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YOBE STATE, NIGERIA AS A LINGUISTIC AREA

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1. Introduction

In late summer 1969, I arrived in Potiskum, Nigeria for the first time. I was a Research Assistant gathering data on the Ngizim language for a comparative Chadic syntax project¹ and for my dissertation. I could not have imagined that 30 years later I would be returning to Potiskum, essentially to pick up where I left off.

From 2001-2004, I worked in collaboration with Dr. Alhaji Maina Gimba of the University of Maiduguri and speakers of five languages of Yobe State, Nigeria to document these languages. The primary focus was lexical and morphological documentation and collection of texts. An important aspect of the project was to have native-speaking participants do most of the data collection, and resulting documents have been printed and distributed locally as a stimulus for members of the respective communities to continue adding to the documentation after the end of the project.

Though the Nigerian states are somewhat artificial political creations, Yobe State, fortuitously, has an interesting linguistic composition. There are six distinct modern languages that are indigenous to the area that is now Yobe State—Duwai, Ngizim, Bade, Karekare, Bole, Ngamo—and with the exception of Bole, these languages are spoken almost entirely within the confines of Yobe State (Bole has a large number of speakers to the south, in Gombe State). The other three languages with large resident populations in Yobe State are Kanuri, Hausa, and Fulfulde, all of which have spread into Yobe State area from elsewhere, though the eastern and far northern parts of the state have probably been Kanuri-speaking for several centuries. See Figures 1 and 2 for locations and linguistic relationships.

The Yobe languages project has revealed yet another unifying linguistic trait of Yobe State, namely the languages in this state form a *Sprachbund*—an area in which languages share a cluster of typologies that are absent, at least as a cluster, outside the area. Although the indigenous languages of Yobe State are all members of the West Branch of the Chadic family, they fall into two distinct groups. Karekare, Bole, and Ngamo are members of the “A” group of West Chadic, whereas Duwai, Ngizim, and Bade are mem-

¹ US National Science Foundation Award #2279, Paul Newman, Principal Investigator. This was the first of several National Science Foundation awards that have supported work in this area. Work on an Ngizim dictionary and descriptive work on Bade in 1979-1981 was supported by NSF award #BNS79-10366 (Russell G. Schuh, Principal Investigator). Work on Bole in 1999-2000 was supported by NSF award #BCS-9905180 (Russell G. Schuh, Principal Investigator). Most of the work that serves as the basis for the current paper was done in 2001-2004, supported by NSF award #BCS-0111289 (Russell G. Schuh, Principal Investigator, Alhaji Maina Gimba, In-Country Director). I am grateful to the scores of people who have been friends, collaborators, and facilitators over the past 35 years, especially Paul Newman and Alhaji Maina Gimba. Further information about the last mentioned project, including downloadable papers, are available at <http://www.humnet.ucla.edu/humnet/aflang/Yobe/>.

bers of the “B” group.² These two groups of Yobe languages, however, share properties that that must result from areal diffusion rather than inheritance from ancestral languages of the respective subgroups or from a common ancestral language. This paper will describe some of those properties, and, where feasible, will try to show that they do not comprise a random list of unconnected properties. The ideas in this paper really present a framework for future research. The Yobe languages project was not conceived of or pursued as a comparative language project, *per se*. The types of convergences described here emerged from the data that was assembled, and other exigencies of the project made it impossible to study comparative aspects in a systematic way.

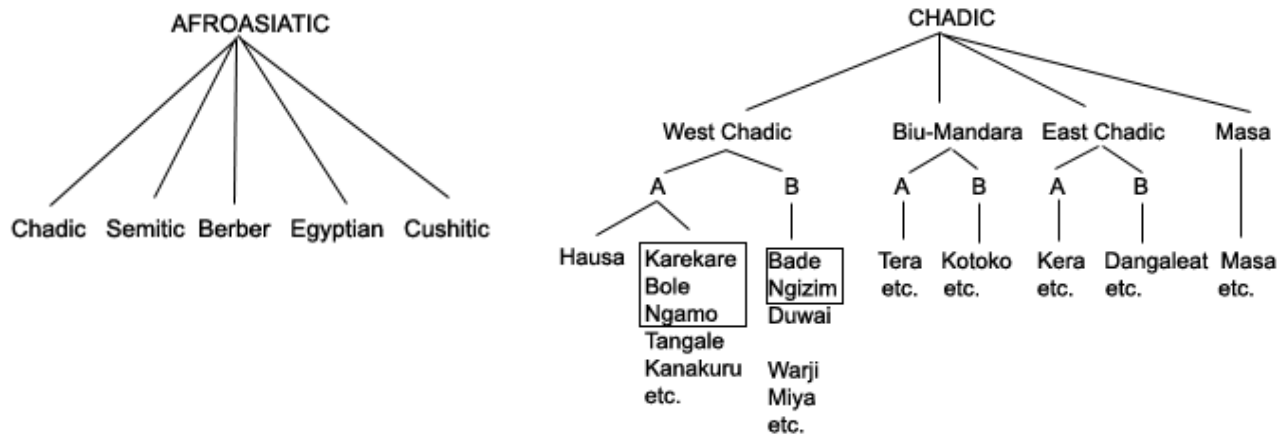
Figure 1. Yobe State, Nigeria and the Yobe languages

Yobe State within Nigeria

The locations of the Yobe languages



Figure 2. Linguistic relationships



² See Newman (1977) for the classification of the Chadic languages. Dialectally, Ngizim and Karekare are relatively uniform. Bole has a major dialect split, roughly defined by the Gongola River that forms part of the southwestern border between Yobe and Bauchi States. This paper considers only the Fika dialect, which is that of Yobe State. Ngamo has a major split between the Gudi dialect to the east, indicated Ngamo (G) here, and the Yaya dialect, to the west, indicated Ngamo (Y) here. Bade is dialectally so diverse that it might be considered a group of closely related languages (Schuh 1981). This paper has data from the Western variety, Bade (W), and the Gashua variety, Bade (G).

In order to discuss the nature of Yobe State as a linguistic area, some additional information about the linguistic situation is necessary. The map in Figure 1 shows that Ngizim, Karekare, Ngamo, and Bole are geographically contiguous whereas Bade and Duwai³ are geographically separated from this group by a Kanuri/Hausa speaking zone.⁴ I will refer to the former group as the “Potiskum area” languages since Potiskum is the largest city in the vicinity and many speakers of all the languages live in Potiskum. I will refer to the latter group as the “Bade-Duwai area” languages. It turns out that each of these areas comprises its own *Sprachbund*. In this paper I will focus on the Potiskum area.

Although Ngizim is clearly more closely related to Bade than either of those languages is to Duwai, Bade and Duwai share certain properties not found in Ngizim and vice versa. Some of these properties must be inherited from the common ancestral language but have been lost in Ngizim, e.g. ‘nine’ is Duwai **wàrìyà**, Bade (Gashua), **wuliyà**, Bade (Western) **wurayà**, but Ngizim **kudkùvdà**. Others are a result of diffusion within the Bade-Duwai area that must have taken place after their geographical separation from Ngizim, e.g. a change of original initial CəCV to əCCV as in the word for ‘thirst’: Duwai **əgji**, Bade (Gashua) **əgji**, Bade (Western) **əgjan**, but Ngizim **gəji** (Schuh 1978a). Bade-Duwai thus provide a way to identify properties in Ngizim that result from areal diffusion within the Potiskum area, i.e. where Bade-Duwai share features not found in Ngizim or Ngizim-Karekare-Bole-Ngamo share features not found in Bade-Duwai, a likely explanation will often be diffusion of those features in the respective areas.

All of the existing close linguistic relatives of Karekare, Ngamo, and Bole lie to the south, in Gombe and Bauchi states. Two of the better known and better documented languages are Tangale and Kanakuru. Others are Kirfi, Galambu, Gera, Kwami, and Pero.⁵ These languages can provide evidence regarding features that seem special to the Yobe State languages, and more specifically, the Potiskum area languages, such as words like Ngizim **būcì**, Karekare **būcì**, Ngamo **būshî**, Bole **būshì** all meaning ‘palm leaf mat’ (an old loanword from Kanuri), which does not seem to be found in West Chadic languages outside Yobe State.

³ The Duwai area, which is not separately designated on the map, is contiguous to the Bade area, east and southeast of Gashua. Study of Duwai was not part of the Yobe languages project. While working on Duwai in 1973-75, I had the impression that it was in the process of being replaced by Bade and Hausa, or, at its eastern extremities, by Kanuri. However, during the Yobe project I discovered that my prediction of Duwai’s demise was premature! It still seems to be actively spoken by a significant population, and it will certainly be included in future research projects in this area.

⁴ Fulfulde is spoken throughout this area, and northern Nigeria in general, by nomadic herders and in Fulfulde-speaking villages and neighborhoods of towns and villages where other languages are dominant. In Yobe State and contiguous areas, Fulfulde has exerted virtually no linguistic influence on the languages with which Fulfulde speakers come in contact. Though the Fulb’e retain a strong cultural identity and typically speak Fulfulde within their own communities, they all become fluent speakers of one or more of the local languages, whereas it is rare to find speakers of other languages who acquire speaking ability in Fulfulde.

⁵ The largest Chadic language speaking group immediately south of Bole is Tera, with whom the Boles have a special historical connection (Newman 1969/70). Tera belongs to the Biu-Mandara Branch of Chadic and is typologically quite different from the West Chadic languages, making areal connections other than lexicon less revealing than among the more closely related West Chadic languages.

2. Lexicon

2.1. Shared lexicon in the Potiskum area. The most readily visible (or better, audible) criterion for believing that the Yobe area is a *Sprachbund* is a large number of shared lexical items that have probably not been inherited from a single Chadic ancestor language but where the original source cannot be pinpointed with certainty, as would be the case of obvious loanwords (see below). More specifically the languages of the Potiskum area (Karekare, Ngamo, Bole, and Ngizim) share many words that are apparently not shared by Bade nor are they obvious loanwards from outside the Yobe area.⁶ Particular significant is the fact that such words are shared between Ngizim and the other three languages, to which Ngizim is not closely related, but not between Ngizim and its close cousin, Bade. Also significant are words where Karekare is phonologically nearly identical to Bole and Ngamo. Though all three languages are in the Bole-Tangale group, Karekare is not closely related to Bole and Ngamo within that group.

The tables in (1) present some examples, roughly grouped into social/semantic categories. All items include Ngizim and at least one of the Bole-Tangale languages. The fact that items are missing for particular languages means only that those words did not come up in the current project. In most cases, corresponding words probably do exist in those languages. In fact the significance of these lists is that the words came up with no expectation on my part of which items WOULD be shared across languages. Ngamo examples are from the Gudi dialect unless otherwise noted.

(1) Examples of Yobe areal words

	KAREKARE	NGAMO (G)	BOLE	NGIZIM
Shared material culture (foods, clothes, household items)				
‘steamed cake’		làmbà	làmbà	làmbà
‘chip-like confection’			bàlámno	bàlànno
‘locust bean cake’			gìskirmi	gàskərmi
‘woman's loincloth’	dīdàm	dīdàm	dīdàm	dīdàm
‘bead belt’	kwaikwàdò		koikodò	kwaikwadò
‘basket’	dà̀bir	dà̀ùr	dà̀bur	dà̀bər
‘stalk door panel’	gwamper		gompor	gwampèř

Animals and birds

baboon	bangài	bàngèi	bangè	bangài
‘hairy goat or sheep’	bàzà	bàzâ	bàza	bàzà
‘domestic pigeon’	bàru	bàrù	bàru	bàri
‘grey hornbill’	tīlākò	tīlākò		tīlākòk

⁶ Some of these items do have counterparts outside the Yobe region. For example, the word in the first group below, defined as ‘a chip-like confection’, is related to Kanuri **bòlòmbo** and also exists in Hausa as **bàlámbo**, identified as a Kanuri loanword in Bargery (1934). The word defined as ‘locust-bean cake’ was identified by Yobe speakers as Hausa **gàskamī**, defined by Bargery (1934) as ‘the mealy pulp from the inside of locust-bean pods’. Unlike typical loanwords, these words cannot be related phonologically in a straightforward way across languages, and indeed, the direction of borrowing itself is not obvious.

'red-billed hornbill'	kòkòji	kòkkòji		kòkkòji
'old animal'	gāuzhi mà bìdò 'old monkey'	gāwuji (bìdò) (Y) 'baboon'	gāwùshi	

Farming

type of sorghum	dàshà	dàshà (Y)	dàshà	dàshà
'young corn'	kuncàu	kùnshô	kunsho	kunco
'buried granary'		dādàfīdà	dādàfīdà	dātāfīdòk

Shared aspects of culture (implements, customs, occupations)

'large pressure drum'		kànjâu	kanjàu	kanjàu
'widow'		gudgùm	gudugùm	gudùgùm

Descriptive terms

'cold'	layi	leilei	lai	layi
'sour'	zhìmu 'smell sour'	shòmshòm	shòmshòm	còmcom

Expressions and grammatical markers

'until; even'		kaba	kapa = kaa	kapa = haĩ
'that's it, OK'	anyà	anyà	anyà	anyà = niyà

Shared lexical traits extend above the word level. These include idioms, such as Ngamo (Y) *fàna sàra*, Bole *'yùwa sara*, Ngizim *jə̀bà amài* 'offer condolences', all meaning "catch hand" in the respective languages. I did not systematically collect idioms or identify them in texts, but I am sure that there are a large number that calque on the same expression with the same meaning, as in this example. There are also shared Yobe lexicon-related expressions at yet a more complex level. These include many proverbs and riddles that seem to be regional rather than general to (West) Africa, song texts, and even folktale motifs.

2.2. Kanuri as an areal force in the Yobe languages. In northeastern Nigeria, Kanuri was the dominant cultural and linguistic force for centuries, extending into the 20th century. This is evident in the large number of Kanuri loanwords in the Yobe languages. Although it is possible to identify many loanwords introduced directly from Kanuri into one or more of the Yobe languages, there is an extensive group of words of Kanuri origin that typify the languages of the Yobe area but for which it is not possible to identify the language or languages that served as the path by which the words were introduced. Moreover, these words set the Yobe languages apart from related languages, such as Tangale and Kanakuru, which are outside the Yobe area. A few such words are the following:

(2) Some Kanuri loanwords shared across the Yobe languages

Kanuri	Bade (W)	Bade (G)	Ngizim	Karekare	Ngamo (G)	Bole	
jirè	jàrén	jīrāi	jīrèwa	jirè	jirê	jirè	‘truth’
karè	karen	kaṛài	kaṛê	karài	kârêi	karài	‘stuff’
ngudì	ngúdí	ngudì	ngudì	ngudì	ngùdî	ngudì	‘lazy p.’
bàjì	būcikuran	būjikurà	būcì	būcì	būshî	būshì	‘mat’ ⁷
retə	rètu	rètu	rètu	?	rètâ	rètu	‘to split’
ngalwò	ngalkò	ngalkò (ḃa)	ngalkò	ngalkò	ngalkò	ngalkò	‘better that...’

The influence of Kanuri has been much greater on Bade-Ngizim as a group than on the Bole-Tangale languages, suggesting that many of these words entered Bade-Ngizim while the languages of the group still occupied a contiguous geographical zone separate from the Bole-Tangale languages. The table below shows percentages of identified Kanuri loanwords in currently available lexicons:⁸

Table 1. Percentages of Kanuri loanwords in the Yobe languages

Western Bade:	12% Kanuri loanwords
Gashua Bade:	15%
Ngizim:	15.6%
Karekare:	9%
Ngamo:	4.6%
Bole:	7%

Schuh (2003) discusses the historical background and the linguistic adaptation of Kanuri loanwords in Bade-Ngizim.⁹ Of interest for the current study is the dating of the heaviest Kanuri borrowing into Yobe languages. Kanuri has undergone a set of sound changes that weakened intervocalic labial and velar obstruents: *p, b > w, *k, g > Ø. Kanuri data from Koelle (1854), which was collected from expatriated slaves, most of whom would have been born in the late 18th century or early 19th century, shows that these sound changes had already begun by the turn of the 19th century. In Kanuri loanwords, the Yobe languages preserve the non-weakened sounds, indicating that these words had entered the languages by the 18th century and probably well before.

⁷ The basic meaning is ‘mat woven from palm fronds’. In Bade the word is part of a Kanuri phrase meaning “big mat” (Kanuri *kurà* ‘big’). In Bole, the word means ‘partially woven mat, mat in the making’.

⁸ The figures, esp. for the Bade-Ngizim languages, are probably too low, first, because I am not an authority on Kanuri and have certainly failed to identify many Kanuri loans, and second, because the currently available lexicons of Yobe languages do not include extensive numbers of items in lexical arenas which would consist largely of Kanuri loans, such as religious, legal, and philosophical concepts.

⁹ This paper is downloadable in PDF format from the website mentioned in footnote 1.

(3) Dating Kanuri loanwords

Modern Kanuri	Bade (Gashua)	Bole	
ɽiwà	ɽīpá	rīpa	‘carrion’
dàwi	dàbi	dàbi	‘hoe’
kàshaàr	kàsakàř	kàsikàr	‘sword’
gàwàa	gàbàga	gàbàga	‘cotton cloth’

It appears that contact of Kanuri with Bole-Tangale was of a different nature from that with Bade-Ngizim, in part reflected by the smaller number of Kanuri loanwords as a percentage of vocabulary in Bole-Tangale vs. Bade-Ngizim and in part from the types of words that were borrowed. In particular, Bade-Ngizim languages have borrowed many more verbs from Kanuri than have the Bole-Tangale languages—22% of the Kanuri loanwords in Ngizim are verbs, whereas only 8% of the Kanuri loans in Bole are verbs. Thus, for example, to express ‘weigh, measure’, all languages of the Bade-Ngizim group, including Duwai, use the Kanuri loanword **ngàltu** whereas the Bole-Tangale languages use a native root ***kar-** (Karekare **caru**, Ngamo **kar-ko**, Bole **koru**). Bole has clearly borrowed Kanuri words on its own, i.e. not via Bade-Ngizim. This is most evident in verbs. Bade-Ngizim languages consistently adapt Kanuri verbs by borrowing the Kanuri verbal noun, which has a **t** suffix, then adding their own inflections. Bole does not have a single pattern for Kanuri loan verbs, but the most common pattern is to add a suffix **n** to the root.¹⁰ Compare loans such as the following:

(4)

Kanuri verbal noun	Ngizim verb	Bole verb	
njès-tə	ngèstu	ngèsunu	‘be late’
wàà-tə	wàkàtu	wàkànu	‘happen’

Although Bole has borrowed fairly extensively directly from Kanuri, there is less evidence for direct borrowing from Kanuri into Karekare and Ngamo. Karekare has a larger number of Kanuri loans as a percentage of vocabulary than Bole, but many, if not most Kanuri loans in Karekare have come in via Ngizim, which jibes with the general relationship between Ngizim and Karekare (see below). Compare, for example, Karekare **ngèstu** ‘be late’, with **-t-** as the final consonant, to the Ngizim word in the table above, or Karekare **bìlân** ‘beautiful’ < Kanuri **bàlân** via Ngizim **bàlân**, a word also used in Bade, but not found in other Bole-Tangale languages. Ngamo has a smaller number of Kanuri loanwords as a percentage of vocabulary than the other languages considered here, and many of those must have come in via Bole. Compare, for example, Ngamo (G) **ngèsná** ‘be late’, with **-n-** as the final consonant, to the Bole word in (4), or Ngamo **gède** ‘different’ < Kanuri **gàde** via Bole **gède**, a word not used in Karekare or the Bade-Ngizim languages. (See below for further discussion of the relationship between Bole and Ngamo.)

¹⁰ I do not know the source of the **n** suffix. There is no native verb derivational suffix of this form in Bole. It may come from one of the complex set of Kanuri inflectional suffixes.

The reason for the direct vs. indirect source of Kanuri loanwords in the Bole-Tangale languages is cultural. The Boles have been Muslims with a centralized political power structure throughout their known history, and the Kanuris, as propagators of Islam in the area west of Lake Chad, probably recognized the Boles as worthy associates. The Karekares and Ngamos, on the other hand, maintained traditional religious and cultural practices with a rather decentralized political structure until the second half of the 20th century and probably had much less direct cultural contact with the Kanuris. The peoples of southern Yobe State have, however, had extensive cultural interaction with each other over a long period, providing indirect paths for the introduction of Kanuri loanwords.

2.3. Hausa as a recent source of loanwords. The influence of Hausa provides a useful contrast with Kanuri. The previous section argued that one of the *Sprachbund* aspects of the Yobe languages is the result of a long period of Kanuri influence. Though Hausa has had, and continues to have massive influence on the Yobe languages, its influence cannot be viewed as *areal* in nature. As is the case throughout northern Nigeria, everyone in Yobe State, regardless of heritage language, speaks Hausa. Younger people, aside from those who have grown up in very rural areas, generally seem to feel more comfortable speaking Hausa than their heritage languages, and in conversations between speakers of any of the Yobe languages, code-switching between that language and Hausa is the standard mode of speech. Not surprisingly, all the Yobe languages have incorporated many Hausa loanwords. The table below shows percentages of identified Hausa loanwords in currently available lexicons:

Table 2. Percentages of Hausa loanwords in the Yobe languages

Western Bade:	3.8%	Hausa loanwords
Gashua Bade:	5%	
Ngizim:	4.2%	
Karekare:	5.6%	
Ngamo:	3.7%	
Bole:	7.1%	

These figures are surely on the low side for all the languages because at this stage of research, there has been no effort made to collect words in lexical arenas where virtually all words are Hausa loanwords, such as imported tradegoods, modern occupations, modern media and communications, modern mechanical objects, and the like. Many Hausa loanwords, like Bole **àyàbà** ‘banana’ or **kèke** ‘bicycle’, themselves originally loanwords into Hausa, refer to introduced items that would have not had traditional names, and in many cases where a Hausa loanword refers to something that would have preexisted contact with Hausa, it is hard to know whether it is really an integrated lexical item or a sort of code-switch, introducing a Hausa word even though a native word exists. For example, is Ngizim **kûřkudù** ‘sandhopper’ (Hausa **kûřkudù**) the word that all Ngizims would now use for this insect or has the speaker who provided the word just forgotten (or never heard) the native word?

Even allowing for the fact that the figures in Table 2 would be larger with more complete lexicons, two facts of interest emerge: (1) the low numbers compared to the

percentages of Kanuri loanwords seen in the previous section, especially in Bade-Ngizim, and (2) the uniformity of the percentages across the languages (the Bole number is skewed high because the currently available lexicon for this language is the largest). The relatively low numbers as a percentage of vocabulary must be a result of the lengths of the contact periods of the Yobe languages with Kanuri vs. Hausa. While continuous contact with Kanuri must have lasted over many centuries, intensive contact with Hausa probably does not extend back much more than a century, and the linguistic dominance that Hausa exerts today would extend over even less time. The uniformity of the percentages must have to do with the way Hausa loanwords are being introduced. Everyone speaks Hausa, and every language is independently introducing Hausa loanwords through the same processes, viz. frequent code-switching and the universal practice of using Hausa words when “native” words are not readily available, either because the concepts are new or because the speakers cannot immediately access existing native words.

In short, though the lexicons of Yobe languages have been and are being shaped by the introduction of loanwords from non-Yobe languages, the legacies are quite different. Kanuri loans have been, for the most part, integrated and adapted such that they give the Yobe languages a regional flavor not found in related languages outside the region. Hausa loans are a recent and relatively superficial, albeit highly prominent part of the lexicon that does not differentiate the Yobe languages from virtually every other minority language of northern Nigeria.

2.4. Ngizim loanwords in Karekare. Section 2.2 suggested that many Kanuri loanwords in Karekare have come in indirectly through Ngizim. This is part of a larger pattern of influence of Ngizim on Karekare, i.e. Karekare has also borrowed many words that are native to Ngizim but not to Karekare and its near relatives. In current data, I have identified Ngizim loanwords as comprising 4.1% of the Karekare lexicon, excluding words of Kanuri origin and words that have diffused more broadly among the Yobe languages. Additional Ngizim loanwords will certainly emerge with further study.

Several types of evidence identify words in Karekare as having come from Ngizim. First, Karekare has not only borrowed Ngizim lexical items, but also aspects of Ngizim phonology that are absent in the Bole-Tangale group, to which Karekare belongs. Most striking are lateral fricatives, inherited into Bade-Ngizim from proto-Chadic but lost in Bole-Tangale (Newman 1977). Also not found elsewhere in Bole-Tangale but found in Ngizim is the voiced alveopalatal fricative **zh**. Some Ngizim loanwords into Karekare show Ngizim derivational morphology without a cognate counterpart in Karekare, such as an agentive prefix **mV-** and a type of verbal noun of the form $C_1V_1C_2V_1C_3$ derived from $C_1V_1C_2C_3V$ verb roots. Finally, many Ngizim loanwords in Karekare have cognates in Bade-Ngizim but not in Bole-Tangale. The word for ‘fool’ in (5) is interesting in that it shows that the pattern of Karekare borrowing from Ngizim must be of considerable time depth. The lateral fricative in Karekare **tlùkùm** identifies the word as a loanword. Ngizim speakers could not provide a comparable word in use today, but it is used in Bade, with which Karekare speakers would have little or no contact.

(5) Ngizim loanwords in Karekare

Karekare	Ngizim	Evidence for Ngizim origin	
cagàdlau	jagadlau	contains lateral fricative	‘lion’
tlùkùm	?	contains lateral fricative—cf. Bade (G) ətlkum	‘fool’
zhiyom	zhìyām	contains zh	‘cuspid’
mìgìnì	məgənyì	< Ngizim gənu ‘receive’ + agentive prefix mə-	‘owner’
bìrìd	bəřəd	< Ngizim CVCVC verbal noun from bəřdu ‘prosper’	‘prosperity’
ràkin	ràkan	cf. Bade (G) làkan but Bole məsshe , Tangale məsə	‘walking’
gùbùsù	gùbəs	cf. Bade (G) əgvəs but Bole dòzùm	‘warthog’

In contrast to the large number of Ngizim words adopted into Karekare, there seem to be few, if any, native Karekare words adopted into Ngizim. What accounts for this asymmetric relationship? There have been strong cultural relationships between the Karekares and the Ngizims about which I have only minimal anecdotal knowledge and which are in urgent need of documentation before memory of them has been lost. Many of the customs and celebrations have been abandoned as Islam, Christianity, and modern life in general replace traditional practices. From what I have observed, however, the linguistic asymmetries may be related to marriage practices. Polygyny has been the norm in the Yobe area among people practicing traditional religions, and, not surprisingly, it has continued among those who have converted to Islam. Ngizim men typically would have at least one Karekare wife, and Karekare seems to have been the preferred common language in such households, at least before Hausa became dominant. Ngizims—at least Ngizim men—all seemed to speak Karekare when I first went to Potiskum in 1969, whereas few Karekares spoke Ngizim. Children in such households would grow up with Ngizim as the dominant language, inasmuch as the head of the household was Ngizim, he probably had at least one Ngizim wife, and the household was probably in a predominantly Ngizim village or neighborhood. These children, especially those with Karekare mothers, would be competent speakers of Karekare as well. The result would be children speaking Karekare but code-switching with Ngizim, the dominant language of the household and the neighborhood, much like speakers of Yobe language code-switch with Hausa today.¹¹

2.5. Bole loanwords in Ngamo. In the same way that Karekare has adopted many Ngizim words, Ngamo has adopted many Bole words. In fact there has been a drift in at least some parts of the Ngamo area to become Bole-speaking. A striking case is Gadaka, one of the largest Ngamo-speaking towns, if not the largest, and the location of the court of Mai Gudi, the paramount Islamic ruler of the Ngamos.¹² Bole is the language of the court of Mai Gudi, and the first Bole speaker with whom I did a significant amount of

¹¹ An ironic twist is that Karekare takes its place in at least some otherwise Ngizim-speaking situations. Women’s songs often are in Karekare or incorporate Karekare words or whole lines. This, too, must result from households having both Karekare and Ngizim wives, who work and sing together.

¹² A supreme Mai (Emir) is not a traditional position in Ngamo society. The Ngamos almost all followed traditional religious practices until the latter half of the 20th century, and social and political organization was based around local clans.

work was from Gadaka and, as far as I know, did not speak Ngamo, as least as a preferred first language.

The asymmetric linguistic relationship between the Boles and Ngamos is easy to grasp in broad terms. The Boles have long been the dominant political force in southern Yobe State. In fact, the Boles have arguably been the most influential minority ethnic group in northern Nigeria. Moi Fika, the supreme Islamic ruler of the Boles, is one of the paramount traditional Islamic rulers in Nigeria. Needless to say, the entire social relationship between the Boles and their geographic neighbors, the Ngamos, has been asymmetrical, which is reflected in the fact that many Ngamos speak Bole but not vice versa, leading to a path for introduction of Bole words into Ngamo, but few Ngamo words into Bole.

It is harder to identify Bole loanwords in Ngamo than Ngizim words in Karekare because Bole and Ngamo are close linguistic relatives and it is thus difficult to distinguish inherited cognate items from loanwords. For example, are words like Ngamo (G/Y) **rùtā/rùta** ‘work’ (Bole **rùta**) or Ngamo (G/Y) **ngòldā/ngòldô**, ‘bend, twist’ (Bole **ngòldu**) loanwords or are they inherited cognate items that have descended with nearly identical forms into the modern languages?

In some cases, one Ngamo dialect has a word that is essentially identical to Bole where the other dialect has a word without a Bole cognate (at least in common use in the meaning in question), as in (6a). In such cases, the word that resembles the Bole counterpart is almost certainly a loanword. Another telltale sign that an Ngamo word is a Bole loanword is a geminate consonant, as in (6b). A characteristic feature of Bole is a very large number of words containing geminate consonants, whereas few if any native Ngamo words contain geminates. Most words that ultimately come from Arabic because of the influence of Islam probably have entered Ngamo through Bole, as in (6c). Finally, Ngamo uses a number of grammatical markers and particles otherwise found only in Bole among the Yobe languages and which are probably not inherited from a common ancestral language, as in (6d).

(6) Ngamo loanwords from Bole

	Ngamo (Gudi)	Ngamo (Yaya)	Bole	
a.	sòmà	sūdò	sòma	‘deaf person’
	wùyò	tònkò	wùyo	‘hole’
	zàl-kò	toḅ-kò	zalu	‘begin’
b.	dàkkà		dakka	‘cornstalk fence’
	kùnnâ	kùnnô	kùnnu	‘thank’
c.	Àlâmusùwà	Àlâmusùwà	Àlâmūsùwà	‘Thursday’ (and other days of the week)
	lājàbì		lājàbì	‘astonishment’
d.	đō	đō	đō	‘or, whether’
	dòngô	dòngo	dòngo	‘first; (not) yet’

3. Morphology¹³

3.1. Gender: feminine as default. Proto-Chadic inherited a three-way noun classification system from proto-Afroasiatic: *masculine* singular, *feminine* singular, and common gender *plural*. At least some languages in all the major subbranches of West Chadic retain this system. In Yobe State, gender remains a robust lexical feature of nouns in Western Bade and in Ngamo, as shown by the demonstrative agreement patterns in (7). Other gender/number sensitive morphemes in these languages are genitive linkers and personal pronouns.

(7) Grammatical gender agreement in Western Bade and Ngamo

	Bade (W)	Ngamo (G)	
masculine	gwàmā-mso	gâm wòye'e	'this ram'
feminine	tàmàku-mco	tèmshi wònse'è	'this ewe'
plural	tàmàkùnâ-mdo	tèmka màye'è	'these sheep'

Gender as an idiosyncratic property of individual lexical items is in various states of decay in other Yobe languages. Gashua Bade still retains gender agreement in its demonstrative system, genitive linkers, and pronouns, but aside from nouns with inherent natural gender (humans, some domestic animals), choice of agreement is shifting toward predictability on the basis of phonological form of the noun—essentially, nouns ending in **-i**, **-u**, **-a** take feminine agreement and others take masculine, though there is fluctuation, especially in vowel-final nouns (Schuh 1977). Bole differentiates gender/number agreement forms in demonstratives and pronouns, though not genitive markers. Most nouns other than those with inherent natural gender take masculine agreement, but nouns in certain semantic groups have specific genders, e.g. fruit-bearing trees are feminine but the fruits are masculine (Gimba, in preparation). Karekare demonstratives are not gender sensitive, but Karekare does distinguish gender in personal pronouns and in genitive linkers used in N+N genitives, e.g. **mizi ma Jilwaye** 'the husband of Jilwaye' vs. **men ta idihu** 'the wife of the king'. More investigation is needed to discover whether there are consistent patterns of gender agreement, but for many nouns agreement fluctuates. Ngizim has lost gender as a lexical category. There is only one set of demonstratives, one paradigm for genitives, and pronoun agreement is like that of English, with regular masculine/feminine agreement only for referents with inherent natural gender.

Despite this range of systems related to gender, one striking Yobe areal feature emerges: THE DEFAULT GENDER IS FEMININE. This claim is supported by the languages where gender remains a robust lexical category and, ironically, in languages that are losing or have lost this lexical property.

Evidence for feminine as the default gender in Western Bade and Ngamo, the languages with robust systems of lexical gender, comes from loanwords. As noted in

¹³ During the conference presentation related to this paper, Larry Hyman asked whether there were any phonological features that areally typify the Yobe languages. It is harder to identify clear examples in phonology than in lexicon, morphology, and syntax. Reorganization of syllable structure in Bade-Duwai, mentioned in §1 is one feature that distinguishes that area from the Potiskum area. Karekare, through the influence of Ngizim has neutralized distinctions between medial short high vowels. A feature shared by most Yobe languages is rightward tone spreading, but this is not restricted to Yobe languages.

section 2.2, the most significant source for loanwords in Yobe languages until fairly recent times has been Kanuri. Kanuri does not have grammatical gender. Hence, languages that do categorize nouns for gender must have strategies for assigning gender to nouns borrowed from Kanuri. Semantic properties play a key role, in particular when the noun is human and hence has inherent natural gender. For example, Western Bade **kàdùkùmān** (m) ‘messenger’ (Kanuri **kàdùnómà**) would normally refer to a role played by a male whereas **dùkəramón** (f) ‘pot maker’ (Kanuri **duwùrà̀m`[njèmá]**) refers specifically to women who make pots. In Ngamo (G) **mà`ì** (m) ‘king’ (Kanuri **mái**) refers to a position always occupied by males whereas **kilākì** (f) ‘prostitute’ would refer to a female (the latter is ultimately from English ‘clerk’ and may have come into Ngamo via Hausa, though it is also used in Kanuri). In Western Bade, all mass nouns take plural agreement (cf. **sàsâ-m̀do** ‘this meat’ with the plural noun in the table above), and as expected, loanwords with a mass referent fall into this category, e.g. **bə̀rbə̀rən** ‘dust’ (Kanuri **bə̀rbə̀r**). Sometimes gender has apparently been assigned by semantic association with another noun, e.g. **zènān** (m) ‘gourd ladle’ (Kanuri **jènyì**) may be masculine because of association with the native word **madakwān** (m) ‘gourd cup’.¹⁴

For most borrowed nouns, however, natural gender, semantic association, and/or phonological form do not determine assignment of lexical gender. This is true both for loanwords from Kanuri, which does not have grammatical gender, and from Hausa, which does have grammatical gender. As might be expected, Hausa gender does sometimes coincide with gender assigned by the borrowing language, but it is just as often overridden, e.g. Hausa **gōrò** (m) ‘kola nut’ borrowed as Western Bade **gōrón** and Ngamo (G) **gōrò**, which are feminine in the respective languages. Overriding Hausa feminine with masculine in the borrowing language does take place, e.g. Hausa **mārā** (f) ‘food scoop made of a calabash fragment’ borrowed as Western Bade **mārān** (m), but this is less common than overriding masculine with feminine. Counts of borrowed nouns according to gender assignment clearly show the skewing of gender assignment toward feminine. In Table 3, the Bade figures exclude mass nouns (see above) and nouns with paired masculine and feminine counterparts, such as **ā̀pə̀non** ‘Hausa man’, **ā̀pə̀nā̀kon** ‘Hausa woman’ (Kanuri **ā̀fùno** for either gender). The overall greater numbers in Bade reflect the fact that the currently available lexicon for Bade is about twice as big as that for Ngamo.

Table 3. Counts of gender assignment for loanwards

	Western Bade		Ngamo (G)	
	Kanuri	Hausa	Kanuri	Hausa
Masculine	58	28	15	13
Feminine	98	59	32	27

¹⁴ In providing gender for loanwords, Bala Dagona Wakili, the primary Western Bade participant in this project, would often say something like, “It has to be masculine (or feminine) because X is masculine (or feminine).” Unfortunately, I seem not to have cited any such comments in my notes and cannot recall specific cases.

A few typical examples of borrowed nouns that have been assigned feminine lexical gender show that there is no obvious correlation between form or meaning and gender.

(8) Some loanwords classified as feminine in Western Bade and Ngamo (G)

Kanuri	Bade (W)		Kanuri	Ngamo (G)	
àshîr	âsirən	‘secret’	kâshaâr	kâskâr	‘sword’
bəndəgə	bəndəgin	‘gun’	jînadə	jînādi	‘flintstone’
çiwà	rîpan	‘carrion’	sərgə	sîrkâ	‘poison’
Hausa			Hausa		
dàlîlî(m)	dàlîlîn	‘reason’	hankàlî (m)	hànkali	‘sense’
gōrò (m)	gōrón	‘kola nut’	gōrò(m)	gōrò	‘kola nut’
makařanta (f)	makarantan	‘school’	àyàbà (f)¹⁵	àyàbà	‘banana’

Evidence for the default nature of feminine gender in languages that have lost gender as an idiosyncratic feature of lexical items is more equivocal, but at the very least this evidence shows that the automatic default is not masculine. As languages lose a multi-parameter category such as gender, they must decide how to dispose of the marking system that they have inherited from the time when the category was active. In the case of Ngizim, we can see what decisions were made by comparing Ngizim and Gashua Bade, the Bade dialect that most closely resembles Ngizim. The demonstrative systems of Bade and Ngizim have three parameters comprising ‘near’ (= proximal), ‘far’ (= distal), and a third parameter, translatable as something like “that very one mentioned”. Comparing the forms in the table, it is evident that Ngizim, having lost lexical gender as an active category, has extended the original FEMININE forms to all nouns, including plurals. (We return to the fate of the original masculine forms in a later section.) It appears that as lexical gender began to shift to natural gender in Ngizim (as is now the case in pronoun agreement), nouns where gender was not an inherent feature were assigned what was felt to be the unmarked or default form—the feminine. Eventually, the erstwhile feminine became so overwhelmingly frequent that it was extended to nouns with referents of masculine natural gender and even plurals.

(9) Evidence from Gashua Bade that Ngizim has extended original feminine to all nouns

	Gashua Bade			Ngizim		
	Near	Far	Mentioned	Near	Far	Mentioned
Masculine ‘bull’	kwàm-āu	kwàm-âni	kwàm-ânau	kwàm-tku	kwàm-tiwú	kwàm-tənu
Feminine ‘cow’	tlà-tku	tlà-tiwú	tlà-tənáu	tlà-tku	tlà-tiwú	tlà-tənu
Plural ‘cattle’	ùkti-ândau	ùkti-ândiwú	ùkti-ândənáu	tlàđ’in-tku	tlàđ’in-tiwú	tlàđ’in-tənu

With pronoun possessors, Bade has a three-way system for marking genitives, one for masculine and plural possessed nouns, one for feminine possessed nouns, and a non-gender marked form used with objects of nominalized verbs, prepositions, and a handful

¹⁵ The word for ‘banana’ is borrowed into Western Bade as **àyàbān**, which is categorized as a mass noun.

of “inalienable” nouns, such as **ṅgwa** ‘household’ (both languages have a single non-gender sensitive system for marking for N+N genitives). Ngizim has only one method of marking pronominal genitives. The table below shows 2nd feminine singular and 3rd masculine singular possessive pronouns, whose morphology is representative of other pronouns in the system.¹⁶

(10) Extension of non-gender sensitive genitive to all nouns in Ngizim

Gashua Bade			Ngizim			
	‘son’	‘daughter’	VN ‘catching’	‘son’	‘daughter’	VN ‘catching’
‘your (f)...’	wun-n-əm	wunya-tk-əm	gəf-ā-gəm	wun-kəm	wuny-ā-kəm	gaf-ā-kəm
‘his...’	wul-li /wun-li/	wunya-tkə-li	gəf-ā-li	wùn-gərì	wunya-gərì	gafa-gərì

A comparison of these paradigms shows that the Ngizim genitive most closely resembles the non-gender marked Gashua Bade forms, exemplified with the verbal noun+object. The 2nd feminine singular pronoun is virtually identical in the two languages, modulo some minor phonological differences, and both languages insert a long **-ā-**, rather than a gender-sensitive linker, when the first noun ends in a vowel. The 3rd masculine singular form in Ngizim has a formative **-gə-**, which appears to be the common gender linker seen with nouns. Notably, Ngizim lacks either of the gender sensitive linkers **-n-** and **-tk-** seen in Gashua Bade. In short, in losing grammatical gender, Ngizim abandoned all erstwhile gender sensitive genitive linkers.

Karekare has moved in a somewhat different direction with respect to its genitive linkers and demonstratives. As noted above, Karekare has linkers **ma** and **ta** in N+N genitive constructions that agree with at least referents having masculine and feminine natural gender, respectively. This agreement pattern is inherited from proto-Bole-Tangale and comparative evidence shows that at one time it also functioned in constructions with pronoun possessors, as it does today in a number of Bole-Tangale languages—cf. Kirfi **kayala mi-shi** ‘your (f) ram’ vs. **wùcci shi-shi** ‘your (f) female goat’ (Schuh 1978b:35). Karekare, however, has only a single paradigm of linked possessive pronouns for masculine, feminine, and plural referents.¹⁷

¹⁶ See Schuh (1977) for a full description of the genitive systems of all the languages of the Bade-Ngizim group.

¹⁷ By a regular sound change, the sequence **ti-** becomes a nasally released [tⁿ] before **nV**. This is represented as **hn-** in the first person possessives. This change is a productive phonological rule of Karekare—cf. **tì-kau** ‘he ate’ vs. /tinà/ → **hn-nà** ‘eating’. I describe this phenomenon in “Shooting through the nose in Karekare”, available for download at the website mentioned in footnote 1. Probably as part of the same phenomenon, the ***ti-** of the possessive pronoun has disappeared when the consonant of the pronoun is a coronal—cf. **kà tiko** ‘your (m) head’, **kà ci** ‘your (f) head’, **kà to** ‘her head’, **kà tìmu** ‘our head’, **kà su** ‘their head’.

(11) Extension of feminine genitive pronoun forms to all nouns in Karekare

	‘husband’	‘wife’	‘wives’
1 sg. possessor	mìzì h̀̀no < *t̀̀no	mèn h̀̀no < *t̀̀no	mendè h̀̀no < *t̀̀no
2 m. sg. possessor		mèn t̀̀ko	mendè t̀̀ko
2 f. sg. possessor	mìzì ci < *t̀̀ci		
but cf. nominal genitives			
	mizi ma Jilwaye ‘the husband of Jilwaye’	men ta idihu ‘the wife of the king’	

On the other hand, independent genitive pronouns use the original MASCULINE forms, regardless of referent, viz. **m̀̀no** ‘mine’, **m̀̀ko** ‘yours (m. possessor)’, **m̀̀ci** ‘yours (f. possessor), etc.

Formatives ***m-** masculine and ***t-** feminine also served as bases for demonstratives in proto-Bole-Tangle—cf. Kanakuru **lowòì me** ‘that boy’ vs. **gunyòì she** ‘that girl’ (Newman 1974:87). Karekare uses one gender/number neutral base **-m-**, undoubtedly from the original masculine, though in Karekare demonstratives have taken on a different appearance from those of Kanakuru, which probably looks more like the original:¹⁸

(12) Karekare demonstratives

Near	Far		Forms with gender marked genitives
k̀̀r-àyam	k̀̀rò àm	‘donkey’	cf. k̀̀rò mà r̀̀ya ‘donkey of the bush’
kwàr-àyam	kwàrà àm	‘house’	cf. kwàr ta ba’ato ‘house of her father’
kwarcin-àyam	kwarcinò àm	‘houses’	

To summarize, the strongest claim would be that the default gender for Yobe languages is FEMININE, which runs against the vastly more common tendency of languages with grammatical gender to take masculine as default. Evidence from languages that have lost grammatical gender as an active idiosyncratic lexical parameter, shows that an absolute claim for feminine being default is probably too strong, but these languages have generalized originally feminine morphology in ways that show that masculine is NOT the default.

By including discussion of gender in the present paper, I have implicitly suggested that feminine-as-default is a Yobe areal feature, and indeed I believe this to be the case. However, it may be an areal feature by accident. To understand what I mean by this, consider the case of Hausa. Hausa cannot provide internal evidence such as that from assignment of gender in loanwords in Western Bade and Ngamo, because Hausa assigns gender almost entirely on the basis of either natural gender (**diřebà** (m) ‘driver’, **kilàkì** (f) ‘prostitute’) or phonological form: nouns ending in **-a** are feminine (**mòt̀̀à** ‘car’, **sùfà̀nà** ‘wrench’ < British ‘spanner’), others are masculine (**inj̀̀ì** ‘engine’, **famf̀̀ò** ‘pump’, **sàl̀̀àk** ‘salad’). A robust system of grammatical gender in Hausa is giving way to a default masculine in some parts of the Hausa-speaking area, most notably in the south

¹⁸ There is an additional gender/number neutral demonstrative formative in Karekare, **ɓ-**, that can be used alone as **ɓi** ‘the one in question’ (**kwàrà ɓi** ‘the house in question’) or combined with **am**, as in **ɓàm/amb̀̀i** ‘that one’. This seems to add a meaning like that called “mentioned” in the Bade/Ngizim table (9).

and far east. Particularly in the southern area, this may not be so much an internal evolution of a language losing gender and reassigning pre-existing gender marking, as in Ngizim or Karekare, but rather a substratum effect of Hausa being adopted by people who originally spoke languages that did not have grammatical gender in the first place.

In short, in order to really know whether feminine-as-default is a Yobe areal feature or a deeper Chadic feature, we need to study the functions of gender in languages that retain it and the patterns of redeployment of gender-marked forms in languages that are losing or have lost it.

3.2. Ideophonic adjectives. The four southern Yobe languages—Karekare, Bole, Ngamo, and Ngizim—all have a large class of words that I will refer to as “ideophonic adjectives”.¹⁹ Ideophonic adjectives share a cluster of semantic, phonological, and syntactic properties across the four languages, whereas languages outside this area do not have a comparable category that combines the same properties as far as I know.

Ideophonic adjectives are adjective-like in that they describe nominal referents, but like ideophones, the descriptions are idiosyncratic and have to be associated with a particular referent or referent type to have a meaning. This is in contrast to regular adjectives like ‘red’, ‘long’, ‘new’, ‘hot’, etc., which could be descriptive of any referent where the property would be applicable.

The Potiskum area Yobe languages share a number of canonical formal shapes that typify ideophonic adjectives but are virtually absent in other word categories. The most common are listed in (13) with an example from each of the four Yobe languages.

(13) Canonical forms of ideophonic adjectives in the Yobe languages

(a) CVC²: Bole **bilbil** ‘tiny’, Karekare **wàlwàl** ‘neat-looking’, Ngamo (Y) **dobdob** ‘short’, Ngizim **sadsad** ‘emaciated’

(b) CVσ² (σ = a CV or CVC syllable): Bole **njalulū** ‘emaciated’, **kàtamtàm** ‘waiting in vain’, Karekare **yididi** ‘finely granulated’, Ngamo (G) **sèlèblèb** ‘tasteless’, Ngizim **zòlòlò** ‘long and thin (like a crane’s neck)’

(c) XCvv (X = one or two syllables, vv = long vowel or diphthong): Bole **dìgìzà** ‘big and broad’, Karekare **kùdlùbù** ‘big and fat of stomach’, Ngamo (Y) **tèshidè** ‘big and wide of head’, Ngizim **cuṛungudlu** ‘pot-bellied’

(d) CVCCVC: Bole **yurđum** ‘protruding forehead’, Karekare **linkir** ‘tiny’, Ngamo (G) **saktar** ‘lightweight without substance’, Ngizim **nyàktlām** ‘rather hard to the touch’

(e) CVCCVCVC: Bole **sippidim** ‘heavy’, Karekare **jàngwàzàm** ‘tall and skinny but energetic’, Ngamo (G) **rèmbizèm** ‘big and fat of stomach’, Ngizim **bàkwsàkwàř** ‘dry and hard to swallow’.

¹⁹ Newman (2000) may be the first person to coin the term “ideophonic adjective” with reference to similar categories of words. Though I read Newman’s book cover to cover, I must admit that I had forgotten that he had used this term when I applied it in Yobe languages two or three years later. Newman (2000:26) uses the term to describe a particular class of reduplicated Hausa adjectives, e.g. **kwalā-kwàlà** ‘bulging (said of eyes)’, though he seems to broaden the category on pages 251-252.

Bole is the only language who ideophonic adjectives I have systematically studied over a large number of examples. Bole ideophonic adjective impose the formal features in (14) on the canonical patterns in (13). Available data from the other languages, for the most part, show the same features, though more study is required.

(14) Formal features cross-cutting all categories of ideophonic adjectives in Bole

- All ideophonic adjectives are monotonal.
- If the final segment of an ideophonic adjective is a vowel, it is always long.
- For category (e), a common pattern is CVNCVCN. In this pattern, the medial NC sequence and the final N are always at the same point of articulation: (labial) **zùmbùrùm** ‘shaped like a corncob’, (coronal) **mìj’ýilin** ‘hard, tiny, and slippery’, (velar) **zèngilèn** ‘tall and erect’.

Bole is unlike the other languages in one respect: in a very large number—perhaps the majority—of ideophonic adjectives in categories (d-e), the CC medial sequence is a geminate, e.g. **ḏekkem** ‘excessively short (clothes)’, **pòllòr** ‘faded’, **dekkidék** ‘heavy’, **sìppidìm** ‘heavy’. Of those in category (e), moreover, by far the largest number have a geminate **-kk-** and a final **-k**. Ngamo also has category (e) ideophonic adjectives of this type, e.g. Ngamo (G) **dekkidék** ‘hard surface’. We can be quite sure that these are borrowed from Bole, or at least modeled on Bole (cf. the phonologically identical Bole word for ‘heavy’ above), given the fact that Ngamo has a history of lexical borrowing from Bole and does not have geminate consonants in any native roots.

Ideophonic adjectives are particularly common in the following semantic areas, illustrated with a few examples from the four languages:

Personal appearance or appearance of some part of the body: Bole **yùggùdùk** ‘protruding forehead’, Ngizim **gwàzhgwàm** ‘protruding forehead’, Ngamo (G) **zèmbilèm** ‘protruding occiput’, Karekare **cànkàlài** ‘protruding teeth’, Karekare **ràgàḏàù** ‘ears sticking out’, Ngamo (G) **bàngràṅ** ‘ears sticking up’, Ngizim **jəřùl** ‘wide-eyed’, Ngamo (G) **ruḏshùm** ‘wide-eyed’, Bole **mò’y’ýilòtò** ‘bulging eyes’, Ngizim **càcəkəř** ‘unplaited hair’, Bole **jaḏurbur** ‘disheveled (hair or feathers)’, Ngizim **yàbzàwài** ‘disheveled’, Bole **dìngìnài** ‘large buttocks’, Karekare **màrdàl** ‘large penis’, Bole **pùmpùrùm** ‘big and stooped over’, Bole **bàḏiwàr** ‘naked’, Karekare **ḡumburum** ‘naked’, Ngizim **zèmbə̀lə̀m** ‘naked’

Size and/or shape: Bole **mùkkùtùk**, Karekare **dlàbàḏcà**, Ngamo (Y) **lekkirek**, Ngizim **bə̀ḏàntàm** all meaning ‘huge’, Bole **pītirī**, Karekare **yìḏigài**, Ngizim **jilili** all meaning ‘tiny’, Bole **zùmpùtùm** ‘long’, Ngizim **zàràrà** ‘long’, Bole **zùntùrùn** ‘long and protruding’, Ngizim **tə̀mbə̀lə̀m** ‘protruding’, Bole **zengileṅ** ‘long and thin’, Karekare **ḏiridiri** ‘long and thin’, Ngizim **zàlài** ‘long and thin’, Bole **pakkitak** ‘small and flat’, Ngizim **lə̀nkəř** ‘small and flat’, Ngizim **də̀mbə̀dləm** ‘ovular’, Bole **gùngùrùṅ** ‘round and huge’, Bole **zùmbùlùm** ‘round and long’, Bole **yurḏum** ‘round and protruding’, Bole **gòlìlì** ‘round and small’, Bole **tunguluṅ** ‘shallow’, Bole **sòrdàlè** ‘sloping’, Ngizim **zə̀gə̀rə̀p** ‘sloping’, Karekare **dùrùrù** ‘spacious’

Qualities applied to the sense of touch: Ngizim **sùktàř** ‘light-weight’, Ngamo (G) **saktar** ‘light-weight’, Bole **pokkitok** ‘lacking mass or weight’, Ngizim **jàgwzam** ‘lacking mass or weight’, Karekare **kàrcànàì** ‘rough surfaced’, Bole **sàldfìnàì** ‘slick’, Ngamo (Y) **sùldàđu** ‘slick’, Bole **tèllèkì** ‘slimy’, Ngamo (G) **nzòklàlù** ‘slimy’, Ngizim **kùlàb** ‘slimy’, Bole **sulsul** ‘smooth’, Ngizim **səloi** ‘smooth’, Ngizim **dùřkùs** ‘thick (liquid)’, Bole **shòròrò** ‘watery’, Ngizim **càđàm-càđàm** ‘watery’

Qualities having to do with taste and/or edibility: Bole **shòmshòm** ‘sour’, Karekare **fidok** ‘sour’, Ngamo (G) **shòmshòm** ‘sour’, Ngizim **còmçòm** ‘sour’, Bole **gàlàmlàm** ‘tasteless’, Ngamo (G) **sèlèblèb** ‘tasteless’, Bole **salamlam** ‘lacking salt’, Karekare **gùlam** ‘brackish taste’, Ngizim **ɓàkwəsàkwàř** ‘dry and hard to swallow’, Ngizim **mbəřàđ-mbəřàđ** ‘not thoroughly cooked’, Ngizim **zənàm-zənàm** ‘nutty taste’, Karekare **ribis-ribis** ‘soft and edible’

Other semantic realms encountered but less well-represented in current data are personal demeanor, such as ‘sullen’ or ‘pensive’, and odor.

Ideophonic adjectives have syntactic properties not shared by any other single category of words. The archetypal use is as a predication, either directly following the referent, following a copulative verb, or following a verb that indicates transition into the state indicated by the ideophonic adjective. In the latter case, there is nothing overt to indicate that the ideophonic adjective is not an ideophone acting as a manner adverb describing the effect of the verb. For example, in the third Bole example in (15), **kàkkidàk** could refer to the extent of the drying rather than an attribute of the fruit. I prefer the adjectival interpretation, which unifies it with the other uses.

(15) Predicate complements

Bole:	kulà emē sokkitok sùbà kòrè ijìnì pòllòr mbormi pò”ujìnì kàkkidàk	‘this calabash is lightweight’ ‘the indigo gown has become faded’ ‘the ebony fruit has dried up very hard’
Karekare:	utu ma Kariya cired ’yàsūsikà likid	‘Kariya’s teeth are gapped’ ‘she ground (the corn) fine-textured’
Ngamo (G):	lùma wòNSE selèblèb	‘that sauce is tasteless’
Ngizim:	gàmbàgàdlam kutəřgu pid’pid bī tku dlànngara còmçòm kwařa mətəngəri i pata kafa tlàtlarəngəri ɓembəřem	‘the giant rat, its tail is long and pointed’ ‘this thing has become sour’ ‘the donkey died in the bush and it has swelled up huge and round’

Regular adjectives used as attributive modifiers of nouns follow the noun in Yobe languages, sometimes with a linking element, e.g. Bole **òshîn bù’ùm** ‘black goat’ (“goat-n black”), Ngizim **māyim gāgwvən** ‘short boy’ (“boy short”). Ideophonic adjectives, on the other hand, precede the noun and the overall construction is that of an N+N genitive construction, shown by tonal alternations characteristic of genitives (see the first examples in (16) for Bole and Ngamo) and/or genitive linkers (see **ma** in the first

Karekare example and **gə** in the first Ngizim example).²⁰ Another prenominal attributive construction that all the Potiskum area languages share is IA+“with”+Body Part, where the ideophonic adjective (IA) refers to a perceived physical abnormality.²¹ This construction always seems to be abusive. The data in (16) show one example of the “N+N” type construction for each language and one example of the “IA with BP” construction.

(16) Prenominal attributives with N+N-like properties or N+PP complement

Bole:	jaburbur sowwò < /sòwwò/ zùntùrùn gà bò	‘disheveled hair’ ‘poked out in the mouth’
Karekare:	fèlàzùm ma ido kùdlùbù kà àkau	‘rolled up eyes’ ‘big and fat in the stomach’
Ngamo (G):	rèmbizèm hawò < /hàwò/ zèmbilèm kì kà	‘big fat stomach’ ‘protruding in the occiput’
Ngizim:	pařak gə đā jəřul na da ka mi kalbe	‘empty town’ ‘gawking in the eyes like a hungry person’

The predicative and attributive uses illustrated in (15-16) have motivated the term “adjective” as a label for these words. I consider them “ideophonic” for two reasons: first is their meanings, which are highly specific and carry an affect in addition to being purely descriptive; second is the fact that they can be used adverbially to add specificity or emphasis to a more general predication. Above, I suggested that when used with verbs indicating a change of state, I prefer to interpret the ideophonic adjective as being predicated of a nominal referent rather than the manner in which the action took place. However, ideophonic adjectives, under appropriate semantic conditions, can modify adjectives, as in the following examples (I have no examples of this type for Ngamo). In each case the ideophonic adjective adds meaning that fits with the basic meaning of the adjective, such as strength associated with big size, or it emphasizes the quality in question.

²⁰ The overall picture is a bit more complicated. Bole can use attributive ideophonic adjectives either prenominally (**wersel ido** “bright-eyed eye”) or postnominally (**idôn wersel** “eye-n bright-eyed”). Although I did not explore syntactic alternatives with attributive ideophonic adjectives in the other languages, dozens of examples provided in the process of collecting lexical data in those languages as well as examples from texts do not reveal any cases of postnominal attributive uses of ideophonic adjectives. As for the syntax of regular adjectives, in Schuh (1972:132ff.), I describe Ngizim as allowing regular adjectives in attributive function to be either prenominal or postnominal, but postnominal is certainly the most common position. Bole never allows regular attributive adjectives in prenominal position. I have not studied this issue for Ngamo or Karekare, though postnominal is the normal position.

²¹ This construction is reminiscent of Hausa constructions using “with” in conjunction with ideophones described by Newman (2000:251-252), as in **mahàukàcī zīgìdīř dà shī** ‘a stark naked madman’ (“madman naked with him”). The Yobe and Hausa constructions differ in a couple of ways, however. First, the Hausa ideophone is postnominal and the “with” phrase contains a pronoun referring to the described referent. Second, the ideophone in Hausa usually is viewed not as a descriptor of a relevant body part but as an attribute of the *possessor* of the physical characteristic, though Newman does give an example **hařòrankà gatsò-gàtsò dà sū** ‘teeth disproportionate as yours’ (“teeth-your crooked with them”).

(17) Ideophone-like qualifiers of attributives

Bole:	Madù gàraṅ pàrtàtâ kùḍa sīrì gùngùrùṅ	‘Madu is tall and well-built’ (Madu [is] <i>partata</i> tall) ‘a great big round pot’ (pot [that is] <i>gungurung</i> big)
Karekare:	kwam yi maiwa dlàbàḍcâ	‘the cow is monstrous’ (cow-the [is] <i>dlabadca</i> big)
Ngizim:	jàunàk mārəm bəḍàntàm gangam jilili ḍagài	‘a gigantic elephant’ (elephant [that is] <i>bidantam</i> big) ‘a teensy-weensy one’ (<i>jilili</i> small a certain one—see above for the use of <i>ḍagài</i> ‘a certain one’ in Ngizim)

The claim in this section is that the development of a word category that has a particular suite of formal, semantic, and syntactic characteristics, shared by the four languages spoken in the Postikum area of Yobe State, is a case of areal diffusion rather than inheritance from a shared ancestor. To support this claim, it is instructive to look at Bade, which is genetically close to Ngizim but is geographically separate from the Potiskum area languages. Bade²² does have a large group of words that are semantically akin to ideophonic adjectives, e.g. **ngwèllà** ‘peering eyes’, **ḍyirimma** ‘big and fat’, **gə̀rə̀ṅṅà** ‘lined up’, **catlcatlâ = cattlâ** ‘raw, uncooked’, **niyakkà = niyakniyakkà** ‘completely full’. These words in Bade have final *-cca*, where “cc” = geminate consonant, reduplication of the root, or a combination of reduplication and gemination. Aside from the fact that these are formally different from any of the canonical patterns of the ideophonic adjectives of the Potiskuma area languages, there is another important difference. Although ideophonic adjectives of the Potiskum area languages fall into a small set of canonical patterns, they are all lexical roots.²³ The Bade patterns, on the other hand, are formed on the basis of a productive derivational pattern that can apply to any descriptive word. If the base word ends in a consonant C_x, the consonant is geminated to produce a word ending in C_xC_xa. If the base word ends in a vowel, the derived form adds *-yya* (→ *-wwa* after a round vowel).

Adjective: **ḍàvayyà** < **ḍàva** ‘good, beautiful’; **kùliyyà** < **kùli** ‘pleasant’; **sə̀riyuwwà** < **sə̀riyu** ‘silent, silence’ (Hausa loanword)

Quantifier: **gàwayyà** < **gàwa** ‘much, many’

Manner adverb: **kalla** < **kal** ‘exactly, correctly’ (the base is a Kanuri loanword)

Ideophone: **zə̀mma** < **zə̀m** ‘hot to the touch’

²² All examples here are from the Western dialect. Other dialects use the same morphology to form words of comparable meaning. I do not know how Duwai deals with these concepts.

²³ Two classes involve reduplication, but words in these classes are not derived from existing forms that lack reduplication.

In short, the patterns of phonaesthetic words in Bade is quite different from that of the Potiskum area languages, including Ngizim, even though Ngizim is genetically close to Bade. It may well be that the typological class of ideophonic adjectives can be reconstructed for a deeper level (cf. the description of comparable words in Hausa in Newman (2000) mentioned in footnote 19), but the particular set of phonological templates and uses described here seem to be unique to the Potiskum area languages of Yobe State.

3.3. The Totality Extension. TO BE WRITTEN: distribution and meaning of the Totality Extension—presence in all the Potiskum area languages, absence in Bade and in other Bole-Tangale languages, at least functionally like the Potiskum area languages; preference for use in “neutral” completive sentences, but less prevalent in other TAMs; exclusion in negative predicates and WH questions (suggesting that it is auxiliary focus); Totality and ICP

4. Syntax

4.1. Marking of conditional clauses. The Potiskum area Yobe languages mark conditional clauses in the following ways (... = the position of the clausal proposition).

(18) Marking of “if/when” conditional clauses in Potiskum area languages

Bole: **bà... (ye)**
 Ngamo (G): **na... (-i)**
 Karekare: **...ya/ye**
 Ngizim: **...-n/nən**

That is, Bole and Ngamo have clause initial markers translatable as ‘if/when’ and optional clause final markers. Karekare and Ngizim have only clause final markers. The examples in (19) illustrate the various options. The first example in each case is a proverb meaning, “If a person says he will swallow an axe, hold the handle for him.” The first Karekare example happens to have initial **in** ‘if’, borrowed from Hausa—ultimately from Arabic. This is a recent innovation. In several dozen examples of conditional clauses in current data, only a couple have initial **in**.

(19) Conditional clauses in Potiskum area languages

Bole:

Bà **memu na a dola jonto, ’yuw-ni koduwi-ni.**
 if person quote aux swallow(fut) axe hold-for him handle-its

Bà **ka ngora sōtà ye, ngòrī gà bò pàtà zònge.**
 if you tie(fut) lie “if” tie on end tail hyena
 ‘If you are going to tie up a lie, tie on the end of a hyena’s tail.’ (because the hyena will run off to the bush with it)

Ngamo (G):

Ngoi **na** **an-ko** **ta** **a** **go-nni** **ɗala** **dala-i** **ngap-ni** **hata-n-ni**.
 person if say-to you quote aux going-he swallow axe-"if" hold-for him handle-of-it

Na **ko** **gotko** **opa** **wuyo-k** **nauta**, **ko** **opi** **duklu**.
 if you going-to dig hole-of evil you dig(sjn) shallow
 'If you are going to dig a hole of evil intent, dig it shallow.'

Karekare:

In **nga** **da** **sa** **ɗala** **dayaku** **ye**, **cau-ni** **gudi**.
 if person quote he-will swallow axe "if" hold-for him handle

Amu **taɓka** **ya**, **eko** **kuma** **bai**.
 water spill(cpl) "if" do(cpl) collecting not
 'If water spills, it can't be collected back together.'

Ngizim:

Nən **ma** **a** **ntana** **gawa-n**, **a-gaf-ici** **gəji-u**.
 person quote aux swallow(incpl) axe-"if" hold(imper)-for him handle-the

Ka **zəɗa** **vək** **kəmangaɾ** **nən**, **a-zəɗi** **gwavgun**.
 you dig(incpl) hole evil "if" dig(imper) shallow
 'If you are going to dig a hole of evil intent, dig it shallow.'

The conditional clauses in (19) exemplify what I call *imperfective* discourse in Schuh (1998:165), i.e. discourse that refers either to events that have not yet taken place or that apply generically. Conditional clauses in imperfective discourse in Yobe languages, and Chadic languages in general, can be translated as English 'if' or 'when' depending on the certainty of the event's taking place. There is no formal difference corresponding to the English translations.

'When' clauses also appear in *perfective discourse*, i.e. discourse which relates discrete completed events, as in a historical text, a story, or a report. These clauses use the markers in (20), illustrated in (21).

(20) Marking of "when" clauses in perfective discourse in Potiskum area languages

Bole: ...(ye)

Ngamo (G): No external marking of 'when' clauses in perfective discourse..

Karekare: ...(ma)

Ngizim: ...(tənu/ngum)

(21) “When” clauses in perfective discourse

Bole

Kòḅam m̀àl̀a [ye], ita bòli adà à g̀à m̀òcci.

head to(cpl) bush “when” she find(sjn) dog at inside locust bean

‘When she headed to the bush, she found the dog up in a locust bean tree.’

S̀unakkò, d̀àshi s̀àtò g̀òlle.

sleep(cpl) well morning dawn(sjn)

‘When she had slept, well the morning came (dawned).’

Ngamo (G)

Turum ha’ako, sai a-goptu bo gaba sot!

lion eat(cpl) then beat(sjn-vent) cough sot

‘When the lion had eaten (the medicine), then he emitted a cough *sot*!’

Karekare

Fati ngataka min tan wad̀a [ma], sai rasu a benu tid̄su.

sun fall(cpl) people eat(cpl) food “when” then enter(sjn) in house lie down(sjn)

‘When the sun had gone and and the people had eaten, then they entered the house and lay down.’

Cagadlau na kuti, sai mald̄ise, sai jojo.

lion see(cpl) thus then turn(sjn) just running

‘When the lion saw that, he turned around and just ran off.’

Ngizim

Da tlanu [t̄anu], ja da nai.

town dawn(cpl) “when” dog aux come(sjn)

‘When the area dawned, the dog came.’

Jagadladlin k̄ama [ngum], da rakai ja.

elephants hear(cpl) “when” aux chase(sjn) dog

‘When the elephants heard that, they chased after the dog.’

Da tlanu, nda zaḡəmna s̄ama-u.

town dawn(cpl) people pour(sjn-tot) beer-the

‘When the dawn came, they poured out the beer.’

That is, ‘when’ clauses in perfective discourse either have no overt marking at all or have a clause final marker. The principal marking of clausal relations is in the verb aspect choice. Sequential clauses in all these languages use the subjunctive (sjn) in both perfective and imperfective discourse. The completive (cpl) conveys posteriority. Note in the examples in (21), the ‘when’ clauses all have a completive verb whereas the the “main” clauses have a subjunctive. The effect of the completive is to take a step back in the sequence, often repeating the immediately preceding action, while the subjunctive in the main clause is the next event in the story sequence. A translation closer to the Yobe

structure would thus be (illustrating with the first Bole example), “She had headed to the bush (and) she found the dog up in a locust bean tree,” where the pluperfect (“when”) clause sets up a context for the next event in the sequence in the same way that a conditional clause in imperfective discourse sets up a context for the consequent clause.

Summarizing the situation for “conditional” clauses in perfective and imperfective discourse, all the Yobe languages utilize at least a clause final marker (with the apparent exception of Ngamo in perfective discourse ‘when’ clauses, where sequence of tenses is enough),²⁴ some require a clause initial marker in ‘if/when’ clauses in imperfective discourse, and none use a clause initial marker in ‘when’ sentences in perfective discourse (again, with the exception of Ngamo, perhaps dialectally—see footnote).

Other types of subordinate clauses in these languages all use clause-initial conjunctions, e.g. ‘before’ and ‘after’ clauses, ‘purpose’ and ‘reason’ clauses, and relative clauses. One thus wonders what the source of the POST-clausal markers in conditional clauses is. The answer is that all the post-clausal markers come from definite determiners, some of which are still in use in the respective languages, some of which are no longer used as definite determiners, but which comparative evidence, even at a shallow level, reveals the source to be definite determiners.

(22) Definite determiners as the source of clause final conditional markers

	Clause type	Clause marking	Determiner source
Bole	‘if/when’ ‘when’	bà...(ye) ...(ye)	Definite article: tèmshi yê ‘the sheep’ (same)
Ngamo (G)	‘if/when’ ‘when’	na...(-i) (no marking)	Definite article: tèmshis’è ‘the sheep’ (cf. -i in Yaya tèmshì’i ‘the sheep’)
Karekare	‘if/when’ ‘when’	...ye/ya ...(ma)	Definite article: lo-yi ‘the meat’ Demonstrative: kwàrà ’ám ‘that house’ (cf. Kanakuru gamī mè ‘this ram’)
Ngizim	‘if/when’ ‘when’	...-n/nən ...(tənu/ngum)	< Masculine proximal demonstrative: cf. Bade (G): kwàm-âni ‘that bull’ “Known” demonstrative: tlà tənu ‘that cow’ Cf. Definite article: sônò-gu ‘the shoe’

The Yobe languages have grammatically instantiated a semantic connection discussed in Schlenker (2004) between definite descriptions and conditionals. Schlenker says (p. 448), “*If* [and *when* as a marker of conditionals—RGS] is simply the form taken by *the* when it applies to a description of worlds.” Schlenker’s paper provides a formal semantic comparison of definite descriptions and conditionals that goes beyond the scope of the present discussion. Suffice it to say that an expression marked by a definite article (or demonstrative) refers to an *entity* that is most salient to the domain of discourse

²⁴ This is the case in several dozen examples drawn from folktale texts in the Gudi dialect of Ngamo collected as part of the current project. The Yaya dialect consistently uses a clause initial marker **ido**, e.g. Ngamo (Y) **Ido Ba Zenge nduno’o, nzuba sai fani-ni**. ‘When Brother Hyena came(pf), fear then overcame-him(sjn).’ Elicited data that I collected in the mid-1970’s, and which I believe was from the Gudi dialect (I knew nothing about Ngamo dialect distinctions at the time), also shows clause initial **ido**, e.g. **ido ndano, yak nzi nam ula-su** ‘when (they) came(pf), then they collected their-goods’.

whereas a conditional clause refers to a *world* that is most salient to the domain of the consequent clause or, in perfective discourse, to the domain of the next event in the narrative.

The source of conditional clause marking in definite determiners also explains another fact about conditional marking in these languages, viz. that fact that the clause final markers are not obligatorily present (with the exception of Karekare and Ngizim ‘if/when’ clauses). In Yobe languages, and Chadic languages in general, determiners are never required by grammatical rules. It is a speaker’s choice to overtly mark a noun as “known” or “new”. The grammatical optionality is reflected in conditional clause marking. Karekare and Ngizim do require clause final markers in ‘if/when’ clauses. This seems to be a case of grammaticalization, probably as a way to assure that imperfective and perfective conditionals be kept separate. Comparative evidence from languages like Kanakuru and Tangale suggests that at least the Bole-Tangale group of languages originally used a clause initial conjunction meaning ‘if/when’, as is still the case in Bole and Ngamo. Loss of clause initial marking in such clauses has either been facilitated or has been compensated for by requiring clause final marking.

4.2. WH question formation and the marking of questioned subjects. A characteristic feature of all the Yobe languages is the following positioning of WH question words:

(23) Word order in questions in Yobe languages

Questioned non-subjects: in situ

Questioned subjects: post-VP

In (24) are two questions for each language, the first with a questioned object, the second with a questioned subject. “Neutral” word order for all Yobe languages is rigid SVO. Like direct objects, other questioned postverbal constituents such as indirect objects or instrumentals occupy the position they would take in statements. Focused constituents, such as constituents that answer WH question words, have the same positioning and additional morphological marking, if any, as the corresponding WH words.

(24) Questioned objects and questioned subjects in Potiskum area languages

Bole

Sauna gojjū le?

Sauna buy(cpl) what

‘What did Sauna buy?’

Gojjitu sōto in Sauna ye lo?

sell(cpl) bean cake to Sauna Q-sbj who

‘Who sold bean cakes to Sauna?’

Ngamo (G)

Sauna kaja miya?

Sauna buy(cpl) what

‘What did Sauna buy?’

Bo’ota soto ki Sauna i lo?

sell(cpl) bean cake to Sauna-Q-sbj who

‘Who sold bean cakes to Sauna?’

Karekare

Na 'yu miya?

I do(cpl) what

'What have I done?'

Tukà wàḍa-yì nà lâ?

eat(cpl) food-the Q-sbj who

'Who ate the food?'

Ngizim

Sauna mase tam?

Sauna buy(cpl) what

'What did Sauna buy?'

Dəbḍə are i Sauna-n tai?

sell(cpl) bean cakes to Sauna-Q-sbj who

'Who sold bean cakes to Sauna?'

This syntactic pattern, with in situ questioned non-subjects but post-VP questioned subjects, is not unique to the Yobe languages. It extends along the entire eastern edge of the West Chadic speaking region, from Bade and Duwai in the north to Tangale and Kanakuru in the south. It does not extend to the west. Within Yobe State, the language to the immediate west of the Yobe languages is Hausa, which fronts all WH question words. Further south, the Chadic languages west of “post-VP subject” languages, such as Kirfi and Galambu of the Bole-Tangale group (Schuh 1978) and Guruntum of the South Bauchi group (Haruna 2003), have in situ as the normal order for all WH questions, i.e. questioned subjects are sentence initial.

Although the word order pattern illustrated above is not unique to the languages of Yobe State, there is a feature that is unique to the Potikum area languages, namely morphological markers (boxed in the examples) of postverbal questioned subjects. Kanakuru (Newman 1974) and Tangale (Jungrathmayr 2002), for example, have postverbal questioned subjects but no marking other than position, e.g. Tangale **poduk sòbòk-no nòḡ?** ‘who has taken my slaves out?’, lit. “removed slaves-my who” (Jungrathmayr 2002:14).

The resemblance of the post-VP subject makers to the markers of conditional clauses discussed in §4.1 is immediately obvious. Only Karekare departs from the pattern. Assuming that conditional markers and post-VP subject markers all have their source in definite determiners, the semantic motivation for using these markers with questioned and focused subjects emerges. The post-VP subject marker is actually in constituency with the clausal material that precedes it, and that material refers to a *presupposed proposition* that is relevant to the variable expressed by the WH word or to the value assigned in place of the variable, i.e. the referent that answers the WH question or a subject that takes contrastive focus.

The source of the Karekare post-VP subject marker **na** is not clear at the moment. A definite determiner of the form “**n**” is widespread in West Chadic, but not in the Bole-Tangale languages. It is possible that the Karekare **na** derives from **ma** (see the data on ‘when’ clauses above) or, alternatively, its may be borrowed from the formative **-n/nən** of Ngizim, which has heavily influenced Karekare in other ways.

If this hypothesis on post-VP subject marking is correct, one wonders why a determiner-derived marker is not used with other WH words. In Bole, at least, this is a possible option.

(25) Bole marking of questioned object

Bamoi kappu (ye) le nzono? ‘what did Bamoi plant yesterday?’
 Bamoi plant(cpl) Q-marker what yesterday

A full account of the distribution of **ye** in Bole questions and focus constructions is complex (French 2004), but it appears to be consistent with the hypothesis of the function of definite determiner-derived clause-level markers. Among the Yobe languages, Ngizim is the only other language for which I have extensive syntactic data, and Ngizim NEVER extends the use of its **-n/nən** marker to constituents other than subjects. Textual data from Karekare and Ngamo suggests that the same is true for them. The only explanation I have for this distribution at the moment is that Bole reflects a stage of development where its marker **ye** still actively functions semantically as described here, whereas in the other languages, the post-VP subject marker has become grammaticalized as a marker of a “displaced” subject.

4.3. Negative marking and the “Scope Left” principle. All the Yobe languages mark clausal negation with a single clause final negative marker.

(26) Clausal negation by a single sentence final negative marker in Yobe languages

Karekare: **Càfû sàwā bai.** ‘She did not thresh corn.’
 Bole: **Sauna tubbū mōta ye sa.**²⁵ ‘Sauna did not push the car.’
 Ngamo: **Sauna tuba motas bu.** ‘Sauna did not push the car.’
 Ngizim: **Sauna jəmbələ mətka**u** bai.** ‘Sauna did not push the car.’
 Bade (Western): **Ac**i** uktāta zəmən-əm.** ‘He did not take grass.’

This method of marking negation is, itself, a Yobe areal feature. The most common method of marking negation in West Chadic is paired markers that bracket the negated proposition, e.g. Hausa **Hàlīmà bà tà dakà dāwà ba** ‘Halima did not pound corn’. Paired markers of this type are found in most major subgroups of West Chadic. In addition to Hausa, paired negative markers are found in the southern Bole-Tangale languages, such as Pero (Frajzyngier 1989:209ff.) and Kanakuru (Newman 1974:59ff.), the North Bauchi languages such as Miya (Schuh 1998:143ff.). South Bauchi languages have both paired negatives and a single clause final negative, depending on context (Caron 2001:12, Caron 2002:177). It seems unlikely that paired negative markers would have developed independently in these languages, which are both genetically and geographically remote from each other, meaning that LOSS of the initial negative marker must be an areal innovation of the Yobe languages.²⁶

²⁵ The Bole negative marker, **sa**, presents a comparative mystery. The nearly universal West Chadic negative marker is a labial, probably reconstructable as ***ba** and usually **bV** in modern languages, though sometimes **m-**.

²⁶ The languages of the Angas-Goemai group (cf. Burquest (1973) for Angas) and the Ron group (Jungraithmayr 1970), which lie at the southern edge of West Chadic country, have a single sentence final-marker. Throughout this area, the basic negative marker is **k-** rather than **b-**, which must be an areal

Clause final position of negative marking obviously requires that negative scope always be to the left. In fact, sentence level adverbs such as temporal adverbs and reason phrases, which scope over the clause AND its negation fall to the right of the negative marker, as in Ngizim **wà dlama wana bai amzharu** ‘we will not do the work tomorrow (*amzharu*)’ (Schuh 1972:465ff.). If the negation follows the adverb, the interpretation is that it is the adverb that is negated—cf. **wà dlama wana amzharu bai** ‘we will do the work (but) not tomorrow’.

These facts about negative marking plus the placement of question words (and their focused counterparts) suggest a general principle, which I will refer to as “Scope Left”, operating areally across the Yobe languages. The Yobe languages are the most consistent head initial languages that I know of.²⁷ The verb is always the first constituent in the Verb Phrase and the noun is always the first constituent in the Noun Phrase. Thus, the canonical order of elements in the NP is from lesser to greater scope, as in Bole **gare-n asse bolou maine** ‘these two big lizards’ (“lizard-n big two these”).²⁸

In a question like, “Who did not push the car?”, the variable expressed by the question word has scope over negation, i.e. the presupposed proposition of “not pushing a car” includes the negation. It is therefore not surprising that in the Yobe languages, which postpose questioned subjects, the subject follows the negative marker in order to include the negation within its scope.²⁹ (“PreSp” = “presupposition”, i.e. the proposition preceding “PreSp” is presupposed.)

(27) Questioned subject in a negative sentence

Bole: **Tubbu mōta sa ye lo?** ‘Who did not push the car?’
 push(cpl) car not PreSp who

innovation. Marking negation with a single sentence final marker in these languages must also be an areal innovation that came about independently of that in Yobe State.

²⁷ In the terminology of Principles and Parameters syntax, one would say that the head parameter has been set to “initial”. I have always thought of the notion of syntactic “parameters” and “parameter setting” as non-explanatory. The idea that humans are born with parameter switches in their brains that get triggered to be set one way or the other is reminiscent of the Intelligent Design “theory” of evolution. It explains nothing, it is untestable, and in fact, it absolves the researcher from seeking a serious explanation for the facts. Somewhat better in looking for real explanations is Optimality Theory, in which constraints attempt to encapsulate mini-explanations (such as the logic of the human mind in determining scope of modifiers over modifiees), and these mini-explanations are given more or less prominence (“the constraints are ranked”) as speakers work out the logic of utterances.

²⁸ I have never understood the replacement of “Noun Phrase” (NP) by “Determiner Phrase” (DP) as the highest level constituent for a phrase like ‘these two big lizards’. In such a phrase, the head of the phrase is obviously ‘lizards’, revealed by the fact that the choice of a plural determiner is driven by the plural noun, not vice versa. This contention is further supported by the fact that consistent head final languages, like Korean, place the noun at the right edge of its phrase and the determiner at the left edge whereas consistent head initial languages, like Bole, place the noun at the left edge and the determiner at the right edge.

²⁹ I collected data on these constructions only for Bole, Ngamo, and Ngizim. The data comes mostly from a Q&A questionnaire that I created in an attempt to get speakers to ask questions and respond in as natural a way as possible. I videotaped the speakers as they worked through the questionnaire. I did, in some cases, interrupt to ask whether alternative constructions were possible, but I tried as much as possible to let them do what came naturally. I cannot say that this experiment was entirely successful, but it is safe to say that utterances collected in this way represent things that native speakers can say while still sounding like natives.

Ngamo: **Tuba mota bu-i lo?** ‘Who did not push the car?’
 push(cpl) car not-PreSp who

Ngizim: **Jəmbələ mətka-u bi-n tai?** ‘Who did not push the car?’
 push(cpl) car-the non-PreSp who

What about other questioned constituents, which I described above as being *in situ*? As with a questioned subject, a questioned object in a question like, “What did you not see?” has the entire proposition, including negation, in its scope, i.e. the question is about “not seeing” something, not a denial of questioning the seeing of something. In available data, Bole and Ngamo follow the “Scope Left” principle and place the questioned constituent to the right of the negation in order to take the entire negated clause into its scope. Ngizim, however, maintains the *in situ* position for the questioned object. In optimality theoretic terms (see fn. 27), we can differentiate Bole/Ngamo from Ngizim by a different ranking of two constraints: *Scope Left*, which favors placing the constituent with widest semantic scope as far to the right as possible, and *In Situ*, which favors a consistent ordering of constituents regardless of sentence type.

(28) Questioned direct objects in a negative sentence

Bole: **Sauna innā sa ye dabba yalla?** ‘Which animal did Sauna not see?’
 Sauna see(cpl) not PreSp animal which

Ngamo: **Sauna moiko-si bu-i are-i dabba yiya?** ‘Which kind of animal did Sauna see(cpl)-it not-PreSp kind-of animal which Sauna not see?’

Ngizim: **Sauna ika vaya zadak tawan bai?** ‘Which kind of animal did Sauna see(cpl) animal kind which not not see?’

These observations are based on only a small amount of data. Future research will require testing the placement of other questioned constituents, such as indirect objects or locatives, which, in declarative negative statements, would be within the scope of negation and hence to the left of the negative marker. It will also be necessary to explore alternative orders, though in Yobe State, where bilingualism in Hausa is an ever-present factor, one is never sure whether a word order that matches that of Hausa is a calque on Hausa or a natural native order. These issues aside, the fact that questioned constituents CAN follow negation in natural speech in at least some languages—an impossible ordering in languages outside the Yobe State area—is strong evidence for the cross-linguistic reach of the “Scope Left” principle.

4.4. Marking of conditional clauses, questioned constituents, and negation in Bade. The preceding sections have implied that the syntactic phenomena described in section 4.1-4.3 are areal features particular to the Yobe languages spoken in the vicinity of Potiskum. By and large this is the case, that is, use of clause final conditional markers still transparently associated with determiners and use of the same markers, for the most part, in conjunction with questioned and focused subjects are unique to the Potiskum area

languages. Postposing of questioned/focused subjects and use of a single clause final marker of negation are properties shared with Bade. In (29) are examples of the relevant types from Western Bade and Gashua Bade.

(29) a. Conditional clauses

Western: **akci jāwa na, akci a ngwa karekci**

Gashua: **aksi dā ni, aksi ā-kwta karensi**

‘when/if they come, they will take their stuff’

b. ‘when’ clauses in perfective discourse

Western: **akci jāwa mān, akci da ngwi karekci**

Gashua: **aksi dāwau Ø, aksi ta-kwti karensi**

‘when they came, they took their stuff’

c. Questioned subjects

Western: **tłəmpətə-n k-əm zanēŋi?**

Gashua: **tłəmpətə zaninī n-əm?**

‘what tore your gown?’

(W: ‘tore Qsbj-what your gown?’; G: ‘tore your gown Qsbj-what?’)

d. Clause final negative

Western: **aci uktāta zəmən-əm** ‘He did not take grass.’

Gashua: **ndà tləptə liyàk bai** ‘they did not cut the *gamba*-grass’

Gashua Bade does, in fact, look similar to Ngizim in some respects.³⁰ In particular, **n(i)** marking conditional clauses looks like **n(ə)** marking questioned subjects in both languages—compare the GB examples in (29a) and (29c) with the Ngizim examples in (19) and (24) respectively. The clause final negative **bai** is identical in the two languages—cf. (29d) and (26). Absence of overt marking of ‘when’ clauses is also a possibility in both languages—cf. (29b) and (21)—but optional overt markers are different in the two languages, Ngizim using a determiner-derived marker (21) but Gashua Bade using **yau (ba)**, which is unrelated to the determiner system. The Western Bade conditional marker **na** (29a) resembles that of Gashua Bade and Ngizim, but otherwise Western Bade differs, most notably in the absence of a morphological relationship between markers of conditionals, ‘when’ clauses, and post-posed questioned subjects. The latter actually resemble genitive linking constructions. Moreover, in Western Bade, there is a preference for putting postposed questioned subjects directly after the verb rather than in sentence final position, an impossible configuration in any of the Potiskum area languages.

³⁰ From the time that I began comparative work in the Bade-Ngizim group, I have always thought that Gashua Bade looks closer to Ngizim than it does to other Bade dialects, i.e. that the genetic grouping is probably Gashua Bade + Ngizim vs. the rest of Bade. On the other hand, all Bade dialects, including Gashua, share features that distinguish them as a group from Ngizim. A project for the future is to look into all the structural nooks and crannies of all these languages/dialects and come up with definitive criteria for internal classification of this group.

In short, though Bade dialects share certain broad characteristics with the Potiskum area Yobe languages in terms marking conditionals, ‘when’ clauses, questioned subjects, and negation, Bade does not share the cluster of details that the Potsikum area languages have, despite the fact that Ngizim, a Potiskum area language, is a close genetic cousin of Bade.

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