

Sally Anderson (5/3/92; partial update 7/19/2015)

The Jos Plateau (Nigeria) Sprachbund

Abstract:

The Jos Plateau region of northern Nigeria presents a striking contrast between a great diversity of genetic linguistic groups which are comparatively homogeneous in many typological features. Speakers of languages from at least twelve branches of Benue-Congo and three branches of West Chadic have interacted and intermingled with each other, on relatively equal terms, for hundreds of years. In the course of these interactions a great deal of sharing of aspects of language has occurred. This sharing has included not only lexical items, but also phonological, morphological and syntactic features. The purpose of this paper is to describe some of the major linguistic features common to the various groups of Benue-Congo and Chadic languages spoken on and near the Jos Plateau in Northern Nigeria. Whenever possible an attempt will be made to determine the original source of the specific feature. One of the most noticeable of these areal features is the fact that words (excepting class prefixes) tend to be monosyllabic, consonant-final, and do not end in voiced obstruents. This will be shown to be the result of final-vowel apocope in both families. It is proposed that the apocope has entered neighbouring Chadic languages (and some Jarawan Bantu languages) from Benue-Congo (minus Bantu), in which it is widespread. It is also shown that in certain Benue-Congo languages there has been a second apocope, this time of final consonants. This combined with certain types of metathesis occurring in Birom, Eggon and a few other languages leads one to suspect that there may be a "conspiracy" to produce the shortest possible words. Another major feature is the presence of morphologically derived verb forms denoting plurality of action, subject or object (Wolff and Gerhardt (1977)). Morphologically marked "plural" (or pluractional) verbs are a standard feature of Chadic languages (Newman (1990)), but do not appear to exist in Benue-Congo in general, thus it is assumed that the category of verbal plurality has been borrowed from Chadic into BC. However, the morphological markers for verbal plurality in BC are not the same as those in Chadic. Thus it appears that the category of verbal plurality was

borrowed, but the markers were not. One group of Chadic languages (Sura, Cip, Kofyar, etc.) appears to have then borrowed verbal plurality markers from the Benue-Congo languages. A number of other areal features will also be discussed, but in less detail.

It is hoped that this account of a non-Indo-European, non-Semitic "Sprachbund" may add to the understanding of the notion "Sprachbund" and the nature of universals of language contact. Of particular interest is the fact that in some cases a concept or category was borrowed rather than a specific morphological or syntactic construction (e.g. verbal plurality in BC), and that phonological rules or processes appear to have been borrowed.

0. Introduction

The Nigerian Middle Belt is one of the most linguistically diverse regions in the whole of Africa, with languages of the Chadic, Benue-Congo (including Bantu), Kwa, Adamawa-Ubangian, Mande, West Atlantic and in the past Saharan language families. Right in the center of this region is the Jos Plateau on and around which are spoken languages from four branches of West Chadic, three branches of Benue-Congo and in some areas one West Atlantic language (Fulani). Historically almost all of the peoples of the Plateau have been relatively equal to each in terms of political and religious power. The major political and religious entities (i.e. Hausa, Hausa-Fulani and Jukun-Kwararrafa) which have influenced parts of the Plateau have been located off of the Plateau and have had their greatest influence on peoples of the lowlands at the edges of the Plateau (Jukun-Kwararrafa influence on Ankwe, Gerka, Tarok and Plains Angas; Hausa-Fulani influence on Pyem, some South Bauchi peoples, Katab, Kaje, Kadara, Koro, Hyam and neighboring peoples) and almost no influence whatsoever on the peoples of the high plateau (e.g., Hill Angas, Sura, Ron, Birom, Zarek, Irigwe, Aten and the numerous Plateau 1b peoples in the northern hills). The fact that most peoples were relative equals to their neighbors has led to a great deal of bilingualism¹, intermarriage, immigration and mutual influence in all aspects of life, including language (cf. Gunn (1953), Gunn (1956), Isichei (1982), Gazetteers (1970 [1934])). The situation in much of the Plateau was in keeping with Hock's

¹ Including sometimes partial bilingualism. "The tribe [Aten, P3] understand the speech of the Attaka, Moroa and Kagoro [all P2.2] tribes to the west of them, but do not speak it, and vice versa." (Gazetteers (1970 [1934]) p. 77)

conditions necessary for convergence to occur:

"Put differently, a long-standing tradition of bilingualism is most likely to come about and to persist where the languages in contact are more or less equal in strength, especially if they are also more or less equal in prestige. ... It is in bilingual societies of this sort that a phenomenon can be observed which commonly is referred to as convergence, the increasing agreement of languages not only in terms of vocabulary (which may in fact remain quite distinct²; cf. 16.3.5 below), but especially in regard to features of their overall structure." (Hock (1986), pp.491-2)

In the Plateau (and especially among the peoples who are or formerly were living on the high plateau area) there has been a great deal of convergence between languages not only of different branches within one family, but even between Chadic languages and Benue-Congo languages. This type of convergence has led to the development of a Jos Plateau Sprachbund. A Sprachbund, or "linguistic area" is "an area which includes languages belonging to more than one family but showing traits in common which are found not to belong to the other members of (at least) one of the families." (Emeneau (1956)). Perhaps an even better definition of a Sprachbund is afforded by Hock's description of the process behind a Sprachbund:

"Convergence has even more far-reaching and interesting effects in areas where adstratal languages are in long-standing bilingual contact. Under these circumstances, languages which may be quite distantly related or which exhibit no discernable genetic relationship may come to converge to the extent that they form a group that is structurally quite distinct from the surrounding and/or genetically related languages. Such a group of languages is commonly referred to as a sprachbund [sic], i.e. 'language league'." (Hock (1986), p.494)

Two of the most visible and widespread examples of convergence in the Jos Plateau Sprachbund,

² This study has not focused on lexical borrowings, but the truth of Hock's point has been somewhat impressionistically noted. It has often seemed to the author as if there were often comparatively few lexical borrowings and many morphological or syntactic borrowings from language X into language Y, as well as the opposite case of many lexical borrowings and few/no morphological or syntactic borrowings from language X.

canonical word/root structure and verbal extensions marking plurality/habituality of action, will be discussed in detail in Parts I and II below, and several other non-lexical borrowings will be briefly described in Part III. In Part IV this Sprachbund will be discussed in comparison with previously described Sprachbünde.

Part I. Major Root Structure Types

I.0 Introduction

One of the most obvious features of the languages of the Jos Plateau has been the tendency for words (or roots without class prefixes) in both Benue-Congo and Chadic languages to be monosyllabic and consonant-final. In the following section it is demonstrated that in the case of both Benue-Congo and Chadic languages a diachronic rule of appocoptation accounts for this phenomenon. The various possible realizations of forms reconstructed as Proto-X³ *(-)CVCV and *(-)CVC will be discussed.

I.1 (-)CVCV < *(-)CVCV and (-)CVC < *(-)CVC

Languages with the most conservative word structures, preserving the distinction between Proto-X *CVCV and *CVC words, do not occur on the actual Jos Plateau. However, two groups of languages situated just east of the Plateau have both *CVCV and *CVC forms in the proto-language and in some of the modern languages. These groups are Jarawan Bantu, the eastern members of which preserve the *CVCV vs. *CVC distinction; and South Bauchi, most of the members of which preserve this distinction.

	sun	earth	egg
PSB	*pitì	*atli	*mbuutl
Zangwal	pidì	átlí	mbutl
Guruntum	fuudì	---	---
Polci	pidə̀	aatl	mbwòtl
Dwat	peedì	aatl	mbotl
Zaar (Kàl)	fìitə̀	yaatl	bu^utl

³ Where X = Benue-Congo or West-Chadic, both of which have both *CVCV and *CVC.

	ten	three	arm
PBtu	*-kúmĪ	*-tátù	*-bókò
PJB	*lum/luʔum	*tatu	*buku
Nagumi	lum	taaru	---
Numan grp.	lum	taro/taru	bu
Mama	lum	taro/taru	---
Lame	lum	tátù	---
Ligri	lum	taro	---
Bobar	---	taru	---

I.2 (-)CVCV <*(-)CVCV and <*(-)CVC, or (-)CV <*(-)CVC

The Plateau 1 branch of Benue-Congo appears to have undergone a change whereby word-final obstruents were eliminated, but it is unclear whether the word-final obstruents were deleted or vowels added. Part of the problem is in lack of data, and the other part is inconsistency and occasional glaring inaccuracy of Proto-BC reconstructions. At present the author is only able to point to one clear example of a Proto-BC *(-)CVC root in Plateau 1. One other small group of languages, The Geji cluster and Zul of South Bauchi, has eliminated word-final consonants, in this case clearly by adding an anaptyctic vowel. These languages are adjacent to an area in which Plateau 1b languages were formerly spoken, but have now been completely replaced by Hausa. The anaptyxis may have occurred under the influence of these Plateau 1b languages.

	cow	animal
PBC	*-nak	*-nama
PPl	*-na	*-nama
Piti	in-na	e-nam
Chawai	---	nam
Buji	---	bi-nama
Sheni	bi-na	i-nama
Gure	pi-na	i-nama
Kurama	be-nah	e-name
Reshe	hi-na	---

	sun	earth	egg
PSB	*pit-ì	*atli	*mbuutl
Bolu	---	àtli	mbuutli
Geji	---	atli	mbuutlì
Zaranda	---	àtlì	mbuutli
Zul	pètè	atli	mbùtlè
Tule	---	ɲatli	mbòðtle

I.3 (-)CVC < *(-)CVCV and < *(-)CVC

Almost all of the languages of the Plateau itself have undergone a diachronic rule of final-vowel apocoptation resulting in the collapsing together of Proto-X *CVCV and *CVC roots. The languages and groups which have undergone this apocoptation are: Proto-Eastern Plateau (i.e. Plateau 2-4, 6), Proto-Benue (i.e. Plateau 5, 7-10, Jukunoid), Proto-Sura-Gerka, Proto-Ron, some South Bauchi languages (Boghom group (Boghom, Kir, Balar, Mangas), Buli, Lushi/Dokshi, Zaar of Gambar Lere, Zaar of Lusa) and western Jarawan Bantu languages (Jaku, Kulung, #Bankal, Gingwak, Duguri dialects, Baɗa). These languages form an area of predominantly CVC words stretching from Kadara and Koro off the western end of the Plateau to Kir-Balar, Boghom and all Jarawan Bantu languages in between off the eastern end. The north-south expanse is even farther: from just south of the Plateau 1 languages at the northern extremus of the Plateau southward and southwestward all the way to the Nigeria-Cameroon border and beyond. This great north-south expanse is due to the fact that the vast majority of Benue-Congo languages have undergone this apocoptation⁴ While this apocope seems to be almost the rule in Benue-Congo it is quite uncommon in Chadic and Jarawan Bantu, only occurring in the region of contact with Benue-Congo. It is therefore proposed that the Chadic and Jarawan Bantu languages have undergone this apocoptation as a result of influence from Benue-Congo languages. In the case of Jarawan Bantu the situation may actually be more complicated. The Jarawan Bantu languages may have undergone apocoptation due to contact with speakers of the Boghom cluster (Kir-Balar, Mangas and Boghom). The present-day distribution of the Boghom cluster indicates that at some point in the past Boghom or related

⁴ In fact almost all of them have except for Plateau 1 and Bantu. Excluding Jarawan Bantu and Plateau 1 there are only seven Benue-Congo languages out of ca. 150 in Williamson and Shimizu (1968) which have not undergone this apocope.

being collapsed into CV. In Irigwe this change may have come about through contact with neighboring Plateau 1 languages which do not allow word-final consonants. The motivation for this change in Ninzam and Mada is unknown, but both of these seem to be systematically doing away with word-final consonants, as the next change, the metathesis below, demonstrates.

	bone	animal	cow
PBC	*-kupe	*-nama	*-nak
PP2 Kg	*kup	*niam	*niak
Irigwe	kú	nyÉ	nyá
PP4	*-kŪp	*-naŋ	*-ŋghak
Ninzam	ù-kfə'kfə'	i-na zvù	---
Mada W	kúkú	ná ru~`	ŋgyà
Mada N	kúkú	ná hwa~'	---

I.5 (-)CCV < *(-)CVC < *(-)CVCV

Probably the most unusual change in word structure in the Plateau area is that which has occurred in one Plateau 5 language, Eggon, and partially in two Plateau 4 languages, Ninzam and Mada. In these languages Proto-X *CVCV forms have first undergone the general Proto-Eastern Plateau and Proto-Benue final-vowel apocoptation, and then have undergone a metathesis whereby *C₁VC₂ becomes C₁C₂V. In Eggon this metathesis has occurred in all cases except when C₂ is /m/ or /ŋ/, but in Ninzam and Mada it has only occurred when C₂ is /r/ or /l/. It does not seem to be possible to determine which language or group of languages originated this metathesis.

	bone	three	cow
PBC	*-kupe	*-tatu	*-nak
PP5	*-kup	*-tat	*-ndak
Eggon	a-k'pu	tra	È-ndgha
	fire	monkey	nose
PP4	*-ghwor	*-kar	*-ŋver
Ninzam	ù-ghrú	---	ì-ŋvrí
Mada W	gló	klà	ŋvrí
Mada N	glú	klà	ŋvré

I.6 Summary

The tendency in most of the languages of Jos Plateau is towards shorter and shorter words. The first cut was made by the final-vowel apocope in I.3, which changed disyllabic, two mora words into monosyllabic, two mora words. The next change has only occurred so far in a very limited subset of these languages, and has been variable. Either the final consonant of a CVC word was deleted or it was metathesized with the preceding vowel, in either case resulting in monosyllabic, two mora words becoming monosyllabic, single mora words. This tendency toward shortening words was apparently a Benue-Congo phenomenon which has entered the neighboring Chadic and Jarawan Bantu languages.

Part II. Verbal Extensions for Plurality/Habituality

II.0. Introduction

Many of the Benue-Congo languages and probably all of the Chadic languages spoken have verbal extensions marking either habitual vs. non-habitual action and/or plurality vs. non-plurality of action (sometimes of subjects or objects). In many cases both the habitual and plural meanings cooccur⁶. According to Newman (1990) markers for the latter type, which he has termed "pluractionals", may be reconstructed in Proto-Chadic; and the vast majority of present-day Chadic languages, which stretch from Central Chad to Western Niger have morphologically marked pluractionals. On the other hand, marking of verbal plurality/habituality is not characteristic of Benue-Congo languages (Wolff and Gerhardt (1977)) outside of the Benue-Congo - Chadic contact area⁷. For this reason Wolff and Gerhardt (1977) consider the existence of pluractionals in the BC languages of the Plateau to be

⁶ It may be that this multiple function is even more widespread than is currently known. In the case of Zarek the -s(-) forms were originally described as "habitual" (Lukas and Willms (1961)), but Gerhardt (1984) found that many of the forms carry a plural meaning.

⁷ Dr. Paul Newman has informed me of a paper by Brian Brooks discussing pluractionals in African languages. I have thus far been unable to contact Brooks to read the paper, but according to Newman he has found pluractionals in several Benue-Congo languages outside of the region of contact with Chadic languages. According to Newman one of these languages is Efik, which is spoken in South-Eastern Nigeria.

an interference from Chadic. Interestingly, most of the pluractional markers in the BC languages bear no resemblance to the Proto-Chadic and Proto-West Chadic markers, but are similar to verbal extensions with different meanings which occur in Proto-Bantu (Gerhardt (1983a)). One group of Chadic languages, Sura-Gerka, has a number of pluractionals which seem to be formed with the BC extensions; these are especially common in the Sura-Kofyar subgroup, which borders on BC languages having these extensions. In the following pages the BC and Proto-Chadic extensions will be described and discussed; the BC-like extensions in Sura-Gerka will be described and compared with BC extensions; and an attempt will be made to determine from which BC languages the Sura-Gerka extensions have been borrowed.

II.1 Plateau Benue-Congo Verbal Extensions

II.1.0 Introduction

Within the Plateau BC languages there are four main verbal extensions for plurality/habituality: -s(-), -k, -ŋ and -l/r-. Of these the first two (-s(-) and -k) are widespread, occurring in Plateau 1⁸, 2, 3, 4 and possibly other languages; the third (-ŋ) occurs only in the Kagoro subgroup of Plateau 2.2⁹; and the fourth (-l/r-) occurs only in the Katab cluster and Kaje of the Kagoro subgroup¹⁰. Extended verbs are most common in Zarek, in which most verbs appear to have both a singular/non-habitual and a plural/habitual form, then Birom, with the Katab cluster following a close third. Thus, of Plateau 2 and 3 those languages which are (or have been in the case of the Katab cluster) the immediate neighbors of Chadic languages make the greatest use of these extensions.

According to Gerhardt (1983) all four of these extensions may be connected with Proto-Bantu

⁸ The author has been unable to find examples of verbal extensions in Plateau 1a languages, but according to Gerhardt (1983) they do exist in both groups of Plateau 1 ("den beiden Plateau 1-Sprachen" must be taken in context to refer to both Plateau 1 language groups, not two individual languages.), generally marking habitual or continuous action. "In den beiden Plateau 1-Sprachen ist diese zweite Funktion [i.e. habitual/continual] offensichtlich die einzige." (p.206)

⁹ There is a slight chance that -ŋ may also occur in Plateau 2.3 as suggested by the Kadara form *kpuŋ*, to die (< Proto-Plateau 2 **kɔwu*), but this form may be a borrowing or a different morpheme which is coincidentally similar to **kɔwu*.

¹⁰ According to Gerhardt (1983) there is one word in Koro that appears to contain this extension, *kpo/kpori*, to die.

extensions with meanings not related to plurality/habituality (###).

###. Relationship of Plateau and Proto-Bantu verbal extensions (after Gerhardt (1983))

Plateau	Proto-Bantu	(Gerhardt (1983))
(pl.) -s(-)	-i-	(causative)
(sg.) -k	-ik-	(causative/stative)
(pl.) -l/r-	-el-	(applicative)
(pl.?) -ŋ	-an-	(reciprocal)

The author is not sufficiently qualified in Benue-Congo historical linguistics to properly critique this model, however, a few comments seem reasonable. One would hope that these Proto-Bantu extensions may be shown also to occur in Benue-Congo as a whole, not just in Bantu. Assuming that they are reconstructable for Proto-Benue-Congo with essentially the same meanings as in Proto-Bantu, Linda Schwarz has suggested that the semantic changes to indicate verbal plurality do not seem far-fetched: causative, applicative and possibly reciprocal are valency-increasing and therefore indicate plurality of arguments inherently¹¹ so it might be possible for them to come to refer to plurality of subjects or objects and then by extension plurality of action¹². This hypothesis would also help to explain the fact that the BC extension -k indicates singular/non-habitual action in some languages and plural/habitual in others, as the Proto-Bantu form may be causative (valency-increasing) or stative (valency-decreasing).

II.1.1 Individual BC Verbal Extensions

¹¹ Note, however, that causative, applicative and reciprocal indicate that there are more types of arguments (subject, direct object, indirect object), not that there are more individuals within the argument.

¹² This extension from subject/object plurality to pluractional could be influenced by Chadic pluractionals, which frequently indicate subject/object plurality as well.

a. -s(-)¹³

The suffix or infix -s(-) is a widespread and common marker of habitual or plural action in the Plateau languages. It occurs in the Plateau 1 languages, in which it marks habitual or continuous action, in the form -s*V*.

Plateau 1b

-s*V* habitual/continuous

Ibunu (gwàrà/gwàrsó, to cut, divide)

Janji (ruma/rumza, to bite (< *rum))

Kurumi (lOmze, to bite (< *rum) (vn: kO-lOma))

It occurs in Plateau 2, 3 and 4 generally as a pluractional marker, but in the Katab cluster, Kaje and Zarek of Plateau 2.2 it also marks habitual, continuous or distributive action. In these languages one encounters several forms of this marker: -(*V*)s in Plateau 2, 3 and 4 (Nindem); -s- in Plateau 2.2 and 3; and -s*V* in Plateau 2.1, 2.2 (Kagoma) and 4. Most of the Plateau 2.2 and 3 languages make use of both the infix and the suffix form, but no semantic distinction between the two has been observed.

Plateau 2.1

-sa, -y < *-s

Koro (gba/gbésà, to fall, tEr/tEy, to shoot, pierce)

Plateau 2.2

-s

Kagoma (mE/mEs, to shoot; kOk/kOksa, to knock down)

Zarek (bE/bEs, to come)

Kagoro (ɲwo/ɲway, to enter)

Katab (kwa/kway, to fall)

Atakar (ku/kwi, to die)

Kaje (ba/bay, to come)

¹³ In the Katab cluster and Kaje final -s weakens to become -y and intervocalic -s- weakens to become -y- or -ʔ-.

-s-

Zarek (kábák/kasàp, to divide (vn: ku-káp))

Kagoro (sem/seÈp, to tear)

Katab (nyat/neat, to bury)

Plateau 3

-s

Biom (vó/vós, to catch; lOk/lOgOs, to build)

-s-

Biom (dal/dasal, to surpass)

Aten (hwOsOp, to divide (< *kap))¹⁴

Plateau 4

none in Kaningkom, Ninzam, Mada (Gerhardt 1983) (at least one possible one in Kaningkom, see below)

-s(V)

Kwanka (kap-si, to divide (< *kap))

Rukuba (bà/bə̀sà, to snap; ñará/ñárása, to tear)

Kaningkom (gab-saw, to divide (< *g/kap))

Nindem (tÈn/tÈs, to cut one tree/~ many trees; mun/mus, to break/~ many things)

b. -k¹⁵

This suffix marks non-habitual or non-plural action in all of the languages except Katab¹⁶, in

¹⁴ The word "to divide" seems to have an inherently pluractional meaning in some languages (cf. P4 Kwanka, Kaningkom), but not in others (cf. P1b Ibunu, P2.2 Zarek).

¹⁵ In Plateau 2.2 and 3 -k assimilates to a root-final nasal to become -ŋ, then in Plateau 2.2 intervocalic coronal stops (/n,t/) weaken to [r/l]. In Biom only non-nasal coronal stops weaken.

¹⁶ and possibly other members of the Katab cluster. Gerhardt's (1983) data for Kagoro and Atakar are somewhat inconsistent and confusing as to whether the forms extended with -k are singular/non-habitual or plural/habitual, and later works have copied his data.

which it marks the reverse meaning: habitual and plural action. It occurs in Plateau 1b in the form $-kV$ denoting non-habitual or non-continuous action.

Plateau 1b: $-kV$, non-habitual?

Surubu (kaska, to bite (< *kaz))

It occurs regularly in Plateau 2.2, 3 and possibly 4 and 5. In Plateau 4 (Rukuba) and 5 (Yashi) most of the noted instances could be due to borrowing from Plateau 2.2 languages, however, the available data on Rukuba and Yashi verbs are very limited so that the actual status of verbal extensions is unclear. In Zarek most verbs with plural forms in $-s(-)$ have corresponding singular forms in $-k$, but in the rest of Plateau 2.2 and 3 the marked plural forms outnumber the marked singulars. In a very few cases (e.g. Kagoro $\eta wak/\eta wat$, to give) the singular is marked while the plural is unmarked. This could be an interesting case typologically, assuming that singular marking implies plural marking for verbs as well as nouns¹⁷.

Plateau 2.2: non-plural (except in Katab, in which it is plural)

Zarek (kábak/kasàp, to divide (< *kap) (vn: ku-káp); báran/báràs, to add (< *ban-k/*ban-s))

Kaje (wrak/wwat, to give (< *wa-t-ak/*wa-s-at); wrán/wán, to cook (< *wán-ak/wán))

Kagoro ($\eta wak/\eta wat$, to give (< * ηwat -k/* ηwat); wurán/wan, to cook (< *wan-ak/wan))

Katab ($\eta wat/\eta wak$, to give (< * ηwat /* ηwat -k))

Plateau 3: non-plural

Biom (horok/horos, to dry (< *hot))

Plateau 4: non-plural?

Rukuba (kuruk, to become dry (< *kur); terrek, to spread in sun to dry (< *ter) (cf. Nindem tÉ~r) (or < Zarek tárák))

Plateau 5: non-plural?

¹⁷ This could be an interesting case typologically, assuming that singular marking implies plural marking for verbs as well as nouns.

Yashi (demek, to press (< *dem); wirik, to come out (cf. Kaje uruq, to go out; Kagoro wurug))

c. -ŋ

The suffix *-ŋ* marking plural verbs is found only in Plateau 2.2 (Kagoro subgroup), with a possible exception in Kadara (P2.3). This is by far the most limited in usage of the four major extensions. It is only found on a few mostly CV verbs most of which may be reconstructed as having had the *-ŋ* plural in Proto-Kagoro subgroup.

Plateau 2.2

Zarek (ta/taŋ, to shoot¹⁸)

Kaje (tá/taŋ, to shoot; ma/maŋ, to shoot; hwôk/pfón, to hear; kwan/kwaŋ, to fight)

Katab (ta/taŋ, to shoot; ma/maŋ, to shoot; fók/fuón, to hear)

Kagoro (ta/taŋ, to shoot; ma/maŋ, to shoot; fók/CóN, to hear)

Atakar (ti/taŋ, to shoot; mi/maŋ, to shoot)

Plateau 2.3

Kadara (kpuŋ, to die (< *ku))

d. -l-/-r-¹⁹

If the *-ŋ* suffix was the most limited in usage, the *-l-/-r-* infix is the most limited in terms of the number and genetic breadth of languages utilizing it. This form, denoting plural/habitual action is limited to the Katab cluster and Kaje of Plateau 2.2, with the possible exceptions of one word in Koro (P2.1) and at least one in Rukuba (P4).

Plateau 2.1

Koro (kpo/kpori, to die--only example and possibly a different construction according to Gerhardt (1983))

¹⁸ This is the only example of this suffix known by Gerhardt to occur in Zarek.

¹⁹ The choice between *-l-* and *-r-* is apparently phonological (generally based on vowel-quality), but the individual phonological rules for the languages have not been worked out.

Plateau 2.2

Kaje (kkyék/kyrék, to come down; séyák/srwap, to pass)

(Katab cluster)

Atakar (fúp/furùp, to jump)

Kagoro (ship/shirip, to rise; kwOk/kwOrOk, to pack)

Katab (fəp/fələp, to jump, fly; nyip/nyirip, to open)

Plateau 3 Apparent -r- extensions in Birom are result of dissimilation. (Gerhardt (1983))

Birom (gas/garas, to divide (< *gas/*gas-as); dusa/durus, to insult (< *dusa/*dus-us))

Plateau 4

Rukuba (torok, to draw water (< *tok))--possibly by analogy to the many CVr-Vk forms

Many of these forms with -l/r- have apparently irregular variation in the final consonant, some of which may be explained by the presence of an additional extension which has altered the final consonant in either the singular or the plural form, but in some cases the final consonant of the plural is [p] even though the root-final consonant is [k]. Gerhardt (1983) suggested the possibility that this -p might be another suffix, or that it might represent the original root-final consonant which has been replaced in Proto-Plateau 2.2 by the extension -k. The result is that synchronically there are forms which seem to utilize a suffix of the shape -rVp.

Irregularities in Kagoro and Katab forms w/ -l/-r- (Gerhardt (1983))

	Kagoro	Katab	Kaje	
to ask	lip/lirəm	lip/lirəm		*dim+-k ?
to call	yi/yuroŋ	yey/yuroŋ		*gi+-r-ŋ ?
to make warm	hyay/hyErak			*pyas+-r-k?
to come down	ccok/corop	cyok/corop		< *tiik
to come down			kkyék/kyrék	< ??
to surpass	şşak/səra	şak/şəap		< *suak
to pass			séyák/srwap	< *suak
to break off			gbyók/gbyrə'p	< ??

II.2 Chadic Verbal Extensions:

II.2.0 Introduction

Newman (1990) has reconstructed the methods of marking verbal plurality in Proto-Chadic and has related most of the verbal plurality markers in present day Chadic languages to these reconstructed forms. The reconstructed Proto-Chadic forms are as follows:

Partial or Full Reduplication

Gemination

Vocalic ablaut/apophony

Suffixation of: -d-, -ay/-aw, -tV

The South Bauchi and Ron groups of Chadic both form pluractionals with reflexes of one or more of the above Proto-Chadic markers²⁰. The Sura-Gerka languages also regularly form pluractionals via one of the Proto-Chadic methods, vocalic ablaut/apophony; but there are many pluractionals, especially in the Sura-Kofyar subgroup, which seem to be marked by the Plateau BC affixes -r/l-, -k and -ŋ.

II.2.1 Sura-Gerka Verbal Extensions

1. Chadic-Style Extensions

The Sura-Gerka languages, like most other Chadic languages, make use of pluractional morphemes inherited from Proto-Chadic. The majority of pluractionals in Sura-Gerka are formed by means of Newman's "vocalic ablaut/apophony" and at least one each in Sura and Kofyar may be formed by Newman's *-tV.

²⁰ The Ron languages have in addition plural and habitual markers which are not cognate with Newman's reconstructed forms, but which are similar to other Chadic suffixes. These suffixes are: Fyer: -an, pluractional; Sha: -an, pluractional; Kulere: -ay, habitual. They will not be discussed further as they do not appear to be the result of language contact.

a. Vocalic ablaut/apophony:

Angas (pus/pwas, to shoot; cen/can, to cut)

Sura (pùs/pwas, to shoot; fii/fyaa, to blow (instrument,fire))

Kofyar (cut/cwàt, to hit; ?ogot/?ágát, to close)

b. -t < *-tV ??

Kofyar (tónj/twagat, to sit (twagat < *twa-at; or < *twaat < Pre-Zarek *twat, to wait (Gerhardt (1983) ?)

Sura (sháj/shwat, to take out)

2. Benue-Congo-Style Extensions

A number of pluractionals in Sura-Gerka languages, especially in the Sura-Kofyar subgroup (i.e. Sura, Cip, Kofyar, Jorto and Cakfem-Mushere), are formed by means of affixes which are similar or identical to three of the four Plateau BC extensions discussed above: b²¹: -k, c: -ŋ and d: -l/r-. The extension -s(-) (a.) does not seem to occur in Sura-Gerka.

b. -k²²

This extension occurs with vowel-final verb roots²³ in Sura-Kofyar subgroup as a whole, and possibly with some /n/-final roots in Sura²⁴. In Benue-Congo languages this extension denotes

²¹ The letters relate to the discussion of Benue-Congo extensions above.

²² The Sura-Kofyar languages have the same phonological rules mentioned above for Plateau 2.2, that is -k (and -p ?) assimilate to a root-final nasal to become -ŋ (-m), then intervocalic coronal stops (/n,t/) and perhaps all nasals weaken to [r].

Sura: to lie down, gàn/gəraŋ < *g@n-k

Kofyar: to break, pin/piram < *pin-p or < *pin-rVp ?

²³ This is the single observable difference between -k in Sura-Gerka and in Plateau BC. In Plateau BC -k appears to occur only rarely with vowel-final roots (only example so far is Kaje: mak/maŋ, to shoot < *ma); this may be due to paucity of data, however.

²⁴ The examples of an extension [Vŋ] on /n/-final verb roots could result from either of two extensions: b: -k or c: -ŋ.

non-plurality/non-habituality, except in the case of Katab and possibly other members of the Katab cluster. However, in Sura-Gerka it always marks the pluractional form, never the singular form. In this respect the *-k* extension in Sura-Gerka patterns with Katab 80+ miles to the west, and against Zarek and Birom, the languages with the *-k* extension which are currently the Suras' neighbors. This patterning of Sura-Gerka extensions with those of Katab as opposed to Zarek and Birom will also be demonstrated for the other two extension.

	Kofyar	Sura	Cip
b to cross	tá/tək		
b to come back	wa/wak		
b to catch	yáa/yák	yàa/yak	yàá/yák
b/c to lie down			gàn/gəraŋ
b/c to crush		tèn/tərəŋ	

c. -ŋ

This extension appears to occur only with verb roots ending in /l/ and possibly /n/ in Sura-Gerka, but the corresponding Plateau BC extension occurs predominantly with vowel-final roots. This limited phonological environment leads one to suspect that this might be a conditioned variant of another extension, but the most likely candidate, *-k*, is ruled out by the fact that sequences of CVIVk are permitted in Sura (cf. to hoe, cultivate, sak/səlak). Assuming that the underlying form of this extension is in fact *-ŋ*, it would again possibly reveal a connection between Sura-Gerka and Plateau 2.2 languages spoken 80+ miles away. This extension is exceedingly rare in Zarek²⁵, but somewhat more common in the Katab cluster and Kaje. It would seem to be more likely for borrowing to occur if there were more forms in the source language from which speakers of the borrowing language could analogize.

	Kofyar	Sura	Cip
c? to bore through		sùl/sulwaŋ	
c? to pierce			səl/shulaŋ
c? to pick fruit	tàl/təl@ŋ		
b/c to lie down		gàn/gəraŋ	
b/c to crush		tèn/tərəŋ	

²⁵ perhaps only one form (Gerhardt (1983)).

d. 1. -l/r-, 2. -p²⁶

These two affixes have been grouped together because they are both connected with the -l/r- extension of the Katab cluster and Kaje. In fact, the two different forms appear to be in complementary distribution: -p is suffixed when the root-final consonant is [l], [r] or one that weakens to [r] intervocally (i.e. coronal stops and all nasals); and -l/r- is infixes in other cases. This distribution has the effect of creating a great many pluractionals which appear to be marked by replacing the root-final consonant with a suffix -rVp. This apparent -rVp extension also occurs in the Katab cluster and Kaje as noted above (II.1.1, d.). The Sura-Gerka languages seem not only to have adopted the -l/r- extension from the Katab cluster or Kaje, but also to have reanalyzed those Katab and Kaje forms with a final [k] in the singular and final [rVp] in the plural and then borrowed the supposed extension -p.

	Kofyar	Sura	Cip
d1 to break	tep/terep	tep/tərep	
d1 to hoe, cultivate		sak/səlak	
d2 to starve	pèt/pèrèp		
d2 to buy/sell	seét/serep	séet/sərep	
d2 to call		pèt/pərep	
d2 to die		mùut/murap	
d2 to beat down		bèt/bərep	
d2 to jump		mét/mərep	
d2 to lie down	ter/turàp		
d2 to be healthy			bà'r/bərep
d2 to fall			pal/pələp
d2 to break	pin/piram		
d2 to beat		nùŋ/niram	
d2 to stand	dár/dyaram		
	Angas	Montol	
d2 to die	muut/mwarp	mùut/miyEEp	
d2 to buy		sÉEt/sErEp	

²⁶ It appears that the phonological rule assimilating -k to a root-final nasal also applies to -p.

Sura: to beat, nùŋ/niram < *niŋ-p

Kofyar: to break, pin/piram < *pin-p

e. Other pluractional affixes

Out of all of the sources on Sura-Gerka languages available to the author only one non-suppletive pluractional was found which was marked in some way other than the two Chadic markings (ablaut, -tV) and the three Plateau BC markings (-k, -ŋ, -l/r-/-p).

Sura: to beat, fwèt/fwo

This is pointed out in order to show that the Plateau BC-like extensions are not chance resemblances from among a much larger set of affixes in Sura-Gerka. All but one of the documented Sura-Gerka non-suppletive pluractionals which are not marked with Proto-Chadic affixes are marked with affixes that are formally identical to those in the Katab cluster of Plateau 2.2.

f. Summary of Sura-Gerka verbal extensions

In the case of all three of the extensions discussed above the closest connection is with the languages of the Katab cluster more than 80 miles to the west. While it is certainly possible for vocabulary items to be borrowed from even further distances, it is highly unlikely that morphological features such as these verbal extensions could have been borrowed from such distant languages unless the source language had some great prestige (whether political, religious or otherwise) attached to it. Among the languages of the Jos Plateau most of the fairly major peoples were relative equals. None of the Plateau peoples controlled empires or major religions as the Hausa (and later Hausa-Fulani) to the north, east and west and the Jukun to the south did. There seems to be no reason for there to exist a sufficient amount of bilingualism for the borrowing of such morphological features to take place. However, with the exception of the Katab²⁷, the peoples of the Katab cluster claim to have come from the area of the high plateau which the Birom and Zarek now occupy (Gunn (1956), McKinney (1983)). Thus the languages of the Katab cluster were once spoken in an area adjacent to that in which the

²⁷ The Katab claim to have come from Kargo, a village between Zaria and Kano (McKinney (1983)), but this tradition may refer to a ruling dynasty or these people may have adopted the language of the Kagoro-Atakar-Kachichere.

Sura-Kofyar languages are now spoken, however, the chronology of when who was where is sufficiently confused (see Isichei (1982)) that we may never know (other than by inferences from linguistic and cultural similarities) whether the Katab cluster languages were actually adjacent to the Sura-Gerka languages at one point in time. The traditions of origin at least give us "probable cause" if not a "smoking gun" to propose that there was at some time in the past intercourse, some bilingualism and perhaps intermarriage between speakers of Katab cluster or pre-Katab cluster languages and pre-Sura-Kofyar or pre-Sura-Gerka languages, leading to the borrowing of these verbal extensions by Sura-Gerka speakers.

II.3 Summary

In this section the verbal extensions marking plurality/habituality of action in languages of the Jos Plateau were described and discussed with particular emphasis on demonstrating the fact that not only do the Sura-Gerka extensions "look like" the Plateau BC extensions in general as shown by Wolff and Gerhardt (1977), but each of the individual non-Chadic extensions in Sura-Gerka may be shown to be identical to a specific extension in the Katab cluster of Plateau 2.2. Thus it appears that the concept of plural/habitual verbs may have come into Plateau BC from some unknown Chadic languages, then Plateau BC developed its own system of marking plural/habitual verbs (probably just *-s* and *-k* at this stage), then Plateau 2.2 Kagoro subgroup developed another marker *-ŋ*, then the group comprising the Katab cluster and Kaje developed the marker *-l/r-* (and *-p*?) and at this point the last three markers made the full round and were borrowed back into Chadic languages.

Part III. Other Examples of Convergence

III.0. Introduction

In addition to the two major examples of convergence discussed above there are numerous other cases of convergence over smaller subsets of the Sprachbund area. Due to the already excessive size of this paper the descriptions will be kept quite brief.

III.1 Assimilation of word-final stops to nasal

In both Sura-Gerka and Plateau 2 word-final stops become nasals when preceded by a nasal, as noted in footnotes to Part II.

III.2 Intervocalic weakening of coronal stops

As noted in footnotes in Part II intervocalic weakening of coronal stops /t,n/ to [r] occurs in both Plateau 2, 3 and 4 and in Sura-Gerka.

III.3 Occurrence of bilabial affricates

The bilabial affricates occur in the Katab cluster (but not Katab) and Kaje of Plateau 2.2²⁸ and in Mernyang of Sura-Kofyar. In both groups they are derived from labialized bilabials.

	arm	dog
PP2.2	*bwak	*bwu
Katab	bwák	əbwú
Kagoro	bvák	ùbvú
Atakar	bɣ ák	ùbvú
Kajeb	vak	kə'bvú

	mouth	sun
PS-G	*pwo	*p'uus
Mernyang	pfo	pfuus

II.4 Occurrence of labio-velars

Labio-velars occur independently in several of the Plateau language branches, and in each case they are derived from labialized velars. Interestingly, it appears that the voiceless labio-velar is

²⁸ In the Plateau 2.2 languages only the voiced form occurs, except in Kaje in which [pf] arises from /f-s/ in the form hwók/pfón, to hear.

marked relative to the voiced.

	rooster	skin
PP2.2 (Kg)	*guak	*kua
Kagoro	ə̀gbàk	kwá
Katab	ə̀gbàk	kwá
Atakar	ə̀gbàk	kwí
Kaje	àṅgbwàk	kpá
Zarek	---	kùkpá
Irigwe	gbáí	kpÉ
PP4	*gwàk	*kpa
Nindem	àgwàk	ùkwá
Kaningkom	gwàk	hwa
Ninzam	àgbà	ùṅgákpà
Mada	gbà	kpa
Rukuba	---	kukpa
	to fall	to refuse
PP2.2 (Jb)	*gwa	*kweŋ
Jaba	gbò	kpyúŋ
Kagoma	gbá	kpÉ
Koro	gbá	kpè
Lungu	gbà	kpÉÓ~

Part IV. Summary: Comparison with Other Sprachbünde

The proposed Jos Plateau Sprachbund has many features in common with other linguistic areas which have been previously described as Sprachbünde. In terms of the basic characteristics the Jos Plateau is perhaps more in keeping with Hock's (1986) description of a Sprachbund than are many of the others. He refers to the languages being "adstratal", that is basically equal to each other in political/religious status or prestige. This is certainly the case with the languages of the Plateau, but in some of the most celebrated Sprachbünde one of the languages has had a great deal prestige. In the Balkan Sprachbund, of which modern Greek is a member, ancient Greek and later Koine Greek must have carried a great deal of prestige at two separate points in history: ancient Greek would have been politically prestigious under both Greek and later Roman colonialism of the Balkans region, and Koine Greek would have been religiously prestigious from

the time of the introduction of Eastern Orthodox Christianity until the present, additionally Arabic would be religiously prestigious among the predominantly Muslim Albanians. In the South Asian Sprachbund Sanskrit has carried great prestige, especially religious prestige, for several thousand years. So long as the Sprachbund features are not traceable to such an overwhelmingly prestigious language, the concept of convergence is valid, but when a feature of the Sprachbund is traceable to the prestige language the possibility of mono-directional influence must be considered. Some of the other Sprachbünde may be more like Jos Plateau in not having a single prestigious language, e.g. the Caucasus, and possibly Meso-America.

In terms of what types of features have been borrowed the Jos Plateau Sprachbund is for the most part very similar to others. Numerous lexical items, morphological categories as well as markers, syntactic features such as noun numeral order and isolating tense/mood/aspect morphology, phonological structures of morphemes and specific phonemes have all been borrowed from one group to another. What are most interesting to the author, however, are the phonological rules or processes which seem to have been borrowed or in some way spread from one language or language group to another. I can not doubt that phonological rules or tendencies have similarly spread in many, if not all, of the other Sprachbünde; but the discussions of phonological convergences in Sprachbünde focus on the similar phonemic inventories and syllable structures, without discussing the phonological processes which have occurred to produce the similarities. It is hoped that this paper may spur someone on to research the borrowing of phonological rules and processes and to begin to establish language contact universals pertaining to them.

Sources for Plateau languages (Alphabetical by common English name)²⁹:

[XXX] = Abbreviated XXX on enclosed map

BT = Bole-Tangale [West Chadic/Bole-Angas/Bole]

HG = Hausa group [West Chadic/Hausa]

JB = Jarawan Bantu

Ju = Jukunoid

N-Btu = Non-Bantu Bantoid

P1b = Plateau 1b [-> Kainji/Eastern]

P2 = Plateau 2 [-> Plateau/Central/South-Central]

P3 = Plateau 3 [-> Plateau/Beromic]

P4 = Plateau 4 [-> Plateau/Ayu and Plateau/Western/Southwestern/A and

Plateau/Tarokoid pars]

P5 = Plateau 5 [-> Plateau/Western/Southwestern/B]

P6 = Plateau 6 [-> Plateau/East (aka "Southeast")]

P7 = Plateau 7 [-> Plateau/Tarokoid]

P8 = Plateau 8 [-> P6, Plateau/Southeastern]

P9 = Plateau 9 [-> Eloyi (incertae sedis: Plateau or Idomoid)]

Ron = [West Chadic/Ron]

SB = South Bauchi [West Chadic/Barawa (aka South Bauchi)]

SG = Sura-Gerka [West Chadic/Bole-Angas/Angas and WC/BA/Yiwom]

Ake (P5): Williamson and Shimizu (1968) [aik ; Plateau/South/Eggonic/Ake]

Amo (P1b): Williamson and Shimizu (1968) [amo; Kainji/East Kainji/Amo]

Angas (SG): Hoffmann (1975), Kraft (1981) [Ngas; anc; West Chadic/Bole-Angas/Angas]

²⁹2015 revision: updated classifications (following Ethnologue) and language names and ISO-639-n codes added in brackets, as most languages have moved away from foreign (esp. Hausa-based) names to versions of the endonym in the ensuing years. Some formerly empty forms have been filled in from Roger Blench's more recent work (<http://www.rogerblench.info>), which has vastly increased the amount of data available for central Nigerian languages of all sorts.

Atakar (P2.2) [Katab c]: Gerhardt (1971), Gerhardt (1983a), Williamson and Shimizu (1968) [Atakat dial. of Tyap; kcg; Plateau/Central?/Tyapic]

Aten (P3): Williamson and Shimizu (1968) [Eten; etx; Plateau/Beromic]

Ayu (P4): Williamson and Shimizu (1968) [ayu; Plateau/?Ninzic? (incertae sedis)]

Bada (JB): Williamson and Shimizu (1968) [Mbat dial. of Jarawa; bau; Bantu (A)/Mbam/Jarawan/Nigerian Jarawan]

Balar (SB) in [K-B]: Shimizu (1978) [Balar dialect of Kir-Balar; kkr; West Chadic/Barawa/Boghom]

Bambara (JB): Maddieson and Williamson (1975) [Mbaru dial. of Lame; bma; Bantu (A)/Mbam/Jarawan/Nigerian Jarawan/Lame-Gwa]

#Bankal (JB) [Bnk]: Gerhardt (1982), Gerhardt (1988), Williamson and Shimizu (1968) [Zhar dial. of Jarawa; jjr; Bantu (A)/Mbam/Jarawan/Nigerian Jarawan]

Baram (SB) in [Polci]: Kraft (1981), Shimizu (1978) [Baram dial. of Polci; plj; West Chadic/Barawa/Zaar/Polci]

Baraza (SB) in [Dass]: Shimizu (1978) [Durr-Baraza dial. of Dass; dot; West Chadic/Barawa/Zaar]

Bashar (P7) [Bshr]: Williamson and Shimizu (1968) [Yankam; bsx; Plateau/Tarokoid]

Biom (P3): Gerhardt (1983a), Gerhardt (1971), Williamson and Shimizu (1968), Wolff, H. (1963) [Berom; bom; Plateau/Beromic]

Bobar (JB): Williamson and Shimizu (1968) [Bobar ?dial. of Jarawa; jar; Bantu (A)/Mbam/Jarawan/Nigerian Jarawan]

Boghom (SB): Johnston (1919), Jungraithmayr (1964), Shimizu (1978) [bux; West Chadic/Barawa/Boghom]

Boi (P4) in [K-B-B-L]: Williamson and Shimizu (1968) [Ya dial. of Kwanka; bij; Plateau/Tarokoid/Vaghat-Ya-Bijim-Legeri]

Bokkos (Ron): Jungraithmayr (1968), Jungraithmayr (1970) [Bokkos dial. of Ron; cla; West Chadic/Bole-Angas/Ron]

Bolu (SB) in [Geji]: Shimizu (1978) [Bolu dial. of Geji; gji; West Chadic/Barawa/Zaar]

Boto (SB) in [Zari]: Shimizu (1978) [Boto dial. of Zari; zaz; West Chadic/Barawa/Zaar]

Buji (P1b) [Jeere a]: Williamson and Shimizu (1968) [Boze dial. of Jere; jer; Kainji/East Kainji]

Buli (SB) in [Polci]: Kraft (1981), Shimizu (1978) [Buli dial. of Polci; plj; West Chadic/Barawa/Zaar/Polci]

Buta (P1b) in [Buta Ningi]: Shimizu (1982a), Shimizu (1982b), Williamson and Shimizu (1968) [Gamo dial. of Gamo-Ningi; bte; Plateau/Kainji/East Kainji]

Chaari (SB) in [Zeem]: Shimizu (1978) [Caari dial. of Zeem; zua; West Chadic/Barawa/Zaar]

Chamo (P1b) in [K-C]: Williamson and Shimizu (1968) [Camo dial. Kudu-Camo; kov; Kainji/East Kainji]

Chawai (P1b) [Chw]: Williamson and Shimizu (1968) [Atsam; cch; Kainji/East Kainji/Piti-Atsam]

Chokobo (P1b) [Chk]: Shimizu (1979), Shimizu (1982) [Zora; cbo; Kainji/East Kainji/]

Cip (SG): Jungraithmayr (1964), Kraft (1981) [Miship; mjs; West Chadic/Bole-Angas/Angas]

Daffo-Butura (Ron): Jungraithmayr (1968), Jungraithmayr (1970) [Daffo-Butura dial. of Ron; cla; West Chadic/Bole-Angas/Ron]

Dir (SB) in [Polci]: Shimizu (1978) [Dir dial. of Polci; plj; West Chadic/Barawa/Zaar/Polci]

Doka (P2.3): Williamson and Shimizu (1968) [dbi; Plateau/Central?/North Plateau?]

Duguri (JB) [Duguri, D]: Gerhardt (1988) [Zugur dial. of Jarawa; dbm; Bantu (A)/Mbam/Jarawan/Nigerian Jarawan]

Dur (SB) in [Dass]: Shimizu (1978) [Durr-Baraza dial. of Dass; dot; West Chadic/Barawa/Zaar]

Dwat (SB) in [Dass]: Kraft (1981), Shimizu (1978) [Dot dial. of Dass; dot; West Chadic/Barawa/Zaar]

Eggon (P5): Gerhardt (1983b), Sibomana (1985), Williamson and Shimizu (1968) [ego; Plateau/South/Eggonic]

Eloyi (P9): Mackay (????), Williamson and Shimizu (1968) [afo; (incertae sedis: Plateau or Idomoid)]

Fyer (Ron): Jungraithmayr (1968), Jungraithmayr (1970) [fie; West Chadic/Bole-Angas/Ron]

Gana (P1b) [??]: Shimizu (1982a), Shimizu (1982b) [Gana dial. of Lere; gnh; Kainji/East Kainji/]

Geji (SB) in [Geji]: Kraft (1981), Shimizu (1978) [Geji dial. of Geji; gji; West Chadic/Barawa/Zaar]

Gerka (SG): Jungraithmayr (1964) [Yiwom; gek; West Chadic/Bole-Angas]

Gingwak (JB): Williamson and Shimizu (1968) [Gwak dial. of Jarawa; jgk; Bantu (A)/Mbam/Jarawan/Nigerian Jarawan]

Goemai (SG) [Ankwe]: Hoffmann (1975), Kraft (1981) [ank; West Chadic/Bole-Angas/Angas]

Gure (P1b) in [G-K]: Williamson and Shimizu (1968) [Gbiri dial of Gbiri-Niragu; grh; Kainji/East Kainji/Kauru]

Guruntum (SB) in [Guruntum-Mbaaru, G-M]: Shimizu (1978) [Guruntum dial. of Guruntum; grd; West Chadic/Barawa/Guruntum]

Gyem (P1b): Shimizu (1982a), Shimizu (1982b), Williamson and Shimizu (1968) [gye; Kainji/East Kainji/]

Horom (P6) [Hrm]: Williamson and Shimizu (1968) [hoe; Plateau/East]

Ibunu (P1b) [Jeere d]: Williamson and Shimizu (1968) [Bunu dial. of Jere; jer; Kainji/East Kainji/]

Idong (P2.3) [Idon]: Williamson and Shimizu (1968) [Idon; idc; Plateau/Central?/North Plateau?]

Ikulu (P2.3): Williamson and Shimizu (1968) [Kulu; ikl; Plateau/Central?/North Plateau?]

Irigwe (P2.2): Gerhardt (1980), Gerhardt (1983a) [iri; Plateau/Central?]

Jaar (JB) [??]: Gerhardt (1988) [Jarawa; jar; ; Bantu (A)/Mbam/Jarawan/Nigerian Jarawan]

Jaba (P2.2) [Hyam]: Gerhardt (1983a), Williamson and Shimizu (1968) [Hyam (probably Nok dial.); jab; Plateau/Central/Hyamic]

Jaku (JB) [Jku]: Gerhardt (1982), Gerhardt (1988), Maddieson and Williamson (1975), Williamson and Shimizu (1968) [Labir; jku; Bantu (A)/Mbam/Jarawan/Nigerian Jarawan/Jaku-Gubi]

Janji (P1b) [Jnj]: Shimizu (1979), Shimizu (1982), Williamson and Shimizu (1968) [jni; Kainji/East Kainji/]

"Jarawa" (JB) [??]: Johnston (1919) [prob. Zhár dial. of Jarawa; jjr; Bantu (A)/Mbam/Jarawan/Nigerian Jarawan]

Jere (P1b) [Jeere c]: Shimizu (1982a), Shimizu (1982b) [Jere dial. of Jere; jer; Kainji/East Kainji]

Jibu (Ju) [??]: Shimizu (1980), Williamson and Shimizu (1968) [jib; Jukunoid/Central/Jukun]

Jimi (SB) [??]: Shimizu (1978) [jmi; West Chadic/Barawa/Boghom]

Ju (SB): Shimizu (1978) [juu; West Chadic/Barawa/Guruntum]

Jukun of Kona (Ju) [Jukun Kona, JK_n]: Shimizu (1980), Williamson and Shimizu (1968) [Jiba; juo; Jukunoid/Central/Kororofa]

Jukun of Wase (Ju) [Jukun Wase, JW_s]: Shimizu (1980), Williamson and Shimizu (1968) [Wāpha/Wase; juw; Jukunoid/Central/Jukun]

Jukun of Wukari (Ju) [Jukun Wukari, JW_k]: Shimizu (1980), Williamson and Shimizu (1968) [Wapan/Jukun Wapan/Wukari; juk; Jukunoid/Central/Kororofa]

Kachichere (P2.2) [Katab e]: Williamson and Shimizu (1968) [Kacicere dial. of Tyap; kcg; Plateau/Central?/Tyapic]

Kadara (P2.3): Williamson and Shimizu (1968) [kad; Plateau/Central?/North Plateau?]

Kafanchan (P2.2) [Katab f]: Williamson and Shimizu (1968) [Kafanchan dial. of Tyap; kcg; Plateau/Central?/Tyapic]

Kagoma (P2.2): Gerhardt (1983a), Williamson and Shimizu (1968) [Gyong/Kagoma; kdm; Plateau/Central?/Gyongic?]

Kagoro (P2.2) [Katab b]: Gerhardt (1971), Gerhardt (1983a), Gerhardt (1980), McKinney (1983), McKinney (????), Williamson and Shimizu (1968) [Gworok/Kagoro dial. of Tyap; kcg; Plateau/Central?/Tyapic]

Kahugu (P1b) in [G-K]: Williamson and Shimizu (1968) [Niragu dial. of Gbiri-Niragu; grh; Kainji/East Kainji/Kauru]

Kaje (P2.2) [Kaje, K_j]: Gerhardt (1971), Gerhardt (1980), Gerhardt (1983a), McKinney (1983), McKinney (????), Williamson and Shimizu (1968) [Jju; kaj; Plateau/Central?/Tyapic]

Kamantom (P2.2) [Kmt]: Williamson and Shimizu (1968) [kci; Plateau/Central?/Gyongic?]

Kaningkom (P4) [Kng]: Gerhardt (1983a) [Ninkyob dial. of Ninkyob-Nindem; kdp; Plateau/Ninzic]

Kantana (= Mama) (JB) [Mama]: Gerhardt (1982), Gerhardt (1988), Williamson and Shimizu (1968) [Kantana/Mama; mma; Bantu (A)/Mbam/Jarawan/Nigerian Jarawan]

Katab (P2.2) [Katab a]: Gerhardt (1971), Gerhardt (1980), Gerhardt (1983a), McKinney (1983), McKinney (????), Williamson and Shimizu (1968) [Katab dial. of Tyap; kcg; Plateau/Central?/Tyapic]

Kir (SB) in [K-B]: Shimizu (1978) [Kir dial. of Kir-Balar; kkr; West Chadic/Barawa/Boghom]

Kofyar (SG): Hoffmann (1975), Netting (1967) [kwl; West Chadic/Bole-Angas/Angas]

Koro (P2.1): Gerhardt (1983a), Williamson and Shimizu (1968) [several languages included; Plateau/Southern]

Kuda (P1b) in [K-C]: Williamson and Shimizu (1968), Shimizu (1982a), Shimizu (1982b) [Kudu dial. of Kudu-Camo; kov; Kainji/East Kainji]

Kulere (Ron) [Klr]: Jungraithmayr (1968), Jungraithmayr (1970) [kul; West Chadic/Bole-Angas/Ron]

Kulung (= Wurkum) (JB) [??]: Gerhardt (1982), Williamson and Shimizu (1968) [bbu; Bantu (A)/Mbam/Jarawan/Nigerian Jarawan]

Kurumi (= Kurama) (P1b): Williamson and Shimizu (1968) [krh; Kainji/East Kainji/Kauru]

Kuturmi (P2.3) [Ktr]: Williamson and Shimizu (1968) [khj; Plateau/Central?/North Plateau?]

Kuzamani (Rishuwa) (P1b) [Kzm]: Shimizu (1982a), Shimizu (1982b) [Shuwa-Zamani; ksa; Kainji/East Kainji]

Kwanka (P4) in [K-B-B-L]: Williamson and Shimizu (1968) [Kwanka dial. of Kwanka; bij; Plateau/Tarokoid/Vaghat-Ya-Bijim-Legeri]

Langas (SB) in [Polci]: Shimizu (1978) [Nyamzak/Langas dial. of Polci; plj; West Chadic/Barawa/Zaar/Polci]

Ligri (JB): Williamson and Shimizu (1968) [Ligri ?dial. of Jarawa; jar; Bantu (A)/Mbam/Jarawan/Nigerian Jarawan]

Lungu (P2.1): Gerhardt (1983a), Williamson and Shimizu (1968) [Idun; ldb; Plateau/Central?/Koroic?]

Lushi (SB) in [Zeem]: Shimizu (1978) [Lushi dial. of Zeem; zua; West Chadic/Barawa/Zaar]

Mabo-Barkul (P6) [M-B]: Williamson and Shimizu (1968) [Barkul; mae; Plateau/East]

Mada (P4): Gerhardt (1983a), Williamson and Shimizu (1968) [Mada; mda; Plateau/Ninzic]

Mangas (SB) [Mng]: Shimizu (1978) [zns; West Chadic/Barawa/Boghom]

Mbaaru (SB) in [Guruntum-Mbaaru, G-M]: Shimizu (1978) [Mbaaru dial. of Guruntum; grd; West Chadic/Barawa/Guruntum]

Mboa (JB) [??]: Gerhardt (1982) [xmb; Bantu (A)/Mbam/Jarawan]

Mbula (JB) [??]: Gerhardt (1982), Gerhardt (1988), Maddieson and Williamson (1975), Williamson and Shimizu (1968) [Mbula dial. of Mbula-Bwazza; mbu; Bantu (A)/Mbam/Jarawan/Nigerian Jarawan/Numan]

Migili (P3 ?) [Migili, Mgl]: Williamson and Shimizu (1968) [Jili/Lijili; mgi;

Plateau/South/Jilic]

Montol (SG): Jungraithmayr (1964) [mtl; West Chadic/Bole-Angas/Angas]

Moro (P1b): Shimizu (1979), Shimizu (1982) [Lemoro; ldi; Kainji/East Kainji/]

Morwa (P2.2) [Katab d]: Williamson and Shimizu (1968) [Morwa dial. of Tyap; kcg; Plateau/Central?/Tyapic]

Nagumi (JB) [??]: Gerhardt (1982) [ngv; Bantu (A)/Mbam/Jarawan]

Naraguta (P1b) [Nrg]: Shimizu (1979), Shimizu (1982) [Guta/Iguta; nar; Kainji/East Kainji/]

Nindem (P4) [Ndm]: Gerhardt (1983a), Williamson and Shimizu (1968) [Nindem dial. of Ninkyob-Nindem; kdp; Plateau/Ninzic]

Ningi (P1b) in [Buta Ningi]: Williamson and Shimizu (1968) [Ningi dial. of Gamo-Ningi; bte; Plateau/Kainji/East Kainji]

Ninzam (P4) [Ninzam, Nzm]: Gerhardt (1983a), Williamson and Shimizu (1968) [Ninzo; nin; Plateau/Ninzic]

Nungu (P5): Williamson and Shimizu (1968) [would be P4; rin; Plateau/Ninzic]

Pai (P7 ?): Williamson and Shimizu (1968) [Pe; pai; Plateau/Tarokoid/Tarok-Pe]

Piti (P1b): Williamson and Shimizu (1968) [pcn; Kainji/East Kainji/Piti-Atsam]

Polci (SB) in [Polci]: Kraft (1981), Shimizu (1978) [Polci dial. of Polci; plj; West Chadic/Barawa/Zaar/Polci]

Proto-BT: Dolgopolsky (????) [West Chadic/Bole-Angas/Bole]

Proto-Chadic: Jungraithmayr (1968), Newman (1977)

Proto-JB: Gerhardt (1982), Gerhardt (1988), Shimizu (1983) [Bantu A/Mbam/Jarawan]

Proto-Plateau: Gerhardt (1971) [Plateau plus Kainji]

Proto-P1b: Shimizu (1982) [Kainji/East Kainji]

Proto-P2 (Kagoro group): Gerhardt (1983a) [Plateau/Central?/Tyapic]

Proto-P2 (Jaba group): Gerhardt (1983a) [Plateau/Central?/Hyamic]

Proto-P3: Gerhardt (1983a) [Plateau/Biromic]

Proto-P4: Gerhardt (1983a) [Plateau/Ayu and Plateau/Western/Southwestern/A and Plateau/Tarokoid pars]

Proto-SG: Dolgopolsky (????) [West Chadic/Bole-Angas/Angas and WC/BA/Yiwom]

Proto-Ron: Jungraithmayr (1968), Jungraithmayr (1970) [West Chadic/Bole-Angas/Ron]

Proto-SB: Shimizu (1978) [West Chadic/Barawa (aka South Bauchi)]

Proto-SG: Hoffmann (1975) [West Chadic/Bole-Angas/Angas + WC/BA/Yiwom]

Pyem (P6): Williamson and Shimizu (1968) [Fyam; pym; Plateau/East]

Rukuba (P4) [Rkb]: Gerhardt (1983a), Williamson and Shimizu (1968) [Ce; ruk; Plateau/Ninzic]

Rukul (P6) [M-B]: Williamson and Shimizu (1968) [Barkul; mae; Plateau/East]

Sanga (P1b) [Sng]: Shimizu (1979), Shimizu (1982) [xsn; Kainji/East Kainji/]

Sha (Ron): Jungraithmayr (1968), Jungraithmayr (1970) [scw; West Chadic/Bole-Angas/Ron]

Shau (P1b) [??]: Shimizu (1982a), Shimizu (1982b) [sqh; Kainji/East Kainji/]

Sheni (P1b) [Shn]: Shimizu (1982a), Shimizu (1982b) [scv; Kainji/East Kainji/]

Sigidi (SB) in [Sigidi Zaar]: Shimizu (1978) [Guus dial. of Saya; say; West Chadic/Barawa/Zaar]

Sura (SG): Dolgopolsky (????), Hoffmann (1975), Jungraithmayr (1984???), Kraft (1981) [sur; West Chadic/Bole-Angas/Angas]

Surubu (P1b) [Srb]: Williamson and Shimizu (1968) [sde; Kainji/East Kainji/Kauru]

Tala (SB): Shimizu (1978) [tak; West Chadic/Barawa/Guruntum]

Tambas (Ron) [Tmb]: Jungraithmayr (1970) [tdk; West Chadic/Bole-Angas/Ron]

Tarok (P7): Robinson (1976), Sibomana (1980a, 1981b/c), Williamson and Shimizu (1968) [yer; Plateau/Tarokoid/Tarok-Pe]

Taura (P1b) [??]: Shimizu (1982a), Shimizu (1982b), Williamson and Shimizu (1968) [Takaya/Taura dial. of Lere; gnh; Kainji/East Kainji/]

Tiv (N-Btu): Williamson and Shimizu (1968) [tiv; Southern Bantoid/Tivoid/Central A]

Tulai (SB) in [Zeem]: Shimizu (1978) [Tule dial. of Zeem; zua; West Chadic/Barawa/Zaar]

Wangdi (SB) in [Dass]: Shimizu (1978) [Wandi dial. of Dass; dot; West Chadic/Barawa/Zaar]

Yashi (P5) [Yas]: Williamson and Shimizu (1968) [Hasha; ybj; Plateau/Alumic/Hasha-Sambe]

Yeskwa (P2.1): Williamson and Shimizu (1968) [yes; Plateau/Central?/Koroic]

Zaar (SB) in [Sigidi Zaar]: Kraft (1981), Schneeberg (1974), Shimizu (1978) [Zaar dial. of Saya; say; West Chadic/Barawa/Zaar]

Zakshi (SB) in [Zari]: Shimizu (1978) [Zakshi dial. of Zari; zaz; West Chadic/Barawa/Zaar]

Zangwal (SB) [Zng]: Shimizu (1978) [zah; West Chadic/Barawa/Guruntum]

Zaranda (SB) in [Geji]: Shimizu (1978) [Zaranda dial. of Geji; gji; West Chadic/Barawa/Zaar]

Zarek (P2.2): Gerhardt (1971), Gerhardt (1980), Gerhardt (1983a), Gerhardt (1984), Lukas and Willms (1982), Meyer-Bahlburg (1979), Williamson and Shimizu (1968), Wolff, E. and Meyer-Bahlburg (1979) [Izere; izr; Plateau/Central?/Izeric]

Zari (SB) in [Zari]: Shimizu (1978) [Zari dial. of Zari; zaz; West Chadic/Barawa/Zaar]

Zeem (SB) in [Zeem]: Shimizu (1978) [Zeem dial. of Zeem; zua; West Chadic/Barawa/Zaar]

Ziriya (P1b) [??]: Shimizu (1982a), Shimizu (1982b) [zir; Kainji/East Kainji]

Zul (SB) in [Polci]: Shimizu (1978) [Zul dial. of Polci; plj; West Chadic/Barawa/Zaar/Polci]

Zumbul (SB) in [Dass]: Shimizu (1978) [Zumbul dial. of Dass; dot; West Chadic/Barawa/Zaar]

References

AuÜ = Afrika und Übersee
JAS = Journal of the African Society
JWAL = Journal of West African Languages
SAL = Studies in African Linguistics
ZDMG = Zeitschrift der Deutschen Morgenländischen Gesellschaft

Aliyu, A.Y. 1980. "Language and Traditions of Origin Among the People of Bauchi-Plateau Region." Kano Studies 2.1: 133-47.

Ballard, J.A. 1971. "Historical Inferences from the Linguistic Geography of the Nigerian Middle Belt." Africa (London) 41: 294-305.

[Blench, Roger. various materials from <http://www.rogerblench.info>, bibliography to be updated]

- Bouquiaux, Luc. 1970. "La Langue Birom." ????
- Bynon, Theodora. 1978. Historical Linguistics. corrected edition. Cambridge Textbooks in Linguistics. Cambridge: Cambridge U.P.
- de Wolf, P.P. 1971. The Noun-class System of Proto-Benue-Congo. The Hague: Mouton.
- Dolgopolsky, Aharon B. 1982. "Chadic - Semitic - Cushitic: Epenthetic -gh- in Sura in the light of Hamito-Semitic Comparative Linguistics." The Chad Languages in the Hamito-Semitic-Nigritic Border Area (Papers of the Marburg Symposium, 1979). Herrmann Jungraithmayr, ed. Berlin (West): Dietrich Reimer. 32-46.
- Emeneau, Murray. 1956. "India as a Linguistic Area." Language 32: 3-16.
- Frajzyngier, Zygmunt. 1977. "On the Intransitive Copy Pronouns in Chadic." SAL, Suppl. 7: 73-84.
- Gazetteers of the Northern Provinces of Nigeria. Vol. 4, The Highland Chieftaincies (Plateau Province). 1972 [1934]. London: Frank Cass.
- Gerhardt, Ludwig. 1971. "Stammerweiterungen in den Verben einiger zentralnigerianischer Klassensprachen." Afrikanische Sprachen und Kulturen: ein Querschnitt. Hamburger Beiträge zur Afrika-Kunde, Bd. 14 Hamburg. 95-101.
- Gerhardt, Ludwig. 1973/74. "Proto-Benue-Congo und Kagoma." AuÜ 57: 81-93.
- Gerhardt, Ludwig. 1980. "The Fortis-Lenis Contrast in West African Languages." AuÜ 63: 207-17.
- Gerhardt, Ludwig. 1982. "Jarawan Bantu -- The Mistaken Identity of the Bantu who Turned North." AuÜ 65: 75-95.
- Gerhardt, Ludwig. 1983a. Beiträge zur Kenntnis der Sprachen des nigerianischen Plateaus. Glückstadt: J.J. Augustin, 1983.
- Gerhardt, Ludwig. 1983b. "The Classification of Eggon: Plateau or Benue Group?" JWAL 13.1 (1983b): 37-50.
- Gerhardt, Ludwig. 1984. "More on the Verbal System of Zarek (Northern Nigeria)." AuÜ 67: 11-30.
- Gerhardt, Ludwig. 1988. "A Note on Verbal Extensions in Jarawan Bantu." JWAL 18.2: 3-8.
- Greenberg, Joseph H. 1979. "Rethinking Linguistics Diachronically." Language 55.2:

275-90.

Gunn, Harold D. 1953. Peoples of the Plateau Area of Northern Nigeria. Ethnographic Survey of Africa, Western Africa 7. London: IAI.

Gunn, Harold D. 1956. Pagan Peoples of the Central Area of Northern Nigeria. Ethnographic Survey of Africa, Western Africa 12. London: IAI.

Hansford, Keir, John Bendor-Samuel and Ron Stanford. 1976. "An Index of Nigerian Languages." Studies in Nigerian Languages 5: 5-204, map.

Heine, Bernd and Mechthild Reh. 1984. Grammaticalization and Reanalysis in African Languages. Hamburg: Helmut Buske Verlag.

Henderson, Eugénie J.A. 1965. "The Topography of Certain Phonetic and Morphological Characteristics of South East Asian Languages." Lingua 15: 400-34.

Hock, Hans Henrich. 1986. Principles of Historical Linguistics. Berlin: Mouton de Gruyter.

Hoffmann, Carl. 1970. "Ancient Benue-Congo Loans in Chadic?" Africana Marburgensia 3.2: 3-23.

Hoffmann, Carl. 1975. "Towards a Comparative Phonology of the Languages of the Angas-Goemai Group." Faculty Seminar, Ibadan Univ. (Jos Campus), Wednesday, March 19, 1975.

Isichei, Elizabeth, ed. 1982. Studies in the History of Plateau State, Nigeria. London: MacMillan.

Johnston, H.H. "The Semi-Bantu Languages of Eastern Nigeria." JAS 20: 186-94.

Jungraithmayr, Herrmann. 1964. "Materialien zur Kenntnis des Chip, Montol, Gerka und Burrum (Südplateau, Nordnigerien)." AuÜ 48: 161-182.

Jungraithmayr, Herrmann. 1968. "The Hamitosemitic Present-habitative Verb Stem in Ron and Mubi." JWAL 5: 71-76.

Jungraithmayr, Herrmann. 1970. Die Ron-Sprachen: Tschadohamitische Studien in Nordnigerien. Glückstadt: Verlag J.J. Augustin.

Jungraithmayr, Herrmann. 1963. "Die Sprache der Sura (Maghavul) in Nordnigerien." AuÜ 47: 8-89, 204-220.

Kraft, Charles H., ed. and coll. 1981. Chadic Wordlists. Marburger Studien zur Afrika- und Asienkunde, 23-25. 3 vols. Berlin: Dietrich Reimer.

- Lukas, J. and A. Willms. 1961. "Outline of the Language of the Jarawa in Northern Nigeria (Plateau Province)." AuÜ 45: 1-66.
- Mackay, Hugh D. "A Word-list of Eloyi." JWAL 1.1 (????): 5-12.
- Maddieson, Ian and Kay Williamson. 1975. "Jarawan Bantu" African Languages/Langues Africaines 1: 124-163.
- McKinney, Carol V. 1983. "A Linguistic Shift in Kaje, Kagoro, and Katab Kinship Terminology." Ethnology 22.4: 281-293.
- McKinney, Carol V. 1979. "Plural Verb Roots in Kaje." AuÜ 62: 107-17.
- Meek, C.K. 1931. Tribal Studies in Northern Nigeria. 2 vols. London: Kegan Paul, Trench, Trubner and Co.
- Meyer-Bahlburg, Hilke. 1979. "Erzählungen in der Sprache der Afuzare (Jos-Plateau, Nordnigeria)." AuÜ 62: 161-90.
- Moravcsik, Edith A. 1978. "Language Contact." In: Greenberg et al. 1, 93-122.
- Netting, Robert. 1967. "A Word List of Kofyar." Research Notes (Ibadan) 1.2: 1-36.
- Newman, Paul. 1977. Chadic Classification and Reconstructions. Monographic Journals of the Near East, Afroasiatic Linguistics 5.1. Malibu: Undena Publications.
- Newman, Paul. 1990. Nominal and Verbal Plurality in Chadic. Dordrecht: Foris.
- Polak, Louise. 1980. "Note sur la filiation genetique des langues du nord-ouest bantou." Gladys Guarisma and Suzy Platiel, eds. Dialectologie et comparatisme en Afrique noire: actes des journées d'étude tenues au Centre de Recherche Pluridisciplinaire du CNRS: Ivry (France) - 2-5 juin 1980. Paris: CNRS. 85-88.
- Robinson, J.O. Skip. 1976. "His and Hers Morphology: the Strange Case of Tarok Possessives." SAL, Suppl. 6. 201-9.
- Schneeberg, Nan. 1974. Sayanci Phonology. Diss. Indiana Univ. Ann Arbor: UMI. AAC7501752.
- Shimizu, Kiyoshi. 1978. "The Southern Bauchi Group of Chadic Languages: A Survey Report." Africana Marburgensia, Special Issue 2.
- Shimizu, Kiyoshi. 1974. "Five Wordlists with Analyses from the Northern Jos Group of Plateau Languages." AuÜ 57: 253-71.
- Shimizu, Kiyoshi. 1980. Comparative Jukunoid. 3 vols. Beotra"ge zur Afrikanistik 7. Wien: Afro-Pub.

- Shimizu, Kiyoshi. 1982a. "Ten More Wordlists with Analyses from the Northern Jos Group of Plateau Languages." AuÜ 65: 97-134.
- Shimizu, Kiyoshi. 1982b. "Die Nord-Jos-Gruppe der Plateau-Sprachen Nigerias." AuÜ 65: 161-210.
- Shimizu, Kiyoshi. 1983. "Die Jarawan-Bantusprachen des Bundesstaates Bauchi, Nordnigeria." Rainer Voßen and Ulrike Claudi, eds. Sprache, Geschichte und Kultur in Afrika. Vorträge gehalten auf dem III. Afrikanistentag, Köln, 14./15. Oktober 1982. Hamburg: Helmut Buske Verlag. 291-301.
- Sibomana, Leo. 1980. "Grundzüge der Phonologie des Tarok (Yergam)." AuÜ 63: 199-206.
- Sibomana, Leo. 1981a. "Tarok II: Das Nominalklassensystem." AuÜ 64: 25-34.
- Sibomana, Leo. 1981b. "Tarok III: Das Verbalsystem und der Satz." AuÜ 64: 237-47.
- Sibomana, Leo. 1981c. "Tarok-Erzählungen." AuÜ 64 (1981c): 249-79.
- Sibomana, Leo. 1985. "A Phonological and Grammatical Outline of Eggon." AuÜ 68: 43-68.
- Thomason, Sarah G. 1983. "Genetic Relationship and the Case of Ma'a (Mbugu)." SAL 14.2: 195-231.
- Williamson, Kay and Kiyoshi Shimizu, eds. 1968. Benue-Congo Comparative Wordlist. Ibadan: Univ. of Ibadan.
- Wolff, Ekkehard and Ludwig Gerhardt. 1977. "Interferenzen zwischen Benue-Kongo- und Tschadsprachen." ZDMG, Suppl. 3.2: 1518-43.
- Wolff, Ekkehard and Hilke Meyer-Bahlburg. 1979. "Morphologie und Semantik der erweiterten Verbalstämme in der Sprache der Afuzare (Zarek)." AuÜ 62.1: 1-38.
- Wolff, Hans. 1963. "Noun Classes and Concord in Berom." Actes du second colloque international de linguistique négro-africaine, Dakar 12-16 avril 1962. Dakar: Université de Dakar, West African Languages Survey.