt (SB) (Clements & Rialland 2008).

This view of labial velars as a main phonological feature of linguistic areas and concomitant language contact has been challenged recently. Cahill (2017: 20) argues that labial-velars “in Africa arose from sound change in several dozen languages (or proto-languages), from language contact in several dozen cases, and from genetic inheritance in several hundred languages”. In his private database Cahill (2017: 14–15) also finds a much wider distribution of the phonemes extending to Asia, South America and a few other places. Even though the overwhelming majority of languages displaying LV in his data still concentrate in the MSB-area, for him, the argument of an unusual feature that cannot be explained genetically or through internal development accordingly does not hold for LV. To be fair, it also has to be stated that later conceptualizations of linguistic areas in general and the MSB in particular, understand feature development as the result of ‘multiple causation’ where genetic inheritance and areal contact explanations combine (Güldemann 2018: 496–497). Cahill’s (2017: 13) remark that proponents of areal explanations would assume that LV “are uncommon and largely arise through language contact” is thus invalidated.

Childs (2017: 294) supports Cahill’s view in rejecting the “circumstantialist” approach to the definition of linguistic areas which does not “eliminate chance, universals, possible undetected genetic relationships, or internal developments/convergence as explanations”. He promotes a ‘socio-historic’ approach that also considers the nature of the interaction between speakers of different languages which is often missing for areal explanations (Childs 2017: 294–295). Again, one has to add following Güldemann (2018: 497) that such a claim is at times unrealistic. An appropriate socio-historic scenario for feature transmission along both lines of explanations, i.e. con-

tact and genealogical inheritance, may be difficult to obtain. Given the scarcity of historical records and reliable sources for even quite recent times in Africa, such scenario reconstructions for an area like the MSB or a proposed genealogical unit like the Adamawa languages are just not feasible.

So a pertinent question is how these consonants behave in different families and groups in order to understand whether and how they lend themselves to a contact and/or genealogical explanation. Relying on a very large lexical data base, Idiatov and Van de Velde (2021) use advanced statistics and generalized additive modelling to understand the exact repartition and possible developments of LV in the languages of Northern Sub-Saharan Africa (NSSA). They establish that there is an expressive element to this phonological unit, as LV are more often found in expressive parts of the lexicon than anywhere else (Idiatov & Van de Velde 2021: 77–80). This adds to the main finding of their work, namely that LV are concentrated in three separated zones that can be equalized with retention zones for speakers of languages that came under external pressure in the more easily accessible parts of the NSSA spread zone (Idiatov & Van de Velde 2021: 94–96). Judging from the current repartition of language families and groups, Idiatov and Van de Velde (2021: 97, 103) infer that “chances are very high that LV stops [...] originated in a language family or families that have disappeared today”, which also implies that LV stops were not part of the phoneme inventories of the proto-languages of the families currently attested in NSSA.

Mbum, the Adamawa language in the centre of this paper, is actually located in what is named the Cameroon Gap between the Lower Guinea hotbed and the Ubangi Basin hotbed of LV occurrence by Idiatov and Van de Velde (2021: 82). It is therefore particularly interesting to compare the findings from the micro level with their macro level approach.

3 Labial-velars in Mbum and related languages

Mbum is a language of the Kébi-Bénue family within the Adamawa pool¹ of languages. In the following, we first present contemporary

1 In his comprehensive overview of languages and linguistics in Africa, Güldemann (2018: 200) refers to the Adamawa group as “a highly diverse genealogical pool of Niger-Congo languages”. This nomenclature reflects the fact that such classi-

data on labial-velar consonants which comprise quite recent work but also take linguistic descriptions into account that date back to the 1970s. As Mbum-speaking people have been of interest to the German colonial administration there is also a wealth of language data dating back to the late 19th and early 20th century that we present subsequently. In order to also include at least some comparative data above the dialectal level, we also look at some of the closest relatives of Mbum in the Kébi-Bénue family and the occurrence of LV there. An informed guess about the proto-status of LV in this family closes this section.

3.1 Labial-velars in contemporary Mbum

LV have been reported in several publications on Mbum. Hagège's (1970) study of the Mbum variety of Nghanha (some 60 km northeast of Ngaoundéré, see Figure 1) lists the labial-velar stops /k̄p/, /ḡb/, and the prenasalised version /nḡb/ as part of the regular consonant inventory.

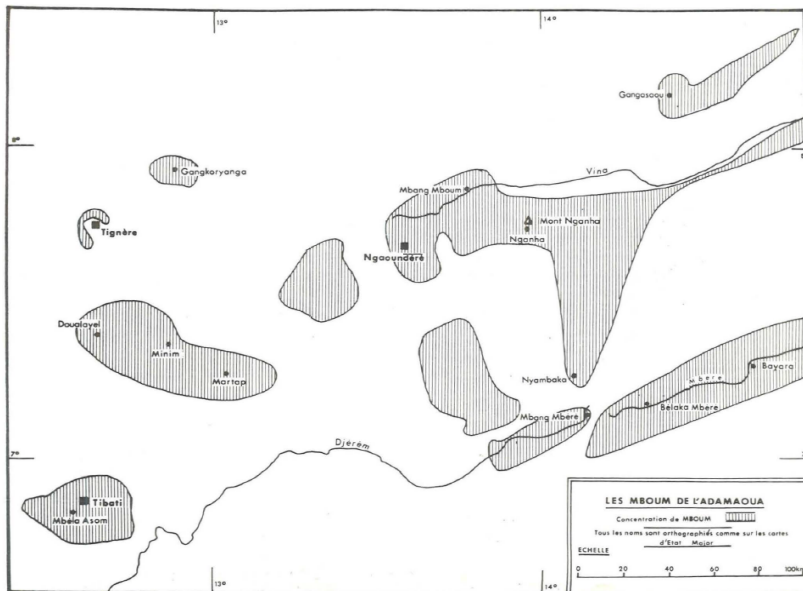


Figure 1. The Mbum varieties on the Adamawa plateau (Hagège 1970: n.p.)

ficatory units are not well-established genealogical lineages or entities (Güldemann 2018: 82) like for instance the Kébi-Bénue family within this pool. In the present paper, we adapt our nomenclature to Güldemann where appropriate.

In the extended word list *Français-Mbum* by Fløttum (1974) all three versions of LV can also be found; And in a more recent publication from Ngaoundéré by the *Association des Mboums autochtones du Cameroun* (Mamoudou et al. 2018), all three labial-velars also figure prominently. The following examples of LV in the three publications can be found among many others:

Table 1. Labial-velars in three published sources on Mbum

	Hagège (1970)	Fløttum (1974)	Mamoudou et al. (2018)
/k̄p/	k̄párá ‘oyster’ k̄pútúk ‘overweight’	k̄pónà ‘power’ k̄pírím ‘intact’	k̄párká ‘age’ k̄pórò ‘left’
/ḡb/	ḡbékè ‘demolition’ ḡbárá ‘needle’	ḡbónà ‘bark’ ḡbàkàr ‘to camp’	ḡbái ‘to hit’ ḡbími ‘hippopotamus’
/N̄gb/ ²	n̄gbéré ‘frog’ n̄gbólòŋ ‘ditch’	n̄gbàm ‘to unnerve’ n̄gbándá ‘youth’	n̄gbúrà ‘to open’ n̄gbór ‘street, passage’

While all three sources illustrated in Table 1 thus support the occurrence of LV stops in general, there are some differences. The prenasalised labial-velar stop figures as /n̄gb/ in Hagège’s (1970: 30) phoneme inventory while in Fløttum (1974) the nasalisation is always rendered with the velar nasal /ŋgb/. A transcription error may be excluded since Hagège (1970: 38) differentiates between the nasals /n/ and /ŋ/ in other lexemes, e.g. *ngàŋ* ‘peau (skin)’. Due to the temporal proximity of the publications by Hagège (1970) and Fløttum (1974), one might therefore assume a dialectal or idiosyncratic variation. In the dictionary from Mamadou et al. (2018), the prenasalised LV is also written with a preceding velar nasal.

Additional contemporary material on Mbum comes from field data recorded in Ngaoundéré from 2018 to 2021 among young urban speakers of Mbum.³ A comparison of the data from the literature with our field data is given in Table 2:

2 /N/ denotes an unspecified nasal consonant.

3 The Mbum data stem from the first phase of the DFG-funded project “Language use and linguistic variation in urban multilingual professional networks in Ngaoundéré (northern Cameroon)”. Most data were collected by Beyer during field trips from 2018 to 2020. With two of the six Mbum speakers Kunzmann has estab-

Table 2. Comparison of published and field data

	Hagège (1970)	Fløttum (1974)	Mamoudou et al. (2018)	field data (2018–2021)
/k̄p̄/				
‘hoe’	k̄p̄à	k̄p̄â	k̄p̄ã	
‘oyster’	k̄p̄ará	k̄p̄ârâ	k̄p̄ârã	
‘power’		k̄p̄óŋà	k̄p̄ónà	k̄p̄óŋà/p̄óŋà
‘short, small’	k̄p̄érkém	k̄p̄útúrí	k̄p̄útúrí	ɲíki
‘yam’	k̄p̄èi	k̄p̄èi	k̄p̄éi/k̄p̄ói	
‘elder’	k̄p̄árká	k̄p̄árká	k̄p̄árká	p̄árká
‘left’		k̄p̄órò	k̄p̄órò	p̄órò
‘intact, pure’	k̄p̄írím	k̄p̄írím	k̄p̄írím	
/ḡb̄/				
‘bark’		ḡb̄ó	ḡb̄ónà	ḡb̄ó
‘excrement’		b̄âr	b̄âr	ḡb̄àrà/ḡb̄ár
‘camp’	ḡb̄ákàr	ḡb̄akar		
‘destroy’	ḡb̄ékè(r)	ḡb̄èkèr/ ḡb̄èsek	ḡb̄èkèr/ḡb̄èsek	
/nḡb̄/				
‘voice, tongue, language’	nḡb̄òk	nḡb̄òk	nḡb̄òk	mbók
‘take, catch’	nḡb̄á/baŋ	nḡb̄á/baŋ	nḡb̄ánà	nḡb̄á(N)/ mbá

While the published sources clearly attest LV-occurrence in the respective varieties, the Mbum of young speakers in Ngaoundéré shows signs of attrition of this phoneme. Although only a few young urban Mbum have been analyzed according to their use of LV so far, we can already detect some general tendencies. The attrition of /k̄p̄/ to a mere unvoiced labial plosive is probably due to the fre-

quency of published communication channels via internet, which we exploited during the pandemic as traveling to Cameroon was not possible for several months. On-site field research will be resumed with the start of phase II of the DFG-project.

quent perception of / \widehat{kp} / as a /p/. On a historic level this is “largely responsible for the sound change $*\widehat{kp} > p$ being much more common than $*\widehat{kp} > k$ ” (Cahill 2018: 153). The voiced onsets, however, display less clear cases of attrition. There seems to be some confusion with the implosive voiced bilabial / \widehat{b} /⁴ and the prenasalised bilabial (cp. Table 2, ‘excrement’, ‘take, catch’). A case in point showing the general attrition tendency is the word for ‘tree, wood’ (see Table 3). While the written sources have / \widehat{kp} / as onset, four speakers (here identified by their initials) of the young urban group reduce it to /p/ while one uses another lexeme, *di* from the Mbum Perre variety:

Table 3. Labial-velar attrition with young speakers in Ngaoundéré (cf. $\widehat{kpù}$ in Hagège (1970), Fløttum (1974) and Mamoudou et al. (2018))

	YS	AO	SM	YM	HF
‘tree, wood’	<i>pù</i>	<i>pù</i>	<i>di</i> (Mbum- Perre)	<i>pù</i>	<i>pù</i>

Another puzzle is that the data Mamoudou et al. (2018) compiled in Ngaoundéré displays nearly the same amount⁵ and distribution of LV as the two publications from the 1970s. In other sources from Ngaoundéré (i.e. Boyd 1974 and our field data), LV are far less prominent. An explanation would be that two of the four authors of Mamoudou et al. (2018) grew up in Nghanha and the other two in more southerly regions (from around Tibati) where LV are still pretty much alive (see also section 4 below). Contrary to that, the speakers from our ongoing research are connected to far more heterogeneous and multilingual social networks and therefore adapt to a more diffuse version of Mbum (Beyer 2022). Most of these young urbanites have also passed at least half their lives in Ngaoundéré and, consequently, have not been exposed to the possibly more conservative up-country varieties for very long. In addition, the difference in purpose between the two data sources is apparent: while our ongoing research aspires to detect phonological variation through empirically observed and meticulously transcribed language data, Mamoudou et al. (2018) are

4 A familiar phenomenon found in many other languages with LV (Cahill 2018: 151, 152).

5 Hagège (1970: 47) gives an idea about the frequencies of these phonemes compared to simple labial and velar consonants: “[...] sur l’ensemble de monèmes à l’initiale bilabiale, vélaire et labio-vélaire [...] en rencontre 15% de p, 18% de b, 16% de k, 16% de g, 18% de kp, 17% de gb”.

more interested in language standardization and koineization, and possibly take the more prestigious version of Nganha as a blueprint.

However, that the voiceless / \widehat{kp} / is articulated in today's Mbum of Ngaoundéré as a simple /p/ is also apparent in some entries in Mamoudou et al. (2018). Sometimes two versions for one and the same gloss are given: 'force' $\widehat{kpónà} \sim pónà$, 'left side' $\widehat{kpórò} \sim pórò$, 'tree' $\widehat{kpù} \sim pù$. There is also one example where / \widehat{kp} / varies with /k/: 'thirst' $\widehat{kpók-mbì} \sim kó mbì$.

3.2 Colonial sources

The picture gets even more complicated when one considers older sources, which is in fact possible in the case of Mbum. Together with other languages, Mbum received substantial attention from German colonial administration and early researchers (e.g. Heinrich Barth and Adolf Overweg, cited in Duisburg 1925: 133), so that we have sources on the language dating back into the 19th century. In Duisburg (1925: 159) we find the entries for the gloss 'Baum' ('tree'), as depicted in Table 4:

Table 4. The entries for 'tree' in several varieties a) and sources b) of the late 19th and early 20th century (Duisburg 1925)

a)

Mbum-Perre	Mbere	Mbum
<i>dì</i>	<i>dì</i>	<i>pù</i>

b)

Thiel (unpubl.)	Dühring (unpubl.)	Strümpell	Overweg
<i>mbu</i>	<i>pu</i>	<i>pěgi</i>	<i>pū</i>

Duisburg adds unpublished sources of his time where the entries for 'tree' do not show the LV-onset either. Unfortunately, the exact locations and varieties referred to in these sources are unclear. As a matter of fact, in Duisburg's (1925) own data no LV are listed at all! The same observation holds for the even older compilation of Adamawa languages from 1910, in which Strümpell lists the entries for 'tree' (cp. Table 5) for some Kebi-Benue languages (as far as we could identify them comparing it with Boyd's classification (Boyd 1974, 1989)):

Table 5. Lexemes designating ‘tree’ in various languages of the Kebi-Benue family according to Strümpell (1910)

Jassing (Ngoum?)	Mangbai	Dama	Lakka	Mbere	Mbum
<i>pu</i>	<i>bēga</i>	<i>pēgi</i>	<i>pū</i>	<i>di</i>	<i>pū</i>

One could multiply such entries where the older sources do not display LV while the younger authors list them (cp. Table 6):

Table 6. Older sources without labial-velars where modern authors have them

	Strümpell (1910)	Duisburg (1925)	Fløttum (1974)	Mamoudou et al. (2018)
‘buffalo (Büffel)’	<i>pěrrě</i>	<i>péře</i>	<i>k̄péré</i>	<i>k̄péré</i>
‘hippopotamus’		<i>b̄ĩmi/b̄ẽme</i>	<i>ḡbémé</i>	<i>ḡbĩmí</i>
‘needle’	<i>ssānǎ</i>	<i>sānā</i>	<i>ḡbara</i>	<i>ḡbárá</i>
‘left’		<i>poro</i>	<i>k̄pórò</i>	<i>k̄pórò</i>
‘passage’		<i>boro</i>	<i>nḡbóró</i>	<i>nḡbór</i>
‘catch, take’		<i>mbā</i>	<i>nḡbá</i>	<i>nḡbánà</i>

From such a comparison one might infer that either some hundred twenty years ago LV were not present at all in Mbum and its close relatives, or that the authors just did not hear the double articulation because they were not sensitive to this kind of complex consonants from their own linguistic backgrounds.

On the other hand, when one looks at the comments and the generally fine-grained phonetic transcriptions employed by the authors, it is hard to believe that they missed labial-velar sounds all together. For instance, Duisburg (1925: 134) and Tessmann (1930: 55) cite Westermann (1911, 1927) as reference for transcription and analysis of language data, which may be considered the “gold standard” of that time.⁶

⁶ Duisburg (1925: 133–134) also reflects on some onset variation in the language name of the most southern language variety and states that he explicitly tried to figure out whether there is a [ke] or even a [te/i] in the onset (as some other sources state). It is finally transcribed as Pěru by him, whereas it is referred to as Kpere [sic] in Boyd (1989). This seems to indicate his phonetic awareness and skill for fine-grained transcription.

3.3 Labial-velars in Kebi-Benue

The Kebi-Benue family within the Adamawa-pool is the classificatory home of the Mbum language. Elders (2006: 48) states that the LV stops / \widehat{kp} /, / \widehat{gb} / and the prenasalised / \widehat{ngb} / (but not the labial-velar nasal / $\widehat{\eta m}$ /) are frequent in all languages of the family – except for Tupuri – and thus also in Mbum. However, while the authors from the influential book on the linguistic geography of Africa (Heine & Nurse 2008) acclaim LV as a strong diagnostic feature for areal contact, Elders is not taking this view explicitly. Cahill (2018: 156) considers the Adamawa-Ubangi family as “promising for reconstruction” of LV in showing that only one sub-branch of Adamawa and one of Ubangi lack these phonological units in most of their languages. Thus, chances are high that genetic inheritance of labial-velars also plays a role in Kebi-Benue and its sub-groups (Northern, Central, Southern).

For a well-founded assessment of the historical development of LV in Mbum we thus need to evaluate the possibility of genealogical inheritance of labial-velars in Mbum and related languages. To that end, we first consult Boyd’s (1974) comparative study of the Lakka-languages that were later called Mbum group (Boyd 1989) and are nowadays known as the Kebi-Benue group (Elders 2006) or family (Güldemann 2018: 209) of the Adamawa pool. As far as we know, Boyd (1974) was the first attempt to reconstruct a proto-system for one of the Adamawa language families (see Figure 2). The specific family of our interest is number 6. *Mbum* below, where the numbers of the sub-groups refer to the classification of Greenberg (1963). Extract (2) in Figure 2 displays the internal grouping where the eponymous Mbum-language and its closest varieties are placed in the Southern branch.

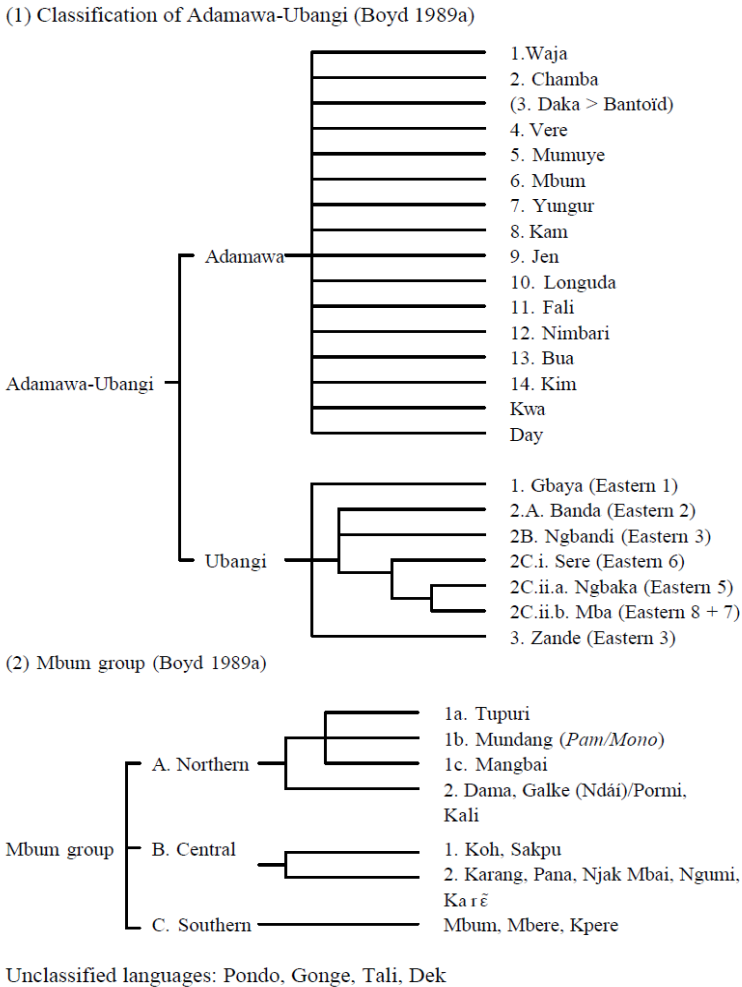


Figure 2. Classification of Adamawa-Ubangi (1) and internal classification of the Mbum group (2) (Boyd 1989 as cited in Elders 2006: 40)

In Boyd’s (1974: 18) comparative study, the Kebi-Benue family is treated under the label “lakka”, a somewhat diffuse exonym that Fula-Speakers used for some ethnic groups in the region of Rey Bouba (~200 km northeast of Ngaoundéré close to the border with Chad, see Figure 3).

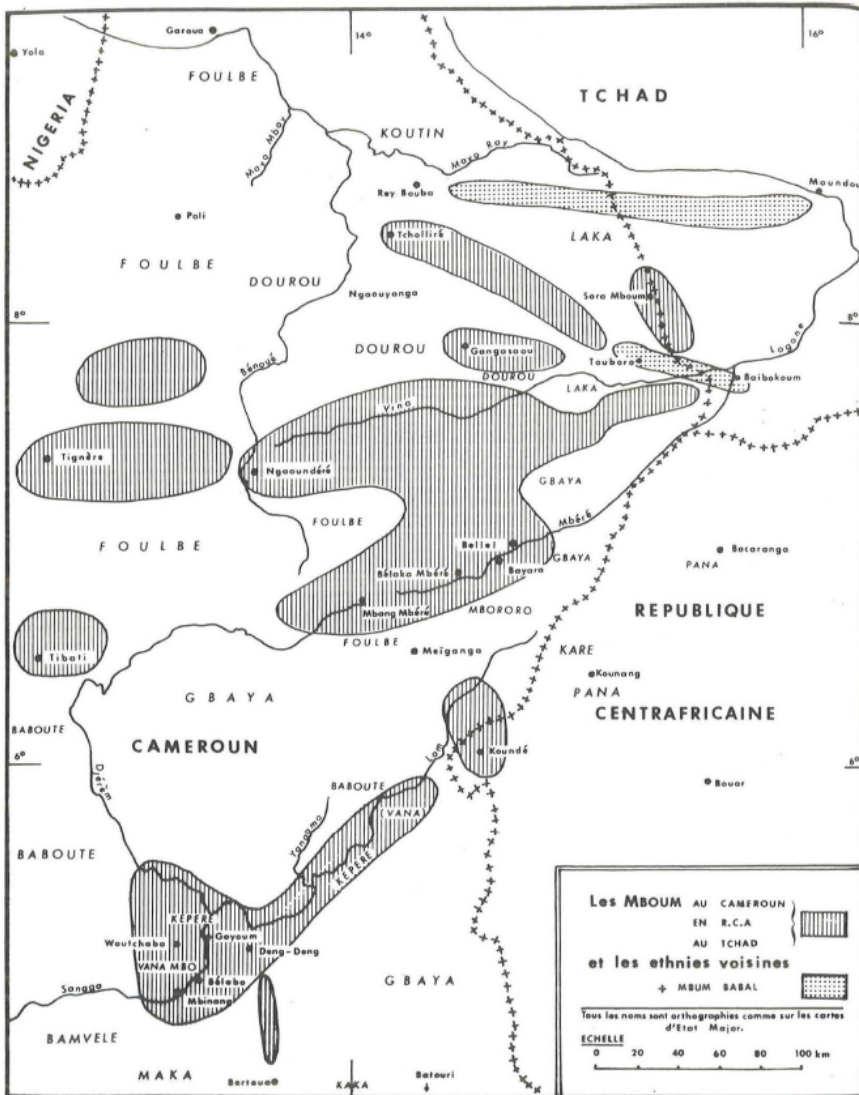


Figure 3. The southern Kabi-Benue languages (Hagège 1970: n.p.)

In this study, Boyd (1974: 27) uses the name for the whole family and tries to reconstruct what he calls a “lakka’ commun” (abbreviated “lc”). The comparative series comprises data for most of the languages from his later Mbum group (cp. Figure 2), except for Tupuri from the Northern branch and Kpere from the Southern branch. In addition, he collects data from the Vere group (called Dourou within

Adamawa by Greenberg (1963)) to provide higher order comparison and sets out to reconstruct a “langue-mère du ‘lakka’ commun et du dourou” (Boyd 1974: 27) (abbreviated “L₂”).

The language data Boyd presents were mainly collected by himself within the project “Linguistic inventory of Cameroon” at the University of Yaoundé in the years 1973 and 1974, by using a word list of 220 glosses, each accompanied by a phrase for contextualization (Boyd 1974: 15).

Apparently, his comparative word lists were already partly finished when he added the data from 1974. This explains the somehow confusing presentation of his data, where the representatives of his supposed sub-group Lakka and data from parallel groupings are mixed up while important languages for the reconstruction (Mundang, Mbum) only figure below the hypothetic proto-phonemes and sometimes do not seem to corroborate them (Boyd 1974: 63ff.; also compare the critique in Güldemann 2018: 202).

His main locations for data collection on the Mbum language were the cities of Ngaoundéré and Tcholliré, and – for the Mbere-variety – along the upper parts of the river Mbéré, some 100 km southeast of Ngaoundéré (Boyd 1974: 18; see Map 1). With regard to the appearance and possible reconstruction of labial-velar consonants from his data, we can state the following: the comparative series 150–156a (Boyd 1974: 82–83) provides evidence for the postulation of initial labial-velar consonants in both ‘lakka’ commun and the hypothetic higher order proto-language L₂ (Boyd 1974: 33, 38). While the voiced and unvoiced versions are well supported by the data, the prenasalised /ng̃b/ is only substantiated with a relatively weak comparative series (156 and 156a). *ng̃b is therefore only postulated for symmetry reasons in lc (Boyd 1974: 32) and considered a free variation in L₂ (Boyd 1974: 37).

The overall picture emerging from Boyd’s data thus hints to labial-velar consonants being part of the proto-Kebi-Benue phoneme inventory, a claim that is also supported by Elders (2006: 48). The additional Dourou data in Boyd (1974) clearly do not provide enough evidence for reconstructions on the proto-level of the whole Adamawa pool or even some intermediary grouping.

Looking at Boyd’s (1974) comparative series more closely we find that none of his entries for the Southern languages Mbum ~ Mbere show any labial-velars at all (Boyd 1974: 82–83). This is all the more

astonishing as the other sources from that period (i.e. Hagège 1970 and Fløttum 1974) display LV where Boyd does not have them. In Table 7 we reproduce all entries for the southern Kébi-Bénue languages from Boyd's comparative series and contrast them with the data from the other two sources of that time. Because in Boyd's compilation data for the third language in the southern branch, namely Kpère (aka Gbete), are missing, we also add entries for this relying on Duisburg (1925), who has mainly collected his data from this most southern language of the Kébi-Bénue group. The last column displays Boyd's (1974) reconstructions of his "lakka' commun". Concerning these reconstructions, one must keep in mind that they reflect all languages of the Kébi-Bénue group whereas in Table 7 we only reproduce Boyd's data for the Southern branch. That is to say that data from the Central and Northern branch are mainly responsible for Boyd's starred forms. At least for the unvoiced LV, the data from Hagège (1970) and Fløttum (1974) support Boyd's reconstruction of **kp* where his own data do not.

How, then, can we explain the mismatch concerning the / \widehat{kp} /-sound between the authors who collected the data at around the same time and in places commonly considered to be part of Mbum's core-area? This stretches roughly from Tibati⁷ (Fløttum 1974) via Ngaoundéré (Boyd 1974) through Nganha (Hagège 1970) to the north-easterly regions of Tchollire (Boyd 1974). Duisburg's data (1925) from the southwest, although collected some 50 years earlier, generally support Boyd.

We also see that despite the relatively numerous instances of / \widehat{gb} / in Hagège (17% of all labial, velar and labial-velars, cp. footnote 2) and Fløttum there are no matches with Boyd's comparative series for the reconstruction of ** \widehat{gb}* . It seems as if the Mbum varieties of Tibati and Nganha reflected in Hagège (1970), Fløttum (1974) and Mamoudou et al. (2018) stick to the Kébi-Bénue proto-system in the

Table 7: Comparative series in Boyd (1974: 82–83) contrasted with other authors

7 Sverre Fløttum also published a Mbum-English vocabulary in 1960. An earlier version of this had already been published in 1957 by the "Mission protestante norvégienne" in Tibati some 200 km southwest of Ngaoundéré (cited in Barreateau et al. 1993: 69). This leads us to infer that Fløttum has mainly worked on this southwestern variety of Mbum. Unfortunately, we do not have access (yet) to neither the 1960 nor the 1957 publication.

sources and locations comp. series: glosses	Hagège (1970): Mbum (Nghanha)	Fløttum (1974): Mbum (Tibati)	Boyd (1974): Mbum (Tcholliré, Ngaoundéré) Mbere (upper Mbéré river)	Duisburg (1925): Kpere = Pěřę (Yoko, Dengdeng)	reconstruction in Boyd (1974): 'lakka' commun
150: 'left hand'	-	<i>k̄pòrò</i>	<i>póro</i>	<i>(ndòk) pòró</i>	* <i>k̄p̄/ḡb̄(nḡb̄)(ε, ɔ)-t</i>
151: 'tree, wood'	<i>k̄p̄ù</i>	<i>k̄p̄ù</i>	<i>p̄ù</i>	<i>d̄i/p̄ù</i>	* <i>k̄p̄à (-k)</i>
152: 'elder per-son'	<i>k̄p̄árká</i>	<i>k̄p̄árká</i>	<i>párka/pok-ri</i>	<i>párka</i>	* <i>k̄p̄/ḡb̄ɔk</i>
153: 'to beat'	-	<i>ndàk</i>	<i>âa</i>	<i>v̄á</i>	* <i>ḡba(l)</i>
154: 'to throw'	<i>v̄ù</i>	<i>hv̄ù</i>	<i>ûu</i>	-	* <i>ḡbu</i>
155: 'ten, twenty'	<i>b̄ôn</i>	<i>b̄õ</i>	<i>b̄õ/bòn</i>	<i>b̄õ; b̄õ ndòa</i>	-
155a: 'path'	-	<i>máâf̄il</i>	-	<i>m̄áful; mb̄ũro</i>	-
156: 'to scratch'	<i>nḡúá</i>	-	<i>mbana</i>	-	* <i>k̄p̄/ḡb̄/nḡban</i>
156a: 'big, large'	-	<i>h̄unàké</i>	-	<i>h̄un</i>	* <i>ngo</i>

case of / \widehat{kp} /-onsets. As for / \widehat{gb} / and / \widehat{ngb} /, these Mbum-varieties seem to have reinvented the / \widehat{gb} /-phoneme and employ lexemes that show this onset where others do not.

A short comparison of the / \widehat{gb} /-varieties with data from the older sources confirms this (Table 8). As further lexical sources of that time other than Boyd are scarce, we return to the colonial authors who unfortunately do not have many cognates for the relevant lexemes. However, even the short list in Table 8 shows that / \widehat{gb} / and / \widehat{ngb} / are much more prominent there than in all other Mbum varieties:

Table 8. The two / \widehat{gb} /-varieties contrasted with colonial sources on Mbum

	Hagège (1970) Nganha	Fløttum (1974) Tibati	Mamoudou et al. (2018) Nganha & Tibati	Duisburg (1925) Strümpell (1910)* Tessmann (1930)**
‘take, catch’	$\widehat{ngbá}/bá\eta$	$\widehat{\eta gbá}/bá\eta$	$\widehat{\eta gbánà}$	$bá\eta$ $bǎ\eta/\widehat{ngbà}$ **
‘dig (open)’		$\widehat{\eta gbúnàké}$	$\widehat{gbúrà}$	$dá\eta$
‘open’	$\widehat{ngbùr}$	$\widehat{\eta gbù}$	$\widehat{gbékà}$	$tùr$ **
‘sing’		$\widehat{gbó} s\eta$	$\widehat{gbónà} s\eta$	$dina schin(g)$ * $dí s\eta$ **
‘surprise’	$\widehat{gbór(ók)}$	$\widehat{\eta gbá}$	$\widehat{gbórók}$ (‘suddenly’)	-

4 Labial-velars in Mbum reconsidered

The above described state of affairs leads to several interrelated questions:

- Given the possibility of LV being part of the proto-inventory of Kebi-Benue, what happened to them in the southern sub-branch of this family?
- What would be a probable socio-historical scenario that accounts for the uneven distribution of LV in this branch and among the different Mbum varieties?
- What does this tell us about the diagnostic value of LV in general?

Starting from the assumption that LV existed in the ancestor language of the Kébi-Bénue family, the early sources without LV would be either marked as unreliable in this respect or one would assume some specific internal attrition process in at least some varieties of the southern branch. Even if we would assume that the early German authors had difficulties to identify these complex phonemes, this would not explain their absence in Boyd's data and the fact that the voiced LV data from Tibati and Nganha do not match at all with the rest. Additionally, the discrepancy observed between the contemporary literature on Mbum of the last 50 years (except Boyd 1974) and the current young speakers' version of it in Ngaoundéré would nourish a contact explanation due to the special sociolinguistic situation of the urban speakers.

Another possible answer to a) would take the authors from the beginning of the 20th century (Strümpell 1910, Duisburg 1925) seriously and neglect LV as a part of the proto-inventory of the southern Kébi-Bénue group all together, thereby also accounting for Boyd's (1974) data. However, that would warrant a different explanation for their existence in the Nganha and Tibati varieties.

Moreover, the even more specific puzzle of the /g̃b/-varieties strongly hints to a contact scenario in which these varieties kept or reinvented labial-velar sounds that have long been lost in other varieties. While /k̃p/ in these regional dialects may well be a retention from Proto-Kébi-Bénue, the /g̃b/-onsets mostly cannot be explained with a preservation of the proto-system in this respect. It seems like the speakers of the /g̃b/-varieties use different lexemes with this specific onset that are not so common in the rest of the Mbum-continuum.

Given the strange pattern, with Tibati and Nganha holding on to a group of phonemes that do not figure in the other varieties and languages of the southern branch, a probable socio-historical context may be found in a specific regional pattern of socio-political domination. Such a context is related to the Fulani intrusion in the Adamawa plateau from the beginning of the 19th century onwards (Mohammadou 1978).⁸ Fulani first migrated into the region to pasture their cattle on the rich soil of the plateau and lived alongside

⁸ In how far the German (1884–1919) and French (1919–1960) colonial occupation had an impact on such dialectal variation is difficult to fathom, but an informed guess would be that it was less operative on the phonological level of the indigenous languages and varieties.

the Mbum. The latter were present in the area at least since the 17th century and had formed a vast kingdom with a federal structure. The local *Belaka* (head of a Mbum fraction) allowed the arriving Fulani to settle down and they founded the city of Ngaoundéré. As time passed, more Fulani arrived, and the socio-political climate changed. The emerging conflict led to a battle between Mbum and Fulani at Ngau Kor in 1830, in which the Mbum were defeated by the Fulani army of Ardo Njobdi (the first Fulani ruler of Ngaoundéré) and two allies. However, after this defeat, the Mbum in and around Ngaoundéré came to an understanding with the newly installed Fulani rulers who agreed to always intermarry with at least one autochthonous woman (Markgraf 2017: 94–95).

So while Ngaoundéré and the surrounding region came to some sort of cohabitation and understanding with the Fulani, Nganha kept its status as cultural centre of all Mbum. Until today, it is considered a stronghold of Mbum culture and language, generally less influenced by the Fulani domination. One could thus explain the extended / \widehat{kp} / use in the Nganha-variety as some kind of identity preserving linguistic marker that was not given up easily. The voiced / \widehat{gb} / seems to have been reintroduced via loans from the central and northern Kebi-Benue groups.

Tibati was also under the domination of Fulani rulers.⁹ But contrary to the understanding reached in Ngaoundéré, the Mbum of Tibati were never integrated into the Fulani ruling system. So they, just like the speakers from Nganha, may have expressed their challenged ethnic identity through the LV as identity marker, a phoneme not known to Fula-speakers at all. As conjectural as this speculation might be, it seems a possibility to explain why and how these two dialects of all Mbum varieties have kept LV in their phonological system, while all other varieties including that of Ngaoundéré did not hold on to them.

Turning to question c) on the diagnostic value of labial-velars for areal contact, the answer is two-sided. According to our findings, the feature cannot be solely attributed to contact. The evidence strongly hints to a genetically transmitted feature that was present in Proto-Kebi-Benue. But as the case of the Nganha- and Tibati-varieties stands, LV phonemes may also be prone to social identity and status

9 One of the allies in the battle of Ngau Kor was the Fulani ruler of Tibati, Ardo Hama Sambo.

marking and thus may have been preserved or even reinvented. The possibility of a socially motivated reintroduction of the voiced /g̃b/ onsets from sources outside Southern-Kebi-Benue still fosters the areal contact explanation.

So the micro-approach to the current distribution of labial-velars in the Mbum area suggests multiple causation driven by socio-historic speech-group events some two hundred years ago in combination with genealogical inheritance of this linguistic feature.

5 Preliminary Conclusion

The micro-perspective on labial-velar onsets in the varieties and lowest level relatives of Mbum reveals a much more heterogeneous picture than one would assume by just looking at general overviews and large-scale comparisons. For the Kebi-Benue family it seems safe to say that LV can be established for the proto-system. Whether this holds for even deeper layers of reconstructed proto-systems – maybe even for the Adamawa pool in general as suggested by Cahill (2017: 22–23) – has yet to be shown.

However, the closer look at LV in Mbum-varieties and Kebi-Benue languages also exemplifies how these phonemes are prone to socially induced manipulation. The proposed scenario of identity-marking with LV yields a plausible explanation for their distribution in contemporary languages and varieties which dates back some two hundred years or so. This also leads to the assumption that, in principle, any social circumstances may have led to a transfer of LV between (proto-) languages and varieties 2000 years ago. The problem is that the further back in time we go, the blurrier gets the picture we can paint of suitable sociolinguistic scenarios to support a contact or genealogical thesis.

For the question at hand, whether the Adamawa pool as a whole or some lower-level parts of it acquired LV via contact within the Macro-Sudan belt, a well-founded answer is quite difficult to give with certainty. The statistic modelling presented by Idiatov and Van de Velde (2021) provides us with some more clues. Their analysis of the frequencies of labial-velar consonants adds some detail to the already known presence of LV in the MSB and in NSSA in general. The Kebi-Benue family of languages is situated at the most western fringe of what they call Ubangi Basin hotbed, where the frequen-

cies of LV trickle out to nearly zero (Idiatov & Van de Velde 2021: 81–82). Their historical interpretation of these facts sees originally Savannah-based populations push south along ecological pathways that matched their former habitat. The low frequencies of LV in the languages of these zones are understood as substrate effects due to borrowing and contact with languages that had them but that only survived in the retention zones of the hotbeds (Idiatov & Van de Velde 2021: 95–97)

In the Cameroon Gap, the latest of such proposed movements of Savannah populations is represented by the southward Fulani expansion. But it is by no means excluded that others came before them who at one point in time added LV to their phoneme inventory. It is also quite natural to think of some proto language that acquired these phonemes and then continued its genealogical development passing on these sounds to their daughter languages.

We think that chances are high that LV in the Kebi-Benue family are a genetic feature handed down to the current languages. They may have been acquired through contact from “Primary LV Populations” (Idiatov & Van de Velde 2021: 96) and later, in the case of the Tibati and Nganha varieties even reached the status of identity marking features. Such a chain of events is hard to prove but highly probable and fits a multivariate understanding of linguistic areas in general (Güldemann 2018: 496).

Clearly, the chances of finding suitable speech-group scenarios and concomitant sociolinguistic contexts decrease the deeper we delve into the past, and with it evidence supporting the view of multiple causation for any given feature. But our micro level case study, which examines a rather short period of time, may be in principle extrapolated to recurring situations in the deep history of language families and linguistic areas.

Diacritics (as found in the early sources)

ˉ	long vowel
˘	tensed vowel
˘	open vowel
ḵ	barely audible [k]
ṅ	velar nasal [ŋ]
ṽ	bilabial vibrant (or labio-dental) (Boyd 1974: 22)
ḁ	significance unclear (Boyd 1974)

References

- Barreteau, Daniel, Evelyn Ngantchui & Terry Scruggs (eds.). 1993. *Bibliographie des langues camerounaises*. Paris: ORSTOM.
- Beyer, Klaus. 2022. Motorcycle taxi drivers in Ngaoundéré, Cameroon. Communication in a diffuse multilingual setting. In Dick Smakman, Jiří Nekvapil & Kapitolina Fedorova (eds.), *Linguistic choices in the contemporary city. Postmodern individuals in urban communicative settings*. London: Routledge. 49–63.
- Boyd, Raymond. 1974. *Étude comparative dans le groupe Adamawa*. Paris: SELAF.
- Boyd, Raymond. 1989. Adamawa-Ubangi. In John Bendor-Samuel (ed.), *The Niger-Congo languages*. Lanham: University Press of America. 178–215.
- Cahill, Michael. 2017. Labial-velars: A questionable diagnostic for a linguistic area. In Shigeki Kaji (ed.), *Proceedings of the 8th world congress of African linguistics*. 13–23.
- Childs, Tucker G. 2017. What's really areal? In Shigeki Kaji (ed.), *Proceedings of the 8th world congress of African linguistics*. 289–312.
- Clements, George N. & Annie Rialland. 2008. Africa as a phonological area. In Bernd Heine & Derek Nurse (eds.), *A linguistic geography of Africa*. Cambridge: Cambridge University Press. 36–85. <https://doi.org/10.1017/CBO9780511486272.004>
- Duisburg von, Adolf. 1925. Untersuchungen über die Mbum-Sprache in Adamaua (Kamerun). *Mitteilungen des Seminars für Orientalische Sprachen* 28(3). 132–174.
- Elders, Stefan. 2006. Issues in comparative Kébi-Bénoué (Adamawa). *Africana Linguistica* 12. 37–88. <https://doi.org/10.3406/aflin.2006.962>
- Fløttum, Sverre. 1974. *Dictionnaire Français – Mbum*. Oslo: Norwegian Protestant Mission.
- Greenberg, Joseph H. 1963. *The languages of Africa*. Bloomington: Indiana University Press.
- Greenberg, Joseph H. 1983. Some areal characteristics of African languages. In Ivan R. Dihoff (ed.), *Current approaches to African linguistics*, Vol. 1, 3–21. Dordrecht: Foris.
- Güldemann, Tom. 2008. The Macro-Sudan belt: towards identifying a linguistic area in northern sub-Saharan Africa. In Bernd Heine & Derek Nurse (eds.), *A linguistic geography of Africa*. Cambridge:

- Cambridge University Press. 151–185. <https://doi.org/10.1017/CBO9780511486272.006>
- Güldemann, Tom (ed.). 2018. *The languages and linguistics of Africa*. (The World of Linguistics 11). Berlin: Mouton de Gruyter. <https://doi.org/10.1515/9783110421668>
- Hagège, Claude. 1970. *La langue mbum de Nganha (Cameroun)*. Paris: SELAF.
- Heine, Bernd & Derek Nurse (eds.). 2008. *A Linguistic Geography of Africa*. (Cambridge Approaches to Language Contact). Cambridge: Cambridge University Press.
- Idiatov, Dmitry & Mark L. O. Van de Velde. 2021. The lexical distribution of labial-velar stops is a window into the linguistic prehistory of Northern Sub-Saharan Africa. *Language* 97(1). 72–107. <https://doi.org/10.1353/lan.2021.0002>
- Maddieson, Ian. 2013. Vowel quality inventories. In Matthew S. Dryer & Martin Haspelmath (eds.), *The world atlas of language structures online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. <http://wals.info/chapter/2>
- Mamoudou, Bia, Mohamadou, Aboubakar Moussa & Sonaibou S. Adamou. 2018. *Fúl béà ṅgbok mbúm: Dictionnaire et allocutions proverbiales: Mbúm – Français*. Ngaoundéré: Association des Mboums autochtones du Cameroun (AMA).
- Manessy, Gabriel. 1979. *Contribution à la classification généalogique des langues voltaïques*. Paris: SELAF.
- Markgraf, Holger W. 2017. Variation and linguistic change in Mbum. In Klaus Beyer & Raija Kramer (eds.), *Language contact and change under multilingual conditions. Case studies from Africa*. Köln: Rüdiger Köppe Verlag. 93–109.
- Mohammadou, Eldridge. 1978. *Les royaumes foulbe du plateau de l'Adamaoua au XIXe siècle: Tibati, Tignère, Banyo, Ngaoundéré*. Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa.
- Strümpell, Kurt. 1910. Vergleichendes Wörterverzeichnis der Heidensprachen Adamauas. *Zeitschrift für Ethnologie* 42(3). 444–488.
- Tessmann, Günther. 1930. Die Sprachen der Mbaka-Limba, Mbum und Lakka: Wörterlisten und Grammatik. *Mitteilungen des Seminars für Orientalische Sprachen* 33. Berlin: Mouton de Gruyter. 55–82.
- Westermann, Diedrich. 1911. *Die Sudansprachen: eine sprachvergleichende Studie*. Hamburg: Friederichsen.
- Westermann, Diedrich. 1927. *Die westlichen Sudansprachen und ihre Beziehungen zum Bantu*. Berlin: Mouton de Gruyter.