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Johannes Lukas (1901-1980) – 25th anniversary of his death

**In Search of Saharan Inflectional Verbal Paradigms
in Old Kanembu**

by D m i t r y B o n d a r e v

ABSTRACT: The extensive Old Kanembu texts found in the Borno Qur'anic manuscripts provide, as far as we know, the earliest evidence for a sub-Saharan language and shed light on the history of the languages of the Saharan family. In this article, the form/meaning features of Old Kanembu inflectional TAM's are compared with the corresponding Kanuri, Teda-Daza and Beria inflectional paradigms. The analysis, though preliminary, demonstrates that Old Kanembu is diachronically close to proto-Western Saharan, and also reflects proto-Saharan features retained in Eastern Saharan Beria which is located at the geographical extreme of the family at some distance from Western Kanuri/Kanembu.

1 Introduction

Old Kanembu*, or the language of the Qur'anic glosses (LG), is a written variety of Kanuri/Kanembu which was used by medieval Borno scholars for Qur'anic interpretation. The Borno Qur'anic manuscripts were found by A.D.H. Bivar in the late 1950's and one of them was briefly examined by Johannes Lukas who confirmed that the vernacular commentaries represented a variety of Kanembu (Bivar 1960: 201; also personal communication with Professor Bivar).

The LG glosses combine three levels of translation of the original Qur'anic Arabic: 1) separate grammatical morphemes, 2) word for word translation with equivalent grammatical markers, and 3) phrase/sentence translations of either the Qur'anic text or an Arabic commentary on the text (tafsīr).

The initial corpus of the manuscripts with extensive LG data has been increased from 230 folios to more than 3,200 folios of Kanembu glosses, contained in an extra seven Qur'anic manuscripts, all of which are now available for study in digital form. The data and analysis represent what has been covered up until August 2007 and are merely the tip of the iceberg.

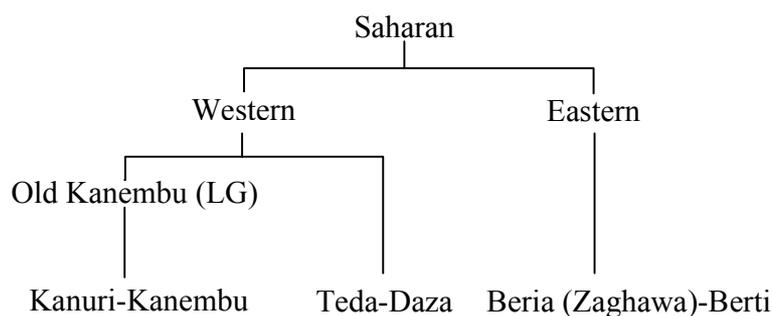
In 2005-2006, in the course of field-trips to north-eastern Nigeria, we encountered an unreported language known locally as ‘Tarjumo’ (Bondarev 2006b). This language can be classified as the offspring of LG, and functions synchronically exclusively as a sacred language for Islamic scholars. It is entirely unintelligible to speakers of modern Kanuri, its sole use being as a language of vernacular sacred commentary on texts written (and read) in Arabic. It thus embodies a local tradition of Islamic scholarship and Qur’anic interpretation. Preliminary analysis of Tarjumo showed that its linguistic structure is much closer to LG than to modern Kanuri, but that it is influenced by the latter in many ways. The Tarjumo data have been of tremendous value for analysing lexical and grammatical properties of LG, due to the structural and functional closeness of the two languages.

In the course of a recent study of the linguistic properties of LG it was established that this language exhibits many lexical and grammatical features unknown in modern Kanuri but attested in Teda-Daza, such as:

- 1) the existential verb *sik* ‘to be’ – Daza *cek* (Chonai 1999: 95), *cək* (Lukas 1953: 113);
- 2) an elaborate system of locative/adverbial postpositions (Bondarev 2005: 16-22);
- 3) and a singular/plural distinction in 3pl possessive suffixes, e.g. <*tata-ndzā*> ‘their son’ vs <*tatawa-nsādi*> ‘their sons’.¹

Assuming that Teda-Daza has preserved more prototypical “Saharan” verbal features than Kanuri (Cyffer 1998), LG may be viewed as a language at a (diachronically) intermediate stage within (Western) Saharan as represented in Diagram 1.

Diagram 1. Genetic classification of the Saharan Languages²



In this article I will compare the form/meaning features of LG inflectional TAM's with the corresponding Kanuri, Teda-Daza and Beria inflectional paradigms, and show that out of nine paradigms analysed in LG, four correspond to Kanuri, three to Beria, and two are shared by all three Saharan languages (Table 1). Notwithstanding the work-in-progress nature of the current research, preliminary comparison of the TAM features attested in LG may provide a new perspective on the historical development of the Saharan family and of Kanuri in particular.

Table 1. Selected Saharan and LG verb TAM morphology

1. Beria (Jacobi and Crass 2004)	2. Teda-Daza (Lukas 1953)	3. LG <graphic representation>	4. Kanuri (Cyffer 1991, 1998)
Perfective: <i>-i/-î</i>	'i-Form': <i>-i (-i?)</i> Aorist: \emptyset Perfect: <i>-de</i>	Perfective (I): $\langle -\bar{i} \rangle$ FOC PRF (III): $\langle -\bar{o} \rangle$ Past (V): $\langle kV\text{-... }-o \rangle$	Verb Emphasis Past: <i>-í</i> Noun Emphasis Past: <i>-ò</i> Past: <i>kV-... -ò</i> Perfect: <i>-nà</i>
NEG PRF: <i>-ð/-ḡ</i>	NEG Aorist: <i>-ni</i>	NEG PRF (VI): $\langle -b\bar{o} \rangle$	NEG Completive: <i>-ò-ní</i>
Imperfective: <i>-ì /-î</i>	Imperfective: <i>-î (-i?)</i> Progressive: <i>-ge</i> Future: <i>s-</i>	Imperfective (II): $\langle -i \rangle$ Future (IV): $\langle tV\text{-... }o \rangle$	Imperfect: <i>-in</i> Future: <i>tV-... ò</i>
NEG IMPF: <i>-ḡ/-ḡ</i>	NEG progressive: <i>-Ø-bei</i>	NEG IMPF (VI): $\langle -b\bar{o} \rangle$	NEG IMPF: <i>-in-bâ</i>
Imperative: verb class I: sg. <i>n-...</i> (tone change on verbs), pl. <i>n-... -u/-u</i> (HT/MT on suffix). verb class II: sg. tone change, pl. <i>-u/-u</i> (HT/MT on suffix) verb class III: non-derived: sg. <i>-o, -o</i> (contrast tone), pl. <i>-u/-u</i> (HT on suffix).	Imperative: verb class I: sg. <i>s-/y-...</i> (tone change on verbs), pl. <i>s-/y-...-o/-u</i> (LT on suffix). verb class II: sg. tone change, pl. <i>-o/-u</i> (HT/LT on suffix) verb class III: sg. <i>-nu</i> (contrast tone), pl. <i>-ntu</i> (contrast tone).	Imperative (VII): sg. $\langle -\bar{e} \rangle$, pl. $\langle -g\bar{o} \rangle$	Imperative: sg. <i>-é</i> , pl. <i>-gó</i>

derived: sg. tone change, pl. - <i>nu</i> (MT on suffix).			
NEG Imperative: (PRFstem)- <i>gV</i> (- <i>gu</i> , - <i>gɔ</i> , - <i>go</i>)	NEG Imperative: (Aorist)- <i>ni</i>	NEG Imperative (VIII): <- <i>o</i> (FOCPF)- <i>bō</i> >	NEG Imperative: - <i>ō</i> (NEP)- <i>nyi</i>
Converb: Converb ₁ = PRF- <i>ε</i> , Converb ₂ = IMPF- <i>ε</i>	Conjunctive: =Aorist (i.e. - <i>Ø</i>)	Converb (IX): - <i>Ø</i> ([-ATR]?)	Sequential: 1sg&pl - <i>è</i> , 2,3sg&pl - low tone on last syllable

Methodological issues

A written source, as LG is, imposes limitations on linguistic analysis. There are three main restrictions for the study of the LG inflectional paradigms:

- a. Full sets are difficult to obtain because of the nature of the Qur'anic text and the deficiencies of LG inscriptions (not every Arabic phrase is accompanied by an LG commentary/interpretation).
- b. Despite the fact that LG shows quite consistent orthographic conventions (Bondarev 2005: 12-15), possibly with some suprasegmental marking (Bondarev 2006a: 126-129), it is difficult to be sure which particular suprasegmental feature is marked in LG: tones? length? stress? a combination of tone and other features?
- c. Inconsistent data from different hands, possibly of different periods, further complicate the retrieval of the relevant linguistic information.

With these constraints in mind, three major steps are required:

- Establishing correspondences between unidentified LG verb forms and Arabic imperfective/perfective forms.
- Since “the Arabic opposition Imperfective/Perfective incorporates both aspect and (relative) tense” (Comrie 1976: 80; 1991) a more exact study of time reference needs to be carried out on the Arabic passages where there is a one-to-one match between LG and Arabic verb forms.
- Internal reconstruction and comparison of LG with available data in other Saharan languages.

2 Basic verb inflectional paradigms in LG – Perfective vs Imperfective: problem and provisional solution

Some of the problematic LG verb forms are those ending with <-*ɪ*>, e.g.

- (1) <*mananm-ɪ*> ‘you told’; <*thases-ɪ*> ‘they killed’
tell.2SG-PRF kill.3PL-PRF

The form is problematic because there is a possibility that LG applied one homographic representation – namely, <-*ɪ*> – to two different categories, perfective and imperfective, due to their segmental identity. Two segmentally identical paradigms are attested in all Saharan languages, where suffix *-i* verb forms are only distinguished by tone (examples below and Table 1).

(2) KANURI (MANGA)

- a. perfective (Cyffer’s (1991, 1998) “V(erb) E(mphasis) P(ast)”, Wolff & Löhr’s (2006) “counter-presuppositionalthetic perfect”) [Context: both locutors knew that Musa was going to saddle his horse, but the speaker was present during the described event (saddling the horse) while the addressee was not]:

Músà f̂arnjú kàss-í [= H] ‘Musa saddled his horse’ (in the end)
Musa his.horse saddle-VEP

- b. imperfective:

Músà f̂arnjú kàss-ì [= L] ‘Musa is saddling his horse’
Musa his.horse saddle-IMPF

(3) TEDA

- a. Lukas’ “emphatic” i-Form, completive meaning, the tone is not specified (Lukas 1953: 95):

tár-i ‘ich ergriff, ich habe’

- b. imperfective with falling tone on final *-î* (Ortman 2003: Appendix A):

lâdînr-î [? < underlying low tone] ‘I am looking at you (sg)’
 [it is not clear whether the underlying tone is low, however]

Beria also exhibits *-i* suffix verb-forms with a complex tonal opposition in perfective/imperfective paradigms: “Le contraste tonal donne lieu à deux paires de tons: 1) un ton Haut au perfectif versus un ton non-Haut à l’imperfectif, 2) un ton modulé Haut-Bas au perfectif versus un ton Haut à l’imperfectif” (Jacobi & Crass 2004: 54). It means that Beria shows the opposite form-meaning correlation (!) of the perfective/imperfective suffixes presumably depending on the verb type (it is not clear however whether this unusual opposition is rule-governed: morphological class? lexical root? derivation? tonal dissimilation?).

(4) BERIA *-i* suffix verb forms

- a. high tone in Perfective (*-î*) vs non-high in Imperfective (*-i / î*):

sâîég-î (PRF) vs *sâîég-i* (IMPF) ‘knock’

- b. falling tone in Perfective (*-î*) vs high tone in Imperfective (*-i*):

tàmàîg-î (PRF) vs *tàmàîg-i* (IMPF) ‘cook’

Since the segmental TAM suffix *-i* (with language specific correlation of tens/aspect semantics according to the tone pattern) is present in all attested Saharan languages, it is probably a retention from proto-Saharan.

The perfective *-i* TAM has received attention in previous accounts as in Cyffer (1998: 48): “It appears that the so-called ‘i-Form’ is represented in all Saharan languages, which could be an indication of its old age”. Also, in his analysis of Kanuri and Teda-Daza verb morphology, Jarrett (1981: 205) argues that “*-i* [a morpheme with perfective scope of meaning] represents the original Aorist suffix.” However, the corresponding imperfective form-meaning correlations have not been described.

Assuming (as I do) that the perfective/imperfective *-i* TAM is a cross-Saharan feature, and Kanuri/Kanembu shows a form-tone-meaning

correlation for segmental *-i* forms (high *-i* = PRF, low *-i* = IMPF, ex. 2), it is expected that the same correlation might be found in LG.

I. Perfective

The <-*ī*> paradigm in LG

In order to identify the category encoded in LG by <-*ī*>, the corresponding Arabic passage should be checked as to its aspect and tense features. There is strong tendency for the LG <-*ī*> form to correspond with Arabic perfective indicating past time reference or/and an anterior situation:

- (5) <*hū nadīka jatalōdsk-ī*>
 I YOU.PL.DO 2PL.OJ.CAUS??.favour 1SG-PRF
 ‘I favoured you [over other people]’
 Arabic: ‘*an‘amtu ‘alaykum* PRF (past time reference)

However, the <-*ī*> form may also correspond to the Arabic imperfective when it has past time reference (but imperfective meaning):

- (6) <*gulsk-ī*> ‘I was saying’; Arabic ‘*aqūlu* IMPF (Past reference)

The <-*ī*> form is also used in stative verbs:

- (7) <*dosk-ī*> ‘I know’; Arabic ‘*a‘lamu* IMPF (Past reference)

The <-*ī*> form is frequently represented in the 3pl:

- (8) <*gulthāy*> ‘they said’
 /*gultsai*/ < *gul-ts-a-i* [phonemic (non-suprasegmental) representation]
 (say-3SG-PL-PRF)

Since the <-*ī*> form corresponds to the Arabic PRF (which may indicate both perfective meaning and/or relative past time reference), and to the IMPF used with past time reference or with stative verbs, the basic semantic scope of the <-*ī*> form is perfective. Hence, I suggest that the <-*ī*> category is Perfective.

This LG form may be considered the perfective morpheme cognate with the Beria perfective *-i/-î*. Interestingly, neither the Kanuri perfective

-*na* (*lezá-na* ‘they came/have come’), nor the Teda perfective -*de* (*bār-de* ‘ich habe geschlagen’ (Lukas 1953: 94)) has been attested in LG.

II. Imperfective

There is a distinct LG verb form which corresponds to the Arabic imperfective with (relative) non-past reference or imperfective meaning, and the Arabic perfective used for situations anterior to non-past reference (in a sentence/larger fragment of text), or to the Arabic future. This form is homographic with the perfective <-*t̃*>:

- (9) <*gulthāy*> ‘they say, will say’
/gultsai/ < *gul-ts-a-i*
(say-3SG-PL-IMPF?)

This form may represent the LG imperfective -*i* (low tone) paradigm, so far attested only in the 3pl; cf. modern Kanuri 3pl: *gulzāi* < *gul-sa-’i*, where the last syllable is phonetically realised as a falling tone.

Given the current state of research it is impossible, however, to arrive at a definitive conclusion about the suprasegmental features of the perfective-imperfective distinction in LG. It might be parallel to the Kanuri/Kanembu high-low opposition (high -*i* = PRF, low -*i* = IMPF), but other possibilities (like the complex correlation in Beria) cannot be ruled out either.

III. Focus Perfective

In LG, the focus perfective verb paradigm is formed by the suffix <-*ō̄*> which morphologically corresponds to the modern Kanuri /-*ō̄*/ form called “noun emphasis past” (Cyffer 1991, 1998), or “in-focus perfect” (Wolff & Löhr 2006). In my notation, I label it FOC(us)P(er)F(ective) until more evidence for the semantic function of this category is available. In LG, like Kanuri, this form is used both for argument focus (subject and object) and, unlike Kanuri, adjunct focus with perfective meaning (no tense reference point applies).

Interrogative constructions with subject and object WH-elements:

- (10) a. <*amū-du yajīg-ō̄*> ‘who will be [their defender]?’
people-who be-FOCPF

- b. <agō-fī 'ālay thrag-ō> 'what does Allah want?'
 thing-which Allah want.3SG-FOCPF

Stative class 2 verb of cognition /dóg/ 'to know' has been attested with this <-ō> suffix form in declarative sentences expressing the Arabic perfect (past time reference) with focus on the subject:

- (11) <dōgīy-ō> 'you (all) indeed knew'
 (after an unknown verb <menīt-ō>, in the same <-ō> form used for Arabic *tawallaytum* 'you (all) turned back').

This category may be extended by a derivation, as in (12), where *kata-* is a progressive TAM prefix:

- (12) <nadīyi kata-sīgīy-ō-thon> 'wherever you were'
 YOU.PL.SJ PROG-be.2PL-FOCPF-wherever

Note: the aspectual perfective/imperfective dichotomy is neutralised in the progressive.

The focus perfective category is not attested in Teda-Daza or in Beria.

IV. Future

The future circumfix <tV-...-o> occurs in LG corresponding to the Arabic imperfective (future reference point) verb-forms and future constructions. The future prefix *t-* is easily retrievable in the passive derivation where its surface form equals the underlying one:

- (13) <nadīyi t-ā-t-kōriy-o-bo> 'you will not be asked'
 YOU.PL.SJ FUT-PL-PAS-ask.2PL-FUT-NEG

In non-derived forms the *t-* morpheme is realised as a voiceless non-palatal affricate /ts/, graphically represented in LG as <th>:

- (14) <th-īrum-o> /ts-írumo/ 'you will see'
 FUT-see.2SG-FUT

When merged with the 2pl object morpheme *nz*, the future suffix *t*- surfaces as a voiced affricate *ndz*- (<*j*-> in graphic representation). This may be shown on the verb *n* ‘say, intend’:

- (15) <*ja-ysk-o*> /*dzaisko*/ ‘I will tell you’
 OJ2PL-SJ1SG-*o*

Cf. (Koelle 1854: 55): 1SG future of the same verb *n*: *tsoskō* (the macron is from Koelle’s original notation).

Teda-Daza exhibits the future prefix *s*- which is considered a cognate with the Kanuri affix *t*-, a prefixed segment of the future circumfix <*tV*-...-*o*>. Beria has no special category for future time reference, which is covered by the imperfective (Jacobi & Crass 2004: 53-4).

V. Past

LG exhibits the past form paradigm used in Kanuri: <*kV*-...-*o*>. This form always corresponds to the Arabic perfective with past time reference.

In (Saharan) class 2 verbs:

- (16) <*ki-sō-koriy-oy*> ‘you asked’
 (PAST-?-ask.2PL-PAST)

<*k-ej̄y-ō*> /*kedziyó*/ ‘he killed’

Cf. MANGA *kejô*, YERWA *cejô*, MOWOR, BILMA, TUMAARI: *ceyô* (Jarrett & Maman 2004)

In class 3 verbs Past has been found in the 1pl:

- (17) <*gulliyyē*> </*gul-ki-y-o*/ ‘we said’
 say-PAST-1PL-PAST

As for the 3pl form of class 3, a possible occurrence of the “modern” Kanuri Past (-*kada*, where -*ka*- is the Past marker and -*da* is the plural) has only been found once: <*gul-gēdā*> ‘they said’ (cf. Koelle (1854: 55) *gēda* ‘they think’, KANURI *fan-gáda* ‘they heard’).

Unlike LG and Kanuri, Beria has no past tense category while Teda-Daza has a - \emptyset morpheme for Past, Lukas’ “Aorist” (see Table 1).

VI. Negative

The forms I (Perfective), II (Imperfective), III (Focus Perfective), and IV (Future) are negated in LG by the suffix <-*bō*> irrespective of aspect, a mechanism significantly different from Teda-Daza and modern Kanuri, with their perfective/imperfective opposition in negation. Both in Teda-Daza and Kanuri two different morphemes are used: for perfective negation this is *-ní*, and for imperfective negation is *-bei* in Teda-Daza (Lukas 1953: 108, 110) and *-bâ* in Kanuri.

A negative strategy similar to LG (no PRF/IMPF opposition) is only known in Beria: “Les formes du perfectif négatif et de l'imperfectif négatif sont construites a l'aide du suffixe -ɔ qui... ne se présente qu'avec un ton Haut ou un ton Moyen, jamais avec un ton Bas” (Jacobi & Crass 2004: 93).

(18) Negative declarative in LG:

- a. <*tandīyih thasdōgi-bō*> ‘they do not know’
they.SJ 3PL.know.PRF-NEG
- b. <*nadīyi wakā thidīyo-bō*> ‘you will never do [it]’
you.PL.SJ never(?) FUT.do.2PL.FUT-NEG

VII. Imperative

The LG Imperative paradigm is the same as in Kanuri: <-*ē*> for 2sg and <-*gō*> for 2pl, presumably both with high tones:

(19) Imperative in LG: 2sg (a), 2pl (b):

- a. <*niyih ḥandīka tūbaka māg-ē*> ‘impose Your repentance on us!’
you.SG.SJ we.DO repentance.DO impose.2SG-IMPER
- b. <*nadīyih tamō-gō*> ‘enter!’
you.PL.SJ enter.2PL-IMPER

The LG and Kanuri imperative formation is distinct from both Teda-Daza and Beria (see Table 1).

VIII. Negative Imperative

Imperative negation in LG is formed with the prohibitive word <itā> and a negative suffix <-bō> attached to the provisionally named “focus perfective” verb form, discussed in section III <-ō> (Ø in 2sg). While 2pl forms exhibit consistent marking (20a, b), 2sg forms occur with and without the negative <-bō> (20 c, d):

(20) Imperative negation in LG:

- a. <itā nadīyih sōmuy-o-bō> ‘do not die!’
 PRHB you.PL.SJ 2PL?.die.2PL-FOCPF-NEG
- b. <itā nadīyeh ladīy-o-bō> ‘do not sell!’
 PRHB you.PL.SJ sell.2PL-FOCPF-NEG
- c. <itā nīyeh gām-bō> ‘do not follow!’
 PRHB you.PL.SJ follow.2SG-FOCPF-NEG
- d. <itā nīyeh dīm-Ø> ‘do not do!’
 PRHB you.PL.SJ do.2SG-FOCPF-Ø

As seen in (20a, b), possible identification of the graphically unmarked segment <-o-> (surfacing in 2pl and preceding the negative morpheme <-bō>) as the Focus Perfective <-ō> is debatable because of their different orthographic representation. Yet, at this stage of our knowledge of LG, there are some reasons for considering <-o-> a graphic variant (encoding a phonetic feature?) of the Focus Perfective <-ō>. First, internally, LG has no other distinct verb category marked by the segmental suffix <-o> which could be considered a stem for the prohibitive paradigm. Another, comparative argument is the structure of the corresponding paradigm in other Saharan languages. The verbal prohibitive paradigm in Kanuri, Teda-Daza, and Beria is based on a perfective/past verb paradigm X + the negative suffix Y:

NEG imperative = X[PRF/PAST]+Y[NEG].

In Kanuri, the prohibitive consists of the perfective argument focus -ò form, segmentally identical to <-o-> / <-ō> in LG, and the negative suffix -nyí:

- (21) wandé lenâm-í (< lenâm-ò-nyí) ‘do not go!’
 PRHB go.out.2SG-FOCPF-NEG

(-ò > Ø after /m/ in Kanuri)

The Teda-Daza negative imperative paradigm is based on the “Aorist” (22) and Beria on perfective (23):

(22) TEDA-DAZA (Lukas 1953: 109)

šé kəsəm-mí ‘do not do!’
PRHB do.2SG.AORIST-NEG

(23) BERIA (Jakobi & Crass 2004: 96-7)

nàrguɔ-ɔ-gò ‘do not have a rest!’
rest.2SG.PRF-NEG-PRHB

IX. Converb³

The non-finite “basic” form (“converb”). This form only consists of the verb stem and the subject marker. Although it is probably segmentally identical to the Kanuri “Sequential”, it is likely that in LG this form was not used for a sequence of events (at least no such usage has been attested so far). The form of the converb is used in subordinate clauses, e.g. relative, adverbial, temporal, concessive, etc.

(24) Relative clause:

[tandī kalagayh kōsa]-ka nadīyi dōgīyō
[they boundary cross.3PL_{CNV}]-DO you.PL.SJ know.3pl.FOCPF
‘You [indeed] know about those [of you] who broke the Sabbath’

The defective verb *n* ‘say’ (the root is not surfaced) used in combination with the full paradigm communicative verb *gul* ‘say , speak’, also occurs in converb form:

(25) a. <*ji guljī*> /*dzi guldzi*/ ‘he said’
say.3SG_{CNV} he.said

b. <*tha gulthāy*> /*tša gultsai*/ ‘they said’
say.3PL_{CNV} they.said

The converb has been also found in clause coordination:

- (26) *kgāyāmyi gulsā yē [tandī sasray]-yih gulthāy*
 messenger.SJ say.3PL_{CNV} and [they believe.3PL_{CNV}]-SJ they.say.IMPF
 ‘The messenger/follower and those who believe were saying...’

Note that the second converb – *sasray* ‘they believe’ – is part of the relative clause ‘those who believe’.

This category may be further expanded by various prefixes to form other non-finite derivations, like *ki-* prefix past/perfect:

(27) Relative clause:

a) *ki-* Past/Perfect

agō [xūyih k-ir-gsā-g]-ka ‘(believe in) what I have sent down’
 thing [I.SJ PAST-CAUS-send.down-1SG_{CNV}]-DO

b) Adverbial construction:

<*ki-sō-nū-y-ro tadigīyo*>
 PAST-2PL.die.2PL_{CNV}-ADV PAS.be.2PL.FOCPF
 ‘you [indeed] were dead’ (lit.: ‘having being died you were’)

This LG category, carrying a high functional load, is comparable to the Beria polyfunctional converb (Jacobi & Crass 2004: 167-176) – an infinite verb category unattested in other Saharan languages.

3 Conclusion

Based on Table 1, where LG verb morphology is compared with other Saharan languages, one can draw a picture of the LG verb inflectional categories and their putative correspondences to other Saharan languages:

- I) LG Perfective: <-î> ~ BERIA *-î/-î*
- II) LG Imperfective: <-î> ~ BERIA *-î/-î* – TEDA-DAZA *-î(-î?)*
 – KANURI *-in*
- III) LG Focus perfective: <-o/ō> ~ KANURI *-ò*
- IV) LG Future: <tV-...-o> ~ KANURI *tV-... ò*

- V) LG Past: <*kV*-...-*o*> ~ KANURI *kV*-... -*ò*
- VI) LG Negative declarative (PRF and IMPF): <-*bò*>
~ BERIA (PRF and IMPF) -*ò/-ò*
- VII) LG Imperative: sg. <-*è*>, pl. <-*gò*> ~ KANURI sg. -*é*, pl. -*gó*
- VIII) LG Negative Imperative: -*o*(FOCPF)-*bò*
~ (structurally) KANURI -*o*(NEP)-*nyí* – also BERIA
(PRFstem)-*gV* (-*gu*, -*gɔ*, -*go*) – TEDA-DAZA (Aorist)-*ní*
- IX) LG Converb: - \emptyset (probably [-ATR]?) ~ BERIA PRF- ϵ , IMPF- ϵ

Hence, the LG TAM system shows

- some cross-Saharan features (II & VIII);
- four LG paradigms shared with (Western Saharan) Kanuri (III, IV, V & VII);
- three LG paradigms shared with (Eastern Saharan) Beria only (I, VI, IX).

The analysis, though preliminary, demonstrates that LG not only represents an archaic variety of the Western Saharan Kanuri/Kanembu language and as such is diachronically close to proto-Western Saharan (Bondarev 2005), but also reflects proto-Saharan features retained in Eastern Saharan Beria which forms the opposite extreme of the family against Western Kanuri/Kanembu.

Abbreviations

ADV – adverbial operator
 AG – agentive
 CAUS – causative
 CNV – converb
 DO – direct object
 FOC – focus
 FOCPF – focus perfective
 FUT – future tense
 IMPER – imperative
 IMPF – imperfective

IO – indirect object
 LG – the language of the Qur’anic glosses
 NEG – negative
 OJ – object morpheme
 PAS – passive
 PAST – past tense morpheme
 PL – plural
 PRF – perfective
 PRHB – prohibitive
 PROG – progressive

SG – singular
SJ – subject marker

VEP – verb emphases past

Notes

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¹ Angled brackets are used for graphic representations. A macron (̄) above the vowel represents the so-called “weak” letters used in Classical Arabic for representation of long vowels, but possibly used for some type of suprasegmental marking in LG. High tone is indicated with an acute accent (e.g. *á*), low tone with grave (*à*), falling with circumflex (*â*), and the rising with hacek (*ǎ*). In the Beria data the macron is used for mid tone.

² Cf. a similar diagram in Bulakarima (1996: 42) where he considers Ancient/Classical Kanembu (= Old Kanembu (LG) in our terminology) “the parent language” of modern Kanuri and Kanembu.

³ Here, I follow the notion “converb” as applied by Jacobi & Crass (2004: 167) to a similar category in Beria. Usually defined as “a non-finite verb form whose main function is to mark adverbial subordination” (Haspelmath 1995: 3), the converb in LG, apart from occupying an adverbial subordinate clause position, can also occur in other subordinate slots, such as predicate position in relative clauses, cf. (24). In Beria, unlike LG, the converb goes beyond its canonical domain and is used in verb serialization for a sequence of co-events (Jacobi & Crass 2004:168-9), though it is not attested in relative clauses.