

Complex clauses in Old Kanembu/LG

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The paper analyses complex clauses in Old Kanembu – a written variety of Kanuri/Kanembu used for Qur’anic interpretation by the Borno scholars in the 16th–18th cc. In Section I, a range of different Old Kanembu complex constructions are illustrated together with equivalent constructions in modern Kanuri. In Section II, it will be shown that Old Kanembu clause types do not easily fit into the four traditional syntactic categories of coordinate, adverbial, complement, and relative clauses. It will be demonstrated that two salient morphosyntactic categories – a participial-like verbal form CONVERB and a polysemic postpositional morpheme **-n** (nominal and clausal coordinator, subordinator, and instrumental) – span all four traditional complex clauses. The paper provides comparative and typological justification for the converb as a valid category in Old Kanembu, and also for Kanuri and Beria. Finally, I suggest a possible scenario for the change in syntactic and semantic functions of the morpheme **-n** in Old Kanembu and Kanuri.

1. Introduction

This paper presents a first time study of complex clauses in Old Kanembu as attested in the AD 16th–18th/AH 10th–12th century Qur’anic manuscripts created in the Borno Sultanate (north-east Nigeria)¹. Old Kanembu is represented by interlinear and marginal glosses, referred to here as the “language of the glosses” (LG). These texts, with their fully developed system of writing in Arabic script, provide the earliest real evidence for a sub-Saharan language. Preliminary grammatical analyses reveal major morphosyntactic differences between Old Kanembu/LG and modern Kanuri (Bondarev 2005a, 2005b), and indicate that the language used in the glosses was not contemporaneous with Kanuri as spoken at the time the manuscripts were created (i.e. between the 16th and 18th

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centuries), but rather reflects a spoken variety of Kanembu dating from the AD 14th–15th/AH 8th–9th century, if not earlier (Bondarev 2006). Old Kanembu was the language of the old Kanem Sultanate (AD 10th–15th/AH 4th–9th centuries), whereas Borno Kanuri was the language of its successor state the Borno Sultanate (AD 15th–18th/AH 9th–12th centuries) (Nachtigal 1879-89, Greenberg 1971: 425). The Old Kanembu of the Borno Qur’anic manuscripts can be regarded therefore as the ancestor language of both modern Kanuri and Kanembu — languages of the (Western) Saharan branch of the Nilo-Saharan family. However, due to the restricted Old Kanembu corpus and the fact that it represents a highly specialized variety of the language used by the medieval Borno scholars for Qur’anic interpretation, it is difficult to ascertain to exactly what form of the language the LG represents. It is possible that LG combines grammatical structures inherited from different chronological stages of Old Kanembu and Borno Kanuri and as such cannot be placed at a particular period but is better considered a cluster of archaic features dating from the period of Old Borno backwards to the Old Kanem period. For this reason, it is more accurate to refer to the language of the manuscripts as LG rather than Old Kanembu and this distinction will be maintained throughout the paper.

A descendant of LG survives in modern-day Borno in a form of a largely unreported language locally known as “Tarjumo” (Tela 1994, Bondarev 2006). This language functions synchronically only as a sacred language for Islamic scholars and it is entirely unintelligible to most speakers of modern Kanuri, its only use being as a language of vernacular sacred commentary on texts written (and read) in Arabic. Preliminary analysis of Tarjumo shows that its linguistic structure is much closer to LG than to modern Kanuri, although it is influenced by the latter in some ways. In the course of a recent study of the linguistic properties of LG I established that it exhibits grammatical features unknown in modern Kanuri but attested in the related Teda-Daza and Beria (Zaghawa), e.g. an elaborate system of locative/adverbial postpositions in Teda-Daza (Bondarev 2005a: 16-22) and a non-finite verb form (“converb”) used in various types of subordination, a feature shared with Beria (Bondarev 2005b).

One of the distinctive syntactic properties distinguishing LG from modern Kanuri (both SOV languages) is coordination and subordination.

Various types of complex clause are better understood as a syntactic continuum — a common approach under the functional-typological framework (Foley & Van Valin 1984, Haiman and Thompson (1984), Bybee (2002), Payne (2003: 306-341), Givón (1990), Croft (2005, 320-361). The parameters identifying the place of a complex clause on the scale differ in the literature (cf. Haiman & Thompson 1984, Lehmann 1988), but they can be roughly narrowed down to a degree of (morpho)syntactic incorporation of a dependent construction into the matrix clause. Languages differ in delineating points on the continuum for grouping complex clauses according to semantic/syntactic criteria. Against this background, I will look at LG complex clauses as follows: in Section I, a range of different LG constructions will be illustrated together with equivalent constructions in modern Kanuri. In Section II, I summarize how LG subordination is organized according to the degree of syntactic binding — non-finite verbal form = bound, finite verb = unbound, and compare the criteria of the LG grouping with that of MK, showing that LG clause types do not easily fit into the four traditional syntactic categories of coordinate, adverbial, complement, and relative clauses. It will be demonstrated that two salient morphosyntactic categories — a participial-like verbal form “converb” and a polysemic postpositional morpheme **-n** (nominal and clausal coordinator, subordinator, and instrumental) — span all four traditional complex clauses. Finally, I will provide comparative and typological justification for the converb as a valid category in LG, and also for Kanuri and Beria, and suggest a possible scenario for the change in syntactic and semantic functions, of the morpheme **-n** in LG and Kanuri.

The proposals are based on examination of one manuscript (724 folios with internally (i.e. the same volume) different hands) — a small part of the total corpus consisting of 3,200 folios in digital form.

SECTION I: Coordination and subordination in LG

2. NP coordination

As an introduction to subordinate constructions in LG, I will touch upon NP and clause coordination with two views in mind. First, both subject NP coordination and clause coordination use a postpositional morpheme **-n** which also occurs in complement clauses of manipulative verbs, generic conditional (‘wherever’) and temporal (‘after’) clauses. Second, a

glance at direct and indirect object NP coordination gives a preliminary idea of how the constituents of the LG complement clauses might be encoded (morpho)syntactically. It will be shown that converb object clauses (see 4.1.2. and complements of some mental verbs (4.1.4.) have identical NP case-marking.

2.1. LG subject NP coordination (NP-**n** ...NP-**n**) (≠M(odern) K(anuri))²

LG subject NP coordination as illustrated in (1) is marked by the morpheme **-n** attached to the last constituent of each coordinated NP. The western dialects of M(odern) K(anuri) coordinate subject NPs with a polyfunctional (associative/coordinative) postposition **-a**, but earlier accounts of the language (Koelle 1854: 304-307) attest the use of both **-n** (**-n** ... **-n**) and **-a** (**-a** ... **-a**) postpositions as coordinators of subject NPs without a clear distinction in semantics, but probably with a possible additive meaning ('as well') conveyed by the **-n** ... **-n** construction. According to Hutchison (1981: 313), in eastern (Kanembu) dialects, **-n** ... **-n** coordination "is used instead of the associative postposition as the major coordinating conjunction of NPs".

- (1) **nābi** **ibrām-n** **nābi** **ismā[̣]īla-n**³
 prophet Ibrahim-and prophet Ismail-and
 '(if you say that) Ibrahim and Ismail' [LG (YM, 2: 140)]

2.2. LG direct/indirect object NPs coordination (direct juxtaposition) (≠ MK)

Examples (2) and (3) illustrate juxtaposed coordination of both direct and indirect object NPs in LG together with the corresponding constructions

² The sign (≠) 'does not equal' indicates that LG differs from MK in formal representation of the discussed syntactic function.

³ In LG data, a macron (̄) above the vowel represents the so-called "weak" letters used in Classical Arabic for representation of long vowels, but used for high and falling tone in LG. The Arabic letter ʕ (pharyngeal/epiglottal) is represented as **ḥ**. High tone in Kanuri and Beria is indicated with an acute accent (e.g. **á**), low tone is unmarked, falling with circumflex (**â**), and the rising with hacek (**ã**). In the Beria data the macron is used for mid tone. A question mark in the glosses to LG data indicates a possible meaning of a lexical/grammatical item.

in MK. Unlike the LG juxtaposed coordination, the Kanuri DO and IO NPs are connected by the associative/coordinative morpheme **-a**. In LG, the DO morpheme **-ka** shows up on the final constituent of each coordinated DO NP. The same syntactic behaviour is attested for the IO postposition **-ro** occurring on each coordinated IO NP. In MK, the DO marker **-ga** (cognate with LG **-ka**) is only obligatory on the pronominal heads as in the first example of (2b)⁴ but does not occur when the heads are nominal as in (2b). The modern Kanuri IO clitic **-ro** is only used once at the final element of two (and more) coordinated NPs as in (3b).

Direct object NPs

- (2a) **nābi** **'ādam-ka** **nābi** **nūḥu-ka** **thūgī**
 prophet Adam-DO prophet Noah-DO he.chose
 'he chose the prophets Adam and Noah' [LG (YM, 3: 33)]

- (2b) **nyí-ga-a** **shí-ga-a** **rúkóna**
 you-DO-and him-DO-and I.saw
 'I saw you and him' [MK]

Áli-a **Músa-a** **rúkóna**
 Ali-and Musa-and I.saw
 'I saw Ali and Musa' [MK]

Indirect object NPs

- (3a) **nābi** **ibrām-ro** **nābi** **ismā'īla-ro**
 prophet Ibrahim-IO prophet Ismail-IO
 '(what was sent to) prophets Ibrahim and Ismail' [LG (YM, 2: 136)]

- (3b) **nyí-a** **shí-a-ro** **yíkin**
 you-and him-and-IO I.give
 'I will give (it) to you and him' [MK]

Áli-a **Músa-a-ro** **yíkin**
 Ali-and Musa-and-IO I.give
 'I will give it to Ali and Musa' [MK]

⁴ Coordination of pronominal heads has not yet been attested in LG.

Note that in complement clauses the LG DO **-ka** is also used on the last element of a direct object complement clause (see 4.1.2.) and the IO **-ro** on the last element of an indirect object complement clause (see 4.1.4.).

3. VP and clause coordination

There is limited data on VP and clause coordination and more research is needed to get a representative number of examples. Example (6) is coordination of declarative clauses while the sentences illustrated in (4) and (5) only represent coordination in non-canonical syntactic environments, i.e. yes-no interrogative and prohibitive utterances respectively. Incomplete as the data may be, the morphosyntactic features in (5) (the morpheme **-n**) and (6) (a converb) show that there is no clear-cut division between coordination and subordination in LG (see also Section II). Fragment (7) shows disjunctive coordination ('or' = inclusive disjunction) and I have not found complete sentences of this type in the data. However, I include this as the earliest written evidence of the coordinator **bíya** 'or' (= MK **bíya**) which has preserved the same form-function in modern Kanuri.

3.1. Juxtaposition (VP coordination) (≠ MK)

(4a) **kitābbi lōgō-ka yazrāyyo lōgō-ro agrthīniyore**
 book.GEN some-DO you.PL.believe some-IO disbelieve.TAG.QST
 [LG (YM, 2: 85)]

(4b) **kitāwu láá-a yasaráwa láa-a angərnúwa**
 book certain-and you.believe certain-and deny.TAG.QST
 '(do) you believe in some [parts] of the book, and not in others?'
 (lit.: 'do you believe in some books and disbelieve others?') [MK]

3.2. VP **-n** ... VP-**n** coordination: same subject (≠ MK)

This type of clause coordination is marked in the same way as subject NP coordination in (1). In parallel with the subject NP coordination, the western dialects of MK do not use **-n** ... **-n** clause (prohibitive clauses are coordinated by juxtaposition as in (5b)).

- (5a) **itā nī andīro gullmbō-n**
 PRHB you to.them tell.2SG.FOCPF-and
itā nī tandīka yagarumbō-n
 PRHB you to.them shout.2SG.FOCPF -and
 ‘do not tell them and do not shout at them’ [LG (YM, 17: 23)]

- (5b) **wānde sandīro gūllumí wānde sandīro yillumí**
 PRHB to.them tell.2SG.FOCPF-∅ PRHB to.them shout.2SG.FOCPF-∅
 ‘do not tell them and do not shout at them’ [MK]

As will be shown in 4.1.3., 4.4., and 4.6., the postposition **-n** is also used to mark clausal complements of mandative verbs, and adverbial clauses of generic condition (‘-ever’ clauses) and time (‘after’).

3.3. Different subject clause coordination: (converb (CNV) + **yē** coordinator) (≠ MK)

The LG coordinating conjunction **yē** (= /yé/) has a cognate form **yé** ‘also’ in MK which functions as an additive marker and coordinating conjunction. Syntactically, the LG and MK **yé** are different in that in clause coordination, the MK **yé** is cliticised to the final element of each VP while LG **yé** is only used once between coordinated VPs. Another important difference is that the LG ‘**yē** construction’ requires the verb in the first VP to appear in a special inflectional form CONVERB (see Section II for discussion). The events in (6) are not tense-iconic in the sense that they may be expressed in either order without a change of meaning. The use of the converb in the first clause is therefore conditioned purely syntactically (= constituent ordering, i.e. whatever the first coordinated clause is, it should be marked by a converb).

- (6) **kgāyāmyi gulsā yē**
 messenger.SJ say.3PL.CNV and
[tandī sasray]yi gulthāy
 [they believe.3PL.CNV].SJ they.say.IMPF
 ‘the messenger was saying and those who believe were saying...’
 (lit. ‘the messenger he is saying and those who are believing were saying’) [LG (YM, 2)]

The converb in the bracketed phrase is conditioned by the relativization of the second subject and I will return to this example later.

3.4. Disjunctive coordination ‘or’ (inclusive): (**bīya** coordinator) (= MK)

- (7) **gōrē** **’ālayh** **ḥandīka** **stmanagiyibūrē**
 if.only Allah.SJ to.us speak.to.PRTCPTAG.QST
tha **bīya** **ḥandīgero** [...]
 they.say.CNV or for.us
 ‘if only God would speak to us or [a miraculous sign would come] to us!’ [LG (YM, 2: 118)]

4. Subordination

4.1. Complement clauses (object complements)

The C(omplement) C(lauses) attested in LG fall into different types according to the syntactic integration of the verb in the CC with the clause of the C(omplement)-T(aking) P(redicate) (the verb in the matrix clause). Here I will deal with: 1) CCs marked by the subordinator **-tī** (PERFECT + **-tī**); 2) Converb Object complements (CNV-**ka**); 3) CCs of manipulative verbs: V(erb)al N(oun) in CC + **-n** (VN-**n**); 4) CCs of (some) mental verbs formed by VN + **-ro** (VN-**ro**); 5) Reported speech clauses.

4.1.1. Complements introduced by the subordinator **-tī** (V (PRF) + **-tī**) (= MK **-dó**, cognate with **-tī**)

This type of complementation is marked by **-tī**, the grammaticalized definite determiner, and is comparable to English “that” complements. It is the only complement construction where the verb appears in its finite (Perfect) form. All other CCs require the verb to convert to either a verbal noun or a converb. In MK, there is no TAM constraint on the verb in CC.

- (8a) [**’ālatī** **thundōgī-tī**] **nadīyi** **dōgōgō**
 [God.DET he.knows.PRF-SUB] you.PL.SJ know.IMP
 ‘you should know that God knows’ [LG (YM, 2: 236)]

- (8b) **Áli Mákkaro lejîn-dó yasarákonyí**
 Ali to.Mecca he.goes-SUB I.do.not.accept
 ‘I don’t agree/accept that Ali is going to Mecca’ [MK] (cf. also (9d))

4.1.2. Direct object complements of emotional ‘like’ and mental ‘remember’ verbs (converb-**ka**) (≠ MK)

This type of CC is not formally distinguishable from H(eadless) R(elative) C(lauses) in position of direct object (see (10) and (11)) and exploits the same non-finite verb category — the converb (Section II). Sentential complements of mental verbs can also be expressed by verbal nouns but this kind of CC is marked by the subordinator **-ro** — etymologically the indirect object marker — (see 4.1.4.). (9a) is an example of an Arabic RC, expressed as a converb complement clause in LG (9b) despite the presence of the Arabic relativizer **’allātī** in (9a) which is usually expressed by the LG subordinator **-tī**, and is written separately above the Arabic **’allātī**. This difference shows that LG does not calque Arabic syntactic constructions.⁵

(9) [LG (YM, 2: 122)]



- (a) **adhkurū ni‘matī [’allātī ’an‘amtu ‘alaykum]**
 remember.2.PL.M.IMP my.favour [REL I.bestowed on.you]
 ‘remember My favour [which I bestowed on you]’ [Arabic]
- (b) **[ḥūyi nadiro kir-gr-ēk]-ka**
 [I.SJ you.PL.IO CAUS-favour-1SG.CNV]-DO
nadiyi lifūgō
 you.PL.SJ remember.IMP [LG]

⁵ For lack of space, I can only illustrate three cases when LG morphosyntax can be considered “independent” from Arabic, i.e., in (9a), (10a), and (18a). As a matter of fact, none of the LG constructions presented in this paper is a calque from Arabic. Thus, LG employs its own distinct syntax and can be regarded as excellent material for Saharan comparative studies.

- (c) [nandíga gúrnongóna]-ga tangnówó
 [to.you.PL I.favoured]-DO remember.IMP
 ‘remember I favoured you’ [MK] (= LG! i.e. \emptyset SUB + obligatory DO)
- (d) [nandíro báná díkóna]-dó(-ga) tangnówó
 [to.you.PL help I.did]-SUB(-DO) remember.IMP
 ‘remember I helped you’ [MK] (\neq LG: i.e. obligatory SUB -dó, optional DO)

The MK utterance in (9d) represents a standard complementation pattern characterised by the use of the -dó subordinator and an optional DO clitic -ga. Interestingly, (9c) (obligatory DO -ga and no -dó) deviates from the standard MK complementation in (9d) and this construction occurs exclusively with the verb gúrno ‘favour’ which is cognate with the LG gr. This is most likely a collocation or fixed expression accounted for by the influence of the literary form of the language (i.e. Old Kanembu in the form of Tarjumo).

(10b) is an ambiguous example where the dependent construction may be interpreted either as a clause or NP depending on the analysis of the pronominal element. If the pronominal element tandī ‘they’ is the independent pronoun, the bracketed part in (10b) is a CC. If tandī is a relative pronoun, the bracketed unit is a HRC.

CC: if pronoun = KNOW [x, P] (‘you know [that they broke...].’)

HRC: if pronoun_{REL} = KNOW [x, y] (‘you know those [who broke...].’)

(10) [LG (YM, 2: 65)]



- (a) **wa la-qad ʿalimtum [allādhīna iʿtadaw**
and TAM 2PL.M.knew those.who they.M.transgressed
min-kum fi-l-sabati]
among-you in-DEF-Sabbath
'you indeed knew those that transgressed from among you in the
matter of the Sabbath' [Arabic]
- (b) [**tandī kalagay kōsa**] -ka **nadiyi dōgīyō**
[they_(REL) boundary cross.3PL.CNV]-DO you.PL.SJ know.3PL.FOCPF
'you know about those who broke the Sabbath' [LG (CC/RC)]

Sentence (11) is an example of the co-occurrence of a CC and an HRC:

- (11) [**tandī [nadiro brse-ka]**]_{CC} **sārāg-ka]**_{RC}
[they_(REL) [you.PL.IO trust.CNV-DO] they.like.CNV-DO]
fugē thirfandiyō
front you.will.find
'you will find (others) who wish to be (feel) safe from you' (Abdel
Haleem 2004: 59) [LG (YM, 4: 91)]

4.1.3. CCs of manipulative verbs, V(erb)al N(oun) in CC + -n (≠ MK)

- (12a) **nadika gālājajji [nadiyi dbā-t-n]**
to.you.PL.DO he.commands.you [you.PL.SJ slaughter-VN-SUB]
'he commands you to slaughter (the cow)' [LG (YM, 2: 67)]
- (12b) [**fēdó duwatá-ro]** **nandíga galáwono**
[cow.DET slaughter.VN-SUB] you.PL.DO he.advise.PAST
'he advised you to slaughter the cow' [MK]

Complement clauses of Kanuri C(omplement) T(aking) P(redicate)s of intention (including manipulative verbs), purpose, and emotion are marked by the subordinator **-ro** (etymologically (and synchronically) the IO), and the action is expressed by a verbal noun as shown in (12b). Thus, this type of modern Kanuri complement clause differs from LG in the selection of the subordinator but uses the same non-finite VN.

A similar pattern is illustrated in (13b) where the MK CC has almost exactly the same features as in LG, i.e. VN + **-n** as a subordinator as (12a). However, the head constituent **tóma-nzó-a** ‘with his hope’ in (13b) is an NP (noun + associative marker **-a**), rather than a VP, and hence the whole construction is in the domain of the noun phrase. In this sense, (13a) is the closest LG match to MK (13b) because the first VP **tandī galātay-xalan** ‘it is ordered to them’ takes the postposition **-xalan** which has ‘adverbial’ semantics, such as simultaneous, manner, purpose, and associative. Since **-xalan** is in itself a subordinating postposition (see 3.7. below), the whole sentence in (13a) is difficult to analyse as a combination of two clauses, and it is only the finiteness of the verb in the first VP that identifies it as a matrix clause.

(13a) **tandī galātay-ḥalan** [tandīyi agr-t-n]
 they order.3PL.PASS-ADV.SUB [they.SJ not.believe-VN-SUB]
 ‘(while) it is ordered to them not to believe in him’ [LG (YM, 4: 60)]

(13b) [awowá ngówu kálío-ṅ] **tóma-nzó-a**
 [things many learning-SUB] hope-his-ASSOC
 ‘he has hope-in learning many things’ [MK] (Hutchison 1981: 231)

4.1.4. Indirect CCs of (some) mental verbs ‘to know about’ formed with VN + **-ro** subordinator (= MK)

The LG complements illustrated in (14) and (15) are marked by the subordinator **-ro** (also functioning as the IO/destination postposition) cliticized to the final element of the dependent clause which makes this type identical to mental CTPs in modern Kanuri (cf. (12b) and (15b)).

(14) **tandīnī tandī brsākīsalan [jrfando-ro]**
 they.DET.PL they believe.PROGR?.LOC? [meet.VN-SUB]
 ‘those who know that they will meet [their Lord]’ [LG (YM, 2: 46)]

(15a) **tandīnī [tandī gālgīsay [’ālaka jrfando-ro]]**
 they.DET.PL [they they.know?.PROGR? [God.DO meet.VN-SUB]]
guljāy
 they.say
 ‘those who knew that they would meet God said ...’ [LG (YM, 2: 249)]

- (15b) [Músa andía léfatá-ro] njéskono
 [Musa us.DO greet.VN-SUB] he.forgot
 ‘Musa forgot to greet us’ [MK] (Hutchison 1981: 230)

4.1.5. Reported (direct/indirect) speech clauses (LG = MK)

LG reported speech constructions consist of the main reporting clause and the quoted (reported) clause. LG, like MK, does not distinguish between direct and indirect speech and the same morphosyntax applies to both types. The Q(quoted) C(lause) is obligatorily followed by the defective verb **n** ‘say’ (the root does not surface on 3rd person sg. & pl.) in converb form, agreeing in person and number with the speech verb **gul** ‘say, speak’.

- (16) **tandīye gul-thāy** [agōfi ‘alay thragō-tha]
 they.SJ say-3PL.IMPF [what Allah.SJ want.3SG.FOC PF-say.3PL.CNV]
 ‘they say, “What does Allah want?” [LG]

- (17a) [hāndīye rezqātāyye **tha**] **gulthāy**
 [we.SJ we.give.provision.PAST.PASS say.3PL.CNV] they.say
 ‘we have been given (this before)’, they say’ [LG (YM, 2:25)]

- (17b) [ádā câ **címóye** sa] **gúlzána**
 [this earlier we.received say.SEQ] they.said
 ‘we already received this’, they said’ [MK]

On the one hand, QCs are distinct from other CCs in taking any (finite) TAM category which makes them the least syntactically bound of the CCs. This is in line with the typological characteristics of CCs of speech verbs which, compared with other CTPs, are the least bound to the main clause (Givón 1990: 519, 530-532). On the other hand, the verb **n** ‘say’ in the form of the converb **tha** is obligatory at the end of QCs and functions as a complementizer (direct/indirect quotation marker) — a subordinating feature which places QCs with the other CCs.

4.2. Relative clauses (converb) (TAM ≠ MK)

Relative clauses are characterised by the non-finite “basic” converb form. Subject NPs in RCs are usually marked by the definite determiner **-tī**, attached to the final constituent of the RC, which functions as a relativizer (18b). However, **-tī** is not used when the subject RC is part of a coordinated clause as in (6). In MK RCs there is a TAM constraint: only the Perfect and Imperfective inflectional categories are used.

(18) [LG (YM, 2: 38)] (syntax = MK)



(18a) **fa-**[**man tabi^ʿa hudē**] **fa-lā khawqu ʿalay-him**
and-[who follow.3SG.PRF guidance.my] and-no fear on-them
[Arabic]

(18b) **kām** [**ksīmonika jgāy]-tī** **tandīlan**
person [guidance.my.DO follow.3SG.CNV]-REL they.LOC
knjāgī bāgō
fear NEG
‘those who follow My guidance, no fear shall be on them’ [LG]

(18c) **kām** [**bīska isóna]-dá** **nongônyí**
person [yesterday he.come.PRF]-REL I.do.not.know
‘I don’t know the man [who came yesterday]’ [MK]

If the direct or indirect object is relativized, no relative marker is used in LG as shown in (19a). MK employs a different syntax for non-subject NPs in RCs, i.e. the relativizer and a resumptive pronoun should be used as in (19b).

(19a) **at-gen kistye thikī kam [allaharo daks]-ro**
DEM-LOC awareness.SJ EXIST person [Allah.IO fear.3SG.CNV]-IO
‘there truly is a lesson for anyone who stands in awe of God’ (Abdel Haleem 2004: 407) [LG (YM, 79: 26)]

- (19b) **kâm** [Alaro rízóna]-**dó** **shílan** **cístó** **mbéjí**
 person [God.IO he.fears.PRF]-REL he.LOC awareness EXIST
 ‘there is awareness in the one who fears God’ [MK]

4.3. Conditional clauses with the **-ya** verb form

The verb used in this type of conditional is what I term COND(itional). It is expressed by the morpheme **-ya** suffixed to the Perfective verb form. The **-ya** form is used in wide range of conditional clauses, i.e. a) open conditionals where temporal-conditional ‘if/when’ clauses overlap (see 4.3.1.), b) open-concessive conditionals ((even) if) introduced by the clause-initial subordinating conjunction **alarō** (see 4.3.2.), and c) hypothetical-counterfactual conditionals (‘if...would’) introduced by the clause-initial subordinating conjunction **gōrē** (see 4.3.3.) (**alarō** and **gōrē** clauses may overlap in the conditional meaning, and their exact functional distribution is yet to be established). The LG Conditional inflectional category directly corresponds to the modern Kanuri **-ya** form termed variously in the literature “Dependent Future” (Lukas 1937, Cyffer 1991) or “Verb Emphasis Completive” (Hutchison 1981: 294). In LG, this verbal category can express both past-time and future-time conditions and signals that the action precedes and entails the action in the consequent clause. Hence, the label Conditional which, for simplicity, I apply to the Kanuri data as well.

4.3.1. Open conditionals (COND ‘if/when’ **-ya**) (LG = MK)

- (20a) **tandī nadika** **bāmjay-ya** **nadī tandika yenōgō**
 they you.PL.DO beat.OJ2PL.SJ3.PL-COND you.PL they.DO answer.IMP
 ‘(but) if they attack you then slay them’ [LG (YM, 2: 191)]
- (20b) **nyíga kapsái-ya sandíga kanné**
 you.SG they.intercept-COND they.DO fend.off.IMP
 ‘if they intercept you, then you fend them off’ [MK]
- (21) **tandīye thazrāy-ya...** **tandīyi kablekan** **simotāy**
 they.SJ believe.3PL-COND... they.SJ right.direction they.are.guided
 ‘if they believe... they will be rightly guided’ [LG (YM, 2: 137)]

- (22) **gultī-ya**
say.3SG.PASS-COND
'when it is said to them' [LG (YM, 2: 11)]
- (23) **tīro guljīnmā niye thīgē-[ji-ya] thajīgōtī**
to.him he.says.FOC? you.SG.SJ be.IMP-[he.says-COND] will.be.it(?)
'if He only says to it, "Be!", and it is' [LG (YM, 2: 117, 3: 47)]

4.3.2. Open and concessive conditionals (**alarō** '(even) if' ... COND) (LG ≠ MK)

The LG conjunction **alarō** '(even) if' corresponds to the Arabic **wa-la-'in** ('and'-'truly'-'that' = 'if indeed' clauses) which is mainly used for real conditionals and concessives, but can also be used for hypothetical conditionals. This conjunction does not exist in MK. Also, the MK concessive conditionals do not employ the conditional inflectional category and they are formed by a postpositional combination of subordinators **-wosó**, **-só**, **-sôn**, **-má** and **-mân** (the last two only when the matrix is negative).

Open conditionals

- (24) [**alarō hāwa-jā-ka niyi gāmī-ya**] ...
[if desire.their-DO you.SJ follow-COND] ...
nīro 'ālakami gurnomay thīgībō
for.you from.God helper.SJ there.is.no
'and indeed if you follow their desires ... there will be no
helper/protector from God for you' [LG (YM, 2: 120)]

Concessive conditionals

- (25a) [**alarō niyi kūtmi-ya**] ... **tandīyi**
[if you.SG.SJ you.bring-COND] ... they.SJ
liqiblanmka yagāybō
your.qiblah.DO they.follow.not
'and even if you brought [every proof] ... they would not follow
your *qiblah*' (direction) [LG (YM, 2: 145)]

- (25b) **yimbarákóna-sôn Kánoro bəlawurowóko**
 I.was.tired-CONC.SUB Kano.IO I.travelled
 ‘though I was tired, I travelled to Kano’ [MK] (Cyffer 1991: 215)

4.3.3. Hypothetical-counterfactual conditionals (**gōrē** ‘if’ ... VERB-**ya**)

The LG conjunction **gōrē** ‘if’ usually corresponds to the Arabic **law** ‘if’ used for hypothetical conditionals, and can also express (optionally combined with **’anna** ‘that’) an exclamatory ‘if only’ hypothetical wish. In modern Kanuri, the cognate form **ngoré** ‘almost, nearly’ functions exclusively as a degree adverb: **ngoré mobile-nyí cukkurô** ‘my mobile almost slipped down’. MK uses a different construction for hypothetical-counterfactual conditionals, formed with the (optional) grammaticalized temporal adverb **câ** ‘early’ and the subordinator **-ga** (etymologically the direct object/topical postposition) which appears on the last constituent of the dependent clause (26b) and (27b). The MK conditional clause in (27b) is the closest match to LG (27a), yet the morphology of the LG gloss **wāgano-ko-ya** (27a) is not entirely clear (**-k-** possibly represents the Past Tense morpheme cognate with the Modern Kanuri Past Tense **-k-** which surfaces as **-w-** (underlined in 27b)).

- (26a) **gōrē tandīye thazrāy-ya ... mukāfatī**
 if they.SJ they.believe-COND ... reward.DET
’ālagemītī lūthino
 from.God.DET bring.benefit
 ‘if they had believed... their reward from God would have been far greater’ (Abdel Haleem 2004) [LG (YM, 2: 103)]

- (26b) **câ Músa ísóna-ga Kánoro lenyéna**
 early Musa has.come-SUB Kano.IO we.have.gone
 ‘if Musa had arrived we would have gone to Kano’ [MK] (Cyffer 1991: 153)

- (27a) **gōrē ’ālay thragī wāgano-ko-ya**
 if God he.wanted become.TAM-PAST?-COND
 ‘if God so willed, [He could take away their hearing and sight]’
 (Abdel Haleem 2004) [LG (YM, 2: 20)]

- (27b) **íshin-ro** **walwóno-ga ...**
 he.comes-IO it.became.PAST-SUB
 ‘if it happens that he comes...’ [MK]

4.4. Generic conditional-concessive clauses (‘wh...ever’) (**krge ...** VERB.TAM-**nn**; **krge ...** VERB.TAM-**tho-n**) (≠ MK)

In LG, these clauses are usually introduced by the element **krge**, possibly consisting of (a) a non-identified item **kr** (= a location noun?) + the postposition **-ge** ‘oblique / destination ‘to’ (?)’ and the clause terminated by the subordinator **-n(n)**; (b) or by the combination of the universal quantifier **-tho** (graphic variation: **-tho/-thō**) ‘every’ and the subordinator **-n**, i.e. **-thon**. (In MK, there is also a noun **káрге** ‘area, region’, cognate with the LG **krge**, which only functions as a noun).

Verbs can operate any TAM in generic conditional-concessives.⁶ In MK, this type of conditional is formed with the adverb **yayé** ‘no matter, ever’ attached to the (leftmost) WH element of the conditional clause and with the locative/instrumental postposition **-lan** ‘in; with’ functioning as the adverbial subordinator (29b).

- (28) **krge** **nadī** **tandika** **kirfandiyō-ŋ**
 wherever you.PL them you.2PL.find.PAST-SUB
 ‘wherever you find them’ [LG (YM, 4: 91)]

- (29a) **krge** **nīyī** **kilūgm-ŋn ...**
 wherever you.SG.SJ come.out.2SG.CNV-SUB [LG (YM, 2: 150)]

- (29b) **ndará** **yayé** **líwúmma-lan ...**
 where no.matter you.came.out-SUB
 ‘wherever you came out ...’ [MK]

- (30) [**krge** **nadīyī** **kātasīgīyō-tho-n**]
 [wherever you.PL-SJ be.PAST.PROGR.2.PL-every-SUB]
tī fotōro fskadōka itfokōgō

⁶ No other ‘wh...ever’ expressions have been attested so far in LG.

it side.IO your.face turn.IMP.2.PL
 ‘wherever any of you (you all) may be you turn your faces towards
 it’ [LG (YM, 2: 150)]

As an alternative to LG **krge**, the pre-positional *wh* element **dara** ‘where’ + the morpheme **-kāro/-kān** (meaning unknown) attached directly to **dara** may be used to introduce the generic conditional-concessive clause indicating direction (the subordinator **-n** marks the whole clause as with **krge**).

(31) **dara-kā-ro nadiyi kittfokiyo-n**
 where-kā-IO you.PL.SJ turn.PAST.2.PL.-SUB
 ‘wheresoever you turn’ [LG (YM, 2: 115)]

(32) **dara-kā-n tika thitfokō-n**
 where-kā-LOC he.DO he.direct.FUT?-SUB
 ‘wherever he directs him’ [LG (YM, 16: 76)]

4.5. Temporal ‘until’ clauses (**-thōro/-jōro**) (LG ≠ MK)

In LG, temporal ‘until’ clauses are marked with the postpositional subordinators **-thōro/-jōro** (conditions for alternation unclear) attached to the verb (any TAM) in the adverbial clause. MK employs pre-positional **hār** ‘until’ and **sâi** ‘(not) until’ (cf. **hār** and **sâi** in Hausa) in combination with the subordinator **-lan** at the end of the dependent clause (on the final constituent) to express this kind of temporal semantics (33b).

(33a) **ḥandiḥi nika jazrāyebō [ḥandiḥi**
 we.SJ you.SG.DO we.will.believe.not we.SJ
‘ālaka thīrōyen-jōro]
 God.DO we.will.see-SUB
 ‘we will not believe you until we see God’ [LG (YM, 2: 55)]

(33b) **nyíga yasaráyenbâ [sâi Ála**
 you.DO we.will.no.believe [(not)until.SUB Allah
rúyéyya/rúyéna-lan]
 if.we.see/we.have.seen-SUB
 ‘we will not believe you until we see God’ [MK]

- (34) **tandīyi kāmka yatadōybō tandīyi guljāyn-thōro**
 they.SJ person.DO they.do/did?not.teach they.SJ they.say-SUB
 ‘but they did not teach anyone until they had said (so)’ [LG (YM, 2: 102)]

4.6. Temporal ‘after’ clauses (nominalised forms-GEN + grammaticalized locative noun **gābo** (‘after’ < ‘back’)-SUB) (LG ≠ MK)

Temporal ‘after’ clauses are expressed by a genitive preposition formed with the genitive morpheme **-bi** (cognate with MK **-be**) suffixed to a nominalised verbal form and followed by a location word (= grammaticalized noun) **gābo** ‘back’ + subordinator **-n** (= nominalized VP-**bi gābo-n**, as shown underlined in (35a) and (36)). In MK, the syntactic order has substantially changed so that the cognate location word **ngáwo** ‘back’ precedes/introduces the adverbial clause and the genitive **-be** + subordinator **-n** are attached to the final element of the clause (= **ngáwo** [ADV. CLAUSE]-**ben** as in 35 b).

- (35a) **ḥandīyi yāmro bayannī yeno-bi gābo-n**
 we.SJ people.IO explanation give.VN-GEN after-SUB
 ‘(as for those who hide the proofs and guidance We send down),
 after We have made them clear to people ...’ (Abdel Haleem 2004)
 [LG (YM, 2: 159)]

- (35b) **ngáwo bayên díyéna-be-n kádio**
after explanation we.have.done-GEN-SUB he.came
 ‘after we had explained (it) he came’ [MK]

- (36) [**nadigēro ḥuja fūloniyh igo-bi gābo-n**]
 [to.you.PL proof clear.SJ come.VN-GEN after-SUB]
nadīyi mīlrgniyoya
 you.PL.SJ stumble.if
 ‘if you slip back after clear proof has come to you, then be aware
 that God is almighty and wise’ [LG (YM, 2: 209)]

4.7. Miscellaneous **-ḥalan** –clauses (LG ≠ MK)

This adverbial construction expresses various semantics, such as Simultaneous action (37), Manner (38a), Purpose (39), and Associative (40).

The LG postposition **-ḥalan** is cliticized to the final element of the clause. Usually, the verb is in converb form (38b, 39), but not always, as in (37) and also see (13). ‘Manner’ clauses can alternatively be encoded by the indirect object/‘goal’ postposition **-ro** and converb (38b). In Purpose constructions (39), the **-ḥalan** construction overlaps with complement construction (= infinitival complements). (40) illustrates **-ḥalan** functioning as an associative postposition which will be further addressed in Section II.

Simultaneous

- (37) **nadiyi ḥūjiniyo-ḥalan nadika**
 you.PL.SJ you.PL.looked-ḥalan you.PL.DO
kntāygomay jāṭāy
 thunderbolt.SJ 2PL.OBJ.seize.3PL.PRF
 ‘while you were looking on a thunderbolt struck you’ [LG (YM, 2: 55)]

Manner

- (38a) **tandiye tandika kisrāg-ḥalan āla-bi krāgoronōn**
 they.SJ them love.CNV-ḥalan God-GEN love.VN.IO.LOC
 ‘they love them with the same love as for Allah’ (lit.: ‘[they loving them] [they love Allah]’) [LG (YM, 2: 165)]

- (38b) **ki-sō-nū-y-ro tadigīyo**
 PAST-2PL-die-2pl.CNV-ADV PAST.be.2PL.FOC PF
 ‘you [indeed] were dead’ (lit.: ‘[you having died] [you were]’)

Purpose/(Infinitival) Complement

- (39) **tandī nadika bamkis-ḥalan tandiye nāktaybō**
 they you.PL.DO beat.CNV-ḥalan they.SJ will.not.stop
 ‘they will not stop (in order to) fight you’ = ‘they will not stop fighting you’ [LG (YM, 2: 217)]

- (40) **sāmi tūlur-halan halga-th-ī**
 sky seven-ASSOC create-3sj-PRF
 'He created [the Heavens] with seven skies' [LG (YM, 2: 29)]

Cf. the Kanuri equivalent of (40) given by Imam Habib Ali (p.c., 2005) where the MK associative **-(C)a** (C = copy of preceding segment) is used: **sami-wá tūlur-ra halak-só-na** (sky-PL seven-ASSOC create-3sj-PRF).

SECTION II: Morphosyntactic features of the LG complex clauses continuum

I will now summarize the findings in the previous section in table 1 which shows types of syntactic constructions in the order they have been presented above.

Table 1: types of coordination and subordination as attested in LG

CO-ORDINATION and SUB-ORDINATION TYPE	SECT-ION	(CNV=CONVERB, VN=VERB NOUN, COND=CONDITIONAL), POSTP. CLITIC (PC), PREPOSITION (PREP), CONJUNCTION (CONJ)	SIMILAR (=) / DIFFERENT (≠) TO MODERN KANURI (MK)	MODERN KANURI EQUIVALENTS (MORPHOSYNTACTIC PARAMETERS)
COORD: SJ NP	2.1.	-n ...-n (PC)	≠ MK	-a ...-a
COORD: DO/IO NP	2.2.	∅ (juxtaposition)	≠ MK	-a ...-a
COORD: VP	3.1.	∅ (juxtaposition)	≠ MK	-a ...-a
COORD: VP (PRHB)	3.2.	-n ...-n	≠ MK	∅ (juxtaposition)
COORD Clause	3.3	CNV + <yē>	≠ MK	-yé ... -yé
COORD disjoint	3.4.	<bīya> (CONJ)	MK	= bīya (CONJ)
Complex cl	'that' Clause	4.1.1.	<-tī> (PRF)	MK = -dó (PRF/IMPF)
	DO CCs of Emotion & mental CTPs	4.1.2.	CNV + DO <-ka>	≠ MK -dó, finite verb

	Manipulative CTPs	4.1.3.	VN + -n	MK (only when the matrix is nominalised in MK) [≈]	VN + -ro (IO) VN + -n (SUB)
	IO CCs of some mental CTPs	4.1.4.	VN + -ro (IO)	MK =	VN + -ro (IO)
	Reported speech	4.1.5.	CNV of n 'say' = quotation marker / complementizer	MK =	SEQUENTIAL (< CNV) of n 'say' = quotation marker
	Relative Clause	4.2.	CNV + <-ti> on SJ; CNV + \emptyset on OBJ	\neq MK	TAM constraint + -dǎ
Adverbial clauses	open conditional	4.3.1.	COND(- ya)	MK =	COND (- ya)
	open & concessive conditional	4.3.2.	alarō CONJ + COND (- ya)	\neq MK	non-conditional TAM + PCs (-só/-sôn/-wosó má/mân)
	Hypothetical-counterfactual cond.	4.3.3.	gōrē CONJ + COND (- ya)	\neq MK	câ PREP + -ga PC
	Generic condit.-concess.	4.4.4.	krge/darakā PREP, TAM + -n(n)/-tho + -n	\neq MK	<i>wh+yayé</i> , TAM + -lan
	'Until' clauses	4.5.	-thōro/-jōro PC	\neq MK	sâi + COND(- ya)/- lan (LOC PC)
	'After' clauses	4.6.	VN-GEN gābo-n (gābo =LOC noun < 'back'; -n =SUB)	\neq MK	ngáwo (LOC noun) PRF/IMPf- dó -n (DET+LOC)
	Simult., Manner, Purpose + NP Associative	4.7.	-ḥalan	\neq MK	various

Table 1 shows that there are two salient morphological properties which spread across various types of traditionally called coordinate and subordinate constructions — the non-finite converb and postpositional morpheme **-n**.

5. Converb

In our corpus, the category converb is obligatory in the following syntactic environments:

Table 2: obligatory use of the LG converb

	SYNTACTIC ENVIRONMENT
a	The first of two clauses coordinated with the conjunction yē
b	Complement clauses of mental predicates, e.g., with matrix verb 'remember'
c	A complementizer of reported speech clauses
d	Relative clauses
e	Manner ('how') adverbial clauses

The LG converb is a nonfinite participial-like verbal form which consists of the verb stem and subject marker, but can also take derivational affixes (Bondarev 2005b: 47-8). Haspelmath (1995: 3) defines the converb as "a non-finite verb form whose main function is to mark adverbial subordination", but the constructions in T(able) 2 cast doubt on the accuracy of the term as applied to LG since only T2e is an adverbial clause. I will demonstrate that there are comparative, syntactic, and typological/cross-linguistic justifications for the converb as a valid inflectional category in LG, which functions in coordinate and subordinate clauses beyond the adverbial domain.

Eastern Saharan Beria has the converb category which, according to Jakobi & Crass (2004: 165-176), is "canonically" used in:

- a) adverbial clauses but also in
- b) verb serialization involving a sequence of tense iconic co-events (i.e. the syntactic sequence of verbal predicates matches the real-world chronological sequence of events).⁷

A closer look into the functions of the Beria converb shows that the con-

⁷ There are two morphological types of Converb in Beria. Converb₁ is derived from the Perfective, and Converb₂ from the Imperfective (Jakobi & Crass 2004: 166).

verb is in fact used in a range of contexts, as follows:

- c) coordination of non-tense iconic clauses (41);

(41) **áI-rá kíg-ε kosoígī-ra káří**
 I-and I.leave-CNV my.younger.brother-and he.came
 ‘I have left and my younger brother has come’ (Jakobi & Crass 2004: 176) (= LG T2a and (6) as coordination of non-tense-iconic actions)

- d) in quoted clauses initiated by the verb **í** ‘say’ the converb form of **n** ‘say’ is used as a complementizer (42a); the 3rd person singular converb of the same verb **n** ‘say’ has been grammaticalized as a subordinate marker in adverbial conditional and causal clauses and in the complement clauses of the speech verbs **bo** ‘say, tell’ and **kóří** ‘ask’ (42b);

(42a) **bεr jú-gin-ε k-í-í**
 he go-say.3SG-CNV PRF.3-say-PRF
 ‘he, he said, “go!” (Jakobi & Crass 2004: 183)

(42b) **áI bεr már I-I gín-ε bo-g-ε jú-g-í**
 I he ill-is he.says-CNV.SUB tell-1SG-CNV go-1SG-PRF
 ‘me, I went to tell him that he is ill’ (Jakobi & Crass 2004: 18)

- e) “benefactive” constructions (in Jakobi & Crass’ terms) formed by the light verb **kéí-** ‘to give’ with various surface realizations (e.g. implicative ‘give’), as in (43);

(43) **áská gíné é-géí**
 door you.2SG.open.CNV to.me-give.IMP
 ‘open the door for me!’ (Jakobi & Crass 2004: 171)
 (= LG T2b, i.e. converb in (some) complement clauses)

- f) potential (‘CAN’) constructions where the prototypical complement taking ‘CAN’ is coded as a converb and hence syntactically dependent on the prototypical complement clause (44).

- (44) **kɪdǎá** **sénnɪ**
he.can.CNV he.stays.IMPF
 'he can stay' (lit.: '[he being able.CNV] [he stays]') (Jakobi & Crass 2004: 172)

The structure in (44) is typologically unusual. Crosslinguistically, the prototypical complement clause of modal predicates is coded as a dependent structure and the modal verb is present in the matrix clause. In Beria (44) and also Kanuri (50), the structure is the reverse. The modal verb 'CAN' is syntactically expressed as a subordinate clause and the content verb appears in the matrix. So, in 'CAN' constructions Beria and Kanuri correlate semantic content with finiteness, and modality with non-finiteness⁸.

The distribution of the converb in Beria corresponds to four LG clause types, i.e. non tense iconic coordination (T2a), complement clauses (T2b), quoted clauses (T2c), and adverbial clauses (T2e). A similar functional distribution is found in the so called "Sequential" verbal category in MK (Cyffer 1991 inter alia).⁹ The LG converb is cognate with the MK converb (= Cyffer's Sequential) and both consist of the verb base, subject marker, and the low tone suffix *-e* in the 1st person sg./pl. and low tone in the 2nd and 3rd persons. In MK, the converb is used in:

- a) clause-chaining constructions to express (tense iconic) sequences of events with different or same subjects (which makes the category close to tense-iconic coordination):

- (45) **Fáti kúloro lezâ** **awánzô bare badiwóno**
 Fati farm.to go.3SG.CNV her.father farming he.began

⁸ In contrast to Beria (44) and Kanuri (50), and cross linguistically more typical, cf. German: **ich konnte nicht kommen** and its English gloss 'I could not come' where **können** 'can' is finite (= agrees with the subject in tense and person) whereas **kommen** 'to come' is non-finite (=no agreement).

⁹ Cyffer's term Sequential is based on the most frequent function of the category in clause-chaining constructions for expressing a sequence of events. Lukas (1937) and Hutchison (1981) call the category "Conjunctive".

'Fati went to the farm and her father began the farm work' (Cyffer 1991: 129) (= Beria, not attested in LG)

b) adverbial clauses (manner)

- (46) **burwozâ** **sədóna**
precede.3SG.CNV he.has.done
 'he has already done it' (lit. 'having already, he has done') (Cyffer 1990: 23) (= Beria & LG (manner))

c) coordination of conjoined complements/ conjoined events (no tense iconicity) where syntactically the first action is coded by 2SG converb (hence the glossing) and the second action is coded by verbal noun;

- (47) **máto** **yíwum** **Mákkaro** **letá** **raákóna**
 car buy.2SG.CNV Mecca go.VN I.want.PRF
 'I want to buy a car and go to Mecca' (lit.: 'you.buying.CNV a car (and) to Mecca going.VN I want') (Hutchison 1981: 322) (MK = Beria & LG non-tense-iconic)

d) in reported/direct speech to mark subordinate quoted clauses (direct/indirect);

- (48) [áðə cá címóye sa] **gúlzána**
 [this earlier we.received say.CNV] they.3PL.said
 "We already received this", they said' (lit.: ["We already received this", they saying], they said') (= (17b) above) (MK = Beria & LG)

e) in modal/aspectual and manipulative verb constructions (49-50) characterized by the high semantic integration of two propositions into a single event (the "strongest bond" in Givón's (1990: 517) terms).

- (49) **âm** **sámmá** **ísa** **dazóna**
 people all come.3PL.CNV they.finished
 'all the people have arrived (lit. finished arriving)' (Hutchison 1981: 323) (MK = Beria & LG)

- (50) **ráksə** **nápcin**
 he.can.CNV he.stays.IMPF
 ‘he can stay’ cf. lit.: ‘[he being able.CNV] [he (will) stay(s)]’ (= Beria,
 not attested in LG)

The functional distribution of the same cognate verbal category converb in LG, Beria and MK is summarized as follows:

Table 3: functional distribution of converb in LG, Beria, and MK.

	TYPE OF COMPLEX CLAUSE	LG CNV	Beria CNV	MK CNV
a	coordination: non tense iconic	√	√	√
b	adverbial	√ manner	√	√ manner
c	clause-chaining	-- (not attested)	√	√
d	quoted clause	√	√	√
e	complement clause	√	√	√ aspectual +
f	‘CAN’ clause	-- (not attested)	√	√
g	Relative clause	√	--	--

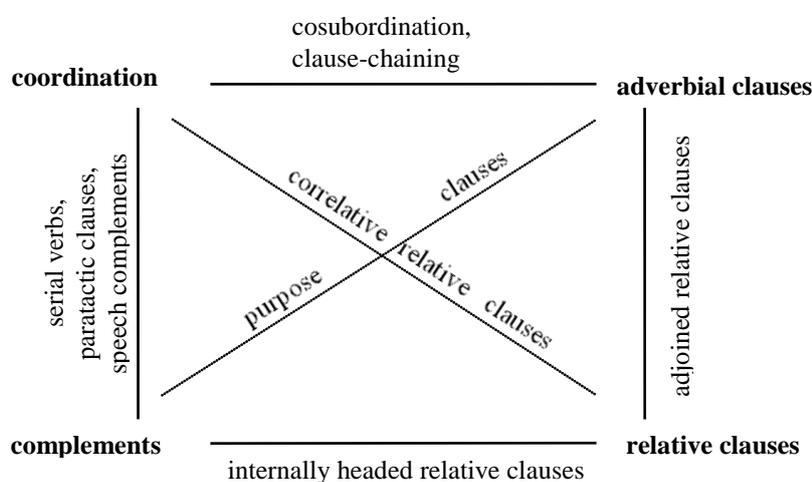
The comparative data in table 3 shows that in all three languages, the cognate converb category has almost the same (wide) range of functions.¹⁰ It is clear that most of these functions are outside the adverbial clause domain and so the converb has a wider distribution.

Given the fuzziness of syntactic boundaries between the main traditional complex clauses (Foley & Van Valin 1984, Givón 1990, Croft 2001) it is plausible that a nonfinite participial-like category could spread along borderline areas of the complex construction types. If we check Saharan

¹⁰ This is despite the fact that Jakobi & Crass (165-176) collapse the five listed functions in Beria into two (i.e., adverbial (including (52e, f)) and clause-chaining constructions). As to the MK Sequential (Cyffer 1991), or Conjunctive (Lukas 1937, Hutchison 1981), different syntactic functions of this category have been treated by all three authors. Hutchison (1981: 321-324) provides the most detailed description, but no explicit distinction between adverbial and complement function has been pointed out.

data against the list of ambiguous/borderline constructions in Diagram 1 (Croft 2001: 322-326), we will see that converbs in LG and Beria and SEQ in MK span all four traditional categories, i.e, **coordination**, **adverbial clauses**, **relative clauses**, and **complement clauses**:

Diagram 1. The continuum of complex sentence types, from Croft (2001: 322-326)



Cosubordination = between **coordination** and **adverbial clause** (= T3c chaining (tense iconic) and T3a (place in the string is not conditioned by sequence, *syntactically* first constituent being marked).

Speech complements = between **coordination** and **complement clause** (= T3d).

Serial verb construction (integration of more than one verbs into a single clause) = between **coordination** and **complement clause** (= T3e (esp. Beria).

Adjoined relative clauses = between **adverbial** and **relative clause** (=T3b & g (LG)).

Internally-headed RC = between **relative** and **complement clauses** (=T3e & g).

Purpose clauses = (infinitival) **complement** and **adverbial clauses** (=T3b & e)

Correlative clause = **coordination** and **relative clause** (=T3a & g (LG))

Thus, the converb/Sequential category of the three related Saharan languages is a unique example of a continuum which hitherto had only been reported in typologically and genetically unrelated languages.

One can ask whether such a multifunctional category can still be called converb in line with the accepted traditional definition. Crosslinguistically, a wide functional coverage (beyond adverbial clauses) is not unusual for this category. Nedjalkov (1995: 457) states that the “Evenki “contextual” converb **-mi** may function as the infinitive in complement clauses of modal and phasal verbs” and the “purpose converb **-da** ... may be used in complement clauses after causative verbs”. The Russian converb may also fill the slot of the complement clause: “[the converb] certainly realizes a semantic valency of the main verb” (Weiss 1995: 243).

As to the use of the converb in the LG relative clauses, a close syntactic and semantic analogue to this function of a participial-like form would be the Russian converb or English *-ing* form (participial) when functioning as a modifier: **On vernulsja ulybajas'**_{CNV} ‘He returned smiling_{PART}’ (Weiss 1995: 241). Syntactically, the Russian converb and English participial modify the main verb, but semantically it is the noun which is modified. The closest analogy to the LG converb spanning complement and relative constituents/clauses would be the same English *-ing* verbal form which is present in a complement clause such as ‘She likes [playing chess]’ and the restricted relative clause function in ‘The girl [playing chess]’. This kind of formal and functional identity explains how LG unified the morpho-syntax of adverbial ‘manner’ clauses along with complement and relative clauses.

Haspelmath (1995: 26, 28), arguing for the validity of the converb as a typologically distinct category, considers marginal (continuum-like)

functions of the converb and mentions overlaps between converbs and medial (= clause-chaining) verbs, and between adverbial purposive converbs and non-adverbial infinitive complements. LG, Beria, and modern Kanuri attest therefore an (extreme) example of how the non-adverbial marginal functions of the crosslinguistically typical category converb can have a widespread distribution.

6. The postposition -n

Another LG syntactically cross-boundary category is the postposition **-n**. As shown in Table 1, it occurs on the last element of coordinated or subordinated expressions in:

- a) subject NP coordination;
- b) VP coordination;
- c) complement clauses of manipulative verbs;
- d) generic conditionals;
- e) adverbial temporal ('after') clause.

If we look at the form and function of the cognate postposition **-n** in modern Kanuri and the Gazir dialect documented by Koelle (1854), we notice that on the diachronic pathway LG → Gazir → MK, the marker **-n** lost its coordinative function and shifted into the locative domain, functionally merging with the locative postposition **-lan** in MK.

Koelle (1854: 33, 147, 174, 299, 305), gives the following distribution for the locative markers **-n** and **-lan** and the associative marker **-wa**:

-n: NP coordinator ('and', 'as well ... as'), locative governed by the grammaticized genitive prepositions (**súró fáto-be-n** (inside house-GEN-LOC) 'inside the house'), instrumental.

-lan: locative (spatial and metaphorical) ('in, on, on top, at, by'), benefactive, adverbial 'while' clauses.

-lan/-n (overlap): locative 'inside', source 'from', temporal 'when'.

-n/-wa: **-n** functionally overlaps with the associative marker **-wa** 'with' in NP coordination.

-wa: NP and VP coordination, associative 'with', adverbial participial ('manner').

The same postpositions **-n** and **-lan** are also attested in MK. They are highly polysemic and each can express array of functions such as ‘source’, ‘locative’, ‘instrumental’, and adverbial clause subordinator. Unlike Gazir, where the functions of **-n** and **-lan** can still be distinguished (with some overlap), the MK forms are in free variation, a fact which has not yet received any plausible explanation (cf. Hutchison 1981: 176). There is no functional overlap of **-n/-lan** with the associative **-wa** as was the case in Gazir.¹¹ The MK **-wa** is used as a coordinator of NPs, associative ‘with’, and adverbial participial (‘manner’), e.g., **bóri záwin-na nápkada** (food they.eat-ASSOC they.sat) ‘they sat eating food’ (Cyffer 1991: 204).

In LG, the marker **-n** is a multifunctional coordinator and subordinator but **-lan** is a locative proper with concrete and extended metaphorical meanings, e.g., ‘on top of, on, at’. All other locative semantics are distributed between **-gen** ‘inside the source’, **-kan** ‘from the source’, **-kami** ‘part of the whole, from within’. The functional equivalent of the Gazir and MK associative **-wa** is the LG associative and adverbial subordinator **-halan**.

Table 4: Coordinative, associative, locative, instrumental, adverbial clause, and complement clause functions in LG, Gazir, and MK

	LG	Gazir	MK
NP coordination	-n... -n	-n/-wa...-n/-wa	-wa...-wa
associative	-halan	-wa	-wa
VP coordination	-n... -n	-wa...-wa	-wa...-wa
genitive prepositions	-n	-n	-n
locative ‘on top’	-lan	-lan	-lan/-n
locative ‘inside’	-gen	-lan/-n	-lan/-n
‘away from the source’,	-kan	-lan/-n	-lan/-n
‘from within’	-kami	-lan	-lan/-n
instrumental	-n	-n	-lan/-n

¹¹ In MK, the associative/coordinative marker is realized as **-(C)a**, where C = copy of the preceding segment.

complement clause	-n	?	-n
Adv.Cl: generic conditional	-n	--	-lan/-n
Adv. Cl: temporal	-n ('after')	-lan/-n	-lan/-n
Adv. Cl: manner	-ḥalan	-wa	-wa
Adv. Cl: simultaneous	-ḥalan	-lan	-lan/-n

I suggest the following eight-step scenario for the functional merger of **-n** and **-lan** in MK and the subsequent replacement of the coordinative **-n** with a newly emerged associative **wa** (< *ḥa):

1. Multifunctional **-n** was initially a coordinative, instrumental, and (adverbial and complement) subordinating morpheme. (Cf. the Hausa multifunctional preposition **dà** analysed by Jaggar (2008) as originating from one historical source (comitative-instrumental) and reanalyzed as a linker in coordinate and subordinate constructions).
2. The locative postposition **-lan** expanded its metaphorical function => becoming more grammaticalized.
3. In manner clauses, the second syllable of the associative/subordinator **-ḥalan** was reanalyzed as **-lan** 'at, in' and made **-ḥalan** bisegmental: **-ḥa+lan**. This led to reassigning the associative meaning 'with' to **-ḥa** in the associative construction (cf. the marginally accepted combination of **-(w)a** and **-lan** in MK (Hutchison 1981: 199): **fáto dâ-a-lan** (house, meat-ASSOC-LOC) 'in a house that has meat').
4. The segment **-ḥa** became a sole associative marker.
5. **-lan** expanded its new subordinating function from 'manner' clauses to simultaneous "**-ḥalan** clauses". This way, an overlap with the adverbial functions of **-n** was created.
6. Having acquired shared adverbial functions, the locative semantics of **-lan** and the instrumental of **-n** merged into allomorphic **-(la)n** resulting in more general locative ('source')/instrumental semantics.
7. With polysemic **-n/-lan**, more specific locative morphemes (**-gen** 'inside', **-kan** 'away from the source', **-kami** 'from within') had become re-

dundant and extinct.

8. Coordinative functions of **-n** have been assigned to the associative **-ḥa** (***-ḥa > -wa > -(C)a**)

7. Summary remarks

As shown in Table 1, out of the sixteen LG complex clauses exemplified in Section I, only five demonstrate the same form-function structure as attested in corresponding clauses in modern Kanuri, i.e. disjoint coordination (3.4.), ‘that’ complement clauses (4.1.1.), complement clauses of the mental verb ‘know (about)’ (4.1.4.), quote clauses (4.1.5.), and (only partially) open conditional clauses (4.3.1.).

The most salient feature distinguishing LG from MK complex clauses is the LG nonfinite category converb and the polysemic morpheme **-n**. Both categories occur in traditional coordinate, adverbial, complement, and relative clauses, and because of this there is no clear-cut division between LG complex clause types.

In *Section II*, it has been demonstrated that the converb spans all four clause types in LG and, remarkably, has high frequency functions beyond adverbial clauses. This kind of converb polyfunctionality is in fact typical of other Saharan languages such as Beria and Kanuri. They only differ from LG in that their converb does not occur in relative clauses and it is less frequent in complement clauses. It is an open question whether the Kanuri converb narrowed the range of its subordinate functions (and if so, why?) or whether the Kanuri converb never had a wider and more frequent functional scope than it has now.

As to the polysemic postposition **-n**, it has been shown that in LG it functions as an NP and VP coordinator and as a subordinator of both nominalized and non-nominalized clauses. Modern Kanuri exploits the morpheme **-n** (cognate with the LG **-n**) quite differently from LG, i.e. the Kanuri **-n** is not used in NP/VP coordination and it is interchangeable with the postposition **-lan**, both being locative/instrumental markers and adverbial clause subordinators. I have proposed that **-n** was originally a coordinative / instrumental / subordinating marker but changed its func-

tion and (partially) merged with the locative **-lan** due to reanalysis of **-lan** as a meaningful segment of the polysemic associative/adverbial subordinator **-h₁alan**. Possibly, this permutation (= affected adjunct slot) made other adverbial structures liable to change resulting in transformation of the whole system of locative postpositions and morphosyntactic reordering of adverbial clauses in LG and MK. For lack of space, I cannot expand upon the change of adverbial constructions here, and will only make a preliminary observation.

As demonstrated in *Section I* and *Table 1*, all LG adverbial clauses differ from MK adverbial clauses in two ways: (1) in the use of the verbal inflectional category Conditional (COND-**ya**) and (2) in the use of subordinating markers. LG conditional clauses of the COND-**ya** type cover almost all conditional semantics expressed in MK by different ‘subordinating introducers’ and ‘clause terminators’ (cf. Cyffer and Ziegelmeyer this volume). Interestingly, such frequent MK conjunctions as **sâi** ‘only, except’ and **hâr** ‘until’ used in various adverbial constructions are not used in LG at all. By the same token, the LG conjunctions **alarô** ‘(even) if’ (4.3.2.) and **gôrê** ‘if’ (4.3.3.) frequently used in adverbial clauses are not attested in MK.

Abbreviations

ADV	adverbial operator
ASSOC	associative
CC	complement clause
HRC	headless relative clause
CAUS	causative
CNV	converb
CONC	concessive conditional
COND	conditional
CTP	complement taking predicates
DEF	definite
DEM	demonstrative
DET	determiner
DO	direct object

EXIST	existential
FOC	focus
FOCPF	focus perfective
FUT	future tense
GEN	genitive
IMP	imperative
IMPF	imperfective
IO	indirect object and destination marker
LG	the language of the Qur'anic glosses
LOC	locative
M	masculine
MK	modern Kanuri
NEG	negative
OJ	object morpheme
PASS	passive
PAST	past tense morpheme
PL	plural
PRF	perfective
PRHB	prohibitive
PROG	progressive
PRTCP	participle
QR	quoted clause
RC	relative clause
REL	relativizer
SEQ	sequential
SG	singular
SJ	subject marker
SUB	subordinator
TAG.QST	tag question
VN	verbal noun
YM	the "Yerima Mustafa" manuscript

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