

Some diachronic observations on gender and number in Bole-Tangale Languages

Sergio BALDI & Rudolf LEGER

(University of Napoli & University of Frankfurt)

1. Introduction

The existence and manifestations of grammatical gender of nouns as well as pronouns is generally accepted as an important proof for the Afro-Asiatic or Hamito-Semitic affiliation of Chadic languages (JUNGRAITHMAYR and LEGER 2002: 79-89). LUKAS (1934) has given this “*proprium*” such an importance, that he distinguished between Chado-Hamitic languages - i.e., those with grammatical gender- and Chadic languages - i.e., whose without grammatical gender. Subsequent to the early works of GREENBERG (1950) and NEWMAN and MA (1966) this principal categorical differentiation has lost its relevance for genetic linguistic classification but it still shows that and how genetically related languages can either preserve or lose a common structural feature in the course of their history. This could also mean that when talking about grammatical gender, any synchronically present gender system “may no longer be identical with the gender system the language had when the system came into existence” (LEGER 1998: 204).

In this paper we provide descriptions of current gender systems of nouns in relation to other grammatical parameters and also with the pronominal systems. Focus is on languages of the southern Bole-Tangale group in general, and on the languages Kwami, Kupto, Kushi, Piya and Widala in particular. Occasionally and in order to support our statements, we also refer to some other Bole-Tangale languages such as Tangale, Pero and Nyam. Most of these languages are spoken in the wider Gongola-Benue basin of North-Eastern Nigeria and are - to the exception of Tangale - spoken by hardly more than five to fifteen thousand speakers in so-called retreat areas. The geographically most northern representatives Kwami and Kupto border onto other Chadic languages like Tera, Maha and Bolanci, whereas the southern representatives, i.e. Tangale, Kushi, Piya, Widala and Nyam, are neighbours to Adamawa and Benue-Congo languages such as Waja, Cham, Bangwinji, Burak, Lo and Kulung.

2. Nouns

All languages of the Bole-Tangale group have grammatical gender without displaying overt gender markers, i.e. there are neither segmental nor

tonal distinctions between masculine and feminine nouns. An interesting fact, however, is that a gender levelling (*'Genusnivellierung'*) in favour of the feminine gender can be observed especially among the geographical southern languages. This can even lead to a complete loss of gender distinction with, possibly, only a few exceptions. The following examples are taken from Kwami, Kushi, Piya, Widala and Nyam:

Gloss	knee	Saliva	tree
Kwami	<i>pùrùm</i> (m.)	<i>ʔillé</i> (m.)	<i>shòobi</i> (f.)
Kushi	<i>vùrùm</i> (f.)	<i>ʔèlèt</i> (f.)	<i>bìró</i> (f.)
Piya	<i>bùrmí</i> (f.)	<i>ʔèléc</i> (f.)	<i>bùrò</i> (f.)
Widala	<i>vùlùm</i> (f.)	<i>ʔèlèk</i> (f.)	<i>v(ù)rò</i> (f.)
Nyam	<i>zùlùm</i> (f.)	<i>d'ègén</i> (f.)	<i>tón</i> (f.)

In Kwami, where the ratio of masculine to feminine nouns is about 60 to 40, there seems to be a specific distinction of grammatical gender for a certain group of nouns which is based on semantics. Here, nouns which refer in the widest sense to the domestic sphere, are generally feminine, in contrast to nouns which refer to the outer sphere of the house, household or compound. For such nouns, an underlying semantic assignment system can be perceived distinguishing the traditional domain of women from the traditional domain of men. Cf.

<i>bìni</i> (f.) 'house, hut'	<i>máalá</i> (m.) 'bush, forest'
<i>fìni</i> (f.) 'room, hut'	<i>zírki</i> (m.) 'woodland'
<i>búdĩ</i> (f.) 'small hut'	<i>díulé</i> (m.) 'farm'
<i>shémí</i> (f.) 'entrance, hut'	<i>piidàlàn</i> (m.) 'field'
<i>gàrà̀n</i> (f.) 'cooking place'	<i>bùnké</i> (m.) 'meeting place in the bush'
<i>túubá</i> (f.) 'house, hut'	<i>ndìgìli</i> (m.) 'guard tower'

A similar observation holds for fruits and plants. As long as these grow in the field, they show masculine gender, but as soon as they are harvested and brought home for manufacturing, their gender is feminine. Again, the same semantic concept can be assumed which would contrast the outer to the inner sphere which would also reflect the complimentary distribution of the influence spheres of men versus women. Cf.

Gloss	growing in the fields	harvested or removed
cotton	<i>lòolów</i> (m.)	<i>lòolów</i> (f.)
pumpkin	<i>gùyà</i> (m.)	<i>gùyà</i> (f.)
millet	<i>sháagúm</i> (m.)	<i>sháagúm</i> (f.)

Kwami nouns further share with many other Chadic and also some Cushitic languages the feature, that most of all small animals, also in addition to plants and fruits, are connected mainly with female gender (CORBETT 1991: 32). Cf.

kàràmmàtá (f.) ‘sp. bird (sort of kite)’; *ngáakí* (f.) ‘sp. bird’; *kállúm-kállúm* (f.) ‘sp. bird’; *jàlàw* (f.) ‘sp. bird’; *lèw* (f.) ‘sp. bird’; *dòrò* (f.) ‘sp. snake’; *gòoyó* (f.) ‘sp. snake’; *wòndóorì* (f.) ‘scorpion’; *jànkàrì* (f.) ‘louse’; *pàkàlì* (f.) ‘caterpillar’; *yèndín* (f.) ‘sp. ant’; *gùdigí* (f.) ‘type of wild apple’; *bòmbítòm* (f.) ‘sp. grass’; *bilbiláatá* (f.) ‘sp. grass’; *ʔàlà* (f.) ‘sp. grass’.

Another peculiarity in Kwami is, that generic or collective terms - in contrast to individual terms - are masculine, cf.

e.g. *ʔàmì* (m.) ‘water’ but:

ʔèwji (f.) ‘river, lake; north’; *ngèèjì* (f.) ‘marshland’; *pàlì* (f.) ‘lake’; *piyó* (f.) ‘rain, rainy season’; *tíndí* (f.) ‘source, spring’.

Masculine gender for generic terms, also holds for abstract nouns, since “in the system of the language *abstracta* are not only ‘per definitionem’, but rather by their generalized meaning logically generic terms” (LEGER 1998: 208). Verbal nouns and verbal substantives fall in this category, too. It seems that the change from the verbal to the nominal category strips off the more concrete verbal meaning in favour to a more abstract, i.e. nominal meaning. Cf.

fàadìn-fàadíyà (m.) ‘trade, commerce’ (< *fàadáy* ‘to sell, to buy’); *kàryà* (m.) ‘obligation’ (< *kàryáy* ‘to bind, to wrap’); *kàwà* ‘shame’ (< *kàwàn* ‘to be ashamed’); *ʔòbìyò* (m.) ‘ulcer, abscess’ (< *ʔòbàn* ‘to swell’); *tàppò* (m.) ‘meeting, assembly’ (< *tàppáy* ‘to collect, to accumulate’); *shàkkà* ‘prayer’ (< *shàkkáy* ‘to beg, to ask’); *kámdì* (m.) ‘oath’ (< *kámdáy* ‘to fill, to swear’); *shéri* (m.) ‘highness’ (< *shèràn* ‘to stand’); *ʔèdikì* (m.) ‘load’ (< *ʔèdikáy* ‘to carry’); *mérgè* (m.) ‘wound’ (< *mèrgáy* ‘to hurt s.o.’); *shìrì* (m.) ‘theft’ (< *shìráy* ‘to steal’).

The language most closely related to Kwami is Kupto. In Kupto, where the ratio of feminine to masculine nouns is roughly 90 to 10, no specific semantic fields are found, which would differentiate masculine from feminine nouns. However and notably so, all verbal nouns are feminine - quite opposite to Kwami.

dìgà (f.) ‘marriage’ (< *dìgáy* ‘to build; to marry’); *gùdò* (f.) ‘refusal’ (< *gùdèy* ‘to deny, to hate’); *màatò* (f.) ‘argument’ (< *màatáy* ‘to talk’); *riishò* (f.) ‘attack’ (< *riishì* ‘to enter’); *kàdò* (f.) ‘reception’ (< *kàdèy* ‘to receive’);

làdirò (f.) ‘transfer’ (< *làdiréy* ‘to cross’); *lòjjò* (f.) ‘mixture’ (< *lòjjéy* ‘to mix, to blend’).

In Kushi, a language spoken in close vicinity to the Adamawa languages Burak and Lo, all nouns with exception of *kèwù* (m.) ‘white beniseed’ and *làdük* (m.), also a type of ‘white beniseed’, are feminine. The explanation given was that these types of beniseed can grow by dew (and are therefore planted in the dry season), whereas all other plants need rain for their growth. Here, some kind of mythological gender assignment can be assumed. No explanation was given for the changing gender assignment of *tèrè* ‘moon’. When the moon increases or decreases it is grammatically masculine, but when the moon is full it shows feminine gender.

In Piya, almost all nouns possess the feminine gender. Only one noun with a masculine grammatical gender was observed. This is the example *còmbò* ‘name, name giving ceremony’, which like in Kwami, Kupto and Hausa (- in spite of its ending in –aa) - carries masculine gender. Cf.

Piya	Kwami	Kupto	Hausa
<i>còmbò</i> (m.)	<i>ʔimí</i> (m.)	<i>ʔùn/wùn</i> (m.)	<i>súunáa</i> (m.)

3. Typological correlates to diachronic changes affecting gender

Interestingly, the observation of gender loss or levelling corresponds to at least three other typological changes in the languages under review: decrease of overt noun plural marking, increase of verbal pluractionality marking, and what here shall be called tone-levelling.

First observation: The increase of feminine gender goes along with the decrease of nominal plural formation.

In Kwami, the distribution of masculine and feminine gender is quite balanced (60 to 40 %) and the language has four types of possible plural formation. In Kupto, the distribution of feminine and masculine nouns is 90 to 10 % and only three types of plural formation exists. Finally, in Kushi, Piya, Widala and Nyam, almost all nouns have feminine gender, and only one type of noun plural formation is found. Cf.

Noun pl type	Kwami	Kupto
<i>external</i>	<i>ʔànjè – ʔànjè-shíná</i> ‘star’	<i>wúyó – wúyó-lay</i> ‘hole’
<i>internal & external</i>	<i>tòojè – tòjjín</i> ‘horse’	<i>kènè – kènnín</i> ‘buffalo, bush cow’
<i>internal & external</i>	<i>kúmíyó – kùmáyà-shíná</i> ‘co-wife’	----

<i>reduplicative</i>	<i>zùm</i> – <i>zùm-zùm</i>	-----
	‘difference’	
<i>suppletive</i>	<i>mánú</i> – <i>?òmbàrà</i>	<i>búu(-)</i> – <i>?àná(-)</i>
	‘woman’	‘possessor/owner of’

	Kushi	Piya
<i>suppletive</i>	<i>là</i> (m./f.) – <i>cíbó</i> ‘child; boy, girl’	<i>pòomón</i> – <i>cèrép</i> ‘woman, wife’

	Widala	Nyam
<i>suppletive</i>	<i>miyá</i> – <i>mèmmè</i> ‘person’	<i>mùdùk</i> – <i>sùlúp</i> ‘woman’

Second observation: The levelling of the gender distinctions to the benefit of feminine gender is not only paralleled by a breakdown in the system of noun plurality, but also corresponds with an increase of the use of verbal plural formations (‘pluractionals’).

In Kwami and Kupto verbal plurality is expressed by suffix morphemes in the perfective tense only, whereas Kushi and Piya have developed their own verbal pluractional stems which are used in all tenses and aspects. ‘Pluractionals’ in Kwami and Kupto indicate the plurality of the subject and are “not derived plural verb stems denoting semantic plurality” (NEWMAN 1990: 53), i.e. the verb plural markers –an- and –a respectively indicate the verb plural agreement. Cf.

Kwami:

<i>yìn rèeb-án-gò</i> ‘they have cleaned’	(NON-PLURAL <i>rèeb-ù-gó</i>)
<i>yìn tèrr-án-gò</i> ‘they have hurt’	(NON-PLURAL <i>tèrr-ù-gó</i>)

Kupto:

<i>mà sháat-à</i> ‘you have helped’	(NON-PLURACTIONAL <i>sháat-ù</i>)
<i>wùn fúud-à</i> ‘they have ridged up’	(NON-PLURACTIONAL <i>fúud-ù</i>)

Cf. Kushi:

shèeyàyanì (sgl. *shèeyàni*) ‘to drink’; *shùyàyanì* (sgl. *shàani*) ‘to eat’; *kùnràni* (sgl. *kùràni*) ‘to hate’; *dìjìyanì* (sgl. *dìyanì*) ‘to sit, to settle, to live’; *pàrdàni* (sgl. *pàttàni*) ‘to deliver’; *yìbìyanì* (sgl. *yìwàni*) ‘to hold’; *nìcìyanì* (sgl. *nìyanì*) ‘to ripen’; *làrràni* (sgl. *làttàni*) ‘to hide’.

Cf. Piya:

tàttìrànnì (sgl. *tàrànnì*) ‘to hide’; *cùppùbànnì* (sgl. *cùbbànnì*) ‘to show’; *làdìlànì* (sgl. *làalànì*) ‘to burn’; *cwàcìrànnì* (sgl. *cwàrànnì*) ‘to decrease’;

fùddírànnì (sgl. *fùddànnì*) ‘to wash’; *wùcciyànnì* (sgl. *wùyànnì*) ‘to dry up’; *bàngilànnì* (sgl. *bàlànnì*) ‘to count’.

Cf. Widala:

mùmùnánì (sgl. *mùnánì*) ‘to give’; *tèwiyànnì* (sgl. *tèwánì*) ‘to talk’; *kèpiyànnì* (sgl. *kèpánì*) ‘to receive’; *pàtirànnì* (sgl. *pàtánì*) ‘to pour in’; *còodilánì* (sgl. *còolánì*) ‘to wait’; *bùtùrànnì* (sgl. *bùrànnì*) ‘to grow up’.

Third observation: In the languages with an increase of feminine gender, a certain tone levelling towards the low tone (*Tonnivellierung*) can be observed. Cf. the following examples from Piya, Kwami and Kupto:

Piya	Kwami	Kupto	Gloss
<i>còwò</i>	<i>shówò</i>	<i>shòwó</i>	‘fear’
<i>kwàddàkh</i>	<i>kwáddáǵí</i>	<i>kwáddàk</i>	‘finger’
<i>cèerè</i>	<i>shérè</i>	<i>céré</i>	‘friend’
<i>pùlè</i>	<i>púlè</i>	<i>fúli</i>	‘pregnancy’
<i>fòyòy</i>	<i>póyó</i>	<i>fòoyò</i>	‘new’
<i>pùgùm</i>	<i>pùgùm</i>	<i>fùhúm</i>	‘blind’

Two basic questions, however, remain. What causes the decline of gender distinction? And, why does gender levelling go in favour of the feminine gender.

The first question is the easier one to answer. We hypothetically assume two steps of diachronic development. In a first step, a partial loss of formal, i.e. ‘overt’ gender markers - having differentiated masculine from feminine - might have taken place, which in a second step led to a complete loss of overt gender marking¹. Though there are no such evidences found in Chadic yet we may refer to CORBETT’s general statement, that “the major cause of the decline of gender systems is attrition, that is, the partial or complete loss of the formal markers on which the system depends” (CORBETT 1991: 315).

But why does gender levelling occur in favour of the feminine? In the view of the speakers, there are marked and unmarked categories, where the “form considered unmarked [...] is claimed to correspond to the form used for gender resolution” (CORBETT 1991: 2991). Unlike in Afro-Asiatic, where the feminine category is the marked one (cf. JUNGRAITHMAYR and LEGER 2002: 84), the situation might be reversed here. This means that the feminine category was most probably considered as the unmarked category which allowed the nouns from the masculine category to cross that boundary more

¹ An interesting speculation connected with the ‘break down’ of the gender system may be whether the tone - at least for an intermediate stage - has functioned as ‘gender stabilizer’.

easily than vice versa. A gradual transfer of nouns from masculine to feminine gender is the result, which once having started cannot be controlled or stopped anymore (cf. also LEGER 1998: 215).

4. Pronouns

When we turn to pronouns in general and to subjects pronouns in particular, the development appears to be quite contrary to that of nouns. Here a steady increase or inflation of the pronominal systems can be observed absorbing or compensating the decline or the loss of number and gender in the nominal sphere. In addition it should be emphasized that some of the pronouns composed with certain morphemes function as TAM markers.

Our first observation pertains to those languages which number and gender is frequently and overtly expressed like in Kwami – and to a certain extent also in Bolanci – only one pronominal set of subject pronouns is found for all verbal paradigms. In languages where gender levelling towards feminine gender gains the upper hand, like in Kupto, one can find the development of a new set of subject pronouns which is specialized to mark remote future. In Piya, Widala and Nyam, where nearly all nouns carry the feminine gender, i.e. where no significant gender and number distinction in the nominal sphere exist, two or even three pronominal sets can be found. In Piya and Widala we find one additional set for the subjunctive with an extension of an element *-n*, *-* and in Nyam one for future, one for present continuous and perfect and one which is exclusively reserved for the subjunctive paradigm. Moreover, Piya and Widala possess an inclusive and exclusive pronoun in the first person plural. See the table on page 34.

Apart from the different pronominal sets, there is another striking feature namely the occurrence of the so called Intransitive Copy Pronoun (ICP) which “copies the person number and gender of the subject onto intransitive verbs” (NEWMAN 1974: 23). This grammatical feature again is found exactly in those languages, where gender levelling has taken place. This means - that apart from Kwami and - more restricted in Bolanci - ICPs are found in all other languages of the southern Bole-Tangale group like Kupto, Pero, Piya, Kushi and Widala, as well as in Maha, Tangale and Kanakuru.

Kupto

wùn rìw-wù ‘they have entered’

Pero

mín -tá -lékkédée-mù ‘we will disperse’ (FRAJZYNGIER 1989: 114)

Piya

nè òlligée-nó ‘I have stood up’

Kushi

shìnù nèshàa-jù ‘they have taken rest’

Widala

tè mùràn-ró ‘she has died’

Maha

yì ʔillò-nì ‘he is standing’

Tangale

ambû-nọ ‘I mount(ed)’ (JUNGRAITMAYR 1991: 59)

Kanakuru

amboi wù lewo-wu ‘the boys have (get) tired’ (NEWMAN 1974: 23)

Further, there is the phenomenon referred to as ‘logophoricity’ which is found in the pronominal systems of Tangale, Pero, Piya and Widala. And again, this grammatical feature arises exactly where we find languages that have given up number and gender distinction. Examples from Tangale, Pero and Widala are given (LEGER and ZOCH 2006: 210-213):

no co-reference	co-reference with the speaker	co-reference with addressee
-----------------	----------------------------------	--------------------------------

Tangale:

<i>mbéendám</i>	<i>yì</i>	<i>péemó</i>	(3. pers. m.)
<i>mbáastám</i>	<i>ta</i>	<i>paaze</i>	(3. pers. f.)
<i>mbiindam</i>	<i>yini</i>	<i>piimo</i>	(3. pers. pl.)

Pero:

<i>cakka</i>	-----	<i>peemo/u</i>	(3. pers. m.)
<i>te</i>	-----	<i>peeje</i>	(3. pers. f.)
<i>cinu</i>	-----	<i>piime</i>	(3. pers. pl.)

Widala:

<i>càkhì</i>	<i>càkhù</i>	<i>pèemò</i>	(3. pers. m.)
<i>mòtò</i>	<i>tè</i>	<i>pèeyè</i>	(3. pers. f.)
<i>yèelè</i>	<i>cùnù</i>	<i>piimè</i>	(3. pers. pl.)

Tangale:

mbéendám yimgo ka mbéendám nego ka mbéendám nga kina
‘He (1) thought that he (2) said that he (3) had money.’

Pero:

péemè tók-nà cákkà n wát-tù áddò róccò-i
‘[He(1) said to him(2)], he(2) kills animals and he (1) will come and eat the liver.’

Widala:

càkhù tèkkòw càkhù/càkhi wèeyòw ʔindè
 ‘He(1) said, he(1)/he(2) saw a dog.’
 (‘anti-logophoric’)

An interesting aspect which should be mentioned here is, that in Tangale the logophoric pronouns which show co-reference with the speaker are the old inherited or classical preverbal subject pronouns in Chadic reconstructed by NEWMAN and SCHUH (1974: 6) as **si* and **ta*.

Finally we want to mention the functions of the direct object pronouns in these languages. At least in Kwami, Kupto, Widala and Nyam we find two different pronominal sets. The first set is employed in paradigms of non-perfective aspect and resembles in shape that of the possessive pronouns in the respective languages. The second set is employed exclusively for the perfective aspect.

	Kwami
<i>tè shúm-à-n-gò</i>	‘she will beat you (m.)’
<i>tè shùm-ì-gá</i>	‘she has beaten you (m.)’
	Kupto
<i>né màad-ò-tò</i>	‘I am telling her’
<i>né màad-ì-tà</i>	‘I have told her’
	Widala
<i>né tì píri bìr(ò)-gò</i>	‘I am going to beat you (m.)’
<i>né bìròw khè</i>	‘I have beaten you (m.)’
	Nyam
<i>nyà kèmd-ì-nò</i>	‘he will sell her’
<i>nyì kèmd-ì-nà</i>	‘he has sold her’

This shows us, that there is an aspect dichotomy indicated by the use of the various direct object pronouns.

5. Summary

In the Bole-Tangale languages gender levelling can be observed, progressing from the geographically northern languages like Bolanci, Kwami and Kupto towards the geographically southern languages like Tangale, Pero, Piya, Widala and Nyam. In the southern languages - with very few exceptions - nearly all nouns have feminine gender. This feature is paralleled by the reduction of nominal plural formatives. This means that, in the northern languages, like Kwami and Kupto, we observe several different

types of plural formation, whereas in the southern languages, like Kushi, Piya and Nyam, only suppletive plural forms - restricted to nouns denoting human beings - are found. Furthermore, it seems that in the southern languages a tone levelling to the benefit of low tones is prevailing. Typologically, in close connection with these features stands an increase of various subject pronoun sets which in Nyam reaches the highest differentiation. On the other hand, the southern Bole-Tangale languages are enriched by the employment of intransitive copy as well as by the use of logophoric pronouns. Tentatively, we wish to advance the diachronic hypothesis that these extensions are directly linked to the various reductions in the nominal sphere. Further research is needed in order to substantiate this hypothesis.

6. References

- CORBETT, Greville G. 1991. *Gender*. Cambridge/New York/ Port Chester/ Melbourne/Sydney: Cambridge University Press, p. xix-363.
- FRAJZYNGIER, Zygmunt. 1989. *A Grammar of Pero* (Sprache und Oralität in Afrika; Band 4). Berlin: Dietrich Reimer, p. viii-310.
- GREENBERG, Joseph H. 1950. Studies in African linguistic classification: IV Hamito-Semitic. *Southwestern Journal of Anthropology* 6, p. 47-63.
- JUNGRAITHMAYR, Herrmann, in collaboration with Njeno Andirya GALADIMA and Ulrich KLEINWILLINGHÖFER. 1991. *A Dictionary of the Tangale Language (Kaltungo, Northern Nigeria) with a Grammatical Introduction* (Sprache und Oralität in Afrika; Bd. 12). Berlin: Dietrich Reimer.
- JUNGRAITHMAYR, Herrmann and Rudolf LEGER. 2003. Loss, shift and growth in Southern Bole-Tangale languages. The interplay of internal and external factors in language development. In NICOLAÏ, Robert and Petr ZIMA (ed.). *Lexical and Structural Diffusion. Interplay of Internal and External Factors of Language Development in the West African Sahel* (Corpus Les Cahiers 1). Nice: Faculté des Lettres, Arts et Sciences humaines de Nice - Sophia Antipolis, p.79-89.
- LEGER, Rudolf. 1998. Grammatical gender in some southern Bole-Tangale languages – Kwami, Kupto, Kushi and Piya. In *Africa, Society, Culture and Languages*. Moscow: Institute of African Studies, p. 204-216.
- LEGER, Rudolf and Ulrike ZOCH. 2006. Logophoric Pronouns in the Southern Bole-Tangale Languages. In CARON, Bernard and Petr ZIMA (ed.). *Sprachbund in the West African Sahel* (Collection Afrique et Langage, 11). Louvain-Paris: Peeters, p. 205-214.
- LUKAS, Johannes. 1934. Die Gliederung der Sprachenwelt des Tschadsee-Gebietes in Zentralafrika. *Forschungen und Fortschritte* 10, 29, p. 356-57.

- NEWMAN, Paul. 1974. *The Kanakuru Language* (West African Language Monograph, 9). Leeds: Institute of Modern English Language Studies, University of Leeds and West African Linguistics Society, p. x-139.
- NEWMAN, Paul and Roxana MA. 1966. Comparative Chadic: Phonology and Lexicon. *Journal of African Languages* 5, p. 218-51.
- NEWMAN, Paul and Russell G. SCHUH. 1974. The Hausa Aspect System. *Afroasiatic Linguistics* 1, 1, p. 1-39.
- NEWMAN, Paul. 1990. *Nominal and Verbal Plurality in Chadic*. Foris Publications Dordrecht - Holland/Providence RI – U.S.A.
- TULLER, Laurice Anne. 1997. Les 'ICP' en tchadique. In ZRIBI-HERTZ, Anne and Charlotte GALVES (ed.). *Les pronoms: morphologie, syntaxe et typologie* (Sciences du Langage). Saint-Denis: Presses universitaires de Vincennes, p. 213-229.

Appendix

	Bole	Kwami	Kupto	Piya		Widala		Nyam			
Sg. 1.	<i>ʔn</i>	<i>nè</i>	<i>nè</i>	<i>nàa</i>	<i>nè</i>	<i>nèn</i>	<i>né</i>	<i>nèn</i>	- / ñ	<i>ndà</i>	<i>nàa(-)</i>
2. m	<i>ká</i>	<i>kè</i>	<i>kè</i>	<i>kàa</i>	<i>kè</i>	<i>kèn</i>	<i>khè</i>	<i>khèn</i>	<i>khì</i>	<i>kà</i>	<i>nàagí</i>
f	<i>shí</i>	<i>shì</i>	<i>shì</i>	<i>shàa</i>	<i>cì</i>	<i>cìn</i>	<i>cì</i>	<i>cìn</i>	<i>kì</i>	<i>kyá</i>	<i>nàaji</i>
3. m	<i>(íshí)</i> <i>(à)</i>	<i>yì</i>	<i>yì</i>	<i>yàa</i>	<i>càkéy</i>	<i>càkén</i>	<i>càkhù</i> <i>càkhi</i> <i>pèemò</i>	<i>càkhùn</i> <i>càkhìn</i> <i>pèemòn</i>	<i>nyì</i>	<i>nyà</i>	<i>nàanyí</i>
f	<i>(ítá)</i> <i>(à)</i>	<i>tè</i>	<i>tè</i>	<i>tàa</i>	<i>tè</i>	<i>tèn</i>	<i>tè</i> <i>mòtò</i> <i>pèeyè</i>	<i>tèn</i> <i>mòtòn</i> <i>pèeyèn</i>	<i>sì</i>	<i>sà</i>	<i>nàari</i>
Pl. 1.	<i>mú</i>	<i>mìn</i>	<i>mìn</i>	<i>mùnà</i>	<i>mìn(ù)</i>	<i>mìnùn</i>	<i>mùn excl.</i> <i>khàmmè incl.</i>	<i>mùn excl.</i> <i>khàmmèn incl.</i>	<i>ʔàn</i>	<i>ʔándà</i>	<i>nàaʔán</i>
2.	<i>măa</i>	<i>mà</i>	<i>mà</i>	<i>màa</i>	<i>mà</i>	<i>màn</i>	<i>mà</i>	<i>màn</i>	<i>kà</i>	<i>káará</i>	<i>nàagá</i>
3.	<i>(màté)</i> <i>(à)</i>	<i>yìn</i>	<i>wùn</i>	<i>wùnà</i>	<i>cùn(ù)</i>	<i>cùnùn</i>	<i>cùnù</i> <i>yèelè</i> <i>piimè</i>	<i>cùnùn</i> <i>yèelèn</i> <i>piimèn</i>	<i>kày</i>	<i>kàyrá</i>	<i>nàagáy</i>