1. Introduction

Relations between languages are determined by their degree of similarity or difference. When languages share a great amount of lexical or grammatical similarity, we assume, that these languages are either genetically related or else they have been in close contact for a long time.

In addition to genetic aspects, we also have to consider phenomena which may lead to common structural features in languages of different genetic affiliation. We are aware, e.g., through oral traditions, that aspects of social, cultural or language change are not only a phenomenon of our present period, we should also keep in mind that our knowledge about the local history in many parts of Africa is still scanty. The dynamic processes of social, cultural and linguistic change have been an ongoing development. In our area of investigation we can confirm this from the 11th century. Here, the linguistic landscape kept changing throughout time.

The wider Lake Chad area provides a good example for these developments. For example, Hausa, which is today the dominant language in northern Nigeria, played a lesser role as a language of wider communication (LWC) in the past. This becomes obvious when we assess the degree of lexical borrowing in the languages that are situated between Hausa and Kanuri. However, during the past decades, we observed a decrease of Kanuri influence and an increase of Hausa.

* Research on linguistic contact and conceptualization in the wider Lake Chad area was carried out in the project Linguistic Innovation and Conceptual Change in West Africa, funded by the Austrian Science Fund (FWF), project number P 15764.
In this paper we will take a look into various aspects of language contact and its impact on the grammatical structures. Our concern is not only the amount of borrowing of structures and concepts, but also the time-depth of the contact procedures. Apart from lexical similarities, we will also throw some light on the phonological, morphological and syntactic structures of Kanuri at the time of the contact situation. Here, we may expect better information about the structural shape of Kanuri in past periods.

We should also note that research in this field must be carried on in order to improve our knowledge about language relations in the area. Further in-depth studies of the morphology and syntax of the neighbouring Chadic languages are necessary to obtain a more precise picture of the relation between Kanuri and its adjacent Chadic languages. Of course, a better knowledge of the history and societies of the area will assist us to evaluate our linguistic findings and to place them into the proper context of language development.

1.1. Historical and Sociolinguistic Background

The Kanuri speaking people began to move to their present habitat more than 1,000 years ago. The expansion of the Kanem empire (in present Chad) led to a continuous migration to the west of Lake Chad into present Nigeria and bordering Niger. Due to its political strength and economic importance on east-west and north-south trade routes the new Kanem-Borno Empire gained political and economical influence in the wider Lake Chad area. Early Islamization in the 11th century also played an important role (Lange 1984).

Before the area west of Lake Chad was inhabited by the Kanembu (‘people of Kanem’), it was inhabited by peoples who spoke Chadic languages. Sometimes they were summarized under the term So or Sau. Increasing immigration from Kanem in Chad and political domination of the immigrants lead to a process of Kanurization in the area. The term Kanuri was applied to the Kanem people, who became residents in the west of Lake Chad in present Borno. Though the knowledge of the local history of Borno is very scanty, the former existence of Chadic languages in Borno can be illustrated by the occurrence of names of Chadic people in the east and south of the Kanuri area, which are identical with clan terms in the Kanuri society, e.g., Tera and Bade (Bulakarima 2001:22-27). This may lead to the assumption that some people left Borno looking for new residential areas, while others were integrated into the Kanuri society. Rothmaler (2003) relates numerous toponyms in Borno to pre-Kanuri settlements, which throw some light on earlier societies and languages in the area.
By the middle of the 19th century, the role of Kanuri as a LWC reached its peak. This can be well illustrated by a quote from the traveller Gerhard Rohlfs. In the 1860s he travelled from Tripoli across the Sahara desert and further to the West African coast. With regard to the linguistic situation in Fezzan (southern Libya) Rohlfs (1984) said:

“If at all, one may talk of a national language of a mixed people like Fezan [i.e., present southern Libya], one has to mention the Kanuri or Bornu language, which is also spoken by the children. Next to it one hears Arabic, and many people also understand the Tuareg as well as the Teda and Hausa language.” (Translation mine).

From the second half of the 19th century onwards the importance of the Borno Empire declined. Reasons for this are the growing domination of the Sokoto caliphate, the colonial subjugation, the decreasing importance of the trans-Saharan trade, etc. Consequently, the Kanuri language gradually lost its function as a LWC. During the 20th century the dominance of the Hausa language grew rapidly because of intensive Islamization and Christianization as well as “western” education and mass media.

These historical developments left their imprints in the lexicon of languages in the Kanuri and Hausa contact areas in northeastern. Due to Russell Schuh’s recent dictionaries of Bade, Karekare, Ngizim, Bole, and Ngamo (Schuh 2004a-f) and his study of Kanuri influence on Bade and Ngizim (Schuh 2003), plus the works of Lohr (1998, 2002) on Malgwa and Awagana (2001) on Buduma, we now have better insight into the contact phenomena affecting those languages.

In this context the question arises to what degree the Kanembu(-Kanuri) language adopted lexical or even grammatical features from Chadic languages (see Ehret, this volume). In the lexicon we find very few common lexemes which may be of Chadic origin. One of these is the term for ‘crocodile’, kárám in Kanuri, in Chadic reconstructed as *kdm. However, those common terms are extremely rare. Most other similar lexemes moved into the opposite direction.

Greenberg (1960) pointed out that Hausa, too, borrowed Kanuri vocabulary in earlier times, e.g., kásůwá ‘market’, karátů ‘read’, and rubůtů ‘write’. In his Hausa reference grammar Newman (2000: 315) makes an interesting statement:

“The number of words borrowed from Kanuri is undoubtedly underestimated because many words of Arabic origin that are included in lists of Arabic loanwords in fact came into Hausa via Kanuri.”

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1 In examples in this paper, high tone is indicated by an acute accent, low tone is left unmarked.
From the point of view of the present linguistic landscape, this statement may appear to be counterintuitive. However, when considering that the political, social and linguistic situation in the area kept changing in past periods of time, we have to take Newman’s quote as realistic. Phonological and morphological arguments also support the influence of Kanuri on Hausa.

2. Kanuri and its Chadic Neighbours

Map 1: Kanuri and contact languages

The map above only refers to those Chadic languages which are considered in this paper. A special case could be made for the inclusion of Shuwa Arabic. This language, which is spoken in the Kanuri speaking area, also has been subject to influence by Kanuri (Owens 1993). However, its consideration would take us beyond the scope of this paper.

2.1. The Degree of Lexical Connection

While the Chadic languages under consideration were exposed to borrowing from Kanuri in different amounts, the exposure to Hausa is more balanced and ranges between three and seven percent in the western contact area of Kanuri.

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2 Chadic Kotoko, located between Buduma in the north and Malgwa in the south, should have been included in our consideration. Unfortunately sufficient data are not available to contribute to our analysis. However, it can be assumed from the few data inspected that the lexical coherence may be close to that of Malgwa (Cyffer et al. 1996).

3 The results were obtained from the cited dictionaries and wordlists. This does not reflect recent developments in codeswitching between Hausa and the languages considered here.
The following diagram shows the different extent of lexical borrowing from Kanuri and Hausa. We should note that it does not contain recently adopted loans from Hausa.

Table 1: Lexical borrowing from Kanuri and Hausa in contact languages

Not surprisingly, in the eastern contact zone the rate of Hausa borrowings is below three percent. However, generally we have to consider that the influence of Hausa may become more prominent in the future through intensive contact phenomena. On the other hand we have to assume that the influence from Kanuri has been a long process lasting over several centuries, during which the exposure to Kanuri differed in the individual languages. Kanuri also acted as a link to carry Arabic loanwords to other languages in the contact zone, including Hausa. We should also point out that the Lake Chad area attracted many people for a long time. One of the common languages in the region besides Kanuri was Hausa.

3. The Western Contact Zone

The languages bordering Kanuri in the west show a different degree of contact intensity from those in the east. But also within the western Chadic languages, we recognize different degrees of contact. Ngizim and Bade took over a bigger portion of their vocabulary from Kanuri, while Bole, Karekare and, especially, Ngamo were much less exposed to this influence from outside. On the other hand

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4 In this respect we also have to look into the impact of Hausa on the syntax of Kanuri and other language in northern Nigeria. Research on this issue is on the way, see also Ziegelmeyer (2005).
the impact of Hausa, which is evidently more recent, is relatively low. The varying degree of contact with Kanuri may also reveal the proximity or the distance between the Kanuri people and the other peoples in the past. As our knowledge about the local historical relations is still scanty, it is premature to relate social interactions of the past with the present linguistic or ethnic landscape. Here, linguistic relations may tell us more about social relations in the past.

Generally we confirm that lexemes were borrowed at a time when certain phonological processes had not yet applied in Kanuri at the period of borrowing. This especially refers to phonological processes of consonant weakening. Rules like voicing, spirantization or deletion were evidently not active in earlier periods. The following examples show the archaic structure of the borrowed forms.

(1)  
<table>
<thead>
<tr>
<th>Kanuri</th>
<th>Ngizim Bade</th>
<th>Bole</th>
<th>Karekare Ngamo</th>
</tr>
</thead>
<tbody>
<tr>
<td>reconstr. present</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘cloth’ (var.)  gaBaGá    gawaá  gabagá  gabagān  gabagá  gabagá</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘sword’  kashaKar  kashaar  kasákār  kasákār  kasikar  kaskăr</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘better’  ngálKo  ngálwo  ngálko  ngálko  ngálko  ngálko</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The comparison of Kanuri lexemes, which were borrowed earlier by neighbouring Chadic languages, unveils more archaic phonological structures of the older Kanuri grammar. For example, in Kanuri the palatal fricative /sh/ or the affricate /c/ usually occur in loan words (e.g., Arabic), or they are a result of a palatalization process when followed by front vowels. (This rule does not apply to some northern dialects.) Sometimes we can detect the underlying phonological structure as in (2).

(2)  cári ‘old (of male person)’ < kyári < kiyári  
(Note: Proper names still use the archaic form, e.g., Ábba Kyári.)

When palatal consonants occur in environments other than the above, we suspect that phonological processes have earlier taken place which cannot be recognized in present surface forms. However, the Kanuri loans in the contact zone may lead us to a plausible explanation as illustrated in the following example.

The Kanuri lexeme kashár ‘sword’ contains a palatal fricative /sh/, for which we do not find immediate evidence in the language. When we consider the languages which adopted the word from Kanuri, we may obtain an explanation
for this “irregular” phonological shape. The clue may be found in Bole, which probably shows the most archaic form. From the Bole lexeme we may derive the archaic Kanuri form *kasîkar*.

(3) Old Kanuri (= Bole): (a) *kasîkar* becomes in Kanuri: (b) *kashîkar* > (c) *kashàkar* > (d) *kashagar* > (e) *kashàar*

The steps of the phonological changes are: palatalization (*s > sh*), assimilation (*i > a*), voicing (*k > g*), and deletion *g > Ø*). It should be noted that these rules are still applied in present Kanuri.

We also note that other phonological rules had already applied before the borrowing took place. In Kanuri the lateral /l/ becomes a retroflex flap [ɾ] in front of /i/, i.e., /l/ → [ɾ] /__ i.

(4) /báli/ → [báti] ‘tomorrow’
/líwula/ → [tíwula] ‘needle’

As [ɾ] is also reflected in the Chadic contact languages (usually as /r/), it appears that this rule had already applied before those forms were borrowed. In other cases the borrowing may have taken place before Kanuri had applied the rule.

(5) Kanuri  Ngizim  Bade  Bole  Karekare

a. /l/ followed by /i/, usually borrowed as /ɾ/

<table>
<thead>
<tr>
<th>Kanuri</th>
<th>Ngizim</th>
<th>Bade</th>
<th>Bole</th>
<th>Karekare</th>
</tr>
</thead>
<tbody>
<tr>
<td>jîli</td>
<td>jîri</td>
<td>jîri</td>
<td>båreme</td>
<td>bårime</td>
</tr>
<tr>
<td>balîmi</td>
<td>bârime</td>
<td>båləma</td>
<td>bårime</td>
<td>‘kind’</td>
</tr>
<tr>
<td>zolî</td>
<td>zôrî</td>
<td></td>
<td>arína</td>
<td>‘weapon’</td>
</tr>
<tr>
<td>alînmâ</td>
<td>aţînàm</td>
<td></td>
<td>rînjâm</td>
<td>‘fool’</td>
</tr>
<tr>
<td>linzām</td>
<td>lînjâm</td>
<td>rînjâm</td>
<td>rîgizâm</td>
<td>‘dyer’</td>
</tr>
<tr>
<td></td>
<td>lînjâm</td>
<td>rînjâm</td>
<td></td>
<td>‘bridle’</td>
</tr>
<tr>
<td>lîtoùn</td>
<td>lîtoùn</td>
<td></td>
<td></td>
<td>(= lîgizâm)</td>
</tr>
<tr>
<td></td>
<td>lîtoùn</td>
<td></td>
<td></td>
<td>‘Monday’</td>
</tr>
<tr>
<td>lîtoùn</td>
<td>lîtârin</td>
<td>lîtârin</td>
<td>lîtârin</td>
<td>‘Monday’</td>
</tr>
</tbody>
</table>

b. /l/ followed by vowel other than /i/, borrowed as /l/

<table>
<thead>
<tr>
<th>Kanuri</th>
<th>Ngizim</th>
<th>Bade</th>
<th>Bole</th>
<th>Karekare</th>
</tr>
</thead>
<tbody>
<tr>
<td>lâdo</td>
<td>lâduwa</td>
<td>lâdûwa</td>
<td>lâdî</td>
<td>lâdî</td>
</tr>
<tr>
<td>bîgola</td>
<td>bîgola</td>
<td></td>
<td>bîgîla</td>
<td>‘Sunday’</td>
</tr>
<tr>
<td>kalak-</td>
<td>kalaktû</td>
<td></td>
<td>bîgîla</td>
<td>‘harvest season’</td>
</tr>
<tr>
<td>lârdò</td>
<td></td>
<td></td>
<td></td>
<td>‘country’</td>
</tr>
</tbody>
</table>
In environments without a following /l/, no change is observed in the borrowed forms. When followed by /l/, Kanuri applied its regular allophonic rules and the contact languages usually took over the forms with the r-like pronunciation. (In their own language, \( \varphi \) was replaced by \( r \).) This allows the conclusion that the allophonic rule affecting /l/ is older than the consonant weakening rules, because effects of the latter are not visible in the Kanuri loans of the contact languages.

We also observe that syntactic features were taken over from Kanuri. At least in Bade and Ngizim we get the Kanuri lexeme yayé meaning ‘even if, although, no matter (that)’. This form also functions in Kanuri as a concessive conjunct (‘however’) as well as, derived from it, a concessive conjunction (‘though’), which is a derivation from its basic meaning. The neighbouring Chadic languages also adopted all of these functions. One reason for this may be that in general subordinate constructions did originally not exist. Kanuri, too, developed these clause types later in its development. The necessary subordination markers were introduced by external borrowing and, to a larger degree, by grammaticalization processes of existing forms. This takes us to the assumption that the borrowing processes took place after Kanuri had developed this subordination pattern.

The borrowing procedures from Kanuri into other languages are evident, when typical derivational Kanuri extensions in the receiving languages are also carried over, however, without any specific function in that contact language, e.g.,

\[
\text{(6) ‘kingship’} \quad \text{Kanuri} \quad kərmâi \quad (kər- \text{ abstract derivative}, \text{mai} \ ‘\text{king}') \\
\text{Bade (G)} \quad kərmâi \\
\text{Bade (W)} \quad kərmâyín \\
\text{Bole} \quad kirmâi \\
\text{Ngizim} \quad kərmâi \\
\quad \text{‘landlord’} \quad \text{Kanuri} \quad \text{fatomá} \quad (\text{fáto} \ ‘\text{house’}, \text{-ma/-má noun agent}) \\
\text{Bade (G)} \quad pâtômá \\
\text{Bade (W)} \quad pâtômán \\
\text{Ngizim} \quad pâtômá
\]

In the example in (6) lexemes are borrowed as monomorphemic forms and ignore the Kanuri derivation process.
4. The Eastern Contact Zone (Buduma, Malgwa)

To the east, two languages will be considered, Malgwa (formerly “Gamergu”) and Buduma, recently documented by Löhr (2002) and Awagana (2001), respectively. Although these languages have been, and still are, in a very close geographical contact with Kanuri, they coped differently with this situation. Many speakers of Malgwa, especially those in proximity to Kanuri, gradually changed their ethnic and linguistic identity in favour of Kanuri (Cyffer et al. 1996). The following map illustrates this fact. In the following it can be illustrated that the derivation markers themselves are adopted and applied.

The map below reveals interesting bits of information. Though only 150 years old, it shows that the linguistic landscape in the area was different about 1850. Evidently the Kanuri territory was smaller than it is today. Though Kanuri already played the most important factor in the area, Malgwa (in the map referred to as “Ghamerghu”) was still present in the east and northeast of the present Kanuri centre Maiduguri. The map also shows that the former Malgwa capital was located about 20 kilometers northeast of Maiduguri. Kanurization processes led (and still lead?) to changes of ethnic identity and the adoption of a new language. It is not the fact itself that these changes occurred here in the past, it is striking that in this part of Borno these changes are likely to continue.

![Map of the area showing the former capital of Malgwa](image)

Heinrich Barth, Travels and Discoveries on North and Central Africa. 1857 - 59. Vol. II.

4.1. The Special Case of Buduma

We have already noticed that Buduma shows the highest degree of lexical borrowing from Kanuri followed by Malgwa in the southeast as well as Bade and Ngizim in the east. From the rate of lexical agreement we may derive the intensity of linguistic contact with Kanuri.

The Chadic languages to the west of Kanuri possess derivational abstract and agentive morphemes in borrowed nouns (see 3). We assume that they were taken
over as lexicalized forms, i.e., these don’t carry any specific function or meaning in the contact language. This observation, however, does not apply to Buduma.

4.1.1. Abstract nouns. In Buduma some of these derivatives, e.g., abstract kar- and nam-, also function as productive morphemes, e.g., they can be applied to other Buduma nouns (Awagana 2001:53-56):

(7) **Buduma**

<table>
<thead>
<tr>
<th>Demú</th>
<th>‘big’</th>
<th>Námdemú</th>
<th>‘power’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tó</td>
<td>‘lay down’</td>
<td>Kártó</td>
<td>‘quietness’</td>
</tr>
</tbody>
</table>

**Kanuri**

<table>
<thead>
<tr>
<th>Kúra</th>
<th>‘big’</th>
<th>Námkúra</th>
<th>‘importance, bigness’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Málam</td>
<td>‘learned person’</td>
<td>Kámálam</td>
<td>‘being a learned person’</td>
</tr>
</tbody>
</table>

In Kanuri the derivative suffixes exceed the prefixed ones by far in number. Buduma, too, applies several of such derivations and maintains the same ordering pattern. The examples in (8) – (11) illustrate this.

4.1.2. Agent nouns. The most common Kanuri derivative is the agent noun marker -mal/-má, which has high or low tone, depending on the preceding tonal structure. In the plural the suffix -bul-bú replaces -mal-má.

Buduma applies the suffix -má in the singular. Unlike in Kanuri, it always carries a high tone, but, like Kanuri, it requires preceding low tones. In the plural, the Kanuri -bul-bú pattern is not applied, rather the common plural marker -ány is used.

(8) **Kanuri**

<table>
<thead>
<tr>
<th>Letó</th>
<th>‘going’</th>
<th>Letómá, pl. Letówu</th>
<th>‘traveller’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cída</td>
<td>‘work’</td>
<td>Cidámá, pl. Cidawú</td>
<td>‘worker’</td>
</tr>
</tbody>
</table>

**Buduma**

<table>
<thead>
<tr>
<th>Kídá</th>
<th>‘work’</th>
<th>Kidámá , pl. Kidámay</th>
<th>‘worker’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tugún</td>
<td>‘clay’</td>
<td>Tugunmá , pl. Tugunmáy</td>
<td>‘potter’</td>
</tr>
</tbody>
</table>

4.1.3. ‘Son of’. The derivative -mi illustrates that the borrowed form can adopt a new function. While it is in Kanuri related to the meaning ‘son of’, in Buduma it can also carry the meaning ‘language of’. (Kanuri derives terms for languages, characteristics, etc. by a distinct tonal pattern).
(9) **Kanuri**

<table>
<thead>
<tr>
<th>Músa</th>
<th>‘Musa’</th>
<th>Músami</th>
<th>‘Musa’s son’</th>
</tr>
</thead>
</table>

**Buduma**

<table>
<thead>
<tr>
<th>Músa</th>
<th>‘Musa’</th>
<th>Músami</th>
<th>‘Musa’s son’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yédiná</td>
<td>‘Buduma (person)’</td>
<td>yédinámi</td>
<td>‘Buduma language’</td>
</tr>
<tr>
<td>Ngánay</td>
<td>‘Kanuri (person)’</td>
<td>ngánaymi</td>
<td>‘Kanuri language’</td>
</tr>
</tbody>
</table>

4.1.4. ‘Daughter of’. In Kanuri the derivative *-ram/-rám* denotes ‘daughter of’, ‘place’, ‘instrument’, ‘payments or presents’. The tonal structure is identical with that of the action noun.

(10) **Kanuri**

<table>
<thead>
<tr>
<th>Músa</th>
<th>‘Musa’</th>
<th>Musarám</th>
<th>‘Musa’s daughter’</th>
</tr>
</thead>
<tbody>
<tr>
<td>cída</td>
<td>‘work’</td>
<td>cidarám</td>
<td>‘working place’</td>
</tr>
<tr>
<td>gota</td>
<td>‘taking’</td>
<td>gotaram</td>
<td>‘handle’</td>
</tr>
<tr>
<td>máləm</td>
<td>‘learned person’</td>
<td>maləmrám</td>
<td>‘fee for a learned person’</td>
</tr>
</tbody>
</table>

Buduma semantically distinguishes between a suffix *-ram* denoting ‘body parts’ and *-ram* denoting ‘daughter of’ or ‘presents’. As the suffix is evidently taken from Kanuri, it seems likely that Kanuri too may have had tonally separate suffixes in the past, which might have been later collapsed to one form.

(11) **Buduma**: body part

<table>
<thead>
<tr>
<th>koráy</th>
<th>‘urine’</th>
<th>korayrám</th>
<th>‘bladder’</th>
</tr>
</thead>
<tbody>
<tr>
<td>tidi</td>
<td>‘beard’</td>
<td>tdirám</td>
<td>‘chin’</td>
</tr>
</tbody>
</table>

**Buduma**: daughter of, gift, fee

<table>
<thead>
<tr>
<th>máy</th>
<th>‘king’</th>
<th>máyram</th>
<th>‘princess’</th>
</tr>
</thead>
<tbody>
<tr>
<td>mallám</td>
<td>‘learned person’</td>
<td>mállámram</td>
<td>‘present for a learned person’</td>
</tr>
<tr>
<td>bawa</td>
<td>‘aunt’</td>
<td>bawáram</td>
<td>‘present for the aunt’</td>
</tr>
</tbody>
</table>

Similar to the two different usages of *-ram* in Buduma, Kanuri employs two derivatives *-ma*. One denotes noun agent. The other one always carries a low tone and denotes the holder of a title or office, e.g., *bšla* ‘village, town’ *bšlama* (not *bšlamá*) ‘village head’.
4.1.5. Numerals. With regard to numerals, we note the borrowing of numerals from 6 to 9. This is a phenomenon which must be explained in terms of a very close contact situation. We may assume that Buduma, like other languages, originally operated a numerical system based on five and later changed it to a decimal system. The missing numbers were borrowed from Kanuri.

<table>
<thead>
<tr>
<th>Buduma</th>
<th>Kanuri</th>
</tr>
</thead>
<tbody>
<tr>
<td>5  hinji</td>
<td>(úwu)</td>
</tr>
<tr>
<td>6  ḡarḳká</td>
<td>arakká</td>
</tr>
<tr>
<td>7  tulwár</td>
<td>túlur</td>
</tr>
<tr>
<td>8  wosaḳo</td>
<td>wusku</td>
</tr>
<tr>
<td>9  hiligar</td>
<td>ləgár</td>
</tr>
<tr>
<td>10 hákkán</td>
<td>(mewú)</td>
</tr>
<tr>
<td>20 hágá</td>
<td>(fíndi)</td>
</tr>
<tr>
<td>30 fiyaḳḳo</td>
<td>fíyaḳḳo</td>
</tr>
<tr>
<td>40 fidegu/ hakkan higay</td>
<td>fídegə</td>
</tr>
<tr>
<td>100 aru</td>
<td>yôr</td>
</tr>
</tbody>
</table>

Awagana (2001:154-56) correctly observed that Buduma originally operated a quinary system. It seems clear that Kanuri was the primary donor language for numeral innovations in Buduma. Other neighbouring Chadic languages under consideration, on the other hand, did not follow the Buduma example of adopting a new numbering system. In this context, it should be noted that Kanuri, too, may originally have possessed a quinary system, e.g.,

(13) wuskú ‘eight’ composed of úwu ‘five’ and yaskó ‘three’

We come across an interesting feature concerning the formation of ordinal numbers in Buduma. The formation principle is borrowed from Kanuri. However, while Kanuri, in addition to a derivative nominalizing prefix (kón-), applies the derivative -mi ‘son of’, Buduma uses the opposite gender and applies -ram ‘daughter of’.
4.1.6. Plurational verbs. Plurational verbs are of great interest with regard to their existence and formation in Kanuri (Awagana 2001:104-105). Though not active in present-day Kanuri, we may assume that they existed in Kanuri in the past. It cannot be ruled out that plurational marking is also a Saharan feature, which is still operative in Teda-Daza. Those verbs which are cognates in Kanuri and Teda-Daza evidently utilize the plurational form in Kanuri. However, Kanuri lost the function of pluractionality whereas the distinction is still evident in Teda-Daza (Cyffer 1981).

At present we cannot be sure whether this derivational process is a common Saharan feature or whether it was adopted by Kanuri and Teda-Daza through areal contacts. In connection with this discussion we should bear in mind that the infix -a- is a common Saharan plural feature (Cyffer 1981). However, we may allow two preliminary hypotheses. The first is that plurational verb stems (excluding reduplication, which may be a universal feature) are an areal feature occurring in Chadic languages as well as in the Saharan languages Teda-Daza and Kanuri. The other hypothesis is that the feature of plurational verb stems is basically Chadic and taken over by other non-Chadic language.

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5 Tone is not marked in the Teda-Daza forms.
The fact that Kanuri operates former pluractional stems as general forms may be a result of neutralization of such distinctions. Consequently those languages which borrowed these verb forms did so at a time when the distinction in Kanuri had already been given up, e.g.,

(16) ‘dye’  
Teda-Daza: dil-, dal- 
Kanuri: dál- 
Bade (Western, Gashua) daltu (citation form); 
Ngizim daltu (citation form)

‘dig’  
Teda-Daza: lu-, la- 
Kanuri: lá- 
Buduma la-

5. Syntactic Structures

Syntactic descriptions of the languages in the Kanuri contact zone are still scanty. Nevertheless, the data provided by Awagana (2001) or Löhr (2002) allow us to take a new look at contact features in the syntax of the languages under consideration. In addition to the lexical and morphological ties between Kanuri and Buduma, we also observe—especially in Buduma—similar clause subordination patterns. However, it is noteworthy that Buduma only applies one of the two subordination types of Kanuri.

Those subordinations which are made on the sentence level we refer to as Type A subordinations. Those which are made below the sentence level are Type B subordinations.

5.1. Subordination Type A: Sentence Level Subordination

Because syntax does not play a central part in Awagana’s monograph nor in the other grammatical descriptions, it is difficult to come to reliable conclusions about syntactic structures as they relate to contact situations with Kanuri. Yet, we can detect several structural features which display common syntactic patterns. These may be explained as direct borrowing, taking over a new concept, or as areal features. Specifically we refer to subordination patterns and to the multi-functionality of grammatical markers. In his chapter on temporal clauses Awagana (2001:196) makes an interesting statement:

“It is difficult to make a clear distinction between coordination and subordination with regard to temporal expressions. In Buduma we have a continuum, in which the syntactic category of the subject and the sequence of actions play an essential role.” (Translation mine)
From this statement we may conclude that temporal subordination is not a clear-cut syntactic category. This is also likely to be confirmed in other languages of the area (and beyond). For subordination, Buduma makes use of deriving a new function from an existing lexeme. Another strategy is the direct borrowing of Kanuri subordinators.

Kanuri itself underwent several grammaticalization processes to indicate subordinate clauses. As subordinate markers it also uses borrowed concepts as well as existing lexemes with an additional function and meaning, e.g.,

\[
\begin{array}{lll}
\text{(17)} & \text{Basic meaning} & \text{Subordinator} \\
-ga & \text{reference marker} & \text{‘when, if’} \\
duwô & \text{‘at first’} & \text{‘while’} \\
yaye & \text{‘however’} & \text{‘though’} \\
sô & \text{‘all’} & \text{‘though’} \\
\end{array}
\]

In Kanuri subordinated clauses are innovative processes. They either result from new (areal or universal?) developments or they can be reduced to adverbial phrase constructions. The following examples illustrate the extension of a referential marker \(-ga\) to an (a) temporal and (b) conditional subordinator:

\[
\begin{align*}
(18)(a) & \quad \text{cida tamojiya Músa fátoro lejìn} \\
& \quad \text{‘Musa will go home when he finishes his work.’} \\
& \quad \text{cida tamoji-GA Músa fáto-ro lejìn} \\
& \quad \text{work he.finished-TEMP Musa home-to he.will.go} \\
(b) & \quad \text{cida tamojinga Músa fátoro lejìn} \\
& \quad \text{‘If Musa finishes his work, he will go home.’} \\
& \quad \text{cida tamojin-GA Músa fáto-ro lejìn} \\
& \quad \text{work he.will.finish-COND Musa home-to he.will.go}
\end{align*}
\]

Buduma has two postpositions that show functional similarities with the Kanuri referential suffix \(-ga\). In Kanuri we assume that this suffix developed several functions from a basic form, which Hutchison (2000) relates to the “associative” and Cyffer (1998:70) to a “referential” marker, however, both are claiming the same basic concept of the morpheme. Though the form itself varies in some cases, the general grammatical functions are identical in both languages.
Buduma has two different forms, one of them likely being a loan from Kanuri -\textit{ga}. We are not arguing that Buduma generally applies markers which are identical with Kanuri. We rather propose that the general concept is taken over accompanied by an expansion of the meaning or function of grammatical morphemes in order to create a new syntactic category.

(20) (a) Temporal subordination

‘When I will go tomorrow to Malam Fatori, I will buy millet.’
\begin{verbatim}
əbá wə́ló Mál Fártírī ngó wátu piyáw
\end{verbatim}
tomorrow I.will.go.to Malam Fatori when I.will.buy millet

(b) Conditional subordination

‘If he had come, he would have seen him.’
\begin{verbatim}
wámtə náu ngó nómunə
\end{verbatim}
earlier he.has.come if I.will.see.him

Buduma also follows the ordering pattern of Kanuri and places the “conjunction” at the end of the clause. This is the typical pattern in Kanuri, probably linked with its SOV typological system. Though Buduma is a SVO language, it generally adopted the same characteristics for clause subordination.

Two aspects should be considered here. First, it is assumed that in a number of languages grammaticalization processes have taken place, through which clause subordination on clause and sentence levels were made possible. It appears that the subordination on the clause level (Type B) are a development in a confined area, and those on sentence level (Type A) in a wider area. Evidently Buduma does not apply adverbial constructions (Type B) with embedded clauses like example (21) in Kanuri and Hausa.
5.2. Subordination Type B: Subordination Below Sentence Level

The following subordination pattern—clause embedding in an adverbial noun phrase—is quite common in Hausa and Kanuri, but, as it appears, uncommon in Buduma and Malgwa. Here we may ask, whether this clause type is a recent feature in Kanuri, which was taken over from Hausa, probably at a time when syntactic borrowing from Kanuri became less active. We have to emphasise that this interpretation must be conjectural for the time being. It is noteworthy that we don’t find the construction in Koelle (1854). In order to obtain a clearer picture, we need further investigation.

(21) (a) Hausa

Adverbial noun phrase

\[
\text{sún taftí báayán ítaacée} \quad \text{‘They went behind the tree’} \\
\text{sún tafi báayá-n ítaacée} \\
\text{they.PERF go back-of tree}
\]

Embedding in adverbial noun phrase

\[
\text{báayán sún tafi gidáa súka cí abíncí ‘After they went home, they ate food’} \\
\text{báayá-n [sún tafi gidáa] súka cí abíncí} \\
\text{back-of they.PERF go home they.RELP. eat food}
\]

(b) Kanuri

Adverbial noun phrase

\[
\text{ngáwo kaskábero lezána ‘They went behind the tree’} \\
\text{ngáwo kaská-be-ro lezána} \\
\text{back tree-of-to they.PERF go}
\]

Embedding in adverbial noun phrase

\[
\text{ngáwo fátoro lezánaben bári jáwo ‘After they went home, they ate food’} \\
\text{ngáwo [fátoro lezána ]-be-n bári jáwo} \\
\text{back home-to go.they.PERF - GEN - LOC food they.PAST.eat}
\]

In (21) the subordination is carried out in an adverbial phrase construction. The locative noun phrase is filled by an embedded clause. Here we may raise the question, how present Kanuri speakers perceive these constructions. Analyses of
sentence intonation patterns suggest that individual speakers may have different perceptions about it. However, further investigation is required.⁶

It is premature to arrive at conclusions why Type B constructions are not common in Buduma. Further investigation into the syntactic structure of other Chadic languages in the Kanuri contact zone may contribute to a better understanding of the different innovation processes.

When taking a look at the role of Hausa and its influence on the languages in the area, its growing and dominant role is obvious. However, though Hausa has become the dominant LWC, the lexicon of the languages in the contact areas is less affected by Hausa than by Kanuri. A preliminary answer to this may be, that after borrowing the necessary lexemes from Kanuri, there was evidently no need of additional ones from Hausa. This especially applies to original Arabic lexemes which got into the contact languages through Kanuri. Even Hausa made use of this process.

Of course, we are aware of the present growing role of Hausa in northeastern Nigeria, esp. in urban areas. Codeswitching occurs frequently and may finally cause structural and lexical changes in the local languages. Syntactic structures of Hausa penetrate into other languages with increasing frequency, including Kanuri.

6. Conclusions

Though differing in many of their lexical and grammatical structures, the Saharan and Chadic languages coexisted in large parts of western and central Africa in a close neighbourhood for a long time. For some centuries Kanuri played the dominant role in the wider area around Lake Chad. This left its imprint on the structure of all surrounding languages, however, with a different intensity. When

⁶ Recently we carried out research on sentence intonation patterns, in order to identify the perception and structure of the sentences in question. There are no definite results yet. However, we can confirm that two downdrift structures are involved in the same sentence. Yet, for this we may have two interpretations:
(a) the original adverbial noun phrase has become a subordinate temporal clause, creating the sentence structure $S = CL_1 + CL_2$, or
(b) the adverbial noun phrase occurs in the fronted focus slot, thus involving a different intonation pattern: $S = [FOC: adv.NP] + NP_{subj}$, etc. + V. Though a final result is still awaiting, we can already propose that the study of intonation will help to solve the problem. Note that Hausa applies in analogous constructions the relative TAM, which also indicates a focus position of the (originally) adverbial construction (see example 20).
the dominance of Kanuri began to fade in the first half of the 20th century, Hausa began to take over its role and became the LWC in the second half of the 20th century.

Though lexical borrowing from Kanuri was common in the area, the quantity of Kanuri loanwords in the neighbouring languages varies considerably (see table 2). While it is rather low in Bole, Karekare and Ngamo, it is high in Ngizim, Malgwa and, especially, Buduma. In the latter case this is not necessarily surprising, because Buduma is completely surrounded by speakers of Kanuri(-Kanembu). It is noteworthy that the Buduma people have retained their linguistic identity. In other similar circumstances we observed a change of linguistic and even cultural identity. This certainly applied to other parts of Borno in the past.

Malgwa reveals by far less lexical influence from Kanuri than Buduma does. Here, however, we observe that the language is receding, and a change of linguistic and ethnic identity took place. A Kanurization process has taken place over the past two centuries or more. A map of the mid 19th century (see above) shows well that the present centre of the Kanuri people was predominantly inhabited by speakers of Malgwa (Cyffer et al. 1996). There is sufficient evidence, that these changes in the area around Maiduguri happened because of the political and religious dominance of the Borno empire. Today there is some indication that the impact of Kanuri is receding, and that of Hausa is taking its place. Here, we have to note that the new role of Hausa in the area cannot be compared with that of Kanuri in the past. Unlike Kanuri, Hausa is a more neutral language in the area, i.e., cultural or political dominance is not immediately related with the present role of the language.

On the one hand we observe these remarkable shifts of identity in parts of the Malgwa society, on the other hand we observe less infiltration of Kanuri grammar features in Malgwa than in Buduma. As illustrated above, Kanuri has not only penetrated the Buduma lexicon, but also grammatical structures, the morphology as well as the morphosyntax and the syntax. Here it is interesting to note that the borrowing processes were more intense from the western Kanuri varieties than from the eastern Kanembu varieties, though the latter occur in vicinity of the Buduma language.7

7 Barbara Dehnhard and Jan Patrick Heiss (personal communication) relate this fact to a different prestige of the two variety clusters among the Buduma society. They also argued that the Buduma retained their linguistic identity because of their tight social structure and delimitation of the surrounding peoples.
In order to better understand linguistic relations, it would be of advantage to take a closer look at the language situation in past times. Of course, this will not be always possible, but in our case we can well observe how the linguistic situation in a given area changed over time.

As already pointed out, we find a diametric situation in the eastern contact zone. On the one side the Buduma people successfully resisted a decline of their language, on the other side they were open to innovation processes in their lexicon and grammar. Though relatively small in number, the Buduma maintained until present their ethnic and linguistic identity. On the other side, many Malgwa speakers underwent a Kanurization process in the past.

In order to explain these phenomena, linguistics alone may not be suitable to find a solution. Here, further historical and sociological investigations may help to understand the phenomenon. A better knowledge of the social, cultural and political structures of the two societies may bring about a better understanding of these phenomena. Linguistics comes in to show us the former traces of contact relations between the languages. It may also provide some information about the time dimensions of the ongoing processes of change.

As already mentioned, Buduma differs from the other Chadic languages in the adjacent area in many respects:

(a) Unlike the Malgwa speakers in the Kanuri contact zone, the speakers of Buduma so far have not given up their language in favour of Kanuri.

(b) The counter strategy has been the flexibility to integrate a great number of lexemes into its own lexicon.

(c) The morphology and syntax of Buduma adopted Kanuri grammatical structures, e.g., the derivation of nouns and subordination of clauses.

The explanation for (a) may be found through studies of the Buduma as well as the Kanuri and Kanembu societies. That for (b) may be explained by the intense contacts in all social domains of the people. With regard to (c), a plausible answer may be more complex. The derivational morphology may be seen in the light of the possibility of a wider range of lexical innovations. The influence of syntax, however, is more intricate. There are convincing arguments that Kanuri, like other languages, did not employ subordinate clauses. The new subordinators were either obtained through lexicalization and grammaticalization procedures, or through borrowing from other languages. In a second phase these structures were also accepted by the Buduma language.

It was the aim of this paper to stimulate further research in various aspects of language contact, especially with regard to the changing structures of the grammar and the lexicon. To present comprehensive ready results would be
presumptuous at this time. However, I tried to illustrate, that the thorough knowledge of language structures will assist us to discover how languages reacted to the challenges of their linguistic neighbours, and generally to the adaptation to new requirements and concepts.

Earlier analyses of language contact reveal that we could propose an eastern boundary of a language contact zone extending from Lake Chad to the southwest along the mountain region in the Nigeria–Cameroon borderland. As Kanuri-Kanembu is represented on both sides of this boundary, we observe that Kanuri in the west of the lake absorbed more syntactic features through influence from the west than Kanembu did on the eastern side. Analyses of the development of the Kanuri TAM system confirm this hypothesis.

We also argue that in general many contact features in West Africa extended from the west to the east and were held up at Lake Chad. However, we should not take this as a one way road. The assumed expansion of linguistic structures may have taken place in a more complex manner. Though we are aware that this hypothesis requires further investigation, we propose the movement of contact features, as shown in figure 1.

*Figure 1: Hypothetical contact directions in West Africa (here northern Nigeria)*

In this context, a closer look at the derivational morphology and the syntax of the sub-branches of Chadic, which are found over a wider area in West and Central Africa, may also give us more information about areal features in the different contact zones.
REFERENCES


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