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THE SYNTAX AND SEMANTICS OF RELATIVE CLAUSES IN KUSAAL¹

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Abstract

This paper looks at the syntax and semantics of relative clause constructions in Kusaal, a Mabia (Gur) language spoken in the Upper East Region of Ghana. Although extensive work has been done on sister Mabia languages on this topic, little can be said of same in relation to Kusaal. This paper presents a comprehensive discussion on the various elements, functions, and formations of Kusaal relative clauses and, among other things, shows that the language has both in-situ internally-headed relative clauses and left-headed internally-headed relative clauses (Hiraiwa et al. 2017). This is carried out with data collected on fieldwork, in addition to the author's own native speaker intuitions.

Keywords: Kusaal, relative clauses, Mabia (Gur) language, in-situ head-internal relative clause, left-headed head internal relative clause

1. Introduction

Relative clauses are subordinate/embedded clauses that function as modifiers within a noun phrase. Functionally, relative clauses (REL-clauses), together with other noun modifiers, form part of the grammar of referential coherence providing either anaphoric or cataphoric clues for referential identification (Givón 2001:175). The following restrictive REL-clause in Kusaal modifies the definite head noun *dáú* 'man' in

¹ This is a modified version of a paper on 'Relativisation in Kusaal' in SOAS working papers in Linguistics (2018). This version presents additional discussion on the 'Diachronic and Synchronic uses of the morphemes *Né* and *KA* in Kusaal among other things which were not previously mentioned in the SOAS working papers in Linguistics. This is deemed relevant as readers will benefit from a much more comprehensive analysis of the topic.

(1a-b). The event coded in the REL-clause is assumed to be familiar or known to the hearer, a familiarity referred to as “pragmatic presupposition” (Givón 2001: 176).

(1) REL-clause in Kusaal

a. *Dáú* [*kàné sà dā'* *gbáúŋ lá*]
 man REL PAST buy.PERF book DEF

m̄r lígídí.

have money

‘The man who bought the book has money’

b. *Dáú[-sɔ'] né sà dā'* *gbáúŋ lá*
 man.IDEF.P COMP PAST buy.PERF book DEF

m̄r lígídí.

have money

‘The man who bought the book has money.’

The rel-clause in (1) expresses an event of ‘buying’ where the agent is co-referent with the head noun *dáú* ‘man’ which is modified by the rel-clause. Thus, the subject of the main clause (2) is modified by the rel-clause in (3) and its co-referent noun is the subject. The speaker does not assert the proposition in the relative clause (2); however, s/he presupposes that it is known or familiar to the hearer (3).

(2) Main clause

Dáú lá m̄r lígídí.

man DEF have money

‘The man has money.’ (asserted)

(3) Subordinate clause

Dáú lá sà dā' *gbáúŋ lá*

man DEF PAST buy-PERF book DEF

‘The man bought the book.’ (presupposed)

This paper examines the syntax and semantics of relative clauses in Kusaal. Although extensive research exists on sister Mabia languages on the topic (see Hiraiwa et al. 2017: footnote 3 for a list of languages), much cannot be said of same in relation to Kusaal. This study is to fill the gap by discussing the various functions, formations and elements of relative clauses in Kusaal. I look at in-situ internally-headed relative clauses and left-headed internally-headed relative clauses. I also explore restrictive and non-restrictive relative clauses as well as the various noun phrase (NP) positions accessible to relativisation in Kusaal. I will indicate areas where Kusaal patterns with observations made in sister languages and areas where they differ. This is purposely done to show the close relatedness or otherwise of these languages in relative clause formation.

Kusaal is an SVO language in which the verb does not inflect for tense or number. The remoteness of an activity or event is expressed using particles: *sà* for an event that is a day old, *dàà* for an event that is two days and beyond but less than a year and *dà* for an event that is a year old and beyond. As a tonal language, all data and examples are marked for tones. There are two dialects of Kusaal: Atoende and Agole. Both dialects are spoken in the Upper East Region of Ghana. However, while the Atoende dialect is spoken in Bawku West and its surrounding areas the Agole dialect is spoken in Bawku Municipal, Garu-Tempene and adjoining areas. The data used in this work mainly come from the Agole dialect though there are instances where the Atoende dialect is used to clarify some concepts. This is mentioned anytime such a move is taken.

The paper is divided into six sections with the rest organised as follows: after this introduction, section two looks at the syntactic structures of rel-clauses in Kusaal whilst section three provides further insight on other elements of Kusaal relativisation. Section four discusses the accessibility hierarchy showing the possibility of relativising all elements in the scale in Kusaal. Section five gives account of restrictive versus non-restrictive relative clauses and their respective interpretations in Kusaal, and section six summarises the work.

2. Syntactic structures of relative clauses in Kusaal

Though this paper takes a more descriptive approach to the analysis of relativisation in Kusaal, an insight on the formal structural composition of the relative clause remains indispensable. Such formal explications, where required, will be carried out using the minimalist approach (Chomsky 1995).

Cross-linguistic realisations of relative clauses are generally grouped into two categories based on the structural positioning of the relativised head noun. The types are:

an externally-headed relative clause (EHRC) where the relativised head noun is structurally located outside the relative clause complementiser phrase (CP); and an internally-headed relative clause (IHRC) where the head noun is structurally located inside the relative clause CP (Hiraiwa et al. 2017; Bodomo & Hiraiwa 2009). Hiraiwa et al. (2017: 4) add that relative clauses are further divided into three types depending on linear positions of the relative head noun (H). A relative clause is described as left-headed, if H appears to the left of the relative clause, whilst it is said to be right-headed when H appears to the right. It can also be in-situ, when H is located within the relative clause. Hiraiwa et al. (2017) show that Mabilia languages including Buli, Dagbani, Gurene, Dagaare and Kabiye have left-headed IHRCs; in addition, all the aforementioned languages with the exception of Dagaare also have in-situ IHRCs. Kusaal like Buli, Gurene, Dagbani and Kabiye has both in-situ IHRCs and left-headed IHRCs.

In-situ head-internal relativisation in Kusaal:

- (4) *Fún* *sà* *nyē* *dáú-só'* *lá* *àn(é)*
 2SG PAST see-PERF man-IND.P DEF COP.be
m̄ *zúá.*
 1SG.POSS friend
 'The man whom you saw is my friend.'
- (5) *Àdúk* *sà* *nyē* *Àdólúbné* *sū'oe*
 Aduk PAST see-PERF Adolub COMP own-PERF
ná'á-síebá *lá.*
 cow-INDEF.P.PL DEF
 'Aduk saw the cattle that Adolub owned.'

The examples in (4-5) demonstrate the most important properties of head-internal relativisation in Kusaal. The head noun is left in its original position and directly followed by an indefinite pronoun acting as a relative particle. The structure of the in-situ relative clause is as in (6).

- (6) [DP [CP...(COMP)...H-INDEF.PRO (REL)...] DEF]

Left-headed head-internal relativisation in Kusaal:

- (7) *Dáú kà̀nè ká fù sà nyḗ lá à̀n(é)*
 man REL.P COMP 2SG past see.PERF DEF COP.be
m̄ zúá.
 1SG.POSS friend
 ‘The man whom you saw is my friend.’

- (8) *Ádúk sà nyḗ ná'á̀bà̀nè ká Ádólúb*
 Aduk PAST see-PERF cow.PL-REL COMP Adolub
sū'òe lá.
 own DEF
 ‘Aduk saw the cattle that Adolub owned.’

- (9) *M̄ sà nyḗ bíkà̀nè sà wá'á̀d lá.*
 1SG PAST see child-REL PAST dance DEF
 ‘I saw the child who was dancing.’

From the examples in (7-8), it can be seen that in left-headed IHRC in Kusaal, the REL-clause occurs adjacent to the head noun. Unlike subject relativisation that requires no complementiser, it is obligatory to have the complementiser in object relativisation. Structurally, left-headed IHRC is represented as in (10) (see Hiraiwa et al 2017: 11).

- (10) [DP [CP...H_j-REL...(COMP)...t_j...] DEF]

Generally, relative clauses in Kusaal can be said to have the following features, which are subsequently discussed in subsections 2.1-2.3.

- i. A head/antecedent NP
- ii. The particles *ne* and *ka* in-situ IHRC and Left-headed IHRC respectively
- iii. An obligatory relative clause marker *kane/bane* for Left-headed IHRC and *so' / sieba* for in-situ IHRC
- iv. Clause final determiner *la*

2.1. Diachronic and Synchronic uses of *Nε* and *KA* in Kusaal

Abubakari (2018) argues that the striking sameness or near sameness between copulas, connectives, complementisers and contrastive focus markers in Kusaal cannot be overlooked. The close phonological and morphological similarities in clausal connectives and focus markers are quite common in the grammar of several African languages with Ghanaian languages being no exception. Fiedler and Schwarz (2005) in their work on five (5) Ghanaian languages: three (3) Kwa and two (2) Gur languages suggest that clausal conjunctions are used in linking together focus constituents and their non-focal parts. They allude the inter-marriage between particles that function both as connectives and focal markers to grammaticalization process in the languages they studied though they are quick to add that the process is still at its inception stages. Data from Kusaal point to the same direction and further show that the grammaticalization process in this language can be said to be in a far advanced stage if not even completed compared to the languages used by Fiedler and Schwarz (2005). The grammaticalization chain (Stassen 1997:85) in Kusaal stretches from two copula verbs *an(ε)* ‘to be’ and *ka’a* ‘to be/have not’ to connectives to complementisers to present day focus markers (Abubakari 2018: 108). I begin by showing the distribution and meaning of *nε* as it is used in coordination, focus constructions and relative constructions and follow same with *ka*. All data and examples below are taken from (Abubakari 2018: 108-111).

2.1.1. The uses of *Nε*

i. Coordination

(11) *Àsùmbúl nε Àvúlúm vúúl nε Àbáá nε Àdàyúúg nε*
 Asumbul CONJ Avulumvuul CONJ Abaa CONJ Adayuug CONJ

Àtámpúá yé lá.
 Atampua matter

‘The story of Asumbul, Avulumvuul, Abaa, Adayuug and Atampua’

ii. Focus Particle

(12) *Àsùmbúl nε Àkúndúg í dà bē* SF
 Mr.Rabbit CONJ Mr. Hyena FOC PAST EXIST.

‘There lived MR RABBIT AND MR HYENA.’ (not Mr Wolf and Mr Spider or any other animal)

- (13) *Àsùmbúl né Àvúlúm vúúl dā' né dádám.* NON-SF
 Asumbul CONJ Avulumvuul buy FOC alcohol
 ‘Asumbul and Avulumvuul bought ALCOHOL.’ (not water or any other thing in addition)

- (14) *Àsùmbúl né Àvúlúm vúúl dā' dádám né.* IP FOCUS
 Asumbul CONJ Avulumvuul buy alcohol FOC
 ‘Asumbul and Avulumvuul bought alcohol.’ (not any other activity, this action also evokes surprise)

iii. Relative Clauses

- (15) *Àdúk n(ε) sà tūm tóúm sí'él lá àn(ε) súm.*
 Aduk COMP PAST work work.NOM INDEF DEF COP good
 ‘The work which Aduk did yesterday was good.’

A pronominal subject NP in the matrix clause of the Relative Clause in (15) uses the emphatic form of the pronoun.

- (16) *Fún sà tūm tóúm sí'él lá àn(é) súm.*
 2SG.EMPH PAST work work.NOM INDEF DEF COP
 good
 ‘The work YOU did is good.’

Clearly, *nε* has different distributions matching the diverse functions it plays. The conjunction does not have same interpretation or scope as the focus particle. The use of *n(ε)* in relative clauses cannot be directly linked to the conjunction but the emphatic interpretation could have a bearing with the focus marker. It is argued based on the above situations that *nε* as conjunction and as focus marker are different lexical items synchronically though a diachronic relationship can be strongly traced (Abubakari 2018).

2.1.2. The uses of KA

The sentences below are complex constructions in Kusaal. They are aimed at providing a holistic view of the functions of the *ka* morpheme in a single glance. All examples are taken from Abubakari (2018: 111-113).

i. Coordination

- (17) *Bà nà dɔl ká pāām lígídí.*
 2PL FUT follow CONJ reach money
 ‘They will pursue and make money.’

ii. Clause initial linker

- (18) *Ká nànnànnà bē lá, bíís gɔ́síg*
 LINKER now EXIST LA children see.NOM
ká’á ná’ánáá.
 NEG.COP easy
 ‘As we speak/in these present days, taking care of a child is not easy.’

iii. Complementiser

- (19) *Bāñim ká fɔ́ yá’á yúúg, ñ nà kēn ká*
 know.IMP COMP 2SG if delay, 1SG FUT go CONJ
bāsíf.
 leave.2SG
 ‘Be aware that I will leave you behind if you delay.’
- (20) *Bà sà nyē búpúŋ kàn ká bà sà*
 3PL PAST see lady REL COMP 3PL PAST
ĩis ø/ð lígídi lá.
 give ø/3SG money DET
 ‘They saw the lady whom they gave the money to yesterday.’

iv. Ex-situ non-subject focus

- (21) a. *Lì àné dáám kà Àsúmbúl né Àvúlúm vúúl dā́.*
 it COP.be alcoholFOC Asumbul CONJ Avulumvuul buy
 ‘It is alcohol that Asumbul and Avulumvuul bought.’ (not, for instance, water)
- b. *Dáám kà Àsúmbúl né Àvúlúm vúúl dā́.*
 alcohol FOC Asumbul CONJ Avulumvuul buy
 ‘It is alcohol that Asumbul and Avulumvuul bought.’ (not, for instance, water)

In all scenarios, *ka* functions as a clausal connector. In (17) it links two independent clauses, whilst in (18-21) it introduces the subordinate clauses. However, the particle in (21) has undergone some phonological change with respect to tone. Whereas the conjunction, the complementiser as well as the clause initial *ká* are marked with high tones, the particle *kà* after the fronted focused constituent has a low tone. The argument here is that the conjunction *ká* has metamorphosized into an inherently emphatic clause initial *ká* and further into a complementiser which is equally emphatic and restricted in usage to only ex-situ relativized head nouns compared to the default complementiser *yé* in the language. The inherently emphatic *ka* is further reanalysed into a focus marker when it occurs after a fronted non-subject constituent in Kusaal where an interpretation proposed to be a contrastive focus interpretation is encoded instead of mere emphasis.

The proposed grammaticalization of the conjunctions *né* and *ka* into focus particles is not unique to Kusaal since this has been attested as one prominent feature in information structure particles in mostly African languages (Heine and Kuteva 2002: 95, 331; Heine and Reh 1984:181-2; Stassen 1997:85; Fiedler and Schwarz 2005:137; Boadi 1974). In a more recent observation, Mwinlaaru and Yep (2017) discuss the grammaticalization of demonstrative into focus particles in Lobr Dagara, a dialect of Dagaare. From the table illustrated below, I conclude by suggesting a pattern of desemanticization of focus particles in Kusaal from the copula verbs *àn(é)* ‘to be’ and the negative polarity copula verb *ka'a* ‘to be/have not’. These particles trigger contrast and or exhaustive focus interpretation when they occur with a focused constituent. They are analysed as focus particles following the chain presented in table (1) below.

Table 1. Grammaticalization Chain

Lexical items	Copula >Conjunction > Complementiser > Focus Particle			
Copula ‘to be’	àn(é)	né	né	ń, né
Copula+Neg ‘to be/have not’	ká'á	Ká	Ká	Kà

I opt to gloss *né* and *ká* in relativisation in Kusaal as complementisers. It is important to add that there are some dialectal variations in the use of *né*. Whilst it is predominantly used in the Atoende dialect, it is realized as *n'* in the Agole dialect and at times even silent in casual speech. This will be discussed further in section 2.2 below.

2.2. Asymmetry in relativisation in Kusaal

The asymmetry between left-headed IHRC and in-situ IHRC deserves mention in any discussion on relativisation in Kusaal. In left-headed IHRC the relative pronouns *kànè* and *bànè* are used for marking singular and plural respectively. These pronouns are obligatory indicators of relativisation in left-headed IHRC in Kusaal and cannot be omitted. An additional feature of these pronouns is that they only agree in number but not in person. Person agreement is not characteristic of Kusaal. The stem of the head noun forms a compound with the relative pronoun and number is determined on the relative pronoun that is used. For instance, *bìbànè* ‘the children who’ is composed of *bíís* ‘children’ and *bànè* ‘rel.pl’ and *díkànè* is composed of *dííb* ‘food’ and *kànè* ‘rel.sg’ in (22a) and (23a) respectively.

(22) Subject relativisation (plural)

- a. *M̃ sà nyē bíbànè sà*
 1SG. PAST see.PERF child- REL.PL PAST
wā'ad lá.
 dance-PERF DEF
 ‘I saw the children who were dancing.’

- b. **M̄* *sà* *nyē* *bíís* *là* *sà* *wāād*
 ISG PAST see.PERF child DEF PAST dance.PERF

lá.

DEF

Lit.: 'I saw the children who were dancing.'

(23) Subject relativisation (singular)

- a. *Ádúk* *sà* *dī* *díkàné* *ká*
 Aduk PAST eat.PERF food-REL COMP

Ásíbi *sà* *dūg* *lá.*

Asibi PAST cook.PERF. DEF

'I ate the food which/that Asibi cooked.'

- b. **Ádúksà* *dī* *dííb* *ká* *Ásíbi*
 Aduk past eat.PERF food comp Asibi

sà *dūg* *lá.*

PAST cook.PERF DEF

Lit.: 'I ate the food which/that Asibi cooked.'

The relative pronouns in (22a) and (23a) occur after the head noun of the relative clause in both subject and object relativisation. The other difference between these two forms is that whilst the particle *ká* occurs after the relative pronoun in object relativisation (23a), the same is not the case for subject relativisation in (22a) since object relativisation involves the extraction of the supposed object to the clause initial position of the embedded clause. All forms of non-subject displacements that leave gaps at the extraction sites have the particle *ka* after the moved constituents in Kusaal (Abubakari 2016a).

(24) Non-subject relativisation

- a. *Àdúk sà dī díkànè ká Ásìbì*
 Aduk PAST eat.PERF food.REL COMP Asibi
sà dūg lá.
 PAST cook.PERF DEF
 ‘I ate the food which/that Asibi cooked.’
- b. **Àdúk sà dī díkàn Ásìbì sà*
 Aduk PAST eat.PERF food.REL Asibi PAST
dūg lá.
 cook.PERF DEF

In in-situ IHRC on the other hand, the “indefiniteness restriction”, which requires that internally headed relative clauses have a definiteness effect (Williamson 1987), strictly applies in Kusaal. The indefinite pronouns, in the table in (2) below, are used in correlation with the status of the relativised head noun. These pronouns are mostly used as suffixes with the stem of the relativised head noun in both subject and object relativisation in in-situ IHRC. Thus, number is generally determined on the pronoun and not on the head noun (Abubakari 2016b).

Table 2: Indefinite pronouns in Kusaal

Indefinite Pronoun	Use	Gloss
<i>sí'á</i>	Generic	any, some
<i>-só', só'</i>	Human	anyone, someone, somebody, whoever
<i>sí'él</i>	Non-human	something, anything, somewhere
<i>sí'ebá</i>	Generic plural	

The complementiser *né* is used in in-situ IHRC. It occurs after the subject of the matrix clause in subject relativisation as in (25-27). However, should the subject of the matrix clause be the same as the head of the relativised NP, *né* follows the indefinite

pronoun *sɔ'* as in (27). As mentioned in the previous section, the complementiser in in-situ IHRC can be realised as either *né* or *n'* depending on the dialect in use. The example in (25a) is Atoende whilst (25b) is Agole.

- (25)
- a. *Àdúk né sà nyē pú'á*
 Aduk COMP PAST see.PERF woman
sɔ' lá kūsìdné gúúr.
 INDEF.P.SG DEF sell.IMPERF cola nut
 'The woman whom Aduk saw/met sells cola nuts.'
- b. *Àdúk n' sà nyē pú'á sɔ'*
 Aduk COMP PAST see.PERF woman INDEF.
lá kūsìdné gúúr.
 DEF sell.IMPERF cola nut
 'The woman whom Aduk saw/met sells cola nuts.'
- (26) *Pú'á lá né sà dā' ná'ásíá lá*
 woman DEF COMP PAST buy.PERF cow.INDEF.P DEF
àné ná'ábil.
 COP.be calf
 'The cow the woman bought is a small one/the cow the woman bought is a calf'
- (27) *(Nín)- sɔ' né kūl lá àné*
 person.INDEF.P COMP go-home.PERF DEF COP.be
m̄ zúá.
 1SG.POSS friend
 'The person who went home is my friend.'

In both dialects, pronominalised subjects in relative clauses are always the emphatic forms (28a). Abubakari (2016a) argues that the emphatic pronoun in Kusaal can be

explained to occur due to the assimilation of the subject pronoun with the contrastive focus particle *né*.

- (28)
- a. *Fún(é)²* *sà* *nyē* *dáú-só'* *lá*
 2SG.EMPH PAST see.PERF man-INDEF.P DEF
- àn(é)* *m̄* *zúá.*
 COP.be 1SG.POSS friend
 ‘The man whom you saw is my friend.’
- b. **Fv̄* *sà* *nyē* *dáú-só'* *lá*
 2SG. PAST see.PERF man-INDEF.P DEF
- àn(é)* *m̄* *zúá.*
 COP.be 1SG.POSS friend
 ‘The man whom you saw is my friend.’

In object relativisation, the complementiser *né* occurs after the subject of the relative clause with the indefinite pronoun occurring on the relativised head noun. Pronouns are also the emphatic forms in the same environments (30).

- (29) *Àdúk* *sà* *nyē* *Àdólúbné* *s̄v̄'oe*
 Aduk PAST see.PERF Adolub COMP own.PERF
- ná'á-síéba* *lá.*
 cow.INDEF.P.PL DEF
 ‘Aduk saw the cattle that Adolub owned.’

² Whilst Agole drops the *ε* in the emphatic pronoun *fún(ε)*, Atoende does not, hence the realization of the full form which is *f̄v̄+nε=f̄vnε* 2SG.EMPH. ‘you’.

- (30) *Àdúk sà nyḗ mán sū'oe*
 Aduk PAST see.PERF 1SG.EMPH own.PERF
- ná'á-síebá lá.*
 COW.INDEF.P.PL DEF
 'Aduk saw the cattle that I owned.'

2.3 Clause final determiner *lá'*

In relative clause constructions in Kusaal, the particle *lá'* is used as a marker of definiteness and it is restricted to clause final position. This particle is the same as the definite article in the language, thus making the relative clause obligatorily definite. Consequently, the head of the relative clause cannot occur with a determiner as shown below in (31).

- (31) [*Bí (*lá) kàné ká Àdólúbsà nyḗ*
 child DEF REL COMP Adolub PAST see.PERF
- *(lá) kūlyá.*
 DEF go-home.PERF
 'The child who Adolub saw has gone home.'

(32) Main clause

- Bííḡ lá kúlyá*
 child DEF go-home.PERF
 'The child has gone home.'

(33) Subordinate clause

- Àdólúbsà nyḗ bííḡ lá.*
 Adolub PAST see.PERF child DEF
 'Adolub saw the child.'

In both the main clause and the subordinate clause, the subject and object NP *bííḡ* 'child' respectively is modified by the definite article *lá* but this is missing on the relativized head *bííḡ* in the relative clause in (31). Unlike in languages like Akan (Saah 2010: 94) where the head of the relative clause can occur with or without a determiner, Kusaal, in conjunction with other Mabilia languages that allow in-situ IHRC, has a clause

final determiner or demonstrative. Examples (35-37) are taken from Hiraiwa et al. (2017:7) to show the predominant use of the clause final determiner in these languages.

- (34) Kusaal
 [DP_{[CP} *Dáú-sɔ'* *né* *kārim* *gbáúŋ*] *lá*
 man.INDEF.P. COMP read.PERF book DEF

sà *kēnā*.
 PAST come-PERF.LOC
 'The/A man who read the book came.'
- (35) Buli
Amoak *nya* [DP_{[CP} *Atim* *ale* *sua* *naa* *buui*
 Amoak saw Atim C own cow REL

**(la)*.
 DEM
 'Amoak saw the/*a cow which Atim owned.'
- (36) Gurene
 [DP_{[CP} *Atia* *n* *da'* *bua* *seka* *da'a* *zaam*]
 Atia C buy.PERF goat REL market yesterday

**(la)*] *bɔi* *mɛ*.
 D lose.PERF PAST
 'The/*A goat that Atia bought at the market got lost.'
- (37) Dagbani
 [DP_{[CP} *Ata* *ni* *nya* *yili* *sheli* **(maa)*]
 Ata C see.PERF house REL D

vela.
 nice
 'The/*A house that Ata saw is nice.'

It then follows that Kusaal is consistent with the observation made by Hiraiwa et al. (2017) for the structure in (38) where these languages uniformly have the demonstrative (D) element occurring at clause final position in the relative construction.

(38) [DP[CP....(C)...H-REL.][D] (Hiraiwa et al. 2017: 5)

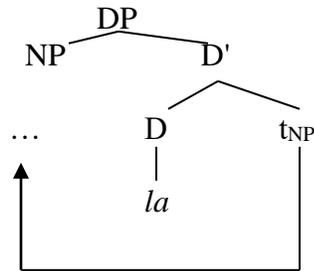
It is interesting to note the recurrent use of the identical morpheme *la* as clausal determiners in Kusaal, Buli, Gurenɛ as well as Dagbani where *maa* alternates with *la*. The clausal determiner is said to “assert the content of the proposition, relating to something that has been said earlier in the conversation” (Hiraiwa et al. 2017: 5-7; see also Lefebvre 1992; 1998; Larson 2003).

(39) *Pú'á lá sá'al Àdúk lá.*
 woman DEF advise-PERF Aduk DEF
 ‘The woman advised Aduk, as I said.’

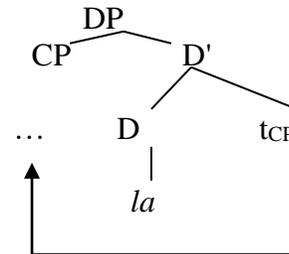
As elaborated by Hiraiwa et al. (2017), the clausal determiner in IHRCs is a determiner for the clausal constituent taking the CP as its complement. Comparing this to the structure of a DP in Kusaal, both the NP and the CP in a determiner phrase and a relative clause respectively move to the specifier of DP (whilst assuming the same extended projection principle (EPP) features for D).

(40)

a. Structure of DP



b. Structure of IHRC



However, anytime the relativised head noun is indefinite, the clause final definite determiner must be absent. The indefinite determiner *sí'à* ‘a certain’ can be used in place of the definite determiner. This determiner cannot fully have the intended indefinite

meaning; it has an interpretation where the indefinite determiner functions as a numeral ‘one’ (also see Bodomo & Hiraiwa 2009).

(41) Object relativisation (Definite)

M̄ *dà* *kārīm* *gbáúŋ* *kàné* *ká* *Àsíbi* *dà*
 ISG. PAST read.PERF book REL COMP Asibi PAST

sɔ̄b *lá.*
 write.PERF DEF
 ‘I read the book that Asibi wrote.’

(42) Object relativisation (Indefinite)

- a. *M̄* *dà* *kārīm* *gbáúŋ* *ká* *Àsíbi* *sɔ̄b.*
 ISG. PAST read.PERF book COMP Asibi write.PERF
 ‘I read a book that Asibi wrote.’
- b. *M* *dà* *kārīm* *gbáúŋ* *sí à* *ká*
 ISG. PAST read.PERF book certain COMP
- Àsíbi* *sɔ̄b* *lá.*
 Asibi write.PERF DEF
 ‘I read a certain book which Asibi wrote’ (the book is one)

2.4. Resumptive pronouns and the relative clause in Kusaal

A common strategy employed by some languages in relative clause constructions is the use of resumptive pronouns at the site where the referent of the head NP should have been (Saah 2010: 97; Maxwell 1979; Payne 1997). Sigurd (1989: 107) argues that this method is to “recall the referent in the position where it should have been”. The use of resumptive pronoun in Kusaal relativisation is optional and limited to object relativisation. However, there are always two interpretations anytime the pronoun occurs in relativisation. The resumptive pronoun creates both restrictive and non-restrictive interpretations (discussed in section 5). The pronoun, when used, occurs immediately

after the verb representing the relativisation site of its antecedent as shown in (43a). The sentences in (43 and 44) have similar restrictive interpretations respectively with (43a) and (44a) having additional non-restrictive interpretations.

(43)

- a. *Pú'á* *kà̀nè* *ká* *m̀* *sá* *nyē* (ò) *lá*
 woman REL COMP 1SG. PAST see.PERF (3SG) DEF

kū̀sìdné *gúúr.*
 sell.IMPERF cola nut
 'The woman I saw sells cola nuts.'

- b. *Pú'á* *kà̀nè* *ká* *m̀* *sà* *nyē* (ø) *lá*
 woman REL COMP 1SG PAST see.PERF (3SG) DEF

kū̀sìdné *gúúr.*
 sell-IMPERF cola nut
 'The woman I saw sells cola nut.'

(44)

- a. *Pú'á* *kà̀nè* *ká* *dáú* *lá* *tīs* ò
 woman REL COMP man DEF give.PERF 3SG

lígídí *lá* *kū̀lyá.*
 money DEF go-home.PERF
 'The woman to whom the man gave money has gone home'

- b. *Pú'á* *kà̀nè* *ká* *dáú* *lá* *tīs* (ø) *lígídí* *lá*
 woman REL COMP man DEF give (3SG) money DEF

kū̀lyá.
 go-home
 'The woman to whom the man gave money is gone home.'

- (45) *M̄ sà nyē bíbàné (*bà) sà wā́ád lá.*
 1SG. PAST see chil-REL.PL (3PL) PAST dance DEF
 ‘I saw children who were dancing.’

The use of the pronoun in (45) renders the construction ungrammatical. Moreover, resumptive pronouns do not occur when the antecedent NP is non-human (46-48).

- (46) *Búkàné ká m̄ sá dā́ (*lì) lá*
 goat-REL COMP 1SG. PAST buy-PERF (*it) DEF
àn(é) bútítá’ár.
 COP.be goat-big
 ‘The goat which/that I bought is big.’

- (47) *Búkàné ká m̄ sà tīs (*lì) váánd lá*
 goat-REL COMP 1SG. PAST give (*it) leaves DEF
bēn’ēdné.
 sick
 ‘The goat I gave leaves to is sick.’

- (48) *Fúkàné ká m̄ sá dā́ (*lì) lá*
 dress.REL COMP 1SG. PAST buy-PERF (*it) DEF
àn(é) fútítá’ár.
 COP.be dress.big
 ‘The dress which I bought is big.’

Similarly, the resumptive pronoun does not occur in in-situ IHRC. Anytime a resumptive pronoun is used after the verb in such constructions, the interpretation changes to include a possessive reading as also observed in Gurene (see Atintono 2003: 121).

- (49) *Mán* *sà* *nyē̄* *pú'á* *só* *lá*
 1SG.POSS PAST see-PERF woman INDEF.P DEF

kūōsidné *gúúr.*
 sell-IMPERF cola nut
 'The woman I saw sell cola nut.'

- (50) *Mán* *sà* *nyē̄* *ò* *pú'á*
 1SG.EMPH PAST see-PERF 3SG.POSS woman

só' *lá* *kūōsidné* *gúúr.*
 INDEF.P DEF sell-IMPERF cola nut
 'His wife that I saw sells cola nut.'
 'The particular wife of his that I saw sells cola nut.'

3. Other elements of Kusaal relativisation

3.1. Long-distance dependency

Kusaal allows long-distance relativisation in which case an obligatory pronoun is required for subjects but not in cases involving objects. The relativiser *kàné/bàné* must be used in the highest clause of the embedded clauses and cannot be used in the intermediate clauses.

- (51) Long- distance relativisation (Object)

- a. *Àtibil* *dā'* *gbáúŋ* *kàné* *ká* *m̄* *mī'í*
 Atibil buy.PERF book REL COMP 1SG. know

yé *Àsibi* *kārīm* *lá.*
 COMP Asibi read.PERF DEF
 'Atibil bought the book that I know that Asibi read.'

- b. **Atíbil* *dā̄* *gbáwɛ̀* *m̀* *mī̄* *yé*
 Atibil buy.PERF book 1SG. know COMP

Àsibi *kā̄rīm* *kà̄nè* *lá.*

Asibi read.PERF REL DEF

‘Atibil bought the book that I know that Asibi read.’

- c. **Atíbil dā̄* *gbáwɛ̀* *kà̄nè* *ká* *m̀* *kà̄nè*
 Atibil buy.PERF book REL COMP 1SG. REL

mī̄ *yé* *Àsibi* *kā̄rīm* *lá.*

know COMP Asibi read.PERF DEF

‘Atibil bought the book that I know that Asibi read.’

(52) Long-distance relativisation (Subject)

- a. *M̀* *nyē* *dáú* *kà̄nè* *ká* *m̀* *mī̄*
 1SG. see.PERF man REL COMP 1SG. know

yé *ò* *bū* *Àsibi* *lá.*

COMP 3SG. beat.PERF. Asibi DEF

‘I saw the man who I know beat Asibi’

- b. **m̀* *nyē* *dáú* *kà̄né* *ká* *m̀* *mī̄*
 1SG. see.PERF man REL COMP 1SG. know.PERF

yé *ò* *kà̄nè* *bū* *Àsibi* *lá.*

COMP 3SG. REL beat.PERF Asibi DEF

‘I saw the man who I know beat Asibi.’

- c. **m̀* *nyē* *dáú* *kà̄nè* *ká* *m̀* *kà̄nè*
 1SG. see.PERF man REL COMP 1SG REL

mī̄ *yé* *ò* *kà̄nè* *bū* *Àsibi* *lá.*

know COMP 3SG REL beat Asibi DEF

‘I saw the man who I know beat Asibi.’

3.2. Island/subjacency

Relativisation in Kusaal is constrained by island/subjacency effects. It is ungrammatical to have relativisation out of a complex NP or an adjunct clause in Kusaal, which suggests that relativisation is created by movement (see Ross 1967; Bodomo & Hiraiwa 2009).

(53) Complex NP constraint

**M̄ dā kārīm gbáw̄y kànè ká m̄ nyē*
 1SG PAST read.PERF book REL COMP 1SG. see.PERF

pú'á kànè ká s̄b lì lá.
 woman REL COMP write it DEF

‘I read the book that I saw the woman who wrote.’

(54) Adjunct Island

**M̄ dā kārīm gbáw̄y kànè ká m̄ nyē*
 1SG PAST read.PERF book REL COMP 1SG. see.PERF

pú'á lá ón s̄b lì lá.
 womanDEF 3SG.EMPH. write it DEF

‘I read the book that I saw the woman when she was writing it.’

Extraction of the relative clause is impossible, irrespective of whether the extraction is overt or covert. The same situation applies to instances of A-dependency such as Wh-question and cleft/focus.

(55) Island effect for Wh-movement/Wh-in-situ

**bó ká f̄v̄ dā nyē pú'á kànè*
 what FOC 2SG. PAST see.PERF woman REL

s̄b lá?
 wrote.PERF DEF

‘What did you see the woman that wrote?’

- (56) * *fù* *dà* *nyē* *pú'á* *kàné* *sɔ̃b*
 2SG. PAST see.PERF woman REL wrote.PERF
bɔ́ *lá?*
 what DEF
 ‘What did you see the woman that wrote?’

3.3. Tense and particles within relative clauses in Kusaal

Preverbal particles as well as aspectual morphemes are compatible with relative clauses in Kusaal. The temporal preverbal particle *sa*, marking events that are a day old, and future particle *na*, are used as illustrations in (57-58) below.

- (57) Object relativisation (past)
M̃ *sà* *kārim* *gbáúŋ* *kàné* *ká* *Àsíbi* *dà*
 1SG. PAST read.PERF book REL COMP Asibi PAST
sɔ̃b *yúúm* *lá.*
 write.PERF year DEF
 ‘Yesterday, I read the book which Asibi wrote last year.’

- (58) Object Relativisation (future)
M̃ *sà* *nyē* *gbáúŋ* *kàné* *ká* *Àsíbi* *nà*
 1SG. PAST see.PERF book REL COMP Asibi FUT
nɔ̃ki *tisif* *béóg* *lá.*
 take give-2SG tomorrow DEF
 ‘I saw the book that Asibi will give you tomorrow’

The tense particle *sà* in (57-58) occurs right before the verb and the relativiser maintains its usual position that is after the head noun. The fact that these tense particles can occur within the relative clause in Kusaal shows that relative clauses in Kusaal are fully finite.

3.4. Adverb placement

An embedded adverb cannot be placed immediately before or after the relative head noun. The well-formed adverbial distribution is either before or after the end of the entire construction.

(49) Adverb placement in Kusaal relativisation

- a. *M* *sà* *dī* *díkàné* *ká* *Àsíbi*
 1SG PAST eat.PERF food-REL COMP Asibi
- dūg* *sú'òs* *lá.*
 cook.PERF yesterday DEF
 'I ate the food which Asibi cooked yesterday'
- b. *Sú'òs,* *m̄* *sà* *dī* *díkàné*
 yesterday, 1SG. PAST eat.PERF food-REL
- ká* *Àsíbi* *dūg* *lá.*
 COMP Asibi cook.PERF DEF
 'I ate the food which Asibi cooked yesterday'
- c. **M̄* *dī* *díkàné* *ká* *sú'òs*
 1SG. eat.PERF food-REL COMP yesterday
- Àsíbi* *sà* *dūg* *lá.*
 Asibi PAST cook.PERF DEF
 'I ate the food which Asibi prepared yesterday.'
- d. **M̄* *sà* *dī* *sú'òs* *díkàné*
 1SG PAST eat.PERF yesterday food-REL
- ká* *Àsíbi* *sà* *dūg* *lá.*
 COMP Asibi PAST cook.PERF DEF
 'I ate the food which Asibi prepared yesterday.'

- e. **M* *sà* *dī* *dífb* *sú'òs* *kàné*
 1SG PAST eat.PERF food yesterday REL
ká *Àsíbi* *sà* *dūg* *lá.*
 COMP Asibi PAST cook.PERF DEF
 'I ate the food which Asibi prepared yesterday.'

Adverbials can precede the subject in simple clauses as illustrated in (60).

- (60) *Sú'òs* *Àsíbi* *sà* *dā'* *fúúg* *lá.*
 yesterday Asibi PAST buy.PERF dress DEF
 'Yesterday, Asibi bought the food.'

3.5. Stacked relative clauses

Kusaal, like Dàgáárè (Hiraiwa & Bodomó 2004: 62), does not allow stacking of relative clauses compared to other Mabilia languages like Buli and Gureñ where stacking of relative clauses is grammatical (see Atintono 2003; Hiraiwa 2003).

- (61) **M* *dà* *kārim* *gbáúŋ* *kàné* *ká* [*Àsíbi* *dà* *sɔb*
 1SG. PAST read book REL COMP Asibi PAST write
yúúm-áyí] [*Áyípókà* *kàné* *dā'* *sú'òs* *lá.*]
 year-two Ayipoka REL buy yesterday DEF
 'I read the book that Asibi wrote two years ago that Ayipoka bought yesterday.'

One possible way of rendering the above sentence is by turning the whole structure into a complex construction as below:

- (62) *M̄ dà kārīm gbáúŋ kàné ká Àsìbì dà*
 1SG. PAST read.PERF book REL COMP Asibi PAST
sɔ̄b yúúm-áyí ká Áyípókà sà dā
 write.PERF year-two CONJ Ayipoka PAST buy.PERF
sú'òs lá.
 yesterday DEF
 'I read the book that Asibi wrote two years ago that Ayuo bought yesterday.'

3.6. Extraposed relative clauses

The canonical form of the relative clause is such that the relative head noun is immediately followed by the relative clause. This adjacency is described by Givoón (2001: 207) as one of the most transparently iconic devices used in directing the hearer's attention to the head noun that is co-referent with the missing argument inside the relative clause. However, another strategy referred to as extraposed rel-clause allows the relative clause to be 'ejected' to the end of the main clause. Kusaal does not allow extraposed relative clauses in both narrative constructions (63) and in casual speech (64-69).

- (63) *Ná'á-s' dà bé ká ò yú'úr b̄ōn Àdúk.*
 chief INDEF.P PAST COP.be CONJ 3SG name call Aduk
 'There lived a chief whose name was Aduk.'
- (64) *Dáú [kàné ká ò búúg sà b̄ōdīg lá]*
 man REL COMP 3SG.POSS goat PAST lost-PERF. DEF
sà kēn sú'òs ná.
 PAST come.PERF. yesterday LOC
 'The man who lost his goat came yesterday.'

- (65) **Dáú lá sà kēn sú'òs ná [kàné*
 man DEF PAST come.PREF yesterday LOC REL
ká ò búúg sá bōdīg lá]
 COMP 3SG.POSS goat PAST lost DEF
 'A man came in yesterday who lost his goat.'

Another way of rendering (65) is to use (66):

- (66) *Dáú lá sà kēn sú'òs ná óné*
 man DEF PAST come yesterday LOC 3SG.EMPH
ká ò búúg bōdīg lá.
 COMP 3SG.POSS goat loss-PERF DEF
 'The man came yesterday who lost his goat.'

- (67) *Pú'á [kàné ká m̄ dàà yēlíf*
 woman REL COMP 1SG PAST tell.-2SG
ò yél lá] kēn sú'òs ná .
 3SG.POSS matter DEF come.PERF yesterday LOC
 'The woman I told you about came in yesterday.'

- (68) **Pú'á lá kēn sú'òs ná [kàné ká m̄*
 woman DEF come yesterday LOC REL COMP 1SG
dàà yēlíf ò yél lá]
 PAST tell.2SG.ACC 3SG say.PERF DEF
 'The woman came in yesterday that I told you about.'

Another way of correcting (68) is by using (69) as below.

(69)	<i>Pú'á</i>	<i>lá</i>	<i>sà</i>	<i>kēn</i>	<i>sú'òs</i>	<i>ná,</i>
	woman	DEF	PAST	come-PERF.	yesterday	LOC
	<i>óné</i>	<i>ká</i>	<i>m̀</i>	<i>dà</i>	<i>yēlíf</i>	<i>lá.</i>
	3SG.EMPH	COMP	1SG.	PAST	tell-2SG.	DEF
	'The woman came in yesterday that I told you about.'					

4. The accessibility hierarchy

A topical issue on studies on relativisation in languages cross-linguistically concerns the various positions of the noun phrase that are relativisable. Typological variances exist in languages regarding elements that can be relativised and what cannot. The most recognised parameter used for this judgment is the NP accessibility hierarchy by Keenan & Comrie (1977) and Comrie (1981; 1989). The accessibility hierarchy (AH) shows the relative accessibility to relativisation of NP positions in simplex main clauses. The AH is shown in (70) where the symbol “>” means “more accessible than”.

(70) Subject > Direct Object > Non-Direct Object > Possessor

(Comrie 1989: 156)

According to Comrie (1989: 56), if a language can form relative clauses on a given position on the accessibility hierarchy, then it can also form relative clauses on all positions higher to the left on the hierarchy. From the accessibility scale above, the subject represents the easiest relativisable element compared to all others. It also means that it is easier to relativise the direct object than it is to do the same for the non-direct object. Cross-linguistically, the possessor appears to be the most difficult and a language that can relativise the possessor NP can relativise all other elements on the scale which is the case in Kusaal. Kusaal shows no grammatical restrictions on elements that are relativisable as far as the hierarchy is concerned. In possessive relativisation, the possessee noun phrase is left in-situ with a resumptive possessive pronoun.

4.1. Possessor relativisation

- (71) *M̄* *sà* *nyē* *pú'á* *kà̀nè* *ká* *m̄*
 1SG. PAST see.PERF woman REL COMP 1SG.

dà *kā̀rīm* *ò* *gbáúŋ* *lá.*
 PAST read.PERF 3SG.POSS book DEF
 'I saw the woman whose book I read'

It is also possible to relativise the non-direct object, the object of locative, the object of the postposition, and the object of comparison in Kusaal.

4.2. Non-direct object

- (72) *Pú'á* *kà̀nè* *ká* *dáú* *lá* *tīs*
 woman REL COMP man DEF give.PERF

lígídí *lá* *kū̀lyá.*
 money DEF go-home.PERF
 'The woman to whom the man gave the money is gone home.'

4.3. Locative relativisation

- (73) *M̄* *dā'* *péóg* *kà̀nè* *ká* *Àsìbì* *nōk*
 1SG. buy.PERF basket REL COMP Asibi take.PERF

bórbè *nīŋ* *lá.*
 pineapple put.PERF DEF
 'I bought the basket in which Asibi put the pineapple.'

4.4. PP relativisation

- (74) *Gádúg kàné ká Àsìbì gbīsìdi lì zúg lá*
 bed REL COMP Asibi sleep.PERF it head DEF

àn(é) gád-títá'ár.
 COP.be big.bed
 'The bed on which Asibi slept is big.'

4.5. Comparative relativisation

- (75) *Dáú kàné ká Àsìbì wá'á t'v'g lá kpí-yá.*
 man REL COMP Asibi long pass DEF die-PERF
 'The man who Asibi is taller than is dead.'

Other Mabia languages where the possibility exists for possessor relativisation high down to subject relativisation include Dagaare (Bodomo & Hiraiwa 2004) and Gurene (Atintono 2003: 121-122). In addition, languages like Akan (Saah 2010) and Ewe (Dzameshie 1983; 1995) show the same flexibility in relativisation.

5. Restrictive and non-restrictive relative clauses

The difference between restrictive and non-restrictive relative clauses is semantically captured in the following lines from Permuter & Soames (1979: 267-268).

A restrictive clause restricts predication to the class of individuals specified in the relative clause. An appositive relative clause does not. When the clause is appositive, the predication is made of all those individuals specified by the head NP; it is further asserted that this set of individuals is the same set of individuals specified by the relative clause.

Adding to this, Givón (1993: 107) asserts that restrictive relative clauses are the prototypical types of rel-clauses and the most common cross-linguistically. This reason perhaps explains why studies including Givón (1993) and Comrie (1981) are silent on non-restrictive relative clauses also referred to as appositive relative clauses (Permuter & Soames 1979: 267-268; Saah 2010: 101). Givón's assertion aptly applies to the case in Kusaal where unlike a restrictive relative clause; a non-restrictive relative clause has

limitations regarding the form of the relative head noun it may occur with. It is impossible to have non-restrictive relative clauses with proper nouns as head nouns in Kusaal as illustrated in the examples below.

(76) Non-restrictive relative clause

**M̂* *dà* *nyē̄* *Àsìbì, kàné* *dà* *sɔ̄b*
 1SG. PAST see.PERF Asibi REL PAST write.PERF

gbáúŋ *lá.*
 book DEF
 ‘I saw Asibi, who wrote the book’

If a relativiser is used with a proper noun, it receives a restrictive interpretation.

(77) Restrictive Relative Clause

M̂ *dà* *nyē̄* *Àsìbì kàné* *dà* *sɔ̄b*
 1SG. PAST see.PERF Asibi REL PAST write.PERF

gbáúŋ *lá.*
 book DEF
 ‘I saw the Asibi who wrote the book.’

Both restrictive and non-restrictive interpretations however can be obtained with normal noun phrases. The example in (78) can be interpreted as restrictive in the sense that one woman is selected among a set of other women. It can also be interpreted non-restrictively in which sense it is adding more information about the woman who is already known by both interlocutors in the discourse (see Bodomo & Hiraiwa 2004). This is because of the presence of the resumptive pronoun, which triggers the non-restrictive interpretations.

(78) Restrictive/non-restrictive interpretation

M̄ *sà* *nyē* *pú'á* *kàné* *ká* *m̄*
 1SG. PAST see.PERF woman REL COMP 1SG

kārim *ò* *gbáúy* *lá.*
 read.PERF 3SG.POSS book DEF
 'I saw the woman whose book I read'
 'I saw the woman, whose book I read'

(79) *Ón/mán/fún* *kàné* *kūl* *Ghánà*
 3SG.EMPH./1SG.EMPH/2SG.EMPH. REL go-home Ghana

yúúm *kàné* *gáád* *lá* *mī'í* *ti* *téŋ* *yél-à.*
 year REL PAST DEF know 2PL.POSS land matter-PL
 'He/I/You, who went home to Ghana last year, know(s) about our
 country.'

6. Summary

In summary, this paper has shown that relativisation in Kusaal can be either in-situ IHRC or left-headed IHRC similar to sister languages such as Buli, Gurene, Dagbani and Kabiye' observed by Hiraiwa et al (2017). It has further been established that the use of resumptive pronouns is restricted to object relativisation in which instance both restrictive and non-restrictive interpretations are generated. In addition, the stacking, as well as the extraposition, of relative clauses is not allowed in Kusaal. Kusaal does not have any restrictions as far as elements that are relativisable are concerned when using the accessibility hierarchy of Keenan & Comrie (1977).

Abbreviations

C/COMP	complementiser
CONJ	conjunction
COP	copular
CP	complementiser phrase
D/DEF	definite determiner
D/DEM	demonstrative

EMPH	emphatic
FUT	future
H	head noun
IMPRERF	imperfective
INDEF.P	indefinite pronoun
LOC	locative
PAST	time depth particle
PERF	perfective
PL	plural
REL	relative pronoun
SG	singular

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