An introduction into Chechen relative clauses

Abstract

Chechen is an SOV language that uses clauses headed by a participial form of a verb to modify a noun where other languages would use a relative clause headed by a relative pronoun. Most relative clause types in Chechen can optionally contain a resumptive (realized as reflexive pronoun). The participial heading the relative clause agrees in case with the head noun, while its noun-class agreement is a non-trivial issue. Other features noted of the Chechen relative clause are that it does not distinguish between appositive and restrictive ones, and that free relatives in Chechen function as other noun phrases. In the second part of this paper the syntax of the relative clause is described. Resumptives are argued to be base-generated. Extraposed relative clauses are analyzed as stranded IP remnants after the argument they modify has moved up to a focus phrase.

Keywords: Chechen; relative clauses; resumptive; reflexive; extraposition

1. Introduction

Chechen is a language spoken in the Caucasus by approximately one million people. The unmarked surface order of the language is SOV, and it is morphologically ergative.

Unlike a language such as English that uses relative pronouns such as *which*, or relativizers such as *that*, to introduce a relative clause, Chechen does not have a special word fulfilling that function. The strategy for relativization in Chechen works as follows: the noun to be relativized is not spelled out in the relative clause; the main verb of the relative clause becomes a participle (i.e.: a verbal adjective) that agrees in case with the head noun it is modifying in the clause that dominates it, and that agrees in noun-class either with the relativized noun or with another noun in the relative clause.[1]

This paper is set up as follows. In section 2 I give an overview of the relative clause in Chechen –its basic composition, what can be relativized, how relative clauses can be nested, and what free relatives look like. In section 3 I propose a syntactic description of the Chechen relative clause based on a minimalist point of view (Chomsky 1995). The conclusions are summarized in section 4, where I also discuss areas for further research.

2. Relative clauses in Chechen – the data

In this paper the examples that are given are the result of consultation with native speakers unless another source is explicitly identified at the end of the example. I will no clarify the conventions I use (see Alexiadou 2000). The *relative clause* in example (1) is the part of the sentence set out with square brackets. The relative clause is a modification of the *head noun* "picture". When referring to the head noun as it has been within the relative clause before

[1] Since Chechen does not have another strategy I will speak about the Chechen *relative clause*. In this paper I argue that the Chechen relative clause is a CP.

relativization took place, one speaks of the *relativized noun* or *relativized nominal*.[2] In a language like English the head noun is not expressed inside the relative clause, leaving a gap. In some other languages there is a *resumptive* instead of the gap.

(1) I have given the picture$_i$, [that/which$_i$ my father had taken ***t***$_i$], to my children.

In the example above the head noun is in the accusative case in the matrix clause. The relativized noun is also in the accusative case in the relative clause. The linking element between the head noun and the relative clause can be a *relativizer* like *that* or a *relative pronoun* like "which". In English relative pronouns are usually the same as question words.

Section 2.1 describes general features of the Chechen relative clause are shown. In section 2.2 I show what elements can be relativized in Chechen. Then in section 2.4 I show that nested relative clauses are allowed to some extent in Chechen, but that they are problematic due to the head-final structure of the language. Next section 2.5 gives an overview of free relatives in Chechen. In section 2.6 I show that a distinction between restrictive and appositive relative clauses is not morphologically or syntactically marked in Chechen.

2.1. Basics of the Chechen relative clause

2.1.1. Simple main verb of the relative clause

The Chechen relative clause differs from a simple finite clause in the following ways: (a) the relativized argument is either deleted or replaced by a resumptive, (b) the word order is strictly verb-final, (c) the main verb occurs in a participle form. This process is illustrated by the finite clause in (2) and its relative clause counterpart in (3).[3] The object *dieshnash* 'words' of clause (2) becomes the head noun of the relative clause in (3). The object is not repeated in

[2] In this paper I may speak of the head *noun*, even though at times it might be more appropriate to speak of the *noun phrase* heading a relative clause, as shall become clear in section 3.

[3] Unless a source is given, the Chechen examples have all been provided by native speakers.

the relative clause, leaving a gap there. The head noun is in the absolutive case, and so is the relative clause as a whole. That the original clause's main verb *xae'a* 'knows' has become a participial *xu'u* in the relative clause is visible because of the vowel changes.

(2) Suuna i dieshnash xae'a
1S-DAT these word-PL-ABS know-PRS
'I know these words'

(3) [Sajna xu'u] dieshnash$_i$ niisa swa'aala lae'a suuna
1S-DAT know-PRS-PTC word-PL-ABS right speak-INF want-PRS 1S-DAT
'I want to pronounce the words that I know right.'

The above clear distinction between the present tense form *xae'a* of a verb and the present participial form *xu'u* is an exception. For most verbs, the participial suffix is phonologically empty[4]. The fact that the verb *hwyequ* 'blows' has become a participial in example (4) becomes visible due to its case ending. There the head noun is in the ergative case, for which reason the relative clause gets an "oblique" case marker attached (oblique denotes any non-absolutive case).

(4) [Lyra hwyequchu] muoxuo dittash uoramashca swadooxura.
fiercely blow-PRS-OBL wind-ERG tree-PL-ABS root-PL-INS hither-D-extract-IMPF[5]
'The fiercely blowing storm uprooted trees.' (Khamidova 2003:buorz)

Case marking on the relative clause is done in the same way as it is done for adjectives. For instance the adjective *dika* 'good' does not have an additional ending when it modifies a noun in the absolutive, as in *dika stag* 'a good person'. But when the noun it modifies is in any other case, the morpheme *–chu* is added, as in *dikachu stagana* 'to a good person'. The case of the

[4] Depending on the dialect this morpheme is realized as nasalisation in bisyllabic roots. For instance *muox hwyequ* 'the wind blows', but *hwyequn muox* 'the blowing wind'.

[5] The capital D refers to the noun-class prefix *–d* of the verb. In this situation agreement is with the absolutive case argument *dittash* 'trees'. Contrary to what is often seen in Bantu languages, in Chechen the noun does *not* usually begin with the noun-class prefix. Other noun-class prefixes in Chechen are: *-j*, *-v*, *-b*. They will be referred to in the gloss lines by J, V and B respectively.

relative clause's participial verb (i.e: absolutive or oblique) *always* agrees with the case of the head noun (e.g: absolutive, ergative, dative etc.). Together they seem to form one noun phrase, with the relative clause appearing to be a participial clause in nature, functioning much the same as an adjective.[6]

2.1.2. Auxiliary as main verb of the relative clause

The auxiliary can be the main verb of a clause, as in example (5). The clause consists of a subject *juow* 'girl' and an adjectival complement *xaza* 'beautiful'. The auxiliary agrees in noun class with the subject.

(5) Juow xaza ju
girl-ABS beautiful J-PRS
'The girl is beautiful.'

When the subject of this simple clause is relativized, then a clause like example (6) can result. Note that the auxiliary *ju* transforms into the participial form *jolu* of the auxiliary.

(6) Xaza jolu juow aarahw laetta
beautiful J-REL girl-ABS outside stand-PRS
'The/a beautiful girl stands outside.'

Adjectives can modify nouns straightforwardly, without being part of a relative clause, as is illustrated in example (7). This is the unmarked case.

(7) Xaza juow aarahw laetta
beautiful girl-ABS outside stand-PRS
'The/a beautiful girl stands outside.'

The difference between (6) and (7) is only marginal. One hypothesis is that (6) is slightly more definite, in the sense that it is more likely to be a girl that came up earlier in a discourse, but this merits further study.

[6] The syntactic nature of the Chechen relative clause will be discussed in more depth in section 3.1.

There is another construction where the auxiliary is the main verb of the relative clause, which is explained in section 2.2.6. In that case the auxiliary does not have the meaning 'to be', but 'to have'.

2.1.3. Complex main verb of the relative clause

When a clause such as (8), which uses a compound tense like the present or past continuous, is transformed into a relative clause, then the auxiliary (in this case *vu*) changes into a special participial form (in this case *volu*), as shown in (9).

(8) Muusa cigahw laettash vu
Musa-OBL there stand-PRS-PTC V-PRS
'Musa is standing there.'

(9) [Cigahw laettash volchu] Muusana so gira
there stand-PRS-PTC V-REL-OBL Musa-ERG 1S-ABS see-PSTR
'Musa, who was standing over there, saw me.'

Just as the auxiliary has an affirmative and negative form, so the auxiliary's participial can also occur in an affirmative and negative form. Table 1 gives a paradigm of the auxiliary, its negative counterpart, and its participial forms. The declension of the participal auxiliary for case follows the same pattern as the one for adjectives. That is to say there is one form for the absolutive, and one oblique form for all the other cases.

Table 1 Auxiliary participial forms

	Affirmative			**Negative**		
	Auxiliary	**Participial**		**Auxiliary**	**Participial**	
Class		**Absolutive**	**Oblique**		**Absolutive**	**Oblique**
v	*vu*	*volu*	*volchu*	*vaac*	*voocu*	*voocuchu*
j	*ju*	*jolu*	*jolchu*	*jaac*	*joocu*	*joocuchu*
d	*du*	*dolu*	*dolchu*	*daac*	*doocu*	*doocuchu*
b	*bu*	*bolu*	*bolchu*	*baac*	*boocu*	*boocuchu*

2.1.4. Agreement

While the participial relative clause always agrees in *case* with the head noun, phi-feature agreement (number, gender, person) does not usually do so.

In general Chechen indicates phi-feature agreement by means of noun class agreement between the main verb of a clause and an argument. For verbs that do not take a class prefix (which is one of the consonants *v*, *j*, *b*, *d*), agreement is not usually visible, as in example (4). For those verbs in Chechen that do take a class-prefix, the noun-class agreement becomes visible. The first consonant of the verb is the one that agrees with the argument's noun class and number. Unlike Bantu languages, for instance, the nouns themselves do not have a class-marking affix. In a Chechen main clause the noun class agreement always occurs with an absolutive case argument (either the object of a transitive clause or the subject of an intransitive clause).

For relative clauses the noun class agreement is between the main verb (i.e. the participial head) of the relative clause and an argument within the relative clause. Note the agreement in example (10) below.

(10) [Kiexat dieshna] k'ant vyelush vara
letter-ABS D-read-PSTN boy-ABS V-laugh-PRS-PTC V-PSTR[7]
'The boy who had written the letter was laughing.'

Here the head noun *k'ant* 'boy' takes class marker *v*, while the noun *kiexat* 'letter' takes class marker *d*. The main verb of the relative clause (the past tense participial *dieshna*) agrees with the noun-class of the absolutive object *kiexat* 'letter' of the relative clause. In general it can be said that the past and present tense participials in a relative clause that are derived from "simple" verbs (i.e. non-auxiliaries), agree in noun-class with an absolutive object within the relative clause.

Agreement in relative clauses involving the participial auxiliary *dolu* is sometimes ambiguous. Take for example clause (9) from the previous section. It is ambiguous whether the participial auxiliary *volchu* agrees in class with the absolutive case trace of *Muusa* in the

[7] The abbreviation PSTN refers to the *–(i)na* suffix kind of past tense. This is in opposition to the PSTR, which refers to the *–ira* suffixed past tense. Differences between these tenses will not be treated here.

relative clause, or whether it agrees with the head noun *Muusa*, which is the dative subject of the main clause.

I will say more about agreement later on in this paper, after the whole paradigm of relative clauses has been reviewed in section 2.9.

2.1.5. Tense

The verb in a matrix clause can occur in many tenses. For an overview of the meaning of tenses in Chechen I refer to the literature (Nichols 1994a). The tenses that can be used by the main verb of the relative clause (i.e. a participial form) are a subset of the available tenses in Chechen. An overview of the tenses that can be used in matrix clauses and in participial clauses is given in Table 2. Note that in principle the simple verb can only be transformed into a present (like *dyeshu*) or past (like *dieshna*) participle. But when headed by a participial auxiliary, more complex tenses can be formed. The participial auxiliary *dolu* (and related forms) only has a present tense form, while *xilla* (derived from the auxiliary *xila* 'to be, to happen, to become') can only be used as a past tense auxiliary.

Table 2 Participle Clause tenses

Tense forms	**Matrix clause**	**Participial Clause**	
		with simple verb	with auxiliary
Generic present	*dyeshu*	*dyeshu(n)*	-
Present continuous	*dyeshush vu*	-	*dyeshush volu*
Plain future	*dyeshur*	-	-
Compound future	*dyeshur du*	-	*dyeshun dolu*
Recent past	*diishi*	-	-
Non-referential past	*dieshna*	*dieshna*	
Compound past	*dieshna du*	-	*dieshna dolu*
Referential past	*diishira*	-	-
Past continuous	*dyeshush vara*	-	*dyeshush xilla*
Imperfective	*dyeshura*	-	-
Remote past	*dieshniera*	-	-

Note that in a relative clause it is not possible to make the distinction between referential (also called "witnessed") and non-referential past tense, nor are the imperfective, the remote past and the recent past tenses possible. But the relative clause is not the only kind of subordinate clause in Chechen that has a limited set of tenses available. The same subset of tenses is, for

example, available in causal clauses ending on the word *deela* 'since' (Good 2003). The absolute tense of the relative clause depends on the combination of the tense within the relative clause and the tense of the matrix clause.

2.2. What can be relativized?

In this section I will review which constituents of a clause can be extracted out of that clause to function as the head noun of a relative clause. The information given here partly overlaps with what can be read in the literature (Nichols 1994a). However, I will be making slightly different conclusions as to what noun phrase the relative clause's head agrees with. Furthermore I will show where resumptives – pronouns that fill the gap left by relativization – can and cannot be used. At the end of this section the results are compared with the accessability hierarchy (Keenan and Comrie, 1977).

2.2.1. Relativizing the subject

The subject of of an *intransitive* clause can be relativized as shown in example (11). The case of the head noun *Hwabib* is absolutive, since it is the subject of the matrix clause that also happens to be intransitive. The relative clause is headed by the auxiliary participial *volu*, which agrees in (absolutive) case with the head noun. The relativized noun within the relative clause would have been in the absolutive case, since it is the subject of the intransitive clause 'Habib walked back and forth'.

(11) [***t***$_i$ Dwaasalielash **v**olu] Hwabib$_i$ shien mieqash hwiizuo vuolavelira.
backforth-walk-PTC V-REL Habib-ABS 3S.RF-GEN moustache-ABS twist-INF V-start-PSTR
'Habib, who was walking back and forth, started to strike his moustache.' (Baduev 1991:25)

In many situations the gap left by the relativized noun can be filled with a reflexive pronoun functioning as a resumptive, as we will see in the other subsections of 2.2 and in the summary in section 2.10. But in relative clauses where the absolutive subject of the intransitive verb is relativized the gap can not be filled with a resumptive. This is illustrated in example (12). In

this situation it is possible (but not very natural) to use a reflexive pronoun in the subject position within the relative clause, but it does not function as a place-filler of the gap left by the subject. Instead it conveys the idea that Musa had sat down "alone", "by himself".

(12) ?[Shaa$_i$ uohwaxi'na volu] Muusa$_i$ mellasha twaevsira
3S.RFL-ABS down-sit-PSTN V-REL Musa-ABS slowly fall.asleep-PSTR

*'Muusa, who had sat down, slowly fell asleep.'

'Muusa, who had sat down alone, slowly fell asleep.'

I have elicited native speaker's opinion on relative clauses both with unergative as well as unaccusative verbs, but neither situation would allow a reflexive to be used as resumptive.

The subject of a *complement* clause can be relativized as shown in example (13). The case of the relative clause in this example is oblique, which is signalled by the suffix *–chu* on the participial auxiliary *dolchu* that is heading the relative clause. Since "oblique" just means "any case other than absolutive", the relative clause's case agrees with the genitive case of the head noun *ghullaqan* 'of that matter'.

The relative clause's main verb *dolchu* agrees in noun class either with the deleted absolutive case subject *ghullaq* 'matter' of the relative clause, or with the genitive case head noun *ghullaqan* 'of that matter'. Which of the two it agrees with cannot be said with certainty from the example given. But I will come back to this point in other examples, that are less ambiguous.

(13) [***t***$_i$ Ishtta **d**olchu] cu ghullaqan$_i$ ojla a juora Peet'amata.
thus D-REL-OBL that-OBL matter-GEN thought-ABS & J-make-IMPF Petamat-ERG

'Petamat thought about that matter that was thus.' (Baduev 1991:31)

The subject of a *transitive* clause can be relativized as shown in example (10), repeated here in (14). Note that the case of the relative clause agrees with that of the head noun – both are in the absolutive case. This can be seen from the absence of case suffixes on the relative clause's main verb *dieshna* 'read' and on the head noun *k'ant* 'boy'.

Without any ambiguity the main verb of the relative clause agrees in class with the absolutive case direct object of the relative clause, the word *kiexat* 'letter' (the word *k'ant* 'boy' takes the class prefix *v*, reserved for singular male nouns).

(14) [***t***$_i$ Kiexat **d**ieshna] k'ant$_i$ vyelush vara
letter-ABS D-read-PSTN boy-ABS V-laugh-PRS-PTC V-PST
'The boy who had written the letter was laughing.'

In the example above the verb that heads the relative clause is a simple verb. Such verbs always keep agreeing with the absolutive object (or the trace of it) in their own clause. However, when a compound verb (which consists of a simple verb and a participial *auxiliary*) heads a relative clause, a different picture results. Take as a starting point the clause in (15).

(15) Rebiqas cynga xi maliitira
Rebecca-ERG 3S-ALL water-ABS let.drink-PSTR
'Rebecca let him drink water.'

When the subject *Rebiqa* of this clause is relativized, a sentence like (16) arises.

(16) [***t***$_i$ Cynga xi maliitina **j**olu] Rebiqa ch'oogha macjelira.
3S-ALL water-ABS let.drink-PSTN J-REL Rebecca-ABS very hunger-J-PSTR
'Rebeccai, [who$_i$ had made him$_j$ drink water], became very hungry.'

The main verb *maliitina* does not have a class prefix, so does not show agreement. But the participial auxiliary *jolu* does have a class prefix, and shows agreement with *Rebiqa* (either the noun heading the relative clause or the relativized noun within the relative clause – those are indescernible from noun class agreement point of view), since that is the only noun in this sentence that belongs to the *j*-class. The noun *xi* belongs to the *d*-class, and the pronoun *cynga* goes with the *v*-class, since it refers to a male in this case.[8]

The gap in the relative clause (denoted here with ***t***$_i$) left by the head noun can be filled with a reflexive pronoun as shown in (17).

[8] In general pronouns in Chechen can refer to masculine or feminine antecedents, but in this case the fact that *cynga* should refer to a male was communicated to the native speakers.

(17) [(Shaa$_i$) cynga xi maliitina **j**olu] Rebiqa$_i$
3S.RFL-ERG 3S-ALL water-ABS let.drink-PSTN J-REL Rebecca-ABS
ch'oogha macjelira.
very hunger-J-PSTR
'Rebeccai, [who$_i$ had made him$_j$ drink water], became very hungry.'

Filling the gap left by an ergative subject with a reflexive pronoun, as shown above, is not very usual. When dative subjects are relativized the gap can be filled with a reflexive pronoun more naturally.[9] That is illustrated by the original clause (18), which, when the subject is relativized, looks like (19).

(18) Muusana i stag sielxana gira
Musa-DAT that man-ABS yesterday see-PSTR
'Musa saw that man yesterday.'

(19) [(Shiena$_i$) i stag$_j$ sielxana ginchu] Muusas$_i$ cynga$_j$ cwa-shi
3S.RFL-DAT that man-ABS yesterday see-PST-OBL Musa-ERG 3S-ALL one-two
duosh aelliera.
word-ABS speak-REM
'Musa$_i$, who$_i$ had seen that man$_j$ yesterday, spoke a few words with him$_j$.'

The reflexive pronouns that are used to fill the gap in the relative clause can also be labelled as "resumptives". They are a special case of Long Distance Agreement – anaphoric agreement that crosses the border of two clauses. Nichols first noticed that a reflexive pronoun in a subordinate clause in Chechen can be used to refer to the subject of a main clause (Nichols 2001).

(20) Cuo$_i$ gajtira txyega [shaa$_i$ ***t***$_k$ jaazdina dolu] teptar
3S-ERG show-PSTR 1P.EXC-ALL 3S.RFL-ERG write-PSTN D-REL book-ABS
'He$_i$ showed us the book [that he$_i$ had written].' (Nichols 2001)

It is true that in the examples with gap-filling reflexives given so far, the head noun has been the subject of the main clause. There are, however, examples where the reflexive fills the gap of the subject of the relative clause, while the coreferent head noun is not the subject of the main clause, but another argument. In (21) there is an example where the head noun is the

[9] The grammatical subject of a clause can be in several different cases, depending on the requirements of the main verb. For instance verbs like 'see', 'want' and 'hear' take a dative subject.

direct object of the main clause, and in (22) the head noun is in the allative case, fulfilling the role of causee. In these examples the reflexive can *optionally* fill the gap, for which reason I have put brackets around it.

(21) [Sielxana saermik (shiena$_i$) gina volu] Muusa$_i$ ca vevza suuna.
yesterday dragon-ABS 3S.RFL-DAT see-PSTN V-REL Musa-ABS NEG V-know-PRS 1S-DAT
'I don't know Musa$_i$, who$_i$ yesterday saw a/the dragon.'

(22) [Sielxana (shiena$_i$) saermik gina volchu] Muusaga$_i$ xi
yesterday 3S.RFL-DAT dragon-ABS see-PSTN V-REL-OBL Musa-ALL water-ABS
maliitira Rebiqas.
let.drink-PSTR Rebecca-ERG
'Rebecca let Musa$_i$, who$_i$ yesterday saw a/the dragon, drink water.'

To summarize, when the subject of a clause is relativized, the resulting relative clause agrees in case with the head noun. If there is a simple verb in the relative clause, then it retains its class agreement with the clause's direct object. If the relative clause is headed by a participial relative, then this agrees in class with the head noun. Normally the relativized noun leaves a gap in the relative clause. The gap left by the subject can optionally be filled with a reflexive pronoun, while the head noun may then be a subject, direct object or another argument. This is a natural method for dative subject clauses, and slightly less natural for ergative subject clauses. An open question at this point is whether the reflexive can be labelled as resumptive in all the situation described above.[10]

2.2.2. Relativizing direct object arguments

When the direct object of a transitive clause is relativized, the resulting relative clause looks for example like (23). The head noun *ghullaqash* 'things' has left a gap in the relative clause, where it was the direct object. The relative clause, headed by the participial auxiliary *dolu*, agrees in case with the absolutive head noun.

[10] The alternative would be to call them long-distance reflexives for those instances where the head noun is the subject of the main clause, and to call them resumptives in other instances.

(23) [Dudas t_i lieluosh **d**olu] ghullaqash$_i$ wiedalna xi'iniera
DUDA-ERG deal-PRS-PTC D-REL matter-PL-ABS authority-DAT find-REM
'The authorities had found out the things Duda was dealing with.' (Baduev 1991:25)

The participial auxiliary agrees in class with the head noun *ghullaqash* 'things', or with the trace of it in the relative clause.

The usage of a reflexive pronoun as a resumptive to fill the gap left by the relativized noun depends on the kind of transitive verb being used. Dative subject transitive verbs do not allow reflexives to fill the gap left by the relativized noun, as shown in (24), which is derived from (18). Neither this particular word order in the relative clause, nor others are allowed.[11]

(24) *[Muusana$_k$ shaa$_i$ sielxana ginchu] staga$_i$ cunax$_k$ laecna dyycura
Musa-DAT 3S.RFL-ABS yesterday see-PST-OBL man-ERG 3S-MAT about D-speak-IMPF
'The man$_i$, who$_i$ had seen Musa$_k$ yesterday, spoke about him$_k$.'

The unacceptability of the sentence may be due to the fact that there is an irresolvable semantic ambiguity. It would be possible to understand *shaa* as a (local) anaphor of Musa, whereas it should be interpreted as a long distance anaphor of *staga*.

For ergative subject transitive verbs the usage of a resumptive to fill the gap left by a relativized noun depends on the word order within the relative clause. This is illustrated by the acceptability of (25) and the unacceptability of (26). In these examples the head noun is a dative-case goal in an intransitive matrix clause. But the same results are met when the head noun for instance is an object of a postpositional phrase in the matrix clause, as illustrated by the acceptable (27) and the unacceptable (28).

(25) [Muusas shaa$_i$ xiestajiesh jolchu] zudchunna$_i$ baaxam qoochu
Musa-ERG 3S.RFL-ABS praise-J-do-PTC J-REL-OBL woman-DAT possession reach-PRS
'The possessions befall the woman$_i$, whom$_i$ Musa praises.'

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[11] Native speakers rejected all six permutations of S O Adv, where S is the subject *Muusana*, O is the resumptive pronoun object *shaa* and Adv is the time adverb *sielxana*. Permutations that contained the resumptive pronoun, and where the relativized verb *ginchu* was changed into the simple past tense *gina* 'saw' and the auxiliary participial *volchu* 'who is/was' were rejected likewise.

(26) *[Shaa$_i$ Muusas xiestajiesh jolchu] zudchunna$_i$ baaxam qoochu
3S.RFL-ABS Musa-ERG praise-J-do-PTC J-REL-OBL woman-DAT possession reach-PRS
'The possessions befall the woman$_i$, whom$_i$ Musa praises.'

(27) [Muusas shaa$_i$ aella dolchu] dashax laecna humma a ca
Musa-ERG 3S.RFL-ABS say-PST D-REL-OBL word-MAT about nothing NEG
xae'a suuna
know-PRS 1S-DAT
'I don't know anything about the word, which Musa spoke.'

(28) *[Shaa$_i$ Muusas aella dolchu] dashax laecna humma a ca
3S.RFL-ABS Musa-ERG say-PST D-REL-OBL word-MAT about nothing NEG
xae'a suuna
know-PRS 1S-DAT
'I don't know anything about the word, which Musa spoke.'

The role of the head noun can also be that of direct object as in example (29) and that of subject as in (30).

(29) [Muusas shaa$_i$ xiestajiesh jolu] zuda$_i$ gira suuna sielxana
Musa-ERG 3S.RFL-ABS praise-J-do-PTC J-REL woman-ABS see-PSTR 1S-DAT yesterday
'Yesterday I saw the woman$_i$, whom$_i$ Musa praises.'

(30) [Muusas shaa$_i$ xiestajiesh jolchu] zudchuo$_i$ pondar loqura
Musa-ERG 3S.RFL-ABS praise-J-do-PTC J-REL-OBL woman-ERG instrument-ABS play-IMPF
'The woman$_i$, whom$_i$ Musa praises, plays the instrument.'

2.2.3. Relativizing other arguments

The head noun of the relative clause can originate from the dative case indirect object of a ditransitive verb. The indirect object 'him' from example (31) is in the dative case. Its main verb agrees in *d*-class with the absolutive object *laatta* 'land'. When the indirect object is relativized it leaves a gap, as shown in (32). Note that the relative clause's main verb *dwaadella* retains its case agreement with the absolutive object *laatta* 'land'. But the participial relativizer *volu* shows agreement in class with the absolutive case head noun *stag* 'person' (or the trace of it within the relative clause – which happens to be in the dative case).

(31) Kilaaba cunna dika laatta dwaadelira.
Caleb-ERG 3S-DAT good land- ABS away-D-give-PSTR
'Caleb gave him good land.'

(32) [Kilaaba ***t***$_i$ dika laatta dwaadella **v**olu] stag hinca cigahw
Caleb-ERG good land- ABS away-D-give-PSTN V-REL person-ABS now there
vaaxa uohwaxi'ira.
V-live-INF down-sit-PSTR

'The person$_i$ [to whom$_i$ Caleb gave good land], has now settled down to live there.'

For the gap left by the relativized indirect object a reflexive pronoun can be inserted, serving as a resumptive. This is shown in (33) and (34).[12] It is not prerequisite that the head noun is the subject of the matrix clause for the resumptive to be acceptable. But some relative clauses with resumptives have stricter conditions on word order and preverbs. Example (35) for instance, where the head noun is the direct object of the matrix clause, is not acceptable. But this is apparently not due to the presence of the resumptive as such. When an other word order is chosen, as in example (36), the sentence is quite acceptable. An additional prerequisite in that case is that the verb within the relative clause be stripped of its preverb. Word order (as well as the influence of the resumptive on it) is further discussed in section 2.3.

(33) [Kilaaba shiena$_i$ dika laatta dwaadella **v**olu] stag hinca
Caleb-ERG 3S.RFL-DAT good land- ABS away-D-give-PSTN V-REL person-ABS now
cigahw vaaxa uohwaxi'ira.
there V-live-INF down-sit-PSTR

'The person$_i$ [to whom$_i$ Caleb gave good land], has now settled down to live there.'

(34) [Kilaaba shiena$_i$ dika laatta dwaadella **v**olchu] staga
Caleb-ERG 3S.RFL-DAT good land- ABS away-D-give-PSTN V-REL-OBL person-ERG
so dwaatettira.
1S-ABS away.push-PSTR

'The person$_i$ [to whom$_i$ Caleb gave good land], rejected me.'

(35) *[Kilaaba shiena$_i$ dika laatta dwaadella **v**olu] stag
Caleb-ERG 3S.RFL-DAT good land- ABS away-D-give-PSTN V-REL person-ABS
as dwaatettira.
1S-ERG away.push-PSTR

'I rejected the person$_i$ [to whom$_i$ Caleb gave good land].'

[12] Some native speakers remarked that these sentences are only acceptable when the simple form *della* 'given' is used instead of the form *dwaadella*, which contains the preverb *dwaa*.

(36) [Shiena$_i$ Kilaaba dika laatta della **v**olu] stag
3S.RF-DAT Caleb-ERG good land- ABS D-give-PSTN V-REL person-ABS
as dwaatettira.
1S-ERG away.push-PSTR
'I rejected the person$_i$ [to whom$_i$ Caleb gave good land].'

In example (37) the argument *cynga* 'to him' is a goal.[13] When such an argument is relativized, then a clause like (38) results.

(37) Baaxam cynga qoochur bu
possession-ABS 3S-ALL reach-FUT B-PRS
'He will inherit the possessions/The possessions will go over to him.'

(38) [Baaxam ***t***$_i$ qoochun **b**olu] stag$_i$ ooxa vyyr vu
possession-ABS reach-FUT D-REL person-ABS 1P.EXC-ERG V-kill-FUT V-PRS
'We will kill the person who inherits the possessions.'

The gap left by the relativized goal can be filled with a reflexive pronoun, serving as a resumptive. As shown in (39), a construction that minimally reflects (37) and (38) is not acceptable by the native speaker.[14] But with slight emendations, as shown in (40), a reflexive can be used as resumptive in the relative clause. The resumptive needs to be positioned at the left edge of the relative clause, and it needs to have dative instead of allative case. The dative and allative case are both used to express a goal or a benefector. According to one native speaker the dative case gives a slightly different nuance to the meaning of the verb.

(39) ?[Baaxam shiega$_i$ qoochun **b**olu] stag$_i$ ooxa vyyr vu
possession-ABS 3S.RFL-ALL reach-FUT B-REL person-ABS 1P.EXC-ERG V-kill-FUT V-PRS
'We will kill the person who inherits the possessions.'

(40) [Shiena$_i$ i baaxam qoochun **b**olu] stag$_i$ ooxa vyyr vu
3S.RFL-DAT that possession-ABS reach-FUT B-REL person-ABS 1P.EXC-ERG V-kill-FUT V-PRS
'We will kill the person who inherits the possessions.'

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[13] The dative case *cunna* 'to him' is also possible for this clause, with a slightly different meaning. With the allative case goal the native speaker identified the meaning (in Russian) as: *богатство перейдет к нему*, whereas with the dative case benefactor the meaning was given as: *богатство достанется ему*.

[14] Another native speaker didn't see any problem with this sentence. Nor did it make any difference to him if the allative case resumptive *shiega* was changed to the dative case *shiena*.

One more observation needs to be made here. When the relative clause in (40) is changed from the future into the present continuous, then the auxiliary relative can either be *bolu* or *volu*, as shown in (41) and (42). When *bolu* is taken the native speaker senses more emphasis on *baaxam* 'possession' – the direct object within the relative clause. Likewise when *volu* is taken, the native speaker senses more emphasis on *stag* 'person' – the head noun of the relative clause (or the benefector within the relative clause). A difference in agreement for the auxiliary in the present continuous has been reported for matrix clauses (especially in the closely related Ingush), where one of the two possible options was labelled as conveying an antipassive (Nichols 1994b:105). Agreement results will be summarized in section 2.11.

(41) [Shiena$_i$ i baaxam qoochush**b**olu] stag$_i$ ooxa vyyr vu
3S.RFL-DAT that possession-ABS reach-PTC b-REL person-ABS 1P.EXC-ERG V-kill-FUT V-PRS
'We will kill the person who inherits the possessions.'

(42) [Shiena$_i$ i baaxam qoochush**v**olu] stag$_i$ ooxa vyyr vu
3S.RFL-DAT that possession-ABS reach-PTC v-REL person-ABS 1P.EXC-ERG V-kill-FUT V-PRS
'We will kill the person who inherits the possessions.'

2.2.4. Relativizing the possessor of an argument

When the possessor *zuda* 'wife' of the subject argument – the noun phrase *zudchun majra* 'the husband's wife' – in example (43) is relativized, a construction like example (44) results. In the original clause (43) the auxiliary *vu* (used for singular males) agrees in noun class with the direct object *majra* 'husband'. But in (44) the participial auxiliary *jolu* does *not* agree in noun class with the direct object *majra* 'husband' of the relative clause. Instead it agrees in noun class with the head noun *zuda* 'woman' (the class prefix *j* is used for singular females).

(43) [Zudchun majra] vella vu
wife-GEN husband-ABS V-die-PSTN V-PRS
'The wife's husband has died.'

(44) [[***t***$_i$ Majra] vella **j**olu] zuda$_i$ maarie jaxara
(wife's) husband-ABS V-die-PSTN J-REL woman-ABS marriage-ALL J-go-PST
'The woman, whose husband had died, married.'

Note that the agreement can not be changed, as in (45). Such a sentence is rejected by the native speakers I consulted with.

(45) *[[***t**$_i$ Majra] vella **v**olu] zuda$_i$ maarie jaxara
(wife's) husband-ABS V-die-PSTN V-REL woman-ABS marriage-ALL J-go-PST
'The woman, whose husband had died, married.'

The gap left by the relativized noun can be filled with a reflexive pronoun, that functions as a resumptive, as shown in (46). In this case the head noun is the subject of the intransitive verb of the main clause.

(46) [[shien$_i$ Majra] vella jolu] zuda$_i$ maarie jaxara
3S.RFL-GEN husband-ABS V-die-PSTN J-REL woman-ABS marriage-ALL J-go-PST
'The woman, whose husband had died, married.'

The gap can still be filled with a reflexive pronoun if the head noun is not the subject, but rather the direct object, of the main clause. It doesn't matter whether the main clause's subject is first person as in (47) or third person as in (48).

(47) [[shien$_i$ Majra] vella jolu] zuda$_i$ gira suuna sielxana
3S.RFL-GEN husband-ABS V-die-PSTN J-REL woman-ABS see-PSTR 1S-DAT yesterday
'Yesterday I saw the woman$_i$, whose$_i$ husband had died.'

(48) [[shien$_i$ Majra] vella jolu] zuda$_i$ gira Aptina sielxana
3S.RFL-GEN husband-ABS V-die-PSTN J-REL woman-ABS see-PSTR Apti-DAT yesterday
'Yesterday Apti saw the woman$_i$, whose$_i$ husband had died.'

There is a difference in relativizing a kinship possessive or another possessive. Taking (49) as a starting point, it can be seen from (50) and (51), that a possessive kinship term needs to have the gap in the relative clause filled with a reflexive pronoun (functioning as resumptive).

(49) Suunagira [ocu stegan vasha]
1S-DAT see-PSTR that-OBL man-GEN brother-ABS
'I saw that man's brother.'

(50) *[Suuna [***t**$_i$ vasha] gina volu] stag$_i$ aarahw lielash vara
1S-DAT brother-ABS see-PSTN V-REL man-ABS outside walk-PRS-PTC V-PST
'The man$_i$, whose$_i$ brother I had seen, was walking outside.'

(51) [Suuna [shien$_i$ vasha] gina volu] stag$_i$ aarahw lielash vara
1S-DAT 3S.RFL-GEN brother-ABS see-PSTN V-REL man-ABS outside walk-PRS-PTC V-PST
'The man$_i$, whose$_i$ brother I had seen, was walking outside.'

On the other hand, taking (52) as a starting point, it can be seen from (53) and (54), that another possessive (not a kinship term) preferably should *not* fill the gap in the relative clause with a reflexive pronoun.

(52) Suunagira [ocu stegan kiexat]
1S-DAT see-PSTR that-OBL man-GEN letter-ABS
'I saw that man's letter.'

(53) [Suuna [***t***$_i$ kiexat] gina volu] stag$_i$ aarahw lielash vara
1S-DAT letter-ABS see-PSTN V-REL man-ABS outside walk-PRS-PTC V-PST
'The man$_i$, whose$_i$ letter I had seen, was walking outside.'

(54) ?[Suuna [shien$_i$ kiexat] gina volu] stag$_i$ aarahw lielash vara
1S-DAT 3S.RFL-GEN letter-ABS see-PSTN V-REL man-ABS outside walk-PRS-PTC V-PST
'The man$_i$, whose$_i$ letter I had seen, was walking outside.'

As an aside, note from (55) and (56) that the order of the arguments within the relative clause has its limits – in these cases the subject should precede the object as in (51), yielding the unmarked SOV order. As will be shown in section 2.3, there are word order restrictions within relative clauses.

(55) *[[Shien$_i$ vasha] suuna gina volu] stag$_i$ aarahw lielash vara
3S.RFL-GEN brother-ABS 1S-DAT see-PSTN V-REL man-ABS outside walk-PRS-PTC V-PST
'The man$_i$, whose$_i$ brother I had seen, was walking outside.'

(56) *[[***t***$_i$ kiexat] Suuna gina volu] stag$_i$ aarahw lielash vara
letter-ABS 1S-DAT see-PSTN V-REL man-ABS outside walk-PRS-PTC V-PST
'The man$_i$, whose$_i$ letter I had seen, was walking outside.'

2.2.5. Relativizing the object of an adjunct

Objects of adjuncts – for instance locative, comparative or postpositional phrases – can also be relativized. I will give different examples in this section.

An example of the relativization of the possessor of a locative (an adverbial phrase of location) is given in (57) and (58). In the original (57) the auxiliary *du* agrees in noun class with the clause's intransitive subject *sovghat*. But when the possessor *stegan* 'of the man' from

the original phrase in (57) is relativized as in (58), then the participial auxiliary *volu* of the relative clause agrees in noun class with the head noun *stag*. Agreement with the relative clause's subject *sovghat* is retained within the relative clause by the verb *disina* (which is a past participle—in form equal to the *–na* suffixed past).

(57) Sovghat [stegan karahw] disina du
present-ABS man-GEN hand-LOC D-stay-PSTN D-PRS
'The gift has stayed in the man's hand.'

(58) [Sovghat [t_i karahw] disina volu] $stag_i$ quzahw laettash vu
present-ABS hand-LOC D-stay-PSTN V-REL man-ABS here stand-PRS-PTC V-PRS
'The man_i in whose hand the gift stayed, is standing here.'

When a locative phrase is part of a clause as shown in (59), where the main verb only consists of an auxiliary, then the relativization of the possessor of that locative phrase offers insight on the noun-class agreement. When the possessor is retrieved from the locative phrase and relativized, a sentence like (60) can result. There is agreement in case between the relative clause as a whole and the head noun (both are in the absolutive case). As usual the relativized noun is deleted in the relative clause, leaving a gap. In the original clause there was class agreement between the auxiliary *du* and the subject *sovghat* 'present'. Similarly there is class agreement between the participial relativizer *dolu* and *sovghat* in the relative clause. The class agreement is *not* with the head noun *stag* (which is of *v*-class) or with the trace left by it within the relative clause. More on agreement will be said at the summary of the data in section 2.11.

(59) Sovghat [stegan karahw] du
present-ABS man-GEN hand-LOC D-PRS
'The man has the present.'

(60) [Sovghat $\mathbf{t}_i$ karahw dolu] $stag_i$ quzahw laettash vu
present-ABS hand-LOC D-REL man-ABS here stand-PRS-PTC V-PRS
'The man, who has the present, is standing here.'

When there is an object inside a postpositional phrase, like *zudchunna* 'woman' in example (61), it can also be relativized, as shown in example (62). In the original clause the auxiliary *dara* agrees in class with the noun *duuxar* 'clothing'. And in the relative clause the participial relativizer *dolu* also agrees in class with *duuxar* (class *d*) rather than with *zuda* (class *j*), which is the head noun being modified by the relative clause.

(61) [Zudchunna t'iehw] daarix dina duuxar dara
woman-DAT on silk-MAT D-make-PSTN clothing-ABS D-PST
'The woman had clothes made from silk.'

(62) Cigahw [daarix dina duuxar [$\mathbf{t}_i$ t'iehw] **d**olu] $zuda_i$ jara
There silk-MAT D-make-PSTN clothing.D on D-REL woman.J J-was[15]
'There was a woman who had clothes made from silk.'

The gap left by the relativized noun can be filled with a reflexive pronoun, that functions as a resumptive, as shown in (63). In this case the head noun is the subject of the main clause. When the head noun is the direct object of the main clause, a reflexive pronoun can still be used as resumptive to fill the gap left by the relativized noun, as in (64).

(63) [[$shiena_i$ t'iehw] daarix dina duuxar dolu] $zuda_i$ jara cigahw
3S.RFL-DAT on silk-MAT D-make-PSTN clothing.D D-REL woman.J J-was there
'The $woman_i$, who_i had clothes made from silk, was there.'

(64) [[$shiena_i$ t'iehw] daarix dina duuxar dolu] $zuda_i$
3S.RFL-DAT on silk-MAT D-make-PSTN clothing.D D-REL woman.J
gira suuna cigahw.
see-PSTR 1S-DAT there
'There I saw the $woman_i$, who_i had clothes made from silk.'

The object of a comparison is put into the *comparative* case in Chechen, as illustrated by example (65). In this case the noun *zuda* 'woman' is compared with the noun *stag* 'man, person'. The point of comparison is the height, which is expressed by the adjective *leqa* 'high, tall', or more specifically the 'being tall' (that is to say the combination of the adjective and the

[15] For clarity the noun class of clothing has been provided in the gloss by the .D addition. Likewise it is provided by a .J addition in the gloss to *zuda* 'woman.J'.

verb – in this case the auxiliary). The whole phrase containing the adjective and the comparative case noun phrase can be regarded as an adverbial phrase of manner.

(65) Majra [zudchul leqa] vu
husband-ABS woman-CMP tall V-PRS
'The husband is taller than the wife.'

In such a construction, where the main verb is an auxiliary, the object of the comparative *zuda* 'woman' can be relativized as illustrated by example (66). In the matrix clause the head noun *zuda* 'woman' is the subject. The gap left by the relativized noun *stag* 'person' can be filled with a reflexive, as shown in (67). According to the native speaker the sentence *with* the reflexive is preferable.

Note that the participial relative *volu* agrees with the direct object within the relative clause *majra* 'husband' in class (the head noun *zuda* 'woman' is of the *j*-class).

(66) [[t_i leqa] majra volu] $zuda_i$ cigahw laettash jara
tall husband-ABS V-REL woman-ABS there stand-PRS-PTC J-PST
'The $woman_i$, $whose_i$ husband is taller than her_i, was standing there.'

(67) [[shiel leqa] majra volu] $zuda_i$ cigahw laettash jara
3S.RFL-CMP tall husband-ABS V-REL woman-ABS there stand-PRS-PTC J-PST
'The $woman_i$, $whose_i$ husband is taller than her_i, was standing there.'

The head noun can also be a direct object, as illustrated in (68) or be in the allative case and have a causee role, as illustrated in (69). In both cases the reflexive pronoun is desirable according to the native speaker, but not obligatory – it can be left out.

(68) [[shiel leqa] majra volu] $zuda_i$ gira suuna
3S.RFL-CMP tall husband-ABS V-REL woman-ABS see-PSTR 1S-DAT
'I saw the $woman_i$, $whose_i$ husband is taller than her_i.'

(69) [[shiel leqa] majra volchu] $zudchynga_i$ xi maliitira as
3S.RFL-CMP tall husband-ABS V-REL woman-ABS water-ABS let.drink-PSTR 1S-ERG
'I let the $woman_i$, $whose_i$ husband is taller than her_i, drink water.'

In (70) the reflexive is a long distance anaphor and can be called a resumptive, but this example requires some more exploring. In this case the reflexive *shiel* 'than he' is coreferrent with the subject of the matrix clause *Alxast*, and not with the head noun *vasha*. One might

argue that the noun *vasha* 'brother', being a kinship term, does not stand on itself, but is an ellipsis of the more fuller noun phrase *Alxastin vasha* 'the brother of Alxast'. The possessor *Alxastin* is left unpronounced as possessor, whereas it is this phrase that is coreferent with the resumptive.

(70) [[shiel$_i$ zhimax] volu jaalx vasha$_k$ swavaaliira Alxasta$_i$
3S-CMP small-CMP V-REL six brother-ABS hither-D-bring-PSTR Alxast-ERG
'Alkhast$_i$ brought the six brothers$_k$, who$_k$ were younger than he$_i$.' (Kamina 2007)

But the argument above can be refuted by looking at the elicited example in (71), where the possessor of the brothers has been made overt, and for clarity it has been changed into another person. According to the native speaker the resumptive *shiel* is still coreferent with the matrix clause's subject *Alxast* and not with sister *Zulaj*, who grammatically is the possessor of the six brothers.

(71) [[shiel$_j$ zhimax] volu Zulajn$_j$ jaalx vasha$_k$ swavaaliira Alxasta$_i$
3S-CMP small-CMP V-REL Zulaj-GEN six brother-ABS hither-D-bring-PSTR Alxast-ERG
'Alkhast$_i$ brought the six brothers$_k$ of Zulay$_j$, who$_k$ were younger than him$_i$.'

The above implies that a reflexive occurring in a relative clause is *not* automatically to be taken as a resumptive (ie. coreferent with the head of the relative clause).

2.2.6. Relativizing the subject of a "have" clause

Chechen does not have a separate verb with the meaning "to have". Instead different constructions are used. In one construction the clause's main verb is the auxiliary, the subject is in the genitive and the object in the absolutive. An example is shown in (72). The subject is *uolxazaran* 'of the bird', and the object is *shi t'aam* 'two wings'.

(72) Uolxazaran shi t'aam bu
bird-GEN two wing-ABS B-PRS
'The/a bird has two wings.'

When the subject of such a "have" clause is relativized, the result can be as in (73).

(73) [***t***$_i$ shi t'aam **b**olchu] uolxazaruo jish lyequra
two wing-ABS B-REL-OBL bird-ERG song-ABS sing-IMPF
'The bird that has two wings sang a song.'

The participial auxiliary *bolchu* agrees with the direct object *t'aam* in noun class (class *b*) rather than with the head noun *uolxazaruo* (class *d*).

The gap left by the genitive subject in the relative clause can be filled with a reflexive pronoun, as shown in (74). In this example the head noun is the ergative subject of the main clause.

(74) [shien$_i$ shi t'aam **b**olchu] uolxazaruo$_i$ jish lyequra
3S.RFL-GEN two wing-ABS B-REL-OBL bird-ERG song-ABS sing-IMPF
'The bird$_i$ that has two wings sang a song.'

When, as illustrated in (75), the head noun is the absolutive case object within the main clause, then it is in principle possible to fill the gap left by the relativized noun in the relative clause with a reflexive, but it is seen as superfluous by the native speaker.

(75) ?[shien$_i$ shi t'aam **b**olu] uolxazar gira suuna cigahw
3S.RFL-GEN two wing-ABS B-REL bird-GEN see-PSTR 1S-DAT there
'There I saw the bird that has two wings.'

When the direct object of this kind of "have" clause is relativized, the result can be as shown in (76).

(76) [uolxazaran ***t***$_i$ **b**olu] shi t'aam xaza bara
bird-GEN B-REL two wing-ABS beautiful B-PST
'The two wings that the bird had were beautiful.'

One more example is given in (77). The word *xi* has noun class *d*, while *mettig* has noun class *j*. The relativizer *dolu* does *not* agree with the head noun *mettig* 'place' in noun class, but instead it agrees with the noun *xi* 'water', which is still visible in the relative clause.

(77) [Xi **d**olu] mettig juj cigahw?
water-ABS D-REL place-ABS J-PRS-QM there[16]
Is there a place that has water over there?

[16] The abbreation QM stands for the yes/no question marker suffix.

2.2.7. The accessibility hierarchy

Keenan and Comrie (1977) proposed a hierarchy of which kind of constituents can be relativized, which they labelled the "NP accessibility hierarchy". The hierarchy they proposed is repeated here in (1).

(1) **NP Accessibility Hierarchy**

Subject >

Direct Object >

Indirect Object >

Object of a post- or prepositional phrase >

Possessor >

Object of comparison

Each element in the hierarchy is more accessible than the elements below it. Applied to relative clauses the prediction is that if a language allows, for example, indirect objects to be relativized, it also allows direct objects and subjects to be relativized. But it would not necessarily allow elements below the indirect object to be relativized.

In Chechen the primary relativization strategy is to leave a gap for the relativized noun. This strategy works in Chechen for all of the elements form the NP accessibility hierarchy. As Croft (2003) showed, languages can have a primary and secondary strategy for relativization. The secondary relativization strategy for Chechen is to use a resumptive. As we have seen, resumptives can not be used in all situations—they cannot fill the gap left by the relativized absolutive case subject of an intransitive verb and the relativized absolutive case object of a dative-subject transitive verb. These situations are at the top end of the NP accessibility hierarchy. Notice that instead of the absolutive case objects of *ergative*-subject transitive verbs, it is objects of *dative*-subject transitive verbs that are not accessible with the secondary relativization strategy.

Behaviour at the lower end of the NP accessibility hierarchy for Chechen is as expected. Apparently for the relativization of the objects of a comparison the primary strategy (leaving a gap) works less well than the secondary strategy (filling the gap with a resumptive).

2.3. Word order restrictions within the relative clause

There were several rejected sentences in the previous sections. Some of these had an accepted matching sentence where the only difference was the word order within the relative clause. For this reason I have done some more research into the restrictions on word order within the relative clause.

First I have looked at word order variations within a relative clause centered around the ditransitive verb *dala* 'to give'. A native speaker was asked to evaluate a number of sentences built on example (78), which is a slight variation of the earlier example (33), where the head noun is the absolutive subject of an intransitive verb in the matrix clause and sentences built on example (79), where the head noun is an absolutive case direct object of the transitive verb in the matrix clause.

(78) [Kilaaba shiena$_i$ dika laatta dwaadella **v**olu] stag
Caleb-ERG 3S.RFL-DAT good land- ABS away-D-give-PSTN V-REL person-ABS
cigahw vaaxa uohwaxi'ira.
there V-live-INF down-sit-PSTR

'The person$_i$ [to whom$_i$ Caleb gave good land], has settled down to live there.'

(79) [Kilaaba shiena$_i$ dika laatta dwaadella **v**olu] stag
Caleb-ERG 3S.RFL-DAT good land- ABS away-D-give-PSTN V-REL person-ABS
gira suuna sielxana.
see-PSTR 1S-DAT yesterday

'Yesterday I saw the person$_i$ [to whom$_i$ Caleb gave good land].'

The results of the native speaker's evaluation are summarized in Table 3. In this table the columns headed by S_A show the evaluation for the sentences derived from example (78), where the head noun is the absolutive subject in the matrix clause. The columns headed by O_A show the evaluation for sentences derived from (79). The orders within the relative clause are

denoted by S_E for ergative case subject and IO_{res} for the resumptive, which is an indirect object reflexive.

Table 3 Word order restrictions in relative clause with ditransitive verb

Order in RC	**S_A**	**O_A**	**Ref**	**Order in RC**	**S_A**	**O_A**
S_E O V	ok	ok		O S_E V	?	?
IO_{res} S_E O V	ok	ok		IO_{res} O S_E V	?	ok
S_E IO_{res} O V	?	ok	(78), (79)	O IO_{res} S_E V	ok	??
S_E O IO_{res} V	?	ok		O S_E IO_{res} V	ok	?

When a resumptive is not used, there is a more severe word order restriction: OSV is rejected. But when a resumptive is introduced, then more possibilities open up. Strangely enough an example like (79) is accepted, whereas an example like (35) is rejected. But this may be due to something that is totally unrelated to presence or absence of a resumptive: the native speakers indicated that the presence of the preverb *dwaa-* in examples like (35) puts additional restrictions on word order possibilities. This is something for further research.

One more point to notice is that the acceptability of a resumptive in a relative clause apparently is connected with a combination of (a) the position of the resumptive within the relative clause, and (b) the role the head noun is playing within the matrix clause.

I have elicited an evaluation of the same native speaker on relative clauses with a slightly different internal mak-up. In this case, shown in examples (80) and (81), the relative clause contained a causativized transitive verb. Such a verb is also ditransitive, where the ergative subject is the causer, and the allative case argument is the causee.

(80) [Rebiqas shiega xi maliitina volu] stag
Rebecca-ERG 3S-ALL water-ABS let.drink-PSTN V-REL man-ABS
cigahw laettash vara.
there stand-PTC V-PST

'The person, [whom$_i$ Rebecca had made drink water], was standing over there.'

(81) [Rebiqas shiega xi maliitina **v**olu] stag
Rebecca-ERG 3S-ALL water-ABS let.drink-PSTN V-REL man-ABS
gira suuna sielxana.
see-PSTR 1S-DAT yesterday
'Yesterday I saw the person, [whom$_i$ Rebecca had made drink water].'

The results of the native speaker's evaluation are summarized in Table 4. Within the "order" columns G_{res} stands for the allative case resumptive.

Table 4 Word order restrictions in relative clause with causative verb

Order in RC	**S_A**	**O_A**	**Ref**	**Order in RC**	**S_A**	**O_A**
S_E O V	ok	ok		O S_E V	no	no
G_{res} S_E O V	ok	ok		G_{res} O S_E V	no	no
S_E G_{res} O V	ok	?	(80), (81)	O G_{res} S_E V	no	no
S_E O G_{res} V	no	?		O S_E G_{res} V	no	no

Again the OSV order as such, that is to say without resumptive, is not allowed in the relative clause. Contrary to what was shown for the relative clause with the ditransitive verb, the introduction of a resumptive now severely restricts the allowed word orders within the relative clause. Only those orders are allowed, where the object immediately precedes the verb.

The observations about possible and impossible word orders are of interest for the syntactic description of relative clauses as such.

2.4. Nested relative clauses

Evidence from native speakers shows that it is possible to have a relative clause within a relative clause. Take as basis the clause in (82), which can be further expanded in the clauses (83) and (84).

(82) Muusas c'a dina
Musa-ERG house-ABS make-PSTR
'Musa built a house.'

(83) Cynan jisha ocu c'a chuohw jeexash ju
3S-GEN sister-ABS that-OBL house-DAT inside J-live-PRS-PTC J-PRS
'His sister is living in that house.'

(84) Cynan vasha ocu c'a chuohw veexash vu
3S-GEN brother-ABS that-OBL house-DAT inside V-live-PRS-PTC V-PRS
'His brother is living in that house.'

When the direct object house from sentence (82) is relativized and then combined with the relativized subject brother from (84), then the following sentence can be made (see (85)).

(85) [***t***$_k$ [Muusas$_i$ dina dolchu] c'a chuohw veexash volu]
Musa-ERG D-make-PSTN D-REL-OBL house-DAT inside V-live-PRS-PTC V-REL
cynan$_i$ vasha$_k$ ch'oogha leqa stag$_k$ vara.
3S-GEN brother-ABS very tall man-ABS V-PST
'His$_i$ brother$_k$, who was living inside the house built by Musa$_i$, was a very tall person.'

When the subject Musa from sentence (82) is relativized and combined with the relativized postpositional phrase object house from (83), then the following sentence results.

(86) [[Shien$_i$ jisha chuohw wash dolu] c'a dina volu]
3S.RFL-GEN sister-ABS inside live-PRS-PTC D-REL house-DAT D-make-PSTN V-REL
Muusa$_i$ vedda dwaavaxara.
Musa-ABS V-run-PSTN away-V-go-PST
'Musa$_i$, who$_i$ had built the house$_k$ inside which$_k$ his$_i$ sister was living, run away.'

In this last case the presence of the reflexive pronoun *shien* is considered necessary by some native speakers.

2.5. Free relatives

A free relative is a relative clause that functions independently, that is to say, without a head noun. In example (87) the relative clause *who finishes first* is headed by the noun *the person*. But in example (88) the relative clause independantly functions. It is the subject of the verb *win*, so can be regarded as a noun phrase. In example (89) the whole free relative is the object of the verb *know*.

(87) The person who finishes first wins the prize.

(88) [Who finishes first] wins the prize.

(89) I know [who finishes first].

While a normal relative clause in Chechen grammatically behaves largely as an adjective, a free relative behaves as a noun.[17] So the transformation of a relative clause into a free relative can be regarded as nominalization in Chechen. The nominalization of a relative clause takes place exclusively on the participial verb heading the clause. For the absolutive singular the suffix *–rg* is added to the participial verb, and for the absolutive plural the suffix *–rsh* is added. Take for example the simple relative clause from section 2.1.1, example (3), which is repeated here for convenience as (90). It is nominalized as shown in (91). While in the English translation of the free relative "what I know", it is not possible to distinguish between singular and plural, the number distinction is obligatory in Chechen.

(90) [Sajna xu'u] dieshnash$_i$ niisa swa'aala lae'a suuna
1S-DAT know-PRS-PTC word-PL-ABS right speak-INF want-PRS 1S-DAT
'I want to pronounce the words that I know right.'

(91) [Sajna xu'ursh] niisa swa'aala lae'a suuna
1S-DAT know-PRS-PTC-NML-PL right speak-INF want-PRS 1S-DAT
'I want to pronounce what I know right.'

When the free relative, which functions as a noun, is in an inflected case, then it gets the "normal" case endings. This is shown in example (92). The verb *xa'a* 'to know' is transformed into a present participial form *xu'u*. The suffix *–ch* is added, which indicates adjectivization.

[17] The relative clause agrees with the head noun in case and sometimes in noun-class. Compare this with an adjective like *deza* 'valuable', which agrees with the noun it modifies in case and noun-class, as illustrated in: *deza c'a* 'valuable house-ABS', *beza muohw* 'heavy load-ABS', *dezachu dashuo* 'valuable word-ERG'. The differences between adjectives and relative clauses then boil down to two things: (1) noun class agreement of the participial head of the relative clause is, when the verb consists of one element, with a noun inside the relative clause, not with the head noun, and (2) relative clauses can be extraposed, but I have not observed extraposition for adjectives.

Then this suffix is followed by *–yn*, which indicates that a singular nominal ending is following. The actual case marking is *–ga* for the allative (goal or benefector). Note that there is no head noun above the relative clause, but the gap left by the relativized noun is still present in the relative clause. The whole relative clause itself functions as one noun phrase.

Note that the gap in the relative clause left by the relativized noun may be filled with a reflexive, as shown in (93).

(92) [***t***$_i$ Diesha xu'uchynga] dwaaluo i teptar
D-read-INF know-PRS-NML-ALL away.give-INF that book-ABS
'Give that book to who knows to read.'

(93) [shiena diesha xu'uchynga] dwaaluo i teptar
3S.RFL-DAT D-read-INF know-PRS-NML-ALL away.give-INF that book-ABS
'Give that book to who knows to read.'

Free relatives can also be formed from the participial auxiliary. An overview of singular and plural forms for several cases is given in Table 5. In this table only the free relative forms for noun-class *d* are given. Not all cases available in Chechen are given either – the overview serves as an illustration of the auxiliary free relative system.

Table 5 Auxiliary free relatives

	Affirmative		**Negative**	
Case	**Singular**	**Pural**	**Singular**	**Plural**
Absolutive	*derg*	*dersh*	*doocurg*	*doocursh*
Ergative	*dolchuo*	*dolchaara*	*doocuchuo*	*doocuchaara*
Genitive	*dolchun*	*dolcheeran*	*doocuchun*	*doocucheeran*
Dative	*dolchunna*	*dolchaarna*	*doocuchunna*	*doocuchaarna*
Comparative	*dolchul*	*dolchaaral*	*doocuchul*	*doocuchaaral*
Material	*dolchux*	*dolchaarax*	*doocuchux*	*doocuchaarax*
Allative	*dolchynga*	*dolchaerga*	*doocuchynga*	*doocuchaerga*
Locative	*dolchuohw*	*dolchaergahw*	*doocuchuohw*	*doocuchaergahw*
Source	*dolchyra*	*dolchaergara*	*doocuchyra*	*doocuchaergara*

The following examples with auxiliary free relatives are taken from the literature (CRL-Say 2007).

(94) Hinca [taruo jolchuo] hu"a a aaraxyecu
now possibility-ABS J-REL-ERG whatever & out.release-PRS
'Now those who can, publish anything.' (CRL say 2007: 34-00002:240)

(95) [Wyllush volchuo] qunna quzza tapcha tyexna.
lie-PRS-PTC V-REL-ERG this-DAT three-TMS pistol-ABS hit-PSTN
'Who was lying fired a gun at him three times.' (CRL say 2007:86-00173:144)

The example given earlier in section 2.2.1 can be transformed into an auxiliary free relative too. Here again, as in example (93), it is possible to use the reflexive *shiena* to fill the gap left by the relativized noun – even though that noun is now completely implicit in the sentence.

(96) [Sielxanai stag$_k$ (shiena$_i$) gina volchuo$_i$] cynga$_k$ cwa-shi
yesterday that man-ABS 3S.RFL-DAT see-PSTN V-REL-ERG 3S-ALL one-two
duosh aelliera.
word-ABS speak-REM
'Who$_i$ had seen that man$_k$ yesterday, spoke a few words with him$_k$.'

The following examples show that the free relative does not necessarily need to be the subject of the matrix clause for the usage of a resumptive to be acceptable. In example (97) the free relative is the object of the matrix clause, while in example (98) it is the allative case causee of the matrix clause.

(97) [Sielxanai saermik$_k$ shiena$_i$ gina verg$_i$] ca
yesterday that dragon-ABS 3S.RFL-DAT see-PSTN V-REL-ABS NEG
vevza suuna.
V-know-PRS 1S-DAT
'I don't know the man$_i$, who$_i$ had seen that dragon$_k$ yesterday.'

(98) [Sielxanai saermik$_k$ shiena$_i$ gina volchynga$_i$] xi
yesterday that dragon-ABS 3S.RFL-DAT see-PSTN V-REL-ALL water-ABS
maliitira Rebiqas.
let.drink-PSTN Rebecca-ABS
'Rebecca let the man$_i$, who$_i$ had seen that dragon$_k$ yesterday, drink water.'

A special case among the free relatives is reserved for the form *dolchu* (and related forms for other classes, as well as related negative forms). This can be illustrated by example (99) which is taken from the literature. The phrase *walaamatash miel dolchu* 'wherever there are miracles' could be seen as a free relative where the head noun *mettig* 'place' is left unpronounced. Possibly the relative clause originates from the genitive subject auxiliary clause in (100). With a "normal" free relative the combination *dolchu mettie* would have been replaced with the free relative auxiliary *dolchynga* (compare Table 5). But possibly in

situations like this the adjectival form *dolchu* (compare Table 1) is understood as a shorthand for *dolchynga*. (The allative case in Chechen is known to have full and shortened forms for normal nouns.)

(99) Xizir-pajxamar, [walaamatash miel dolchu] qaacha Daala hwuuna nicq'
Hizir-prophet-ABS miracle-PL-ABS any D-REL-GOAL reach-INF God-ERG 2S-DAT strength-ABS
bella vu.
B-giv-PSTN V-PRS

'Prophet Hizir, God gave you power to get to any place in the world where are miracles.'
(CRL say 2007:86-00200:34)

(100) Cu mettigan walaamatash du.
that-OBL place-GEN miracle-PL-ABS D-PRS

'That place has miracles/there are miracles at that place.'

In other instances where the implied *mettig* 'place' is deleted the free relative is spelled out more fully. The example in (101) is from a fairy tale about happiness and agreement (in the sense of peace). The person speaking is the personified happiness (noun *irs* of class *d*). Possibly the relative clause originates from the genitive subject auxiliary clause in (102).

(101) [Bart bolchuohw] so a xila dieza
agreement-ABS B-REL-LOC 1S-ABS & be-INF D-need-PRS

'Where agreement is, I too have to be.' (Khamidova 2003:Irs)

(102) Cu mettigan bart bu.
that-OBL place-GEN agreement-ABS B-PRS

'That place has agreement/there is agreement at that place.'

2.6. Restrictive versus appositive relative clauses

Restrictive relative clauses in general serve to identify one particular noun out of a set of possibilities. In example (103) for instance the class of all women is further specified by the relative clause as belonging to the class of all the things that I saw yesterday, thereby restricting the possibilities as to who that woman is.

(103) The woman [that I saw yesterday] has blond hair.

Appositive relative clauses on the other hand do not restrict a noun or noun phrase in the sense given above, but give further background information about the noun phrase.

Syntactically they must be somewhat different from restrictive relative clauses, since the appositive relative clause can modify a whole noun phrase instead of only a noun. An appositive can for instance modify a pronoun as in (104) or a common noun as in (105). Both pronoun and common noun are regarded as complete noun phrases already.

(104) We, [who are camping in the forest], want the weather to be nice.

(105) Mark, [who was here yesterday], bought a new car.

A language like English formally distinguishes between restrictive and relative clauses through constraints on the usage of relativizers. For restrictive relative clauses the pronoun *that* can be used, while appositive relative clauses must be introduced by a *wh*-question word.

Chechen equally allows appositive relative clauses and restrictive ones and, as far as I have observed, does not make a formal distinction between them. Examples (9), (13) and (16) contain appositive relative clauses and are repeated here for convenience. Note in example (107) that the noun phrase *cu ghullaqan* 'of that matter' is already specific enough in the context for the reader to know what the author is talking about. So the relative clause *ishtta dolchu* 'which is thus' must be seen as an appositive one.

(106)	[Cigahw	laettash	volchu]	Muusana	so	gira
	there	stand-PRS-PTC	V-REL-OBL	Musa-ERG	1S-ABS	see-PSTR

'Musa, who was standing over there, saw me.'

(107)	[***t***$_i$	Ishtta	**d**olchu]	cu	ghullaqan$_i$	ojla	a	juora	Peet'amata.
		thus	D-REL-OBL	that-OBL	matter-GEN	thought-ABS	&	J-make-IMPF	Petamat-ERG

'Petamat thought about that matter that was thus.' (Baduev 1991:31)

(108)	[***t***$_i$	Cynga	xi	maliitina	**j**olu]	Rebiqa	ch'oogha	macjelira.
		3S-ALL	water-ABS	let.drink-PSTN	J-REL	Rebecca-ABS	very	hunger-J-PSTR

'Rebeccai, [who$_i$ had made him$_j$ drink water], became very hungry.'

Sentence (109) is added as an example of an appositive relative clause where a pronoun serves as head noun phrase.

(109) [Cynan deena gharbashuo q'uot'algha vina volu] iza qi'niera
3S-GEN father-DAT slave-ERG illegitimate V-do-PSTN V-REL 3S-ABS raise-REM
Panama-ghaalina juqq'ierchu baazaran k'oshtan jaamartachu uuramashkahw.
Panama-city-DAT middle-SRC-OBL market-GEN district-GEN mean-OBL street-PL-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.' (CRL-say 2007:34-00603:40)

2.7. Position of the relative clause within the noun phrase

Nouns in Chechen can be modified by, for example, demonstratives, adjectives, numerals, possessives and relative clauses.[18] A combination of these elements is possible too. The order of these constituents within a noun phrase is a separate topic for research. However, at this point it is interesting to see that the position of the relative clause within the noun phrase can vary. Take the sentence in (110) as starting point. The relative clause *cigahw laettash jolu* 'who are standing there' comes after the demonstrative, and before the possessive, the adjective and the numeral.

(110) [$_{NP}$ Hara [cigahw laettash jolu] pacchahwan xaza pxi juow]
this-ABS there stand-PRS-PTC J-REL king-GEN beautiful five daughter-ABS
eesharsh lyeqush ju.
song-PL-ABS sing-PRS-PTC J-PRS

'These five beautiful daughters of the king, who are standing there, are singing songs.'

Alternative orderings are possible, as illustrated in (111) and (112), where the translation is the same as in (110).

(111) [$_{NP}$ Pacchahwan [cigahw laettash jolu] hara pxi xaza juow]
king-GEN there stand-PRS-PTC J-REL this-ABS five beautiful daughter-ABS
eesharsh lyeqush ju.
song-PL-ABS sing-PRS-PTC J-PRS

(112) [$_{NP}$ [cigahw laettash jolu] pacchahwan hara pxi xaza juow]
there stand-PRS-PTC J-REL king-GEN this-ABS five beautiful daughter-ABS
eesharsh lyeqush ju.
song-PL-ABS sing-PRS-PTC J-PRS

In the above two cases the numeral needs to precede the adjective. Possibly other orders are allowed too. More research can be done in the area of the noun phrase as a whole, where it would be of particular interest to find out what differences in meaning there are between the

[18] Possibly some of these modifiers do not modify a single noun, but only a noun phrase.

different constituent orders within a noun phrase. But this falls outside the scope of the current research. It should be taken into account when word order within the Noun Phrase as a whole is investigated.

2.8. Extraposition of the relative clause

Looking further at mobility, there is one way the relative clauses in Chechen distinguish themselves from what could be expected were they but simple participial clauses (that is to say: adjectival phrases). The whole relative clause can be extraposed to a matrix-clause-final position.[19] An example of extraposing to a position following the head-noun is given in (113). Note that the relative clause immediately follows the head noun *zuda* 'wife'. The relative clause is appositive, since it modifies a whole noun phrase *Beshir-mollin zuda* 'the wife of mullah Beshir', which by itself is restrictive enough to identify one unique participant. The relative clause is bracketed in this example.

(113) I jara Beshir-mollin zuda, [cuo mogush joocush ju,
that J-PST Beshir$_i$-mulah-GEN wife$_k$-ABS 3S-ERG health-ABS J-NEG-PRS-PTC J-PRS
aella hincca qo butt hwalxa jitina jolu].
say-PSTN now-INT three month-ABS earlier J-leave-PSTN J-REL

‘That was the wife$_k$ of mulah Beshir$_i$, whom$_k$ he$_i$ had left now three months before, having said that [she$_k$] was unhealthy.’ (Baduev 1991:29)

Also consider example (114) where the head noun *huordie* is in the allative case, and the relative clause agrees with it since the relativizer *bolchu* has an oblique case marker *–chu*. Again here is a case of an appositive relative clause.

(114) Hwazhahwa huordie, [boqqa a, shyyra a bolchu].
look-IMV sea-ALL B-large & wide & B-Rel-Obl

‘Look at the sea, which is large and spacious.’

The fact that extraposition is to the right edge of the matrix clause becomes more apparent in the following elicited example (115). In this case the relative clause is *restrictive*, determining

the head noun *zuda* 'woman'. The relative clause is extraposed at the right edge of the matrix clause, after the verb.

(115) Cunna cwa zuda jiezajelira, [geenachu tuoghi chuohw wash jolu]
3S-DAT one woman-ABS J-love-PSTR distant-OBL valley-DAT inside live-PRS-PTC J-REL
'He fell in love with a woman that lived in a distant valley.'

The relativized noun does not need to be in the nominative case for extraposition to be possible. In example (116) the head noun is *naaxie* 'people', and the noun phrase *ocu naaxie* is in the allative case – as it is the indirect object of the verb 'to phone' (literally, 'hit the telephone'). In the matrix clause this noun phrase is the only one having the *b*-class (in this case *b*-class means that it is 3rd person human plural). So in this case there is class agreement between the relativizer *bolchu* and the head noun *naaxie* (the relativized noun would have been in the allative case *naaxax* 'about people' within the relative clause). Besides there is case agreement between them. The noun phrase has allative case and the participial relativizer *bolchu* is in the oblique case, which means that it modifies anything but the absolutive.

(116) Iza a ditii, cul a ocu naaxie telefon tuoxahwa,
3S-ABS& D-leave-CONJ 3S-CMP & these-OBL people-ALL phone-ABS hit-POL-SG
[ajhwa biicina bolchu].
2S.RFL-ERG B-speak-PSTN B-REL-OBL
'Leave that, and instead phone these people, about whom you spoke.'
(CRL say 2007: anonymous-00675:99)

Relative Clauses with the participial auxiliary *dolu* are not the only ones allowing extraposition. Example (117) shows that a relative clause without *dolu* can also be extracted to the clause-final position.

(117) San Syelzha-ghaala$_i$ uohwavaan diezara, [t'amuo ***t***$_i$ juoxiinachu].
1S-GEN Grozny-city-ALL down-V-come-INF D-need-IMPF war-ERG J-destroy-PSTN-OBL
'I had to come down to the city Grozny, which was destroyed by the war.'
(CRL say 2007:anonymous-00102:245)

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[19] I use the term "extraposed" figuratively here. It remains to be shown what exactly – if anything at all – moves to which position, when there is an extraposed relative clause.

In this sentence *ghaala* is from the *j*-class, while *t'om* 'war' is of the *b*-class. The relative clause's head *juoxiinachu* 'which was destroyed' agrees with the city in noun class. And it has an oblique case marker, because the head noun *ghaala* 'city' is in an allative case.

Here the relative clause is an appositive one, modifying a whole noun phrase. The city Grozny already determines quite well what is being spoken about.

2.9. Gender agreement

As was already stated in section 2.1.4, the participial heading the relative clause agrees in grammatical case with the head noun. But as to gender agreement the picture is not so simple. Noun-class agreement (which is gender agreement) has been mentioned frequently already in the subsections of 2.2. What I will do here is summarize the agreement data and draw a general picture of it.

When there is one single verb (simple verb or auxiliary) heading the relative clause, it agrees in noun class with an absolutive argument in that clause. It does not matter whether that argument is visible in the relative clause or whether it only has left a gap. These agreement situations are summarized in Table 6.

Table 6 Agreement of participial from a simple verb

			Participial auxiliary agrees in noun-class with:						
			Argument in RC		**Gap in RC**		**Head noun in MC**		
#	**What is relativized?**	**Vb/Tense**	**Case**	**Function**	**Case**	**Function**	**Case**	**Function**	**See**
1	Subject of intransitive	aux	-	-	**abs**	**subject**	gen	about	(13) (16)
2	Subject of transitive	simple	**abs**	**object**					(10)
3	Possessor of locative	aux	**abs**	**subject**	-	-	-	-	(60)
4	Object of postposition	aux	**abs**	**object**	-	-	-	-	(62)
5	Subject of "have" clause	aux	**abs**	**subject**	-	-	-	-	(73)
6	Object of "have" clause	aux	-	-	**abs**	**direct object**	abs	subject	(76)
7	Object of comparison	aux	**abs**	**subject**	-	-	-	-	(68)

When a relative clause is headed by a compound verb (a simple verb together with the participial auxiliary), then the agreement is more complex. The participial relative from a compound verb sometimes agrees in class (which is the equivalent of phi features) with the

gap left in the relative clause (or the head noun – they are the same), in other cases the participial auxiliary agrees in class with an absolutive case constituent in the relative clause. A summary of the agreement is shown in Table 7.[20]

Table 7 Agreement of participial auxiliary from compound verb

			Participial auxiliary agrees in noun-class with:						
			Argument in RC		**Gap in RC**		**Head noun in MC**		
#	**What is relativized?**	**Vb/Tense**	**Case**	**Function**	**Case**	**Function**	**Case**	**Function**	**See**
1	Subject of transitive	cmpd/pst	-	-	erg	subject	abs	subject	(16)
2	Subject of transitive	cmpd/pst	-	-	dat	subject	all	causee	(22)
3	Direct object	cmpd/prs	-	-	dat	direct object	abs	subject	(23)
4	Indirect object	cmpd/pst	-	-	dat	indirect object	abs	subject	(32)
5	Possessor of subject	cmpd/pst	-	-	gen	possessor	abs	subject	(44)
6	Possessor of subject	cmpd/pst	-	-	gen	possessor	abs	object	(47)
7	Goal in intransitive clause	cmpd/prs	-	-	dat	recipient	abs	object	(42)
8	Goal in intransitive clause	cmpd/prs	abs	subject	-	-	-	-	(41)
9	Goal in intransitive clause	cmpd/fut	abs	subject	-	-	-	-	(38)
10	Possessor of locative	cmpd/pst	-	-	gen	possessor	abs	subject	(58)

Of importance here is the minimal pair formed by examples (41) and (42). The gender agreement differences here differ from those found for what has been called the "antipassive" (Nichols 1994b:104-105).[21]

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[20] In this table "cmpd" stands for "compound verb".

[21] The auxiliary used in a compound present tense matrix clause normally agrees with the absolutive case direct object in gender, as in (where *so* is a female):

suuna *iza* *viezash* *vu*

1S-DAT 3S-ABSV-love-PTC V-PRS

'I(female) love him'

The dative subject can in this situation be changed into the absolutive case. That construction is called the antipassive. In that situation the auxiliary agrees in gender with the absolutive case subject:

so *iza* *viezash* *ju*

1S-DAT 3S-ABSV-love-PTC J-PRS

'I(female) love him'

But in the minimal pair formed by examples ((41) and ((42) the auxiliary participial agrees in gender either with the absolutive case subject *baaxam* 'possession' or with the dative case recipient.

2.10. Resumptives

Normally the relativized noun leaves a gap in the relative clause. In some instances this gap can be filled by a reflexive pronoun which functions as a resumptive. This is one particular instance of long distance anaphora (see Nichols, 2001 for other usages of long distance anaphors in Chechen).

An overview of the situations where a reflexive can be used and where it can not be used is given in Table 8. Each row gives the situation where the relativized noun fulfills one particular grammatical function in the relative clause. Each column shows what the grammatical function of the head noun is in the matrix clause. Where possible a link to an example is given. Several situations have not been elicited, which is indicated by a hyphen.

Table 8 Usage of reflexive to fill the gap in the relative clause

	Head noun in matrix clause		
Relativized noun	**Subject**	**Direct Object**	**Goal**
Subject (Absolutive)	no: (12)	-	-
Subject (Ergative)	allowable: (17)	-	-
Direct Object (Dative subject)	no: (24)	-	-
Direct Object (Ergative subject)	possible: (30)	possible: (29)	possible: (25)
Subject ("have" clause)	possible: (74)	allowable: (64)	-
Possessor	possible: (46)	allowable: (47)	-
Subject (Dative)	possible: (19)	possible: (21)	possible: (22)
Indirect Object	possible: (33)	possible: (36)	-
Goal	-	possible: (40)	-
Adjunct object	possible: (62) desirable: (67)	possible: (64) desirable: (68)	desirable: (69)

As has been discussed in section 2.2.7 the usage of resumptives for the most part matches the NP accessibility hierarchy: the secondary strategy for relativization (using a resumptive) is highly desirable at the lower end of the hierarchy (relativizing objects of a comparison), where the primary strategy (leaving a gap) is less well received. On the upper end of the hierarchy (absolutive case arguments) only the primary strategy is possible, so no resumptives are allowed. For those situations where both the primary as well as the secondary strategy can be used, it is not yet clear what determines the choice between these strategies. An answer may be sought in the area of topic continuity (Givón 1983). In many languages expressing

arguments in a matrix clause by null forms is associated with a continuing topic, whereas overt pronouns signal a change in topic. Further research is needed to see whether this same principle holds for the usage of gapping versus resumptives in Chechen relative.

2.11. Summary of the data

Concluding this chapter on what kind of relative clauses are observed in Chechen I would like to summarize what has been found so far, before I continue with the syntactic description of the clauses.

All kinds of constituents that have been reviewed can be relativized in Chechen: the subject, the direct object, the indirect object, a noun phrase containing a goal, the object of a postpositional phrase, the possessor of an argument, the object of a comparison, the subject of a "have" clause.

The resulting relative clause seems to be a participial clause, since it is headed by a verb or auxiliary that gets an ending transforming it in a kind of adjective. Free relatives are made by deleting the head noun and adding a nominalizing suffix to the participial heading the relative clause. Number and case suffixes are then attached to the nominalizing suffix.

Relative clauses can be restrictive or appositive. Chechen has no formal means of distinguishing between these two types. Appositive relative clauses can modify a pronoun or a common noun, but restrictive relative clauses can do so, as well.

Relative clauses in Chechen show quite some ability to move. First, a relative clause can move within a noun phrase. Second, both restrictive as well as appositive relative clauses can be extraposed to a matrix-clause-final position. No motivation has been found yet for either movement, but motivation and data supporting it will be provided in section 3.5.

The relative clause always agrees in grammatical case with the head noun. The head noun's case is determined within the matrix clause.

Gender agreement is more complex. When a single verb (a simple one or an auxiliary) heads the relative clause, it agrees in gender with an absolutive case argument in the relative clause. When a relative clause is headed by a compound verb (a simple verb plus an auxiliary) then the participial auxiliary shows mixed agreement behaviour (see section 2.9).

Resumptives which fill the gap left by the relativized noun are possible in many situations, though optional. When the object of a comparison is relativized, the speakers I consulted found it desirable to use a resumptive. Relativized direct objects of ergative-subject verbs could be substituted for a resumptive, but not the direct objects of dative-subject verbs.

3. Syntax of the Chechen relative clause

In the second part of this paper I would like to say a few more words on the syntax of relative clauses, and where applicable I will do so in the framework of minimalism (Chomsky 1995).

3.1. What kind of phrases are Chechen relative clauses?

The first question I would like to ask, is how to label the relative clauses in Chechen. Since the relative clause contains a tensed verb form (the participle can be past, present or future), the relative clause is at least a TP.[22]

The conclusion that the relative clause, even though its main verb is a participial, can be a TP, is in line with the conclusions drawn for the Turkish language (which is also SOV and makes use of case-marking) by Jaklin Kornfilt (2000), although her arguments are a bit different. She argues that Turkish participle clauses may contain different kinds of adjuncts

[22] But the relative clause tense should be seen as a relative tense. For instance, if the relative clause is in the present tense, and the main verb of the matrix clause is in the past tense, then the tense of the relative clause should be interpreted as past.

(adverbial phrases), which, as she notes, is not normal for participial clauses like in English, indicating that the Turkish participle phrases are more like TP's.

The next question is, how the maximal projection of the Chechen relative clause should be labeled. I will set out to show that it is similar to, but not in all respects equal to an adjectival phrase (i.e. AP). Then I will consider the question whether it should be seen as a CP. In section 3.1.1 will argue that for some relative clauses Chechen has an overt relativizing morpheme heading the relative clause, for which reason the status of the clause should be that of a CP. Then in section 3.1.2 I will consider the status of the relativizer in Chechen.

3.1.1. Relative clauses and adjectival phrases

Relative clauses receive the same kind of morphological inflection as adjectives. Like adjectives they can be bound to a noun which they modify, or they can be free and get the same inflection nouns get. That they are not to be put completely in the same category as Adjectives (or Adjectival Phrases) can be seen by comparing phrases such as (118) and (120).

(118) Xaza a, dika a juow
beautiful-ABS & good-ABS & girl-ABS
the beautiful good girl

(119) Xaza dika juow
Beautiful-ABS good-ABS girl-ABS
the beautiful good girl

(120) [Xaza jolu] dika juow
beautiful-ABS J-AUX-NOM good-ABS girl-ABS
the good girl that is beautiful

(121) [niisachu, t'iehw qaaluor joocuchu] txov t'e
flat-OBL on tile-ABS J-NEG-AUX-OBL roof-DAT on
on the flat roof, that doesn't have tiles on it

(122) *[Xaza jolu a] dika a juow
Beautiful-ABS J-AUX-NOM & good-ABS & girl-ABS
the good girl that is beautiful

Example (118) and (119) show conjoining of adjectives to form a complex Adjectival Phrase. Examples (120) and (121) show that an adjective can be combined with a relative clause

(either following or preceding it respectively), but example (122) shows that conjoining an adjective and a relative clause is not allowed. This shows that there must be a syntactical difference between the two. A relative clause differs syntactically from an Adjectival Phrase.

3.1.2. Chechen relativizing morpheme

In this section I will address the question whether Chechen has overt relativizers, in particular, relativizing morphemes. The quest for possible relativizing morphemes in Chechen starts with the auxiliary *du* from which the auxiliary's participial *dolu* is derived. Four other foms derived from *du* are relevant to the discussion. The first form is *delahw* (with corresponding affirmatives *velahw*, *jelahw*, *belahw* and corresponding negatives *daacahw*, *vaacahw*, *jaacahw*, *baacahw*). This form is for instance used to convey a condition, as illustrated by example (123).

(123) Nagahw ysh diina belahw, so vovzyytur vu as
If 2P-ABS alive B-AUX-COND 1S-ABS V-know-CAUS-FUT V-PRS 1S-ERG
'If they are alive, I will make myself known.' (Ajdamirov 2007:3)

If the verb is not the auxiliary but a simple verb, then only the suffix *–ahw* expresses the condition. This is illustrated by *vitahw* in example (124). This is the *v* noun class conditional form derived from the verb *dita* 'to leave'. For simple verbs the conditional is attached to the infinitive root.

(124) Zelimxa maersha vitahw, Vedana okrugiehw cq'a a
Zelimkhan-ABS free V-leave-COND Vedeno-ABS area-LOC never
sintiem xir baac
peace AUX-FUT B-NEG
'If you leave Zelimkhan free, there will never be peace in the Vedeno area.' (Ajdamirov 2007:2)

The second form relevant for the discussion is *delahwaara* (with corresponding affirmatives and negatives). This form is used to convey a counterfactual condition. An example is given in (125). Note that the implication is that the addressed person does *not* listen well, and therefore the reading of the poem will *not* happen.

(125) Ahw dika laduughur delahwaara, as sajn stix jyeshur
2S-ERG good listen-FUT D-AUX-IRR 1S-ERG 1S.RFL-GEN poem-ABS J-read-FUT
jara hwuuna
J-PST 2S-DAT
'If you would listen well, I would read my poem to you.' (Maciev 1961:608)

A third form relevant for the discussion is *delara*, which is a form of the auxiliary that is used to convey the irreal variant of the desirative. This expresses a desire, but it is known that the desire is unrealistic and there is no expectation of fulfilling it. Or when the clause is in the past tense it is a fact that the desire did not take place. A past tense example is given in (126).

(126) Sielxxaniehw liichina velara hwo cigahw
yesterday-INT bathe-PSTN V-AUX-IRR.DES 2S-ABS there
'Would that you had bathed even yesterday!' (Maciev 1961:608)

Before considering the common factor between the suffixes used in expressing the conditionals and moods above, I would like to consider one more suffix, which is used to express subjunctive and volitive mood. The suffix is *–la*, and two examples where it is used as a volitional marker are given in (127) and (128). Note that there is a polar question marking suffix *–ii* (or *–j* on phonological grounds) between the verb root and the volitiona suffix *–la*.

(127) Qin cq'a a mago-j-la t'eman buoxam
again once NEG see-QM-VOL war-GEN destruction-ABS
'May they never see military tragedy!' (CRL say 2007:86-00029:56)

(128) Deela reeza xyl-ii-la caarna
God-ABS agreeing be-QM-VOL 3P-DAT
'May God be pleased with them!' (CRL say 2007:86-00050:54)

The same suffix is also used to mark a subordinate clause that is the complement of verbs like 'know', 'want' etc. This is illustrated in (129). Note that in this case the form of the auxiliary may be *duj* or *dujla*. The presence of the suffix *–la* is optional.

(129) Suuna xae'a vaj diirig niisa huma duj(la)
1S-DAT know-PRS 1P.INC-ERG D-do-NML-ABS right thing-ABS D-PRS-QM-SUBJ
'I know that we are doing the right thing!' (CRL say 2007:34-00728:15)

Now I would like to look at the common factor between these diverse suffixes that I have been showing above. The present conditional suffix from the first set of examples is *-ahw*, but

when attached to the auxiliary, a suffix *-el-* with unknown meaning is inserted. This same suffix appears in the counterfactual condition and the counterfactual desire forms of the auxiliary. A summary of the meaning of the suffixes reviewed above is given in Table 9. The subjunctive suffix that marks a subordinate clause contains an optional suffix *-la*.

Table 9 Several verbal suffixes

Type	Infinitive	Meaning	Class	Root	QM	X	Neg	Mood	Example	Ref
Present condition		(auxiliary)	*b-*			*-el-*		*-ahw*	*belahw*	(123)
Present condition		(auxiliary)	*d-*				*-aac-*	*-ahw*	*daacahw*	
Present condition	*dita*	leave	*v-*	*-it-*				*-ahw*	*vitahw*	(124)
Counterfactual condition		(auxiliary)	*d-*			*-el-*		*-ahwaara*	*delahwaara*	(125)
Counterfactual desire		(auxiliary)	*v-*			*-el-*		*-ara*	*velara*	(126)
Volitive/Subjunctive	*gan*	see		*go-*	*-j-*	*-la*			*gojla*	(127)
Subjunctive		(auxiliary)	*d-*		*-j-*	*-la*			*dujla*	(129)
Volitive	*xila*	be/happen		*xil-*	*-ii-*	*-la*			*xyliila*	(128)

I argue that the suffix *–l* is in fact a complementizer suffix, i.e. an overt realisation of C^0, the head of a CP. The fact that it is preceded by a vowel or followed by a vowel should be explained purely on phonological grounds.

In most cases above the presence of the complementizer suffix is either optional (i.e. the subjunctive), or restricted to instances involving the affirmative form of the auxiliary (the other cases above). At this point I can offer no explanation why a complementizer suffix would be in complementary distribution with a negating suffix.[23]

Since the suffix *–l* is identified as a complementizer in the cases above, which are unrelated to relative clauses, it seems reasonable to assume that the same suffix *–l* surfaces in the participial auxiliary *dolu*. As noted above, it does not surface in the negative form of the

[23] From another study the suggestion was made that a negator is part of an overt realisation of the IP head. But a complementizer would be an overt realisation of a CP head. These two suggestions therefore don't seem to match. An alternative analysis would be that the *–l* suffix in the participial auxiliary simply conveys affirmative meaning, and doesn't have anything to do with relativizing or complementizing. However, affirmative suffixes are elsewhere unattested in Chechen.

participial auxiliary *doocu*, just as it does not surface in the negative form of the conditional *daacahw*.

If the above reasoning holds true, then the participial auxiliary contains an overt realisation of a C^0 head. That raises the status of the relative clause to that of a CP.

3.2. Syntax of the normal relative clause

I will assume a theoretical framework that is a unification of the matching and the raising analysis (Henderson 2007). For the syntactic description I accept the following assumpions:

- The theoretical framework is minimalism (Chomsky 1995).
- The suffix *–l* is accepted as complementizer (relativizer).
- The auxiliary is an overt realisation of the head of the inflectional phrase.

Given these assumptions an analysis where strict branching is assumed, runs into problems. This is illustrated in section 3.2.1. The only way in which an analysis seems to reflect reality is one where heads branch to the right and specifiers to the left. This is illustrated in section 3.2.2.

3.2.1. Analysis using strict branching

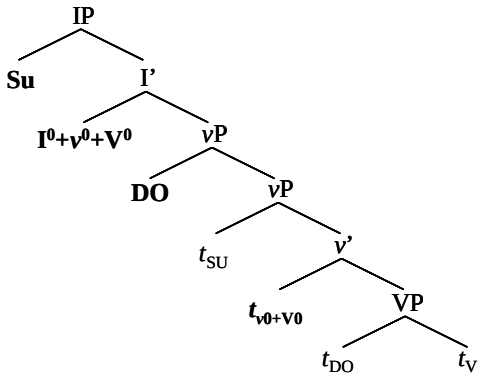
Within minimalism one assumption that is often made in addition to the assumptions stated in the preamble of this section, is that there is strict branching.[24]

---

[24] There has been a proposal to parameterize the Merge operation, but I have not seen others take this idea up (Saito and Fukui 1998). Many within the minimalist program, however, adhere to strict branching (the specifier-head-complement hypothesis) and tie this up with the linear correspondency axiom (Kayne 1995). But others have shown that this axiom does not hold, and that it is for different reasons easier and more natural to analyze languages as each adhering to one particular specifier-head-complement ordering (Ackema and Neeleman 2002, Abels and Neeleman 2006).

The analysis of the unmarked SOV clause runs along the lines given by Author (2007a). The clause structure is shown in Figure 1.

Figure 1 Unmarked SOV clause



A verb phrase is projected from the main verb. The direct object is copied into the specifier of the verb phrase, and receives a theta role from the main verb. Then a light verb projects a phrase, and the subject gets copied in its specifier, where it gets a theta role from the light verb. An additional specifier is added to *v*P where the direct object is copied to and where it checks absolutive case and agreement with the light verb. Then the inflectional phrase is projected, the subject is copied into its specifier, where the subject's case (ergative or dative – depending on the main verb) is checked.

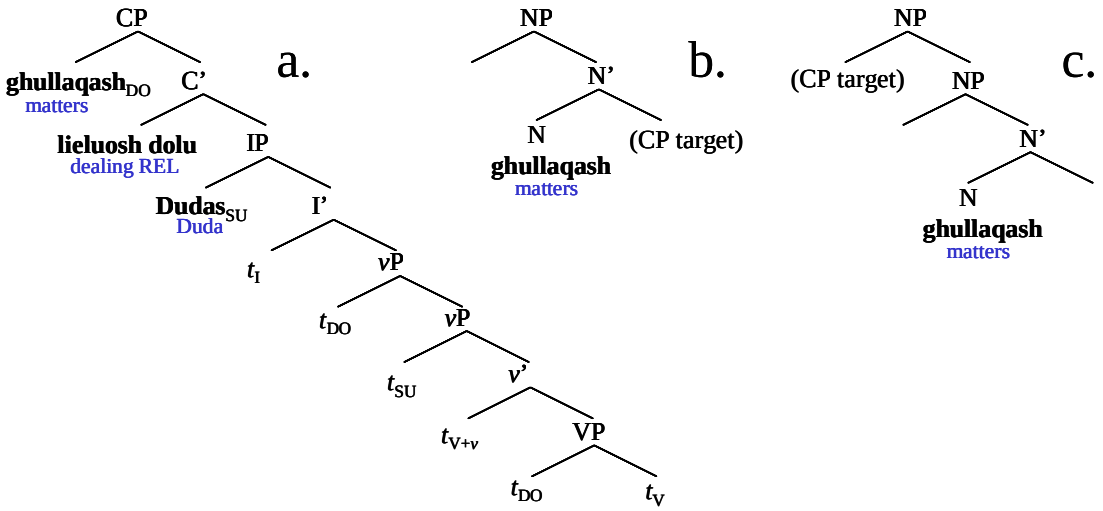
Next, I show the derivation of the relative clause using part of the example given in (23), which is repeated here in (130).

(130) [Dudas t_i lieluosh **d**olu] ghullaqash$_i$
DUDA-ERG deal-PRS-PTC D-REL matter-PL-ABS
the things Duda was dealing with (Baduev 1991:25)

As shown in Figure 2, the relativizer projects a CP, and the direct object is copied to its specifier attracted by a relativizing feature. The relativizer has joined up with the head of IP (which is overtly realized as an auxiliary) to form a compound head *dolu*. According to the raising analysis the relative clause CP would become the complement of an NP, as shown in (b) of Figure 2. An alternative analysis has recently been proposed by Henderson (2007). Under this analysis a copy of the NP *ghullaqash* is made, which then heads a separate NP

within the matrix clause. The relative clause CP adjoins to this copy of the NP, as shown in (c) of Figure 2.

Figure 2 Formation of relative clause using strict branching



With the raising analysis, as shown in (b), the whole relative clause would, at the point of spell-out, appear to the right of the noun *ghullaqash*, which is clearly not the case. Even with the alternative in (c), the adjunct analysis, the resulting clause at spell-out would be as shown in (131), which is not in line with the observed form in (130).

(131) [$_{NP}$ [$_{CP}$ ***t***$_i$ lieluosh **d**olu Dudas] ghullaqash$_i$]

One might be tempted to argue that the compound IP head *lieluosh du* does not move to adjoin to the head of CP until after spell-out. But that would be in conflict with the phasing theory, which predicts the whole CP to be formed correctly before spell-out.

3.2.2. Analysis using directionality

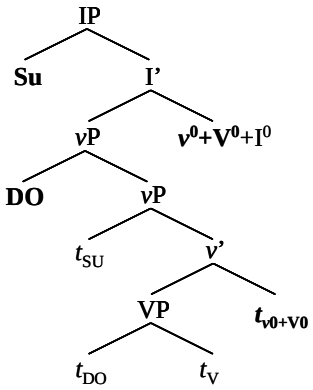
Instead of accepting strict branching another approach would be to say that a language chooses between a left and right branching specifier and between a left and right branching head for each phrase type (i.e. VP, NP, IP, CP etc). I will call this the "directionality approach". My assumptions for Chechen in this section are as follows:

- Heads of the VP, *v*P, IP and CP branch right.
- Specifiers of the VP, *v*P, IP and CP branch left.

- Spell-out order is arrived by walking the tree from left to right.
- Chain reduction applies: only the highest items in a chain are spelled out.

Given these assumptions the syntactic analysis of the unmarked SOV clause looks as shown in Figure 3 (taken from Author 2007a:48).

Figure 3 Unmarked SOV clause using the directionality approach

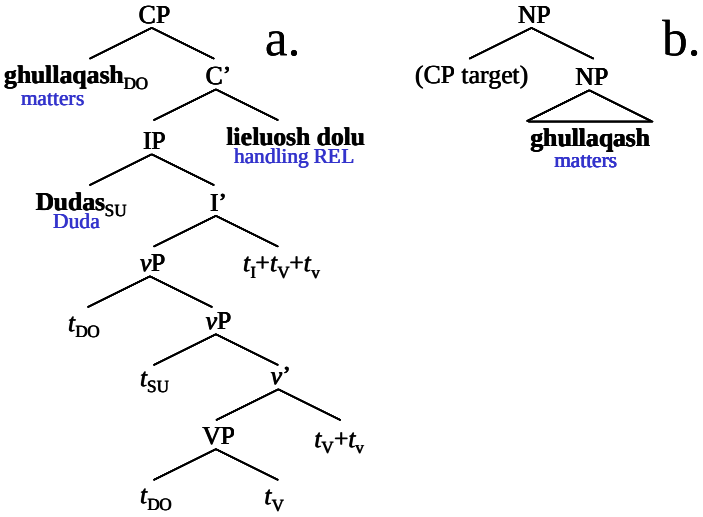


The derivation of the relative clause given in (130) runs as shown in Figure 4. A relativizing head C^0 is taken from the numeration and projects a CP. The head has a strong feature, attracting the direct object being relativized into its specifier. The compound heads V^0+v^0+I^0 move up and combine with the head of CP. This yields the object shown in (a) of Figure 4. Then a separate copy of the NP *ghullaqash* 'matters' is made, which becomes a separate syntactic object within the matrix clause. This yields the object shown as (b) in Figure 4.

In accordance with the adjunct analysis of relative clauses the CP of the relative clause now adjoins to the left of the NP *ghullaqash* 'matters' (Henderson 2007).[25]

[25] According to Henderson adjunction takes place to the NP, but within the DP. For Chechen so far no DP has been established, but it has nevertheless been included in this picture for completeness.

Figure 4 Formation of relative clause using the directionality approach



At spell-out chain reduction is applied as shown in (132).

(132) [$_{NP}$ [$_{CP}$ ~~ghullaqash$_{DO}$~~ [$_{IP}$ Dudas$_{SU}$ [$_{vP}$ ~~ghullaqash$_{DO}$~~ ~~Dudas~~ [$_{VP}$ ~~ghullaqash$_{DO}$~~ ~~lieluosh$_V$~~ ~~lieluosh$_V$~~+*v*^{0}] ~~lieluosh$_V$~~+*v*^{0}+I^0] lieluosh$_V$+*v*^{0}+dolu$_I$] ghullaqash$_{DO}$]

3.3. Restrictive versus appositive relative clauses

Since Chechen data does not distinguish between appositive and restrictive relative clauses, there is no need to make a distinction in the syntactic description of these two types of relative clauses. Formally an appositive relative clause modifies a full NP, whereas a restrictive relative clause could in principle be a specifier within an NP. But under the adjunct analysis above all relative clauses are adjoined to full NP arguments anyway.

3.4. Syntax of the resumptive

I argue that the resumptive pronoun is base-generated within the relative clause CP. I am assuming that the adjunct analysis of the relative clause is the most plausible one for Chechen. Within that analysis the CP containing the relative clause is always c-commanded by the noun phrase heading the relative clause. This noun phrase is part of the matrix clause.

The basic configuration of relative clauses with and without resumptives can be illustrated with two examples. The first example, which is taken from (62) and repeated here as (133),

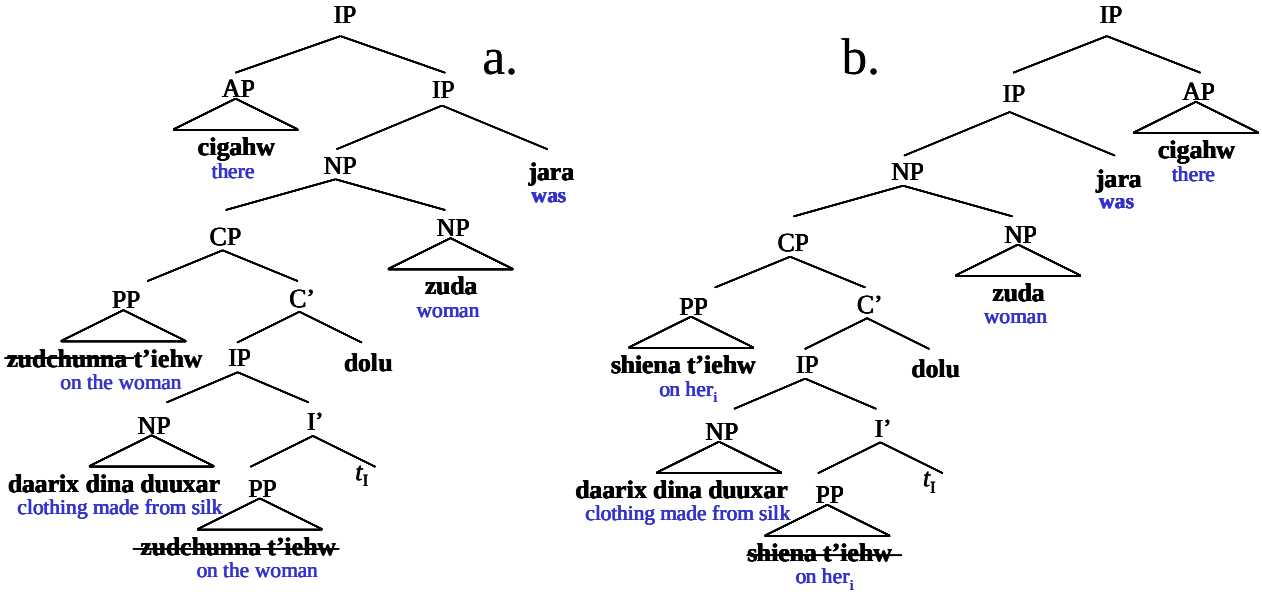
shows a relative clause without resumptive. The second example, taken from (63) and repeated as (134), shows a relative clause *with* resumptive.

(133) Cigahw [daarix dina duuxar [$\mathbf{t}_i$ t'iehw] **d**olu] $zuda_i$ jara
There silk-MAT D-make-PSTN clothing.D on D-REL woman.J J-was
'There was a woman who had clothes made from silk.'

(134) [[$shiena_i$ t'iehw] daarix dina duuxar dolu] $zuda_i$ jara cigahw
3S.RFL-DAT on silk-MAT D-make-PSTN clothing.D D-REL woman.J J-was there
'The $woman_i$, who_i had clothes made from silk, was there.'

The basis for both the matrix as well as the relative clause given above is, in essence, a verbless clause. That is to say – the main verb of the matrix clause and the main verb of the relative clause consist solely of an auxiliary. I will assume that no actual verb phrase is generated, but that the auxiliary is base-generated as head of IP. Example (133) then becomes as shown in (a) of Figure 5, while example (134) then becomes as (b) in Figure 5.

Figure 5 Simple relative clause without and with resumptive pronoun



In the case of example (133) no resumptive pronoun is base-generated in the relative clause. Instead the postpositional phrase *zudchunna t'iehw* 'on the woman' is base-generated as the complement of the auxiliary. This postpositional phrase contains the noun *zuda* 'woman' that is to be relativized. Therefore it has a feature that can be checked by the head of C^0, and so it moves to the specifier of the CP. Meanwhile the noun phrase *zuda* 'woman' heading the

relative clause has been base-generated in the matrix clause. The relative clause CP is left-adjoined to this noun phrase. At spell-out chain reduction applies, and only one instance of *zuda* 'woman' can be spelled out (besides, principle C is at work here too, which prohibits a referential expression to be c-commanded by itself). The lower copy of the postpositional phrase *zudchunna t'iehw* 'on the woman' is completely crossed off at spell-out due to chain reduction. The resulting word order is as in (133).

The case of example (134) is very similar. Only this time the base-generated postpositional phrase is different, since it contains the anaphor *shiena* 'onto self', which is capable of long distance reference ("long distance" in the sense that it can cross the border from one CP/IP domain into another CP/IP domain). At chain reduction there is no reason for *shiena* to be crossed-off – it can be sent to the phonological component to be pronounced. Note that the resumptive *shiena* is c-commanded by the noun phrase *zuda* 'woman' from the matrix clause, to which the relative clause CP is adjoined.

The other difference between (133) and (134) is the location of the the adverb *cigahw* 'there' in the matrix clause. In Figure 5 I have analyzed this as a difference between left and right adjunction. Whether this is the correct analysis is something that is certainly worthy of further investigation, but which is beyond the scope of this paper.

What is of interest in the analysis of the resumptive pronoun above is that the resumptive pronoun in essence is an instance of long distance anaphora, since the binding reaches down from an NP in the matrix clause into the relative clause, thereby crossing a CP boundary.

3.5. Syntax of extraposed relative clauses

I claim that extraposed relative clauses are actually base-generated in the position they occur. If relative clauses are analyzed with a raising construction, the extraposed ones come out to the right, since they are "left behind". The whole NP containing the relative clause is copied to a position above the verb, and at spell-out selective deletion takes place (as part of

chain reduction).[26] One option then is to spell out the whole NP relative clause in its topmost copy. The other option is to spell out part of the NP in the topmost copy, and spell out the CP part of the NP in the lower copy.

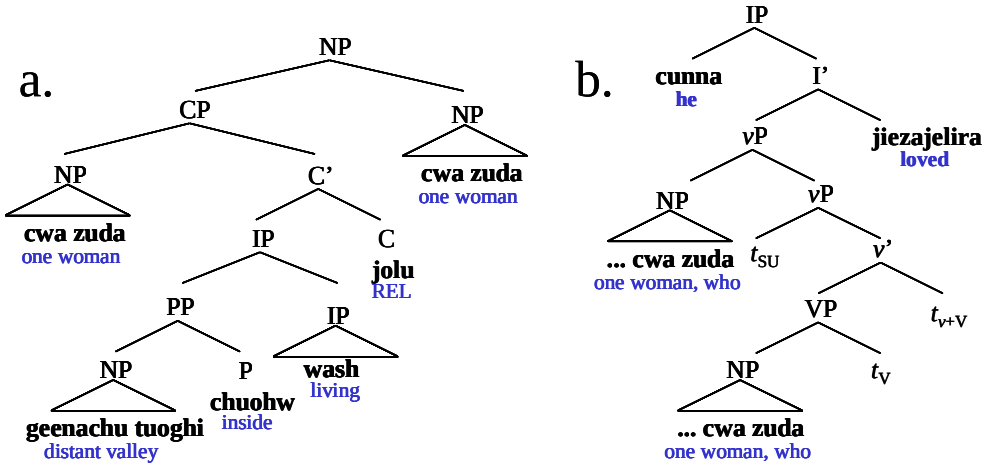
I will illustrate this process using the relative clause from (115), which is repeated here for convenience as (135).

(135) Cunna cwa zuda jiezajelira, [geenachu tuoghi chuohw wash jolu]
3S-DAT one woman-ABS J-love-PSTR distant-OBL valley-DAT inside live-PRS-PTC J-REL
'He fell in love with a woman that lived in a distant valley.'

The syntax of the relative clause *geenachu tuoghi chuohw wash jolu* 'that was living in a distant valley' can be described as shown in Figure 6, part (a). In particular this shows the adjunct analysis of relative clauses – the CP is adjoined above the NP proper. According to the hypotheses made until now, the matrix clause would look like (b) in Figure 6. Under the raising hypothesis there would be two copies of the whole relative clause. Under the adjunct hypothesis either the copy of the object NP in the specifier of VP, or the copy in the upper specifier of *v*P would get the relative clause CP adjoined to it. Whichever of the two analyses is used – this construction would not lead to an extraposed relative clause, since the last constituent of the IP continues to be the verb (that is to say, the compound head consisting of the IP head, the *v* head and the V head).

[26] Within the theory of minimalism nothing is actually deleted – there only is a proces of selecting what gets spelled out (i.e. sent to the phonological componant) and what not.

Figure 6 Extraposition of relative clause



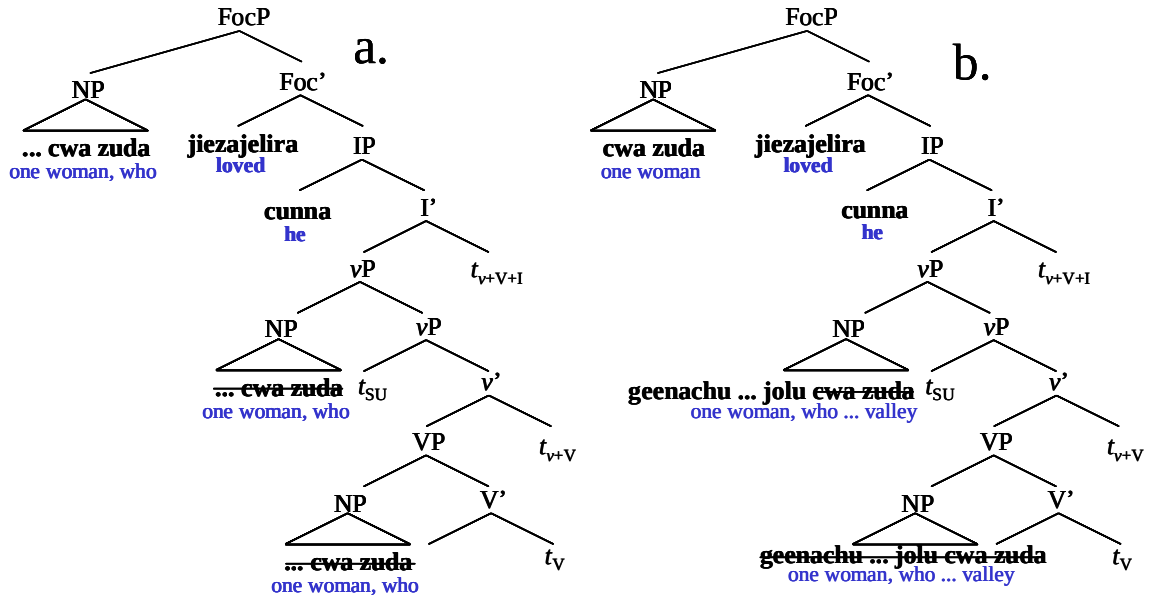
The idea of partial deletion giving two plausible configurations will only work if the object NP proper, i.e. the part without the relative clause, is moved out of the IP into a left-branching Focus Phrase. That also implies the subject moves even further upwards. As has been shown in another research, the subject can move into a Topic Phrase, which is situated above the Focus Phrase (Author 2007a).

The Focus Phrase must have a left branching head and a left branching specifier, so that the IP complement of the Focus phrase comes out completely at the right of the matrix clause. Otherwise this analysis would not work.

3.5.1. Extraposition under a raising analysis

If the object has become focused, then a separate focus phrase is formed above the IP. The direct object moves to the specifier of that FocP, while the verbal complex moves to adjoin to the head of this FocP. In (a) of Figure 7 the situation is shown where, under a raising analysis, the upper copy of the whole NP is transferred to the phonological component. In (b) of that same figure the situation of selectively crossing off is shown. The relative clause part of the upper copy is crossed off and the NP proper part of the lower copy (the specifier of *v*P) is crossed off. What is fed into the phonological component then contains an extraposed relative clause.

Figure 7 Extraposed relative clause under a raising analysis



There is one problem however with the derivation of the extraposition possibilities constructed so far. This problem will be illustrated in the next section, where I show what happens when the relative clause itself contains a focus feature.

3.5.2. Problems with the raising hypothesis

In order to illustrate the problem that comes up under a raising hypothesis I will look at the possibilities and impossibilities of having an extraposed relative clause when it contains a focused element. As was shown in other research I assume that a constituent consisting of or containing a question word gets a strong (i.e. uninterpretable) focus feature (Author 2007a). I have therefore looked at sentences containing the following four situations:

- O_{RC} +O: Neither the object NP nor the relative clause contain a question word.
- O_{RC} +O_q: The object NP contains a question word, but the relative clause does not.
- $O_{RC,q}$ +O: The object word does not contain a question word, but the relative clause does.
- $O_{RC,q}$ +O_q: Both the object as well as the relative clause contain a question word.

As a basis I have taken the clause from example (135) in the introduction to section 3.5. Two native speakers evaluated the different possibilities, and the results are shown in Table 10.

Table 10 Acceptability of question words in relative clause

#	Order				Eval	Ref
a	S	O	V	O_{RC}	?	(135), (136)
b	S	O_q	V	O_{RC}	?	(138), (142)
c	S	O	V	$O_{RC,q}$	*	(147)
d	S	O_q	V	$O_{RC,q}$	*	(148), (149)
e	S	O_{RC}+O	V		ok	(137)
f	S	O_{RC}+O_q	V		ok	(141), (143)
g	S	$O_{RC,q}$+O	V		ok	(144)
h	S	$O_{RC,q}$+O_q	V		*	(145), (146)
i		O	V S	O_{RC}	ok	(150)
j		O_q	V S	O_{RC}	ok	(139)
k		O_q	V S	$O_{RC,q}$	*	(152), (153)
l		O	V S	$O_{RC,q}$	*	(151)
m		O_{RC}+O	V S		ok	(154)
n		O_{RC}+O_q	V S		ok	(139)
o		$O_{RC,q}$+O_q	V S		ok	(156), (157)
p		$O_{RC,q}$+O	V S		ok	(155)

As can be seen from the results in Table 10, the SOV order apparently has a problem with extraposed clauses. They are only marginally acceptable according to the judgment of native speakers. Extraposed relative clases are not problematic in OVS clauses, but extraposition is only possible under the condition that the extraposed relative clause does *not* contain a question word (as illustrated by lines i,j,k and l in Table 10). In terms of the minimalistic approach this means that the relative clause should not have a focus feature.

On the other hand it is perfectly acceptable for a relative clause to be extraposed when the object NP as such has a question word (see line j in Table 10). In terms of the minimalist approach the object NP has then moved to become specifier of the Focus Phrase, while the relative clause is attached to the partly spelled out object within the *v*P.

This now leads to the essence of the problem. Under the raising analysis (see also Figure 7) there would be three copies of the whole object NP including the relative clause: one as the specifier of the VP, one as a second specifier of the *v*P, and one as the specifier of the FocP. Even though the object NP contains a relative clause with a strong focus feature, under this raising analysis it would be hard to find a good reason for not being allowed to selectively

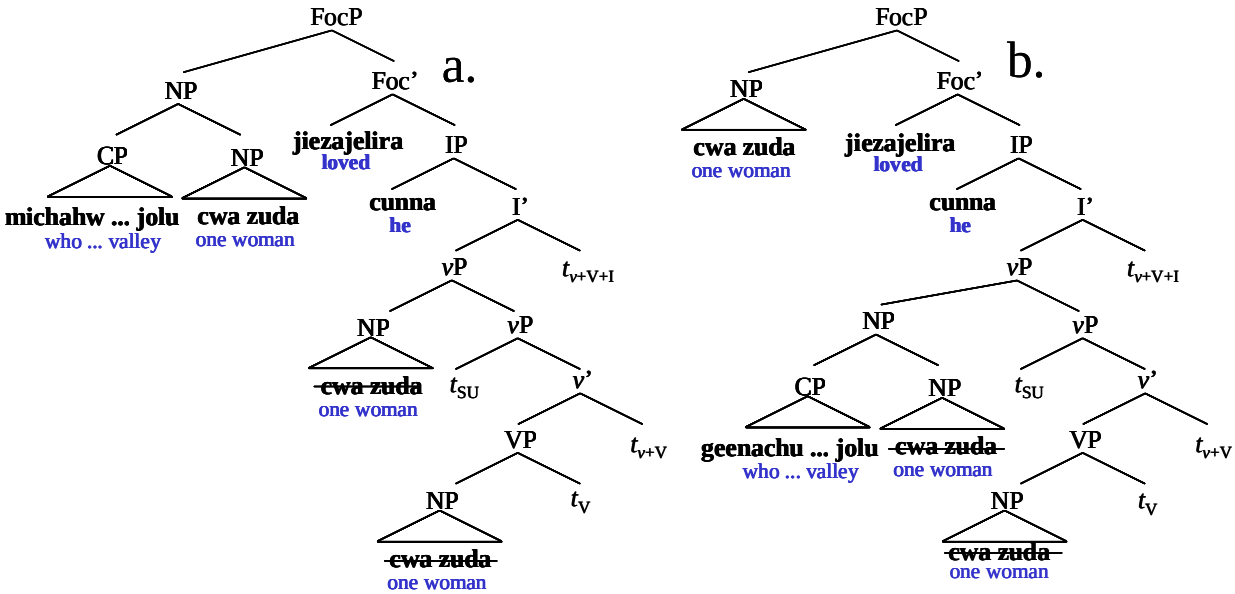
cross off parts of the three copies of the object NP, which would result in an extraposed relative clause.

An analysis of the relative clause syntax is necessary, where the clause on the one hand belongs to the NP it modifies, but on the other hand is separate to some degree. Such a solution has been offered by Henderson, and will be treated in the next section (Henderson 2007).

3.5.3. Extraposition under an adjunct analysis

According to Henderson relative clauses can be analyzed as CP's that are attachable to argument NP's as adjuncts (Henderson 2007). In the situation of an OVS clause, such as the one presented in the introduction in example (135), the adjunct relative clause can be attached either at the lower copy of the object NP within the *v*P or at the higher copy of the object NP, which is the specifier of the Focus Phrase. These situations are illustrated in Figure 8.

Figure 8 Extraposed relative clause under adjunct analysis



Part (a) of Figure 8 shows how the relative clause CP is adjoined to the object NP that sits in the specifier of the Focus Phrase. At spell-out chain reduction applies, and the highest copy of

the NP is fed into the phonological component, together with the relative clause CP, which resides only at one place.

Part (b) of Figure 8 shows how the relative clause CP is adjoined to the object NP that is located in the highest specifier of the *v*P. At spell-out chain reduction applies, and the highest copy of the NP is fed into the phonological component. Since there is only one copy of the relative clause, and since it is linked to the object NP copy in the *v*P, only that copy is fed into the phonological component, and therefore the whole sentence comes out with a displaced relative clause.

3.5.4. Remaining challenges

The results from the research on the behaviour of question words within relative clauses as shown in Table 10 have helped to show which analysis of relative clauses works better for the Chechen language. However, these same results also give rise to additional questions.

One question that was mentioned earlier already, is why extraposition with an SOV order is less acceptable than extraposition with an OVS order. I can offer no answer to this problem.

An additional question it apparently is linked with double focus. When both the object NP and the relative clause adjoined to it contain a question word, then both have an uninterpretable focus feature. Such a situation could be seen as double focus. From the data in Table 10 it is clear that this kind of double focus is possible when the clause order is OVS (line o in the table), but it is not possible when the clause order is SOV (line h in the table). I can offer no solution at this moment.

4. Conclusions and discussion

Relative clauses in Chechen are headed by a participial form of the verb, but can be analyzed as CP's. Arguments and obliques can all be relativized. At least one additional level of nesting is possible. The tenses in a relative clause are a subset of the tenses available in

matrix clauses, but this same subset is shared by several other subordinate clauses. The head of the relative clause agrees in case with the noun phrase it adheres to.

When talking about noun-class agreement, a distinction needs to be made between relative clauses having a simple tense and a compound tense. For simple tense relative clauses the participial of the verb heading the relative clause agrees in noun-class with an absolutive case argument (object or subject – overt or trace) within the relative clause. For compound tense relative clauses the verb consists of a simple verb and an auxiliary. In that situation the simple verb agrees in noun-class with an absolutive case argument in the relative clause. The noun-class agreement of the auxiliary heading the relative clause with compound tenses can differ. In general it agrees in noun-class with the relativized noun in the relative clause – in whatever case that was. But agreement with an absolutive case argument in the relative clause (instead of with the relativized noun) is also possible.

Any relative clause can be turned into a free relative. Chechen does not formally distinguish between appositive and restrictive relative clauses, and both types can be extraposed.

The gap in the relative clause should be filled by a resumptive when the relativized noun is a comparison object, may not be filled by a resumptive when it is the subject of an intransitive verb or the object of a dative-subject transitive verb, and can optionally be filled by a resumptive in all other cases.

In the second part of this paper the relative clause is analyzed as a full CP. The syntax of Chechen relative clauses can be explained in the framework of minimalism (Chomsky 1995). However, the analysis contradicts the specifier-head-complement order hypothesis, which is assumed when the linear correspondency axiom is adopted (Kayne 1994). The analysis works when a specifier-complement-head order is assumed for the following syntactic projections: the VP, *v*P, IP, CP and NP.

Resumptives are analyzed as being base-generated. Extraposed relative clauses are analyzed as IP-remnants, which are stranded when other arguments are focused and/or topicalized.

While this paper gives a start to the research into Chechen relative clauses, several questions remain. Among them are the following:

- Why are resumptives in some situations obligatory and other times forbidden? How can this be explained syntactically?
- When resumptives are optional, then what determines whether the gap left by the relativized noun is left empty or filled with a resumptive?
- Is the relationship between extraposed relative clauses and focus confirmed by prosody?
- What is the explanation for the minimal pair in noun class agreement between the relativizing auxiliary and an argument in the relative clause (see section 2.9)?

5. Acknowledgments

This paper is partly based on a term-paper I wrote in 2006 for the Advanced Syntax class led by professor doctor XXX as part of the MA linguistics program of the University of YYY, and it is partly based on research I did on relative clauses in preparation for conference CCC, which was held at ZZZ. AAA and BBB gave valuable input. I wish to express my gratitude to XXX, AAA and BBB for their comments on and suggestions for this current paper. I would also like to thank the Chechen speakers who evaluated data for me, but who would like to remain anonymous.

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Appendix

In this appendix all the individual clauses provided for evaluation in section 3.5.2 have been incorporated. They are referred to from within column "Ref" in Table 10.

(136) Cunna cwa zuda jiezajelira, [tuoghi chuohw wash jolu]
3S-DAT one woman-ABS J-love-PSTR valley-DAT inside live-PRS-PTC J-REL
'He fell in love with a woman that lived in a valley.'

(137) Cunna [tuoghi chuohw wash jolu] cwa zuda jiezajelira
3S-DAT valley-DAT inside live-PRS-PTC J-REL one woman-ABS J-love-PSTR
'He fell in love with a woman that lived in a valley.'

(138) Cunna mila jiezajelira, [tuoghi chuohw wash jolu]?
3S-DAT who-ABS J-love-PSTR valley-DAT inside live-PRS-PTC J-REL
'He fell in love with whom that lived in a distant valley?'

(139) Mila jiezajelira cunna, [tuoghi chuohw wash jolu]?
who-ABS J-love-PSTR 3S-DAT valley-DAT inside live-PRS-PTC J-REL
'He fell in love with whom that lived in a distant valley?'

(140) [Tuoghi chuohw wash jolu] mila jiezajelira cunna?
valley-DAT inside live-PRS-PTC J-REL who-ABS J-love-PSTR 3S-DAT
'He fell in love with whom that lived in a distant valley?'

(141) Cunna [tuoghi chuohw wash jolu] mila jiezajelira?
3S-DAT valley-DAT inside live-PRS-PTC J-REL who-ABS J-love-PSTR
'He fell in love with whom that lived in a distant valley?'

(142) Cunna mylxazuda jiezajelira, [tuoghi chuohw wash jolu]?
3S-DAT which woman-ABS J-love-PSTR valley-DAT inside live-PRS-PTC J-REL
'He fell in love with which woman that lived in a valley?'

(143) Cunna [tuoghi chuohw wash jolu] mylxazuda jiezajelira?
3S-DAT valley-DAT inside live-PRS-PTC J-REL which woman-ABS J-love-PSTR
'He fell in love with which woman that lived in a valley?'

(144) Cunna [michahw wash jolu] cwa zuda jiezajelira?
3S-DAT where live-PRS-PTC J-REL one woman-ABS J-love-PSTR
'He fell in love with a woman that lived where?'

(145) Cunna [michahw wash jolu] mylxazuda jiezajelira?
3S-DAT where live-PRS-PTC J-REL which woman-ABS J-love-PSTR
'He fell in love with which woman that lived where?'

(146) Cunna [michahw wash jolu] mila jiezajelira?
3S-DAT where live-PRS-PTC J-REL who-ABS J-love-PSTR
'He fell in love with whom that lived where?'

(147) Cunna cwa zuda jiezajelira, [michahw wash jolu]?
3S-DAT one woman-ABS J-love-PSTR where live-PRS-PTC J-REL
'He fell in love with a woman that lived where?'

(148) Cunna mylxa zuda jiezajelira, [michahw wash jolu]?
3S-DAT which woman-ABS J-love-PSTR where live-PRS-PTC J-REL
'He fell in love with which woman that lived where?'

(149) Cunna mila jiezajelira, [michahw wash jolu]?
3S-DAT who-ABS J-love-PSTR where live-PRS-PTC J-REL
'He fell in love with whom that lived where?'

(150) Cwa zuda jiezajelira cunna, [geenachu tuoghi chuohw wash jolu]
one woman-ABS J-love-PSTR 3S-DAT distant-OBL valley-DAT inside live-PRS-PTC J-REL
'He fell in love with a woman that lived in a distant valley.'

(151) Cwa zuda jiezajelira cunna, [michahw wash jolu]
one woman-ABS J-love-PSTR 3S-DAT where live-PRS-PTC J-REL
'He fell in love with a woman that lived where?'

(152) Mylxa zuda jiezajelira cunna, [michahw wash jolu]
which woman-ABS J-love-PSTR 3S-DAT where live-PRS-PTC J-REL
'He fell in love with which woman that lived where?'

(153) Mila jiezajelira cunna, [michahw wash jolu]
who-ABS J-love-PSTR 3S-DAT where live-PRS-PTC J-REL
'He fell in love with whom that lived where?'

(154) [geenachu tuoghi chuohw wash jolu] cwa zuda jiezajelira cunna
distant-OBL valley-DAT inside live-PRS-PTC J-REL one woman-ABS J-love-PSTR 3S-DAT
'He fell in love with a woman that lived in a distant valley.'

(155) [michahw wash jolu] cwa zuda jiezajelira cunna?
where live-PRS-PTC J-REL one woman-ABS J-love-PSTR 3S-DAT
'He fell in love with a woman that lived where?'

(156) [michahw wash jolu] mylxa zuda jiezajelira cunna
where live-PRS-PTC J-REL which woman-ABS J-love-PSTR 3S-DAT
'He fell in love with which woman that lived where?'

(157) [michahw wash jolu] mila jiezajelira cunna
where live-PRS-PTC J-REL whom-ABS J-love-PSTR 3S-DAT
'He fell in love with whom that lived where?'