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Chechen extraposition as an information ordering strategy

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Relative clauses in Chechen normally precede their heads, but corpus research shows that about 2% of them appear in an extraposed position. Scrutiny of these instances reveals that there is no link between extraposition of a relative clause and the pragmatic category (focus vs. topic) of the head. When it comes to restrictive relative clauses, which consist of two parts that only together allow for identification of the complex noun phrase's referent, this study finds that the head can only occur in the focus position (immediately before the finite verb), and that it is often involved in contrast and comes with heightened emphasis. I interpret this as a result of the tension that is built-up due to the delay in identification.

Keywords: Chechen; relative clause; extraposition; information structure

1. Introduction

Narratives usually have a global structure (a plot and a storyline), but each sentence in a narrative has its own micro structure where the information is divided, depending on its content and on the syntax of a language. A question that has been raised in the past and is still not completely answered is whether and how the ordering of information on the level of the sentence intertwines with the larger level of a narrative. Can subordination, for instance, which is a syntactic feature that operates on the level of the sentence, be used in a strategy where part of the content of a sentence (the subordinated part) is placed off the story line, so that another part (the part that is not subordinated) is more on the foreground, or even focused? Some researchers (such as Tomlin 1985) see a clear correlation between main clause and foregrounding on the one hand and subordinate clause and backgrounding on the other hand. Other researchers (such as Reinhart 1984: Footnote 10; and also Thompson 1987) recognize that such a strong division is problematic. This article zooms in on one particular relation between subordination and information structure, asking what the link is between extraposition of relative clauses and narrow focus, and it does so with data from Chechen.

Within the different subordination strategies, extraposition of relative clauses is an interesting candidate for further research. This is because it has all the ingredients of a link between subordination and information structure: there is a division of a noun phrase into two parts, i.e. the head and the extraposed relative clause, with one part (the relative clause) subordinated, and the other part (the head noun) being a constituent of the main clause whose position may depend on its information content. Authors may, generally speaking, have different reasons to postpone a relative clause so that it ends up at the end of a sentence. Extraposition does not automatically follow from the principle of end weight (Behaghel 1909; Quirk et al. 1985:968). Instead, it may have discourse functions. If the relative clause is, for instance, appositive, the effect of extraposition may be that of providing additional information about the relative clause's head. This information can be either backgrounded, when it is not taken up anymore, or foregrounded, when it is crucial to the storyline and elements are picked up in the subsequent discourse. The fact that a relative clause appears extraposed as such, then, does not automatically classify the subordinated material to the background or the foreground of the story.

Chechen belongs to the North-East Caucasian family, is predominantly head-final and has relative clauses in the form of participial clauses. Chechen is an ideal candidate for research into the relation between extraposition and information structure because (i) ordering of constituents in Chechen is influenced by information structure (Komen 2007), and (ii) it has extraposed relative clauses that can easily be distinguished from non-extraposed ones (the former have the relative clause follow the head, whereas the latter have the relative clause precede the head). An earlier claim made by Komen (2009a) that noun phrases heading relative clauses are always focused is not borne out by the data reviewed in this article, nor do these data provide evidence for any simple relation between the extraposition of a relative clause and the information status of the noun phrase heading this relative clause. What I argue in this article is that there is a slightly more complex relationship: whenever an extraposed relative clause is *restrictive*, the noun phrase heading it is in the language's focus position, the extraposition has narrow focus and is accompanied by strong emphasis or contrast. The reason for this relationship results from two factors: (a) the splitting of one constituent into two physically separated parts, and (b) the characteristics of relative clauses that are *restrictive*. A relative clause in general can be viewed as an open proposition: a proposition with a variable that is defined by the noun phrase heading it. Consider the relative clauses in (1).

- (1) a. *The woman [who lives in this house] rides a motorbike.*
 b. *John, [who lives in this house], rides a motorbike.*
 c. *[Who lives in this house] is John.*

The relative clause *who lives in this house* in (1a) and (1b) can be viewed as an open proposition 'x lives in this house'. The noun phrase heading the relative clause provides the value of the variable x, which is *the woman* in (1a) and *John* in (1b). The major

difference between restrictive relative clauses and appositive ones is that the noun phrase heading the former does not uniquely identify a referent, whereas the head of the latter does. The referent of a restrictive relative clause's head is identified by making a cross-section of two classes: (i) the class of entities that can belong to the head (which are all *women* in our example), and (ii) the possible values for the value *x* provided by the relative clause as open proposition (which are all people *living in this house* in our example). Since the head needs the relative clause for its identification in (1a), the addressee (the reader or listener) needs to make an as yet unlinked mental entity in his mind, and be on the lookout for information that links this mental entity to already established information. This is not necessary for the appositive relative clause in (1b): the addressee can link '*John*' to an already established mental entity in his mind, and just add the information in the relative clause to this entity. As a result, there is greater tension of expectation between the head and a restrictive relative clause than between the head and an appositive one.

This 'expectation tension' can also be seen to occur between the two components of a *wh*-cleft, such as the one in (1c): the free relative subject *who lives in this house* is an open proposition where the value for the variable is not yet available. The mental entity made for the subject cannot be uniquely established until the addressee reaches the variable's value *John* in the complement of the clause. This fact, combined with the characteristics of identificational equative clauses in general, leads to constituent focus on the complement of *wh*-clefts like the one in (1c).

I argue that this tension of expectation between a head and its extraposed restrictive relative clause also plays a role in Chechen. In Chechen, the head of an extraposed restrictive relative clause must be in the language's focus position, i.e. the position immediately preceding the finite verb, and as a result of the tension created by the need to restrict the identification of the head, there is a high likelihood for the presence of overt contrast.

Building on previous research, Section 2 introduces how focus, word order and relative clauses are realized in Chechen, and Section 3 shows what kinds of interaction between information status and extraposed relative clauses have been found so far. Section 4 describes the results of a corpus investigation of extraposed relative clauses, and Section 5 discusses the implications of these findings, pointing a way to future research.

2. Basic concepts

In order to understand how extraposition of relative clauses in Chechen works, this chapter introduces several basic concepts. It shows what is known about the canonical word order of the main clause, and what the significance is of deviations from this word order. It also explains how relative clauses are formed in the language.

2.1 Focus and word order

Chechen has been described as having SOV as a basic word order, which is found almost always in non-main clauses and often in main clauses (Nichols 1994: 58). Word order in Chechen is partly determined by information structure: Komen (2007) found that constituents with narrow focus need to immediately precede the finite verb of a clause, as can be seen in the examples in (2).¹

- (2) a. *Muusas taxana dika buolx bina*
 Musa-ERG today good work B-do-PSTN
 ‘Musa did a good job today.’
- b. *Muusas taxana dika buolx bina*
 Musa-ERG today **good work** B-do-PSTN
 ‘Musa did a **GOOD JOB** today.’
- c. *Taxana dika buolx Muusas bina*
 today good work **Musa-ERG** B-do-PSTN
 ‘**MUSA** did a good job today.’
- d. *Muusas dika buolx taxana bina*
 Musa-ERG good work **today** B-do-PSTN
 ‘Musa did a good job **TODAY**.’

The unmarked SOV word order in (2a) can also be interpreted as one with narrow focus on the object as in (2b).² Subject focus, as in (2c), and adjunct focus, as in (2d), are both characterized by using the preverbal position.

- (3) a. *Sielxana dika buolx banbellarg Muusa vara*
 yesterday good work B-do-B-could-NMLZ **Musa** V-PST
 ‘Who was able to do a good job yesterday was **MUSA**.’
- b. *Muusas taxana binarg dika buolx bara*
 Musa today B-do-PST-NMLZ **good work** B-PST
 ‘What Musa did today was a **GOOD JOB**.’

Narrow focus can also be expressed using the constructions in (3a) and (3b). These constructions are the Chechen equivalent of the *wh*-cleft, since they have the basic order of an equative clause, $NP_{\text{SBJ}} + be + NP_{\text{COMPL}}$, with the subject NP being a free relative – a relative clause that lacks a nominal head. Since Chechen relative clauses are

1. Examples without reference have been elicited from native speakers. The Chechen examples follow the Latinized orthography closely resembling the one developed for Ingush (Nichols 2007).

2. Focus is indicated by capitalization of the focused constituent in the free translation line.

syntactically participial clauses, the equivalent of free relatives are the nominalized variants of these clauses. Free relatives are formed from verbs by adding the nominalization suffix *-arg*. The relative clause *taxana bina buolx* ‘the work done today’, for instance, can serve as the basis for the free relative *taxana binarg* ‘what was done today’.

The *wh*-clefts in (3a) and (3b) are constructions of the form $NP_{\text{SBJ}} + NP_{\text{COMPL}} + be$ where the focus is on the complement NP, since it immediately precedes the finite verb (the copula containing tense and agreement). The syntactic subjects of the *wh*-clefts are the free relative NPs. The *wh*-cleft in (3a) provides focus on *Muusa* ‘Musa’, who is the agent of the lexical verb *ban* ‘do’, and the *wh*-cleft in (3b) causes focus on *dika buolx*, which is the object of the verb *ban* ‘do’. The last example is significant, since it shows that the *wh*-cleft is a strategy to put focus on an object of a verb unambiguously, avoiding the ambiguity in (2b).

2.2 The postverbal position

While Chechen is a head-last language, main clauses do allow for constituents to appear *after* the finite verb. Nichols (1994) noted OVS as an alternative to SOV in main clauses, where she recognized that XVS, i.e. a subject following a finite verb which is preceded by any number of other constituents, can be used for presentational focus on the subject and she found that a subject that “has been the theme or topic of a string of sentences or chained clauses is usually verb-final in the (paragraph-final or chain-final) main clause” (Nichols 1994: 58–60). Komen (2007) suggested that the postverbal position is used for ‘discourse’ topics, which are entities that are thematic or topical over a larger number of sentences.

The studies mentioned above only offer preliminary insight into the function of postverbal constituents. More research is needed to understand the role (or roles) of constituents occurring postverbally.

2.3 Relative clauses

Chechen relative clauses can be used to relativize an argument, the possessor of an argument, and the object of adjuncts like comparatives and postpositional phrases (Nichols 1994). The usual way to form a relative clause is by using a verb’s simple past tense or generic present tense form as relativizer, as in (4).³

3. Maciev (1961:612) reports that future tense relative clauses (such as ‘the boy who will read the letter’) can be built from the *periphrastic future* tense. The NMSU database confirms that there are no basic future tense participial forms, but only relative clauses with *periphrastic*

- (4) a. *Muusa xaan jaalalie baalxara dwaavoolu*
 Musa time J-spend-BEF work-SRC away-V-go-PRS
 ‘Musa quit his job prematurely.’ [p86-00082:21]
- b. *Suuna [xaan jaalalie baalxara dwaavoolu]*
 1SG-DAT time J-spend-BEF work-SRC away-V-go-PRS-REL
Muusa gira
 Musa see-PSTR
 ‘I saw Musa, who quit his job prematurely.’

The clause in (4a) ends with the verb *dwaavoolu* ‘go away’ in the present tense. This form can also be used as relativizer, as in (4b). The structure of (4b) is SOV: the subject is *Suuna* ‘I’, the direct object is *xaan jaalalie baalxara dwaavoolu Muusa* ‘Musa, who quit his job prematurely’, and the finite verb is *gira* ‘saw’. The crucial element in the object NP is the word *dwaavoolu*, which in form coincides with the present tense ‘go away’, but is now used as a relativizer.

The form of the relativizer only coincides with the simple past or present tense when the head noun is not declined – that is: it is in the nominative case, as in (4b). As soon as the head noun is in a different case (such as the ergative, dative or genitive), the verb that functions as relativizer receives the suffix *-chu*, as illustrated in (5).

- (5) a. [*Lyra hwyequ-chu*] *muoxuo dittash swadooxura*
 fiercely blow-PRS-OBL wind-ERG trees hither-D-extract-IPFV
 ‘The fiercely blowing storm uprooted trees.’
- b. *Boqqa-chu muoxuo dittash swadooxura*
 strong-OBL wind-ERG trees hither-D-extract-IPFV
 ‘A storm uprooted trees.’

future tense forms, where the lexical verb is in the future, but the participial form built from the auxiliary is in the present tense, as for instance (i):

- (i) [*Swa'yecush bolu kegiirxuoj*] *massuo a rajonashkara xir bu*
accept-ptc B-REL young-PL all district-PL-SRC will B-PRS
 ‘The students who will be admitted to the institute will be from all the districts
 of the Republic.’ [p86-00181:40]

In the examples with relative clauses in this paper, I underline the finite verbs, I use square brackets to indicate where relative clauses start and finish, and I use bold face to set out the head of the relative clause. The references to examples that are taken from the NMSU corpus are in square brackets that follow the example. The references start with a ‘p’ for texts from the parallel part of the corpus, and with a letter ‘m’ for texts from the monolingual part. Next follows the number of the text, a colon, and then the line number within the text.

The present tense form of *hwieqa* ‘blow’ is *hwyequ* ‘blows’. If the head noun of the relative clause was in the nominative case, the relative clause would be *lyra hwyequ muox* ‘the fiercely blowing storm (or: the storm that blows fiercely)’, in which case the present tense form cannot be distinguished from the participial form that functions as relativizer. But in (5a) the head noun is in the ergative case (indicated by the suffix *-uo*), so that the relative clause’s verb receives the oblique case suffix *-chu*. This suffix is the same as that used for adjectives, as illustrated in (5b): the adjective *boqqa* ‘large, great’ is used as such when a noun is not declined, but becomes *boqqachu* whenever the noun it modifies is in any other case.

Chechen has a few verbs that have a separate relativizing form in the present tense, such as *xae’a* ‘know-PRS’ versus *xu’u* ‘know-PRS-REL’, and *do’u* ‘eat-PRS’ versus *du’u* ‘eat-PRS-REL’. An example is shown in (6).

- (6) a. *Suuna i dieshnash xae’a*
 1SG-DAT those words know-PRS
 ‘I know those words.’
- b. [*Sajna xu’u*] *dieshnash niisa swa’aaala*
 1SG-RFL-DAT know-PRS-REL words correct speak
lae’a suuna
 want 1SG-DAT
 ‘I want to pronounce the words I know correctly.’

The main clause in (6a) can be transformed into the relative clause *sajna xu’u* ‘that I know’ headed by *dieshnash* ‘words’ in (6b). The verbal head of the relative clause is transformed from present tense *xae’a* ‘know’ to its participial form *xu’u* ‘know-REL’.

Chechen has periphrastic tense forms (e.g. the present progressive and the past progressive), which are a combination of a lexical verb and the auxiliary (Nichols 1994: 38–39). When these periphrastic tense forms are relativized, two things happen. First, the auxiliary becomes the relativizer, and it has a separate attributive participial form (*volu, dolu, bolu, jolu*), which is formed from the present tense (*vu, du, bu, ju*).⁴ Second, the main (lexical) verb is realized using a predicative participial form, which is generally referred to as ‘converb’. The past tense of the predicative participle coincides with the finite form of the participle (e.g. *bina* in Example (2)). The present tense of the predicative participle, which is the one that is comparable to the English *-ing* form, has its own suffix *-sh*. Example (7a) shows an appositive relative clause modifying *Hwabib*. We have seen that the relativizer used in Chechen participial clauses agrees in *case*

4. Chechen distinguishes between attributive and predicative present participial forms. The predicative form of the auxiliary would be *volush, dolush, bolush, jolush*.

with the head noun's case, and in (7a) the relativizer *volu* has the same nominative case as the head *Hwabib*.

- (7) a. [Dwaasalielash volu] *Hwabib shien mieqash*
 backforth-walk-PTC V-REL **Habib** 3SG.RFL-GEN moustache
hwiizuo vuolavelira
 twist-INF V-start-PSTR
 'Habib, who was walking back and forth, started to twist his
 moustache.' (Baduev 1991:25)
- b. [Ishkoliehw dyeshush volchu] *juq'ana diesharan*
 school-LOC D-learn-PRS-PTC V-REL-OBL **period-DAT** learning-GEN
q'iisadalarshkahw daaq'aloocura cuo
 competition-PL-LOC parttake-IPFV 3SG-ERG
 'At the time he was studying at school, he participated in academic
 contests.' (Abdulaev 2005)

Chechen noun-class agreement (comparable to gender agreement) normally occurs between the verb and a nominative argument, and is signaled by a class prefix on some verbs.⁵ The relativizer also has noun-class agreement, but that agreement is with a nominative argument *inside* the relative clause. Consider (7a), where the nominative argument *Hwabib* has been relativized. The *v-* prefix on the relativizer agrees in noun class with that of the subject inside the relative clause. A clearer example of the fact that the noun-class agreement is with a constituent *inside* the relative clause is (7b). Again the relativizer has the prefix *v-*, but the head of the relative clause, the noun *juq'-ana* 'period-DAT', is of a noun class requiring the prefix *j-*, so that it is clear there is no agreement in noun class between the head noun and the relativizer. The noun-class agreement is with *cuo* 'he', even though this is not explicitly mentioned in the relative clause. When the subject of the main clause coincides with that of the relative clause, it is usually ellipted in the relative clause.

3. Focus and relative clauses

In Section 2.1, we have looked at word order in Chechen, and we saw that the immediately preverbal position is used for focus. We then looked at relative clauses in Section 2.3, how they are formed, and how their case agreement and noun-class

5. Chechen has a closed class of less than 300 'basic' verbs (Beerle 1988). Only part of these have class-identifying prefixes. The prefixes are *v*, *j*, *b*, *d*. Chechen has six noun classes, which are distinguished by pairs of class prefixes – one for singular and one for plural verbs: *v-b/d*, *j-b/d*, *j-j*, *d-d*, *b-b*, *b-d*. The first two of these classes are human male and human female.

agreement works, and that they (normally) occur before their head nouns. This section looks at the interaction between focus and relative clauses, and this interaction becomes visible as soon as a relative clause is extraposed.

3.1 Extraposition of relative clauses

The examples in Section 2.3 show that relative clauses behave much like adjectival clauses. They are headed by an attributive participle and occur before the nominal head they modify. Chechen does not distinguish between restrictive and non-restrictive relative clauses when they occur in this adjectival position.

Unlike adjectives, which may only occur before their head, relative clauses may occur in a clause-final position, which I will refer to as ‘extraposed’.⁶ Example (8a) shows an extraposed relative clause found in the literature, while (8b) shows a non-extraposed variant, as elicited from native speakers.

- (8) a. *San Syelzha-ghaala uohwavaan diezara,*
 1SG-GEN Grozny-city-ALL down-V-COME-INF D-need-IPFV
[t'amuo juoxiinachu]
 war-ERG J-destroy-PSTN-OBL
 ‘I had to go down to the city Grozny, which was destroyed by the war.’
 (Beksultanov 2004: 245)
- b. *[T'amuo juoxiinachu] Syelzha-ghaala uohwavaan*
 war-ERG J-destroy-PST-OBL Grozny-city-ALL down-V-COME-INF
diezara san
 D-need-IPFV 1SG-GEN
 ‘I had to go down to the city Grozny, which was destroyed by the war.’

I have not been able to determine a semantic difference between the extraposed variant in (8a) and the non-extraposed one in (8b), but, as far as I have been able to determine from the available data, extraposition most often coincides with the relative clause being non-restrictive, that is, with the referent of the head of the relative clause being uniquely identifiable as it stands (the corpus results described in Section 4.2, however, contain exceptions to this generalization). The head in Example (8a) is *Syelzha-ghaala* ‘the city Grozny’, which is uniquely identifiable in and by itself, so that the relative clause *t'amuo juoxiinachu* ‘destroyed by the war’ only adds background information, which is not needed to identify the referent of the head.

6. I am using the established terminology here, and I am not claiming that rightward *movement* has taken place in order for the relative clause to appear in the sentence-final position. As argued by Komen (2009a), if any movement has occurred at all, the relative clause became stranded in its base generated position, and the head moved for focus reasons.

3.2 Extraposition and focus

As shown by Komen (2009a), there is a restriction on the appearance of question words inside a relative clause when they are extraposed. Consider the relative clause in the default word order in (9a), and its extraposed variant in (9b).

- (9) a. *Cunna* [tuoghi chuohw wash jolu] cwa
 3SG-DAT valley-DAT inside living-PTC J-REL one
zuda jiezajelira
 woman J-love-PSTR
 ‘He fell in love with a woman living in a valley.’
- b. *Cwa zuda jiezajelira cunna*, [tuoghi chuohw
 one woman J-love-PSTR 3SG-DAT valley-DAT inside
wash jolu]
 living-PTC J-REL
 ‘He fell in love with a woman living in a valley.’
- c. *Cunna* [michahw wash jolu] cwa *zuda jiezajelira?*
 3SG-DAT where living-PTC J-REL one woman J-love-PSTR
 ‘He fell in love with a woman that lived where?’
- d. **Cwa zuda jiezajelira cunna*, [michahw wash jolu]?
 one woman J-love-PSTR 3SG-DAT where living-PTC J-REL
 ‘He fell in love with a woman that lived where?’

When the relative clause is in the default position, preceding the noun it modifies, it may host a question word, as in (9c), but not when it is extraposed, as in (9d).⁷ Apparently constituents with narrow focus (as signaled by the question word) are restricted in their position. Komen (2009a) checked different forms of clauses with and without question words with a native speaker for grammaticality, and found that question words as such may appear in the nominal head of the relative clause, the relative clause itself, or in both. The only situation when a question word is not allowed in a relative clause is when it is extraposed. The explanation given by Komen (2009a) for this phenomenon was that extraposition of a relative clause is only possible when its head is focused.

4. Corpus investigation

This section describes a limited corpus investigation into Chechen extraposed relative clauses, which was conducted to see what the relation is between extraposition and focus. The research conducted by Komen (2009a), and summarized in Section 3.2,

7. The status of Example (9c) is not completely clear, and more corpus research is needed to see if a construction with a question word inside a relative clause occurs in natural texts.

suggests that the fact that a relative clause is extraposed correlates with its head noun appearing in the immediately preverbal focus position. There are, however, reasons to question such an analysis: the conclusion was reached on the basis of elicited examples, and there seems to be no theoretical explanation for the relationship posited. By looking at natural and untranslated texts, the possible bias of elicited material can be avoided, and the theoretical explanation provided in the introduction to this article points to an alternative hypothesis: there is a relationship between *restrictive* extraposed relative clauses and the information status of their heads. The purpose of the corpus research described in this chapter, then, seeks to answer the following questions:

- (10) a. Where do the heads of extraposed relative clauses occur?
- b. What values can the information status of these heads have?
- c. Do *restrictive* extraposed relative clauses always have a head in focus?

The data used by this paper come from two different corpora. The first corpus is a selection of books that are available in electronic form (Arsanukaev 2008; Ezhaev & Ezhaeva 2007; Nunaev 1991). The second corpus consists of a set of newspaper and journal articles collected by the New Mexico State University, and will be referred to as the ‘NMSU corpus’ (Zacharsky & Cowie 2011). The data from both corpora are currently only available as plain text; they lack part-of-speech information, let alone syntactical parsing.

This chapter sets out by describing an automated search on non-extraposed relative clauses in the NMSU corpus (Section 4.1), which serves to illustrate how widespread the use of relative clauses is in Chechen, and what kind of relative clauses are found. The second search described in this Chapter (4.2) focuses on extraposed relative clauses. Both the corpus of books and the NMSU corpus have been used in that search.

4.1 Canonical relative clauses

The term ‘canonical relative clauses’ refers to those relative clauses that appear in the canonical position, which is before the noun phrase they modify. While this paper as a whole concentrates on the behaviour of *extraposed* relative clauses, the goal of looking for canonical (non-extraposed) relative clauses is that we would like to be able to compare the extraposed with the non-extraposed ones to some extent.

A search for canonical relative clauses was conducted on the NMSU corpus, since that corpus is available electronically, and can be investigated using the corpus research tool ‘CorpusStudio’, which has been developed in our research group in Nijmegen (Komen 2009b). The NMSU corpus has not been tagged for word category (part-of-speech), and this restricts the possibilities of looking for relative clauses. The algorithm that I have used, described in (11), detects only part of the canonical relative clauses.

(11) *Algorithm to find canonical relative clauses*

Step 1: Consider attributive participle forms that adhere to:

Condition a: it belongs to the set of recognizable forms

Condition b: it is *not* immediately followed by end punctuationCondition c: the preceding part of the sentence does *not* contain a comma

Step 2: Give the sentence and its translation as output

The algorithm concentrates on the part of the relative clause that can best be recognized automatically in Chechen, which is the participle form of the verb (Step 1). While there are many participle forms that completely coincide with the present or past tense of a verb, there are other forms that are uniquely identifiable as participle forms. ‘Condition a’ of Step 1 says that we only look at a subset of these uniquely identifiable forms. The subset taken for the search of the NMSU corpus consists of: (a) the nominative and oblique participle forms of the auxiliary (both affirmative and negative), and (b) the present tense oblique participle forms of the verbs from one particular conjugation (the ‘a-conjugation’).⁸ The participle forms that are located should not be immediately followed by end punctuation according to ‘Condition b’, because if they were, they would very likely be indicators of *extraposed* relative clauses. Canonical relative clauses precede the noun phrase that heads them, so that the relativizer – the attributive participle form of the verb – will never be followed by end punctuation if we have such a canonical relative clause. The last ‘Condition c’ of Step 2 is an additional precaution: extraposed relative clauses are obligatorily preceded by a comma, so if we exclude all sentences where the participle form is preceded by a comma, we are certain to have only those relative clauses that are not extraposed at all. The results of applying the algorithm described in (11) on the NMSU corpus are given in Table 1.

Table 1. Canonical relative clauses in the NMSU corpus

	Canonical relative clauses			
	Original		Translated	
Nominative	1298	(4,1%)	242	(3,5%)
Oblique	991	(3,1%)	277	(4,0%)
<i>N</i>	31624		6850	

8. The ‘a-conjugation’ consists of verbs like *tiesha* ‘believe’, which have a present tense ending on the vowel ‘a’. Only a small part of the ‘basic’ verbs (see Note 5) are of the ‘a-conjugation’, which makes describing them more doable.

The NMSU corpus consists of two parts: texts that are original Chechen (82%), and texts that have been translated from English into Chechen (18%). The number of canonical relative clauses that have been found with the algorithm in (11) may be called representative: there is not much difference in the kinds of canonical relative clauses found in the original and the translated parts, and there is not much difference between the proportion of relative clauses in the nominative case and other cases (marked as ‘oblique’).

A small sample of the different kinds of relative clauses found in the NMSU corpus is shown in (12). The kinds of relative clauses that have been found are restrictive (12a–c) as well as non-restrictive (13a–c), and the noun phrase heading the relative clause is found in different positions with respect to the finite verb.

- (12) a. *Doqqachu maewnie du [vajn maxkahn quollaran*
 great-OBL meaning-ALL D-PRS our country-LOC creating-GEN
aaghuor diesh dolu] mylxxa a ghullaq
 side D-PTC D-REL any thing
 (*Tq'a taxana, gush ma-xillara, Ahwmad-Hwaezhin carax jolchu fonduo*
i tajpa ghullaqash diesh du.)
 ‘Any creative thing done in our republic is of great importance.
 (And today, as we see, the Ahmad-Hadji fund is doing such things.)’
 [p86-00021:12]
- b. [*Diesharxuoshca jolu*] *juq'amettig choogha larjo po'eta*
 reader-PL-INS J-REL relation strongly value-PRS poet-ERG
 ‘The poet values his relationship with readers very much.’ [p86-00111:9]
- c. [*Erna lielash dolu*] *diinatash, baaxarxuoshna qieram ca*
 empty wander-PTC D-REL animals residents-DAT afraid NEG
xiliita juqq'iera dwaadaaxa dieza
 be-CAUS-INF midst-SRC away.take-INF d-need-PRS
 ‘Loose animals should be removed in order to provide security to
 residents.’ [p86-00163:43]

Although the NMSU corpus, which lacks part-of-speech tagging, cannot be used to automatically find word orders, a cursory glance at the results from the CorpusStudio project reveals that noun phrases headed by restrictive relative clauses can appear anywhere with respect to the finite verb. Example (12a) has it postverbally, and (12b) and (12c) have it appear clause-initially. The reason for having the relative clause postverbally in (12a) may be that the subject is then in a position where it can easily be picked up in the next clause by *i tajpa ghullaqash* ‘such things’.

If we turn from restrictive to non-restrictive relative clauses, the examples in (13) show that they have the same flexibility in position: the noun phrases that contain these relative clauses can occur before or after the finite verb.

- (13) a. *I sovghat hweeshashna dira [dynienna a dika*
 that gift guests-DAT D-do-PST world-DAT and good
jevzash jolchu] «Vajnax» xielxaran ansambluo
 J-know-PTC J-rel-OBL Vajnax dancing-GEN ensemble-ERG
 ‘That gift was made to the guests by the world renowned dance
 ensemble “Vainakh”. [p86-00038:17]
- b. [*Cynan deena gharbashuo q’uot’algha vina volu*] *iza*
 3SG-GEN father-DAT maid-ERG illegitimate V-do-PST V-rel 3SG
qi’niëra Panama ghaalan juq’ierchu baazaran
 raise-REM Panama city-GEN midst-SRC-OBL market-GEN
k’oshtan jaamartachu uuramashkahw
 district-GEN mean-OBL streets-LOC
 ‘Born the illegitimate son of his father’s maid, he was raised on the mean
 streets of the central market district of Panama City.’ [p34-00603:40]
- c. [*2003-chu sheran 6-chu oktjabriëhw t’ëiečna dolu*] *i*
 2003-OBL year-GEN 6-OBL oktober-LOC accept-PST d-rel that
zakon ghullaqdan duolalur du 2006-chu sheran 1-chu
 law operate-INF D-start-FUT D-PRS 2006-OBL year-GEN 1-OBL
janvariehw dyyna
 January-LOC from
 ‘That law, which was passed on October 6, 2003, will take effect on
 January 1, 2006.’ [p86-00186:15]

The noun phrase “*Vajnax*” *xielxaran ansambluo* ‘the dance ensemble Vajnakh’ in (13a) contains a non-restrictive relative clause, and appears *after* the finite verb. The noun phrases heading non-restrictive relative clauses in (13b) and (13c) both appear clause-initially, and their non-restrictive character is evident from the fact that the head in (13b) is a pronoun and in (13c) it is a demonstrative noun phrase: such word categories refer back to entities that have already been established in the text, and do not need a restricting modification in the form of a relative clause.

What we have seen so far, then, is that the canonical relative clauses we find in the NMSU corpus can be restrictive as well as non-restrictive, and the position of the noun phrase heading these relative clauses varies.

4.2 Extraposed relative clauses

The corpus research into *extraposed* relative clauses consists of two parts, since we have two different corpora we are working with: the manually searchable corpus of books and the NMSU corpus that we can search with CorpusStudio. We will start out by explaining the algorithm to search the NMSU corpus automatically for extraposed

relative clauses, and then continue with a discussion of the results from both corpora. The search results will be divided into categories that depend on two factors: (a) the position of the relative clause's head with respect to the finite verb (sentence-initial, immediately preverbal, or postverbal), and (b) the syntactic function of the head (adjunct or argument). There are then four different categories: preverbal argument heads, preverbal adjunct heads, clause-initial argument heads and postverbal argument heads, each of which will be discussed in turn in the next sections.

4.2.1 Finding extraposed relative clauses

Extraposed relative clauses have a few clear distinguishing factors. Since these clauses come clause-finally, and the relativizer (which is a participial form of the verb) always comes at the very end of the relative clause, we can find them by looking for these relativizers that appear before a sentence's end punctuation (such as a period and a question mark). This minimizes the job of finding relativizers that are uniquely identifiable: the participial forms of the copula, and the verb forms that have an oblique case suffix. Another discriminating factor for extraposed relative clauses is the fact that they need to be preceded by a comma. The algorithm that performs this search automatically is described in (14).

(14) *Algorithm to find extraposed relative clauses*

Step 1: Consider attributive participle forms that adhere to:

Condition a: the form belongs to the set of recognizable forms

Condition b: it is immediately followed by end punctuation

Condition c: the preceding part of the sentence contains a comma

Step 2: Give the sentence and its translation as output

The algorithm in (14) does what has just been described: it looks for recognizable participle head forms (Step 1a), checks whether these are immediately followed by end punctuation (Step 1b) and preceded somewhere in the sentence by a comma (Step 1c). If these conditions are met, then the sentence passes. It should be noted that the algorithm finds a number of results that need to be rejected, since they do not involve *extraposed* relative clauses, but the equivalent of *free* relatives in a locative case, as exemplified in (15).

- (15) a. *As cwa xillarg diica hwuuna. Macax cwa*
 1SG-ERG one happen-PST-NMLZ tell-INF 2SG-DAT once one
nuc ve'ana xilla, booxu,
 son-in-law come-PST-PTC be-PSTN say-PRS
 [stuncaxuoj bolchu]
 in-laws B-REL-OBL
 'Let me tell you a story. They say there once was this son-in-law, who
 came to visit his in-laws.' [m00094.43]

- b. *stuncaxuoj bersh*
 in-laws B-REL-NMLZ-PL
 ‘The in-laws.’

The second sentence in (15a) contains the clause in square brackets, which, at first glance, might look like an extraposed relative clause, but this is not true. The clause derives from the nominative form in (15b) *stuncaxuoj bersh* ‘those who are in-laws’, which is a ‘free relative’: a relative clause that lacks a head in the form of a noun or pronoun. The form *stuncaxuoj bolchu*, which is found in (15a), can be best translated as ‘to [the place] where the in-laws are’. It is the free relative from (15b), but now in a generic locative case.⁹

Table 2 shows the results of applying the algorithm in (14) on the NMSU corpus as well as the results of searching the book corpus manually. The free relatives and any other mismatches have been manually taken out, so that these results only contain extraposed relative clauses that have been manually verified.

Table 2. Extraposed relative clauses in the NMSU corpus and the book corpus

Head		NMSU corpus				Book corpus	
Position	Category	Original		Translated		Original	
Clause-initial	Argument	2	4%	0	0%	1	7%
Preverbal	Argument	41	73%	2	100%	6	43%
Preverbal	Adjunct	3	5%	0	0%	2	14%
Postverbal	Argument	10	18%	0	0%	5	36%

The total number of results of extraposed relative clauses in the NMSU corpus is 56, which contrasts starkly with the 2808 occurrences of non-extraposed relative clauses (see Table 1). This means that extraposed relative clauses constitute no more than a mere 2% of all relative clauses. The manual search in the corpus of books resulted in a total of 14 extraposed relative clauses. More research is needed to find out why Chechen has such a prevalence for non-extraposed relative clauses, but it could be a reflection of the strong head-final character of the Chechen language. If this were the case, there is all the more reason to find an answer to the question what causes extraposed relative clauses to appear at all.

9. Chechen, like other North-East Caucasian languages, has a range of locative cases. Most of the suffixes for these locative cases build on a basic form. It is this basic form *-chu* of the locative case that happens to coincide with the oblique participial form *-chu*.

The fact that we find heads of extraposed relative clauses in different positions with respect to the finite verb already answers research question (10a), which asks where these heads may occur. In order to also answer research question (10b), which concerns the information status of the heads of the extraposed relative clauses, we will review several examples from the different categories of extraposed relative clauses.

4.2.2 *Reverbal argument heads*

Extraposed relative clauses whose heads are arguments within the main clause, appearing preverbally, may contain different kinds of information, depending on whether the relative clause is restrictive or non-restrictive. The heads of relative clauses in this category appear in the preverbal narrow focus position, and they are often accompanied by contrastive focus, as illustrated in (16).

- (16) a. (*Syegahwa uuzur daac. Suox cwa voqqa wovdal xietar vu. Ghullaq xir daac ajqviilarx. Cwaccanhwaa bielxashka dwaanisbella, kajiettash boxkuchu naaxana ca yeshu so sannarsh.*)
caarna tiina, eesala hwaekam yeshu, [shiega
 3P-DAT calm quiet boss need-PRS self-ALL
qovdiinarg dwa a yecush, wadda wash volu
 hand.down-NMLZ away and accepting fixed living V-REL
 ‘(They won’t like me. They’ll think I’m a great idiot. Nothing will come from an informer. Work is provided everywhere, people don’t need the likes of me.)
 What they are looking for is a calm quiet captain, who accepts bribes and does nothing.’ (NunaeV 1991: 172).
- b. *Ishttachaarna juq’ahw obkomax boozush bolu*
 like-PL-DAT among province-MAT B-depending B-REL
rajkoman sekretarash a, tajp-tajpana laqarchu baalxahw
 region-GEN secretaries and different higher-OBL work-LOC
bolu kyygalxuoj a xir bu, [bertahw cwaena ju’ush
 B-REL leaders and FUT B-PRS peace-LOC together eating
xilla bolu
 been B-REL
 (*Ishttachaariex deputatash xilaw, iza q’ooman doq’azalla ju.*)
 ‘Among the likes will be regional secretaries associated with provinces, leaders of different kinds of important projects, who have been peacefully eating together. (If there were party-representatives among them, it would be a national disaster.)’ (NunaeV 1991: 173)

- c. (*Dyhwal gerz ca doolush tiinalla hyetticha, kuorax aarahwaezhira husamdaa. Shien kiet'ahw arq'al vyezhna wyllush stag gira cunna. Vevzira cunna iza.*)

iza *q'uu vaacara,* *naaxa* “*Deelan peeq'ar*”, *oolush,*
3SG-NOM thief V-NEG-PSTR people-ERG God-GEN poor saying
c'e *jooqqush,* *cwa miska stag vara,* [*laqa juq'ahw, tishachu*
name J-calling one poor man V-PSTR high amidst old-OBL
c'a chuohw wash volu]
house inside living V-REL

‘(When the shooting stopped, the head of the house looked out of the window. He saw a man near his courtyard, who had fallen down backwards. He knew him.) It was not a thief, but a poor man whom the people called “God’s misfortune”, who lived high up in an old house.’

(Axmadov 2006: line 56)

The head of the relative clause can be contrastive with respect to the preceding context, as in (16a), the following context, as in (16b), or within the main clause itself, as in (16c). The contrast in (16a) is between *hwaekam* ‘captain’ and *so sannarsh* ‘the likes of me’. It is between *kyygalxuoj* ‘leaders’ and *deputatash* ‘representatives’ in (16a) and (16b), and *miska stag* ‘a poor man’ in (16c) contrasts with *q'uu* ‘a thief’.

- (17) (“*Dika du, – eelira cuo, – dika du t'aaqqa, cwacca aatta humnash a jazjiesh, zhimma sadawa mega as,*” – *aella. Txojscha kevnal aarahw vara, i q'amiel cheqdoolush.*)

san *Syelzha-ghaala uohwavaan* *diezara,*
1SG-GEN Grozny-city-ALL down-V-come-INF D-need-IPFV
[*t'amuo juoxiinachu*]
war-ERG J-destroy-PSTN-OBL

‘(“Okay, – he said – good, I can write down some light stuff and take a bit of a rest.” The two of us were standing outside the gate, finishing our discussion.) I had to go down to the city of Grozny, which was destroyed by the war.’

(Beksultanov 2004: 245)

One more example with a focused preverbal head is (17), and this example also involves contrast, but *not* on the head of the relative clause. The main contrast is between two clauses: the whole clause *Syelzha-ghaala uohwavaan* ‘go down to the city Grozny’ (which is the constituent preceding the finite verb *diezara* ‘need’) contrasts with the clause *zhimma sadawa* ‘take a bit of a rest’. This means that, even though the head of the extraposed relative clause *Syelzha-ghaala* ‘the city Grozny’ is in the focus position, it does not coincide with the constituent that explicitly contrasts with another constituent. The difference between this example and the previous ones in (16), however, is that the three earlier examples have *restrictive* extraposed relative clauses, whereas

the relative clause in (17) is non-restrictive: the city *Syelzha* ‘Grozny’ can be uniquely identified without the help of the relative clause.

On the whole, we can conclude that the data show an interesting link between extraposition and information status: the head of an extraposed non-restrictive relative clause is often contrastive if the head occurs in the immediately preverbal focus position.

4.2.3 Preverbal adjunct heads

Both the manual research on the corpus of books and the automated research on the NMSU corpus gave a number of occurrences where the extraposed relative clause is headed by a constituent that has an *adjunct* role in the relative clause. These form a special class to which, as far as I am aware, attention has not been drawn before. A typical representative of these data is (18), taken from a literature primer. The author discusses a story with Nuradilov as the main character.

- (18) (*Dramaturguo ... qechu bwaexuoshka a dyycyytu Xanpashin aamaliex, cynan quonaxalliex, majralliex laecna. Gnezdikovs booxu:*)
sho sov xaan ju, [naaq'uost Nuradilov syeca
 year more (J)time J-PRS comrad (V)Nuradilov 1SG-INS
t'aamiehw volu]
 war-LOC V-REL
(Ocu xaanna ... jaalx bwee aax bwee fashist viina cuo, ... shiitta muostagh laecna karavaliina.)
 ‘(The author shows Nuradilov in action... and makes other people speak of him. Gnezdikov says:) It is now more than a year in time that comrade Nuradilov has been fighting at my side.
 (During that time he has done ... killed 650 fascists and ... taken 12 prisoners.)’ (Arsanukaev 2008: 209)

The main clause in (18) is like a subject-less equative clause, where the temporal noun phrase is the complement (comparable to English **A year ago is that I visited him*). As is usual in equative clauses, there is noun-class agreement between the complement (in this case *xaan* ‘time’, which is of the *J*-class) and the finite verb (here *ju* ‘is’). The relativizer *volu* ‘who/that is’ in the relative clause agrees in noun class with the nominative case argument within the relative clause (the *v*-class is used for masculine singular persons).

The function of the extraposed relative clauses with temporal adjunct head is that of frame-setting. The temporal NP provides the time for the new frame, and the relative clause contains material starting a new section, and it is completely on the story-line, as the following context in the example above shows.

The instances that were found with this construction are not accompanied by explicit contrast on the head. The type of relative clause used in these instances is

restrictive, which does not contradict the hypothesis about the relationship between extraposed *restrictive* relative clauses and the appearance of the heads of such clauses in the preverbal focus position, as stated in the introduction.

4.2.4 Clause-initial argument heads

There are a few instances of extraposed relative clauses with an argument head that appears in clause-initial position, preceding the preverbal focus position, as for instance (19). A contrastive reading seems to be fitting for the head noun (the ‘party chief’ is contrasted with the ‘director’), but this certainly is not contrastive *new* information. It is more like a contrastive topic, since the party chief has been mentioned earlier.

- (19) (A: “*Shun direktorna xae’i tq’a iza?*”
 B: “*So vaxara direktor chuohw vu hwazha. Vaac iza. Comgush xilla, bolniciehw vu booxu.*”
 A: “*Partkomie ca vaxara hwo tq’a?*”
partkomana hun xae’a, uchitirna, [xix
party.chief-DAT what knows teacher-DAT water-MAT¹⁰
jooluchu viran c’oga a laacaza volchu]
J-go-PRS-OBL donkey-GEN tail and catch-NEG V-REL-OBL
 ‘(A: “Did your director know it then?”
 B: “I went to see whether the director was in. But he wasn’t. They said he was ill and in hospital.”
 A: “Didn’t you go to the party chief then?”
 B: “What does the party chief know, who cannot even catch the tail of a donkey walking in water?”” (Nunaev 1991: 106)

This class of extraposed relative clauses helps answer the research question in (10a): heads of relative clauses do not always occur immediately preverbally, but may also occur clause-initially. The class also extends the answer to (10b): extraposed relative clauses can have heads that are a *topic* instead of being a focus. The nature of the relative clause in (19) is appositive, since the *Partkom* ‘party chief’ is an established entity, so that we may safely conclude that this class does not contradict the hypothesis in the introduction about the relation between *restrictive* relative clauses and the position of their heads either.

10. The material case (MAT) expresses (1) the material from which something is made, (2) aboutness, (3) through (with water).

4.2.5 *Postverbal argument heads*

The corpus investigation was instrumental in revealing a number of instances where extraposed relative clauses have heads occurring *after* the finite verb in the main clause – something that has not been noted in previous work on Chechen, as far as I am aware. Example (20) serves as an illustration of this class. The ‘children’ are introduced in the preceding discourse. They are the ones being commented on through the extraposed relative clause ‘they are sweaty from playing’.

- (20) a. (*Beerash lovzush a jitina, jystaxjeelira i shi*. ... *Maalxana dyhwal hwaeddachu maarxanuo shiila windagh daerzhiira laetta t̃e. Ch̃oozhara duoxk laqqa hwalajdelliera. Shellush laettara.*)
“sheldala mega beerash, [lovzush hwacarsh a devlla get-D-cold may-PRS (D)children playing sweat-PL and D-gone dolu] dwaadigii vajshimmuo ysh?” xaettira Lajsa
 D-REL away-D-lead-QM we.INCL-TWO-ERG 3PL asked Lajsa-ERG
 ‘(Having left the children playing, the two of them stepped to the side. ... A cloud hid the sun, spreading a cold shadow. A fog came up from the wood. It became chilly.)
 “The children might get cold. They are sweaty from playing. Shall we pick them up?” – asked Laysa.’ (Nunaev 1991: 11)
- b. (*Ghullaq, oolush ma xillara, ynsharahwleerchu xilamashca dyezna dara: txan deeda Lagash laecnachuohw vajniera. I laacarna biexkie txan tajpanan naaxa qynan deeda Mezhad loorura.*)
muuxxa delahw a, hwynax dechigie vaxxanchyra Lagash
 however may.be forest-MAT wood-ALL V-go-PST-SRC Lagash
laecna dwaaviga baexkinchaarna juq̃ahw giniera iza,
 arrested away-V-lead B-come-PST-NMLZ-DAT among see-REM 3SG
 [cu xeenahw NKVD-iehw buolx biesh xilla volu]
 that-OBL time-LOC NKVD-LOC work B-do-PTC be-PSTN V-REL
 ‘(It was said that the case was connected with events going way back: our grandfather Lagash had disappeared during his arrest. The people from our tribe regarded Mezhad guilty of his arrest.)
 However it may be, he (=Mezhad), who at the time was working at internal affairs, was seen among those who took away Lagash, after he had been arrested when he came from the woods to glean wood.’
 [m00130.47]

The main clause in the examples from this category often contains an intransitive verb, which is then followed by the subject (20a), or alternatively it contains a transitive verb and is then followed by the object (20b). The subject is left unexpressed in the latter type, which is a typical way in Chechen to achieve a kind of passivization,

as can be observed from the translation of the example into English. If we take the observation from Section 2.1 into account that the immediately preverbal slot is used for narrow focus, and combine this with the explanation for the postverbal position (see Section 2.2), then it appears from the data we have that Chechen uses the V-S/V-O word order to force a topic interpretation of the intransitive subject or transitive object.

This is exactly what takes place in Example (20a): the ‘children’ are re-introduced as topic (they were topic several sentences back), and this is confirmed by the following sentence, which refers to them with a pronoun. The extraposed relative clause contains backgrounded material, not on the main story line. In Example (20b), the author wants to continue with ‘grandfather Mezhad’, who has just been introduced, and this is possible by making him a postverbal topic.¹¹ One more example of an extraposed relative clause with postverbal head in (21) illustrates how this postverbal position is used for topical referents.

- (21) (*Jaessa laettash ju hinca Cheberlojski, Itum-Kalinski ... rajonash xilla mettigash. Dwaatiisina kuotarsh, irziesh. Aaqajevlla, xirdina laamanan jartash.*)
baassabella diinna laamanan muoxk, [bweennash
 B-empty-B-PST whole mountain-GEN country hundred-PL
ezarnash adamash qaebna bolu]
 thousand-PL people-PL feed-PST B-REL
 (*Vajshimma hun dina, i naax ciga juxabierzuo hwazha?*)
 ‘(The places where the provinces of Cheberloj, Itum-Kali ... were located are now devastated. The settlements and the fields have been demolished. The mountain villages have become wild.) The whole mountainous country has been emptied, which (once) fed hundreds of thousands of people. (What have we two done to see to it that those people were returned there?)’
 (Nunaev 1991: 127)

The head of the extraposed relative clause in (21) is *laamanan muoxk* ‘mountainous country’, which clearly is the lead topic of all the preceding sentences: the Cheberloj and Itum-Kali provinces are the mountainous ones, and the settlements, fields and villages are positioned in these mountain areas. The information in the relative clause that this mountain area once fed ‘hundreds of thousands of people’ is background

11. The structure of the sentence is: Adv-PP_{LOC}-V_f-S_{PRO}. The locative PP serves as ‘point of departure’, which is why it has to appear clause-initially. If the subject pronoun (either on its own with an extraposed relative clause, or as complex subject with preceding non-extraposed relative clause) were placed between the PP_{LOC} and the finite verb, then it would have to be interpreted as being focused, which contradicts its topical nature. Postverbal placement, then, seems to be part of a strategy of avoidance. But more research is needed to establish this unequivocally.

information, while the next sentence, where the author asks what ‘we’ have done to return the people there, is part of the storyline.

It appears, then, that the extraposed relative clauses that have a postverbal head are quite a different construction than those where the head occurs before the finite verb. The differences result from two observations: (i) constituents that occur after the finite verb in Chechen are from a particular topic-oriented type anyway (or at least a focus-avoidance type), and (ii) extraposition of relative clauses from postverbal heads is only possible if the relative clauses are appositive.

4.2.6 *Embedded heads*

One token, which is in (22), does not fit any of these four types, because its head is neither a sentential adjunct nor an argument of the main verb in the relative clause; instead, its head *xiexuo* ‘guard’ is syntactically dominated by the word *bien* ‘only’, which is a focus particle.¹²

- (22) (*Evlajuqq’ie ve’ara so.*)
cwa a vaacara, xiexuo bien, [tykana xa
 no one V-NEG-PST guard **except** shop-DAT watch
diesh volu]
 D-keeping V-REL
 ‘(I came to the center of the village.)
 There was nobody there except for the guard, who was keeping watch at
 the shop.’ (Beksultanov 2005: 100)

It should be noted that an argument of *bien* ‘only’ always has focus, and also strongly implies contrast, since ‘only’ explicitly excludes alternatives. More examples from natural texts would be needed to see what generalizations can be drawn from the placement of extraposed relative clauses with respect to *bien*.

4.2.7 *Restrictive versus non-restrictive extraposed relative clauses*

The previous sections have shown that the heads of extraposed relative clauses can appear in different positions with respect to the finite verb, and it has become clear that the presence of such an extraposed relative clause does not change the information status of the heads. Heads in the immediately preverbal position, for instance, are focused, just as constituents in that position would be if they did not have a relative clause. In sum, we have clear answers to research questions (10a) and (10b). The claim in the introduction that has been repeated as research question (10c), however, has

12. The focus particle *bien* ‘only, except’ syntactically functions as a postmodifier in Chechen, much like a postposition, but without case assignment.

not yet been completely answered. This claim involves a relationship between *restrictive* extraposed relative clauses and the information status of their heads. In order to address the claim, all the 70 extraposed relative clauses that were identified in the NMSU corpus and the corpus of books have been checked manually to establish the type of each relative clause. Those relative clauses whose heads are identifiable without the presence of the relative clause have been labelled ‘appositive’, and the others have been labelled ‘restrictive’. The results of this exercise are shown in Table 3.

Table 3. Restrictive versus non-restrictive extraposed relative clauses

Head		Type				Total
Position	Category	Restrictive		Non-restrictive		
Clause-initial	Argument	0	0%	3	7%	3
Preverbal	Argument	19	79%	28	61%	47
Preverbal	Adjunct	5	21%	0	0%	5
Postverbal	Argument	0	0%	15	33%	15

The results unequivocally confirm the claim that only *restrictive* extraposed relative clauses have a head that occurs in the language’s focus position (the position immediately preceding the finite verb). Appositive (non-restrictive) relative clauses may apparently occur almost everywhere, with the exception of those whose relativized head has an adjunct role in the relative clause. The relative clauses from this last class, as in Example (18), all have a temporal adjunct as head, and none of the 5 temporal references were absolute, so that they all need the relative clause for their identification.

Most important for the main hypothesis in this paper, however, is the relationship found between the restrictive nature of a relative clause and the position of the head: only focused heads can have a restrictive relative clause. Many of the 19 instances found in the two corpora have the head of the extraposed relative clause involved in explicit contrast, witness the examples in (16a–c), but the examples in (23) make clear that contrast is not an essential feature of this group.

- (23) a. (*Suuna c’esh gira sajna t’iehw.*)
juxa krant dagaje’ara, [ishkolan kiertahw jolu]
 then tap remember-PSTR school-GEN yard-LOC J-REL
 ‘(I saw blood on myself.) Then I thought of the tap in the schoolyard.’
 [m00677:101–102]
- b. (*As c’esh dwaadeexira, kuorta a bylush, jyhw a.*)
avtobus gira suuna [bielxaluoj a iecna, ghaala]
 bus see-PSTR 1SG-DAT workmen and take-PST-PTC city

jyedush jolu]
 J-go-PTC J-REL
 (So *t'iehwā xi'ira uohwa.*) [m00677:103–105]
 '(I wiped the blood away and washed my face.) A bus taking workmen
 to the city was what I saw next.' (I sat down in the back.)

The examples in (23a) and (23b) are about a boy running away from an argument with relatives, trying to flee the village. In (23a) he notices blood on his face and is confronted with the problem of how to make himself presentable. The resolution to this problem pops up in his mind as he remembers there is a tap in the schoolyard. The *krant* 'tap' is new to the discourse and needs additional information for identification. This is supplied by the restrictive relative clause, which gives the location of the tap. The combination of the head and the relative clause form what Prince (1981:236) has coined a "containing inferrable": the 'tap' infers from the 'schoolyard', which is contained within the whole complex noun phrase 'the tap in the schoolyard'. Seeing the head and its relative clause as two parts of such a close-knit unit as a containing inferrable makes it clear that there is a strong attraction between the two. Indeed, when the addressee reads or hears the generic *krant* 'tap', he creates a mental entity in his mind, but is on the lookout for further information to tie this entity either to information that is already in his mind or is otherwise situationally evoked. The resolution to this built-up tension comes when he encounters the relative clause: this supplies the necessary ties to identify the 'tap' uniquely. It is the tension-building resulting from delayed identification that leads to additional emphasis on the already focused constituent *krant* 'tap'.

Having found water, the story's protagonist cleans himself, and the next thing he sees in (23b) is a bus heading for the capital city (Grozny). The *avtobus* 'bus' is clearly in focus: it is a new entity on the scene, and it is central to subsequent sentences (it is referred to by inference from *t'iehwā* 'back' in the next sentence). The bus is not contrasted with other entities, but it has a very prominent position (both clause-initial as well as preverbal) and a pivotal function in the story: it provides the means of escaping from the village. Sentence (23b), too, has tension-building due to delayed identification of the otherwise generic *avtobus* 'bus'.

5. Conclusions

Thompson (1987) and Reinhart (1984) already concluded that there is no easy and obvious link between subordination and backgrounding, and the research discussed in this paper confirmed these findings for one form of subordination (extraposed relative clauses) and the information status of the noun phrase heading the relative clause.

However, there is a more complex link: extraposed restrictive relative clauses can only have heads that are narrowly focused, and this focus is often accompanied by overt contrast.

The research described in this paper has made use of two corpora: a manually investigated corpus of several books and a programmatically searchable corpus of journal and newspaper articles (the NMSU corpus). The corpus research revealed that only 2% of all relative clauses that are identifiable with the currently available means are extraposed. The question addressed in this article is whether the use of extraposed relative clauses finds its motivation in information structure. Non-extraposed relative clauses seem to occur in all different positions of the clause, and so do the noun phrases heading the extraposed relative clauses that were found. The placement of the heads of extraposed relative clauses is mainly determined by information structure requirements that are linked with SOV languages in general: focused constituents immediately precede the finite verb (Komen 2007). This indicates a lack of correlation between extraposition of relative clauses and information structure. However, when the extraposed relative clauses are divided into two groups, restrictive and non-restrictive ones, it becomes clear that only the restrictive ones have a head that appears in the immediately preverbal focus position. Inspection of these instances shows that there is narrow focus on these heads, and in many cases there is overt contrast.

The research presented here begs for a follow-up in terms of genre: the texts in the corpora used for this research were all written prose, so that we do not know how the numbers will be when it comes to poetic texts and to oral communication.

The results of this research lead to the expectation that other SOV languages that allow extraposition of restrictive relative clauses also need to have the heads of these clauses occur in the language's focus position. The research also revealed an interesting group of extraposed relative clauses that are characterized by having a temporal noun phrase as head, which has an adjunct role in the relative clause. This construction deserves separate attention.

Abbreviations

ALL	allative	NMLZ	nominalizer
B	noun class B	NOM	nominative
BEF	before	OBL	oblique
CAUS	causative	PL	plural
D	noun class D	PRS	present
DAT	dative	PST	past
ERG	ergative	PSTN	past on <i>-na</i>
FUT	future	PSTN	past on <i>-ra</i>

GEN	genitive	PTC	predicative participle
IPFV	imperfective past	QM	polar question marker
INCL	inclusive	REL	relativizer
INF	infinitive	REM	remote past
INS	instrumental	RFL	reflexive
J	noun class J	SG	singular
MAT	material case	SRC	source
LOC	locative	V	noun class V
NEG	negation	1, 2, 3	first, second, third person

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