Dependency and discourse-configurationality
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This chapter presents an analysis of Avar relative clauses, which, unlike the more familiar examples of 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
3.1. Prenominal relative clauses: an introduction


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 akılı.  
    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.

(3) a. *an obviously running boy
   b. [Oya-nn herhalde — sev- e- me- diğ- i ] bir insan
      Oya-GEN probably — love-ABL-NEG-NMLZ-3SG a person
      ‘a person whom Oya probably cannot love’

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]
   b. očevidno ne pročitannaja 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:

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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/)
3.1. Prenominal relative clauses: an introduction

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 A-dependencies.

3.1.3 A-properties of relative clauses

As a subset of 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 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 α-position in the terminology of Pesetsky 2013).

In a similar vein, an A-dependency should also demonstrate clear signs of the base position (or, for Pesetsky 2013, the β-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, mother ] that every soldier, 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.  

The last two characteristic properties that $\lambda$-dependencies share are best discussed together. They are unboundedness, which refers to the ability of $\lambda$-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 Lindenbergh (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.\(^3\)

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).

\begin{enumerate}
\item (11) a. \(\text{he-} \quad \text{w} \quad \text{či-} \quad \text{jas} \quad \text{ču} \quad \text{b-iq’-} \quad \text{ana}\) \[\quad \text{that.abs-m} \quad \text{man-erg} \quad \text{horse.abs} \quad \text{N-sell-pst}\]
\hspace{1cm} ‘That man stole the horse.’
\item b. \([\_ \quad \text{ču} \quad \text{b-iq’-} \quad \text{a-} \quad \text{ra-} \quad \text{w} / \text{*b-iq’-} \quad \text{ana}] \quad \text{či} \quad \text{t’ur-ana}\)
\hspace{1cm} \(\text{horse.abs} \quad \text{N-steal-pst-ftcp-M} \quad \text{N-sell-pst} \quad \text{man.abs} \quad \text{flee-pst}\)
\hspace{1cm} ‘The man that stole the horse has run away.’
\end{enumerate}

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 \textit{worden} rather than the modal \textit{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 \textsc{erg} and \textsc{abs} respectively. In Turkish relatives, on the other hand, subjects shift their case marking to \textsc{gen}, as can be seen in (3b) on p. 65.

(12) a. muḥamadi- ca mašina b–ič- ana
   Muhammad-\textsc{erg} car.\textsc{abs} N–\textsc{sell}\textsc{-pst}
   ‘Muhammad has sold the car.’

b. [muḥamadi- ca b–ič- a- ra– b] mašina χwa-na
   Muhammad-\textsc{erg} N–\textsc{sell}\textsc{-pst}\textsc{-ptcp–n} car.\textsc{abs} die- \textsc{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- al- uq w–alah-un w–ugo
   boy.\textsc{abs} girl-obl-apess m–look\textsc{-cvb} m–be.\textsc{prs}
   ‘The boy is looking at the girl.’

b. [was w–alah-un w–ugo- e- j] jas hejxun j–us- ana
   boy.\textsc{abs} m–look\textsc{-cvb} m–be.\textsc{prs}\textsc{-ptcp–f} girl.\textsc{abs} away f–turn\textsc{-pst}
   ‘The girl at whom the boy is looking has turned away.’

(14) a. was-as jas- al- e baryič ʃ– una
   boy-\textsc{erg} girl-obl-dat ring.\textsc{abs} give-\textsc{pst}
   ‘The boy gave the girl a ring.’

b. [was-as baryič ʃ– u- ra– j] jas him- ana
   boy-\textsc{erg} ring.abs give-\textsc{pst}\textsc{-ptcp–f} girl.abs smile-\textsc{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).
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(15) a. was-as gordu ganč’i- ca b–ek- ana
   boy-erg window.abs stoneobl-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 maçačqala- jel- de
    boy-obl-gen parents.abs go.abs Makhachkala-obl-lat
    ‘The boy’s parents went to Makhachkala.’

    b. [ ebel-emen maçačqala- jel- 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-ec– ul– e– 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-ec– ul– e– w] či
       father.obl-erg m–praise-prs-ptcp–m man

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.⁴

### 3.2.3 An excursus: Crossover and reconstruction effects

When discussing the reconstruction property of 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.

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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.
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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 $\overline{A}$-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) $lûukmáaj$ [thūi lōŋ māj klaj ton] tham-hāj phô-мēc sābaaj-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 $lûukmáaj\ lôn\ māj\ klaj\ tôm$ ‘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 __i masi-n ] miyekkwuk_i
    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-
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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’s problems that she 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.

(24) a. *the man1 who1 his1 mother saw __1
   b. *the man1 Op1 his1 mother saw __1

The unavailability of the bound interpretation for the possessive pronoun $his_1$ 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 boy1 that saw his1 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 boy1 whom1 his1 mother saw’

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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 Á-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 Á-movement are traditionally treated as being subject to Principle C of the Binding theory.\(^6\),\(^7\)

\[(26) \quad \begin{align*}
\text{a.} & \quad \text{*the man₁ whom₁ he₁ likes₁} \\
\text{b.} & \quad \text{*the man₁ whose father he₁ likes₁}
\end{align*}
\]

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

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

\[(i) \quad \begin{align*}
\text{a.} & \quad \text{Henrik / han tror at ham kunne ingen lyve over for t} \\
& \quad \text{‘Henrik/he thinks that him nobody could lie over for’}
\end{align*}
\]

\[\begin{align*}
\text{b.} & \quad \text{Henrik / han tror at her kunnen ingen lyve over for Henrik} \\
& \quad \text{‘Henrik/he thinks that here nobody could lie over for Henrik’}
\end{align*}
\]

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 Á-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.
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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 Ā-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 Ā-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-ol’- ule– w] či
    self.DAT=EMPH  M-like-PRS:PTCP=M man.ABS

b. *[hesie  w-ol’- 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 Ā-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 bol’ize ‘want’. As can be gathered from the examples in (28), this kind of relativisation is permitted.8

(28) a. [di- e _ b-os- ize b-ol’- 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-ol’- un b-uk’-a- ra- w] telefon
    1SG-ERG CAR.ABS N-sell-INF  N-want-CVB N-be- PST-PTCP-M
    či- jas bat’ja- 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 converbal clauses.9 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 [ʕali-ca mašına 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 la- la [ʕali-ca mašına 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.1NF’ 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 [ʕali-e jas j–ol'- un j–ik'-in- Ø ] b/j–ix- ana
   1SG-LOC Ali- DAT girlABS 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.10

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

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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.
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).  

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?  

(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  

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.
3.2. Avar relative clauses

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 Lindenbergh (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’oçene ‘forget’, uryel habize ‘worry’, and gara-č’wari ‘discuss’.

(37) ahmadi-ca ebel ina- l- ul uryel ha-b-i- ĝ’o
   Ahmed-ERG mother.ABS go-MSD-ABL-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) "[(ahmadi-ca [__ in- al- ul ] uryel ha- b-iĝ’- e- j ]
   Ahmed-ERG go-MSD-ABL-GEN worry.ABS make-N-PST:NEG-PTCP-F
   ſadan ] hesul ebel ji- īgo
   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) [ahmadi-ca [__ un-ilan ] uryel ha- b-ič-. e- j
Ahmed-erg go-comp worry.abs make-N-pst:NEG-ptcp-f
fadan ] 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) [ʕali w-ač’- a- ra- χ ] hes-ul mašina χw-ana
Ali.msc 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
mašina 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
    wac w–ugo
    brother.abs m–be.prs
(The boy that the car broke down when _ arrived is my brother.)

    he.obl-loc f–come-pst =comp f–see-pst-ptcp-cvb car.abs
    χw-a- ra– j ] ŋadan ana
    die-ptcp-f give.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 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 isuntensed, 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). This does not seem to extend to masdar-shaped specifiers, as the contrast in acceptability between (45) and (46) illustrates.


‘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
   ‘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 A-movement underlying the derivation of Catalan relative clauses.

(ii) Catalan long-distance relativisation

a. [els quals conferenciants dels quals et sembla que les propostes em van impress] són americans.
   speakers of whom 2SG seems that the proposals 1SG go impress
   ‘The speakers that it seems to you that the proposals by have impressed me are American.’
   [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).

find-PST Ahmed.OBL-ERG window.ABS N-break-MSD good–N
ʔo 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).

b–iq’– an= ilan
N–steal–PST=COMP

‘Everyone thinks that Murad stole the horse.’

b–ug– e– b ] ċu 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.

\[(48)\]
\[
\begin{array}{l}
a. \text{insu- e b–ol’- un b–ugo } [\text{bajbix-ize halt’-ize } ] \\
\quad \text{father.OBL-DAT N–want-CVB N–be.PRS start- INF work-INF} \\
b. \text{insu- e b–ol’- un b–ugo } [\text{halt’-ize baibix-ize } ] \\
\quad \text{father.OBL-DAT N–want-CVB N–be.PRS work-INF start- INF} \\
\end{array}
\]

‘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:

\[(49)\]
\[
\begin{array}{l}
\text{insu- e } [\text{[halt’-ize ] bajbix-ize } ] b–ol’- un b–ugo \\
\quad \text{father.OBL-DAT work-INF start- INF N–want-CVB N–be.PRS} \\
\end{array}
\]

‘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 či ‘man’ (50b) inside the infinitival clause:
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(50) a. niže-e q'wariʕ-un w–ugo [[[__ halt' ize ] bajbix-ize ]
   we- DAT need- CVB m–be.PRS work-INF start-INF
   b–ol'- un b–uge– w ] či ]
   N–want-CVB N–be.PRS:PTCP–M man

b. niže-e q'wariʕ-un w–ugo [[[__ halt' ize ] bajbix-ize ]
   we- DAT need- CVB m–be.PRS work-INF start-INF
   b–ol'- un w–uge– w ] či ]
   N–want-CVB m–be.PRS:PTCP–M man

c. *niže-e q'wariʕ-un w–ugo bajbix-ize halt'-ize b–ol'- 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.  

Let us now consider cases involving long-distance relativisation of a verb's internal argument.  

(51) insue b–ol’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–ol’un b–uge– ]
   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 bol’- ‘want’, the dative case being assigned to it lexically. The

13. These word-order restrictions are reminiscent of Willaims’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.
Avar relative clauses

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 l’oloze k’weze
1sg.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 [[ l’oloze ] k’weze ] b–oł’un b–uk’ara– b]
1sg.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.’

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. Avar relative clauses

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 la- la [insu-ca [niler askaraz berhenli
Aminat-LOC know-PRS father-ERG 1PL.GEN troops.ERG victory.ABS
b-os- jal-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 [niler askaraz berhenli b-os- un
Aminat-ERG father-LOC 1PL.GEN troops.ERG victory.ABS N-take-CVB
b-uk’in- Ø ] laj- al-ul ] b-ic- un b-uqe
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 [niler askaraz berhenli b-os- un
Aminat-LOC father-LOC 1PL.GEN troops.ABS victory.ABS N-take-CVB
b-uk’in- Ø ] laj- al-da ] bož- 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 — la- ‘know’, bic- ‘tell’ and bož- ‘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 [niler askaraz b-os- jal-ul ]
Aminat-LOC father-ERG 1PL.GEN troops.ERG N-take.MSD-OBL-GEN
b-ic- un b-uk’in- Ø ] la- l e- b ] berhenli 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 presuppositional 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 [niler askaraz b–osi- jal- ul ]
Aminat-LOC father-ERG IPL:GEN troops.ERG N–take.MSD-obl-GEN
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 [niler askaraz b–os- un b–uk’-in- Ø ]
Aminat-ERG father-LOC IPL:GEN troops.ERG N–take-CVB N–be- MSD–ABS
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 [niler askaraz b–os- un b–uk-in- Ø ]
Aminat-LOC father-LOC IPL:GEN troops.ERG N–take-CVB N–be- MSD–ABS
laj- al- da ] bož- ul e b] berhenli 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.’


‘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 $\overline{A}$-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 $\overline{A}$-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 $\overline{A}$-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
3.3. Sketching the proposal

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 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
affixes corresponding to tense are highlighted in boldface. \textsuperscript{15,16}

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

\begin{equation}
\text{a. Force} \\
\text{\textbackslash~ Fin} \\
\text{\textbackslash~ Fin}_{\text{FUT}}
\end{equation}

\begin{equation}
\text{b. Force}_{\text{EL}} \\
\text{\textbackslash~ Fin} \\
\text{\textbackslash~ Fin}_{\text{FUT}}
\end{equation}

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.

\textsuperscript{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.

\textsuperscript{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 an 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) \ japon- al c’al- ul- e- l ŋadam-az šib- nigir bero’wa-č’o
\textcedilla 
magazine-PL read-PRES-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’alul-č’ ‘reading’ is interpreted relative to the time of the matrix clause, which is, in this case, in the past.
Avar relative clauses

(67) a. ebel- al keč’ ah- ana
    mother-erg song.abs shout-pst
    ‘Mother sang a song.’

b. ebel- al ah- 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 ah- ‘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 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 A-dependencies in Avar as viewed from the perspective of Zwart’s (2009) layered-
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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.17

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.18

(69) a. *

Ahmed.erg go.msd.gen wotry.abs make–n.pst:NEG:PTCP–f

Yadan.  

woman.abs

('The woman about whose departure Ahmed didn’t worry…')

b. *

Ahdmi-  

find.pst Ahmed.obl.erg window.abs n-break.msd good–n

zo hec‘-  

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, √go the root in- ‘go’, and Op1 the empty operator that is to serve as the embedded verb’s only argument.

(70) **Derivational layer 1**

a. Numeration: {√go, n, Op1,}

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.19

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 \( \text{give} \) as a verb whose meaning is not fully compositional, since \( \text{give} \), hypothetically a conflation of \( \text{cause} \) and \( \text{have} \), is semantically different from \( \text{cause to have} \). 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: \[
\begin{align*}
&n \quad \operatorname{Op}_1 \quad \sqrt{\text{go}} \\
&v, \sqrt{\text{worry}}, \text{Ahmed}
\end{align*}
\]

b. Derivation:

\[\begin{array}{c}
\text{Ahmed} \\

\sqrt{\text{worry}} \\

\text{uryel} \\

\text{inal-}
\end{array}\]

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.\(^\text{20}\)

\(^{20}\) The “trapping” of the moved element inside a particular derivational layer, as is, I argue, the case with the null operator $\operatorname{Op}_1$, 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.\(^{21}\)

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, \textit{viz.} before it is merged in the specifier position of the copular clause.

(72) Derivational layer 1

\begin{enumerate}
\item Numeration: \{Ahmed, window, Op\(_1\), $\sqrt{\text{break}}$, n, v, Appl\}
\item Derivation:
\end{enumerate}

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.\(^{22}\)

\(^{21}\) 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 \textit{gančica} ‘with a stone’ in the syntactic structure in (72b) is introduced by an applicative head Appl (Pykkänen 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.
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.\textsuperscript{23}

\textbf{Opacity of converbial clauses}

Adverbial clauses, appearing in Avar as converses, 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.\textsuperscript{24}

\textsuperscript{23} It is, however, entirely possible that $\text{Op}_1$ 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 $\text{Op}_1$ will not be able to undergo subsequent movement out of the complex specifier into the new derivational layer.

\textsuperscript{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) 
\[
\text{[[][ w–ač’- a- ra- χ ] mašina χw-a- ra- w\]} \text{ was} \text{ \text{M–come–PST–PTCP–CVB car.ABS \text{die–PST–PTCP–M} boy.ABS}\}
\]

(The boy that the car broke down when _ 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) 
\[
\]
\[
\text{c’aq’=go xirija– b b–ugo} \text{ \text{very–EMPH expensive–N n–be.PRS}}
\]

‘The phone that I want to buy is very expensive.’

(76) \{Op\(_1\), buy\text{INF}, 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 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 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 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):

![Diagram of focus construction](image)

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, $\overline{A}$-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 $\overline{A}$-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 NP/$\overline{S}$, 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).


[Turkish, G. Güneş (p.c.)]

Upon careful examination, however, this counterexample, or series of counter-examples 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 λ-abstract, and nothing happens if it fails to apply.
3.3. Sketching the proposal

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 $\lambda_3$ muhamadica $t_3$ biča-

b. $\lambda x. \lambda s$. Muhammad sold $x$ 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 A-constructions, the most notable exception being the unboundedness property. In particular, long-distance relativisation was not permitted across con-verbial 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.