

## Relative Clauses in Dazaga

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**Abstract:** In this paper I describe relative clauses in the Saharan language Dazaga. As a point of comparison, I provide an overview of Kanuri relative clauses. I demonstrate that Dazaga uses externally headed, postnominal relative clauses. In Dazaga, relative clauses are characterized by a clause-final determiner (=ma, or one of its allomorphs) or relativizer (=ηa). Dazaga employs the gap strategy for the relativization of all grammatical relations (unlike Kanuri); relativized secondary objects, obliques, and possessors can optionally use the resumptive pronoun strategy. Dazaga can relativize on any grammatical relation on the Accessibility Hierarchy from subject to possessor.

### 1. Introduction

This paper provides a description and analysis of relative clauses in Dazaga. Dazaga is a Nilo-Saharan language of eastern Niger and northern Chad, spoken by the Daza people. It is spoken by about 380,000 people (Lewis, Simons, & Fennig 2013a), mostly in Chad (about 330,000 speakers), but also in Niger (the remaining 50,000 speakers). The Daza, and their language, Dazaga, are generally referred to by outsiders as Tubu or Toubou, and are normally referred to as Gorane by the non-Daza people in Chad.

Dazaga is a Nilo-Saharan language, and is a member of the immediate and small subgroup, Saharan (Greenberg 1963:130). Saharan contains a total of nine languages, which are generally broken down into two further subgroups, Eastern Saharan and Western Saharan (Cyffer 2000, 2007; also Lewis, Simons, & Fennig 2013b). Eastern Saharan contains only two languages, Berti and Zaghawa (Beria), the former of which is now extinct. Western Saharan is further subcategorized into Kanuri (including Kanembu and Kanuri proper: Bilma, Manga, Central, and Tumari) and Tebu. Tebu comprises Tedaga and Dazaga.

Tedaga and Dazaga have generally been treated together in descriptive work (LeCoeur & LeCoeur 1956, Lukas 1953; Jourdan 1935 deals with only Dazaga), even though they are distinct (but closely related) languages (Lukas 1937:x). There is lexical and grammatical evidence for this distinction, as well as a definite distinction in the minds of the speakers of Tedaga and Dazaga (Kevin Walters, p.c.). For this reason, it is desirable for there to be an independent description of Dazaga. An additional impetus for new descriptive work on Dazaga is the age of the primary works on Dazaga, all of which are 50 years old or older and do not take into account any of the vast amount of typological and theoretical work that has revolutionized syntactical studies in the past half century.

I continue this paper with a brief review (§2) of the key typological features of relative clauses. I then give an extended overview (§3) of relative clauses in Kanuri (a well-studied close relative of Dazaga) as a basis of comparison for Dazaga. In §4 I give a detailed description of Dazaga relative clauses, and occasionally compare my findings with the features of relative clauses in Kanuri. The bulk of §4 deals with the structure of relative clauses in Dazaga (§4.1) and relativization strategies and the Accessibility Hierarchy (cf. §2.3) in Dazaga (§4.2). §5 concludes.

## 2. Relative Clauses<sup>1</sup>

In examining relative clauses in any language, there are particular features or aspects that need to be considered. Payne (1997:326) helpfully lists three major parameters along which relative clauses differ, namely, 1) the position of the head noun to the relative clause, 2) the strategy (or strategies, where more than one are observed) of relativization, and 3) which grammatical relations can be relativized. I will briefly comment on each of these in more detail below, but it will be helpful to first establish some of the terminology (drawing on Andrews 2007) that I will use in this paper.

I will use the term ‘relative clause’ in this paper to refer to the modifying clause itself, excluding the ‘head’ noun. Thus, in *the man who cracked the code*, *man* would be identified as the head noun and *who cracked the code* would be the relative clause. This use of the term ‘relative clause’ fits best with other descriptors such as ‘externally/internally headed relative clause’, which would be a non-distinction if the head noun is taken to be part of the relative clause. Unless otherwise stated, I will use ‘relative clause’ to refer only to restrictive relative clauses (excluding non-restrictive relative clauses and correlatives). I will use NP<sub>mat</sub> to refer to the noun phrase in the matrix clause which is modified by the relative clause. The coreferent noun phrase in the relative clause (whether manifested as a resumptive pronoun or a gap) will be referred to as NP<sub>rel</sub>.

### 2.1 Position of the head noun in relation to the relative clause

Relative clauses may be helpfully categorized by the relation of the head noun to the relative clause (Andrews 2007; Keenan 1985). Thus, if the head noun is outside the relative clause (as is typically the case), we label the relative clause ‘externally headed’ or an ‘external’ relative clause. If the head noun occurs within the relative clause, then we label the relative clause ‘internally headed’ or an ‘internal’ relative clause. Additionally, a relative clause may be ‘free’ (Andrews 2007:213), if there is no head noun, as with the relative clause *what was on the floor* in the sentence *The dog was eating what was on the floor.*<sup>2</sup> Andrews (2007) calls these three categories ‘embedded’ relative clauses, and distinguishes them from what he calls ‘adjoined’ relative clauses (under which label he includes ‘left-adjoined’ relative clauses and ‘right-adjoined’ or ‘extraposed’ relative clauses). Keenan (1985:163) refers to left-adjoined relative clauses as ‘correlatives’ and does not consider them to be true relative clauses. In this paper, our focus will be on restrictive ‘embedded’ relative clauses, but we will briefly touch on possible correlative and non-restrictive relative clause constructions.

<sup>1</sup>See Peranteau *et al.* 1972 for a valuable collection of studies on relative clauses in over 20 languages.

<sup>2</sup>In the literature, the term ‘headless relative clause’ is often used interchangeably with ‘free relative clause’ (cf. Payne 1997:326). Thus, for example, van Riemsdijk & Williams (1986:108) use the terms interchangeably and simply define a free/headless relative clause as one that lacks a head (1986:160). Similarly, Givón (2001:205) uses ‘headless’ to refer to relative clauses that Kroeger (2005:239) calls ‘free’ relative constructions. For a useful discussion of the differences between ‘free’ relatives and ‘headless’ relatives, see Kroeger (2005:238-240).

## 2.2 Strategies for relativization

Languages use one of three strategies to form relative clauses (Keenan 1985; Kroeger 2004:176-9). These are called the gap strategy, the relative pronoun strategy, and the resumptive pronoun strategy. (Andrews (2007:214-7) adds what seems like a fourth method, namely retaining the full noun NP in a relative clause, because he considers correlatives (his ‘adjoined’ relative clauses) to be relative clauses.)

In the gap strategy, a gap is left in the relative clause where the relativized noun would otherwise occur, thereby negatively signaling the grammatical relation of the NP<sub>rel</sub>. This is exemplified in a sentence such as *I married the woman [I love \_\_\_\_]*.

In the relative pronoun strategy, a relative pronoun occurs before the relative clause and is often marked for agreement with the NP<sub>mat</sub>, but is marked with the case (if marked in a given language) appropriate for the grammatical function of the gapped NP<sub>rel</sub>. This strategy is typically (maybe always) used along with gapping. An example of a relative pronoun would be the pronoun *whom* in *I married the woman [whom I love \_\_\_\_]*.

Resumptive pronouns fill the gap that would otherwise occur in the relative clause. If the language allows, they will be marked for agreement with their antecedent (the NP<sub>mat</sub>) and will bear the case marking (if marked) of the grammatical relation borne by the NP<sub>rel</sub> in the relative clause. Standard English does not allow this strategy, but it is occasionally used by native speakers of English in conversation (cf. Kroeger 2004:168).

A given language will typically have one preferred strategy for relativization, but may use other methods as well. However, there are some constraints on which methods are used and in what situations (see §2.3, below and Keenan & Comrie 1977).

## 2.3 Possible grammatical relations of NP<sub>rel</sub>

Keenan & Comrie (1977) claim that there are strong typological patterns as to what grammatical relations in a relative clause can be borne by the NP<sub>rel</sub>. More specifically, they claim that any language which allows relative clauses will allow NP<sub>rel</sub> to bear the grammatical relation of subject. If one additional grammatical relation is allowed for NP<sub>rel</sub>, it will be object; if two, it will be object and indirect object, and so forth. Their claims result in their proposed Accessibility Hierarchy (Keenan & Comrie 1977:66; cf. Dik 1997:§16.4.1), which is given in (1), below:

- (1) *Accessibility Hierarchy*  
 SU > DO > IO > OBL > GEN > OCOMP

In this hierarchy, OBL refers to oblique arguments (and not to adjuncts), GEN stands for genitives (i.e., possessors), and OCOMP to objects of comparison. Based on their research, they posit two groups of constraints that govern relativization in any given language. These are reproduced (and slightly adapted) below, in (2) and (3).

- (2) *The Hierarchy Constraints (HCs)*
1. A language must be able to relativize subjects.
  2. Any relative clause-forming strategy must apply to a continuous segment of the accessibility hierarchy.
  3. Strategies that apply at one point of the accessibility hierarchy may, in principle, cease to apply at any lower point.
- (3) *The Primary Relativization Constraint (PRC)*
1. A language must have a primary relative clause-forming strategy.
  2. If a primary strategy in a given language can apply to a low position on the accessibility hierarchy, then it can apply to all higher positions.
  3. A primary strategy may cut off at any point on the accessibility hierarchy.

### 3. Relative Clauses in Kanuri

In this section of the paper, I review the structure of relative clauses, the relativization strategies, and grammatical relations of NP<sub>rel</sub> in relative clauses in Kanuri. Kanuri is a Saharan language closely related to Dazaga, and is by far the most thoroughly studied and described Saharan language. For this reason, it will be very helpful to survey relative clauses in Kanuri, to establish possible points of comparison, before moving on to our description of relative clauses in Dazaga.<sup>3</sup> The following summary of Kanuri relative clauses is primarily dependent on Hutchison 1981 and Lukas 1937, which are two of the most comprehensive studies of Kanuri.<sup>4</sup>

#### 3.1 The structure of Kanuri relative clauses

Noun phrases in Kanuri are characterized by the head-modifier order of constituents (Hutchison 1981:217), as demonstrated in example (4), where the noun *fèrò* ‘girl’ precedes the adjective *sháwà* ‘beautiful’.

- (4) *fèrò*     ***sháwà***     *rúkónà*  
 girl     beautiful     1S.saw  
 ‘I saw a beautiful girl.’ [Hutchison 1981:195]

This head-modifier constituent order also applies for the determiner =*dá* ‘the’.<sup>5</sup> This is shown in example (5), where =*dá* follows the head noun *kâm* to form the noun phrase *kâm=dá* ‘the person’.

<sup>3</sup>A description of relative clauses in a more distantly related Nilo-Saharan language, Tadaksahak, is presented in Christiansen & Levinsohn 2003. Because of the more distant relationship between Tadaksahak and Dazaga, we will not survey relative clauses in Tadaksahak in this paper, but it will be of interest to readers studying the typology of Nilo-Saharan languages.

<sup>4</sup>I have not been able, at this time, to access two other key works on Kanuri syntax, namely Cyffer 1998 and Fannami & Mu’azu 2011.

<sup>5</sup>For both Kanuri and Dazaga, the morphemes glossed ‘DET’ or translated ‘the’ in this paper may not always express definiteness (cf. example (24)). Further study is required to determine whether these morphemes in Kanuri and Dazaga encode definiteness, specificity, or some other feature. See Kroeger 2014 for a useful discussion of the semantics of various article systems. For the purposes of this paper, I will provisionally gloss these morphemes as ‘DET’.

- (5) *kâm=dó rúkónà*  
 person=DET 1S.saw  
 ‘I saw the person.’ [Hutchison 1981:218]

Given the head-modifier pattern observed above for adjectives and the determiner =*dó*, it is not surprising to find that Kanuri relative clauses follow the same pattern and occur after the head noun they modify, that is, they are POSTNOMINAL. This is demonstrated in examples (6) and (7). In (6), the modifying clause ‘I am advising you’ follows the head noun *àwó* ‘thing’, and, in (7), the modifying clause ‘who came yesterday’ follows the head noun *kâm* ‘person’.

- (6) *àwó [nyia gàlàngîn]=dó fàné!*  
 thing to.you 1S.advise =DET 2S.listen.IMV  
 ‘Listen to what/the **thing** [I am advising you].’ [Hutchison 1981:224]

- (7) *kâm [biskà ísàná]=dó Kánò=ro lezónà*  
 person yesterday 3S.came=DET Kano=to 3S.went  
 ‘The **person** [who came yesterday] has gone to Kano.’ [adapted from Lukas 1937:155]

The head noun marks the left edge of the NP and the determiner =*dó* marks the right edge, clearly showing that the modifying phrase is embedded within the NP, and is therefore a relative clause. Lukas (1937:155-8) notes that the end of the relative clause may be marked with a combination of the determiner and the relevant case marking (e.g. =*dógà* for accusative case).

When other modifying elements (adjectives, possessors, etc.) occur in an NP that also includes a relative clause, the relative clause comes last in the NP, following the other modifying elements. This is illustrated in example (8) below, where the relative clause follows the adjective *kúra* ‘big’.

- (8) *kàlá kàská kúra [shí=rò tármù gùlzâibèlàn] nápkàtà*  
 3S tree big 3S=to tarmu 3P.call 3S.sit  
 ‘S/he is seated on the big tree [which they refer to as the tarmu].’ [Hutchison 1981:226]

### 3.2 Relativization strategies in Kanuri

Kanuri employs two strategies for relativization (cf. §2.2, above), namely the GAP STRATEGY and RESUMPTIVE PRONOUNS. When NP<sub>rel</sub> functions as subject or primary object of the relative clause, it is gapped, as illustrated respectively in examples (9) and (10), with the gaps explicitly indicated by the underlined blanks (in example (10), the subject has also been omitted through pro-drop).

- (9) *kâm [ \_\_\_\_\_ kû yêrwà=rò lèzónà]=dó báli wáltìn*  
 person \_\_\_\_\_ today Yerwa=to 3S.went=DET tomorrow 3S.return  
 ‘The person [that went to Yerwa today] will return tomorrow.’ [Hutchison 1981:223]

- (10) *kâm [ \_\_\_\_\_ rúkónà]=dó sàwàném*  
 person \_\_\_\_\_ 1S.saw=DET your.friend  
 ‘The person [that I saw] is your friend.’ [Hutchison 1981:218]

When the NP<sub>rel</sub> functions in the relative clause as secondary object,<sup>6</sup> oblique argument, or possessor, it is marked with a resumptive pronoun. When secondary object or oblique argument, the NP<sub>rel</sub> is marked with an independent resumptive pronoun; when possessor, NP<sub>rel</sub> is marked as a suffixed resumptive pronoun. NP<sub>rel</sub> secondary object, oblique argument, and possessor are illustrated below, in examples (11), (12), and (13), respectively. The resumptive pronouns and their glosses are italicized for ease of identification.

(11) fèrò [shí=rò kúngónà yíkónà]=dó=à áli=yè sùrù-nyí  
 girl 3S=to money 1S.gave=DET=ACC Ali=GEN 3S.see-NEG  
 ‘Ali did not see the girl [to whom I gave the money].’<sup>7</sup> [adapted from Hutchison 1981:226]

(12) jáná [kányî shí=làn dùwàzónà]=dó tímià  
 knife goat 3S=INSTR 1S.slaughter=DET sharp  
 ‘The knife [with which I slaughtered the goat] is sharp.’ [Hutchison 1981:223]

(13) bàrémá [fâr-nzô ndàlzána]=dó fâr gàdé kâiwò  
 farmer horse-3S.POSS 3P.stole=DET horse other 3S.bought  
 ‘The farmer [whose horse they stole] bought another horse.’ [Hutchison 1981:226]

The strategies of relativization employed by Kanuri (exhibited above) follow the prediction of Keenan and Comrie (1977:92) that the gap strategy is more likely to be used on the higher end (subject, primary object, etc.) of the Accessibility Hierarchy and resumptive pronouns are more likely to be used on the lower end of the Accessibility Hierarchy (obliques, possessors, etc.).<sup>8</sup> The patterns of relativization strategies in Kanuri are summarized below in Table 1:

Table 1: Summary of Kanuri patterns of relativization strategies

	subject	object	object <sub>2</sub>	oblique	possessor
gap	√	√			
res. pro.			√	√	√

<sup>6</sup>Throughout this paper, for both Kanuri and Dazaga, I refer to certain constituents as ‘secondary objects’. However, it is not altogether clear that this is a distinct grammatical relation from obliques in these languages. Further research may not support the designation ‘secondary object’ for some or all of these constituents. However, that would not greatly affect the claims of this paper, as what I am calling secondary objects would then be grouped with obliques and the relativization strategies would remain continuous across the Accessibility Hierarchy.

<sup>7</sup>The free translation for examples (11) and (18) is given in Hutchison (1981:226) as ‘The girl to whom I gave the money was not seen by Ali’. Eric Fields (p.c.) calls this Kanuri construction a ‘quasi-passive’. The verb is actually active, and the accusative constituent (the NP<sub>mat</sub>) is the primary object. However, the experiencer (or other ‘subject-like’ constituent) is marked as genitive, and the clause can be translated into English with a passive. Without further investigation, it is unclear to me whether this is an impersonal passive or some other kind of construction.

<sup>8</sup>Hutchison (1981:227) mentions some special oblique (possibly adjunct) functions of NP<sub>rel</sub> where the head noun is a specific word meaning ‘time’, ‘place’, ‘manner’, and occasionally ‘reason’. In these particular instances, he notes that the gap strategy seems to be preferred. It is not clear to me whether these are exceptions to the predictions of Keenan and Comrie (1977), or if the function of NP<sub>rel</sub> in relative clauses with these head nouns is subject or primary object.

### 3.3 The Accessibility Hierarchy and relativization in Kanuri

Kanuri allows NP<sub>rel</sub> to function as subject, object, oblique argument, and possessor, as demonstrated by the following examples.

#### 3.3.1 NP<sub>rel</sub> subject

Based on the Hierarchy Constraints presented in (2), we know that Kanuri will be able to relativize SUBJECTS, if any positions can be relativized. This is, in fact, the case, as demonstrated in examples (14) and (15), where NP<sub>rel</sub> functions as (gapped) subject of its clause.

(14) *kâm* [kû yêrwà=rò lèzónà]=dó báli wáltìn  
 person today Yerwa=to 3S.went=DET tomorrow 3S.return  
 ‘The person [that went to Yerwa today] will return tomorrow.’ [Hutchison 1981:223]

(15) *âm* [ísàì]=dó=rò górò yé  
 people 3P.coming=DET=to kola 2S.give.IMV  
 ‘Give kola to the people [who are coming].’ [Hutchison 1981:223]

#### 3.3.2 NP<sub>rel</sub> primary object

The following examples, (16) and (17), demonstrate that Kanuri allows NP<sub>rel</sub> to function as PRIMARY OBJECT. In these examples, *kâm* ‘person’ is coreferential with the gapped object of ‘saw’ and *àwó* ‘thing’ is coreferential with the gapped object of ‘advise’.

(16) *kâm* [rúkónà]=dó sáwáném  
 person 1S.saw=DET your.friend  
 ‘The person [that I saw] is your friend.’ [Hutchison 1981:218]

(17) *àwó* [nyíà gàlàngîn]=dó fàné!  
 thing to.you 1S.advise=DET 2S.listen.IMV  
 ‘Listen to what/the thing [I am advising you].’ [Hutchison 1981:224]

#### 3.3.3 NP<sub>rel</sub> secondary object

In examples (18), (19), and (20) below, NP<sub>rel</sub> functions as SECONDARY OBJECT within the relative clause, as indicated by the ‘postposition’ (as Hutchison calls it (1981:226)) =*rò*, which indicates something like dative case. This postposition can mark at least recipient (examples (18) and (19)) and addressee (example (20)).

(18) *fèrò* [shí=rò kúngónà yíkónà]=dó=à àli=yè sùrù-nyí  
 girl 3S=to money 1S.gave=DET=ACC Ali=GEN 3S.see-NEG  
 ‘Ali did not see the girl [to whom I gave the money].’ [adapted from Hutchison 1981:226]

(19) [shí=rò kùrwûn yíkónà-má]=dó ngàzê-nyí  
 3S=to medicine 1S.gave-?=DET 3S.get.well-NEG  
 ‘(The one) [to whom I gave the medicine] has not gotten well.’ [Hutchison 1981:226]

- (20) kàlá kèská kúrà [shí=rò tármù gùlzâibèlàn] nápkàtà  
 3S tree big 3S=to tarmu 3P.call 3S.sit  
 ‘S/he is seated on the big tree [which they refer to as the tarmu].’ [Hutchison 1981:226]

In these three examples, NP<sub>rel</sub> is marked by what appears to be a resumptive pronoun. Hutchison (1981:222) states that for an NP<sub>rel</sub> that is ‘the indirect object NP of the [relative clause], there is normally obligatory independent pronoun retention with function-marking by the indirect postposition’, =rò. Hutchison (1981:226) mentions that this ‘independent pronoun plus postposition is retained to represent’ the NP<sub>rel</sub> when it functions in these ways (secondary object).

### 3.3.4 NP<sub>rel</sub> oblique argument

OBLIQUE arguments may also be relativized, as shown in the following example of an NP<sub>rel</sub> that functions as an oblique instrument.

- (21) ádè mátò [shí=làn cídà=rò lèngîn]=dó  
 DEM car 3S=INSTR work=to 1S.go=DET  
 ‘This is the car [in which I go to work].’ [Hutchison 1981:226]

Hutchison (1981:223) notes that, with instrumental obliques, use of a resumptive pronoun is obligatory. Omission of the resumptive pronoun (without another change, such as change of subject agreement from 1<sup>st</sup> to 3<sup>rd</sup> person) would lead to an ungrammatical clause, as demonstrated by examples (22) and (23) below.

- (22) jáná [kànyî **shí=làn** dùwàzónà]=dó tímià  
 knife goat 3S=INSTR 1S.slaughter=DET sharp  
 ‘The knife [with which I slaughtered the goat] is sharp.’ [Hutchison 1981:223]

- (23) \*jána kànyî dùwàzónà=dó ...  
 knife goat 1S.slaughter=DET  
 (for: ‘The knife with which I slaughtered the goat ...’) [Hutchison 1981:223]

### 3.3.5 NP<sub>rel</sub> possessor

Kanuri allows NP<sub>rel</sub> to function as POSSESSOR, as demonstrated in example (24), where *kâm* functions as the subject of the main clause, but is coreferential with the possessor in the relative clause.

- (24) kâm láá [sû-nzó njèsèngónà]=dó kádìo  
 person some name-3S.POSS 1S.forgot=DET 3S.came  
 ‘Some person [whose name I have forgotten] came.’ [Hutchison 1981:219]

In the case of NP<sub>rel</sub> possessors, Hutchison (1981:223) notes that there is ‘obligatory pronoun retention’ (that is, a resumptive pronoun) to represent NP<sub>rel</sub> in the relative clause. However, rather than an independent resumptive pronoun, such as is used with secondary objects and obliques, the suffixed pronouns *-nzó* ‘3S.POSS’ or *-nzá* ‘3P.POSS’ are used. This is shown in example (24), and also in example (25) below.

- (25) bàrè má [fâr-nzǎ ndàlzá nà]=dǎ fâr gǎdé kǎiwò  
 farmer horse-3S.POSS 3P.stole=DET horse other 3S.bought  
 ‘The farmer [whose horse they stole] bought another horse.’ [Hutchison 1981:226]

### 3.4 Non-restrictive relative clauses in Kanuri

Kanuri forms NON-RESTRICTIVE relative clauses (cf. Andrews 2007:207; Kroeger 2004:175-6; Keenan 1985:168-9) using a similar structure to what is used for restrictive relative clauses, as demonstrated in example (26).

- (26) **kām** láá [sûnzǎ njèsǎngǎnà]=dǎ kǎdio  
 person some name forgot.1S=DET came.3S  
 ‘Some **person** [whose name I have forgotten] came.’ [Hutchison 1981:219]

Hutchison (1981:219) mentions that this example would be interpreted as a non-restrictive relative clause if appropriate pauses were added on either side of the relative clause. Otherwise it would be a restrictive relative clause. The same pattern (head noun, modifying clause, then determiner) is used in the following example, which is unambiguously meant to have a non-restrictive meaning.

- (27) Sadusiya laa, tayi [cinowo dunia=ye bawo wuljaiso]=dǎ,  
 Sadducees some 3P rise world=GEN 3S.be.not 3P.say=DET  
 na Isaye=ro isane ti=ro koro cadde:  
 place Jesus=to 3P.come 3S=to question 3P.put  
 ‘Some of the Sadducees, they [who say there is no resurrection], came to Jesus and questioned him.’ [Eric Fields, p.c. – no tone data available]

The context of this passage from Matthew 22.23 makes it clear that the relative clause in example (27) serves not to distinguish some of the Sadducees from the rest (that is, it is not restricting the scope of reference of the head noun), but is describing some fact about the group named with the proper name *Sadusiya*.

### 3.5 Summary of Kanuri relative clauses survey

Based on our review, above, of relative clauses in Kanuri, we can list the following expectations for how Dazaga relative clauses are likely to be structured and to function:

- (28) a. Dazaga relative clauses will be postnominal.  
 b. Dazaga relative clauses are likely to end with a determiner.  
 c. Dazaga relative clauses will follow any other modifying elements in the same NP.  
 d. Dazaga will use the gap strategy for NP<sub>rel</sub> SUBJ and primary OBJ.  
 e. Dazaga will use resumptive pronouns for NP<sub>rel</sub> OBJ<sub>2</sub>, OBL, and POSS.  
 f. Dazaga will be able to relativize any function from SUBJ to POSS.

With these points of comparison identified, we will turn now to an examination of relative clauses in Dazaga.

#### 4. Relative Clauses in Dazaga

As mentioned in the introduction to this paper, the published work on Dazaga is fairly scarce, and what does exist is largely outdated (methodologically and possibly due to language change as well). Within these works, relative clauses receive very little attention. Lukas (1953) gives slightly less than one page to relative clauses; LeCoeur & LeCoeur (1955) give barely half a page to the matter. Where quotes are given from Lukas (1953), it is the translation (from German) of an anonymous volunteer, who graciously provided an unofficial, unpublished English translation for those studying Dazaga. Quotes from LeCoeur & LeCoeur are my own translations (from French).

The following description and analysis takes into account the work of Lukas and LeCoeur & LeCoeur, but deviates from it somewhat and is based on new data and on a more careful comparison with Dazaga's close relative, Kanuri (surveyed above). Where data was elicited via French, I have given the original French along with the English free translation. In the standard orthography of Dazaga, tone is not marked, but vowel harmony is marked. A circumflex is placed over the first vowel of word whose vowels are all [+ATR]; otherwise the vowels in a word are [-ATR]. I have followed these standards in the Dazaga examples below.

Relative clauses in Dazaga are distributed within their respective sentences according to their grammatical relation within the matrix clause. Thus, given Dazaga's SOV word order, a subject relative clause will appear before the object and verb of the main clause, an object relative clause after the subject but before the verb of the main clause, and so forth.

In our discussion of relative clauses in Dazaga, similar to our review of Kanuri relative clauses in §3, above, we will proceed by looking primarily at the structure of relative clauses in Dazaga (§4.1) and relativization strategies and the Accessibility Hierarchy in Dazaga (§4.2). I also include a brief discussion of non-restrictive relative clauses (§4.3), possible correlative constructions (§4.4), and TAM and word order in relative clauses (§4.5) in Dazaga.

##### 4.1 The structure of relative clauses in Dazaga

In this section I describe the ordering of head noun and relative clause, the ordering of other modifiers and relative clause, and the structural markers of a relative clause in Dazaga.

###### 4.1.1 Positions of relative clause and head noun

Dazaga does not use free relative clauses or headless relative clauses.<sup>9</sup> To express an English free relative such as 'what she said', Dazaga requires that a generic head noun such as *ini* 'thing' be employed, as in example (29). If the interrogative word *inni* 'what?' were used to try to construct a free relative clause, the result would be ungrammatical, as demonstrated in example (30).

- (29) *ini faru=ũ dagi-ni*  
 thing 3S.said=DET 3S.like-NEG  
 'He didn't like what [she said].' [lit. 'He didn't like the thing she said.']

<sup>9</sup>Cf. Kroeger 2005:238-240 for a discussion of the difference between these two, which are often lumped together.

- (30) \*înni faru=ũ daazi-ni  
 what? 3S.said=DET 1S.heard-NEG  
 (for: ‘I didn’t hear what she said.’)

So, it may be noted at the outset that all relative clauses in Dazaga are EXTERNALLY HEADED, and we are left with the binary distinction of prenominal and postnominal externally headed relative clauses (Keenan 1985:143). Though many languages with SOV word order typology (and only SOV languages) allow prenominal relative clauses (Comrie 1981:87; Andrews 2007:209; Keenan 1985:144), Dazaga does not exhibit this pattern; rather, its relative clauses are strictly POSTNOMINAL, as predicted above in (28), and as illustrated in the following two examples, (31) and (32). In these examples, the head noun is in bold type, and the following relative clause is enclosed with square brackets.

- (31) **Aũ** [gonu=ũ cobu]=ũ deheŋi nuru=ũ ru nũki cen.  
 man camel=DET 3S.bought=DET brother 1S.POSS=DET to 3S.spoke 3S.gave  
 ‘The **man** [who bought the camel] spoke to my brother.’  
 ‘L’homme qui a acheté le chameau a parlé à mon frère.’

- (32) **Aũ** [îyi anab-u kubbu cêyi]=ŋa êski dagu-ni.  
 man water grape-GEN old 3S.drink=REL new 3S.want-NEG  
 ‘The **man** [who has drunk old wine] doesn’t want new.’

#### 4.1.2 Positions of relative clause and other modifying elements

Other modifying elements, such as determiners, possessives, other ‘genitives’, or adjectives follow their head noun in Dazaga. This is clearly illustrated in (33), where the genitive *anab-u* follows the head noun *îyi*. The genitive, in turn, is followed by the adjective *kubbu*. Examples (34) and (35) illustrate the postnominal position of determiners and possessives in Dazaga noun phrases.

- (33) îyi anab-u kubbu  
 water grape-GEN old  
 ‘old wine’ (more literally, ‘old water of the grape’)

- (34) mêri ai  
 message this  
 ‘this message’

- (35) deheŋi nur  
 brother 1S.POSS  
 ‘my brother’  
 ‘mon frère’

When such other modifying elements co-occur with relative clauses as modifiers of the same head noun, the relative clause follows the other modifiers, whether demonstratives, possessives/genitives, or adjectives. These are illustrated, respectively, in the following three examples, (36) to (38).



- (42) Aũ [goni num=*ma* wûyi-ŋo-o dagu] hananir-gi.  
 man camel 2S.POSS=DET 3S.steal-IPFV-CNTG 3S.wanted 1S.know-IPFV  
 ‘I know the man [who tried to steal your camel].’  
 ‘Je connais l’homme qui a essayé de voler ton chameau.’

In this example, the verb *dagu* ‘3S.wanted’ appears to be unmarked (but no recording is available against which to test the transcription). However, it is possible that this should actually be *dagu=ũ* ‘3S.wanted=DET’, which would fit with the usage of the determiner (modifying the head noun) as a normal way of ending a relative clause (and any NP) in Dazaga.

Finally, there does not seem to be a strong correlation between the definiteness of the head noun and whether the relative clause is marked with the determiner or the relativizer =*ŋa*. Lukas (1953:179) gives the following as an example of an indefinite head noun (*ein unbestimmtes Nomen*):

- (43) Aũ [aski cîru]  
 man horse 3S.killed  
 ‘**man** [who killed a horse]’  
 ‘der **Mann**, [der das Pferd getötet hatte]’ [Lukas 1953:179]

However, the example in (43) is suspect, given the preponderance of evidence suggesting that relative clauses are obligatorily ended with either the determiner or the relativizer. It seems likely to me that *cîru* here should actually be *cîru=ũ* ‘3S.killed=DET’. This may also be reflected in Lukas’ use of the German definite article *der* instead of *ein* before *Mann*.

Despite Lukas’ claims, it seems it is not so easy to categorize the distribution of the morphemes that can occur at the end of relative clauses in Dazaga. However, there are two ways of constructing relative clause in Dazaga that seem to be distinct, though structurally similar.

First, and seemingly most commonly, relative clauses are ended by a DETERMINER.<sup>11</sup> Many simple noun phrases in Dazaga end with a determiner, but the placement of the determiner is distinctive in a relative clause, where the NP-final determiner immediately follows, and is cliticized to, a verb. The determiner in Dazaga is =*ma*, =*ũ*, or =*ã*, depending on what phoneme ends the word to which it cliticizes.<sup>12</sup> The form =*ma* occurs after a word-final nasal consonant, a long vowel, or a diphthong. Following a non-nasal word-final consonant (virtually only /ɾ/, /l/, and /s/), and following the high vowels /i/, /ɪ/, /u/, and /ʊ/, the allophone =*ũ* occurs. The allophone =*ã* occurs following the word-final mid and low vowels /a/, /e/, /ɛ/, /o/, and /ɔ/. Because the determiner follows the verb, the form =*ma* only occurs after 2<sup>nd</sup> person forms ending in /m/, which are much more rare than the other forms. The occurrence of the determiner at the end of a relative clause is illustrated in examples (44) to (46). In these examples, the relative clause is enclosed in square brackets, and the determiner is in bold type.

<sup>11</sup>Keenan (1985:146) notes that, of the possible orders of head noun, modifying clause, and determiner, the order in which the determiner is separated from the head noun by the modifying clause, as in Dazaga, is less common.

<sup>12</sup>Cf. Wolff & Alidou 1989 for a study of the interaction of tone and the ‘definite’ marking (determiner) morpheme and allomorphs in Dazaga. Wolff & Alidou (1989:68) also mention the allomorph =*ĩ* (they give two attestations), which I have not yet encountered.

- (44) Aũ [agasu yobur yeniru]=ũ kii nũnkir.  
 man sword 1S.bought 1S.gave=DET with 1P.spoke  
 ‘We spoke to the man [whose sword I bought].’  
 ‘Nous avons parlé avec l’homme à qui j’ai acheté une épée.’
- (45) Kulo [daa yege nuru=ũ tomuru]=ũ yobur.  
 field on house 1S.POSS=DET 1S.built=DET 1S.bought  
 ‘I bought the land [where I built my house].’  
 ‘J’ai acheté le champ où j’ai construit ma maison.’
- (46) Ini [farum]=ma ginna ai-re kege ru taŋu ru tigiŋ-e.  
 thing 2S.say=DET all this-ADVZ like DAT 1S.GEN to 3S.happen-OPT  
 ‘May it happen to me like every thing [you said].’

Because Dazaga has SOV word order typology, and its relative clauses are postnominal, the extent of the relative clause is fairly clearly marked, with the head noun (immediately, except for other elements within the same noun phrase) preceding the relative clause, and the determiner appearing at that very end of the relative clause, following the clause-final verb. In some cases, as in (45), above, another definite noun phrase is embedded within the noun phrase that contains the relative clause, with the result that there are multiple determiners. However, even in (45), the second determiner clearly marks the end of the relative clause because it follows the relative clause verb, rather than some other non-verbal element.

The other way that a relative clause in Dazaga can be ended is by the RELATIVIZER =*ŋa* cliticized to the end of the relative clause, in much the same way that the determiner can appear at the end of a relative clause.<sup>13</sup> This is illustrated in examples (47) to (48), below.

- (47) Aũ [ĩyi anab-u kubbu cēyi]=ŋa êski dagu-ni.  
 man water grape-GEN old 3S.drink=REL new 3S.want-NEG  
 ‘The man [who has drunk old wine] doesn’t want new.’
- (48) Agu mēri ai [nunta ru nufattir]=ŋa  
 then message this 1P to 3S.spoke=REL  
 ‘So this message [that he spoke to us] ...’

With some verbs whose stem ends in a velar stop, a morphophonemic process takes place whereby the final velar stop of the verb root fully assimilates to the initial nasal of the relativizer, so that the result is simply =*ŋa*. For example, the form *ci=ŋa*, in (49) below, is a combination of the root *cik-* plus the relativizer=*ŋa* (i.e. *cik-* plus =*ŋa* → *ci=ŋa*).

- (49) Kôyi [kũ ci]=ŋa sayi-ma ru kũliyi  
 place between 3S.is=REL sky=DET thus 3S.called  
 ‘The place [which was between], he called sky.’

Based on data from Kevin Walters (p.c.), it appears that the distribution of the determiner versus the relativizer at the end of relative clauses may be a dialectical difference between clans,

<sup>13</sup>Cf. Tucker & Bryan 1966:183: ‘The Relative in TUBU is expressed by *ŋa*, *ŋaa* at the end of the Noun Group.’

rather than anything to do with the definiteness of the head noun. Thus, the same relative clause can be expressed with either morpheme, depending on the speaker, as illustrated in (50) and (51).

- (50) Ai-re shai tamur=**ŋa** / tamuru=**ũ**  
 this-INTS tea 1S.drunk=**REL** 1S.drunk=**DET**  
 ‘This here is the tea that I drank.’  
 ‘C’est le thé que j’ai goûté.’

- (51) Ai-re shai damu=**ŋa** / damu=**ũ**  
 this-INTS tea 3S.drunk=**REL** 3S.drunk=**DET**  
 ‘This here is the tea that he drank.’  
 ‘C’est le thé qu’il a goûté.’

The data also suggest that co-occurrence restrictions on determiners and demonstratives may be a motivating factor in some of the occurrences of the relativizer =*ŋa*. Thus, in simple noun phrases, a determiner may modify a noun, or a demonstrative may modify a noun, but determiners and demonstratives cannot co-occur. This is demonstrated in (52) to (54).

- (52) arii=**ma**  
 woman=**DET**

- (53) arii **ai**  
 woman **this**

- (54) \*arii=**ma** **ai**  
 woman=**DET** **this**  
 \*ari **ai=ma**  
 woman **this=DET**

In complex NPs containing a relative clause, a similar avoidance of the co-occurrence of determiners and demonstratives exhibits itself. Thus, though the determiner is the most common way to end a relative clause, in all cases where the head noun is modified by a demonstrative, the relativizer =*ŋa* is used instead of the determiner, as illustrated in examples (55) to (57).

- (55) mēri **ai** [nunta ru nufattir]=**ŋa**  
 message **this** 1P to 3S.spoke=**REL**  
 ‘this message [that he spoke to us]’

- (56) Mēri **ai** [owor-a ntaã dro Alla-i dīnni]=**ŋa**  
 message **this** heart-P 2P.POSS in God-SUBJ 3S.put=**REL**  
 ‘this word [that God has put in yours hearts]’

- (57) Arii **ai** [êski-ru irri]=**ɲa**<sup>14</sup>  
 wife **this** new-ADV 3S.arrive=**REL**  
 ‘this wife [who had newly arrived]’

This neatly explains some of the instances of the relativizer, but does not explain why it also occurs in other examples where no demonstrative modifies the head noun, as in (58).

- (58) Aũ [mi sum=ma tunta kulogo ci]=**ɲa** kii nũnkir.  
 man son 3S.poss=**DET** 1P next.to 3S.is=**REL** with 1P.spoke  
 ‘We spoke with a man [whose son lives near us].’  
 ‘Nous avons parlé avec un homme dont le fils vit près de chez nous.’

## 4.2 Relativization Strategies and the Accessibility Hierarchy in Dazaga

As we would expect to find based on our survey of Kanuri, in Dazaga, NP<sub>rel</sub> can serve any function in the relative clause from SUBJECT to POSSESSOR. This will be illustrated throughout the following examples as we discuss the relativization strategies used for the various functions of NP<sub>rel</sub>. Despite the fact that Lukas (1953:179) refers to =*ɲa* as a *Relativ-pronomen*, LeCoeur & LeCoeur (1955:71) are correct in pointing out that ‘there is no relative pronoun in Dazaga’ (confirmed by Kevin Walters, p.c.). As we will see, below, Dazaga can use the GAP STRATEGY for relativization of all grammatical relations, and allows the use of RESUMPTIVE PRONOUNS for certain functions of NP<sub>rel</sub>.

### 4.2.1 NP<sub>rel</sub> subject

Given that Dazaga can relativize at all, we assume, based on Keenan & Comrie (1977), that Dazaga can relativize the subject grammatical relation. This is, in fact, the case, as illustrated in the following examples, (59) to (62). Like Kanuri, the gap strategy is used for relativized subjects, though there is subject agreement marked on the relative clause verb to agree with the relativized subject.

- (59) Aũ [gonu=ũ cobu-i ci]=**ɲa** deheŋi nur.  
 man camel=**DET** 3S.buy-PROG 3S.is=**REL** brother 1S.POSS  
 ‘The man [who is buying the camel] is my brother.’  
 ‘L’homme qui achète le chameau est mon frère.’
- (60) Aũ [gonu=ũ cobu-ga]=**ã** lau nur.  
 man camel=**DET** 3S.buy-IPFV=**DET** friend 1S.POSS  
 ‘The man [who will buy the camel] is my friend.’  
 ‘L’homme qui va acheter le chameau est mon ami.’

<sup>14</sup>This example may actually be a correlative, not a relative clause proper. See section 4.4.

- (61) Agu mēri ai [nunta ru nufattir]=ŋa amma [kōyi ai ru  
 then message this 1P to 3S.spoke-REL people place this at  
 bini bēkki-n-n-a]=ã ru mura ru na fattu yi.  
 today 3P.not.be-NEG-ADJZ-P=DET to 3P to to also 2P.tell.IMV 3S.said  
 ‘So this message [that he spoke to us], he said “Tell it to the people [who are not here  
 today].”’
- (62) Nta nēbi kogoo, aũ [nc-awu]=ŋa hananu-ŋi-ro-o, fa!  
 2s prophet if man 2S.OBJ-3s.hit=REL know-IPFV-ADJZ-CNTG 2S.say.IMV  
 ‘If you’re a prophet, tell if you know who the man is [who’s hitting you].’
- 4.2.2 NP<sub>rel</sub> primary object
- Dazaga also allows relativization of primary object, as shown in examples (63) to (67), below. As with relativized subjects, relativized primary objects are gapped in their relative clauses. Unlike subjects, the primary objects in these relative clauses are not marked with object agreement on the relative clause verbs.
- (63) Daraya unnu [uŋko dēdi]=ŋa ginna soppu ni taani-i cii.  
 glory now before 3P.have=REL all 3S.left and 3S.fall-PROG 3S.is  
 ‘The glory they had before now has left them all and is falling.’
- (64) Amma orko [kasugu ru cobu]=ũ cīru.  
 man.DET goat market at 3S.bought=DET 3S.killed  
 ‘The man killed the goat [which he bought in the market].’  
 ‘L’homme a tué la chèvre qu’il a acheté au marché.’
- (65) Amma jana [cobu]=ũ ru yīni gor.  
 man.DET knife 3S.bought=DET with meat 3S.cut  
 ‘The man cut the meat with the knife [which he’d bought].’  
 ‘L’homme coupe la viande avec le couteau qu’il avait acheté.’
- (66) Amma kulo [cobu]=ũ dro tigani-i cii.  
 man.DET field 3S.bought=DET in 3S.walked-PROG 3S.was  
 ‘The man walked in the field [which he’d bought].’  
 ‘L’homme marchait dans le champ qu’il avait acheté.’
- (67) Agu mēri ai [nunta ru nufattir]=ŋa amma [kōyi ai ru  
 then message this 1P to 3S.spoke=REL people place this at  
 bini bēkki-n-n-a]=ã ru mura ru na fattu yi.  
 today 3P.not.be-NEG-ADJZ-P=DET to 3P to to also 2P.tell.IMV 3S.said  
 ‘So this message [that he spoke to us], he said “Tell it to the people [who are not here  
 today].”’
- (68) Mēri ai [owor-a ntaã dro Alla-i dīnni]=ŋa naddi ru gashitu.  
 message this heart-P 2P.POSS in God-SUBJ 3S.put=REL child like 2P.obey.IMV  
 ‘This word [that God has put in yours hearts], obey like a child.’

4.2.3 NP<sub>rel</sub> secondary object<sup>15</sup>

Secondary objects may be relativized in Dazaga. Unlike Kanuri, Dazaga does not, at this point on the Accessibility Hierarchy, obligatorily switch relativization strategies, but can continue to use the gap strategy to represent NP<sub>rel</sub>, as illustrated in example (69).

- (69) Aũ [agasu yeniru]=ũ=i deheŋi nuru=ũ ga wawu.  
 man sword 1S.gave=DET=SUBJ brother 1S.POSS=DET OBJ 3S.hit  
 ‘The man [to whom I gave the sword] hit my brother.’  
 ‘L’homme à qui j’ai donné l’épée a frappé mon frère.’

However, Dazaga does allow the use of resumptive pronouns for NP<sub>rel</sub> secondary objects. This is illustrated in example (70), where the meaning is exactly the same as in example (69), suggesting that these two relativization strategies do not represent any semantic difference.

- (70) Aũ [**mere ru** agasu yeniru]=ũ=i deheŋi nuru=ũ ga wawu.  
 man 3s to sword 1S.gave=DET=SUBJ brother 1S.POSS=DET OBJ 3S.hit  
 ‘The man to whom I gave the sword hit my brother.’  
 ‘L’homme à qui j’ai donné l’épée a frappé mon frère.’

When the secondary object resumptive pronoun does appear, it must occur at the beginning of the relative clause, before the primary object. If moved between the primary object and verb, the sentence becomes ungrammatical, as demonstrated in example (71).

- (71) \*Aũ [agasu **mere ru** yeniru]=ũ=i deheŋi nuru=ũ ga wawu.  
 man sword 3S to 1S.gave=DET=SUBJ brother 1S.POSS=DET OBJ 3S.hit  
 ‘The man to whom I gave the sword hit my brother.’  
 ‘L’homme à qui j’ai donné l’épée a frappé mon frère.’

4.2.4 NP<sub>rel</sub> oblique argument

Oblique arguments, such as locative obliques or instrumental obliques, can be relativized in Dazaga. Whereas Kanuri uses obligatory resumptive pronouns to represent NP<sub>rel</sub> in such situations, Dazaga continues to be able to use the gap strategy at this relatively low level on the Accessibility Hierarchy. This is illustrated in examples (72) and (73).

- (72) Kulo [daa yege nuru=ũ tomuru]=ũ yobur.  
 field on house 1S.POSS=DET 1S.built=DET 1S.bought  
 ‘I bought the land [where I built my house].’  
 ‘J’ai acheté le champ où j’ai construit ma maison.’

<sup>15</sup>I use the term ‘secondary object’ here, but the work has not yet been done to demonstrate definitively that these are secondary objects rather than obliques (as may be suggested if *ru* is a postposition, as glossed, and not a ‘dative’ case marking – which could, nevertheless, be an oblique). Further work may show that this categorization needs to be corrected.

- (73) Jana [orka=ã yidiru]=ũ kir.  
 knife goat=DET 1S.killed=DET 1S.broke  
 ‘I broke the knife [with which I killed the goat].’  
 ‘Je me suis cassé le couteau avec lequel j’ai tué la chèvre.’

Of particular interest is example (72), where the NP<sub>rel</sub> is gapped, but the postposition *daa* ‘on’ is retained (i.e. stranded) even though no resumptive pronoun is supplied to complete the postpositional phrase. This differs from the pattern in example (69), where the postposition *ru* (or case ‘dative’ marker, depending on how it is analyzed) is deleted. This difference in pattern may suggest a difference of grammatical relations between instrumentals and locatives in Dazaga, such as oblique instrumental versus adjunct locative (a possibility suggested by Paul Kroeger, p.c.). This analysis may be supported by the fact that resumptive pronouns are ungrammatical for the relativized locative NP with the postposition *daa*, as illustrated in example (74), but are fully grammatical for a relativized instrumental NP, as illustrated in (75).

- (74) \*Kulo [mere daa yege nuru=ũ tomuru]=ũ yobur.  
 field 3S on house 1S.POSS=DET 1S.built=DET 1S.bought  
 ‘I bought the land [where I built my house].’  
 ‘J’ai acheté le champ où j’ai construit ma maison.’

- (75) Jana [mere ru orka=ã yidiru]=ũ kir.  
 knife 3S with goat=DET 1S.killed=DET 1S.broke  
 ‘I broke the knife [with which I killed the goat].’  
 ‘Je me suis cassé le couteau avec lequel j’ai tué la chèvre.’

Keenan & Comrie (1977:67) claim that a relativization strategy ‘must apply to a continuous segment of the [Accessibility Hierarchy]’ (cf. Hierarchy Constraint 2 in §2.3). This pattern, which is strongly supported typologically, would be violated if NP<sub>rel</sub> obliques could not use resumptive pronouns, but NP<sub>rel</sub> secondary objects and possessors (on either side of obliques on the Accessibility Hierarchy) could. If the relativized locative NP is analyzed as an adjunct instead, this disparity is resolved.<sup>16</sup>

#### 4.2.5 NP<sub>rel</sub> possessor

Dazaga allows possessors to be relativized, as illustrated in examples (76) to (79). In this case, there is mixed evidence of strategies for marking NP<sub>rel</sub>. Thus, in example (76), the NP<sub>rel</sub> is gapped, following the strategy employed by Dazaga for relativization of subjects, primary and secondary objects, and obliques. However, in examples (77) to (79), the resumptive possessive pronouns *sun* ‘3S.POSS’ or *sum=ma* ‘3S.POSS=DET’ are used.

- (76) Aũ [agasu yobur yeniru]=ũ kii nũnkir.  
 man sword 1S.bought 1S.gave=DET with 1P.spoke  
 ‘We spoke to the man [whose sword I bought].’  
 ‘Nous avons parlé avec l’homme à qui j’ai acheté une épée.’

<sup>16</sup>Alternately, it may be that Dazaga presents an exception to Keenan & Comrie’s proposed Hierarchy Constraints.

- (77) Aũ [agasu **sun** yobur yeniru]=ũ kii nũnkir.  
 man sword 3S.POSS 1S.bought 1S.gave=DET with 1P.spoke  
 ‘We spoke with the man [whose sword I bought].’  
 ‘Nous avons parlé avec l’homme à qui j’ai acheté une épée.’
- (78) Aũ [agasu **sum=ma** yobur yeniru]=ũ kii nũnkir.  
 man sword 3S.POSS=DET 1S.bought 1S.gave=DET with 1P.spoke  
 ‘We spoke with the man [whose sword I bought].’  
 ‘Nous avons parlé avec l’homme à qui j’ai acheté une épée.’
- (79) Aũ [mi **sum=ma** tunta kulogo ci]=ŋa kii nũnkir.  
 man son 3S.poss=DET 1P next.to 3S.is=REL with 1P.spoke  
 ‘We spoke with a man [whose son lives near us].’  
 ‘Nous avons parlé avec un homme dont le fils vit près de chez nous.’

The alternation between gap strategy and resumptive pronoun for relativized possessor does not appear to be motivated by any syntactic constraints. This is demonstrated in examples (76) to (78), where the only difference is relativization strategy and the determiner on the resumptive pronoun (between examples (77) and (78)). The meaning is the same in examples (76) to (78). There does not appear to be any clear motivation for the alternation between presence or absence of the determiner on the optional resumptive pronoun in examples (77) and (78). It may be that, since the referent of the resumptive pronoun in the relative clauses in these examples is already definite (because it is coreferential with the definite head noun), the determiner on the resumptive pronoun is optional.

#### 4.2.6 Summary of relativization strategies and the Accessibility Hierarchy

We can summarize the data and analyses of §4.2 as follows, in Table 2, below.

*Table 2: Summary of Dazaga patterns of relativization strategies*

	<b>subject</b>	<b>object</b>	<b>object<sub>2</sub></b>	<b>oblique</b>	<b>possessor</b>	<b>adjunct</b>
<b>gap</b>	√	√	√	√	√	√
<b>res. pro.</b>			√	√	√	

#### 4.3 Non-Restrictive Relative Clauses

Dazaga allows NON-RESTRICTIVE relative clauses, and forms them in the same way that restrictive relative clauses are formed. This is exemplified in (80):

- (80) **Ayii** [mere kii ci]=ŋa ru cen ni mere na uwi  
 husband 3S with be.3S=REL to give.3S.PFV and 3S also eat.3S.PFV  
 ‘She gave it to (her) **husband** [who was with her], and he also ate.’

As with restrictive relative clauses, this non-restrictive relative clause is externally headed, postnominal, and is signaled by the presence of the relativizer =ŋa. The fact that restrictive and non-restrictive relative clauses are structurally similar is not surprising, as this

seems to be a common pattern in the languages of the world (Keenan 1985:169, Comrie 1981:132; cf. Andrews 2007:207, Kroeger 2004:175)

#### 4.4 Corelatives (Left dislocation?)

It is unclear whether Dazaga allows the use of corelatives, or what Andrews (2007:214) classifies as ‘left-adjoined’ relative clauses. A possible example of this construction in Dazaga is given in (81):

- (81) [Arii ai êski-ru irri]=*ŋa*,                    **mere**<sub>i</sub> yali-ya cûu dêyi.  
 wife this new-ADV 3S.arrive=REL 3S child-P two 3S.have  
 ‘[This **wife** who had newly arrived], **she** had two children.’

The distinctive features of sentences containing corelatives are: 1) the modifying clause (the corelative) could stand on its own as a complete sentence (Keenan 1985:164), 2) but the corelative will be somehow marked as subordinate (Keenan 1985:164), and 3) a full NP occurs in the corelative clause (Andrews 2007:214). Corelatives tend to occur in verb-final languages, so it would not be surprising to find them in Dazaga (Keenan 1985:164, Andrews 2007:216, Downing 1973).

Example (81) appears to match these criteria. First, the modifying clause *Arii ai êski-ru irri* can stand on its own, once the subordinating relativizer/corelative marker =*ŋa* is removed. Second, the relativizer/corelative marker =*ŋa* marks the (possible) corelative clause as subordinate. And third, the full NP *ari* appears in the corelative clause.

Keenan (1985:166) mentions that what may appear to be a corelative marker could have other functions, and then should not be analyzed as a corelative marker but as another marker that can be functionally equivalent to a corelative marker. Based on example (81) (which, however, is not indisputably a corelative), it appears that, in Dazaga, the relativizer =*ŋa* may also be used to subordinate corelatives. Keenan (1985:164) mentions that corelatives are typically not marked with determiners and other nominal markings associated with NPs. This may explain why the relativizer =*ŋa* is used here rather than the determiner.

The analysis of (81) as a corelative may be supported by the fact that the pronoun *mere* in the main clause can be replaced with a regular NP, *ari*, so that both the corelative clause and the main clause contain a regular, full NP, which are identified. This is illustrated in (82).

- (82) [Arii ai êski-ru irri]=*ŋa*,                    **ari**<sub>i</sub> yali-ya cûu dêyi.  
 wife this new-ADV 3S.arrive=REL 3S child-P two 3S.have  
 ‘[This **wife** who had newly arrived], (that) **wife** had two children.’

However, it may be that (81) is simply a left dislocation. This may be suggested by the fact that the NP in the (possible) corelative clause is not specially marked, which seems to be the normal pattern in corelatives, according to Keenan (1985:164). More data and further analysis are required to be able to make a confident identification of this construction in Dazaga.

#### 4.5 TAM of verbs and word order in relative clauses

As will probably have already been noticed from the examples above, Dazaga’s usual SOV word order is maintained in relative clauses. Further work remains to be done on the full

range of verbal forms possible in relative clauses in Dazaga. However, it is worth pointing out here that at least three forms of the verb can be used as the ‘main’ verb in a relative clause. Thus, in (83), the basic form of the verb (something like ‘perfective’ or ‘aorist’) is used to convey the meaning ‘bought (*a acheté*)’. In (84), the progressive form of the verb, marked with the progressive suffix *-i*, is used to convey the present tense meaning ‘is buying (*achète*)’. And in (85), the imperfective form of the verb, signaled by the imperfective suffix *-gi* (or its allomorph *-ga*), is used with a future referring sense to convey ‘will buy (*va acheter*)’.

(83) Aũ [gonu=ũ **cobu**]=ũ deheŋi nuru=ũ ru nũki cen.  
 man camel=DET 3S.bought=DET brother 1S.POSS=DET to 3S.spoke 3S.gave  
 ‘The man [who bought the camel] spoke to my brother.’  
 ‘L’homme qui a acheté le chameau a parlé à mon frère.’

(84) Aũ [gonu=ũ **cobi-i** ci]=ŋa deheŋi nur.  
 man camel=DET 3S.buy-PROG 3S.is=REL brother 1S.POSS  
 ‘The man [who is buying the camel] is my brother.’  
 ‘L’homme qui achète le chameau est mon frère.’

(85) Aũ [gonu=ũ **cobu-ga**]=ã lau nur.  
 man camel=DET 3S.buy-IPFV=DET friend 1S.POSS  
 ‘The man [who will buy the camel] is my friend.’  
 ‘L’homme qui va acheter le chameau est mon ami.’

Hutchison (1981:217-8) mentions that Kanuri never uses special subordinate verb forms in relative clauses, but that, nevertheless, there are certain restrictions on verb forms in Kanuri relative clauses. For example, he states ‘none of the affirmative completive aspects may occur within the relative clause’ (1981:218). It seems, therefore, not unlikely that similar restrictions may be found on the verbal forms that can occur in relative clauses in Dazaga.

## 5. Conclusion

In this paper I have described relative clauses in Dazaga, and have given an overview of Kanuri relative clauses as a point of comparison. I have shown that Dazaga uses externally headed postnominal relative clauses. Like Kanuri, these relative clauses are characterized by a clause-final determiner or the clause-final relativizer =*ŋa*. Unlike Kanuri, Dazaga uses the gap strategy for the relativization of all grammatical relations, and can also optionally use resumptive pronouns for relativized secondary object, obliques, and possessors. Dazaga shows the same range of possible relativization as is exhibited by Kanuri, and can relativize on any grammatical relation on the Accessibility Hierarchy, from subject to possessor.

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### Abbreviations

Besides standard abbreviations listed in the Leipzig Glossing Rules, I have used the following abbreviations in this paper:

ADJZ	adjectivizer
CNTG	contingent (temporally or logically)
INTS	intensive
P	plural
S	singular
SUBJ	subject

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