Focus in Chechen

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Summary
In this research a detailed study of focus in the Northeast Caucasian SOV language Chechen is conducted. Focus data is elicited using question-answer pairs and correction pairs. Further data is gathered by looking at sentences from the literature containing question constituents. Question constituents are by default focused in Chechen. The data shows that any focused or question constituent immediately precedes the verb. For transitive clauses this results in four possible word orders. When the object is focused S-O_FV and O_FV-S clauses are found. When the subject is focused S_FV-O and O-S_FV clauses are found. It is shown that arguments residing in the position preceding the focused constituents refer either to Contrastive or to Given Topic. Post verbal arguments refer to a Discourse Topic.

In the second part of this research attempts are made to describe the syntax of clauses having an unmarked order or a word order influenced by a focused constituent. This is done using a minimalist approach. Two focus phrase positions are investigated: a high-focus position (with the focus phrase above the IP) and a low-focus position (with a focus phrase below the IP). With both positions it is possible to describe the data, but the high-focus solution leaves less unanswered questions.

Double focus is possible using two different approaches. Multiple question constituents usually appear stacked. This is syntactically described by allowing multiple specifiers of a focus phrase. Double focus for non-question focused constituents is usually resolved using a cleft construction consisting of a free relative subject, a complement and an auxiliary. The main focus is on the complement. Secondary focus is on the leftmost constituent in the free relative.

At the end of the thesis recommendations for further research are made.

Keywords: *focus, topic, cleft, minimalism.*

Abbreviations

ABS	absolutive case
ALL	allative case
AP	adverbial phrase
AP[time]	adverbial phrase of time
AP[loc]	adverbial phrase of location
Aux	auxiliary (a form of the verb 'to be')
Aux_F	focused auxiliary
Caus	argument in the allative case having the role of causer
DAT	dative case
ERG	ergative case
IMPF	imperfective past tense
IO	indirect object in the dative case (but not a subject!)
LOC	locative case
Neg	negator
NML	nominalizer
NP	noun phrase
NP[goal]	noun phrase inflected in the "goal" case
NP[mat]	noun phrase inflected in the "material" case
NRPS	non-referential (or: non-witnessed) past tense
O	absolutive case object
O_F	focused direct object
O[q]	absolutive case object consisting of or containing a question word
PL	plural
PRS	present tense
PTC	participle (adverbial or adjectival)
pv	preverb
REM	remote past tense
RFPS	referential (or: witnessed) past tense
SG	singular
S[e]	ergative case subject
S_F	focused subject
S[d]	dative case subject
S[g]	genitive case subject
S[a]	absolutive case subject
S[all]	allative case subject
S[eq]	ergative case subject consisting of or containing a question word
S[dq]	dative case subject consisting of or containing a question word
S[gq]	genitive case subject consisting of or containing a question word
V	main verb, possibly combined with negator and/or auxiliary
V_F	focused verb
VP	verb phrase
wh	independent question word
XP	any constituent (i.e. NP, AP, CP etc)
XP_F	focused constituent
1S … 3P	first to third person singular or plural
1P.INC	first person plural inclusive pronoun
1P.EXC	first person plural exclusive pronoun
3S.REFL	third person singular reflexive pronoun

1. Introduction

The Chechen language is spoken by more than a million people. Their homeland is situated north of the Caucasus mountain range, and its size equals that of the Netherlands. The country divides roughly into three parts: a northern part above the Terek river, a central part of the plains below the Terek river and a mountainous part in the south.

Figure 1 The location of the Chechen's homeland

Linguistic research into the Chechen language started with the research conducted by baron Uslar (1862). The emphasis of Russian scholars has been on describing Chechen phonetics, morphology and grammar. Only in the last decades has Chechen gained interest among western scholars.

While word order has been investigated to some extent in Chechen, focus has not had attention yet. The aim of this thesis is twofold:

- Find out whether Chechen has a structural focus position, and if so, where that position is.
- Find out how unmarked clauses as well as clauses containing focused constituents can best be described syntactically.

I start this thesis in chapter 2 by looking a bit deeper into Chechen word order, showing what is known from related languages, what is known from Chechen, and what should be expected. In chapter 3 a few basic notions of Chechen are introduced. For a more detailed account of Chechen the reader is referred to Nichols (1994a). Chapter 4 introduces the focus data that was gathered and how it was gathered. At the end of chapter 4 it will become clear that focused constituents in Chechen immediately precede the verb. In chapter 5 I attempt to answer the question what the positions before the focus and after the verb are used for. Chapter 6 describes several attempts to fit the unmarked and the focus data in structural descriptions. I finish in chapter 7 with a summary of the conclusions and a discussion of unanswered questions.

2. Word order

In this section I will consider what is known about word order in languages related to Chechen and I will also review what has until now been found out about word order in Chechen.

2.1. Related languages

Some research has been conducted as to word order in related languages. Chechen is very closely related to Ingush (spoken in a republic to the west of Chechnya) and Tsova-Tush (also called Batsby, spoken in Georgia). Chechen, Ingush and Tsova-Tush form the Nakh-family of languages. This family is considered to be part of the wider family of Northeast Caucasian[1] languages. The other languages in this larger family are the Dagestanian ones. Writing about Dagestanian languages one author noted that word order in ergative transitive sentences is relatively free, that the SOV order is unmarked, but can be interchanged with SVO/OVS/OVS under certain conditions, while the verb initial orders VSO/VOS are sporadically acceptable as well (Kazenin 2002). Writing about East Caucasian languages in general, van den Berg noted that word order encodes primarily pragmatic functions like topic, focus, givenness and contrastiveness (van den Berg 2005). She notes a tendency for OVS to encode object focus, and OSV to encode subject focus. In some Dagestanian languages contrastive topic occurs clause initial, whereas the "normal" topic occurs clause final.

2.2. Word order in Chechen

Johanna Nichols wrote about word order in Chechen clauses (Nichols 1994a). She noted that the unmarked word order is SOV, but that OVS is not uncommon too. She found that the word order of existential clauses is XVS and that subjects that have been the theme or topic in previous chained clauses or sentences usually appear after the verb in the main clause. The same strategy was observed by Nichols for Ingush. She noted that in narratives the SOV order is found in subordinate clauses, whereas main clauses with a paragraph-thematic subject have either OVS or VSO order (Nichols 1994b). Unless thematization causes a constituent to be postverbal, she found that in general the older information precedes newer information.

2.3. Information structure

It appears then, that the Northeast Caucasian languages in general, can be categorized as discourse configurational languages (Kiss 1998). In discourse configurational languages structural positions are not used to encode grammatical relations like subject, direct object or indirect object, but they are used to encode informational units (Halliday 1967). The parts of the information structure can broadly be divided into two categories. The first category includes (see for instance Büring 1997):

- Theme   - what a discourse unit is about.
- Given   - it has been mentioned explicitly before.
- Background   - it is not on the main line of the story, but has already been provided by the previous material and context.
- Presupposed   - though not mentioned explicitly, it is presupposed within the context.
- Topic   - what this sentence or this discourse unit is about.

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[1] This language family is alternatively called East-Caucasian or Nakh-Dagestanian.

The second category of informational units includes:
- New   - it has not been mentioned explicitly before.
- Focus   - one particular alternative from a set of overt or implied alternatives (this is often called contrastive focus).
- Comment   - the thing that is being said about the topic.

In section 4 I will look at how focus is encoded in Chechen. Then in section 5 I will attempt to find out which other informational units are encoded by word order. Based on the data from sections 4 and 5 I will come up with a syntactical description in section 6. As a result some of the above questions will then be answered. But first section 3 gives some basic information about Chechen that is helpful for understanding the whole of this thesis.

3. More about Chechen

In this chapter I would like to give some relevant background information about the Chechen language. This information will be of benefit to understanding the remainder of this Thesis.

Chechen is an SOV language and it is quite strongly head final. That is to say, nouns are completely at the end of the NP, and there are only postpositional phrases (PPs). Chechen is a morphologically ergative language which means that the subject of the intransitive and the object of the transitive sentence share the same absolutive case. The subject of the transitive sentence can be any of several cases (ergative, dative, genitive, allative), depending on the verb used and on the mood of the verb.

A fuller description of the language can be found in the literature (Nichols 1994a).

The orthography used here for Chechen is not the Cyrillic one that is in use in the Russian Federation. It is an orthography that closely resembles the orthography developed by Johanna Nichols for the related Ingush language (Nichols 2007).

3.1. Question words and pronouns in Chechen

Chechen has a system of pronouns and anaphors (reflexive pronouns). Chechen also differentiates between 1st person plural inclusive and exclusive pronouns. Note that several pronouns don't make a distinction between ergative and absolutive case:

- 1st person plural inclusive pronoun
- 2nd and 3rd person plural reflexive pronouns
- 3rd person singular reflexive pronoun

An overview of most of the pronouns that are used in the transitive sentences is given in Table 1.

Table 1 Pronoun system overview

Person	Absolutive		Genitive		Dative		Ergative		Allative	
	Pn	Ana	Pn	Ana	Pn	Ana	Pn	Ana	Pn	Ana
1S	so	suo	san	sajn	suuna	sajna	as	ajsa	syega	sajga
2S	hwo	hwuo	hwan	hwajn	hwuuna	hwajna	ahw	ajhwa	hwyega	hwajga
3S	i/iza	shaa	cynan	shien	cunna	shiena	cuo	shaa	cynga	shiega
1P.EXC	txo	txuo	txan	txajn	txuuna	txajna	ooxa	txaesh	txyega	txajga
1P.INC	vaj	vaesh	vajn	veeshan	vajna	vaeshna	vaj	vaesh	vajga	vaeshka
2P	shu	shaesh	shun	shajn	shuna	shajna	ash	shaesh	shyga	shajga
3P	ysh	shaesh	ceeran	shajn	caarna	shajna	caara	shaesh	caerga	shajga

The independent question pronouns that can function as a complete argument (subject or object) are given in Table 2. In the same table the dependant question pronouns like 'which' and 'what' are given.

Table 2 Question pronouns

Case	Independent		Dependant	
	Who?	What?	Which?	What?
Absolutive	mila	hun	mylxa	hun
Genitive	hweenan	stienan	mylxachu	hun
Dative	hwaanna	stienna	mylxachu	hun
Ergative	hwaan	stien	mylxachu	hun
Allative	hwaenga	stienga	mylxachu	hun
Instrumental	hwaenca	stienca	mylxachu	hun

Some of the other question words in Chechen are the following:

masa	'how many?' (dependant)
miel	'how many?' (dependant)
maca	'when?'
michahw	'where?'
michara	'from where?'

3.2.   Transitive clauses

By definition a transitive verb has two arguments – an internal one and an external one. The verb's internal argument usually has the absolutive case. For most of the transitive clause types the verb agrees with the absolutive object in noun class. A subset of verbs marks the noun class of the object it agrees with by a prefix *v-, j-, b-* or *d-.*

The majority of transitive verbs – like for instance *aala* 'say', *qajqa* 'call', *laan* 'bear' – take a subject in the ergative case. The verb agrees with the absolutive object noun in gender class, as illustrated in example (1). The verb is prefixed with *b-*, which is the indicator of the class to which the noun *buolx* belongs.

1) Sielxana   Muusas   buolx   bira
   yesterday   Musa-ERG   work-ABS   B-do-RFPS
   Musa worked yesterday.

A subset of verbs – like *xieta* 'reckon', *muotta* 'think', *gan* 'see', *xa'a* 'know', *qieta* 'understand/touch', *vieza* 'love' – take a subject in the dative case. The verb agrees in noun class with the absolutive object. This is illustrated in example (2), where the verb has the prefix *v-* by which it shows agreement with the noun *majra* 'husband'.

2) Hoqu   zudchunna   shien   majra   vieza
   this-OBL woman-DAT   3S.REFL-GEN   husband.G1-ABS   G1-love-PRS
   This woman loves her husband.

When transitive verbs have a potential mood suffix *dala* attached, the external argument is not in the ergative but in the allative case[2].

3) Sielxana   Muusaga dika   buolx   banbelira
   yesterday   Musa-ALL good   work-ABS   B-do-B-POT-RFPS
   Yesterday Musa was able to do a good work.

A special category of transitive clauses is formed by clauses in the present continuous tense. In order to express the present continuous, the clause's main verb gets a present participle[3] suffix and the present tense auxiliary of "to be" is added to the clause. For the majority of verbs this results in a biabsolutive construction, as illustrated in example (4). Both the subject *so* '1S' and the object *buolx* 'work' are in the absolutive case.

4) Taxana so   c'ahw   buolx   biesh   vu.
   Today   1S-ABS   home-LOC work-ABS   B-do-PRS-PTC   V-PRS
   Today I am working home.

Verbs that normally provide a dative subject in a transitive clause continue to do so when the tense is the present continuous, as illustrated in example (5).

5) Suuna   xaza   ditt   gush   du.
   1S-DAT beautiful tree-ABS see-PRS-PTC   D-PRS
   I am seeing a beautiful tree.

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[2] The potential mood suffix is derived from the verb *dala* 'to give'. This suffix (like the verb it is derived from) agrees in class (alpha features) with the object of the transitive verb. This agreement is shown by the first letter of the suffix, which can be *d, j, v,* or *b*. The present tense form of the suffix is *–lo.*
[3] This participle suffix turns the main verb into an adverb, which is modifying the auxiliary.

3.3.   The cleft construction

A cleft sentence is a construction where a single clause has been divided into two separate sections, each with its own verb. For example the sentence *Liesbeth reads a book* can be clefted in the following two ways:

   a.   *It's Liesbeth who reads a book*.
   b.   *It's a book that Liesbeth reads*.

In English a cleft sentence consists of the expletive *it*, followed by a form of the auxiliary verb *to be*, followed by a constituent X, and finally followed by a relative clause Y (Smith 1989).

   (1)   it + be + [constituent X] + [relative clause Y]

Often a cleft sentence is used to explicitly mark the constituent X as focused. The subordinate clause Y is introduced by a complementizer *that* or *who*.

An alternative to the cleft in English is the pseudo-cleft (Smith 1989), also called wh-cleft. The same sentence *Liesbeth reads a book* as was used in the cleft examples above can be transformed into pseudo-clefts in the following ways:

   c.   *Who reads a book is Liesbeth.*
   d.   *Liesbeth is the one who reads a book.*
   e.   *What Liesbeth reads is a book*.
   f.   *A book is what Liesbeth reads*.

The form of the English pseudo-cleft construction is as in (2). A free relative Y is followed by a form of the auxiliary verb *to be*, which is then followed by a constituent X. This constituent X is focused as a result of the pseudo-cleft construction.

   (2)   [free relative Y] + be + [constituent X]

Chechen does not have expletives, and does not have overt complementizers, but it can divide a single clause into two separate sections with a cleft construction that is similar to the English pseudo-cleft[4]. The most common scheme for the Chechen (pseudo) cleft is shown in (3) and the less frequently used one is shown in (4).

   (3)   [free relative Y] + [constituent X] + be.

   (4)   [constituent X] + be + [free relative Y].

As in the English pseudo-cleft constructions the constituent X is focused due to the cleft construction used. An example of a cleft construction according to the scheme in (3) is shown here in (6). Instead of the more straight forward *cwa nieq' bysu* 'One option remains', a cleft construction is used to put special emphasis on 'one option'. The subject *bysush berg* 'what remained/remains' is a free relative. This subject is followed by the complement *cwa nieq'*, 'one way'. The complement is effectively functioning as a direct object, in that the agreement of the following auxiliary is with the complement. In this case *nieq'* is from the b-class, for which reason the past tense auxiliary is realized as *bara* (instead of *dara, jara* or *vara*).

   6)   [Bysush   berg]   [cwa nieq']   bara.
        B-remain-PRS-PTC B-NML one   way-ABS B-PST
        S[a] O[comp] Aux
        There was only one remaining option.
        che-para-86-00166:36

The second kind of cleft construction, which is in accordance with the scheme in (4), is illustrated by the example in (7). This cleft is derived from the simple clause *Vajn respublikuo xala mur lovsh bu* 'Our republic bears a difficult time'. The clause starts with the predicate

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[4] I will refer to the Chechen construction as a *cleft* construction since there is only one kind of *cleft* in Chechen, but, strictly speaking, the Chechen construction is a pseudo cleft.

xala mur 'a difficult time', followed by the main verb, the auxiliary *bu* 'is'. Finally the free relative *vajn respublikuo lovsh berg* 'what our republic bears' follows. Note that all agreement is with the noun *mur* 'time period', that requires a b-class prefix.

7) [Xala   mur]   bu   [vajn   respublikuo   lovsh   berg]
    difficult time-ABS   B-PRS   1P.INC-GEN   republic-ERG   bear-PRS-PTC   B-NML
    O[comp] Aux S[a]
    It is a difficult time that our republic is bearing.
    `che-para-86-00056:7`

Taking into account that Chechen has "free" word order, the question could be asked why only two out of six possible word orders are (mainly) used for the cleft construction. The full scale of word orders would be as follows (where S[a] is the free relative and O[comp] is the constituent):

(5) a.   S[a] O[comp] Aux
    b.   S[a] Aux O[comp]
    c.   O[comp] S[a] Aux
    d.   O[comp] Aux S[a]
    e.   Aux S[a] O[comp]
    f.   Aux O[comp] S[a]

From these word orders a native speaker indicated that (e) and (f) are not used. From the remaining word orders (a) is most acceptable, followed in decreasing order by (b), (d) and (c).

The reason to use a cleft construction at all (that is to say, instead of using a normal SOV clause) is to put focus on the complement. In order to comply with the function of focusing the complement, this constituent needs to immediately precede the main verb of the clause, which in this case is the auxiliary. This requirement is only fulfilled by word orders (a) and (d). The fact that the position immediately preceding the verb can function as a focus slot is something that will become clear from chapter 4.

Other word orders may surface for other reasons. For instance the word order (b) surfaces below in example (8). In this case the complement 'one of my villagers' is followed by an identification who exactly. Apparently it is more important to have the complement and the identificational NP clause final than to put emphasis on the complement by positioning it before the verb.

8) [Taxana as   vyycu   verg]   vu   [san   jyrtaxuojx   cwa']   -   Mohwmad
    today   1S-ERG   V-speak-PRS   V-NML   V-PRS   1S-GEN   villager-PL-MAT   one-ABS   Mohammed-ABS
    S[a] Aux O[comp]
    The one I will be talking about today is one of my villagers – Mohammed.
    `che-para-86-00191:4`

Having introduced some basic notions of the Chechen language it is now time to look at focus data that was gathered.

4. Focus data

In this chapter the effect of focus on word order of Chechen will be illustrated by data. First section 4.1 briefly introduces the notion of focus. Then in section 4.3 the effects of focusing arguments and other constituents will be shown for several clause types. The effect of focus on word order is summarized in section 4.4. Since focused and question constituents are mutually exclusive, the latter ones are scrutinized in section 4.5. Then in section 4.6 the effects that independent question words have on word order are illustrated. All information is then summarized in section 4.7.

4.1. What is focus?

Focus relates to the information in a sentence that is distinguished by one or more of the following criteria (SIL 2004, Kiss 2002):

- It is new with respect to the other parts of the clause or of the preceding clause(s).

- It contrasts with presupposed information.

- It is of high communicative interest.

Alternatively focus can be defined as the method to identify one alternative out of a set of alternatives. These alternatives could have been verbalized earlier in a discourse, or they may be implied within the context. Overt or implied alternatives play a role in question/answer pairs but also in contrastive contexts like correction, or with focus-sensitive particles like *only*.

On the basis of the size of the set of alternatives and the interaction of the focused constituents with other alternatives focus can be subdivided in different kinds. Some of these subdivisions are described in the following subsections.

4.1.1. Information focus

Information focus refers to the part of the sentence containing the new information. This kind of focus is sometimes called *presentational focus* or *wide focus* (Gussenhoven 2006). A constituent having information focus appears quite naturally as the result of an answer to *wh* questions (Aboh 2006:6). For that reason this focus is sometimes also labeled as *question-answer* focus.

4.1.2. Correction focus

When a person makes a statement and someone else corrects part of this statement, then this correction receives *correction focus*. This kind of focus is sometimes also called *narrow focus* and at other places *counterassertive focus* (Dik 1980).

4.1.3. Identificational focus

If a constituent has identificational focus, then the sentence is exclusively valid for that constituent. Identificational focus is used to identify a constituent (in the sense that it marks a constituent as being the only one of which a given predication is true). Sometimes identificational focus is distinguished further depending on contrastiveness. Identificational focus is called *non-contrastive* if the focused element is taken from an open set of possibilities. It is *contrastive focus* if it is taken from a closed set of possibilities (Kiss 2002). In the last case the identification is exhaustive.

4.1.4.   Focus in Chechen

In many languages a question constituent is by default marked as focused. This may not be a universal truth, as some languages seem to distinguish between focused and non-focused *wh*-phrases (Aboh 2006:217).

But for Chechen the data further on in this paper will show that *wh*-constituents and focus constituents behave in the same way. Besides, there are no indications that Chechen makes a structural difference between different focus types.

Since question constituents are marked as focused in Chechen, looking at the behaviour (syntactically) of question constituents can help in understanding what happens to focused constituents in general.

In the remainder of this chapter on Focus I will present data illustrating information focus and correction focus in Chechen. Since it is argued that focus in Chechen behaves mutually exclusive with *wh* constituents, section 4.5 will present how *wh* constituents behave.

But I will start with a word about methodology in section 4.2.

4.2. Methodology

Eliciting and gathering data pertaining to informational categories such as focus and topic is a task where the researcher has to constantly be aware of not reading into the data and of not influencing the outcome. I would like to share a few words about the methodology used.

Clauses with questions have only been gathered from existing literature that was not translated from any other language, otherwise that could have influenced the results.

Clauses containing focused constituents have been elicited from native speakers. I have *not* cued them with Russian or Chechen phrases, asking them how they would say it with the focus on a particular word or constituent, because that would have given quite a biased result. I *have* used question-answer elicitation and correction elicitation (see the next section for details).

For word-order preferences I have asked native speakers to evaluate complete sets of possibilities. Sometimes I have used multiple-choice questions to gain insight into preferences – but even then I gave the option of accepting all candidates equally well or rejecting all candidates.

4.3. Focus paradigm

In this section I present an overview of word order variation resulting from question-answer and correction focus. These two focus types have been elicited for several different clause types:
  (i)   Intransitive clauses.
  (ii)   Ergative subject transitive clauses
  (iii)   Dative subject transitive clauses (tied to specific verbs like 'know', 'hear', 'see').
  (iv)   Potential mood transitive clauses.
  (v)   Present continuous transitive clauses, which grammatically is something like S-(O-V)-Aux, where the main verb is in a kind of participial[5] form.

For each of these clause types focus has been elicited on different constituents:
  (vi)   Subject
  (vii)   Object
  (viii) The whole verb phrase
  (ix)   Only the main verb

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[5] More specifically the main verb seems to be transformed into an adverb, which is modifying the auxiliary.

(x)   Other constituents where relevant

The systematic collection of different clause types containing different focus types is inspired by lectures from Daniel Büring (2005).

4.3.1.   Intransitive clause

The basic clause used for eliciting focus in intransitive clauses is given in (9).

9)   Muusa   sielxana Waerbi-maxka   dwaavaxara
     Musa-ABS   yesterday Arabia-country-ALL   V-away.go-RFPS
     Yesterday Musa went to Arabia.

The respondent was asked questions like *who* went to Arabia yesterday and *where* Musa went to yesterday. The answers, containing question-answer focus, were recorded and later on transcribed. In the transcription the main stress of the clause was identified. A similar procedure was followed for eliciting correction focus. Given the situation explained in (9) the respondent was given statements like: "I thought Ayshat went to Arabia yesterday". The answers contained the necessary correction and were of type: "No, MUSA went to Arabia yesterday".

The clauses elicited by asking questions and by prompting for correction are all available in appendix 10.2.

A summary of the results elicited for the intransitive clause is shown in Table 3. Note that the correction to the wrong *subject* is made using a cleft construction (see section 3.3 for an explanation of this construction). When both the subject and the goal are incorrect the correction also makes use of a cleft construction (the free relative points to the subject). Further note that the correction to the wrong time constituent is made by first denying the statement that was made and then expressing it correctly.

Table 3 Results for the intransitive clause

Focus	Question	Ref	Correction	Ref
neutral	(not elicited)		-	
goal+V	-		S[a] AP[time] **NP[goal]** **V**	A.5.i
V	-		S[a] **V** NP[goal]	A.9.i
S[a]	**S[a]** V	A.1.i	cleft: NP(NP[goal] V) **S[a]** Aux	A.6.i
NP[goal]	S[a] AP[time] **NP[goal]** V	A.2.i	S[a] AP[time] **NP[goal]** V	A.7.i
S[a] + NP[goal]	-		cleft: O[topic] **S[a]** Aux NP(NP[goal] V)	A.10.i
AP[time]	S[a] **AP[time]** V	A.3.i	S[a] **AP[time]** Neg V, S[a] **AP[time]** V NP[goal]	A.8.i

In almost all cases the emphasized constituent immediately precedes the verb (or the auxiliary if that has become the clause's main verb). These are the exceptions:
-   When the goal plus verb (i.e. "went to Arabia") are corrected, both are emphasized (sentence A.5.i).
-   When only the verb is corrected, only the verb is emphasized (sentence A.9.i).
-   With the correction of the time a negator intervenes between the emphasized constituent and the verb (sentence A.8.i).

Note that when the subject is emphasized either the goal "to Arabia" is not mentioned at all or it is demoted to a position inside a free relative. And then when the verb alone is emphasized, the goal appears in a position after the verb (prosodically that is quite an unstressed position). It seems to me that these are three different strategies with a common goal of getting the NP[goal] out of the way so as to allow word orders whereby the main emphasis can more naturally be expressed on constituents like the subject or the verb.

   When both the subject and the goal are in focus (because they both have to be corrected) the main focus is on the subject by letting it be in the main clause before the main clause's

verb. A secondary focus is on the goal, as it precedes the verb within the free relative. As will become clear later on in the data, double focus is not always encoded in this way.

4.3.2.   Ergative subject transitive clause

Two clauses were used for eliciting focus in ergative-subject transitive clauses. The simple clause is given in (10) and the more advanced clause with two adverbs added is given in (11).

10) Voqqa-daadas   Deni   hwala'yyzira chaardaq   t'e.
grandfather-ERG   Danny-ABS   up-pull-RFPS platform-ABS onto
Grandfather pulled Danny onto the platform.

11) Voqqa-daadas   taxana Deni   sixa   hwala'yyzira chaardaq   t'e.
grandfather-ERG   today Danny-ABS   quickly   up-pull-RFPS platform-ABS onto
Today grandfather quickly pulled Danny onto the platform.

The results elicited for the ergative-subject transitive clause are shown in Table 4. Note again that a cleft construction can be used to indicate focus. For this clause type the speaker used a cleft construction to focus the object. Further note that the speaker didn't like the preverb to stay attached to the main verb when the subject was focused. He used two strategies to prevent this. For the answer focus the preverb was moved forward past the subject. For the correction of the subject the preverb was deleted (this can be done since it is implied in the statement, and needs no correction).

Table 4 Results for the ergative-subject transitive clause

Focus	Question			Ref	Correction			Ref
neutral	O S[e]	**PP**	V	B.4.i	-			
V	-				S[e] O PP		**V**	B.5.i
S[e]	O PP pv	**S[e]**	V	B.1.i	O PP	**S[e]**	V	B.6.i
O	S[e]	**O**	V PP	B.2.i	cleft: NP(S[e] PP V) O NegAux, **O** Aux			B.7.i
S[e] + O	-				cleft: NP(O PP V) **S[a]** Aux			B.9.i
PP	S[e] O	**PP**	V	B.3.i	S[e] O	**PP**	V	B.8.i
AP[time]	S[e] O **AP[t]** AP[m] V PP			B.10.i	-			
AP[man]	S[e] AP[t] O **AP[m]** V PP			B.11.i	-			

Again the emphasized constituent immediately precedes the verb (or the auxiliary if that has become the clause's main verb). Only when the verb itself is emphasized does the emphasis come on the verb and not on a constituent preceding the verb.

The first entry in the table shows what happened when a question was made about the whole VP. It was expected that the answer would be of the unmarked SOV order, but against expectations an order of O-S-PP-V was given. It may be that the respondent was topicalizing the object. This is plausible, because by the time the neutral sentence was elicited (it was 4th in the row), the information in the constituents had already become "given". It may also be due to a difficulty for the respondent to answer whole-VP questions in general. Note that for the intransitive clauses the respondent was not able to come up with any sentence (see table Table 3).

4.3.3.   Dative subject transitive clause

The basic sentence used for eliciting focus in dative-subject transitive clauses is given in (12).

12) Joqqa-baaba   gira   Denina
grandmother-ABS   see-RFPS   Danny-DAT
Danny saw grandmother.

The results elicited for the dative-subject transitive clause are shown in Table 5. Here the object correction was made using a cleft construction.

Table 5 Results for the dative-subject transitive clause

Focus	Question		Ref	Correction		Ref
neutral	S O V		C.3.i	-		
V	-			S O	**V**	C.4.i
S[d]	O	**S[d]** V	C.1.i	O	**S[d]** V	C.5.i
O	S[d] V	**O**	C.2.i	cleft:		C.6.i
	S[d]	**O** V	C.2.ii	NP(S[d] V)	**O** Aux	
S[d]+O	-			cleft:		C.7.i
				NP(S[d] V)	**O** Aux	

For this clause the respondent came up with the unmarked SOV order in reply to a whole-VP question, which is in line with expectations.

In most of the cases the emphasized constituent directly preceded the verb (or the auxiliary if that acts as the clause's main verb). One exception was with sentence C.2.i. Here the object was emphasized in reply to a question about the object. Instead of the expected O_F-VS order the speaker answered the object-question with an SVO$_F$ clause. The fact that the object was focused is prosodically marked (the object *joqqa-baaba* starts with a high tone, and the preceding verb *gira* ends with a high tone). I can offer no explanation for this exception. Re-elicitation gave the more expected answer with SO$_F$V order as shown in sentence C.2.ii.

4.3.4.   Potential mood transitive clause

The basic sentence that was used to find out how focus works in potential mood transitive clauses (i.e. where the subject is in the allative case) is given in (13).

13) Sielxana   Muusaga dika   buolx   banbelira
    yesterday   Musa-ALL good   work-ABS   B-do-B-POT-RFPS
    Yesterday Musa was able to do a good work.

The results elicited for the potential mood transitive clause is shown in Table 6. Here a cleft construction was used to correct the subject.

Table 6 Results for the potential mood transitive clause

Focus	Question		Ref	Correction		Ref
neutral	S[all] AP[time] **O**	V	D.4.i	-		
O+V	-			AP[time] S[all]	**O** V,	D.5.i
					O Neg V	
V	-			S[all] AP[time] O V		D.10.i
S[all]	AP[time] O	**S[all]** V	D.1.i	cleft:		D.6.i
				NP(AP[time] O V) **S[a]** Aux		
O	AP[time] S[all] **O**	V	D.2.i	AP[time] S[all]	**O** V,	D.7.i
					O V	
S[all]+O	-			AP[time]	**S[all] O** V	D.13.i
AP[time]		**AP[time]** V	D.3.i	S[all]	**AP[time]** O V	D.9.i
Adj in O	-			AP[time] S[all]	**O** V	D.8.i

4.3.5.   Biabsolutive transitive clause

The basic sentences used to elicit focus in absolutive subject present continuous clauses are given in (14) and (15).

14) Musa   cwa   dika   buolx   biesh   vu
    Musa-ABS   one   good   work-ABS   B-do-PRS-PTC V-AUX-PRS
    Musa is doing some kind of good work.

15) Taxana Musa   ghaalahw cwa   dika   buolx   biesh   vu
    today   Musa-ABS city-LOC one   good   work-ABS   B-do-PRS-PTC V-AUX-PRS
    Today Musa is doing some kind of good work in town.

The results elicited for the absolute-subject present continuous clause are shown in Table 7. Here three cleft constructions were used: two for correcting the object and the subject, and one in reply to a subject question.

Table 7 Results for the absolute-subject present-continuous clause

Focus	Question	Ref	Correction	Ref
neutral	S[a] **O** V Aux	F.4.i	-	
V	-			
S[a]	cleft: NP(O V) **S[a]** Aux	F.1.i	cleft: NP(AP[time] O V) **S[a]** NegAux	F.6.i
O	S[a] **O** V Aux	F.2.i	S[a] AP[time] **O** V Aux	F.8.i
Adj in O	S[a] AP[t] **O** V Aux	F.3.i	S[a] AP[time] **O** V Aux	F.7.i
S+O	-		cleft: AP[time] NP(O V) **S[a]** Aux	F.9.i
AP[time]	S[a] **AP[t]** AP[loc] O V Aux	F.10.i	S[a] **AP[t]** O V Aux S[a] **AP[t]** O V Aux AP[loc]	F.5.i F.14.i
AP[loc]	S[a] **AP[loc]** O V Aux AP[t]	F.11.i	S[a] AP[t] **AP[loc]** O V Aux	F.13.i
AP[l]+AP[t]	S[a] **AP[t] AP[loc]** O V Aux	F.12.i	-	

When the focus is on an argument in the biabsolutive clauses too the emphasized constituent immediately precedes the verb or the combination of the verb and the auxiliary.

Slightly other behavior is seen when the time adverb or the location NP is focused. The time and location constituents appear in the second position of the clause or completely to the right. I argue that this is due to conflicting constraints. On the one hand the focused constituent likes to immediately precede the verb (or the combination of the verb and the auxiliary). On the other hand the object likes to immediately precede the participle verb it agrees with within present continuous clauses (this seems to be completely obligatory actually – see elicitation results in the appendix, section 10.4). Finally, as will be shown in 5.2.1, adverbs (or AP's) are usually only found clause initially or in the second position.

When both time and location are focused, as in F.12.i, the two constituents are phonologically fused into one phrase, which appears in the second position of the clause.

The tension between two competitors (the focused constituent and the object) to immediately precede the verb can also help in answering the question why cleft constructions are used for focus in the absolute subject present continuous clauses. Note that whenever the subject is emphasized and needs to precede the main verb of a clause, the clause is broken up in such a way that the object precedes the participialized verb within a free relative clause and the subject then precedes the auxiliary within the main clause.

4.3.6.   Dative subject present continuous clause

The basic sentence used to elicit focus in dative subject present continuous clauses is given in (16).

16) Naanna   shira surt   gush   ju
    mother-DAT old   picture-ABS   see-PRS-PTC   J-AUX-PRS
    Mother is seeing an old picture.

The results elicited for the dative-subject present continuous clause is shown in Table 8. Here three cleft constructions were used: two for correcting the object and the subject, and one in reply to a subject question.

Table 8 Results for the dative-subject present-continuous clause

Focus	Question	Ref	Correction	Ref
neutral	O V Aux S[d]	E.3.i	-	
V	-		S[d] O **V** Aux	E.4.i
S[d]	cleft: **S[a]** Aux NP(O V) NP(OV) **S[a]** Aux	E.1.i E.9.i	cleft: NP(O V) **S[a]** Aux	E.6.i
O	S[d] **O** V Aux	E.2.i	cleft: NP(S[d] V) **O** Aux	E.7.i
S[d]+O	**S[d]** V Aux O	E.10.i	-	
Aux	-		S[d] O **V** Aux	E.5.i
Adj in O	-		cleft: NP(S[d] V) **O** Aux	E.8.i

In general for the dative-subject present-continuous clauses too the emphasized constituent immediately precedes the verb or the combination of the verb and the auxiliary.

Cleft constructions are used to get the subject in a focus position before the main clause's verb, while allowing the object to precede the verb within the free relative. Note that the free relative can either precede the combination of subject+auxiliary, or follow it.

Clefts are also used as an alternative when the object is emphasized.

When nothing is in focus one would have expected the unmarked SOV order to appear. However, the respondent answered the question of "What happened?" with an OV-Aux-S order (see E.3.i). One possible explanation could be that with the OVS order the subject is in a "discourse[6] topic" position as suggested by Nichols (1994a), which is plausible given the fact that this clause was elicited as third in a row. Another possibility could be that the whole remnant VP (consisting of the verb and the object) is focused and therefore has moved to the position immediately prior to the auxiliary. Another possibility is that, following Rajabov's reasoning for Tsez, the OV complex is seen as a subordinate clause that functions as an adverb, and that the neutral order confirms the tendency of adverbs to appear clause initial (Rajabov 1997:139).

4.4.   Focus and word order

The paradigm of question-answer and corrective focus has been described in the previous sections. In this current section I would like to rearrange the data from the paradigm and summarize what happens in terms of word order when the subject, the object, the verb or another constituent is focused.

4.4.1.   Focusless orders

As far as focus is concerned the following orders were elicited that should be considered as unmarked, in the sense that all the information was new. All the orders here are an answer to the question "What happened?".

a.	S	O V	see: Table 5 (C.3.i)
b.	S XP	O V	see: Table 6 (D.4.i)
c.	S	O V Aux	see: Table 7 (F.4.i)
d.		O V Aux S	see: Table 8 (E.3.i)
e.	O S XP	V	see: Table 4 (B.4.i)

Some of the sentences above may have been marked with respect to topic, because almost all of them were asked *after* the information had already been fed to the native speakers, and after he had processed in several question-answer elicitations.

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[6] Nichols calls it a "thematic topic", but I use the term "discourse topic" to avoid confusion.

While the variation within the all-new orders showing up above can not be explained by focus, the difference between SOV, OVS and OSV might be explained by accepting the two information positions argued for by Nichols (1994a):

    b.   Old information is sentence initial – that explains OSV.

    c.   Discourse topic is sentence final – that explains OVS.

Analysis of existing texts could be used to verify these claims. But since this section is first and foremost about focus, I refer the reader to section 5.

4.4.2.   Focus on the subject

When the question answer or the correction focus was on the subject, the following word orders were elicited:

a.		S_F V	see: Table 3 (A.1.i)
b.	XP	S_F V	see: Table 3 (A.6.i), Table 6 (D.6.i),
			Table 7 (F.6.i), Table 8 (E.6.i)
c.	O XP pv	S_F V	see: Table 4 (B.1.i)
d.	O XP	S_F V	see: Table 4 (B.6.i)
e.	O	S_F V	see: Table 5 (C.1.i, C.5.i)
f.	XP O	S_F V	see: Table 6 (D.1.i)
g.		S_F V XP	see: Table 8 (E.1.i)

Clearly irrespective of the exact transitive or intransitive clause type a focused subject immediately precedes the verb. When the verb contains a preverb as in (c), then apparently the focused constituent can come between the preverb and the actual verb. See a further discussion on preverbs in section 5.2.2.

4.4.3.   Focus on the object

When the question answer or the correction focus was on the object, the following word orders were elicited:

a.	S	O_F V XP	see: Table 4 (B.2.i)
b.	S	O_F V Aux	see: Table 7 (F.2.i), Table 8 (E.2.i)
c.	S XP	O_F V Aux	see: Table 7 (F.8.i)
d.	S	O_F V	see: Table 5 (C.2.ii)
e.	XP	O_F V	see: Table 4 (B.7.i), Table 5 (C.6.i), Table 8 (E.7.i)
f.	XP S	O_F V	see: Table 6 (D.2.i, D.7.i)
g.	S V	O_F	see: Table 5 (C.2.i)

Irrespective of the clause type a focused object immediately precedes the verb or the combination of the verb and the auxiliary. This general rule is violated only in (g), which might have been a slip of the tongue on the part of the speaker, since re-eliciting resulted in the canonical order in line (d).

4.4.4.   Focus on the verb

When the verb itself was focused, the following word orders were elicited:

a.	S	O XP V_F	see: Table 4 (B.5.i)
b.	S	O V_F	see: Table 5 (C.4.i)
c.	S XP O	V_F	see: Table 6 (D.10.i)
d.	S	O V_F Aux	see: Table 8 (E.4.i)
e.	S XP O V	Aux_F	see: Table 7 (F.5.i)

Most of the results show an order with the verb in final position. The only exception is (d) where the verb is almost final – it is only followed by the auxiliary. And when the focus is on the auxiliary itself, then that occurs clause final as in (e).

4.4.5. Focus on other constituents

When other constituents, like an AP[goal], AP[loc] or an AP[time] or a PP, are focused, they too move to the position immediately preceding the verb, irrespective of the clause type. When all other (non argument) constituents are taken together as XP, the following word orders appear when they are focused:

a.			XP_F V	see: Table 6 (D.3.i)
b.	S		XP_F V	see: Table 3 (A.3.i)
c.	S	O	XP_F V	see: Table 4 (B.3.i, B.8.i)
d.	S	XP	XP_F V	see: Table 3 (A.2.i, A.7.i)
e.	S		XP_F V XP	see: Table 3 (A.8.i)
f.	S		XP_F O V	see: Table 6 (D.9.i)
g.	S		XP_F O V Aux	see: Table 7 (F.5.i)
h.	S		XP_F O V Aux XP	see: Table 7 (F.14.i, F.11.i)
i.	S	XP	XP_F O V Aux	see: Table 7 (F.13.i)
j.	S		XP_F XP O V Aux	see: Table 7 (F.10.i)

When there are not too many other constituents a focused constituent appears immediately preceding the main verb. But when there is a subject, an object and a focused XP, then the focused XP usually appears in the second position in the clause, and the object retains its place preceding the verb (see also the explanations in section 4.3.4 and in section 4.3.5). Apparently it is more important for a time adverb or a location NP to appear in a position close to the left edge of the clause, then for a non-argument constituent to appear in the pre-verbal focus position.

4.4.6. Focus on parts of a constituent

When the object contains an adjective and only this adjective is focused, the following word orders are observed:

a.	XP	S	O_F V		see: Table 6 (D.8.i)
b.		S	XP	O_F V Aux	see: Table 7 (F.3.i, F.7.i)
c.	XP		O_F Aux		see: Table 8 (E.8.i)

These orders do not significantly differ from those where the object as a whole is the focus (see section 4.4.3).

4.4.7. Double focus

When two constituents receive focus due to the fact that they need to be corrected, the following word orders are observed:

a.	XP	S_F O_F V		see: Table 6 (D.13.i)
b.	O	S_F	Aux NP(XP_F V)	see: Table 3 (A.10.i)
c.	NP(O_F XP V)	S_F	Aux	see: Table 4 (B.9.i)
d.	NP(S_F V)	O_F	Aux	see: Table 5 (C.7.i)
e.	XP NP(O_F V)	S_F	Aux	see: Table 7 (F.9.i)

Two different strategies seem to be used to express the double focus. The first strategy appears in line (a). Both constituents to be focused appear before the verb.

The second strategy, using a cleft, appears in all the other lines. One constituent is focused by placing it immediately before the main clause's main verb (which is the auxiliary). The other constituent that is to be focused is embedded in a free relative. Within that freestanding relative clause it mostly appears directly preceding the relative clause's main verb. However, there is one exception in line (c). Perhaps the focus within (free) relative clauses (which are participial phrases – see section 3.3) is *not* on the constituent preceding the main verb, but on the *first* constituent? More data would be needed to decide decisively between the two options. Within the scope of this paper it suffices to find out what structural positions are used within the *main* clause to express focus.

4.5. Question constituents

In this section I give an overview of Chechen transitive clauses that include a question word. This question word can either (a) modify the subject or object, (b) be the whole subject or object. Cases where the question word is in addition to the subject and object arguments will be treated in section 4.6.

I have used two sources for data. First I have consulted existing Chechen literature as found in schoolbooks, newspaper articles, journals and on the internet. Second I have elicited data from native speakers. Sources are indicated where appropriate.

4.5.1. The subject as question constituent

When the subject contains the question word or when the whole subject consists only of a question word, then the following word orders are found in the dataset from the literature:

a.	XP	O	S[q] V	see: 60)
b.		O XP	S[q] V	see: 64)
c.		O	S[q] V Aux	see: 68)
d.		O	S[q] V	see: 71)
e.		O	S[q] V XP	see: 69), 70)
f.			S[q] V CP	see: 97)
g.			S[q] V O	see: 94)

So: basically the question subject is before the verb. The object usually is before the S-V complex. But when the object is a subordinate clause, it can come after the S-V complex.

Two Chechen speakers evaluated all possible word orders for the Chechen transitive clause containing a question word for the subject. The ergative subject is replaced with the question word *hwaan* 'who-ERG'. The results are shown in Table 9.

Note that glosses are provided only for the first of each 6 sentences.

Table 9 Ergative subject replaced with a question word

Eval	Chechen	Translation	Order	Remarks
?	Hwaan k'ant vitira? who-ERG boy-ABS left	Who left the boy?	SOV	
ok	Hwaan vitira k'ant?	Who left the boy?	SVO	
ok	K'ant hwaan vitira?	Who left the boy?	OSV	
?	K'ant vitira hwaan?	Who left the boy?	OVS	
*	Vitira hwaan k'ant?	Who left the boy?	VSO	Not very well
?	Vitira k'ant hwaan?	Who left the boy?	VOS	

The two verb initial orders VSO and VOS are rejected by the speakers. From the four remaining orders only those with the subject question word directly preceding the verb are allowed: SVO and OSV. This coincides with the data found in the literature.

4.5.2. Combination of cleft and question constituent

A transitive or intransitive clause with a question constituent can be rearranged using a cleft construction so as to put even more emphasis on the question constituent (even though it is focused by default). The resulting cleft construction is always of type S O[q] Aux, where the subject is the free relative containing the original clause's presupposition, and the object is the question constituent being focused.

When the *subject* of the original clause is being replaced with a question constituent, the following word orders are found, where S and O refer to the original clause's subject and object:

a. NP(O V)   S[q] Aux   see: 144), 148)
b. NP(XP O Neg V) S[q] Aux   see: 145)

When the *object* of the original clause is being replaced with a question constituent, then the following word orders are found. Again S and O refer to the original clause's subject and object.

c. NP(XP V)   O[q] Aux   see: 146)
d. NP(S V)   O[q] Aux   see: 147)

Note that although a native speaker indicated that other matrix clause word orders are possible for cleft constructions (see section 3.3), only one of them (the S O[q] Aux order) was actually found in the literature.

Further note that both object and subject question constituents can in principle be focused using the cleft construction.

4.5.3.   The object as question constituent

When the object contains a question word or when the whole object is a question word, then among the 45 sentences from the literature that fulfill this criterion the following word orders are found:

a. XP   O[q] V S   see: 53), 63)
b. XP   O[q] V Aux S   see: 54)
c. C   O[q] V S   see: 57)
d.   O[q] V S   see: 79), 86)
e.   O[q] V Aux S XP   see: 84)
f. XP   S   O[q] V   see: 55), 56)
g.   S   O[q] V   see: 100), 105)
h.   S   O[q] Neg V   see: 99)
i.   S XP O[q] V   see: 108), 109)
j.   S   O[q] V XP   see: 118), 119)

So: basically again the argument being or containing the question word directly precedes the verb. The only exception is that a negator can intervene. The subject then either follows the O-V complex or precedes it. Other XPs occur on different places.

Two Chechen speakers evaluated all possible word orders for the Chechen transitive clause containing a question word for the object. The absolute object is replaced with the question word *mila* 'who-ABS'. The results are shown in Table 9.

Note that glosses are provided only for the first of each 6 sentences.

Table 10 Ergative subject sentences with a question word for the object

Eval	Chechen	Translation	Order	Remarks
ok	Daas mila vitira? father-ERG who-ABS left	Whom did father leave?	SOV	
?	Daas vitira mila?	Whom did father leave?	SVO	
*	Mila daas vitira?	Whom did father leave?	OSV	Not very well
ok	Mila vitira daas?	Whom did father leave?	OVS	
??	Vitira daas mila?	Whom did father leave?	VSO	Used extremely rarely
*	Vitira mila daas?	Whom did father leave?	VOS	Sounds very artificial

The two verb initial orders VSO and VOS are rejected by the speakers. From the four remaining orders only those with the object question word directly preceding the verb are allowed: SOV and OVS. This coincides with the data found in the literature.

4.5.4.   Clauses with two question arguments

There are a few clauses (transitive, intransitive and other) in the <u>literature</u> containing two question words. The following word orders are found in the data:

a.	S[q]	O[q]	V		see: 95), 96), 125)
b.	O[q]	wh	V		see: 139)
c.	S[q]	O[q]	V	XP	see: 140)
d.	S IO[q]	O[q]	V		see: 141)

Note that in all cases do the two question constituents appear after one another. As to the order between the constituents – apparently there is a preference in transitive or ditransitive clauses for the object to appear closest to the verb. But as the intransitive clause (139) shows, an independent question word (an adverb) appears even closer to the verb. The explanation for this would be that an independent question word is base-generated in a focus projection, but an argument only comes there through movement.

The <u>elicited</u> data also contains double question clauses. From there the following orders seem to be allowable:

a.	S[q]	O[q]	V	see: 149)
b.	O[q]	S[q]	V	see: 154)
c.		O[q]	V S[q]	see: 152)

Items (a) and (b) show that a *wh*-subject can precede a *wh*-object (this is the preferred, less marked order), but that a *wh*-object can also precede a *wh*-subject. A third option is in (c), where the object precedes the verb and the subject follows it. In this case the subject finds itself in the position where the Discourse topic is expected to be. Maybe this is, after all, a case where a question constituent is *not* by default focused (see section 4.1.4). At any rate, since this exception to what has been found so far comes from elicited data, it should be regarded with more suspicion and needs confirmation by unelicited data.

4.6. Independent question words

When an independent question word like *maca* 'when', *hunda* 'why', *muuxa* 'how', *michahw* 'where' is part of a transitive clause, the following word orders are found.

a.	C	wh V S O	see: 58)
b.		wh Neg V S O	see: 127)
c.		wh V S O	see: 128)
d.		wh V S O XP	see: 129)
e.	O	wh V S	see: 74), 76)
f.	O S	wh V	see: 67), 134)
g.	S	wh V O	see: 106), 122)
h.	S O	wh V	see: 98), 93)
i.	S XP O	wh V	see: 107)
j.	O V	wh Aux S	see: 138)

When there is an independent question word in a transitive clause, this word takes the immediately preverbal position, resulting in the order [wh V]. Again the only possible intervener is a negator. All the other constituents – the verb, the subject and the object – can occur in almost all of the six possible positions (only VOS is not attested). There were a few cases when additional constituents (XPs) were added to the basic transitive clause body.

There were 3 or 4 cases from the phrases taken from the literature where the preverb detached from the main verb[7]. This led to the following pattern:

    a.   O pv wh V   S see: 66)
    b.   O pv wh V Aux   S see: 143)
    c. XP O pv wh V Aux   S see: 142)
    d. S   O pv wh V   see: 111), 112)

The clause with reference number (142) is from a short story where the object *ghurq* 'pole' is the item about which is being spoken. More about word order and information structure is written in chapter 5.

4.7. **Summary of the data**

Taking the data presented here in chapter 4 together the following generalizations can be made about focus and word order in Chechen:

- A focused constituent immediately precedes the main verb of a clause.
    - When the subject is focused, two orders are possible: S_FVO, OS_FV.
    - When the object is focused, two orders are possible: O_FVS, SO_FV.
- Question constituents are focused by default, in that they behave – as far as allowable word orders is concerned – exactly like other focused constituents.
- Question constituents can be even more emphasized by using a cleft construction.

There are only very few exceptions to the rules stated above:

- When the main verb of a clause itself is focused, it usually comes clause-final with the other arguments appearing in their unmarked order.
- With compound tenses the focused constituent is followed by the participial verb and then by the auxiliary. Possibly the verb and the auxiliary join together to form one complex head.
- A negator can intervene between the focused (or question) constituent and the verb.

While a focused constituent should ideally be positioned before the verb the following factors potentially are in conflict with this:

- <u>Preverb</u>: when a verb contains a preverb the focused constituent can take the place of the preverb. The preverb either is found further to the left and functions as head for a topic (that this is a topic will become clear in 5.4) or it is found further to the right, where it serves as a head for an argument (the nature of this position is discussed in section 5.5).
- <u>Compound tenses</u>: in the present and past continuous tense the object of the transitive clause needs to immediately precede the main verb (which in these clauses is in a participial form – see section 4.3.5 and 10.4).
- <u>Adverbs</u>: most adverbs want to be in clause initial or second position. When an adverb is focused, then it may not end up in the position preceding the verb when the verb is too far away. This tendency has been tested for time and place adverbs (see 4.4.5). Further research would be needed to test it for other adverbs (reason, cause, manner) and for adjuncts.
- <u>Double focus</u>: When two constituents are focused different strategies are used in Chechen. When the constituents are question constituents (which are by default focused), then they both appear before the verb, but there is a particular preferential order. Immediately preceding the verb an independent question word, being an

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[7] There was one case with the fixed expression *naaxala daaqqa* 'display publicly' where it is probably not completely right to call *naaxala* a preverb.

adverb, comes. Preceding this a question object can come. Finally other question arguments can come before the object.

When the focused constituents are not question constituents, then it is possible that both constituents precede the verb, but usually one of the two constituents is transformed into a cleft (see sections 4.4.7 and 4.5.4). If both subject and object are focused, the subject is usually demoted to the cleft and the object receives the focus in the matrix clause.

The order of clauses without specific focus (all new information) is not always the unmarked order – it may be influenced by other information structure criteria (e.g.: topicalization). Seemingly focusless[8] clauses were found with orders SOV, OVS, OSV.

Besides focus there might be other factors in Chechen having an influence on the word order. These factors will be treated in the next section.

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[8] Sentences that were elicited as all new. These are "focusless" in the sense that there is no constituent that is more in focus than the other.

5. Word order and information structure

In chapter 4 it has become clear that Chechen uses word order to mark focus. While the unmarked order in Chechen is SOV, object focus is codified by either S-O_FV or O_FV-S. Subject focus is codified by either S_FV-O or O-S_FV. These observations lend credibility to what was stated earlier in section 2, that Chechen is a discourse configurational language.

Before trying to describe the Chechen focus position in a syntactic way (see chapter 6), there are now a few questions that need answering. Given the fact that Chechen encodes focus by positioning a focused constituent immediately before the main verb, and assuming that Chechen is a discourse configurational language:

(i)   Isn't the word order within a sentence determined by other (local) factors like the heaviness of the argument, possible confusion between adjacent arguments etc?

(ii)   Which informational units are encoded by the position before the focused constituent?

(iii) Which informational units are encoded by the position after the verb?

(iv) What, if any, is the difference between the unmarked SOV order and the order whereby the object is focused SO_FV?

The remainder of this chapter will be devoted to trying to find an answer to these questions.

5.1. Word order and local factors

In this section I will try to answer the question whether word order in a sentence is perhaps also determined by local factors like the following ones:

- The heaviness of an argument. What effect does it have when one argument is a simple noun, pronoun or name, while the other argument is a larger NP or even a free relative NP?

- Confusion. When two arguments (subject and object) are positioned adjacent and it is not clear where the boundary between the arguments is, does this then have an effect on the word order of the sentence?[9]

- Referential status. Some arguments inherently refer back to participants that must be known from the earlier part of a discourse. Such is the case for instance with pronouns, demonstratives or nouns preceded by a demonstrative. On the other hand other arguments inherently point to participants that may be new or are mentioned again more fully for some reason. Such is the case with proper names and nouns preceded by the qualifier *cwa* 'one'.

In order to find out whether some of the factors above might have influence on the word order of sentences I used a questionnaire with sets of two sentences with minimal difference, where the native speaker could indicate which of the two sentences was to be preferred. The speaker also had the possibility to completely reject both sentences or to indicate that there was no difference between the status of the sentences.

The difference between SV and VS ordering were evaluated by the speaker as shown in Table 11. When the subject was a heavy noun phrase or when it was a proper name the SV

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[9] As far as I have noticed, consecutive arguments (NPs) do not necessarily have a prosodic boundary between them. Confusion is possible, for instance, if a simple NP (e.g *k'ant* 'boy') is followed by a more complex NP consisting of a relative clause where not all participants are mentioned (e.g. *lyexush verg* 'the one who is seeking'). A resulting clause like *K'anta lyexush verg dwaavigira* might be understood as 'The boy led the seeker away' or 'The boy, who was seeking, was led away'. On the one hand possible confusion may not be something that should be handled in syntax. On the other hand this does influence word order, and it would be nice if syntax is able to explain the reasons behind different word orders.

order was preferred. But when the subject was more generic noun or a pronoun the orders SV and VS were allowed equally well.

Table 11 Intransitive clause SV versus VS

#	Adverb	Subject	Evaluation
1		Noun	no difference
2		Complex RC	SV
3	Adv[time]	Name	SV
4	Adv[time]	Pronoun	no difference
5	Adv[time]	Complex RC	SV

The speaker's evaluation of differences between clauses of SOV and OVS orders are shown in Table 12. No preference whatsoever for a particular word order was given by the speaker!

Table 12 Transitive SOV versus OVS

#	Adverb	Subject	Object	Evaluation
1	Adv[time]	Noun	wh-word	no difference
2	Adv[time]	Complex RC	wh-word	no difference
3	Adv[time]	pronoun	wh-word	no difference
4		Name	Noun	no difference
5	PP[time]	Name	Noun	no difference
6		Adv[time]	Noun	no difference
7	C	Adv[time]	Noun	no difference
8		NP referring	Noun	no difference

The speaker's evaluation of differences between clauses of SVO and OSV orders are shown in Table 13. When the subject was a *wh*-constituent the speaker indicated that he had no preference between SVO and OSV order. But when the subject was a pronoun (i.e. referring to old or presupposed information) and when it was a heavy noun phrase, the speaker preferred the SVO order above the OSV order.

Table 13 Transitive SVO versus OSV

#	Adverb	Subject	Object	Evaluation
1		wh-word	NP	no difference
2		wh-word	Complex RC	no difference
3		wh-word	Pronoun	no difference
4		wh-word	Noun	no difference
5		wh-word	Larger NP	no difference
6		Pronoun	Complex RC	SV-O
7		Pronoun	NP referring	SV-O
8		Complex RC	Complex RC	SV-O

From the speaker's evaluation it seems very unlikely that local factors as defined earlier in this section have an influence on the word order. Most of the preferences for SVO above OSV and for SV above VS indicated by the speaker can equally well be explained by informational content factors. The heaviness of the arguments does seem to have some influence, though. It seems preferable to not place heavy noun phrases adjacent, and in intransitive clauses it seems better to put larger noun phrases before the verb.

5.2. Unmarked SOV versus marked SO$_F$V

When clauses are elicited with all new information, for instance by asking the question "What happened?", then the unmarked SOV order appears. This was shown in section 4.4.1.

But when the object is focused, or when the object is a question constituent, then the order SOV is also one of the two possibilities appearing, as illustrated in section 4.4.3 and 4.5.3.

The question that I address here is whether there is any difference between these two orders. I will look at adverb placement in section 5.2.1, and then to preverbs in section 5.2.2.

Irrespective of whether the difference between SOV and SO$_F$V can be shown to be structural, it still is insightful to see whether focus is signaled prosodically. This is investigated in section 5.2.3.

5.2.1.   Adverb placement

According to one theory adverbs take fixed positions within the structure of a sentence (Cinque 1999). Other constituents may move, for instance when attracted to a structural focus position, or when going to a canonical subject position, but adverbs are supposed to stay where they are. If in Chechen too adverbs are bound to positions within a sentence, then they could be used as to see whether SOV differs from SO$_F$V.

I conducted research with two native speakers, asking them to position different kinds of adverbs (see Table 14) in three different transitive clause types: dative subject, ergative subject and potential mood. All of the sentences were given in the canonical SOV order.

Table 14 Adverb results for one native speaker

	Level	Chechen	Translation	Speaker 1	Speaker 2
1	CP	*baq'du*	to be true	Adv S O V	Adv O V S, Adv S O V
2	MoodP	*swaxietariehw*	probably	Adv S O V, S Adv O V	Adv O V S, Adv S O V
3	MoodP	*ishtta*	that way	Adv S O V	Adv S O V, S Adv O V
4	MoodP	*deera*	of course	Adv S O V	Adv O V S
5	IP	*cq'a*	once	Adv S O V, S Adv O V	Adv O V S, Adv S O V
6	IP	*hetahw*	then	Adv S O V	Adv O V S
7	IP	*qaana*	tomorrow	Adv S O V	Adv O V S
8	ModP	*nicq' ma-qoocchu*	as power suffices	Adv S O V, S Adv O V	Adv O V S
9	ModP	*jish xilcha*	when possible	Adv S O V	Adv O V S
10	AspP	*kiest-kiesta*	frequently	Adv S O V	Adv O V S
11	AspP	*duqahwoolahw*	generally	Adv S O V	Adv O V S
12	AspP	*duqazza*	many times	Adv S O V	Adv O V S
13	AspP	*daa'im*	always	Adv S O V	Adv O V S
14	(manner)	*mellasha, sixa*	slowly, quickly	Adv S O V, S Adv O V	Adv O V S
15	(manner)	*ghuoza*	happily	Adv S O V, S Adv O V	Adv V S O

For the majority of these adverbs the native speakers indicated that the adverb had to be positioned clause initial. Only in a few cases there was the option of placing the adverb in the clause second position. Those were the only two possibilities indicated.

From these results it is clear that in Chechen adverbs cannot serve to determine where other constituents are located within a sentence.

5.2.2.   Preverb placement

On a few occasions it was found that preverbs detach from the verb they belong to as if to make room for a focus or question constituent. See for example (17), which is repeated from 111), and also (B.1.i) from the focus paradigm, which is repeated here as (18):

17) As   aaxcha   dwaa michahw lo?
    1S-ERG   money-ABS   away   where   give-PRS
    Where do I pay?

18) Deni   chaardaq   t'e   hwala voqqa-daadas   yyzira
    Danny-ABS platform-DAT onto   up   grandfather-ERG lift-PST
    Danny was lifted up onto the platform by GRANDFATHER.

Would there perhaps be a difference in placement of the preverb between the SOV and the SO$_F$V order?

I investigated possible placement of preverbs by asking a native speaker to evaluate SOV and SO$_q$V sentences where the preverb was dislocated to different positions. Note that instead of a focused Object I used a question Object, which, as discussed in 4.7, takes the same position in the clause, as it has a kind of default focus marking.

The following SOV sentences were used[10], where an asterisk indicates, as usual, unacceptability. The first four sentences contain an affirmative auxiliary *vu*, while the second four sentences contain a negative auxiliary *vaac*.

19) Duottaghchuo mila   dwaatottur   vu?
    friend-ERG   who-ABS away-push-FUT   V-PRS
    Who will be rejected by a friend?

20) Duottaghchuo k'ant   dwaatottur   vu.
    friend-ERG   boy-ABS   away-push-FUT   V-PRS
    A friend will reject a boy.

21) Duottaghchuo dwaa mila   tottur   vu?
    friend-ERG   away who-ABS push-FUT   V-PRS
    Who will be rejected by a friend?

22) *Duottaghchuo dwaa k'ant   tottur   vu.
    friend-ERG   away boy-ABS   push-FUT V-PRS
    A boy will be rejected by a friend.

23) Duottaghchuo mila   dwaatottur   vaac?
    friend-ERG   who-ABS away-push-FUT   V- PRS-NEG
    Who will not be rejected by a friend?

24) Duottaghchuo k'ant   dwaatottur   vaac.
    friend-ERG   boy-ABS   away-push-FUT   V- PRS-NEG
    A friend will not reject a boy.

25) Duottaghchuo dwaa mila   tottur   vaac?
    friend-ERG   away who-ABS push-FUT   V-PRS-NEG
    Who will be rejected by a friend?

26) *Duottaghchuo dwaa k'ant   tottur   vaac.
    friend-ERG   away boy-abs   push-FUT V-PRS-NEG
    A friend will not reject a boy.

The results are summarized in Table 15, where the constituent types have been indicated too. The table repeats the data from clauses (19)-(26), but now the constituent order is added more explicitly. Again the first four items describe positive clauses while the second part of the table contains the negative clauses. Note that there is no difference in behaviour between the positive and negative clauses.

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[10] Actually more data has been elicited, i.e. also for OVS, SVO and OSV orders. See appendix 10.5.

Table 15 Preverb placement in SOV clauses

Ref	Chechen	Constituents	Acceptable
19)	*Duottaghchuo mila dwaatottur vu?*	S O$_q$ pv V Aux	yes
20)	*Duottaghchuo k'ant dwaatottur vu.*	S O pv V Aux	yes
21)	*Duottaghchuo dwaa mila tottur vu?*	S pv O$_q$ V Aux	yes
22)	*Duottaghchuo dwaa k'ant tottur vu.*	S pv O V Aux	no
23)	*Duottaghchuo mila dwaatottur vaac?*	S O$_q$ pv V NegAux	yes
24)	*Duottaghchuo k'ant dwaatottur vaac.*	S O pv V NegAux	yes
25)	*Duottaghchuo dwaa mila tottur vaac?*	S pv O$_q$ V NegAux	yes
26)	*Duottaghchuo dwaa k'ant tottur vaac.*	S pv O V NegAux	no

As illustrated by 19) and 21) the fact that a constituent is a question constituent (i.e. the same holds for a focused constituent) does not seem to determine whether the preverb stays attached to the verb or is able to detach and move to the left. So with focused objects preverb detachment is optional.

On the other hand 21) and 22) illustrate that *when* the preverb is detached and occurs before the object, *then* this is possible if the object is a question constituent, but it is not possible if the object is not a question constituent. So SOV word order preserving preverb detachment is only possible with a focused object.

The difference between SOV and SO$_F$V as observed above could be partially explained as follows. A focused constituent (in this case the question word *mila*) needs to have a head[11] hosting it, and obviously the verb (with or without preverb joined to it) is able to function as such. In clauses 19) and 21) the subject is in a position that is structurally higher than a focused constituent. As will become clear in section 5.4 this position is reserved for a topic. Apparently the topical subject *duottaghchuo* 'friend' can be hosted by a phonologically empty head as in 19), but the preverb can also function as a head for it as in 21).

In 22), where the object is not explicitly focused, the preverb can apparently *not* move to become the head of a topical phrase and host a topical subject. Why exactly the preverb is not able to move in this case needs further investigation.

5.2.3.   Prosody

Even if there seems to be no conclusive way to structurally distinguish SOV from SO$_F$V, there still might be a way that the difference is marked prosodically. All the clauses elicited for the focus paradigm (described in section 4.3) were recorded and prosodic features have been tagged (see the appendix in 10.1). From this paradigm it becomes clear that in many cases (but not all) Chechen also marks focus prosodically. For those cases where focus is marked, it is done as follows:

- The first syllable of the focused constituents is stressed (which is realized as a high tone).
- The last syllable of the preceding phonological phrase is stressed (this is realized as the same high tone as the focused constituent begins with).

That the first syllable of a phonological phrase starts with a high tone is usual, since, as far as stress in Chechen is concerned, it has been established that Chechen uses trochees with the main stress of the word's first trochee (Komen 2007). The fact that Chechen uses trochees (feet with the main stress on the first syllable) explains why marking the last syllable of the phonological phrase preceding the focused constituent with a high tone is so discernable – it overrules the normal rules of stress assignment.

The question now is, whether the focus paradigm contains marked SO$_F$V and unmarked SOV clauses, and if so, in which way they differ prosodically.

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[11] This explanation presumes a description of the data using X-bar theory, which is an ingredient of Government and Binding as well as Minimalism. Notice that the explanation here is also in line with the violable OBLHD constraint spoken about in section 10.9.

Excluding cases with intervening XPs, and doubtful cases, there is only one unmarked SOV clauses: C.3.i. There also is a clearly unmarked OVS clause: E.3.i. For convenience the prosodic layout of these phrases is repeated here in examples (27) and (28).

27) [Dénina   jòqqa-baaba   gira]
Danny-DAT grandmother-ABS see-RFPS
Danny saw grandmother.

28) [shíra   surt   gùsh   ju   nàanna]
old   picture-ABS   see-PRS-PTC J-PRS mother-DAT
Mother sees an old picture.

Characteristic for the prosody of the unmarked SOV clause is that the trochaic foot structure is adhered to, and that the whole clause is in one uninterrupted prosodic phrase (with decreasing tone).

The data contains several cases of the marked SO$_F$V clauses: B.2.i, F.2.i, E.2.i D.2.i and D.7.i. Again for convenience their layout is repeated here in (29), (30), (31) and (32) respectively (clause D.7.i is not repeated since it is virtually equal to D.2.i).

29) [Voqqa-daadàs]   [DÉni   hwala'yyzira chàardaq   t'e]
Grandfather-ERG   Danny-ABS   up.lift-RFPS platform-DAT onto
Grandfather lifted DANNY up onto the platform

30) [MÚUsa]   [Díka buolx   biesh   vu]
Musa-ABS   good   work-ABS B-do-PRS-PTC V-PRS
Musa is doing GOOD WORK.

31) [naannà]   [SHÍra surt   gùsh   ju]
mother-DAT   old   picture-ABS   see-PRS-PTC J-PRS
Mother is seeing an OLD picture.

32) [sielxanà   Muusagà]   [DÍka buolx   bànbelira]
yesterday   Musa-ALL   good work-ABS B-do-POT-RFPS
Yesterday Musa was able to do GOOD WORK.

Note that in three of the four cases the focus clause is prosodically marked by (a) the fact that the constituent starts a new prosodic phrase, and (b) the last syllable of the preceding prosodic phrase is stressed. The one exception is line (30), where the focused constituent does start a new prosodic phrase, but the previous phrase does not end with a stressed syllable.

In conclusion: it has not been possible to find a way to make a *structural* distinguishment between SOV and SO$_F$V, but it is possible to see a prosodic difference between them.

5.3. Discourse structure

Although this thesis is not the right place to try and give a complete account of the discourse structure of Chechen, it would be good to try and make some preliminary observations here, to see how the discourse structure influences word order.

Two stories have been partly included in this thesis. The first story, "The night, the stars and the moon", was transcribed from an audio recording and is available in the appendix 10.7. More about this story will be said in section 5.5 when the postverbal position in the clause is reviewed.

In this section I would like to focus on the second story that is partly included in section 10.8 of the appendix.

The first line of the story (repeated here in 33) sets the scene and introduces the main participants in a post-verbal position. This is common case in fairy-tales or other narratives.

33) Juxxiehw   war-daaxar   nisdella   gharaghulin   a, cwoogalan   a.
    nearby-LOC rest-NML-D-live-NML D-appear-NRPS bird-of-crane-GEN   & fox-GEN   &
    A bird-of-crane and a fox were living nearby[12].

The next sentence (repeated here in 34) consists of two clauses. The first clause is a chained clause. Usually the subject is not expressed overtly in chained clauses, but is implied from the main clause. Such is the case here too. The subject is 'they'. The predicate, what is being said about the subject (which is a local topic in this first clause), is the fact that they have become good neighbors. It could be argued that the object in this first clause is focused (which is for instance done by Good 2002). More important here is that in the second clause, which is the main clause, the participants are again referred to in the postverbal position. They are what the story is about so far.

34) Dika   lulaxuoj   a   xilla,   wash   xilla   ysh.
    good   neighbour-PL & be-NRPS   live-PRS-PTC   be-NRPS 3P-ABS
    They became good neighbors.

The next line develops the story by giving some information about one of the two participants, the bird-of-crane, as shown here in (35).

35) Gharaghuli, shiena   bien   a bina,   ho'ash   t'e   xi'na.
    crane-ABS   3S.RFL-DAT   nest-ABS & B-make-NRPS egg-PL-DAT   onto   sit-NRPS
    The bird-of-crane made herself a nest and sat down onto her eggs.

Several interesting things can be observed here. The *bird-of-crane* is a contrasting topic here. It is contrastive because it is one element from a closed set of already introduced participants, and it is topical in the sense that a predication is being made about it.

The subordinate chained clause is positioned between the subject and the verb of the main clause. As has been noted for the chained clause in (34) already, the subject can be left implicit in the chained clause[13]. If not overtly expressed, the subject of a chained clause is the subject of the main clause.

Now that the attention (i.e. the discourse topic) has shifted from the two animals to one of them in particular, that one has become the discourse topic. So in the next sentence (repeated here in 36) the bird-of-crane appears postverbally.

36) Xaan-zaama   jaelcha,   k'orniesh   daexna   cuo.
    time-period-ABS   J-go-WHEN   young-PL-ABS extract-NRPS   3S-ERG
    When some time went by she gave birth to young ones.

Then in the next sentence the attention shifts to the fox, the other one from the already introduced set of main participants. Just as the introduction of the bird-of-crane, the fox too is introduced as a contrastive topic, even though the set of participants it is chosen from is now already several sentences up. The fact that "too" is added makes the reference to this set of earlier introduced participants clear.

37) Cwoogaluo a k'ezii   dina.
    fox-ERG   & young-PL-ABS D-make-NRPS
    The fox too gave birth to young ones.

The story continues by another piece of background information (this can be seen from the imperfective verb form used). The habits of the two main participants are expounded upon (see 38). The sentence breaks down in two parts – the first part about the bird-of-crane and the second part about the fox. In each part the main participant is referred to in a position before the verb, and could be seen as a contrastive topic (i.e.: as for the bird-of-crane, it

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[12] A more literal translation would be: *the living of a bird-of-crane and a fox found itself nearby.* The subject *bird of crane and fox* literally is a possessor, which seems to be stranded post-verbally, while the head of its NP, *the living*, has moved further to the left of the clause.

[13] Note that the subject of the main clause is in the absolute case, since the main clause's verb is intransitive. But the chained clause's main verb is transitive, so requires a subject in the ergative case. As illustrated here it can still be left implicit, even though its case does not coincide with the case of the main clause's subject.

would do this, and as for the fox, it would do that). The postverbal position is not used in these clauses, since there is not a particular discourse topic.

38) Hoora   wyyranna gharaghuli   satossush   izhuu   laxa   jyedura,
    every   morning   crane-ABS   dawn-INT-PRS-PTC prey-ABS seek-INF J-go-IMPF

    tq'a   cwoogal c'ahw   dysura,
    but   fox-ABS   home-LOC D-stay-IMPF

    cynan   a, shien   a beerashka   a hwozhush,
    3S-GEN   & 3S.RFL-GEN & child-PL-GOAL & watch-PRS-PTC

    dan   diezarg   a diesh.
    D-do-INF D-need-NML-ABS & D-do-PRS-PTC

Every morning, right at dawn, the bird-of-crane would go to seek food,
while the fox would stay at home looking after her and his children, doing what needed doing.

In the next line the attention again switches to the behavior of one of the two participants, the fox (see the appendix). For that reason it comes in the contrastive topic position again. In this sentence the fox eats the first young of the bird-of-crane.

Leaving part of the story where there is a discourse between the fox and the bird-of-crane about the missing young bird (I leave it at your imagination how the fox makes sure he is not a suspect), the narrative picks up on the next day when the bird-of-crane goes for food again, and the fox eats the second young (see 39).

39) Shoolghachu diinahw gharaghuli   juxa a wyyranna izhuu   laxa   jaxana,
    second-OBL   day-LOC crane-ABS   again & morning prey-ABS seek-INF J-go-NRPS

    tq'a   cwoogaluo   sixxa   swalaecna   dwaaqaellira
    but   fox-ERG   quickly   capture-NRPS away-eat-RFPS

    gharaghulin   shoolgha k'orni   a.
    crane-GEN   second   young-ABS   &

The next day the bird-of-crane again went to seek prey in the morning,
while the fox quickly took the second young of the bird too, and ate it.

Note again that the two contrastive topics appear in a position prior to the verb of their respective clauses. Of interest here is what happens postverbally. This object 'the second young one too' now appears in that position instead of in a preverbal position where objects have been found until now. What is the nature of this object and why does it appear postverbally? Possibly the key to the answer on this question is in the fact that the word 'too' is added to this postverbal object. This word establishes a link between this participant and the set of young ones to whom the bird-of-crane gave birth. This link is a kind of discourse link, as it stretches over several sentences. By making this link the author subtly indicates that what this story is about – the discourse topic is the fate of the bird's young ones.

Summarizing what has been learned about Chechen discourse structure so far, the following things can be noted:
- The postverbal position is used for the following two purposes:
  - First introduction of a participant for a piece of narrative.
  - A topic that stretches over several preceding clauses – a discourse topic.
- The information before the main verb of a clause is used for focused or otherwise new information.
- The position before the preverbal focus is used for contrastive topic.

In the next sections I will look continue to look at the position before the focused constituent and the postverbal position.

5.4.   The position before the focused constituent

In this section the question is what kind of information is encoded in the argument position preceding a focused constituent. So what is the informational unit in which the Subject finds itself in S-O$_F$V sentences, and in which the Object finds itself in O-S$_F$V sentences?

The answer to this question has partly been given in the preceding section, but I think it is good to look further at the data that has been gathered – in particular at the data from the focus paradigm. When information focus and correction focus were elicited, this was done by feeding the native speaker with information either by asking a question or by making a statement that needed correction. When the focus was thus on the *object*, the results almost without exception gave an SO_FV order, as was shown in section 4.4.3.

And when the focus was on the *subject*, the results were without any exception given in an OS_FV order, as shown in section 4.4.2.

I therefore argue that, besides being a possible place for contrastive topic, the informational unit preceding the focused constituent encodes information as it is known or given in a relatively limited scope. This is in line with the observations that were earlier made by Nichols (2004a), who noted that in general the older information precedes the newer information, unless something becomes topical within a discourse unit.

In this thesis I will label the kind of familiarity, old information topic that precedes a focused constituent as a Given Topic.

It would be good at this point if the nature of the topical position before the focused constituent could be tested by more independent means. Zerbian argues that a topic characterized by familiarity, what I have named the Given Topic, distinguishes itself in that it can be left out (Zerbian 2006). Skipping an argument can be done if a language contains pro-drop, and Chechen indeed has that feature. While it is true that Chechen skips arguments when they are retrievable from the context, I think this feature cannot serve as a good test for the Given Topic position. If an argument is not expressed overtly, then it is not clear at all where it would have been, had it been expressed. To illustrate this example (40) shows one sentence from the fairy tale "Spring of love" (Xamidova 2007).

40) Shien   jyewan   a, cu   k'entan   a deq'ii   swa   a daexna,
     3S.RFL-GEN daughter-GEN & that-OBL boy-GEN & corpse-PL hither & D-take-NRPS

     cwana   kasha   chu   dwaadyellira   cuo.
     one-OBL   grave-DAT into   away-D-bury-RFPS   3S-ERG
     Having taken the corpses of his daughter and that boy,
         he buried [them] in one grave.

The sentence consists of two clauses. The first clause (a chained clause – it can not stand on its own) has the order O pv & V. Even though the main verb of that clause is transitive, the subject is not expressed overtly here. It is expressed later on, completely at the end of the sentence. But as for the first (chained) clause – from this example it cannot be established where the subject would have been, had it been expressed overtly.

The second clause, also containing a transitive verb, has the structure PP V S. So the ergative subject comes postverbally, but the object is left implicit (by implication – which is supported by the class prefix on the verb, which agrees with the object – the object of the main clause is the object of the subordinate chained clause). It is not clear where the object would have been, had it been expressed overtly in the main clause.

In conclusion, the position before the focused constituent can contain Contrastive Topic or Given Topic.

5.5.   The postverbal position

In this section I will try to answer the question which kind of discourse information is encoded by an argument if it occurs postverbally, when the other argument has the focus. So what is the informational unit in which the Subject finds itself in O_FV-S sentences and in which the Object finds itself in S_FV-O sentences?

This question has been preliminary answered in section 5.3, where it was concluded that the postverbal position is limited to a Discourse Topic. But at this point it would be good to review more data and try to find out with more certainty that the conclusions are correct.

I have tried using an independent test to find out whether the postverbal position can hold a Discourse Topic (see Zerbian 2006:182), but this test failed to give conclusive results (see section 10.5 in the appendix).

Clauses of the O_FV-S or S_FV-O type were not elicited as part of the focus paradigm. They have only been found within questions (see section 4.5) and within stories. I have looked in more detail to one particular story. The English translation of part of that story is given in the appendix in 10.7. I will now discuss the sentences of type OV-S and SV-O that were in the first 36 lines of this story[14].

Line 7 from the story is glossed here in (41). Leaving aside the intro *yyt'a vaelcha* and the final part about grandmother's activities, the main clause is of OVS type. The subject Danny is the thematic participant[15] of this discourse.

> 41) Yyt'a   vaelcha,   joqbaaba   gira   Denina,
>   enclosement-GOAL V-go-WHEN grandmother-ABS see-PST   DANNY-DAT
>
>   kuotaman   k'uorniesh duzuosh,   caarna   ahwaran   buott   tyysush
>   chicken-GEN young-PL D-fill-PRS-GER   3P-DAT   mill-NML-GEN   shell-ABS fling-PRS-PTC
>   *Having gone to the enclosement, Danny sees grandmother,*
>   *filling youngs of chicken, throwing milled shells to them.*

Line 10 from the story is glossed here in (42). Again the main clause has OVS order, where the subject points to Danny, the thematic participant of this discourse.

> 42) T'uo-bieram   chu   hwoqum   hwyegush,   berrigie   a   dwaabi'ira cuo,
>   sour.milk-sauce   into   round.bread smear-PRS-GER B-all   &   eat-RFPS   3S-ERG
>
>   t'e jetshura   molush.
>   onto   sour.milk drink-PRS-PTC
>   *While pasting sour-cream-sauce onto the bread, he ate everything, drinking sour.milk with [it].*

Line 17 from the story is glossed here in (43). Again the main clause has OVS order, where the subject points to Danny (the boy), the thematic participant of this discourse.

> 43) Keeda   t'iera neghar dwaadaeqqira   k'anta
>   bowl-DAT   from   lid-ABS D-away.take-RFPS   boy-ERG
>   *The boy took the lid from the bowl.*

Line 20 from the story is glossed here in (44). There is a large "when" clause, which functions to set the time of the main clause (note, incidentally, the pro-drop: the main clause's subject is not overtly reproduced in this subordinate when clause – but it is implied by the class marker on the verb *vuolavelcha*). The main clause itself is of type S XP V O. The position immediately preceding the verb is filled by *ocu minutiehw* 'at the same time'. Probably there is some focus on this constituent. The post-verbal position is filled with a heavy object, which consists of a relative clause headed by the noun *kaad* 'bowl'. This bowl and its content was introduced in line 16, and has been functioning as a kind of discourse topic since then. Only now does *Deni* enter the picture again. His re-entrance is marked by a subject position preceding the focused constituent. According to section 5.4 a constituent in this pre focus position contains the given/known information. This coincides with what we find here – the listener already knows *Deni*, and since he is not the thematic participant here, he is moved to the pre-focus position.

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[14] Within the minimalist assumptions made in the next section it is very likely that OV-S coincides with O_FV-S, and that SV-O coincides with S_FV-O.

[15] With a "thematic participant" I do *not* refer to a theta role assigned by a verb, but to a discourse role. A thematic participant is a participant about whom remarks are being made over several clauses in a narrative.

44) Sixxa   cheda kara   a laecna,   ja'a   vuolavelcha,
    quickly spoon hand-GOAL & grasp-NRPS J-eat-INF V-begin-WHEN

      Denis   ocu   minotiehw   dwaatyyxira,
      Danny-ERG   that-OBL minute-LOC   unite-RFPS

      shuriex   siskal   cyrgiex   byzzina   kaad.
      milk-MAT cornbread-ABS crumb-MAT B-fill-NRPS   bowl-ABS

    When [he], quickly having taken hold of the spoon, started to eat, Danny at the same time added the bowl filled with cornbread crumbs and milk.

Line 21 from the story is glossed here in (45). The clause has the order C O Neg V S. The post-verbal subject[16] again points to Danny, and is expressed by a pronoun. It is fair to argue that Danny again has become the thematic participant. Again the main clause has OVS order, where the subject points to Danny (the boy), the thematic participant of this discourse. The word *t'aaqqa* 'then' is focused due to the presence of the word *bien* 'only', which functions as a focus phrase head. But I am not so sure that *tidam* 'attention' is focused here, even though it immediately precedes the Neg+Verb complex. Since it has the same tone as the preceding *bien*, the word *tidam* is prosodically marked.

45) T'aaqqa bien   tidam   ca   xilira   cynan
    then   only   attention-ABS NEG   happen-RFPS 3S-GEN
    Only then did he notice.

Line 23 from the story is glossed here in (46). This line contains direct speech. The whole of the direct speech could be regarded as an object of the verb "to say", so that the main clause's word order is O V S. The main clause is then followed by a subordinate clause, which describes an action undertaken by the subject (grandfather), which preceded the action of the main clause (telling something to Danny). Looking strictly at the main clause, then the postverbal subject *cuo* 'he' refers to the thematic participant of this section in the discourse. Attention has shifted from Danny to grandfather in line of the story at line 22. He has now become the thematic participant, which readily explains the subject coming after the verb

46) "Macjella   xilla   buorz", - eelira   cuo,   qynga   a hwaezhna.
    J-get.hungry-NRPS become-NRPS wolf-ABS say-RFPS 3S-ERG   this.one-ALL & look-NRPS
    "The wolf has become hungry", - he said, having looked to this one.

Lines 27 and 29 from the story also contain direct speech and the main clauses likewise have the OVS structure.

Then in line 30 grandfather is speaking to Danny in answer to his request to join him on a night excursion in line 29 "Please let me go with you". The line is glossed here in (47). The word order is S V Aux O. The post-verbal object *pajda* 'opportunity' refers to the whole of Danny's question (whether grandfather will let him join in). In that sense it might be called thematic.

47) As   vo'yytur-x   buj   paida?
    1S-ERG V-go-CAUS-FUT-X   B-AUX-QM   opportunity-ABS
    Would I really let the occasion go?

5.6. Concluding remarks

I will now return to the four questions with which this chapter on word order and information structure started out.

In section 5.1 the question whether there are local factors determining the word order variations observed in Chechen was considered. The results were not very convincing. The heaviness of an argument noun phrase does seem to play a role from time to time. For instance, placing two heavy noun phrases adjacent seems to be less preferable.

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[16] The subject is in the genitive here, which is dictated by the combinarion *tidam xila* 'to notice'.

In the next section, in 5.2 the question was addressed whether there is any difference between the unmarked SOV clause order versus the marked SO$_F$V order, where the object is focused. No structural way has yet been found to distinguish between these two clause types, but there was a clear prosodic difference. The focused object is prosodically marked, whereas the unfocused object is not. This means that *if* a clause is found with word order SOV, it does not *automatically* mean that the object is focused.

An introduction into the discourse structure of a narrative was given in section 5.3. This showed that the postverbal position is only used by a Discourse Topic, and that the position preceding a focused constituent can be used for Contrastive Topic.

Section 5.4 dealt with the question what characterizes arguments when they appear before a focused constituent, i.e. the object in an OS$_F$V clause or the subject in a SO$_F$V clause. I concluded that arguments in this position contain information as it is known or given in a relatively limited scope. This information has also been labeled *familiarity topic* (Zerbian 2006). In this thesis I use the label *Given Topic*.

Finally section 5.5 dealt with the question what characterizes arguments when they appear in the post-verbal position. By looking at a recorded text it was found that the post-verbal position can contain a discourse topic – the main character from a larger stretch of the discourse. Arguments conveying this kind of information have also been labeled as the *aboutness topic* (Zerbian 2006). In this thesis I will use the term *discourse topic*.

In summary, a Chechen clause can contain the following elements with informational content:
   a. Given topic or Contrastive Topic.
   b. Focus or other new information.
   c. Discourse topic.

Besides these marked constituent types a Chechen clause can also contain constituents that are unmarked as to their informational content. A syntactic description should take into account all these possibilities.

6. Syntactic description of focus

In this chapter I will present attempts to describe clauses containing a focused constituent in a syntactical way. Such a syntactical description should also be able to describe the unmarked order and it should be able to convey the two topic types (pre-focal given or contrastive topic and post-verbal discourse topic) that were determined in the previous chapter.

In section 6.1 an introduction will be given to put the syntactic descriptions in a wider perspective and to look at what has already been done. Then in section 6.2 the question whether the preverbal focus position is a structural position is addressed. Section 6.3 then addresses the question where this structural position is located with respect to other structural elements normally found in clauses (in particular with respect to IP – the inflectional phrase, where tense and agreement with the object are checked).

   An alternative account of the focus and topic positions is given in section 10.9.

   Finally section 6.4 summarizes the attempts made at describing the focus data in a syntactic way.

6.1. Introduction

In this introduction to the syntactic description of the focus data as have been described in the previous chapters section 6.1.1 summarizes the criteria that an acceptable syntactic description should fulfill, section 6.1.2 briefly touches upon the minimalist assumptions that will be made and section 6.1.3 looks at earlier research in the area of syntactic descriptions for Chechen word order.

6.1.1. Criteria

Before starting to suggest and check syntactic descriptions of focus in Chechen I would like to look back at the data and summarize the criteria, which an acceptable syntactic description would have to fulfill. Ideally a syntactic description of the different word orders with or without focused constituents in Chechen should not only be an adequately description, but it should also have explanatory force. Specifically, it should be able to answer the following questions.

  a. What is the syntactic structure for the unmarked SOV order?
  b. Why doesn't there seem to be a structural difference between the SOV and the SO$_F$V order?
  c. Why does the transitive verb only agree with the direct object[17] in phi features?
  d. Why does a focused constituent – be it subject, object, other constituent or focus-marked question word – need to be followed by the clause's main verb?
  e. Why can only a negator intervene between a focused constituent and the main verb of the clause?
  f. Which structural position does the Given Topic – the topic before the focused constituent – take?
  g. Which structural position does the Discourse topic – the postverbal topic – take?

The criteria above sketch the ideal world, the goal that I would finally like to reach. In this current thesis I wish to limit myself to the preverbal focus position. For that reason I will *not* aim to solve the agreement and case puzzles (point c), which the Chechen language offers. Rather, I hope to give a satisfactory explanation for points (a) and d (), and I hope to point the way forward to answer the questions in (f) and (g).

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[17] Besides, the structures should also make it clear why in an intransitive clause the verb agrees with the subject, irrespective of the verb being unaccusative or unergative

6.1.2.   Minimalism

One of the syntactic description theories currently in use is minimalism (Chomsky 1995). An up to date description is given in the textbook of Hornstein (2005). While trying to argue for a structural description of the different focus word orders found in Chechen I will be assuming a minimalist approach which finds its roots in the cited works. Specifically I will be taking the following assumptions.

- There is strict right branching[18].
- The linear correspondency axiom is accepted (Kayne 1994).
- The verb phrase consists of a VP shell above which there is a vP shell.
- There are not AgrS and AgrO projections, since object case and agreement is checked by the small verb v^0 and subject case and agreement is checked by the head of the inflectional phrase I^0.
- The base configuration order is $[_{vP}$ SU $[_{v'} v^0 [_{VP}$ DO $[_{V'} V^0$ IO $]$ $]$ $]$ $]$ (see Hornstein 2005:98, formula 69).
- Above the vP an IP is generated for any finite clause.
- Above the IP a CP can be generated for clauses with an overt complementizer head or for clauses where an operator targeting the CP.

Note that within this particular kind of minimalism the difference between SOV and SVO languages is *not* expressed by using parameters to specify the branching directions of the head and specifier. Universally, for all languages, there is one base configuration order (see above). The "unmarked" order in any given language, if it deviates from the base configuration order given above, is derived by movements of the constituents. So what *is* language specific is the amount and the order of movements that are being made before the syntactic structure is spelled out.

According to minimalism movement is motivated by feature attraction. There are two kinds of features. Weak features need to be "resolved" by movements in overt syntax. Strong features are resolved by movements in covert syntax.

The notion of "movement" according to minimalism consists of the two basic operations *copy* and *merge*. During the derivation of a syntactic construction there is no deletion. Within a derivation multiple copies of a constituent may result. Only at the point of spell-out are decisions made as to which, or which part, of these copies is spelled out.

6.1.3.   Earlier research

Chechen word order has been touched upon by Nichols (1994a, 1994b). As far as I know the syntactic structure of word order has only been addressed in one research before (Komen 2007). This research was based on elicited data and on data from the Chechen literature. The findings of this research can be summarized as follows:

- SOV is regarded as the unmarked word order.
- The orders SVO, OVS and OSV are acceptable too.
- The verb-initial orders VSO and VOS were not readily acceptable to native speakers, but they could occur with a clause initial *hunda* 'why'.
- Anaphors show that the subject is hierarchically above the object when these arguments are base generated.
- Within the framework of minimalism (Chomsky 1995, Hornstein 2005) it is possible to explain the variation in SOV, SVO, OVS and OSV word orders as follows:
  - o Assumptions: there are structural focus and topic positions above IP, subjects check case overtly at SpecIP, objects check case within the vP.
  - o SOV is the unmarked order where the subject has moved to SpecIP to check case (which can be dative, ergative or genitive): $[_{IP}$ S $[_{vP}$ O V] $]$.
  - o OSV can be the result of Object topicalization: $[_{TopP}$ O $[_{IP}$ S $[_{vP}$ V $]$ $]$ $]$.

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[18] Or strict left branching – but then for all languages. The point is that an asymmetrical c-command relationship should determine the word order at spell-out.

- o The SVO order can be the result of Subject focussing, where the verb becomes the head of the focus phrase, and the object stranded in the *v*P, as follows: [_{FocP} S V [_{IP} [_{vP} O]]].
- o While the OVS order was more difficult to explain one suggestion was, that after the subject has moved to SpecIP the whole remaining *v*P (consisting of the object and the verb) could move to SpecCP. However, no stimulus for such movement was found.

The analyses above leave several questions, although not all of these will be answered in this thesis:

a. Why do Chechen verbs only have agreement with the absolute object in a transitive clause? (This question needs to be addressed separately, outside the current work.)
b. What could attract the remnant *v*P resulting in OVS order?
c. Given a clause initial *hunda* 'why', how can the VSO or VOS orders be accounted for?
d. Is there proof for structural focus and topic positions in Chechen? (This question was answered positively in the current research, in chapter 5.)
e. What is the position of the Topic Phrase, the Focus Phrase and the Inflectional Phrase relative to the Verb phrases?

While noting the above questions, the current thesis focuses on providing a syntactic explanation for the preverbal focus position and all that is involved with it.

6.2.   The Focus position is structural

In this section I would like to address the question whether the focus position in Chechen could be labeled structural in the sense that there is a separate phrase within the syntactic structure, which is exclusively for focused constituents.

6.2.1.   Proof for a structural focus position

According to the data shown in previous chapters a focused constituent in Chechen is, with the exception of a possible intervening negator, always followed by the main verb of the clause. If one assumes that the negator is phonologically incorporated into the verb it precedes, then there never is any real intervener between the focused constituent and the verb. This in itself might be enough evidence for the existence of a structural focus position.
   I will proceed by looking at the negator a bit more carefully in the next section.

6.2.2.   Interveners between focused constituent and verb

As can be seen from the data in sections 4.4 and 4.5 almost nothing can intervene between the focused constituent (or the question constituent) and the verb. The only intervener that is found in the data actually is a negation. This can be seen from line A.8.i from the focus paradigm, which is repeated here:

48) [Haan-háa   Mùusa   STÓOmara   ca   vaxanà],
      No   Musa-ABS day-before-yesterday   not   V-go-NRPS

    [Muusà SIÉLxana vaxanà   Wáerbi-maxka]
    Musa   yesterday V-go-NRPS   Arabia-country-GOAL
    No, Musa didn't go YESTERDAY, Musa went to the country Arabia TODAY.

Note the first part of this sentence, where we have S Adv_F Neg V. So the negation *ca* intervenes between the focused adverb *stoomara* 'day before yesterday', and the verb *vaxana* 'went'. There are two ways to interpret this situation:

a. There is a NegP projection above the verb phrase, and the focus phrase is situated above that NegP.
b. The negator *ca* combines with the verb to form a complex head.

Prosodically the negation never gets stress. For that reason it is not unreasonable to assume that it cliticizes to the verb before which it is positioned. So option (b) of a complex head is

quite attractive. In that case there never is a real intervener between the verb and the focused constituent, which probably means that they stand in a head-spec relation.

6.2.3.   Why the verb is obligatory

A legitimate question to ponder about at this point is why a focused constituent should obligatory be followed by a verb? In the previous section I concluded that the focused constituent and the verb stand in a spec-head relation. Such a relation is crucial for checking a feature. In this case that relation is used to check the strong (i.e.: uninterpretable) focus feature on the focused constituent. With the focused constituent in the specifier there should be a head to check this feature with. That head should have a matching feature, which attracts the constituent in the first place.

Functional projections in general can be phonological realized or phonologically empty. At any rate the head of the focus phrase should contain a focus feature attracting matching constituents: focused constituents and question constituents.

It is very unlikely that Chechen verbs as such have a focus feature attached to them. I argue that Chechen, like many other languages, has a phonologically empty focus head containing a focus feature by which it attracts a focused constituent to the specifier of a the focus phrase it projects.

Now, if a focus phrase consists of a phonologically empty head and a focused constituent in the specifier of the phrase, then where does the verb come in the picture? I argue that Chechen has a language specific constraint stating that a focus phrase head in the language needs to be phonologically filled. In Chechen the verb seems to be a particularly suitable candidate to fulfil this requirement. The verb adjoins to the phonologically empty focus head.

Note that other words beside a verb can function as a head hosting a focused constituent. For instance in example (45) in section 5.5 the word *bien* 'only' serves as a head for a focused constituent.

Winding up this excursion on the status of the focus position in Chechen I conclude that it can be called a structural position. Focused and question constituents in Chechen move into a Focus Phrase. The verb adjoins to the phonologically empty head of the focus phrase fulfilling a language specific constraint that the focus phrase should have a phonologically non-empty head.

6.3.   Position of the focus phrase within the clause

If the assumption is true that a focused constituent is located in a separate FocP projection somewhere above the verb phrase, then the question is where exactly this FocP is with respect to the inflectional phrase, the functional projection IP. In the following sections several different options will be checked. Section 6.3.2 checks whether a position above the IP is feasible and 6.3.4 attempts a solution where the focus phrase is below IP (the so called *low-focus* phrase). But first in section 6.3.1 I address the question where exactly the IP itself is situated in the clause.

6.3.1.   The position of the IP within the clause

In languages in general the IP can serve several purposes:
  • The verb moves from the verb phrase to the head of IP, where it checks the tense.
  • The subject moves from the verb phrase to the Spec of IP, where it checks
    agreement with the verb.

In Chechen there is agreement in noun class between the verb and either the absolutive object of the transitive clause or the absolutive subject of the intransitive clause. Noun class

agreement can be seen as a combination of gender, number and person[19], hence as phi-agreement. (Extensive treatment of Chechen agreement will not be undertaken here.)

According to the model used in this thesis object agreement is checked in one of the specifiers of *v*P.

In many languages the IP head that takes care of the agreement is not overtly realized. Following a cue from Sybesma for the Basque language, I would argue that in Chechen the head of IP is overtly realized in the auxiliary (Sybesma 2002). In the compound tenses Chechen uses an auxiliary that is generally assumed to be a variant of the verb "to be". However, the present and past tense forms of the auxiliary lack an overt verb root component. They are built up by a class-marking prefix *v-, j-, b-* or *d-*, followed by a tense marker. This tense marker is *–u* for the present and *–ra* for the past, where an epenthetic short *–a-* is placed between the class marker and the past tense marker.

Having posited that the auxiliary forms *vu, ju, bu, du, vara, jara, bara, dara* are overt heads of IP, determining the position of IP in a clause becomes more visible. Whenever a clause contains an auxiliary, any constituents before it (i.e. higher than it) should automatically be regarded as being above the IP. This incalculates the possibility that IP itself moves to a higher position for some reason.

Note at this point that the auxiliary only occurs in Chechen sentences that use a compound tense (present continuous, past continuous etc). Such a tense consists of a verb in a particular form followed by the auxiliary. For compound tenses the verb can be expressed as a past participle (with adverbial meaning), a present participle (also with adverbial meaning) or a future form.

If a sentence does not have a *compound* tense, then the auxiliary only occurs when it functions as the main verb of an existential clause.

I would like to extend the notion of the visible IP in Chechen even a bit further, so that the possibility arises to determine IP in sentences without a compound tense too. The auxiliary, of which I have just established that it is an overt realizations of IP, is also available in negated forms: *vaac, jaac, baac, daac, vaacara, jaacara, baacara, daacara*. I would like to suggest that in Chechen the IP and the NegP are not separated, but conflated into one IP. This IP then marks: (a) verb-object agreement, (b) tense, and (c) negation. If this is true, then it has wider implications for using an overtly realized IP as a measuring stick to determine whether a constituent is above IP. The position of IP can now be determined in sentences with the normal past or present tense forms by looking at the position of the negator within the clause. If a constituent finds itself left of the negator, then it must be higher up than IP.

Note that the reverse is not necessarily true: constituents to the right of the negator or the auxiliary are not necessarily base generated below IP, because theoretically IP could have been below that constituent, and then moved upwards for some reason, leaving that particular constituent stranded.

6.3.2.   Unmarked word order

There are two possibilities for the unmarked SOV word order, which are shown as options (a) and (b) in Figure 2.

Within the framework of minimalism the derivation of possibility (a) proceeds as follows. First the main verb is taken from the numeration[20]. This verb projects the lower VP. Then the direct object is taken from the generation and takes the place of the VP's specifier, where it is assigned a theta-role by the verb. next the light verb is taken from the numeration, and it

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[19] For human arguments the class prefix on the verb, which identifies agreement with a particular noun, is *v-* for a male singular, *j-* for a female singular, *d-* for 1st and 2nd person plural, and *b-* for 3rd person plural.

[20] A numeration within minimalism is the set of lexical and functional items from which a clause is going to be built. In the case of a simple transitive tensed clause the numeration will hold something like: {subject, object, main verb, light verb, tense}.

projects the *v*P. Next the subject is taken from the numeration, and put in the specifier of *v*P, where it gets a theta-role by the light verb.

If the transitive clause is non-finite, i.e. tenseless, this may be the end of the derivation and the complete structure has been arrived at. However, transitive clauses that stand on their own normally are finite. That means there still is one functional item left in the numeration that has not been used yet: the inflectional head containing the clause's tense. So for a finite clause situation (a) would not be possible.

The first steps of the derivation of (b) proceed along the same lines as (a). Where (a) stops, derivation (b) proceeds by joining the lower verb with the light verb[21]. Next the direct object is copied to a newly made specifier of *v*P, where the case of the direct object is checked. Then in the next step the functional head I^0 is taken from the numeration and an Inflectional Phrase, an IP, is projected. The final step in overt syntax is the subject moving to the specifier of IP, where its case is checked by I^0. Note that this is one possibility as far as case checking is concerned. An other possibility would be that the subject's case is inherent, and therefore no movement is needed to check it. How, when and where case and agreement checking in Chechen actually happens should be investigated outside the current research, where the main attention is directed towards focus.

Note that at some point in the derivation the combined verb should move to I^0 in order to check tense. Apparently in Chechen this step is triggered by features that do not need to be checked before spell-out takes place.

Figure 2 Unmarked SOV word order
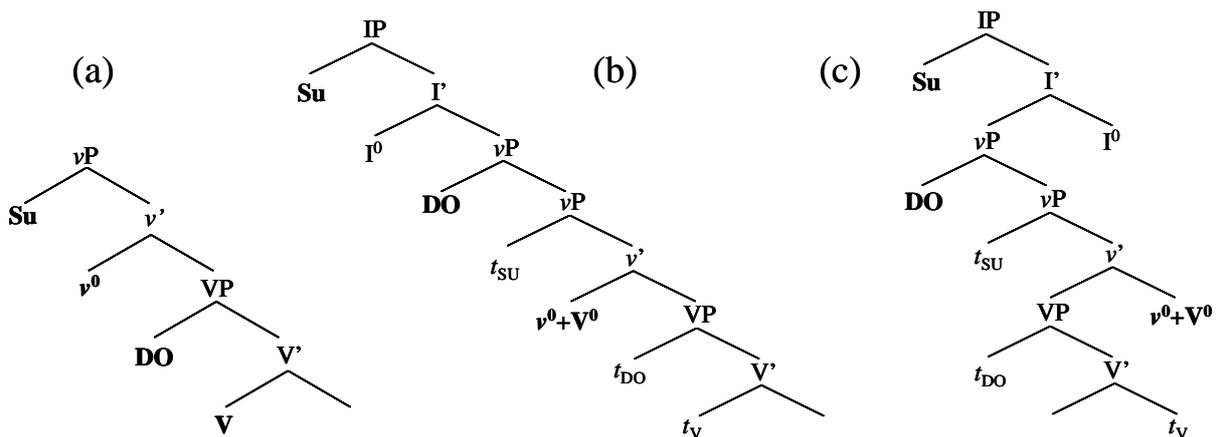
One problem with the unmarked SOV derivation above is the role of I^0. If it is accepted that the auxiliary represents the overt realization of the head of IP (see section 6.3.1), then the unmarked SOV order would entail S Aux O V. But such an order has not been attested. The only attested unmarked order with an auxiliary is S O V Aux (see section 4.4.1).

Note that this problem would have been resolved quite elegantly if the basic assumptions made within the framework of minimalism would have been made differently (see 6.1.2). Two requirements would have to be dropped: the requirement on strict branching and the stipulation that the linear correspondency axiom is accepted.

With these different assumptions the unmarked SOV order could be derived at as shown in (c) of Figure 2. The derivation proceeds completely similar to the one shown in (b). At the end the constituents are not spelled on the basis of their asymmetric c-command relationship, but by walking the tree from left to right.

The resulting order then is Su DO v^0+V^0 Aux (where the auxiliary is taken to be I^0).

---

[21] Actually the head V^0 adjoins to the existing v^0 head, after which the two phonologically merge.

However promising the derivation of the unmarked order as sketched in (c) may look like, for this thesis I will hold on to the assumptions defined in 6.1.2, which includes the fact that only left branching is accepted. This choice is a logical consequence of rejecting directionality parameters, which is well motivated by Hornstein (2005:219-239).

In summary, the unmarked word order in Chechen, SOV, is arrived at by following scheme (b) in Figure 2, which means the following assumptions are made:

- The main verb V^0 adjoins to the light verb v^0. Even though for the derivation above this does not necessarily happen in overt syntax, I will assume it does.
- The direct object moves to a [Spec,vP] to let its absolutive case be checked by the light verb.
- The subject moves to [Spec,IP] to let its case be checked.
- The inflectional phrase head I^0 is able to check dative, ergative and genitive cases of subjects.
- The compound verb v+Vb does *not* move to I^0 in overt syntax.

Given these basic assumptions I will now proceed and show how the word orders with a focused constituent can be arrived at.

6.3.3.   Focus phrase above the IP

The assumption that there is a Focus Phrase above the IP is for instance assumed for Hungarian (Kiss 2002), it is assumed by Hornstein (2005:244) and also by Sybesma (2002:216). I will label this focus position as *high-focus* in order to distinguish it from the possible focus position below IP as will be discussed in 6.3.4.

While trying to account for the data with this high-focus position, I will be assuming that above the Focus Phrase and below the CP there still is room for a Topic Phrase. This topic phrase should host the Contrastive or the Given Topic as discussed in section 5.4. Below the focus phrase there should be a projection hosting the Discourse Topic as discussed in section 5.5. Either IP should host this Discourse Topic or a separate projection should be made above IP to host it.

The order of the basic transitive clause assuming a high-focus position looks as follows:

49) $[_{CP} C^0 [_{TopP} Top^0 [_{FocP} Foc^0 [_{TopP} Top^0 [_{IP} I^0 [_{vP} SU [_{v'} v^0 [_{VP} DO [_{v'} V^0 IO]]]]]...]$

I will now proceed and try to account for the unmarked SOV word order and for the four focus configurations of the transitive clause $SO_F V$, $O_F VS$, $S_F VO$ and $OS_F V$.

6.3.3.1   Word order O_F V S

Having defined the derivation of the unmarked word order in the previous section, Figure 3 shows how the derivation might proceed when the object is focused and when the Focus Phrase is assumed to be above the IP.

There are two ways to correctly derive an $O_F VS$ order. The first way is shown in part (a) of Figure 3. Initially the derivation goes as sketched in 6.3.2. In the next step a focus head is established, which attracts both the combined verb as well as the object. While the combined verb moves to Foc^0, it passes by I^0 where it joins with this head. The last one moves to the spec of this focus phrase, where its focus feature is checked with the Foc^0 head.

For this derivation the Subject does not end up in a separate Topic Phrase. It sits in the specifier of IP and is interpreted as Topic by other means.

The second way to derive a correct $O_F VS$ order is shown in part (b) of Figure 3. In this case a separate Discourse Topic phrase is projected with a phonologically empty head Top^0. The subject passes by Spec,IP and then ends up in the specifier of the discourse topic phrase.

Figure 3 Deriving O$_F$VS with a high-focus position

$$
\begin{array}{cc}
\text{(a)} & \text{(b)}
\end{array}
$$
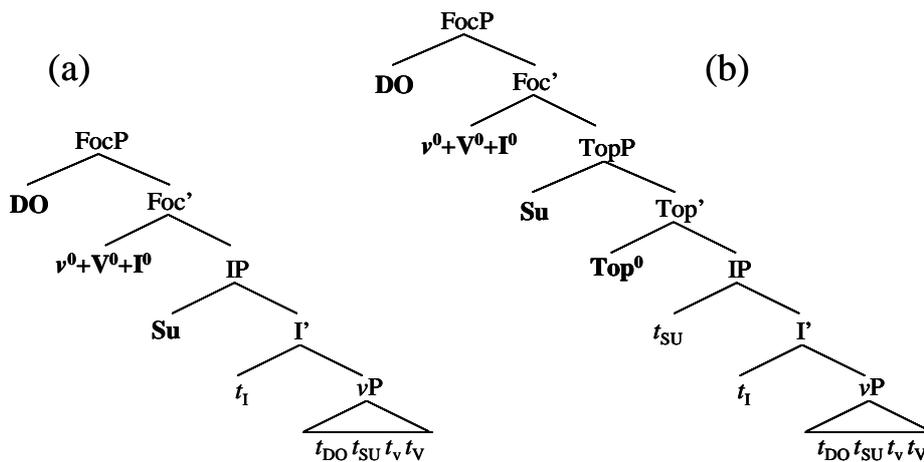
In future research a method should be found to test which of the two derivations is the right one. Derivation (b) has as advantage that the Discourse Topic ends up in a separate phrase.

Assumptions that need to be made for this derivation to proceed correctly are the following:
- The light verb and the main verb combine into a compound and move into I^0.
- Later the combined verbs have to move to the Foc^0 position – otherwise the object and the verb would not be directly adjacent.
- In variant (b) a separate topic phrase above IP and below FocP is projected, hosting the subject.

With respect to the placement of the overt IP head, the auxiliary, the derivation above deserves credit. The O$_F$VS order is confirmed for question constituents in section 4.5.3. From the data there the auxiliary follows the verb, after which the subject comes. This is confirmed by the derivation above.

6.3.3.2   Word order S O$_F$ V

When the object is focused the subject can move to the left of the focused object, in which position it gets the role of Given or Contrastive Topic (see section 5.4). Both the object and the subject have an uninterpretable feature that needs to be checked in overt syntax. The derivation of a SO$_F$V sentence with high-focus position goes as sketched in Figure 4.

Figure 4 Derivation of SO$_F$V with a high-focus position

After the *v*P has been successfully established (see 6.3.2) a focus phrase is projected above the IP. The verb moves there, passing through I^0. Then the object moves to the specifier of the Focus Phrase to check its focus feature. Finally a topic phrase is projected above the

focus phrase. The head of the topic phrase is phonologically not realized. But it does have the power to check the topic feature of the subject, once this has moved into the specifier of the topic phrase.
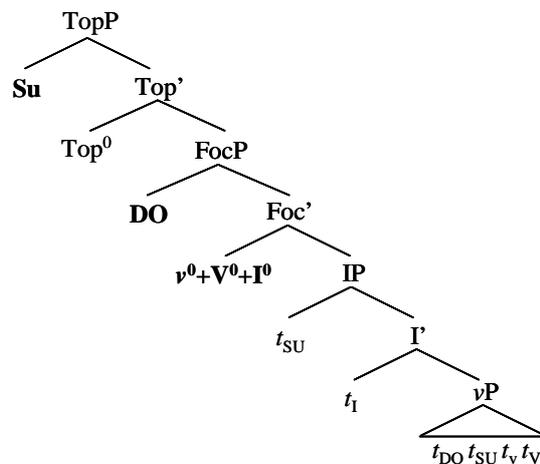
Assumptions made for this derivation are the following:

- The light verb and the main verb combine into a compound and move into I^0.
- Later the combined verbs have to move to the Foc^0 position – otherwise the object and the verb would not be directly adjacent.
- A topic phrase can be projected above the focus phrase.

With respect to the placement of the overt IP head, the auxiliary, the derivation above shows that it joins up with the combined verb. From section 4.4.3 it is known that the verb and the auxiliary should be clause final, which is confirmed by this derivation.

6.3.3.3   Word order S_F V O

When the subject is focused the first steps of the derivation still go as for the unmarked SOV order as shown in section 6.3.2. Afterwards there are two possible ways to go forward, which are both shown in Figure 5.

According to option (a) from Figure 5 the subject moves on to the specifier of IP, and the combined verb joins up with the head of IP. Next a focus phrase is projected above the IP, attracting the subject to check its uninterpretable focus feature. Finally the combined verb and I^0 heads move up to the head of the focus projection to fulfill the requirement that a phrase should be headed.

Characteristic for this derivation is that the direct object stays within the vP. It does not move to a separate topic phrase. So if it is to be interpreted as Discourse Topic, as was argued in section 5.5, then this is not done by syntactical means.

The alternative is sketched in part (b) of Figure 5. This alternative is similar in structure to alternative (b) of Figure 3 in section 6.3.3.1. According to this option a Topic and a Focus Phrase are projected above the IP. First the topic phrase is projected. Then the direct object should move out of the vP, skip the specifier of IP and land in the specifier of the topic phrase to check an uninterpretable topic feature. Then the compound verb picks up I^0 and continues to adjoin to the phonologically empty head of the topic phrase, fulfilling the desire that heads be filled overtly. Next a focus phrase is projected and the subject moves to its specifier to check its uninterpretable focus feature. As a last step the compound verb moves from the head of the topic phrase to the head of the focus phrase, so that an overt head appears there.

Figure 5 Derivation of the S_FVO order for high-focus
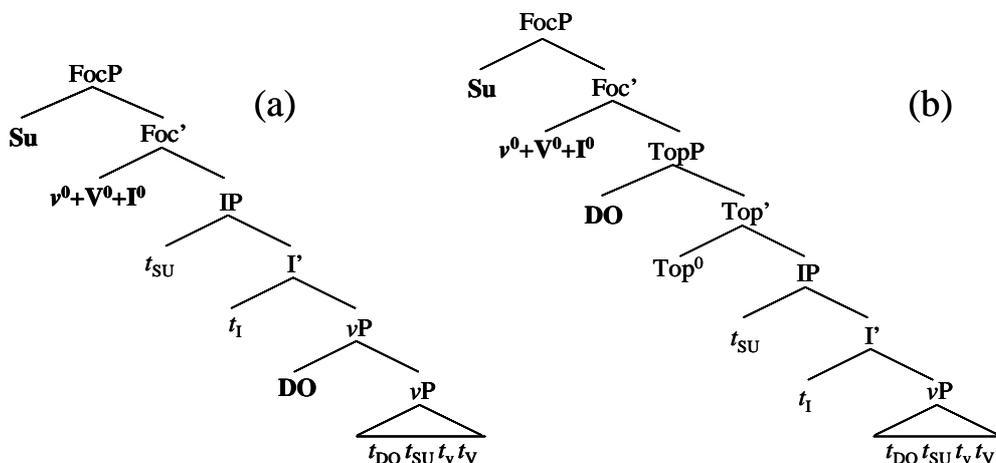
The derivations above can be checked against the data in sections 4.4.2 and 4.5.1. Derivation (b) is appealing since it has an additional topic phrase, which is able to host the

postverbal Discourse Topic. Future research will have to provide tests to find out which of the two possible derivations is more likely to occur in actual practice.

Besides the points mentioned above in the other sections about the high-focus position I should point out another implication of the derivations made here: they predict that the auxiliary (the overtly realized inflectional head) and the verb form one large phonological compound. But up to this point there seems to be nothing in the data contradicting that either.

6.3.3.4   Word order O S_F V

When the subject is focused and the object precedes it, then the object must have been attracted by a topic position. Under those assumptions the $OS_F V$ order can be derived along the following lines. First the basic line of the $S_F VO$ derivation (a) is followed, but then two steps are added. A topic phrase is projected and the object is moved to it attracted by a strong topic feature.

The assumptions that need to be made here are similar to the ones made for the other high-focus position derivations.

6.3.3.5   Summary of high-focus

In general it is possible to make derivations for the unmarked and the focused orders assuming a high-focus position. There are however a few assumptions that have to be made.
- The light verb and the main verb combine into a compound $v^0 + V^0$.
- For the unmarked SOV order the compound verb stays in v^0.
- When the compound verb moves past I^0 it has to phonologically incorporate it. When I^0 is realized overtly as an auxiliary, then the compound verb should incorporate the auxiliary.
- If it is accepted that the auxiliary is an overt realization of the IP head, then the derivable unmarked order (S Aux O V) does *not* coincide with the observed unmarked order (S O V Aux).

This last point is problematic, but it hinges on the assumption that the auxiliary is an overt realization of I^0, which needs further checking.

The solution should *not* be sought in abandoning strict branching and accepting directionality, as suggested in section 6.3.2 in Figure 2 item (c). Although such a solution fits the unmarked order perfectly, it is a dead-end as soon as a focus phrase is added above the IP. For the $O_F V$-S order, for instance, the specifier of the focus phrase correctly ends up on the left side of the clause, but the compound verb ends up completely clause final. This contradicts the data, which says that the focused constituent and the verb are together in one projection: $[_{FocP}$ XP $[_{Foc'}$ V]].

6.3.4.   Focus phrase below the IP

A Focus Phrase between the IP and the vP is sometimes called a "low-focus position". Such a position seems to be particularly attractive to some African languages (Aboh 2004).

I will assume that right below the CP, above the IP, a Given Topic Phrase can be formed (see section 5.4). Below the focus phrase a Discourse Topic Phrase can be formed.

The order of the basic transitive clause therefore looks as follows:

50) $[_{CP}$ C^0 $[_{TopP}$ Top^0 $[_{IP}$ I^0 $[_{FocP}$ Foc^0 $[_{TopP}$ Top^0 $[_{vP}$ SU $[_{v'}$ v^0 $[_{VP}$ DO $[_{v'}$ V^0 IO]]]]]…]

I am *not* assuming that all projections are present in each and every sentence. Projections are only formed when the need arises during the derivation.

Given these basic assumptions and the low-focus position, I will now proceed and try to account for the four focus configurations of the transitive clause $SO_F V$, $O_F VS$, $S_F VO$ and $OS_F V$ (the unmarked SOV order has already been accounted for in section 6.3.2).

6.3.4.1   Word order S O_F V

When the observed word order is S O_F V, the DO (direct object) has an interpretable focus feature that needs to be checked. The derivation initially proceeds along the lines sketched for the unmarked order in section 6.3.2, until the following situation is reached:

- The verb from the lower VP shell has adjoined to the light verb (they form a complex head).
- The subject is base generated in the specifier of vP.
- The object has moved to a second specifier of vP where it checks case.

From this point on the derivation continues as follows (see Figure 6). A focus phrase is projected above vP, and the direct object moves to the specifier of this phrase attracted by an uninterpretable focus feature in the phonologically empty head of this phrase. Next the compound verb v^0+V^0 moves out of the vP and adjoins to the phonologically empty focus phrase head. Then the IP is projected and the subject moves past the Focus Phrase into the specifier of the IP in order to check its case. At the next step a Topic Phrase is projected above the IP. The subject moves out of the specifier of IP to the specifier of this Topic Phrase, since it is attracted to by an uninterpretable feature.

According to this low-focus derivation of the SO_FV order, the compound verb does not adjoin to the head of IP in overt syntax. Nor is the head of the Topic Phrase projection filled overtly.

Figure 6 Derivation of S O_F V for low-focus
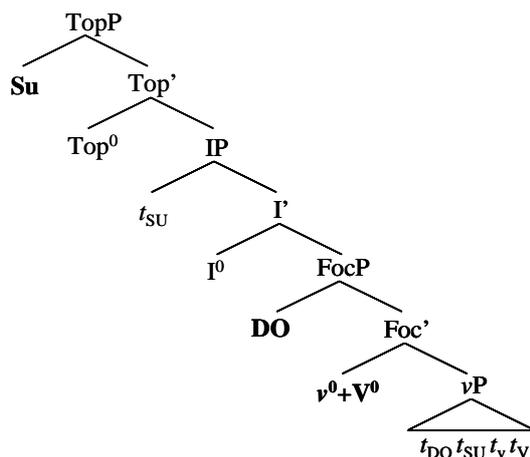
The assumptions (in addition to the ones made previously already) that need to be made for this derivation to work are:

- The <u>verb</u> does *not* move to IP in *overt* syntax to check tense.
- The lower verb V^0 first joins with the light verb v^0 and then the combination joins with a phonologically empty focus head.
- The head of the topic phrase projection is not filled in overt syntax.

Some of these assumptions lead to a situation that is theoretically difficult to explain. For the object to be interpreted as focused, the focus phrase needs to be headed by LF. Yet the compound verb needs to move to the head of IP in order to check tense.

Perhaps an explanation runs as follows. First and foremost the Focus Phrase has a phonologically empty head. It is this head that contains the focus feature interpretable at LF. The compound verb only "temporarily" adjoins to this phonologically empty head in order to fulfill a constraint that is specific for the Chechen language, namely that the focus phrase has a phonologically filled head at spell-out. After spell-out the compound verb travels further upwards to I^0 in order to check tense.

Besides the above consideration there is one more potentially difficult point. If the auxiliary (when it occurs in a clause) is an overt realization of I^0, then the derivation above predicts a word order of S Aux O_F V, whereas the actually observed order is S O_F V Aux.

6.3.4.2   Word order O_F V S

When the observed word order is O_F V S, the derivation initially proceeds along the lines sketched for the unmarked order in section 6.3.2, until the following situation is reached:

- The verb from the lower VP shell has adjoined to the light verb.
- The subject is base generated in the specifier of vP.
- The object has moved to a second specifier of vP where it checks case.

At this point a phonologically empty head of a Discourse Topic Phrase is taken from the numeration, which projects a Topic Phrase. The subject has an uninterpretable topic feature and therefore it moves to the specifier of this topic phrase so as to check it. The numeration contains a phonologically empty Focus Phrase head. When this is taken out of the numeration it projects a Focus Phrase. The object has an uninterpretable focus feature so it moves to the specifier of this focus phrase. The compound verb v^0+V^0 moves out of the vP, passes through the topic phrase head (i.e. adjoining to it and then moving on) finally adjoining to the phonologically empty focus phrase head Foc^0. This is done in order to fulfill the language specific requirement that the head of the focus phrase be filled with a phonologically realized component. There is one last element in the numeration, which is the IP head containing an interpretable tense feature. When it is taken out of the numeration an Inflectional Phrase is projected.

Figure 7 Derivation of O_F V S for low-focus
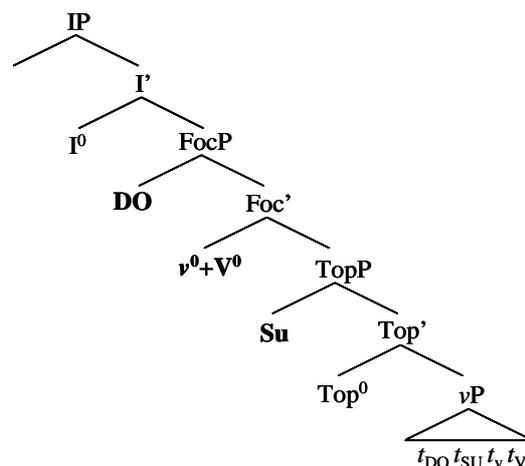
Given the low-focus situation and the assumptions made so far, the compound verb only moves to the IP to check tense after spell-out, i.e. in covert syntax. This seems to contradict one of the basic minimalist requirements, namely that syntactic structures must be built from lexical items (Hornstein 2005:98). However, the I^0 head is arguably not completely empty, since it contains a tense feature.

Another point connected with the IP is the following. If the auxiliary is accepted as an overt realization of I^0, then a low-focus derivation as sketched above predicts O_F V S clauses with an auxiliary to have word order Aux O_F V S, whereas the attested order is O_F V Aux S.

Concluding this low-focus O_FVS derivation, the following assumptions need to be made in addition to the ones mentioned in section 6.3.2:

- Above vP and below IP there is room for a Topic Phrase (hosting the Discourse Topic) and a Focus Phrase.
- IP is filled only after spell-out (in order to check the tense of the verb).
- The head of the Topic Phrase does not need to be phonologically filled at spell-out.
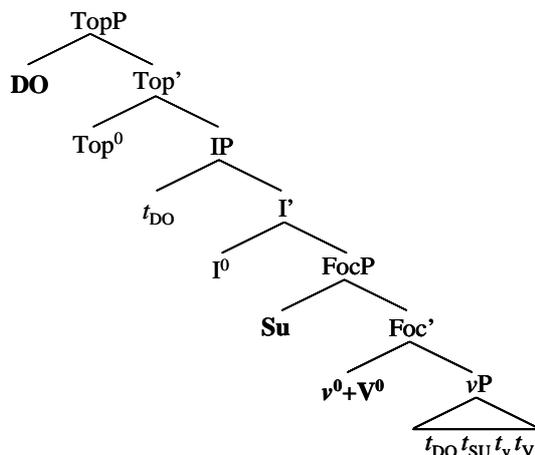
6.3.4.3   Word order S_F V O

As has been shown by example (39) in section 5.3 an object in the postverbal position can also function as a Discourse Topic. Given this fact, the derivation for the S_FVO order proceeds basically along the same lines as the O_FVS order from the previous section, with the difference that subject and object are interchanged. In the current case the object ends up in a Topic Phrase just above the vP, while the subject ends up in the Focus Phrase just below IP. And as for IP – again the assumption needs to be made that the compound verb only moves to the head of IP to check tense after spell-out, so in covert syntax.

6.3.4.4   Word order O S_F V

The derivation for the O S_F V order proceeds basically along the lines of the S O_F V order with the difference that the subject and object are swapped around. There is one other minor difference, for which reason the derivation is shown in Figure 8.

The derivation proceeds up to the point that a focus phrase is projected, the subject is attracted into its specifier, and the compound verb adjoins to the head of the focus phrase. Then the IP head containing the tense feature is taken from the derivation and it projects an Inflectional Phrase. (The compound verb is stuck in the head of the FocP until spell-out, but it can move to I^0 in covert syntax to check tense.) Next the phonologically empty topic phrase head is taken from the derivation, which with its uninterpretable feature attracts the direct object to its specifier. As the object moves from the vP, it passes by the specifier of IP, where it leaves a copy. But this means that the subject will not be able to move to the specifier of IP anymore after spell-out. Such movement would not be necessary anyway, if the subject has inherent case – but I will leave the problem of case for another occasion.

Figure 8 Derivation of O S_F V for low-focus

TopP
- DO
- Top'
  - Top⁰
  - IP
    - t_{DO}
    - I'
      - I⁰
      - FocP
        - Su
        - Foc'
          - v^0+V⁰
          - vP
            - $t_{DO}\,t_{SU}\,t_v\,t_V$

Assumptions made for the derivation of O S_F V to work are the following:
- The verb does *not* move to I^0 in overt syntax.
- The subject does *not* have to check case by moving to the specifier of IP in covert syntax – it should be able to check it in another way.
- The head of the topic phrase stays phonologically empty.

6.3.4.5   Summary of low-focus

Here is a summary of the assumptions that need to be made if a low-focus position, between IP and vP, is assumed. These assumptions are in addition to the ones made in general for minimalism (section 6.1.3) and the ones for deriving the unmarked order (section 6.3.2).
  a) The order of possible phrases is: TopP, IP, FocP, TopP, vP, VP. So the Given Topic phrase is above IP, and the Discourse Topic phrase is below IP and even below the focus phrase.

b) The verb does *not* move to IP in *overt* syntax to check tense – it does so in *covert* syntax, i.e. after spell-out.

c) The combination of the main verb and the light verb adjoins to the FocP head. But the compound verb can break off again and move further up to IP after spell-out.

## 6.3.5.   The syntax of Double Focus

Taking the high-focus solution as a starting point, I would now like to account for a part of the data that has not been considered yet for the syntactic descriptions: double focus.

In section 4.5.4 it was shown from the literature that double focus for question constituents[22] is realized by putting the two question constituents before the verb in a particular order. If one of the question constituents is an adverb (e.g. *maca* 'when?', *michahw* 'where?') then it comes first before the verb. If one of the question constituents is the direct object, then that is the next one to come before the verb. The subject comes as the last one. So the preferred order observed is as follows:

(6)   **Multiple Focus Order**
        Subject – Object – Adverb – Verb

Two possible double focus constructions using the high-focus position are shown in Figure 9. Part (a) shows double focus with subject and object question constituents. Part (b) shows double focus with an independent question word (an adjunct) and an object question constituent. Note that the double focus is realized by using multiple specifiers.

Figure 9 Double focus with question constituents
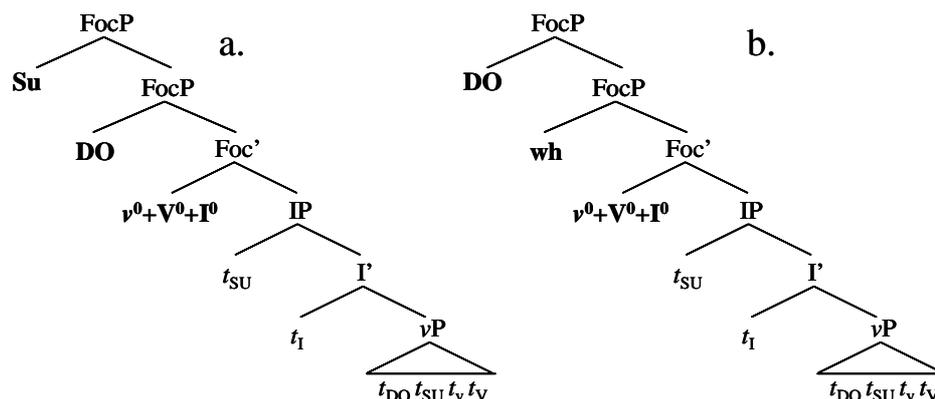
A syntactic explanation for the order given in (6) can be as follows. Independent question words like 'when' and 'where' are normally generated in the position where they stay. Usually adjuncts do not have features that need checking, and therefore they do not need to move[23]. The location where independent question words are base-generated (i.e. enter the derivation) is the specifier of the Focus Phrase. Since the verb adjoins to the phonologically empty focus phrase head, the question adjunct ends up immediately preceding the verb.

The fact that the object usually precedes the subject in moving to the specifier of the focus phrase indicates that it must be closer to the focus phrase at the moment it is projected.

In section 4.4.7 the results of double focus elicited as part of the focus paradigm were described. It was found that when two non-question constituents are focused, one option is that they stack onto one another as shown above for the question constituents. But in 4 of the 5 cases another strategy was used: a cleft construction was used. As explained in section 3.3, a cleft construction divides one clause into two clauses, each containing a verb.

---

[22] Recall the assumption from section 4.1.4 that in Chechen a question constituent is by default marked for focus.

[23] No movement is needed within the minimalism theory, where movement can only be triggered for feature checking reasons. See section 10.9 for an optimality theory account on movement motivation.

The scheme of the Chechen cleft construction that is used most, repeated from (3), looks as follows:

(7)   [free relative Y] + [constituent X] + be.

Note that the constituent X is in a natural position to be perceived as focused, since it is followed by the main verb of the matrix clause, which happens to be a form of the auxiliary 'to be'.

   The free relative Y can, according to the high-focus solution adopted in this thesis, only be interpreted as a Given or Contrastive topic[24]. The free relative itself is an NP headed by a nominal ending and containing a CP with a relative clause. This relative clause is headed by a relativizer and for the rest contains the topical part of the main clause. Since the relative clause itself is a clause, it should also be able to host a focused constituent.

To illustrate the double focus using a cleft construction example C.7.i from section 4.4.7 is repeated here in (51).

51) [Denina   ginarg]   joqqa-baaba   jara
    Danny-DAT see-NRPS-NML   grandmother-ABS   J-PST
    The one whom DANNY saw was GRANDMOTHER.

The syntactic structure of this sentence is shown in Figure 10. Note that the verb *ginarg* 'the one who saw' can be divided into the actual past-tense verb *gina* 'saw' and two morphemes. The last morpheme *–g* indicates that the resulting constituent is a singular noun in the absolute case. The plural form would have been *ginar-sh*. The *–r* suffix functions as relativizer.

Figure 10 Double focus using a cleft construction
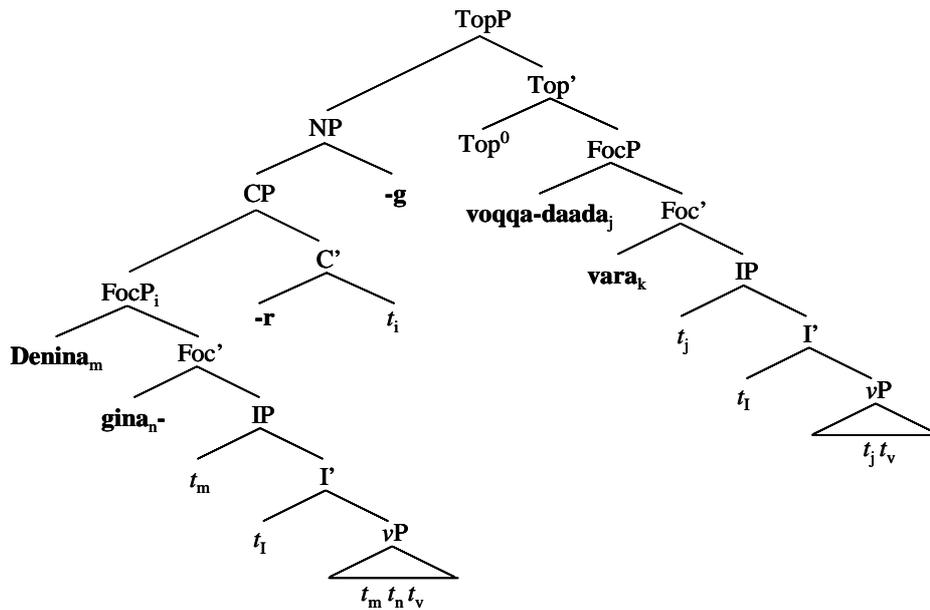
The structure above has at least one problem, which I will explain by looking at an example from the data. It was noted in section 4.4.7 that the focus within the free relative is *not* on the element immediately preceding the verb, but on the leftmost constituent. This was seen from example B.9.i, repeated here as (52).

52) [Deni   chaardaq   t'e   hwala'yeznarg] voqqa-daada   vara
    Danny-ABS platform-DAT onto   up-lift-NRPS-NML grandfather-ABS   V-PST
    The one who pulled DANNY up onto the platform was GRANDFATHER.

---

[24] According to the low-focus solution the free relative Y could either be a topic (the topic phrase position above the IP), or it could be without specific informational load, residing in the specifier of IP.

Within the free relative *Deni* 'Danny' must be considered as focused. But it does *not* occur immediately preceding the free relative's verb *hwala'yezna* 'lifted up'. It occurs completely at the left hand side of the free relative.

The "focus-before-IP" construction is not able to account for this deviation, and from a minimalist point of view I have no solution to offer[25].

6.3.6.   Focus phrase conclusions

The lower focus possibility was checked out in section 6.3.4. Most of the focus configurations could be readily derived by assuming this focus position under IP and above *v*P. Below the focus phrase and above *v*P a topic phrase that hosts a Discourse Topic can be projected. Above the IP a topic phrase hosting a Given or Contrastive topic can be projected. The verb should be able to first join with the phonologically empty focus phrase head, and then later, after spell-out, move further up to the head of IP in order to check tense. Although case is something to be studied separately, it seems that for the low-focus position one has to assume that the subject has inherent case.

The more widely acceptable high-focus position (focus phrase above IP) was reviewed in section 6.3.2. All the configurations could be derived given the minimalist assumptions that were made at the outset. From the two focus phrase positions this was the most realistic and the most promising one. For all word orders containing a focused constituents the verb passes by through IP, where it checks tense. Likewise the subject passes by through the specifier of IP where it checks case.

A slight inconsistency in the high-focus position is the case checking of the subject. If this checking is not done inherently, but using the specifier of IP, then checking the subject's case is done covertly for the unmarked word order, but overtly for all word orders containing a focused constituent. Since the main goal of this thesis is the description and syntax of focus in Chechen, I will leave the case-checking problem for future research.

The conclusion at this point is that the high-focus solution is slightly more plausible than the low-focus solution.

Double focus is realized in two different ways. The first method is to stack focused constituents in multiple specifiers of the focus phrase. This method is mainly used by question constituents, which be default are focused in Chechen.

The second method uses a cleft construction, which consists of a free relative, an argument and a form of the auxiliary 'to be'. The first focus is on the argument preceding the auxiliary. A second focus is on the leftmost constituent within the free relative.

6.4.   Summary of syntactic description

From the syntactic descriptions using minimalism and advocating a structural position for focus and topic the most promising one is the high-focus solution – the one with a focus phrase above IP. Both high and low-focus solutions are able to describe the unmarked SOV order adequately, but the high-focus solution tackles word orders whereby an argument is focused in a slightly more plausible way. With that solution tense is checked trivially.

The low-focus solution is also able to describe the data adequately. However, for this solution it has to be assumed that a phonologically empty inflectional phrase is projected in

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[25] There is a possible solution from the Optimality Theory point of view. In OT any constraint may be violated by a higher ranked constraint. Since OT does not work with features, the positioning of the focused constituent before the verb is the result of an alignment constraint stipulating that the left edge of the verb should be aligned with the right edge of the focus. Apparently there is a higher ranking alignment constraint saying that the right edge of the verb should align with the righ edge of a clause if the clause is a subordinate one. This fits with observations that the verb is almost exclusively final in Chechen subordinate and chained clauses.

overt syntax. The verb moves to the IP to check tense only in covert syntax. That movement is potentially problematic since the verb has first adjoined to the phonologically empty head of the focus phrase.

If the auxiliary that is used in certain kinds of clauses (e.g. clauses in the present or past continuous tense) is accepted as an overt realization of the IP head, then the low-focus solution is very problematic. According to that solution the auxiliary would have to be somewhere above the focused constituent, whereas in actual fact the auxiliary usually follows the verb (which has moved to the focus phrase). The high-focus solution fares better in this respect. For all four focus word orders it appears that the verb and the head of IP are joined into one complex head. The only problem is accounting for the position of the IP head for the unmarked order.

Another way to provide a syntactic description for the unmarked and focused word orders is by using optimality theory. Such an approach seems to be attractive, since constraints and conflicting desires – natural ingredients for this theory – have been noted at several points until now in this thesis. However, since the theory has not been readily accepted yet for an application in syntax, and since it has been possible to describe the data adequately without it, I will *not* present an optimality theory solution in the main body of this thesis. One possible attempt has been added in the appendix, in section 10.9.

7. Conclusions and discussion

For this research data with clauses having focused and question constituents was gathered. The data showed that question constituents are by default focused in Chechen, since they adhere to the same word order requirements. Focused constituents occupy one particular position in the word order of the Chechen clause: with little exceptions they appear immediately before the verb. A negator can intervene between the focused constituent and the verb. I have argued that the negator phonologically cliticizes with the verb.

While the unmarked order of the transitive clause was established as SOV, the order with a focused object can be either O_FV-S or S-O_FV, and the order with a focused subject can be either S_FV-O or O-S_FV. Postverbal arguments contain a Discourse Topic, while pre-focused arguments contain a Given Topic. SOV was found to differ from S-O_FV minimally – not in structure but only in prosody.

Using minimalism, and with the assumption that there is strict right branching, I investigated whether a structural position for the focused constituents, a Focus Phrase, could be defended. I have investigated two different focus phrase solutions: low-focus and high-focus. For several African languages the low-focus solution, where the focus phrase resides below IP and above vP, has been successfully proposed, and for Chechen such a solution is possible too. An even more promising construction was shown to be the high-focus solution, where the focus phrase resides above the IP.

   Both the high and the low focus solutions were able to accommodate a topic phrase above the focus phrase to host a Given or Contrastive Topic, and a topic phrase below the focus phrase to host a Discourse Topic.

   The only unanswered question left by both solutions has to do with the position of the auxiliary within the unmarked causative clause.

The syntax of double focus was investigated for the high focus solution. It was shown that focused constituents (especially question constituents) can stack in multiple focus phrase specifiers. The order of stackable focus constituents, with respect to their distance from the verb, was found to be: adjunct, object, subject.

   Another strategy used for double focus was found to be the cleft construction. This strategy is especially used by double focus of non-question constituents. The argument preceding the matrix clause's main verb (a form of the auxiliary 'to be') receives main focus, while the leftmost argument in the free relative containing the presupposition of the cleft receives a secondary focus.

In this research I have limited myself mainly to the four possible word orders of a transitive clause with a focused constituent. I have been arguing that the informational content of a postverbal argument and a pre-focus argument is topical. Further research could, by looking at more text material and by developing good tests, try to find out whether pre-focus arguments *always* have to have a topical nature (as predicted by the high-focus solution) or not (as predicted by the low-focus solution). On the same line it should be established whether postverbal arguments *always* have a discourse topic nature or not. Both focus solutions predict that it is *not* possible to have an OVS clause where S is a Discourse Topic and O is *not* focused. This could be tested too.

The area of Case and Agreement in Chechen should also be studied in-depth. This is outside the scope of the current research, but it could give further evidence that the high-focus solution fits the data more in Chechen.

Further research is also needed in the area of present and past continuous clauses. What is their syntactic structure exactly, and how does that fit into the results gained here?

8. Acknowledgments

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10. Appendices

10.1. Focus paradigm

All the sentences elicited as a result from asking questions about a basic sentence and prompting for corrections are listed in this section.
Notes:
- Prosodic words are not marked separately
- Between brackets are prosodic phrases without pauses.
- The main stress of a prosodic phrase is indicated by CAPITAL letters
- Other stresses are indicated by accent aigú and accent gràve.
- **Bold**-faced are the wh-constituents or the constituents to be corrected.
- Only the **answers** can be used, since they are given by a native speaker. The questions were construed and asked by a non-native speaker.

The Chechen could be divided bottom-up in (i) prosodic word, (ii) prosodic phrase, (iii) intonational sentence. But the only division indicated by the square brackets […] here is the middle level – the *prosodic phrase*.

A. Muusa sielxana Waerbi-maxka dwaavaxara.
   Yesterday Musa left for Arabia.

   A.1   Sielxana **mila** dwaavaxara?
         Yesterday who away went?

         A.1.i [MÚUSA   dwaavàxara]
               Musa   away-went

   A.2   Muusa sielxana **micha** dwaavaxara?
         Musa yesterday where away went?

         A.2.i [Mùusa   sielxaná] [WÁERbi-maxka dwàavaxara]
               Musa   yesterday Arabia-country   away-went

   A.3   Muusa **maca** dwaavaxara?
         Musa when away went?

         A.3.i [Muusà   SIÉLxana dwàavaxara]
               Musa   yesterday away-went

   A.4   **Hun** xilla?
         What happened?

         A.4.i (no satisfactory answer was elicited)

   A.5   Suuna myettariehw Muusa **c'a ve'ara**
         to me in thinking Musa home went

         A.5.i [Haan-háa]   [izàsielxanà WÁERbi-maxka dwàavaxana]
               No   he yesterday Arabia-country   away-went

   A.6   Suuna myettariehw **Leila** sielxana Waerbi-maxka dwaajaxara.
         to me in thinking Leila yesterday Arabia country away went

         A.6.i [Haan-háa]   [Wàerbi-maxka dwaavàxanarg MÚUsa   vu]
               No   Arabia-country   away-went-one   Musa   is

   A.7   Suuna myettariehw Muusa sielxana **Israa'il-maxka** dwaavaxara.
         to me in thinking Musa yesterday Israel country away went

         A.7.i [Haan-háa]   [Muusà   sielxanà WÁERbi-maxka vaxara]
               No   Musa   yesterday Arabia-country   went

   A.8   Suuna myettariehw Muusa **stoomara** Waerbi-maxka dwaavaxara
         to me in thinking Musa day-before-yesterday Arabia country away went

         A.8.i [Haan-háa   MùusaSTÓOmara   ca vaxanà], [Muusà   SIÉLxana vaxanà   Wáerbi-maxka]
               No   Musa day-before-yesterday not went   Musa   yesterday went   Arabia-country

   A.9   Suuna myettariehw Muusa **dwaavedira**
         to me in thinking Musa away run

A.9.i [Haan-háa   Muusá DWÁAvaxara Wáerbi-maxka]
             No   Musa away-went   Arabia-country

A.10 Suuna myettariehw **Leila** sielxana **Misar-maxka** dwaavaxara.
          to me in thinking Leila yesterday Egypt country away went

A.10.i [Háan-haa]   [izá   MÚUsa   vara   Wáerbi -maxka   váxanarg]
             No   it   Musa   was   Arabia-country   gone-one

B. Voqqa-daadas Deni hwala'yyzira chaardaq t'e
   Grandfather pulled Danny onto the platform.

   B.1 Deni **hwaan** hwala'yyzira chaardaq t'e?
        Danny who up lifted platform onto?

        B.1.i [Denì] [chaardaq t'e   hwalà] [VÓQqa-daadas yyzira]
               Danny platform   onto   up   grandfather   lifted

   B.2 Voqqa-daadas **mila** hwala'yyzira chaardaq t'e?
        Grandfather whom up lifted platform onto?

        B.2.i [Voqqa-daadàs]   [DÉni hwala'yyzira   chàardaq t'e]
               Grandfather   Danny up-lifted   platform   onto

   B.3 Voqqa-daadas Deni **stienna t'e** hwala'yyzira?
        Grandfather Danny what onto up lifted?

        B.3.i [Voqqa-daadàs]   [Denì]   [CHÁARdaq   t'e   hwala'yyzira]
               Grandfather   Danny platform   onto   up-lifted

   B.4 **Hun** xilla?
        What happened?

        B.4.i [Denì] [voqqa-daadàs   CHÁARdaq   t'e   hwala'yyzira]
               Danny grandfather   platform   onto   up-lifted

   B.5 Suuna myettariehw voqqa-daadas Deni **hwalaquossiitira** chaardaq t'e
        to me in thinking grandfather Danny had-thrown-up platform onto

        B.5.i [Háan-haa]   [vòqqa-daadas   Dèni   chàardaq t'e   HWÁla'yyzira]
               No   grandfather   Danny platform   onto   up-lifted

   B.6 Suuna myettariehw **joqqa-daadas** Deni hwala'yyzira chaardaq t'e
        to me in thinking grandmother Danny up lifted platform onto

        B.6.i [Háan-haa]   [Dèni chàardaq t'é]   [VÓQqa-dàadas yyzira]
               No   Danny platform   onto   grandfather   lifted

   B.7 Suuna myettariehw voqqa-daadas **Ajshat** hwala'yyzira chaardaq t'e
        to me in thinking grandfather Ayshat up lifted platform onto

        B.7.i [Háan-haa]   [vòqqa-daadas   chàardaq t'e   hwàla'yeznarg]   [Ajshàt   joocush – DÉni
                 vara]
               No   grandfather   platform   onto   up-lifted-one   Ayshat   not-being Danny was

   B.8 Suuna myettariehw voqqadaadas Deni **dittana t'e** hwala'yyzira
        to me in thinking grandfather Danny tree onto up lifted

        B.8.i [Háan-haa]   [vòqqa-daadas   Dèni]   [CHÁARdaq   t'e   hwala'yyzira]
               No   grandfather   Danny] platform   onto   up-lifted

   B.9 Suuna myettariehw **joqqa-baabas** Ajshat hwala'yyzira chaardaq t'e
        to me in thinking grandfather Ayshat up lifted platform onto

        B.9.i [Háan-haa]   [Dèni chàardaq t'e   hwala'yeznárg]   [VÓQqa-daada vara]
               No   Deni   platform   onto   up-lifted-one   grandfather   was

   B.10 **Maca** voqqa-daadas Deni sixa hwala'yyzira chaardaq t'e?
        When grandfather Danny quickly up lifted platform onto?

        B.10.i [Voqqa-daadàs]   [denì]   [taxan síx   hwala'yyzìr   chàardaq t'e]
                  grandfather   Danny   today   quickly up-lifted   platform   onto

   B.11 Voqqa-daadas Deni taxana **muuxa** hwala'yyzira chaardaq t'e?
        grandfather Danny today how up lifted platform onto?

        B.11.i [Vòqdaadas   tàxana]   [dèni SÍX   hwala'yyzìr   chàardaq t'e]
                  grandfather   today   Danny quickly up-lifted   platform   onto

C. Joqqa-baaba gira Denina.
   Danny saw grandmother

   C.1 Joqqa-baaba **hwaanna** gira?
        grandmother who saw

C.1.i [joqqa-baabà] [DeNÍNa   gira]
  grandmother   Danny   saw

C.2 **Mila** gira Denina?
 whom saw Danny

  C.2.i [Dènina   girà]   [JÓQqa-baaba]
   Danny   saw   grandmother

  C.2.ii [Deninà   JÓQbaab   gir]
   Danny   grandmother   saw

C.3 **Hun** xilla?
 what happened

  C.3.i [DÉnina   jòqqa-baaba   gira]
   Danny   grandmother   saw

C.4 Suuna myettariehw Denina **xezira** joqqa-daada
 to me in thinking Danny heard grandmother

  C.4.i [Háan-haa]   [Deninà]   [joqqa-baabà] [GÍra]
   No   Danny   grandmother   saw

C.5 Suuna myettariehw joqqa-baaba gira **Muusana**
 to me in thinking grandmother saw Musa

  C.5.i [Háan-haa]   [joqqa-baabà] [DÉnina   gira]
   No   grandmother   Danny   saw

C.6 Suuna myettariehw **voqqa-daada** gira Denina
 to me in thinking grandfather saw Danny
 I reckon Danny saw GRANDFATHER.

  C.6.i [Háan-haa]   [Dènina   ginàrg]   [JÓQqa-baaba   jara]
   No   Danny   seen-one   grandmother   was

C.7 Suuna myettariehw **Muusana voqqa-daada** gira
 to me in thinking Musa grandfather saw
 I reckon MUSA saw GRANDFATHER.

  C.7.i [Háan-haa]   [Dènina   ginàrg]   [JÓQqa-baaba   jara]
   No   Danny   seen-one   grandmother   was

D. Sielxana Muusaga dika buolx banbelira.
 Musa was able to do good work yesterday

 D.1 Sielxana dika buolx **hwaenga** banbelira?
  yesterday good work who do-could

  D.1.i [siélxana dika   buòlx] [MÚUsaga   banbelira]
   yesterday   good   work   Musa   do-could

 D.2 Sielxana Muusaga **hun** dandelira?
  yesterday Musa what do-could

  D.2.i [sielxanà   Muusagà] [DÍka   buolx   bànbelira]
   yesterday   Musa   good   work   do-could

 D.3 Muusaga dika buolx **maca** banbelira?
  Musa good work when do-could

  D.3.i [SIÉLxana bànbelira]
   yesterday   do-could

 D.4 **Hun** xilla?
  what happened

  D.4.i [Muusagá] [sielxanà DÍka   buolx   bànbelira]
   Musa   yesterday   good   work   do-could

 D.5 Suuna myettariehw sielxana Muusaga **telefon tuoxajelira**
  to me in thinking yesterday Musa telephon hit-could

  D.5.i [Háan-haa]   [sielxaná]   [Muusagá] [DÍka   buolx   bànbelira] –   [telefón   ca   tùuxush]
   no   yesterday   Musa   good   work   do-could   telephone   not   hitting

 D.6 Suuna myettariehw sielxana **hwyega** dika buolx banbelira
  to me in thinking yesterday you good work do-could

  D.6.i [Haan-háa]   [sièlxana   dìka   buolx   bànbellarg   MÚUsa   vara]
   no   yesterday   good   work   do-could-one   Musa   was

 D.7 Suuna myettariehw sielxana Muusaga dika **qaacha** banbelira
  to me in thinking yesterday Musa good food do-could

D.7.i [Háan-haa]   [sièlxana Muusagà] [DÍka buolx bànbelira] [qàacha   boocush]
      no   yesterday Musa   good work do-could   food   not-being

D.8 Suuna myettariehw sielxana Muusaga **vuon** buolx banbelira
     to me in thinking yesterday Musa bad work do-could

     D.8.i [Háan-haa]   [sièlxana Mùusaga] [DÍka buolx bànbelira]
           no   yesterday Musa   good work do-could

D.9 Suuna myettariehw Muusaga dika buolx **stoomara** banbelira
     to me in thinking Musa good work day-before-yesterday do-could

     D.9.i [Háan-haa   Mùusagà] [SIÉLxana dika   buòlx bànbelira]
           no   Musa   yesterday good work do-could

D.10 Suuna myettariehw sielxana Muusaga dika buolx **ca** banbelira
     to me in thinking yesterday Musa good work not do-could
     I reckon that Musa yesterday could NOT do good work

     D.10.i [Háan-haa]   [Mùusagá sièlxan(a)][díka buolx bànbelira]
            no   Musa   yesterday good work do-could

D.11 Suuna myettariehw sielxana Muusaga dika buolx **buolabajtira**
     to me in thinking yesterday Musa good work start-could
     I reckon that Musa yesterday could START good work

     D.11.i [Haan-háa]   [sièlxan(a) MÚUsas] [DÍka buolx bira]
            no   yesterday Musa   good work did

D.12 Suuna myettariehw sielxana Muusaga dika buolx **bitabelira**
     to me in thinking yesterday Musa good work leave-could
     I reckon that Musa yesterday could LEAVE the good work

     D.12.i [Há']   [MÚUsas sièlxan(a) díka   buolx bànbelira]
            yes   Musa   yesterday good work do-could

D.13 Suuna myettariehw sielxana **hwyega** dika **qaacha** banbelira
     to me in thinking yesterday you good food do-could
     I thought that yesterday YOU were able to make good FOOD.

     D.13.i [Háan-haa]   [sielxaná] [MÚUsaga   DÍka buolx bànbelira]
            no   yesterday Musa   good work do-could

E.   Naanna i shira surt gush ju.
     Mother is seeing that old picture.

     E.1 I shira surt **mila** gush ju?
          that old picture who seeing is

          E.1.i [NÁAna   ju shíra   surt   gùsh jerg]
                mother   is old   picture seeing one

     E.2 Naanna **hun** gush ju?
          mother what seeing is

          E.2.i [naannà] [SHÍra surt   gùsh ju]
                mother   old   picture seeing is

     E.3 **Hun** xylush du?
          what happening is

          E.3.i [shíra surt   gùsh ju nàanna]
                old   picture seeing is mother

     E.4 Suuna myettariehw naana i shira surt **iet'uosh** ju
          to me in thinking mother that old picture ripping is

          E.4.i [Haan-hàa] [nàanna shìra surt   GÚSH ju]
                no   mother   old   picture seeing is

     E.5 Suuna myettariehw naanna i shira surt gush **jara**
          to me in thinking mother that old picture seeing was

          E.5.i [Haan-hàa] [nàanna i   surt   GÚSH ju]
                no   mother   that picture seeing is

     E.6 Suuna myettariehw **daadda** i shira surt gush vu
          to me in thinking father that old picture seeing is

          E.6.i [Háan-haa] [i shíra   surt   gùsh jerg   NÁAna   ju]
                no   that old   picture seeing one   mother is

     E.7 Suuna myettariehw naanna **i teptar** gush ju.
          to me in thinking mother that book seeing is

E.7.i [Háan-haa]   [naannà   gùsh   derg   SHÍra   surt   du]
       no   mother   seeing   one   old   picture   is

E.8 Suuna myettariehw naanna i **kerla** surt gush ju.
to me in thinking mother that new picture seeing is

    E.8.i [Háan-haa]   [naannà]   [gùsh   derg   SHÍra   surt   du]
         no   mother   seeing   one   old   picture   is

E.9 I shira surt **hwaanna** gush ju?
that old picture who seeing is

    E.9.i [i   shira   súrt   gush   jerg   NÁAna   ju]
         that   old   picture seeing one   mother   is

E.10 **Hwaanna hun** gush ju?
who what seeing is

    E.10.i   [NÁANna   gush   du   surt]
          mother   seeing   is   picture

F. Taxana Muusa cwa dika buolx biesh vu
   Today Musa is doing a good work.

    F.1 I dika buolx biesh **mila** vu?
    that good work doing who is

       F.1.i [i   díka   buòlx   biesh   vérg   MÚUsa   vu]
          that good   work   doing   one   Musa   is

    F.2 Musa **hun** biesh vu?
    Musa what doing is

       F.2.i [MÚUsa]   [Díka   buolx   biesh   vu]
          Musa   good   work   doing   is

    F.3 Musa **hun** buolx biesh vu taxana?
    Musa what work doing is today

       F.3.i [MÚUsa   tàxan(a)]   [Díka   buolx   biesh   vu]
          Musa   today   good   work   doing   is

    F.4 **Hun** xylush du?
    What happening is?

       F.4.i [MÚUsa]   [Díka   buolx   biesh   vu]
          Musa   good   work   doing   is

    F.5 Suuna myettariehw **sielxana** Musa cwa dika buolx biesh vara.
    to me in thinking yesterday Musa a good work doing was

       F.5.i [Haan-háa]   [Músa Táxan(a)   dika   buolx   biesh   vu]
          no   Musa today   good   work   doing   is

    F.6 Suuna myettariehw taxana **Apti** cwa dika buolx biesh vu.
    to me in thinking yesterday Musa a good work doing was

       F.6.i [Haan-háa]   [táxan(a)   dika   buolx   biesh   vérg]   ÁPti   vaac
          no   today   good   work   doing   one   Apti   not-is

    F.7 Suuna myettariehw taxana Musa cwa **xala** buolx biesh vu.
    to me in thinking yesterday Musa a good work doing was

       F.7.i [Haan-háa]   [Múusá]   [tàxan(a)   Díka   buolx   biesh   vu]
          no   Musa   today   good   work   doing   is

    F.8 Suuna myettariehw taxana Musa cwa dika **qaacha** biesh vu.
    to me in thinking yesterday Musa a good work doing was

       F.8.i [Haan-háa]   [Músa taxaná]   [Díka   buolx   biesh   vu]
          no   Musa today   good   work   doing   is

    F.9 Suuna myettariehw taxana **Apti** dika **qaacha** biesh vu.
    to me in thinking yesterday Musa a good work doing was

       F.9.i [Haan-háa]   [tàxan(a)   Díka   buolx   biesh   vérg   MÚUsa   vu]
          no   today   good   work   doing   one   Musa   is

    F.10 Musa ghaalahw cwa dika buolx **maca** biesh vu?
    Musa in-city a good work when doing is

       F.10.i   [Múusa   taxaná]   [GHÁAlahw   cwa   dìka   buolx   biesh   vu]
           Musa   today   in-city   a   good   work   doing   is

    F.11 Taxana Musa cwa dika buolx **michahw** biesh vu?
    today Musa a good work where doing is

F.11.i   [Muusá]   [GHÁAlahw   cwa   dìka   buolx   biesh   vù   taxan]
         Musa   in-city   a   good   work   doing   is   today

F.12 Buolx **maca michahw** biesh vu Musa?
     work when where doing is Musa

F.12.i   [Muusá]   [TÁxan   ghaalahw   dìka   buolx   biesh   vu]
         Musa   today   in-city   good   work   doing   is

F.13 Suuna myettariehw taxana Musa **jyrtahw** cwa dika buolx biesh vu.
     to me in thinking yesterday Musa in-village a good work doing was

F.13.i   [Háan-haa]   [Mùsa   tàxana GHÁAlahw   cwa   dika   buolx   biesh   vu]
         no   Musa   today   in-city   a   good   work   doing   is

F.14 Suuna myettariehw **sielxana** Musa ghaalahw cwa dika buolx biesh vara.
     to me in thinking yesterday Musa in-city a good work doing was

F.14.i   [Háan-haa]   [Músa   TÁxana   dika   buolx   biesh   vara   ghaalahw]
         no   Musa   today   good   work   doing   was   in-city

10.2. Sentences with question words

In this section all the sentences taken from existing Chechen literature are given. Note that these sentences do *not* contain material that was translated from another language into Chechen – all is originally Chechen literature (as far as I know).

Below each original Chechen sentence a line of corresponding glosses is given. The next line, here in blue, gives an overview of the constituent types of the clause within the sentence that contains the question word.

Note that the last line of each example contains a short code to identify the reference used. These should be interpreted as follows:

ZX   - Xamidova 1991
che-para   - SAY 2007
che-mono   - SAY 2007
NL8-9Kl   - Xamirzoev 1991
mininform   - Mininform 2007
kamina   - Website www.amina.com/kamina

53) Diinahw   masa   cigaerka   uuzu   ahwa?
    day-LOC   how.many   sigaret   smoke-PRS 2S-ERG
    AP[time] O[q] V S[e]
    How many sigarets do you smoke in a day?
    ZX:329:1

54) Taxanleerchu diinahw   hun   terahwash   daaluor   dara   ahw
    today-ADJ-OBL day-LOC   what-ABS number-PL   D-bring-FUT D-be-PST 2S-ERG

    shaesh   binchu   bielxan   gajtamash   bilgalbooxush?
    3S.REFL-ERG   B-do-PST-OBL   work-GEN   show-PL   determine-PRS-PTC
    AP[time] O[q] V Aux S[e]
    What numbers would give us to demonstrate the results of the work you have up until today?"
    che-para-86-00081:36

55) Siisara   suuna   hun   xilliera   booxii   ahwa?
    yesterday-evening   1S-DAT   what-ABS happen-REM   say-PRS-QM   2S-ERG
    AP[time] S[d] O[q] V
    Are you asking what happened to me yesterday evening?
    ZX:345:3

56) Hinca   vaj   hun   dan   diezii?
    now   1P.INC   what-ABS   D-do-INF   D-need-PRS-QM
    AP[time] S[e] O[q] V
    What we have to do now?
    ZX:397:1

57) T'aaqqa hun dira ahw?
then what-ABS D-do-PST 2S-ERG
C O[q] V S[e]
Then what did you do?
`NL8-9Kl:185/20`

58) Tq'a muuxa q'aastuor vu as boqq'al verg a, voocurg a?
and how discern-FUT V-is 1S-ERG true V-what.is & V-what.is.not &
C wh V S[e] O
And how will I discern what is and what isn't true?
`che-mono-anonymous-00131:102`

59) Baalxa vyedush hwajca hun hwo ahwa?
work-GOAL V-go-PRS-ADV 2S-REFL-INS what-ABS carry-PRS 2S-ERG
CP NP[ins] O[q] V S[e]
What do you take with you while going to work?
`ZX:342:3`

60) Cunax dala aaxcha hweenan du?
3S-MAT D-give-INF money-ABS who-GEN D-is
CP O S[gq] V
Who has such money?
`ZX:396:2`

61) Hwo samajaelcha hun myettura hwuuna?
2S-ABS wake.up-WHEN what-ABS think-PST 2S-DAT
CP O[q] V S[e]
When you woke up, what did you think?
`NL8-9Kl:185/23`

62) Laduogharxuoshka hun eer dara ahw?
listener-PL-GOAL what-ABS say-FUT D-was 2S-ERG
NP[Goal] O[q] V S[e]
What would you like to say to the listeners
`che-para-86-00188:74`

63) Xorbazan kilanax hun dyexu ahwa?
ARBUS-GEN kilogram-MAT what-ABS ask-PRS 2S-ERG
NP[mat] O[q] V S[e]
What do you ask for a kilogram of arbuz?
`ZX:387:1`

64) Kavkazan q'aemnash cwana bartie hwaan yezna?
CAUCASUS-GEN nation-PL one-OBL agreement-ALL who-ERG pull-PST
O NP[goal] S[eq] V
Who procured unity for the Caucasian nations?
`NL8-9Kl:366/5`

65) Ju'urg hun ju shun?
food what-ABS J-is 2P-GEN
O O[q] V S[g]
What food do you have?
`ZX:328:1`

66) Molla Nesart, i san dieqar swa maca lo ahw?
MULLAH NESART that 1S-GEN request hither when give-PRS 2S-ERG
O pv wh V S[e]
Mullah Nesart, when do you give this request of mine?
`che-mono-anonymous-00078:5`

67) Ysh cynga muuxa laalo, asa a xala lovsh xilcha?
3P-ABS 3S-ALL how bear-POT-PRS 1S-ERG & difficult bear-PRS-PTC be-WHEN
O S[all] wh V
How does he bear with them, when I already am coping with difficulty?
`che-mono-anonymous-00674:372`

68) Iza   hwaanna yeshur   vu?
     3S-ABS   who-DAT   need-FUT   V-is
     O S[dq] V
     Who will need him?
     `che-mono-anonymous-00180:96`

69) Dieshnash, muq'amash hwaan   jaazbo   hwuuna?
     word-PL   melody-PL   who-ERG   B-write-PRS   2S-DAT
     O S[eq] V IO
     Who writes the words and composes the music for you?
     `che-para-86-00167:11`

70) Ju'urg hwaan   kechjo   shuna   chuohw?
     food   who-ERG   prepare-PRS   2P-DAT   inside
     O S[eq] V PP
     Who prepares the food at your place?
     `ZX:342/8v`

71) Pxye'algha nomer   hweenan ju?
     fifth   room-ABS who-GEN   J-is
     O S[gq] V
     Who has room number five?
     `ZX:350:3`

72) Hara dechig micha   dilla   as?
     this   wood   where-GOAL   put-PST   1S-ERG
     O wh V S[e]
     Where did I put this wood?
     `NL8-9Kl:182/34`

73) I   dechigash hunda dicdiniera   ahw?
     that wood-PL   why   forget-REM   2S-ERG
     O wh V S[e]
     Why have you forgotten these sticks?
     `NL8-9Kl:183/36`

74) I   muuxa eelira   ahwa,   va Aq-Bolat?
     that-ABS how   say-PST   2S-ERG   oh AKH-BOLAT
     O wh V S[e]
     How did you say that, oh Akh-Bolat?
     `che-mono-anonymous-00678:162`

75) Qin   dwaa buolx muuxa,   michwa   biir   bu   ooxa?
     further   away   work   how   where   B-do-FUT   B-is   1P.EXC-ERG
     O wh V S[e]
     How and where will we continue to work?
     `che-mono-anonymous-00369:19`

76) Shajn   otpusk   michahw jooqqu   asha?
     2P-REFL-GEN   leave-ABS where?   J-spend-PRS   2P-ERG
     O wh V S[e]
     Where do you spend your leave?
     `ZX:350:1a`

77) So   hunda ca vigira   ahwa   hwajca?
     1S-ABS   why   not V-lead-PST   2S-ERG   2S-REFL-INS
     O wh V S[e] NP[ins]
     Why didn't you take me with you?
     `ZX:315:1`

78) So   hunda jaeqqi   ahw   naaxala?
     1S-ABS   why   J-extract-REC 2S-ERG   public
     O wh V S[e] pv
     Why have you disgraced me publicly?
     `NL8-9Kl:39/30`

79) Hun jieza   hwuuna?
    what-ABS   J-need-PRS   2S-DAT
    O[q] V S[d]
    What do you need?
    ZX:385:1

80) Hun xieta   hwuuna?
    what-ABS   reckon-PRS   2S-DAT
    O[q] V S[d]
    WHAT do you think?
    NL8-9Kl:40/9

81) Daaxaran   hun   aaghuonash a, muuxaa jovzyytu   wilmanuo?
    life-GEN   what   side-PL   & how & J-know-CAUS-PRS   scientist-ERG
    O[q] V S[e]
    Which sides of life and how does the scientist make known?
    NL8-9Kl:7/3

82) Hun   dina   asa?
    what-ABS   D-do-PST 1S-ERG
    O[q] V S[e]
    What have I done?
    ZX:367:2

83) Hun   dira   ahwa   taxana?
    what-ABS   D-do-PST 2S-ERG   today
    O[q] V S[e] AP[time]
    What did you do today?
    ZX:342:4

84) Qin hun   eer   du   as   cunax?
    more what-ABS say-FUT D-is 1S-ERG   3S-MAT
    O[q] V S[e] NP[Mat]
    What more shall I say about it?
    che-para-86-00173:252

85) Hun waalashuonash hittajo   Malikas   shiena   hwalxaa?
    what purpose-PL   position-PRS   MALIKA-ERG   3S.REFL-DAT   before
    O[q] V S[e] PP[loc]
    What purposes does Malika position before herself?
    NL8-9Kl:361/2b

86) Masa   seri   ju cynan?
    how.many   part J-is 3S-GEN
    O[q] V S[g]
    How many part does it have?
    ZX:348:4

87) Masa   sho   du   hwan?
    how.many   year-ABS D-is 2S-GEN
    O[q] V S[g]
    How old are you?
    NL8-9Kl:183/1

88) Ocu   diicarie   daeqqinchu   ghullaqax   hwuuna   hun   xieta?
    that-OBL talking-GOAL D-extract-PST-OBL   matter-MAT   2S-DAT   what-ABS reckon-PRS
    PP S[d] O[q] V
    What do you think about the problem which is being discussed?
    che-para-86-00087:11

89) Vajn   zanjatiex   laecna hwuuna   hun   xieta?
    1P.INC-GEN   exercise-PL-MAT about 2S-DAT   what-ABS reckon-PRS
    PP S[d] O[q] V
    What do you think of our exercises?
    ZX:325/7:d

90) Stienax   tera   xieta   po'etana shien   vaaxar?
    what-MAT   like   reckon-PRS   poet-DAT 3S-REFL-GEN life
    PP[q] V S[d] O
    To what does the poet compare his life?
    `NL8-9Kl:366/2a`

91) Cuo   vaj   michahw dytu?
    3S-ERG 1P.INC-ABS   where   leave-PRS
    S O wh V
    Where does that leave us?
    `che-para-34-00636:8`

92) Hwuuna muuxa xieta   quzara   hwaal?
    2S-DAT how   reckon-PRS   here-SRC   richess
    S wh V O
    How do you like the wealth from here?
    `che-mono-anonymous-00493:143`

93) Suuna ca   xae'a,   sajga   hara   hunda jaazlo.
    1S-DAT NEG   know-PRS 1S.REFL-ALL this   why   write-POT-PRS
    S[all] O wh V
    I don't know, why I am able to write this.
    `che-mono-anonymous-00127:3`

94) Hwaan dina   hara?
    who-ERG D-do-NRPS this-ABS
    S[q] V O
    Who did this?
    `chechen.org:171/636`

95) Hwaanna   hun   lae'a?
    who-DAT   what-ABS want-PRS
    S[dq] O[q] V
    Who wants what?
    `ZX:345:1`

96) Hwaanna   hun   xieta?
    who-DAT   what-ABS reckon-PRS
    S[dq] O[q] V
    Who finds what?
    `MinInform:1`

97) Ja   hwaanna xae'a   cunax   hinca hun   oolu   a
    or   who-DAT know-PRS 3S-MAT   now   what-ABS say-PRS   &
    S[dq] V CP
    Or who knows what is now spoken about that
    `che-mono-anonymous-00287:61`

98) Hwuuna iza   maca vevzina?
    2S-DAT him   when V-know-PST
    S[d] O wh V
    When did you meet him?
    `che-para-9-00018:723`

99) Hwuuna hun   ca tye'ara?
    2S-DAT what-ABS NEG   suffice-IMPF
    S[d] O[q] Neg V
    What did you lack?
    `che-mono-anonymous-00678:123`

100) Hwuuna hun   xilliera?
    2S-DAT what-ABS happen-REM
    S[d] O[q] V
    What happened to you?
    `ZX:345:2`

101) Hwuuna hun   xieta?
    2S-DAT what-ABS reckon-PRS
    S[d] O[q] V
    What do YOU think?
    `NL8-9Kl:40/15`

102) Hwuuna miel   yeshu?
    2S-DAT how.much?   need-PRS
    S[d] O[q] V
    How much do you need?
    `ZX:383:1`

103) Hwuuna mila   yeshura?
    2S-DAT who-ABS   need-IMPF
    S[d] O[q] V
    Whom did you need?
    `ZX:311:1`

104) Hwuuna mylxa muq'amash   bieza?
    2S-DAT which melodie-PL   B-like-PRS
    S[d] O[q] V
    Which melodies do you like?
    `ZX:349:3`

105) Txuuna   qin   mila   gur   vara, hwo   voocurg?
    1P.EXC-DAT more   who-ABS   see-FUT V-was 2S-ABS   V-NEGAUX-NML
    S[d] O[q] V
    Who else would we see, except for you?
    `che-mono-anonymous-00678:508`

106) Hwuuna maca yeshu   i?
    2S-DAT when need-PRS it
    S[d] wh V O
    When do you need it?
    `che-para-9-00018:388`

107) Ahw   duqahwoolahw   bedarsh   michahw yecu?
    2S-ERG usually   clothing-PL where   buy-PRS
    S[e] AP O wh V
    Where do you usually buy clothes?
    `che-para-9-00018:419`

108) As   qaana   mollie   hun   eer   du?
    1S-ERG tomorrow   mullah-ALL   what-ABS tell-FUT D-is
    S[e] AP[time] NP[goal] O[q] V
    What shall I tell the mullah tomorrow?
    `NL8-9Kl:41/7`

109) Caara vovshashca hun   diicina   hwaanna xae'a?
    3P-ERG eachother-INS what-ABS speak-PST who-DAT know-PRS
    S[e] NP[ins] O[q] V
    Who knows what they spoke with one another?
    `che-mono-anonymous-00673:67`

110) Asa   sajn   otpusk   hwuuna chuohw jooqqu
    1S-ERG 1S-REFL-GEN leave-ABS   2S-DAT inside J-spend-PRS
    S[e] O PP V
    I spend my leave in your place.
    `ZX:350:1b`

111) As   aaxcha   dwaa michahw lo?
    1S-ERG money   away where   give-PRS
    S[e] O pv wh V
    Where do I pay?
    `che-para-9-00018:910`

112) Quzara   lyerasha   shaesh   t'e muuxa iicira   diicahwa?
here-SRC   doctor-PL-ERG   2P.REFL-ABS on how take-PST tell-POLITE
S[e] O pv wh V
Please tell how the doctors from here accepted you?
`che-mono-anonymous-00493:126`

113) Ahwa   hun   dyycu?
2S-ERG   what-ABS   speak-PRS
S[e] O[q] V
What do you say?
`ZX:345:5`

114) Ahwa   hun   dyycu?
2S-ERG   what-ABS   say-PRS
S[e] O[q] V
What do you say?
`ZX:331:2`

115) Ahwa   hun   diir   dara, hwo   san   metta xilcha?
2S-ERG   what-ABS   D-do-FUT   D-was 2S-ABS   1S-GEN   place   be-WHEN
S[e] O[q] V
What would you do, if you were in my place?
`ZX:345:4`

116) Asha   hun   lyexu?
2S-ERG   what-ABS   seek-PRS
S[e] O[q] V
What do you seek?
`ZX:347:3`

117) Caara   hun   zhamwash   de'ana?
3P-ERG   what   result-PL   D-bring-PST
S[e] O[q] V
What results did they bring?
`che-para-86-00174:76`

118) Cuo   hun   lar   jitina   shien   daaxariehw?
3S-ERG   what-ABS trace-ABS   J-leave-PST   3S.REFL-GEN life-LOC
S[e] O[q] V AP[loc]
What mark has he left in his life?
`che-para-86-00091:4`

119) As   hun   do   qunax?
1S-ERG   what-ABS D-do-PRS   this-MAT
S[e] O[q] V NP[mat]
What do I do with it?
`NL8-9Kl:83/11`

120) Vajnaaxa   Timuuran   q'izallina   dyhwal   q'iisam   hunda laatiina?
Nakh.people-ERG   TIMUR-GEN   harshness-DAT   against   fight-ABS why   ignite-PST
S[e] PP O wh V
Why did the Nakh-people provoke a fight against Timur's harshness?
`NL8-9Kl:22/5`

121) Asa   hunda bo   degaba'am?
1S-ERG   why? B-make   insult
S[e] wh V O
Why should I be offended?
`ZX:345:7`

122) Xalq'uo   muuxa looru   neenan   sii   a, cynan   q'inxietam a?
people-ERG how   regard-PRS   mother-GEN   honour& 3S-GEN   mercy   &
S[e] wh V O
How do the people regard the mother's honour and her mercy?
`NL8-9Kl:85/2`

123) Programmin hun maax bu?
program-GEN what price B-is
S[g] O[q] V
What does the program cost?
ZX:347:2

124) Shun mylxa mettigash ju?
2P-GEN which place-PL J-is
S[g] O[q] V
Which places do you have?
ZX:347:4

125) Hwaan hun dan dieza tie aella, xaattar dira
who-ERG what-ABS D-do-INF D-need-PRS DOUBT say-PST ask-NML-ABS D-do-PST

ooxa tajp-tajpana govzallash jolchu naaxie.
1P.EXC-ERG different skill-PL J-REL-OBL people-ALL
S[qe] O[q] V
We asked people of several skills, who should do what.
Mininform:2

126) Hwamid, hwuuna muuxa xieta hwajn nomer?
HAMID 2S-DAT how reckon-PRS 2S.REFL-GEN room
Top S[d] wh V O
Hamid, how do you like your room?
ZX:274/8

127) Hunda ca xieta hwuuna iehw?
why not reckon-PRS 2S-DAT shame-ABS
wh Neg V S[d] O
Why are you not ashamed?
NL8-9Kl:39/31

128) Muuxa xieta hwuuna txan aarienash, xaza juj?
how reckon-PRS 2S-DAT 1P.EXC-GEN field-PL beautiful J-is-QM
wh V S[d] O
How do you like our fields, are they nice?
NL8-9Kl:87/2

129) Hunda xieta cunna iza ishtta?
why reckon-PRS 3S-DAT 3S-ABS thus
wh V S[d] O AP
Why does he find it like that?
NL8-9Kl:366/2b

130) Horsh ju-q san baq'uonash, hunda saciina ahwa so?
these J-is-INT 1S-GEN right-PL why? stop-DIRCAUS-PST 2S-ERG 1S-ABS
wh V S[e] O
These are my licences, why have you stopped me?
ZX:367:1

131) Hunda dyycu ahw xarcderg?
why speak-PRS 2S-ERG false-NML-ABS
wh V S[e] O
Why do you speak a lie?
NL8-9Kl:36/9

132) Oj, muuxa jii ahw hara?
oh how J-kill-REC 2S-ERG this-ABS
wh V S[e] O
Well, how did you kill it?
che-mono-anonymous-00694:16

133) Stienna jye ahw so?
what-DAT J-kill-PRS 2S-ERG 1S-ABS
wh V S[e] O
Why do you kill me?
NL8-9Kl:39/29

134) Buolx   ooxa   muuxa bo hwuuna   hwajna   a xae'a.
work 1P-ERG how   B-do-PRS 2S-DAT 2S.REFL-DAT & know-PRS
O S[e] wh V
You yourself know how we work.
`NL8-9Kl:88/39`

135) Muzej   dwaa maca jyellu?
museum-ABS   away when J-open-PRS
O pv wh V
When is the museum opened?
`ZX:348:37`

136) Maca   dwaa jyellu   univermag?
when   J-open-PRS   store
wh pv-V O
When the store opened?
`ZX:381:5`

137) Shuna-m   ca   xae'a,   michahw hun   kino   ju?
2P-DAT-M   NEG   know-PRS where   what-ABS movietheatre-ABS   J-AUX-PRS
…wh O[q] V
Don't you know where which theatre is?
`ZX:348:8`

138) Buolx   biesh   michahw vu   hwo?
work-ABS   B-do-PRS-PTC where   V-PRS 2S-ABS
O V wh Aux S[a]
Where are you working?
`che-mono-anonymous-00097:169`

139) Hwovsur   vaj   mila   michahw veexa!
see-PL-FUT 1P.INC-ABS   who-ABS   where   V-live-PRS
… S[aq] wh V
Let us see who lives where!
`che-mono-anonymous-00665:180`

140) Hwaan   hun   sovghatash   dina   hwuuna?
who-ERG   what-OBL present-PL   D-make-NRPS 2S-DAT
S[eq] O[q] V IO
Who made which presents for you?
`ZX:404.14.zh`

141) Vaj   hwaanna hun   dina,   Xelipat?
1P.INC-ERG who-DAT what-ABS D-do-NRPS   Khelipat-ABS
S[e] IO[q] O[q] V
To whom have we done what, Helipat?
`che-mono-anonymous-00121:74`

142) Shiena   ca   yeshuchu   xeenahw i   ghurq   dwaa michahw
3S.REFL-DAT   NEG   need-PRS-OBL time-LOC   that-OBL   pole-ABS away   where

byllush   xilla-tie   cuo?
B-put-PRS-PTC   be-NRPS-DOUBT   3S-ERG
AP[time] O pv wh V Aux S[e]
Then where was he putting that pole at the time he didn't need it?
`kamina:496330-892-uno`

143) Dokumentaci   swa   maca lur   jara   ahwa?
documentation-ABS   hither when give-FUT J-AUX-PST 2S-ERG
O pv wh V Aux S[e]
When would you give the documentation?
`Chechen.org:razgovornik:4`

144) Telefon jiettash   verg   mila   vu?
telephon J-hit-PRS-PTC V-NML who-ABS V-PRS
S(O V) O[q] Aux
Who is calling?
`che-para-9-00018:1007`

145)Syega   naab   ca   jojtush   jerg   mila   vu?
    1S-ALL   sleep-ABS NEG   J-do-CAUS-PRS-PTC   J-NML   who-ABS   V-PRS
    S(NP[Caus] O Neg V) O[q] Aux
    Who is not letting me sleep?
    `che-para-9-00020:2762`

146)Quzahw   dyycush   derg   hun   du?
    here   D-speak-PRS-PTC   D-NML what-ABS   D-PRS
    S(AP[loc] V) O[q] Aux
    What is being said here? (fig: We are talking about something else here)
    `che-para-34-00002:329`

147)Cunna   gush   derg   hun   du   tie?
    3S-DAT   see-PRS-PTC   D-NML what-ABS   D-PRS DOUBT
    S(S[d] V) O[q] Aux
    What is it that he sees?
    `che-mono-anonymous-00127:11`

148)Q'uola   dinarg   mila   vu   xu'ush   daac.
    theft-ABS D-do-NRPS-NML   who-ABS   V-PRS   know-PRS-PTC   D-NEG
    S(O V) O[q] Aux …
    It is not known who it was that stole.
    `che-mono-anonymous-00365:2`

10.3. Double question sentences

A native speaker provided me with double question sentences, which are listed here below.

149)Hwaan   mila   lyexu?   *(unmarked order)*
    who-ERG   who-ABS   seek-PRS
    Who seeks whom?

150)Mila   hwaan   lyexu?
    who-ABS   who-ERG   seek-PRS
    Who is sought by whom?

151)*Hwaan   lyexu   mila?
    who-ERG   seek-PRS who-ABS
    Who seeks whom?

152)Mila   lyexu   hwaan?
    who-ABS   seek-PRS   who-ERG
    Who is sought by whom?

153)Hwaanna   mila   gira?   *(unmarked order)*
    who-DAT   who-ABS   see-PST
    Who saw whom?

154)Mila   hwaanna   gira?
    who-ABS   who-DAT   see-PST
    Who was seen by whom?

155)*Hwaanna   gira   mila?
    who-DAT   see-PST   who-ABS
    Who saw whom?

156)*Mila   gira   hwaanna?
    who-ABS   see-PST   who-DAT
    Who was seen by whom?

157)Hwaanna   hun   gira?
    who-DAT   what-ABS   see-PST
    Who saw what?

158)*Hun   hwaanna   gira?
    what-ABS   who-DAT   see-PST
    What was seen by whom?

159)*Hwaanna   gira   hun?

   who-DAT   see-PST   what-ABS
Who saw what?

160)*Hun   gira   hwaanna?
     what-ABS   see-PST   who-DAT
     What was seen by whom?

161)Hwaan   hun   lyexu?   *(unmarked order)*
    who-ERG   what-ABS seek-PRS
    Who seeks whom?

162)Hun   hwaan   lyexu?
    what-ABS   who-ERG seek-PRS
    Who is sought by whom?

163)*Hwaan   lyexu   hun?
     who-ERG   seek-PRS what-ABS
     Who seeks what?

164)Hun   lyexu   hwaan?
    what-ABS   seek-PRS   who-ERG
    What is sought by whom?

10.4. Word order in biabsolutive clauses

Two native speakers were presented all 24 possible permutations of the following biabsolutive clause:

165) Muusa   buolx   biesh   vu.
    Musa-ABS   work-ABS B-do-PRS-PTC V-PRS
    Musa is working.

Evaluating all these possibilities only three word orders were considered possible by both speakers and one was considered possible by one of the speakers. The allowable orders were as shown in Table 16 (for the glosses see above 165).

Table 16 Allowed word orders for the present continuous

#	Chechen	Order			
1	Muusa buolx biesh vu.	S[a]		O V Aux	
2	Muusa vu buolx biesh.	S[a] Aux		O V	
3	Buolx biesh Muusa vu.			O V S[a] Aux	
4	?Buolx biesh vu Muusa.			O V Aux S[a]	

Note that the only word orders allowed are those where the object and the participial form of the verb form follow one another closely. Note too that the absolutive subject agrees in noun class with the auxiliary, while the absolutive object agrees in noun class with the participial form of the main verb. This leads to the following conclusions:

- The object and the participial form of the verb in a present continous clause form one inseparable constituent. I would label it an AP.
- Word orders with the auxiliary completely clause initial are not allowed.

10.5. Testing for topic

Zerbian argues that noun phrases containing operators like "no one" or "about/approximately" cannot function as the kind of topic (which she calls the Aboutness Topic) that is restricted in scope to one sentence (Zerbian 2006). Such a topic is called a Given Topic in this thesis. The following examples from the literature show in which positions noun phrases containing these kind of operators occur.

166)Verrigie a 80 gerggastag   vu   quzahw   wash
    V-all   & 80 about person-ABS V-PRS here   live-PRS-PTC
    S[a] Aux AP
    About 80 people in total are living here.
    che-mono-anonymous-00394:2

167) Otrjadana juq'ahw vu 300 gergga stag.
    unit-DAT among V-PRS 300 about person-ABS
    PP[loc] Aux S[a]
    The unit contains about 300 people.
    `che-mono-anonymous-00475:22`

168) Hwynarsh ziira 70 gergga sportaxuosha.
    skill-PL test-RFPS 70 about sportsman-PL-ERG
    O V S[e]
    About 70 sportsmen tested their skills.
    `che-mono-anonymous-00522:5`

169) Ittiex gergga kniga aaraxiecna cuo.
    ten-BY about book-ABS out-release-NRPS 3S-ERG
    O V S[e]
    He published about ten books.
    `che-mono-anonymous-00533:96`

170) Cwammuo a cwa mogha a ca jaazbiniera.
    one-ERG & one-ABS line-ABS & NEG write-B-REM
    S[e] O Neg V
    No one wrote any line.
    `che-para-anonymous-00011:11`

Noun phrases containing *gergga* 'approximately' can occur before or after the main verb of the transitive and intransitive clause. A noun phrase containing *cwa a* 'no one' (in an inflected form) can occur before the object and the verb.

It seems that this test excludes all possible positions as containing a Given Topic. It is therefore not a good one to use for Chechen.

10.6. Transitive clauses with a preverb

Native speakers were presented a complete scala of clauses of types SOV, OVS, SVO and OSV with focused counterparts SO_FV, O_FVS, S_FVO, OS_FV. The speakers were asked to show their preference for one type over the other type. The clauses used are listed here.

In this first part all clauses of type SOV and OVS are listed with focused or unfocused object, both negatie and positive. The preverb is put on different positions: attached to the verb, a position more left of the verb, and a clause final position. The selection of these positions of the preverb are inspired by clauses found in the data.

171) Duottaghchuo mila dwaatottur vu?
    friend-ERG who-ABS away-push-FUT V-PRS
    Who will be rejected by a friend?

172) Duottaghchuo k'ant dwaatottur vu.
    friend-ERG boy-ABS away-push-FUT V-PRS
    A friend will reject a boy.

173) Duottaghchuo dwaa mila tottur vu?
    friend-ERG away who-ABS push-FUT V-PRS
    Who will be rejected by a friend?

174) *Duottaghchuo dwaa k'ant tottur vu.
    friend-ERG away boy-ABS push-FUT V-PRS
    A boy will be rejected by a friend.

175) Duottaghchuo mila dwaatottur vaac?
    friend-ERG who-ABS away-push-FUT V- PRS-NEG
    Who will not be rejected by a friend?

176) Duottaghchuo k'ant dwaatottur vaac.
    friend-ERG boy-ABS away-push-FUT V- PRS-NEG
    A friend will not reject a boy.

177) Duottaghchuo dwaa mila tottur vaac?
friend-ERG   away who-ABS push-FUT V-PRS-NEG
Who will be rejected by a friend?

178) *Duottaghchuo dwaa k'ant tottur vaac.
friend-ERG   away boy-abs push-FUT V-PRS-NEG
A friend will not reject a boy.

179) Mila   tottur   vu duottaghchuo dwaa?
who-ABS   push-FUT V-PRS friend-ERG   away
Who will be rejected by a friend?

180) K'ant   tottur   vu duottaghchuo dwaa.
boy-ABS push-FUT V-PRS friend-ERG   away
A boy will be rejected by a friend.

181) Mila   tottur   vaac   duottaghchuo dwaa?
who-ABS   push-FUT V-NEG-PRS   friend-ERG   away
Who will not be rejected by a friend?

182) K'ant   tottur   vaac   duottaghchuo dwaa.
boy-ABS push-FUT V-NEG-PRS   friend-ERG   away
A boy will not be rejected by a friend.

The native speaker evaluation of this first series of clauses is presented in Table 17.

Table 17 S-O$_F$V versus S-OV (including OV-S types)

#	Type A				Type B		Evaluation
1	S	O$_q$ pv V	Aux		O$_q$	V Aux S pv	equal
2	S pv	O$_q$	V	Aux	O$_q$	V Aux S pv	equal
3	S	O$_q$	pv V	Aux	S pv O$_q$	V Aux	equal
4	S	O pv V	Aux		O	V Aux S pv	slight preference for A
5	S pv	O	V	Aux	O	V Aux S pv	B possible, but with ?
6	S	O pv	V	Aux	S pv O V Aux		A
7	S	O$_q$ pv V	NgAux		O$_q$	V NgAux S pv	slight preference for A
8	S pv	O$_q$	V	NgAux	O$_q$	V NgAux S pv	slight preference for A
9	S	O$_q$	pv V	NgAux	S pv O$_q$	V NgAux	equal
10	S	O pv V	NgAux		O	V NgAux S pv	equal
11	S pv	O	V	NgAux	O	V NgAux S pv	only B
12	S	O pv	V	NgAux	S pv O V NgAux		only A

In this second part the clause types SVO and OSV that were presented to the native speakers are shown.

183) Hwaan   dwaaboostur   bu hara   mush?
who-ERG   away-untie-FUT B-AUX this-ABS   rope-ABS
Who will untie this rope?

184) Muostaghchuo dwaaboostur   bu hara   mush.
enemy-ERG   away-untie-FUT B-AUX this-ABS   rope-ABS
An enemy will untie this rope.

185) Hwaan   dwaaboostur   baac   hara   mush?
who-ERG   away-untie-FUT B-NEG-AUX   this-ABS   rope-ABS
Who will not untie this rope?

186) Muostaghchuo dwaaboostur   baac   hara   mush.
enemy-ERG   away-untie-FUT B-NEG-AUX   this-ABS   rope-ABS
An enemy will not untie this rope.

187) Hwaan   boostur   bu hara   mush   dwaa?
who-ERG   untie-FUT B-AUX this-ABS   rope-ABS away
Who will untie this rope?

188) Muostaghchuo boostur   bu   hara   mush   dwaa.
enemy-ERG   untie-FUT B-AUX this-ABS rope-ABS away
An enemy will untie this rope.

189) Hwaan   boostur baac   hara   mush   dwaa?
who-ERG   untie-FUT B-NEG-AUX   this-ABS   rope-ABS away
Who will not untie this rope?

190) Muostaghchuo boostur   baac   hara   mush   dwaa.
enemy-ERG   untie-FUT B-NEG-AUX   this-ABS   rope-ABS   away
An enemy will not untie this rope.

191) Hara   mush   dwaa hwaan   boostur   bu?
this-ABS rope-ABS away who-ERG untie-FUT B-AUX
Who will untie this rope?

192) Hara   mush   dwaa muostaghchuo   boostur   bu.
this-ABS rope-ABS away enemy-ERG   untie-FUT B-AUX
An enemy will untie this rope.

193) Hara   mush   dwaa hwaan   boostur   baac?
this-ABS rope-ABS away who-ERG untie-FUT B-NEG-AUX
Who will not untie this rope?

194) Hara   mush   dwaa muostaghchuo   boostur   baac.
this-ABS rope-ABS away enemy-ERG   untie-FUT B-NEG-AUX
An enemy will not untie this rope.

The native speaker evaluation of this second series of clauses is presented in Table 18.

Table 18 O-S$_F$V versus O-SV (including SV-O types)

#	Type A		Type B		Evaluation
1	S$_q$ pv	V Aux O	S$_q$	V Aux O pv	equal
2	S$_q$ pv	V Aux O	O pv S$_q$ V Aux		equal
3	O pv S$_q$	V Aux	S$_q$	V Aux O pv	equal
4	S pv V Aux O		S V Aux O pv		slight preference for A
5	S pv V Aux O		O pv S V Aux		A
6	O pv S	V Aux	S V Aux O pv		B
7	S pv V NgAux O		S V NgAux O pv		equal
8	S pv V NgAux O		O pv S V NgAux		equal
9	O pv S	V NgAux	S V NgAux O pv		equal
10	S$_q$ pv	V NgAux O	S$_q$	V NgAux O pv	slight preference for A
11	S$_q$ pv	V NgAux O	O pv S$_q$ V NgAux		equal
12	O pv S$_q$	V NgAux	S$_q$	V NgAux O pv	slight preference for A

10.7. The night, the stars and the moon

One Chechen story was recorded from radio and transcribed. Part of this story is given here.

10.7.1.   English translation

Here is the English translation of the story, divided into numbered sentences. Note that several participants have been colour coded for convenience.

1. The night, the stars and the moon
2. **Danny** had come to visit his grandparents when the summer holiday was ending.
3. As soon as **he** got to the village, **he** went to the forest with children like **himself**.
4. When **he** got home, tired from wandering about the forest until the evening, a light drowsiness got onto him as soon as **he** had finished eating.

5. In the morning, only when the sun had gone up well, did **he** wake up.
6. In the hall, on the guest-bed, where it was laid out, grandfather lies fallen asleep.
7. Having gone to the enclosement, **Deni** sees grandmother, filling youngs of chicken, throwing milled shells to them.
8. "Did **you** wake up, young one of grandmother? Now who will do the feeding?" - grandmother said, when she saw **him**.
9. Then grandmother, having positioned a small table under the large apple.tree in the hall, gave **Danny** food.
10. While pasting sour-cream-sauce onto the bread, **he** ate everything, drinking sour.milk with [it].
11. Then **he** ran off to the road.
12. Grandmother shouted out loudly: "Please come in to eat something at noon!"
13. But **Danny** didn't come home until the sun went down in the evening.
14. Until then **he** rested, bathing inside the mountain stream, kneading clay from stones in the puddle.
15. Since **he** was very hungry, as soon as **he** started going, **he** run towards the table standing under the apple tree.
16. On it a large coated bowl stood, with a meal put onto it, and lying beside it there was a large wooden spoon.
17. **The boy** took the lid from the bowl.
18. Inside it there was cornbread, cut up in sweet ???
19. Oh, how nice this food was!
20. When [he], quickly having taken hold of the wooden spoon started to eat, **Danny** at the same time added the bowl filled with crumbs of cornbread in milk.
21. Only then did **he** notice.
22. In the hall, seated on a low chair, grandfather watched **him**.
23. "The wolf has become hungry", - he said, having looked to **this one**.
24. **Danny** came up to grandfather.
25. He was filling the cartridges of a rifle.
26. Nearby stood a double-barreled rifle and a cartridge-box.
27. "Grandfather, are you going to hunt?" - asked **Danny**.
28. "I have gone away to go hunting, we will get some nice sweet pigs".
29. "Grandfather, please let me go!" - requested **Danny**.
30. "Would I really let the occasion go?
31. If you go to sleep now, then after resting you go with me to gather maise tonight.
32. Prepare yourself to sleep tomorrow during the day!" - said grandfather, who weighed the quantity and put stuff into a cartridge,
33. putting lead balls onto it, then hitting a gasket onto them.
34. **Danny** didn't know what **he** did then.
35. As soon as **he** lies down on the bed in the hall, sleep hits **him**.
36. The next day, when the sun had gone up well, **Deni** woke up.

10.8. The bird of crane and the fox

The following story is taken from *Chechen Fairytales* (Xamidova 2007). It is used in section 5 to gain insight into the information structure of Chechen clauses.

The translation of the part of the story used in the display below is as follows.

> A bird of crane and a fox were living nearby. They became good neighbours. The bird of crane made herself a nest and sat down onto her eggs. When some time went by she gave birth to young ones. The fox too gave birth to young ones. Every morning at dawn the bird of crate would go to seek food, and the fox would stay at home to look after her and his children and taking care of what needed doing. As soon as the bird of crane had left the fox took a young of the bird, twisted its head, and devoured it.
>
> …

The next morning the bird of crane again want to seek food in the morning, but the fox quickly captured the second young of the bird too, and devoured it.

Table 19 The bird of crane and the fox

Ref	setting	subject	other	subject/object	Verb	subject/object
1	Juxxiehw war-daaxar *living closeby*				nisdella *found-themselves*	gharaghulin a, cwoogalan a. *a bird-of-crane and a fox*
2a				dika lulaxuoj *good neighbours*	a xilla *having become*	
2b					wash xilla *living were*	ysh *they*
3a		Gharaghuli *bird-of-crane*	(3b)	ho'ash t'e *onto eggs*	xi'na *sat down*	
3b			shiena *for itself*	bien *nest*	a bina *having made*	
4	Xaan-zaama jaelcha *when some time went by*			k'orniesh *young ones*	daexna *extracted*	cuo *she*
5		Cwoogaluo a *the fox too*		k'ezii *young ones*	dina *made*	
6a	Hoora wyyranna *Every morning*	gharaghuli *bird-of-crane*	satossush *at dawn*	(6b)	jyedura *would go*	
6b				izhuu *prey*	laxa *to seek*	
6c	tq'a *but*	cwoogal *the fox*	c'ahw *at home*		dysura *would stay*	
6d			cynan a, shien a beerashka *to her and his children*		a hwozhush *looking*	
6e				dan diezarg *necessity*	a diesh *doing*	
7a		Gharaghuli *bird-of-crane*			dwaa ma jaxxaniehw *as soon as went away*	
7b		cwoogaluo *fox*		gharaghulin k'uorni *the young of the bird*	swa a laecna *having taken*	
7c				kuorta *head*	a hwovziina *having twisted*	
7d				ur-attalla cwa daewaxk *even one bone*	a ca jytush *not leaving*	
7e					dwaaqaellira *away-ate*	
10a	shoolghachu diinahw *the next day*	gharaghuli *bird-of-crane*	(10b)		jaxana *went*	
10b	juxa a *again*		wyyranna *in the morning*	izhuu *prey*	laxa *to seek*	
10c	tq'a *but*	cwoogaluo *the fox*	(10d)		dwaaqaellira *away-ate*	gharaghulin shoolgha k'orni a *the second young of the bird too*
10d				(implied from 10c)	sixxa swalaecna *quickly having taken*	

10.9. Focus with optimality theory

In this chapter of the appendix I consider an alternative to describing the focus data that has given promising results for languages ranging from Italian and English to the Bantu language Northern Sotho (Zerbian 2006).

The alternative approach involves optimality theory (Prince & Smolensky 1993). This theory is not a theory of syntax as such. It is a metatheory that uses input generated by other means and produces output configurations, which depend on the ordering of a set of universal violable constraints. For details of optimality theory I refer to the excellent textbook of Kager (1999).

The main argument for attempting to use optimality theory for describing syntactic phenomena in Chechen is that the idea of optimality and conflicting constraints has come up even as the focus data was being evaluated (see section 4.3.5).

10.9.1.   The input and the candidate set

Crucial and essential for an optimality theory within the realm of syntax is a clear definition of the input. I will make use of the basic ideas laid out by Grimshaw (1997).

The idea given by Grimshaw is that the input to the optimality theory evaluation process should be *partially structured*. Specifically, the input should contain predicate-argument structures and specifications about tense and aspect. Noun phrases are encoded as subject

or objects in the input. Additionally, constituents in the input may bear the feature *F*, which identifies them as a focused constituent (see Grimshaw and Samek-Lodovici 1998).

The candidates constituting the candidate set should be a syntactic realization of the input in accordance with the general rules of X-Bar theory. The candidates can contain additional functional structure to the left or to the right.

For further comments on the input set and the candidates see Zerbian (2006).

10.9.2.   Optimality theory versus minimalism

A huge difference between optimality theory and minimalism is found in the way movements are handled.

In minimalism movements should in principle be triggered by features. A distinction is made between interpretable and uninterpretable features so as to explain covert and overt movement – movement after and before the point of spell-out.
   Sometimes movement happens without there being a good explanation in terms of features. Some of that movement is labeled as "scrambling", the explanation of other movements is said to be determined by factors outside of syntax proper, e.g. phonology or discourse.

Optimality theory of syntax usually does not work with feature-triggered movements. Instead movements are the result of an interplay between conflicting constraints. The constraints are said to be part of universal grammar, while the differences between languages are explained by a difference in constraint ranking.

10.9.3.   Which constraints determine the word order?

The following constraints are copied from the literature (Kager 1999, Grimshaw 1997, Zerbian 2006).
   First there is a faithfulness constraint that says that every time a constituent moves to another position one violation is incurred.

   (8)   **STAY**
         Trace is not allowed.

If nothing else is done then the best candidate will always be the one with the least amount of movements. To promote movement a constraint is used, which says that all elements from the input have to be parsed.

   (9)   **PARSE**
         Input elements are parsed into the output.

In the next section I will look at some more constraints that should make the picture clearer for Chechen.

10.9.4.   What are the constraints for Chechen?

At this point it becomes important to incalculate the observations made from the data. The general observations need to be repeated here, and those observations that have remained unaccounted for by the structural focus position approach from section 6.2 and 6.3 need to be stated here too.
   a.   A focused constituent immediately precedes the main verb of a clause.
   b.   There only is verb-object agreement and no verb-subject agreement.
   c.   The postverbal position is reserved for a discourse topic.
   d.   The position before a focused constituent is used by a given topic.

There were some other observations made in section 4.3.5, which were not usable for the structural topic position approach, but which might be crucial for an optimality theory approach. They are summarized here:

    e.   In present continuous clauses the object wants to immediately precede the participle verb it agrees with.

    f.   Adverbs tend to come only clause initially or in the second position of a clause.

Observation (a) translates into two markedness constraints. The first one required operators (like the focus operator) to be in specifier. The second one requires projections to have a head. The two are defined as follows:

    (10)   **OPERATOR IN SPECIFIER** (OP-SPEC)
           Syntactic operators must be in a specifier position.

    (11)   **OBLIGATORYHEAD** (OB-HD)
           A projection has an overt head.

Before continuing to the next observation one more constraint needs to be introduced that should tame the movement of heads (Kager 1999). It is defined as follows (note that – as for all constraints with optimality theory – this is a *violable* constraint):

    (12)   **NO MOVEMENT OF A LEXICAL HEAD** (NO-LEX-MVT)
           A lexical head cannot move.

So movement of a head can only take place with the correct ranking of constraints, but there may be languages where this constraint is ranked so high, that no head movement ever takes place.

I suggest to translate the observation made in (b) into general constraints related to agreement. The constraints are defined as follows:

    (13)   **OBJECTAGREEMENT** (OBJAGR)
           The verb agrees with the object in number, gender and person.

    (14)   **SUBJECTAGREEMENT** (SUBAGR)
           The verb agrees with the subject in number, gender and person.

Apparently in Chechen OBJAGR can never be violated, while SUBAGR is fulfilled only when there is no object to agree with. This leads to a ranking of OBJAGR >> SUBAGR.

Observation (c) would translate quite naturally into an alignment constraint saying that the right edge of a Discourse topic should correspond to the right edge of a clause. It is defined as follows:

    (15)   **ALIGNTHEME** - ALIGN(ThematicTopic,R;clause,R)
           The right edge of the Discourse topic corresponds with the right edge of the clause.

Observation (d) could be stated in more general terms too by an alignment constraint. I argue that the idea here is to align the Given Topic with the left edge of the clause. This can be defined as follows:

    (16)   **ALIGNGIVEN** - ALIGN(GivenTopic,L;clause,L)
           The left edge of the Given topic corresponds with the left edge of the clause.

Observation (e) should be stated more generally too. I argue that, whereas in many languages the subject moves to the specifier of IP, checks subject case and checks agreement with the verb, in Chechen the Object first moves to the specifier of *v*P where it checks case, later moves to the specifier of IP to check agreement with the verb. So instead of a constraint like SUBJECT, which expresses the subject moving to IP, ideally I would argue that Chechen has a highly ranked, but sometimes violated, constraint OBJECT, which is defined as follows:

(17)   **OBJECT**
       The direct object moves into the specifier of IP.

However, in the ranking schemes from the next section I have not been able to use this constraint. Instead I have used the traditional SUBJECT one, which is defined as follows:

(18)   **SUBJECT**
       The grammatical subject moves into the specifier of IP.

More research would be needed to try to replace SUBJECT for OBJECT.

Observation (f) could be expressed by an alignment constraint too. The adverb wants to be as close to the left edge of the clause as possible. In that respect it competes with the ALIGNGIVEN constraint. It can be defined as follows:

(19)   **ALIGNADVERB** - ALIGN(Adverb,L;clause,L)
       The left edge of the adverb corresponds with the left edge of the clause.

I suggest that ALIGNGIVEN >> ALIGNADVERB, which explains why a subject, expressing a Given Topic, can precede an adverb.

10.9.5.   Constraint ranking and tableaux

In this section all relevant configurations will be tested against the constraints by taking a representative sentence from the data and showing a tableau with its ranking.

10.9.5.1   Unmarked SOV

To check the unmarked SOV order sentence C.3.i was used, which is repeated here for convenience as (195).

195) Denina   joqqa-baaba   gira
      Danny-DAT grandmother-ABS see-RFPS
      Danny saw grandmother.

Candidate (c) violates the highly ranked PARSE constraint, because the input feature "tense=past" has not been parsed. Candidate (a) violates the OBJECT constraint, since no IP has been formed where the object could have checked agreement with the verb. Candidate (b) is the winning candidate, even though two movements were involved (the object moving from lower VP to vP to check case and the subject moving from vP to SpecIP in order to check its case), and one head is missing from a functional projection (IP is without head).

Table 20 Unmarked SOV sentence

Input:	$\{gira(x,y), x = Deni, y = joqqa\text{-}baaba, tense = past\}$	Parse	Ob-Hd	Stay	Object
a.	[$_{FocP}$ Denina Foc^0 [$_{vP}$ joqqa-baaba t_S v_0 [$_{VP}$ t_O gira]]]	*!	**	**	*
b. ☞	[$_{IP}$ Denina I^0 [$_{vP}$ joqqa-baaba t_S v_0 [$_{VP}$ t_O gira]]]		*	**	
c.	[$_{vP}$ Denina v_0 [$_{VP}$ joqqa-baaba gira]]	*!	*		*

10.9.5.2   Object focus: SO$_F$V

What happens when the object is focused? To check this I will make use of the following sentence, which is repeated from data item D.2.i, and reproduced here as (196).

196) Sielxana   Muusaga dika   buolx   banbelira
      yesterday   Musa-ALL good work-ABS B-do-B-POT-RFPS
      Yesterday Musa was able to do a good work.

Leaving aside the constraint arranging for the adverb to be clause initial for a moment (it doesn't differ between the candidates below), the following can be said. The candidates (b) and (c) fatally violate the constraint arguing that the focus operator be in a specifier position. Candidate (a) again fails because the tense is not parsed. Candidate (e) works almost well, except that the given topic *Muusaga* is too far away from the left edge of the clause. The

winning candidate therefore is (d), which contains a focus position above the IP to which the object is moved, and which contains a topic projection above FocP to which the given topic *Muusaga* is moved.

Table 21 Object focus and subject topic (SO$_F$V)

Input: $\{\text{banbala(x,y)}, x = \text{Muusa(FocOp)}, y = \text{dika buolx}, \text{given} = x \text{ tense} = \text{past}\}$	Op-Spec	Parse	AlignGiven	Ob-Hd	Stay	Subject
a. [$_{CP}$ Sielxana [$_{FocP}$ Muusaga Foc^0 [$_{vP}$ dika buolx t_S v_0 [$_{VP}$ t_O banbelira]]]]		*!	*	**	**	*
b. [$_{CP}$ Sielxana [$_{IP}$ Muusaga I^0 [$_{vP}$ dika buolx t_S v_0 [$_{VP}$ t_O banbelira]]]]	*!		*	*	**	
c. [$_{CP}$ Sielxana [$_{vP}$ Muusaga v_0 [$_{VP}$ dika buolx banbelira]]]	*!	*	*	*		*
d. ☞ [$_{CP}$ Sielxana [$_{TopP}$ Muusaga Top^0 [$_{FocP}$ dika buolx banbelira [$_{IP}$ t_S t_V [$_{vP}$ t_O t_S t_V [$_{VP}$ t_O t_V]]]]]]]			*	*	*******	
e. [$_{CP}$ Sielxana [$_{FocP}$ dika buolx banbelira [$_{IP}$ Muusaga t_V [$_{vP}$ t_O t_S t_V [$_{VP}$ t_O t_V]]]]]]			*!*		******	

10.9.5.3 Object focus: O$_F$VS

The next configuration to consider is the one where the object is focused, but the subject finds itself on the right side of the clause as a Discourse topic. For checking purposes clause (79) from the data is used, which is reproduced here as (197).

197) Hun   jieza   hwuuna?
     what-ABS   J-need-PRS   2S-DAT
     What do you need?

Candidates (a), (b) and (c) that fail to have the focus operator moved into a specifier position are rejected. One candidate (g) can be rejected outright because the object agreement is not in order. Candidate (d) has the operator moved into a specifier position (SpecIP), but it has failed to construct the functional projection FocP, for which reason it should be rejected. Candidate (e) has moved the subject completely to the left, thereby fatally violating the constraint that the theme should be on the right (AlignTheme is counted in number of words). Finally candidate (j), even though trying to save on the number of movements, is rejected because neither the IP nor the focus phrase have a head. This leaves candidate (f) as the winner.

Table 22 Object focus and subject theme (O$_F$VS)

Input: $\{\text{dieza(x,y)}, x = \text{hwo(J)}, y = \text{hun(FocOp)}, \text{theme} = x, \text{tense} = \text{past}\}$	AgrObj	Op-Spec	Parse	AlignTheme	Ob-Hd	Stay	Subject
a. [$_{FocP}$ Hwuuna Foc^0 [$_{vP}$ hun t_S v_0 [$_{VP}$ t_O jieza]]]		*!	*	**	*	**	*
b. [$_{IP}$ Hwuuna I^0 [$_{vP}$ hun t_S v_0 [$_{VP}$ t_O jieza]]]		*!	*	**	**	**	
c. [$_{vP}$ Hwuuna v_0 [$_{VP}$ hun jieza]]		*!	*	**	*		*
d. [$_{IP}$ hun jieza [$_{vP}$ Hwuuna v_0 [$_{VP}$ t_O t_V]]]			*		*	**	
e. [$_{TopP}$ Hwuuna Top^0 [$_{FocP}$ hun jieza [$_{IP}$ t_S t_V [$_{vP}$ t_O t_S t_V [$_{VP}$ t_O t_V]]]]]]				**	*	*******	
f. ☞ [$_{FocP}$ hun jieza [$_{IP}$ hwuuna t_V [$_{vP}$ t_O t_S t_V [$_{VP}$ t_O t_V]]]]						******	
g. [$_{FocP}$ hun dieza [$_{IP}$ hwuuna t_V [$_{vP}$ t_O t_S t_V [$_{VP}$ t_O t_V]]]]	*!					******	
i. [$_{FocP}$ hun Foc^0 [$_{IP}$ jieza [$_{vP}$ t_O hwuuna t_V [$_{VP}$ t_O t_V]]]]					*!*	****	*

10.9.5.4   Subject focus: S$_F$VO

I will now consider the configuration where the subject is focused, and the object finds itself on the right side of the clause as a Discourse topic. There was only one example in the data for this type of clause. So sentence (94) is used, which is reproduced here as (198).

198) Hwaan   dina   hara?
who-ERG   D-do-NRPS   this-ABS
Who did this?

Candidates (d) and (e) fail to have the focus operator moved into a specifier position and therefore are rejected. Candidates (a) and (c) have not fully parsed the input for which reason they are rejected. Candidates (f) and (g) have not aligned the discourse topic to the right, so have to be rejected too. That leaves winner (b).

Table 23 Subject focus and object theme (S$_F$VO)

Input: $\{dan(x,y),\ x = hwaan(FocOp),$ $y = hara, theme = y, tense = past\}$	AgrObj	Op-Spec	Parse	AlignTheme	Ob-Hd	Stay	Subject
a. [FocP Hwaan Foc^0 [vP hara t_S v_0 [VP t_O dina]]]			*!	*	**	**	*
b. ☞ [FocP Hwaan dina [IP t_S t_V [vP hara t_S t_V [VP t_O t_V]]]]						******	
c. [IP Hwaan I^0 [vP hara t_S v_0 [VP t_O dina]]]			*!	*	**	**	
d. [vP Hwaan v_0 [VP hara dina]]	*!	**		*	*		*
e. [vP Hwaan dina [VP hara t_V]]	*!	**				*	*
f. [TopP hara Top^0 [FocP hwaan dina [IP t_S t_V [vP t_O t_S t_V [VP t_O t_V]]]]]				*!*	*	*******	
g. [FocP hara dina [IP Hwaan t_V [vP t_O t_S t_V [VP t_O t_V]]]]				*!*		******	

10.9.5.5   Subject focus: OS$_F$V

The next configuration to consider is the one where the subject is focused, and the object is considered to be a given topic. For checking purposes clause (C.5.i) from the data is used, which is reproduced here as (199).

199) Joqqa-baaba   Denina   gira
grandmother-ABS   Danny-DAT   see-RFPS
Danny saw grandmother.

Candidates (c) fails to have the focus operator moved into a specifier position and is therefore rejected. Candidates (a), (b) and (f) fail to parse an element from the input (i.e. construction of a tense phrase, or putting Deni in the focus position). Candidate (d) fails to align the Given Topic *joqqa-baaba* on the left side of the clause. This leaves candidate (e) as the winner.

Table 24 Subject focus and object given (OS$_F$V)

Input: $\{gira(x,y),\ x = joqqa\text{-}baaba,\ y = Deni(FocOp),$ $tense = past\}$	AgrObj	Op-Spec	Parse	AlignGiven	Ob-Hd	Stay	Subject
a. [FocP Denina Foc^0 [vP joqqa-baaba t_S v_0 [VP t_O gira]]]			*!	*	**	**	*
b. [IP Denina I^0 [vP joqqa-baaba t_S v_0 [VP t_O gira]]]			*!	*	**	**	
c. [vP Denina v_0 [VP joqqa-baaba gira]]	*!	**		*	*		*
d. [TopP Denina Top^0 [FocP joqqa-baaba gira [IP t_S t_V [vP t_O t_S t_V [VP t_O t_V]]]]]				*!	*	*******	
e. ☞ [TopP Joqqa-baaba Top^0 [FocP Denina gira [IP t_S t_V [vP t_O t_S t_V [VP t_O t_V]]]]]					*	*******	
f. [FocP Joqqa-baaba gira [IP Denina t_V [vP t_O t_S t_V [VP t_O t_V]]]]			*!			******	

10.9.6. Discussion of Optimality Theory approach

The syntactic descriptions resulting from the optimality theory approach give insight into what seems to be happening in Chechen word order. The results could be summarized as follows:

- In all cases the subject obligatory moves to the head of IP to check case.
- When there is a focused constituent a Focus Phrase projection is made above IP.
- Due to the OB-HD constraint the verb obligatory moves to become head of the focus phrase projection when it is formed.
- An argument to the left of the focused constituents becomes the Given Topic and a separate projection is made for it too.
- Given and Discourse Topic are the result of alignment constraints.
- No special projection is needed to get the Discourse topic on the right.