Borrowings But No Diffusion: A Case of Language Contact in the Lake Chad Basin

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Abstract

Makary Kotoko, a Chadic language spoken in the flood plain directly south of Lake Chad in Cameroon, has an estimated 16,000 speakers. An analysis of a lexical database for the language shows that of the 3000 or so distinct lexical entries in the database, almost 1/3 (916 items) have been identified as borrowed from other languages in the region. The majority of the borrowings come from Kanuri, a Nilo-Saharan language of Nigeria, with an estimated number of speakers ranging from 1 to 4 million. In this article I first present the number of borrowings specifically from Kanuri relative to the total number of borrowed items in Makary Kotoko, and the lexical/grammatical categories in Makary Kotoko that have incorporated Kanuri borrowings. I follow this by presenting the linguistic evidence which not only suggests a possible time frame for when the borrowings from Kanuri came into Makary Kotoko, but also supports the idea that this is essentially a case of completed language contact. After discussing the lexical and grammatical borrowings from Kanuri into Makary Kotoko in detail, I explore the limited evidence in Makary Kotoko for lexical and grammatical ‘calquing’ from Kanuri, resulting in almost no structural diffusion from Kanuri into Makary Kotoko. I finish with a few proposals as to why this is the case in this instance of language contact in the Lake Chad basin.

Keywords

Makary Kotoko – Kanuri – borrowings – calquing – diffusion
1 Introduction

Aikhenvald and Dixon (2006) present a book length cross-linguistic study of language contact situations for different parts of the world. The following quote from Aikhenvald’s introductory chapter to the book provides the impetus for the current paper.

Only in-depth empirical studies of a variety of language contact situations and their impact on the overall structure of one or more languages, based on first-hand fieldwork, will enable us to work out inductive generalizations and preferences according to which some aspects of grammar spread more readily than others.

Aikhenvald, 2006a: 3

In this context, Aikhenvald (2006b) describes the case of language contact between Tariana (Arawak) and the East Tucanoan languages in the Vaupés linguistic area within the Amazon basin. An important cultural feature of this area is the practice of linguistic exogamy, where one is required to marry someone from a different language group (Aikhenvald, 2002: 11). This has produced a high degree of bilingualism and has resulted in multilateral diffusion of certain grammatical features/patterns.

Epps (2006) describes another language contact situation in the same linguistic area between Hup (Makú) and East Tucanoan languages, and notes unilateral diffusion of grammatical features from the East Tucanoan languages into Hup. One significant factor in the different diffusional patterns between these two language contact situations appears to be the issue of cultural/social dominance. In the Tariana/East Tucanoan case of the previous paragraph, there is apparently no dominance relation to speak of, while in the Hup/East Tucanoan case, the Hup are in a ‘context of social inequality’ relative to the neighbouring speakers of East Tucanoan languages (Epps, 2006: 287).

A third case, presented by Adelaar (2006), is the language contact situation in Peru between Quechua languages and Amuesha (Arawak), located to the west of the Vaupés linguistic area. In this case, there is significant borrowing of lexical and (to a lesser degree) grammatical items from Quechua into Amuesha. As Adelaar notes, ‘[o]ne might expect the high incidence of Quechua lexical borrowings in Amuesha to be matched by a substantial amount of structural diffusion. This supposition does not come true, however’ (Adelaar, 2006: 300). Adelaar concludes that ‘[i]n spite of abundant borrowing ... due to Quechua influence, the observable effects of language contact on Amuesha
Borrowings But No Diffusion

1 Aikhenvald notes that ‘not much is known about the Amuesha-Quechua bilingualism. It is perhaps the absence of such bilingualism which explains a relatively meagre degree of influence of Quechua onto the Amuesha grammar’ (Aikhenvald, p.c.). Relations of dominance are not discussed in this case though they can likely be assumed given the important status that Quechua had in parts of Amazonia, both during the Inca expansion (roughly from 1470 to 1532) and during Spanish colonization (roughly from 1532 to 1770) (Adelaar, 2006: 293).

Discussion of this last case leads us to a similar language contact situation – this time in sub-Saharan Africa – between a Chadic language, Makary Kotoko (MK) and a Saharan language, Kanuri (Ka.).

2 Language Contact in the Lake Chad Basin

Makary Kotoko is spoken by an estimated 16,000 speakers. Lewis, Simons and Fennig (2015) give a figure of 3,760,500 for what it calls the macrolanguage of Kanuri (including Central Kanuri, Manga Kanuri, and Tumari Kanuri). Kanuri (and the closely related language Kanembu) was the language of the Kanem-Bornu empire ... [which] can presumably be traced back as far as the 8th Century A.D. In the second half of the 11th Century the Islam and oriental culture found its way into Kanem-Bornu and became of decisive importance for its further development. ... Towards the end of the 14th Century, on account of the perpetual threats on the part of the Bu-lala tribe the centre of the empire gravitated [from Kanem in the north-east] towards the province of Bornu on the western side of Lake Chad [(cf. Fig. 1)]. The conquered tribes around Lake Chad used [Kanuri] as lingua franca, and many of them finally relinquished their own language and adopted KANURI as first language... As language of the conquerors

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2 Source: Henry Tourneux (http://llacan.vjf.cnrs.fr/langues/kotoko.html; last accessed 10 September, 2014).
3 A reviewer notes that current conservative estimates for speakers of Kanuri (−Kanembu) would place this figure much higher, with more than 5 million speakers.
4 Bornu is the term used by Arab writers. Borno is the Kanuri based name for the region. I’m grateful to a reviewer for pointing this out to me. I use Borno when not quoting from a reference.
5 In Fig. 1, Kanem, Borno, and Bagirmi represent kingdoms in the region. Logone and Chari are the names of the principal rivers running into Lake Chad. Makary is both the name of a village and the region around it in which Makary Kotoko is spoken as a mother tongue.
A reviewer notes that many of the findings presented in this paper for Makary Kotoko could also be applied to Buduma, a closely related language (Awagana, 2001). The exonym of the principal town around which Makary Kotoko is spoken – Makary – suggests a Kanuri source. In Kanuri, the suffix -ri is ‘a morpheme used to derive nouns of place when applied to a noun referring to the occupant of the place’ (Hutchison, 1981: 4). Who the occupant ‘Maka’ would be remains a mystery. The autonym for the town is m̀pàdə̀.

KANURI won greater importance particularly amongst the ruling classes of the conquered peoples.

Heine, 1970: 112, italics and capitalization in original

Cyffer (2002) notes that ‘speakers of languages of the Chadic family were “Kanurized” i.e. a language and cultural change from traditional mother-tongue to Kanuri took place’ (2002: 27). Makary Kotoko was one of the Chadic languages that the Kanuri came in contact with during this period, but the contact was not extensive enough to lead to ‘kanurization’. In present day, the influence of Kanuri has considerably waned in the Makary Kotoko area. Lebeuf, J.-P. and Rodinson (1948: 46) and Lebeuf, A. (1969: 46) situate the Islamization of the Makary Kotoko due to Kanuri influence in the second half of the 16th century ‘with the installation of a new dynasty (originating from Birni-Ngazargamu (the former capital of Bornu)) over the little kingdom of Makary’ (Allison, 2007: 11). Zeltner (1988: 9), on the other hand, places the conversion of the Makary Kotoko over two hundred years later, at the beginning of the 19th century.

The remainder of the paper is divided as follows. In section 3, I look at the number of borrowings specifically from Kanuri relative to the total number
of borrowed items in Makary Kotoko, and the lexical/grammatical categories in Makary Kotoko that have incorporated Kanuri borrowings. In section 4, I present the linguistic evidence which not only suggests a possible time frame for when the borrowings from Kanuri came into Makary Kotoko, but also supports the idea that this is essentially a case of completed language contact. In section 5, I examine in detail the borrowings in the different lexical categories of Makary Kotoko, followed in section 6 by a discussion of the small number of grammatical morphemes that have been borrowed from Kanuri into Makary Kotoko. Section 7 presents the meager evidence for lexical and grammatical calquing, while section 8 addresses the issue of the limited amount of structural diffusion of typological features from Kanuri into Makary Kotoko. I conclude with a few proposals as to why there is no real structural diffusion in this instance of language contact in the Lake Chad basin.

3 Borrowings – by the Numbers

The socio-cultural influence that the Kanuri had on the Makary Kotoko is evident from the number of borrowings in Makary Kotoko from Kanuri. In a database containing a little over 3000 distinct lexical entries, I have identified 916 borrowings. Of these, 401 have a Classical Arabic (c.a.) source. Of those with a c.a. source, 133 show evidence of having been borrowed through Kanuri. In addition, another 379 borrowed items (with no apparent c.a. source) have been borrowed from Kanuri. Borrowings from Kanuri (512 in total) account for more than half the known borrowings in the language and for about one sixth of the terms in the Makary Kotoko lexical database. Other borrowings come from Shuwa Arabic (s.a.), Hausa, Fulfulde, Bagirmi, French, and English. Table 1 summarizes the distribution of the borrowings relative to the posited source language for each borrowing.

Table 2 shows how the borrowings from Kanuri (considering only those with no apparent c.a. source) are distributed among the different lexical categories of Makary Kotoko.

4 A Case of Completed Contact: Dating the Borrowings

In discussing the language contact situation in Peru between Quechua languages and Amuesha, Adelaar (2006) notes that ‘[t]he fact that Yaru [a Quechua dialect complex] depalatalization is not reflected in Amuesha loans from Quechua is an indication of the antiquity of the loans at issue, which must
Table 1  
Number of borrowings from each posited source language in Makary Kotoko

| Language                          | Number of borrowings |
|-----------------------------------|----------------------|
| Kanuri                            | 379                  |
| Classical Arabic (total)          | 401                  |
| C.A. (probably via Ka.)           | 133                  |
| C.A. (probably via S.A.)          | 171                  |
| C.A. (possibly via Ka. or S.A. or another source) | 89                  |
| C.A. (probably via another source) | 8                   |
| Shuwa Arabic                      | 6                    |
| Hausa                             | 37                   |
| Fulfulde                          | 10                   |
| Bagirmi                           | 8                    |
| French                            | 22                   |
| English                           | 21                   |
| other                             | 32                   |
| Total                             | 916                  |

Table 2  
Number of borrowings in Makary Kotoko from Kanuri by lexical category

| Kanuri borrowings                  | Number |
|------------------------------------|--------|
| Nouns                              | 302    |
| Verbs                              | 12     |
| Adjectives                         | 32     |
| Adverbs                            | 15     |
| Ideophones                         | 8      |
| Grammatical morphemes              | 10     |
| Total                              | 379    |

have pre-dated that change’ (Adelaar, 2006: 296). Phonological evidence can also be presented to suggest the ‘antiquity’ of (at least some of) the borrowings from Kanuri into Makary Kotoko. Data on Kanuri is available from different time periods: 1854 (Koelle), 1937 (Lukas), 1981 (Hutchison), and 1990 (Cyffer and Hutchison). The data brings to light an ongoing general lenition process
in Kanuri that is absent in the data as it appears in Makary Kotoko. This weakening process in Kanuri generally affects bilabial and velar stops in intervocalic environments or in the environment of a liquid consonant (Hutchison, 1981: 15,19). It is said to be conditioned by morphophonemic, phonemic and phonetic contexts and is seen in the phonological processes of degemination, voicing, fricativization and deletion (Cyffer and Hutchison, 1990: 4). A process of palatalization could also be added to the list. These phonological processes can be seen in the data in Table 3.

By way of illustration, consider example (4), where the intervocalic [b] that occurs in the MK data (and the Kanuri data from 1854) for kàbókó ‘short’ is weakened to a labio-dental voiceless fricative in the Kanuri data from 1990. Similarly the intervocalic voiceless velar [k] of MK is weakened to a labio-velar glide in the 1990 Kanuri data.

A careful look at the data presented in Table 3 and throughout this paper shows that some borrowings into Makary Kotoko show tonal changes from the tonal pattern of the Kanuri source. Makary Kotoko has a three tone system (H, M, L) both lexically and grammatically, though tone has a low functional load in the language. Both rising and falling tone occur in very limited ways in the data as well (cf. examples (1) and (3)). Kanuri is described as having a two tone system (H, L) and ‘tone is of great importance … both lexically and grammatically’ (Hutchison, 1981: 23). The process of ‘nativization’ of the tone...
Table 3  Select borrowings in Makary Kotoko with their pronunciation in Kanuri from different time periods

| MK 2014 | Kanuri 1854 | Kanuri 1937 | Kanuri 1981,1990 | Gloss |
|---------|-------------|-------------|------------------|-------|
| (1)     | bàbà        | bábà        | báwà             | ‘aunt (father’s sister)’ |
| (2)     | bóté        | póté; púté  | fúté             | ‘west’ |
| (3)     | digô         | -           | diwò             | ‘grandchild’ |
| (4)     | kábókô       | kábügu / kafügu | káfüwù         | ‘short’ |
| (5)     | kábógá       | kábagá      | káwáà            | ‘span’ |
| (6)     | kábógá       | gábagá      | gáwáà            | ‘white cotton cloth’ |
| (7)     | kémí         | keömi       | cémi             | ‘co-wife’ |
| (8)     | kórbi        | kárbi       | körwi             | ‘sack for drawing water’ |
| (9)     | kókó         | -           | kówò             | ‘voice, sound’ |
| (10)    | libà         | lídá       | liwà              | ‘dead unslaughtered animal’ |
| (11)    | libù         | lìjì         | liwù             | ‘pocket’ |
| (12)    | lìbrà        | lìsÌrà       | liwùlà           | ‘needle’ |
| (13)    | ngálkô       | ngálgo      | ngálvó           | ‘better’ |
| (14)    | nikà         | nígà        | nyiyà            | ‘marriage’ |
| (15)    | rápà         | ráfà         | ràwà             | ‘mother’s brother’ |
| (16)    | tikù         | -           | tìwù             | ‘brother or sister-in-law’ |

patterns from Kanuri into Makary Kotoko appears to be quite complex, the details of which remain to be determined.

In many cases, the Makary Kotoko data more closely resembles the Kanuri data from 1854 than the Kanuri data from 1937, 1981 or 1990. This would suggest that the borrowings may have come into Makary Kotoko at least 150 years ago, but possibly even a good bit earlier than that, given that the data in Table 3 suggests that the lenition process in Kanuri was already underway in 1854. Consider, for instance, examples (11) and (15) where the intervocalic bilabials of MK are realized as labio-dental [f] in the 1854 Kanuri data. Similarly, in example (13), the voiceless velar stop [k] of MK is realized as voiced following a liquid consonant in the 1854 Kanuri data.

The historical-genealogical method as described by Braukämper (1993: 29) estimates the length of a generation in this region of Africa at c. 25 years. This would mean that (at least) six generations have passed since many
of these words have been borrowed into Makary Kotoko from Kanuri, and would help explain why many of the Kanuri borrowings are not regarded as such by Makary Kotoko speakers of today. This is in contrast to borrowings from Shuwa Arabic which are readily identified as such by Makary Kotoko speakers.

The ‘completed’ status of this language contact situation is possibly due to the arrival of the Shuwa Arabs into the Kotoko (and Kanuri) area which probably reduced the amount of contact that the Makary Kotoko had with the Kanuri. One reason for proposing this possibility is that in current day, the Shuwa Arabs have control over (almost) all the markets within the Makary Kotoko speaking area. However, Allison (2006, 2007) shows that a significant number of market terms in Makary Kotoko come from Kanuri, which suggests that at a time in the past, the Kanuri had a greater influence over the market places of the Makary Kotoko area.

Braukämper (1993) suggests that the Shuwa ‘did not cross the Shari [river] to the west [and thus into the Kotoko area and on into Borno] ... before the middle of the 18th century’ (Braukämper, 1993: 30). Zeltner situates the arrival of the Shuwa Arabs to the Makary Kotoko area a little later, around the 1790’s (1997: 64). If the arrival of the Shuwa Arabs did reduce the contact of the Makary Kotoko with the Kanuri, this would push the date of (some of) the borrowings back to more than 200 years ago.

5 Lexical Borrowings

Allison (2007) presents a selection of the lexical borrowings from Kanuri into Makary Kotoko. That article highlights 86 lexemes (predominantly nouns) from various semantic domains, including: family relations, body parts, bodily functions, ailments, household terms, market terms, cardinal points, days of the week, concrete religious terms, and abstract religious terms. Borrowing of terms from these domains provides linguistic evidence in support of the claim that the islamization of the Makary Kotoko was due to Kanuri influence. Here, I present other lexical borrowings from a range of lexical categories. I limit the discussion to those borrowings from Kanuri which have no apparent Classical Arabic source.

5.1 Nouns

Many of the borrowings in the following selected sample of noun borrowings show a semantic shift from the meaning in Kanuri to the meaning in Makary Kotoko. This could be due to an incomplete understanding of the meaning of
the term in Kanuri by Makary Kotoko speakers. It is not yet clear what the depth of bilingualism was for Makary Kotoko speakers at its peak, both in terms of how well Makary Kotoko speakers knew Kanuri, and whether the bilingualism extended beyond the ruling class (cf. quote given earlier from Heine, 1970: 112). In the lists below, the data are given in the following order:

(example number) MK data ‘MK gloss, Ka. data (Ka. source(s)) ‘Ka. gloss’

(17) kógóná10 ‘roaming for sex’, kógóná (Ka.3) ‘courtier’

(18) kóbóli ‘preferring the company of the opposite sex’, kóbóli / kóbóli (Ka.1/Ka.3) ‘itinerant market trader’

These last two examples make one wonder about the roles/activities of courtiers and itinerant market traders in the Makary Kotoko area.

(19) kirýúrli ‘title of respect for the lion in folk tales’, kirwúlí / kirgyúli (Ka.1/Ka.3) ‘lion / lion (nickname)’

(20) kitómé ‘folk tale introduction’, tittímí (Ka.1) ‘riddle; folktale, fable’

(21) ngám ‘wild cat’, ngám, (Ka.1) ‘cat’

Regarding example (21), note that ngámó ‘cat’ in Makary Kotoko appears to have been formed by adding the marginally productive tone-integrating diminutive suffix -ó (with the H tone of the suffix spreading back onto the root) to the word borrowed from Kanuri. This same process may also explain the form of the Makary Kotoko term in the following example:

(22) bugró ‘wooden bowl’, búwúr / bügúr (Ka.1/Ka.3) ‘black wooden bowl / wooden dish from which one eats’

(23) ngūdí / ngūdí ‘poor / fisherman’s helper’, ngūdí (Ka.1) ‘poor, destitute or needy person’

Makary Kotoko appears to have borrowed this last term, then differentiated two distinct (though presumably related) meanings through tone.

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9 The Kanuri data from different time periods is referenced as follows:

| Abbreviation | Bibliographical source |
|--------------|------------------------|
| (Ka.1)       | Cyffer and Hutchison (1990) |
| (Ka.2)       | Hutchison (1981) |
| (Ka.3)       | Lukas (1937) |
| (Ka.4)       | Koelle (1854/1970) |

10 The high central vowel [i] is written as ‘ә’ in this paper, following typical practice within Chadic linguistics.
5.2 Verbs

There are very few verbs that have been borrowed from Kanuri into Makary Kotoko. This is likely attributable to the relatively complex verb morphology of Kanuri, due, in part, to its ‘elaborate system of tense-aspect-moods’ (Cyffer, 2000: 49). In addition, ‘[p]honological processes are abundantly applied in Kanuri’ (2000: 44), ‘resulting in complex morphophonemic alternations’ (Dimmendaal, 2006:155). As Aikhenvald (2006a: 33) notes ‘[e]asily separable forms with clear boundaries are more prone to being borrowed than forms involving complex morphophonological alternations.’ That is, Kanuri verbs were not readily borrowed into Makary Kotoko due to the complexity of verbs in Kanuri.11

There are only 12 cases of a verb (probably or possibly) being borrowed from Kanuri into Makary Kotoko. I present the most likely below. Verbs listed for Kanuri are presented with two forms when these are provided: the first and third person forms of the imperfect aspect of the verb (Cyffer and Hutchison, 1990: 10).12

\[(24)\] ʰo̞n d̞ɔmt̄ó ‘settle, remain forever’, d̞ɔmt̄ó (Ka.1) ‘stay forever’

\[(25)\] ʰo̞n s̞ágá ‘weave’, s̞ágâŋ̄in, s̞áḡáj̄in (Ka.3) ‘weave’

\[(26)\] s̞i̞ nḡw̄r̄ ‘growl, roar’, nḡw̄nḡr̄nḡin, nḡw̄nḡr̄j̄in (Ka.1) ‘roar (e.g. of a lion) (v.); grumble, pout (of people)’

Examples (24)–(26) show a means by which Makary Kotoko integrated Kanuri verbs into Makary Kotoko. The ‘root’ of the Kanuri verb form became the nominal complement of a ‘light’ verb in Makary Kotoko – a construction type that is used extensively in the language.

\[(27)\] nḡál h̄o̞ ‘measure’, nḡáŋ̄in, nḡáj̄in (Ka.1) ‘measure (distance, etc.), measure out, buy sth. sold in measures (e.g. millet)’

\[(28)\] s̞āl h̄ē ‘chop (tree)’, s̞áŋ̄in, s̞áj̄in (Ka.1) chop, cut (with an axe, sword, matchet, etc.); cut down, harvest (e.g. one’s millet crop); talk behind (s.o.’s) back, tell on (s.o.)’

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11 Interestingly, this would be the flip side of the case mentioned for Mohawk which ‘does not borrow verbs ... ‘due to the fact that the obligatory affixes on verbs [in Mohawk] are especially complex’... ‘the particular structure of Mohawk [verbs] ... acts as a restriction impeding the borrowing of foreign words’ (Bonnin, 1978: 32; cited in Aikhenvald, 2006a: 33).

12 Lukas (1937: 183) labels this verbal form the Continuous.
If these last two examples are borrowings from Kanuri, they show a certain degree of integration into the Makary Kotoko verbal system since they require particular locative particles (hō and hē, respectively).

(29) dō ‘chase away’, dúngìn, dújìn (Ka.1) ‘drive away, chase away’
(30) kàdō ‘follow’, kàdúngìn, kàdújìn (Ka.1) ‘pursue, go after, chase, follow’
(31) lē ‘(be) good (of taste, smell, trip); léléjìn, lélé (Ka.1) ‘be sweet, taste delicious; good-tasting, sweet’
(32) sám ‘feel, palpate’, sámngìn, sámjìn (Ka.1) ‘rub on, smear on, smoothe on (usu. with the hands); anoint; feel with the palms of the hands’
(33) sún ‘beg’, sùnngîn, sùnjîn (Ka.1) ‘beg (for sth.)’

5.3 Adjectives

A little over 30 adjectival concepts have been borrowed from Kanuri into Makary Kotoko from a wide range of semantic types. The semantic types are based on Dixon (2006: 3–5) and Dixon (2010: 112–114):

i) dimensions
(34) kàb Yakó ‘short’, kàfiwù (Ka.1) ‘short’
(35) párán ‘wide’, faràŋ (Ka.4) ‘open; clear, bright, light’
(36) sársár ‘thin’, sársár (Ka.1) ‘slender, thin’

ii) age
(37) mbûn ‘new’, bôlîn (Ka.1) ‘fresh, new’

iii) value
(38) ngálkō ‘better’, ngálwó (Ka.2) ‘state of being improved or having recuperated; the better one of two, being better’

iv) colour
(39) sêlîm ‘black’, sêlîm (Ka.1) ‘black’
(40) kûrgûm ‘yellow’, kûrwûm (Ka.1) ‘yellow’

v) physical property
(41) kàmpôy ‘light (in weight)’, kàmpôi (Ka.4) ‘light, not heavy’
(42) kôrkôkā ‘heavy’, kûrwôwù (Ka.1) ‘heavy; important, serious, grave’
(43) ngâmðô ‘hard’, ngâmðô (Ka.1) ‘dry, lean, thin’
(44) s’êms ‘em ‘sour’, câmcâm (Ka.1) ‘sour’
The palatal affricate [ʧ] represented by ‘c’ in the Kanuri data is of marginal phonemic status in Makary Kotoko. In example (44), it appears that it has been replaced with apico-alveolar affricate ejective in Makary Kotoko [ʦ'], represented by ‘s’.

\[(45)\] wárây ‘bright (of light)’, wúrál (Ka.1) ‘emphasizes brightness, emphasizes the cleanliness of clothes’

\[(46)\] tóbór ‘thick (of a sauce)’, tówór (Ka.1) ‘thick (of a liquid), dense, thick (of plants in a field), constant, frequent, rapid’

\[(47)\] dëy ‘empty’, dë (Ka.1) ‘futility, worthlessness; empty’

vi) human propensity (including corporeal properties)

\[(48)\] dómí ‘sick’, dómí (Ka.1) ‘sick’

\[(49)\] krë ‘generous’, kárë (Ka.1) ‘generous’

\[(50)\] yánkà ‘greedy’, yámɡà (Ka.1) ‘greedy, ambitious, greed, ambition’

\[(51)\] ngójì ‘wise’, ngójíngójì (Ka.1) ‘cunning, cleverness’

\[(52)\] ngúrzám ‘fat’, gúrzám (Ka.1) ‘big or heavy person’

\[(53)\] k’ásáli ‘hurried’, kásáli (Ka.1) ‘impatient’

The last two examples show evidence of segmental ‘adaptation’ of the Kanuri terms into Makary Kotoko. In example (52) the voiced velar of Kanuri [g] is realized as a prenasalized velar [ŋg] in Makary Kotoko. In example (53), the voiceless velar stop of Kanuri is realized as an ejective in Makary Kotoko.

\[(54)\] zólì ‘crazy’, zólì (Ka.1) ‘mad or crazy person, mad, crazy, insane’

\[(55)\] nómánɡàr ‘disobedient’, nómánɡàr (Ka.1) ‘cruelty, wickedness’

\[(56)\] tóskàn ‘lazy’, tóskàn (Ka.1) ‘poor in spirit, lacking in self-respect’

vii) speed

\[(57)\] ngórmà ‘fast (of a horse)’, ngórmà (Ka.1) ‘big and strong (of a horse)’

Note the semantic shift from the Kanuri meaning of a ‘big and strong’ horse to a ‘fast’ one in Makary Kotoko.

viii) difficulty

\[(58)\] kósé ‘easy, near’, kósé (Ka.1) ‘simple, unimportant’

ix) similarity

\[(59)\] gádé ‘other’, gádé (Ka.1) ‘other’
x) qualification
(60) kálkál 'right, correct', kálkál (Ka.1) 'sameness, alikeness, exactness'

xi) quantification
(61) ngå 'whole', ngå (Ka.1) 'healthy, clever'

The word ngå ‘whole’ has also developed a grammatical function in Makary Kotoko. Used in a negative context it expresses the notion similar to ‘at all’ in English.\textsuperscript{13}

(62) álù wà ngå
\textsuperscript{3SG.M.PERF} come NEG whole
‘He didn’t come at all.’

xii) position
(63) bân ‘open', bông (Ka.1) ‘expresses openness’

Note that the alveolar nasal phoneme /n/ is realized velar [ŋ] in syllable-final position.

xiii) cardinal numbers
(64) pál ‘one', fál (Ka.2) ‘the number ‘tiló’ (one) is today normally preferred over ‘fál’ in counting environments, though ‘fál’ is also sometimes used to count. As a modifier, ‘fál’ is preferred over ‘tiló’
(Hutchison, 1981: 202)
(65) tülùr ‘seven', tülùr (Ka.1) ‘seven’

5.4 Adverbs
About fifteen adverbs also appear to have been borrowed from Kanuri into Makary Kotoko.

(66) dám ‘(know, listen) well', dám (Ka.1) ‘emphasizes knowledge, awareness; emphasizes staying seated; emphasizes putting down’
(67) dàtên ‘early', dâtê; dàtên (Ka.1) ‘early (adj.); early (adv.)’

\textsuperscript{13} The following abbreviations are used for the gloss lines in this paper: 3: 3\textsuperscript{rd} person; ABSTR: abstract; CONC: concrete; EMPH: emphatic marker; F: feminine; M: masculine; MOD: modification marker; NEG: negative marker; NONSPEC: non-specific referent marker; PERF: perfective aspect marker; PL: plural; SG: singular.
(68) kál ‘immediately, even, quite simply, exactly, just’, kál (Ka.1) ‘same, similar, equal; describes sth. very near, right next to; describes sth. or s.o. being belittled; describes agreement’
(69) kórómá ‘immediately’, kórómá (Ka.1) ‘now, at present’
(70) lán ‘completely’, lán (Ka.1) ‘describes steady continuous movement ahead’
(71) lóm lóm ‘when the sun is covered by clouds’, lóm lóm (Ka.1) ‘describes coolness of the shade of a tree’
(72) nádí ‘on purpose, by habit’, nádí (Ka.1) ‘deliberateness, on purpose, intentionally’
(73) pér ‘much, a lot (for mass nouns)’, fér (Ka.1) ‘abundant, full of’
(74) sór ‘very (hard)’, sór (Ka.1) ‘describes good health, describes thinness of the body’

Note the semantic shift in the meaning of the term in example (74).

(75) sórin ‘in silence, speechless’, sórin (Ka.1) ‘silently’
(76) súl ‘completely (empty)’, súl (Ka.1) ‘describes: emptiness, poverty, nakedness, one’s dislike of seeing s.o; completely empty’
(77) táról ‘immediately, straight’, táról (Ka.1) ‘describes action of suddenly standing up to act’
(78) tóróm ‘a lot’, tóróm (Ka.1) ‘plenty, excessive, heap, pile’
(79) túr ‘necessarily, compulsorily’, túr (Ka.1) ‘describes directness of one’s movement, without deviation’
(80) wámké / wánté ‘perhaps’, wámké / wánté (Ka.1/Ka.3) ‘maybe, perhaps’

5.5 Ideophones

Ideophones are similar to adverbs in function but typically have a very restricted domain of use. The phonotactics of ideophones are also quite often exceptional. This last point has been criterial for distinguishing ideophones from adverbs. Note that the following examples contain an obstruent in syllable coda position. For other lexical categories, only sonorants (/m, n, r, l, y, w/) can occur in this position. I have identified just a handful of ideophones which are probably borrowed from Kanuri in my Makary Kotoko data:

(81) kóráp ‘sound of sth. closing up tight, quickly’, kóráp (Ka.1) ‘describes sth. completely closed or covered’
(82) pít ‘very (red)’, fít (Ka.1) ‘emphasizes redness’
(83) pót ‘very (black)’, fót (Ka.1) ‘very black’
(84) pók ‘very (white)’, fök (Ka.1) ‘emphasizes whiteness’
(85) pyát ‘quickly (removing sth.)’, fiyát (Ka.1) ‘describes pulling out or unsheathing’
(86) sák ‘(travel) straight ahead’, sák (Ka.1) ‘straight, straight ahead’
(87) tôlók ‘sound of a liquid dripping’, tôlák (Ka.1) ‘drop, drip’

In this section I have provided examples of borrowings from the lexical categories of nouns, verbs, adjectives, adverbs and ideophones. In the following section, I present the grammatical borrowings from Kanuri into Makary Kotoko.

6 Grammatical Borrowings

In addition to the numerous lexical borrowings, there is also a smaller number of grammatical borrowings from Kanuri into Makary Kotoko. Most of these are clause level particles which occur at pragmatic boundaries of the clause.

(88) àʃé ‘however, on the other hand’, àʃé (Ka.1) ‘exclamation of astonishment or surprise comparable to “Is that so?” or “You don’t say!”’
(89) dàsí / dàjí ‘be enough, okay, next’, dàjí (Ka.2) ‘then; and then; next’
(90) dó, ‘clause-final non-sequential marker’, dìwò (Cyffer, 2000: 53), ‘clause terminator with manifold derived uses’
(91) dē ‘also, even’, yé (Ka.1) ‘and, also, too’
(92) i ‘interrogative marker (to confirm sth one believes to be true)’, nyí (Ka.1) ‘... adverbial adjunct/status marker one can use it to re-ask a question one has gotten an unbelievable or unacceptable answer to, and wants therefore to hear the answer again... The initial consonant is not always clearly articulated, and the pronunciation becomes more like a very nasalized [yí] ... functions somewhat rhetorically, to posit or question something that one already believes to be true but wants verified when unsure.’ (Hutchison, 1981: 245,6)
(93) má ‘even (focus marker)’, +má (Ka.2) ‘emphatic particle’

Hutchison (1981) lists a number of functions for the particle + má in Kanuri and notes that ‘[a]ll of its uses share the common feature of some form of emphasis on a given constituent or clause’ (Hutchison, 1981: 243). For one function, he states that the ‘negative indefinite pronouns are normally formed through the affixation to the interrogative pronoun of the emphasis marker + má and take on this role in negative environments’ (1981: 52). This is illustrated in the next two examples.
In contrast, when Makary Kotoko adjoins the particle má to the interrogative pronouns, universal quantifiers are formed:

(96) \[ \text{Yàgí má} \] 
who? EMPH everybody

(97) \[ \text{Wà hè má} \] 
thing.PL.CONC\textsuperscript{14} INTERR EMPH everything

However, the particle má is used to form indefinite pronouns in negative contexts in Makary Kotoko, but in combination with the non-specific marker. Examples (98) and (100) show the (gender sensitive) non-specific markers without má. Examples (99) and (101) show them with má and the negative marker as well.

(98) \[ \text{blō n sì ā lū} \] 
man MOD.M NONSPEC.M 3SG.M.PERF come ‘Someone came.’

(99) \[ \text{blō n sì má ā lū wà} \] 
man MOD.M NONSPEC.M EMPH 3SG.M.PERF come NEG ‘No one came.’

(100) \[ \text{nì rò sò} \] 
thing.ABSTR MOD.F NONSPEC.F something

\textsuperscript{14} Makary Kotoko makes a lexical distinction between a concrete thing and an abstract thing.
This is not the same morpheme as the homophonous feminine marker of non-noun modification rò seen in examples (100) and (101) above.

Unlike Kanuri, Makary Kotoko makes a gender distinction. It appears the Kanuri term in example (102) has been adapted to account for this typological feature.

Hutchison notes that for Kanuri ‘the indefinite/concessive yàyé [is] applied very productively to the interrogative pronouns to produce the indefinite pronouns’ (Hutchison, 1981: 52).

The same is true of Makary Kotoko, as illustrated below.

In this section I have presented grammatical borrowings in Makary Kotoko from Kanuri, highlighting the similar and distinct functions of the grammatical markers in the two languages. In the following section, I examine the language contact issue of calquing.

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15 This is not the same morpheme as the homophonous feminine marker of non-noun modification rò seen in examples (100) and (101) above.
7  Calquing

Calquing is patterning the lexicon and grammar of the target language (Makary Kotoko, in this case) after the lexicon and grammar of the source language (Kanuri). Section 7.1 presents a case of lexical calquing. Section 7.2 addresses grammatical calquing.

7.1  Lexical Calquing

Lexical calquing or ‘loan translation’ occurs when bilingual speakers begin to shape or reorganize the open class categories of the lexicon of one of the languages they speak (the target language) to the structure of the other language (the source language). That is, the range or scope of meaning of lexical items of comparable meaning will increasingly coincide. Ross (2006: 97) claims that this type of calquing precedes grammatical calquing, both of which necessarily precede ‘metatypy’ (i.e. a ‘change of type’ due to structural diffusion).

I have only found one likely instance of lexical calquing in Makary Kotoko as evidenced by the polysemy of a particular word. The words for ‘hyena’ in Makary Kotoko and Kanuri are respectively: mäfì and búltù. In both languages,

FIGURE 2  Picture of rubber sack used for drawing water from a well
this same word is used to refer to a metal instrument shaped like a large four-pronged fish hook. A long rope is attached to the end of the instrument and this is used to fish out the rubber sack that is used to draw water out of the well when the rope attached to the sack breaks and the sack falls into the well.

It is possible that the term for *hyena* is used for this instrument because of a (hoped for) association with the strong jaws of a hyena who, when it grabs its prey with its teeth, refuses to let go. It is probable that this technological advance was brought to the Makary Kotoko through Kanuri by bilingual Makary Kotoko traders. Understanding the polysemy of the word *bültù* in Kanuri, these traders likely calqued this same polysemy onto the Makary Kotoko word for ‘hyena’: *màʃì*. Supporting evidence for this is provided by the fact that Makary Kotoko borrowed the term for the ‘rubber drawing sack’ as well: MK: *kárbi*; Ka.: *kárwi* (see figures 2 and 3).

### 7.2 Grammatical Calquing

Ross describes grammatical calquing as the ‘reorganization or creation of closed categories’ (Ross, 2006: 95). One such possible case of this in Makary Kotoko is with the grammatical function of tone within the verbal system of the language.

As noted earlier, Kanuri uses a two tone system (H and L) both lexically and grammatically. Mid tones that occur ‘result from tonal approximation’ (Cyffer, 2000: 45). As Hutchison explains: ‘[i]n certain environments, the morphological combination of syllables resulting in the tone pattern H-L-H will result in the raising of the low tone to mid (M), and the lowering of the final high tone to mid, producing H-M-M’ (Hutchison, 1981: 23).
For Kanuri, both Cyffer (2000) and Hutchison (1981) make note of the fact that ‘many high tone roots [for verbs] tend to be transitive, and low tone roots intransitive (Hutchison, 1981: 26–27). Hutchison provides the following examples and comments that ‘there are certainly exceptions [to this generalization] in the following minimal pairs, [but] the semantic relations are quite apparent’ (1981: 26–27) Hutchison provides the examples given in Table 4 and comments:

Makary Kotoko uses a three tone system (H, M, L) both lexically and grammatically though there are restrictions on the possible combinations that can occur. Makary Kotoko has about two dozen tonal minimal pairs within the verbal system. It is not always clear what grammatical/semantic relationship (if any in some cases) may exist between the different pairs since a number of Makary Kotoko verbs either (a) have a very generic meaning, or (b) are polysemous, or (c) are actually homophones representing distinct roots. Some pairs suggest a tonal pattern comparable to the transitive/intransitive distinction that Hutchison proposed for Kanuri, as shown in Table 5.

Others, however, seem to have the tonal correlation flip-flopped so that low/mid tone would correlate with an increase in transitivity (or perhaps in the degree of affectedness of the potential object) as shown in Table 6.

A similar pattern is noted by Jungraitmayr (1988: 11,12) for two other Chadic languages. For Tangale, LL marks transitive and HL marks intransitive as shown in Table 7.

For Kwami L(1)H marks transitive and LHL marks intransitive (Jungraitmayr 1988: 11, 12) as shown in Table 8.

| Table 4 | Correlation between tone and transitivity in Kanuri (Hutchison 1981) |
|---------|---------------------------------------------------------------------|
| **L tone: intr** | **Gloss** | **H tone: tr** | **Gloss** |
| dàm+ | ‘become crowded, fill up’ | dàm+ | ‘seep, ooze’ |
| fù+ | ‘blow’ | fù+ | ‘swell’ |
| kà+ | ‘avoid, escape’ | kà+ | ‘open, uncover, reveal’ |
| kòk+ | ‘peck at’ | kòk+ | ‘plant, stick in ground’ |
| lè+ | ‘go’ | lè+ | ‘touch’ |
| sàm+ | ‘distribute, give out’ | sàm+ | ‘rub on’ |
| sàp+ | ‘shovel up’ | sàp+ | ‘lower, bring down’ |
| tär+ | ‘spread out, lay out’ | tär+ | ‘scatter, disperse’ |
| yìn+ | ‘breathe’ | yìn+ | ‘smell, sniff’ |
| zòk+ | ‘scrape, grate, shake’ | zòk+ | ‘annoy, pester, irritate’ |
### Table 5  
**Correlation between tone and transitivity in Makary Kotoko**

| L/M tone: intr | Gloss            | H tone: tr | Gloss            |
|---------------|------------------|------------|------------------|
| fō            | ‘run’            | fō         | ‘blow (nose)’    |
| gā            | ‘jump’           | gā         | ‘put, pick up’   |
| tò            | ‘return’         | tò         | ‘reply’          |
| yā            | ‘be, become’     | yā         | ‘want, need, look for’ |

### Table 6  
**Correlation between tone and transitivity/object affectedness in Makary Kotoko**

| L/M tone: tr | Gloss       | H tone: intr | Gloss       |
|--------------|-------------|--------------|-------------|
| bō           | ‘pierce; have’ | bō           | ‘enter (quickly)’ |
| dō           | ‘take sth. to s.o.’ | dō           | ‘drive, chase away’ |
| kō           | ‘lift up; tell’ | kō           | ‘vomit; pull up’ |
| sī           | ‘take’      | sī           | ‘pull’      |
| sō           | ‘mount (e.g. a horse); mate’ | sō           | ‘climb’      |

### Table 7  
**Correlation between tone and transitivity in Tangale (Jungraithmayr 1988)**

| L tone: tr | Gloss       | H tone: intr | Gloss       |
|------------|-------------|--------------|-------------|
| sōgi       | ‘make disappear’ | sōgi       | ‘disappear’ |
| hàli       | ‘burn’      | hàli         | ‘be burnt’  |
| sàgi       | ‘jump (sth.)’ | sàgi         | ‘jump’      |

### Table 8  
**Correlation between tone and transitivity in Kwami (Jungraithmayr 1988)**

| L tone: tr | Gloss       | H tone: intr | Gloss       |
|------------|-------------|--------------|-------------|
| ni pidūgò móótàa | ‘I washed the car’ | ni pidūgò | ‘I washed myself’ |
| ni indūgò Gòmbè  | ‘I left Gombe’  | ni indūgò   | ‘I stood up’   |
It may be that Makary Kotoko shows evidence of two conflicting systems for marking transitivity tonally.

These last two sub-sections have examined the limited evidence for lexical and grammatical calquing in Makary Kotoko from Kanuri. In the following section of the paper, I examine the issue of structural diffusion.

8 Structural Diffusion

Ross suggests that ‘lexical and grammatical calquing precede syntactic restructuring’ (Ross, 2006: 96). Following Sasse (1985), he claims that ‘only when the [lexical and grammatical] categories of the two [i.e., source and target] languages match each other closely does syntactic restructuring begin’ (2006: 97). Assuming Ross is correct, the limited evidence of lexical and grammatical calquing in Makary Kotoko would help explain why this language has not undergone any significant structural diffusion despite having borrowed a large number of items from various lexical categories, along with some grammatical morphemes.

The lack of structural diffusion from Kanuri into Makary Kotoko can be seen by comparing the typological profile of each language. In Table 9, I highlight a short selection of typological traits of Kanuri and Makary Kotoko.

| Feature                     | Makary Kotoko | Kanuri |
|-----------------------------|---------------|--------|
| Vowel inventory            | /i, e, ә, a, u, o/ | /i, e, ә, a, u, o/ |
| Glottalized stops          | Yes           | No     |
| Tone                        | 3 tones       | 2 tones |
| Morphophonemics             | Simple        | Complex |
| Gender                      | Yes           | No     |
| Plural formation            | Complex       | Simple |
| Noun-phrase syntax          | Head-initial  | Head-initial |
| 1pl inclusive/exclusive     | Yes           | No     |
| Verb morphology             | Simple        | Complex |
| Adpositions                 | Prepositional | Postpositional |
| Word order                  | svo           | sov    |
| Complementation             | Post-verbal   | Pre-verbal |
The one area where the effect of Kanuri on Makary Kotoko may be visible is in the vowel system. Both languages have essentially the same six underlying vowels. The large number of borrowings into Makary Kotoko from Kanuri containing the mid vowels (/e/ and /o/) has likely strengthened the phonological status of these vowels in Makary Kotoko, particularly within the nominal system. Newman (2005) notes that quite often in Chadic languages the mid vowels are of a marginal status. This is particularly true for Makary Kotoko within the verbal system in closed syllables, where their presence is likely due to the palatalizing or labializing effect of contiguous palatal and labial consonants on an underlying /a/:

(112) ngêy 'learn, imitate'
(113) fêw 'dig, hollow out (log)'
(114) wôw 'bark (as dog)'

9 Conclusion

Why has Makary Kotoko borrowed lexical items so extensively yet with so little evidence of calquing or diffusion? Storch suggests that ‘[i]f we want to explain why in some cases of language contact originally typologically diverse grammars do become similar and why in other cases they would not converge, we may have to take ethnolinguistic and of course ethnohistorical data into account...’ (Storch, 2006: 110). Moving in that direction, I conclude by suggesting five possible reasons for the lack of structural diffusion of typological traits of Kanuri into Makary Kotoko:

(a) complex morphophonemics of Kanuri
(b) fusional verb morphology of Kanuri
(c) relation of (social and cultural) dominance of Kanuri over Makary Kotoko
   (attested by the islamization of the Makary Kotoko by the Kanuri)
(d) Kanuri formerly spoken primarily by Makary Kotoko elites and merchants in the context of traditional government roles and in the market place
(e) interrupted language contact due to the subsequent arrival of the Shuwa Arabs into the Makary Kotoko area

Having begun this article with a quote from Aikhenvald, I conclude by agreeing with another where she notes that the ‘impact of a prestigious second
language ... typically results in an abundance of loanwords, but hardly any structural influence’ (Aikhenvald, 2006a: 37).

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