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## Dependency and discourse-configurationality

Rudnev, Pavel

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# Dependency and discourse-configurationality

A study of Avar



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The work presented here was carried out under the auspices of the Centre for Language and Cognition Groningen (CLCG) of the Faculty of Arts of the University of Groningen and the Netherlands Graduate School of Linguistics (Landelijke Onderzoekschool Taalwetenschap).



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Dependency and discourse-configurationality

A study of Avar

Afhankelijkheid en *discourse*-configurationaliteit

Een studie van het Avaars

(met een samenvatting in het Nederlands)

Proefschrift

ter verkrijging van het doctoraat in de  
Letteren

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*Памяти Анны Васильевны Кукариной и игумена Прокла (Васильева)*



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## Contents

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Acknowledgements . . . . .	xiii
Abbreviations . . . . .	xv
List of Tables . . . . .	xix
List of Figures . . . . .	xxi
<b>1 Introduction</b>	<b>1</b>
1.1 Problem statement . . . . .	1
1.2 The solution in brief . . . . .	2
1.3 Previous work on Avar . . . . .	3
1.4 Thesis outline . . . . .	4
<b>2 Framework</b>	<b>7</b>
2.1 Introduction . . . . .	7
2.1.1 The basics . . . . .	7
2.1.1.1 Syntax . . . . .	8
2.1.1.2 Semantics . . . . .	14
2.2 Overview of Avar grammar . . . . .	15
2.2.1 Sources and methodology . . . . .	17
2.2.2 Basic word order . . . . .	18
2.2.3 Nouns and agreement . . . . .	19
2.2.4 Nominal syntax . . . . .	21
2.2.4.1 Prenominal modifiers . . . . .	21
2.2.4.2 Case marking . . . . .	25
2.2.4.3 Pronouns . . . . .	29



2.2.4.4	Adpositions . . . . .	34
2.2.5	Verb . . . . .	35
2.2.5.1	Verbal categories . . . . .	36
2.2.5.2	Derivational affixes . . . . .	41
2.2.5.3	Negation . . . . .	43
2.2.5.4	Clausal complementation . . . . .	49
2.2.6	Summary . . . . .	52
2.3	Towards a configurational structure of an Avar clause . . . . .	52
2.3.1	Subject–object asymmetries . . . . .	52
2.3.2	Affix ordering: from morphemes to the functional hierarchy . . . . .	58
2.3.3	Avar syntax in derivational layers . . . . .	60
2.4	Chapter summary . . . . .	62
<b>3</b>	<b>Avar relative clauses</b>	<b>63</b>
3.1	Prenominal relative clauses: an introduction . . . . .	63
3.1.1	Why study participial relative clauses? . . . . .	63
3.1.2	Participial constructions: are they even relative clauses? . . . . .	64
3.1.3	$\bar{A}$ -properties of relative clauses . . . . .	66
3.1.4	Research question: Locality . . . . .	67
3.2	Avar relative clauses . . . . .	68
3.2.1	Preliminaries . . . . .	68
3.2.2	Word order in RCs . . . . .	70
3.2.3	An excursus: Crossover and reconstruction effects . . . . .	71
3.2.3.1	Reconstruction effects . . . . .	72
3.2.3.2	Crossover effects . . . . .	74
3.2.4	Locality in participial relative clauses . . . . .	76
3.2.4.1	Relativisation across an infinitival clause boundary . . . . .	77
3.2.4.2	Relativisation across a masdar clause boundary . . . . .	77
3.2.4.3	Relativisation across an adjunct clause boundary . . . . .	81
3.2.4.4	Relativisation of an element of a specifier . . . . .	82
3.2.4.5	Relativisation across a finite clause boundary . . . . .	84
3.2.4.6	LDR: preliminary summary . . . . .	84
3.2.5	Long-distance relativisation: multiple levels of embedding . . . . .	85

3.2.5.1	LDR across multiple infinitival clause boundaries . . . . .	85
3.2.5.2	LDR across multiple masdar clause boundaries . . . . .	88
3.2.5.3	Finite complement clauses . . . . .	90
3.2.6	Summary . . . . .	91
3.3	Sketching the proposal . . . . .	91
3.3.1	Structure . . . . .	92
3.3.2	Clause-typing and the Split CP Hypothesis . . . . .	92
3.3.3	Locality: islands and workspaces . . . . .	95
3.3.3.1	Extreme locality . . . . .	95
3.3.3.2	Syntactic opacity . . . . .	96
3.3.3.3	Syntactic non-opacity . . . . .	102
3.3.3.4	Clause-boundedness . . . . .	103
3.3.3.5	Non-opacity of Turkish nominalisations . . . . .	105
3.3.4	Structure-to-meaning mapping . . . . .	105
3.4	Conclusion . . . . .	107
<b>4</b>	<b>Syntax of Avar wh-questions</b>	<b>109</b>
4.1	Introduction . . . . .	109
4.2	Data and problem . . . . .	110
4.2.1	Data . . . . .	111
4.2.2	Analytic options . . . . .	113
4.2.2.1	Movement or base generation? . . . . .	113
4.2.2.2	Predictions . . . . .	115
4.3	Why can't it be movement? . . . . .	117
4.3.1	Movement and base generation: diagnostics . . . . .	117
4.3.1.1	Presence of a gap . . . . .	123
4.3.1.2	Locality constraints on wh-questions . . . . .	124
4.3.1.3	Reconstruction . . . . .	128
4.3.1.4	Crossover Effects . . . . .	131
4.3.2	Against an optional wh-movement analysis . . . . .	133
4.3.2.1	Wh-movement must be triggered . . . . .	133
4.3.2.2	Wh-movement applies freely . . . . .	134
4.3.3	Against an obligatory roll-up movement analysis of wh-in situ . . . . .	135
4.3.4	Against a monoclausal analysis for wh-ex situ . . . . .	138
4.3.5	Summary . . . . .	140
4.4	A pure base-generation analysis is untenable . . . . .	141

4.5	Proposal . . . . .	147
4.5.1	Syntax and semantics of questions: the ingredients . . .	148
4.5.2	Avar constituent interrogatives . . . . .	149
4.5.2.1	Wh-ex situ . . . . .	150
4.5.2.2	Wh-in situ . . . . .	157
4.5.2.3	Comparison with previous approaches . . . . .	162
4.5.2.4	Wh-questions and scrambling . . . . .	164
4.6	Conclusions and open questions . . . . .	166
4.6.1	Conclusions . . . . .	166
4.6.2	Open issues . . . . .	166
<b>5</b>	<b>The Avar focus construction</b>	<b>169</b>
5.1	Introduction . . . . .	169
5.2	Syntactic and semantic properties of Avar focus . . . . .	172
5.2.1	Syntax . . . . .	172
5.2.1.1	Linear placement of particles . . . . .	173
5.2.1.2	Structural distance: Sensitivity to islands . . . . .	176
5.2.2	Semantics . . . . .	179
5.2.3	Summary . . . . .	180
5.3	Against a cartographic approach to Avar focus . . . . .	180
5.3.1	Cartographic approaches to information structure . . . . .	180
5.3.2	Problems with the Split CP Hypothesis . . . . .	183
5.3.3	Slade (2011) on focus in Sinhala . . . . .	184
5.4	Towards a proposal . . . . .	190
5.4.1	Q-particles and focus particles . . . . .	190
5.4.2	The focused constituent does not $\bar{A}$ -move . . . . .	192
5.4.2.1	Idiom interpretation . . . . .	192
5.4.2.2	Crossover effects . . . . .	193
5.4.3	Avar focus involves clefting . . . . .	194
5.4.3.1	Biclausality . . . . .	194
5.4.3.2	Parallels with English clefts . . . . .	198
5.4.4	It is the focus particle that moves . . . . .	206
5.4.4.1	Syntactic movement: feature-driven or free? . . . . .	207
5.4.4.2	Focus <i>in situ</i> . . . . .	209
5.4.4.3	Focus <i>ex situ</i> . . . . .	210
5.4.5	Summary . . . . .	211
5.5	Conclusion . . . . .	211
<b>6</b>	<b>Concluding remarks</b>	<b>213</b>

<b>A Declension samples</b>	<b>217</b>
<b>B Synthetic verb forms in Avar</b>	<b>219</b>
B.1 Derivational schemata . . . . .	219
B.2 Synthetic forms of some common verbs . . . . .	222
Bibliography . . . . .	225
<b>Nederlandse samenvatting</b>	<b>245</b>
Groningen Dissertations in Linguistics (GRODIL) . . . . .	249



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it is Barbara's inspirational teaching and enthusiasm that have shown to me how fun something as complex as formal semantics can be.

It was in Moscow that I first learned about the Avar language, at a course taught by Yakov Testeleets, who also encouraged me to look more closely at some aspects of the language. It is hard to describe how significant a contribution he has made to shaping my identity as a linguist.

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## Abbreviations

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∅	Null element.
-	Morpheme boundary.
–	Boundary between agreement prefix and verb.
1	First person.
2	Second person.
3	Third person.
A	Agent.
ABIL	Abilitative.
ABL	Ablative.
ABS	Absolutive.
ACC	Accusative.
ADN	Adnominal.
AE	A-ending.
ALL	Allative.
AP	Apud.
APEL	Apudelative.
APESS	Apudessive.
APL	Apudlative.
CAUS	Causative.
CM	Class marker.
CNJ	Conjunction.
COMP	Complementizer.



CONC	Concessive.
COND	Conditional.
COP	Copula.
CVB	Converb.
DAT	Dative.
DECL	Declarative.
DEF	Definite.
DET	Determiner.
DIR	Direct.
E	E-ending.
EL	Elative.
EMPH	Emphatic.
ERG	Ergative.
ESS	Essive.
F	Feminine.
FIN	Finiteness.
FOC	Focus.
FUT	Future.
GEN	Genitive.
GNRL	General.
HON	Honorific.
ILL	Illative.
IMM	Immediate.
IMP	Imperative.
IN	In.
INC	Inceptive.
INEL	Inelative.
INESS	Inessive.
INF	Infinitive.
INS	Instrumental.
INT	Inter.
IPF	Imperfective.
IRR	Irrealis.
ITER	Iterative.

LAT	Lative.
LOC	Locative.
M	Masculine.
MSD	Masdar.
N	Neuter.
NEG	Negative.
NMLZ	Nominalizer.
NOM	Nominative.
OBL	Oblique.
OPT	Optative.
P	Patient.
PFV	Perfective.
PL	Plural.
POL	Polarity.
POSS	Possessive.
PRF	Perfect.
PROG	Progressive.
PROH	Prohibitive.
PRS	Present.
PRT	Particle.
PRV	Preverb.
PST	Past.
PTCP	Participle.
PTV	Partitive.
Q	Question particle.
RECP	Reciprocal.
REL	Relative.
S	Argument of intransitive verb.
SG	Singular.
SUB	Sub.
SUBEL	Subelative.
SUBESS	Subessive.
SUBL	Sublative.
SUP	Super.

xviii

SUPESS	Superessive.
TEMP	Temporal.
TERM	Terminative.
TRANS	Translative.

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## List of Tables

---

2.1	Avar consonants . . . . .	16
2.2	Core cases in Avar . . . . .	26
2.3	Locative case series in Avar (adapted from Creissels 2008) . . . . .	27
2.4	Avar demonstratives . . . . .	32
3.1	Finite and participial forms of <i>aħize</i> ‘shout’ . . . . .	94
5.1	Finite and participial forms of <i>aħize</i> ‘shout’ (repeated) . . . . .	189
A.1	Declension of <i>ču</i> ‘horse’ and <i>c’ali</i> ‘reading’ . . . . .	218
B.1	Synthetic forms of <i>CM-uk’</i> ‘be’ . . . . .	223
B.2	Synthetic forms of <i>CM-ix’</i> ‘see’ . . . . .	224



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## List of Figures

---

2.1	Map of Daghestan . . . . .	15
2.2	Direct and oblique stems . . . . .	20
5.1	The entailment scale for <i>Coĥo Ahmad ana</i> ‘Only Ahmed left.’ modelled on Velleman et al. (2012) . . . . .	202
B.1	Verbal forms derived from the PRS-stem . . . . .	220
B.2	Verbal forms derived from the FUT-stem . . . . .	220
B.3	Verbal forms derived from the PST-stem . . . . .	221
B.4	Verbal forms derived from the IMP-stem . . . . .	221
B.5	Verbal forms derived from the INF-stem . . . . .	222



# CHAPTER 1

---

## Introduction

---

The present doctoral thesis examines the syntax and semantics of a number of constructions encoding operator–variable dependencies in Avar, a Northeast Caucasian language predominantly spoken in the Republic of Dagestan in the Russian Federation. In doing so it touches upon such empirical domains as reflexivity and anaphoricity, argument structure, A-movement, pronominalisation and *pro*-drop, as well as important theoretical notions of numeration, derivation, locality, formal features, modularity and the general architecture of the grammar.

### 1.1 Problem statement

Consider a regular declarative sentence of Avar

- (1) was ana / \*a- ra- w  
boy.ABS go.PST go.PST-PTCP-M  
'The boy has left.'

— and the same sentence turned into a relative clause:

- (2) [\_\_ a- ra- w / \*ana ] was ...  
go.PST-PTCP-M go.PST boy.ABS  
'The boy who has left...'



It can be seen from comparing these two clauses that they differ radically with respect to verbal morphosyntax: the declarative sentence features a verb in a tensed, finite form, whereas the relative clause must be headed by a participle.

The converse does not hold: declarative clauses can, under very restricted circumstances, also be headed by a participle (sentence (3), for instance, marks *was* ‘boy’ as being contrastively focused):

- (3) was= in a- ra- w / \*ana  
 boy.ABS=FOC go.PST-PTCP-M go.PST  
 ‘The [ boy ]<sub>F</sub> has left.’

Even more strikingly, the finite verb cannot be used when asking a question (the question in (4) is a wh-question).

- (4) š:iw a- ra- w / \*ana  
 who.M go.PST-PTCP-M go.PST  
 ‘Who has left?’

It is my ambition in this thesis, on the one hand, to answer the question whether there is a common semantic core underpinning the morphosyntactic contrast between the sentences above, and to draw comparisons with better-studied phenomena in better-studied languages when making the decision as to the exact syntactic structures underlying their derivation, as each of these  $\bar{A}$ -constructions comes with a set of properties unique to it, in addition to those that are common to all of them.

## 1.2 The solution in brief

When looking at (2)–(4), all of which require the verb in a participial form, one of the questions that arises is which one of these sentence types serves as a base for the other ones to be built upon. The present thesis answers this question by treating (2), i.e. the relative clause, as being the structural core of the remaining types of clause.

This structural core is expanded upon to give rise to a cleft-like structure, in which the relationship between the relative clause core and the rest of the clause is mediated by either a predicator or a dedicated particle. What this entails is that, rather than comparing Avar wh-questions and sentences with focus marking to (5) in a language like English, the better candidates for comparison are in fact the ones given in (6).

- (5) a. [ The boy ]<sub>F</sub> left.  
 b. Who left?
- (6) a. It was the boy that left.  
 b. Who was it that left?

The hypothesised cleft-like structures feature question and focus particles, warranting the inclusion of Avar in the class of languages where such particles are realised overtly. These languages are as diverse as Tlingit (Cable 2010b), Sinhala (Slade 2011), Japanese (Hagstrom 1998) etc.

In the chapters to come we shall be working through the predictions of this question-particle clefting analysis and comparing the empirical coverage of the emerging analysis with that of some common alternatives.

### 1.3 Previous work on Avar

Avar being spoken in Russia, it is unsurprising that the absolute majority of academic work on various aspects of its grammar has been written in Russian. This includes the classic descriptive grammars von Uslar (1889) and Bokarev (1949). What is much more surprising is the immediately noticeable dearth of both descriptive and theoretical work, especially in light of other, smaller languages, having received significantly more scholarly attention (see Polinsky's 2003 review of Kibrik 1999).

Nevertheless, Avar has been discussed in the literature, mostly in the context of (morphological) ergativity, argument structure and reflexivisation; furthermore, an edited volume appeared in 1993, having since become somewhat of a rarity, dealing with various phenomena in the nominal domain of the Andalal dialect (Kibrik 1993).

A concise overview of scholarly works given in Erschler 2014 lists a total of 7 studies on Avar, accompanied by the following note:

Although it is one of the largest Northeast Caucasian languages in terms of the number of speakers, Avar is very poorly represented in the literature: even the first systematic description of Avar ever, von Uslar (1889), is still relevant to some extent. (Erschler 2014)

It should, however, be pointed out that the present study is by no means the first one to deal with  $\bar{A}$ -dependencies in either Avar or the broader context of Northeast Caucasian languages, the most important empirical generalisations having been established by the late Aleksandr E. Kibrik and his colleagues at

the Department of Theoretical and Applied Linguistics at Moscow State University. The present thesis builds, in particular, on the analyses of the Northeast Caucasian focus construction proposed by Kazenin (2002) and Testelec (1998a,b). It is my intention on these pages to fill in some of the gaps left by these studies, especially as far as the semantic side of  $\bar{A}$ -constructions is concerned, but because the syntactic and semantic properties of Northeast Caucasian languages remain an unploughed field pretty much to date, some of the gaps will remain.

I now present a concise summary of the contents of the thesis.

## 1.4 Thesis outline

**Chapter 2**, entitled **Framework**, can be split in two parts: its first part introduces the general framework, which follows in the footsteps of Zwart (2009) in capitalising on the punctuated nature of syntactic derivations. It also introduces the necessary background to understanding the details of semantic interpretation of Avar *wh*-questions and sentences with focus later discussed in Chapters 4 and 5 respectively. The other, longer, part is intended as a brief introduction to the fascinating world of Avar grammar.

As briefly mentioned in §1.2 above, I analyse Avar questions and focus sentences as pseudoclefts of sorts, underlying which is a relative clause. These are dealt with at length in **Chapter 3**. Despite being participial constructions, Avar relative clauses are shown to have most of the properties characteristic of  $\bar{A}$ -constructions crosslinguistically with the notable exception of unboundedness. I then propose that Avar relative clauses are derived via null operator movement that is interpreted by the meaning system as creating a predicate. Following Zwart (2009), I argue that Avar relative clauses are generated in a distinct derivational layer and enter any subsequent numerations as atomic elements whose internal structure is invisible to any element in that numeration.

**Chapter 4** focuses on the two types of matrix constituent interrogatives in Avar, which I call, following the syntactic and semantic literature on *wh*-questions, the *in-situ* and *ex-situ* strategies of question formation. As the name suggests, they differ in whether the *wh*-item appears in its thematic position or dislocated from it. Having introduced the reader to the fundamentals of question semantics, I treat both of these strategies as truncated pseudoclefts by appealing to the analysis of relativisation from the preceding chapter and combining it with the Hamblin/Karttunen semantics for questions. The con-

nection between the gap and the dislocated *wh*-phrase is then argued to be established indirectly.

**Chapter 5** scrutinises the syntax and semantics of the expression of focus in Avar, mainly by contrasting the behaviour of the cleft-like particle with that of *only*, capitalising on their exhaustivity and analysing them in line with the approach to *it*-clefts in English recently put forward by [Velleman et al. \(2012\)](#). The chapter also strives to eliminate non-syntactic, information-structural notions of topic and focus from the narrow syntax, making the resultant analysis decidedly non-cartographic.

**Chapter 6** succinctly summarises the achievements of the thesis as well as lists potential directions for future research.



## CHAPTER 2

---

### Framework

---

This chapter has two main goals. The first one is to introduce the reader to the grammatical properties of Avar (§2.2) whereas the other one is to establish a clause structure that would serve as the basis for the discussion in the chapters to come (§2.3). Before we see how the particular properties of Avar map onto a syntactic hierarchy, several basic notions must be introduced and a few general remarks on the architecture of the grammar given. This is done in the remainder of this section.

### 2.1 Introduction

#### 2.1.1 *The basics*

Since the subject matter of this thesis, operator–variable dependencies, belongs in the domain of the syntax–semantics interface, I find it useful to introduce, in brief, the key notions of what I take to be the structure-building module (syntax) and the interpretational component (semantics). I do this in sections 2.1.1.1 and 2.1.1.2 respectively. Readers familiar with the fundamentals of generative syntax might find it useful to go directly to §2.2, which, in turn, can be skipped by those who are fairly comfortable with the morphosyntax of Northeast Caucasian languages.

### 2.1.1.1 Syntax

The present thesis adopts a broadly minimalist approach to syntax, syntax being understood in the narrow sense as a computational system that generates potentially arbitrarily complex expressions (Chomsky 1993, 1995, 2007). The core syntactic operation is *merge*, which can be defined as a function combining two elements from the domain of syntactic expressions and yielding a set containing those syntactic expressions. The output of an application of merge is therefore a symmetrical set and its definition is given in (1):<sup>1</sup>

$$(1) \text{ merge}(\alpha, \beta) = \{\alpha, \beta\}$$

I follow the conventions generally accepted in the generative literature and notate the sets resulting from the application(s) of merge, such as  $\{\alpha, \beta\}$  above, as either labelled brackets (2a) or branching nodes mostly referred to as *trees* (2b, although I will use a revised version of the tree notation as explained later in this subsection). I use  $\gamma$  here for the resulting syntactic object.<sup>2</sup>

$$(2) \text{ a. } [\gamma \alpha \beta]$$

$$\text{b. } \begin{array}{c} \gamma \\ \wedge \\ \alpha \quad \beta \end{array}$$

The set notation, in turn, will be reserved to represent *numerations* — collections of items drawn from the lexicon that syntax will operate on whilst building the structure. To exemplify, in order to create a complex object like *this houndstooth jacket*, the computational system will draw the following elements from the lexicon (the lexicon itself being, uncontroversially, a repository of elements that contains information on their various properties):<sup>3</sup>

$$(3) \text{ N} = \{\text{this, houndstooth, jacket}\}$$

Syntactic operations like merge apply to the elements of N in any possible order, the resulting objects receiving an interpretation at the interfaces. Given

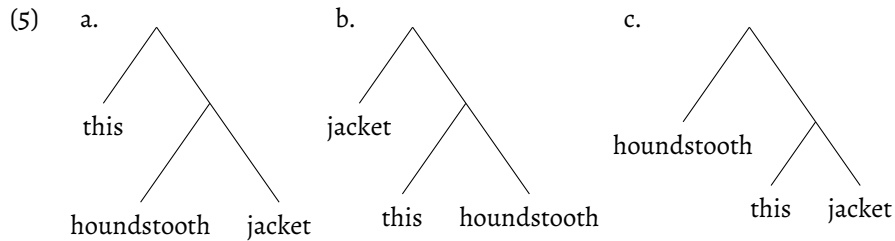
1. This view of merge as a binary operation is, although classic, not the only possible one. See Zwart 2009 for an alternative proposal whereby merge is understood as a unary operation that takes an object from the numeration and merges it to another object in the workspace, resulting in an ordered pair instead of an unordered set of Chomsky (1995) *et seq.*

2. The notion of labelling, or projection, has become problematic as the generative enterprise started to move away from preset phrase structure. In this thesis I do not discuss the nature of endocentricity and invite the interested reader to consult Chomsky (2013) and Adger (2013) for an overview of the problems and two very different solutions.

3. I will also use the set notation in Chapter 5 to represent sets of alternative propositions that focus-sensitive expressions evoke.

that  $N$  contains three elements, merge can apply to them in the following ways (since the outputs of merge are sets, the order of elements is irrelevant, a fact obscured by the tree notation):

- (4) a.  $\text{merge}(\text{houndstooth}, \text{jacket}) = \{\text{houndstooth}, \text{jacket}\}$   
 $\text{merge}(\{\text{houndstooth}, \text{jacket}\}, \text{this}) = \{\text{this}, \{\text{houndstooth}, \text{jacket}\}\}$   
 b.  $\text{merge}(\text{this}, \text{houndstooth}) = \{\text{this}, \text{houndstooth}\}$   
 $\text{merge}(\{\text{this}, \text{houndstooth}\}, \text{jacket}) = \{\text{jacket}, \{\text{this}, \text{houndstooth}\}\}$   
 c.  $\text{merge}(\text{this}, \text{jacket}) = \{\text{this}, \text{jacket}\}$   
 $\text{merge}(\{\text{this}, \text{jacket}\}, \text{houndstooth}) = \{\text{houndstooth}, \{\text{this}, \text{jacket}\}\}$



Once there are no elements left in  $N$  the complex syntactic object is ready to be sent to the interfaces to receive a semantic interpretation and a phonological realisation. Whilst there appears to be nothing wrong with either (5b) or (5c) from the point of view of pronunciation, neither of them can receive the right semantic interpretation, which is reflected in their unacceptability. This means, amongst other things, that syntax cannot process the information pertaining to *selection*.

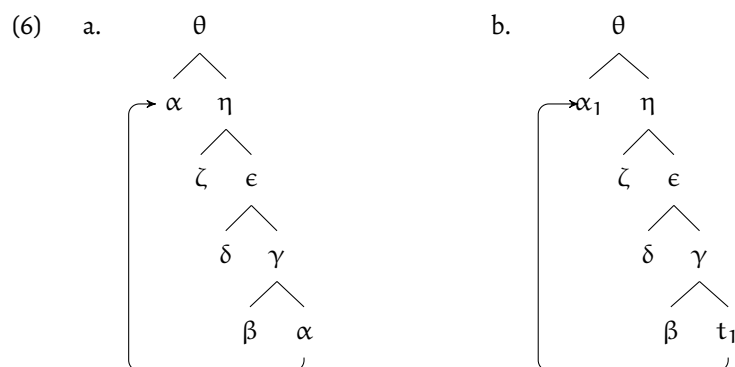
The items drawn from the lexicon, or *lexical items*, I take to be collections of *features*.<sup>4</sup>

Coming back to merge, the general consensus in the literature is that it exists in two kinds — *external* and *internal* (Chomsky 2004). External merge, which has been illustrated in (1) and (2) above, introduces new material from the numeration into the derivation. In contrast, internal merge (also called *remerge*, or *movement*) operates on elements already present in the structure by remerging a *copy* of that element with the already built structure. For the purposes of this thesis internal merge, remerge and movement are treated as synonyms and I will use them interchangeably.

4. I choose ‘collection’ over ‘bundle’ or ‘structure’ purely because I wish to remain agnostic as to the exact way of putting the features together to create a lexical item; see Adger & Svenonius (2011) for a detailed discussion of these issues as well as Adger (2010) for an explicit formalisation.



Using internal merge allows one to derive long-distance dependencies, which will be represented in this thesis with the trace notation, whereby the unpronounced *copy* is notated as *t*, oftentimes with a subscripted index, and the two positions related by movement are connected with an arrow. This is illustrated immediately below.

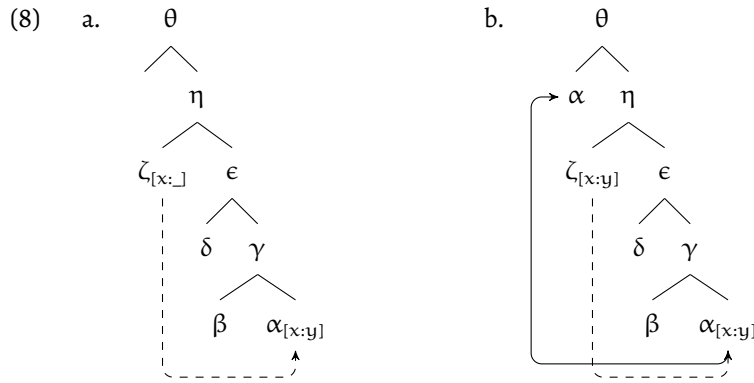


In (6) the syntactic object  $\alpha$ , originally in a sisterhood relationship with  $\beta$ , has undergone syntactic movement to, or has become internally merged with, the node labelled  $\eta$ . This is indicated by replacing the base position of  $\alpha$  with the trace symbol *t*, and by connecting the two nodes with an arrow. The tree in (b) is identical to the one in (a) but for the appearance of a numerical index on the nodes related by a movement dependency, which is especially useful in trees where more than one element moves.

To paraphrase the foregoing discussion in Pesetsky's (2013) terms, internal merge has the following two properties: the *c-command* property (in the sense of  $\alpha$  c-commanding *t* in (6)) and the *multidominance* property (in the sense of  $\alpha$  being dominated by both  $\theta$  and  $\gamma$ ). C-command can be viewed in both representational and derivational terms, a derivational definition being given in (7) below.

- (7) *C-command*  
 $\alpha$  c-commands  $\beta$  and all and only elements contained by  $\beta$  iff  $\alpha$  was merged with  $\beta$  in the course of the derivation. (based on Epstein et al. (1998: 32))

Arrows of a different kind, dashed, notate the Agree relation between features on various lexical items. In (8) below,  $\alpha$ , whilst still in its base position, carries a feature  $[x:y]$ , where  $x$  is the feature's attribute and  $y$  its value. A node higher than  $\alpha$  in the structure, say  $\zeta$ , has a feature with a matching attribute but without a value.



The majority of the current generative literature presupposes that it is these feature-valuation operations, or *probe-goal relations*, which are responsible for triggering syntactic movement, either directly or with the help of dedicated movement-triggering features (*edge features*, or EPP-features in earlier work). In this thesis I depart from this tradition and follow Chomsky 2007, 2013 in viewing internal merge as an operation that is not driven by the featural needs of either the element undergoing it or those of the derived position.

Syntactic categories are organised in a *functional sequence* (cf. Starke 2001) roughly corresponding to Grimshaw’s (1997) notion of an *extended projection* that the outputs of merge must respect in order for the derivation to be interpretable.

An assumption widely shared in the generative literature is that syntactic derivations consist of subderivations that become opaque upon being completed, preventing any further syntactic operations such as internal merge from applying. These *locality constraints* are often taken to correspond to Ross’s (1967) “islands”, and most current approaches couched in the minimalist framework formalise these as *phases* of Chomsky (2001, 2008), although equating them has been shown to be problematic (Boeckx 2012). Since in this thesis I adopt a different view of locality, viz. that of *derivation layering* (Zwart 2009 *et seq.*), and given that an in-depth discussion of the concept of phases is beyond my immediate concerns, I limit myself to noting that if the approach of Zwart (2009) *et seq.* is on the right track, phases as a separate domain become redundant. The interested reader will find detailed introductions to the phase theory in Gallego (2010), Citko (2014), among others, and an explicit proposal of how the CED effects (=islands) follow from this notion in Müller (2010).

### The notation: Spanning

In notating the dependencies created by merge as tree-like diagrams I adopt, after *Bye & Svenonius (2012)*, *Svenonius (2012)*, the use of the Telescope principle (*Brody 2000*, *Brody & Szabolcsi 2003*), whereby the intermediate projection level — or the bar level — is omitted from the tree entirely, and the node's right daughter is its complement whilst the left one is its specifier.

As the Minimalist Programme places particular emphasis on the interfaces, I follow *Halle & Marantz (1993)* in adopting an approach to morphology whereby morphological exponents are inserted in the representation post-syntactically. This insertion is notated, in line with *Bye & Svenonius (2012)*, *Svenonius (2012)* and *Ramchand & Svenonius (2014)*, via the squiggly lines.

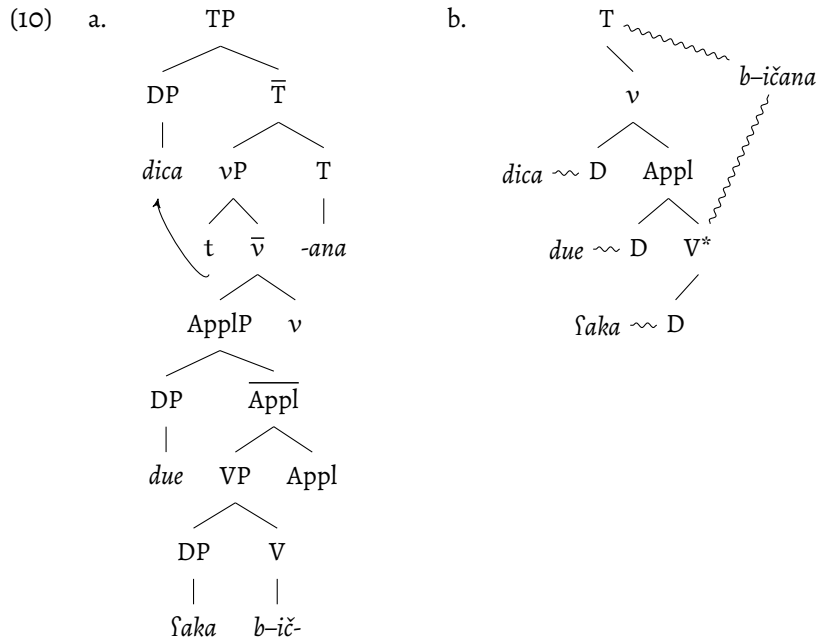
The choice of notation is, for the most part, aesthetic, motivated not least of all by the peculiar shape that trees for head-final languages tend to take, especially those where specifiers, like complements, linearise to the left of the heads. The notation used in this thesis is more economical of the vertical space and arguably reflects the properties of syntactic representations more accurately by focusing on the complement line (*Bye & Svenonius 2012: 433*). It also allows me to sidestep the problem of discussing the nature of head-final word orders, i.e. abstract away from whether sentences in languages like Avar, Turkish or Japanese are generated head final as a macroparametric option, or whether these orders result from multiple roll-up complement-to-specifier movements as proposed in *Julien (2002)*.

To introduce the notation, let us consider a (simplified) syntactic representation of the following sentence containing a ditransitive predicate *CM-ič* 'sell':

- (9) di-      ca    du-      e      řaka    b-ič-    ana.  
 1SG:OBL-ERG 2SG:OBL-DAT COW.ABS N-sell-PST  
 'I sold you a/the cow.'

The traditional tree in (10a), even though necessarily incomplete, as it does not contain any information as to how the various functional heads in the clausal spine come to be pronounced as suffixes attached to the root, occupies twice as much vertical space as its Telescoped version in (10b).<sup>5</sup>

5. The two structures also differ with respect to EPP: whereas the subject undergoes movement to Spec,T in (a), it remains inside the v-layer in the tree under (b). The distinction is immaterial at this point but I will suggest, in §4.5.2.4, that this movement to Spec,T is not restricted to subjects alone.



The projection, or complement, line in (10b) should be read bottom-up starting from V, with the elements dominating it corresponding to suffixes. The asterisk diacritic on V indicates that the complex morphological word is to be pronounced at V (as opposed to Appl, v or T) to ensure that it is linearised to the right of both the complement and the specifier.

What needs stressing at this point is that the tree in (10b) is a representation which the interfaces read the information off. In particular, it makes no claims as to the nature of merge, which I take to be binary, in accordance with most current work on the matter.

Having introduced the relevant syntactic notions, one more aspect of the notation that I find worth mentioning concerns the mapping from syntax to morphology. Most contemporary approaches to the syntax–morphology interface hold it that morpheme insertion, or lexical insertion, happens after the syntactic computation has run its course, i.e. after a numeration has been exhausted. The most famous approach of this kind has come to be known as *Distributed Morphology* (Halle & Marantz 1993, Embick & Noyer 2007) but it is not the only one possible, as evinced by the existence of frameworks like *Nanosyntax* (Caha 2009), where morpheme insertion is also performed after the syntactic computation has run its course but the need of having such operations as *fusion* or *fission* does not arise because morphemes are viewed as

being able to correspond to units bigger than just the terminal nodes. In this thesis, therefore, I subscribe to the view of morphology as operating after the narrow-syntactic computation has been done without going into the technical details of these postsyntactic processes.

### 2.1.1.2 Semantics

The preceding subsections will have hinted at the conclusion that, the organisation of the syntax being fairly simple (ideally reducible to just merge, Chomsky 2013), the interfaces must be set up in such a way as to interpret the “right” outputs only. As far as semantics is concerned, the main principle guiding semantic interpretation is that of **compositionality**, i.e. the conjecture that the meaning of a complex expression is calculated based on (i) the meanings of its parts and (ii) their mode of combination. Put differently, semantic interpretation is sensitive to certain syntactic relations (mostly *dominance* and *c-command*).

Where I discuss semantic interpretation, the formal framework is that of Heim & Kratzer (1998), one where syntactic expressions are interpreted by  $\llbracket \ ]$  — the interpretation function — directly (i.e. without an intermediate translation step). The composition rules themselves are introduced where relevant.<sup>6</sup>

#### Presuppositions and partial functions

In addition to such standard interpretation rules as Function Application or Predicate Abstraction, one aspect of Heim & Kratzer’s (1998) system that features prominently in Chapter 5 is their notation for presupposition. In that chapter I follow Heim & Kratzer (1998) and separate the presupposed material from the rest of the information by putting it between a colon and a full stop:

(11)  $\lambda f: \alpha. f$

Heim & Kratzer (1998) treat presuppositions as definedness conditions on semantic values: the function  $f$  is defined if and only if  $\alpha$  is satisfied, and undefined otherwise.

6. See Haug 2014 for a discussion of the advantages and disadvantages of Heim & Kratzer’s (1998) treatment of presupposition, the disadvantages that automatically carry over to most analyses that take Heim & Kratzer (1998) as their point of departure, as well as Coppock (2014) for an alternative, based on Beaver & Kraemer 2001, that is arguably immune to the problem.



Figure 2.1: Map of Daghestan

## 2.2 Overview of Avar grammar

Avar (self-nomination: *maʃarul mac* ‘language of the mountains’) is the biggest language of the Avar-Andic branch within the Northeast Caucasian, or Nakh-Daghestanian, language family. It is spoken mainly in the western and southern parts of the Russian Caucasus republic of Daghestan, and the Balaken, Zaqatala regions of north-western Azerbaijan. According to the 2010 census, there are some 703,000 native speakers of Avar in the Russian Federation (compared to 744,000 eight years previously), and speakers of smaller Avar-Andic languages use it as a *lingua franca*.<sup>7</sup> Although Avar has enjoyed a special status as a language of instruction with lots of published material, it is continuously being replaced by Russian as both the language of instruction and the *lingua franca* within the Republic of Daghestan, particularly so amongst the younger speakers.

The language has existed in written form (Arabic-based script) since the 17th century. In the 19th century a Russian Imperial Army major-general Baron von Uslar undertook an attempt at developing a Russian-based alphabet for

7. The results of the 2010 census can be accessed at [http://www.gks.ru/free\\_doc/new\\_site/population/demo/per-itog/tab6.xls](http://www.gks.ru/free_doc/new_site/population/demo/per-itog/tab6.xls) (in Russian).

		Lab	Den	Alveolar		Pal	Vel	Uvu	Epiglot	Glott
				central	lateral					
Nasal		m	n							
Plosive	voiced	b	d				g			ʔ
	voiceless	p	t				k			
	ejective		t'				k'			
Affricate	voiceless		c	č	ɬ			q		
	ejective		c'	č'	ɬ'			q'		
Fricative	voiceless		s	š	ɬ		x	χ	ħ	
	voiced	v	z	ž				ʁ	ʕ	
Trill				r						
Approximant					l	j				

Table 2.1: Avar consonants

several Northeast Caucasian languages including Avar, of which he also published the very first grammar (von Uslar 1889). The resulting alphabet was phoneme-based and digraph-free, at the cost of having a number of additional characters. In the Soviet period, the script was first changed to Roman and then back to Cyrillic, and Avar became one of several major languages in Dagestan that had a special status: it was a language of instruction and learning in elementary and secondary schools, and a language of media and emerging literature.

### A note on romanisation

As just mentioned, the current orthography for Avar is the Russian alphabet with one diacritic character, *palochka* ‘stick’, and given the abundance of consonants in the language’s phoneme inventory (illustrated in Table 2.1), those are often rendered as digraphs. For the purposes of this study I have decided to use a simplified mixture of transcription and transliteration, where gemination is only conveyed where it is realised orthographically in the original.<sup>8,9</sup>

8. The romanisation I adopt here differs very slightly from that in Yamada 2013. To avoid confusion, the Roman-to-Cyrillic correspondences are as follows, where the apostrophe represents ejectives: a = a, б = b, в = w, г = g, гъ = ɣ, гь = h, гI = ɣ, д = d, е = e, ж = ž, з = z, и = i, й = j, к = k, къ = q', къ = ɬ', кI = k', л = l, лъ = ɬ, м = m, н = n, о = o, п = p, р = r, с = s, т = t, тI = t', у = u, ф = f, х = χ, хъ = q, хь = x, хI = ħ, ц = c, цI = c', ч = č, чI = č', ш = š, шъ = š', э = e, ю = ju, я = ja, ь = ʔ.

9. The romanisation adopted here is similar to the orthography of Standard Avar in not making a distinction between the lateral affricate, and the lateral fricative, which itself can be strong and weak, all of which are standardly written as лъ, or l in the system adopted here.

As mentioned at the very beginning of this report, developing a theory of operator–variable dependencies for a free word order language like Avar implies having a credible syntax that could easily be mapped onto semantics, given the working principle of compositional interpretation. In the following few sections I attempt to do precisely this paying particular attention to subject–object asymmetries and identifying constraints on word order permutations, although I will remain largely agnostic as to the exact mechanism(s) effecting these. Before this can be done, however, I present an overview of Avar grammar that should be both detailed enough for the purposes of this thesis and concise enough so as not to distract from the main subject matter.

### 2.2.1 *Sources and methodology*

In line with the general methodology of theoretical and typological approaches to natural language syntax, I have chosen to use grammaticality and acceptability judgements of Avar native speakers as the primary source of linguistic data for the current project. I find it necessary, however, to complement this sort of approach to data collection by referring to (i) existing descriptions of Avar (von Uslar 1889; Bokarev 1949; Madieva 1980; Alekseev & Ataev 1997) and related languages (cf. Kibrik 1999, Lyutikova 2000 for Tsakhur, Kibrik 2001 for Bagwalal or Khalilova 2009 for Khwarshi), and (ii) written and published material in Avar collected from newspapers, magazines and other web-based resources.

Not being an Avar speaker myself, I employ translations and examples modelled on attested structures to elicit the speakers' judgements using Russian as the mediating language (see Matthewson 2004, 2011 for strong arguments in favour of this approach over certain others, such as reliance on (collections of) texts). It is thus extremely important to have speakers clearly understand what they are being asked, particularly so because of the notorious difficulties in obtaining reliable judgements regarding scope-related phenomena (Szabolcsi 2010: §6), which in the case at hand is the scope of focus and question particles. Parts of the data on focus marking presented in Chapter 5 were elicited using the questionnaire on the semantics of focus-sensitive expressions in Renans, Zimmermann & Greif (2011).

In the subsections that follow I present an overview of Avar grammar so as to introduce the reader to the main properties of the language. To reiterate, this description is to be thought of as a brief sketch rather than a rigorous descriptive grammar. We begin with word order.



### 2.2.2 Basic word order

Although Avar, like the other Northeast Caucasian languages, displays a considerable freedom of word order (Testelec 1998a), it is still possible to identify a basic, ‘unmarked’, order:<sup>10</sup>

(12) Subject > Indirect\_Object > Direct\_Object > Verb

The two sentences below illustrate this basic order, ignoring temporal and other adjuncts for the moment.

(13) was-as insu- e ruq’ b-a l- e- b b-ugo  
 son-ERG father.OBL-DAT house.ABS N-build-PRS-PTCP-N N-be.PRS  
 ‘The son is building (his) father a house.’

(14) di- ca du- e řaka b-ič- ana  
 1SG:OBL-ERG 2SG:OBL-DAT cow.ABS N-sell-PST  
 ‘I sold you a/the cow.’

In both (13) and (14) there are three noun phrases to be thought of, descriptively, as agent (*wasas* ‘son’ in (13) and *dica* ‘I’ in (14)), indirect object (*insue* ‘father’ in (13), *due* ‘you.DAT’ in (14)), and direct object (*ruq* ‘house’ in (13), *řaka* ‘cow’ in (14)).

The unmarkedness of SOV is true not only of monoclausal constructions but also of cases of causativisation (15) and clausal complementation (16), which contains an infinitival clause:

(15) učitel- as rasuli-da kayat qwaz-a- b-una  
 teacher-ERG Rasul-LOC letter.ABS write-CAUS-N-PST  
 ‘The teacher made Rasul write a letter.’ [SOV]

Causative stems are formed by merging the base stem of a verb with that of the verb *ha-CM-ize* ‘do/make’, which contains a slot for a gender agreement marker. This whole cluster behaves like a single word from the prosodic and orthographic perspective, although this behaviour is subject to inter-speaker variation. I return to the morphosyntactic composition of the Avar verb in §2.2.5.

(16) untaras- e řirurg w-ix- ize b-ol’- ana  
 sick.man-DAT surgeon.ABS M-see-INF N-want-PST  
 ‘The patient wanted to see the surgeon.’ [SOV]

10. I am using *unmarked* here as a purely descriptive label without attributing to it any theoretical significance.

However, alternative word orders are also very frequent, with the verb's internal argument instantiated by a nominal phrase (17–19) or a clause (19–20):

- (17) b-os- un b-ugo řaka he- w ři- jas  
 N-buy-CVB N-be.PRS cow.ABS that-M:ABS man-ERG  
 'That man bought a cow.' [VOS]
- (18) avtomobil- ař b-ař- ula niže-ca t'orř:el  
 automobile-ERG N-transport-PRS we- ERG grain.ABS  
 'We transport the grain with the car.' [VSO, Gimbatov (2006: 34)]
- (19) di- e b-oř'- un b-ugo wac- as institut řuř- ize  
 1SG-DAT N-want-CVB N-be.PRS brother-ERG institute.ABS finish-INF  
 'I want (my) brother to graduate.' [SVO]
- (20) a- b-do- b heč'o= go raziř- ana dol di- e  
 this-N-that-N COP:NEG=EMPH agree-PST 3PL.ABS 1SG:OBL-DAT  
 řas ře- ze  
 daughter.ABS give-INF  
 'They agreed to give their daughter to me (as a wife) straight-out.'  
 [VSO, Gimbatov (2006: 26)]

As can be seen from the four sentences above, noun phrases can appear dislocated to the left or right periphery of the clause. For the purposes of this thesis I make the more or less standard assumption that such deviations from the SOV order are derived via overt syntactic movement, whilst also leaving open the possibility of these orders being base generated and involving no syntactic movement (see Brody & Szabolcsi 2003 and Adger, Harbour & Watkins 2009 for base-generation analyses of certain word-order patterns in Hungarian and Kiowa, respectively). We will see in the chapters to come that these disruptions of the basic word order result in particular information- and discourse-structural interpretations (which does not entail, I argue, that the movements underlying their derivation have to be triggered by dedicated information-structural features).

Returning to the issue of the default word order, it will become obvious from the exposition to follow that head finality in Avar is not restricted to verb phrases — the language can in principle be characterised as head-final.

### 2.2.3 Nouns and agreement

In Avar, like in other Northeast Caucasian languages, parts of speech can be easily distinguished morphologically. Not only is the inflectional morphology

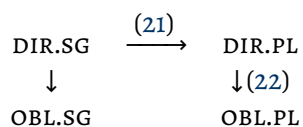


Figure 2.2: Direct and oblique stems

extremely rich in terms of the number of exponents, but there are also numerous nominal and verbal morphological categories.

Avar nominal morphology is fairly rich: there is abundant case marking as well as gender/noun class agreement on verbs, adjectives and adpositions that overlaps with number agreement. There are four noun classes: I for masculine, II for feminine, III for neuter and inanimate and IV for plural objects; in this thesis, however, rather than following the convention of using Roman numerals to refer to the relevant noun class, I shall utilise mnemonic M, F, N, PL for the purposes of clarity. Plural agreement on nominal modifiers and verbs is expressed via distinct affixes, and I am using PL for both of them. The nouns themselves have distinct stems for singular and plural, as well as oblique stems.

Absolutive is treated as the ‘direct case’, and is derived from the singular and plural ‘direct stems’; all other cases are morphologically oblique, being derived from corresponding oblique stems (see Figure 2.2 for morphological details).

The most productively used plural affix in the absolutive case is *-l*, being followed by the somewhat less productive *-abi*. In order to form the ‘direct plural’ from *wac* ‘brother’ or *ču* ‘horse’, the corresponding ‘direct singulars’ take on *-l*, whilst certain other nouns like *gali* ‘step’ or *mašina* ‘car’ use *-abi* to the same end. This is illustrated in (21).

- (21) a. *wac* ‘brother’ — *wac-al* ‘brothers’; *ču* ‘horse’ — *ču-jal* ‘horses’  
 b. *gali* ‘step’ — *gal-abi* ‘steps’; *mašina* ‘car’ — *mašin-abi* ‘cars’  
 c. a number of other, less productive, suffixes

Before the ‘oblique plural’ can be formed, the final segment of the ‘direct plural’ stem is changed to *-z-* in the following ways:

- (22) *-l* → *-z-*: *wac-a-l* ‘brother.DIR.PL’ → *wac-a-z-* ‘brother.OBL.PL’  
*-i* → *-a-z-*: *mašin-a-bi* ‘car.DIR.PL’ → *mašin-ab-a-z-* ‘car.OBL.PL’

In the singular, the direct-to-oblique transition is subject to a fair amount of variation determined for the most part by the declension class a particu-

lar noun belongs to, and the oblique stem corresponds in some cases to the ERG-marked noun. Some of the more common patterns are given in (23).

- (23)  $-\emptyset \rightarrow -s-$ : *wac*- $\emptyset$  ‘brother-DIR.SG’  $\rightarrow$  *wac-as-* ‘brother-OBL.SG’  
 $-\emptyset \rightarrow -t-$ : *jas*- $\emptyset$  ‘girl-DIR.SG’  $\rightarrow$  *jas-at-* ‘girl-OBL.SG’  
 $-\emptyset \rightarrow -i-$ : *t’ox*- $\emptyset$  ‘roof-DIR.SG’  $\rightarrow$  *t’ox-i-* ‘roof-OBL.SG’  
 ...

Given the fact that the oblique stem may fully correspond to the noun’s ergative form, as is the case for *wac* and *jas* in (23) above, there is potential for confusion with respect to the glossing conventions. In this thesis I use both OBL and ERG and rely on the ambiguity being resolved with the help of the surrounding context.

#### 2.2.4 Nominal syntax

In noun phrases, the head noun is linearly always phrase-final with respect to its modifiers such as adjectives, demonstratives or relative clauses.<sup>11,12</sup>

##### 2.2.4.1 Prenominal modifiers

Adjectives and demonstratives precede the head noun and agree with it in noun class (CM); the agreement marker is realised as a suffix, unlike the cases of agreement on the verb, on which see §2.2.5. This is exemplified in (24) for adjectives and (25) for demonstratives, the agreement marker appearing in boldface.

- (24) a. *lik’a-**w*** was ‘good-**M** boy’  
 b. *lik’a-**j*** *jas* ‘good-**F** girl’  
 c. *lik’a-**b*** *žo* ‘good-**N** thing’

11. I prefer, for the time being, to refrain from joining the debate as to whether the Avar noun phrase projects a (possibly null) determiner, thus being structurally parallel to a clause (Abney 1987), or whether the D-layer is absent from the structure altogether, since it is difficult to evaluate the impact either view may have on the main subject matter of this thesis, perhaps with the exception of determiners probably not being syntactic heads, as that would make Avar head-initial in the nominal domain.

12. I also leave the discussion of the ordering restrictions on the placement of the various elements internal to the noun phrase, as well as the mechanisms underlying these restrictions, to future work.

- (25) a. *he-w* was ‘that-M boy’  
 b. *he-j jas* ‘that-F girl’  
 c. *he-b žo* ‘that-N thing’

Adjectives and determiners, although possessing full declension paradigms in both singular and plural, always appear in their absolutive form when modifying a noun phrase regardless of the case marking on the noun, their oblique forms being reserved for standalone uses.

- (26) a.  $\chi$ wali- ca hiq'-ana  $\chi$ era-w čiči- jas- da  
 death.OBL-ERG ask- PST old- M:ABS man-OBL-LOC  
 ‘Death asked the old man.’  
 b. \* $\chi$ wali- ca hiq'-ana  $\chi$ era-s- da čiči- jas- da  
 death.OBL-ERG ask- PST old- OBL-LOC man-OBL-LOC  
 c.  $\chi$ wali- ca hiq'-ana  $\chi$ era-s- da  
 death.OBL-ERG ask- PST old- OBL-LOC  
 ‘Death asked the old one.’

As can be observed from the three sentences above, the locative case marker on *čiči-jasda* ‘man.LOC’ must not be shared by the adjective (26a–b) unless the adjective is coerced into a nominal, or substantivised (26c). In this respect Avar is different from certain other languages with adjective declension such as Russian or Estonian, where the modifying element shares the case of the noun.

It seems to me that this is the right moment to give a sketch of how this pattern can be given a very natural treatment in a Layered-Derivational framework of Zwart 2009 *et seq.*, before proceeding with the grammatical description.

The pattern to be derived is the contrast between (26a) and (26b), where the adjective  *$\chi$ era-CM* may only appear in the absolutive case when modifying a locative-marked noun. Suppose, following Zwart 2009, that the noun phrase *old man* is created, from a numeration of its own (any one of those given in (27), or something similar in spirit, depending on one’s favourite analysis of the noun phrase), in a derivational layer distinct from the one where the rest of the clause is being derived.

- (27) a.  $\{\sqrt{\text{OLD}}, \sqrt{\text{MAN}}, \alpha, n\}$   
 b.  $\{\text{old}, \text{man}\}$   
 c.  $\{\text{Adj}, \text{N}\}$

d. { $\chi$ era-,  $\dot{c}$ i}

Merge will then apply to the elements of the numeration — which I have chosen to look like (27d) — in any possible order, and create a number of hierarchically structured expressions that will, or fail to, receive an interpretation at the interfaces as outlined in §2.1 above. The crucial point here is that the numeration being exhausted, the output of merge can be put into the next derivational layer — the one corresponding to the vP, for concreteness — as a single opaque object. Its numeration is given in (28):<sup>13,14</sup>

$$(28) \quad \left\{ \text{Appl, } v, \sqrt{\text{ASK}}, \textit{pro}, \textit{death}, \begin{array}{c} \diagup \quad \diagdown \\ \chi\textit{eraw} \quad \dot{c}\textit{i} \end{array} \right\}$$

Let us make a further assumption that the argument corresponding to the addressee of the question in (26) gets its LOC case in the same derivational layer; given the numeration in (28) case assignment will most plausibly be done by the applicative head Appl, but since the complex internal structure of the noun phrase is invisible to the case assigner, the case marker is affixed to the rightmost element of the complex noun phrase (presumably in the post-syntactic component, since for the purposes of the narrow syntax such notions as ‘prefix’, ‘word’ or ‘suffix’ are devoid of any meaning).

Having presented a sketch of how the Layered-Derivations framework might provide one with a handle on the absence of case marking on Avar adjectives, let us go back to the nominal domain and consider another type of nominal modifiers, relative clauses.<sup>15</sup>

13. The sentence under consideration contains one complication in the form of *pro*-drop of the internal argument of *hiq*- ‘ask’. To see that it can be there, consider (i), where it appears, overtly, as *lalareb* *žo* ‘unknown thing’:

(i)  $\dot{\text{t}}\text{a-}$   $\text{la-}$   $\text{r-}$   $\text{e-}$   $\text{b } \dot{\text{z}}\text{o}$        $\dot{\text{t}}\text{al-}$        $\text{e-}$        $\text{s-}$        $\text{da}$        $\text{hiq}'\text{-e}$   
 know-PRS-NEG-PTCP-N thing.ABS know-PRS-PTCP-OBL-LOC ask-IMP  
 ‘What you don’t know ask the person that does.’ (Gimbatov 2006)

14. T that on its way from the first numeration to the second the adjective has transformed from  $\chi\textit{era-CM}$  to  $\chi\textit{eraw}$  by undergoing morphological agreement with the (masculine) noun. Since the current thesis sidesteps the issue of the place of agreement in the architecture of the grammar entirely, I prefer not to spell out the mechanism, suffice it to say that it is only natural for it to be confined to a particular derivational layer.

15. Another type of nominal construction — proper names — behave, from the point of view of case marking, in a fashion identical to regular modified nouns in that only the rightmost element inflects for case, all the other elements to its left in their default (i.e. absolutive) form. It should therefore be fairly straightforward to extend the Layered-Derivational analysis sketched

Relativisation, which is the subject matter of Chapter 3, proceeds with a gap in the relativisation site, meaning that relative clauses feature neither a relative nor a resumptive pronoun. The verb takes on participial morphology, the participle patterning with the other modifiers in not realising, morphologically, the case of the head noun (the underscore in 29 corresponds to the gap left by the relativisation of the agent):

- (29)        narkotikal r- ič- ul- e- w či- jas  
           drugs.ABS PL-sell-PRS-PTCP-M man-ERG  
           ‘drugs dealer’ (lit.: ‘drugs-selling man’)

As can be seen from (29), the participle has two positions for agreement markers — a prefix and a suffix, which makes the participles’ “dual” (both verbal and adjectival) nature all the more salient: the agreement prefix, as well as the agreement trigger, correspond to the ones of the verb, whereas the agreement, or perhaps concord, suffix is that of the adjective. In the example at hand the verb *CM-ič-* ‘sell’ agrees with its plural-marked internal argument, *narkotikal* ‘drugs’, whereas the participle, by virtue of modifying a masculine head noun, appears with a masculine suffix.

out above to the declension of proper names, as well, which would have to be generated in a separate derivational layer before appearing, as an atomic item, in the position where they get morphological case. This is illustrated, exclusively for presentational reasons, in (i) for the ergative and the absolutive only.

- (i) ABS: ramazan        ʃabdulat’ipov  
       ERG: ramazan(\*-as) ʃabdulat’ipov-as

As the typological evidence would suggest, however, the two structures do not have to behave on a par, since we do find languages where adjectival modifiers inflect together with the head noun and whose proper names behave as their Avar counterparts. This is illustrated in (ii) for Estonian *valge maja* ‘white house’ and the name of the incumbent President of Estonia.

- (ii) Estonian common and proper nouns
- |       |                       |                                 |
|-------|-----------------------|---------------------------------|
| NOM   | <i>valge maja</i>     | <i>Toomas Hendrik Ilves</i>     |
| GEN   | <i>valge maja</i>     | <i>Toomas Hendrik Ilvese</i>    |
| PTV   | <i>valget maja</i>    | <i>Toomas Hendrik Ilvest</i>    |
| ILL   | <i>valgesse majja</i> | <i>Toomas Hendrik Ilvesesse</i> |
| INESS | <i>valges majas</i>   | <i>Toomas Hendrik Ilveses</i>   |
| EL    | <i>valgest majast</i> | <i>Toomas Hendrik Ilvesest</i>  |
| ALL   | <i>valgele majale</i> | <i>Toomas Hendrik Ilvesele</i>  |

Moreover, the elements conventionally characterised as ‘modifiers’ do not have to behave in a uniform fashion either. To stay with Estonian, where adjectives do inflect for case together with the head noun, as shown above, it is clear that certain possessors in that language are obligatorily invariant. This heterogeneous behaviour can be taken to suggest that derivational layers need not be opaque to interface processes.

### 2.2.4.2 Case marking

Avar is a morphologically ergative language to the extent that all noun phrases, as well as pronouns, deverbal nouns and nominalisations are capable of assuming the ergative case marking. Unlike in many ergative languages, there is no tense/aspectual split in Avar ergative alignment — descriptively the direct object (and intransitive subject) always appears with nominative/absolutive case marking, except in the case of causativisation.<sup>16</sup>

The core cases, to the exclusion of the absolutive, which is the citation form, and their affixes, are represented in Table 2.2 — in addition to these Avar, as is typical of Northeast Caucasian languages, has several locative cases with distinct locative series, depicted in Figure 2.3 (Creissels 2008, Daniel & Ganenkov 2009), which are analysed, from a nanosyntactic perspective, in Pantcheva (2011). Unlike ABS, which corresponds to the direct stem, all the other case forms are based on either the oblique stem of the relevant nominal discussed on p. 20 above or, as in the case of most of the locatives, on the LOC/SUPES stem, which is in turn derived from the oblique stem (see Appendix A for examples of declension). In what follows I provide a brief outline of the uses to which some of the cases are put.

The prototypical function of the **ergative** case is to mark the subject of a transitive clause (the A-argument, to use the typological term), whereas the **absolutive** is reserved for both P- and S-arguments (the patient/theme argument in a transitive clause and an intransitive verb's only argument respectively, cf. Comrie 1978). The case marking in the transitive context is illustrated in (30a), whereas the absolutive marking on S is shown in (30b).

16. Readers familiar with Coon (2013a,b,c) might find this statement surprising, since these works cite Northeast Caucasian amongst languages featuring TAM-split ergativity. It is, to the best of my knowledge, still an open question whether the so-called *biabsolutive construction* present, to an extent, in all Northeast Caucasian languages is an instance of an aspect-based split (Forker 2012; Gagliardi et al. 2014).

(i) a. hel nuχ ha- b-ul- e- l r- ugo  
3PL.ABS way.ABS make-N-PRS-PTCP-PL PL-be.PRS  
'They are in the state of building a road. They build a road.'

b. hez nuχ ha- b-ul- e- b b-ugo  
3PL.ERG way.ABS make-N-PRS-PTCP-N N-be.PRS  
'They are building the road.' [Bokarev (1949: 113), cit. ex Forker (2012: 81)]

Given the absence of a clear-cut, precise definition of a split-ergative system I follow the tradition of Caucasian linguistics in treating Avar ergativity as unsplit. The same view is taken in a recent article on Avar relativisation (Polinsky, Gallo, et al. 2012).



CASE	EXPONENT	EXAMPLE
Ergative	-∅// -ca	(30a)
Genitive	-ul// -l	(34)
Dative	-(j)e	(35)

Table 2.2: Core cases in Avar

- (30) a.  $\chi$ an- as hes- uqe č̣i w-it'- ana  
 khan-ERG he.OBL-APL man.ABS M-send-PST  
 'The khan sent a man to him.' (Alekseev & Ataev 1997: 45)
- b. son c'ad b-ana  
 yesterday rain.ABS N-go.PST  
 'It rained yesterday.'

The absolutive case is also assigned to the nominal part of the predicate in copular constructions, as is the case for both *muhammad* 'Muhammad' and *učitel* 'teacher' in (31), where the nominal part of the predicate is *učitel*:

- (31) muhammad učitel w-ugo  
 Muhammad.ABS teacher.ABS M-be.PRS  
 'Muhammad is a teacher.'

As is typical of ERG-marking (Dixon 1994: 57), Avar ergatives also function as instrumental arguments, or, put differently, Avar displays an ERG/INS syncretism (Palancar 2009).

- (32) ebel- ał han noso-ca q'ot'- ana  
 mother-ERG meat.ABS knife-ERG chop-PST  
 'Mother chopped the meat with a knife.'

Besides the instrumental, the ergative case also appears on certain adjuncts (reason in (33a) and time in (33b)):

- (33) a.  $\zeta$ emer kwana-jał čax- al= gi unt- ulaan  
 much food- ERG tummy-PL=CNJ hurt-PST:ITER  
 'And (their) tummies hurt because of the abundance of food.'
- b. heb= go sordo-jał wac- al roq'o- r- e š:w-ana  
 that=EMPH night-ERG brothers-ABS home.OBL-PL-ILL get-PST  
 'Brothers got home that same night.' (Alekseev & Ataev 1997: 45)

Turning now to the core cases that remain (i.e. the genitive and the dative), their functions are as follows. The **genitive** marks what could very loosely be

	SUP	AP	INT	SUB	IN
ESS	- <i>da</i>	- <i>q</i>	- <i>l̥</i>	- <i>l̥ʷ</i>	- <i>CM</i>
LAT	- <i>de</i>	- <i>qe</i>	- <i>le</i>	- <i>le</i>	- <i>CM-e</i>
EL	- <i>da-sa</i>	- <i>qa</i>	- <i>la</i>	- <i>la</i>	- <i>sa</i>
TRANS	- <i>da-sa-n</i>	- <i>qa-n</i>	- <i>la-n</i>	- <i>la-n</i>	- <i>sa-n</i>

Table 2.3: Locative case series in Avar (adapted from Creissels 2008)

referred to as the possessor in a variety of constructions (e.g. possessive proper and part–whole relations, both illustrated in (34a) by a line from a poem whose authorship I have not been able to establish);<sup>17</sup> in addition to that, it is also assigned to the complement of a limited number of adpositions (on which see §2.2.4.4 below), as illustrated in (34b) for *ħaqʷaɬ* ‘about’.

- (34) a. *dir* *kʷodo-* *ca* *aħ-* *a-* *ra-* *b* *kočʷ-* *ol* *raʃ-* *abi*  
 ISG:GEN grandmother-ERG shout-PST-PTCP-N song.OBL-GEN word-PL  
*kko-* *la*  
 hold-PRS  
 ‘(I) remember the lyrics of the song sung by my grandmother.’
- b. *dayistanaɬ-* *ul* *kulturajaɬ-* *ul* *wa* *etnografijaɬ-* *ul*  
 Daghestan.OBL-GEN culture.OBL-GEN and ethnography.OBL-GEN  
*ħaqʷaɬ* *dokumentali-* *jal* *film-al*  
 about documentary-PL film-PL  
 ‘documentaries about the culture and ethnography of Daghestan’  
 (<http://hakikat.info/6-test.html>)

The (a) sentence above contains two GEN-marked noun phrases, both corresponding to possessors of sorts: *dir* ‘my’ in *dir kʷodo* ‘my grandmother’ is a true possessor, whereas *kočʷol* ‘song.GEN’ stands for the ‘whole’ in a part–whole relation. The possession relation (between Daghestan and its culture and ethnography) is expressed in (34b) as well, but there we also see that the coordinated noun phrase in the genitive case is itself the dependent of a postposition.

Finally, the Avar **dative** marks either the goal/recipient argument (35a) or an experiencer subject of certain verbs such as *CM-olʷ-* ‘love’ (35b).

17. The poem itself appears on page 5 of Issue 15 of the *Cʷumadizesul haraɬ* [Voice of Tsumada] newspaper (<http://www.mo-tsumada.ru/attachments/article/44/15-08-03-2012.pdf>).

- (35) a. di- ca kin du- e hab b-ec'- il- e- b  
 1SG:OBL-ERG how 2SG:OBL-DAT this.ABS N-repay-FUT-PTCP-N  
 'How will I give this back to you?' (Alekseev & Ataev 1997: 84)
- b. di- e mun w-oł'- ula.  
 1SG:OBL-DAT 2SG:ABS M-love-PRS  
 'I love you.'

We will see in §2.3.1 that DAT-marked subjects of experiencer verbs behave like their ergative counterparts in the agentive environments with respect to such structure-sensitive phenomena as variable binding, causativisation, control and raising.

The core cases having been introduced, a few words should be said about the locative cases, some of which are frequently used in non-locative environments (see below). Similarly to the dative, the Avar **locative** (which is, strictly speaking, SUP<sub>ESS</sub> but which I from now on gloss as LOC) can be used to mark external arguments of certain non-agentive verbs, as shown in (36a) for *CM-ix*- 'see' (some others belonging to this category are *la*- 'know', *bož*- 'believe', *kwe*- 'think' etc.). In addition to the properly locative, its other functions are marking the applicative argument of certain verbs such as *hiq*'- 'ask', see (36b), repeated from before, as well as expressing a temporal meaning (36c).<sup>18</sup>

- (36) a. di- da heb b-ix- ana  
 1SG:OBL-LOC that.ABS N-see-PST  
 'I saw it.'
- b. xwali- ca hiq'-ana xera-w či- jas- da  
 death.OBL-ERG ask- PST old- M man-OBL-LOC  
 'Death asked the old man.'
- c. heb kino b-aq- un b-uk'-ana 1992 son- al- da  
 that film.ABS N-appear-CVB N-be- PST 1992 year-OBL-LOC  
 'That film was released in 1992.'

Just like LOC, the other locative cases are often used outside of purely locative

18. Given the information on the semantics of the ergative case marker provided at the beginning of this subsection, one might wonder if the temporal semantics can be expressed by marking *son* 'year' with the ergative case. This is indeed correct:

- (i) heb kino b-aq- un b-uk'-ana 1992 son- al  
 that film.ABS N-appear-CVB N-be- PST 1992 year-ERG  
 'That film was released in 1992.'

The extent to which the distribution of temporal expressions with ERG- and LOC-case marking overlaps is to be further investigated.

contexts. In comparative constructions, for instance, the object of comparison carries an **elative** case marker to express the comparative degree (there being no comparative marking on the adjective):

- (37) wac- as- da- sa jac ħik'a- j j- igo  
 brother-OBL-LOC-EL sister.ABS good-F F-be.PRS  
 'Sister is better than brother.' (von Uslar 1889: 91)

Such locative cases as **subelative** or **apudessive** mark the oblique arguments of *ħinq'* 'fear' (38a) and *CM-alah-* 'look' (38b) respectively:

- (38) a. sundu- ĩ'- a mun ħinq'-a- ra- w  
 what.OBL-SUB-EL 2SG:ABS fear- PST-PTCP-M  
 'What are you afraid of?'  
 b. kinalgo passažir- al hesu-q r- alah-ana  
 all.ABS passenger-PL he- APES M-look-PST  
 'All passengers looked at him.'  
 ([http://hakikat.etnosmi.ru/one\\_stat.php?id=9380](http://hakikat.etnosmi.ru/one_stat.php?id=9380))

This concludes the necessarily brief introduction to the syntax of Avar noun phrases before we return to locativity in §2.2.4.4.

### 2.2.4.3 Pronouns

I begin the discussion of Avar pronouns with reflexives — a topic that I have addressed previously (Rudnev 2010, to appear, 2011).

#### Reflexive pronouns

Avar reflexives come in three varieties: a reduplicated reflexive, *ži-w=go žinca=go*, that is strictly local (39)<sup>19</sup>, a compound reflexive *ži-w=go* that can be both local and long-distance ((40) illustrates long-distance uses only); a simplex reflexive *ži-w* which is strictly non-local and (arguably) logophoric (41). The reduplicated and *go*-reflexives are both derivatives of the simplex reflexive formed by reduplication in the case of *ži-w=go žinca=go* and by adding an emphatic particle, *=go*, to form the compound reflexive *ži-w=go*.<sup>20</sup> This distributional

19. When such a reflexive is used, which means in (almost) all local contexts, its reduplicated components can come in either order.

20. As in many languages of Daghestan, Tsakhur or Bagwalal, for example, one component of the reduplicated reflexive bears the case marking of the antecedent with the other element absolutive-marked.

pattern of various reflexive-like elements holds of the majority of other North-east Caucasian languages as well (see [Testelec & Toldova 1998](#) for an overview; as for descriptions and analyses of reflexivity in separate Daghestanian languages, see [Toldova 1999](#) on Tsakhur, [Lyutikova 2001](#) on Bagwalal, [Khalilova 2009](#): §3.5 on Khwarshi).

- (39) ʃali-ca žinca= go ži- w-go č'w-ana  
 Ali- ERG self.ERG=EMPH self.ABS-M=EMPH kill- PST  
 'Ali killed himself.'

As can be seen from (39), Avar reflexive pronouns inflect for case, and when in ABS also carry a noun class marker. Since in all the other cases agreement marking is absent, and because the non-reduplicated complex reflexive can have non-local antecedents, sentences like (40) are referentially ambiguous.

- (40) ebelal- da b-ix- ana maliki- ca žindi-e= go ruq'  
 mother.OBL-LOC N-see-PST Malik.OBL-ERG self- DAT=EMPH house.ABS  
 b-a- l- e- b  
 N-build-PRS-PTCP-N  
 'Mother<sub>1</sub> saw Malik<sub>2</sub> build her<sub>1</sub>/himself<sub>2</sub> a house.'
- (41) pat'imati-ca ab- una χadižati- da žindi-e čaj t'e= jilan  
 Patimat- ERG say-PST Khadizhat-LOC self- DAT tea.ABS pour.IMP=COMP  
 'Patimat<sub>1</sub> told Khadizhat<sub>2</sub> to pour her<sub>1</sub>/\*<sub>2</sub> some tea.'

In my previous work I have argued that this three-way distinction is illusory and that Avar only has one type of reflexive — *žiwo*, which in both local and long-distance configurations is obligatorily interpreted as a bound variable. I have also argued that the simplex *žiw* is in fact a *bona fide* logophoric pronoun akin to those in African languages ([Hagège 1974](#)).

Foreshadowing the discussion of the configurational structure of the Avar clause in §2.3, the behaviour of reflexive pronouns in the contexts of variable binding will provide important evidence against the competing, non-configurational, approaches.

### Reciprocal pronouns

[Yamada \(2013\)](#) presents a very detailed description of the syntax of reciprocal binding. Even though the analysis of the behaviour of reciprocal pronouns is not of direct concern to the present thesis, I choose to dedicate a couple of remarks to them, mainly because they appear to contradict, very directly, the

well-established typological generalisation that reciprocal pronouns must be c-commanded by their antecedent.

The main reciprocalisation strategy in Avar is to employ a reciprocal pronoun *coco* ‘one another’, which is a reduplicated form of *co* — the numeral meaning ‘one’. The reciprocal pronoun inflects for case in accordance with the declension rules in §2.2.3 and 2.2.4 but not for number, in the sense that it only inflects in the plural.<sup>21</sup>

- (42) a. [šamil= gi ŷumar= gi ] coca-da r- ix- ana  
 Šamil.ABS=CNJ Omar.ABS=CNJ RECP-LOC PL-see-PST
- b. \*[šamili- da= gi ŷumari-da= gi ] coca-l r- ix- ana  
 Šamil-LOC=CNJ Omar- LOC=CNJ RECP-ABS PL-see-PST  
 ‘Šamil and Omar saw each other.’

The coordinated noun phrase is the reciprocal pronoun’s antecedent, yet in (42a) it is marked with the absolutive case, the locative case marker, which is typically assigned to subjects of certain experiencer verbs, being carried by the reciprocal pronoun itself. Similarly, when an agentive transitive verb is being reciprocalised, it is the reciprocal pronoun that carries the ergative case marking, and the absolutive case is reserved for the antecedent. Although typologically rare, this behaviour of Avar reciprocal pronouns is unlikely to shed new light on the proper treatment of ergativity since, as Yamada (2013) convincingly argues, ergative case marking on the reciprocal pronoun is distinct from the regular ergative marking. The construction itself, however, remains by and large unanalysed, although I do not see any immediate problems for semantic accounts of reciprocity such as Dotlačil (2013).

### Personal and demonstrative pronouns

Avar only has personal pronouns for the 1st and the 2nd person in both SG and PL, all of which have full inflectional paradigms with respect to case marking, just as their reflexive counterparts. Instead of 3rd person pronominals of the *he* type in English, demonstrative pronouns are employed. Crucially, and unlike *he* in English, they cannot be bound by a c-commanding quantifier phrase.<sup>22</sup>

21. Avar has two other reciprocalisation strategies — reduplication of the pronoun *coja* ‘one of the members’ and the use of *dand=*, a preverb expressing symmetrical reciprocity, — both of which are much less frequent (as well as less exotic-looking) than the one illustrated in the main text. I refer the interested reader to Yamada’s (2013) article for examples and discussion.

22. Given this duality of function of Avar demonstratives, they appear, in the examples in this thesis, glossed as either pronouns (he, she, it, *etc.*) or as demonstratives, depending on the

	M	F	N	PL
Proximal	<i>haw</i>	<i>haj</i>	<i>hab</i>	<i>hal</i>
Medial	<i>hew</i>	<i>hej</i>	<i>heb</i>	<i>hel</i>
Distal	<i>dow</i>	<i>doj</i>	<i>dob</i>	<i>dol</i>

Table 2.4: Avar demonstratives

Demonstrative pronouns vary along a variety of dimensions, the principal one being the relative-distance-from- $x$ ,  $x$  either the speaker or the addressee. From this perspective Avar demonstratives can be split into *proximal*, *distal* and *medial*, similar to the *this–that–yon* opposition in some dialects of English. Demonstratives, like reflexives, display full case-marking paradigms; unlike reflexives, however, their case forms in oblique cases distinguish noun class as well. What is crucial for the three demonstratives in this group is that the object they modify appears on roughly the same horizontal level as either the speaker or the addressee. Their absolutive forms are listed in Table 2.4.

Another dimension of variation, in addition to what can be called proximity, involves the level at which the noun phrase modified by the demonstrative is located with respect to the speaker. If the object’s location is higher than that of the speaker, *yo–CM* is used; if the relation is the opposite one, *lo–CM* is to be employed. Just as was the case with the proximal, distal and medial demonstratives, these, too, have full inflectional paradigms as far as noun class, number and case are concerned.

Avar demonstratives having been introduced, let us turn now to the remaining personal pronouns — 1st and 2nd person pronouns, or *indexicals*. Their properties are as follows.

Firstly, they can be used referentially, just like first-person pronouns in other languages, such as *I* in English, by picking up the contextually relevant referent that includes or corresponds to one of the speech act participants.

- (43) a. pavel b-ugo dir c’ar  
 Pavel N-be.PRS 1SG:GEN name  
 ‘My name is Pavel.’
- b. niže- ca ruq’ b-a l- e- b b-ugo  
 1PL.OBL-ERG house.ABS N-build-PRS-PTCP-N N-be.PRS  
 ‘We are building a house.’

---

syntactic environment where they appear.

Secondly, and probably because the language lacks 1st and 2nd person reflexives, Avar indexicals can be used locally in contexts of reflexivisation.

- (44) a. du- da mun w-ix- un w-uqe- w  
 2SG:OBL-LOC 2SG:ABS M-see-CVB M-be.PRS:PTCP-M  
 ‘Have you seen yourself?’  
 b. di- e dun w-oł’- ula  
 1SG:OBL-DAT 1SG:ABS M-like-PRS  
 ‘I like myself.’

Thirdly, these same indexicals can be interpreted as bound variables, which can be seen from the availability of ‘sloppy’ readings that obtain under ellipsis (such indexicals are also known as ‘fake indexicals’, possibly because the person features on them are not semantically interpreted).

- (45) di- ca dir tušman č’w-ana, hedingo muradi- ca= gi  
 1SG:OBL-ERG 1SG:GEN enemy.ABS kill-PST too Murad.OBL-ERG=CNJ  
 ‘I killed my enemy, and Murad did too.’  
 = Murad<sub>1</sub> killed his<sub>1</sub> enemy [binding]  
 = Murad killed my enemy [coreference]

The sentence in (45) features *dir* — a GEN-marked indexical pronoun — as the possessor in a possession relation, and the pronoun in the ellipsis site should, at least if we take the ellipsis parallelism more or less seriously, be identical, in one way or another, to the pronoun in the antecedent clause (Fiengo & May 1994). The availability of the bound-variable reading (x killed x’s enemy) in addition to the purely indexical reading whereby *dir* picks out the speaker is at least as puzzling for the purely indexical theories as the presence of the same reading in the English translation.

Finally, when embedded under attitudinal predicates such as *ab-* ‘say’ in (46), Avar indexicals can undergo a reference shift, which means that they may optionally be interpreted relative to the embedded context rather than only being sensitive to the circumstances of evaluation.

- (46) [marija dir c’ar= ] ilan ab- una he- ł.  
 Maria.ABS 1SG:GEN name= COMP say-PST she-ERG  
 ‘She said {my/her} name was Maria’

The embedded clause in (46) contains a first-person possessive pronoun *dir* ‘my’, which can be interpreted as referring to either the person uttering (46), or the speaker of the saying event, i.e. *heł* ‘she.ERG’.

Both (45) and (46) present a problem for mainstream accounts of index-



icality whereby indexicals are evaluated relative to the utterance context (D. Kaplan 1989) simply because it is true of neither case. In (45) the  $\phi$ -features on the pronoun do not seem to be interpreted at all, whereas in (46), on the non-canonical reading, the possessive indexical *dir* ‘my’ embedded under an attitude predicate is interpreted relative to the embedded context rather than the utterance context.

#### 2.2.4.4 Adpositions

We have seen in §2.2.4 that a variety of relations, mostly locational with respect to space, find their expression in Avar in the case morphology. In addition to the locative case series (illustrated in Table 2.3 on p. 27), however, the language also has a different sort of adpositions — postpositions — expressing locative, temporal, causal relations as well as some others. Besides these, Avar has various adverbs, including those with locative and temporal semantics.

The postpositions themselves are mostly homonymous with the adverbs of the same semantics, and have three important properties.<sup>23</sup>

First, postpositions assign case to their complement, which is illustrated in (47) below. The assigned case is predominantly LOC, although we have already seen a genitive-assigning postposition — *ħaq’atul* ‘about’ — during our discussion of the genitive case on p. 27 above.

- (47) *γorl’* ‘under’  
 zobal- da *γorl’* b-ugo ra’  
 sky.OBL-LOC under N-be.PRS earth.ABS  
 ‘The earth is under the sky.’ (von Uslar 1889: 231)

Next, postpositions undergo agreement with the ABS-marked argument in the clause, just like the verbs do, rather than an ABS-marked dependent within their c-command domain (provided they have a corresponding slot, see (48) for an illustration). Incidentally, this agreement pattern extends to some of the locative cases, such as INESS and ILL, as shown in the table.

23. The rule of thumb in distinguishing adverbs from postpositions is to establish whether the element under consideration is used in a particular environment with a dependent or on its own. If there is a dependent, we are dealing with a postposition, the standalone uses being characteristic of adverbs. This makes these adpositions similar to their counterparts in the Germanic languages, where superficially one and the same lexical item can be characterised as a preposition in one set of context (i.e. when having a dependent) and as a particle in another.

(48) *ask'o-CM* 'at'

- a. dun w-ugo řanč'i- da ask'o-w  
 1SG:ABS M-be.PRS rock.OBL-LOC near- M  
 'I am at the rock.'
- b. niř r- ugo řanč'i- da ask'o-r  
 1PL:ABS PL-be.PRS rock.OBL-LOC near- PL  
 'We are at the rock.'

(von UsLAR 1889: 232)

Both the verb (*CM-uk'*) 'be' and the postposition carry a noun class marker by virtue of having undergone agreement with the absolutive subject (masculine in (a) and plural in (b)). Observe that the plural marker — a suffix — on the postposition, *-r*, is not the same one as we saw earlier with adjectives, demonstratives and participles.

Finally, Avar postpositions can themselves inflect for case, or at least change the locative series, as can be glimpsed from (49).

- (49) a. řumari- ca limer bořuda-qa řori'- e b-ač- ana  
 Omar.OBL-ERG child.ABS stairs- APEL under-LAT N-lead-PST  
 'Omar helped the child down the stairs.'
- b. di- da ask'o-sa Ø-ana dow  
 1SG:OBL-LOC near- INEL M-go.PST he.ABS  
 'He went away from me.'

(von UsLAR 1889: 233)

The meaning contributed by the postpositions in (49) has changed from the purely locative one to a directional one, the relevant directional relations being "towards-the-object" in (49a), where we also see a change in case-marking on the postposition's complement (from LOC to APEL), and "from-the-object" in (49b).

This completes the presentation of the nominal domain. We can now turn to the Avar verb.

### 2.2.5 Verb

The present subsection is a brief description of the morphosyntax of the Avar verb. We begin by considering the categories constituting the extended projection, to use Grimshaw's (1997) term, of the verb (§2.2.5.1), proceeding next, in §2.2.5.2, to review those derivational affixes which underlie the composition of deverbal forms, such as nominalisations (masdars), participles and converbs, of relevance for the subject matter of this thesis. Appendix B contains derivational schemata for most of the synthetic forms as well as examples of those

forms for several common verbs featuring in this thesis.

To return to agreement, which has already been touched upon in §2.2.3 from the perspective of the noun phrase, Avar verbs are not uniform with respect to its morphological realisation. This non-uniformity is reflected in both the presence of an (overt) agreement marker and its position inside the verbal form in question. It should be added that, as the foregoing exposition has illustrated all of the patterns described below, I am not adding further examples.

As regards the presence of an agreement marker, a descriptive generalisation has it that, in the overwhelming majority of cases, verbs with consonant-initial stems (e.g. *la-* ‘know’, *čwa-* ‘kill’, *qwa-* ‘write’, *ʔe-* ‘give’ etc.) systematically fail to display agreement, the exception to this generalisation being *ha-CM-* ‘do’, where the agreement marker does appear overtly. That the stem should begin with a vowel, on the other hand, is not sufficient for the verb to carry an agreement marker, as the case of, for instance, *ab-* ‘say’ or *aħ-* ‘shout’, makes clear. But more often than not, verbs with vowel-initial stems, such as the already familiar *CM-ix-* ‘see’, *CM-oʔ-* ‘like’, *CM-ič-* ‘sell’ or *CM-uk-* ‘be’, tend to come equipped with an agreement marker.

The agreement marker itself, if present, is most of the time realised as a prefix — we have seen numerous examples of this already. It is much rarer that the marker of agreement on the verb takes the shape of a suffix, an example of such a pattern being *ha-CM-* ‘do’ as well as all of the causatives by virtue of their being built with its help.<sup>24,25</sup>

### 2.2.5.1 Verbal categories

Various verbal categories can be expressed in Avar as either synthetic or analytic forms of the verb, the distinction being somewhat blurred in certain cases. One of these unclear cases is causativisation, which, as already mentioned, was formed by combining a lexical verb with the “light” verb *ha-CM-* ‘do’. Recall from §2.2.2 the existence of a certain degree of inter-speaker variation with regards to the status of such constructions: one set of speakers treat the “light” verb as having incorporated into the more complex, and synthetic, causative

24. It is unlikely that the reasons precluding the agreement marker from appearing as a suffix lie in the particular shape of the marker itself, since the marker’s default place on, for instance, adpositions is the suffixal position, as we have seen in §2.2.4.4.

25. Other verbs with suffixal noun class markers include *tʔi-CM-it-* ‘spread’ and *tʔo-CM-it-* ‘see off’, both of which, in fact, consist of a preverb (*tʔi* and *tʔo* respectively) and *CM-it-* ‘send’ (Testelec 2008).

verb form, with others viewing the “light” verb as a full-fledged auxiliary, at least from the point of view of prosody. Let us review some of the categories starting with those that appear as synthetic forms.

### Synthetic verb forms

Since we have already discussed causativisation, let us stay in what can, perhaps with a stretch, be called the *v*-domain of the clause, which is constituted, together with causativising morphemes, of markers of certain flavours of aspect.<sup>26</sup>

The **inceptive** aspect is marked by adding the suffix *-l-* to the stem, the stem typically being a noun. The meaning conveyed is one of starting a new action.<sup>27</sup>

- (50) dos- ul pikru rit'uq-l- ana  
 he.OBL-GEN opinion.ABS true- INC-PST  
 ‘His opinion was confirmed.’

The inceptive voice marker in (50) attaches to *rit'uq* ‘true’, verbalising it.

Another aspect realised synthetically is the **iterative** (51), which becomes **antipassive** when a transitive verb is involved (51b). The markers signalling such a transformation are many, the choice depending partly on the phonological make-up of the stem of the verb in question.

- (51) a. muradi-ca t'ex c'al- ul- e- b b-ugo  
 Murad-ERG book.ABS read-PRS-PTCP-N N-be.PRS  
 ‘Murad is reading a book.’  
 b. murad (\*t'ex) c'al- d- ul- e- w w-ugo  
 Murad.ABS book.ABS read-ITER-PRS-PTCP-M M-be.PRS  
 ‘Murad is studying.’

The addition of an iterative morpheme to *c'al-* ‘read’ detransitivises it, which is reflected in the case marking on the argument.

We return to the remaining aspectual distinctions (progressive, perfect etc.) shortly when discussing the analytic verbal forms on p. 40.

26. I am not including the category of voice here because such voice, or diathesis, alternations, as, for instance, passivisation do not exist in Avar.

27. It is not entirely clear to me why the inceptive aspect should belong to the grammatical categories of the verb, since one of its most obvious properties is changing the word class from nominal/adjectival to verbal.

Moving on, and onto the inflectional domain, Avar **tense** markers can be split into **present** (traditionally referred to as *general* in the tradition of Caucasian linguistics), **future** and **past** (also frequently alluded to as *aurist*). Exponents for these vary depending, once again, on the conjugation class (see §B.2 for some examples of this variation); besides, certain verbs like *CM-uk'*-‘be’ have a stem alteration in some of the tense forms. The **infinitive**, being distinct from the root, is also marked morphologically, the exact shape of the marker also being dependent on the conjugation class (see sentences (59) for illustrations).<sup>28</sup>

- (52) a. dun mac'ał- ul ʃalimči w-ugo  
 ISG:ABS language.OBL-GEN scholar.ABS M-be.PRS  
 b. dun mac'ał- ul ʃalimči w-uk'-ana  
 ISG:ABS language.OBL-GEN scholar.ABS M-be- PST  
 c. dun mac'ał- ul ʃalimči w-uk'-ina  
 ISG:ABS language.OBL-GEN scholar.ABS M-be- FUT  
 ‘I am/was/will be a linguist.’

What (52) shows is that the present tense of *CM-uk'*- ‘be’ has a stem, ending in *-g*, that is different from the one used to host the past and future inflection. The tensed forms can themselves serve as stems for a number of verbal forms, a summary of which can be found in §B.1.

In addition to tense, the category of **mood** manifests itself in Avar, being represented, besides the indicative, by the **imperative** (53a), **prohibitive** (53b), three different **optatives** (54), and **irrealis** (55).

Forming the imperative depends on both the verb’s conjugation class and its transitivity; as for the prohibitive, its marker, *-ge*, is invariant and attaches to the verb’s present tense stem:

- (53) a. a! c'ał- e!  
 go.IMP read-IMP  
 ‘Go! Read!’  
 b. un- ge! c'alu- ge!  
 go.PRS-PROH read.PRS-PROH  
 ‘Don’t go! Don’t read!’

28. Forker (2014) describes the general tense as expressing ‘characteristic properties or habitual situations’ without having a specific temporal reference. Since the tense marker that traditional grammars categorise as general in Avar nevertheless does have a specific reference to the present, I gloss it as PRS. The difference between it and the ‘regular’ present tense are most noticeable with the verb *CM-uk'*- ‘be’, which the reader is invited to consult in §B.2 of Appendix B.

Avar possesses three distinct forms of the optative, i.e. the forms intended at expressing the wish of the speaker, the differences between them remaining largely unexplored (Testelec 2008). The three forms are exemplified, in (54), with *CM-aq*'- 'fall'.

- (54) a. ʔolo- ʔa b-aq- ad  
 saddle.OBL-SUBEL N-fall-OPT  
 'May you die!' (lit.: 'May you be taken from under the saddle!')
- b. k'ijab=go ber b-aqa-ja- w  
 both= EMPH eye.ABS N-fall- OPT-M  
 'May your eyes both fall out!'
- c. talaw b-aqa-gi  
 ulcer N-fall- OPT  
 'May you be ridden with ulcers!'

A significant subset of contexts featuring an OPT-marked verb can be classified as maledictions.

We round off the discussion of the category of mood with *irrealis* frequently used in conditionals, as (55) demonstrates.

- (55) b-os- a- ra- b-ani bibliotekajal-da- sa heb t'ex  
 N-take-PST-PTCP-N-COND library.OBL- SUP-EL that.ABS book.ABS  
 hik' b-uk'-ina- an  
 well N-be- FUT-IRR  
 'If (you) took that book from the library, that would be lovely.'

(Alekseev & Ataev 1997: 59)

There remains one category that we have not addressed yet, and that is **polarity**. I defer the discussion of negation, chiefly for presentational reasons, until §2.2.5.3, and proceed directly to an overview of the analytic forms.

### Analytic verb forms

The two main groups in which the analytic forms can be divided are **aspect** and **modality**. I discuss them both in turn.

The *perfect* is formed by combining the converbial form of the lexical verb with *CM-uk*'- 'be'. If the auxiliary is in the present tense, the meaning that results is very similar to the resultative (56a), and if past, as in (56b), we are dealing with the pluperfect.

- (56) a. dun ħalt'-ize w-ač'- un w-ugo  
 1SG:ABS work-INF M-come-CVB M-be.PRS  
 'I have come here to work.'
- b. amma co nuḡaḡ hes di- qe kayat b-ač'- un  
 but one time.ERG he.ERG 1SG:OBL-APL letter.ABS N-come-CVB  
 b-uk'-ana  
 N-be- PST  
 'But he had once brought me a letter.'
- [\(http://www.magiarulal.com/40/\)](http://www.magiarulal.com/40/)

The **progressive** form, which can both be present (57a) and past (57b), consists of a present participle of the lexical verb and *CM-uk'*- 'be' in the present or past tense respectively.

- (57) a. jacaḡ t'ex c'al- ul- e- b b-ugo  
 girl.ERG book.ABS read-PRS-PTCP-N N-be.PRS
- b. jacaḡ t'ex c'al- ul- e- b b-uk'-ana  
 girl.ERG book.ABS read-PRS-PTCP-N N-be- PST  
 'The girl is/was reading a book.'

As regards the order of the elements of the analytical forms, the auxiliary need not always follow the lexical verb, as in (57), and can appear in a variety of positions in the clause:

- (58) a. jacaḡ t'ex b-ugo c'al- ul- e- b  
 girl.ERG book.ABS N-be.PRS read-PRS-PTCP-N
- b. jacaḡ b-ugo t'ex c'al- ul- e- b  
 girl.ERG N-be.PRS book.ABS read-PRS-PTCP-N

The meaning of the Avar progressive is similar to the English progressive. The much bigger issue of Northeast Caucasian verbal aspect has received very little attention in the literature.

Finally, **prospective future** is formed by combining the infinitive of the lexical verb with the present auxiliary to give the meaning similar to that of the *futur immédiat* in French, i.e. to describe an action or event that is about to happen. Alekseev & Ataev (1997) and Testelec (2008) report this form as contributing a deontic flavour, similarly to the *is-to* construction in English.

- (59) q'isas b-os- ul- e- b q'o b-ač'- ine b-ugo  
 reckoning.ABS N-take-PRS-PTCP-N day.ABS N-come-INF N-be.PRS  
 'The day of reckoning is going to come.'

In (59) the relevant form is *bač'ine bugo*.

Turning to **modality**, it is customary for the modal predicates such as *CM-ol'* 'want', *kke-* 'have to' etc. to combine with the infinitive of the lexical verb, as shown in (60a) for the epistemic reading of *beh-* 'may', and in (60b) for its deontic interpretation.

- (60) a. anoreksijał unt- ize beh- ula hit'ina-l ħimal= gi  
 anorexia.ERG suffer-INF may-PRS small- PL children.ABS=EMPH  
 'Small children, too, may suffer from anorexia.' (<http://hakikat.info/651-bercinliyalda-hadur-rekerulago-scholeb-unti.html>)
- b. hedina-b bak'al- da ħalt'-ul- e- w či č'uħara- w  
 such- N place.OBL-LOC work-PRS-PTCP-M man.ABS arrogant-M  
 w-uk'-ine beh- ula- ro  
 M-be- INF may-PRS-NEG  
 'Someone working at such a place must not be arrogant.'

Having introduced some of the forms of the Avar verb, let us take a brief look at some of the language's derivational morphology, and more specifically to various deverbal forms. We will, however, touch on both the modals and the infinitives again when discussing agreement patterns in the context of clausal complementation.

### 2.2.5.2 Derivational affixes

It is a well-established fact with an impressive amount of typological evidence that verbs may serve as a basis to derive other word classes such as (deverbal) nouns, participles, which in traditional grammar are frequently described as deverbal adjectives (62), and converbs, perhaps better known as adverbial participles or verbal adverbs. An example of a nominalisation can be seen in (61), from Dutch.

- (61) a. een artikel schrijv-en [Dutch]  
 DET article write- INF  
 '(to) write a paper'
- b. het schrijven van een artikel  
 DET write.NMLZ of an article  
 'the writing of a paper'

A progressive participle is illustrated in (62), from English:

- (62) a running boy



Finally, an example of a converb is presented in (63), this time from Russian.

- (63) na- pisa- v pis'mo on uexal domoj [Russian]  
 PFV-write-CVB letter.ACC he.NOM went home  
 'Having written the letter, he went home.'

Avar allows all of these kinds of derivation. Deverbal nouns, which I refer to as **masdars**, following the tradition of Caucasian linguistics, correspond, morphologically, to the verb's root followed by the thematic vowel (further followed, for some verbs and declension classes, by a glide or a nasal sonorant).

- (64) aħmadi-ca gordu ganč'i-ca b-ek- i ħik'a- b žo  
 Ahmed-ERG window.ABS stone-ERG N-break-MSD good-N thing.ABS  
 b-ugo  
 N-be.PRS  
 'That Ahmed broke the window with a stone is a good thing.'

The masdar in (64) is *b-eki*, which is derived from *CM-ek-* 'break' by adding the thematic vowel *-i*. The Avar masdars' verbal characteristics are reflected in their ability to undergo agreement with the absolutive noun phrase in their c-command domain (as made evident by the neuter agreement prefix *b-* on the masdar above). The masdars are fully nominal, however, in their external syntax, as it were, i.e. the properties and categories they may display — such as case marking — depending on the surrounding syntactic context. Since this chapter is intended to be but an introduction, I choose to move on to Avar participles now and discuss both internal and external syntax of masdars in §3.2 of the next chapter.

Avar **participles**, too, display heterogeneous properties in being verbal on the one hand (e.g. by undergoing agreement as if they were regular verbs) and either adjectival or nominal on the other.

- (65) narkotik-al r- ič- ul- e- b bak'  
 drug- PL:ABS PL-sell-PRS-PTCP-N place.ABS  
 'the place where the drugs are (being) sold'

The participial clause in (65) occupies the prenominal modifier position. Morphologically Avar distinguishes between present, past and future tense participles, and the participle *ričuleb* 'selling' in (65) contains the present tense morpheme *-ul-* that was introduced during the discussion of the category of tense on p. 38. The syntactic properties of participial clauses are addressed in detail in chapter 3.

Verbal adverbs, or **converbs**, in Avar are derived by attaching dedicated

markers — either affixes or particles — to a selection of verbal or deverbal stems. These forms are typically interpreted as heading adjunct clauses of all manners and kinds. Let us consider (66) as illustrating temporal adjuncts (66a), as well as those of condition (66b) and reason (66c). I have bracketed the clausal adjuncts to enhance readability.

- (66) a. [roq'o- w w-uk'-ago ] c'al- ila dica t'ex  
 home-M M-be- CVB read-FUT 1SG:ERG book.ABS  
 'I shall read the book when I am home.' (von Uslar 1889: 139)
- b. [mun hani-w w-ugo- ni ] dun= gi w-uk'-ina  
 2SG:ABS here-M M-be.PRS-CVB:COND 1SG:ABS=CNJ M-be- FUT  
 'If you are here, so am I.' (von Uslar 1889: 143)
- c. [hani-w w-uge- lul ] ha-b-ula dica heb  
 here-M M-be.PRS-CVB do-N-PRS 1SG:ERG that.ABS  
 'I do this because I am here.' (von Uslar 1889: 140)

The converbs in (66) differ from one another both with respect to the particular affixes (*-go*, *-ni* and *-lul* respectively, *-lul* apparently being the genitive-marked form of the present participle) and the stem to which those markers attach. The reader is invited to consult §B.1 of appendix B to see which converb derives from which stem.

### 2.2.5.3 Negation

The discussion of the category of polarity, and of negation more specifically, has had to wait until the present subsection because, morphologically speaking, it relies heavily on the familiarity with deverbal forms described in §2.2.5.2.

#### Sentential negation

Sentential negation in Avar can be realised by a number of distinct markers, depending on the tense of the event being negated. Suffixal *-ro*, for example, is added to present or future tensed forms to negate present (67) or future events (68).

- (67) heb aptekajal- da- san b-ič- ula-ro  
 that.ABS pharmacy.OBL-LOC-TRANS N-sell-PRS-NEG  
 'They do not distribute it through the pharmacy.'  
<http://hakikat.info/276-samozdrav-gunar-tiokiab-apparat.html>

- (68) dica hab mina kidanigi b-ič- ila- ro  
 ISG:ERG this house.ABS ever N-sell-FUT-NEG  
 ‘I shall never sell this house.’  
 ([www.youblisher.com/files/publications/64/378082/pdf.pdf](http://www.youblisher.com/files/publications/64/378082/pdf.pdf))

It is perfectly transparent, then, that the form, or stem, hosting the negation marker is the one of the tensed verb.

The same negation marker may not be used, however, if one were to negate a past event (69a). Moreover, not only must the negation marker be a different one, *-č'o* instead of *-ro*, the stem that it attaches to is, unexpectedly, that of the masdar, and hence unmarked for tense (69c), whereas the combination of *-č'o* with the past tense stem is considered unacceptable (69b).

- (69) a. \*dica hab mina b-ič- ana-ro  
 ISG:ERG this house.ABS N-sell-PST-NEG  
 b. \*dica hab mina b-ič- ana-č'o  
 ISG:ERG this house.ABS N-sell-PST-NEG  
 c. dica hab mina b-ič- i- č'o  
 ISG:ERG this house.ABS N-sell-MSD-NEG  
 ‘I did not sell this house.’

The two negation markers bear a certain degree of resemblance to the two negative copulas in the present tense, *guro* and *heč'o*, to which I return shortly.<sup>29</sup> These seem to be described in the literature as suppletive stems of *CM-uk'*-‘be’ (Alekseev & Ataev 1997), the present-tense copula being, for some reason, incompatible with the non-past negation marker *-ro*:

- (70) a. dir c'ar pavel b-ugo  
 ISG:GEN name.ABS Pavel.ABS N-be.PRS  
 ‘My name is Pavel.’  
 b. \*dir c'ar muḥamad b-ugo- ro  
 ISG:GEN name.ABS Mohammed.ABS N-be.PRS-NEG  
 c. dir c'ar muḥamad guro  
 ISG:GEN name.ABS Mohammed.ABS COP:NEG:PRS  
 ‘My name is not Mohammed.’

29. See Rudnev (in prep.) for an analysis of the *-č'o* marker as projecting a locative-like structure (cf. Salanova 2007, 2011 for a similar approach to the morphosyntax of negation in Mebengokre), in which *-č'o* is a variant of the locative negative copula *heč'o* that takes two dependents: a vP-level nominalisation (i.e., a masdar clause) and an abstract location. The second negation marker, *-ro*, is analysed as a regular sentential negation marker.

The distribution of the two negative copulas requires further investigation. Testelec (2008) cites a hypothesis due to Kalinina (1993), and based on the data from the Andalal dialect, whereby predicational, identificational and characterisational copular clauses allow both negative copulas, as opposed to the possessive and locative ones, where only *heč'o* is acceptable. Alekseev & Ataev (1997), on the other hand, name contrastivity as the main factor underlying the use of *guro*. Their examples do not, however, contradict Kalinina's (1993) generalisation. To illustrate the pattern, I give two predicational sentences in (71), *guro* and *heč'o* being allowed in both cases.<sup>30</sup>

- (71) a. muḥamad učitel guro / heč'o  
 Muhammad.ABS teacher.ABS COP:NEG:PRS COP:NEG:PRS  
 'Muhammad is not a teacher.'
- b. he- w či lik'a- w guro / heč'o  
 that-M man.ABS good-M COP:NEG:PRS COP:NEG:PRS  
 'That man is not good.'

An illustration of the second part of Kalinina (1993) observation is provided in (72a), which involves a negated locative statement, and (72b) a negative possessive.

- (72) a. rasul šahar-al- da heč'o / \*guro  
 Rasul.ABS city- OBL-LOC COP:NEG:PRS COP:NEG:PRS  
 'Rasul is not in town.'
- b. ʕali-l ʕadi heč'o / \*guro  
 Ali- GEN wife.ABS COP:NEG:PRS COP:NEG:PRS  
 'Ali hasn't got a wife.'

One other set of environments in which *heč'o* is systematically chosen over *guro* are negated analytic tense forms whose affirmative counterpart would have contained the auxiliary in the present tense (*CM-ugo*) (Alekseev & Ataev 1997: 77). This is shown in (73).

- (73) amma niḥ-ca žaq'a haḥ- ul b-ic- ine heč'o / \*guro  
 but 1PL- ERG today this.OBL-GEN N-speak-INF COP:NEG:PRS  
 'But we are not going to discuss this today.'

(<http://maarulal.ru/2009/12/26/>)

The analytic form of the verb in (73) corresponds to the one for prospective future, which normally consists of an infinitive and an auxiliary, as discussed

30. The judgements as presented here differ from the ones in Testelec (2008), where *heč'o* is marked as unacceptable in sentences (72a–b).

in §2.2.5.1 on p. 40. When negated, the auxiliary must appear as *heč'o* and may not be realised as with *guro*.

Besides being used as the negative copula in the present tense, *guro* serves as the marker of constituent negation, to which we now turn.

### Constituent negation

There are two things to be remembered about constituent negation in Avar. The first one is that it is marked by inserting *guro* to the right of the focused constituent. Secondly, and most importantly, the verb may no longer appear in its finite form and must become a participle instead. Examples of this are given in (74), where I have also included sentential negation to make the paradigm complete.

- (74) a. jac            j- ač'-    ana  
           sister.ABS F-arrive-PST  
           '(My) sister has arrived.'
- b. jac            j- ač'-    in-    č'o  
           sister.ABS F-arrive-MSD-NEG  
           '(My) sister has not arrived.'
- c. jac            guro j- ač'-    a-    ra-    j / \*j- ač'-    ana  
           sister.ABS NEG F-arrive-PST-PTCP-F    F-arrive-PST  
           'It was not my sister that arrived.'

The relevant contrast is between (74a), where the verb carries a past tense marker (i.e. is finite), and (74c), where the same verbal form is disallowed. The only other element distinguishing the two sentences is the presence of the constituent negation marker *guro* in (74c) and its absence in (74a). We shall keep coming back to this issue in all of the subsequent chapters, ultimately reaching the conclusion that sentences involving constituent negation, as well as a number of other focus-sensitive expressions, project a biclausal cleft-like structure around a relative clause, participialisation being, in Avar, the hallmark of relativisation. This proposal is put forward in chapter 5.

### Negating an infinitive

An additional negation strategy is involved when one attempts to use a negative infinitive, as deciding to group it with sentential or constituent negation is a non-trivial matter. The verbal form is, morphologically speaking, a temporal converb such as the ones we have seen in §2.2.5.2, and whose meaning can be

loosely paraphrased as ‘whilst in the process of P’, P being a placeholder for whatever verb happens to be negated.<sup>31</sup> The more or less literal translation of (75), then, is something along the lines of *Father allowed me to be in the process of not going to school*, with (76) meaning *Murad allowed his wife to put the khinkal in the state of not being made*.

- (75) insuca w-ič- ana dun školal- de Ø-in- č'o= go  
 father.ERG M-let-PST 1SG:ABS school.OBL-LAT M-go.MSD-NEG=PRT  
 w-uk'-ine  
 M-be- INF  
 ‘Father allowed me not to go to school.’

- (76) muradi- ca b-ič- ana č'užujał- e ha- b-i- č'o= go te- ze  
 Murad.OBL-ERG N-let-PST wife.OBL-DAT make-N-MSD-NEG=PRT put-INF  
 χink'al  
 khinkal.ABS  
 ‘Murad allowed his wife not to make khinkal.’

Variants of (75) and (76) containing any one of the negation markers attached directly to the infinitive that is being negated are unacceptable. The three sentences below are intended as expressing the same meaning as (75), and speakers have no doubts rejecting them all.

- (77) a. \*insuca w-ič- ana dun školal- de Ø-ine guro  
 father.ERG M-let-PST 1SG:ABS school.OBL-LAT M-go.INF NEG  
 b. \*insuca w-ič- ana dun školal- de Ø-ine- ro  
 father.ERG M-let-PST 1SG:ABS school.OBL-LAT M-go.INF-NEG  
 c. \*insuca w-ič- ana dun školal- de Ø-ine- č'o  
 father.ERG M-let-PST 1SG:ABS school.OBL-LAT M-go.INF-NEG  
 (‘Father allowed me not to go to school.’)

All of these sentences are identical but for the actual negation marker: (77a) attempts to treat the negation as constituent negation by combining the infinitival clause with *guro*, whereas (77b) and (77c) append a sentential negation marker — non-past and past, respectively — to the verb carrying the infinitival morphology. The distribution of various negation markers in Avar is, though fairly peculiar, orthogonal to the main issue of this thesis.

31. I am grateful to Charlotte Lindenberg (p.c.) for posing this question.

### Wh-questions

From the point of view of overt morphosyntax, Avar questions have at least one aspect in common with constituent negation, that aspect being the requirement that the verb may not remain in the same finite form as in the question's declarative counterpart but should instead appear as a participle whenever a *wh*-phrase is present (cf. the unacceptable (78a) with (78b)).

- (78) a. \*kida jac j- ač'- ana  
 when sister.ABS F-arrive-PST  
 b. kida jac j- ač'- a- ra- j  
 when sister.ABS F-arrive-PST-PTCP-F  
 'When has (your/my/...) sister arrived?'

As for the position of the *wh*-phrases, these often appear at the left edge of the clause, as just illustrated. To anticipate the discussion in Chapter 4, this position does not correspond to the top link of an  $\bar{A}$ -movement chain, instead being the predicate position of a pseudo-cleft.

The left-edge position, however, is not the only one available to Avar interrogative expressions, which can also remain *in situ*:

- (79) a. mun š:aj řod-ul- e- j  
 2SG:ABS why cry- PRS-PTCP-F  
 'Why are you crying?'  
 b. du- ca niž bertał- e š:aj aħ- i- č'- e- l  
 2SG-ERG 1PL:ABS wedding-DAT why call-PST-NEG-PTCP-PL  
 'Why didn't you invite us to the wedding?'  
 c. di- ca kin du- e ha- b b-ec'- il- e- b  
 1SG-ERG how 2SG-DAT this.ABS-N N-repay-FUT-PTCP-N  
 'How will I give this back to you?' (Alekseev & Ataev 1997: 84)

Interrogative phrases, moreover, can appear at the right edge of the clause, as evidenced by the acceptability of (80):

- (80) du- e řuh- a- ra- b žo š:i- b  
 2SG-DAT happen-PST-PTCP-N thing.ABS what-N  
 'What happened to you?' (*ibid.*)

Multiple *wh*-questions are allowed, although reportedly dispreferred, and because of the preverbal surface positions of *wh*-elements it is often hard to see if any movement has taken place — a problem also characteristic of questions containing but one interrogative expression. I return to multiple *wh*-questions

in §4.5.1.<sup>32</sup>

- (81) li- ca š:i- b du- da ab- u- ra- b  
 who-ERG what.ABS-N 2SG-LOC tell-PST-PTCP-N  
 ‘Who told you what?’ (Alekseev & Ataev 1997: 85)

Evidently, (81) above can in principle be understood as having several possible structures, i.e. with either one, both or neither one of the *wh*-phrases undergoing  $\bar{A}$ -movement. As just mentioned, I argue in Chapter 4 that Avar *wh*-questions do not involve  $\bar{A}$ -extraction of *wh*-phrases, regardless of the number of such elements in one given question.

Coming back to participialisation, it is not, strictly speaking, mandatory that every verb in every question should appear as a participle. Instead, the participial morphology on the verb seems to mark the scope of a question, as shown immediately below:

- (82) jac- al- da ła- la- ro [š:iw w-ač'- a- ra- w]  
 sister-OBL-LOC know-PRS-NEG who.ABS M-arrive-PST-PTCP-M  
 ‘Sister does not know who arrived.’

The matrix verb in (82) appears in the present tense, giving rise to the embedded question reading; the verb in that question, on the contrary, must be a participle. This sentence containing an embedded clause, it seems an appropriate place to provide an overview of the strategies of clausal embedding available to an Avar speaker.

#### 2.2.5.4 Clausal complementation

Avar allows for clausal complements to be embedded under the matrix verb via two distinct strategies — finite (with a complementiser) and non-finite. Unlike in languages like English, the use of the finite strategy of clausal embedding is severely restricted: it is only allowed for reported speech. All other embedding is non-finite, with the verbs in embedded clauses appearing as infinitive, *masdars*, participles, and, in the case of clausal adjuncts, as *converbs*. In the examples that follow the clausal complements are bracketed to facilitate their identification.

32. It should be emphasised that I have been unable to verify the marginal acceptability of multiple questions reported by Alekseev & Ataev (1997), as speakers readily accept, and produce them during elicitation, so long as the necessary context is provided.



### Non-finite embedded clauses

Non-finite embedded clauses can be further classified into infinitival (83), nominalised (84) and participial (82) varieties. Their subject position can be filled by either a null pronoun (ignoring for the moment the null pronoun's status as a PRO or a *pro*) or an overt noun phrase.<sup>33</sup>

- (83) a. untaras- e [χirurg w-ix- ize ] b-oʔ- ana  
 sick.man-DAT surgeon.ABS M-see-INF N-want- PST  
 'The patient wanted to see the surgeon.'
- b. dow [čord- eze] Ø-a- na  
 he.ABS swim-INF M-go-PST  
 'He's gone swimming.'

Embedded clauses behave very much like regular arguments, which can be seen in (83a), where they trigger gender agreement on the matrix verb. More concretely, the embedded verb in (83a), CM-*ixize* 'see', agrees with the absolutive object NP, *χirurg* 'surgeon' thus taking the masculine agreement prefix. The matrix verb, too, has a slot for gender agreement, which is filled by the neuter prefix.

Certain matrix predicates are comparatively flexible with respect to the kind of clause they can take as their dependent. The verb *la-* 'know', for instance, is compatible with questions, as we have just seen in the preceding subsection, as well as masdars, as shown in (84a). It goes without saying that, just like *know* in English, *la-* 'know' can combine with non-clausal noun phrases.

- (84) a. dos-da łalaroan heb kayat heresija-b b-uk'-in  
 he- LOC know.PST.ITER.NEG that letter.ABS fake- N N-be- MSD  
 'He didn't know that the letter was fake.'
- b. di- da r- ix- ana heł-ul kweral=gi sorod-ul- e- l  
 1SG-LOC PL-see-PST she-GEN hands=CNJ shake-PRS-PTCP-PL  
 r- uk'-in  
 PL-be- MSD  
 'And I saw that her hands were trembling.' (Alekseev & Ataev 1997: 105)

33. It is possible, in most cases, to identify which clause a particular noun phrase belongs to, as Avar displays the phenomenon similar to backward raising or backward control familiar from Tsez (Polinsky & Potsdam 2002, Potsdam & Polinsky 2012), by relying on the class of the verb. In (83a) the subject is in the dative case presumably assigned by the matrix verb CM-*oʔ-* 'want'. Had it been located inside the embedded clause, it would have to have been marked with the locative case, as was explained in §2.2.4.2. Deciding on the exact location of *dow* 'he' in (83b) is more difficult as in that case both verbs, by being intransitive, require an absolutive-marked subject. The constraints on these backwards-oriented phenomena in Avar are very poorly understood.

The matrix verb *can*, in addition to undergoing agreement with the *masdar* (which option was illustrated in (84a) above), agree with an absolutive argument contained within the *masdar*. It is this long-distance agreement that obtains in (84b) and accounts for the particular agreement prefix on *CM-ix-* ‘see’, which would have to be neuter, had the verb only been able to agree with the *masdar*, but is in fact plural.

### Finite embedded clauses

In reported discourse an embedding particle, which for the present purposes I take to serve as a complementiser, is adjoined to the immediate right of the embedded clause. These elements, *=(j)ilan*, *=(j)in*, *=(j)an*, are occasionally alluded to as quotative particles in the literature on indirect discourse and evidentiality.

The following are examples of attitude predicates that subcategorise for the finite clause with *=(j)ilan*: *ab-* ‘say/tell’, *bic-* ‘speak’, *k’at-* ‘say/talk’, *har-* ‘ask’, *aħd-* ‘yell’, *šur-* ‘whisper’, *t’ad žub-* ‘add’, *lazab-* ‘announce’ (technically a causative version of *la-* ‘know’), *žawab l’-* ‘answer’ (lit. ‘answer give’). In (85), for instance, we are witnessing *ab-* ‘say/tell’ with a complement clause that is headed by *=ilan*, which cliticises to the embedded verb in the future tense.

- (85) žin- ca ču b-ič- il= ilan ab- una wac- as  
 self-ERG horse.ABS N-sell-FUT=COMP say-PST brother-ERG  
 ‘Brother said that he would sell the horse.’

Interestingly, it is not just the finite forms of embedded verbs which *=(j)ilan* combines with, as it can also be adjoined directly to imperatives (86) and nominal predicates (87):

- (86) nuž ĩk’ ĥalt’-e= jilan ab- una ebel- ał  
 2PL:ABS well work-IMP=COMP say-PST mother-ERG  
 ‘Mother told us to work hard.’
- (87) asijat b-ugo dir c’ar= ilan t’ade=žub-ana he- ĩ  
 Asiyat.ABS N-be.PRS my name.ABS=COMP to= add-PST she-ERG  
 ‘She added that {her/my} name was Asiyat.’

Observe that both (86) and (87) represent the so-called ‘shifted’ readings of indexical pronouns briefly mentioned in §2.2.4.3, whereby indexical elements get their interpretation with respect to the embedded context instead of the context of evaluation. As for the fact that *=ilan* has so flexible a distribution, it can, in principle, be taken as evidence of the embedded clause being represen-

ted as direct quotation rather than a properly embedded clause. In §3.2.4.5 we shall see preliminary evidence against such a conclusion, and establish that the =*ilan* clauses, unlike pieces of direct quotation, are transparent for such syntactic operations as relativisation.<sup>34</sup>

### 2.2.6 Summary

To sum up this section, I have sketched here an overview of the Avar grammar, concentrating mainly on the morphosyntactic peculiarities of the language in the nominal and verbal domain. We have also got acquainted with the default word order in the clause as well as deviations from that default order. We have, in addition, taken a cursory look at  $\bar{A}$ -dependencies, thus paving the path for the chapters to come, as well as introduced non-matrix clauses of various kinds that will also play an important part in establishing locality constraints on the derivation of operator–variable dependencies in Avar. Before such a derivation can be elaborated, however, a closer look at how these properties reflect the clause structure of the language is in order.

## 2.3 Towards a configurational structure of an Avar clause

In discussing the theoretical significance of certain aspects of Avar morpho-syntax, it is essential that two issues should be kept separate: (i) the existence of structural asymmetries between a verb’s arguments, and (ii) the cooccurrence, as well as ordering, restrictions on the position of affixes within an Avar morphological word. I address these three questions in §§2.3.1, 2.3.2 and 2.3.3 respectively. On a related note, a third point could be added concerning the ease of accounting for some of the aforementioned properties once a layered-derivational framework is assumed. This is discussed in §2.3.3.

### 2.3.1 Subject–object asymmetries

In this subsection I attempt to show that free word order notwithstanding, the Avar clause can still be treated as configurational to the extent that it dis-

34. There remains the possibility of these clauses being instances of *mixed quotation*, which have recently been argued to allow such operations as *wh*-movement to cross the quote’s boundary:

(i) Who did Mary say that she would “never underestimate ever again”? (Maier 2014: 7)

The question is whether a mixed-quotation account such as the one sketched by Maier (2014) can be extended to Avar =(*j*)*ilan* clauses, and it is even less clear what the status of *wh*-extractions analogous to (i) is. However interesting, I defer the discussion of these questions to future work.

plays fairly robust asymmetries between arguments of transitive verbs. More specifically, I will show that *ERG*-marked NPs are hierarchically superior to *ABS*-marked ones. Before doing so I would like to summarise the best-known arguments against a configurational syntax of Northeast Caucasian languages from the literature.

### Ergativity and agreement

The first such argument is rooted in morphological ergativity and agreement marking: indeed, the fact that subjects of transitive and intransitive predicates carry distinct case marking makes the application of constituency tests based on substitution difficult, as illustrated by the contrast between (88) from English and (89) from Avar.

- (88) a. John died.  
 b. John sells drugs.

In English an intransitive VP can be replaced by a transitive VP without triggering a change in case marking on the subject. This, however, is not the case in the ergative languages.<sup>35</sup>

- (89) a. aħmad      χw-ana  
 Ahmed.ABS die-PST  
 ‘Ahmed died.’  
 b. \*aħmad      narkotikal r- ič- ula  
 Ahmed.ABS drugs.ABS PL-sell-PRS  
 c. aħmadi-ca      narkotikal r- ič- ula  
 Ahmed-ERG drugs.ABS PL-sell-PRS  
 ‘Ahmed sells drugs.’

The agreement problem is demonstrated by (89b), where the verb agrees with the *P*-argument in opposition to the English (88b). Besides these obvious cases there is also reason to believe that Avar might be a non-configurational language, to which we now turn.<sup>36</sup>

35. It can be argued, as has been done by Kazenin & Testelec (1999) for Tsakhur, that distributional tests do in fact yield positive evidence for the VP being a constituent to the exclusion of the subject, with that evidence coming from the biabsolutive construction introduced on p. 25.

36. This is not to say that non-configurationality should be treated as a theoretical primitive or that it cannot be given a configurational treatment. On the contrary, there have been studies proposing very configurational analyses for languages like Passamaquoddy (Bruening 2001), Warlpiri (Legate 2002) and Kiowa (Adger, Harbour & Watkins 2009), to name just a few.

### Hallmarks of non-configurationality

Descriptively speaking, non-configurational languages are languages displaying the following characteristics (Hale 1983):

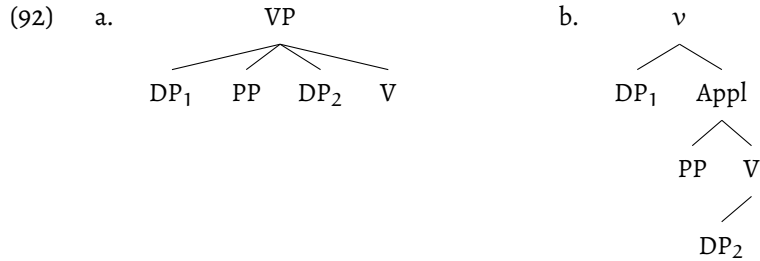
- (90) a. freedom of word order  
 b. freedom of argument omission  
 c. possibility of having discontinuous constituents

From what is known about Avar, it seems to fit this description of non-configurationality rather snugly: as regards the first hallmark, we have already witnessed the freedom of argument ordering in §2.2.2. The availability of *pro*-drop, illustrated in (91), can be taken to be analogous to the freedom of argument omission.

- (91) a. *pro*<sub>1</sub> mašina b-ič- un, muradi-ca<sub>1</sub> mina b-ana  
 car.ABS N-sell-CVB Murad-ERG house.ABS N-build.PST  
 ‘Having sold his car, Murad build a house.’  
 b. was-as<sub>1</sub> mašina b-ič- un, insu- ca *pro*<sub>1</sub> w-uχ- ana  
 son-ERG car.ABS N-sell-CVB father-ERG M-beat-PST  
 ‘The son sold the car, and the father beat him up’ (Samedov 2003)

Furthermore, Kazenin (2009) reports, citing his own field notes but not adducing any data, Avar as allowing discontinuous constituents, albeit only noun phrases in the absolutive case. Avar thus displays all three hallmarks of non-configurationality, and given the absence of certain grammatical processes normally viewed as targeting exclusively the “subject” such as passivisation, the base clausal structure of most of the Northeast Caucasian languages can be argued to be as depicted in (92a), where all of the verb’s dependents are in a sisterhood relation, as opposed to the more asymmetric structure represented in (92b). Indeed, something like this “flat” structure is currently the consensus, at least in the typological literature, as to the general make-up of a Northeast Caucasian clause.<sup>37</sup>

37. This is indeed the set-up that has explicitly been argued for, for instance, Tsakhur in Kibrik (1999) and Bagwalal in Kibrik (2001).



The issue is exacerbated by the fact that such subjecthood diagnostics as control environments, which typically only target syntactic subjects, as exemplified in (93) for English, do not exclude absolutive arguments:

- (93) a. Mother sent her daughter to school  
 b. Mother agreed [ PRO to send her daughter to school ]  
 c. \*The daughter agreed [ mother to send PRO to school ]

If, in Avar, the ergative argument is the syntactic subject, the prediction is for the Avar counterpart of (93c) to be as unacceptable. This prediction is not confirmed.

- (94) a. ebel- at jas [\_\_ c'al- ize ] j-it'- ana  
 mother-ERG daughter.ABS PRO.ABS study-INF F-send-PST  
 'Mother sent her daughter to school.'  
 b. ebel razil- ana [\_\_ jas c'al- ize j-it'- ize ]  
 mother.ABS agree-PST daughter.ABS study-INF F-send-INF  
 'Mother agreed to send her daughter to school'  
 c. jas razil- ana [ebel- at \_\_ [\_\_ c'al- ize ] j-it'- ize ]  
 girl.ABS agree-PST mother-ERG study-INF F-send-INF  
 'The girl agreed for her mother to send her to study.'

The acceptability of (94c) contradicts the conclusion, formulated in Polinsky, Gallo, et al. (2012), that '[t]he ergative, and not the absolutive, participates in control structures' (Polinsky, Gallo, et al. 2012: 270). Let us note, however, before taking this acceptability as proof of the absence of structural asymmetries between the transitive verb's ergative and absolutive arguments, that it can have its roots in the availability of an alternative structure — the one involving object *pro*-drop, as sketched below:

- (95) jas razil- ana [ebelat pro [\_\_ c'al- ize ] j-it'- ize ]  
 girl.ABS agree-PST mother.ERG study-INF F-send-INF

There are, however, several other subjecthood tests, with respect to which Avar ergative noun phrases unambiguously behave as c-commanding the absolutive noun phrases. First, another infinitival construction, **raising** (Keenan 1976), differs from control in only targeting subjects, which in Avar are hypothesised to correspond to ergative arguments of transitive verbs.

- (96) a. šamili- ca tušman č'w-ana  
 Shamil-ERG enemy.ABS kill-PST  
 'Shamil has killed the enemy.'
- b. šamil ħuh- ana [\_\_ tušman č'w-aze]  
 Shamil.ABS begin-PST kill- INF  
 'Shamil has started to kill the enemy.'
- c. \*tušman ħuh- ana [šamili- ca \_\_ č'w-aze]  
 enemy.ABS begin-PST Shamil-ERG kill-INF  
 'The enemy has started to be killed by Shamil.'

Second, the ergative and not the absolutive argument of a transitive verb is the addressee of an imperative — just as we would expect if the ergative argument were the canonical subject in nominative–accusative languages (although see Dixon 1994: §5.3 for arguments against this being a robust subjecthood test).

- (97) pro t'ex c'al- e!  
 pro.ERG book.ABS read-IMP  
 'Read the book!'

In addition, it is the ERG-marked argument that changes its case (to LOC) when the verb is causativised, example (98b) repeated from p. 18 above:<sup>38</sup>

- (98) a. rasuli-ca kayat qw- ana  
 Rasul-ERG letter.ABS write-PST  
 'Rasul wrote a letter.'

38. This statement does not generalise across all possible ERG-marked noun phrases in the Avar language. One systematic exception involves ERG-marked reciprocal pronouns under causativisation, whose case-marking does not alter to LOC but remains ERG (Yamada 2013), as shown below.

- (i) İsa-ca he- l coca-z / coca-ca č'wa-ze ha- r- una  
 Isa- ERG that-PL.ABS RECP-ERG kill- INF CAUS-PL-PST  
 'Isa made them kill each other.' (Yamada 2013: 164)

This can hardly be considered to be counterevidence to the claim that ERG-marked nominals c-command ABS-marked ones in transitive contexts, especially if Yamada (2013) is correct in treating predicates with reciprocal pronouns as intransitive.

- b. učitel- as rasuli-da kayat qwaz-a- b-una  
 teacher-ERG Rasul-LOC letter.ABS write-CAUS-N-PST  
 ‘The teacher made Rasul write a letter.’
- c. \*učitel- as kayti- da rasuli- ca qwaz-a- b-una  
 teacher-ERG letter.OBL-LOC Rasul.OBL-ERG write-CAUS-N-PST  
 (‘The teacher made the letter be written by Rasul.’)

The unacceptability of (98c) is unexpected if there is no asymmetry between the A- and P-arguments of *qw*- ‘write’.

Finally, ergative arguments can bind absolutive arguments but the converse is not true (I provide examples involving quantificational antecedents to rule out the possibility of coreference which is frequently argued to be significantly less structure-sensitive than variable binding).<sup>39,40</sup>

- (99) a. ħi- ca- nigi ži- w=go č’w-ač’o  
 who-ERG-POL self-M=EMPH kill- PST.NEG  
 ‘Nobody has killed himself.’
- b. \*žin- ca= go š:iw- nigi č’w-ač’o  
 self-ERG=EMPH who.M:ABS-POL kill- PST.NEG  
 (‘Nobody has killed himself.’)

The binding dependency between a quantificational antecedent and a reflexive pronoun can be established in (99a) but not in (99b), which is expected if the ergative argument c-commands the absolutive. The impossibility of a bound-variable interpretation appearing in (99b) is arguably due to the structural restrictions (=c-command) on variable binding, accidental coreference being ruled out by the non-referential nature of the antecedent. It is worth noting, too, that the unacceptability of (99b) cannot be the result of the reflexive preceding its antecedent, since the reversal of word order does not alter the judgement:

- (100) \*š:iw- nigi žin- ca= go č’w-ač’o  
 who.M:ABS-POL self-ERG=EMPH kill- PST.NEG  
 (‘Nobody has killed himself.’)

39. It should be noted that both Toldova (1999) and Lyutikova (2001) provide hardly any evidence from variable binding; instead they use referential antecedents, which are independently known to be more liberal in the way they establish a coreferential relation with a reflexive, to reach the conclusion that the structure of the verb phrase in Tsakhur and Bagwalal respectively is “flat”.

40. We shall return to Principle C and its interaction with movement when discussing diagnostics of  $\bar{A}$ -movement in §§3.2.3, 4.3.1.4.



Besides ERG-marked agents, this pattern is also very robust for dative- and locative-marked subjects of psych verbs such as *CM-ol'* 'love' or *CM-ix* 'see', in contrast to the same argument types in Tsez, another Northeast Caucasian language (Polinsky & Comrie 2003).

Taking into account the aforementioned facts, I believe there is enough reason to conclude that at least in the transitive constructions, the ergative argument asymmetrically c-commands the absolutive argument. The same is true for the dative and locative 'subjects' of experiencer verbs although there is evidence to suggest that these two cases are licensed in distinct positions in the clausal spine. Put differently, these facts are incompatible, in the absence of additional mechanisms or stipulations, with the structure in (92a).

### 2.3.2 *Affix ordering: from morphemes to the functional hierarchy*

Just as important as the relationship between the verb's arguments is the question, also concerning both structure and order, of the mechanisms underlying the composition of Avar morphological words. One way of looking at things is to adopt what has come to be known a "cartographic" perspective of clause structure, whereby such categories as V, T and C from the GB era can be further decomposed into dozens of categories. In the particular case of the Avar verb, for instance, clauses would be built, besides the lexical root, on the basis of such functional heads, presumably coming from a universal repository of functional elements, as *v* (in some frameworks the head responsible for introducing the external argument), *Asp* to encode aspectual information, *T* and *Fin* expressing tense and finiteness, and eventually one derivational affix or another, with an occasional applicative head in the case of, for instance, ditransitive verbs.

The cartographic effort has given rise to a number of empirical generalisations regarding the (linear) ordering of various elements in the clause, the noun phrase and the adpositional phrases, from which the hierarchical structure can be gleaned. In an ideal world the attested ordering of the affixes encoding various types of information should be derived from the semantic scope that each of those elements takes in the interpretation of a particular syntactic object, with possible restrictions being reducible to some fundamental cognitive principle. In relation to the languages of the Caucasus, this has been proposed, by Korotkova & Lander (2010), to be what is responsible for the ordering of suffixes in Adyghe, a polysynthetic West Caucasian language, whose suffixes functioning as semantic operators are argued to modify the part of

the stem that (immediately) precedes it.<sup>41</sup>

Given the inventory of categories and morphemes realising them that we have come to know in §2.2, the functional hierarchy in the clausal domain, in the indicative mood for the sake of concreteness, would have to be a version of (101).

(101) Force > Fin > T > Asp > Caus > Voice > v > Appl > V/√

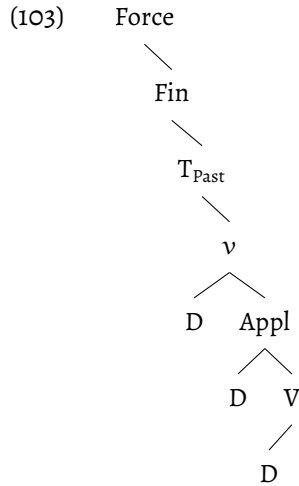
As is evident from (101), the list of categories lexicalised in Avar by dedicated morphemes is not especially vast, and it is inevitable that future work will bring about further refinements. Suffice it to say, the hierarchy as sketched above reflects two crucial properties of the Avar clause: first, it connects the order of morphemes within the morphological word to the scope of semantic operators encoded by those morphemes. It also ensures that the verb's arguments display certain asymmetries by virtue of being introduced, via dedicated elements such as Appl, v or Caus, at different points in the derivation.

To take a concrete example, consider (14), repeated here as (102), which is built around the ditransitive predicate *CM-ič-* 'sell' and where all the arguments are expressed overtly.

(102) di- ca du- e řaka b-ič- ana  
 1SG:OBL-ERG 2SG:OBL-DAT COW.ABS N-sell-PST  
 'I sold you a/the cow.'

Its syntactic representation will, then, be as sketched in (103):

41. An important argument made in Korotkova & Lander 2010 regarding the flexibility of ordering displayed by a number of suffixes in Adyghe cannot, regrettably, be extended to Avar, where I have been unable to find any such affixes. It can, however, be the case that the semantic operators in question are realised in Avar as auxiliaries, such as modal verbs, which do seem to allow for some flexibility of ordering.

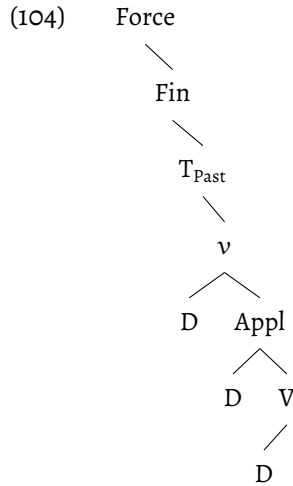


The tree above should be read, in a bottom-up fashion, as the complex consisting of V–Appl–v–T–Fin–Force being spelled out as one morphological word, *-ič-∅-∅-a-na*, which becomes *b-ič-∅-∅-a-na* by hosting a neuter agreement prefix.

As far as the semantic interpretation is concerned of various portions of the clause, I am inclined to follow [Ramchand & Svenonius \(2014\)](#) and split it into three partitions: the event zone with various functors operating on events ( $e_{\langle v \rangle}$ ), the situation zone where events become constitutive parts of situations ( $s_{\langle s \rangle}$ ), and the proposition zone where propositions are created out of situations. The event zone corresponds to vP, the situation zone is the TP, and everything above TP involves propositions.

### 2.3.3 Avar syntax in derivational layers

I have already given an illustration, in §2.2.4.2, of the workings of the layered-derivational approach (as put forth in [Zwart 2009 et seq.](#)) in the nominal domain. The clausal domain should not be any different: given the binary nature of merge and the presence of numerations, the interfaces will assign interpretations to whatever objects delivered to them once the numeration has been exhausted. Staying with the derivation of our example from the previous subsection, repeated here as (104), the numerations and derivational steps leading to this representation will be as follows.



A direct consequence of Zwart's (2009) approach is that specifiers, such as the three arguments of argument-introducing elements notated as D in the tree above, are necessarily opaque by virtue of being outputs of separate, and distinct, derivational layers.<sup>42</sup>

The crucial question at this point is whether the representation in (104) is derived by exhausting just one numeration (not counting those underlying the derivation of complex arguments) with all the relevant elements already in it, or whether a number of smaller numerations are involved in building the resulting structure (as would be the case in the Phase Theory, where the opacity of a domain is tied to that domain's syntactic category). Derivation layering, on the other hand, makes no mandatory connection between a particular syntactic category and the object with that label being the output of a distinct derivation. Put differently, objects of different syntactic categories can be outputs of a distinct derivation (not just  $v$  and  $C$ , as in the Phase Theory), and not every  $vP$  and  $CP$  is opaque. The answer to the question about the number of numerations implicated in the derivation of (104) above should, ideally, be found in the notion of the numeration, and the selectional procedure responsible for its creation.<sup>43</sup>

42. It seems to me that there is no reason to think of *dica*, *due* and *faka* as not being syntactically complex, especially in light of recent analyses of pronouns as definite descriptions (Elbourne 2005, 2008).

43. Trotzke 2012 contains a preliminary discussion of opacity as a biproduct of derivation layering.

## 2.4 Chapter summary

The aims of this chapter were declared to be (i) introducing the framework, and (ii) providing a description of Avar grammar, both intended as paving the way for the discussion to follow. As regards (i), I have introduced, in § 2.1 the basic notions of linguistic minimalism as an interface-centric research programme. The next, and longest, section of the chapter introduced the reader to such aspects of Avar grammar as word order in both the verbal and nominal domains, case marking, pronominalisation and reflexivisation, verbal categories, negation, matrix and embedded clause types. Finally, in §2.3 I have argued that, despite appearances and contrary to much work on Northeast Caucasian languages, Avar could and should be given a configurational treatment in such domains as affix ordering and the structural asymmetries between arguments. Reiterating, only a very small selection of properties listed in the present chapter will be elucidated as the discussion unfolds, with all others remaining as promising avenues for future work.

This being said, we turn our attention to the syntax of Avar prenominal relative clauses.

## CHAPTER 3

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### Avar relative clauses

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This chapter presents an analysis of Avar relative clauses, which, unlike the more familiar examples of  $\bar{A}$ -constructions in better-studied languages, do not display the unboundedness property and are subject to stricter locality constraints. The analysis identifies relativisation as resulting from null operator movement interpreted by the meaning component as abstraction over a variable introduced in the gap position. The lack of unboundedness is analysed as a corollary of a particular architecture of the grammar, the Layered Derivations framework of Zwart (2009) *et seq.*

### 3.1 Prenominal relative clauses: an introduction

The present chapter continues to examine the structure of Avar clauses, turning now in more detail to the syntax and semantics of relativisation. It will pave the way for the discussion in Chapters 4 and 5, where a pseudo-clefting analysis is proposed of Avar questions and focus marking.

#### 3.1.1 *Why study participial relative clauses?*

Even though attested in a significant number of languages (see the maps and discussion in Dryer 2013), prenominal relative clauses, especially non-finite

ones, have received only a modicum of attention in the formal literature beyond a number of influential studies on Turkish (Haig 1997, Kornfilt 1997, 2000), Japanese (T. I. Kaplan & Whitman 1995, Kuno 1976, Murasugi 2000) and Korean (J.-I. Han 1992, T. I. Kaplan & Whitman 1995).

Before proceeding with the presentation of Avar relativisation and its properties, I find it advisable to state a number of questions that this chapter will strive to answer. Besides the obvious matter of disentangling the verbal and adjectival properties shared by participles, the first two questions, which can be characterised as parametric, or typological, pertain to the inventory and ultimately the source of locality constraints on relativisation.

**Locality 1:** Are participial relative clauses more or less opaque than their finite counterparts in other languages?

**Locality 2:** What makes participial relative clauses opaque for extraction — like nominalisations and adverbial clauses — rather than transparent — like regular *that*-clauses?

As far as answers to both of these questions go, the work referenced above rarely goes beyond demonstrating that relativisation in languages with prenominal relative clauses displays sensitivity to islands, presupposing that in the absence of an opaque domain these prenominal relative clauses are no different from postnominal ones with respect to unboundedness. Typological work does not engage with these questions either, judging by the fact that the most recent typological survey of prenominal relativisation (Wu 2011) does not contain a single example of the relativisation operation crossing more than one clausal boundary.

### 3.1.2 *Participial constructions: are they even relative clauses?*

Unlike most languages that employ a relative pronoun or complementiser plus a regular tensed form of the verb, prenominal relative clauses often make use of dedicated nominalised or participialised deverbal forms.

- (1) a. Kadın kitabı okudu. [Turkish, Güliz Güneş (p.c.)]  
 woman.NOM book.ACC read.PST  
 'The woman read the book.'
- b. Kitabı okuyan kadın çok akıllı.  
 book.ACC read.PTCP woman.NOM very smart  
 'The woman who read the book is very smart.'

According to Kornfilt (2000), such non-finite prenominal relative clauses differ from superficially similar participial constructions in more familiar languages, such as (2) from English, in a number of respects.

(2) a running boy

The first point of difference concerns the possibility of inserting speaker-, or subject-oriented adverbials appearing inside the relevant constructions: while in English this leads to sharp unacceptability (3a), such structures are perfectly acceptable in Turkish.<sup>1</sup>

(3) a. \*an obviously running boy

- b. [Oya-nın herhalde \_\_ sev- e- me- diğ- i ] bir insan  
 Oya-GEN probably love-ABIL-NEG-NMLZ-3SG a person  
 ‘a person whom Oya probably cannot love’

[Turkish, Kornfilt (2000: 124)]

Looking at other languages, it is easy to see that speaker-oriented adverbs are also allowed, as in (4b) from Russian.

- (4) a. kniga, kotoruju vy očevidno ne čitali [Russian]  
 book which.ACC 2SG:NOM obviously NEG read.PST:3PL  
 b. očevidno ne pročitanaja vami kniga  
 obviously NEG read.PST:PTCP 2SG:INS book  
 ‘a/the book that you obviously haven’t read’

It would seem that at least on the surface Avar patterns with Turkish and Russian in allowing speaker-oriented adverbials to be used with participial relative clauses:

1. This argument advanced by Kornfilt (2000) as well as the one to follow is by no means theory-independent in relying heavily on the assumption — albeit a widely shared one — that speaker-oriented adverbs are introduced by highly specific functional heads (Cinque 1999). It is used as a propositionality test by Potts (2005), amongst many others, but it must be pointed out that even in English the combination of a speaker-oriented adverb with a progressive participle is not altogether disallowed, as evidenced by the following naturally occurring examples:

- (i) a. I just find it strange that an obviously working setup is considered “not working” (<http://forums.mozillazine.org/viewtopic.php?f=42&t=666045>)  
 b. ... because the PowerBook has a fucked up keyboard without an obviously working Alt key (<https://bugs.debian.org/cgi-bin/bugreport.cgi?bug=248055>)  
 c. Pete is smart and following an obviously working path even if I don’t find much value in what they do (<http://thefuturebuzz.com/2010/09/14/digital-copywriting-tips/>)



- (5) bit'un bicanani a- ra- w was dir wac w-ugo  
 definitely go.PST-PTCP-M boy.ABS 1SG:GEN brother.ABS M-be.PRS  
 'The boy that has definitely left is my brother.'

Another dissimilarity between prenominal relative clauses and participial relative constructions concerns the amount of functional structure either construction may involve.

For the purposes of this chapter I assume that Avar participial modifiers are clauses and analyse them in §3.3.2, primarily for morphosyntactic reasons, as projecting a left periphery containing at least the Fin and Force heads. I begin, however, by recapitulating the properties traditionally associated with  $\bar{A}$ -dependencies.

### 3.1.3 $\bar{A}$ -properties of relative clauses

As a subset of  $\bar{A}$ -constructions, relative clauses are thought to be derived via phrasal movement (as opposed to head movement) and therefore display the hallmarks of this type of movement. Sparing the details, the current consensus is that these are the following properties (see Pesetsky 2013, Richards 2011 for a thorough state-of-the-art discussion of all of these). Since the goals of the present subsection are to give but a cursory introduction to these properties as manifested by relative clauses, I use well-known data from English alone.

The first property of  $\bar{A}$ -movement, illustrated in (6) is that it leaves a gap in the base position.

- (6) the house [ that Jack built \_\_ ]

A slightly different way of describing this gap-leaving property (simply called *gapping* in Wu 2011, not to be confused with a highly specific variety of ellipsis) is by referring to the moved element's position in the movement chain. In this particular instance we see the pivot in the top position (or  $\alpha$ -position in the terminology of Pesetsky 2013).

In a similar vein, an  $\bar{A}$ -dependency should also demonstrate clear signs of the base position (or, for Pesetsky 2013, the  $\beta$ -position), which can be either morphosyntactic or semantic or, preferably, both.

- (7) a. I was offended by the [ **lip service** ] that was **paid** to civil liberties at the trial.  
 b. [ The picture of **his**<sub>i</sub> mother ] that **every soldier**<sub>i</sub> kept \_\_ wrapped in a sock  
 was not much use to him. (Salzmann 2006: §1.3.1)

The effects demonstrated in (7) are known under a variety of names, amongst

which are *reconstruction effects*, *connectivity effects* and *identity effects* (Adger & Ramchand 2005), and the idea is very simple: in order for semantic interpretation to go through and yield the idiomatic reading of (7a) and the bound-variable reading of the indexed possessive pronoun in (7b) these purportedly moved elements must occupy the base position at some point during the derivation.<sup>2</sup>

The last two characteristic properties that  $\bar{A}$ -dependencies share are best discussed together. They are *unboundedness*, which refers to the ability of  $\bar{A}$ -operations to cross infinitely many nodes (8) as long as those nodes do not demarcate syntactically opaque domains such as adjunct clauses (9a) or coordinated XPs (9b). It is this failure to cross such opaque domains, frequently referred to as *sensitivity to islands*, that is the property occurring in tandem with unboundedness.

(8) the house that Jill thinks [ that Jack built \_\_\_ ]

(9) a. \* the house where Jill moved [ after Jack built \_\_\_ ]

b. \* the house that [ Jill bought a car and \_\_\_ ]

### 3.1.4 Research question: Locality

A well-known property of relative clauses is that relativisation, just like wh-movement, is sensitive to locality constraints — the property illustrated for English relatives in (9) above. Now the question which, as far as I have been able to ascertain, has not received much attention in the literature is whether syntactic islands constrain the derivation of participial relative clauses as well.

(10) een [eigenlijk door iedereen \_\_\_ gekocht moeten wordende ]  
 an actually by everyone bought must.INF get.PRS:PTCP

telefoon

phone

‘a phone that everyone must buy’ [Dutch, Charlotte Lindenberg (p.c.)]

Stilted though they may sound, examples like (10) show that in principle, participial relative constructions do not have to be monoclausal — it is fairly uncon-

2. The argument depends on two crucial assumptions, neither of them uncontroversial:

(i) a. Variable binding requires c-command.

b. Different parts of an idiom must be adjacent at the level of interpretation.

troversial that they can embed non-finite complement clauses. What is less clear is whether they can recursively embed clauses besides infinitival ones.<sup>3</sup>

The present chapter is structured as follows. I first acquaint the reader with the properties of Avar relative clauses (§3.2), striving to compare them against the properties of  $\bar{A}$ -constructions from the preceding subsection and concentrating on the issue of locality. Subsequently, in §3.3, I propose a way of deriving these properties within a Layered Derivations framework of Zwart (2009) *et seq.*, and §3.4 concludes.

## 3.2 Avar relative clauses

In this section I lay out the descriptive background of Avar relativisation and show that in the simplest cases any nominal phrase can be relativised. I then discuss more complex cases involving long-distance operations.

### 3.2.1 Preliminaries

Avar relative clauses never involve a relative pronoun, the target of relativisation being realised as a gap and the relative clause preceding its head noun. Just like in Turkish, and unlike in several other head-final languages like Japanese, the finite verb may not appear in such structures and is replaced by a participial form (11b).

- (11) a. he- w čiči- jas ču b-iq'-ana  
 that.ABS-M man-ERG horse.ABS N-sell-PST  
 'That man stole the horse.'
- b. [\_\_ ču b-iq'-a-ra- w / \*b-iq'-ana] čiči t'ur-ana  
 horse.ABS N-steal-PST-PTCP-M N-sell-PST man.ABS flee-PST  
 'The man that stole the horse has run away.'

The bracketed relative clause in (11b) exemplifies the relativisation of a subject argument, but other arguments can be relativised as well, and the ergative nature of the language does not seem to place any restrictions, such as the ones discussed by Assmann, Georgi, *et al.* (to appear), on the arguments that can be relativised. I illustrate some of the options in (12–16), where examples of relativisation are preceded by their “base” sentences involving a finite verb

3. It must be observed that the participial suffix attaches to the rightmost element within the verbal cluster, which in the example at hand is the passive auxiliary *worden* rather than the modal *moeten* ‘must’. See Hoeksema 1993, 1994 for a historical perspective on this construction, and Hoeksema 2003 for a discussion of free-standing participial groups.

and no gap. The parallel with Turkish made above is, in actual fact, incomplete, as in Avar creating a relative clause does not alter the case marking on the arguments: both the subject noun phrase and the gap in the object position inside the relative clause in (12) are case-marked in the usual manner, *viz.* with ERG and ABS respectively. In Turkish relatives, on the other hand, subjects shift their case marking to GEN, as can be seen in (3b) on p. 65.

- (12) a. muḥamadi- ca mašina b-ič- ana  
 Muhammad-ERG car.ABS N-sell-PST  
 ‘Muhammad has sold the car.’
- b. [muḥamadi- ca \_\_ b-ič- a- ra- b] mašina χwa-na  
 Muhammad-ERG N-sell-PST-PTCP-N car.ABS die- PST  
 ‘The car that Muhammad sold has broken down.’

Observe that unlike Turkish, Avar does not employ distinct verbal morphology for subject- and non-subject relativisation — the only factor determining which participial morphemes should appear on which verbs is the tense marking on those verbs. Besides, given the unavailability of a passivisation process in the language, inflecting the participle for the past tense does not contribute a passive component to the meaning of the clause, as is the case in the comparable participial constructions in, for instance, the Germanic languages.

Obliques, too, are relativised in an identical fashion. (13b) illustrates relativisation of a goal, and (14b) that of a recipient argument.

- (13) a. was jas- ał- uq w-alah-un w-ugo  
 boy.ABS girl-OBL-APESS M-look-CVB M-be.PRS  
 ‘The boy is looking at the girl.’
- b. [was \_\_ w-alah-un w-ug- e- j] jas hejχun j- us- ana  
 boy.ABS M-look-CVB M-be.PRS-PTCP-F girl.ABS away F-turn-PST  
 ‘The girl at whom the boy is looking has turned away.’
- (14) a. was-as jas- ał- e baryič ł- una  
 boy-ERG girl-OBL-DAT ring.ABS give-PST  
 ‘The boy gave the girl a ring.’
- b. [was-as \_\_ baryič ł- u- ra- j] jas him- ana  
 boy-ERG ring.ABS give-PST-PTCP-F girl.ABS smile-PST  
 ‘The girl to whom the boy gave the ring smiled.’

Other obliques, even PP-like (15), likewise relativise with a gap, as do possessors (16).

- (15) a. was-as gordu ganč'i- ca b-ek- ana  
 boy-ERG window.ABS stone.OBL-ERG N-break-PST  
 'The boy broke the window with a stone.'
- b. [was-as gordu \_\_\_ b-ek- a- ra- b] gamač' k'udija-b  
 boy-ERG window.ABS N-break-PST-PTCP-N stone.ABS big- N  
 b-uk'-ana  
 N-be- PST  
 'The stone with which the boy broke the window was big.'
- (16) a. was-as- ul ebel-emen ana maḡačqala- jal- de  
 boy-OBL-GEN parents.ABS go.ABS Makhachkala-OBL-LAT  
 'The boy's parents went to Makhachkala.'
- b. [\_\_\_ ebel-emen maḡačqala- jal- de a- ra- w] was  
 parents.ABS Makhachkala-OBL-LAT go.PST-PTCP-M boy.ABS  
 roq'o- w č'- ana  
 home-M stay-PST  
 'The boy whose parents went to Makhachkala stayed at home.'

We have seen in this subsection that as far as Avar monoclausal sentences are concerned, any DP, or even PP, can serve as the target of a relativisation operation. We now proceed to look more closely at the constraints on this operation.

### 3.2.2 Word order in RCs

Avar relative clauses have one more very interesting property, not yet mentioned in the current chapter but highly relevant for the chapters to come, setting them apart from matrix declarative clauses. It concerns the available word-order variation in either type of clause: whilst declarative root clauses allow all possible constituent orderings, SOV and SVO still being the most common, relative clauses may not be verb-initial (Testelec 1998a,b). Because the flexibility of constituent order in Avar has already been illustrated in §2.2.2, I limit myself to the following minimal pair:

- (17) a. w-ecc- ul- e- w w-uk'-ana rasul insu- ca  
 M-praise-PRS-PTCP-M M-be- PST Rasul.ABS father.OBL-ERG  
 'Father was praising Rasul.'
- b. [insu- ca \_\_\_ w-ecc- ul- e- w] či  
 father.OBL-ERG M-praise-PRS-PTCP-M man

- c. \*[w-ecc- ul- e- w insu- ca ] či  
 M-praise-PRS-PTCP-M father.OBL-ERG man.ABS  
 ‘a/the man praised by father’

The relevant contrast is between (17a) and (17c), the verb-initial order being acceptable only in the declarative sentence. As observed by [Testelec \(1998a,b\)](#), it gives us a diagnostic, which I put to crucial use in the chapters to come, of biclausality. Summing up, whatever mechanism is behind the flexibility of word order in matrix declarative clauses, relativisation appears to disable it.<sup>4</sup>

### 3.2.3 *An excursus: Crossover and reconstruction effects*

When discussing the reconstruction property of  $\bar{A}$ -movement in §3.1.3 above I failed to mention that those tests are often employed to argue in favour of a particular analysis of relativisation — a head-raising analysis (HRA, [de Vries 2002](#) and references therein), a matching analysis (MA, [Salzmann 2006](#) and references therein), and a head-external analysis (HEA, [Boef 2013](#) being the most recent implementation). As I will not argue for any of these in the present chapter, I invite the interested reader to consult the cited works and references therein but for the sake of completeness choose to address the reconstruction arguments in the current subsection.

4. It might be tempting to attribute, in the spirit of [Rizzi’s \(1997\)](#) Split CP Hypothesis, the unavailability of verb-initial orders in relative clauses to the absence of the functional heads serving as attractors for various displaced objects. The intuition in this case is this: since root clauses contain a fuller left periphery as opposed to clauses of other types, movements that are permissible in root clauses are impossible in, say, relative clauses.

Despite the initial plausibility of this intuition, it appears to be wrong, at least on the strongest interpretation of the Split CP Hypothesis: for [Rizzi \(1997\)](#), Force is clearly higher in the structure than both Top\* and Foc, predicting that whenever a clause contains Force, it will also contain every other left-peripheral head it c-commands, including both Top\* and Foc, which should be able to attract all the other elements that they can attract in main clauses. It is therefore inevitable that appealing to the truncated nature of the left periphery in relative clauses in an attempt to rescue the cartographic analysis of word-order permutations can rule out the presence of the topic and focus heads only by stipulation. I address the composition of the left periphery in §3.3.2, and in more detail in Chapter 5 when I discuss the intricacies of focus marking, making for now the conclusion that the absence of particular word orders in relative clauses cannot be explained by postulating fewer functional elements than in non-relative ones.

### 3.2.3.1 Reconstruction effects

As mentioned above, reconstruction effects in relative clauses are frequently adduced as evidence for the existence of a base position in what can informally be named a movement chain. In a slightly looser formulation these pieces of evidence concern not only semantic interpretation but also morphosyntactic shape of the moved elements (primarily case morphology in languages that have it). Because using case connectivity as a test for syntactic reconstruction in relative clauses seems unlikely to yield any coherent results for the simple reason of head nouns, or pivots, receiving morphological case in the derived position, I consider the semantic side of reconstruction effects. We shall revisit reconstruction in §4.3.1, keeping in mind that connectivity effects in *wh*-questions are typically more pronounced than in relative clauses.

#### Idiom interpretation

Idiom interpretation is frequently used in the literature on  $\bar{A}$ -dependencies as a test for syntactic movement as opposed to base generation, the intuition being that in order for the idiomatic reading to be available, various components of an idiom must be adjacent at the moment that the semantic interpretation takes place (Chomsky 1993, Bhatt 2002, although the argument itself can be traced back to Chomsky 1965 for *wh*-questions, and is discussed in application to relative clauses in Vergnaud 1974). The absence of the idiomatic reading is therefore often taken to be an argument against the discontinuous phrase ever forming a constituent at any level of representation (Adger & Ramchand 2005).

The relevant contrast is between (18) and (19) from English and Thai on the one hand, and (20) from Scottish Gaelic and (21) from Korean on the other.

(18) Mary praised the headway that John made.

(19) *lûukmáaj* [ *t̃hî* \_ *lòŋ* *mâj* *klaj* *ton* ] *tham-hâj* *phôw-mêe* *sàbaaj-caj*  
 nut REL fall NEG far tree CAUS parents content  
 ‘Children that aren’t different from their parents put their parents at ease.’  
 [Thai; Jenks (2014: 306)]

The relevant idiom in (18) is *make headway*, whose elements, though discontinuous on the surface, form a constituent at LF — a state of affairs that would not be possible had the noun modified by the relative clause been generated outside it. Similarly, (19) involves a relative clause built on the basis of an idiomatic expression *lûukmáaj lòn mâj klaj tôn* ‘the nut doesn’t fall far from the tree,’

where the idiomatic reading is retained.

This does not extend to certain idioms in such languages as Scottish Gaelic or Korean, where the idiomatic reading is lost once one of the idiom's constituent parts is clefted away (20) or relativised (21).

- (20) 'S ann às gach seid a bhitheas e a'toirt sop.  
 it's from each bundle C-REL be-FUT-REL he taking wisp  
 \*'He tries his hand at everything.'  
 OK 'It's from every bundle that he has taken a wisp.'  
 [Scottish Gaelic; Adger & Ramchand (2005: 170)]

- (21) a. Mira-ka ipen sihem-eyse miyekkwuk-ul masi-ess-ta  
 M-NOM this time exam-at seaweed soup-ACC drink-PST-DECL  
 'Mira failed the exam this time.'  
 (lit.: 'Mira drank seaweed soup at the exam this time')
- b. #[Mira-ka ipen sihem-eyse \_\_<sub>i</sub> masi-n ] miyekkwuk<sub>i</sub>  
 M-NOM this time exam-at drink-ADN seaweed soup  
 #'the seaweed soup which Mira ate at the exam'  
 [Korean; Kwon, Polinsky & Kluender (2006: fn. 4)]

Both Adger & Ramchand (2005) and Kwon, Polinsky & Kluender (2006) conclude from the absence of the idiomatic reading in these examples that the discontinuous parts of the idioms at hand are indeed generated as discontinuous phrases and never form a unit at the level of representation where the interpretation of idioms takes place.

It appears, however, that such arguments are not very strong, at least given the field's current understanding of the syntax and semantics of idiomatic expressions from a crosslinguistic perspective: besides the presence of the idiomatic reading in English relative clauses and its absence in their Gaelic and Korean counterparts just illustrated, there is one crucial distinction setting them apart — the English idiom is structurally transparent when compared to its non-idiomatic paraphrase (*make headway* vs. *make progress*), whilst the Gaelic or the Korean one is not. The importance of this distinction can be demonstrated by attempting to relativise an element of an English idiom that is not syntactically transparent.

- (22) Mary admired the bucket that John kicked.

The sentence in (22) containing a non-transparent idiom *kick the bucket* only has the compositional reading that involves an event of admiring a particular bucket. Crucially, the idiomatic reading is absent here.

The issue of idiom interpretation being applied as a test for syntactic re-



construction of  $\bar{A}$ -moved items has recently been raised by Heycock (2012), who, based on examples like (23), argues that idiom interpretation does not conclusively signal syntactic reconstruction.

- (23) This represents the only headway on Lucy<sub>1</sub>'s problems that she<sub>1</sub> thinks they have made so far.

The example in (23) is problematic for the view that takes  $\bar{A}$ -moved terms to reconstruct to their base position at LF for the following reason: it presents a reconstruction environment, as evidenced by the presence of the idiomatic reading of *make headway*, which would put the complex DP *the only headway on Lucy's problems* containing the R-expression *Lucy* in the c-command domain of a coindexed pronoun *she*, predicting the sentence to be unacceptable, contrary to fact.

### 3.2.3.2 Crossover effects

Like other  $\bar{A}$ -dependencies, relative clauses are often taken to display Weak Crossover effects (WCO), at least in English.<sup>5</sup>

- (24) a. \*the man<sub>1</sub> who<sub>1</sub> his<sub>1</sub> mother saw \_\_<sub>1</sub>  
 b. \*the man<sub>1</sub> Op<sub>1</sub> his<sub>1</sub> mother saw \_\_<sub>1</sub>

The unavailability of the bound interpretation for the possessive pronoun *his*<sub>1</sub> in (24) is due to the fact that its antecedent, *man*, does not c-command it in its base position (i.e. inside the relative clause) but only in its derived position.

Avar relative clauses, on the other hand, display no such restrictions on the coindexing between the head noun, the gap in the object position (which in Avar is easily identifiable through agreement marking) and the possessive pronoun.

- (25) a. [\_\_ žindir= go ebel j-ix- a- ra- w] was  
 self.GEN=EMPH mother.ABS F-see-PST-PTCP-M boy.ABS  
 'a/the boy<sub>1</sub> that saw his<sub>1</sub> mother'  
 b. [žindir= go ebelal- da \_\_ w-ix- a- ra- w] was  
 self.GEN=EMPH mother-LOC M-see-PST-PTCP-M boy.ABS  
 'a/the boy<sub>1</sub> whom<sub>1</sub> his<sub>1</sub> mother saw'

5. I follow the conventions in Büring (2005) and mark the structures inducing a WCO effect with an asterisk as opposed to ascribing it a milder degree of unacceptability by appending a question mark to the relevant examples.

The fact that Avar relative clauses do not display the unacceptability traditionally ascribed to WCO should not deter one placing them in the class of  $\bar{A}$ -dependencies nor concluding, automatically, that movement cannot be implicated in their derivation — after all, WCO has been shown to be inoperative in various constructions in a number of languages as well-studied as German, and its effects have been claimed to weaken significantly in certain environments even in English.

In addition to WCO, English relative clauses, like other operator–variable dependencies, display the so-called *Strong Crossover* effects illustrated in (26), where the moved item *c*-commands both its trace *and* its antecedent. Put differently, traces of  $\bar{A}$ -movement are traditionally treated as being subject to Principle C of the Binding theory.<sup>6,7</sup>

- (26) a. \*the man<sub>1</sub> whom<sub>1</sub> he<sub>1</sub> likes \_\_<sub>1</sub>  
 b. \*the man<sub>1</sub> whose father he<sub>1</sub> likes \_\_<sub>1</sub>

It thus seems desirable, at least in the interest of diagnosing phrasal movement, to examine whether Avar relative clauses display similarly strong SCO effects. It appears, however, that this test should be applied very carefully, for the reason, already hinted at in §2.3.1, that Avar gaps cannot unambiguously be interpreted as unpronounced copies of moved elements, the alternative analysis in terms of *pro*-drop being independently available. As there are also no relative pronouns showing the position of the relative operator relative to the gap, the acceptability of any configuration predicted to display SCO effects

6. Although the following example of embedded topicalisation in Danish (Büring 2005: 174) does not behave in this particular way:

- (i) a. *Henrik/han* tror at *ham* kunne ingen lyve over for t  
 Henrik / he thinks that him could no-one lie over for  
 ‘Henrik/he thinks that him, nobody could lie to.’  
 b. \**Henrik/han* tror at her kunnen ingen lyve over for *Henrik*  
 Henrik / he thinks that here could no-one lie over for Henrik  
 ‘Henrik/he thinks that here, no one could lie to Henrik.’

Unlike the unacceptable example in (b) displaying the predicted Principle C effect by virtue of the *r*-expression *Henrik* inside the PP being *c*-commanded by its antecedent, whether another instance of *Henrik*, an *r*-expression, or *han* ‘he’. In (a), however, the purportedly  $\bar{A}$ -moved pronoun *ham* ‘him’ *c*-commands its trace from its derived position but no Strong Crossover effect obtains.

7. A different line of reasoning would abandon Principle C as belonging in the realm of the narrow syntax (Evans 1980, Reinhart 1983), which will effectively render many arguments involving reconstruction for the purposes of binding in a number of well-known constructions null and void.

could be analysed in this alternative way.

More curiously, should the hypothesised SCO configuration be judged as unacceptable, it would still be inconclusive as a diagnostic of the lowest or intermediate links in an  $\bar{A}$ -chain derived by movement because more factors are at play than just the interaction of the position of the antecedent and that of the purported trace of  $\bar{A}$ -movement. Avar facts show us that the degree of unacceptability varies depending on the crossed-over pronoun: if it is a reflexive, the effect is mild (27a), compared to the case in (27b) that involves a demonstrative.

- (27) a. ?[žindie= go \_\_\_ w-oł'- ule- w] či  
 self.DAT=EMPH M-like-PRS:PTCP-M man.ABS
- b. \*[hesie \_\_\_ w-oł'- ule- w] či  
 he.DAT M-like-PRS:PTCP-M man.ABS  
 'the man whom he likes'

A possible reason for the unacceptability of (27b) on the relevant reading could be the fact that the head noun, *či* 'man' c-commands the experiencer subject of the relative clause, *hesie* 'he.DAT', triggering a Principle B effect, since Avar demonstratives differ from the English pronominals in resisting to take c-commanding antecedents, as was mentioned in §2.2.4.3. One should therefore take extreme care to view the acceptability of (27a) involving a reflexive in the subject position as evidence of base generation, and the unacceptability of (27b) as a definitive sign of movement.

I conclude this brief excursus by noting that neither reconstruction for idiom interpretation nor crossover effects give us any conclusive evidence either for or against  $\bar{A}$ -movement being implicated in the derivation of Avar relative clauses.

### 3.2.4 Locality in participial relative clauses

Having seen how Avar relativisation works in the simplest of cases, we are now ready to proceed to more complicated cases, viz. those involving at least one level of embedding.

In this subsection we consider long-distance relativisation, i.e. examine relative clauses, as well as constraints on their formation, based on clauses traditionally characterised as *non-finite*: infinitivals, masdars (nominalisations) and participles.

### 3.2.4.1 Relativisation across an infinitival clause boundary

Let us begin with the type of structure that arguably involves a matrix verb taking an infinitival complement. In Avar, just like in English, the prototypical example of such predicates is *bo'ize* 'want'. As can be gathered from the examples in (28), this kind of relativisation is permitted.<sup>8</sup>

- (28) a. [di- e \_\_\_ b-os- ize b-oł'- un b-ug- e- b ] telefon  
 1SG-DAT N-buy-INF N-want-CVB N-be.PRS-PTCP-N phone.ABS  
 c'aq'=go χirija- b b-ugo  
 very=EMPH expensive-N N-be.PRS  
 'The phone that I want to buy is very expensive.'
- b. [di- ca \_\_\_ mašina b-ič- ize b-oł'- un b-uk'-a- ra- w]  
 1SG-ERG car.ABS N-sell-INF N-want-CVB N-be PST-PTCP-M  
 č-i- jas bat'ija- b mašina b-os- un b-at- ana  
 man-ERG different-N car.ABS N-buy-CVB N-find-PST  
 'The man to whom I wanted to sell the car has bought another one.'

The arguments undergoing relativisation — *telefon* 'phone' and *mašina* 'car' — in the examples above are the internal (28a) and the applicative (28b) argument of the embedded infinitive, respectively.

### 3.2.4.2 Relativisation across a masdar clause boundary

As already mentioned in §2.2.5.4, Avar has several types of dependent clauses, both argumental and adverbial, that are traditionally characterised as non-finite. These include nominalisations, which I refer to as *masdars*, following the tradition of Caucasian linguistics, participial and converbial clauses.<sup>9</sup> Given that infinitival clauses are syntactically transparent, the question whether this transparency is also a property of any, or all, of the remaining non-finite clauses is only natural. We begin with *masdars*.

Being deverbal nominals, *masdars* have many properties in common with regular nominal phrases, including their being able to inflect for case, the particular case affix depending on the exact syntactic environment, the simplest of those involving the *masdar* in the absolutive case. *Masdar*-selecting matrix

8. It should be noted that Avar infinitives are themselves a verbal derivative as opposed to being the basic form hosting further derivational morphology.

9. The issue of finiteness with respect to the morphosyntax of the Northeast Caucasian languages has recently been taken up in Kalinina & Sumbatova (2007). The authors identify predicativity as the main factor behind the notion of finiteness, and attempt to show that in Northeast Caucasian languages predicativity need not be realised on the verb.

predicates that assign absolutive to their clausal argument are verbs of *knowing, understanding, remembering, perceiving, discovering*, most or all of which are factive predicates. It is therefore not inconceivable that extraction out of these nominalised complements should lead to unacceptability, by virtue of their status as the so-called *factive islands*, a subset of *weak islands* (Szabolcsi 2007).

To see the absolutive-marked masdars in action, let us consider the following two sentences, the only difference between them concerning the matrix predicate:

- (29) a. di- da [ʃali-ca mašina b-ič- un b-uk'-in- Ø ] b-ix- ana  
 1SG-LOC Ali- ERG car.ABS N-sell-CVB N-be MSD-ABS N-see-PST  
 'I saw that Ali (had) sold the car.'
- b. di- da ʃa- la [ʃali-ca mašina b-ič- un b-uk'-in- Ø ]  
 1SG-LOC know-PRS Ali- ERG car.ABS N-sell-CVB N-be MSD-ABS  
 'I know that Ali has sold the car.'

The particular type of masdar we are dealing with in (29) is formed from the past tense stem of the verb *b-uk'ine* 'N-be.INF' which carries the unmarked absolutive case. The matrix predicate in (29a) has a slot for the agreement marker, that slot being filled by the neuter agreement marker signifying agreement with the absolutive-marked clausal argument. The long-distance agreement option is also available, as (30) makes clear.

- (30) di- da [ʃali-e jas j-oʃ'- un j-ik'-in- Ø ] b/j-ix- ana  
 1SG-LOC Ali- DAT girl.ABS F-like-CVB F-be-MSD-ABS N/F-see-PST  
 'I saw that Ali liked the girl.'

What is common to these three sentences is the presence in them of two nominal expressions that are marked with the absolutive case, which, as was explained in §2.2.4.2, triggers morphological agreement on the verb. Considering the situation at hand, with there being two potential targets for agreement, either one of them can enter into an agreement relation with the verb.<sup>10</sup>

It appears that arguments in an absolutive-marked masdar clause can be relativised, as (31), based on (29), demonstrates.

10. This agreement pattern bears a certain degree of resemblance to the famous phenomenon of Long-distance agreement as manifested by Tsez (Polinsky & Potsdam 2001). Establishing the extent of the similarity between these cases, however, would have to wait until another occasion.

- (31) [[dida [ʃalica — b-ičun b-uk'in- Ø ] b-ix- a- ra- b]  
 1SG.LOC Ali.ERG N-sell.CVB N-be.MSD-ABS N-see-PST-PTCP-N  
 mašina] χwana  
 car.ABS die.PST  
 'The car that I saw that Ali had sold broke down.'

The sentence in (31) is an example of the relativisation process targeting the internal argument of the most deeply embedded verb, *CM-ič-* 'sell'. One could conclude on the basis of this piece of evidence that absolutive-marked masdar clauses are transparent for at least some syntactic operations, contrary to the prediction formulated above that if they are complements to *see* or *know*, they are also syntactic islands. This move, however, is hasty, since weak islands are so named precisely because of the fact that under certain circumstances island effects can be obviated. As is known in the literature on weak islands (Cinque 1990), one such obviation environment concerns definite or referential DPs, of exactly the sort we see in (31).<sup>11</sup>

The facts, however, seem to indicate that the question of whether relativisation of non-definite material is possible is, although a prudent one to pose, unanswerable to a large extent: unlike *wh*-questions, which demonstrate the contrast between the status of extracting *who* (32a) as opposed to *how* or *how much* (32b–c) from within a presuppositional island, relative clauses cannot be formed to modify adverbials. If an adverbial has to be relativised, relativisation is done by including an overt nominal with the corresponding semantics as the relative clause's head noun (33), even though Abrusán (2014) reports the literature on relativisation out of weak islands, without giving concrete references, as claiming that relativisation in such contexts as negative islands is unavailable (34).

- (32) a. Who does John regret that he invited to the party?  
 b. \*How does John regret that he behaved at the party?  
 c. \*How much milk does John regret that he spilled? (Abrusán 2014: 57)
- (33) a. the manner/way/... that John regrets he behaved at the party  
 b. the amount of milk that John regrets that he spilled
- (34) a. #the way in which John didn't behave  
 b. #the speed with which John didn't drive (Abrusán 2014: 111)

11. Fox & Hackl (2007) present another set of weak island obviations brought about by embedding the island under such modal predicates as *allow*, casting doubt on the syntactic source of the unacceptability.

Ignoring for the moment the fact that (34) are very hard to judge in isolation without the remainder of the sentence, let alone a surrounding context, an informal poll of a handful of English speakers reveals that (35), an elaboration on (34b), is acceptable; in a similar vein, Dutch allows relativisation out of potential negative islands (36).

- (35) On his first day, John was fined for going with the speed at which he didn't even drive.
- (36) Ik blijf betalen voor de snelheid waar ik nooit mee heb  
I keep paying for the speed where I never with have  
geinternet  
internet.PTCP  
'I keep paying for the connection speed which I have never reached.'  
[Dutch, Charlotte Lindenberg (p.c.)]

Both sentences above illustrate the well-known observation that context can ameliorate weak island violations.

Unlike *know* or *see* discussed above, certain predicates mark their dependent with another case but absolutive, which can be genitive, dative or a variety of locative. The genitive case affix, for example, is assigned to their clausal arguments by such verbs as *bicine* 'tell', *k'očene* 'forget', *uryel habize* 'worry', and *gara-čwari* 'discuss'.

- (37) aħmadi-ca ebel ina- ł- ul uryel ha-b-i- č'o  
Ahmed-ERG mother.ABS go.MSD-OBL-GEN worry do-N-MSD-NEG  
'Ahmed didn't worry about his mother's departure.'  
(adapted from Samedov 2003: §7.7.3.2)

When one attempts to relativise an argument of the most deeply embedded verb (*ine* 'go' in the relevant sentences above and below) and preserve the nominalisation morphology on it, together with the genitive case marking, unacceptability ensues (38).

- (38) \*[aħmadi-ca [\_\_ in- ał- ul ] uryel ha- b-ič'- e- j ]  
Ahmed-ERG go.MSD-OBL-GEN worry.ABS make-N-PST-NEG-PTCP-F  
Ŷadan ] hesul ebel j- igo  
woman.ABS his mother.ABS F-be.PRS  
(‘The woman about whose departure Ahmed didn't worry is his mother.’)

Instead, in order to express the desired meaning the highest predicate in the relative clause under formation can exceptionally take a finite clause headed by the (quotative) complementiser *=(j)ilan* 'that', out of which relativisation

can proceed unimpeded:

- (39) [aħmadi-ca [\_\_ un-ilan ] uryel ha- b-ič'- e- j  
 Ahmed-ERG go-COMP worry.ABS make-N-PST:NEG-PTCP-F  
 řadan ] hesul ebel j-igo  
 woman.ABS his mother.ABS F-be.PRS  
 'The woman about whose departure Ahmed didn't worry is his mother.'

The preliminary empirical generalisation regarding the status of structures involving relativisation from within a nominalised clause, given the data and discussion above, is that such relativisation operations result in unacceptability. In §3.2.5 I return to this generalisation and revise it in such a way as to include long-distance relativisation.

### 3.2.4.3 Relativisation across an adjunct clause boundary

Adjunct clauses in languages that have them have been shown to belong in the class of *strong islands* (i.e. domains uniformly impenetrable for syntactic operations) as opposed the weak islands mentioned in §3.2.4.2 above. The reader will recall from the discussion in §2.2.5.2 that Avar too has a variety of adjunct clauses expressing various sorts of relations (temporal, reason etc.), most of these relations being expressed with the help of converbial affixes. Example (40), for instance, contains a temporal adjunct clause (bracketed) expressing the relation of temporal precedence.

- (40) [řali w-ač'- a- ra- χ ] hes- ul mařina χw-ana  
 Ali.ABS M-come-PST-PTCP-CVB he.OBL-GEN car.ABS die-PST  
 'Ali having arrived, his car broke down.'

Naturally, the adjunct clause does not have to be monoclausal as long as its highest predicate can embed other clauses and has the relevant converbial morphology:

- (41) [hes- da [aminat j-ač'- an ] =ilan j-ix- a- ra- χ ]  
 he.OBL-LOC Aminat.ABS F-come-PST =COMP F-see-PST-PTCP-CVB  
 mařina χw-ana  
 car.ABS die-PST  
 'He having seen Aminat had arrived, the car broke down.'

The bracketed adjunct clause in (41) satisfies both of these criteria: its topmost predicate, *CM-ix-* 'see', can embed clauses and is morphologically a temporal converb. Now, if we were to attempt to relativise an argument contained inside



the adjunct clause to make it an argument of the matrix predicate, unacceptability would ensue:

- (42) \*[[\_\_ w-ač'- a- ra- χ ] mašina χw-a- ra- w] was dir  
 M-come-PST-PTCP-CVB car.ABS die-PST-PTCP-M boy.ABS ISG:GEN  
 wac w-ugo  
 brother.ABS M-be.PRS  
 ('The boy that the car broke down when \_\_ arrived is my brother.')

- (43) \*[[hes- da [\_\_ j- ač'- an ] =ilan j- ix- a- ra- χ ] mašina  
 he.OBL-LOC F-come-PST =COMP F-see-PST-PTCP-CVB car.ABS  
 χw-a- ra- j ] ŋadan ana  
 die-PST-PTCP-F woman.ABS go.PST  
 ('The woman that the car broke down when he saw \_\_ had arrived left.')

It is therefore evident that adjunct clauses are as opaque in Avar for the purposes of relativisation as they are in English, with the following important qualification as to the finiteness issue: although converbial clauses are traditionally described as non-finite, they are still impenetrable for  $\bar{A}$ -operations, unlike their English counterparts involving non-finite verbs.

- (44) a. \*Which topic did you leave [ because Mary talked about \_\_ ] ?  
 b. Which topic did you leave [ without talking about \_\_ ] ?  
 (Szabolcsi 2007: 486)

As the contrast between the two questions above shows, extractions from certain adjuncts in English is permissible when the clausal adjunct is untensed, such as the gerundival in (44b), although see Truswell 2007 for evidence from secondary predication that the matter is much more complicated than just involving the finite/non-finite distinction.

#### 3.2.4.4 Relativisation of an element of a specifier

So far we have seen that Avar relativisation behaves as expected with respect to island sensitivity in being disallowed out of converbial adjunct clauses, complex noun phrases — both those modified by a relative clause and embedding a clause. Another well-known subset of domains opaque to movement operations is represented by complex specifiers of various sorts so much so as for these to be grouped together with the aforementioned strong islands under the label of the Condition on Extraction Domain, or the CED (Huang 1982).

For Avar there are two subsets of cases to be considered: (a) nominals with

nominal or adpositional arguments and (b) masdars in the subject position. As regards (a), we have already seen above that relativisation of a possessor contained inside a specifier is a legitimate operation (16).<sup>12</sup> This does not seem to extend to masdar-shaped specifiers, as the contrast in acceptability between (45) and (46) illustrates.

- (45) aħmadi-ca gordu ganč'i-ca b-ek- i hik'a- b žo  
 Ahmed- ERG window.ABS stone- ERG N-break-MSD good-N thing.ABS  
 heč'o  
 COP:NEG  
 'That Ahmed broke the window with a stone isn't a good thing.'

More precisely, (45) shows that a masdar clause can appear as a specifier of

12. It has been observed in the literature that unlike the other strong islands, specifiers are not universally opaque for extraction.

(i) *Catalan wh-questions*

- a.\*[de quins conferenciants] et sembla que les propostes em van impressionar?  
 of which speakers 2SG seems that the proposals 1SG go impress  
 b.[De quins conferenciants] et sembla que em van impressionar les propostes?  
 of which speakers 2SG seems that 1SG go impress the proposals  
 'Which speakers does it seem to you that the proposals by (have) impressed me?'  
 [modelled on Boeckx's (2012) examples from Spanish]

According to Boeckx (2012), the relevant empirical generalisation is that subextraction out of specifiers in Spanish (illustrated for Catalan in (i) above) is allowed as long as that specifier appears postverbally. As (ii) demonstrates, this same generalisation extends to  $\bar{A}$ -movement underlying the derivation of Catalan relative clauses.

(ii) *Catalan long-distance relativisation*

- a.\*Els conferenciants [dels quals et sembla que les propostes em van  
 the speakers of whom 2SG seems that the proposals 1SG go  
 impressionar] són americans.  
 impress are American  
 b. Els conferenciants [dels quals et sembla que em van impressionar les  
 the speakers of whom 2SG seems that 1SG go impress the  
 propostes] són americans.  
 proposals are American  
 'The speakers that it seems to you that the proposals by have impressed me are Amer-  
 ican.'  
 [Bernat Bardagil-Mas (p.c.)]

The contrast between extractions of pre- and post-verbal subjects observed above is crucial for Boeckx's own view of locality domains, whereby islandhood is an emerging, or acquired, property imparted by internal merge. Paraphrasing, this means that complex objects that have undergone movement become syntactically opaque (Boeckx 2011). To reiterate, this contrast does not manifest itself in Avar.

a copular predicate, whilst attempting to relativise an argument from within that masdar clause leads to unacceptability (46).

- (46) \*bat- ana [[ [aħmadi- ca gordu \_ b-ek- i ] lik'a- b  
 find-PST Ahmed.OBL-ERG window.ABS N-break-MSD good-N  
 žo heč'- e- b ] gamanč' ]  
 thing.ABS COP:NEG:PRS-PTCP-N stone.ABS  
 ('The stone which that Ahmed broke the window with isn't a good thing has been found.')

The DP *gamanč'* 'stone' in (46) above is the argument of the matrix predicate whilst simultaneously being modified by a relative clause that it serves as the head noun for. The observed unacceptability does not come unexpected, since relativisation out of a specifier is, by hypothesis, disallowed.

#### 3.2.4.5 Relativisation across a finite clause boundary

Recall from the foregoing discussion that only a small number of Avar predicates can take finite complements. Those include verbs of thinking and saying and their complement being connected with the help of the =*ilan* complementiser (47a).

- (47) a. kina-da= go kko- l- e- b b-ugo muradi-ca ču  
 all- LOC=EMPH think-PRS-PTCP-N N-be.PRS Murad- ERG horse.ABS  
 b-iq'- an= ilan  
 N-steal-PST=COMP  
 'Everyone thinks that Murad stole the horse.'
- b. [[kina-da= go muradi-ca \_ b-iq'- an= ilan ] kko- l- e- b  
 all- LOC=EMPH Murad- ERG N-steal-PST=COMP think-PRS-PTCP-N  
 b-ug- e- b ] ču b-at- ana  
 N-be.PRS-PTCP-N horse.ABS N-find-PST  
 'The horse that everyone thinks Murad stole has been found.'

The fact that (47b) is acceptable shows that the relativisation operation may cross at least one boundary of a finite clause.

#### 3.2.4.6 LDR: preliminary summary

Summing up the present subsection, long-distance relativisation crossing one clause boundary is, in general, permissible but with a number of qualifications. Firstly, infinitival clauses have been shown to be syntactically transparent, as

have been their finite embedded counterparts. On the other end of the spectrum are adverbial clauses, which are invariably opaque. Finally, nominalised embedded clauses — *masdars* — display a variable behaviour: whilst mostly opaque, they do nevertheless allow certain extractions, possibly due to the extractees' referential nature.

### 3.2.5 Long-distance relativisation: multiple levels of embedding

In this subsection I discuss more complex examples of LDR, the operation crossing, this time, several clause boundaries as opposed to just one. Just like with the previous subsection, I begin this one with infinitival clauses.

#### 3.2.5.1 LDR across multiple infinitival clause boundaries

We have seen earlier (28) that the relativisation operation could easily cross one clause boundary as long as that clause was infinitival. The examples below demonstrate that outside of the relativisation environments embedding an infinitival inside another infinitival is possible.

- (48) a. *insu- e b-ol'- un b-ugo [bajbix-ize ħalt'- ize ]*  
 father.OBL-DAT N-want-CVB N-be.PRS start- INF work-INF
- b. *insu- e b-ol'- un b-ugo [ħalt'- ize bajbix-ize ]*  
 father.OBL-DAT N-want-CVB N-be.PRS work-INF start- INF  
 'Father wants to start working.'

In addition to the orderings in (48), where the cluster consisting of the infinitives follows the matrix verb and the infinitives themselves come in either order, the following one is available too, with the complex infinitival preceding the matrix verb in a “default” SOV manner:

- (49) *insu- e [[ħalt'- ize ] bajbix-ize ] b-ol'- un b-ugo*  
 father.OBL-DAT work-INF start- INF N-want-CVB N-be.PRS  
 'Father wants to start working.'

The sentence recursively embedding two infinitival clauses allows relativisation from within the most deeply embedded infinitival. The agreement relation can then be established either between the participle and the infinitival clause, in which case the participle appears carrying the neuter agreement marker (50a), or between the participle and the masculine noun phrase *čī* 'man' (50b) inside the infinitival clause:

- (50) a. niže-e q'wariŋ-un w-ugo [[[[\_\_ ħalt'-ize ] bajbix-ize ]  
 we- DAT need- CVB M-be.PRS work-INF start- INF  
 b-oł'- un b-uge- w] či ]  
 N-want-CVB N-be.PRS:PTCP-M man
- b. niže-e q'wariŋ-un w-ugo [[[[\_\_ ħalt'-ize ] bajbix-ize ]  
 we- DAT need- CVB M-be.PRS work-INF start- INF  
 b-oł'- un w-uge- w] či ]  
 N-want-CVB M-be.PRS:PTCP-M man
- c. \*niže-e q'wariŋ-un w-ugo bajbix-ize ħalt'-ize b-oł'- un  
 we- DAT need- CVB M-be.PRS start- INF work-INF N-want-CVB  
 w-uge- w či  
 M-be.PRS:PTCP-M man  
 'We need a man who is willing to start work at once.'

The first two cases are self-explanatory but the unacceptability of (50c) needs to be elucidated, especially given the acceptability of (48a). This unacceptability can be most naturally accounted for if the reversed word order in (48a) is viewed as derived; the process underlying this derived order may then be unavailable in the context of relativisation, especially in light of certain restrictions on word order in relative clauses introduced on p. 70.<sup>13</sup>

Let us now consider cases involving long-distance relativisation of a verb's internal argument.<sup>14</sup>

- (51) insue b-oł'un b-ugo [mašina q'ač'aze bajbixize]  
 father.DAT N-want.CVB N-be.PRS car.ABS mend.INF start.INF  
 'Father wants to start mending the car.'
- (52) [[insue [[\_\_ q'ač'aze ] bajbixize] b-oł'un b-uge- b ]  
 father.DAT mend.INF start.INF N-want.CVB N-be.PRS:PTCP-N  
 mašina] basrija-b b-ugo  
 car.ABS old- N N-be.PRS  
 'The car that the father wants to start mending is old.'

The DAT-marked DP *insue* 'father.DAT' in (52) is the external argument of the experiencer verb *boł'* 'want', the dative case being assigned to it lexically. The

13. These word-order restrictions are reminiscent of Williams's (1982) Head-Final Filter.

14. The examples of long-distance relativisation in the discussion below are preceded by baseline sentences that do not involve relativisation; in them I only provide the non-derived order of the embedded infinitive and the matrix verb, the other order also being available, unlike in the relativisation examples proper for the simple reason of Avar relative clauses being strictly verb-final.

only properly transitive predicate here is *q'ač'*- 'mend', whose internal argument is being relativised. We can therefore be sure that we are in fact dealing with long-distance relativisation of an argument from within the most deeply embedded infinitival clause.

The very same long-distance relativisation across two infinitival clause boundaries is illustrated in (54–58), this time involving an oblique argument (54b), a transitive verb's agent (56b) and a transitive verb's patient (58b).

- (53) rasulica jacale ruq' b-aze kumek ha-bize kkola  
 Rasul.ERG sister.DAT house.ABS N-build.INF help.ABS do-N.INF must.PRS  
 'Rasul must help his sister build the house.'

- (54) [[rasulica [[\_\_ ruq' b-aze ] kumek ha-bize ]  
 Rasul.ERG house.ABS N-build.INF help.ABS do-N.INF  
 kkole- j ] jac ] ana  
 must.PRS:PTCP-F girl.ABS go.PST  
 'The sister whom Rasul must help build a house went away.'

- (55) die b-oł'un b-uk'ana ču ɸ'oloze k'weze  
 ISG.DAT N-want.CVB N-be.PST horse.ABS saddle.INF can.INF  
 'I wanted to be able to saddle a horse (but couldn't).'

- (56) [[die [[\_\_ ɸ'oloze ] k'weze ] b-oł'un b-uk'ara- b ]  
 ISG.DAT saddle.INF can.INF N-want.CVB N-be.PST:PTCP-N  
 ču ] χwana  
 horse.ABS die.PST  
 'The horse that I wanted to be able to saddle died.'

- (57) dibirase b-oł'un heč'o hab t'ex c'alize  
 Dibir.DAT N-want.CVB COP:NEG that book.ABS read.INF  
 'Dibir doesn't want to read this book.'

- (58) [[[š:iwaw čijase [\_\_ c'alize ] b-oł'ize ] kkole- b ] t'ex ]  
 each man.DAT read.INF N-want.INF must.PRS:PTCP-N book.ABS  
 č'amuč'a-b b-ugo  
 boring- N N-be.PRS  
 'The book that everyone should want to read is very boring.'

It can thus be concluded that Avar infinitival clauses are syntactically transparent, irrespective of the number of layers of embedding.

### 3.2.5.2 LDR across multiple masdar clause boundaries

We have seen earlier that certain masdar clauses (*viz.* those carrying the absolutive case marker) allowed the relativisation operation to cross their boundary whereas some others, most notably genitive-marked ones, did not. Before we consider relativisation patterns involving multiple masdar clause boundaries, we need to establish that masdars can embed other masdars.

- (59) a. aminati-da ɬa- la [insu- ca [niɬer askaraz berhenɬi  
Aminat-LOC know-PRS father-ERG 1PL:GEN troops.ERG victory.ABS  
b-osi- jaɬ- ul ] b-ic- un b-uk'-in- Ø ]  
N-take.MSD-OBL-GEN N-tell-CVB N-be- MSD-ABS  
'Aminat knows that father has told us about our troops' victory.'
- b. aminati-ca [insu- da [niɬer askaraz berhenɬi b-os- un  
Aminat-ERG father-LOC 1PL:GEN troops.ERG victory.ABS N-take-CVB  
b-uk'-in- Ø ] ɬaj- aɬ- ul ] b-ic- un b-ugo  
N-be- MSD-ABS know.MSD-OBL-GEN N-tell-CVB N-be.PRS  
'Aminat has said that father knows our troops have won.'
- c. aminati-da [insu- da [niɬer askaraz berhenɬi b-os- un  
Aminat-LOC father-LOC 1PL:GEN troops.ABS victory.ABS N-take-CVB  
b-uk'-in- Ø ] ɬaj- aɬ- da ] boʒ- ula  
N-be- MSD-ABS know.MSD-OBL-LOC believe-PRS  
'Aminat believes that father knows our troops have won.'

Although all three sentences in (59) illustrate that embedding one masdar inside another is possible, they all contain different matrix predicates — *ɬa-* 'know', *bic-* 'tell' and *boʒ-* 'believe'.

Having made sure that embedding one masdar inside another does not lead to unacceptability, we can continue examining the properties of Avar relativisation with respect to unboundedness.

- (60) *know > say*  
\*[aminati-da [insu- ca [niɬer askaraz b-osi- jaɬ- ul ]  
Aminat-LOC father-ERG 1PL:GEN troops.ERG N-take.MSD-OBL-GEN  
b-ic- un b-uk'-in- Ø ] ɬa- l- e- b] berhenɬi kidanigi  
N-tell-CVB N-be- MSD-ABS know-PRS-PTCP-N victory.ABS never  
b-uk'-inč'o  
N-be- PST:NEG  
'The victory that Aminat knows father has said our troops achieved never actually happened.'

It appears from (60) that the relativisation operation may not cross two masdar

clause boundaries if the matrix predicate is *la-* ‘know’ and the embedded predicate is *bic-* ‘say’. There are several potential reasons for this unacceptability, one of them being precisely the fact that the matrix predicate is *know*, which requires a factive complement, unacceptability thus resulting from the pre-suppositional island being violated. This line of reasoning, however, is flawed, since the same unacceptability is observed with other attitudinal predicates, as illustrated in (61), involving *bož-* ‘believe’, a predicate that does not require that the proposition expressed by its complement should be true.

- (61) With *believe* > *say*  
 \*[aminati-da [insu- ca [niŋer askaraz b-osi- jaŋ- ul ]  
 Aminat-LOC father-ERG 1PL:GEN troops.ERG N-take.MSD-OBL-GEN  
 b-ic- un b-uk'-in- al- da ] b-ož- ul- e- b] berhenŋi  
 N-tell-CVB N-be-MSD-OBL-LOC N-believe-PRS-PTCP-N victory.ABS  
 kidanigi b-uk'-inč'o  
 never N-be- PST:NEG  
 ‘The victory that Aminat believes father has said our troops achieved never actually happened.’

The same unacceptability obtains if the positions of the two masdar-embedding predicates are reversed:

- (62) With *say* > *know*  
 \*[aminati-ca [insu- da [niŋer askaraz b-os- un b-uk'-in- Ø ]  
 Aminat-ERG father-LOC 1PL:GEN troops.ERG N-take-CVB N-be-MSD-ABS  
 ɭaj- aŋ- ul ] b-ic- un b-ug- e- b] berhenŋi kidanigi  
 know.MSD-OBL-GEN N-tell-CVB N-be-PRS-PTCP-N victory.ABS never  
 b-uk'-inč'o  
 N-be- PST:NEG  
 ‘The victory that Aminat has said father knows our troops achieved never actually happened.’

- (63) With *believe* > *know*  
 \*[aminati-da [insu- da [niŋer askaraz b-os- un b-uk'-in- Ø ]  
 Aminat-LOC father-LOC 1PL:GEN troops.ERG N-take-CVB N-be-MSD-ABS  
 ɭaj- al- da ] bož- ul- e- b] berhenŋi kidanigi  
 know.MSD-OBL-LOC believe-PRS-PTCP-N victory.ABS never  
 b-uk'-inč'o  
 N-be- PST:NEG  
 ‘The victory that Aminat believes father has said our troops achieved never actually happened.’



In light of the data above the generalisation formulated in §3.2.4.6 can now be revised in such a way as to designate most masdar clauses as syntactically opaque, and it remains to be seen whether the source of this opacity is internal or external to syntax.

### 3.2.5.3 Finite complement clauses

Recall from §2.2.5.4 that in addition to non-finite complementation Avar also has several predicates capable of embedding finite clauses, which can themselves contain a finite embedded clause, as in (64a) below. Given the fact that relativisation across one finite clause boundary was permitted, it is natural to expect the number of layers of embedding not to matter. The unacceptability of (64b) shows, however, that this expectation is not borne out.

- (64) a. kinazdago kko- l- e- b b-ugo [aminati-ca ab-un= ilan  
 everyone.LOC think-PRS-PTCP-N N-be.PRS Aminat-ERG say-PST=COMP  
 [muradi-ca ču b-iq'- an= ilan ]]  
 Murad-ERG horse.ABS N-steal-PST=COMP  
 'Everyone thinks that Aminat said that Murad stole the horse.'
- b. \*kinazdago aminati-ca muradi-ca — b-iq'- an= ilan  
 everyone.LOC Aminat-ERG Murad-ERG N-steal-PST=COMP  
 ab-un= ilan kko- l- e- b b-uk'a- ra- b ču  
 say-PST=COMP think-PRS-PTCP-N N-be.PST-PTCP-N horse.ABS  
 b-atana  
 N-find.PST
- c. \*kinazdago aminati-ca muradi-ca — b-iq'- an= ilan  
 everyone.LOC Aminat-ERG Murad-ERG N-steal-PST=COMP  
 ab-u- ra- b kko- l- e- b b-uk'a- ra- b ču  
 say-PST-PTCP-N think-PRS-PTCP-N N-be.PST-PTCP-N horse.ABS  
 b-atana  
 N-find.PST  
 ('The horse that everyone thinks Aminat said Murad stole has been found.')

Unlike a non-relativisation context in (64a), where a finite clause is embedded inside another finite clause, which is in turn embedded inside another finite-clause embedding predicate, relativisation is impossible. The two ungrammatical relative clauses in (64b-c) differ in how the intermediate finite clause is connected to the rest of the structure: all embedded clauses in the (b)-sentence connect to the higher predicate via the complementiser =*ilan*, whilst the example in (c) features participial morphology on *ab-* 'say'. Neither

way of creating a relative clause under these structural conditions is possible.

We have therefore arrived at a paradox: on the one hand, finite embedded clauses are transparent for the purposes of relativisation, hinting at unboundedness, but on the other hand the number of layers of embedding also plays a crucial role.

### 3.2.6 Summary

This section has presented the data and discussion of the syntactic constraints on the operation of relativisation in Avar. We have learned that despite their non-finite nature, prenominal relative clauses in Avar are of a clausal nature (as opposed to similar-looking participial constructions in languages like English which do not have properties traditionally associated with clausality) and thus demonstrate the behaviour typical of  $\bar{A}$ -constructions:

- relativisation of a constituent leaves a gap in the base position
- relativisation does not alter the case marking on the arguments
- any argument can be relativised
- relativisation obeys locality constraints: long-distance relativisation is available as long as there are no independent considerations blocking it
- relativisation is sensitive to islands, both strong and weak

It is noteworthy that an important characteristic of  $\bar{A}$ -constructions — unboundedness — appears to be absent from relativisation in Avar, which is instead clause-bounded.

## 3.3 Sketching the proposal

The analysis of Avar relativisation to be presented shortly is fairly conservative with respect to the mechanisms underlying the derivation of relative clauses and rules and operations mapping the resulting structure onto the meaning(s) that relative clauses have been argued to have. The only departure from mainstream analyses of relativisation, it seems to me, concerns the ban on unbounded  $\bar{A}$ -dependencies.

In this section I derive the properties of Avar relativisation summarised in §3.2.6 above by deploying the notion of null operator movement (Chomsky

1977, and developed in detail in Browning 1987) — a process frequently alluded to in the relativisation literature (Kornfilt 2000 on Turkish, C.-h. Han & Kim 2004 on Korean, Aoun & Li 2003 on Mandarin Chinese, Potsdam 2006, 2009 on Malagasy, Caponigro & Polinsky 2011 on Adyghe). I will take this operator movement to obtain freely instead of being feature-driven, and the locality constraints on  $\bar{A}$ -dependencies to be external to relativisation as such.

As far as the ban on unbounded dependencies is concerned, modelling opacity in terms of the notion of *phases* (Chomsky 2001, 2008) is a non-trivial matter. I thus appeal to a different framework, Zwart (2009), that seems to me more promising. It should be noted, however, that the analysis of wh-questions and focus-marking put forward in Chapters 4 and 5 is not dependent on the internal syntax of relative clauses but only on the presence of a relative clause in the structure.

### 3.3.1 *Structure*

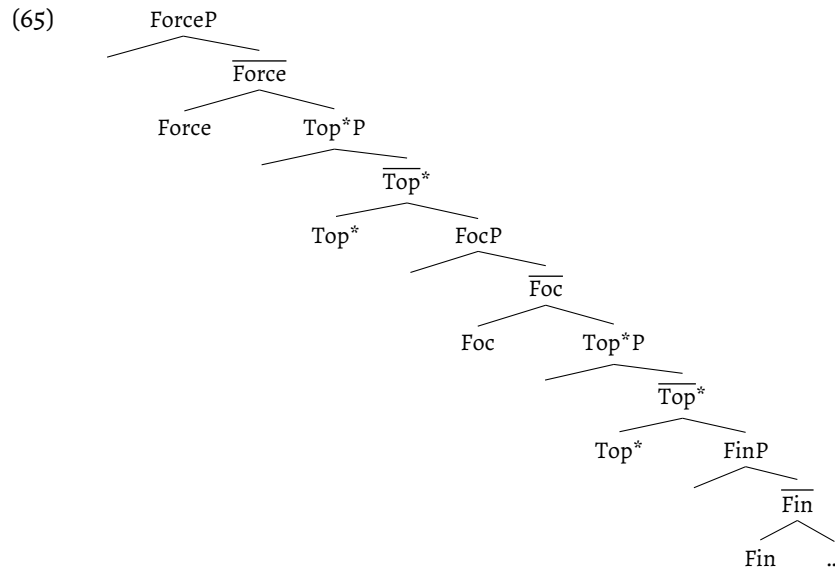
The relatively big question of what the structure of an Avar relative clause, whether headed or headless, is can in turn be decomposed into several sub-questions.

1. How can an extended projection of a verb (i.e. a clause) transform into an object with adjectival properties whilst retaining some, if not all, of its clausal characteristics?
2. What node, or nodes, in the hierarchical syntactic structure are lexicalised as the participial affixes carried by verbs in relative clauses?
3. Why is Avar relativisation clause-bounded rather than unbounded?
4. What is the source of variability illustrated in §3.2 with respect to unboundedness as far as long-distance relativisation is concerned?

I now proceed to discuss these questions one by one.

### 3.3.2 *Clause-typing and the Split CP Hypothesis*

In developing my analysis I adopt a broadly cartographic approach to the architecture of the clause taking as my point of departure Rizzi's (1997) proposal as to the composition of the complementiser portion of the clause, illustrated in (65) below.



According to Rizzi, the complementiser domain contains information of several distinct types: the type, or force, of the clause (ForceP), the information on finiteness (FinP), and various information-structurally relevant notions like givenness/topicality, focus etc. Furthermore, all of these projections come equipped with specifier positions hosting those elements which have moved for feature-checking reasons.

I propose that the functional heads from the decomposed C-domain of relevance for the current subsection are Force and Fin, which is the required minimum if morphological exponence is to be taken seriously, as it makes it clear that a line can easily be drawn separating at least the exponent of tense from that of finiteness (§3.3.2 below contains a brief discussion pertaining to the status of Force in this architecture), and eschew the information-structural heads Top\* and Foc from the narrow syntax altogether, for reasons mentioned in chapter 5.

**Order of affixes in RCs**

As already demonstrated in chapter 2, in an Avar verbal form, whether tensed or non-finite, clause-typing affixes tend to follow those expressing finiteness-related information, which when translated into structural terms can be interpreted as equivalent to Force being hierarchically superior to Fin, in full accordance with Rizzi's (1997) analysis. This is shown in Table 3.1, where the

	Affirmative		Negative	
	Finite	Participle	Finite	Participle
Past	<i>aḥ-a-na</i>	<i>aḥ-a-ra-w</i>	<i>aḥ-ič'-o</i>	<i>aḥ-ič'-e-w</i>
Present	<i>aḥ-ul-a</i>	<i>aḥ-ul-e-w</i>	<i>aḥ-ula-ro</i>	<i>aḥ-ula-r-e-w</i>
Future	<i>aḥ-il-a</i>	<i>aḥ-il-e-w</i>	<i>aḥ-ila-ro</i>	<i>aḥ-ila-r-e-w</i>

Table 3.1: Finite and participial forms of *aḥize* ‘shout’

affixes corresponding to tense are highlighted in boldface.<sup>15,16</sup>

The version of the Split-CP Hypothesis I adopt is depicted in (66).



Using this version of the left periphery, we can represent the tensed declarative sentence (67a) and a corresponding participial relative clause (67b) as (68a) and (68b) respectively.

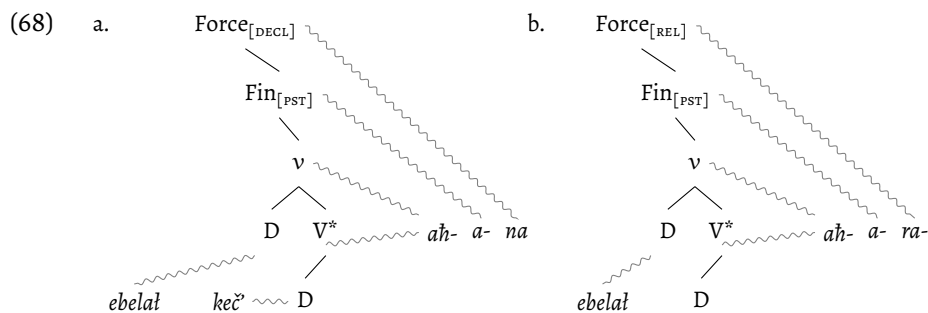
15. A close look at Table 3.1 will reveal the fact that the exponents for Fin and Force in the past tense, both affirmative and negative, are very different from those of non-past tenses. At this moment I do not have a clear idea as to why this should be the case.

16. As regards the possibility of Avar participles realising aspect rather than tense, and consequently being smaller in size than TPs, a semantic argument can be made against it, adding to the morphosyntactic evidence (I owe this argument to Doron & Reintges 2005). Aspect, as is well-known since at least Reichenbach (1947), encodes relations between an event time E and a(n abstract) reference time R, whereas the relations established by tense must be between R and the speech, or utterance time S, which makes a very concrete prediction concerning the status of particular morphemes on, in our case, the participial forms. If the morpheme in question shifts the reference time of the participle, whether relative to the utterance time or the time of the clause hosting the participial modifier, we are dealing with tense, which is clearly what is going on in Avar.

(i) žurnal- al c'al- ul- e- l řadam-az ř:ib- nigi berč'wa-č'o  
 magazine-PL read-PRS-PTCP-PL people-ERG what.ABS-POL notice- PST:NEG  
 'The people who were reading magazines noticed nothing.'

The present-tense marking on the participle *c'alulel* 'reading' is interpreted relative to the time of the matrix clause, which is, in this case, in the past.

- (67) a. ebel- at keč' aħ- ana  
 mother-ERG song.ABS shout-PST  
 'Mother sang a song.'
- b. ebel- al aħ- a- ra- b keč'  
 mother-ERG shout-PST-PTCP-N song.ABS  
 'a/the song that mother sang'



The tree in (68b) corresponds to the strictly relative clause portion of (67b), hence the absence of both the head noun and the neuter concord marker on the participle), and D notates the null operator introduced as the internal argument of aħ- 'shout'.

As regards the lowest layer of structure, I have drawn the external and internal arguments in both the declarative and relative clauses as being introduced within that layer, much in line with contemporary work on the decomposition of the verb phrase. I return to the problems involved in modelling this within the framework of layered derivations shortly.

### 3.3.3 Locality: islands and workspaces

One of the most striking properties of Avar relativisation presented in this chapter is its ultra-sensitivity to locality constraints: indeed, unlike its counterparts in languages like English or Japanese, Avar relative clauses have been shown to lack the unboundedness property typically taken to be one of the hallmarks of  $\bar{A}$ -constructions, perhaps with the exception of Quantifier Raising, which too appears to be clause-bounded.

#### 3.3.3.1 Extreme locality

I see two possibilities of deriving the extreme locality associated with the  $\bar{A}$ -dependencies in Avar as viewed from the perspective of Zwart's (2009) layered-

derivations framework: either the lack of unboundedness is caused by syntactic, configurational, reasons, or it is an interface phenomenon.

### 3.3.3.2 Syntactic opacity

The recent years have seen a resurgence of interest in the various issues surrounding the notion of locality, the major discussions concentrating on the nature of the already established locality constraints. In particular, the advent of Phase Theory (Chomsky 2001, 2008) has triggered the line of work either trying to reduce islands to phases (Müller 2010) or using (strong) islands and phases interchangeably (Adger & Ramchand 2005).

Since it is not my intention in this thesis to offer an account of locality and islandhood, the remainder of this subsection is necessarily speculative.

Instead of trying to reduce islands to phases, or chunks of the derivation carrying very particular category labels (v, C, and N/D), I follow Zwart (2009, 2011a,b) in adopting the notion of *workspace*, or *derivational layer* as one of the integral elements in the architecture of the grammar. Another important concept is that of a *numeration*, which is the set of all the elements of a particular subderivation (see §2.1.1.1 for more details).

In Zwart's framework outputs of one derivational layer can enter the numeration for the next derivational layer as atomic elements (Zwart 2009, Trotzke 2012, Trotzke & Zwart 2014, Zwart to appear) whilst being syntactically complex.<sup>17</sup>

### Opacity of masdar clauses

Recall from the brief discussion in §2.2.5.2 that Avar masdars come in two kinds, as far as their morphosyntax is concerned. One variety corresponds, at least if the morphosyntactic cues are to be taken seriously, to little more

17. The idea of creating objects in a distinct workspace or derivational layer and then transferring it to the current workspace as an atomic element is roughly what is traditionally, albeit implicitly, taken to happen to complex specifiers, or at least complex sentential subjects (as opposed to the specifiers of heads that occur lower in the clausal spine than T), given the Spanish and Catalan data from fn. 12 op p. 83. Chomsky (2001) writes, for instance, of '[c]omplex objects already constructed in the course of the derivation, which proceeds in parallel' (Chomsky 2001: n. 22). Alternatively, and *pace* Boeckx (2012), all specifiers could be treated alike for the sake of uniformity (Müller 2010), i.e. as syntactically opaque. The same opacity for nominalised clausal arguments in Avar as the one resulting from their being created in a separate derivational layer could be derived in more traditional frameworks by allowing clausal arguments to be introduced by dedicated functional heads in the decomposed VP (Ramchand 2008, Adger, Harbour & Watkins 2009).

than a verb's root, which precludes them from being CPs. The other kind of masdar, the *-li*-masdar, is by necessity bigger than a CP, which is identifiable morphologically.

In the present chapter, in turn, we have established that their size and syntactic category notwithstanding, masdar clauses, both embedded under attitudinal verbs and functioning as sentential subjects, are islands blocking relativisation. Let us take here a concrete example of unacceptability resulting from attempting to relativise a DP from a masdar clause — (38), the relevant part of which is repeated below as (69a) for embedded masdars, and (46), represented here as (69b), for masdars as specifiers, — and derive this effect from derivation layering.<sup>18</sup>

- (69) a. \*[[aħmadica [\_\_ inatul ] uryel ha- bič'e- j ]  
 Ahmed.ERG go.MSD.GEN worry.ABS make-N.PST:NEG:PTCP-F  
 řadan ]  
 woman.ABS

(‘The woman about whose departure Ahmed didn’t worry...’)

- b. \*bat- ana [[aħmadi- ca gordu \_\_ b-ek- i ] ħik'a- b  
 find-PST Ahmed.OBL-ERG window.ABS N-break-MSD good-N  
 žo heč'- e- b ] gamanč' ]  
 thing.ABS COP:NEG:PRS-PTCP-N stone.ABS

(‘The stone which that Ahmed broke the window with isn’t a good thing has been found.’)

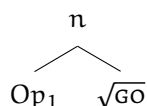
Proceeding in a bottom-up fashion, the first step is to create the embedded clause in (69a) from a numeration along the lines of (70a), where  $n$  is the nominalising head,  $\sqrt{\text{GO}}$  the root *in-* ‘go’, and  $\text{Op}_1$  the empty operator that is to serve as the embedded verb’s only argument.

(70) **Derivational layer 1**

- a. Numeration:  $\{\sqrt{\text{GO}}, n, \text{Op}_1, \}$   
 b. Derivation:

18. Even though in this subsection I treat both types of masdars on a par, I remain open to the possibility of their opacity being derived by distinct mechanisms — it might turn out that nominalised clausal arguments of attitudinal predicates are weak islands rather than strong islands, as suggested in the main text, in which case unacceptability would most likely be external to the narrow syntax. See Trotzke 2012 for a tentative proposal within the Layered Derivations framework, as well as Abrusán 2011 and ultimately Abrusán (2014) for a detailed analysis of weak island effects localising their source to a contradiction at the level of interpretation. It is my conviction that the two approaches are not fundamentally incompatible.





After numeration 1 has been exhausted the resulting structure (70b) is ready to be interpreted by the interfaces and, crucially, can become an atomic element of the next derivational layer's numeration.<sup>19</sup>

Before we proceed to examine the next derivational layer, it should be noted that generating the arguments in the same derivational layer as the complex object consisting of the verbal root and the nominalising head *n* runs counter the conclusion reached by Zwart (2009: §4) that all elements involved in multiple exponence should be created in a separate derivation layer, to the exclusion of all the arguments. This conclusion is arrived at by considering certain interface effects characterising, by hypothesis, certain objects as outputs of a previous (sub)derivation, as being displayed by “conflated” items such as the V-*v* complex.

These interface effects associated with syntactic objects that consist of a lexical root and a functional element such as *v* are (i) conventionalisation, (ii) categorisation, (iii) morphological realisation and (iv) atomisation. As regards conventionalisation, Zwart (2009) notes that such conflated verbs clearly ‘acquire a conventional sound–meaning pairing,’ providing *give* as a verb whose meaning is not fully compositional, since *give*, hypothetically a conflation of *cause* and *have*, is semantically different from *cause to have*. This, together with the observation that this conflation is obligatory and results in the creation of a monomorphemic unit, is taken as proving that the V-*v* complex is the output of a separate derivation, and form a constituent to the exclusion of the nominals corresponding to the verb's arguments.

Although this conclusion is inevitable in Zwart's top-down system with merge being a unary rather than binary operation, the more traditional bottom-up architecture such as the one adopted in this thesis can accommodate most, if not all, of the interface effects just mentioned. If the syntax-to-morphology mapping can be construed in such a way as for the morphological words to be

19. In the structure depicting the derivation of the masdar clause I take the nominalising head *n* to also introduce the external argument in (70b) above but not in (72b) below, where the external argument is introduced by *v*. Both of these types of structure have been proposed in the literature on nominalisations (see Alexiadou 2010a,b, Rozwadowska 2006, Milsark 2006, as well as references cited there, for detailed overviews of the existing approaches to derived nominals), and both are compatible with the approach in this chapter. I leave it to future work to develop the precise analysis of Avar masdars.

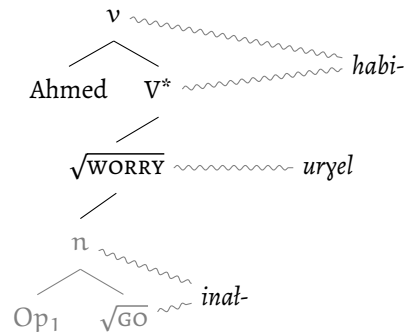
read off, in a bottom-up fashion, of the complement, or projection line, whilst simultaneously ignoring the specifiers, then conventionalisation, categorisation, morphological realisation all receive a natural explanation. As for opacity, the unavailability of certain extractions, such as in the case at hand, is a by-product of the completion of a particular derivational layer. Alternatively, the conflation process responsible for creating the  $\sqrt{-n}$  complex in (69) indeed takes place in a separate derivational layer, and the argument is added to the output in the next one (provided the availability of a mechanism responsible with associating a particular noun phrase with a particular argument slot). This would add another step to the derivation with a numeration of its own.

Returning to the derivation of (69), once the derivation of the masdar has been completed, the masdar, together with its argument, can undergo atomisation and enter the numeration for the subsequent derivational layer.

(71) **Derivational layer 2**

a. Numeration:  $\left\{ \begin{array}{c} n \\ \swarrow \quad \searrow \\ Op_1 \quad \sqrt{GO} \end{array} , v, \sqrt{WORRY}, Ahmed \right\}$

b. Derivation:



Because the leftmost element in the numeration in (71a) is atomic, it is syntactically opaque, which entails that the empty operator is “trapped” inside it, relativisation being precluded for semantic reasons, as the structure, although a licit output of Merge, cannot receive the intended interpretation, if any at all. It is therefore immaterial how the rest of the clause is derived, since the cause for the observed unacceptability is local to the embedded masdar.<sup>20</sup>

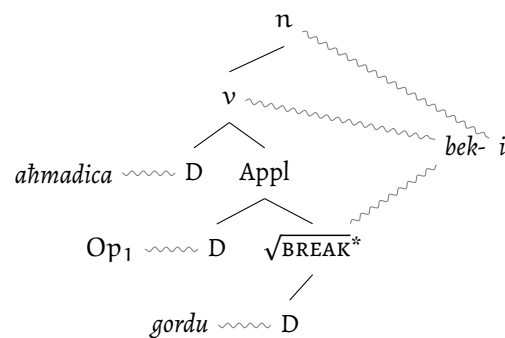
20. The “trapping” of the moved element inside a particular derivational layer, as is, I argue, the case with the null operator  $Op_1$ , could in principle be formulated as a constraint on the association of a variable with an operator inside a particular domain. What is less clear, however, is why this semantic association should be constrained by the locality domains created

The case in (69b) involving an attempt to relativise a constituent contained within a specifier works in roughly the same way, the complex specifier being constructed in a separate derivational layer.<sup>21</sup>

The complex specifier contains three DPs (the agent, the theme and the instrument) and the masdar is analytic expressing the relevant aspectual information. Rather than going through the derivation of the specifier step by step, I choose to represent it here at the last stage of the derivation, viz. before it is merged in the specifier position of the copular clause.

(72) **Derivational layer 1**

- a. Numeration: {Ahmed, window, Op<sub>1</sub>,  $\sqrt{\text{BREAK}}$ , n, v, Appl}
- b. Derivation:



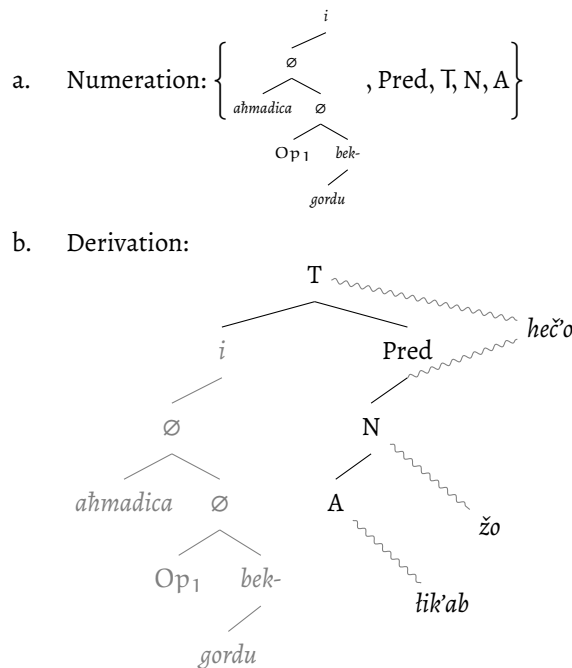
Since the numeration for derivational layer 1 has been exhausted, the resulting structure is ready to be interpreted and once lexicalisation has taken place it can enter the numeration for the next derivational layer as an atomic lexical item.<sup>22</sup>

in the narrow syntax, especially given the existence of an abundance of analyses of various operator–variable dependencies as invoking a semantic binding mechanism applying at LF with the view of deriving the absence of locality effects.

21. The original example features a verb-initial order, which is acceptable, albeit slightly more marked than those not involving the leftmost positioning of the verb. This is done intentionally in order to demonstrate that postverbal subjects in Avar are very different from their Spanish and Catalan counterparts, which do allow  $\bar{A}$ -processes. It should be noted, however, that the positioning of the complex subject with respect to the verb does not affect the observed unacceptability — relativisation from within complex specifiers is always disallowed.

22. Note that the null operator corresponding to the instrumental DP *ganē'ica* ‘with a stone’ in the syntactic structure in (72b) is introduced by an applicative head Appl (Pylkkänen 2008, Caponigro & Polinsky 2011, Polinsky 2013) as opposed to it being an instrumental adjunct. Suffice it to say that whichever view is the correct one, the present analysis is compatible with both options.

(73) **Derivational layer 2**



At this stage, too, the null operator introduced as the specifier of the Appl head is “trapped” inside the by now atomic element of the numeration, which is why the relativisation operation cannot proceed any further: since the operator is phonologically null, the specifier appears to have a gap, but the abstraction over a variable cannot take place.<sup>23</sup>

**Opacity of converbial clauses**

Adverbial clauses, appearing in Avar as converbs, are also created in a distinct derivational layer of their own and only then merged into the bigger structure they are to become a part of.<sup>24</sup>

23. It is, however, entirely possible that  $Op_1$  should be able to move internally to the first derivational layer, resulting in predicate abstraction over the variable in the trace position. This does not affect the analysis, since  $Op_1$  will not be able to undergo subsequent movement out of the complex specifier into the new derivational layer.

24. On a cartographic, Cinquean, view to adverbials, those adjunct clauses will most likely be reanalysed as specifiers of dedicated functional heads (Cinque 1999) with the right semantics, in which case they will be treated in exactly the same manner as I have described for specifiers. For the purposes of this subsection, however, I view them as adjuncts, i.e. as necessarily being

To take a concrete example I consider (74), repeated from before, which involves a temporal adverbial clause (other adverbial clause types — concessive, conditional, counterfactual etc. — should in principle be amenable to the same analysis).

- (74) \*[[<sub>\_\_</sub> w-ač'- a- ra- χ ] mašina χw-a- ra- w] was  
 M-COME-PST-PTCP-CVB car.ABS die-PST-PTCP-M boy.ABS  
 ('The boy that the car broke down when <sub>\_\_</sub> arrived...')

Just like the masdar cases, the adverbial clause in (74) will be created in a separate derivational layer and connected to the root clause in another in whatever way turns out to be correct. The null operator  $Op_1$ , although able to move within that layer, will not be able to leave it, preventing predicate-abstraction from applying.

Interestingly, the morphosyntax of the verb in (74) appears to be compatible with analyses which view adverbial clauses as free relative clauses with some material being truncated (Haegeman 2012: §5). Although it is not the case in Avar for every converb, the one in the sentence immediately above is built on the basis of a participle.

### 3.3.3.3 Syntactic non-opacity

In Zwart's (2011a) framework (partial) non-opacity can be derived via composing the numeration in such a way as for the embedded clause not to be sent to the interface once its derivation has been completed. One example of this is the (recursive) embedding of infinitival clauses, leaving open the question of whether those involve raising, control or restructuring. The numeration for (75), repeated from above, is given in (76), abstracting from irrelevant detail:

- (75) [di- e <sub>\_\_</sub> b-os- ize b-oł'- un b-ug- e- b] telefon  
 ISG-DAT N-buy-INF N-want-CVB N-be.PRS-PTCP-N phone.ABS  
 c'aq'=go χirija- b b-ugo  
 very=EMPH expensive-N N-be.PRS  
 'The phone that I want to buy is very expensive.'

- (76) { $Op_1$ , buy<sub>INF</sub>, want, T, v, I}

The reason for non-opacity here, then, is the fact that  $Op_1$  can move freely until the derivational layer it is an element of has been constructed and sent

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outputs of a separate derivational layer, and leave the elaboration of their internal and external syntax for future work.

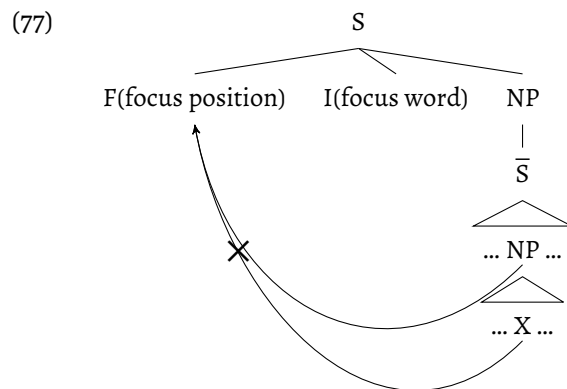
for interpretation to the interfaces.

Speaking of effects associated with long-distance movement, it appears that the top-down approach to  $\bar{A}$ -movement as sketched by Zwart (2009) faces serious difficulties with modelling successive cyclicity: indeed, the solution proposed there involves both the operator and the variable as a “double atom” (Zwart 2009: 181), raising the issue of the existence of triple or quadruple atoms, depending on the number of the required reconstruction sites. In a bottom-up system as envisaged here, on the other hand, it is possible for elements to move successive cyclically, but at the cost of delaying the shipping of the output of a derivation for interpretation after the numeration for that derivational layer has been exhausted.

The most exciting question here, it seems to me, is why relativisation out of recursively embedded clauses in Avar does not appear as restricted in the case of infinitivals as it does with finite embedded clauses.

**3.3.3.4 Clause-boundedness**

The ban on unbounded relativisation in Avar might be less puzzling when viewed in light of the generalisation formulated in Testelec (1998b: ex. 36), the original proposal being due to Kazenin (1993, 1998), which generalises the  $\bar{A}$ -movement possibilities in Northeast Caucasian languages in the following schematic way (the complete tree illustrates the focus construction but the node that is relevant for my purposes is the topmost NP):



Ignoring the whole issue of focus movement for the time being, until I return to it in Chapter 5, and expressing the generalisation schematised above

in prose,  $\bar{A}$ -operations in Northeast Caucasian languages may not cross the boundary of a complex noun phrase, which is, in essence, Ross's (1967) Complex Noun Phrase Constraint. In Zwart's (2009) framework this makes them outputs of a separate derivational layer that can only enter the numerations for subsequent derivational layers as atomic elements. But given the fact that the overwhelming majority of embedded clauses in Northeast Caucasian languages are deverbal nominals, and are therefore created in a separate derivation, it follows that such  $\bar{A}$ -operations as relativisation are clause-bounded instead of being unbounded like their counterparts in many other languages.

According to Kazenin (1993, 2002), it is this constraint that rules out the possibility of long-distance focus extraction in several Northeast Caucasian languages, the presupposition being that the focus construction in those languages corresponds to a cleft-like structure, which can already be seen from the tripartite representation in (78) from Godoberi, where the focus marker serves the function of the copular predicate in the pseudo-cleft.

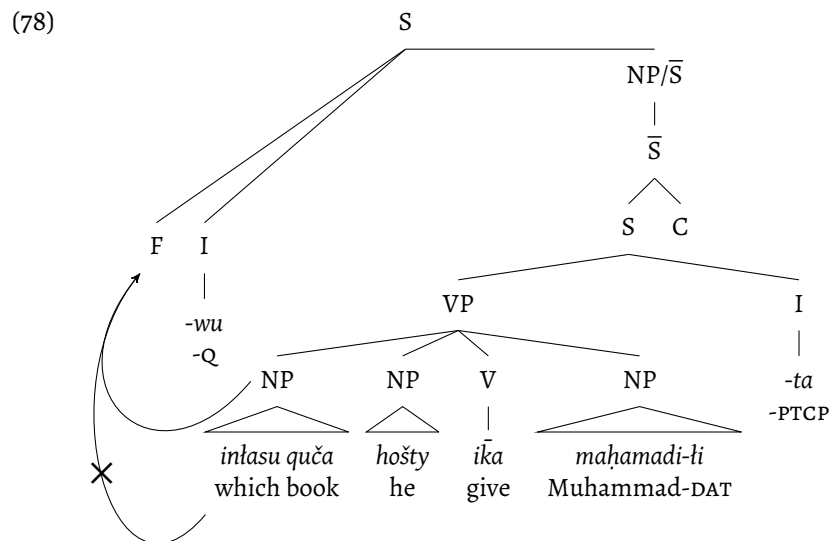


Diagram (78) above illustrates Kazenin's (1993) analysis of Godoberi focus marking, adopted by Testelec (1998b), as a type of cleft. What is of relevance for our discussion here is the node labelled  $\text{NP}/\bar{\text{S}}$ , this node corresponding to the headless relative clause that expresses the sentence's presupposition.

### 3.3.3.5 Non-opacity of Turkish nominalisations

The analysis, at least as presented in the current chapter, makes a very strong prediction regarding the status of nominalisations, both relative clauses and embedded masdars, which is for them to be syntactically opaque, having been generated in a separate derivational layer. This prediction is clearly falsified by the apparent syntactic transparency of nominalised clauses in Turkish, which do allow relativisation from recursively embedded clauses (Haig 1997, Kornfilt 2000), as illustrated by the acceptability of (80) based on the sentence in (79).

- (79) Mustafa [Kemal-in [Güliz-in bir adam gör-düğ- ün- ü ]  
 Mustafa Kemal-GEN Güliz-GEN a man see-NMLZ-POSS-ACC  
 söyle-diğ- in- e ] inan- ıyor  
 say- NMLZ-POSS-DAT believe-PROG  
 ‘Mustafa believes Kemal said Güliz saw a man.’
- (80) [[Mustafa-nın [Kemal-in [Güliz-in — gör-düğ- ün- ü ]  
 Mustafa-GEN Kemal-GEN Güliz-GEN see-NMLZ-POSS-ACC  
 söyle-diğ- in- e ] inan- dığ- ı ] adam] içeri gir- di.  
 say- NMLZ-POSS-DAT believe-NMLZ-POSS man inside come.in-PST  
 ‘The man that Mustafa believes Kemal said Güliz saw has just come in.’  
 [Turkish, G. Güneş (p.c.)]

Upon careful examination, however, this counterexample, or series of counterexamples in Kornfilt (2000), is much less problematic: Kornfilt (2000) shows that in order for long-distance relativisation to go through, the nominalised verb must morphologically agree with the appropriate noun phrase, analysed as *pro* whose presence is signalled by the mandatory appearance of the agreement marker (italicised in (80)). This null pronoun can be viewed as a resumptive element, which are known for rescuing certain island violations (Boeckx 2012) and in whose absence long-distance relativisation is ungrammatical.

### 3.3.4 Structure-to-meaning mapping

Syntactically the relativisation operation, at least as envisaged in this thesis, effectively corresponds to an instance of null operator movement. This movement, or internal merge, applies freely within a given derivational layer but its (in)application has consequences for the semantics: if it does apply, the resulting configuration is interpreted as a  $\lambda$ -abstract, and nothing happens if it fails to apply.



Even though the literature evoking null operators is predominantly syntactic and is therefore rarely explicit as to the exact semantic rule interpreting the result of null operator movement, it is nevertheless possible to find analyses such as [Caponigro & Polinsky 2011](#) where relativisation in a Northwest Caucasian language Adyghe is treated as resulting from  $\lambda$ -abstracting over the null element corresponding to the target of relativisation. It is not clear, however, whether this abstraction operation is part of the semantic value of the relativising complementiser or indeed the result of an application of a default rule interpreting movement dependencies.

On the present proposal the participial morphology on the verb is the spellout of  $\lambda$ -abstraction triggered by the movement of  $Op$ , which might clash with my initial assumption of that morphology being the spellout of either the Force head or the Force–Fin span. This tension can in principle be resolved by folding the  $\lambda$ -abstraction into the definition of Force but at the cost of tying it to  $\bar{A}$ -movement.

To illustrate how the freely moving null operator creates relative clauses let us consider a concrete example, such as that of object relativisation, repeated from (12) above.

- (81) [muḥamadi- ca \_ b-ič- a- ra- b] mašina χwa-na  
 Muhammad-ERG N-sell-PST-PTCP-N car.ABS die- PST  
 ‘The car that Muhammad sold has broken down.’

The structure for the bracketed clause is created, in a separate derivational layer, by exhausting the corresponding numeration, as described in the preceding subsection. The element corresponding to the verb’s internal argument is realised as a null operator  $Op$ . Once the numeration has been exhausted, the derivational layer can either immediately be shipped for interpretation or  $Op$  can undergo  $\bar{A}$ -movement, yielding an object, along the lines of the one depicted in (82a), that the semantic interface will interpret as a  $\lambda$ -abstract in (82b). Because Avar participles are marked for tense and have further functional structure on top of that depending on finiteness, [Ramchand & Svenonius’s \(2014\)](#) approach that I adopt treats these as sets of possible situations ([Barwise & Perry 1983](#), [Kratzer 1989, 2014](#)).

- (82) a.  $Op \lambda_3 muḥamadica t_3 biča-$   
 b.  $\lambda x. \lambda s. \text{Muhammad sold } x \text{ in } s$

As shown in §3.3.2, at the stage at which Avar participles are created via the null operator movement the temporal information is already present in the derivation.

Whether this operator movement, interpreted at the interface as an abstraction operation, is all there is to the derivation of relative clauses, whether in Avar or elsewhere, depends on the manner in which the relative clause combines with the head noun, there being at least two major views on this relation. The more traditional view, going back to Partee 1973, treats the head noun and the relative clause as being of the same semantic type, which is sufficient for them to yield an intersective interpretation by means of a semantic composition rule such as Heim & Kratzer's (1998) rule of Predicate Modification.

The competing view, originating from Carlson 1977 and subsequently defended by Kayne (1994), introduces an auxiliary element mediating the composition of the relative clause with the head noun.

### 3.4 Conclusion

The discussion in this chapter has centred on the syntactic and semantic properties of Avar relative clauses. I have demonstrated that even though they are participial constructions rather than finite clauses introduced by a relative pronoun, Avar relatives share most of the characteristics traditionally ascribed to  $\bar{A}$ -constructions, the most notable exception being the unboundedness property. In particular, long-distance relativisation was not permitted across converbial clause boundaries and masdar clause boundaries.

These properties being established, I have sketched a tentative proposal with a view of deriving the lack of unboundedness from the punctuated nature of syntactic derivations, whereby most opacity effects result from derivation layering (Zwart 2009 *et seq.*).

Anticipating the discussion to follow, the presence of a relative clause will play a crucial role in my analysis of Avar *wh*-questions in Chapter 4 and focus-marking constructions in Chapter 5, as both constructions will be argued to have the structure of a pseudocleft.



## CHAPTER 4

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### Syntax of Avar wh-questions

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This chapter contains the discussion of Avar wh-questions, followed by a tentative analysis of the various strategies involved in the derivation of several types of wh-questions. We concentrate on matrix wh-interrogatives containing a single wh-phrase, proposing two basic structures for the *ex-* and *in-situ* orders. Building on the discussion in the preceding chapter, a claim is put forward that the structure underlying both the *ex-situ* and *in-situ* orders is that of a truncated pseudocleft whose presuppositional core corresponds to a relative clause formed via null operator movement within a single derivational layer. The semantic analysis follows closely that of Beck (2006) in viewing Avar wh-phrases as having no other semantic value besides the focus semantic value.

#### 4.1 Introduction

In this chapter I present an overview of the syntax of Avar matrix wh-interrogatives. As the discussion unfolds, we shall see that the range of the observed facts cannot be analysed in a conventional fashion via wh-extraction. These facts include contradictory evidence for and against syntactic movement underlying the derivation of the *ex-situ* order. Instead I will defend the idea that Avar wh-dependencies are hybrid structures which arise via a single mechanism — null operator movement — applied in two distinct ways: the fronted

and right-extraposed *wh*-phrases, I shall argue, occupy the subject position of a predicational structure, whereas those *wh*-elements which are left *in situ* are situated inside the relative clause expressing the question's presupposition.

Using English, the structure of an object *wh*-question *What did you see?* with the *wh*-phrase *ex situ* receives the paraphrase in (1).

- (1) What is [ what you saw \_\_\_ ]?

The evidence against movement, then, can be accounted for if the *wh*-phrase in (1) is treated as being generated outside of the bracketed presupposition. The dependency between the *wh*-phrase and the gap is, in this instance, established indirectly via a predication relation. As far as the gap is concerned, it results from the movement of a null operator performed to build the relative clause (cf. §3.3). The conflict between evidence favouring both movement and base generation is, therefore, only illusory.

The *in-situ* order, on the other hand, has a more involved structure, paraphrased in (2).

- (2) You are [ the one that \_\_\_ saw what ]?

We shall see on the pages to come that due to the particular semantics of *wh*-phrases (Beck 2006), both (1) and (2) have the same interpretation.

## 4.2 Data and problem

Recall from the description in Chapter 2 some of the characteristic morpho-syntactic properties of Avar, all of which will play a role in the unfolding discussion.

Firstly, Avar's head-finality (*modulo* some exceptions) and the freedom of constituent ordering will be important in diagnosing biclausality.

- (3) *pro*<sub>1</sub> mašina b-ič- un, muradi-ca<sub>1</sub> mina b-ana  
 car.ABS N-sell-CVB Murad- ERG house.ABS N-build.PST  
 'Having sold his car, Murad build a house.'

Secondly, the language makes use of both subject and object *pro*-drop.

- (4) was-as<sub>1</sub> mašina b-ič- un, insu- ca *pro*<sub>1</sub> w-uχ- ana  
 son-ERG car.ABS N-sell-CVB father-ERG M-beat-PST  
 'The son sold the car, and the father beat him up' (Samedov 2003)

#### 4.2.1 Data

Before proceeding to describe the data and the problem they pose, and in order to facilitate understanding of the data to come, I give a brief overview of the morphosyntax of Avar questions and focus constructions.

An important morphosyntactic property of Avar wh-questions, already briefly touched upon on p. 48, concerns the morphological form of the verb. Unlike in regular declarative sentences, the verb is obligatorily participialised:

- (5) a. aħmad aħ- ana  
Ahmed.ABS shout-PST  
'Ahmed shouted.'
- b. š:iw aħ- a- ra- w  
who.ABS shout-PST-PTCP-M
- c. \*š:iw aħ- ana  
who.ABS shout-PST  
'Who shouted?'

Recall that the word order of arguments in an Avar clause is relatively free, and the same is true of most adjuncts, *modulo* some exceptions, such as vP-level adverbials. Similarly, in wh-constructions the question word (*in italics*) can either be fronted (6a), remain *in situ* (6b) or appear at the right periphery of the clause (6c).

- (6) a. š:aj mun ʎod-ul- e- w  
why 2SG:ABS cry- PRS-PTCP-M
- b. mun š:aj ʎod-ul- e- w  
2SG:ABS why cry- PRS-PTCP-M
- c. mun ʎod-ul- e- w š:aj  
2SG:ABS cry- PRS-PTCP-M why  
'Why are you crying?'

As (6) illustrates, the adjunct wh-phrase *š:aj* 'why' can appear in various positions within the clause.

Question words in argument positions display a similar flexibility with respect to their surface position in the interrogative clause: (7) illustrates this for object wh-questions, whereas (8) and (9) do the same for subject and indirect object wh-questions respectively.<sup>1</sup>

1. The reason that (8) only lists two sentences is because the *in-situ* position of the subject is linearly identical to the left-dislocated one.

- (7) a. š:ib heł b-ič- ul- e- b  
 what.ABS she:ERG N-sell-PRS-PTCP-N  
 b. heł š:ib b-ič- ul- e- b  
 she:ERG what.ABS N-sell-PRS-PTCP-N  
 c. heł b-ič- ul- e- b š:ib  
 she:F N-sell-PRS-PTCP-N what.ABS  
 ‘What does she sell?’
- (8) a. ħi- ca mun w-uχ- a- ra- w  
 who-ERG 2SG:ABS M-beat-PST-PTCP-M  
 b. mun w-uχ- a- ra- w ħi- ca  
 2SG:ABS M-beat-PST-PTCP-M who-ERG  
 ‘Who beat you up?’
- (9) a. di- ca baš:dab ħi- e b-ič- il- e- b  
 1SG-ERG half.ABS who-DAT N-sell-FUT-PTCP-N  
 b. ħi- e di- ca baš:dab b-ič- il- e- b  
 who-DAT 1SG-ERG half.ABS N-sell-FUT-PTCP-N  
 c. di- ca baš:dab b-ič- il- e- b ħi- e  
 1SG-ERG half.ABS N-sell-FUT-PTCP-N who-DAT  
 ‘Who will I sell the (other) half to?’<sup>2</sup>

A final point, before we proceed any further, concerns the fact that certain linearisation options, viz. verb-initial ones, are unavailable in *wh*-questions:

- (10) a. \*ŋod-ul- e- w mun š:aj  
 cry- PRS-PTCP-M 2SG:ABS why  
 b. \*ŋod-ul- e- w š:aj mun  
 cry- PRS-PTCP-M why 2SG:ABS  
 (‘Why are you crying?’)

In summary, then, the data presented above raise the following issues. On the empirical side, we must have a way of deriving the different attested place-

2. It has to be noted that more permutations than those indicated in (9) are possible, one of them being the possibility of scrambling the object DP across both the subject and the *wh*-phrase, as in (i) below:

- (i) baš:dab ħi- e di- ca b-ič- il- e- b  
 half.ABS who-DAT 1SG-ERG N-sell-FUT-PTCP-N  
 ‘Who will I sell the (other) half to?’

I return to the derivation of this naturally occurring order in §4.5.2.4.

ment possibilities of wh-phrases in Standard Avar whilst at the same time ruling out all the unattested verb-initial orders. More precisely, a decision should be made as to exactly what mechanism (i.e. wh-movement or not) underlies the derivation of the attested surface orders. Furthermore, it must be discovered whether these different orders bring about distinct interpretations or whether we are dealing with true optionality. On the theoretical side, we are facing two other problems: if we *are* dealing with optionality, which at first blush seems about right, how do we find room for this optionality in our theory of grammar? Finally, if it turns out that the derivational mechanism behind Avar wh-dependencies cannot be  $\bar{A}$ -movement, as I argue is the case, and that languages can choose either  $\bar{A}$ -movement or base generation as their strategy of constructing (certain)  $\bar{A}$ -dependencies, what is it that determines the particular parameter setting for every given language?

#### 4.2.2 Analytic options

##### 4.2.2.1 Movement or base generation?

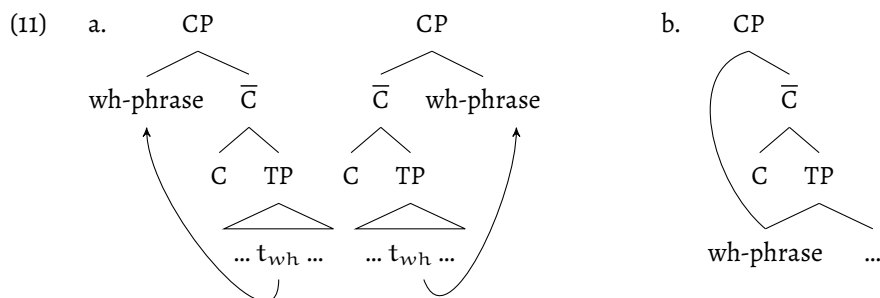
To answer our first question, namely what mechanism derives the observed flexibility of wh-phrases choosing their positions in an Avar clause, let us consider the analytic options we have at our disposal and formulate the predictions each of them makes.

One possibility is that Avar does not differ from languages like English with respect to the way of constructing wh-dependencies and displays overt (or covert) movement of its wh-elements to the left periphery of the clause (the precise landing site, whether Spec,CP or Spec,FocP, is insignificant for my purposes at this stage). Structures with right-extraposed wh-elements could, in principle, be derived in a similar fashion save for the direction of wh-movement, which might be stipulated to be rightwards. Both of these alternative derivations are represented in (11) below.<sup>3,4</sup>

3. Even though the right-hand structure in (11a) represents an instance of rightward wh-movement, it should be noted that rightward wh-movement itself is typologically very rare (Kayne 1994).

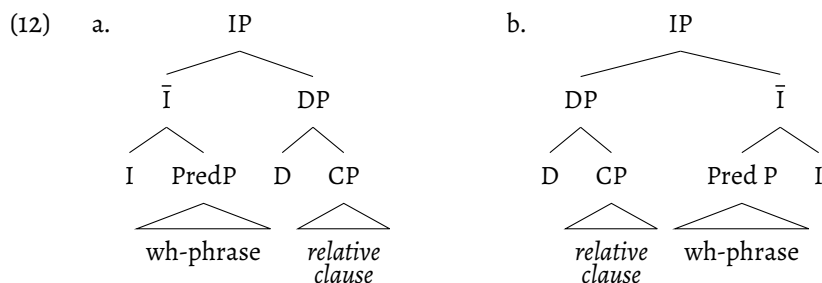
4. It goes without saying that there are further analytic options available, such as roll-up movement of the wh-phrase, or remnant movement, but these are necessarily variants of the analysis in (11) involving further derivational steps. In §4.3.3 we return to, and ultimately reject, such an approach as underlying the derivation of the *in-situ* strategy of forming a wh-question in Avar.





Observe that the left- or rightward movement of the *wh*-element to the specifier of *C* does not alter the status of the construction in any significant way by, for instance, transforming a monoclausal structure into a biclausal one. On a Rernerge and multidominance theory of movement ((11) illustrates subject *wh*-movement), moreover, the syntactic and semantic identity of the *wh*-phrase in both base and target positions is a must.

A second line of reasoning, going in the opposite direction and entertained by, amongst others, Potsdam (2006, 2009) for Malagasy *wh*-questions, would assume that rather than moving the *wh*-phrase from its base position at the foot of the  $\bar{A}$ -dependency, a language might prefer base generation combined with pseudoclefting. For Potsdam, this structure consists of a *wh*-phrase (plus a possibly null copula) corresponding to the predicative core of the pseudocleft and a headless relative clause expressing its presuppositional part and occupying the subject position (the two structures in (12) differ only with respect to the relative position of the subject and predicate of the pseudocleft, to which I will come later). A crucial difference between the simple *wh*-movement construction and Potsdam's (2006) proposal is the inherent biclausality of the clefted structure: the first clausal element is the presuppositional relative clause whereas the whole pseudocleft is yet a different clause.



The two opposing kinds of analysis described above are not the only ways to go: indeed, there is nothing to stop us taking an intermediate view, namely to find a way of combining the movement and base-generation approaches with either one of these mechanisms preceding, and consequently providing input for the other.

To be able to choose the most appropriate line of analysis, one must understand their predictions, because these predictions will provide the empirical testing ground for our theories, and it is to formulating these predictions that I now proceed.

#### 4.2.2.2 Predictions

It has already been emphasised in the literature on  $\bar{A}$ -dependencies (Paul 2001, Potsdam 2006, 2009, Potsdam & Polinsky 2011) that the wh-movement and pseudoclefting analyses make largely identical predictions. There are, however, domains where these predictions differ. One such domain is word order in matrix and embedded clauses.

For those languages whose word order is relatively free, the monoclausal wh-extraction structure considered above seems to be making different predictions with respect to word order than its clefting alternative. This is so because of the frequently observed contrast between the freedom of word order in root and embedded clauses. Consider short wh-movement in (11): as already mentioned, the wh-phrase moving from the base position to the left periphery and adjoining to the root of the tree does not create a biclausal structure. A consequence of that is that the question should still permit the same word-order permutations as in a regular monoclausal environment. Both structures in (12), on the other hand, would arguably impose stricter constraints on word order in the presuppositional relative clause. Thus, extracting the wh-phrase *čto* ‘what’ in Russian, which is a wh-movement language with free word order, does not bleed further rearrangements (13).

- (13) a. *Čto ty mne prinės* [Russian]  
           what.ACC 2SG.NOM 1SG.DAT brought  
       b. *Ty mne čto prinės*  
           2SG.NOM 1SG.DAT what.ACC brought  
       c. *Čto ty prinės mne*  
           what.ACC 2SG.NOM brought 1SG.DAT  
       d. *Ty čto mne prinės*  
           2SG.NOM what.ACC 1SG.DAT brought

- e. Prinēs ty mne čto  
 brought 2SG.NOM 1SG.DAT what.ACC  
 ‘What have you brought me?’

The availability of the orders presented in (13) contrasts rather sharply with the following data from Turkish. Like Russian, Turkish can be characterised as a discourse configurational language (É. Kiss 1998); although generally SOV, the word order can mutate depending on the particular discourse requirements. Regular finite clauses in Turkish can appear in any of the following shapes:

- (14) a. Kadın kitabı okudu. [Turkish]  
 woman.NOM book.ACC read.PST  
 b. Kitabı kadın okudu.  
 book.ACC woman.NOM read.PST  
 c. Kitabı okudu kadın.  
 book.ACC read.PST woman.NOM  
 d. Okudu kadın kitabı.  
 read.PST woman.NOM book.ACC  
 ‘The woman read the book.’

Crucially for my purposes, finite matrix clauses in Turkish, although preferably SOV, can also be verb-initial (14d). In dependent clauses, such as relative clauses (15), verb-initial orders are ungrammatical.

- (15) a. Kitabı okuyan kadın çok akıllı. [Güliz Güneş (p.c.)]  
 book.ACC read.PTCP woman.NOM very smart  
 b. \*Okuyan kitabı kadın çok akıllı.  
 read.PTCP book.ACC woman.NOM very smart  
 ‘The woman who read the book is very smart’

Another example of a discourse configurational language exhibiting similar contrasts with respect to word order in matrix and embedded clauses is Ossetic: in contrast to root clauses, where the word order is highly flexible, Ossetic embedded clauses cannot be non-verb-final (16b). More precisely, (16a) represents an instance of the Ossetic correlative construction.

- (16) a. soslan-i ni-ccəv-un či kuj-i fənd attəj je=jin  
 Soslan-OBL PRV-hit-INF what dog-OBL want.PST be.PST.3SG it=DAT.3SG  
 fə-llikd-əj  
 PRV-run.PST-PST.3SG

- b. \*soslan-i č̣i kuj-i f̣end atṭej ni-cc̣ev-un ...  
 Soslan-OBL what dog-OBL want.PST be.PST.3SG PRV-hit-INF  
 ‘The dog that Soslan wanted to hit ran away.’

[Ossetic, David Erschler (p.c.)]

Whatever the precise mechanism behind these asymmetries in word order between matrix and subordinate clauses, and inasmuch as a particular language displays such asymmetries, we have now arrived at an important generalisation allowing us to distinguish monoclausal structures from biclausal ones. In §4.3.4 I will use precisely this diagnostic to argue for the biclausality of Avar structures with fronted or extraposed wh-phrases.

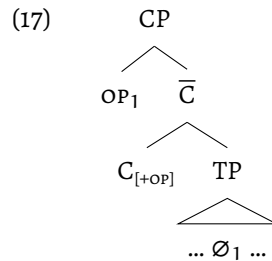
Besides word order, structures like (11) and (12) also make different predictions regarding the placement of predicate-related particles, as has been convincingly argued by E. Potsdam (Potsdam 2006, 2009). For now I leave this test aside, primarily for reasons of the (in)completeness of the data.

### 4.3 Why can't it be movement?

In this section I discuss empirical and theoretical arguments against a movement analysis of  $\bar{A}$ -dependencies involved in Avar wh-questions. Instead, I will demonstrate that it is more plausible to analyse these constructions as arising via external merge and an agree operation parasitic on it, the whole structure projecting a pseudocleft. The empirical side of the argument will consist of two parts: first, I will show that a simple wh-extraction analysis cannot be maintained for wh-phrases appearing either in- or ex-situ. I will then argue for a biclausal approach to wh ex situ. Before doing so, however, I review the diagnostics that allow us to differentiate between movement and base generation.

#### 4.3.1 Movement and base generation: diagnostics

Let us take a step back and consider again the generalised structure of  $\bar{A}$ -dependencies, represented in (17), where ‘ $\emptyset$ ’ symbolises a gap which is semantically interpreted as a variable bound by the coindexed operator in the specifier of C. This structure is almost identical to the one in (11) *modulo* the nature of the gap at the foot of the dependency.



It is often tacitly assumed that  $\bar{A}$ -dependencies are (mostly) established as a result of movement, and the following phenomena have been used as diagnostics of  $\bar{A}$ -movement:

- presence of gap (*terseness* of Johnson 2012 — of the two positions related by movement, only one is pronounced)
- unboundedness
- sensitivity to islands
- crossover effects
- reconstruction effects


Let us discuss each of these tests separately. To begin with, the presence of phonologically unrealised material, or a gap, at the foot of the dependency as such (and, by extension, *Terseness*) cannot be viewed as a movement-specific phenomenon but is equally well-suited to diagnose base-generated structures. Consider (18), which involves a syntactico-semantic dependency between a *wh*-phrase, *which tie*, and some unpronounced material in the object position. Note, however, that this configuration may have arisen as a result of moving, or internally merging, *which tie* from the object position to the specifier of the interrogative complementiser (18a), or by externally merging *which tie* and establishing a syntactic dependency between it and a null *pro* in the base position (18b).

- (18) Which tie will you wear \_\_\_?
- a. Which tie will you wear t?
  - b. Which tie will you wear *pro*?

In analyses adopting Chomsky's (2000) mechanism of feature valuation both of these dependency-forming operations — wh-movement in (18a) and a syntactic dependency between the wh-phrase and a null element in (18b) — would have to be sensitive to locality constraints, which I will discuss shortly.


Similarly, unboundedness, which refers to the ability of a moved phrase to “travel” across multiple clause boundaries (19), can be modelled as a chain of local agree relations established via external merge — something that has been proposed by Kratzer (2009) to explain the behaviour of indexical pronouns.

(19) Which tie do you think [she says [I will end up buying t in the end]]?



As (19) clearly shows, at least on the assumption that wh-dependencies in English arise via movement, the wh-phrase *which tie* has crossed at least two clause boundaries on its way to the left periphery of the sentence. It is not unimaginable, however, that rather than having *which tie* move across multiple clause boundaries, we could externally merge it in its surface position:

(20) Which tie do you think [she says [I will end up buying *pro* in the end]]?



There is, of course, an additional constraint on structures like (20): the outputs of the application of the Agree (feature checking/feature valuation) operation must featurally match every step of the way to yield a coherent, semantically interpretable structure.

Likewise, island sensitivity, despite being considered by many a hallmark of movement, is not unique to it, at least not on the currently popular approach to movement as internal merge.<sup>5</sup> Indeed, we need a locality domain with a constraint of its own (such as a *phase*, cf. Chomsky 2001) which would constrain both internal, as well as external, Merge (Starke 2001, Adger & Ramchand 2005).<sup>6</sup> The reason for this is that most theories of movement take movement/Internal Merge to be preceded by an Agree operation between (the features of) a Probe and a Goal. Once such an operation has taken place, the relevant syntactic object can undergo internal merge.

5. On a historiographic note, Boeckx (2012: 15) traces the identification of sensitivity to islands with a syntactic transformation back to Chomsky (1977).

6. For a dissenting view, one that takes external and internal merge to be subject to distinct locality (and minimality) constraints, see Bošković 2007.

(21) Adjunct Island

- a. He has no pocket square because he's wearing a bow tie.
- b. \*What does he have no pocket square because he's wearing t?

We can thus make a preliminary conclusion that at least half of the tests allow for a plausible reinterpretation of movement-derived structures as those involving base generation. Put differently, they can be used as diagnostics of  $\bar{A}$ -dependencies more generally, not necessarily movement-based ones.

What about the remaining tests? It appears that they *can* be used to discriminate between external and internal merge. Let us see how they work.

The first test in this group of phenomena are crossover effects, which refer to the inability of non-referential DPs (such as *wh*-operators or quantifiers) in a derived position to bind pronouns which they do not already *c*-command from their base position. (22b) illustrates what has come to be known as *Weak Crossover*, whereas the ungrammatical structure in (23b) is said to involve *Strong Crossover*.<sup>7</sup>

- (22) a. Who<sub>1</sub> hates his<sub>1</sub> older brother?
- b. \*Who<sub>1</sub> does his<sub>1</sub> older brother hate t<sub>1</sub>?
- (23) a. Who<sub>1</sub> hates himself<sub>1</sub>?
- b. \*Who<sub>1</sub> does he<sub>1</sub> hate t<sub>1</sub>?

The assumption that crossover effects may arise due to the movement of a phonologically null operator has become common currency in contemporary syntactic theory. It is movement of this null operator which is argued to be implicated in causing the weak crossover effects even in those relative clauses which contain no overt relative pronoun, illustrated for English in (24) below.

(24) \*the man<sub>1</sub> his<sub>1</sub> mother saw

Now to our next test. Some syntactic dependencies involving movement,  $\bar{A}$ -dependencies amongst them, differ from similar-looking base-generated dependencies with respect to (syntactic) reconstruction effects. Syntactic re-

7. Crucially for my purposes, the argument from crossover effects can only withstand scrutiny on the assumption that crossover effects are distinct from Principle C effects and can therefore not be reduced to them, Principle C being further eliminated from the syntax (Evans 1980, Reinhart 1983). This idea receives intuitive support from the fact that, unlike Principle C, strong crossover effects *cannot* be obviated via appropriate context manipulation. The term *crossover* goes back to Postal (1971), and the strong vs. weak distinction was introduced by T. Wasow (cf. Wasow 1972).

construction refers to the fact that for a number of interpretational procedures (such as scope assignment or binding theory), moved constituents behave as though in their base position.

- (25) [Which pictures of himself<sub>2</sub>]<sub>1</sub> did Mary say [every boy]<sub>2</sub> would have to burn t<sub>1</sub>?
- a. [which]<sub>1</sub> did Mary say every boy<sub>2</sub> should burn [t<sub>1</sub> pictures of himself<sub>2</sub>]
- b. did Mary say every boy<sub>2</sub> should burn [which pictures of himself<sub>2</sub>]

In (25) the moved wh-phrase *which picture of himself* contains a reflexive anaphor, which, as we know for English, must be bound by a c-commanding antecedent, something that is certainly not the case considering the wh-phrase c-commands *every boy*, the reflexive's binder.<sup>8</sup> A plausible assumption (particularly so on the copy theory of movement) is that the moved wh-phrase (or at least its restrictor) "reconstructs" at LF for the purposes of interpretation so that the reflexive inside it can be semantically bound by *every boy*. How exactly we go about formalising reconstruction (i.e. whether the moved item literally moves back into its original position at LF, or the lower copy is interpreted, or, on a multidominance view, whether the quantifier and restrictor are merged in the corresponding positions) is immaterial for my current purposes, but it can definitely be used to diagnose movement.<sup>9</sup>

Reconstruction effects have frequently been diagnosed in the literature in at least three distinct environments. The first two — Principle A and Principle C effects — are related to binding. Reconstruction effects inducing a Principle A violation have just been illustrated in (25) above, whereas (26) is an example of unacceptability that results from the interaction of Principle C and reconstruction.

- (26) \* [Which picture of John<sub>1</sub>]<sub>2</sub> did he<sub>1</sub> buy yesterday t<sub>2</sub>?

The sentence in (26) is often claimed to be bad precisely because, for the purposes of interpretation, the wh-phrase *which picture of John* reconstructs to the base position thus leading to a proper name, *John*, being c-commanded by a coindexed pronoun, in clear violation of Principle C.

The third way to test reconstruction, which we have already touched upon in §3.2.3, is with the help of idioms, provided that we accept Chomsky's (1993)

8. Accidental coreference is out of the question here, as the reflexive's antecedent, *every boy*, is non-referential (Büring 2005).

9. I am carefully avoiding the so-called *semantic reconstruction* here and talking exclusively about syntactic reconstruction.



argument that for the idiomatic reading to arise, the idiom's parts must be adjacent at LF.

- (27) John wondered which picture of himself Bill took t.
- a. John wondered [which x, x a picture of himself] [Bill took x]
- b. John wondered [which x] [Bill took [x picture of himself]]
- (Chomsky 1993: 39)

Chomsky argues that the idiomatic reading of *to take a picture*, which can be paraphrased as *to photograph*, is only available given the structure in (27b), where *took* and *picture* are adjacent. The compositional reading, roughly corresponding to a transfer-of-possession relation, arises from the structure in (27a).

Summing up, if a hypothesised  $\bar{A}$ -construction in a given language disallowed analogues to (25) due to a Principle A effect, but allowed analogues to (26) whilst also displaying no idiomatic readings with discontinuous parts of idioms, we could make the conclusion that the structure in question is not created via movement.

A final test to discriminate between movement and base generation was proposed by Adger & Ramchand (2005), which they dub *identity effects*. Identity effects, in essence, might be thought of as a subset of reconstruction effects but in the domain of morphology/morphosyntax: if a constituent has undergone movement, it must be able to also occur in the base position. If movement is nothing more than just remerge, this is expected; otherwise, no morphosyntactic identity is necessary. Adger & Ramchand's (2005) data are from Scottish Gaelic, where the fronted *wh*-phrase involved in relativisation is not morphologically compatible with originating in the base position of the dependency:

- (28) a. Chuir thu am peann anns a'bhocsa.  
 put-PST you the pen in-DEF the box-DAT  
 'You put the pen in the box.'
- b. Dè am bhocsa a chuir thu am peann ann/\*anns  
 which the box C-REL put-PST you the pen in-3SG/\*in-DEF  
 'Which box did you put the pen in?' (Adger & Ramchand 2005: 169)

It is a well-established empirical generalisation that Gaelic prepositions morphologically agree with their complement in definiteness: the DP *a'bhocsa* 'the box' in (28a) is definite and thus requires that the preposition should appear with a definiteness marker. When the very same definite DP (*modulo* the *wh*-word) is fronted, however, the stranded preposition cannot be marked for



As shown above, the presence of a gap cannot unambiguously be interpreted as an unpronounced copy of a moved constituent. It is, however, also the case that the absence of a gap does not unequivocally indicate the absence of movement. In both cases independently available alternative analyses can be given. I return to this in §4.3.3 when I discuss, and ultimately reject, the possibility of deriving the *in-situ* position of Avar wh-phrases as resulting from a combination of multiple movement steps.

#### 4.3.1.2 Locality constraints on wh-questions

Another asymmetry between the two strategies of forming a wh-question concerns their sensitivity to locality constraints. The asymmetry is illustrated for the adjunct island, the coordinate structure constraint, and the complex noun phrase constraint.

For the adjunct clauses, recall from §2.2.5.2 that these appear in Avar as converbial clauses. This is illustrated in the baseline examples (30a–d) for a variety of possible positions for the adverbial clause.

- (30) a. *dun roq'o-w-e ana [rasul w-ač'- a- rawgo]*  
 2SG:ABS home-M-LAT go.PST Rasul.ABS M-come-PST-CVB
- b. *[rasul w-ač'- a- rawgo] dun roq'o-w-e ana*  
 Rasul.ABS M-come-PST-CVB 2SG:ABS home-M-LAT go.PST
- c. *dun [rasul w-ač'- a- rawgo] roq'o-w-e ana*  
 2SG:ABS Rasul.ABS M-come-PST-CVB home-M-LAT go.PST
- d. *roq'o-w-e dun ana [rasul w-ač'- a- rawgo]*  
 home-M-LAT 2SG:ABS go.PST Rasul.ABS M-come-PST-CVB  
 'You went home when Rasul arrived.'

The temporal adverbial clause is postposed relative to the matrix clause in (30a), preposed with respect to it in (30b), and interrupting it in (30c). The sentence in (30d) demonstrates that the constituent order inside the matrix clause need not be fixed in the presence of an adjunct clause.

In order to test whether Avar wh-questions are sensitive to islands only the orderings can be used where the adjunct clause is either postposed or intraposed with respect to the matrix clause, since preposing an adjunct clause would create a string-vacuous configuration where a wh-phrase appearing at the left periphery could be interpreted as the movement of the wh-phrase internally to the adjunct clause. With this in mind, let us consider the following minimal pair:

- (31) a. mun roq'owe [š:iw w-ač'- a- rawgo] a- ra- w  
 ISG.ABS home.M.LAT who.ABS M-come-PST-CVB go-PST.PTCP-M  
 'I went home when who arrived?'  
 b. \*š:iw mun roq'owe [\_\_ w-ač'- a- rawgo] a- ra- w  
 who.ABS ISG.ABS home.M.LAT M-come-PST-CVB go-PST.PTCP-M  
 (\*'Who did I go home when arrived?')

The acceptability of (31a), where the *wh*-question interpretation is available despite the *wh*-phrase being trapped inside an opaque domain, can be taken as demonstrating the insensitivity of the *in-situ* strategy to locality constraints. The *ex-situ* version, however, is well-behaved in displaying the unacceptability status attributable, under the view that takes syntactic relations to be constrained by a locality mechanism, to an attempt of establishing such a relation across an island boundary.<sup>11,12</sup>

The same result is delivered in coordinate structures where one of the coordinands is a *wh*-phrase, but before discussing it I provide a brief description of the coordination strategies available in Avar.

The most common coordination strategy, illustrated in (32a), consists in adding the coordinating particle =*gi* to every conjunct. Alternatively the conjuncts can be connected by the conjunction *wa*, as in (32b).

11. Notice that I only provide those *ex-situ* examples where the *wh*-phrase appears to the left of the remainder of the clause. The reason for this is that, at least as far as the adjunct clauses are concerned, placing the *wh*-item at the right periphery produces an acceptable sentence with a different interpretation. This is visible in (i) below, where the two structures are disambiguated via bracketing.

- (i) [mun roq'o-w-e w-ač'- a- rawgo] š:iw a- ra- w  
 \*mun [ roq'o-w-e w-ač'- a- rawgo š:iw ] a- ra- w  
 ISG.ABS home-M-LAT M-come-PST-CVB who.ABS go-PST.PTCP-M  
 'Who left when I came home?'  
 ('Who did I go home when came?')

12. As is common with strong islands (Boeckx 2008), one way of obviating the island effect is by virtue of pied-piping: if the rest of the island is fronted together with the *wh*-phrase, the question becomes acceptable.

- (i) [š:iw w-ač'- a- rawgo] mun roq'o-w-e a- ra- w  
 who.ABS M-come-PST-CVB ISG.ABS home-M-LAT go-PST.PTCP-M  
 'When who came did I go home?'

It is perhaps worth mentioning that unlike its English translation, the question in (i) has no echo-tint to it.

- (32) a. co bixinči-jas b-os- ana ču= gi ĥama= gi  
 one man- ERG N-buy-PST horse.ABS=CNJ donkey.ABS=CNJ  
 'A man bought a horse and a donkey.'
- b. aĥmadi-ca ču wa ĥama b-os- ana  
 Ahmed-ERG horse.ABS and donkey.ABS N-buy-PST  
 'Ahmed bought a horse and a donkey.'

Even though I only use the (a)-strategy for the purposes of demonstration, the *in-* vs. *ex-situ* asymmetry presented below extends to the (b)-strategy as well.

Now, if one of the conjuncts were a *wh*-phrase appearing *in situ*, the question would be judged as acceptable, provided that the verb is realised as a participle.

- (33) a. co bixinči-jas ču= gi š:ib= gi b-os- a- ra- b  
 one man- ERG horse.ABS=CNJ what.ABS=CNJ N-buy-PST-PTCP-N  
 'A man bought a horse and what (else)?'
- b. co bixinči-jas š:ib= gi ĥama= gi b-os- a- ra- b  
 one man- ERG what.ABS=CNJ donkey.ABS=CNJ N-buy-PST-PTCP-N  
 'A man bought what and a donkey?'

It can be seen from the acceptability of both sentences above that the *in-situ* strategy is applicable when the *wh*-phrase is confined to a coordinate structure. I give two examples rather than one to demonstrate that this observation holds irrespective of which particular conjunct appears as the *wh*-item.

If the *wh*-conjunct appears *ex situ*, however, the resulting string is judged as unacceptable, there being no difference with respect to which of the conjuncts is extracted:

- (34) a. \*š:ib= gi co bixinči-jas [\_\_ ĥama= gi ] b-os- a- ra- b  
 what.ABS=CNJ one man- ERG donkey.ABS=CNJ N-buy-PST-PTCP-N  
 ('What did a man buy \_\_ and a donkey?')
- b. \*š:ib= gi co bixinči-jas [ču= gi \_\_] b-os- a- ra- b  
 what.ABS=CNJ one man- ERG horse.ABS=CNJ N-buy-PST-PTCP-N  
 ('What did a man buy a horse and \_\_?')

Pied-piping the island yields the expected result, rendering the question acceptable:

- (35) a. š:ib= gi ĥama= gi hes b-os- a- ra- b  
 what.ABS=CNJ donkey.ABS=CNJ he.ERG N-buy-PST-PTCP-N  
 'What and a donkey did he buy?'

- b. ču= gi š:ib= gi hes b-os- a- ra- b  
 horse.ABS=CNJ what.ABS=CNJ he.ERG N-buy-PST-PTCP-N  
 ‘A horse and what did he buy?’

Finally, the same asymmetry as the one observed above obtains in cases involving a complex NP. Even though we have seen an ample number of examples of relativisation in the preceding chapter, I provide a baseline sentence in (36).

- (36) diqe b-il- ana [insuca die ʔ- u- ra- b t'ex ]  
 1SG.APL N-lose-PST father.ERG 1SG.DAT give-PST-PTCP-N book.ABS  
 ‘I have lost the book that my father gave me.’

Just as is the case with the strong islands which we have already considered, the *in-situ* variant of a wh-question can be formed successfully if the wh-phrase appears inside the relative clause (37).

- (37) duqe [hica due ʔ- u- ra- b t'ex ] b-il- a- ra- b  
 2SG.APL who.ERG 2SG.DAT give-PST-PTCP-N book.ABS N-lose-PST-PTCP-N  
 ‘You have lost the book that who gave you?’

Fronting the wh-phrase originally belonging inside the relative clause leads, as expected, to unacceptability:

- (38) \*hica duqe [due ʔ- u- ra- b t'ex ] b-il- a- ra- b  
 who.ERG 2SG.APL 2SG.DAT give-PST-PTCP-N book.ABS N-lose-PST-PTCP-N  
 (‘Who did you lose the book that \_\_ gave you?’)

Pied-piping the whole complex noun phrase, once again, ameliorates the fronting:

- (39) [hica due ʔ- u- ra- b t'ex ] duqe b-il- a- ra- b  
 who.ERG 2SG.DAT give-PST-PTCP-N book.ABS 2SG.APL N-lose-PST-PTCP-N  
 ‘You lost the book given to you by whom?’

To sum up the data presented above, Avar wh-questions are sensitive to islands but only if the wh-phrase appears *ex situ*, the *in-situ* option being freely available. We return to this asymmetry in §4.3.3 below.

The discussion of locality with reference to wh-questions would be incomplete if it did not touch upon the curious property of Avar relativisation discussed in §3.2.5, namely the lack of unboundedness typically associated with  $\bar{A}$ -dependencies. Since we have already seen that long-distance wh-questions are possible across one participial clause boundary, I proceed directly to describing the properties of long-distance questions when more than one clause

boundary is involved.

#### 4.3.1.3 Reconstruction

I begin by considering reconstruction effects in Avar, or rather, lack thereof. Before doing so, however, let us make sure that in regular declarative sentences Principle C effects not only exist but are also very strong:

- (40) a. rasuli-ca ži- w= go č'wana.  
 Rasul-ERG self-M:ABS=EMPH kill.PST  
 'Rasul killed himself'
- b. \*žin-ca= go / \*hes rasul č'wana.  
 self-ERG-EMPH / he.ERG Rasul.ABS kill.PST  
 ('Rasul killed himself) [Principle C violation]

Recall from chapter (2) that in Avar transitive clauses it is the ergative subjects that can bind reflexive pronouns in their c-command domain (40a). The converse, on the other hand, is ungrammatical: ergative-marked pronouns, whether reflexive or otherwise, must not c-command absolutive R-expressions with which they are supposed to be coindexed. (40b) is, therefore, a run-of-the-mill violation of Principle C that is as bad as its English counterpart.

Now, wh-questions differ from regular declaratives in that there are no Principle C effects arising due to the wh-phrase reconstructing to its base position (41b), unlike in English (41a). Put differently, the anaphoric demonstrative *hej* 'she', marked with the dative case, *can* be coindexed with a proper name that, on an  $\bar{A}$ -movement approach, it would c-command.<sup>13</sup>

- (41) a. \*Which picture of John<sub>1</sub> did he<sub>1</sub> buy yesterday?
- b. [aminat-il haq'aluł b-uqe- b kina- b xabar ] heł-ie  
 Aminat-GEN about N-be.PRS:PRT-N which-N story.ABS she-DAT  
 (žind-ie= go) biš:ungo b-of'ule- b  
 self- DAT=EMPH the.most N-like.PRS:PRT-N  
 'Which story about Aminat<sub>1</sub> did she<sub>1</sub> (herself) like the most?'

Facts like this are our first empirical evidence against an  $\bar{A}$ -movement approach to Avar wh-fronting as it is certainly more natural to take the wh-phrase to be generated outside the c-command domain of the pronoun than to analyse

13. Speakers admit that structures like (41b) are not the most elegant way of expressing the desired coreference, but unlike their English counterparts, they are far from being considered ungrammatical. As is often the case crosslinguistically, the judgements become even more robust once we adjoin an adnominal intensifier *žindiego* 'self.DAT' to the pronominal subject.

it as having undergone  $\bar{A}$ -movement and then either devise a way for reconstruction to be blocked or relax the definition of Principle C in a manner that, given identical hierarchical relations between a proper name and a pronoun c-commanding it, would enforce Principle C in simple declarative sentences but obviate it in questions.

A note of caution here: it is in fact possible that the acceptability of (41b) has little to do with reconstruction as such. Observe that the referential DP *Aminat* is contained inside a relative clause with the meaning *which story that is about Aminat*, which, being an adjunct, might give rise to the so-called *Lebeaux effects* first introduced by David Lebeaux (Lebeaux 1985, 1990, 2009). Lebeaux effects refer to the contrast in certain kinds of Principle C violations and obviation:

- (42) a. Which claim that Harry<sub>1</sub> had made did he<sub>1</sub> later reject?  
 b. \*Which claim that Harry<sub>1</sub> is an idiot did he<sub>1</sub> dismiss as nonsense?

In light of the contrast between (42a) and (42b) a number of proposals have been made in the literature arguing for the *late merger* of adjunct material: the complex wh-phrase *which claim that Harry had made* contains a relative clause containing a proper name. This relative clause, some would argue, is merged later than the antecedent, effectively obviating Principle C effects which simply do not arise: when the moved wh-phrase reconstructs, the proper name is not there yet, and none of the binding principles are violated. In (42b), on the other hand, there is no way for the proper name to be late-merged, since it is contained within the argument of *claim*, hence the observed ungrammaticality.<sup>14</sup>

In order to rule out a late-merger explanation of the acceptability of proper names inside complex wh-phrases coreferring with pronouns in subject position, consider (43), which contains no relative clause and the wh-word is *how many* instead of *which*.

- (43) ʕali-l ħaq'aluʕ čan xabar hes bic-a- ra- b  
 Ali- GEN about how.many story.ABS he.ERG tell-PST-PRT-N  
 'How many stories about Ali<sub>1</sub> did he<sub>1</sub> tell?'

In (43) the proper name, *Ali*, is the complement of a postposition, and the whole PP is the argument of the complex wh-phrase *how many stories*, just like in (42b) from English, except for the grammaticality judgement.

To see that this pattern is more general and not a peculiar 'quirk' of the

14. It appears that adopting a late-merger approach to the syntax of adjuncts has serious implications for the syntax of relativisation, as it is arguably incompatible with the head-raising analysis of relative clauses.



postposition *ħaq'aluł* 'about', consider another example:

- (44) prezidentas-ul čan kayat hesu-qe (žindi-qe= go)  
 President- GEN how.many letter.ABS he- APL self- APL=EMPH  
 b-ač'- a- ra- b  
 N-come-PST-PRT-N  
 'How many letters from the President<sub>1</sub> did he<sub>1</sub> receive?'  
 'How many of the President<sub>1</sub>'s letters did he<sub>1</sub> receive?'

In (44) the genitive-marked DP *the President* is the argument of *letter*, descriptively speaking (to eliminate the possibility of Lebeaux effects) and can be coindexed with the demonstrative in subject position, just like we have seen for *which story* and *how many stories*.<sup>15</sup>

We have seen that structures involving wh-fronting display no Principle C effects parasitic on reconstruction thus providing a first indication that they might arise by base-generating the wh-phrase outside the position of the gap, followed by establishing an Agree relation of sorts to create a syntactic dependency.

Because so far I have only been considering fronted wh-phrases, the question of whether sentences with *in-situ* orders behave in an identical fashion with respect to reconstruction effects is an important one. The data in (45), (46) and (47) below demonstrate that there is an acceptability contrast between the *ex-* and *in-situ* orders.

- (45) \*hes [ʃali-l ħaq'aluł čan xabar ] bic-a- ra- b  
 he.ERG Ali- GEN about how.many story.ABS tell-PST-PRT-N  
 'How many stories about Ali<sub>1</sub> did he<sub>1</sub> tell?'

In (45) the complex wh-phrase occupies the preverbal position — the canonical object position in SOV languages, and unlike its counterpart with wh-fronting (43), this sentence disallows coreference between the proper name and the demonstrative c-commanding it.

Example (46), itself the *in-situ* counterpart of (44), displays exactly the same ungrammaticality:

15. A variant of this structure would have *the President* assume ablative case instead of the genitive:

- (i) prezidentas-dasan čan kayat hesu-qe (žindi-qe= go) b-ač'- a- ra- b  
 President- ABL how.many letter.ABS he- APL self- APL=EMPH N-come-PST-PRT-N  
 'How many letters from the President<sub>1</sub> did he<sub>1</sub> receive?'

Observe, however, that nothing changes here with respect to coreference: the R-expression and the pronominal still can corefer.

- (46) \*hesu-qe (žindi-qe= go) [prezidentas-ul čan kayat ]  
 he- APL self- APL=EMPH president- GEN how.many letter.ABS  
 b-ač'- a- ra- b  
 N-come-PST-PRT-N  
 'How many letters from the President<sub>1</sub> did he<sub>1</sub> receive?'

Observe that unlike previously, the presence or absence of an adnominal intensifier is immaterial for the judgement at hand.

The next sentence shows that the contrast in Principle C effects is not sensitive to the argument/adjunct distinction: in it, the proper name is contained inside an attitude report which itself appears inside a relative clause, a state of affairs problematic for various late-merger analyses of adjunction, as the observed Principle C effect remains unexplained.

- (47) \*hesu-qe (žindi- qe= go) [[prezident xwan= ilan qw- a- ra- b ]  
 he- APL himself-APL=EMPH president.ABS die.PST=COMP write-PST-PRT-N  
 čan kayat ] b-ač'- a- ra- b  
 how.many letter.ABS N-come-PST-PRT-N  
 'How many letters about the President's<sub>1</sub>'s death did he<sub>1</sub> receive?'

In summary, with respect to syntactic reconstruction effects, we have observed that in the case of *wh-ex situ* the *wh*-phrase does not reconstruct into its purported original position at the foot of the  $\bar{A}$ -dependency thus yielding no Principle C effects. As for the *in-situ* cases, they display a very dissimilar behaviour in that they give rise to Principle C effects. It could be argued, in principle, that these cases involve *wh*-movement followed by genuine reconstruction of the sort observed in English, only then one would have to come up with a story for why this reconstruction happens *overtly* whilst also explaining the lack of reconstruction effects with *wh-ex situ*. An alternative would be to say that both types of *wh*-dependency involve base generation of two different kinds. As it is unclear to me how plausible the first view is, in the rest of this chapter I will pursue the alternative view. Before doing so, however, I would like to present additional data against analysing Avar *wh*-questions as involving  $\bar{A}$ -movement.

#### 4.3.1.4 Crossover Effects

Recall from the discussion above that English sentences like (48a) are ungrammatical on the reading presented in (48b), the Strong Crossover effect observed with  $\bar{A}$ -movement.

- (48) a. \*Who<sub>1</sub> does he<sub>1</sub> love t<sub>1</sub>?  
 b. for what x, x loves x?

A very peculiar feature of Avar is that Strong Crossover effects like those in (48a) are absent in *wh*-questions (49b), polar questions (50b) and focus sentences (51b). I have also included regular baseline examples to facilitate comparison.

- (49) a. li- ca ži- w= go č'w-a- ra- w *Wh-Questions*  
 who-ERG self-M:ABS=EMPH kill- PST-PRT=M  
 'Who killed himself?'  
 b. š:iw žin- ca= go č'w-a- ra- w  
 who.M:ABS self-ERG=EMPH kill- PST-PRT=M  
 'Who killed himself?'
- (50) a. rasuli-ca ži= w- go- jiš: č'w-a- ra= w *Polar Questions*  
 Rasul-ERG self=M:ABS-EMPH-Q kill- PST-PRT=M  
 'Did Rasul kill himself?'  
 b. žin- ca- go- jiš: rasul č'w-a- ra= w  
 self-ERG-EMPH-Q Rasul.ABS kill- PST-PRT=M  
 'Did Rasul kill [ himself ]<sub>F</sub>?'
- (51) a. rasuli-ca ži= w- go č'w-ana *Focusing*  
 Rasul-ERG self=M:ABS-EMPH kill- PST  
 'Rasul killed himself.'  
 b. žin- ca- go- xa rasul č'w-a- ra= w.  
 self-ERG-EMPH-FOC Rasul.ABS kill- PST-PRT=M  
 'Rasul killed [ himself ]<sub>F</sub>.'

These structures contrast rather sharply with regular declarative sentences such as (40) on p. 128, which display robust Principle C effects. Assuming that the ungrammaticality of sentences like (48a) is due to movement (and not just Principle C, Büring 2005), we can take the acceptability of (49b), (50b) and (51b) to be indicative of base generation.

So far we have been examining the evidence in favour of a base-generation analysis of a number of Avar  $\bar{A}$ -dependencies (*wh-ex situ* and relativisation) and against deriving those dependencies via a simple instance of  $\bar{A}$ -movement. Even though we have established an important contrast in Principle C effects between the two different types of *wh-ex situ* that has been in our focus thus far. *In-situ* structures, however, are no less problematic, and

in the following two subsections I will consider further evidence against a *wh*-extraction analysis of either *in-* or *ex-situ* *wh*-constructions.

#### 4.3.2 Against an optional *wh*-movement analysis

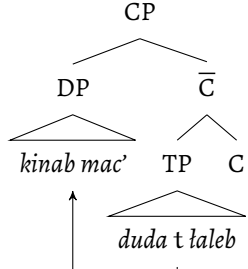
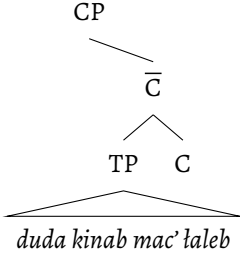
Let us consider how the *ex-* and *in-situ* orders can be derived in a framework allowing optional *wh*-movement. Depending on how syntactic movement is treated there are at least two large groups of such analyses, both of them being discussed immediately below. For concreteness, we shall be trying to derive the orders in (52).

- (52) a. kina- b mac'            duda    ɭa-    l-    e-    b  
           which-N language.ABS 2SG:LOC know-PRS-PTCP-N
- b.   duda    kina- b mac'            ɭa-    l-    e-    b  
       2SG:LOC which-N language.ABS know-PRS-PTCP-N  
       ‘What languages do you know?’

The main factor distinguishing the two optional *wh*-movement analyses discussed below concerns the nature of syntactic movement, *viz.* whether syntactic movement must be triggered.

##### 4.3.2.1 Wh-movement must be triggered

Arguably the simplest approach would analyse (52a) as involving  $\bar{A}$ -extraction of the *wh*-element and (52b) as being generated in the absence of such movement. This is, in fact, the analysis developed by Slade (2011) for the optional *wh*-movement in Sinhala, a language that, at least on the surface, has striking morphosyntactic similarities in the domain of  $\bar{A}$ -dependencies with Avar. Approximate structures for (52a) and (52b) are schematised in (53a) and (53b) respectively, with the featural dependency between C and the *wh*-phrase assumed but not indicated in the trees.

- (53) a. 
- b. 

Perhaps the most popular approach to wh-movement in the generative literature has it that wh-movement must be triggered, either by the feature-checking requirements of particular (functional) heads (Adger 2003) or by dedicated movement-inducing features, which have at different stages been referred to as EPP-features (Chomsky 2000) and edge features (Chomsky 2001, Müller 2011). As stated above, the trees in (53) presuppose that the featural dependency between the wh-features on C and the interrogative phrase can be established *in situ*, hence the movement of the wh-phrase to the specifier of interrogative C, if triggered at all, is triggered by virtue of C carrying an EPP-feature.

The optional wh-movement analysis is therefore able to derive the *ex-situ* order. In order to account for the possibility of the *in-situ* orders, however, it is forced to admit that the movement-triggering EPP-feature on C is only optionally present, and in cases where C has no EPP-feature no wh-movement is triggered. And even though such frameworks as Chomsky 2000, 2001 have enough room to accommodate optionality, there must be a reason for an optional operation, such as endowing an interrogative complementiser with an EPP-feature in a selected subset of cases rather than universally, to apply, as indicated in the following quote from Chomsky 2001.

The natural suggestion [for constraining optional operations — PVR]  
... is a general economy principle: an optional rule can apply only  
when needed to yield a new outcome. (Chomsky 2001: 34)

Therefore, the approach that appealed to wh-movement in order to derive the *ex-situ* placement of wh-phrases would have to motivate the absence of the trigger for the *in-situ* cases such as (52b) depicted in (53b).

Such an analysis also seems inferior to the base-generation approach when it comes to empirical coverage, as it will have serious difficulties accounting for the lack of reconstruction and crossover effects with *ex situ* wh-phrases, which is why I shall not pursue it any further.

#### 4.3.2.2 Wh-movement applies freely

The assumption that syntactic movement must invariably be triggered is no less problematic, conceptually speaking, than the optional applications of syntactic operations, as noted by Chomsky himself in Chomsky 2007 *et seq.*

As an alternative to the more common feature-driven view of the syntax of wh-questions Šimík (2012) develops an analysis where (criterial) wh-movement is presented as being interface-driven: since syntactic movement

is nothing more than another instance of the basic combinatory, set-forming operation merge (Chomsky 2007, 2013, Šimík 2012), it is no longer possible to appeal to such economy conditions as Merge-over-Move of earlier proposals (Chomsky 2000).<sup>16</sup>

Under a free wh-movement approach such as the one of Šimík 2012 the structures for the *ex-* and *in-situ* orders in (52) will remain the same as sketched in (53) above, and the optionality problem, or the problem of motivating the application of wh-movement will not arise. Instead, a free wh-movement analysis faces the issue of assigning the right semantic interpretation to the *in-situ* structure in (53b), since, as already mentioned, internal merge is driven by the requirements of the component responsible for semantic interpretation. In particular, Šimík (2012) analyses questions as involving a question operator that combines with a  $\lambda$ -abstract created by the application of wh-movement. He also assumes that those languages which make use of the *in-situ* strategy of creating constituent questions establish the relation between the question operator and the variable indirectly. This effectively resurrects the optionality problem, at least until it is demonstrated (i) that both the direct and indirect strategies of linking the question operator and the variable are available within one given language, and (ii) how the choice of strategy is regulated.

We must not forget that the optional wh-movement analyses leave a number of phenomena unexplained. In particular, additional mechanisms are required to account for the absence of reconstruction effects in the *ex-situ* cases, just as we have seen in §4.3.2.1. Nor can these analyses explain the peculiar participial morphology on the verb whenever a wh-phrase is present in the sentence.

### 4.3.3 *Against an obligatory roll-up movement analysis of wh-in situ*

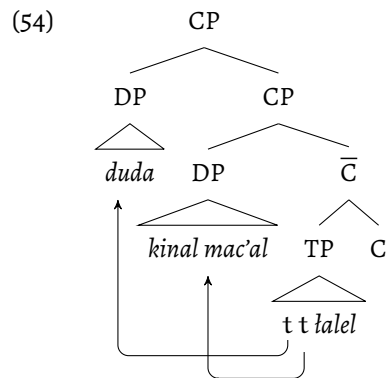
As follows from the foregoing discussion, to rescue a free wh-movement analysis of Avar constituent interrogatives something has to be done about the *in-situ* orders. A question worth asking is whether the *in-situ* position of the wh-element is indeed its base position or whether it is a derived position with the *in-situ* order arising from further movements across the wh-phrase.

As Kayne's (1994) *Antisymmetry* framework became popular, such 'masked-

16. One of the goals of Šimík's (2012) manuscript is to dissociate wh-movement from movement to the complementiser domain by showing that wh-phrases can appear at the edge of constituents as small as vP, NP or AP in addition to the usual CP. This is, although crucial for Šimík's (2012) purposes, orthogonal to mine. I do, however, sympathise with Šimík's main goal of eliminating formal wh-features from the narrow syntax altogether.

movement' analyses have been proposed to account for the possibility of having a unified view of *wh*- and focus-movement in those languages that nevertheless allow (optional) *wh-in-situ*. Analysing the *in-situ* positions of *wh*-phrases in Malayalam, for instance, Jayaseelan (2001) assumes, after Kayne (1994), an Antisymmetry-inspired analysis with *Spec > Head > Comp* as an underlying order supplemented by a Focus projection right above *vP* to which *vP*-internal arguments can migrate. A similar analysis of *in-situ* questions in Spanish is offered by Uribe-Etxebarria (2002).

Applying an analysis along these lines to our cases in (52), the structure for the *ex-situ* example is as already schematised in (53a). It is also the base structure for the *in-situ* order, which obtains after the locative-marked subject of *la-* 'know' is moved across the extracted *wh*-phrase, as shown in (54) below.<sup>17</sup>



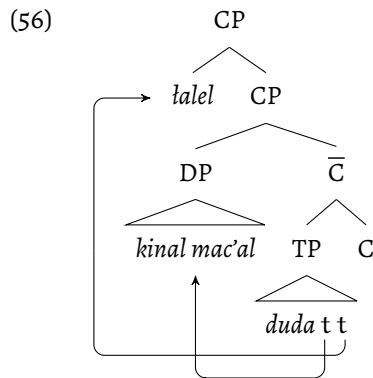
It appears, then, that further empirical evidence is required before we can discard such a roll-up movement analysis as depicted in (54) in favour of the one I have already begun sketching. Avar (as well as several of its neighbouring languages) provides us with at least two ways of doing so. I owe these two arguments to Kazenin (2002).

First, Jayaseelan's (2001) approach predicts, in principle, that following the initial extraction of the *wh*-phrase to a *vP*-external position, any constituent and not just the subject should be able to move across it to the position I

17. In the representation in (54) I have put the subject's derived position as another specifier of the same complementiser as the one whose specifier position is occupied by the moved *wh*-item *kinab mac'* 'which language'. The only reason for this is to save vertical space by omitting a layer of functional structure putatively responsible for attracting the sentential subject, as other possible variants would involve the presence of a *Top\**-head above the one attracting the *wh*-phrase. Analyses differ as far as the exact positions of these attractors are concerned, with Jayaseelan (2001) putting them just above the *vP*, as opposed to Uribe-Etxebarria (2002), who locates these heads in the cartographic split CP. As far as I can tell, nothing hinges on this.

have notated as the outer specifier of CP separately, and one of the possible outcomes would be a verb-initial order such as the one given in (55), and graphically represented in (56), below for a constituent interrogative — something that never happens. Daghestanian data suggests, on the contrary, that the *in-situ* position is precisely that position in which the object NP would be in a declarative sentence.<sup>18</sup>

- (55) \**ləleb*                      *kinab*    *mac'*                      *duda*  
 know.PRS.PTCP.N    which.N    language.ABS    2SG:LOC  
 ('What language do you know?')



The second argument against deriving the *in-situ* constructions by overt wh-extraction involves the differences in sensitivity to locality constraints between it and *wh-ex situ* which was introduced in §4.3.1.2. Kazenin (2002) observes that in Tsakhur (Tsezic), focus *in situ* does not obey locality constraints, which is why focusing *in situ* can occur inside islands.

- (57) *rasul* [fAt'imat<sub>i</sub>-o-r a-r-InGal    ] *ark'in*  
 Rasul    Fatimat-be-F    F-come-TEMP1    M.leave.PRF  
 'FATIMAT having arrived, Rasul left.'                      [Tsakhur, Kazenin (2002: 301)]

To derive (57) on Jayaseelan's (2001) story, we would be forced to allow the wh-phrase to move out of islands, perhaps under very restricted circumstances.<sup>19</sup>

18. This is not strictly true, as we have already seen indirect object wh-questions where the indirect object precedes the subject, as per usual, but is itself preceded by the direct object which has scrambled to the left periphery. I will return to such sentences at the end of this chapter.

19. One way of doing so is by adopting Hagstrom's (1998) concept of *Q-migration*, whereby Q, the question particle, is able to contercyclically move to the edge of an island thus becoming



If that were the case, however, we would be expecting that overt extraction from the same adjunct island should also be permitted, a prediction that is not fulfilled. (58) illustrates.

- (58) \*fAt'imat<sub>i</sub>-o-r rasul [t<sub>i</sub> a-r-InGal ] ark'in  
 Fatimat-be-F Rasul F-come-TEMPI M.leave.PRF  
 'After FATIMAT came, Rasul left.' [Tsakhur, Kazenin (2002: 301)]

The same test is applicable to Avar *wh*-questions, with exactly the same results: we have seen in §4.3.1.2 above that *wh*-phrases can appear inside strong islands but cannot be extracted from them overtly (the examples below are repeated for ease of reference).

- (59) a. mun roq'owe [š:iw w-ač'- a- rawgo] a- ra- w  
 ISG.ABS home.M.LAT who.ABS M-come-PST-CVB go-PST.PTCP-M  
 'I went home when who arrived?'  
 b. \*š:iw mun roq'owe [\_\_ w-ač'- a- rawgo] a- ra- w  
 who.ABS ISG.ABS home.M.LAT M-come-PST-CVB go-PST.PTCP-M  
 ('\*Who did I go home when arrived?')

Considering the data above, as well as even graver problems of the lack of reconstruction and crossover effects described earlier, we can conclude that an analysis whereby all *wh*-phrases, *in*- and *ex-situ* alike, are extracted from the base position, is untenable.

Let us take stock. By now we have the first half of the argument against *wh*-extraction being involved in constructing Avar *wh*-questions: empirical evidence presented in the last few sections compellingly argues against movement. The second half of the argument resides in mono- vs. biclausality of structures with extracted *wh*-phrases.

#### 4.3.4 *Against a monoclausal analysis for wh-ex situ*

Recall that, as mentioned earlier, the two kinds of approach to  $\bar{A}$ -dependencies discussed in §4.2.2 yield different empirical predictions with respect to observed word order (i.e. for those languages whose word order is relatively free): the pseudoclefting approach assumes a biclausal structure with the embedded

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accessible for extraction. Then one could try to pursue an obligatory *wh*-movement analysis of *wh*-in situ (cf. Yeo 2010 on optional *wh*-fronting in Japanese, Sinhala, Singapore English and Babine-Witsuwit'en). This possibility requires further investigation, but it looks at first blush that Q-migration is too permissive a concept, as there is still no way for us to tell what will block overt extraction purportedly implicated in the derivation of *ex-situ* structures.

clause demonstrating rigid constraints on word order (the case of Turkish and Ossetic), whereas *wh*-movement obtains in monoclausal environments and no rigidity of order is enforced (the case of Russian).

Similarly to Turkish, Avar is a discourse configurational language, and, as it has been emphasised already, the order of arguments and adjuncts is extremely flexible (60), but only so in root clauses — embedded sentences display fewer possible reorderings (61) with relative clauses being strictly verb-final (Testelec 1998a,b).

- (60) a. insu- ca mina b-ale- b b-ugo  
 father-ERG house.ABS N-build.PRS.PTCP-N N-be.PRS
- b. mina insu- ca b-ale- b b-ugo  
 house.ABS father-ERG N-build.PRS.PTCP-N N-be.PRS
- c. b-ale- b b-ugo mina insu- ca  
 N-build.PRS.PTCP-N N-be.PRS house.ABS father-ERG  
 'Father is building a house'

The ordering possibilities in (60) are only a subset of those possible: arguments can appear in any order either preceding the verb (or the V+Aux complex) or following it; most importantly, verb-initial orders in such declarative sentences are easily available. This situation is so far similar to that in Turkish and Ossetic.

Now, when it comes to relativisation, verb-initial orders in such constructions are ungrammatical, again as in Turkish and Ossetic.

- (61) a. narkotikal r- ičule- w či  
 drugs.ABS PL-sell.PRS.PTCP-M man.ABS
- b. \*r- ičule- w narkotikal či  
 PL-sell.PRS.PTCP-M drugs man.ABS  
 ('drugs dealer')

The same rigidity of order is characteristic of focus sentences and *wh*-questions (62), which reinforces the already observed similarity between the shape of their presuppositional part and that of canonical relatives.

- (62) \*b- ičule- b š:ib hes  
 N-sell.PRS.PTCP-N what he.ERG  
 ('What does he sell?')

Moreover, the presuppositional part of a question/focus sentence can in certain cases be realised as a full-on relative clause headed by a semantically

bleached noun *žo* 'thing':<sup>20</sup>

- (63) [due      ługara-                      b žo                      ] š:i**b**  
 you:DAT happen.PST.PTCP-N thing.ABS what  
 'What happened to you?' (lit.: 'What's the thing that happened to you?')

#### 4.3.5 Summary

To sum up, it is undeniable that any monoclausal analysis which has the wh-phrase moving out of its base position seems problematic for several reasons.

Firstly, of all the (conclusive) diagnostics of movement-derived  $\bar{A}$ -dependencies, none have given us enough reason to suppose that wh-extraction has taken place: there are no Principle C effects that we might be expecting due to reconstruction (§4.3.1.3); there are also no crossover effects, either in questions and focus sentences or in relative clauses (§4.3.1.4). With *in-situ* wh-questions, moreover, we do not find any locality effects (§4.3.1.2), which suggests yet more strongly that an obligatory wh-extraction analysis is untenable.

Secondly, with both *ex-* and *in-situ* orders we find surprising restrictions on word order in that the normally admissible verb-initial structures suddenly become unacceptable — a natural consequence of a biclausal pseudocleft-like structure proposed for wh-dependencies in other languages.

Thirdly, we have seen evidence that the core of Avar wh-questions not only shows a certain resemblance to relative clauses but can even take the shape of a full-on headed relative clause, which is unexpected on a simple wh-movement analysis.

In the rest of the chapter I will propose an explicit analysis of the syntactic structure of *ex-* and *in-situ* wh-questions in Avar. I defer the discussion of the semantics of questions and focusing to the next chapter.

20. It is here that Adger & Ramchand's (2005) anti-identity effects mentioned on p. 122 can be argued to appear. The semantically bleached noun, *žo* 'thing', is a count noun capable of assuming plural inflection, *ž-al* (\*<žo-al) 'thing.PL', and appearing as the absolutive-marked internal argument of transitive verbs:

- (i) duca      r-      icune-                      l      řantal      žal                      š:i-      b  
 2SG.ERG PL-say.PRS.PTCP-PL stupid.PL thing.PL what-N  
 'What stupid things are you saying?' (Alekseev & Ataev 1997: 85)

What is peculiar about structures like (i) is the number mismatch between the wh-phrase in singular absolutive and the rest of the noun phrase it is supposed to have originated together with, which is plural, as evinced by the plural marking on (i) the NP and its modifier, and (ii) the verb. I take this behaviour as additional evidence that a base-generation account is better suited for Avar wh-questions.

#### 4.4 A pure base-generation analysis is untenable

To derive a relative clause, then, we should have a syntactic way of constructing a predicate in the semantics. This is most easily done by establishing a syntactic dependency between the operator at the top and the variable at the foot of the dependency. One option, put forth by Adger & Ramchand (2005), would be to assume that phasal heads like C come equipped with an operator feature [ $\Lambda$ ] that the semantics interface interprets as a  $\lambda$ -abstract. In addition to the  $\Lambda$ -feature, Adger & Ramchand introduce a feature [ID: ] which stands for the position abstracted over — a variable. This [ID: ] feature can take at least two values,  $\phi$  and dep. The  $\phi$  value should not concern us here, as the lexical item specified as [ID:dep] will correspond to a pronoun whose value is determined directly by the assignment function. The other value, however, is precisely the ingredient needed to ensure that the identification of the variable occurs via the assignment function that is itself determined by the syntactic operator bearing a  $\Lambda$ -feature.

$$(64) \quad [\Lambda \dots \text{ID}] \rightarrow \lambda x \dots x$$

Let us follow Adger & Ramchand 2005 in assuming that Avar relative clauses involve predicate abstraction over a null pronoun, *pro*, that, due to its pronounness, bears a categorial D feature and an unvalued ID feature:

$$(65) \quad [\text{D}, \text{ID}: ]$$

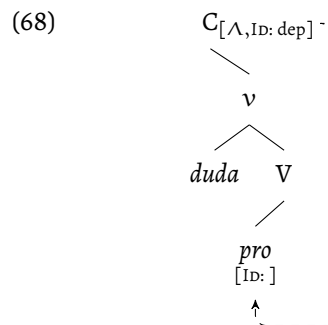
The relativising complementiser, in Avar realised as participial morphology on the verb, I take to bear an interpretable  $\Lambda$ -feature. As this  $\lambda$ -operator must semantically bind the right pronoun, the relativiser must also bear an interpretable [ID:dep] feature, which will syntactically value the matching but unvalued ID-feature on *pro* thus creating the desired dependency. Finally, the relativising complementiser in Avar lacks an EPP-feature (unlike its counterpart in, say, English) triggering the movement of the head noun or that of the empty operator.

$$(66) \quad \begin{array}{ll} \text{a.} & [\text{C}, \Lambda, \text{ID:dep}] \dots \text{pro}[\text{D}, \text{ID}: ] \quad \text{(before feature valuation)} \\ \text{b.} & [\text{C}, \Lambda, \text{ID:dep}] \dots \text{pro}[\text{D}, \text{ID:dep}] \quad \text{(after feature valuation)} \\ \text{c.} & \lambda x \quad \dots \quad x \quad \text{(semantic interpretation)} \end{array}$$

Because we have discussed the derivation of Avar relative clauses in the previous chapter, I provide a diagram in (68) that represents the simplified derivation of the predicative core of the headless relative of our *ex-situ* example in

(67).<sup>21</sup>

- (67) kina- b mac' [duda pro ła- l- e- b]  
 which-N language.ABS 2SG:LOC know-PRS-PTCP-N  
 'What language do you know?'



It should be added that to allow, on Adger & Ramchand's (2005) assumptions, relative clauses bigger than a single phase to realise the question's presupposition, every phasal head must be specified with a matching but unvalued [ID: ] feature, effectively deriving syntactic transparency when needed.

As far as semantic interpretation is concerned, so far relativisation has created an object that the interface will interpret as a property of type  $\langle e, t \rangle$ . It should be noted that  $\lambda$ -abstraction in Adger & Ramchand's (2005) system is completely independent of  $\bar{A}$ -movement, being instead encoded featurally by the  $\Lambda$ - and ID-features. Depending on one's analysis of headless relatives (which is not spelled out by Adger & Ramchand 2005) this  $\langle e, t \rangle$ -type object can now either combine with a phonologically null head noun, also of type  $\langle e, t \rangle$ , via the commonly assumed rule of Predicate Conjunction/Predicate Modification (Heim & Kratzer 1998), or the relative CP can wait until the next step, when it is taken as the complement by a definite determiner (see below).<sup>22</sup>

21. To save space, I have conflated all the functional heads in the projection line above  $v$  under the label  $C$  and only included the exponents of the arguments.

22. The Predicate Modification rule is, in essence, a conjunction operation on two or more predicate-denoting objects. Its definition is in (i) below.

(i) *Predicate Modification*

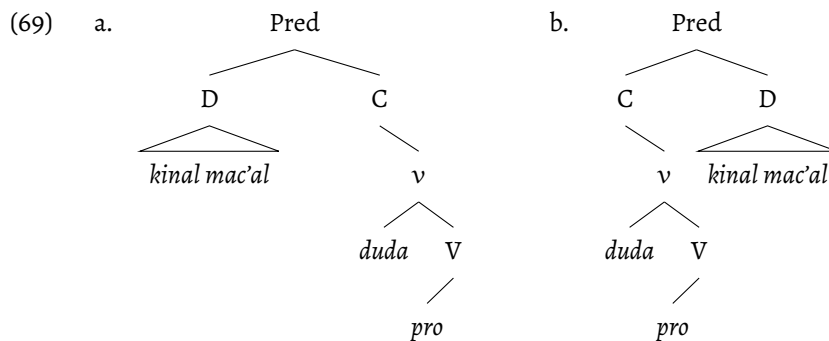
If  $\alpha$  is a branching node and  $\{\beta, \gamma\}$  is the set of  $\alpha$ 's daughters, then  $\alpha$  is in the domain of  $\llbracket \llbracket \alpha \rrbracket \rrbracket$  if both  $\beta$  and  $\gamma$  are, and  $\llbracket \beta \rrbracket$  and  $\llbracket \gamma \rrbracket$  are both in  $D_{\langle e, t \rangle}$ . In this case,  $\llbracket \alpha \rrbracket = \lambda x \in D_e. \llbracket \beta \rrbracket(x) = \llbracket \gamma \rrbracket(x) = 1$ . (Heim & Kratzer 1998: 83)

To use a concrete example, if *man* denotes a set of men, and *whom Mary saw* denotes a set of individuals seen by Mary, the two sets can be intersected, yielding a set of men seen by Mary.

If the head noun is null, we get the usual headless relative clause; otherwise the presupposition is spelled out as the full headed relative. To reiterate, Avar allows both options.

The next step is to create an object that the semantic component will be able to interpret as ranging over individuals, i.e. of type  $\langle e \rangle$ , as it is commonly assumed that headless relative clauses, also known as free relative clauses, denote a semantically maximal individual. The source of the maximality restriction is typically the same as with other nominals, viz. either a definite determiner, whether overt or not, or a type-shifting operation (see the influential Chierchia 1998 for a detailed discussion of maximality in nominals, and Rullmann 1995; Caponigro 2003 for a thorough overview of maximality in free relatives).

We can further follow Adger & Ramchand (2005), and eventually Adger (2011), and introduce a predicational head Pred (Bowers 1993) that will connect the question's two parts — the wh-phrase and the relative clause. Another standard assumption made in theories invoking Pred is that it does not assign either a  $\theta$ -role or Case to its complement (Rothstein 2004, Mikkelsen 2005). Regarding the choice of complement, there are two options: Pred first combines with the relative clause, creating the predicate (69a), or it is the wh-phrase which Pred takes as its complement (68b), and then the output of that step combines with Pred's remaining dependent.



Pred's left daughter in the trees above is the subject of the predication, whereas Pred, together with its right daughter, form the predicate. It should be kept in mind that the tree in (69a) will be linearised with the wh-phrase at the left edge, whereas the structure in (69b) will result in the reversed order. As has been shown in §4.2.1, both orders are attested.

Granting the differences in notation, the reader familiar with the literature on the clefting strategy of question-formation (Paul 2001, Potsdam 2006, 2009,

Potsdam & Polinsky 2011) will recognise the predicate-final structure in (69b) above, which gives us a way of deriving right-peripheral positions of *wh*-items, as the mirror image of that proposed in Potsdam 2006 for *wh*-questions in Malagasy, a predicate-initial Western Austronesian language of Madagascar.

Both structures above are equally compatible with the pseudoclefting analysis of focus in Nakh-Daghestanian proposed by Kazenin (2002), and also briefly sketched for Avar in Testelec 1998b, at least for the *ex-situ* cases.

Even though such an analysis could, in principle, derive some of the properties of Avar *wh*-questions we have seen in the first half of this chapter, it faces what look to me like insurmountable problems.<sup>23,24</sup>

The first problem concerns a crucial difference between Scottish Gaelic, the language on whose basis Adger & Ramchand's (2005) analysis is developed, and Avar with respect to the case marking on the purported cleft's pivot (since clefts are, by hypothesis, copular constructions). In Scottish Gaelic the *wh*-phrase in the pivot position appears in the nominative case as opposed to carrying the case marker assigned to the gap in the base position.

- (70) a. Bha thu a'geàrradh na craoibhe [Scottish Gaelic]  
 be.PST 2SG cutting the tree.GEN  
 'You were cutting the tree.'
- b. \*Dè na craoibhe a bha thu a'geàrradh  
 which the tree.GEN C.REL be.PST 2SG cutting
- c. Dè a' chraobh a bha thu a'geàrradh  
 which the tree.NOM C.REL be.PST 2SG cutting  
 'Which tree were you cutting?' (Adger & Ramchand 2005: 169)

When looking at the case marking on Avar *wh*-phrases, however, it becomes obvious that the absolutive case is not the default case in which the *wh*-phrase must appear (which, as the reader will recall from the discussion in §2.2.4.2, it typically is in copular clauses) and the case marker carried by the *wh*-element is the same one as the noun phrase would receive in its argument position. Put

23. I am excluding from the present discussion a surmountable difficulty related to Adger & Ramchand's (2005) reliance on the existence of a null copula in Scottish Gaelic in addition to overt copulae which are obligatory in identificational and predicational clauses. This point extends to Avar as well.

24. Parasitic gaps, employed by Adger & Ramchand (2005) as a diagnostic of  $\bar{A}$ -movement, cannot be used to diagnose  $\bar{A}$ -movement in Avar for the same reason as Control structures could not be used, in §2.3.1, to unambiguously identify the external argument as the subject: since Avar is a *pro*-drop language, what looks like a parasitic gap could just as well be interpreted as an instance of *pro*-drop — a separate process with conditions and restrictions of its own.

differently, Avar wh-questions display case connectivity, as shown in (71).

- (71) a.  $\zeta$ ali-ca jacał- e mašina b-ič- ana  
 Ali- ERG sister.OBL-DAT car.ABS N-sell-PST  
 ‘Ali has sold the car to his sister.’
- b. \*š:i- j  $\zeta$ ali-ca mašina b-ič- a- ra- b  
 who.ABS-F Ali- ERG car.ABS N-sell-PST-PTCP-N
- c. li- e  $\zeta$ ali-ca mašina b-ič- a- ra- b  
 who-DAT Ali- ERG car.ABS N-sell-PST-PTCP-N  
 ‘Who has Ali sold the car to?’

The declarative sentence in (71a) demonstrates that the addressee argument of a ditransitive verb in Avar typically carries a dative case marker. This case marker appears on the fronted wh-phrase *lie* ‘who.DAT’ in (71c). Crucially, the wh-phrase in (71b) may not appear in the absolutive case, unlike in the Scottish Gaelic example (70c) where the nominative case was obligatory.

In a similar vein, agreement in wh-questions where the absolutive-marked internal argument is questioned displays connectivity, agreement in Avar being tightly linked with case marking.

- (72) a. š:i**b**  $\zeta$ ali-ca \_ b-ič- a- ra- b  
 what.ABS Ali- ERG N-sell-PST-PTCP-N
- b. \*š:i**b**  $\zeta$ ali-ca \_ r- ič- a- ra- l  
 what.ABS Ali- ERG PL-sell-PST-PTCP-PL  
 ‘What has Ali sold?’

To elucidate, the two sentences in (72) differ with respect to the agreement marker on the verb: whereas (72a), which involves matching noun class features on the wh-phrase *š:i**b*** ‘what’ and the gap triggering agreement, is acceptable, (72b) is not, as the  $\phi$ -features on the wh-phrase and the gap do not match. This agreement pattern, although completely normal, is problematic for pure base-generation analyses because it entails that an element in the gap position must carry precisely those  $\phi$ -features which appear on the *ex-situ* interrogative expression.<sup>25</sup>

25. In her analysis of cleft-like interrogative utterances Frascarelli (2010) claims that feature matching on the cleft’s pivot and the gap inside the relative clause could be the result of an application of the Agree operation. Assuming, however, that Agree is constrained by a locality mechanism such as the Phase Impenetrability Condition (Chomsky 2001, 2008), and complex noun phrases contain a phase boundary, the plausibility of Agree crossing this boundary is difficult to envisage as this would violate the PIC. I therefore make the preliminary conclusion that either a different mechanism is required of ensuring that the relevant features appear on



The second point of difference between Avar and Scottish Gaelic wh-dependencies pertains to the (un)availability of multiple wh-questions. Adger & Ramchand (2005) use this phenomenon to rule out the competing analysis whereby the relative clause corresponding to the question's presupposition is derived via null operator movement instead of being created via base generation coupled with the feature-checking processes described above.

In particular, Adger & Ramchand (2005) contrast clefted multiple wh-questions in English such as (73a), which allow pair-list answers, with their structural counterparts like (73b) in Scottish Gaelic, which not only disallow such answers but cannot be asked at all.

- (73) a. Who was it that kissed who?  
 b. \*Cò a bha a'pògadh cò [Scottish Gaelic]  
 who C.REL be.PST kissing who  
 ('Who was it that kissed who?') (Adger & Ramchand 2005: 183)

Adger & Ramchand (2005) follow Higginbotham & May (1981) and analyse pair-list readings as arising from an absorption operation that obtains after the object wh-phrase has raised, covertly, to the specifier of the embedded *that*-clause, putting itself close enough to the subject wh-phrase for the absorption operation to go through. Since in Gaelic the object wh-phrase *cò* 'who' will remain *in situ* and therefore too far away from the subject wh-phrase, preventing absorption from happening, multiple wh-questions in Gaelic cannot be interpreted.

On the empirical side, Avar patterns with English in allowing both multiple wh-questions and pair-list answers to those questions. Consider (74), the context fashioned after Gribanova (2009: 140):

- (74) *Context:* We are in the dining room where there are several dishes on the table: the cured meat soup, the dumplings and the halawa. There are also three guests at the table. What I want to know is:  
 kinaw hobol-as kinab kwen kw-a- ra- b  
 which.M guest-ERG which.N dish.ABS eat-PST-PTCP-N  
 'Which guest had which dish?'

The context brings pairs of guests and dishes to the fore, making (75) the most appropriate answer.

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the pivot, or that case and agreement are regulated by different mechanisms than commonly assumed.

- (75)  $\zeta$ alica ba $\chi$ u $\chi$  kwana, sa $\zeta$ idica  $\chi$ ink'al kwana wa  
 Ali.ERG halawa.ABS eat.PST Saeed.ERG dumplings.ABS eat.PST CNJ  
 $\zeta$ umarica holodul karš: kwana  
 Omar.ERG salt.meat.GEN soup.ABS eat.PST  
 'Ali had halawa, Saeed had dumplings and Omar had the soup.'

One can conclude that a pure base-generation analysis of Avar wh-questions such as the one put forth by Adger & Ramchand (2005) captures a subset of properties associated with Avar wh-questions. First, it can account for the apparent biclausality of the construction: because relative clauses are a constitutive part of pseudoclefts, the fact that the verb in a wh-question appears in the same participial form as in relative clauses follows naturally. In a similar vein, the rigidity of order in wh-questions and relative clauses is consistent with Adger & Ramchand's (2005) approach. Island sensitivity and the lack of reconstruction and crossover effects in *ex-situ* environments, too, are naturally accounted for if the wh-phrase is externally merged as the pseudocleft's pivot. However, additional machinery is required to explain both the presence of morphosyntactic identity effects (case and agreement marking) and the availability of pair-list answers to multiple wh-questions. I show in the next section that a cleft-like analysis is nevertheless preferable to a direct  $\bar{A}$ -extraction approach and propose modifications that arguably resolve the morphosyntactic issues noted above.

#### 4.5 Proposal

I have argued in the preceding section that Avar wh-dependencies possess a set of properties that are too contradictory to warrant a pure movement or base-generation analysis. On the one hand, we have evidence from reconstruction and crossover effects signalling a lack of a direct dependency between the *ex-situ* wh-phrase and the gap. In the present section I capture this observation by proposing a cleft-like, predicational structure in which the *ex-situ* interrogative expression is one of the dependents of a predicational element Pred (Bowers 1993, Mikkelsen 2005), and is thus connected with the gap only indirectly.

Island effects, on the other hand, I view as evidence of  $\bar{A}$ -movement, which leads to the derivation of a relative clause, and the element undergoing  $\bar{A}$ -movement is a null operator familiar from §3.3.4 above. The relative clause is Pred's other dependent, and the entire structure is therefore akin to the structure of a pseudocleft.

I begin this section by sketching the general approach to the syntax and semantics of questions, proceeding next to presenting the structures underlying the derivation of *in-* and *ex-situ* orders.

#### 4.5.1 Syntax and semantics of questions: the ingredients

For the purposes of this study I adopt the Hamblin/Karttunen approach to the syntax and semantics of questions (Hamblin 1973, Karttunen 1977), whereby the meaning of a question is the set of propositions corresponding to its answers (possible answers for Hamblin and true answers for Karttunen).<sup>26</sup>

- (76) a.  $\llbracket \text{Who left} \rrbracket = \lambda p_{(s,t)}. \exists x [p = x \text{ left in } w_0 \wedge x \in \text{human}]$   
 b. Domain of possible lefttees: {George, Edmund}  
 c. { George left, Edmund left }

I further follow Rooth (1985, 1992) and assume that linguistic expressions can have, at the level of semantic interpretation, two semantic values: an *ordinary semantic value*  $\llbracket \cdot \rrbracket^o$  and a *focus semantic value*  $\llbracket \cdot \rrbracket^f$ . The focus semantic value of a linguistic expression, according to Rooth (1992), is a (contextually relevant) set of alternatives of the same type. The focus semantic value of an expression depends on whether that expression is itself being focused: if the expression is not focused, its focus semantic value corresponds to a singleton set containing its ordinary semantic value; should the expression carry focus marking, its focus value is treated as the set of contextually suitable alternatives.

Let us consider a simplified semantic interpretation of *Who left?*, glossing over most of the syntactic categories in both *who* and *left*, and making a reasonably plausible stipulation that *who* is focus-marked; the predicate, however, is not focus-marked. To compute the semantic value of the entire question, the predicate must apply, point-wise, to every member of the alternative set, which in our example is restricted to two individuals, George and Edmund, and yield a set of alternative propositions.

- (77) a.  $\llbracket \text{who} \rrbracket^o = \text{tba}$   
 $\llbracket \text{who} \rrbracket^f = \{x: x \in \{\text{George, Edmund}\}\}$   
 b.  $\llbracket \text{left} \rrbracket^o = \lambda x. x \text{ left}$   
 $\llbracket \text{left} \rrbracket^f = \{\lambda x. x \text{ left}\}$   
 c.  $\llbracket \text{Who left} \rrbracket = \{x \text{ left}: x \in \{\text{George, Edmund}\}\}$

26. See Cross & Roelofsen (2014) for an accessible overview of approaches to the semantics of questions.

Because the context in which *Who left?* is uttered contains just two individuals, *George* and *Edmund*, the focus semantic value of *who* is a two-element set containing *George* and *Edmund* (77a). The focus semantic value of *left* is a singleton set containing *left*'s ordinary semantic value (77b). Finally, when the result of the merge operation combining *who* with *left* is interpreted, as in (77c), the only semantic value that can be calculated is the focus semantic value, which in this instance is a set containing two alternative propositions. The meaning of *Who left?* is therefore, that either *George* left or *Edmund* left.

To avoid confusion, a remark is in order concerning the interaction of the two types of semantic value. One of the novel aspects of Rooth's (1985) system was the proposal that the computation of the ordinary and focus semantic values proceeds in parallel, thus making it impossible for them to interact: ordinary semantic values only combine with ordinary semantic values, and similarly, focus semantic values combine with focus semantic values.<sup>27</sup>

For the purposes of this chapter I adopt Beck's (2006) modification of the Hamblin/Karttunen semantics to the extent of analysing wh-phrases as only having a focus semantic value and leaving their ordinary value undefined. This entails that the ordinary semantic value of every node dominating the wh-phrase will be undefined. In order to be able to return to the question's ordinary semantic value, a question operator is required, which I identify with Cable's (2010b) Q-particle.<sup>28</sup>

#### 4.5.2 Avar constituent interrogatives

As a preliminary to the presentation of the analysis, I would like to refine the semantic values of the wh-expressions with a view to capturing the fact that the lexical item *š:i-CM* can mean both 'who' and 'what' (78c), depending on the noun class marker, as well as 'what items' and 'what individuals', since it can also take the plural inflection (78d), with a further subdivision of *who* into masculine and feminine (78a–b).

- (78) a. *š:i-w* 'who-M'  
 b. *š:i-j* 'who-F'  
 c. *š:i-b* 'what-N'  
 d. *š:a-l* 'who/what-PL'

27. I am grateful to Jakub Dotlačil (p.c.) for bringing this to my attention.

28. To my knowledge, the idea of an abstract question-creating element Q goes at least as far back as C. L. Baker 1970.

The semantic values for the interrogative expressions above are as in (79); because the ordinary semantic value of *wh*-elements is by hypothesis undefined, I only give the focus semantic values (at present we are to think of the restrictors in (79) in a pre-theoretic way).

- (79) a.  $[[\check{s}:iw]]^f = \{x: x \in \text{male}\}$   
 b.  $[[\check{s}:ij]]^f = \{x: x \in \text{female}\}$   
 c.  $[[\check{s}:ib]]^f = \{x: x \in \text{non-human}\}$   
 d.  $[[\check{s}:al]]^f = \{x: x \in \text{group}\}$

The meaning of  $\check{s}:iw$  ‘who.M’ is thus a (contextually restricted) set of male individuals (similarly for  $\check{s}:ij$  ‘who.F’ and  $\check{s}:ib$  ‘what’), whereas  $\check{s}:al$  is a set of pluralities (79a–d).

Let us proceed now to the derivation of the *ex-* and *in-situ* types of matrix constituent interrogatives described in §4.2.1 above. I will argue that in both *ex-* and *in-situ* environments a truncated pseudocleft is projected, the difference between the orders arising because of a different partitioning of the pseudocleft into the “subject” and “predicate”. We begin by considering those sentences where the *wh*-phrase appears outside of its thematic position.

#### 4.5.2.1 Wh-ex situ

The first part of the analysis is as follows. I claim that *wh*-questions with *ex-situ* question words have the structure of a reduced pseudocleft built on the basis of a relative clause expressing the question’s presupposition.<sup>29</sup> Besides the relative clause, the pseudocleft’s other key element is the *wh*-phrase, which is connected with the relative clause by means of a functional element *Pred* effecting predication. Consequently, there is no direct dependency between the *wh*-phrase and the gap inside the relative clause, and the lack of reconstruction effects is expected.

As we have seen in §4.4 during the discussion of Adger & Ramchand’s (2005) clefting analysis of *wh*-questions in Scottish Gaelic, the pseudocleft-internal relative clause can either be taken to occupy the subject position of the pseudocleft with the *wh*-phrase serving as the pseudocleft’s predicate, or the other way round. This treatment follows, to a certain extent, some earlier work on Northeast Caucasian, such as Kazenin (2002). Unlike under Kazenin’s (2002) proposal, however, the composition of these two parts of the pseudocleft — the *wh*-element and the relative clause — will be mediated by a

29. The pseudocleft is “reduced” in the sense that it has the structure of a *PredP* thus lacking the higher layers of functional structure.

phonologically empty head Pred that is responsible for forming the predicative core of a sentence.

As the literature on the syntax and semantics of predication is typically silent regarding the interaction of predication with association with focus, I introduce a modification to what is otherwise a standard analysis of Pred with the goal of capturing an areal feature of the Northeast Caucasian languages, viz. the use of copula/auxiliary float to convey various information-structural shifts in the meaning of a sentence.

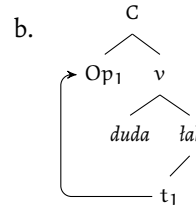
Building on the existing analyses of the predicational core of copular clauses (Bowers 1993, Adger & Ramchand 2003, and especially Mikkelsen 2005), I treat the predicator as a function which takes an intensionalised predicate and an individual as its two arguments and yields a proposition in which the predicate applies to the individual (see below for details). Because PredP, at least in questions, is bound to end up lacking an ordinary semantic value at the level of interpretation, a further element is required, which I identify with the Q-particle (Hagstrom 1998, 2000; Cable 2010b,a). The Q-particle operates on the focus semantic value of its PredP complement and turns it into an ordinary semantic value.

To consider a concrete case, recall our *ex-situ* example (52a), repeated as (80) below. The interpretation of this question that we are after is the same one as that of its English counterpart — the ordinary semantic value of (80) must correspond to a set of propositions of the form *You know*  $x \in \textit{language}$  — but the ingredients and the manner in which they are put together are distinct from the corresponding question in English.

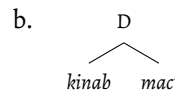
- (80) kina- b mac'                    duda    ła-    l-    e-    b  
       which-N language.ABS 2SG:LOC know-PRS-PTCP-N  
       'What language do you know?'

The structure underlying the derivation of the order in (80), built from the numeration in (83), can be represented as (84). In line with the analysis sketched in §3.3 of the preceding chapter, both the relative clause and the complex wh-phrase are created from separate numerations in distinct subderivations (cf. (81) and (82) for the simplified numeration and derivation of the relative clause and the complex wh-phrase respectively).

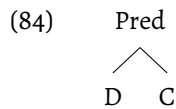
(81) a.  $N_1 = \{C, Op_1, v, \textit{duda}, \textit{lal}\}$



(82) a.  $N_2 = \{\textit{kinab}, \textit{mac}', D\}$



Since both of *Pred*'s dependents have, by hypothesis, been created in distinct derivational layers, *Pred* combines them blindly, as it were, without being able to see their internal structure.



Turning to the semantic interpretation, we already have the first ingredient to the semantic part of our proposal, *viz.* the denotation of the *wh*-expression *kinab mac'* 'what language':

(85) **The semantics of *wh*-elements**  
 $\llbracket \textit{kinab mac}' \rrbracket^o$  is undefined  
 $\llbracket \textit{kinab mac}' \rrbracket^f = \{\chi_e : \chi \in \textit{language}\}$

Nevertheless, in order to create the predicate *Pred* needs to combine with a relative clause, which results, as suggested in §3.3.4, from  $\lambda$ -abstraction over an individual variable on the basis of a tensed clause. The  $\lambda$ -abstraction operation is the consequence of the (null) operator moving within a derivational layer:

(86) **The semantics of relative clauses**  
 $\llbracket \textit{duda} \_ \textit{laleb} \rrbracket^o = \lambda y. \lambda s. \textit{you know } y \textit{ in } s.$

The gap in (86) corresponds to the direct object, making the entire relative clause an instance of object relativisation. The predicator, whose semantic value is given in (87), combines with a property (type  $\langle e, st \rangle$ ) and an individual; this lexical entry is adopted from Mikkelsen (2005: 188). Because the denotation of the relative clause is in the domain of the function denoted by *Pred*,

the two dependents can combine by the usual composition rule of Function Application. Furthermore, due to the absence, at this particular stage, of any focus-marked subconstituent, no reference to focus semantic values need be made. This is all illustrated in (88) below.

- (87) **The semantics of the predictor**  
 $\llbracket \overline{\text{Pred}} \rrbracket^{\circ} = \lambda P_{(e, st)}. \lambda x. \lambda s. P(x) = 1 \text{ in } s.$

The object labelled  $\overline{\text{Pred}}$  in (88a) is the output of the merge operation applying to  $\text{Pred}$  and  $\text{CP}_{[\text{REL}]}$ , whereas (88b) represents the computation of the semantic value for the whole  $\text{PredP}$ .

- (88) a.  $\llbracket \overline{\text{Pred}} \rrbracket^{\circ} = \llbracket \text{Pred} \rrbracket^{\circ} (\llbracket \text{CP} \rrbracket^{\circ})$   
 $= \lambda P_{(e, st)}. [\lambda x. \lambda s. P(x) = 1 \text{ in } s](\lambda y. \lambda s. \text{you know } y \text{ in } s)$   
 $= \lambda x. \lambda s. \text{you know } x \text{ in } s = 1 \text{ in } s.$
- b.  $\llbracket \text{PredP} \rrbracket^{\circ}$  is undefined  
 $\llbracket \text{PredP} \rrbracket^f = \llbracket \overline{\text{Pred}} \rrbracket^f (\llbracket \text{DP} \rrbracket^f)$   
 $= \lambda x. [\lambda s. \text{you know } x \text{ in } s](\{y_e: y \in \text{language}\})$   
 $= \{\lambda s. \text{you know } y \text{ in } s: y \in \text{language}\}$

The ordinary semantic value of the predicate (88a) is the same one as that of the relative clause, i.e. a set of objects known by the addressee.

The undefinedness of  $\text{PredP}$ 's ordinary semantic value is inherited from the *wh*-phrase, which we are treating as only having a focus semantic value. It can be seen from my use of the set-notation in (88b) that  $\text{PredP}$  still has no ordinary semantic value, its focus semantic value being calculated by applying the predicate to the *wh*-argument in a point-wise manner.

The final step is to merge the truncated pseudocleft with the *Q*-morpheme, which will ensure, at the moment of interpretation, that the focus semantic value of the topmost node will be transformed into a required ordinary value:

- (89)  $\llbracket \text{Q } \textit{kinab mac' duda laleb} \rrbracket^{\circ} = \{\lambda s. \text{you know } y \text{ in } s: y \in \text{language}\}$

It is only natural to pose the question to what extent the proposed analysis is compatible with such properties of questions containing *ex-situ* interrogative expressions as the lack of reconstruction and crossover effects, a morphosyntactic similarity to relative clauses, and sensitivity to islands.

Firstly, the obligatory participial morphology on the verb follows from the biclausal nature of the hypothesised structure: because one of  $\text{Pred}$ 's arguments is a relative clause, the presence of those affixes which are normally seen in the context of relativisation receives the simplest account possible. Related to this is the prohibition on verb-initial orders in both questions and



relative clauses: because questions have relative clauses as their integral part, they automatically share the restrictions on relativisation.

Secondly, the lack of reconstruction and crossover effects can, as in Adger & Ramchand's (2005) analysis, be accounted for by placing the *wh*-phrase's generation site in a distinct derivational layer with respect to the operator-variable dependency. I leave the exact elaboration of this part of the proposal to future work.

Thirdly, island sensitivity and clause-boundedness follow from derivation layering as outlined in the previous chapter: since long-distance relativisation is prohibited for most types of embedded clauses, a corresponding pseudocleft cannot be formed.

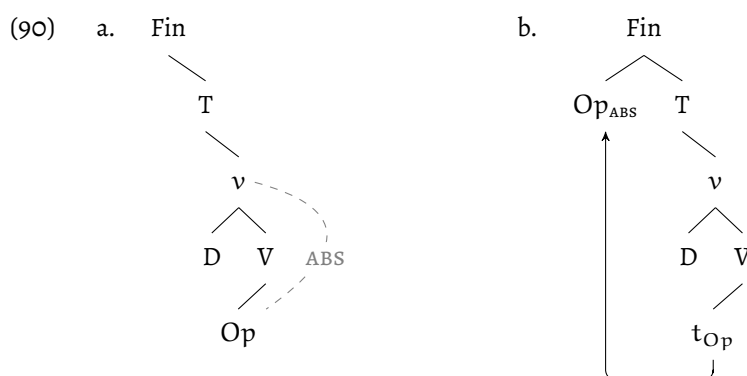
Two more characteristics require more effort to be accommodated in the present system: these are case and agreement connectivity on the one hand, and the availability of multiple *wh*-questions on the other. Both are *prima facie* problematic, primarily because morphosyntactic connectivity effects fit more naturally with  $\bar{A}$ -movement analyses, and because the availability of multiple *wh*-questions goes against the typological generalisation regarding the distribution of strategies of question formation (*wh*-movement, focus-movement, *in situ* and clefting), according to which languages employing clefting as a question strategy typically disallow multiple *wh*-questions. And whereas I discuss the morphosyntactic side of connectivity effects immediately below, I prefer to postpone the discussion of multiple *wh*-questions until the next subsection.

The key factor allowing the current analysis to accommodate case and agreement connectivity is the inability of Pred to assign Case and  $\theta$ -roles to its dependents, leaving either one or both of them without Case or  $\theta$ -role (Mikkelsen 2005, Rothstein 2004). The empty operator inside the relative clause, however, does receive both Case and a  $\theta$ -role in the customary manner, which in ergative languages normally means internally to the *vP* (Woolford 2006, Legate 2008). The structure below repeats the derivation of the relative clause portion but this time also conveys the relevant information regarding case assignment whilst ignoring all case-related marking on those nominals that have little to do with the connectivity effects under consideration. We continue using our *What language do you know?* example.<sup>30</sup>

The relative clause instantiates, as was mentioned above, object relativ-

30. The present analysis seems to be compatible both with the feature-valuation accounts of Case assignment (Pesetsky & Torrego 2011), as well as those that view Case as a reflex of the syntactic dependency between two elements (Zwart 2006). I only adopt Zwart's (2006) version to minimise the number of subscripts notating feature valuation. As far as I can tell, nothing hangs on this.

isation, and direct objects typically appear in the unmarked ABS-case. Even though the case marking on the *wh*-phrase in *Kinab mac' duda laleb?* is absolutive, in this instance we are dealing with an example of case connectivity rather than the absolutive case that is assigned, by default, to the elements flanking the copula in copular constructions.<sup>31</sup>



As can be seen from the two steps illustrated in (90), after the null operator in the position of the internal argument has received its absolutive case (90a), it can undergo internal merge targeting the root of the tree (90b). Notably, in doing so it keeps its newly acquired absolutive property.<sup>32</sup>

I believe it is worth drawing a parallel between the solution to the case connectivity problem presented below and the analysis of case-marking patterns in relativisation environments under the head-raising analysis. An objection frequently raised against various implementations of the head-raising analysis of relativisation concerns the fact that the purportedly moved head noun is predicted to be able to be marked for Case several times. It first receives case from a case assigner inside the relative clause. It then moves out of the relative clause and is case-marked from a higher clause. Because the exact manner in which variants of the head-raising analysis solve this problem is immaterial, I only provide an illustration of the issue itself (cf. [Salzmann 2006](#) for a useful discussion).

31. Case connectivity extends to DPs in cases other than the absolutive — the reader may recall our earlier example (71) on p. 145 above.

32. The account of case connectivity that follows next is reminiscent of the mechanisms proposed to handle Case-related issues in the head-raising analysis of relativisation ([Kayne 1994](#), [Bianchi 2000](#), [de Vries 2002](#) etc.).

- (91) Ja kupil knigu, kotoraja — tol'ko vyšla [Russian]  
 I bought book.ACC which.F:NOM just exit.PST  
 'I have bought a book that has just appeared.'

In the Russian sentence above the gap inside the relative clause is a copy of the head noun *kniga* 'book', and it is inside the relative clause that it gets NOM. It then moves out of the relative clause and, being the internal argument of the matrix verb, receives ACC inside the matrix vP.

It is my opinion that a similar mechanism can be used to account for morphosyntactic connectivity effects in Avar PredPs. If Pred is the head that is unable to assign Case to the specifier (Rothstein 2004, Mikkelsen 2005), its specifier remains without any Case marking at all. Returning to our structure in (90), once a syntactic dependency has been established between the subject of the predication and the rest of it, the absolutive property of the null operator can be inherited by the subject wh-phrase under predication (Zwart 2006). This is depicted in (92), and works in an identical manner for all the other morphological cases:<sup>33,34</sup>

- (92)
- 

Rounding up our discussion of questions with left- and right-extrapolated wh-phrases, I present a brief summary of the dependencies and relations involved in their formation. The key feature of the approach advocated here is that the gap is never in a direct relation with either the wh-phrase or the Q-element. Rather, the gap is  $\bar{A}$ -related to a non-interrogative relative complementiser responsible for contributing a  $\lambda$ -abstraction operation to the meaning of the clause. The relation between the resulting relative clause and the wh-phrase is that of predication mediated by a phonologically null Pred head. As far as semantic interpretation is concerned, the following needs to be reiterated:

33. The mechanism proposed here differs from Zwart's (2006) analysis in that feature transmission under merge can proceed in either direction. Under Zwart's approach it is the predicate that can inherit (morphosyntactic) features from the subject but not the other way around.

34. Note a crucial link between the status of an Avar wh-question as a PredP and the case-transmission mechanism described in the main text. Because clefts in other languages can project further functional structure above Pred, such as T, case-assignment works in the usual way (i.e. the subject of a copular construction receives NOM from T).

wh-items are analysed as only having a focus semantic value within the framework of Alternative semantics, and must cooccur with a dedicated Q-element in order for the linguistic expression to be interpretable.

#### 4.5.2.2 Wh-in situ

Having concluded that *ex-situ* versions of wh-questions in Avar are a subset of the pseudocleft construction, let us turn our attention to their *in-situ* counterparts. We have seen from the exposition in §4.3.3 that wh-phrases that appear *in situ* could not have undergone overt wh-movement, with that movement being masked by other constituents moving across the wh-phrase. Furthermore, we have observed, in §4.3.1.3, a contrast with respect to Principle C effects in reconstruction environments between the *ex-* and *in-situ* variants of wh-questions: only in the *ex-situ* cases can Principle C be lifted.

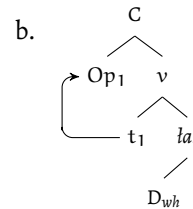
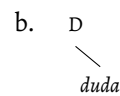
I therefore pursue a parallel analysis to the one presented in the preceding section and propose that Avar questions with *in-situ* wh-phrases again correspond to a reduced pseudocleft. In a sentence like (93), repeated from (52b) above, the wh-phrase is both generated and pronounced in exactly one and the same position — the position of the direct object inside the relative clause. Just like on the *ex-situ* scenario, the elements forming the pseudocleft are related via a Pred head.

- (93) *duda kina- b mac'            ɫa- l- e- b*  
 2SG:LOC which-N language.ABS know-PRS-PTCP-N  
 'What language do you know?'

The numeration and syntactic representation of (93), given as (96) and (97) respectively, is parallel to the *ex-situ* cases, only the predication's "subject" is realised as *duda* '2SG:LOC', whereas the wh-element appears inside the relative clause.

The numeration is identical to the one we have utilised in (83) above, and its composition is preceded by the two subderivations running their course: one subderivation results in a relative clause (94), whereas the other creates the subject of the predication, *duda* '2SG:LOC' (95).<sup>35</sup>

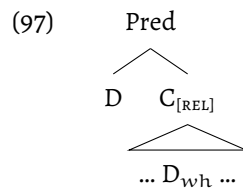
35. At least on the approach to pronominal syntax and semantics that treats them as complex expressions such as definite descriptions (Elbourne 2005, 2008, 2013).

(94) a.  $N_1 = \{C, Op_1, D_{wh}, v, \textit{lal}\}$ (95) a.  $N_2 = \{D, \textit{duda}\}$ 

Just like in the *ex-situ* example we have seen above, the outputs of the subderivations above — the subject of the predication *duda* ‘2SG:LOC’ and the participial relative clause *kinab mac’ laleb* ‘knowing what language’ — enter the numeration in (96) as atomic objects D and C with their internal structure invisible in the current derivational layer, or at least none that is visible to the narrow syntax.

(96)  $N_3 = \{D, C, \textit{Pred}\}$ 

The elements of  $N_3$  in (96) will combine in an unrestricted order, yielding as one of the outputs the structure in (97), where *Pred* takes as its complement the relative clause containing a *wh*-phrase in the direct object position. It then merges with the LOC-marked subject DP.



One of the consequences of positing such a structure with the *wh*-item inside the relative clause is the fact that the proposed structure aligns nicely with the observation, discussed earlier in §4.3.3, that in *in-situ* orders the interrogative expressions can appear inside islands. The *ex-situ* cases, in contrast, have been shown to be sensitive to locality constraints.

The relative clause in (97) differs from its counterpart in (68) in involving  $\lambda$ -abstraction over the subject, whereas (68) was an example of object relativisation.

Turning to semantic interpretation, it proceeds as outlined below (I am

glossing over the exact details of how null operator movement effectively creating a  $\lambda$ -abstract out of a clause interacts with the focus semantic value of the clause in question). Because the relative clause contains a *wh*-expression as one of its subconstituents, its ordinary semantic value is undefined, just like that of the *wh*-phrase itself. What this amounts to saying is that even though one of the semantic values is undefined, both structure building and semantic interpretation can proceed unimpeded, which is a natural consequence of a modular approach as envisaged here.<sup>36</sup> Indeed, null operator movement is an instance of merge, which applies freely, and the requirement that linguistic objects should have ordinary semantic values will only apply at the root level once all the syntactic composition has been done.<sup>37</sup>

(98) **The semantics of *wh*-item containing relative clauses**

$\llbracket \_ \text{ kinab mac' laleb } \rrbracket^o$  is undefined

$\llbracket \_ \text{ kinab mac' laleb } \rrbracket^f = \{\lambda z. \lambda s. z \text{ knows } y \text{ in } s: y \in \text{language}\}$

The focus semantic value of the relative clause containing the *wh*-phrase *kinab mac'* 'what language' in (98) is a set of alternative properties of knowing a lan-

36. Pace the so-called 'crash-proof' approaches, cf. Putnam (2010) for a collection of papers contrasting 'crash-proof' approaches with 'free-merge' analyses.

37. As far as operational timing is concerned, it only seems logical that the computation of the focus semantic value should precede null operator movement, and hence also  $\lambda$ -abstraction. Put differently, at the point that null operator movement is interpreted as  $\lambda$ -abstraction the only computable semantic values of the entire object at hand are focus semantic values, which presents a challenge for the application of traditional interpretational procedures. Nevertheless, the literature on focus and Hamblin semantics provides several revisions of the standard Predicate Abstraction rule (Heim & Kratzer 1998), such as the two presented below.

(i) **Pointwise/Flexible Predicate Abstraction**

If  $\alpha$  is a branching node and  $\{\beta, \gamma\}$  the set of its daughters, with  $\beta$  a numerical index. Then the denotation of  $\alpha$  follows from (a) or (b), whichever one is defined.

a. If  $\llbracket \gamma \rrbracket \in D_{\langle \tau \rangle}$ , then for any arbitrary assignment  $g$ :  $\llbracket \alpha \rrbracket^g = \lambda x. \llbracket \gamma \rrbracket^{[x/i]} \in D_{\langle e, \tau \rangle}$ .

b. If  $\llbracket \gamma \rrbracket \in D_{\langle \tau, t \rangle}$ , where  $\tau$  is a complex type, then for any arbitrary assignment  $g$ :  $\llbracket \alpha \rrbracket^g = \lambda x. \llbracket \gamma \rrbracket^{[x/i]} \in D_{\langle \langle e, \tau \rangle, t \rangle}$ . (Assmann & Heck 2013)

A potential alternative is Kratzer & Shimoyama's (2002) version of the *Predicate Abstraction* rule, presented below for the sake of concreteness, despite the authors' own dissatisfaction with the definition.

(ii) If  $\alpha$  is a branching node whose daughters are an index  $i$  and  $\beta$ , where  $\llbracket \beta \rrbracket^{w, g} \subseteq D_{\langle \sigma \rangle}$ , then  $\llbracket \alpha \rrbracket^{w, g} = \{f: f \in D_{\langle e, \sigma \rangle} \wedge \forall a. f(a) \in \llbracket \beta \rrbracket^{w, g[a/i]}\}$ .

To the extent that this is a real problem, it seems to me that Kotek (2014) faces it as well, at least when it comes to the derivation of questions with islands (Kotek 2014: 227). The various problems are discussed in Shan (2004) and Novel & Romero (2010).

guage.

Just as before, as far as the derivational history of *kinab mac'* is concerned, the most consistent state of affairs is for the entire wh-phrase to be the output of a separate derivational layer.

$$\begin{aligned}
 (99) \quad \llbracket \overline{\text{Pred}} \rrbracket^o & \text{ is undefined} \\
 \llbracket \overline{\text{Pred}} \rrbracket^f & = \lambda P_{\langle e, st \rangle} \cdot [\lambda x. \lambda s. P(x)(s)] \\
 & \quad (\{\lambda z. \lambda s. z \text{ knows } y \text{ in } s: y \in \text{language}\}) \\
 & = \{\lambda x. \lambda s. x \text{ knows } y \text{ in } s: y \in \text{language}\}
 \end{aligned}$$

Because the subject of the predication contains no focus-marked expressions, nothing stops it having the usual two values, i.e. both the ordinary and focus semantic values. These are specified in (100), where I leave it up to the reader to fill in what they find to be the most correct analysis of indexicality. It is my impression that nothing hinges on this, since the only difference between the ordinary and focus semantic values will be that the focus semantic value is represented as a set whose single member is the ordinary semantic value.

$$\begin{aligned}
 (100) \quad \llbracket \text{duda} \rrbracket^o & = \iota z. z \in \mathbf{u}, \text{ where } \mathbf{u} \text{ notates the addressee} \\
 \llbracket \text{duda} \rrbracket^f & = \{\iota z. z \in \mathbf{u}\}
 \end{aligned}$$

Even though (100) does contain both values, the relevant one for our purposes is the focus semantic value, as *duda's* syntactic sister contains a focus-marked expression and hence only has the focus semantic value.

$$\begin{aligned}
 (101) \quad \llbracket \text{PredP} \rrbracket^o & \text{ is undefined} \\
 \llbracket \text{PredP} \rrbracket^f & = \{\lambda x. \lambda s. x \text{ knows } y \text{ in } s: y \in \text{language}\}(\text{you}) \\
 & = \{\lambda s. \text{you know } y \text{ in } s: y \in \text{language}\}
 \end{aligned}$$

In order to interpret the entire PredP, the subject DP must merge with a projection of the relative clause. Once the semantic computation has been completed, it can be appreciated that the semantic values of (88b) and (101) are identical, even though the routes leading up to them differed in a variety of ways. Equally, their combination with the Q-particle at the sentential level results in identical truth conditions.

How do the structure in (97) and its semantic interpretation in (98) through to (101) derive the properties of *in-situ* questions in Avar? Of particular interest are those properties which are asymmetric to those of the *ex-situ* cases, viz. the behaviour of *in-situ* questions with respect to reconstruction effects and island sensitivity as well as participialisation.

As far as the participial morphology on the verb is concerned, it is trivially accounted for by the fact that PredP contains a relative clause.

Next, the lack of island sensitivity follows from the fact that there is no relativisation operation crossing more than one clausal boundary; since the pseudocleft's pivot is a constituent different from the *wh*-phrase, the gap can easily be in the topmost clause, one of this clause's other constitutive parts being the atomised island as the output of a separate derivational layer. The island's focus semantic value will be inherited from the *wh*-phrase inside it. The following provides an illustration, where the question is repeated from (31a) above with the modification of the (subject) gap being graphically indicated in (102):

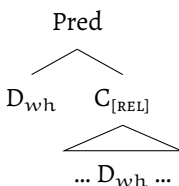
- (102) mun [\_\_ roq'owe [š:iw w-ač'- a- rawgo] a- ra- w  
 1SG:ABS home.M.LAT who.ABS M-come-PST-CVB go-PST-M  
 'I went home when who arrived?'

The adverbial-clause island containing the *wh*-phrase š:iw 'who' appears as an atomic element in the numeration that precedes the derivation of the relative clause, whose subject is realised as the null operator doing the movement, precipitating  $\lambda$ -abstraction at the semantic interface.

The asymmetry with respect to reconstruction follows trivially from the fact that the *wh*-phrase has never left its position so as to lose the binding properties.

The story for case connectivity in examples like (93) is the same one as we have seen discussed in the *ex-situ* environments. Where the two stories differ is the exact case transferred to the subject via the predication relation mediated by Pred. The precise case value is not fixed and depends largely on what sort of relativisation is assumed.

The murkiest issue is that of multiple *wh*-questions. I have shown in §4.4 that those are indeed attested in Avar, and I have used that fact to dismiss Adger & Ramchand's (2005) base-generation approach as extendable to Avar. One possible way to generate a structure for the multiple *wh*-question in (74) would be to have the subject *wh*-phrase as the pivot, the other one being contained inside the relative clause in, essentially, a combination of the *ex-* and *in-situ* strategies analysed above and depicted in (103) below.

- (103)
- 
- ```

  graph TD
    Pred --> Dwh[Dwh]
    Pred --> Crel[C[REL]]
    Crel --> Ellipsis["... Dwh ..."]
  
```



Given the by now familiar semantic values of the constituents in (103), the composition will proceed as follows:

- (104)
- |    |                                                       |                                                                                               |
|----|-------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| a. | $\llbracket \_ \text{kinab kwen kwarab} \rrbracket^f$ | $= \{\lambda y. y \text{ ate } x: x \in \text{dish}\}$                                        |
| b. | $\llbracket \text{Pred} \rrbracket^f$                 | $= \llbracket \text{Pred} \rrbracket^f (\llbracket \_ \text{kinab kwen kwarab} \rrbracket^f)$ |
|    |                                                       | $= \{\lambda z. \lambda s. z \text{ ate } x \text{ in } s: x \in \text{dish}\}$               |
| c. | $\llbracket \text{kinaw hobolas} \rrbracket^f$        | $= \{y: y \in \text{guest}\}$                                                                 |
| d. | $\llbracket \text{PredP} \rrbracket^f$                | $= \llbracket \text{Pred} \rrbracket^f (\llbracket \text{kinaw hobolas} \rrbracket^f)$        |
|    |                                                       | $= \{\{\lambda s. z \text{ ate } x \text{ in } s: x \in \text{dish}\}: z \in \text{guest}\}$  |

The present approach differs from most other approaches that also appeal to Q-elements in that the Q-element is only invoked once the Pred head has combined with both its complement and its specifier, *pace* Cable (2010b), Kotek (2014). This seems unavoidable if the wh-questions are to be accommodated in the bigger family of focus constructions in Avar, and appears to resemble multiple wh-questions in certain languages with Q-particles, such as Japanese (Hagstrom 2000, 2004), where pair-list readings of multiple questions are generated in the presence of a single Q-particle.<sup>38</sup>

#### 4.5.2.3 Comparison with previous approaches

In this subsection I will draw a number of comparisons between the analyses of related phenomena already put forth in the literature and my own. For reasons of space, I concentrate exclusively on the proposals concerning the derivation of wh-dependencies by base generation and entirely ignore various movement-based analyses.

Now, the present proposal treats both *ex-* and *in-situ* wh-questions as biclausal constructions, pseudoclefts, to be more precise. In doing so it owes an intellectual debt, and therefore bears a fairly close resemblance, to approaches outlined in Kazenin 2002 (for Nakh-Daghestanian) and Potsdam 2006 (for Austronesian). Whilst Kazenin (2002) remains silent on the matter, Potsdam (2006) derives this headless relative clause by null operator movement, thus accounting for the observed crossover effects in Malagasy. My proposal outlined

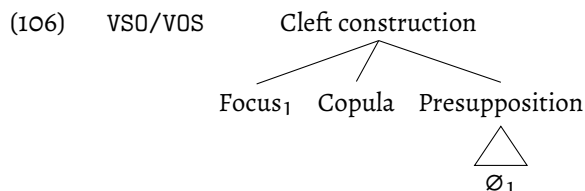
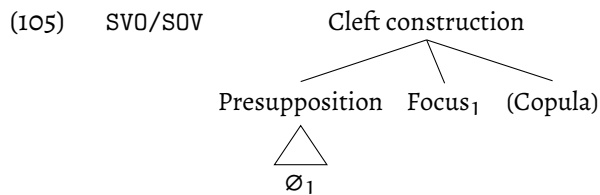
38. The availability of pair-list readings in multiple wh-questions in Japanese, exemplified in (i), presents a problem for those approaches which argue that each wh-phrase must be licensed by a distinct Q-particle (Kotek 2014).

(i) dare-ga nani-o kaimasita ka [Japanese]  
 who-NOM what-ACC bought.HON Q  
 ‘Who bought what?’ [Japanese, Hagstrom (2004: 246)]

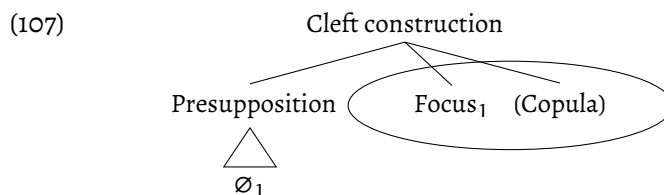
above adopts the same derivational mechanism to generate relative clauses.

Turning to *wh-in situ*, Kazenin (2002) and Potsdam (2006) choose very different paths to its derivation. For Kazenin (2002), the *in-situ* strategy merely represents a linearisation option, with focus sentences uniformly projecting a pseudocleft, which can be followed by the focused constituent (and the focus particle) moving, in a downwards fashion, to occupy the position of the gap. This lowering, according to Kazenin, has an essentially functional motivation, having to do with the word order parameter. Kazenin establishes a correlation between the word order parameter for a given language and the availability in that language of clefting *in situ*.

Unlike predicate-initial languages, where the clefted constituent (the filler) linearly precedes the gap (106), SVO and SOV languages have their clefting constructions built in such a way that it is the gap which precedes the filler, given that focus in these languages is extracted to the right because the focus normally corresponds to the predicate (105).



For Kazenin the *in-situ* focus construction is a way to avoid the “gap-before-filler” order thus facilitating the parsing. On this view, the head (copula) and its dependent (clefted constituent), contrary to the generally assumed restrictions on movement, undergo lowering which targets a position inside the head’s other dependent (107).



There are several problems with such an explanation, functional motivations of the movement operation aside. [Kazenin \(2002\)](#) builds his case on the empirically erroneous observation about the unavailability of focused constituents in predicate-initial languages occupying the *in-situ* position. Whilst it may be true of argument focus constructions, this observation does not hold for constituent interrogatives, which, at least in Malagasy, can be realised *in situ*. Furthermore, [Kazenin's \(2002\)](#) approach has nothing to say about the differences in reconstruction effects described above.

#### 4.5.2.4 Wh-questions and scrambling

Keeping in mind that the general goal of this project is to find the correlations between structure, order and meaning, it is interesting to see how our two types of wh-questions interact with the phenomenon known as scrambling.

To do this, recall an indirect object wh-question (1) that featured in footnote 2 on p. 112, repeated here as (108):

- (108) *baš:dab* *lie* *dica* *b-ičile-* *b*  
 half.ABS who.DAT 1SG.ERG N-sell.FUT.PTCP-N  
 'Who will I sell the (other) half to?'

In (108) the direct object DP *baš:dab* 'half' linearly precedes both the subject DP *dica* 'I' and the indirect object realised as a wh-word *lie* 'to whom'. How does this state of affairs come about and how does it relate to the syntactic structures developed in the preceding subsections?

To answer this question a position is required as to the status of the leftmost noun phrase *baš:dab* 'half.ABS'. I treat it as an instance of Left dislocation, and follow [Ott \(2014\)](#), who analyses Contrastive Left Dislocation (CLD) as involving ellipsis. To be more precise, he ascribes to (109) from German the structure in (110).

- (109) Den Peter, den habe ich gesehen.  
 the Peter him have I seen  
 'I saw Peter.' (Ott 2014: 269)

- (110) [<sub>CP1</sub> [ den Peter ]<sub>i</sub> [ habe ich t<sub>i</sub> gesehen ] ] [<sub>CP2</sub> den<sub>k</sub> habe ich t<sub>k</sub> gesehen ]  
(Ott 2014: 270)

The structure in (110) treats CLD as arising out of two separate clauses (CP1 and CP2 above), there being no syntactic relation between them. Instead, the

connection is established at the discourse level.<sup>39</sup>

The Avar case, I argue, could and should be given a parallel treatment, represented schematically in (111), with the difference that the pronominal correlate of the dislocated expression, which is overt in German, is realised as *pro* in Avar, where *pro*-drop is relatively frequent, especially in spoken speech.

(111) [Cl<sub>1</sub> baš:dab<sub>i</sub> [<sub>TP</sub> dica t<sub>i</sub> bičila]] [Cl<sub>2</sub> [<sub>PreDP</sub> [lie] [[<sub>RelCl</sub> dica \_\_ *pro* bičileb] Pred]]]

I will tentatively assume that this version of the left-dislocation construction is interpreted as an instance of topicalisation, and depends on information-structural requirements as well as the structure of the discourse, based on the following. Unlike most of the data we have seen in this chapter, which were obtained in elicitation sessions with native speakers, (108) is an instance of textual data. Because of this, it, together with the surrounding context, can be subjected to discourse analysis. This sentence is the punchline to a joke from the *Millat* newspaper, which, for the sake of concreteness, I reproduce here *in toto*.<sup>40</sup>

(112) bazaralda čaq'u bičulew řisada c'exanila:  
market.LOC sheep.ABS N-sell.PRS.PTCP:M Isa.LOC ask.FUT  
'At the market, Isa asks the sheepmonger:'

Q: hařul baha ř:ib  
this.GEN price.ABS what  
'How much is this one?'

A: k'inusgo řuruř:  
two.hundred ruble  
'Two hundred rubles'

Q: nusgojalde l'elar= iř:  
hundred.ALL give.FUT:NEG=Q  
'One hundred, maybe?'

A: bař:dab lie dica b-ičile- b  
half.ABS who.DAT 1SG.ERG N-sell.FUT.PTCP-N  
'Who will I sell the (other) half to?'

Now, by the time the punchline is delivered, the concept of the half (of both the price and the sheep) will arguably have become salient enough for both the speaker and the reader to function as a discourse-old, given, topic with respect to the punchline. This seems compatible with the conclusion of Kučerová

39. Instead of repeating Ott's (2014) arguments I refer the reader to the original paper.

40. <http://www.millat.ru/index.php/politika/437-kepalhardal.html>

(2012) that in a certain local domain in a discourse-configurational language, no non-given element can c-command any given element: if *baš:dab* is topicalised to the left periphery, it is not c-commanded by any other argument.

## 4.6 Conclusions and open questions

### 4.6.1 Conclusions

In this chapter I have been examining the structure of matrix constituent interrogatives in Avar. I have argued that unlike their English counterparts, none of the matrix *wh*-questions in Avar are derived by the simple extraction of the *wh*-phrase to any appropriate position in the clausal spine. I have claimed, instead, that Avar is a proper *in-situ* language with the fronted and right-extraposed *wh*-elements being either base-generated in, or predicate-fronted to, their surface position.

I hope to have demonstrated that questions featuring an *ex-situ* position of the *wh*-phrase instantiate a predicational construction, a pseudocleft of sorts, which involves a relative clause combining with a Pred head (Bowers 1993, Mikkelsen 2005). Most importantly, we have seen some language-internal empirical evidence for this *wh*-phrase originating outside of the relative clause.

*In-situ wh*-phrases, and the structures containing them, have been shown to display a cluster of significantly different properties, thus calling for a special treatment. Pushing the base-generation strategy further, I have followed Potsdam 2006 in analysing the *in-situ* constructions as having the *wh*-phrase in its original position inside the relative clause.

Finally, as far as semantic interpretation is concerned, I have employed Alternative semantics to give *wh*-questions a Hamblin/Karttunen analysis. In the coming chapter I attempt to accommodate the Avar *wh*-question construction within the arguably broader family of focus-marking constructions.

### 4.6.2 Open issues

There are several question-related issues that I have not been able to fit within the confines of the present chapter, nor the entire thesis. One of these concerns the availability, in Avar, of multiple *wh*-questions, which I have only mentioned in passing. It appears that the approach developed here faces certain difficulties when an attempt is made to generate a question only allowing for a pair-list answer. It is nevertheless my opinion that the current analysis is an improvement on the others.

The second issue concerns the structure and interpretation of embedded *wh*-interrogatives. These have been omitted from the discussion on purpose, mainly to avoid speculation regarding their exact derivation and interpretation, since very little is yet understood about the manner in which indirect questions attach to the embedding predicate, and the differences between various embedding elements as well as even a taxonomy of these. It is my hope that once more is known about the syntax and semantics of clausal embedding, the current analysis will prove to be compatible with it.

With this in mind, we proceed to investigate the intricacies of Avar focus marking in the next chapter.



## CHAPTER 5

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### The Avar focus construction

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In this chapter I examine the Avar focus construction, restricting my attention to situations where focus marking brings with it a change in the morphosyntactic appearance of the verb. I argue against the popular cartographic approach to focus whereby non-syntactic, interpretative information is instantiated as a head in the functional structure of the clause, and pursue an alternative, free-merge based approach to focus movement.

#### 5.1 Introduction

In this chapter I take a detailed look at the morphosyntactic realisation of focus in Avar, and at its semantic interpretation. The core facts are illustrated in (1) and (2) below.

- (1) **Declarative statement**  
aminati- ca rasul aḥ- ana  
Aminat.OBL-ERG Rasul.ABS invite-PST  
'Aminat invited Rasul.'



(2) **Corresponding statement involving a focus particle and**

- a. the focused material *in situ*  
 aminati- ca rasul= in aħ- a- ra- w  
 Aminat.OBL-ERG Rasul.ABS=FOC invite-PST-PTCP-M
- b. the focused material *ex situ*  
 rasul= in aminati- ca aħ- a- ra- w  
 Rasul.ABS=FOC Aminat.OBL-ERG invite-PST-PTCP-M  
 ‘Aminat invited [ Rasul ]<sub>F</sub>.’

The main difference between a simple declarative sentence like (1) and its analogues containing a contrastive focus particle (2a–b) concerns the morpho-syntactic form of the verb: in (1) the verb carries the finite, past tense morphology, whereas in (2) it must appear as a participle. The cooccurrence of a focus particle and the finite morphology on the verb results in unacceptability:

- (3) a. \*aminati- ca rasul= in aħ- ana  
 Aminat.OBL-ERG Rasul.ABS=FOC invite-PST
- b. \*rasul= in aminati- ca aħ- ana  
 Rasul.ABS=FOC Aminat.OBL-ERG invite-PST  
 (‘Aminat invited [ Rasul ]<sub>F</sub>.’)

The converse also holds: whenever the focus particle is absent, the verb may not take on the participial morphology:

- (4) a. \*aminati- ca rasul aħ- a- ra- w  
 Aminat.OBL-ERG Rasul.ABS invite-PST-PTCP-M
- b. \*rasul aminati- ca aħ- a- ra- w  
 Rasul.ABS Aminat.OBL-ERG invite-PST-PTCP-M  
 (‘Aminat invited [ Rasul ]<sub>F</sub>.’)

The only context where the verb may not take on the participial morphology in the presence of one of these particles involves situations where the particle attaches to the verb itself, in which case the verb must preserve its finite form:<sup>1</sup>

- (5) a. aminati-ca rasul aħ- an= iš:  
 Aminat-ERG Rasul.ABS invite-PST=Q
- b. \*aminati-ca rasul aħ- a- ra- w= iš:  
 Aminat-ERG Rasul.ABS invite-PST-PTCP-M=Q  
 ‘Did Aminat invite Rasul?’

1. This statement only holds of the question and contrastive focus particles =(j)iš: and =(j)in respectively but not of the constituent negation marker *guro*, which is expected since negation at sentential level is automatically sentential.

In this chapter I develop an analysis of this construction, which will minimally require an answer to the following questions:

1. Which particles cause the observed morphosyntactic change in the appearance of the verb, and why?
2. Is the participial morphology the spellout of a dedicated Focus head in the functional structure of the clause?
3. Are the *in-* and *ex-situ* variants of the focus construction derived by the same mechanism?
4. What is the semantic contribution of focus particles?
5. What is the relation between the focus particle and the constituent that it attaches to?

My claims with regard to these questions can be summarised as below:

1. The reason that the verb must appear in the non-finite participial form is that the focus construction is built around a relative clause, which in Avar are always participial. As to the participating particles, these are the contrastive focus particles  $=\text{(j)}in$  and  $=\chi a$ , the question particle  $=\text{(j)}i\check{s}$ , and the constituent negation marker *guro*.<sup>2</sup>
2. The participial morphology is not an exponent of the Focus head; in fact, I analyse the constructions at hand without having to postulate any dedicated information-structural heads in the syntax at all.
3. The *in-* and *ex-situ* variants of the focus construction are irreducible to one another, therefore being derived by distinct mechanisms.
4. Focus particles contribute exhaustivity to the interpretation of a clause.
5. Syntactically, the focus particle functions as an adjunct to its sister, there being no semantic relation between them since the particle is a sentence-level operator that must raise to the left periphery to combine with a proposition.

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2. The parentheses represent glide formation whenever the stem to which the particles attach ends in a vowel.

Before proceeding further, let us review the structure of the chapter. In §5.2 I present a detailed overview of the syntactic and semantic properties of the Avar focus construction, as well as contrast the behaviour of focus particles with that of another focus-sensitive expression, the exclusive *coħo* ‘only’. I then review, in §5.3, a possible analysis of the focus construction as couched within the cartographic approach to syntax, which I eventually dismiss for a number of reasons, before presenting an alternative solution in §5.4. Section 5.5 concludes.

## 5.2 Syntactic and semantic properties of Avar focus

### 5.2.1 Syntax

The first order of business is to find out which focus-sensitive particles trigger a morphosyntactic change in the form of the verb resulting in it taking the participial morphology. These are restricted to the contrastive focus particles  $=\text{(j)}in$  and  $=\chi a$ , the question particle  $=\text{(j)}i\dot{s}$ : and the constituent negation marker *guro*. The examples below illustrate the *ex-situ* version of the focus construction.

- (6) a. aħmadi-ca ču b-os- ana  
 Ahmed-ERG horse.ABS N-buy-PST  
 ‘Ahmed bought a horse.’
- b. ču= jin aħmadi-ca b-os- a- ra- b  
 horse.ABS=FOC Ahmed-ERG N-buy-PST-PTCP-N  
 ‘Ahmed bought a [ horse ]<sub>F</sub>.’
- c. ču= jiš: aħmadi-ca b-os- a- ra- b  
 horse.ABS=Q Ahmed-ERG N-buy-PST-PTCP-N  
 ‘Did Ahmed buy a horse?’
- d. ču guro aħmadi-ca b-os- a- ra- b  
 horse.ABS not Ahmed-ERG N-buy-PST-PTCP-N  
 ‘It wasn’t a horse that Ahmed bought.’

The particles in (6) contrast with a number of other focus-sensitive elements like the exclusive *coħo* ‘only’ and epistemic particle  $=daj$  expressing speaker uncertainty, neither of which can cooccur with the participial morphology in the absence of one of the four particles above.

- (7) a. aḥmadi-ca coḥo ču b-os- ana  
Ahmed- ERG only horse.ABS N-buy-PST
- b. \*aḥmadi-ca coḥo ču b-os- a- ra- b  
Ahmed- ERG only horse.ABS N-buy-PST-PTCP-N  
'Ahmed only bought a horse.'
- (8) a. c'ada ʕada- b bak'= go b-ugo= daj  
Tsada similar-N place=EMPH N-be.PRS=PRT
- b. \*c'ada ʕada- b bak'= go b-ug- e- b=daj  
Tsada similar-N place=EMPH N-be.PRS-PTCP-N=PRT  
'A place like Tsada, is there one really?' (Alekseev & Ataev 1997: 75)

Having established the subset of particles triggering the participialisation of the verb in focus-sensitive contexts, we proceed to examine their syntactic and semantic properties from the viewpoint of linear and structural distance between the particle and the focused constituent.

### 5.2.1.1 Linear placement of particles

We have seen evidence in the preceding subsection that focus particles triggering participialisation differ from the exclusive *coḥo* 'only' in their linear position with respect to their scope: whilst  $=(j)in$ ,  $=\chi a$ ,  $=(j)iš$ : and *guro* occur to the right of their scope, *coḥo* must precede it. The unacceptability of (9) illustrates that the pre-scope placement of  $=jin$  and  $=jiš$ : is impossible.

- (9) a. \*jin ču aḥmadi-ca b-os- a- ra- b  
FOC horse.ABS Ahmed- ERG N-buy-PST-PTCP-N  
(‘Ahmed bought a [ horse ]<sub>F</sub>.’)
- b. \*jiš: ču aḥmadi-ca b-os- a- ra- b  
Q horse.ABS Ahmed- ERG N-buy-PST-PTCP-N  
(‘Did Ahmed buy a horse?’)
- c. \*guro ču aḥmadi-ca b-os- a- ra- b  
not horse.ABS Ahmed- ERG N-buy-PST-PTCP-N  
(‘It wasn’t a horse that Ahmed bought.’)

Just as the three focus particles in (9) cannot precede the constituent they take scope over, *coḥo* cannot follow a constituent and take scope over it:

- (10) \*aḥmadi-ca ču coḥo b-os- ana  
Ahmed- ERG horse.ABS only N-buy-PST  
(‘Ahmed only bought [ a horse ]<sub>F</sub>.’)

In (10) *coho* appears to the immediate right of the constituent it is supposed to establish a relation with, instead of linearly preceding it in the usual manner, and while the sentence is unacceptable on the indicated reading, it is perfectly fine on a different one, namely with the focus on the buying:

- (11) ahmadi-ca ču coho b-os- ana  
 Ahmed-ERG horse.ABS only N-buy-PST  
 'Ahmed only [ bought ]<sub>F</sub> a horse.'

The availability of this alternative reading once again supports the generalisation that the exclusive particle must precede the constituent with which it focus-associates.

All of the examples considered so far involved a simplex noun phrase as the focused constituent, which made the association with focus quite unambiguous. This does not mean that the focused constituent must not be syntactically complex:

- (12) Q. řalil ču= jiř: b-at'- a- ra- b  
 Ali.GEN horse.ABS=Q N-find-PST-PTCP-N  
 'Was Ali's horse found?'  
 A1. guro. řalil řama b-at'- ana  
 no Ali.GEN donkey.ABS N-find-PST  
 'No. They found Ali's [ donkey ]<sub>F</sub>.'  
 A2. guro. rasulil ču b-at'- ana  
 no Rasul.GEN horse.ABS N-find-PST  
 'No. They found [ Rasul's ]<sub>F</sub> horse.'

The question particle *=(j)iř:* in (12Q) scopes over a DP containing a possessor, *řalil ču* 'Ali's horse'. Although *ču* 'horse' appears to the immediate left of the particle *=(j)iř:*, the particle can focus-associate with the possessor as well, as evidenced by the second possible answer to the question. Put differently, *=(j)iř:* displays the *pied-piping* property characterising a number of focus-sensitive expressions in more familiar languages. Let us consider (13) from English.

- (13) He *only* invited ex-convicts with [ red ]<sub>F</sub> shirts. (Drubig 1994)

The scope of focus-sensitive *only* in (13) above is everything to its right, yet the association with focus relation obtains between *only* and *red*.

In Avar this pied-piping property is shared by the other focus particles, *=(j)in/=řa* and *guro*.

A similar claim can be made regarding *coho*, whose behaviour seems to be similar to that of *only* in English: besides constituents immediately following

it, *coho* can ‘probe’ into their internal structure and focus-associate with one of the constituents.<sup>3</sup> In (14) below the focus-sensitive particle *coho* linearly precedes all of the material internal to the VP, which can give rise to a whole host of potential readings, depending on the VP’s subconstituent targeted by *coho* for association with focus. The accompanying sentences in (14a–d) serve to make some of these different readings more salient.

- (14) aħmad-i- ca coho žaq’a ebel- ał- e ruq’ b-a- ze  
 Ahmed-OBL-ERG only today mother-OBL-DAT house.ABS N-build-INF  
 kumek ha-b-ul- e- b b-ugo  
 help do-N-PRS-PTCP-N N-be.PRS  
 ‘Ahmed is only helping mother build the house today...’
- a. š:aguriřul meter maħačqala- jal- de in- e- w w-uk’-in  
 because tomorrow Makhachkala-OBL-LAT go.PRS-PTCP-M M-be- MSD  
 ‘...because tomorrow he is going to Makhachkala.’
- b. hes t’ok’a-b lienigi kumek ha-b-ul- e- b heč’o  
 he.ERG other-N nobody.DAT help.ABS do-N-PRS-PTCP-N COP:NEG  
 ‘He is not helping anyone else.’
- c. amma hes heł- ie boł’ b-a- ze kumek  
 but he.ERG she.OBL-DAT barn.ABS N-build-INF help.ABS  
 ha-b-ul- e- b heč’o  
 do-N-PRS-PTCP-N COP:NEG  
 ‘... but he isn’t helping her build the barn.’
- d. amma hes heł- ie c’ija-b roq’oj-e žani- b raqi- ne  
 but he.ERG she.OBL-DAT new-N house-LAT inside-N move-INF  
 kumek ha-b-ul- e- b heč’o  
 help.ABS do-N-PRS-PTCP-N COP:NEG  
 ‘... but he isn’t going to help her to move in.’

3. There are certain difficulties regarding the exact position of *coho* in the sentence which result from Avar being an OV language, since it is not entirely clear whether in those cases where it precedes one of the preverbal constituents it forms a constituent with the whole phrase marker including the verb or just the constituent immediately following it.

(i) coho ebel- ał- e aħmad-i- ca žaq’a ruq’ b-a- ze kumek  
 only mother-OBL-DAT Ahmed-OBL-ERG today house.ABS N-build-INF help.ABS  
 ha-b-ul- e- b b-ugo  
 do-N-PRS-PTCP-N N-be.PRS

The word order in (i) is compatible with a number of distinct syntactic structures. One possibility is that *coho ebelate* ‘only mother.DAT’ is a constituent; alternatively, *coho* could be viewed as attaching to vP or perhaps even higher.

Taking into account the data presented so far, as well as the general head-final nature of Avar, the behaviour of  $=(j)in$ ,  $=\chi a$ ,  $=(j)i\check{s}$ : and *guro* with respect to linear placement resembles that of syntactic heads, whereas *coho* behaves like an adjunct in preceding the constituent it takes as its scope. This creates an additional problem for the account I have briefly outlined in the introduction, whereby the former focus particles are syntactic adjuncts as well.<sup>4</sup>

### 5.2.1.2 Structural distance: Sensitivity to islands

As far as the hierarchical structure is concerned, Avar focus with *in-situ* and *ex-situ* focused phrases is sensitive to locality constraints. Just as in the preceding chapters, I take Ross's (1967) islands to be the relevant opacity domains. Island sensitivity of focus particle placement is illustrated below for the Coordinate Structure Constraint and Complex Noun Phrase Constraint, instantiating two of the so-called *strong islands*.

#### Coordinate Structure Constraint

We have seen in §4.3.1.2 of the previous chapter that coordination in Avar can be expressed in two different ways: either via affixing  $=gi$  to the right of every conjunct (15a) or using the coordinator *wa* as in (15b):<sup>5,6</sup>

4. Naturally, this aspect of linearisation is only problematic on a view that takes the head directionality parameter (M. Baker 1996) rather seriously, and assumes the existence of a strict linearisation algorithm. Since I do not propose any such algorithm in this thesis, I limit myself to a few speculations to follow at the end of this chapter.

5. Observe that although we are dealing with coordination here, the verb takes on the neuter singular agreement prefix *b-* instead of the plural prefix *r-*. This is an example of the Closest Conjunct Agreement strategy that is operative in Avar as well as other Northeast Caucasian languages. In Avar this is the preferred agreement pattern if the closest conjunct is neuter, cf.:

(i) was= gi jas= gi r- ač'- ana / (?)? j-ač'- ana  
 boy.ABS=CNJ girl.ABS=CNJ PL-come-PST F-come-PST  
 'A boy and a girl came.'

This is equally true of the *wa* coordination strategy, with the plural agreement being judged unacceptable.

6. Mitrović & Sauerland (2014) cite Avar as having a third coordination strategy combining the two described in the main text.

(i) keto=gi wa hwe=gi  
 cat= CNJ and dog=CNJ  
 'cat and dog'

(Mitrović & Sauerland 2014: 45)

I have been able to replicate this pattern with my consultants but more work is required to establish what, if any, the syntactic and semantic restrictions are on this particular strategy.

- (15) a. aḥmadi-ca ču= gi ḥama= gi b-os- ana  
 Ahmed-ERG horse.ABS=CNJ donkey.ABS=CNJ N-buy-PST
- b. aḥmadi-ca ču wa ḥama b-os- ana  
 Ahmed-ERG horse.ABS and donkey.ABS N-buy-PST  
 ‘Ahmed bought a horse and a donkey.’

In order to focus one of the conjuncts using one of the focus particles the particle must adjoin to the entire island, which I am bracketing for the sake of legibility,

- (16) Q. [ču= gi ḥama= gi ]=jiš: aḥmadi-ca b-os- a- ra- b  
 horse.ABS=CNJ donkey.ABS=CNJ =Q Ahmed-ERG N-buy-PST-PTCP-N  
 ‘Was it a horse and a donkey that Ahmed bought?’
- A. guro, aḥmadi-ca čaqu= gi ḥaka= gi b-os- ana  
 no Ahmed-ERG sheep.ABS=CNJ cow.ABS=CNJ N-buy-PST  
 ‘No, Ahmed bought a sheep and a cow.’

whereas isolating one of the conjuncts is impossible with both *in-* and *ex-situ* focus on either coordination strategy, in full compliance with the CSC:

- (17) *XP=gi ... YP=gi*
- a. \*ču= gi= jiš: aḥmadi-ca [\_\_ ḥama= gi ] b-os- a- ra- b  
 horse.ABS=CNJ=Q Ahmed-ERG donkey.ABS=CNJ N-buy-PST-PTCP-N
- b. \*aḥmadi-ca [ču= gi= jiš: ḥama= gi ] b-os- a- ra- b  
 Ahmed-ERG horse.ABS=CNJ=Q donkey.ABS=CNJ N-buy-PST-PTCP-N  
 (‘Was it a [ horse ]<sub>F</sub> and a donkey that Ahmed bought?’)

The difference between the two island violations in (17) concerns the fact that with *ex-situ* focus one of the conjuncts is separated from the island creating a gap in its island-internal base position (17a); in (17b), on the other hand, the focus particle occurs inside the island.

The other coordination strategy, the *wa* strategy, creates an island as well, which can be seen from the unacceptability of (18):<sup>7</sup>

- (18) *XP wa YP*
- a. \*ču= jiš: aḥmadi-ca [\_\_ wa ḥama ] b-os- a- ra- b  
 horse.ABS=Q Ahmed-ERG and donkey.ABS N-buy-PST-PTCP-N

7. There is an alternative structure allowing one of the conjuncts to be split away from the other(s), provided all conjuncts appear with a focus particle. In the case of *=(j)iš:*, this is the preferred way of phrasing an alternative question, with a range of word orders possible:



- b. \*aħmadi-ca [ču= jiš: wa ħama ] b-os- a- ra- b  
 Ahmed-ERG horse.ABS=Q and donkey.ABS N-buy-PST-PTCP-N  
 ('Was it a [ horse ]<sub>F</sub> and a donkey that Ahmed bought?')

Avar focusing, therefore, is sensitive to the CSC irrespective of the particular coordination strategy involved.

### Complex NP Constraint

In the CNPC examples below I use complex noun phrases modified by a relative clause, (19) serving as the base sentence.

- (19) di- qe b-il- ana [insu- ca di- e sajiyat  
 I.OBL-APL N-disappear-PST father.OBL-ERG I.OBL-DAT gift.ABS  
 ha- b-un b-uk'-a- ra- b t'ex ]  
 make-N-CVB N-be- PST-PTCP-N book.ABS  
 'I have lost the book that my father gave me.'

Just as we have seen above for the CSC examples, neither *in-* nor *ex-situ* focus is permissible as long as the focus particle attaches to one of the island's subconstituents.

- (20) \*insu- ca guro di-qe [\_\_ di-e sajiyat ha- b-un  
 father-ERG NEG I- APL I- DAT gift.ABS make-N-CVB  
 b-uk'-a- ra- b t'ex ] b-il- a- ra- b  
 N-be- PST-PTCP-N book.ABS N-disappear-PST-PTCP-N

- (i) a. ču= jiš: aħmadi-ca b-os- a- ra- b ħama= jiš:  
 horse.ABS=Q Ahmed-ERG N-buy-PST-PTCP-N donkey.ABS=Q  
 b. ħama= jiš: aħmadi-ca ču= jiš: b-os- a- ra- b  
 donkey.ABS=Q Ahmed-ERG horse.ABS=Q N-buy-PST-PTCP-N  
 'Did Ahmed buy a horse or a donkey?'

Contrary to what it might seem, these structures do not pose a challenge for the already formulated generalisation concerning the island status of coordinated XPs in Avar. I am inclined to think that they are formed by either syntactically coordinating two full clauses or juxtaposing them at the discourse level, followed by an ellipsis operation in one of them, along the lines of (ii), where the elided piece is greyed out.

- (ii) Was it a horse that Ahmed bought? Was it a donkey *that Ahmed bought?*

This analysis receives support from the fact that the question in (i) above contains no conjunction or disjunction markers and yet is interpreted as a disjunction.

The various attested word orders result, then, from the interaction of the ellipsis site and the *in-* vs. *ex-situ* focus strategy.

- (21) \*di-qe [insu- ca guro di-e sajiyat ha- b-un b-uk'-a- ra- b  
 I- APL father-ERG NEG I- DAT gift.ABS make-N-CVB N-be- PST-PTCP-N  
 t'ex ] b-il- a- ra- b  
 book.ABS N-disappear-PST-PTCP-N  
 ('I have lost the book that my father gave me.')

The desired interpretation, along with a number of others, can be achieved, as before, by attaching the focus particle to the right edge of the island:

- (22) di-qe [insu- ca di-e sajiyat ha- b-un b-uk'-a- ra- b  
 I- APL father-ERG I- DAT gift.ABS make-N-CVB N-be- PST-PTCP-N  
 t'ex ] guro b-il- a- ra- b  
 book.ABS NEG N-disappear-PST-PTCP-N  
 'I didn't lose the book that [ my father ]<sub>F</sub> gave me.'  
 'I didn't lose the [ book ]<sub>F</sub> that my father gave me.'  
 'I didn't lose the book that my father [ gave ]<sub>F</sub> me.'  
 'I didn't lose the book that my father [ gave me ]<sub>F</sub>.'

The island sensitivity displayed by Avar focus supports the conclusion that either a syntactic dependency (encoded via features) or syntactic movement is implicated in their formation. In the following section I explore both options before concluding that the analysis must deal with these facts by having the focus particle itself move to the left periphery.

### 5.2.2 Semantics

Before developing an analysis of Avar focus a closer look must be taken at the effects the focus particles contribute to the semantic interpretation of their host clauses. Below is a brief, and very informal, description of these effects, to which we return in §5.4.3.2.

It would appear that  $=\text{(j)}in$  and  $=\chi a$  impart contrastivity and exhaustivity to the prejacent proposition. Constituent negation marker *guro* shares the contrastivity and exhaustivity properties, too, in addition to expressing the negation itself.

Unlike  $=\text{(j)}in$  and *guro*, the question particle  $=\text{(j)}i\check{s}$ : is not associated with exhaustivity, possibly because it serves to raise a question rather than give a complete answer to it. The existence presupposition accompanying some of the polar questions, I suggest, must be analysed as having a different source — the relative clause.

### 5.2.3 Summary

Let us recapitulate what we have learnt so far as regards the syntactic and semantic properties of  $=(j)i\check{s}$ ,  $=(j)in$ ,  $=\chi a$  and *guro* in Avar.

On the syntactic side, we have considered the category of the phrase that the aforementioned particles can combine with, and examined both linear and hierarchical constraints on their placement. We have discovered that those focus particles do not subcategorise for a particular phrase marker and combine instead with objects of various categories. In addition, they display the pied-piping property, which in this instance corresponds to the ability to ‘look’ into larger constituents, including strong islands, and target a subconstituent for association with focus.

On the semantic side, we have only made preliminary statements ascribing the exhaustivity and contrastivity properties to  $=(j)i\check{s}$ ,  $=(j)in$ ,  $=\chi a$  and *guro*. A more detailed discussion of these properties will have to be postponed until §5.4.3.2.

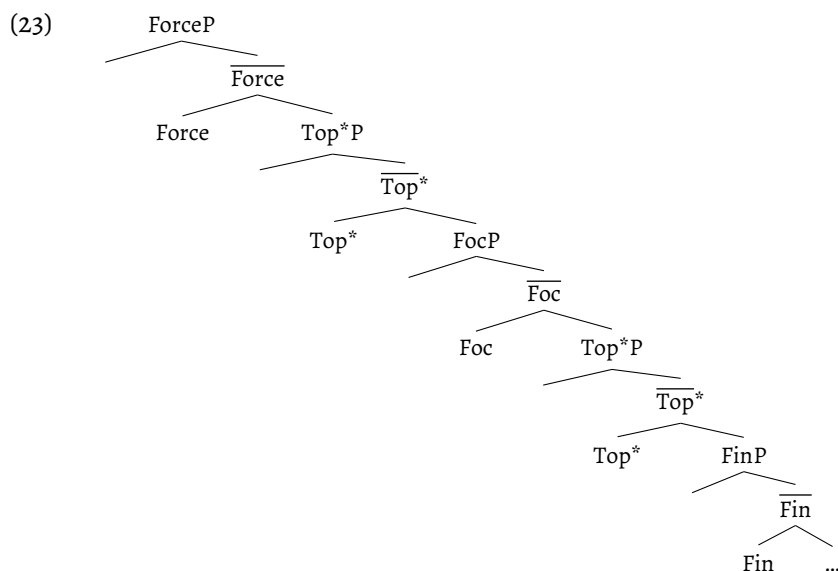
Finally, we have compared  $=(j)i\check{s}$ ,  $=(j)in$ ,  $=\chi a$  and *guro* with another focus-sensitive expression, the exclusive *coho* ‘only’.

## 5.3 Against a cartographic approach to Avar focus

One analytic option can be described as belonging to the family of approaches usually termed *cartographic*, a subset of which dealing with the left-peripheral phenomena take as their starting point the so-called *Split CP Hypothesis* (Rizzi 1997, Poletto 2000, Benincà 2001, Aboh 2004, Benincà & Poletto 2004, Hiraiwa & Ishihara 2012, among many others). In this section I review the original arguments for it, as well as a specific implementation, and conclude that such an approach cannot be extended to our language data.

### 5.3.1 *Cartographic approaches to information structure*

The postulation of a set of features encoding information-structural information which are often distributed over a number of heads, most of those heads replacing the “older” C-node (Chomsky 1986), has become a *de facto* standard in the work on the left periphery. The original split C as first proposed in Rizzi (1997), is represented in (23) below.



As can be seen from the tree above, each of the postulated heads comes with a dedicated specifier position hosting dislocated elements that are interpreted as focused, topicalised etc. whilst the heads themselves contribute various aspects of relevant information regarding the status of the clause. The heads come in a particular hierarchical order and appear in the functional structure of the clause only once, with the exception of the Topic head, which can recur. The heads and their contribution to the interpretation are as follows: Force introduces illocutionary force which effectively “types” the clause as declarative, interrogative etc. At the opposite end we see the Finiteness node, which assigns to its complement IP information regarding finiteness. In between these two heads are two Topic heads and a Focus head.

Most of Rizzi’s original arguments in favour of such an approach to the left periphery were based on the order of a number of heterogeneous elements (mostly complementisers and dislocated XPs) in the left periphery of the clause in certain Romance varieties. I discuss a couple of those arguments and how Rizzi argues they motivate the exact decomposition of the C-layer given in (23).

(24) **Foci can be surrounded by topics**

Credo che a Gianni, QUESTO, domani, gli dovremmo dire  
 I.believe that to Gianni this tomorrow him we.should tell  
 'I believe that to Gianni, THIS, tomorrow, we should say.'

[Italian, Rizzi (1997: 295)]

Information-structurally speaking, (24) contains a focused constituent, *questo* 'this', and two topic-like elements, *a Gianni* 'to Gianni' and *domani* 'tomorrow', surrounding it. Rizzi claims that this ordering can only be explained by the hierarchy in (23): the two topics occupy the specifiers of the lower and higher Topic heads, the focused constituent sitting in the specifier of FocP. The portion of the sentence to the right of *domani* corresponds to FinP/IP, whilst the complementiser *che* 'that' occurs in the specifier of ForceP.

To rule out structures in which one of the information-structurally relevant heads c-commands the Force head — the head that is claimed to be the highest one in the hierarchy — it should suffice, Rizzi argues, to consider the contrasts between relative and interrogative clauses given in (25) and (26).

(25) a. Un uomo a cui, il premio Nobel, lo daranno senz'altro  
 a man to whom the prize Nobel it they.will.give undoubtedly

b. \*Un uomo, il premio Nobel, a cui lo daranno senz'altro  
 a man the prize Nobel to whom it they.will.give undoubtedly  
 'a man to whom they will undoubtedly give the Nobel prize'

[Italian, Rizzi (1997: 298)]

(26) a. \*A chi, il premio Nobel, lo daranno?  
 to whom the prize Nobel it they.will.give

b. Il premio Nobel, a chi lo daranno?  
 the prize Nobel to whom it they.will.give  
 'The Nobel prize, who will they give it to?'

[Italian, *ibid.*]

For Rizzi, the relative complementiser occupies the specifier of ForceP, just like the embedding complementiser *che*, which, by hypothesis, is the highest element in the hierarchy, preventing the topicalised DP *il premio Nobel* from preceding it (25b). As far as wh-questions are concerned, interrogative expressions are analysed on a par with focused constituents, *viz.* as occurring in the specifier of FocP, which is situated lower than the upper Top\*P and can thus be preceded by a topicalised element.

### 5.3.2 Problems with the Split CP Hypothesis

Whilst it is true that Rizzi's (1997) system and its subsequent refinements have been claimed to account for the ordering of elements in the left periphery in a considerable number of languages, the programme itself raises serious concerns, both conceptual and empirical.

The first theoretical problem stems from the assumption, taken for granted, that elements appearing in the left periphery of a clause must be syntactically integrated into that clause. This theoretical issue becomes empirical once one looks at the simplest cases of left dislocation in Germanic, which involve routine exceptions to the well-established V2-generalisation.

- (27) Jan, ik heb hem ontmoet [Dutch]  
 Jan I have him met  
 'Jan, I have met him.'

As can be seen in (27), the finite verb *heb* 'have' occupies the third position from the left instead of appearing in its customary, second-place, position.

The second theoretical issue involves the abundance of postulated heads, and has its roots in the explicit stipulation that heads can only have one specifier. From a strictly minimalist perspective, whereby the narrow syntactic component consists of little more than Merge (Chomsky 2007, Boeckx 2014, Ott 2014, Zwart 2009, Trotzke & Zwart 2014), this stipulation seems to have an especially *ad hoc* flavour.

Perhaps the gravest problem facing those cartographic theories that take the cartographic hierarchies to be a theoretical tool rather than a useful way of notating descriptive generalisations is the fact that these hierarchies amount to mere restatements of the ordering patterns they were initially devised to explain. This is especially obvious when one compares cartographic decompositions of the C layer with those of lower portions of the clause: whilst the order of functional heads encoding event-related, aspectual and temporal information can be derived from the properties of events, argument structure, tense and aspect (see Ramchand & Svenonius 2014 for an attempt at deriving the order of heads in the VP and TP zone as well as a discussion of accompanying challenges), there can hardly be any principled reason for there being, say, two Topic heads flanking one Focus head in (23) rather than the other way round, or why the Topic heads on either side of the Focus head can recur an infinite number of times but the Focus head is invariably one and only.

Finally, two more problems for the cartographic approaches. One is empirical, and it concerns transitivity failures as documented in Venetian (van

Craenenbroeck 2006). The other point is methodological: as is well known, no language lexicalises every single element of a postulated functional hierarchy, which is why the data upon which most cartographic structures are built have to be generalised from partial orders in distinct languages.

In addition to these general points there is evidence that the Split-CP account as outlined above cannot account for our data in question, but in order to formulate the empirical counterarguments one needs a fairly explicit analysis of what a cartographer might think might be going on in the Avar focus construction. Given the lack of a formal account of Northeast Caucasian focus in the literature, I discuss, instead, a recent proposal regarding a very similar set of facts from an Indo-Aryan language Sinhala put forth in Slade (2011).

### 5.3.3 *Slade (2011) on focus in Sinhala*

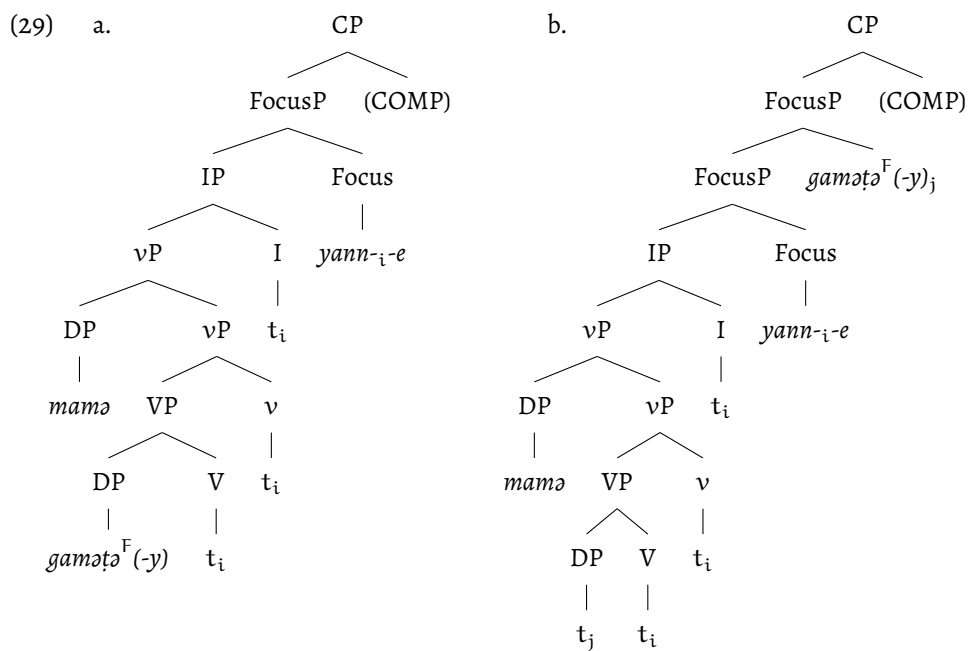
Focusing mainly on Sinhala, Slade (2011) develops a theory of focus particles within the framework of Alternative Semantics, and syntacticises it by proposing that the special morphology that appears on the verb in the presence of such particles, not unlike what we have seen above for Avar, is the pronunciation of the Focus head. In this subsection I review the syntactic side of this analysis and the arguments supporting it, and conclude that at least with respect to our Avar data, such an approach cannot be extended to account for it.

One aspect of Sinhala focus that makes it very similar to Avar, at least on the surface, is that whenever focus is involved, the verb cannot appear in its “normal” finite form but must take on the *-e* ending, which Slade (2011) analyses as spelling out the Focus head.

- (28) a. mamə gaməʔə yann- a  
 I.NOM village.DAT go.PRS-AE  
 ‘I go to the village.’
- b. \*mamə [gaməʔə]<sub>F</sub> yann- a  
 I.NOM village.DAT go.PRS-AE
- c. mamə [gaməʔə]<sub>F</sub> yann- e  
 I.NOM village.DAT go.PRS-E  
 ‘It is to the village I go.’ [Sinhala, Slade (2011: §4.1, exx. (1a,2a))]

(28a) illustrates the regular, non-narrow-focus, context, where the verb must end in *-a*, (28b) shows the unacceptability caused by a cooccurrence of narrow focus on *gaməʔə* ‘village.DAT’ and the *-a* ending on the verb, whereas (28c) demonstrates the *-e* form, which is the only acceptable one in the given context.

To analyse the contrast in (28) Slade assumes a broadly minimalist syntax involving Probe–Goal relations mediated by feature valuation. Syntactic movement is triggered by EPP features on attracting heads. Contrary to most existing proposals regarding the structure of Sinhala focus sentences he argues that these constructions should be viewed as monoclausal, rather than biclausal “cleft” constructions as argued in previous work.



(Slade 2011: §4.2)

The two diagrams in (29) above illustrate the proposed derivations of *in-situ* focus and *ex-situ* focus respectively. What is of interest is the morphological form of the verb, which must end in *-e* whenever there is a clausemate focused constituent present. The focused constituent itself can either appear *in situ* (29a) or be dislocated to the right edge of the clause (29b).

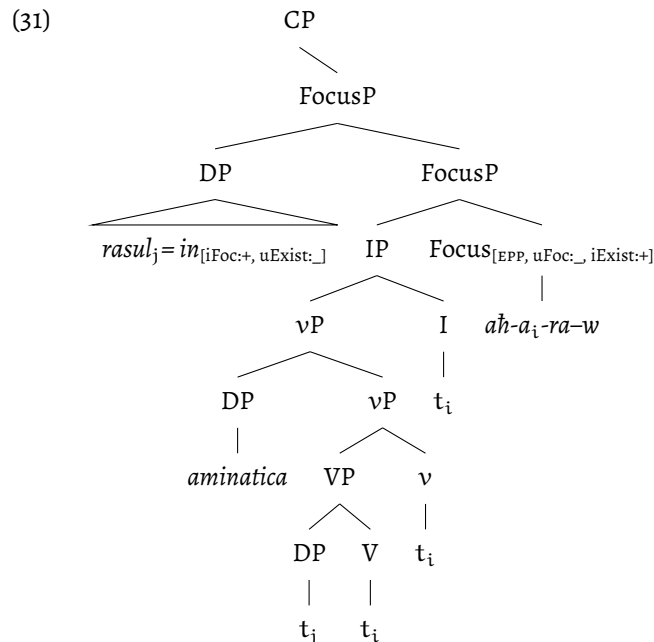
The corresponding focus-related features are distributed in the following fashion: the focused constituent enters the derivation with a valued interpretable [Focus] feature and an unvalued feature [Exist], which is the syntactic correlate of the existence presupposition associated with Sinhala focus. The focus suffix *-e*, on the other hand, carries an unvalued [Focus] feature and a valued [Exist] feature, plus an EPP feature to trigger focus movement in those cases where this movement obtains.



The similarity between the focus constructions in Sinhala and Avar is, however, not full, since in Sinhala no focus particle is required for the verb to appear in its *-e* form, which was a clear impossibility in Avar, as we have seen in § 5.2. In Slade's (2011) system the  $\bar{A}$ -dependency involves two elements, the Focus head and the focused constituent, whereas in Avar there are three: the Focus head, the focused constituent and the focus particle.

If one were to extend Slade's (2011) analysis of focus to Avar, one could postulate that, just like in Sinhala, the participial morphology on the verb is the spellout of the Focus head in the articulated C-layer of the clause. This Focus<sup>o</sup> would be endowed with [uFocus:\_,iExist:+], both of which will enter into Probe–Goal relations with matching [iFocus:+,uExist:\_] features on the focused constituent.<sup>8</sup> There would also be an optional [EPP]/Edge feature triggering overt focus movement to the specifier of Foc. The focus particle could, on this view, be the spellout of the [iFocus:+] feature. The derivation of (2), repeated here as (30), would then be as schematised in (31).

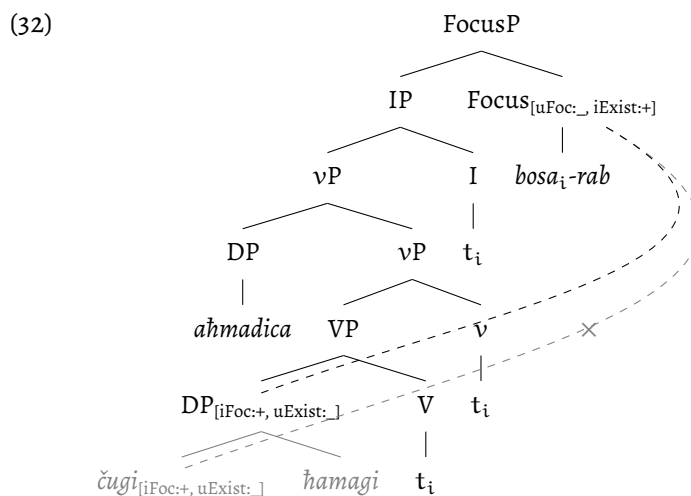
- (30) rasul= in aminati- ca aḥ- a- ra- w  
 Rasul.ABS=FOC Aminat.OBL-ERG invite-PST-PTCP-M  
 'Aminat invited [Rasul]<sub>F</sub>.'



8. See §2.1.1.1 for a brief discussion.

In the modification of Slade's (2011) analysis depicted in (31) two kinds of movement that are relevant for our purposes here take place (like Slade, I am ignoring all other possible movements and features to keep the trees legible): the focus movement of the focused constituent *rasul=in* and a series of steps of head movement involving the verb. The base position along with the intermediate landing sites are notated as traces ( $t_i$ ).

It could also be argued that such an analysis accounts for the observed island-sensitivity of focus marking: if the focus particle is the spellout of the [iFocus] feature on the focused constituent that must enter into a syntactic dependency with a matching feature on the Focus head and one of them occurs inside an island, it will be invisible for the other, on the assumption that islands are phases and phases constrain Agree. If the feature is on the edge of an island, however, it will be able to establish the dependency with a matching feature. This is illustrated for the CSC example (17) involving a focus particle internal to the island, which on Slade's (2011) approach will be identical to focus fronting examples except for the actual fronting.



In the tree above the greyed-out portion corresponds to the strong island, with the relevant Agree operations being represented as dashed lines. Because the coordinated noun phrase *čugi hamagi* is syntactically opaque, the [uExist:~] feature on the first conjunct cannot be valued, just like the [uFoc:~] feature on the c-commanding Focus head cannot be valued.<sup>9</sup>

9. We are ignoring here the phasal status of  $v$  that may require further modifications to the cartographic line of reasoning sketched above, such as pairs of matching features on  $v$  as well.

The structures proposed for Sinhala raise a number of questions, some of those questions concerning the setting of the headedness parameter as well as the linearisation of specifiers, most of which appear to the left of their corresponding heads whilst others obligatorily follow them. These issues notwithstanding, further arguments can be made against extending Slade's (2011) analysis to our Avar cases.

The first argument pertains to the reservations with respect to pursuing a cartographic programme when it comes to the formalisation of essentially pragmatic notions of givenness/topichood and focus as syntactic heads and features, stemming from the assumption that syntactic movement must be triggered by those features. Whilst this latter assumption is a stipulation of its own, as acknowledged in Chomsky (2007, 2013), in a modular system the null hypothesis is that topic and focus are represented in a distinct interpretative component that is crucially non-syntactic, and having it be represented in narrow syntax as well would result in the duplication of the information in question. On this view, word-order based arguments are essentially vacuous since they present interesting explananda but are by no means explanations. Besides, once the stipulation regarding the feature-driven nature of Internal Merge is removed, it becomes much less obvious how these notions are relevant to the pure concerns of the narrow syntax.<sup>10</sup>

Furthermore, it has already been mentioned in passing (§5.2.3) that Avar focus particles impart exhaustivity to the interpretation of the sentence in which they appear. Although it is hard to be certain since the denotations of [iFocus:+] and [iExist:+] are not made explicit, this exhaustivity does not seem to follow from them, unless one were to insist that focus is always exhaustive or that there is an additional [+Exh] feature, or the [i/uFocus:\_] feature can take an *exh* value.

One of the puzzles that the cartographic approach described above was designed to explain concerned the participial morphology on the verb; the explanation consisted in identifying the participle affix with the Focus head — that way the observation is indeed accounted for but at the expense of missing another, arguably broader, generalisation: we have seen in preceding chapters

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Since I end up abandoning the FocusP view altogether, I refrain from discussing these issues any further.

10. If one were to voice an objection to this line of reasoning, it would probably concern the issue of what should be done with the empirical arguments for the Split CP Hypothesis. Some of those arguments, in particular Left- and Right-dislocation, are already being readdressed and reevaluated — see Abels (2012), Ott (2014), Ott & de Vries (in press) for alternative proposals that are arguably superior to the more traditional cartographic analyses.

|         | Affirmative   |                 | Negative         |                     |
|---------|---------------|-----------------|------------------|---------------------|
|         | Finite        | Participle      | Finite           | Participle          |
| Past    | <i>aḥ-ana</i> | <i>aḥ-ara-w</i> | <i>aḥ-i-č'o</i>  | <i>aḥ-i-č'-e-w</i>  |
| Present | <i>aḥ-ula</i> | <i>aḥ-ule-w</i> | <i>aḥ-ula-ro</i> | <i>aḥ-ula-r-e-w</i> |
| Future  | <i>aḥ-ila</i> | <i>aḥ-ile-w</i> | <i>aḥ-ila-ro</i> | <i>aḥ-ila-r-e-w</i> |

Table 5.1: Finite and participial forms of *aḥize* 'shout' (repeated)

that the participial affixes were also obligatorily present on verbs in relative clauses. The cartographer would, seemingly, have to either postulate accidental homonymy between verbs in relative clauses and sentences with focus or be forced to reduce either type of context to the other.

In addition to all of the aforementioned shortcomings, any analysis of the participial morphology on the verb as spelling out  $\text{Foc}^\circ$  does actually not deliver on one of the fronts, viz. it fails to account for the obligatory participialisation after all. To see this, let us consider the (truncated) inflectional paradigm of the verb *aḥize* 'shout', illustrated in Table 5.1. The paradigm illustrated in the table shows that the participial morphology varies depending on tense rather than being invariant, as would be expected if it were spelling out  $\text{Foc}^\circ$ . Several tense-dependent allomorphs of the  $\text{Foc}^\circ$  head are therefore required, which has no motivation other than attempting to capture the facts.

Moreover, the pattern extends to the negated forms as well, which involve more complex morphology, especially in the past tense, than the affirmative forms. Even though this is not entirely incompatible with Split-CP analyses, the accidental homonymy story becomes far less plausible and the across-the-board identity of form between participles in relative clauses and sentences with focus still remains unaccounted for.

Let us take stock: the cartographic approach outlined in this subsection had the attractive property of being able to derive the island-sensitive nature of Avar focus marking by appealing to locality constraints on the syntactic operation of Agree. It also seemed, at first, to be able to account for the participial form that the verb obligatorily takes when in a focus-marking environment. I have argued that it did, in fact, fail to deliver on its promises, just as it was unable to explain the identity of form between verbs in focus sentences and relative clauses. I have also listed a number of conceptual considerations that, in combination with these empirical inadequacies, warrant rejecting the cartographic account of the Avar focus construction.

## 5.4 Towards a proposal

In the discussion so far I have argued that the syntactic and semantic properties of the Avar focus construction should not be approached with a cartographic mindset. Building on the insight from Chapter 3 and especially Chapter 4, this section outlines my alternative, which is an extension of the biclausal analysis developed for *wh*-questions.

More specifically, I treat Avar focus particles as creating a pseudocleft, where they separate the pivot from the presupposition. The analysis is rooted in existing work on focus in Northeast Caucasian languages (Testelec 1998a,b, Kazenin 2002) arguing for a biclausal cleft-like structure of Northeast Caucasian focus. The resulting syntactic structures, I argue, are fully compatible with the general approach to focus advocated in Beaver & Clark (2008), and its specific application to English *it*-clefts proposed by Velleman et al. (2012), which I also adopt.

### 5.4.1 Q-particles and focus particles

For Cable, a key ingredient of many an  $\bar{A}$ -dependency is the so-called question particle, or Q-particle, which although silent in English, can be overtly realised in a number of languages by either heading a projection of its own or adjoining to another constituent. According to Cable (2010b,a), the postulation of a dedicated Q-particle, whether overt or covert, leads to rather an elegant solution to the so-called  *pied-piping problem*.

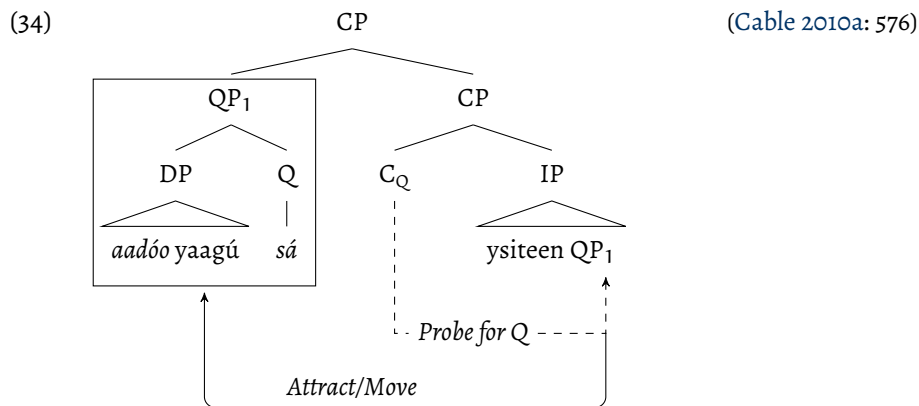
This Q-particle enters into syntactic dependencies with a head in the left periphery carrying a matching feature (Cable follows Rizzi 1997 in assuming the Split CP Hypothesis) and moves to it either overtly or covertly. Because the particle attaches to a certain constituent, the attracting head need not see beyond the features of the particle, and the constituent in question *plus* the particle can undergo a displacement operation.

To see more concretely how the system works, consider (33) from Tlingit, a Na-Dené language followed by its derivation in (34).

- (33) a. [Aadóo yaagú] sá ysiteen?  
           who boat Q you.saw
- b. \*[Aadóo sá yaagú] ysiteen?  
           who Q boat you.saw  
           ‘Whose boat did you see?’

[Tlingit, Cable (2010a: 575)]

The pied-piping problem formulated by Cable (2010b,a) is as follows: If the interrogative complementiser is “interested” in wh-features of the wh-phrase *aadóo* ‘who’ that it attracts to its specifier, the pied-piping structure in (33a) is problematic, since there is no possible reason for the remainder of the moved constituent to leave its base position. What is even more puzzling is the ungrammaticality of the structure resulting from C attracting only the constituent it is meant to see, i.e. the interrogative possessor (33b).



The solution to the pied-piping problem, Cable (2010b,a) maintains, is to assume that the interrogative C probes for a Q-feature on the Q-particle, rather than the [wh] feature on the wh-word, disregarding all the other features of the particle’s sister node (i.e. it is not concerned with whether the interrogative element is a DP, a PP or a CP). The ungrammaticality of (33b) follows from the island status of the DP in question, which would stop C<sub>Q</sub> probing for Q due to a locality constraint on Agree (see §2.1.1.1), yielding an uninterpretable output.

In what follows I take the question particle *=(j)iš*: to be Cable’s (2010b) Q-particle which is, together with the other focus particles, one of the two crucial ingredients of the focus construction, the other one being a free relative clause. Like Cable (2010b,a), I take the focus particle to undergo movement to the left periphery but I depart from him when it comes to motivating that movement. A further modification is that the focus particle moves alone without bringing its sister constituent with it to the left periphery. It is this last property of focused phrases in Avar that I now proceed to discuss.

### 5.4.2 The focused constituent does not $\bar{A}$ -move

We have seen in §4.3 of the preceding chapter that Avar wh-phrases could not be viewed as undergoing  $\bar{A}$ -movement to the left periphery because, unlike their English counterparts, they did not display most of the properties that  $\bar{A}$ -moved phrases often have: they could not be reconstructed to the base position of the  $\bar{A}$ -chain, nor did they trigger any crossover effects in the relevant configurations. I show in this subsection that this pattern extends to focused constituents more generally.

#### 5.4.2.1 Idiom interpretation

The first piece of evidence against focus fronting being derived by  $\bar{A}$ -movement regards the interpretation of idiomatic expressions, which we have already addressed in the context of relativisation (§3.2.3.1) and wh-interrogatives (§4.3.1.3). The intuition behind this test is that in order for the idiomatic reading to be available, various components of an idiom must be adjacent at the moment that the semantic interpretation takes place. The absence of the idiomatic reading is therefore often taken to be an argument against the discontinuous phrase ever forming a constituent at any level of representation.

Polar questions in (36) are based on a declarative sentence (35) that contains the idiom *destroy someone's heart* with the meaning of *scare to death*.

- (35) wac- as dir rak' b-ek- iza- b-una  
 brother-ERG my heart.ABS N-break-CAUS-N-PST  
 'Brother scared me to death. (lit.: 'Brother destroyed my heart.')

As can be seen from the free translation in (36) below, only the compositional reading is available.

- (36) a. dur rak'= iš: wac- as b-ek- iza- b-u- ra- b  
 your heart=Q brother-ERG N-break-CAUS-N-PST-PTCP-N  
 b. wac- as dur rak'= iš: b-ek- iza- b-u- ra- b  
 brother-ERG your heart=Q N-break-CAUS-N-PST-PTCP-N  
 'Was it your heart that brother destroyed?'

The unavailability of the idiomatic reading with both *ex-* and *in-situ* focused phrases can be viewed as signalling the lack of focus movement.

It is fairly obvious that in order for this argument to go through, the idiom in question should be transparent enough to allow a certain number of transformations (i.e. it should be like *make progress* in English rather and not like

*kick the bucket*, which loses the idiomatic reading if *the bucket* is clefted). Since very little is known about the syntactic and semantic properties of Avar idioms, I only take this argument to be indicative of the absence of reconstruction effects instead of asserting that it shows, conclusively, the lack of these effects.<sup>11</sup>

#### 5.4.2.2 Crossover effects

With a hint of doubt as to the involvement of  $\bar{A}$ -movement in the derivation of Avar focus sentences from the preceding subsection in hand, we can now look at more robust piece of evidence, this time one involving the interaction of anaphoric dependencies with purported  $\bar{A}$ -movement.

Just as in the case of *wh*-questions discussed previously, Avar focus sentences display a lack of strong crossover effects.

- (37) a. rasuli-ca žiw= go= jiš: č'w-a- ra- w  
 Rasul-ERG self.M:ABS=EMPH=Q kill- PST-PRT-M  
 'Did Rasul kill himself?'  
 b. žin- ca= go= jiš: rasul č'w-a- ra- w  
 self-ERG=EMPH=Q Rasul.ABS kill- PST-PRT-M  
 ('Was it he himself that killed Rasul?')

The (a) sentence above is a default way of inquiring whether Rasul was involved in a self-killing event, whereas (b) corresponds to the Strong Crossover configuration on the assumption that focus movement is taking place, and its acceptability is therefore surprising. As before, I assume that crossover effects are inseparable from movement and not a mere subset of Principle C effects. If, however, we take the movement out of the equation altogether, the structure giving rise to crossover effects does not obtain and we are left with a case of a Principle C obviation, which should be easier to account for than the absence of crossover effects predicted on the movement analysis.<sup>12</sup>

11. The issue of idiom interpretation being applied as a test for syntactic reconstruction of  $\bar{A}$ -moved items has recently been raised by Heycock (2012), who, based on examples like (i), argues that idiom interpretation does not conclusively signal syntactic reconstruction.

(i) This represents the only headway on Lucy<sub>1</sub>'s problems that she<sub>1</sub> thinks they have made so far.

The example in (i) is problematic for the view that takes  $\bar{A}$ -moved terms to reconstruct to their base position at LF for the following reason: it presents a reconstruction environment, as evidenced by the presence of the idiomatic reading of *make headway*, which would put the complex DP *the only headway on Lucy's problems* containing the R-expression *Lucy* in the c-command domain of a coindexed pronoun *she*, predicting the sentence to be unacceptable, contrary to fact.

12. Just as in the case of *wh*-questions in Chapter 4, our example of a crossover obviation presen-



In the remainder of this section I consider an analysis that does precisely this, and holds that instead of involving an  $\bar{A}$ -dependency between fronted focus and the gap in the base position, like focus movement in English or Italian, Avar focus is in fact similar to cleft constructions.

### 5.4.3 Avar focus involves clefting

So far we have seen that a cartographic focus-movement analysis of Avar focus should hardly be entertained as such analyses failed to account for the absence of SCO effects and the obligatory participialisation accompanying the focus particles. In this subsection I suggest that at least some instances of the focus construction should be analysed as pseudoclefts, i.e. essentially non-monoclausal structures. I do so primarily on the basis of a number of similarities between Avar focus and English *it*-clefts pertaining to their semantic interpretation. I begin, however, with morphosyntax by repeating two points from the preceding chapter that fit with the cleft analysis much better than any monoclausal focus-movement approach. One of them concerns the participial morphology, and the other the rigidity of word order in relative clauses.

#### 5.4.3.1 Biclausality

There are two sets of facts suggesting that the Avar focus construction involves a relative clause as its structural core. Both of these have already been presented in the chapter on *wh*-dependencies, but for the sake of cohesion I reproduce them below as well.

---

ted here involve a reflexive/intensifier corresponding to the variable purportedly crossed over by the antecedent. Even if this has any bearing on the argument, it seems that a corresponding English sentence involving *he himself* as the subject is unacceptable on the intended interpretation:

(i) Did he<sub>1</sub> himself kill Rasul<sub>1</sub>?

If, on the other hand, Avar focusing involves clefting, we expect its English analogue to be at least marginally better than the non-clefted version, although the judgement is admittedly very subtle:

- (ii) a. (?)? It was he himself that killed Rasul.  
 b. (?)? Who killed Rasul was he himself.  
 c. (?)? The person that killed Rasul was he himself.

**Participial morphology signals relativisation**

Unlike the cartographic approaches discussed above that failed to give a satisfactory account of the participial morphology on the verb whenever a focus particle was present, we can capitalise on the very same morphology appearing on relativised verbs. Recall that Avar relative clauses are participial clausal structures. On this view the relative-like morphology on the verb is, in fact, relativisation morphology, eliminating any need to postulate a separate Focus head and capturing the across-the-board accidental homonymy between verbal morphology in focus and relative clauses that the cartographic analyses would be forced to postulate.

- (38) a. aħmadi-ca= jin [\_\_ narkotikal r- ič- ul- e- l ]  
 Ahmed-ERG=FOC drugs.ABS PL-sell-PRS-PTCP-PL  
 ‘It is Ahmed that is selling drugs.’  
 b. [\_\_ narkotikal r- ič- ul- e- w] či w-ač’- ana  
 drugs.ABS PL-sell-PRS-PTCP-M man M-come-PST  
 ‘The drugs dealer has arrived.’

The main difference between the two relative clauses above concerns the absence of a head noun in the focus sentence (38a), and its presence in (38b). Crucially, the present-tense affix *-ul-* on *ričulel* is identical in both sentences, as is the participle affix *-e-* (the distinct concord affix need not concern us here). The same can be said of the past and future tense forms of the participle:

- (39) a. aħmadi-ca= jiš: [\_\_ narkotikal r- ič- a- ra- l ]  
 Ahmed-ERG=Q drugs.ABS PL-sell-PST-PTCP-PL  
 ‘Was it Ahmed that sold (the) drugs?’  
 b. [\_\_ narkotikal r- ič- a- ra- w] či w-ač’- ana  
 drugs.ABS PL-sell-PST-PTCP-M man.ABS M-come-PST  
 ‘The man that sold drugs has come.’
- (40) a. aħmadi-ca guro [\_\_ narkotikal r- ič- il- e- l ]  
 Ahmed-ERG NEG drugs.ABS PL-sell-FUT-PTCP-PL  
 ‘It is not Ahmed that will sell the drugs.’  
 b. [\_\_ narkotikal r- ič- il- e- w] či w-ač’- ana  
 drugs.ABS PL-sell-FUT-PTCP-M man.ABS M-come-PST  
 ‘The man that will sell the drugs has arrived.’

Presumably, the simplest explanation behind participialisation in the focus construction is that the focus construction is built on the basis of a relative clause.

### Fixed word order signals relativisation

The second phenomenon concerns the observation that, just like in relative clauses and unlike declarative root clauses, verb-initial orders are disallowed in the focus construction.

Example (41), repeated from (17) and (60), confirms the availability of verb-initial orders in declarative sentences.

- (41) w-ecc- ul- e- w w-uk'-ana rasul insu- ca.  
 M-praise-PST-PTCP-M M-be- PST Rasul.ABS father-ERG  
 'Father was praising Rasul.'

In the presence of a focus particle, on the other hand, verb-initial orders result in unacceptability:

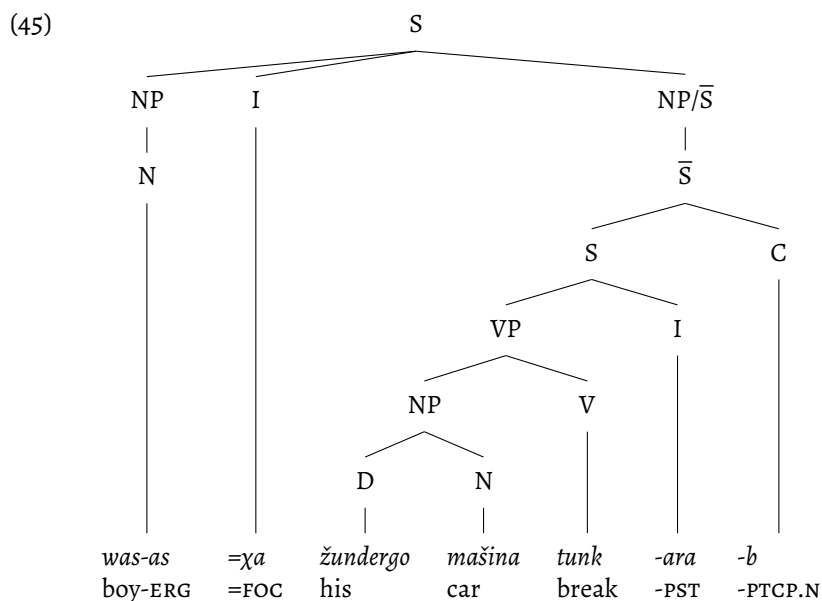
- (42) \*w-ecc- ul- e- w w-uk'-a- ra- w rasul= in insu- ca.  
 M-praise-PST-PTCP-M M-be- PST-PTCP-M Rasul.ABS=FOC father-ERG  
 ('Father was praising [ Rasul ]<sub>F</sub>.')

- (43) a. insuca \_\_\_ w-ecc- ul- e- w či  
 father.ERG M-praise-PRS-PTCP-M man  
 b. \*w-ecc- ul- e- w insuca či  
 M-praise-PRS-PTCP-M father.ERG man  
 ('the man praised by (his) father')

The above facts suggest a parallelism, related to word order, between the focus constructions and relative clauses in Avar that can hardly be ignored. Given this parallelism I hypothesise that the Avar focus construction is a pseudocleft, which entails that it is built around a relative clause. My analysis is thus similar to Testelec (1998b), which I briefly summarise below.

Testelec (1998b) proposes a tripartite, "flat", structure of Avar (the Andalal dialect) focus sentences like (44) below involving *ex-situ* focus sketched in (45) with glossing conventions being adapted to the ones used here:

- (44) was-as= xa žunder= go mašina tunk- a- ra- b  
 boy-ERG=FOC self.GEN=EMPH car.ABS break-PST-PTCP-N  
 'It was the boy that broke his car.' (Testelec 1998b: ex. (37))



It can be seen from the structure above that [Testelec \(1998b\)](#) views the focus marker as a head, placing it under the I(nflection) node. The remaining elements flanking the focus marker are the focused phrase itself and a headless relative clause, the latter corresponding to the non-focused, or presuppositional, part of the clause. For my analysis I will keep the relative clause portion of the structure but modify it in such a way as for the focus marker to be functioning as an adjunct and not a head.<sup>13</sup>

Because the similarity between Avar focus sentences and clefts is not only morphosyntactic, I now proceed to discuss the semantic import of the focus

13. This move can arguably solve the problem of focus *in situ* that will invariably arise on the focus-marker-as-head analyses: if the focus particle is a head, how can it occur, in the case of *in-situ* focused elements, inside one of its own dependents? As already outlined in §4.5.2.3, [Testelec \(1998b\)](#) and [Kazenin \(2002\)](#) speculate that in order to derive the *in-situ* order a subsequent lowering operation must be taking place, whereby both the focused constituent and the focus particle undergo downward movement into the presuppositional clause. This account differs from the cartographic one discussed in §5.3.3 in analysing the *ex-situ* version of the focus construction as the basis for the *in-situ* order. Regrettably, the authors do not discuss in any great detail what exactly this lowering operation is or at what level of representation it takes place, nor can such an analysis explain the asymmetries with respect to connectivity and crossover effects described in §5.4.4.

To be more precise, if the focus particle is adjoined to the focused constituent rather than take it and the headless relative clause as its dependents, the problem simply does not arise, nor do any lowering operations for *in-situ* focus have to be postulated.

particles, as well as the whole construction, which, as will become obvious, further strengthen the claim that we are in fact dealing with a cleft-like structure.

#### 5.4.3.2 Parallels with English clefts

One cannot help but notice that the inference patterns associated with Avar focus particles in question, including the possibility of pied-piping (which is sometimes the only option to mark a constituent as focused), bear a striking resemblance to the behaviour of *it*-cleft pivots in English in at least two ways, both of which I discuss immediately below.

##### Exhaustivity of *it*-clefts

The first similarity between Avar focus and English *it*-clefts, as well as clefts in a number of other languages, concerns the exhaustive nature of inferences arising from their use. This exhaustivity of *it*-clefts is very well known but it is distinct from the exhaustivity of another focus-sensitive expression, *only*.<sup>14</sup>

- (46) a. Patimat only invited Ahmed.  
 b. It was Ahmed that Patimat invited.

Both sentences in (46) have at least two distinct components to their meaning — the lower bound and the upper bound, or, alternatively, the minimal and maximal components. The lower bound can be paraphrased with *at least*: in both (46a and b) there is a sense that Patimat invited at least Ahmed. The upper bound, analogously, is most easily expressed with *at most*: once again, both sentences contain a component of meaning saying that Patimat invited at most Ahmed.

This exhaustivity can be seen from (47), where the use of a continuation expressing a stronger at-issue statement than the upper bound arising from *only* and the cleft leads to a contradiction.

- (47) a. Patimat only invited Ahmed. #She invited Rasul, too.  
 b. It was Ahmed that Patimat invited. #She invited Rasul, too.

It appears that Avar utterances with *coho* and *=(j)in* respectively trigger effects identical to those of their English counterparts from (47):<sup>15</sup>

14. But see [Destruel \(2013\)](#) for data from French demonstrating that clefts in that language are not necessarily exhaustive, and an OT-analysis of *c'est*-clefts.

15. Because the particular morphosyntax of focus is not a primary concern of this subsection, I make the exception here of condensing the glosses as much as possible.

- (48) a. pat'imatica coho aħmad aħana. # heł hedingo rasul= gi aħana  
 Patimat only Ahmed invited she too Rasul=CNJ invited  
 'Patimat only invited Ahmed. #She invited Rasul, too.'
- b. Focus *ex situ*  
 aħmad= in pat'imatica aħaraw. # heł hedingo rasul= gi aħana  
 Ahmed=FOC Patimat invited she too Rasul=CNJ invited
- c. Focus *in situ*  
 pat'imatica aħmad= in aħaraw. # heł hedingo rasul= gi aħana  
 Patimat Ahmed=FOC invited she too Rasul=CNJ invited  
 'It was Ahmed that Patimat invited. #She invited Rasul, too.'

Although both exhaustive, *only* and *it*-clefts in English are very different in how the lower and upper bounds interact in certain contexts, primarily those involving embedding under either a propositional attitude predicate or negation. As is documented in the literature on clefts (e.g. [Velleman et al. 2012](#), [Büring & Križ 2013](#) among many others), the exhaustive component in these contexts survives in *only*-sentences but not in their cleft counterparts:

- (49) a. Bob knew she invited Fred, but he didn't know she only invited Fred.  
 b. #Bob knew she invited Fred, but he didn't know it was Fred she invited.  
 ([Büring & Križ 2013: 2](#))
- (50) a. She didn't only invite Fred. She also invited Gord.  
 b. #It wasn't Fred she invited. She also invited Gord. (*ibid.*)

This asymmetry between embedded clefts and *only*-sentences of English finds a correspondence in Avar. Indeed, if *coho* behaved like *only* whereas one of the focus particles were interpreted as *it*-clefts, we would expect the exhaustivity component to remain in embedded contexts, unlike in the case of one of = $\chi a$ , *guro*, =(j)iš: or =(j)in. It can be seen from (51) that this expectation is borne out for the contrastive focus particles.

- (51) muradida łalaan pat'imatica aħmad aħun wuk'in...  
 Murad.LOC knew Patimat.ERG Ahmed.ABS invited being  
 'Murad knew Patimat invited Ahmed...'
- a. #amma aħmad= in muradida łalew wuk'inč'ew heł aħun  
 but Ahmed=FOC Murad.LOC knowing being.not she.ERG invited  
 wuk'in  
 being  
 '...# but Murad didn't know it was Ahmed she invited.'

- b. amma muradida ɭaleb buk'inč'o hel coho aħmad aħun  
 but Murad.LOC knowing being.not she.ERG only Ahmed invited  
 wuk'in  
 being  
 '... but Murad didn't know she only invited Ahmed.'

We can therefore conclude that whatever its syntactic structure, the Avar focus construction must receive the same (or similar) semantic treatment as the semantics of *it*-clefts. The proposed mechanism should be able to capture the observed asymmetries described immediately above. But before we can provide our focus particles with a denotation, a closer look at the upper and lower bound of exhaustive utterances is in order.

The most elegant analysis of exhaustivity of *it*-clefts known to me is [Velleman et al. \(2012\)](#), which proposes to formalise the upper and lower bound via two distinct operators, MIN for the lower bound and MAX for the upper bound. Both of these operators are parts of the denotations of *only* and  $CLEFT_S$ , [Velleman et al.'s \(2012\)](#) operator responsible for interpreting *it*-clefts. The difference between *only* and  $CLEFT_S$  boils down to which of MIN and MAX is asserted and which is presupposed.<sup>16</sup>

- (52) a. Patimat only invited Ahmed.  
*Presupposed:* Patimat invited at least Ahmed.  
*Asserted:* There is no answer strictly stronger than "Patimat invited Ahmed."  
 b. It was Ahmed that Patimat invited.  
*Presupposed:* There is no answer strictly stronger than "Patimat invited Ahmed."  
*Asserted:* Patimat invited at least Ahmed.

Indeed, [Velleman et al. \(2012\)](#) claim that if the upper bound is part of the assertion of (52a) but not (52b), the contrast between *it*-clefts and *only*-sentences can be easily accounted for with a minimum of assumptions.

The formal system of [Velleman et al. \(2012\)](#) includes  $S$ , the current context, which includes a Current Question Under Discussion, notated as  $CQ_S$ . It also contains  $\geq_S$  and  $>_S$ , notating the salient partial orderings over the alternative answers to  $CQ_S$ . The MIN and MAX operators themselves receive the following definitions:

16. For the purposes of this chapter I choose not to discuss other analyses of exhaustivity associated with *it*-clefts and refer the interested reader to [Velleman et al.'s \(2012\)](#) original arguments, which I assume to be correct.

- (53) a.  $\text{MIN}_S(p) = \lambda w. \exists q \in \text{CQ}_S [q(w) \wedge (q \geq_S p)]$   
 “There is a true answer at least as strong as  $p$ .”  
 b.  $\text{MAX}_S(p) = \lambda w. \forall q \in \text{CQ}_S [(q >_S p) \rightarrow \neg q(w)]$   
 “No true answer is strictly stronger than  $p$ .”

To reiterate, *both* of these operators are claimed to be present in the denotations of *only* and  $\text{CLEFT}_S$ , with one asserted and the other presupposed:

- (54) a.  $\llbracket \text{only} \rrbracket = \lambda w. \lambda p: \text{MIN}_S(p)(w) . \text{MAX}_S(p)(w)$   
 b.  $\llbracket \text{CLEFT}_S \rrbracket = \lambda w. \lambda p: \text{MAX}_S(p)(w) . \text{MIN}_S(p)(w)$

Given the similarity between the semantics of *coho* and *only*, I believe we are justified in attributing that similarity to the sameness of the denotation and defining *coho* as in (55), where I also redefine propositions as sets of possible situations rather than possible worlds:

- (55)  $\llbracket \text{coho} \rrbracket = \lambda s. \lambda p: \text{MIN}_S(p)(s) . \text{MAX}_S(p)(s)$

As far as the focus particles are concerned, Velleman et al.’s (2012)  $\text{CLEFT}_S$  operator is defined in terms not making reference to the exact syntactic structure of the cleft (which is understandable given the lack of a single morpheme adjoining to the cleft’s pivot). But since in Avar the corresponding focus particles  $=(\textit{j})\textit{in}$  and  $=\chi\alpha$  are always overt, there is no need to postulate a covert operator, which leads me to propose that  $=(\textit{j})\textit{in}$  and  $=\chi\alpha$  are overt counterparts of  $\text{CLEFT}_S$ .

- (56)  $\llbracket =(\textit{j})\textit{in} \rrbracket = \lambda s. \lambda p: \text{MAX}_S(p)(s) . \text{MIN}_S(p)(s)$

The function corresponding to the denotation of  $=(\textit{j})\textit{in}$ , then, takes two arguments – a situation and a proposition – and returns true if the proposition expressed in the prejacent holds at that situation; it is also presupposed that no answer to  $\text{CQ}_S$  is stronger than the prejacent.

With these two denotations in place, we can now make our informally formulated exhaustivity claim (p. 199) explicit by going through the semantic interpretation of (57a and b) step by step but ignoring, for the time being, the exact syntactic derivation of the prejacent proposition. Let the set of alternative departees be restricted to three individuals, Ahmed, Rasul and Dibir.

- (57) a. *coho* aħmad Ø-ana. # hedingo rasulgi ana.  
 only Ahmed.ABS M-leave.PST also Rasul.too left  
 ‘Only Ahmed left. # Rasul left too.’  
 b. aħmad= in Ø-a- Ø- ra- w. # hedingo rasulgi ana.  
 Ahmed.ABS=FOC M-leave-PST-PTCP-M also Rasul.too left  
 ‘It was Ahmed that left. # Rasul left too.’



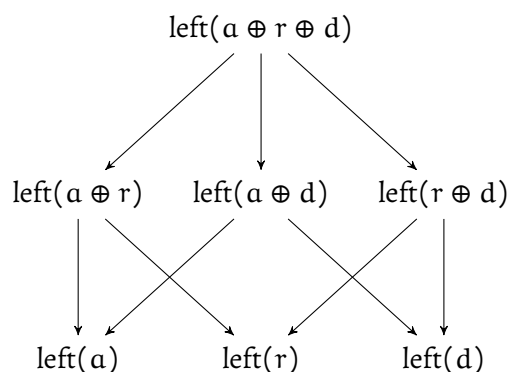


Figure 5.1: The entailment scale for *Coño Ahmad ana* ‘Only Ahmed left.’ modelled on Velleman et al. (2012)

Now, the presuppositional component of the denotation of *coño* given above makes sure that the region of the entailment scale in figure 5.1 that includes those individuals, atomic or otherwise, that are (or contain) Ahmed contains a true answer to the CQ<sub>S</sub>, which means that either Ahmed left or Ahmed and Rasul did, or Ahmed and Dibir, or all three of them. This is our lower bound. The asserted upper bound then filters out those propositions that are strictly stronger (i.e. entail and are distinct from) the prejacent. Clearly all of  $\text{left}(a \oplus r \oplus d)$ ,  $\text{left}(a \oplus d)$  and  $\text{left}(a \oplus r)$  fit this description and are therefore marked as false. A subsequent mentioning of  $\text{left}(a \oplus r)$ , which has already been asserted to be false, creates a contradicting assertion, hence the infelicity of (57a) is derived.

It is clear that the infelicity of (57b) cannot be accounted in exactly the same way, since the upper bound is no longer asserted. Velleman et al. (2012) suggest that instead of a contradiction to the at-issue content, the *also*-continuation is simply uninformative when viewed from the perspective of the common ground. Indeed, once  $\text{left}(a)$  is asserted, the common ground automatically contains  $\text{MIN}_S(\text{left}(a))$ . But because the only assertion made by (57b) is  $\text{MIN}_S(\text{left}(a))$ , the rest is redundant.

In order to provide a denotation for the constituent negation marker *guro* along similar lines it is advantageous to look at how the semantics of  $\text{CLEFT}_S$  interacts with negation. For English, we have already seen an example of this interaction in (50), repeated here as (58):

- (58) a. She didn't only invite Fred. She also invited Gord.  
 b. #It wasn't Fred she invited. She also invited Gord.

The contrast between the two exhaustive expressions when they are embedded under negation boils down to the precise component of meaning that is being negated, and its interaction with the *also*-continuation. The case of (58a) is fairly straightforward, since negating the asserted upper bound does not lead to a contradiction when the *also*-continuation is introduced. To derive the judgement in (58b), the cleft sentence is only true iff there are no answers to the  $CQ_S$  (it being 'Who did she invite?') that are either stronger than or equal to *She invited Fred*. But because uttering the *also*-continuation claims that a stronger answer is, in fact, true, we get a contradiction. Put differently, *It wasn't Fred she invited* presupposes that she did not invite a plural individual containing Fred and asserts that she did not invite Fred at all.

The following denotation, which is identical with the one for  $=(j)in$  except for the negation, for the constituent negation marker formalises exactly that:

$$(59) \quad \llbracket guro \rrbracket = \lambda s. \lambda p: \text{MAX}_S(p)(s) . \neg \text{MIN}_S(p)(s)$$

To sum up, we have seen that the Avar focus construction bears a striking resemblance to *it*-clefts in English when it comes to the matter of exhaustivity. The resemblance also extends to *coho*, the Avar counterpart of *only*.

### Pied-piping of association with focus

Another property that the Avar focus construction shares with English *it*-clefts involves focus proper: Velleman et al. (2012) observe that association with focus in English *it*-clefts displays pied-piping, as can be seen from the three examples below:

- (60) a. It was [ John's eldest daughter ]<sub>F</sub> who liked the movie.  
 → No other people liked the movie.  
 b. It was John's [ eldest ]<sub>F</sub> daughter who liked the movie.  
 → None of John's other daughters liked the movie.  
 c. It was [ John's ]<sub>F</sub> eldest daughter who liked the movie.  
 → Nobody else's eldest daughter liked the movie.

(Velleman et al. 2012: 442)

The relevant fact is that the cleft's pivot does not have to be in focus in its entirety: while this is indeed the case in (60a), both (b) and (c) only involve focusing of the pivot's subconstituents.

Similarly, we have seen in §5.2.1 that Avar focus particles can attach to constituents larger than their immediate scope and target one of its subconstituents (the question–answer pairs in 61–63 disambiguate the three possible ways of associating with focus from 12 on p. 174):

(61) Q1. [ʕalil ču ]=jiš: b-at'- a- ra- b  
 Ali.GEN horse.ABS =Q N-find-PST-PTCP-N  
 'Was [ Ali's horse ]<sub>F</sub> found?'

A1. guro. rasulil ħama b-at'- ana  
 no Rasul.GEN donkey.ABS N-find-PST  
 'No. They found [ Rasul's donkey ]<sub>F</sub>.'

(62) Q2. ʕalil [ ču ]<sub>F</sub>= jiš: b-at'- a- ra- b  
 Ali.GEN horse.ABS=Q N-find-PST-PTCP-N  
 'Was Ali's [ horse ]<sub>F</sub> found?'

A2. guro. ʕalil ħama b-at'- ana  
 no Ali.GEN donkey.ABS N-find-PST  
 'No. They found Ali's [ donkey ]<sub>F</sub>.'

(63) Q3. [ ʕalil ]<sub>F</sub> ču= jiš: b-at'- a- ra- b  
 Ali.GEN horse.ABS=Q N-find-PST-PTCP-N  
 'Was [ Ali's ]<sub>F</sub> horse found?'

A3. guro. rasulil ču b-at'- ana  
 no Rasul.GEN horse.ABS N-find-PST  
 'No. They found [ Rasul's ]<sub>F</sub> horse.'

Moreover, in certain syntactic environments pied-piping was the only way of getting a grammatical focus-marking sentence, since attaching the focus particle to its immediate scope would result in an island violation.

(64) a. [čugi ħamagi ]<sub>F</sub>=jin aħmadica b-os- a- ra- b  
 horse.CNJ donkey.CNJ =FOC Ahmed.ERG N-buy-PST-PTCP-N  
 'It was a horse and a donkey that Ahmed bought.'  
 → Ahmed bought nothing else.

b. [ čugi ]<sub>F</sub> ħamagi= jin aħmadica bosarab  
 horse.CNJ donkey.CNJ=FOC Ahmed.ERG N.buy.PST.PTCP.N  
 'It was [ a horse ]<sub>F</sub> and a donkey that Ahmed bought.'  
 → Besides a donkey, Ahmed bought a horse and nothing else.

- c. čugi [ħamagi]<sub>F=jin</sub> aħmadica bosarab  
 horse.CNJ donkey.CNJ=FOC Ahmed.ERG N.buy.PST.PTCP.N  
 ‘It was a horse and [ a donkey ]<sub>F</sub> that Ahmed bought.’  
 → Besides a horse, Ahmed bought a donkey and nothing else.

Interestingly, English *it*-clefts behave identically under exactly the same circumstances, viz. the whole DP *John’s eldest daughter* in (60) above becomes the cleft’s pivot precisely because it is impossible for either *eldest* or *John’s* to do so alone.

The pied-piping property of association with focus in *it*-clefts and Avar sentences with focus can be derived by Velleman et al.’s (2012) formal system. Recall that in that system, every sentence containing a focus-sensitive expression is evaluated relative to CQ<sub>S</sub>, the current question. It is precisely this component that underlies the differences between the three readings of (60) and analogous interpretations of (61–63). According to Velleman et al. (2012), the three readings of *It was John’s eldest daughter who liked the movie* result from there being three distinct CQ<sub>S</sub>s:

- (65) Current questions for *It was John’s eldest daughter who liked the movie*.
- a. ‘Who liked the movie?’
  - b. ‘Which of John’s daughters liked the movie?’
  - c. ‘Whose eldest daughter liked the movie?’

Similarly, the observed patterns of association with focus between a focused constituent inside a syntactic island and a focus particle at the edge of that island can all be reduced to distinct CQ<sub>S</sub>s:

- (66) Current questions for *It was a horse and a donkey that Ahmed bought*
- a. ‘What did Ahmed buy?’
  - b. Ahmed bought a donkey and what other animal?
  - c. Ahmed bought a horse and what other animal?

All that remains is for the MAX<sub>S</sub> and MIN<sub>S</sub> operators to combine with the proper alternative answers to these CQ<sub>S</sub>s. In a model containing three possible objects for Ahmed to purchase — a horse, a donkey and a cow — these would be the following sets of propositions:

(67) { Ahmed bought a horse, a donkey and a cow }  
 { Ahmed bought a horse and a donkey }  
 { Ahmed bought a donkey and a cow }  
 { Ahmed bought a horse and a cow }  
 { Ahmed bought a horse }  
 { Ahmed bought a donkey }  
 { Ahmed bought a cow }

(68) { Ahmed bought a donkey and a cow }  
 { Ahmed bought a donkey and a horse }

(69) { Ahmed bought a horse and a donkey }  
 { Ahmed bought a horse and a cow }

Once  $\text{MIN}_S$  and  $\text{MAX}_S$  have applied to these answers, only those alternatives corresponding to the prejacent will be true. In (70–72) these are typeset in black, with the false alternatives greyed out.

(70) { Ahmed bought a horse, a donkey and a cow }  
 { Ahmed bought a horse and a donkey }  
 { Ahmed bought a donkey and a cow }  
 { Ahmed bought a horse and a cow }  
 { Ahmed bought a horse }  
 { Ahmed bought a donkey }  
 { Ahmed bought a cow }

(71) { Ahmed bought a donkey and a cow }  
 { Ahmed bought a donkey and a horse }

(72) { Ahmed bought a horse and a donkey }  
 { Ahmed bought a horse and a cow }

This concludes our informal discussion of the semantic properties of Avar sentences with focus particles, deriving both their exhaustivity and pied-piping and capturing their similarity to English *it*-clefts. The rest of the section provides further details on the syntactic side of the story.

#### 5.4.4 It is the focus particle that moves

In the preceding subsections I argued against an  $\bar{A}$ -movement approach to Avar focus. Some of the argumentation was based, just as in the case of *wh*-dependencies discussed earlier, on the inconclusive character of the evidence for movement. I would now like to explore the possibility that we are in fact

dealing with movement, but that movement is distinct from the more conventional focus movement in (i) not targeting a specific specifier of a dedicated Focus head and (ii) involving the focus marker itself rather than the focused constituent.

Recall that one of the most important properties of Avar focusing concerns its sensitivity to syntactic islands, this island-sensitivity being of a very particular kind: the focused element can occur inside an island as long as the focus particle is outside of that island. But before the analysis can be presented, a short remark on syntactic movement is in order.

#### 5.4.4.1 Syntactic movement: feature-driven or free?

Roughly a decade of minimalist research took it for granted that displacement operations, or syntactic movement, constituted an imperfection from the point of view of the design of the computational system underlying our linguistic competence (Chomsky 1995). Movement therefore had to have a trigger, usually in the form of an uninterpretable or unvalued formal feature. More recently, however, syntactic movement has been reinterpreted as an instance of a much simpler operation Merge and there has been a tendency of removing the stipulation about the feature-driven nature of Merge (Chomsky 2007, 2013, Ott 2012, Boeckx 2012, Zwart 2009, to appear) as well as looking for alternative ways of motivating movement in terms of interface phenomena. The reasoning behind this tendency is very simple, and can be reduced to the following syllogism:

- (73)    Syntactic movement is Merge  
           Merge applies freely  
           -----  
           Syntactic movement applies freely

As far as  $\bar{A}$ -dependencies are concerned, this free-merge reasoning as applied to *wh*-movement has most explicitly been articulated by Radek Šimík in an unpublished manuscript (Šimík 2012). The essence of his view is this: *wh*-items in *wh*-movement languages are free to either move or remain *in situ*, i.e. there is no narrow-syntactic mechanism to force them either way in that formal [*wh*] features, by hypothesis, do not exist. If the *wh*-element does undergo movement, this movement is interpreted as creating a property by abstracting over a variable, more or less in accordance with Heim & Kratzer's (1998) *Predicate Abstraction* rule.<sup>17</sup> If no movement takes place, the derivation can still proceed

17. The Predicate Abstraction rule creates a predicate (i.e. an open expression) out of a closed expression. Its adapted definition is given in (i):

uninterrupted but will fail to receive a correct semantic interpretation, since the property resulting from the application of movement, and which is interpreted as an argument of the question operator, cannot be created. Syntactic movement is therefore purely interface-driven but only to the extent that the interpretative interface cannot “tell” the computational system to generate that movement, thus allowing it to generate blindly.

At first glance it might seem odd to extend Šimík’s (2012) analysis to *wh*-dependencies in Avar, not least in light of the previous chapter, where it was argued that Avar was a strictly *wh-in-situ* language, as well as given Šimík’s own explicit statements as to the inapplicability of his system to *wh-in-situ* languages. I suggest that instead the phenomenon that should be subjected to this treatment is relativisation, which is especially appropriate given the general role of relative clauses in the creation of Avar focus structures.<sup>18</sup>

Šimík (2012) proposes that a free relative clause is derived from a proposition by *wh*-movement creating a property that would then combine with the definite determiner. The structure in (74) containing a free relative clause receives the interpretation in (75), given a number of simplifications.<sup>19</sup>

(74) I ate  $[_{DP} D [_{CP} \text{what } [_{TP} \text{Mary cooked } ]]]$ .

(75) a.  $[[[_{CP} \text{what } [_{TP} \text{Mary cooked } ]]] = \lambda x [\text{cooked}(m, x)]$

b.  $[[[_{DP} D [_{CP} \text{what } [_{TP} \text{Mary cooked } ]]]] = \iota x [\text{cooked}(m, x)]$

c.  $[[\text{I ate } [_{DP} D [_{CP} \text{what } [_{TP} \text{Mary cooked } ]]]] = \text{ate}(I, \iota x [\text{cooked}(m, x)])$

I am inclined to follow Šimík (2012) and propose that the movement operation leading to the creation of a (free) relative clause is essentially interface-driven and has no formal syntactic correlate in the form of a dedicated head or feature. Movement remains nothing more than Merge, an operation with no constraints of its own, which nevertheless has a semantic contribution,

(i) *Predicate Abstraction*

If  $\alpha$  is a branching node whose daughters are a moved operator and  $\beta$ , then  $[[\alpha]] = \lambda x. [[\beta]]^x$   
[adapted from Heim & Kratzer (1998: 129)]

An example of a closed formula becoming an open expression is the mechanism whereby *He saw Mary* becomes *who he saw*  $\_$ : the relative pronoun *who* undergoes movement, and the object position of *saw* is abstracted upon.

18. The kind of movement in relative clauses in Avar would, of course, not have to be identical to that involved in English relativisation, primarily as regards the mover — recall that Avar relative clauses never contain a relative pronoun or a *wh*-item.

19. Šimík (2012) also makes a typological claim regarding free relative clauses by attributing to them the property of always being finite. We have seen, however, that Avar relative clauses, headless or not, are always participial.

this contribution consisting of abstraction over a variable. If the movement obtains, so does  $\lambda$ -abstraction; if it does not obtain, the  $\lambda$ -abstract cannot be created. If the output of a derivation requires such an abstract in order to yield a proper semantic interpretation but the movement fails to take place, further Merge still applies but cannot be properly interpreted by the semantic component, resulting in unacceptability.

#### 5.4.4.2 Focus *in situ*

We are now ready to see the structure underlying focus *in situ*, an example of which is repeated in (76) below. I propose that this structure is, in fact, the same juxtaposition structure for left dislocation as we have postulated when looking at the interaction of scrambling and *wh*-questions in the preceding chapter.<sup>20</sup>

- (76) pat'imati-ca rasul= in ah- a- ra- w  
 Patimat- ERG Rasul.ABS=FOC invite-PST-PTCP-M  
 'It was Rasul that Patimat invited.'

The focus particle undergoes raising to the propositional level for the purposes of interpretation, since it is uninterpretable *in situ* due to a type clash: given the discussion of focus particle semantics in §5.4.3.2, focus particles are sentence-level operators that can only combine with a proposition.

- (77) [pat'imatica rasul-ahana] [rasul=in [pro \_\_ aharaw ]]

Observe that the kind of movement that the focus particle undergoes does not leave a trace: in that, the focus particle behaves like an operator such as sentential negation rather than a quantifier. Because of this, it does not obey locality constraints: indeed, in every case involving a focus particle (and *only*, for that matter) associating with the subject, for instance, the particle will have to move out of the subject island, thus routinely violating that constraint.

20. David Erschler (p.c.) informs me that the view which takes focus morphology to be essentially an adjunct, like I am doing here, faces serious issues when confronted with languages where focusing is performed inside a morphological word, as in Nivkh. I do not immediately see why this has to be problematic, however, since on the strictly modular approach to the architecture of the grammar such matters as (morpho)phonological integration fall outside the purview of narrow syntax.



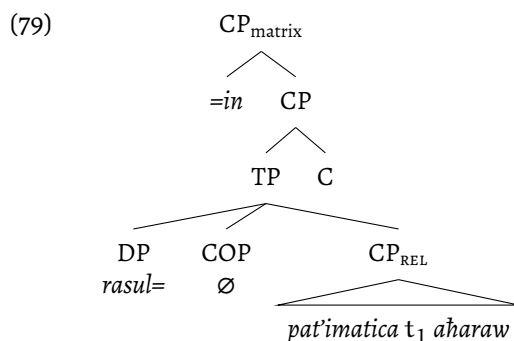
5.4.4.3 Focus *ex situ*

Having seen how our two ingredients — the focus particle and the headless relative clause — conspire to yield the *in-situ* order, we now turn to the derivation of focus fronting, an example of which is repeated in (78).

- (78) *rasul= in pat'imati-ca aħ- a- ra- w*  
 Rasul.ABS=FOC Patimat- ERG invite-PST-PTCP-M  
 'It was Rasul that Patimat invited.'

Given this order, two distinct chunks of the sentence can be identified: the focused phrase (together with the focus particle) and the presuppositional clause. I propose that we take this intuition seriously and analyse the sentence as projecting a biclausal cleft-like structure, which seems appropriate in light of the semantics of the construction as well.

On the clefting view, one immediate syntactic difference between the Avar focus construction and *it*-clefts in English concerns the status of the Avar construction: it can clearly not be an *it*-cleft, since it never contains an expletive. The alternative, it seems to me, is to designate it as a kind of pseudocleft, but I will, for the time being, refrain from describing it as either predicational or specificational. I briefly return to this question after I have unfolded the entire structure.



The relative clause in the *ex-situ* variant of the focus construction does, unlike its *in-situ* counterpart, contain a gap, which dependency being interpreted as  $\lambda$ -abstraction over an individual variable, in accordance with the standard assumptions about the interpretation of relative clauses. The mover is still the null operator, however, just as was the case with the gapless relative in the *in-situ* case above.

We now need a way of asymmetricising the tripartite TP in the tree in

(79), which, depending on the element to combine with the copula first, will give us either a specificational or a predicational pseudocleft. I leave further elaboration of this topic to future work.

#### 5.4.5 Summary

In this section I have presented my alternative to the cartographic approach to such an information-structural notion as focus. The main accents were placed on the properties of two key ingredients of the focus construction — the focus particle and the relative clause. On the semantic side, we observed an almost full parallelism between the focus constructions in Avar and embedded and unembedded *it*-clefts in English and proposed the denotations for the focus particles based on those that [Velleman et al. \(2012\)](#) developed for the covert CLEFT<sub>S</sub> operator responsible for the exhaustivity of English clefts.

I have argued that the focus particles are best treated as sentence-level operators, endowing them with the syntactic status of regular adjuncts, which would allow them to raise to be able to combine with the proposition encoded by the prejacent. By identifying the participial morphology on the verb in the focus construction with the relativising morphology we have been able to account for the obligatory participialisation that the cartographic analyses were unable to tackle.

We have been able to reduce the island-sensitivity of focus marking to locality constraints on relativisation, thus capturing the pied-piping property of association with focus in clefts.

By claiming the dependency between the fronted focused constituent and the gap inside the presuppositional clause is indirect we get a potential explanation of the absence of reconstruction effects: focus movement being eliminated from the equation, we are left with a Principle C obviation.

## 5.5 Conclusion

In this chapter I have examined the syntax and semantics of the Avar focus construction. I have argued that although involving the same building blocks, the *in-* and *ex-situ* orders are generated by distinct mechanisms, neither of them reducible to the other.

I have also considered a number of potential analyses of the observed phenomena and ended up rejecting the cartographic approach on both empirical and conceptual grounds, which allowed me to pursue an alternative, arguably more minimalist, line of analysis in terms of unrestricted merge.

The outlined analysis aimed to capture a number of similarities between such focus particles in Avar as the question marker  $=\text{(j)i}\check{s}$ , the contrastive focus particles  $=\text{(j)in}$  and  $=\chi a$  and the constituent negation marker *guro* on the one hand and the exclusive focus-sensitive expression *coho* ‘only’ on the other. In doing so a connection was established between the Avar focus construction and English *it*-clefts, and between *coho* in Avar and its English counterpart *only*.

I have argued that the reason for the verb appearing in the non-finite participial form is the fact that the focus construction is built around a relative clause, which in Avar are always participial. The participial morphology neither is an exponent of the Focus head nor spells out a [Focus] feature.

Focus particles contribute exhaustivity to the interpretation of a clause, which I have captured by adopting the framework of [Velleman et al. \(2012\)](#) and treating the focus particles as clefting operators acting on Questions Under Discussion.

## CHAPTER 6

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### Concluding remarks

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Over the past four chapters we have been getting more and more information on the syntax and semantics of operator–variable dependencies as manifested in Avar. We began with an overview of Avar grammar in Chapter 2, proceeding next, in Chapter 3, to investigate the properties of participial relative clauses. In doing that we have discovered a curious constraint on Avar relativisation: unlike its counterpart in English and many other languages, Avar relativisation was unable to cross clausal boundaries, unless those clauses were infinitival. I have tentatively argued that this lack of unboundedness followed from the interaction of language-specific strategies of clausal embedding (in that embedding was in most cases equivalent to creating a strong island) with the general principles of the grammar.

With the tentative analysis of the structural core for the other  $\bar{A}$ -dependencies in place, I opened Chapter 4 by comparing the predictions made by two major theories of *wh*-question formation — the direct *wh*-extraction approach for questions in languages like English, and the clefting analysis. We have seen that the empirical evidence favouring the direct extraction analysis hardly exists, and the analyses themselves face severe challenges of both empirical and conceptual nature that simply do not arise on the base-generation line of argument. Adopting Mikkelsen's (2005) analysis of copular clauses as involving a dedicated functional head effecting predication — *Pred* — I combined it with the Hamblin/Karttunen approach to the meaning of questions.

Finally, we have examined the properties of contrastive focus, exclusive *only* and constituent negation, and reached the conclusion in Chapter 5 that these phenomena showed remarkable similarities to the interpretation of *only* and *it*-clefts in English, starting with their syntactic properties such as the frequent use of pied-piping, and finishing with their semantic interpretation as related to association with focus. By adopting Velleman et al.'s (2012) analysis of *it*-clefts, we have been able to give Avar exclusives and focus markers a symmetric treatment in terms of MIN and MAX operators interacting with the current question under discussion. It should also be added that the proposed analysis was decidedly anti-cartographic in its desire to eschew information-structural heads from the syntax altogether, motivating the necessity of certain operations such as movement entirely by the requirements of the interfaces.

As the discussion in the main text unfolded, a lot of promissory notes have been issued regarding certain phenomena of Avar that I did not deem directly relevant to the subject matter of the present thesis, and even some of those that *are* directly relevant — think ‘embedded questions’ — have nonetheless been omitted from the discussion altogether to stop it getting out of hand. Similarly, we have barely scratched the surface of the many issues related to the syntax and semantics of multiple questions, especially in the context of cleft questions, and multiple focus and focus marking have not been discussed at all. Besides, in developing the approach as sketched on the foregoing pages I have made no attempt to situate Avar on the parametric landscape of operator-variable dependencies. In particular, it is unclear why certain languages, like Avar and Malagasy, choose to create their questions and mark their focus by means of projecting a cleft-like structure rather than direct extraction. Other relevant issues involve the syntax and semantics of clausal arguments as well as the various non-matrix clausal units. I have, however, tried, where possible, to indicate potential directions in which to look for answers. All of this, however, is for another book.

# **Appendices**



## APPENDIX A

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### Declension samples

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Avar nominals can be split in several declension classes, and this appendix contains examples of one of them, *ču* ‘horse’, followed by that of a simple event nominal, or masdar *c’ali* ‘reading’.

A few notes are in order on the contents of the table. Firstly, it contains most of the cases, including most of the locative cases, however implausible the resulting interpretation. Indeed, even though any of the strongly locational readings of event nominals might be difficult to construe, this hardly warrants the conclusion that such forms do not exist.

Secondly, while the declension of *ču* ‘horse’ is given in both the singular and the plural, only the singular form is presented of the masdar *c’ali* ‘reading’.



|        | <i>ču</i> 'horse'      |                        | <i>c'ali</i> 'reading'    |
|--------|------------------------|------------------------|---------------------------|
|        | SINGULAR               | PLURAL                 |                           |
| ABS    | <i>ču</i>              | <i>ču-jal</i>          | <i>c'ali</i>              |
| ERG    | <i>čo-(du)-ca</i>      | <i>ču-jaz</i>          | <i>c'ali-jal</i>          |
| GEN    | <i>čo-(du)-l</i>       | <i>ču-jaz-ul</i>       | <i>c'ali-jal-ul</i>       |
| DAT    | <i>čo-(du)-e</i>       | <i>ču-jaz-e</i>        | <i>c'ali-jal-e</i>        |
| SUPESS | <i>čo-da</i>           | <i>ču-jaz-da</i>       | <i>c'ali-jal-da</i>       |
| APESS  | <i>čo-(du)-q</i>       | <i>ču-jaz-uq</i>       | <i>c'ali-jal-uq</i>       |
| SUBESS | <i>čo-(du)-l'</i>      | <i>ču-jaz-ul'</i>      | <i>c'ali-jal-ul'</i>      |
| INESS  | <i>čo-(du)-l'u-b</i>   | <i>ču-jaz-ul'u-b</i>   | <i>c'ali-jal-ul'u-b</i>   |
| ALL    | <i>čo-d-e</i>          | <i>ču-jaz-de</i>       | <i>c'ali-jal-de</i>       |
| APL    | <i>čo-(du)-q-e</i>     | <i>ču-jaz-uq-e</i>     | <i>c'ali-jal-uq-e</i>     |
| SUBL   | <i>čo-(du)-l'-e</i>    | <i>ču-jaz-ul'-e</i>    | <i>c'ali-jal-ul'-e</i>    |
| ILL    | <i>čo-(du)-l'u-b-e</i> | <i>ču-jaz-ul'u-b-e</i> | <i>c'ali-jal-ul'u-b-e</i> |
| EL     | <i>čo-da-sa</i>        | <i>ču-jaz-da-sa</i>    | <i>c'ali-jal-da-sa</i>    |
| APEL   | <i>čo-(du)-q-a</i>     | <i>ču-jaz-uq-a</i>     | <i>c'ali-jal-uq-a</i>     |
| SUBEL  | <i>čo-(du)-l'-a</i>    | <i>ču-jaz-ul'-a</i>    | <i>c'ali-jal-ul'-a</i>    |
| INEL   | <i>čo-(du)-l'u-sa</i>  | <i>ču-jaz-ul'u-sa</i>  | <i>c'ali-jal-ul'u-sa</i>  |

Table A.1: Declension of *ču* 'horse' and *c'ali* 'reading'

## APPENDIX B

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### Synthetic verb forms in Avar

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This appendix presents, in §B.1, several schematic representations illustrating the derivation of various synthetic forms an Avar verb can take, with the guiding principle being the particular stems that can be used as a basis for further forms to be built upon. These schemata are then applied, in §B.2, to some of the more common verbs featuring in the example sentences from this thesis with the view of providing the reader with as much detail as I deemed required.

#### **B.1 Derivational schemata**

The schemata to be presented immediately below are illustrated with the help of *q'ot'*- meaning '√CHOP'.

##### **The PRS-stem**

The PRS-stem underlies the derivation of the iterative past, the imperfective converb, the present participle, which in turn serves as the base for deriving the causative converb, the present participle masdar and the present conditional. The arrows indicate the “is-built-on-the-basis-of” relation.

All of these forms were briefly touched upon in §2.2.5.

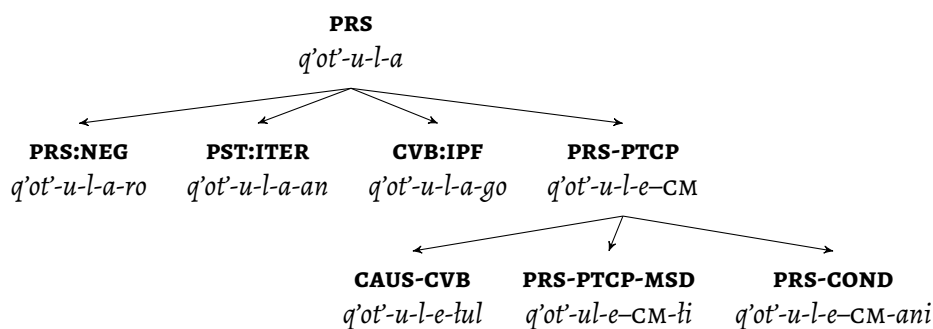


Figure B.1: Verbal forms derived from the PRS-stem

### The FUT-stem

The FUT-stem is the same one as the PRS-stem but with a different vowel (-i rather than -u of the present tense). The irrealis is formed by adding the same suffix -an as in the case of iterative past above to the FUT-stem.

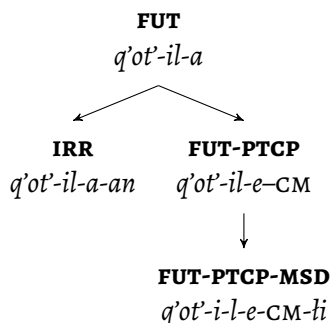


Figure B.2: Verbal forms derived from the FUT-stem

The negative form of the future is omitted from Figure B.2 but is nevertheless illustrated in Table B.1 below.

### The PST-stem

As regards the forms based on the PST-stem, they include the finite past-tense form (affirmative only), the past conditional (or counterfactual) and concessive forms, an optative form (the other OPT-forms being demonstrated shortly), the past participle and the past terminative converb it gives rise to.

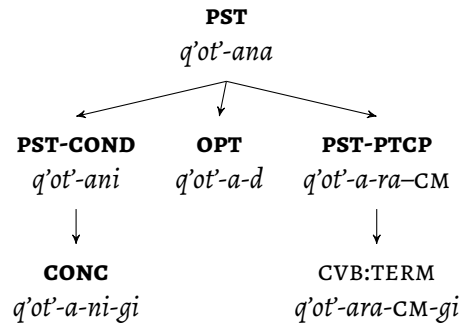


Figure B.3: Verbal forms derived from the PST-stem

As mentioned in §2.2.5.3, past-tense events are negated in a manner that is distinct from the manner in which non-past events are negated. In fact, the relevant form is not even built on the basis of a PST-stem. It can instead be found in Figure B.5, and further illustrated in Table B.1.

### The IMP-stem

Turning to those forms for which the imperative stem is basic, they are two distinct optative forms. The distinction is mentioned on p. 39 in §2.2.5.1.

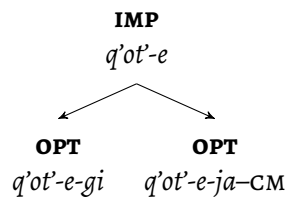


Figure B.4: Verbal forms derived from the IMP-stem

The two optative forms are clearly distinct, but the distinction, not being significant for the present purposes, is not reflected in the glosses, as both forms are glossed identically.

### The INF-stem

Finally, to the infinitive stem. It is the stem that is used to derive masdars, negation in the past tense,

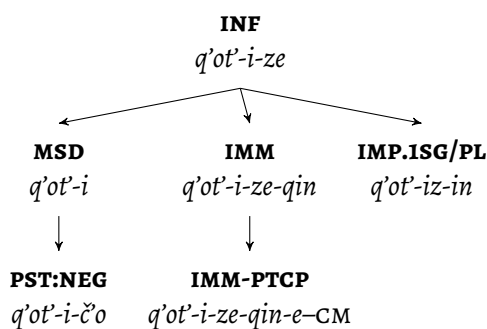


Figure B.5: Verbal forms derived from the INF-stem

The following section exemplifies the synthetic forms of Avar verbs further. We limit ourselves to two verbs, the copula (and auxiliary) *CM-uk'*- 'be', which features prominently in the main text of the dissertation, and *CM-ix*- 'see'. The two verbs belong to distinct inflectional classes.

## B.2 Synthetic forms of some common verbs

It has already been mentioned (cf. fn. 28 on p. 38) that the literature on North-east Caucasian languages distinguishes the present tense from a dedicated general tense. Certain verbs, like *CM-uk'*- 'be', display the distinction in their paradigm, whereas others, such as *CM-ix*- 'see' below, manifest an identity of form between the present and the general tense, hence the presence of the forms derived from the general stem in Table B.1 and the absence of the corresponding cells in Table B.2.

| Stem        | Form                       | Gloss                  |
|-------------|----------------------------|------------------------|
| <b>PRS</b>  | <i>CM-uk'-una</i>          | CM-be-PRS              |
|             | <i>CM-uk'-una-an</i>       | CM-be-PST:ITER         |
|             | <i>CM-uk'-una-ro</i>       | CM-be-PRS-NEG          |
|             | <i>CM-uk'-una-go</i>       | CM-be-CVB:IPF          |
|             | <i>CM-uk'-un-e-CM</i>      | CM-be-PRS-PTCP-CM      |
|             | <i>CM-uk'-un-e-tul</i>     | CM-be-CAUS:CVB         |
|             | <i>CM-uk'-un-e-CM-ti</i>   | CM-be-PRS-PTCP-CM-MSD  |
|             | <i>CM-uk'-un-e-CM-ani</i>  | CM-be-PRS-COND         |
| <b>FUT</b>  | <i>CM-uk'-ina</i>          | CM-be-FUT              |
|             | <i>CM-uk'-ina-an</i>       | CM-be-IRR              |
|             | <i>CM-uk'-ina-ro</i>       | CM-be-FUT-NEG          |
|             | <i>CM-uk'-in-e-CM</i>      | CM-be-FUT-PTCP-CM      |
|             | <i>CM-uk'-in-e-CM-ti</i>   | CM-be-FUT-PTCP-CM-MSD  |
| <b>PST</b>  | <i>CM-uk'-a-na</i>         | CM-be-PST-FIN          |
|             | <i>CM-uk'-a-ni</i>         | CM-be-PST-COND         |
|             | <i>CM-uk'-a-ni-gi</i>      | CM-be-CONC             |
|             | <i>CM-uk'-a-d</i>          | CM-be-OPT              |
|             | <i>CM-uk'-a-ra-CM</i>      | CM-be-PST-PTCP-CM      |
|             | <i>CM-uk'-a-ra-CM-go</i>   | CM-be-CVB:TERM         |
| <b>GNRL</b> | <i>CM-ugo</i>              | CM-be.GNRL             |
|             | <i>CM-ugo-an</i>           | CM-be-PST:ITER         |
|             | <i>heč'o</i>               | be.PRS:NEG             |
|             | <i>CM-ug-e-CM</i>          | CM-be.GNRL-PTCP-CM     |
|             | <i>CM-ug-e-tul</i>         | CM-be.GNRL-CAUS:CVB    |
|             | <i>CM-ug-e-CM-ti</i>       | CM-be.GNRL-PTCP-CM-MSD |
|             | <i>CM-ug-e-CM-ani</i>      | CM-be.GNRL-COND        |
| <b>INF</b>  | <i>CM-uk'-ine</i>          | CM-be-INF              |
|             | <i>CM-uk'-in</i>           | CM-be-MSD              |
|             | <i>CM-uk'-in-č'o</i>       | CM-be-PST:NEG          |
|             | <i>CM-uk'-ine-qin</i>      | CM-be-IMM              |
|             | <i>CM-uk'-ine-qin-e-CM</i> | CM-be-IMM-PTCP-CM      |
|             | <i>CM-uk'-in-in</i>        | CM-be-IMP:1SG/PL       |
| <b>IMP</b>  | <i>CM-uk'-a</i>            | CM-be-IMP              |
|             | <i>CM-uk'-a-gi</i>         | CM-be-OPT              |
|             | <i>CM-uk'-a-ja-CM</i>      | CM-be-OPT              |

Table B.1: Synthetic forms of *CM-uk'*- 'be'

| <b>Stem</b> | <b>Form</b>               | <b>Gloss</b>           |
|-------------|---------------------------|------------------------|
| <b>PRS</b>  | <i>CM-ix-ula</i>          | CM-see-PRS             |
|             | <i>CM-ix-ula-an</i>       | CM-see-PST:ITER        |
|             | <i>CM-ix-ula-ro</i>       | CM-see-PRS-NEG         |
|             | <i>CM-ix-ula-go</i>       | CM-see-CVB:IPF         |
|             | <i>CM-ix-ul-e-CM</i>      | CM-see-PRS-PTCP-CM     |
|             | <i>CM-ix-ul-e-tul</i>     | CM-see-CAUS-CVB        |
|             | <i>CM-ix-ul-e-CM-ti</i>   | CM-see-PRS-PTCP-CM-MSD |
|             | <i>CM-ix-ul-e-CM-ani</i>  | CM-see-PRS-COND        |
| <b>FUT</b>  | <i>CM-ix-ila</i>          | CM-see-FUT             |
|             | <i>CM-ix-ila-an</i>       | CM-see-IRR             |
|             | <i>CM-ix-ila-ro</i>       | CM-see-FUT-NEG         |
|             | <i>CM-ix-il-e-CM</i>      | CM-see-FUT-PTCP-CM     |
|             | <i>CM-ix-il-e-CM-ti</i>   | CM-see-FUT-PTCP-CM-MSD |
| <b>PST</b>  | <i>CM-ix-a-na</i>         | CM-see-PST-FIN         |
|             | <i>CM-ix-a-ni</i>         | CM-see-PST-COND        |
|             | <i>CM-ix-a-ni-gi</i>      | CM-see-CONC            |
|             | <i>CM-ix-a-d</i>          | CM-see-OPT             |
|             | <i>CM-ix-a-ra-CM</i>      | CM-see-PST-PTCP-CM     |
|             | <i>CM-ix-a-ra-CM-go</i>   | CM-see-CVB:TERM        |
| <b>INF</b>  | <i>CM-ix-ize</i>          | CM-see-INF             |
|             | <i>CM-ix-i</i>            | CM-see-MSD             |
|             | <i>CM-ix-i-č'o</i>        | CM-see-PST:NEG         |
|             | <i>CM-ix-ize-qin</i>      | CM-see-IMM             |
|             | <i>CM-ix-ize-qin-e-CM</i> | CM-see-IMM-PTCP-CM     |
|             | <i>CM-ix-iz-in</i>        | CM-see-IMP:1SG/PL      |
| <b>IMP</b>  | <i>CM-ix-e</i>            | CM-see-IMP             |
|             | <i>CM-ix-e-gi</i>         | CM-see-OPT             |
|             | <i>CM-ix-e-ja-CM</i>      | CM-see-OPT             |

Table B.2: Synthetic forms of *CM-ix-* 'see'

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## Nederlandse samenvatting

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Dit proefschrift beoogt een gedetailleerde beschrijving te geven van de syntactische en semantische eigenschappen van een aantal aan elkaar verwante constructies in het Avaars, een Noordoost-Kaukasische taal. Deze groep van constructies, vaak  $\bar{A}$ -constructies genoemd, bestaat uit *relatieve bijzinnen*, *vraagzinnen* en *focuszinnen*. Kenmerkend voor deze constructies is een afhankelijkheid tussen een abstracte *operator* en een *variabele*. Dit boek bestaat uit zes hoofdstukken.

**Hoofdstuk één** introduceert een morfosyntactische relatie tussen de relatieve bijzinnen, vraagzinnen en focuszinnen van het Avaars. Deze relatie, geïllustreerd in (1), wordt in de volgende hoofdstukken verklaard.

- (1) a. was            ana        / \*a-        ra- w  
jongen.ABS gaan.PST    gaan.PST-PTCP-M  
'De jongen ging weg.'
- b. [\_\_ a-            ra- w / \*ana        ] was            ...  
          gaan.PST-PTCP-M    gaan.PST    jongen.ABS  
'De jongen die wegging...'
- c. was=            in a-            ra- w / \*ana  
jongen.ABS=FOC gaan.PST-PTCP-M    gaan.PST  
'De [ jongen ]<sub>F</sub> ging weg.'
- d. š:iw a-            ra- w / \*ana  
wie.M gaan.PST-PTCP-M    gaan.PST  
'Wie ging weg?'

De data in (1) tonen een cruciaal onderscheid tussen de declaratieve hoofdzinnen (1a) en de onder (1b–d) vermelde zinssoorten: het werkwoord in een declaratieve hoofdzin (zonder focus) verschijnt altijd als een finiete werkwoordsvorm die onaanvaardbaar is in (1b–d). Om een relatieve bijzin, een vraagwoordvraag of een focuszin te kunnen vormen moet een deelwoord gebruikt worden.

**Hoofdstuk twee** is in twee delen opgebroken. Het eerste gedeelte geeft een korte inleiding in het Minimalisme, het theoretische kader voor dit proefschrift, en bespreekt een aantal theoretische begrippen zoals numeratie, derivatie, localiteit, formele kenmerken en modulariteit.

Het tweede deel van het hoofdstuk geeft een overzicht van de grammatica van het Avaars. De aspecten die hier besproken worden zijn de woordvolgorde in zowel de werkwoord- als de naamwoordgroep, naamvalsmarkering, pronominalisatie en reflexivisatie, maar ook de werkwoordelijke categorieën, negatie en de syntaxis van hoofd- en bijzinnen.

In **hoofdstuk drie** bestudeer ik de betrekkelijke bijzinnen van het Avaars. Deze worden altijd gevormd op basis van een deelwoord en worden nooit ingeleid door een betrekkelijk voornaamwoord zoals gebruikelijk is in het Engels of het Nederlands. Er wordt aangetoond dat de relatieve bijzinnen van het Avaars veel kenmerken hebben die vaak met  $\bar{A}$ -constructies worden geassocieerd.

Verder bespreek ik een interessante beperking op lange-afstandsrelativisatie in het Avaars: lange-afstandsrelativisatie is onmogelijk wanneer er meer dan één ingebedde bijzin is, en deze bijzin moet bovendien een finiete werkwoordsvorm bevatten.

De syntactische en eventueel semantische afhankelijkheidsrelatie tussen het hoofd van de relatieve bijzin en een lege plek binnen de relatieve bijzin wordt gecreëerd door het mechanisme van *verplaatsing*, een syntactische operatie die door de semantische component als de verzameling-vormende regel van *predicaatabstractie* wordt geïnterpreteerd.

In het **vierde hoofdstuk** wordt de syntaxis en de semantiek van de Avaarse vraagwoordvragen bekeken. Deze vragen komen in twee varianten voor. In de eerste variant wordt het vraagwoord van zijn oorspronkelijke syntactische positie naar een positie vooraan in de zin verplaatst (ook wel *ex-situ* vraagwoord-

vragen genoemd). In de tweede variant verschijnt het vraagwoord in de oorspronkelijke syntactische positie (vaak *in-situ* vraagwoordvragen genoemd).

Wat de *ex-situ* woordvolgorde betreft zijn er twee analyses mogelijk: een analyse waardoor de *ex-situ* woordvolgorde het resultaat is van *vraagwoordextractie* en een cleft-analyse waarbij iedere vraagwoordvraag als een cleftzin wordt gegenereerd.

- (2) a. Jan heeft *wat* gekocht?  
 b. Wat<sub>1</sub> heeft Jan \_\_<sub>1</sub> gekocht?
- (3) Wat is [ hetgeen dat Jan \_\_ gekocht heeft ] ?

De onder (2) en (3) vermelde constructies verschillen in de manier waarop de afhankelijkheidsrelatie tussen het vraagwoord *wat* en een copie daarvan in de thematische positie is gecreëerd: de vraagwoordvraag in (2) is gebaseerd op een declaratieve zin waarin het lijdend voorwerp in een preverbale positie wordt gegenereerd en moet naar voren verplaatst worden vanwege zijn vraagwoordelijke aard. De afhankelijkheid tussen de vooraan staande vraagwoordgroep *wat* en de lege plek in de preverbale positie is een syntactische verplaatsingsafhankelijkheid in vergelijking met voorbeeld (3) dat geen verplaatsingsafhankelijkheid bevat tussen de vraagwoordgroep *wat* en de lege plek.

Ik vergelijk deze twee analyses en adopteer de cleftzin-analyse als basis voor mijn eigen analyse van zowel de *ex-situ* als de *in-situ* vraagwoordvragen in het Avaars. In mijn analyse bestaat elke Avaarse *ex-situ* vraagwoordvraag uit drie componenten: een vraagwoordgroep, een relatieve bijzin en een predicatief element Pred dat een relatie van predicatie creëert tussen de vraagwoordgroep en de relatieve bijzin. Ik noem deze structuur een *beknopte cleftzin* omdat er geen verder functioneel materiaal komt boven het Pred-hoofd. In de *in-situ* volgorde betreft wordt de vraagwoordgroep binnen de relatieve bijzin gegenereerd terwijl het zinssubject zich in SpecPredP bevindt.

De semantische component interpreteert de relatieve bijzin op de in hoofdstuk drie voorgestelde manier, namelijk door middel van de regel van predicaat-abstractie. Om een semantische analyse van vraagwoordvragen te kunnen geven adopteer ik het raamwerk van de Alternatieven Semantiek waardoor elke constituent twee semantische waardes kan hebben: een *standaard semantische waarde* (ordinary semantic value) en een *focus-semantische waarde* (focus

semantic value, cf. Rooth 1985, 1992).

**Hoofdstuk vijf** bevat de discussie van de Avaarse focuszinnen. Ik begin met een overzicht van verschijnselen en constructies die in de literatuur vaak worden beschreven als gevoelig voor focus: constructies met contrastieve focus, constituentnegatie en ja/nee-vragen. Het wordt aangetoond dat deze constructies dezelfde cleftzinsstructuur hebben als werd voorgesteld voor de vraagwoordvragen in hoofdstuk vier.

**Hoofdstuk zes** concludeert dit proefschrift.

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