Information Structure in Standard Arabic Verbal Sentences

Salem Albuhayri
University of Wisconsin-Milwaukee

Follow this and additional works at: https://dc.uwm.edu/etd

Part of the Linguistics Commons

Recommended Citation
https://dc.uwm.edu/etd/2283

This Dissertation is brought to you for free and open access by UWM Digital Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of UWM Digital Commons. For more information, please contact open-access@uwm.edu.
INFORMATION STRUCTURE IN STANDARD ARABIC VERBAL SENTENCES

by

Salem Albuhayri

A Dissertation Submitted in
Partial Fulfillment of the
Requirements for the Degree of

Doctor of Philosophy
in Linguistics

at
The University of Wisconsin-Milwaukee

December 2019
ABSTRACT

INFORMATION STRUCTURE IN STANDARD ARABIC VERBAL SENTENCES

by

Salem Albuhayri

The University of Wisconsin-Milwaukee, 2019
Under the Supervision of Professor Hamid Ouali

This thesis investigates Information Structure (IS) in relation to the clausal architecture in Standard Arabic (SA). The attention is confined to word order variation and its role in structuring discourse. The structural positions with potential information structure import are argued to appear at the edges of phases, namely vP and CP. It presents an analysis which brings together the minimalist scheme as embodied in Chomsky (2000, onwards) and the cartographic approach to discourse as embodied in Rizzi (1997, 2001) and Cinque (1999). First, in chapter (2) a distinction is made between VSO and SVO clauses, in which I propose that the preverbal subject in SVO is ambiguous between two readings: i) a topic reading which involves the external merge of the subject in SpecCP, binding a null pro in SpecvP, and ii) a focus reading which involves subject movement from SpecvP to SpecTP in response to a composite probe on T. Clitic left-dislocated phrases are argued to originate in the same position as preverbal topical subjects and they bind resumptive pronouns internal to the thematic domain. The position of the complementizer, which always ends up higher than topics, is derived by head movement, induced by labeling requirements based on the assumption of the labeling algorithm following Chomsky (2008, 2013, 2015).

In chapter (3), the discussion is shifted to the midfield discourse layer, the vP edge. First, a detailed description of the structural conditions that regulate object shift is presented, followed by a proposal which assumes that OS is driven by a composite probe on v, therefore explaining the mixture of A and Ā characteristics it displays. However, the discussion is not confined to OS,
the transformation that usually receives most attention insofar as this area of the structure is concerned. Rather, a range of other constituents with the potential to appear at the vP edge, namely PPs, CPs, adverbs and secondary predicates, are investigated with the aim of establishing that SA has a midfield discourse layer similar to the CP edge. With regard to the interpretive effects associated with the vP edge, the overall picture that emerged is that whatever moves to this zone becomes more liable for a background interpretation, whereas the elements that are spelled out in the domain of vP are focused.

Chapter (4) is devoted to an investigation of the left periphery. I extend the discussion to the remainder of mathematically possible word orders derivable from SVO and VSO, including SOV, OSV and OVS, building on the derivational difference established between SVO and VSO in chapter (2). I demonstrate that the presence of multiple DPs in the left periphery induces i) contrastive topic plus focus readings when the lower DP arrives at its surface position by movement, and ii) topical readings that set the predicate in focus when they extremally merge in SpecCP. In the course of teasing apart the IS effects associated with the various permutations that result from movement to this area, I propose a non-movement analysis of floating quantifiers in SA in which they are argued to be base-generated in their clause-internal position and are co-indexed with a definite (mostly topical) constituent higher up in the structure. Then, I examine word order variation in answers to constituent questions. I show that clausal answers with preposed constituents are only felicitous in contexts where there is good reason to assume that some discourse participants have other conceivable alternative answers that contrast with the uttered one. As for fragments, I argue for a partial in-situ deletion approach which derives them from their clausal counterparts where answers are in clause-final positions.
Finally, the syntactic and semantic properties of exceptives in SA are examined in chapter (5), with the scope limited to exceptives in VSO clauses and how their syntax interacts with their IS effects. I argue that full exceptives can be analyzed as connected exceptives (CEs) with two configurations; one that has the excepted phrase as a DP-level adjunct in a vP-internal position and another that has the excepted phrase in a right-peripheral non-focused position. They also can function as free CP-level exceptives, in which case the excepted phrase originates in a second clause from which it moves to the left peripheral focus position while the remainder of the clause is deleted or gets phonologically suppressed at PF. As for incomplete exceptives, I argue that they too are CP-level exceptives in which the domain XP is a null *pro* and the excepted phrase is in focus. The analysis shows that exceptives have interpretative effects stretching beyond their truth conditions.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>ix</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>xi</td>
</tr>
<tr>
<td>1 INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>1.1 Introduction</td>
<td>1</td>
</tr>
<tr>
<td>1.2 A Note on Standard Arabic</td>
<td>3</td>
</tr>
<tr>
<td>1.3 Main Claims</td>
<td>5</td>
</tr>
<tr>
<td>1.4 Basic observations</td>
<td>11</td>
</tr>
<tr>
<td>1.4.1 vP Edge</td>
<td>11</td>
</tr>
<tr>
<td>1.4.2 CP Edge</td>
<td>13</td>
</tr>
<tr>
<td>1.4.3 Exceptive Constructions</td>
<td>15</td>
</tr>
<tr>
<td>1.5 Research Questions</td>
<td>20</td>
</tr>
<tr>
<td>1.6 Background and Theoretical Assumptions</td>
<td>20</td>
</tr>
<tr>
<td>1.6.1 The Minimalist Program (MP)</td>
<td>21</td>
</tr>
<tr>
<td>1.6.2 Alternative Semantics</td>
<td>30</td>
</tr>
<tr>
<td>1.6.3 Basic Notions of IS</td>
<td>33</td>
</tr>
<tr>
<td>1.7 Outline of the Thesis</td>
<td>38</td>
</tr>
<tr>
<td>2 CLAUSE STRUCTURE IN SA: VSO VS. SVO</td>
<td>40</td>
</tr>
<tr>
<td>2.1 The Debate</td>
<td>40</td>
</tr>
<tr>
<td>2.2 Discourse Neutrality of VSO</td>
<td>43</td>
</tr>
<tr>
<td>2.3 SVO and Preverbal Subject DPs</td>
<td>50</td>
</tr>
<tr>
<td>2.3.1 Extraction over Preverbal DPs</td>
<td>50</td>
</tr>
<tr>
<td>2.3.2 Do Topics Matter in Extraction?</td>
<td>54</td>
</tr>
<tr>
<td>2.3.3 Analysis</td>
<td>59</td>
</tr>
<tr>
<td>2.4 Interim Summary</td>
<td>77</td>
</tr>
<tr>
<td>2.5 Subject Focus and Agreement</td>
<td>77</td>
</tr>
<tr>
<td>2.6 Complementizer Position</td>
<td>91</td>
</tr>
<tr>
<td>2.6.1 The Labeling Algorithm (LA)</td>
<td>92</td>
</tr>
<tr>
<td>2.6.2 Labeling in SA</td>
<td>96</td>
</tr>
<tr>
<td>2.6.3 LA-based Account of Complementizer Position</td>
<td>99</td>
</tr>
<tr>
<td>2.6.4 Implications of Labeling via HM</td>
<td>106</td>
</tr>
<tr>
<td>2.7 Long-Distance Extraction of Subjects</td>
<td>108</td>
</tr>
<tr>
<td>2.8 Concluding Remarks</td>
<td>111</td>
</tr>
<tr>
<td>3 THE MID-FIELD: vP EDGE</td>
<td>112</td>
</tr>
<tr>
<td>3.1 Introduction</td>
<td>112</td>
</tr>
<tr>
<td>3.2 Background</td>
<td>112</td>
</tr>
<tr>
<td>3.3 vP Edge in SA</td>
<td>118</td>
</tr>
<tr>
<td>3.3.1 Object Shift (OS): Structural Conditions</td>
<td>118</td>
</tr>
<tr>
<td>3.3.2 OS: A or A-movement</td>
<td>123</td>
</tr>
<tr>
<td>3.3.3 OS: IS Effects</td>
<td>133</td>
</tr>
<tr>
<td>3.3.4 Movement of PPs and CPs to vP Edge</td>
<td>141</td>
</tr>
<tr>
<td>3.3.5 Temporal and Locative Adverbs</td>
<td>143</td>
</tr>
</tbody>
</table>
3.3.6 Secondary Predication at vP edge ................................................................. 145
3.4 Implications of IS effects ................................................................................. 150
3.5 Concluding Remarks ....................................................................................... 151

4 THE LEFT PERIPHERY: CP EDGE ........................................................................ 153
4.1 Introduction ......................................................................................................... 153
4.2 SVO vs. VSO ...................................................................................................... 154
4.3 The Left Periphery in SVO ............................................................................... 155
   4.3.1 Topical Subjects ......................................................................................... 155
   4.3.2 SOV with Overt Pronouns ......................................................................... 160
   4.3.3 Quantifiers in SVO .................................................................................... 166
   4.3.4 Focus, Wh-question and Left Dislocation .................................................. 182
4.4 The Left Periphery in VSO ............................................................................... 184
4.5 Constituent Questions and Fragment Answers ................................................ 188
   4.5.1 Introduction ................................................................................................ 188
   4.5.2 Approaches to Fragment Answers .............................................................. 190
   4.5.3 Fragment Answers in SA: Analysis ............................................................. 194
   4.5.4 Fronted Answers ....................................................................................... 198
4.6 Concluding Remarks ....................................................................................... 199

5 EXCEPTIVE CONSTRUCTIONS ......................................................................... 201
5.1 Introduction ......................................................................................................... 201
5.2 Properties of Exceptives ................................................................................... 202
5.3 Categorial Status of Exceptive Markers ............................................................. 204
5.4 The Syntax and Semantics of Exceptives .......................................................... 208
   5.4.1 Full Exceptives ......................................................................................... 208
   5.4.2 Incomplete Exceptives ............................................................................. 212
   5.4.3 yajr and siwaa Exceptives ...................................................................... 215
5.5 Concluding Remarks ....................................................................................... 215

6 CONCLUSIONS ................................................................................................. 217
6.1 Summary of Conclusions ................................................................................. 217
6.2 Limitations and Directions for Future Work .................................................... 220

REFERENCES ......................................................................................................... 222

CURRICULUM VITAE ............................................................................................. 236
LIST OF TABLES

Table 1: Case Inflections in Exceptives ................................................................. 19
Table 2: Case Inflections in Exceptives ................................................................. 208
LIST OF ABBREVIATIONS

<p>| 1 | 1&lt;sup&gt;st&lt;/sup&gt; person |
| 2 | 2&lt;sup&gt;nd&lt;/sup&gt; person |
| 3 | 3&lt;sup&gt;rd&lt;/sup&gt; person |
| ACC | Accusative |
| AFF | Affirmative |
| EC | Epenthetic Consonant |
| EXT | Extended Mood Marker |
| FEM | Feminine |
| FM | Focus Marker |
| FOC | Focus |
| FV | Final Vowel |
| GEN | Genitive |
| IMPERF | Imperfective |
| IND | Indicative |
| LOC | Locative |
| MASC | Masculine |
| Neg | Negation |
| NOM | Nominative |
| NS | Nominalizer |
| PERF | Perfective |
| PL | Plural |
| SG | Singular |</p>
<table>
<thead>
<tr>
<th>SUB</th>
<th>Subjunctive</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOP</td>
<td>Topic</td>
</tr>
<tr>
<td>VC</td>
<td>Verbal Case</td>
</tr>
</tbody>
</table>
I was lucky to have been part of the department of linguistics at UWM for the past four years. I could not have asked for a better environment to pursue my goals. Anyone who pursued a doctoral degree recalls the challenges and sleepless nights they have been through and will always remember with gratitude the people whose presence during the journey has helped smooth things out. At UWM, there was no shortage of such people. The faculty, staff, students and guest speakers have all contributed to maximizing my gains and making my time at UWM a wonderful learning experience.

I have been blessed with a committee whose influence on my research cannot justly be represented by this dissertation. In all honesty, what I have learned from them stretches way beyond this work and words of acknowledgement would never do them justice but I will do my best. First and foremost, my sincere thanks go to my advisor prof. Hamid Ouali. I am deeply indebted to Hamid for his unwavering support and constant encouragement ever since I walked into his office to discuss the initial ideas for this work in the Fall of 2017. His persistent guidance and thoughtful suggestions have always pushed me to look into the issues I am exploring from various perspectives and to reconsider hasty conclusions. I will always recall how my visits to Hamid bailed me out of the difficult impasses I encountered, which in many occasions bordered on being intractable. Thanks, prof. Hamid.

I would like also to extend my thanks to prof. Nicholas Fleisher for his assistance, insightful questions and suggestions. In fact, my interest in information structure grew out of an advanced semantics class I took with Nicholas in the Fall of 2016. Despite the fact that the topic has ramifications that resonate through various disciplines, the way it was presented was sufficient to intrigue me and I decided to explore it in Arabic. I hope this work reflects what I have learned in that class.
and from the discussions I had with Nicholas ever since. I will always be indebted to Nicholas for introducing me to this area of research and for guiding me with his invaluable comments.

Special thanks go to prof. Fred Eckman and prof. Garry Davis for their service in my committee. I have no hesitation to affirm that some sections in this dissertation were designed specifically to respond to conceptual questions that prof. Fred posed at various stages of its development. Similar questions were raised by prof. Garry. I am grateful to both for their assistance and I am confident that my work is now better that these questions are addressed explicitly.

I would like to express my heartfelt appreciation and deepest thanks to prof. Usama Soltan for his gracious acceptance of my invitation to be on my defense committee. Usama had influenced my work long before he joined my committee. His (2007) dissertation is the work that inspired me to look again at clause structure permutations in SA in a multi-dimensional fashion. His thoughtful comments and feedback helped me sharpen my arguments and make them more explicit.

I do not want to miss this opportunity to express my gratitude to prof. Tue Trinh. I was lucky enough to have taken a number of classes in syntax and pragmatics with Tue, which eventually fed into my research. I owe Tue a great debt of gratitude for his assistance at the early stages of this work through guiding me to influential papers that expanded my knowledge of the literature on information structure. I had the fortune to discuss most of them with him in the Fall of 2017 and he offered tremendous help and advice.

From outside the department of linguistics at UWM, I had the chance to discuss parts of my work with Elly van Gelderen, Manfred Krifka and Michael Erlewine. Their constructive comments and thoughtful suggestions deserve recognition. I am grateful to them all for taking the time to provide me with their valuable insights.
During my time in Milwaukee, I was truly blessed with supportive and faithful friends without whom the journey would not have been as easy and joyful. I am very grateful to Abdullah Alsubhi, Abdulrahman Aljutaili, Bader Alharbi, Mohammed Abuhaib, Salman Albardi, Saad Al-shahrani, Turki Alwahibee, Yahya Aldholmi and Yasser Albaty. Their presence in my life made me feel like home, and the fact that we shared interest in linguistics has influenced my work in many respects. I will always recall with happiness that I have been part of this wonderful group. Special thanks go to Mohammed Abuhaib and Turki Alwahibee. My arrival at UWM coincided with theirs and I had the privilege to share most classes with them. Mohammed and Turki are more like bothers to me. They were always available to offer their help whenever I needed.

There is no possible way I can put into words the appreciation and gratitude I owe to my family. If it were not for the sincere prayers, unwavering support and constant encouragement I received from my parents, brothers and sisters from the first day I arrived in Milwaukee, I would not have been able to achieve my goals. I am deeply grateful to them and it is to them all that I dedicate this work.

My first, last, and continual thanks go to the Almighty Allah who blessed me with everything I have and everything I have achieved.
Chapter 1

1 INTRODUCTION

1.1 Introduction

Conversations in their essence are carried out to establish a common understanding of some aspect of the real or some imaginary world. This primary goal is accomplished via the utilization of the repertoire of discourse-structuring mechanics availed by the language used as a medium of conversation, i.e., different languages afford different procedures (Ladd, 1990; Lambrecht, 1994; Rooth, 1985, 1992). For instance, the primary discourse-structuring mechanism in English is prosody; stressing and destressing are used to tell focused and familiar information apart. Other procedures can be used, however, including cleft constructions and focus-associative elements like ‘only’ and ‘even’. Languages such as Japanese and Korean, on the other hand, employ morphology and word order to structure discourse and therefore are dubbed as discourse-configurational languages (É. Kiss, 1995; Miyagawa, 2010, 2017). Noteworthy though is the repeated observation that these cross-linguistically diverse devices are not innocuous options, but rather carry out different functions. The general characterization of such devices and their functions in structuring the informational content of utterances is referred to as Information Structure (IS, hereafter).

Chafe (1976:27f) defines IS as a procedure for information packaging whereby a speaker accommodates his speech in response to the immediate contextual needs of his interlocutors through his encoding of several phenomena including focus, givenness, topic among others. This has the implication that speakers do not usually make random choices in the presentation of their thoughts but rather vary their lexical materials, syntactic devices and pronunciation in a manner that is commensurate with the context; a direct entailment of this is that contexts are depicted in and therefore are in principle retrievable from what speakers say. There exists a generally received
conviction that these discourse organization mechanisms *per se* do not usually influence the truth conditions of a sentence. However, it is by now well recognized that in addition to their role in information packaging some mechanisms may bring about truth-conditional differences (e.g., Jackendoff, 1972; Rooth, 1985, 1992; Krifka, 2008; Erlewine, 2014). For example, focus in the context of focus-sensitive adverbs such as ‘only’ conveys the sense of exhaustivity, a sense that will be illustrated later. Taken together, these rudimentary descriptive statements suffice to illustrate that IS has far-reaching effects that resonate through phonology, syntax, semantics and pragmatics, and hence is a busy domain of inquiry infused with interdisciplinary questions.

Against this background, this thesis is intended to examine IS in Standard Arabic. The point of focus is word order and its role in structuring discourse, a subject matter that has received sporadic attention in the history of generative investigation of the language (e.g., Bakir, 1979; Ouhalla, 1994, 1997; Shlonsky, 1997, 2000; Aoun et al., 2010). Nonetheless, the existing literature, for the most part, puts more emphasis on the syntactic aspects of word order variation at the expense of accompanying interpretations. This tendency has been animated by the pursuit of principled accounts for agreement patterns in the language. However, the little regard given to interpretation was on occasions a corollary of the working principles of the theoretical frameworks within which syntactic accounts were embedded; for example, object shift, a transformation that is by now admitted to bring different interpretations in its train, was deemed to take place for pure syntactic reasons in some early minimalist accounts, namely to check object case in a spec-head configuration (e.g., Ouhalla, 1994; Shlonsky, 1997). On the other hand, those works that accord equal attention to interpretation do not provide a comprehensive picture of IS in the language. The focus has largely been on the clausal edge, i.e., what is commonly identified as the left periphery (e.g., Shlonsky, 2000, Aoun et al., 2010). To the best of my knowledge, no work explores IS in SA in
relation to the clausal architecture in general and how different word orders relate to one another in terms of their felicity conditions. The situation being as such, the goal of this work is to bridge this gap by laying down a detailed analysis of IS in Standard Arabic verbal clauses couched within the recent minimalist accounts of clause structure in the language (mainly Soltan, 2007). The primary interest is in the syntactic means by which IS is manipulated. After these means are identified, potential associated interpretations are teased apart and formalized in terms of Alternative Semantics\(^1\) (von Stechow, 1989; Rooth, 1985, 1992; Büring, 1997, 2003, 2016, a.o.).

1.2 A Note on Standard Arabic

The language under investigation is Standard Arabic (SA henceforth). I use this appellation as a compromise between Classical Arabic (CA) and Modern Standard Arabic (MSA). Even though it is undeniable that these two varieties have proclaimed differences, their morphology and syntax have almost remained unchanged. In the main, differences are confined to lexical and stylistic aspects. Some structures are also considered less frequent in MSA (see Ouhalla 1994 for some relevant discussion). Nonetheless, they basically demonstrate equal freedom in word order, which is in part ascribed to their rich morphology, and hence, for the most part, the analyses posited for the issues discussed here are assumed to extend to both.

---

\(^1\) Throughout this work, I use the notion “interpretation” in a more inclusive sense to involve not only truth conditions but also felicity conditions pertinent to IS; by felicity conditions I mean the contextual circumstances that regulate structure use. This inclusive sense is used elsewhere in the literature (e.g., Wurmbrand, 2008; Bobaljik and Wurmbrand, 2012; Gutzmann, 2015). It is dovetailed with Kaplan’s (1999) notion of use conditions. As Gutzmann (2015:7) puts it, “we now have two modes of expression in which content can be conveyed […]. Some expressions convey only truth-conditional content (dog), others contribute only use-conditional content (damn), while others contribute both (cur)” . This view extends to complex expressions as many need to be analyzed in terms of their truth as well as use conditions in order for their overall meaning to be fully captured. So, a sentence such as the following has two dimensions of meaning as illustrated in (i)a and (ii)b.

\textit{i)} The damn dog howled the whole night.
  a. \textit{Truth Conditions}: (i) is true if the dog howled the whole night
  b. \textit{Use Conditions}: (i) is felicitously used if the speaker feels negatively about the dog

Although the use conditions in (i)b pertain to a lexical item, use conditions can be associated with structural forms.
It should be indicated, however, that there has always been an explicit concern over taking SA as a milieu for linguistic investigation, the reason being the overemphasized conception that it is a language that has no native speakers and thus does not warrant linguistic investigation since native intuitions are unobtainable. While it is true that SA is not the native language parents speak at home, there are various SA input sources that children have access to even before they join school, mostly embodied in children-oriented media programming. This early exposure combined with formal instruction when they join school allows educated Arabs to make reliable grammaticality and felicity judgments on SA data comparable to speakers of other languages. Support for this claim comes from research on language acquisition which reveals that, of all aspects of language, syntax and semantics have longer critical periods for acquisition (Ruben, 1999; Seol, 2005; Albirini et al., 2019).

One further reason to play down this concern is that the basic data under examination here is made up of sentences whose grammaticality is largely uncontroversial as they can be found in academic and formal writings. The large bulk of data is either drawn as it is or adapted from other previous research on SA (mainly Bakir, 1979; Fassi Fehri, 1993; Ouhalla, 1994, 1997; Mohammad, 2000; Benmamoun, 2000; Shlonsky, 2000; Soltan, 2007). However, in the construction of evidence for the arguments being developed I venture out of the confines of the literature to other relevant data whose grammaticality and felicity are checked out through judgments gleaned from Arabic experts and other fellow linguists.

As for why SA is selected as a testing ground for the relation of word order variation to IS, the answer is that SA manifests almost all possible orders, a characteristic attributed to its rich case morphology which preserves the grammatical functions of arguments no matter where they end up in the structure (see Holmberg 1986 and Neeleman 1994 for earlier arguments on the connection
between free word order and rich morphology). Dialects lack this freedom due to the fact that they have lost their case morphology. Aoun et al. (2010:47) report data from three Arabic dialects (Palestinian, Lebanese and Moroccan) which shows that they do not have SOV, OSV and OVS clauses. Lewis (2013:11) points up similar restrictions in Najdi Arabic where only SVO, VSO and VOS are dominantly attested. What ensues from these observations is that word order variation might not be as much revealing in these dialects as it is in SA. One might surmise that these dialects compensate for restrictions on order permutations by the utilization of other means such as lexical and intonational cues to mark IS, which falls outside the perimeter of interest of this thesis (for IS in Arabic dialects, see Owens & Elgibali 2009). Lastly, SA is particularly interesting due to its dual character of being an agreement language (like English and French) and a discourse-configurational language (similar to Japanese and Chinese).

1.3 Main Claims

As a synthetic language characterized by its copious morphology, SA demonstrates a great deal of syntactic flexibility; given a lexical array and barring certain limitations, all mathematically possible structural permutations can be derived. However, it would be surprising if this flexibility is reduced to parallel choices with no differences in interpretation. Economically speaking, it comes across as implausible if two orders can yield the exact same interpretation because the question that arises then is: why the two orders? Economy considerations come into play in adjudication between syntactic structures that are derived from the same lexical materials and have the same interpretation, filtering out uneconomical derivations, with economy defined as the derivational path with the least effort steps (Bošković, 1997; Collins, 2001; Hornstein, 2009; Wurmbrand,
Economy also holds of representations, not just derivations.

For concreteness, let us consider (1) below.

\[
\begin{align*}
\text{a.} & \quad \text{ʔiʃtara-} & \text{ʕalijj-} & \text{kitaab-} & \text{VSO} \\
& \text{buy.PERF-3SG.MASC} & \text{Ali-NOM} & \text{book-ACC} & \\
& \text{‘Ali bought a book.’} \\
\text{b.} & \quad \text{ʕalijj-} & \text{ʔiʃtara-} & \text{kitaab-} & \text{SVO} \\
& \text{Ali-NOM} & \text{buy.PERF-3SG.MASC} & \text{book-ACC} & \\
& \text{‘As for Ali, he bought a book.’} \\
\text{c.} & \quad \text{ʕalijj-} & \text{kitaab-} & \text{ʔiʃtara-} & \text{SOV} \\
& \text{Ali-NOM} & \text{book-ACC} & \text{buy.PERF-3SG.MASC} & \\
& \text{‘As for Ali, a [book]$_F$ he bought.’} \\
\text{d.} & \quad \text{ʕal-kitaab-} & \text{ʕalijj-} & \text{ʔiʃtara-} & \text{OSV} \\
& \text{the-book-NOM} & \text{Ali-NOM} & \text{buy.PERF-3SG.MASC-it} & \\
& \text{‘As for the book, Ali bought it.’} \\
\text{e.} & \quad \text{ʔiʃtara-} & \text{kitaab-} & \text{ʕalijj-} & \text{VOS} \\
& \text{buy.PERF-3SG.MASC} & \text{book-ACC} & \text{Ali-NOM} & \\
\text{f.} & \quad \text{kitaab-} & \text{ʔiʃtara-} & \text{ʕalijj-} & \text{OVS} \\
& \text{book-ACC} & \text{buy.PERF-3SG.MASC} & \text{Ali-NOM} & \\
\end{align*}
\]

The sentences in (1) are derived from the same lexical materials and express the same proposition, namely ‘Ali bought a member of the set denoted by the property ‘book’’. The simple observation that none is ruled out is a sound indication that each one carries out some interpretive function that the rest cannot. Ideally, nothing takes place for no reason. This intuition for the lack of complete interpretive isomorphism becomes more evidenced in the case of different syntactic forms that are derived from different lexical arrays but nevertheless can still express the same proposition. Let us consider the sentences below (adapted from Ward, 1985:2).

2 In the history of the generative tradition, economy considerations are turned into conditions that are assumed to regulate derivations ensuring that only the simplest are passed to the interfaces. Among these conditions are Relativized Minimality (Rizzi, 1990, 2001; Frampton, 1991), the Minimal Link Condition, Attract Closest and Last Resort (Chomsky, 1995, 2000; Richards, 1997; Pesetsky, 2000) and the list goes on.

3 The semantic denotation of indefinite nouns is still subject to debate with discussions revolving around whether they are property-denoting, individual-denoting or quantificational (see Partee 1986 for a discussion), and therefore I should point out that the term ‘property’ is used here only for the sake of simple exposition.
(2) a. John finished Chapter III.
   b. Chapter III was finished by John.
   c. It was Chapter III that John finished.
   d. What John did was finish chapter III.
   e. And finish Chapter III John did!

Ward (1985) argues that even though (2) shows that the proposition ‘John finished Chapter III’ can be conveyed in several distinct ways, the use of different lexical materials in different syntactic arrangements is symptomatic of variation in felicity and interpretation. Thus, it is reasonable to conjecture that the choice of one syntactic form over another is not random. Speakers exploit these structural options to tailor their speech to meet diverse pragmatic ends, i.e., among truth-conditionally equivalent structures they opt for the one that is more context-appropriate.

In a seemingly different but in essence similar vein, Fox (1998, 2000) argues that Quantifier Raising (QR), a covert movement driven by semantic considerations, does not apply when its application is semantically vacuous. (3) below illustrates this point (Fox, 1998:22).

(3) a. A student admires every teacher.
   b. Every student admires every teacher.

Fox argues that, while QR in (3)a is scopally informative in that it can derive two readings based on which of the existentially quantified subject and the universally quantified object outscopes the other, (3)b is scopally uninformative and therefore is restricted to surface scope. He formulates this argument into a principle he calls Scope Economy which basically states that optional QR does not apply if the surface and inverse scope interpretations are not semantically distinct\(^4\). The point

---

\(^4\) Fox’s scope economy is nested in the belief that QR intrinsically comes in two flavors; QR that is driven by compositional requirements to remedy type mismatches, and optional QR that derives inverse scope. For instance, the movement of the object DP from its base-generated position in the sentence below is obligatory for compositional reasons in type-theoretic semantics, but its landing at the edge of vP, deriving the surface scope reading, or at SpecTP above the subject, deriving the inverse scope reading, is optional.
of relevance to our purposes is that since economy considerations are argued to push aside uninformative covert movement, there is good reason to believe that they are operative on overt movement instantiated in (1). The motivation is that overt operations are more costly as they have more ramifications at the interface levels.

Based on the basic observations above, the main claim I entertain throughout this work is twofold. First, although the basic order in SA has been a subject of intense debate (e.g., Anshen & Shreiber, 1968; Bakir, 1979; Ayoub, 1981; Fassi Fehri, 1982, 1993), for syntactic and semantic considerations that will be elucidated in §2.2, I side with the analyses that argue for the basicness and neutrality of VSO (e.g., Bakir, 1979; Fassi Fehri, 1993; Soltan, 2007). Second, I assume that any word order other than VSO is designed to serve specific pragmatic objectives. The claim is embodied in the following generalization.

(4) Order Flexibility Generalization

VSO is the basic and ‘discourse neutral’ word order in SA, and any disruption to this order is accompanied with interpretative consequences pertinent to IS.

This generalization is not a complete novelty of this thesis but rather seems to have been underlying some research at the clause level in SA, but mostly whenever other orders are discussed, they do not get comprehensive treatments because some are usually dismissed as simply being ‘awkward’ and less frequent. Moreover, even when SA as a VSO languages is stressed upon in most works, some proceed after this assertion to reduce the difference between VSO and SVO, the second salient order in the language, to the assumption that the subject moves to SpecTP in SVO in

\[
\begin{align*}
&\text{i. A student admires every tree.} \\
&\text{ii. } [TP [a student] \ldots [\forall \forall \text{every teacher}] \forall [\forall [a student] \ldots \text{admires} \ldots [\forall \forall \text{every teacher}]]] \\
&\text{iii. } [TP \text{every teacher}] [TP [a student] \ldots [\forall \forall \text{every teacher}] \forall [\forall [a student] \ldots \text{admires} \ldots [\forall \forall \text{every teacher}]]] \\
\end{align*}
\]

When the sentence is every student admires every teacher, Fox’s scope economy precludes the derivation in (iii) and lowering the subject back to SpecTP in (ii) at LF (logical form), as both would derive inverse scope, which is not informative as far as this sentence is concerned.
response to EPP (see §2.1 below). This work is intended to exhibit that nothing is ‘awkward’ about these permutations. Rather, the truth of the matter consists in that each has its own felicity conditions that set it distinct from the rest, and that some of these conditions are so elaborate that they might not arise as much frequently as others, but whenever they do, typically a certain structure stands out as the most appropriate. As a caveat, it is worth noting that “basicness” in (4) is to be construed in the minimalist sense of the ‘most economical derivation’, not the transformational sense as the baseline deep structure from which others are derived via transformational rules (Chomsky, 1971), which was the basis for Bakir’s (1979) investigation into clause structure in SA. However, the sense of “most economical” does not rule out the possibility that VSO can still be a step in the derivation of other structures.

By “disruptions” to VSO in (4), I mean in particular alterations that can be brought about by movement to vP edge, through object shift and other movement instantiations targeting the same position, and by movement to CP edge, via focus-fronting, topicalization and clitic left dislocation. Chomsky (2000, 2001) identifies vP and CP as phases and therefore constituents affected by the aforementioned transformations land in positions that correspond to phasal edges. Nonetheless, the general hypothesis espoused throughout, which assumes some sort of a feature inheritance scheme along the lines of Miyagawa (2010), is that movement with interpretive consequences may appear also in positions below phasal heads, viz., v and C. In addition to movement operations affecting the same lexical array, disruptions to VSO can be made via the use of lexical items that alter its discourse neutrality. In this connection, I discuss exceptive constructions in particular and the potential for exceptive markers to have interpretations associated with IS.

In addition to (4) which is a claim about IS, I observe that some permutations are accompanied with truth-conditional effects in the context of quantificational arguments in that they
disambiguate scope in formerly scope-ambiguous sentences. So, unlike (5)a which is liable to surface and inverse scope readings, (5)b is liable to the surface scope reading only.

(5) a. qaraʔ-a tˤaalib-un kull-a kitaab-in
read.PERF-3SG.MASC student-NOM every-ACC book-GEN
‘A student read every book.’

b. qaraʔ-a kull-a kitaab-in tˤaalib-un
read.PERF-3SG.MASC every-ACC book-GEN student-NOM
‘A student read every book.’

This observation has some implications, at the forefront of which is that shifting the quantificational object in (5)b does not reconstruct at LF, contrary to what is characteristic of Ā-movement. Second, it lends further support to the general theme that word order variation is not a mere set of equivalent choices as some movement instantiations not only take place for pragmatic purposes but are also semantically informative as they seem to obligatorily shift scope. This requires some careful examination into the nature of movement like the one in (5)b, a task undertaken in chapters 3 and 4. To the best of my knowledge, this connection between IS effects and scopal relations has not been detected before in SA although it has been a recurrent theme in the literature (e.g., Krifka, 1990, 2015; Partee, 1991). It means that some forms of this overt movement in the language carries out the function QR does in languages like English.

The sections thus far have been devoted to staking out the perimeter for this thesis. In the next section, the attention is shifted to an abridged presentation of the major data under examination. They are divided into sets based on which part of the sentential architecture they belong to.

---

5 Judgments on scope ambiguities in sentences such as (5)a is relatively unstable insofar as inverse scope is concerned. Some informants accept only the surface scope reading.
6 This work is not primarily concerned with scope taking in SA, but rather with scope insofar as it is influenced by IS.
7 In chapter 4, it will be shown that Wh-movement allows for reconstruction, unlike object shift.
1.4 Basic observations

1.4.1 vP Edge

vP edge is optionally targeted by movement of a number of constituents with different grammatical functions. Object shift (OS) epitomizes this kind of movement. It moves the object to a position mediating between the derived verb position under T and the subject base position in SpecvP, therefore deriving VOS clauses. Different constituents can undergo OS, at the forefront of which are definite and indefinite DPs (Soltan, 2007; Musabhein, 2009). Below are examples (Soltan, 2007:117f).

**OS with definite DPs (6)b and indefinite DPs(7)b**

(6) a. qaraʔ-a  
read.PERF-3SG.MASC  
Zayd-NOM  
ʔal-kitaab-a  
the-book-ACC  
‘Zayd read the book.’

b. qaraʔ-a  
read.PERF-3SG.MASC  
ʔal-kitaab-a  
the-book-ACC  
Zayd-NOM  
‘Zayd read the book.’

(7) a. qaraʔ-a  
read.PERF-3SG.MASC  
Zayd-NOM  
kitaab-an  
book-ACC  
‘Zayd read a book.’

b. qaraʔ-a  
read.PERF-3SG.MASC  
kitaab-an  
book-ACC  
Zayd-NOM  
‘Zayd read a book.’

In his development of the argument that SA is a non-A-movement language, Soltan (2007) brings up evidence to illustrate that OS shows the hallmarks of Ā-movement, principally reconstruction and preservation of binding relations, and, to a lesser extent, licensing of parasitic gaps. This argument entails that OS does not take place for mere syntactic reasons and consequently carries out discursive functions. Taking up Soltan’s analysis, Musabhein (2009) argues for a contrastive-focus interpretation of OS. While this analysis captures an attested reading, it overlooks other possible interpretations for which there is abundant evidence. I demonstrate that the movement in (6)b and
(7)b suggests an oscillation between a contrastive focus and a contrastive topic reading, and propose that this oscillation is predictable based on the in/definiteness of the moved object. I also examine in more details the nature of this movement and whether it is uniformly Ā-movement.

In addition to DPs, vP edge can be the landing site for complement PPs and CPs as well as pronominal object clitics which obligatorily undergo OS. All are exemplified in the discussion in §3.3.4. The obligatory OS of clitics is argued to be a reflection of a topic that is realized optionally in the left peripheral topic position. PPs are liable to the same readings as DPs, namely a contrastive focus or contrastive topic reading. As for CPs, since complex arguments tend to appear sentence-finally, their movement to vP edge is shown to set the subject in focus.

The last piece of data pertaining to vP edge is secondary predication. Below are examples, adapted from Bakir (1979:57ff). The depictive can move alone as in (8)c, or along with the object as in (8)d.

```
(8) a. qaabal-a zayd-un ʕamr-an m-ubtasim-an
       meet.PERF-3SG.MASC Zayd-NOM Amr-ACC NS-smiling-ACC
       ‘Zayd met Amr (and he was) smiling.’

b. qaabal-a ʕamr-an zajd-un m-ubtasim-an
       meet.PERF-3SG.MASC Amr-ACC Zayd-NOM NS-smiling-ACC
       ‘Zayd met Amr (and he was) smiling.’

c. qaabal-a m-ubtasim-an zajd-un ʕamr-an
       meet.PERF-3SG.MASC NS-smiling-ACC Zayd-NOM Amr-ACC
       ‘Zayd met Amr (and he was) smiling.’

d. qaabal-a ʕamr-an m-ubtasim-an zajd-un
       meet.PERF-3SG.MASC Amr-ACC NS-smiling-ACC Zayd-NOM
       ‘Zayd met Amr (and he was) smiling.’
```

Another aspect worthy of note is that (8)a is ambiguous as the depictive may be predicating of the subject or the object. It seems that when the object undergoes OS alone as in (8)b, the sentence is disambiguated in favor of a subject-oriented reading. Likewise, when the depictive moves alone as in (8)c, the same effect is derived. The only way to maintain the depictive object-oriented
reading is by movement of both as in (8)d, but the subject-oriented reading remains possible in this case. An attempt is made to account for these disambiguation effects of movement to vP edge, and the possible discursive interpretations are then raveled out.

The investigation of this diversity of elements that can move to the edge of vP is intended to establish that vP is topped with a discourse layer similar to CP; none of the movements that target this midfield zone takes place for syntactic reasons since these constituents can perfectly remain in their base-generated positions without evoking ungrammaticality.

1.4.2 CP Edge

1.4.2.1 Focalization, Topicalization and Clitic-left Dislocation

The second field of clause structure associated with IS is the left periphery (in Rizzi’s 1997 terms) which can host foci, topics and clitic-left dislocated elements (CLLDS), among other things. Focus in SA is primarily expressed either through focal stress in situ as in (9)b or through syntactic movement as in (9)c (Ouhalla, 1997:11ff).

(9) a. ?aalla-fa-t zajnab-u riwaajat-an
   write.PERF-3SG.FEM Zaynab-NOM novel-ACC
   ‘Zaynab wrote a novel.’

b. ?aalla-fa-t zajnab-u [riwaajat-an]$_F$
   write.PERF-3SG.FEM Zaynab-NOM novel-ACC
   ‘Zaynab wrote [a novel]$_F$.’

c. riwaajat-an ?aalla-fa-t zajnab-u
   novel-ACC write.PERF-3SG.FEM Zaynab-NOM
   ‘[A novel]$_F$ Zaynab wrote.’

(10) a. ?aalla-fa-t zajnab-u r-riwaajat-a
    write.PERF-3SG.FEM Zaynab-NOM the-novel-ACC
    ‘Zaynab wrote the novel.’

b. ?ar-riwaajat-a ?aalla-fa-t zajnab-u
   the-novel-ACC write.PERF-3SG.FEM Zaynab-NOM
   ‘[The novel]$_F$ Zaynab wrote.’

c. ?ar-riwaajat-j-u ?aalla-fa-t-haa$_j$
   the-novel-NOM write.PERF-3SG.FEM-it Zaynab-NOM
‘The novel, Zaynab wrote it.’

In (9)b, the object is placed in focus in *situ* through focal stress but when preposed as in (9)c it receives a contrastive focus reading (Moutaouakil, 1989; Ouhalla, 1997; Shlonsky, 2000). In (10), the object could either move from its thematic position to the pre-TP field, leaving behind a gap as in (10)b, or might be externally merged, binding a resumptive pronoun internal to the thematic domain as in (10)c. The latter transformation is what is recognized in the literature as CLLD (Ouhalla, 1997; Shlonsky 2000; Aoun et al., 2010). These structures are examined and a new proposal is advanced in which topicalization and CLLDs are collapsed into one category, i.e., the difference is argued to be purely terminological.

**1.4.2.2 Constituent (wh) Questions**

SA is basically a wh-movement language (Aoun et al, 2010). However, the landing site of the moved wh-word relies on whether or not there is a preverbal subject; wh-words cannot move past the preverbal subject. This led to the emergence of what is referred to as the ban on extraction across preverbal DPs (Fassi Fehri, 1993; Soltan, 2007). Below are illustrative examples.

(11) a. zajd-un qaraʔ-a kitaab-an  
Zayd-NOM read.PERF-3SG.MASC book-ACC  
‘Zayd read a book.’

b. *maaðaa zajd-un qaraʔ-a  
what Zayd-NOM read.PERF-3SG.MASC  
‘What did Zayd read?’

As can be seen in (11)b, the wh-word cannot precede the preverbal subject ‘Zayd’. This observation holds true of focus-preposed constituents, too. ‘The book’ in (11)a cannot move to a position higher than ‘Zayd’⁸. Focus and wh-questions can still be derived from SVO, however, by movement that lands below the subject. These observations are taken as a point of departure to present

---

⁸ For ease of exposition, in the discussion sections throughout this work I use the English counterparts of the Arabic words instead of the common practice of using the Arabic words followed by the English translation.
a new perspective on the status of preverbal subjects in SVO, proposed as an extension of Soltan’s (2007) analysis in which they are treated as topics whose merge-in position is SpecTP. Under this section, I discuss the different types of constituent question answers. First, the answer could be a full sentence in which the constituent that provides the new information appears in its canonical position in the sentence, i.e., in the merge-in position of the wh-word in the question (the original copy position). Second, it could be a full answer whose syntax is identical to that of the question; the constituent appears in the same position as the wh-word in the question. Third, the answer could be confined to the constituent that provides the new information. The first two types are called propositional or clausal answers, whereas the third is called fragment, short or elided answers (Xiang, 2016:2). The three types are exemplified in chapter 4) where an account of them is put forward.

1.4.3 Exceptive Constructions

Exceptive constructions in SA form the third set of data relevant to our purposes. The tendency to make universal claims is a characteristic ingrained in human nature, and therefore language provides strategies that help make qualifications (Hoeksema, 1987:100). Among these strategies is to make exceptions introduced by certain markers such as English except and but and their cross-linguistic counterparts. Exceptive structures raise a number of intriguing questions pertaining to their morphosyntactic properties as well as their semantic interpretation.

SA possesses a relatively large inventory of exceptive markers, including ʔilla, yajr, siwaa, xalaa, haafaa and ʔadaa, all of which have the meaning of ‘except for’ or ‘other than’. These markers diverge in their morphosyntax but they pretty much have the same distribution. The constructions in which they appear can have different interpretations, which for the most part follow
from the internal syntax of the structure and not from the difference in the used marker. I follow traditional grammarians in the presentation of data, starting with ʔilla exceptives.

1.4.3.1 ʔilla Exceptives

An exceptive construction usually consists of an exceptive marker followed by an excepted phrase, which I will call the excepted XP (XP), and preceded by a domain from which the exception takes place, which I will call the domain (DXP). I call the combination of the exceptive marker and the excepted XP the exception phrase (EP). When these three constituents are present, the exceptive is traditionally called full or complete (Omar et al., 1994:468). Sometimes the domain XP does not exist. Another dimension for distinction between exceptive constructions is whether they are positive or negative. The domain might be formulated by a definite DP, a DP with a universal quantifier or by a negative polarity indefinite (NPI) in the context of negation. Below are illustrative examples with a definite DP as the domain XP.

(12) a. dʒaaʔ-a tˤ-tˤullaab-u ʔilla zajd-an/*un
    come.PERF-3SG.MASC the-students-NOM except Zayd-ACC/*NOM
    ‘The students came, except for Zayd.’

    b. qaabal-tu tˤ-tˤullaab-a ʔilla zajd-an
    meet.PERF-1SG the-students-ACC except Zayd-ACC
    ‘The students came, except for Zayd.’

(13) a. maa dʒaaʔ-a tˤ-tˤullaab-u ʔilla zajd-an/un
    neg come.PERF-3SG.MASC the-students-NOM except Zayd-ACC/NOM
    ‘The students didn’t come, except for Zayd.’

    b. maa qaabal-tu tˤ-tˤullaab-a ʔilla zajd-an
    neg meet.PERF-1SG the-students-ACC except Zayd-ACC
    ‘I didn’t meet the students, except for Zayd.’

Intrinsically, exceptives are regarded as performing a subtraction from a given domain of quantification (Fintel, 1994:104). They signal that the excepted XP is the only entity that is or is not in the predicate set based on whether the quantification is negated or not. This is reflected in (12) and (13) by the fact that ‘the students’ denotes the domain XP set, of which ‘Zayd’ is presupposed or
implicated to be part\(^9\). At the level of morphosyntax, as can be observed in (12) the excepted XP is marked for accusative case invariably whereas in (13) it can inflect for accusative or agree with the domain XP. Traditionally, agreement in case is analyzed as the result of the excepted XP being an apposition of the domain. This is especially discernable in (13)a where the DP ‘the students’ is inflected for nominative and ‘Zayd’ can either be nominative or accusative. In (13)b, it is accusative either way because ‘the students’ is accusative. With this said, let us turn to (14) below which are even more interesting both syntactically and semantically. At the level of syntax, while (12) and (13) have an overt domain XP on which the exceptive marker operates, (14) does not, exemplifying what is traditionally called non-full or incomplete exceptives (Omar et al., 1994:469ff). Moreover, the excepted XP inflects for case based on its grammatical function in the structure. In (14)a, it is a subject inflected for nominative and in (14)b it is an object inflected for accusative.

\[(14)\]
\[
\begin{align*}
\text{a. } & *(\text{maa) } \text{dʒaaʔ-a} & \text{ʔilla } & \text{zajd-un/*an} \\
& \text{neg come.PERF-3SG.MASC} & \text{except } & \text{Zayd-NOM/*ACC} \\
& \text{‘Nobody came but Zayd.’} \\
& \text{‘Only Zayd came.’} \\
\text{b. } & *(\text{maa) } \text{qaabal-tu} & \text{ʔilla } & \text{zajd-an} \\
& \text{neg meet.PERF-1SG} & \text{except } & \text{Zayd-ACC} \\
& \text{‘I met nobody but Zayd.’} \\
& \text{‘I met only Zayd.’}
\end{align*}
\]

As illustrated by the translation, in both sentences the meaning is that the only argument of which the predicate is true is the excepted XP. This means that the maximal set of which the predicate ‘came’ is true is a singleton set whose sole element is ‘Zayd’.

\[^9\text{Fintel (1994:102ff) remains neutral on whether the natural inference that the excepted XP is an element of the domain set is a presupposition or implicature, but he provides ample evidence that the exhaustive meaning associated with the excepted XP is derived by entailment.}\]
1.4.3.2 yajr and siwaa Exceptives

The excepted XP that follows yajr and siwaa is invariably genitive while yajr and siwaa themselves inflect for case the same way excepted XPs in ‘ʔilla’ exceptives do. Below are examples with yajr, adapted from Omar et al. (1994:468f).

(15) a. fahim-tu kull-a d-daruus-i yajr-a
    understand.PERF-1SG all-ACC the-lessons-GEN except-ACC
daars-in waahid-in
    lesson-GEN one-GEN
    ‘I understood all lessons, except for one (lesson).’

b. maa zaar-a-n-ii ?ahad-un yajr-a/u
    neg visit.PERF-3SG.MASC-EC me one-NOM Zayd-ACC/NOM
zajd-in Zayd-GEN
    ‘Nobody visited me, except for Zayd.’

c. maa zur-tu ?ahad-an yajr-a/*u
    neg visit.PERF-3SG.MASC-EC me one-ACC except-ACC/*NOM
zajd-in Zayd-GEN
    ‘I did not visit anyone, except for Zayd.’

As can be noticed in (15), the excepted XP is always genitive. yajr takes accusative in (15)a, accusative or nominative in (15)b, as it has the option to agree with the domain, and is accusative in (15)c, either as a result of agreement with the accusative domain XP or as the default case. In non-full exceptives, the excepted XP still inflects for genitive whereas yajr and siwaa inflects for case based on its grammatical position. This is illustrated in (16).

(16) a. maa d3aaʔ-a yajr-u zajd-in
    neg come.PERF-3SG.MASC except-NOM Zayd-GEN
    ‘Nobody came but Zayd.’
    ‘Only Zayd came.’

b. maa qaabal-tu yajr-a zajd-in
    neg meet.PERF-1SG except-ACC Zayd-GEN
    ‘I met nobody but Zayd.’
    ‘I met only Zayd.’
1.4.3.3 Other Exceptives

xalaa, ʕadaa and ħaaʃaa exceptives have a restrained syntactic distribution as they cannot appear in non-full exceptives, exceptives that lack the domain XP\textsuperscript{10}. Below are examples with xalaa.

(17) a. dʒaaʔ-ә tʰ-tˤullaab-u xalaa zajd-an/in come.PERF-3SG.MASC the-students-NOM except Zayd-ACC/GEN
‘The students came, except for Zayd.’

b. dʒaaʔ-ә tʰ-tˤullaab-u maa xalaa come.PERF-3SG.MASC the-students-NOM except zajd-an/(*in) Zayd-ACC/GEN
‘The students came, except for Zayd.’

In (17)a, the excepted XP ‘Zayd’ can either be accusative or genitive, but in (17)b, where it is preceded by the subjunctive marker ‘maa’, it has to be accusative. ʕadaa behaves in the same manner. ħaaʃaa differs from both in that it cannot be preceded by ‘maa’, but its exceptives have the same characteristics as (17)a.

Table (1) below summarizes the morphosyntactic properties of the types of exceptives previewed above. Recall that ɣaj and siwaa inflect for case in a manner parallel to excepted XPs in ʔilla constructions. The discussion of potential interpretations is delayed until the analysis section.

<table>
<thead>
<tr>
<th>Table (1): Case Inflections in Exceptives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Full Positive Exceptives</td>
</tr>
<tr>
<td>ʔilla</td>
</tr>
<tr>
<td>ACC</td>
</tr>
<tr>
<td>yajr/ siwaa</td>
</tr>
<tr>
<td>GEN</td>
</tr>
<tr>
<td>xalaa/ ʕadaa</td>
</tr>
<tr>
<td>-ACC</td>
</tr>
<tr>
<td>-GEN</td>
</tr>
<tr>
<td>haafaa</td>
</tr>
<tr>
<td>-ACC</td>
</tr>
<tr>
<td>-GEN</td>
</tr>
</tbody>
</table>

<p>| 2. Full Negative Exceptives               |
| - ACC                                    |
| - via agreement with the domain XP       |</p>
<table>
<thead>
<tr>
<th>GEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>----</td>
</tr>
</tbody>
</table>

<p>| 3. Non-full Exceptives                    |
| - via agreement with T or v               |</p>
<table>
<thead>
<tr>
<th>GEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>----</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Exceptives with Subjunctive ‘maa’</th>
</tr>
</thead>
<tbody>
<tr>
<td>----</td>
</tr>
<tr>
<td>-ACC</td>
</tr>
<tr>
<td>----</td>
</tr>
</tbody>
</table>

\textsuperscript{10} In chapter 5, I only discuss ʔilla, ɣajr and siwaa as judgments on other markers in terms of IS effects are unstable.
1.5 Research Questions

The overarching question that stimulates this work follows from generalization (4), and focuses on the interpretive consequences that can result from structural disruptions to the VSO order. This question is decomposed into subquestions delineated as follows.

i. How is SVO, the other main word order in the language, derived? How does it interpretively differ from VSO?

ii. What are the syntactic and interpretive properties that are associated with the discourse layer of the vP phase?

iii. How is the left periphery structured in SA? What elements could it host and what are their interpretive contributions?

iv. How are fragment answers derived in SA, and how do they relate to the structure of the left periphery?

v. What is the syntactic structure of exceptive constructions?

vi. What interpretations do exceptive constructions have?

The first question is addressed in a separate preliminary chapter (chapter 2) that establishes the underpinnings for the rest of the dissertation. The second question formulates the major catalyst for chapter (3), in which several types of movement to the edge of vP are probed; the discussion is not confined to object shift. The third and fourth questions are addressed in chapter (4), which is dedicated to the left periphery. In chapter (5), I take up the last two questions.

1.6 Background and Theoretical Assumptions

The theoretical framework adopted in this thesis is a combination of the Minimalist Program (MP), developed by Chomsky (1995, 2000, 2001) and others, and Alternative Semantics (von Stechow, 1989; Rooth, 1985, 1992; Büring, 1997, 2003, 2016). In what follows, the basic tenets of the both are elucidated, with specific concentration on the notions that pertain to the proposed analysis. Further details on the applications of some of these tenets are expanded on in the course of analysis.
MP is reviewed in §1.6.1, followed by *alternative semantics* in §1.6.2. In §1.6.3, I present a concise delineation of the basic notions of IS.

**1.6.1 The Minimalist Program (MP)**

**1.6.1.1 Major Themes**

MP is the tipping point of over sixty years of research in generative linguistics. The foundational doctrine for generativists is that humans come to this world already primed for the task of language acquisition by virtue of possessing a species-unique language faculty that, given experience, enables them to acquire language. Thus, any theory of grammar should provide an account of the structure of this faculty (Chomsky, 1993, 1995). This goal is achieved by attempts to characterize the initial state of this faculty, which is assumed to be uniform and therefore is referred to as Universal Grammar (UG), and the terminal state of a specific-linguistic system attainment. UG is thought to set bounds for languages accessible to the human mind; it is within the confines of UG that language-specific grammars evolve, where a grammar of a language is taken to be a theory of the internalized linguistic system possessed by its speakers, which enables them to process sentences in that language in terms of production and interpretation. This bifurcated perspective on language has led to the emergence of the *Principles and Parameters* model which still underlies generative research (Chomsky & Lasnik, 1993; Bošković, 2013). *Principles* stand for the characteristics that are common across languages, while *Parameters* relate to language-specific properties.

With the advent of MP, superfluous levels of representation such as Deep Structure (DS) and Surface Structure (SS), which were among linguistic levels in the Government and Binding (GB) era, are dispensed with, as derivations came to be analyzed with the minimal amount of apparatus. This minimality is accomplished by the reduction of the generative procedure to two
components: a computational system and a lexicon (Chomsky, 2000:100). The computational system is composed of two primitive operations: Merge, external or internal, and Agree. Internal merge, sometimes referred to as Move, comprises two suboperations, known as Copy and Remerge. This composite character of internal merge led to the emergence of the Copy Theory of Movement, whose crux is that when a constituent moves, what it leaves behind is not a trace but rather a full-fledged but unpronounced copy (Chomsky, 1993). Chomsky (2012:3) argues that Copy and Remerge are not discrete operations; they are two components of internal merge. Internal merge results in the formation of chains, which are then subject to the Chain Reduction via deletion of all links in a chain except for one, usually the higher (Nunes, 1995). Chain Reduction is motivated for the purposes of linearization.

Movement (internal merge) is standardly split into A and Ā-movement. Several works have emerged over the years whose objective was to provide a systematic characterization of how the two types are distinguished (e.g., Chomsky, 1981, 1995; Mahajan, 1990, Déprez, 1990; Miyagawa, 2010). Although many characteristics have been identified, drawn mainly from the behavior movement shows in relation to reconstruction, binding, weak crossover effects (WCO) and parasitic gaps licensing, the major distinction has been framed in terms of syntactic positions, in which A-movement is associated with the positions of complements and specifiers of lexical categories and the functional categories that project directly from them, whereas Ā-movement is associated with functional categories and therefore appear, among other positions, in SpecCP, and as adjunctions to IP11.

This dichotomy is reformulated under the phase theory with the outcome that Ā-positions are associated to the specifiers of phase heads (i.e., C and v) whereas A-positions are associated

---

11 This positional distinction extends to external merge. Constituents that are directly merged in a non-A position are said to be in Ā positions.
with constituents that relate to the heads of phasal complements. However, this standard view is challenged by recent research (e.g., van Urk & Richards, 2015; van Urk, 2015; Georgi, 2014), which turns up evidence that the two types of movement are not as discrete as formerly thought, and that some displacement instances display properties of both. Consequently, van Urk (2015:24) reduces to the difference between the two to the kind of features that drive them. Movement instances driven by features such as [Wh] and [Top] are Ā, whereas those driven by φ-features are A-movement.

As for the question of how the computational system operates, a sentence derivation starts out with a selection of lexical items (LIs), which are then assembled binarily by the computational system to form hierarchical expressions (Chomsky, 2015:5). These expressions are sound-meaning combinations that interface with, provide instructions to and are constrained by the two external systems: the articulatory-perceptual system (Phonetic Form, PF) and the conceptual-intentional level (Logical Form, LF).

*Agree*, on the other hand, is an operation under which agreement relations are established. It was originally developed in Chomsky (2000) but it has undergone several reconceptualizations thereafter (Baker, 2003, 2008; Zeijlstra, 2008; Bjorkman & Zeijlstra, 2014; Preminger, 2014, a.o.). The common denominator across the various incarnations of *Agree* is that it involves two syntactic objects: a probe and a goal. The probe is usually a head, H, that lacks a specification for some feature F, whereas the goal is an XP that appears in the local domain of H and has F as a lexically specified feature. The core idea of *Agree* is that the probe receives a value for F that corresponds with its value on XP. *Agree* in this sense incorporates three steps: i) the probe identifies a local goal, ii) it then enters into an *Agree* relation with that goal, and iii) eventually F on the probe gets the same value it has on the goal (valuation).
In *Problems of Projection*, commonly referred to as PoP, Chomsky (2013, 2015) posits a third primitive operation, the labeling algorithm, which he assumes to be responsible for giving labels to the syntactic objects that result from derivations. Further details on the workings of this operation are held in abeyance until the analysis section when it is invoked to account for some phenomena.

### 1.6.1.2 Phases and Feature Inheritance

Among the central development MP witnessed since its inception is the assumption that a sentence derivation proceeds in ‘building blocks’ or ‘incremental chunks’, called *phases*, which are transferred cyclically to the interface levels by an operation termed *Transfer* or *Spellout* (Chomsky, 2001, 2005, 2008). At first, *spellout* was assumed to apply at a single point in the syntactic derivation, but a number of other works that laid out the foundations for the phase theory (e.g., Uriagereka, 1999; Epstein, 1999; Epstein et al., 1998; Chomsky 2000, 2001) argue that it applies multiply, entailing that the syntactic computation is accessible to the interfaces at various points while the derivation is still unfolding; it is these transfer points that are identified as *phases*.

Even though the array of syntactic objects that form phases is still subject to research and may show parametric variation, Chomsky (2001:12) points out that phases are “propositional” in nature, and therefore are most likely confined to the verbal layer (*vP*), which is the domain for argument structure, and the complementizer layer (CP) in which force is encoded. A phase is typically split into a domain and an edge; the domain corresponds to the complement of the phase head, whereas the edge corresponds to its specifiers (Chomsky, 2001, 2004; Rackowski & Richards, 2005; Gallego & Uriagereka, 2007; Gallego, 2010, 2012).

This set-up ushers in a new perspective on issues such as subjacency, cyclic movement and the interspersion of external and internal merge. For instance, cyclic movement is now attributed
to the *Phase Impenetrability condition* (Chomsky, 2000, 2004) which states that only the head of a phase and its edge are accessible to further operations, and consequently if a constituent is to move to a higher phase, it should be present at the edge of its respective phase by the time its domain is spelled out.

Soon after the introduction of the phase theory, Chomsky (2005, 2008) argues that phase heads are the triggers of syntactic computations as they are the locus of grammatical features which set derivations in motion. The tense head on its own lacks the necessary qualifications to act as a probe. Features are inherited by the heads of phase complements in an operation referred to as *feature inheritance* (FI). FI is empirically supported by the observation that any operation beyond initial merge takes place within phases, substantiating the view that the elements triggering these operations are merged on phase heads, $\varphi$-features being one such elements (Miyagawa, 2010:16)$^{12}$. Chomsky (2008:143) cites that lack of agreement in exceptional cases marking structures (ECM) as evidence for the argument that $\varphi$-features originate on C. Below are illustrative examples.

(18) a. John believes Mary to be honest.
   b. John believes Mary and Sue to be honest.

The infinitival complement in (18) does not show agreement variation on the verb ‘be’ despite the fact that the subject is singular in (18)a and plural in (18)b. Chomsky deduces two conclusions from this structure. First, these complements are TPs, i.e., they are complementizerless. Second, the absence of agreement in these constructions is evidence that $\varphi$-features originate on C. Further

\footnote{\textit{Phi} is a cover term for person, number and gender features, and some scholars extend it to include animacy and definiteness or specificity (Dikken, 2011:857). In this work, I use it the same way it is used in the literature on Arabic to refer to person, number and gender, although I assume later that number is a separate feature. The subgrouping of these features might be parametric as Baker (1985, 2010, 2011) reports that some languages may show agreement in number and gender but not in person.}
empirical evidence comes from languages where agreement inflections appear on C. Below are examples from West Flemish taken from Carstens (2003:393)\textsuperscript{13}.

(19) a. kpeinzen \textit{dan-k} (ik) morgen goan
I-think that-I (I) tomorrow go
‘I think I will go tomorrow.’

b. kpeinzen \textit{Da-j} (gie) morgen goan
I-think that-you (you) tomorrow go
‘I think that you will go tomorrow.’

c. kvinden \textit{dan} die boeken te diere zyn
I-find that-PL the books too expensive are
‘I find those books too expensive.’

As can be observed in (19), the complementizer agrees with the embedded subject in φ-features, an observation that gives more currency to the argument that these features originate on C.

In his treatment of agreement in discourse configurational languages (e.g., Finnish, Japanese), Miyagawa (2010) extends Chomsky’s (2005, 2008) feature inheritance approach to account for movement to clause-initial positions that takes place for discursive purposes. He argues that discourse is represented by formal features that are valued in the course of derivation the same way φ-features are valued. He calls this proposal \textit{Strong Uniformity}, (20)b, reflecting a stronger version of Chomsky’s (2001) \textit{Uniformity Principle} given in (20)a (cf. Rizzi, 2006:102).

(20) a. \textit{Uniformity Principle} (Chomsky, 2001:2)
In the absence of compelling evidence to the contrary, assume languages to be uniform, with varieties restricted to easily detectable properties of utterances.

b. \textit{Strong Uniformity} (Miyagawa, 2010:12)
All languages share the same set of grammatical features, and every language overtly manifests these features.

Miyagawa maintains that discourse features, which he symbolizes as δ-features, originate on C and are then inherited by T the same way φ-features are inherited by T in agreement languages.

\textsuperscript{13} The glossing is maintained as it is in Carstens. I follow this procedure throughout this work for examples quoted from languages other than SA.
and are equally responsible for A-movement\textsuperscript{14}. Below is Miyagawa’s scheme adapted from Miyagawa (2017:4).

(21) a. Agreement-based languages  
\[
\begin{align*}
\text{CP} & \quad \text{C'} \\
\text{C} & \quad \text{TP} \\
\delta\text{-features} & \quad \varphi\text{-features} \\
& \quad \uparrow
\end{align*}
\]

b. Discourse-configurational languages  
\[
\begin{align*}
\text{CP} & \quad \text{C'} \\
\text{C} & \quad \text{TP} \\
\varphi\text{-features} & \quad \delta\text{-features} \\
& \quad \uparrow
\end{align*}
\]

Building on Miyagawa (2010), Jiénez-Fernández and Spyropoulos (2013) go a step further and argue for a strict parallelism between C-T and ν-V, suggesting that ν also enters derivations with both agreement and discourse features what are then passed on to V.

However, Chomsky et al. (2017, 2019:10ff), in their critical evaluation of the basic primitives of UG, point out that discourse-related features are \textit{ad hoc} and unnatural as they are not inherent to lexical items, i.e., unlike φ-features and categorial properties, no lexical item can plausibly be claimed to have a topic or focus feature from the lexicon (see Fanselow 2006 and Horvath 2010 for similar views). With that said, these features represent a stark violation of the \textit{Inclusiveness Condition}, which precludes the introduction of extraneous objects, such as traces, X-bar levels and other labels, during a sentence derivation\textsuperscript{15}.

Despite this criticism, in the analysis to come I follow Miyagawa (2010) in his feature inheritance-based analysis of discourse configurations, but assume that only focus is encoded as a

\textsuperscript{14} He argues that discourse-configurational languages also have φ-features although agreement in such features may not be reflected by morphology.

\textsuperscript{15} This view extends to cartographic approaches to discourse which heavily depend on the presence of discourse-related features (e.g., Cinque, 1999; Rizzi, 1997, 2004, 2016). Cartography is rejected outright by Chomsky et al. (2017:27) on the grounds that the cascades of projections postulated for various areas of clause structure cannot possibly be learned, and there is no conceivable evidence that a child could rely on to learn these templates from experience.
morphosyntactic feature in the syntax. This assumption is based on general as well as language-specific considerations. Focus can, to a large extent, be regarded along with [Wh] as two sides of the same coin, and the presence of the latter as a formal feature is incontrovertible since there exist items in the lexicon that have in their inherent meaning the sense of expressing questions. Moreover, SA has several morphemes that are used for emphasis, which translates into focus (examples will be provided later on). This route accords with Baker’s (2010:346) argument that interesting cross-linguistic subregularities are missed by simply assuming complete syntactic uniformity even in the face of significant morphological diversity.

### 1.6.1.3 How Does Word Order Fit?

A clarification is in order at this juncture. Generative linguists throughout the history of the tradition have always been committed to the notion of *structure dependence* as a curious property of syntactic operations (e.g., Chomsky, 1972; Crain and Nakayama, 1987; Rizzi, 2013)\(^\text{16}\), i.e., the various instantiations of displacement, binding relations and ellipsis, among others, are all based on structure and linear order has nothing to bear on them\(^\text{17}\). A classic example in support of this property is auxiliary movement in yes/no questions in English as in (22) below, adapted from Chomsky et al. (2017:5).

\[
\begin{align*}
(22) \quad & a. \quad \text{The tall man [who is from Italy] is happy.} \\
& b. \quad \text{Is the tall man [who is from Italy] __ happy?} \\
& c. \quad *\text{Is the tall man [who__ from Italy] is happy?}
\end{align*}
\]

\(^{16}\) All the compositional rules delineated in the semantic system proposed by Heim and Kratzer (1998) are structure-dependent too.

\(^{17}\) Bruening (2014) takes issue with the complete neglect of word order and argues that, while structure dependence has ample evidence, there still exist some applications of syntactic operations for which structure dependence provides no explanation whereas word order does. His data is drawn, for the most part, from binding relations. However, this debate is put to the side for our purposes here in favor of the mainstream perspective that espouses structure dependence.
Approaches that adhere to the view that linear order is what determines the domain of syntactic operations would have difficulty explaining why (22)c is ungrammatical. For instance, a tentative hypothesis that the rightmost auxiliary is what undergoes movement can easily be counterexemplified. Consider (23).

(23) a. John is the man who is from Italy.
    b. Is John __ the man [who is from Italy]?
    c. *Is John is the man [who __ from Italy]?

As can be seen, an explanation that derives from linear order would compel inconsistent statements to characterize the facts in (22) and (23). Worse still, even if inconsistency does not arise within a language, such accounts are usually highly parochial that they are bound to miss out innumerable cross-linguistic commonalities that are by now so evident that they cannot be glossed over. In other words, they have no potential for generality. That being the case, I do not intend to take an opposing position to structure dependence as a well-established property of language, but lest the discussion of word order would spark off the question of how it rhymes with a framework that, as far as syntactic displacement is concerned, builds nothing on linearity, a word to brush off any possible confusion is imperative.

    Word order is not disconnected from structure but rather is argued to follow from it as a reflection of c-command relations\textsuperscript{18} (e.g., Kayne, 1994, 2010; Fox & Pesetsky, 2005). However, the derivation of all the syntactic permutations that are investigated here is structure-dependent, and their linear order is only relevant insofar as it reflects the pragmatic notions of foregrounding and backgrounding, which are intertwined with the notions of focusing and topicalization. Any movement that takes place for pure morphophonemic reasons at the PF branch is not considered. So, word order is not deemed as a factor defining domains for the application of syntactic

\textsuperscript{18} A category $\alpha$ c-commands $\beta$ if $\alpha$ does not dominate $\beta$ and every $\gamma$ that dominates $\alpha$ dominates $\beta$ (Chomsky, 2015:31).
operations, but rather as a conduit through which the speaker-hearer “knowledge base” that constitutes the background for sentence interpretation can be channeled and unraveled. Word order has been a recurrent theme in the discussion of discourse-configurational languages, as it is one of the demarcating lines that distinguish this class of languages.

1.6.2 Alternative Semantics

Alternative semantics is a framework that is intended to characterize the semantics of a number of linguistic phenomena, including focus, questions and implicature (Rooth, 2016:19). The basic concept behind alternatives is that the production and interpretation of speech involves in addition to what is uttered in a given context what could have also been uttered. In other words, what the speaker chooses not to say plays a significant role in the determination of the felicity of what he says (Fālāus, 2015:1). On this view, the framework is as much pertinent to pragmatics as it is to semantics.

Rooth (1985, 1992) argues that focus on a constituent indicates the relevance of a set of propositions obtained by introducing alternatives in the position of that constituent. These alternatives, though relevant, are excluded pragmatically as a function of focus. Based on this conceptualization, Rooth proposes that the semantic component of the grammar should have two abstract concepts that stand for two kinds of semantic values, viz., ordinary semantic value and focus semantic value, notationally represented as $[[\alpha]]^O$ and $[[\alpha]]^F$, respectively. To illustrate both, let us consider the two examples below.

(24) a. $[\text{Mary}]_F$ likes Sue.
   b. Mary likes $[\text{Sue}]_F$.

(24)a and (24)b have the same truth conditions as they are both true iff Mary likes Sue. This reflects their ordinary semantic value. As for their focus semantic values, they diverge in terms of the
position where alternatives are introduced. Below is an illustration of this divergence (Rooth, 1992:76).

(25) a. \[ [\text{Mary}]_F \text{ likes Sue}]^F = \{ \text{like} (x, \text{Sue}) \mid x \in E \} \\
    b. \[ [\text{Mary likes Sue}]_F \] = \{ \text{like} (\text{Mary}, y) \mid y \in E \}

(25)a illustrates that (24)a conjures up alternatives of the form ‘x likes Sue’, whereas (25)b illustrates that (24)b conjures up alternatives of the form ‘Mary likes y’, with x and y ranging over a domain of individuals relevant in the context of either sentence. On this view, the focus semantic value could be conceived of as the set of answers to a question that targets the position of focus. For example, the alternative set in (25)a can be viewed as answers to the question ‘who likes sue?’, and in (25)b as answers to ‘who does Mary like?’.

Büring (1997, 2003, 2016) shores up Rooth’s two-dimensional semantics by proposing a third semantic value, designated as topic semantic value (usually contrastive), represented as \([\alpha]^{\text{CT}}\). The contrastive topic value is basically a set of sets of propositions, each of which represents the set of answers to a question under discussion (QUD), which need not be explicit. In a sense, this implies that the topic semantic value can be regarded as inducing alternative questions. This is reflected in the observation that for a contrastive topic use to be felicitous, it typically co-occurs with an instance of focus on another constituent. Below are examples from Büring (2016:2f) to show how the distinctions between the focus semantic value and the contrastive topic semantic value is fleshed out.

(26) \[ \text{She}_{\text{CT}} \text{ wants to kick [me]}_F \text{ out.} \]

---

19 Constant (2012, 2014) argues, based on data on contrastive topics in questions, that the introduction of a topic value to the semantic component as a third semantic value is superfluous. He proposes a Topic Abstraction operator presented within a conservative semantics that requires nothing beyond the focus value to derive topic alternatives. A common dominator this work shares with Constant’s is that I eventually do not postulate the existence of a formal feature for topic either (as will be shown in chapter 2). The abbreviation CT is used for expository purposes.
Büring points out that three semantic values can be distinguished for (26). The ordinary semantic value denotes the truth conditions of the sentence, namely that it is true iff whoever individual, in the context of the utterance, is picked out by the pronoun ‘she’ wants to kick out the speaker. The second semantic value is the focus semantic value, which simply indicates the relevance of other propositions of the form ‘she wants to kick x out’, which are excluded pragmatically. The third semantic value is the topic semantic value which is represented in (27) below.

(27) a. \( \text{[[She]}_{CT}\text{ wants to kick [me]}_{F}\text{ out}]^{CT+F} = \{ \{\text{she wants to kick me out, she wants to kick John out, she wants to kick Mary out, ...}\}, \{\text{Sue wants to kick me out, Sue wants to kick John out, Sue wants to kick Mary out...}\}, \ldots\} \)

b. \( \text{[[She]}_{CT}\text{ wants to kick [me]}_{F}\text{ out}]^{CT+F} = \{\text{Who does she want to kick out, Who does Sue want to kick out, ...}\} \)

In (27)a, the contrastive topic value of (26) is represented as a set of sets of propositions, each of which can be reconceptualized as the set of possible answers to an explicit or implicit QUD, as illustrated in (27)b. The first subset in (27)a contains possible answers to the first question in the set in (27)b, and the second subset in (27)a are possible answers to the second question in (27)b, and the list can go on. The constituent questioned in each is the element in focus in (26), and every question has a substitution in the CT position; in the first, the contrasted topic is ‘she’, and in the second, it is ‘Sue’. So, the two questions can be re-expressed in the overarching question: ‘who do \textbf{they} want to kick out?’, with ‘they’ referring to a common ground set of individuals of which ‘She’ and ‘Sue’ are elements. To sum up, the contribution of a contrastive topic is that it gives rise to a set of alternative questions labeled in the literature as a family of questions or a question strategy (Roberts, 1996; Büring, 1997, 2003; Hagstrom, 1998; Krifka, 2001, 2011; Constant, 2012, 2014).

\[ I \text{ follow Büring (2016) in his use of the notation } [[\alpha]]^{CT+F} \text{ to denote contrastive topics since they are typically accompanied by focus but I depart from him in that I do not assume that topics are represented by a formal feature in the syntax in SA.} \]
Interpretive consequences brought about by syntactic displacement that disrupts the VSO order are predominantly accounted for in terms of the three reviewed semantic values identified by Rooth (1992) and Büring (2016). In the next section, I turn to a presentation of the major concepts that are protenant to our purposes.

1.6.3 Basic Notions of IS

The landscape of IS research is predominated by the tendency to single out one aspect or another of IS and examine it in a certain language or set of languages (e.g., Kuno, 1972; Kuroda, 1972; Reinhart, 1981; Rooth, 1992; Bianchi & Fracarelli, 2007; Neeleman et al., 2009), but there have been some works that took stock of its basic notions across languages, attempting to reduce inflation in terminologies that roughly designate the same phenomena (e.g., Chafe, 1976; Büring, 1997, 2003; Krifka, 2008; Partee, 1991). Chafe (1976) identifies a constellation of notions, including givenness, contrastiveness, definiteness, focus and a set of language-particular flavors of topics. Krifka (2008) reviews Chafe’s work and categorizes these concepts based on whether they relate to Common Ground (CG) content or management. A full-fledged discussion of these notions is beyond the scope of this work, and therefore I adopt Büring’s (1997) tripartition of IS into focus, background and topic. This position is not taken as a matter of convenience but rather for the assumption that all other notions fall out from these three (as will be shown throughout this work).

The topic and focus semantic values reviewed above may be sufficient to illustrate what topic and focus mean, but in what follows I offer an abridged review of both concepts as well as the notion of CG, starting with the latter which is of practical relevance to the way contexts are modelled later on in the analysis sections.
1.6.3.1 Common Ground

A conversation is usually played out against the backdrop of information held by participants. Stalnaker (2002:701) points out that this information or knowledge is conceived of as speakers’ presuppositions which are susceptible to modification in the course of a conversation. Büring (1997:33) gives an intensional definition for CG. To conceptualize this definition, suppose a conversation is established between two participants, Ana and Bert. Each participant enters the conversation with some presupposed beliefs, which can be modelled as a set of propositions and subsequently the set of worlds that result from the intersection of these propositions (\(\cap MB \text{ or } \cap SB\), with MB and SB standing for Ana’s belief set and Bert’s belief set, respectively). In Büring’s perspective, CG represents a set of worlds each of which either Ana or Bert, or both, consider(s) possible, i.e., it is the union of Ana’s belief worlds and Bert’s belief worlds (\((\cap MB) \cup (\cap SB)\))\(^{21}\). It follows from this conception that it is the differences between speakers’ belief sets that allow for CG modifications. Modifications come about in the form of presupposition accommodation and assertions (krifka, 2008:245). Below are illustrative examples adapted from Krifka (2008:245f).

(28) a. I have a cat, and I had to bring my cat to the vet.
   b. I had to bring my cat to the vet.
   c. #I had to bring my cat to the vet, and I have a cat.

(28)a is an assertion consisting of two clauses, the first of which introduces the information that the speaker has a cat, a proposition that conforms with the presupposition of the second clause. In

---

\(^{21}\) Some researchers (e.g., Murray, 2014; Anderbois, 2014; Faller, 2019) define the CG to be the set of worlds that results from the intersection of the sets of conversers’ presuppositions. This contrast with Büring’s conception might have its roots in Stalnaker’ (1978) notion of context set. Stalnaker points out that the every conservation participant has own context set, which consists of his presuppositions. If the presuppositions of all participants are the same, the context is defined as non-defective, and if their presuppositions are inconsistent, the context is defined as defective. Defining the CG as the intersection of conversers’ presuppositions seems to restrict contexts to non-defective ones, while Büring’s definition allow for defective contexts.
(28)b, the presupposition is not explicitly introduced but rather has to be accommodated implicitly by the addressee. The former epitomizes the modification of CG via assertions and the latter via assertion as well as presupposition accommodation. (28)c, on the other hand, is odd since by the time the second clause introduces the information that the speaker has a cat, this information is already present in the CG by accommodation as a presupposition for the first clause; if the truth of the first clause comes across uncontested by the addressee, its presupposition must be accommodated.

Based on the above conceptualization of conversations as modifications to CG, Büring (1997) and Krifka (2008) distinguish between two types of CG: the input CG and the output CG. The input CG is the set of presuppositions shared by speakers, and the output CG is the input CG after the addition of an assertion and its presupposition (if it has any). So, in a context where *John threw the baseball* is uttered, the output CG would throw out from the input CG all the worlds in which this proposition is false. This can be formalized as follows, with CG’ standing for the output CG.

\[ \text{CG}' = \text{CG} \cap P \land P = \text{John threw the baseball} \]

(29) means that the newly formed CG is the result of the intersection between the propositions in the input CG with the asserted proposition.

1.6.3.2 Topic

Giving precise definitions for IS notions is not an easy task due in part to different authors sometimes using the same notion to designate different phenomena, and in part to them following different authors in the choice of terminology even when they are not necessarily in disagreement as to what phenomena they designate. As far as topichood is concerned, definitions vary based on which criteria are considered conclusive in signaling a topic. Jackendoff (1972), Gundel (1974)
and Chomsky (1977) define topics based on their syntactic and phonetic characteristics. Others abstract away from linguistic cues and provide a psychological definition posited in terms of speakers’ intentions and interests (e.g., Schachter, 1973; Garcia, 1975); a topic is what represents the center or focus of a speaker’s intention. What is of concern here is the linguistic characteristics of topics.

A notable syntactic attribute of topics is their tendency to appear sentence-initially. This is reflected in the strong preference in discourse to associate topicality with the grammatical subject or any expression that appears in its position. Below are examples from Reinhart (1981:62).

(30) a. Felix goes out with Rosa
   b. Rosa goes out with Felix.

Although the two sentences in (30) convey the same proposition, the proposition is understood to be about *Felix* in (30)a and about *Rosa* in (30)b. This led to the emergence of the binary distinction between ‘topic’ and ‘comment’ (Gundel, 1974, Reinhart, 1981; Partee, 1991; Rizzi, 1997; Krifka, 2008). This distinction affords the simplest way to define ‘topic’; Partee (1991) defines it as the part of a sentence that corresponds to ‘old’ information which invokes a certain referent in the mind of the addressee and a ‘comment’ as the ‘new’ information provided about that referent

Two approaches that conform with this general ‘aboutness’ nature of topics have emerged. The first, call it the *entity-based approach*, is embodied in Reinhart’s (1981) proposal in which she conceptualizes topics as entries in the *context set* under which the propositions that remain uncontested when they come up in the course of conversation are listed. In other words, topics are hooks or anchors for these propositions. She presents an assortment of tests to detect topics, including; i) liability to be introduced by the expression ‘as for’, ii) embeddability under ‘they said

---

22 Reinhart (1981) takes issue with the notion of ‘old’ information and cites data where the designation ‘old’ is true of the comment and ‘new’ is true of the topic. However, her ‘new’ topics will be shown in chapter (4) to be an instance of focus the first time they figure in discourse, which saves the general hunch of topics as ‘old’ information.
about’, iii) referentiality and iv) their conveyance of existential presuppositions. The second approach, call it the question-based approach, is put forward in Büring (1997, et seq.), in which a topic is viewed as the pivot of a ‘what about’ question, which could be drawn from a question strategy, i.e., a set of questions (see §1.6.2 above).

The ‘aboutness’ notion to which both approaches relate might look as an oversimplification of what topics are because it does not provide a deterministic measure to identify them; a sentence in principle could be about any of the entities denoted by its referential parts. Nevertheless, it supplies the necessary ingredients for our analysis in this work in which I show that topics are associated with certain positions in the structure.

1.6.3.3 Focus

Similar to topic, the notion of focus has been defined in different ways, but the most prominent of which is in terms of the duality of focus and presupposition. Jackendoff (1972:230) defines ‘a sentence focus’ as the part that denotes information which is assumed by the speaker not to be shared by the hearer. Presupposition, on the other hand, is taken to be the part that denotes shared information. As for how focus is marked, Chomsky (1971) takes it to be the element that receives primary stress in the sentence. However, stress is not the only way to mark focus, as many languages require or at least allow focused constituents to move to designated positions in the clause (see Rizzi (1997) for an extensive discussion). In a more technical semantic sense, the contribution of focus is that it provides a resolution for a variable within a presuppositional frame (i.e., a function). Below is the representation proposed by Jackendoff (1972:246).

(31) \text{Focus} \in \lambda x. \text{Presupp}_s(x)

(31), in Jackendoff’s terms, means that the focused constituent is a member of the presuppositional set, i.e., it satisfies the presuppositional function. So, in a sentence like ‘JOHN wrote a letter’,
focus on ‘John’ indicates that it satisfies the presuppositional function ‘\( \lambda x. x \text{ wrote a letter} \)’. This view is consistent with the Roothian alternative semantics delineated above.

It is in terms of this perspective to focus that the analysis provided for constructions with focus is presented. It is assumed to provide a value for a variable existing within a presupposition function.

1.7 Outline of the Thesis

This thesis is organized as follows. Chapter 2 provides a comprehensive examination of the differences between SVO and VSO, and to a lesser extent other clauses. Accordingly, I propose that the preverbal DP in SVO is either a topic base-generated in a left-peripheral position or a focus that arrives to its surface position by movement. I also propose in this chapter a feature-inheritance account of the left periphery in SA whereby [Q] and [Focus] are inherited by a head lower than C, namely T. In chapter 3, I turn to the first field in the structure which can host IS positions, namely vP edge. The account furnished there shows that vP is topped with a discourse layer that, similar to the left periphery, can host topics and foci. Instead of a feature-inheritance account of the discourse layer at the vP edge, I propose that this midfield discourse positions are the result of features being associated with the lower copy of \( v \), which usually vacates vP to a higher projection (more in line with Gallego’s 2014 account of feature inheritance in terms of the copy theory of movement). Chapter 4 is devoted to a thorough examination of the left periphery given the VSO-SVO distinction drawn in chapter . I investigate the contributions of topics, CLLDs and focus and how they interact with one another in structuring discourse, providing evidence for readings that have formerly been unnoticed. In the course of discussion, I put forward a non-movement analysis of floating quantifiers in SA, which captures the morphological and distributional properties of their associate DPs. I allocate a section for constituent questions and the structurally variant answers
they can receive; how these answers are derived and how different they are in terms of their semantics and discourse effects. Chapter 5 examines exceptive constructions and provides an account of how they contribute in the organization of the informational content of discourse. The argument put forward is that they SA has connected DP-level exceptives as well as free CP-level exceptive. Chapter 6 summarizes the conclusions of the thesis and provides guidelines as to what related issues are still in need for further investigation.
Chapter 2

2 CLAUSE STRUCTURE IN SA: VSO VS. SVO

This chapter is intended to present an account of the differences between VSO and SVO clauses with the purpose of gaining more insight into the structure of verbal clauses in general in SA. After reviewing the debate on the status of both structures and investigating their behavior with regard to short and long-distance extractions in §2.1, 2.2, and 2.3, I present my analysis in §2.3.3, in which I propose that preverbal subject DPs can either be topics base-generated in SpecCP or foci whose position is derived by movement to SpecTP. This account is embedded in a feature-inheritance approach to the left periphery mostly in line with Miyagawa (2010, 2017). I then turn to some ramifications of the proposal which pertain to φ-agreement in the context of focused subjects, to the complementizer position and to long-distance extractions of subjects. I address these issues in §§ 2.5, 2.6 and 2.7 respectively.

2.1 The Debate

The inspiration for this study is the generalization in (4), namely that VSO is the basic and discourse neutral structure in SA, and that any structural disruption to it is concomitant with interpretive consequences. Despite the fact that word order variation has been pulled into the discussion of a myriad of issues in the language, the debate on which order is basic persists and even though there is an overwhelming tendency to regard VSO as basic, accounts that assume the contrary still exist (see Bakir (1979) for a thorough review up to that point in time and Aoun et al. (2010) for a recent discussion). Haddad and Wurmbrand (2016), in their investigation of agreement patterns in raising constructions in the context of appropinquation verbs in SA, reduce the difference between SV and VS orders to the mechanism by which φ-valuation takes place, which implies that the two structures are basically the same interpretively. So, for the most part arguments lack uniform
syntactic and semantic substantiation, i.e., what might be considered as basic from a syntactic perspective might be otherwise from a semantic perspective in that it has connotations beyond its truth conditional meaning.

The question of which order is basic has oftentimes been animated by pursuit of accounts for the patterns of φ-features agreement in SVO and VSO, where full agreement is attested only in the former as demonstrated in (32) below23 (Mohammad, 1989, 1990; Fassi Fehri, 1993; Ou-halla, 1994, 1997; Aoun et al., 1994, 2010; Soltan, 2007).

(32) a. ʔal-fatajaat-u qaraʔ-na d-dars-a
      the-girls-NOM read.PERF-3PL.FEM the-lesson-ACC
      ‘The girls read the lesson.’

b. qaraʔa-t l-fatajaat-u d-dars-a
       read.PERF-3SG.FEM the-girls-NOM the-lesson-ACC
       ‘The girls read the lesson.’

Different accounts have emerged but they could generally be subsumed under three major perspectives. The proposal put forward in the first is that VSO is derived from SVO. Both start out with the subject in its VP-internal position, SpecVp, following the predicate-internal subject hypothesis pioneered by a number of authors (e.g., Kitagawa, 1986; Kuroda, 1988; Speas, 1986). V then rolls up to T and the subject to SpecTP. In both cases, agreement is established in a spec-head configuration, deriving full agreement in both. However, in VSO, V raises further to a higher functional head to check some formal feature, and the held hypothesis is that this step leads to the morphological quirk of agreement loss (Aoun et al., 1994). This analysis is schematized in (33).

(33) a. [TP SUB… T+V… [VP SUB… V…]]] SVO

b. [FP…F+ T+V [TP SUB… T+V… [VP SUB… V… ]]]] VSO

23 Recall that the notion of a basic structure throughout this work is reconceptualized in the minimalist sense of the one that has the most economical derivational path.
The second approach endorses the opposite route of argumentation, namely that SVO is derived from VSO, the difference being that, in SVO, T is endowed with strong features that attracts the subject to its specifier, whereas, in VSO, T does not have such features and hence the subject remains in SpecvP. Under this approach, agreement in VSO is established between T and a null expletive in SpecTP, and thus person and number features on T default to third person singular but gender gets its value from the thematic subject (Mohammad, 2000; van Gelderen, 1996). Below is the schematization of this account.

(34) a. \([TP \text{SUB... } T+V... [VP \text{SUB... } \nu...]]\] SVO
b. \([TP \text{EXP... } T+V... [VP \text{SUB... } \nu...]]\] VSO

The third approach is that the two orders instantiate syntactically and interpretively different structures, and therefore neither is derived from the other (Soltan, 2007). The grounds he has for this argument can be summarized in four aspects: i) preverbal subject DPs have to be referential, ii) they require resumption in the context of deontic modals whose experiencer arguments are PPs and in adjunct and coordinate structure islands, iii) their case can be changed by lexical case assigners such as complementizers, and finally iv) the observation that idiomatic readings of sentences cannot be maintained in SVO clauses. Accordingly, Soltan argues that the preverbal DP in SVO is base-generated in SpecTP, which he considers as a topic position, and it binds a null pronoun in the thematic domain. Variation in agreement patterns is attributed then to a difference in the featural content of the tense head in both as shown in (35). He considers gender as a separate feature represented as CLASS, while φ-features are confined to person and number. The argument he proposes then is that defective agreement in VSO is the outcome of a last resort default valuation at PF due to the failure of syntax to license person and number.

(35) a. \([TP \text{SUBi... } T_{\text{EPP/φ/CLASS}} \ldots [\nu^p \text{proi... } v^k+V... [VP... \nu...]]]\] SVO
This diversity has had ramifications on which order is basic, and it is against this background that the next section presents arguments for the basicness and neutrality of VSO.

### 2.2 Discourse Neutrality of VSO

With the debate delineated above in mind, I side with Soltan (2007) and argue that the two structures are different syntactically and interpretively. I argue that VSO is the basic and discourse-neutral order\(^\text{24}\). Discourse neutrality means that it is the one with the least contextual restrictions on its use. Evidence for its neutrality is derived from semantic and pragmatic considerations. First, among the diagnostics used for the neutrality of a given structure is its soundness as an answer to the general state of affairs question ‘what happened’ (Büring, 1997:58f) or ‘What is new’ (van Urk, 2015:95). Below is the example Büring provides from German.

\[
\begin{align*}
\text{(36) a. } & \text{ What happened?} \\
\text{b. } & \text{[PETER hat dem MÄCHEN das BUCH gegeben.]F}
\end{align*}
\]

\[
\begin{align*}
& \text{peter has the girl the book given} \\
& \text{‘Peter gave the girl the book.’}
\end{align*}
\]

Büring uses this diagnostic to argue that the prosody in (36) reflects the normal distribution of stress across an utterance and thus does not alter the neutrality of the structure, hence its felicity as an answer with the entire proposition being in focus. The neutrality of a structure indicates that it is composed such that its constituents have equal footings in terms of their contributions to the overall message it conveys; none is focused, topicalized or marked as given. Applying this diagnostic to SA, one finds that VSO is the only structure that felicitously answers the question ‘what happened’. Consider (37) below (cf. Bakir, 1979:13).

\[
\begin{align*}
\text{(37) a. } & \text{ maạḍaa hadaθ-a} \\
& \text{what happen.PERF-3SG.MASC}
\end{align*}
\]

\(^{24}\) Its basicness in the adopted sense is established in §1.3 when a derivational distinction is drawn between VSO and SVO.
‘What happened?’

b. ʔiʃtara-ʕalijj-kitbaa VSO
   buy.PERF-3SG.MASC Ali-NOM book-ACC
   ‘Ali bought a book.’

c. #ʕalijj-ʔiʃtara-kitbaa SVO
   Ali-NOM buy.PERF-3SG.MASC book-ACC
   ‘As for Ali, he bought a book.’

d. #ʕalijj-kitbaa-ʔiʃtara SOV
   Ali-NOM book-ACC buy.PERF-3SG.MASC
   ‘As for Ali, a [book] he bought.’

e. #ʔiʃtara-kitbaa-ʕalijj VOS
   buy.PERF-3SG.MASC book-ACC Ali-NOM

f. #kitbaa-ʔiʃtara-ʕalijj OVS
   book-ACC buy.PERF-3SG.MASC Ali-NOM

With the exception of (37)b, the sentences in (37) cannot serve as felicitous answers to the question in (37)a for the reason that they either have a familiar or focused constituent, or a combination of both. ‘Ali’ in (37)c is part of the common ground shared by interlocutors by virtue of being a topic (it could also be a focus as will be shown momentarily). The same is true of (37)d, but the latter has a further source of nonneutrality reflected in the object being in focus. In (37)e and (37)f, ‘a book’ is placed in focus via OS and movement to the left periphery, respectively. The inference that transpires then is that, since (37)b is the only felicitous answer, it is the only neutral one.

Another piece of evidence for the neutrality of VSO comes from interaction with the sentential negation particle ‘maa’. Ouhalla (1993) indicates that ‘maa’ is sensitive to the presence of focus and, in case of focus-fronting to the left periphery, there is an adjacency requirement that ‘maa’ immediately precede the focused constituent. I observe that when ‘maa’ negates a VSO with no focus, it functions as an ordinary sentential negation in that it asserts the negation of the whole proposition, i.e., it assumes its typical propositional logic semantics as a truth functional operator.
which flips the truth value of the proposition it takes as an argument. However, it behaves completely differently when it operates on an SVO clause. Consider the illustrative examples below.

(38) a. maa qaraʔ-a zayd-un ?al-kitaab-a
    not read.PERF-3SG.MASC Zayd-NOM the-book-ACC
    ‘Zayd didn’t read the book.’

b. maa zayd-un qaraʔ-a ?al-kitaab-a
    not Zayd-NOM read.PERF-3SG.MASC the-book-ACC
    ‘It is not Zayd that read the book.’

Although, truth conditionally, (38)b expresses the same meaning as (38)a, it has the pragmatic influence of giving rise to the presupposition that ‘somebody read the book’, but that the reader is not ‘Zayd’. In other words, the negation legitimizes the inference that the proposition holds for some other alternative from the set \{x read the book | x \in PERSON\}, which is the focus semantic value for the proposition with ‘Zayd’ in focus. This is not to say that negation in (38)b is a constituent negation; it is still a clausal negation but it is sensitive to the informational structure of the sentence which licenses the presuppositional frame ‘\(\lambda x. x \text{ read the book} \)’ (this point is discussed with more elaboration in chapter 4 where negation is conceptualized in such context as a tripartite construction in the sense of Partee (1991,1993) which builds on the semantics of quantificational adverbs proposed in Lewis (1975)). What is important for our present purposes is that since ‘maa’ negates the whole proposition in (38)a, it is evidence that none of its constituents assumes a specific discourse status.

The same conclusion is drawn from the interaction with the focus sensitive adverb *faqat* ‘only’. Ever since Jackendoff (1972), it has become well-recognized that the interpretation of words such as *even, only* and *just* is tied up with focus and presupposition. For example, focus in the context of ‘only’ is exhaustive in that the focused element is construed as the sole element that turns the presuppositional part into a true proposition. Consider the following examples from
Rooth (1992:77) in a scenario where Mary introduced Tom and Bill to Sue and there were no other introductions.

(39) a. Mary only introduced [Bill]F to Sue.
    b. Mary only introduced Bill to [Sue]F.

The focus on Bill in (39)a makes the sentence false in the context of the assumed scenario. The presuppositional frame for (39)a is ‘λy. Mary introduced y to Sue’. As Rooth expounds, ‘only’ transmits the sense that if Mary has the property of ‘introducing somebody to Sue’, then it is the property of ‘introducing Bill to Sue’, which is not the case under the given scenario since Mary also introduced Tom to Sue. (39)b, on the other hand, is true under the same scenario. It has the presuppositional frame ‘λy. Mary introduced Bill to y’; the sense conveyed in this instance is that if Mary has the property of ‘introducing Bill to somebody’, then it is the property of ‘introducing Bill to Sue’, which is obviously the case.

With truth conditional effect of ‘only’ in mind, let us subject VSO and SVO clauses in SA to this test. Substituting maa in (38)a for faqatʕ derives the meaning that among all the propositions relevant in the context of the utterance, the only one that is true is that ‘Zayd read the book’, i.e., the subject of exhaustification is the entire proposition. Conversely, substituting maa for faqatʕ in (38)b asserts that among all the contextually relevant (salient) individuals that can satisfy the presuppositional frame ‘λx. x read the book’, ‘Zayd’ is the only one that makes the proposition come out true. These observations demonstrate that, unlike the SVO structure in (38)b which is decomposed into a focused constituent and a presupposition, the VSO structure in (38)a is discourse-neutral, hence the association of faqatʕ with the entire proposition.
The neutrality of VSO is further corroborated by examining the subjects it licenses as opposed to SVO. While VSO is indiscriminate because its subject can be definite or indefinite, the subject of an SVO clause has to either be definite or specific\(^25\). Below are illustrative examples.

\[(40)\]
\[
\begin{align*}
\text{(a)} & \quad \text{ʔatˤ-tˤaalib-u qaraʔ-a ?al-kitaab-a} \\
& \quad \text{the-student-NOM read.PERF-3SG.MASC the-book-ACC} \\
& \quad \text{‘The student read the book.’} \\
\text{(b)} & \quad \text{tˤaalib-un mudʒtahid-un qaraʔ-a ?al-kitaab-a} \\
& \quad \text{student-NOM assiduous read.PERF-3SG.MASC the-book-ACC} \\
& \quad \text{‘An assiduous student read the book.’} \\
\text{(c)} & \quad \text{ʔ tˤaalib-un qaraʔ-a ?al-kitaab-a} \\
& \quad \text{student-NOM read.PERF-3SG.MASC the-book-ACC} \\
& \quad \text{‘A student read the book.’}
\end{align*}
\]

The form of the subject (40)a and (40)b shows that it has to be referential, i.e., it is associated with an existential presupposition which ensures the presence of an entity in the context set about which the assertion is made. Recall that referentiality is one of the defining topical characteristics posited in Reinhart (1981). The preverbal indefinite subject in (40)c is acceptable when there are contextual cues that give more weight to its specificness. These observations lead to the conclusion that the subject of SVO has some informational status that sets it apart from normal subjects, which further backs up the postulation that SVO is not discourse neutral. The heterogeneity of subjects in VSO, on the other hand, is more evidence for its neutrality.

As the reader might have noticed, the pieces of evidence mustered from interactions with \textit{maa} ‘not’ and \textit{faqat} ‘only’, on the one hand, and referentiality, on the other, lead us in two directions. While the former indicates that the preverbal subject functions as a focused constituent, the latter shows that it is topical in the sense of Reinhart (1981). I will return to this bifurcation shortly.

---

\(^25\) Specificity can be brought about by a constellation of mechanisms, including modification, coordination with a definite or a modified indefinite, nominalization, to name few.
and advance an argument that it can be either, i.e., a topic or a focus, and it is only through structure and context that one can discern which one is meant.

The discussion up to this point has relied on semantic and pragmatic criteria to establish the claim that, among all permutations, VSO is discourse neutral. Bakir (1979:10) argues that VSO is the unmarked word order and therefore, from a syntactic perspective, tolerates a greater range of changes in mood, tense, aspect, etc., and is more available for embedding, nominalization and other syntactic operations. This is evidenced in that, while SVO appears in embedded contexts under the complementizers ʔinna ‘verily that’ and ʔanna ‘that’, VSO appears under a broader class of complementizer-like elements such as ʔan ‘to, that’, lan ‘not.imperfective’, ʔiðan ‘in that case/then’ as well as optative ʔattaa and ʔaj, both meaning ‘in order to’ or ‘so that’; all these particles encode subjunctive mood26 (Alblushi, 2011:78ff). VSO is also the structure that can appear in jussive mood, under which conditional and imperative moods are subsumed. Jussive mood is prompted by a number of particles including lam ‘not.perfective’, lamma ‘not yet’, laa ‘don’t’ and the command-denoting particle li (Alblushi, 2011:80)27. Notwithstanding the illicitness of VSO under ʔinna and ʔanna, it still has a wider distribution insofar as mood is concerned. Moreover, as will be shown later, unlike SVO, VSO has no restrictions on wh and focus movement.

In addition to the contrasts above, one more reason for the assumption that VSO is neutral is that in ambiguous contexts, where the subject and object are not distinguished by case morphology, there is always a preference for a VSO reading. Below are examples adapted from Bakir (1979:15).

(41) a. dˤarab-a musaa l-fataa

---

26 The complementizer status of these elements has been a subject of debate, much of which is dedicated to ʔan, which is for some linguists a complementizer that embeds non-finite clauses (see Creshler et al., (2016, 2017a, 2017b) and Habib (2009) for a review). This debate is of no relevance here and thus is skated over.

27 The argument here is that these particles are usually followed by a VS structure in which the subject is an overt DP or a null pro co-indexed with a topical subject that is situated higher than such particles.
hit.PERF-3SG.MASC  Musaa.NOM/#ACC  the-boy.ACC/#NOM
‘Mussa hit the boy.’

b.  d'arab-at  lajlaa  musaa
hit.PERF-3SG.FEM  Layla-NOM  Musaa.ACC
‘Layla hit Musaa.’

c.  d'arab-a  lajlaa  musaa
hit.PERF-3SG.MASC  Layla-NOM  Musaa.ACC
‘Musaa hit Layla.’

(41)a is ambiguous between a VSO and a VOS parsing due to the lack of overt case morphology that can set the grammatical functions of subject and object apart\(^{28}\). In an out of the blue context where grammatical and contextual cues are wanting, there is a preference for a VSO parsing. The cues might sometimes come in the form of morphosyntactic features other than overt case, as is the case in (41)b and (41)c, where the subject is identified through verbal agreement: ‘Laylaa’ in the former and ‘Musaa’ in the latter. What transpires from this is that order variation is tolerated only as far as information on the grammatical functions of constituents is retrievable by some other means. Taken together, these facts, in addition to those represented by (37), give more weight to the neutrality of VSO, not only in relation to SVO, but in relation to the entire set of mathematically possible order permutations.

To sum up, this section has established VSO as the neutral order in SA. While this assumption is not novel and in fact has received evidence in the relevant literature, the evidence presented here is more diverse and lays down firmer groundwork for the upcoming section, in which I shift the discussion to SVO.

\(^{28}\) The lack of case morphology on these arguments is attributed to syllable structure restrictions. SA does not permit three vowels in a row, particularly if they are of different qualities. As case inflections for nominative and accusative are /-u/ and /-a/ respectively, their overt realization on ‘Musaa’ and ‘the boy’ in (41)a would violate this restriction.
2.3 SVO and Preverbal Subject DPs

The discussion of the status of preverbal DPs in SVOs has been dominated by oscillating disputes. As indicated in § 2.1, many accounts consider it as a subject that originates in the thematic domain and then A-moves to SpecTP to check agreement (e.g., Mohammad, 1989; Fassi Fehri, 1989; Koopman & Sportiche, 1991). In some others, it is a topic whose merge-in position is SpecTP (Soltan, 2007). In either case, there is an observation that extraction across preverbal subject DPs is typically banned. In what follows, I use this observation as a syntactic litmus to gain more insight into the position a preverbal subject DP occupies, starting with a delineation of how it is presented in the relevant literature.

2.3.1 Extraction over Preverbal DPs

The nature of the ban on extraction has been designated inconsistently in the literature. Fassi Fehri (1993:64) puts it as “no constituent may be extracted over a topic”, whereas Soltan (2007:52) uses a general formulation linking the ban to preverbal DPs, allowing for the implication that it applies to topics or preverbal subjects. The ban is reflected in the ungrammaticality of (42)b and c below (see Shlonsky (2000:330) for the same argument).29

(42) a. zajd-un qaraʔ-a kitaab-an  
   Zayd-NOM read.PERF-3SG.MASC book-ACC  
   ‘Zayd read a book.’

   b. kitaab-an zajd-un qaraʔ-a  
      book-ACC Zayd-NOM read.PERF-3SG.MASC  

   c. *maaðaa qaraʔ-a zajd-un  
      what read.PERF-3SG.MASC Zayd-NOM  

29 This limitation is not attested in VSO clauses as focus and wh-movement can take place across the subject to the domain preceding the verb. Below is a modified version of (42) to illustrate this point.

   i. qaraʔ-a zajd-un kitaab-an  
      read.PERF-3SG.MASC Zayd-NOM book-ACC  

   ii. kitaab-an qaraʔ-a zajd-un  
       book-ACC read.PERF-3SG.MASC Zayd-NOM  

   iii. *maaðaa qaraʔ-a zajd-un  
        what read.PERF-3SG.MASC Zayd-NOM
With (42)a as the baseline structure, the object cannot be extracted across ‘Zayd’, neither for focus nor for a constituent question as in (42)b and (42)c, respectively. The argument Fassi Fehri has for restricting the ban to extraction over topics is drawn from instances of movement across subject DPs in nominal clauses and embedded verbal clauses as illustrated by (43) and (44), in the same order (ibid:64f, see also Bakir (1979:171f) for similar examples).

(43) a. man ?anta muntaqid-un who you criticizing-NOM
   ‘Who are you criticizing?’

b. mataa ?anta ?aatin when you coming.NOM
   ‘When are you coming?’

(44) a. man hasib-ta ?anna r-rad3ul-a dˤarab-a who think.PERF-2SG.MASC that the-man-ACC beat.PERF-3SG.MASC
   ‘Who did you think that the man has beaten?’

b. mataa hasib-ta ?anna r-rad3ul-a ?ataa when think.PERF-2SG.MASC that the-man-ACC come.PERF-3SG.MASC
   ‘When did you think that the man came?’

Fassi Fehri reduces the conspicuous mismatch observed between (42), on the one hand, and (43) and (44), on the other, to a violation of the Empty Category Principle (ECP) defined in terms of barriers and the relational notion of government (Chomsky, 1981, 1986; Rizz, 1982, 1990). In a nutshell, he assumes that the rich agreement morphology on the verb in (42) is an indication of an AGR projection, whose head is nominal in nature and it hosts the subject in its specifier. He then supposes that AGR is a governing head, and in order for it to be transparent for antecedent government\(^{30}\), the antecedent should have passed through its specifier at some point in the derivation,

\(^{30}\) A category \(\alpha\) antecedent-governs another category \(\beta\) if and only if \(\alpha\) c-commands \(\beta\) and both are co-indexed. This configuration can derived via movement in which \(\beta\) would be a copy of \(\alpha\).
a condition that cannot be met with the subject occupying SpecAGRP, hence the ungrammaticality of (42) as an ECP violation. As for (43), the argument is that AGRP does not necessarily host the subject, implicating that the subject remains in its predicate-internal position or moves to a position lower that AGRP. Either way, AGRP does not act as a barrier or intervener for government since its specifier is available for the moving wh-word, therefore deriving the question without engendering ungrammaticality. As for (44), the difference that sets it apart from (42) is that the matrix verb L-marks the embedded CP or AGRP in the sense that it assigns a theta role to it. The assumption then is that when AGRP is not L-marked, as in (42), it acts as a barrier for extraction and government, whereas when it is L-marked as in (44), extraction is possible.

Concluding his argument, Fassi Fehri (1993:66) reaffirms that long-distance movement is still banned when the embedded clause has a topic as the ungrammaticality of the sentence below shows.

(45) *ʔajj-u ridʒaal-in ʔanna l-walad-a dˤarab-uu-hu
which-NOM men-GEN that the-boy-ACC beat.PERF-3PL.MASC-him
‘Literally: Which men did you think that the boy, they beat him?’

The embedded subject in (45) is wh-extracted across the left dislocated embedded object, which can serve as a topic. This observation seems as an exception to the L-marking account put forth in explication of (44), or more accurately, L-marking does not make embedded clauses with a topic transparent to antecedent government and extraction. This kind of constraint is not peculiar to SA either. In their quest to explain it, some authors (e.g., Rochemont, 1989; Lasnik & Saito, 1992; Müller & Sternefeld, 1993) claim that the ungrammaticality of such structures is due islandhood induced by topicalization. Below are English examples that show the same pattern (Rochemont, 1989:147).
(46) a. *What Does John think that bill, Mary gave to? 
    b. *This is the man who that book, Mary gave to.

I will return to this assumed blockage of movement across embedded topics shortly and provide evidence that movement can take place across embedded topics even though questions of the form in (45) remain a bit intractable.

The first point of criticism that stands out in the face of this account is theoretical, consisting in that it involves no longer motivated notions. It has been established ever since Chomsky (1995) that AGR projections are minimalistically suspicious in that they live and die in the syntax because agreement morphology usually ends up vacating the head of an agreement projection and getting pronounced on some other head, (e.g., T), and so does the argument that moves to its specifier. They therefore have no import whatsoever at the interfaces.

Second, the notion of government in its early incarnations which have pervasive applications in every module of grammar in the GB literature (e.g., Case Theory, Theta Theory, Binding Theory, etc.) is abandoned; it is no longer considered as a primitive relation within the theory of grammar and the linguistic phenomena that were accommodated by appeal to government-based accounts are captured by domains defined in light of the simple relation of c-command. Antecedent government which formulates an indispensable part of the account reviewed above is superseded by the Phase Impenetrability Condition, which plays the same role of enforcing strict locality in successive-cyclic movement (Chomsky, 2000). Hornstein et al. (2005) and Boeckx (2006) illustrate that the notion of government has fallen out of interest due to the degenerate character it had in the pre-minimalist era when its definition was revised on almost a case by case basis, which
eventually pared down its explanatory power\textsuperscript{31}. By the same token, the notion of barriers ceases to exist and is rather ‘recycled’ under MP in the relatively more principled one of phases, which are taken to correspond to convergent chunks defined in terms of their satisfaction to the interface conditions (see §1.6 for a review).

In addition to these theoretical qualms, in the following section I show that the account sketched above fares badly on the empirical side, with data exhibiting that some of its predictions are not borne out.

2.3.2 Do Topics Matter in Extraction?

The conclusion drawn from the preceding discussion is that the proscription on movement past the preverbal DP obtains in verbal root clauses and across embedded topics. In what follows, this conclusion is called into question. With ‘Zayd’ in (42)a, repeated in (47)a below, assumed to be in SpecTP, the proscription implies that wh-questions and focus-fronting cannot be derived from SVO. As it turns out, this is an inaccurate inference as both kinds of movement are licit when the landing site is below the preverbal subject DP as shown in (47)b and (47)c below.

(47) a. zajd-un qaraʔ-a kitaab-an
    Zayd-NOM read.PERF-3SG.MASC book-ACC
    ‘Zayd read a book.’

b. zajd-un kitaab-an qaraʔ-a
    Zayd-NOM book-ACC read.PERF-3SG.MASC

\textsuperscript{31} Government was first defined in terms of mutual c-command involved in a sisterhood relation and then redefined in terms of m-command. Two constituents are said to be in an m-command relation if neither dominates the other, and both are contained within the same maximal projection (Hornstein et al, 2005:79). This definition unifies head-complement and spec-head relations. After this remodeling, the notion of government finally assumed the following definition (Hornstein et al, 2005:115).

i. Government
   \( \alpha \) governs \( \beta \) iff
   (i) \( \alpha \) m-command \( \beta \) and
   (ii) there is no barrier \( \gamma \) that dominates \( \beta \) but does not dominate \( \alpha \).

ii. Barrier
   \( \gamma \) is a barrier iff
   (i) \( \gamma \) is a maximal projection and
   (ii) \( \gamma \) is not a complement.

C. zajd-un maaθaa qaraʔ-a
Zayd-NOM what read.PERF-3SG.MASC
‘What did Zayd read?’

Cross-linguistically, clause-initial constituents in such structures are argued to be topics. Below are examples from English and Bulgarian, taken from Chomsky (1977:94) and Lambova (2003:1), respectively.

(48)  a. *To whom, as for this book, should we give it?
       b. As for this book, to whom should we give it?
       c. (As for) John, who do you think saw him.

(49)  a. Decata MAMA šte vodi ne cirk
       Childern-the.TOP Mom.FOC will take to circus
       ‘The kids, MOM will take to the circus.’
       b. *MAMA Decata šte vodi ne cirk
           Mom.FOC Childern-the.TOP will take to circus
           ‘The kids, MOM will take to the circus.’

In (48) and (49), ‘as for this book’, ‘John’ and ‘Decata’ are characterized as topics, and have to precede questions and focus just as observed for the SA data in (47). To capture this distributional fact, Lambova (2003) proposes an articulated left peripheral structure along the lines of Rudin’s (1986) whereby topics are analyzed as adjunctions to CP and focused constituents as adjunctions to IP as schematized in (50).

(50)  [S’/CP TOPIC [S’/CP COMP [S/IP FOCUS [S/IP…]]]]

(Lambova, 2003:1)

The question that arises at this juncture is: with the facts in (47) through (49) as food for thought, does the proscription against extraction across preverbal DPs in SVO sentences still seem to exist? Or is it an inaccurate characterization of the facts? In brief, the data in (47) through (49) can be taken as a sound indication that the assumed obstruction of movement is a misrepresentation of the possibility that the preverbal subject DP is base-generated in a left peripheral position that
precedes that landing sites of wh and focus movement. To avoid jumping to conclusions and to fully address these questions, let us widen our database by the examples in (51) in which the embedded subject is definitely in a topic position (adopted from Bakir, 1979:141).

(51) a. mataa qult-ʔa ?inna muhammad-ʔan ?alijj-ʔan when say.PERF-3SG.MASC that Mohammed-ACC Ali-ACC raʔaa see.Perf.3SG.MASC
   ‘When did you say that Mohammed saw Ali?’

   ‘Where did you claim that Ali met Fatima?’

Unlike (45), in (51)a and (50)b the embedded subjects *Mohammed* and *Ali*, respectively, are undoubtedly topical since both are followed by the focus-preposed embedded object; they are in the Ā-domain. The DPs that precede focused constituents are cross-linguistically analyzed as topics in cartographic approaches (e.g., Rizzi, 1997, 2004; Rizzi & Shlonsky 2007; Belletti, 2004; Hagegeman, 2006). If the argument that movement across topics unequivocally obtains, the prediction is that both would be ungrammatical, which is not the case. Baltin (1982) and Culicover (1996) provide similar data from English where topicalization-induced islandhood does not hold, therefore putting such argument into a quite precarious position. In (52), extraction for relativization and wh-question across the topicalized constituent in bold is shown to be grammatical.  

---

32 As a caveat, the topicalized elements in (52) are argued to have moved to their clause-initial position. They can be interpreted as topics or focus (Kuroda, 1972; Kuno, 1972). In the literature on English that I am aware of, the term *topicalization* is used as a cover term for topics and foci.
(52) a. He is a man to whom liberty we could never grant.  
   Baltin (1982:17)
   
b. I was wondering to what kinds of people books like these you would actually have given if you had had the chances.  
   Culicover (1996:460)

To square the ungrammaticality of (46) with the grammaticality of (52), Culicover (1996) attributes this selective opacity to the type of constituents that have undergone movement; in particular, he argues that when they are both DPs as in (46), ungrammaticality arises for the reason that this categorial identity makes it harder to identify which gap is identified with which DP.

At any rate, the theme that comes out of these cross-linguistic observations is twofold. First movement across topics seems licit, otherwise sentences like (51), or (52) for that matter, would remain inexplicable. Second, the fact that (51)a &b allow for extraction although their embedded subjects are in a topic position signifies that a topical interpretation of the embedded subjects in (44) cannot be ruled out, contra the prediction of Fassi Fehri (1993). Noteworthy is that focus from embedded clauses is also admissible parallel to the long-distance wh-movement shown in (44) and (51), and both yield ungrammaticality when their ultimate landing site precedes a preverbal subject DP in the matrix clause, as the examples in (53) below demonstrate.

(53) a. ?alijj-un δʔann-a kitaab-an book-ACC ʔanna that fahd-an qaraʔ-a read.PERF-3SG.MASC
   ‘Ali thought that Fahd read a book.’

   b. ?alijj-un maaðaa δʔann-a qaraʔ-a read.PERF-3SG.MASC
   ‘As for Ali, what did he think Fahd read?’

   c. ?alijj-un kitaab-an δʔann-a qaraʔ-a read.PERF-3SG.MASC
   ‘Ali thought that Fahd read a book.’

33 See Keine (2016:239) for data that challenges this required categorial mismatch between extracted and topicalized constituents, and for an explanation based on what he calls ‘horizons’.

    d. *maaðaa ʔa lijj-un ʔanna fahd-an
       what    Ali-NOM think.PERF-3SG.MASC that    Fahd-ACC
       qaraʔ-a read.PERF-3SG.MASC

‘What did Ali think Fahd read?’

    e. *kitaab-an ʔa lijj-un ʔanna fahd-an
       book-ACC  Ali-NOM think.PERF-3SG.MASC that    Fahd-ACC
       qaraʔ-a read.PERF-3SG.MASC


Unlike (53)b and c, in which the long-extracted constituent ends up below the preverbal subject in the matrix clause, (53)d and e are ungrammatical because it moves past the matrix preverbal subject in direct alignment with the root extractions illustrated in (42).

The previous discussion brings about two questions that beg for principled answers. First, since movement across topics appears to be licit, how the ungrammaticality of (45) can be explained away; or if you will, how could its ungrammaticality be squared with the grammaticality of (51)? Second, recall that, as we have noted in §2.2, interactions with focus sensitive elements such as maa ‘not’ and faqatʕ ‘only’ in root SVO clauses supports the conclusion that preverbal subject DPs can function as focus. Taken together with the observations previewed in this section, they beget the question: what is the exact status of the preverbal subject DP? As it turns out, an answer to the first question is proven recalcitrant at this point and can lead to a digression from the main concern for the moment which is to establish the status of preverbal subject DPs in SVO. Therefore, this question is deferred until the end of the chapter where I tie the ribbons of some arguments that come up in the course of the discussion leading up to that point and then provide a somewhat speculative view on why (45) is ungrammatical. In the meantime, I shift the discussion to the second question, viz. the status of the preverbal subject DP in SVO.
2.3.3 Analysis

To account for the distributional and interpretive properties elucidated by the data discussed hitherto, in a nutshell I propose that the presumed proscription on extraction across preverbal DPs in SA is an inaccurate rendition of a clausal hierarchy in which these DPs are either topics that project in a position higher than wh-questions and focus or are themselves in focus. In either case, the subject is in an Ā-position.

Evidence for the topical status in drawn from several undeniable parallelisms with CLLD and the fact that a topical subject can alternate freely in position with a CL-dislocated DP. When in focus, a preverbal subject has certain limitations that excludes the possibility of a topical interpretation, among which is that it does not allow another focus neither below it nor above it. It also blocks the derivation of wh-questions because wh-movement targets the same position. A focused preverbal subject also does not need to be definite. The structure posited to assimilate these arguments is presented from a minimalist perspective that avoids the downsides of cartographic approaches. The rest of this section will be devoted to a detailed exposition of this account.

As a prelude, let us review Rizzi’s (1997) seminal work on the discourse layer of structure which amounted to his proposal of the Split-CP Hypothesis. Rizzi’s work came out as a continuation of a research scheme which was burgeoning at the time, referred to as Cartography. This line of research was pioneered by Larson (1988) who argued for a decomposition of the lexical layer of structure (VP) into two projections, one nesting the other in what came to be known later as the VP-shell, which was adopted in various formulations in subsequent research (e.g., Chomsky, 1995; Kratzer, 1996). Shortly afterwards, Pollock (1989) and Chomsky (1991) followed suit and extended the scheme to the grammatical layer, IP, to which agreement projections were introduced.

---

34 I use the term ‘Ā-position’ for the sake of simplicity at this stage since this position is associated with a discourse function. However, it will be shown later that this position in fact displays hybrid A and Ā properties.
The culmination of the scheme came in the form of Rizzi’s (1997) extension of cartography to the discourse layer, CP, which brought about the structure in (55) as a proposal for the left periphery (ibid:297). This proposal is based on typological evidence from some Romance and Germanic languages. (55) is derived from sentences like (54) from Italian (Rizzi, 1997:295f).

(54) a. Credo che a Gianni, GUESTO domani, gli dovremmo dire
   C       Top     Foc     Top     IP
   ‘I believe that to Gianni, THIS, tomorrow we should say.’

   b. Credo che domani, a Gianni, GUESTO gli dovremmo dire
      C  Top     Foc     Top     IP

   c. Credo che GUESTO a Gianni, domani, gli dovremmo dire
      C  Foc     Top     Top     IP

(54)a exhibits that a focus projection can mediate between two topic projections. (54)b and c, on the other hand, show that topic projections on either side of the focus projection can be recursive, but the focus projection cannot be. The crux of this proposal is that functional categories are mapped to designated positions which cannot be assimilated under a single CP. The argument then, as indicated in Rizzi (1997) and Cinque (1999), is that this hierarchy of functional heads is universal, but the cross-linguistic presence of each head is what is prone to parameterization, i.e., the lower TopP, for instance, may not project in some languages (e.g., SA) but ideally no language would have FroceP projecting below TopP.
It has been established in the relevant literature on SA that a low topic projection does not figure in structure (e.g., Ouhalla, 1997; Shlonsky, 2000; Aoun et al., 2010). Below is the structure as put forth in Shlonsky (2000:331)\(^{35}\).

(56) \(\text{ForceP} > \text{TopicP*} > \text{FocP} < \text{FinP} \ [\text{IP} \ldots] \)

(56) shows that SA aligns with the cross-linguistic observation that the topic projection is recursive while the focus projection is non-recursive, i.e., a unique focus projection. Moreover, there is a strict adjacency requirement that focus fronting and wh-words be followed immediately by the verb, a requirement that is analyzed as a case of subject-verb inversion, insinuating that when focus projects in (56) the complex under the inflectional head (tense head) inverts its position with the

---

\(^{35}\) The structure provided in Shlonsky (2000:331) is not as much detailed as it is in (56) for he does not include ForceP and FinP, but his formulation does not deny their existence and their exclusion seems to be for the sake of notational simplicity. The exact syntactic structure he gives is the one below.

i. \(\ldots \text{TopicP*} > \text{FocP} \ldots [\text{IP} \ldots] \)
subject in SpecIP (Ouhalla, 1994; Aoun et al., 2010). This adjacency generalization is embedded in the view that SpecIP is an A-position.

However, Ouhalla and Shlonsky’s analyses are susceptible to the same criticism as the cartographic scheme in general, which, despite its functionality, has been encountered with various objections by subscribers to MP as indicated in §1.6.1. Chomsky et al. (2017:27) argue that the cascades of projections postulated for various areas of clause structure cannot possibly be learned, and there is no conceivable evidence that a child could rely on to learn these templates from experience. This tension between MP and cartography has sparked and continues to spark demands that the linguistic phenomena addressed by appeal to the latter be readdressed within a framework that meshes well with the theoretical spirit of the former.

It was not until Chomsky (2005, 2008) that a workable alternative to the cartographic analysis embodied in (55) came into existence in the form of feature inheritance (FI henceforward), for which theoretical foundations and empirical substantiation is reviewed in §1.6.1. Therefore, building on Chomsky (2005, 2008) and following Miyagawa (2010, 2017), I argue that [uFoc] and [uQ] features originate on C in SA and are inherited by T. The set-up then is that, when the preverbal subject DP in SVO serves as a topic, it is externally merged in SpecCP, binding a null pro

---

36 To be concrete, under this view the sentence in (iii) below can be derived from (ii) by subject-verb inversion. The analysis I develop here and in chapter 4 presents an argument that it can only be derived from (i) where the subject remains in SpecvP.

i. ʔallafa-t zajnab-u riwaajat-an
   write.PERF-3SG.FEM Zaynab-NOM novel-ACC
   ‘Zaynab wrote a novel.’

ii. zajnab-u ʔallafa-t riwaajat-an
   Zaynab-NOM write.PERF-3SG.FEM novel-ACC
   ‘Zaynab wrote a novel.’

iii. riwaajat-an ʔallafa-t zajnab-u
    novel-ACC write.PERF-3SG.FEM Zaynab-NOM
    ‘[A novel]e Zaynab wrote.’
in SpecvP, and that wh-questions and focus are derived by movement to SpecTP. This is schematized in (57)\(^{37}\).

\[(57)\]

\[
\begin{array}{c}
\text{DP}_j \\
\text{C} \\
\text{XP}_{\text{Foc}}/\text{XP}_{\text{Q}} (\text{TP}_{\text{max}}) \\
\text{FI} \\
\text{T} \\
\text{vP} \\
\end{array}
\]

In some respects, (57) builds on Soltan’s (2007) argument that preverbal subject DPs in SVOs are topics base-generated in SpecTP, a position he takes to be an Ā-position. (57) pushes this argument one node higher in the structure by assuming that preverbal DPs, when they are topics, are base-generated in SpecCP. SpecTP is reserved for focus and wh-movement. However, (57) diverges from Soltan’s account in that it leaves room for the evidenced reading in which a preverbal subject in SVO can be focused (as shown in §2.2). Under this reading, the argument I espouse is that it moves from SpecvP to SpecTP. In other words, I argue that an SVO is ambiguous between a topical reading derived via external merge to SpecCP and a focused reading derived from VSO via movement to SpecTP. The topical reading requires the DP to be referential, while the focus reading does not. This interpretive variability of the preverbal subject is not peculiar to SA or VSO languages. Kuno (1972:269) indicates that ‘John’ in a sentence like ‘John kissed Mary’ can be interpreted in four different ways; ‘John’ might be interpreted as a theme, a contrast, an exhaustive listing or as

\[^{37}\text{SpecTP is labeled as FocP or QP based on the workings of the labeling algorithm as proposed in Chomsky (2013, 2015), in which, when a head and a phrase in its specifier share a feature, the feature is passed up as the label. This becomes clearer when the labeling algorithm is reviewed in the coming sections to account for how the complementizer ends up higher than topical constituents in SpecCP. Moreover, when focus is accompanied with specific morphology on the focused constituent (as will be shown shortly), the constituent is thought to come with this morphology from the lexicon and it is what gives value to [uFoc] on T.}\]
a neutral description of the state of affairs in which case it would be an apt answer to the question ‘what happened?’. The first three readings can be rephrased in the sentences below, respectively.

(58) a. Speaking of John, he kissed Mary.
    b. John Kissed Mary, but Bill did not.
    c. John (and only John) kissed Mary.

(58) is evidence that SVO is susceptible to variation in the interpretation of the subject even in languages where SVO is the basic clause structure.

Before I proceed to discussing how (57) captures the observations previewed so far and providing evidence for the array of assumptions it relies on, there are two remarks that should be made. First, we are now in position to project in what sense VSO is basic. VSO clauses are argued to be derived via V-to-T movement with the subject remaining in its thematic position, SpecvP, the same account given in Alexiadou and Anagnostopoulou (1998), Benmamoun (2000), Soltan (2007) and Haddad and Wurmbrand (2016)\(^{38}\). However, I depart from these works in what I argue is the trigger for this V-to-T movement in a sense that will be illustrated in § 2.6.2. SVO, on the other hand, requires, besides the movement of the verb to some higher projection above vP, either the movement of the subject to SpecTP for focus or the establishment of a dependency relation between a subject externally merged to SpecCP and a null pro in SpecvP.

Second, I should point out that CLLD constituents are argued to appear in SpecCP. I argue that they are topics on a par with preverbal topical subject DPs in SVO, and that the designation ‘CLLD’ is a mere terminological difference. CLLD is a cover term used to designate non-subject

---

\(^{38}\) Chomsky (1993) is among the first works that attempted a minimalist account of this movement by appeal to the mysterious notion of feature strength. He points out that, in Romance and Romance-like languages, φ-features are strong and therefore attract the verb, while in English they are weak. In the literature on SA, the motivation for V-to-T movement varies from work to another. In Alexiadou and Anagnostopoulou (1998), for instance, it is taken to be one way the EPP feature of T is valued. Benmamoun (2000), on the other hand, assumes that it is induced by a categorial [+V] feature on T. Both notions have fallen out of interest in recent minimalist literature.
DPs that appear in the left periphery (e.g., Ayoub, 1981; Bakir, 1980; Moore, 1988). Below are examples from Shlonsky (2000:327).

(59) a. katab-a ̣ l-walad-u ̣ r-risaalat-a
    write.PERF-3SG.MASC the-boy-NOM the-letter-ACC
    ‘The boy wrote the letter.’

b. ?ar-risaalat-u katab-a-haa ̣ l-walad-u
    the-letter-NOM write.PERF-3SG.MASC ̣ it.FEM the-boy-NOM
    ‘As for the letter, the boy wrote it.’

c. *?ar-risaalat-u katab-a ̣ l-walad-u
    the-letter-NOM write.PERF-3SG.MASC the-boy-NOM
    ‘As for the letter, the boy wrote.’

d. *risaalat-un katab-a-haa ̣ l-walad-u
    letter-NOM write.PERF-3SG.MASC ̣ it.FEM the-boy-NOM
    ‘As for a letter, the boy wrote it.’

Three observations stand out as typical of CLLD; i) a LD phrase has to be definite, ii) inflected for nominative case and iii) related to a resumptive pronoun (Aoun et al., 2010:209). The clitic related to a LD-phrase can appear as a direct object, a genitive clitic, or a dative clitic (ibid:200). If a LD-phrase is not resumed or definite as in (59)c and (59)d, then the structure is illicit. Shlonsky (2000) remains agnostic on whether a LD phrase arrives to its surface position via movement or external merge. However, a movement analysis can be refuted empirically, the reason being that LD-phrase can relate to an island-internal pronominal. (60) shows a LD-DP related to a resumptive pronoun in an adjunct island.

(60) ʔalij-j-un qaabal-tu-hu qaabl-a ʔan yu-qaabil-a-hu
    Ali-NOM meet.PERF-1SG-him before-ACC SUB 3SG.MASC-meet-SUB-him
    ‘As for Ali, I met him before Ahmed met him.’

Shlonsky argues that LD-phrases are in SpecTopP, assuming Rizzi’s (1997) enriched CP system. One more interesting observation about LD-phrase is that they can positionally alternate
unrestrictedly with the preverbal subject DP (Bakir, 1979; Shlonsky, 2000). (61) showcases this free alternation (see Shlonsky (2000:328) for similar examples).

(61) a. ʔal-walad-u katab-a r-risaalat-a
      the-boy-NOM write.PERF-3SG.MASC the-letter-ACC
      ‘The boy wrote the letter.’

      b. ʔar-risaalat-u 1-walad-u katab-a-\textcolor{red}{haa}
      the-letter-NOM the-boy-NOM write.PERF-3SG.MASC it.FEM
      ‘As for the letter, and as for the boy, he wrote it.’

      c. ʔal-walad-u r-risaalat-u katab-a-\textcolor{red}{haa}
      the-boy-NOM the-letter-NOM write.PERF-3SG.MASC it.FEM
      ‘The boy, the letter, he wrote it.’

This positional freedom is a typical characteristic of phrases that are adjoined to the same node. Therefore, I assume that LD-phrases are adjoined to CP the same way preverbal subjects are. The interpretations of such sentences are approached in the discussion of the left periphery in Chapter 4, but it suffices to know for the moment that CLLD are topics that merge in SpecCP.

Against the backdrop of (57), let us now turn to the question of how extraction patterns are captured. First, the observation that focus and wh-words cannot move past the preverbal DP is the result of the latter being a topic base-generated higher than the landing site of both or to it being focused and already occupying SpecTP. Consider (62), repeated from (42) and (47), in light of the structure in (55).

(62) a. zajd-un qaraʔ-a kitaab-an
      Zayd-NOM read.PERF-3SG.MASC book-ACC
      ‘Zayd read a book.’

      b. *kitaab-an zajd-un qaraʔ-a
      book-ACC Zayd-NOM read.PERF-3SG.MASC

      c. zajd-un kitaab-an qaraʔ-a
      Zayd-NOM book-ACC read.PERF-3SG.MASC

Taking (62)a as the baseline structure, I propose that (62)b is ungrammatical either because the preverbal subject DP ‘Zayd’ is a topic sitting in SpecCP or a focus in SpecTP. In the first case,
‘book’ cannot be moved across it or, more accurately, does not need to move across it since SpecTP is the focus position. In the second, the subject occupies the focus position, SpecTP, and as indicated, it is already established in the literature (e.g., Ouhalla, 1997; Shlonsky, 2000) that SA shows the same limitation on focus as the Romance and Germanic languages in that the focus projection cannot be recursive, i.e., only one constituent can undergo focus fronting.

Second, (57) dissolves the requirement that focus and wh-words be adjacent to verbs, a phenomenon explained as T-to-C movement (subject-auxiliary inversion in traditional terms). This requirement is now derived as a result of FI. This FI-based approach to adjacency can be conceptualized to some extent as an amelioration of a precedent account proposed in É. Kiss (1995), in which a functional projection (FP) is assumed to host a moving focused phrase in languages with a designated focus position such as Hungarian (the same proposal is adopted for SA in Ouhalla, 1997). É. Kiss argues that V moves to the head of FP to enable F to assign focus to the moved constituent in a spec-head configuration. Although the feature [+Focus] is hosted by the head of FP, its assignment to the focused constituent can only be established when the head is lexicalized, and V is one way F is lexicalized39. Below are examples from Hungarian (É. Kiss, 1995:36).

(63) a. \[ \text{JÁNOSNÁL} \text{ volt } \text{Mari magasabb } t_i \]  
\[ \text{JOHN-BY} \text{ was } \text{Mary taller} \]  
‘Mary was taller than JOHN.’

b. \[ \text{JÁNOSNÁL} \text{ magasabb Mari } t_i \]  
\[ \text{JOHN-BY} \text{ taller Mary} \]  
‘Mary is taller than JOHN.’

c. \[ *\text{JÁNOSNÁL} \text{ Mari magasabb } t_i \]  
\[ \text{JOHN-BY Mary taller} \]

In (63)a and (60)b, F is lexicalized by the movement of the verb and the comparative adjective to it, respectively. The sentence is ungrammatical when F is not lexicalized as in (60)c. This proposal

---

39 The mainstream argument is that imperfective verbs in SA do not move as far as T (e.g., Benmamoun, 2000), in which case T might be occupied by some other elements like negation or focus might be hosted by some lower head.
in essence derives from conceivable parallelisms between nominative case licensing in English and focus assignment in languages with a designated focus position. In our current account, the spirit of this ‘necessary’ lexicalization comes in the form of FI since [uFoc] is inherited by T which is usually lexicalized through V movement.

The structure in (57) is shown to account for the facts, but it rests on two premises which are still in need for evidence. In particular, I need to show that i) discourse features originate on C in SA and ii) that the assumption of a [uFoc] feature does not fall within the realm of stipulative features that run afoul of the *inclusiveness condition* (Fanselow, 2006; Chomsky et al., 2017). First, the postulation of feature inheritance in SA is not merely theoretical, but rather has empirical grounds deducible from the lack of left peripheral positions in clauses embedded under ?an in comparison to those embedded under ?anna and ?inna. To illustrate this, let us consider (64).

(64) a. ja-surr-u-n-ii
3SG.MASC-please.IMPERF-IND-EC-me
?alijj-un l-ixtibaar-a
Ali-NOM the-exam-ACC
‘It pleases me that Ali passes the exam.’

b. *ja-surr-u-n-ii
3-please.IMPERF-IND.SG.MASC-EC-me
ja-dżtaaz-a l-ixtibaar-a
3-pass.IMPERF-SUB.SG.MASC the-exam-ACC
‘It pleases that Ali passes the exam.’

c. *ja-surr-u-n-ii
3SG.MASC-please.IMPERF-IND-EC-me
ja-dżtaaz-a ?alijj-un
3-pass.IMPERF-SUB.SG.MASC Ali-NOM
‘It pleases that Ali passes [the exam].’

d. *ja-surr-u-n-ii
3SG.MASC-please.IMPERF-IND-EC-me
l-ixtibaar-a ja-dżtaaz-a
the-exam-ACC 3-pass.IMPERF-SUB.SG.MASC
‘It pleases that Ali passes [the exam].’
As can be observed, (64)a is the only licit sentence. The rest, where the subject precedes the verb, (64)b, the object is focus-fronted, (64)c, or the subject and object appear before the verb, (64)d, are all ungrammatical. I take the illicitness of movement to positions between ʔan and the verb as evidence that clauses under this particle lack the discourse layer\(^{40}\). Now, compare (64) to the clauses embedded under ʔinna in (65).

\[(65)\]
\[
a. \quad \text{ʔinna} \quad \text{ʕalijj-an} \quad \text{idɡtaaz-a} \quad \text{l-ixtibaar-a} \\
\quad \text{that} \quad \text{Ali-ACC} \quad \text{pass.PREF-3SG.MASC} \quad \text{the-exam-ACC} \\
\quad \text{‘Verily, Ali passed the exam.’}
\]
\[
b. \quad \text{ʔinna} \quad \text{ʕalijj-an} \quad \text{l-ixtibaar-a} \quad \text{idɡtaaz-a} \\
\quad \text{that} \quad \text{Ali-ACC} \quad \text{the-exam-ACC} \quad \text{pass.PREF-3SG.MASC} \\
\quad \text{‘Verily, Ali passed [the exam].’}
\]
\[
c. \quad \text{ʔinna} \quad \text{l-ixtibaar-a} \quad \text{ʕalijj-un} \quad \text{idɡtaaz-a-hu} \\
\quad \text{that} \quad \text{the-exam-ACC} \quad \text{Ali-NOM} \quad \text{pass.PREF-3SG.MASC-it} \\
\quad \text{‘Verily, as for the exam, Ali passed it.’}
\]
\[
d. \quad \text{*ʔinna} \quad \text{l-ixtibaar-a} \quad \text{ʕalijj-un} \quad \text{idɡtaaz-a} \\
\quad \text{that} \quad \text{the-exam-ACC} \quad \text{Ali-NOM} \quad \text{pass.PREF-3SG.MASC} \\
\quad \text{‘Verily, Ali passed [the exam].’}
\]

Unlike clauses embedded under ʔan, clauses under ʔinna and ʔanna must be SVOs as in (65)a. They can also be SOV as in (65)b where the object is focus-fronted, or OSV (or SOV for that matter) where the object is a CLLD as in (65)c. Ungrammaticality arises when the structure is

\(^{40}\) Usama Soltan (personal communication) points up that ʔan clauses might have a left-peripheral layer under certain embedding predicates such as ‘want’. Below are examples (Usama’s examples).

\[\]
\[
i. \quad \text{ʔaraad-a} \quad \text{zajd-un} \quad \text{ʔan} \quad \text{ja-rhal-a} \quad \text{ʕalijj-un} \\
\quad \text{want.PERF-3SG.MASC} \quad \text{Zayd-NOM} \quad \text{SUB} \quad 3-leave.IMPERF-SUB.SG.MASC \quad \text{Ali-un} \\
\quad \text{‘Zayd wanted Ali to leave.’}
\]
\[
ii. \quad \text{ʔaraad-a} \quad \text{zajd-un} \quad \text{ʕalijj-an} \quad \text{ʔan} \quad \text{ja-rhal-a} \\
\quad \text{want.PERF-3SG.MASC} \quad \text{Zayd-NOM} \quad \text{Ali-ACC} \quad \text{SUB} \quad 3-leave.IMPERF-SUB.SG.MASC \\
\quad \text{‘Zayd wanted [Ali]-to leave.’}
\]

The sentence in (ii) is undeniably grammatical. One way to account for this sentence is to assume that ‘Ali’ is merged as an object to ‘want’ and it binds a null pro that functions as subject for ‘leave’. Evidence for this argument is derived from the fact that ‘Ali’ is accusative in (ii), i.e., if it originates as subject in the embedded clause and focus-moves to a left-peripheral position within the same clause, the prediction is that it should maintain its nominative case. However, one might still argue that the case inflection is altered due to ECM by the matrix verb. Adverbials that modify the matrix subject can be utilized to test the position of ‘Ali’ in (ii), i.e., if they can only precede ‘Ali’, then ‘Ali’ is positioned within the embedded clause. However, an adverbial like ‘yesterday’ seems to be equally acceptable before or after ‘Ali’ in (ii). Therefore, I would leave it as an open question for future research to determine what role embedding predicates play in regulating the discourse characteristics of their clausal complements.
OSV with the object being focused as in (65)d. Note that (c) is distinct by the resumptive pronoun and nominative case, which mark that the object is not focused. The upshot of this is that clauses under ʔinna and ʔanna have a discourse layer (left periphery), whereas those under ʔan do not, i.e., the projection of the discourse layer is contingent on the embedding C. Since the complementizer-ness of ʔinna and ʔanna is uncontroversial, a C-to-T feature inheritance account can safely be posited. This data could equally be used to back up claims that ʔan is not a complementizer, or at the very least to argue that it is a deficient complementizer that has no discourse features, and consequently the clauses it heads have no discourse layers. Emonds (2004:77) brings up identical data form English in which to-complement clauses lack the discourse layer, as opposed to that-complement clauses which have a discourse layer. Consider (66) below.

(66) a. Bill warned us that [flights to Chicago we should try to avoid].
   b. *Bill warned us [flights to Chicago to try to avoid].

The topical phrase ‘flights to Chicago’ can be long-extracted from the complement position of the verb ‘avoid’ to the discourse layer, CP, under the complementizer ‘that’ in (66)a, while its long-extraction to the discourse layer with ‘to’ (66)b yields ungrammaticality. A conclusion ensues from this to the effect that ‘to’ is parallel to ‘ʔan’ in the lack of a discourse layer in the clause it introduces. This again casts doubts on the complementizer-ness of ‘to’ (see Pesetsky 2019 for a thorough

---

41 The ungrammaticality of (65)d is usually attributed to the assumption that the complementizer cannot be followed by a focused constituent. Under (57), its ungrammaticality is put down to the argument that either ‘Ali’ is a topic and therefore cannot be preceded by a focus, or because ‘Ali’ is focused itself and thus does not allow another focus besides it. More will be said about this in chapter 4.

42 Gallego (2014) recasts Chomsky’s feature inheritance by his argument that the relation between phase heads and feature-inheriting heads is that of identity, i.e., phase heads start out in the head position of their complements and therefore the latter are copies of the former. On this view, feature inheritance is derived via the copy theory of movement (Chomsky, 1993; Nunes, 1999, 2004, among others). This perspective is intended to account for cases where T agrees with a constituent and C with a different constituent as is the case in West Flemish, i.e., the uninterpretable phi-features on C and T end up having distinct goals and values. Agreement on C and T in the context of relative clauses in SA seems to support this line of reasoning but I put aside the data in this regard for their irrelevance to our purposes here. However, in chapter 3, I argue that unlike the CP phase, the discourse layer of the vP phase is not the result of feature inheritance by the head of its complement, V, but is rather due to v movement to a higher projection leaving its features on the lower copy; this corresponds to Gallego’s view of feature inheritance.
discussion of ‘to’ and a new proposal on its syntax). (66) also gives currency to the association of features with C heads.

The second premise that requires evidence is that the postulation of focus as a formal feature is not a pure stipulation. As indicated, formal features related to IS are still debated. Many scholars doubt the existence of bona fide morphosyntactic features for IS (e.g., Chomsky et al., 2017; Fanselow, 2006). Many objections have been leveled at the assumption of a [+focus] feature, when the role of this feature is only to establish the relation between pitch accent and the informational structure of the sentence (Williams, 1997; Zubizarreta & Vergnaud, 2006). As Kratzer and Selkirk (2019:7) put it, “there is no necessary link between prosody and information structure. Cross-linguistically, information structure notions can be spelled out segmentally, prosodically, tonally, or not at all, and can moreover show syntactic behavior, like triggering movement, even without having any distinctive prosodic properties”. In essence, this remark implies that intonational or prosodic cues are not sufficient to conclude that IS notions have to be represented by formal features over which the computational system can operate. However, one might conjecture that if a language has some grammatical reflexes in the form of movement or particles that are used exclusively to mark IS, then that language has bona fide morphosyntactic features corresponding to such effects (Aboh, 2007, 2010; Kratzer & Selkirk, 2019). Let us consider the examples below from Gungbe (Aboh, 2007:289).

(67) a. Sësinnú wê dà Àsfâbá
    Sessino Foc marry Asiaba
    ‘SESSINOU married Asiaba.’

    b. Mënu wê dà Àsfâbá
    who Foc marry Asiaba
    ‘Who married Asiaba?’

In (67), the particle wê is a focus marker that appears in a left-peripheral head position and attracts focused constituents to its specifier. This connection between some particles and certain
informational functions is common. Kuno (1972:270) draws a distinction between the Japanese particles *wa-* and *ga-* based on their IS-related contributions. He argues that *wa-* marks anaphoricity, genericity or contrasted elements, whereas *ga-* is either neutral or exhaustive.

Drawing on this line of research, I argue that the postulation of a formal focus feature in SA is warranted. The lexicon in the language has a number of items that appear for the exclusive purpose of marking a constituent as focused. Among these markers is *ʔinna*, *ʔinnamaa* and *qad*, identified in the Arabic tradition as *huruuf-u t-tawkiid*, which can be translated into ‘corroboration’ or ‘confirmation’ particles. Ouhalla (1997:22) argues that *ʔinna* and *qad* are sentential focus markers. To pin down the semantics of these particles, let us take a short excursion into the notion of verum, which is dovetailed with the notion of affirmation or confirmation. Gutzmann et al. (2017) indicate that this notion was first introduced by Höhle (1992) to designate cases where an accent is used to emphasize the truth of a proposition. (68) is an example from German.

(68) Peter HAT den Hund getreten
Peter has the dog kicked
‘Peter DID kick the dog’ (Gutzmann et al., 2017:4)

Several researchers give this phenomenon the designation “Verum Focus” (e.g., Höhle, 1992 (as cited in Gutzmann et al. (2017)), Lohnstein & Stommel, 2009; Krifka, 2008). It was first assumed to be only realized by an accent on some expression in the sentence, but Gutzmann et al. (2017) provide cross-linguistic evidence that this phenomenon can either be realized by an accent or lexically. (69) shows examples from Spanish and Dutch, respectively.

(69) a. Bien ha cantado la soprano
indeed has sung the soprano
‘The soprano DID sing.’

(69) b. Ik heb het boek WEL gelezen
1sg have the book PRT read
‘I DID read the book.’ (Gutzmann et al., 2017:14)

In (69)a, verum is realized lexically by the clause-initial element *Bien* ‘indeed’ and in (69)b by the
accented particle WEL. In SA, ʔinna usually figures in contexts where its use emphasizes the truth of the proposition it embeds; its use in an out of the blue context, where there is no contextual cue that the veracity of the proposition might be in dispute, is infelicitous. Therefore, following Gutzmann et al. (2017), Albuhayri and Ouali (to appear) propose that ʔinna is a lexical verum particle whose function is to relate a proposition to a question under discussion (QUD), and is subject to the following felicity condition:

\[
\langle \text{VERUM}\rangle^c (p) = \sqrt{\text{if } \{p, \neg p\} = \text{QUD} (c)\rangle^{43} \quad \text{(Gutzmann et al., 2017:9)}
\]

(70) means that verum is only felicitous in a context where the veracity of the proposition given is at issue. The set \(\{p, \neg p\}\), which simply includes a proposition and its negation, is the set of alternatives induced by the question ‘whether \(P\)?’ in the sense of alternative semantics. The contribution of this particle is to rule out the possibility of the proposition being false, i.e., it eliminates \(\neg p\). This is how the notion of affirmation and emphasis associated with ʔinna is captured. What transpires from this approach to the function of ʔinna is that it is a lexicalization of verum. I adopt this argument here and extend it to ʔinnamaa and qad\(^{44}\). However, it is worth noting that qad has this meaning only when the sentence it embeds is perfective. When it is imperfective, qad conveys a modality sense with an existential quantificational force. In the perfective, it could also have an epistemic evidential sense (cf. Fassi Fehri, 1993, 2004).

In addition to verum markers, SA has morphemes for constituent focus, among which is the suffix /-n/ and its variant /-nna/, which attach to verbs, and la which attaches to preverbal arguments as well as verbal and non-verbal predicates. Below are illustrative examples.

\[
\text{(71) a. } \text{la-ʔa-ndכן-a-nna} \quad \text{fii } \text{l-ixtibaar-i} \\
\text{FM-1SG-pass.IMPERF-VC-FM} \quad \text{in } \text{the-exam-GEN}
\]

\(^{43}\) \(\neg p\) denotes the negation of the proposition \(p\).

\(^{44}\) I maintain the mainstream argument that verum is a form of focus as in Krifka (2008) and Lohnstein & Stommel (2009), unlike Gutzmann et al. (2017) who dissociate it from verum on the grounds that it co-occurs with focus.
‘I will definitely pass the exam.’

b. ʔinna  zaid-an  la-muhaädgir-un
that Zayd-ACC FM-emigrating-NOM
‘Verily, Zayd is [emigrating].’

c. ʔa-ʔanta  ʔaðkaa  min  ʔax-ii-ka
FM-you smarter.NOM than brother-GEN-your
‘[You] are smarter than your brother.’

These particles are used exclusively for emphasis, which I take to correspond with focus. They have no influence on the sentence other than inducing alternatives in the position of the constituent to which they affix. Therefore, they formulate a sufficient basis for the assumption that focus in SA is a formal feature whose valuation is reflected, among other things, by visible morphology.45

In addition to the language-specific properties previewed above, research has shown that there is a close relation between focus and wh-questions reflected in their interaction in question-answer pairs (see §1.6.2) and their exclusion of each other in many languages, of which SA is shown to be a case in point. On this view, focus as a formal feature might also be warranted, as question features are justifiable by the availability of lexical items that solely express questions. In principle, the two features share the characteristic that alternatives are introduced in some highlighted position; as indicated, the ordinary semantic value of a question is the set of alternatives generated by substitution in the position of wh-word. This connection led to the assumption that

45 I should point out that this assumption may not necessarily carry over to other discourse-configurational languages. As indicated, formal features are still among the controversial aspects of language, splitting up the landscape into two blocs: the first (e.g., Miyagawa, 2010, 2017) subscribes to the view that they are part of UG and that they follow from the *uniformity condition* proposed in Chomsky (2001:2), while the other subscribes to the view that they are not. Sigurðsson (2003:243ff), for instance, advocates the universality of features so much so that even in languages where morphological and syntactic evidence for their valuation is wanting, features are posited as being present but silent. He refers to this as ‘The Silence Principle’. On the other hand, Zeijlstra (2008) argues that they are not part of UG but are rather susceptible to parametric variation and that their emergence rests on input and language experience. This argument explains why some languages have agreement morphology, indicating the presence of uninterpretable phi-features, whereas some others do not, indicating the possible absence of uninterpretable phi-features. While I offer no specific argument in this regard, Zeijlstra’s view might be taken as a backdrop against which the cross-linguistic presence or absence of focus as a formal feature can be resolved.
wh-phrases and focus phrases bear the feature [F] and are licensed by the same head. (e.g., Hageman 1995; Rizzi, 1997, 2004; Aboh 2004).

What distills from the above discussion is that focus in SA can be valued in three ways: i) phonological stress at PF (as shown in Ouhalla, 1997), ii) morphological merger of a focus marker or iii) syntactic movement. In Chomsky’s (2000, 2001), syntactic movement is put down to an EPP feature, but I depart from this assumption in that I take movement to be the way through which LF can retrieve information on grammatical relations, i.e., agreement, that are not reflected by overt morphology. I consider it as a form of what Miyagawa (2010:35) terms as Probe-goal Union (PGU), which boils down to the requirement that a goal move to the neighborhood of the probe. This comes about in the form of head-to-head movement or movement that creates a spec-head configuration (cf. Rizzi 2006:100). So, focus movement in (57) is attributed to PGU. Note, however, that unlike early minimalist accounts, PGU is not a representational condition specifying under which structural relation agreement must be established but rather is a depiction of an option through which agreement can be flagged up. PGU in this sense is a form of the identification requirement or condition (Rizzi, 1982; McCloskey, 1986; Ouhalla, 1993) which ensures the recoverability of features from the linguistic properties of surface strings.

It remains to show why SA is not argued to have a morphosyntactic feature for topic. The reason is that, unlike focus, topical constituents do not have specific morphology in SA, nor are they associated with syntactic movement, as shown above. As matter of fact, topical constituents do not have to appear overtly in the structure if the context is rich enough for them to be retrievable. When the topic is the subject, the verb usually shows rich agreement morphology and this is what makes SA a null subject (pro-drop) language along with languages like Italian, Spanish and Russian- there is much literature that relates rich agreement to null argument licensing (e.g., Taraldsen
1978; Chomsky, 1981; Rizzi, 1982, 1986) although there are radical pro-drop languages that are also non-agreement such as Chinese. Moreover, referentiality and nominative case are not peculiar to topics and therefore cannot be considered as topic-markers. Likewise, obligatory resumption associated with dislocated internal arguments cannot be considered a morphological realization of a topic feature as it usually occupies the thematic position with which the topic have a dependency; the topicalized constituent ends up composing with the predicate in the position of the resumptive pronoun.

However, the claim here (for the lack of a topic feature) is conservative as it does not rule out the existence of topic as a formal feature in other languages. In fact, some languages do have particles that are used exclusively to mark topics; for example, -wa in Japanese (Kuno, 1972; Heycock, 1993, 2008; Tomioka, 2008), -ne in Chinese (Shao, 1989; Constant, 2011, 2014) and na- in Tagalog (Freeze, 1992; Harley, 1995) are all argued to be topic markers. All are exemplified respectively below.

**Japanese** (Kuno, 1972:27)

(72) John wa watakusi no tomodati desu
    John I ‘s friend is
    ‘John is my friend.’

**Chinese** (Shao, 1989:174)

(73) Māma měi-tiān wānshèng hěn wān cāi huí-jīā.
    mom every-day night very late only.then return-home
    Bāba ne, gāncuí jiù bù huí-lái.
    dad NE simply just not return-come
    ‘Every day mom doesn’t come home until late. Dad ne, doesn’t even come back at all.’

**Tagalog** (Harley, 1995:120).

(74) na- sa babae ang sanggol
    BE at woman TOP baby
    ‘The baby is with the woman.’

Therefore, the argument for the lack of topic as a formal feature in SA aligns with Zeijlstra’s (2008) view that that features are not part of UG but are rather susceptible to parametric variation.
2.4 Interim Summary

This chapter thus far has reestablished with ubiquitous evidence the discourse neutrality of VSO. Then, SVO is contrasted with VSO in terms of extraction patterns, and accordingly, it is argued that SVO clauses are ambiguous between a topical or focus reading of the preverbal subject. This argument is embedded in a feature inheritance-based account of the left periphery whereby topics are argued to be base-generated in SpecCP, while focused and wh-questioned constituents are derived by movement to SpecTP. I have shown evidence that the assumption of feature inheritance is not merely theoretical but is rather grounded in the observation that root and embedded clauses with overt (non-defective) complementizers can have a discourse layer. The account also relies on the assumption that only focus is represented as a formal feature in SA due primarily to the fact that the lexicon of SA has several particles that mark clausal and constituent focus. In what follows, I move on to a pursuit of answers to some puzzles that follow from the account detailed above as well as the predictions it makes, starting with verbal agreement with focused subjects in SVO.

2.5 Subject Focus and Agreement

I have argued that a preverbal subject in SVO functions either as a topic or a focus. Agreement under both interpretations is rich, reflected in the verb inflection for all $\varphi$-features. However, recall that even though the clause is SVO with both readings, the derivation is assumed to be different. A preverbal topical subject is base-generated in SpecCP, while it binds a null $pro$ in Spec$\varphi$P, in which case rich agreement is not a surprise because it follows from the $pro$ identification condition (Rizzi, 1982; McCloskey, 1986 among others) as Soltan (2007) argues. The puzzle arises when the subject is in focus since it is argued to arrive at SpecTP by movement driven by $[\muFoc]$; the verb here also shows rich agreement morphology. Below are examples.

(75) a. $\bar{\text{ʔatˤ-tˤullaab-u qaraʔ-uu ?al-kitaab-a}}$
    the-students-NOM read.PERF-3PL.MASC the-book-ACC
'The students read the book.'

b. maa ?atˤ-tˤullaab-u qaraʔ-uu ?al-kitaab-a
not the-students-NOM read.PERF-3PL.MASC the-book-ACC

'It is not the students that read the book.'

As argued earlier, (75)a is ambiguous between a topical or focused reading of the subject, but (75)b only has the latter reading. The question is fleshed out now; if the movement to SpecTP takes place for discourse purposes, i.e., driven by a [uFoc] on T, how does it happen that it is concomitant with full φ-features agreement, a characteristic that is usually paired with A-movement? Put differently, since agreement in discourse features is the trigger of movement in accordance with Miyagawa’s (2010) PGU condition, the prediction is that φ-agreement would remain defective. In other words, (75)b would show the form in (76), which is obviously not the case.

(76) *maa ?atˤ-tˤullaab-u qaraʔ-a ?al-kitaab-a
not the-students-NOM read.PERF-3SG.MASC the-book-ACC

'It is not the students that read the book.'

It has been noted in the literature that three types of subjects exist: i) narrow subjects which partake in agreement, ii) broad subjects which are analyzed as a second specifier in TP and do not take part in agreement, and iii) topicalized and focused subjects (Doron & Heycock, 1999, 2009; Heycock & Doron, 2003; Landau, 2009; Alexopoulou et al., 2004; Haddad & Wurmbrand, 2016). Topicalized and focused subjects are epitomized by (75). Narrow subjects correspond with subjects in VSOs, which remain in the thematic position. The second type, broad subjects, is demonstrated by the following example from Hebrew (Doron & Heycock, 1999:71).

(77) a. ruti yeS la savlanut
Ruti there-is to-her patience
‘Ruti has patience.’

b. ruti sof-a le-naceax
Ruti end-hers to-win
‘Ruti will end up winning.’
The task at hand is to give an explanation of how a focused subject gives rise to full $\varphi$-features agreement, thereby behaving as a narrow subject.

Two logical possibilities suggest themselves as mechanisms to account for full agreement with focused subjects. The first is to consider focus movement as in instance of A-movement and the second is to assume that $\bar{A}$-movement can induce $\varphi$-agreement. Both trends exist in the literature. It is not unusual for a verb to agree with a constituent outside the A-domain. In fact, Kimball and Aissen (1971:241) report data on relativization constructions from a dialect of English in which the verb in a relative clause agrees with the wh-operator, which in turn agrees with the head noun. Below are their examples.

(78) a. Mark knows the people who Clark thinks are in the garden.
    b. Mark knows the people who Clark think are in the garden.

As can be noticed, the verb ‘think’ in this dialect can agree with the subject ‘Clark’ as in (78)a or with ‘who’ whose $\varphi$-features are determined by agreement with the plural head noun ‘people’ as in (78)b. Baker (2008:75) discusses the same examples and points out that they are indicative, among other things, of the existence of upward agreement as an option in language. Compared to (78), the agreement pattern in (75)b looks less radical since the verb still shows agreement with the subject which, despite movement in response to a discourse feature, is still in the domain of T.

Following from the first possibility alluded to above, full agreement in (75)b can be ascribed to the assumption that SpecTP is still an A-position based on positional definitions of A and $\bar{A}$-movement and therefore whenever the subject moves to that position it is predicted to engender full $\varphi$-features agreement (Baker, 2003; Miyagawa, 2010). Data from non-case languages shows that this assumption seems applicable not only to subjects but to any phrase dislocated to SpecTP (recall that dislocation is also an operation that takes place for discourse purposes). As Baker (2003:112) points out, there are constructions in Kinande, a Bantu language, in which the verb
does not agree with the thematic subject but rather with any nominal expression that ends up in SpecTP. The common characteristic among these agreed-with phrases is that they have to be either definite or specific. Illustrative examples are provided below (ibid:113).

(79) a. Omukali mo-a-seny-ire olukwi (lw’-omo-mbas). (SVO) 
woman.1 AFF-1.S/T-chop-EXT wood.11 LK11-LOC.18-axe.9
‘The woman chopped wood (with an axe).’

b. Oluuki si-lu-li-seny-a bakali (omo-mbas). (OVS) 
wood.11 NEG-11.s-PRES-chop-FV women.2 Loc.18-axe.9
‘Women do not chop wood (with an axe).’

c. ?Omo-mulongo mw-a-hik-a omukali. (LocVS) 
Loc.18-village.318.S-T-arrive-FV woman
‘At the village arrived a woman.’

As can be seen, the verb in (79)b and (79)c does not agree with the subject ‘woman’ but rather with the preposed object and inverted locative respectively. Baker expresses this observation in the biconditional given in (80)a, which he contends is a parameter for polysynthetic languages such as Kinande. Accordingly, Baker proposes that the agreed-with preverbal NP in the constructions in (72) is a dislocated NP merged as a second specifier (i.e., adjunction) to T, while the first specifier is a pro as shown in (80)b (Baker, 2003:109ff).

(80) a. A verb X agrees with an NP Y if and only if Y is in a dislocated, adjunct position.

b. \[ [TP NP_1 [TP pro; T \langle Agr \rangle]+Verb ... [VP ti ... ]] ]

While agreement as expressed in the biconditional is assumed to be established between the dislocated NP and T, the structure proposed in (80)b suggests that agreement is mediated by pro, i.e., the preverbal NPs can technically be dealt with as broad subjects in the sense of Doron and Heycock (1999), Heycock and Doron (2009) and Alexopoulou et al. (2004). This account also has the implication that agreement with nominals is strictly valued in a downward fashion, i.e., once the goal has moved to a position c-commanding the probe.
Let us turn back to the data from subject focus in SA and see whether an account along the lines of Baker’s would work. Setting aside the difference that the preverbal NPs in (79) are dislocated while the DP in (75)b is focused as they both in the end appear in SpecTP for discourse purposes, we find that Baker’s analysis cannot be extended to SA for three reasons. First, it predicts that any XP attracted to SpecTP by [uFoc] on T would give rise to full φ-features agreement, which is not the case since SA is a subject-agreement language; T does not enter into an agreement relation in φ-features with a focused object, and instead shows defective agreement with the subject in SpecvP as given in (81)a below. Second, unlike dislocation which is confined usually to DPs, SpecTP as a focus position in SA can host constituents that cannot be coindexed with a pro, such as temporal adverbs as exemplified in (81)b. Third, unlike dislocated elements in Baker’s account, focused constituents in SA are not base-generated but rather arrive at SpecTP through movement (see §2.3.3).

(81) a.ʔal-kitaab-a qaraʔ-a ʔatˤ-ellaab-u
   the-book-ACC read.PERF-3PL.MASC the-students-NOM
   ‘It is the book that the students read.’

b. sˤabah-an wasˤal-a zajd-un
   morning-ACC arrive.PERF-3SG.MASC Zayd-NOM
   ‘It was in the morning that Zayd arrived.’

Miyagawa (2010:99) recasts Baker’s analysis in a form that does not assume the presence of a pro. In a nutshell, Miyagawa, based on observations on how specific and definite subjects interact with wh-questions in Kinande, argues that (79)a is derived by subject movement to SpecTP as in (82)a, whereas the (79)b and (79)c are derived by movement of the object and locative to the specifier position of an intermediate projection, between TP and CP, symbolized as αP, as schematized in
Spec\text{TP} and Spec\text{oP} are argued to be A-positions. In other words, although the three instantiations of movement induce agreement, the subject induces agreement on T whereas the object and locative induce agreement on \(\alpha\). The difference between the two heads is that T values case whereas \(\alpha\) does not. Miyagawa’s motivation for this differentiation is his argument that, despite the literature arguing that Kinande is a non-case language, Spec\text{TP} is a nominative case position in this language but its valuation does not have overt morphology, an argument that follows from his \textit{Strong uniformity} principle (see §1.6.1).

The motivation for this dissociation between dislocated subjects and other phrases is derived from data where agreement must hold with the subject. Miyagawa (2010), based on similar observations made by Progovac (1993) and Schneider-Zioga (2007), notes that the requirement that the agreed-with phrase in Kinande has to be definite or specific in suspended in the context of wh-questioned subjects. Below are examples (Miyagawa, 2010:100)

i. Iyondi yo u-kandi-gul-a esyongoko?
   who that AGR-will-buy the.chickens
   ‘Who will buy the chickens?’

ii *Iyondi yo esyongoko si-kandi-gul-a?
   who that the.chickens AGR-will-buy
   ‘Who will buy the chickens?’

The assumption is that the subject in (i), being a wh-word in the left periphery, is in a non-case position and therefore must have received its case earlier in the derivation, i.e., that it must have appeared in SpecTP at some point in the derivation even though it is not definite or specific. This prediction is borne out since the verb shows agreement with the subject. In (ii), besides the wh-questioned subject, the object is preposed and the verb shows agreement with it. It is ungrammaticality is due to, as Miyagawa argues, the \(\phi\)-probe inheritance by T and this probe is valued by the subject in its way to the left periphery. Since agreement in such case must be with the subject, it is evidence that subject dislocation is distinct from dislocation of other phrases in that the two target different projections.

\(^{46}\) The motivation for this dissociation between dislocated subjects and other phrases is derived from data where agreement must hold with the subject. Miyagawa (2010), based on similar observations made by Progovac (1993) and Schneider-Zioga (2007), notes that the requirement that the agreed-with phrase in Kinande has to be definite or specific in suspended in the context of wh-questioned subjects. Below are examples (Miyagawa, 2010:100)

i. Iyondi yo u-kandi-gul-a esyongoko?
   who that AGR-will-buy the.chickens
   ‘Who will buy the chickens?’

ii *Iyondi yo esyongoko si-kandi-gul-a?
   who that the.chickens AGR-will-buy
   ‘Who will buy the chickens?’

The assumption is that the subject in (i), being a wh-word in the left periphery, is in a non-case position and therefore must have received its case earlier in the derivation, i.e., that it must have appeared in Spec\text{TP} at some point in the derivation even though it is not definite or specific. This prediction is borne out since the verb shows agreement with the subject. In (ii), besides the wh-questioned subject, the object is preposed and the verb shows agreement with it. It is ungrammaticality is due to, as Miyagawa argues, the \(\phi\)-probe inheritance by T and this probe is valued by the subject in its way to the left periphery. Since agreement in such case must be with the subject, it is evidence that subject dislocation is distinct from dislocation of other phrases in that the two target different projections.
A crucial aspect of Miyagawa’s analysis is that the φ-probe does not enter into an agree relation the moment it is inherited by T or α. It enters such a relation only when an XP is raised to its specifier to satisfy a [-Focus] feature on T or α ([¬Focus] is responsible for the derivation of dislocation in his analysis).

On the face of it, the dissociation assumed in (82) looks promising in that it provides a mechanism that evades the prediction that T should agree in φ-features with non-subject phrases, a prediction that follows from an analysis along the lines of Baker’s. To be concrete, let us consider (81)a again. Suppose that [uFoc] is inherited by α in non-subject focus (instead of T as assumed in my proposal in (57)) and by T in subject focus, while [uφ] is inherited by T in either case. When ‘the books’ is attracted by [uFoc] on α as in (82)b, φ features still agree with the subject in the thematic domain as they are present on T. On the other hand, the subject in (75)b, repeated in (83) for easy reference, is attracted by a [uFoc] on T which also possesses [uφ] and therefore it shows subject agreement, an assumption that is consistent with (82)a and my proposal in (57).

(83) maa ʔatˤ-tˤullaab-u qaraʔ-u al-kitaab-a
not the-students-NOM read.PERF-3PL.MASC the-book-ACC
‘It is not the students that read the book.’

While it seems tempting to follow this line of analysis, it has two major drawbacks. First, why should subject focus be different from focus of non-subjects? That is, while Miyagawa’s approach is warranted under the assumption that dislocation is recursive and therefore an argument that subject dislocation can target a projection that is different from dislocated non-subjects is tenable, this argument, when transposed to focused subject agreement in SA, lacks such substantiation due to the consensus that focus is non-recursive (see §2.3.3). Why should not a subject be focused by movement to SpecαP, in which case φ-agreement would remain defective? Second, Miyagawa’s account has a timing component, which weakens its explanatory power. The assumption that
agreement in φ-features can only be established after a phrase is attracted to the specifier of the relevant head by some other feature, [-Focus] in Kinande case, is stipulative. In other words, why is it not possible for [uFoc] and [uφ] to probe separately but simultaneously with the potential for the latter to be valued as defective and then the subject raises to SpecTP in accordance with Miyagawa’s PGU to satisfy [uFoc], therefore deriving a construction like (76)?

To address these questions, I maintain from Baker (2003, 2008) and Miyagawa (2010) the general concept that φ agreement may follow from a structural configuration that is formed by movement in response to discourse features. However, I present it within the scheme of a composite probe, a notion I borrow from Coon and Bale (2014) and van Urk (2015). Various approaches have emerged to deal with agreement and formal features as the relevant literature grew larger to incorporate data from more languages. One point of variation is whether features can probe for goals separately or in unison. For instance, φ features are analyzed in some early works as a bundle of features on T that are valued by one goal (Gallego, 2007:200), but burgeoning research continues to turn up cross-linguistic agreement patterns in some languages (e.g., Icelandic, Georgian, Algonquian, among others) that are best accounted for if features are allowed to probe separately and target different goals (e.g., Béjar, 2003; Béjar & Rezac, 2003; Sigurðsson & Holmberg 2008; Sigurðsson, 2010; Preminger, 2011).

To preserve this fruitful line of argument (i.e., separate probes) which has proved to have a wide empirical coverage and at the same time sustain an explanation for data where agreement suggests that features probe together as a bundle, Coon and Bale (2014) propose the concept of fused or composite probes, which boils down to an optional operation whereby two probing features can fuse and therefore act as a composite probe with the outcome that they inseparably converge on the same goal. Although the original proposal of feature fusion in Coon and Bale (2014)
is presented in relation to person and number features with evidence from Mi’gmaq, van Urk (2015), based on data from Dinka and other languages, takes up this notion and postulates that in principle there is no restriction on the kind of features that can fuse to form a composite probe. His evidence derives from instances where movement in reaction to discourse features are accompanied by φ-agreement along the way; data includes patterns of φ-agreement that are triggered by movement for wh-questions, topicalization and relativization (see (78) for examples from English).

Below are examples from topicalization in Dinka (van Urk, 2015:19).

(84) a. Miir à-càa ___ tì̂iŋ.
giraffe 3S-PRF.ISG see.NF
‘A giraffe, I have seen.’

b. Kɔ̂ɔc-kê áa-cjì Bôl ké yò̂gk [cP kê nị̂àr ___ Àyên].
people-these 3P-PRF.OV Bol.GEN 3PL find.out.NF c love.SV Ayen
‘These people, Bol has found out love Ayen.’

In (84), ‘giraffe’ and ‘these people’ originate in the position indicated by the sentence-internal solid lines. In both instances, they engender φ agreement (person and number in particular) on the perfect auxiliary as demonstrated by the highlighted prefixes. van Urk (2015) argues that (84)a and (84)b are derived from the a configuration in which the φ probe is fused with [Top] and [Wh], respectively, as schematized in (85) below (ibid:56).

(85) XP
    X . . .
    [Wh, φ] ZP . . .

The argument van Urk advances is couched in a scheme in which the distinction between A and Ā-movement is keyed to the kind of attracting feature (see §1.6.1). On this view, a certain position can be A in a certain construction and Ā in another based on the featural content of the head with which it establishes agreement.
van Urk (2015:56) points out that this approach predicts that movement resulting from agreement with fused probes that are made from discourse and φ-features should display properties from both extremes of the spectrum, i.e., A and Ā properties. For instance, he shows that movement triggered by such probes does not exhibit the strict locality that is usually associated with φ-agreement; a composite probe skips over a potential goal if its featural structure formulates a subset of the features on the fused probe. Moreover, he demonstrates that, when WCO, anaphor binding, and reconstruction for condition C in Dinka are examined in relation to movement induced by composite probes, movement consistently shows properties of A-movement and properties of Ā-movement. With this system at hand, the sentence in (78)b can plausibly be accounted for along the same lines. One might argue that the availability of (78)a and (78)b in this variety of English is attributed to an optionality as to whether the φ probe fuses with the feature that derives the movement of the relative wh-operator on not; when they remain separate, (78)a is derived, and when they fuse, (78)b is derived.

Following the same reasoning, to account for the rich φ-agreement concomitant with subject focus in SA exemplified in (83) I propose that, in the case of subject focus, the two features [uFoc] and [uφ] fuse to form a composite probe which selects the subject in unison as their goal, in which case the subject moves to SpecTP in accordance with Miyagawa’s PGU condition; the resultant structure gives rise to full φ-agreement. However, these features remain separate in non-subject focus. To illustrate, subject focus is derived from the syntactic configuration shown in (86)a, while focus of non-subjects is derived from (86)b in which [uφ] probes the subject whereas [uFoc] probes for a different goal.

(86) a. Subject Focus b. Non-subject Focus
Notice that while van Urk invokes the notion of a composite probe to capture cases where the component features converge on the same goal, i.e., they do not establish an agree relation with different goals, the postulation of a composite probe in (86)a is to explain away that lack of the possibility that the component feature, [uFoc] and [uφ], probe separately when they target the subject, a possibility under which φ features would receive the unattested defective valuation\(^\text{47}\). This analysis, while it preserves the assumption that movement for discourse purposes can give rise to φ-agreement from Baker (2003, 2008) and Miyagawa (2010), it circumvents the aforementioned shortcomings that arise from extending either to subject focus in SA. Moreover, it has a further advantage in that it maintains a uniform position for subject and non-subject focus (SpecTP) and reduces the difference embodied in the former being accompanied with full φ-agreement to whether φ features probe on their own or as one unit along with [uFoc].

The literature on φ-agreement directionality is characterized by diametrical arguments. On the one hand, there are accounts that propose agreement is uniformly downward with the probe always c-commanding the goal, an approach referred to as downward agreement or upward valuation (e.g., Chomsky 2000, 2001; Bošković, 2007; Preminger, 2013; Preminger and Polinsky, \(^\text{47}\) I remain imprecise as to why agreement in a VS clause is defective but use this observation as an argument that if φ features probe on their own, they would not receive full valuation. However, defective agreement may be attributed to number being a separate feature which can probe only upwards while person and gender form a disparate probe that probes only downwards, and therefore when the subject remains in SpecvP number receives a default value.

87
On the other hand, some accounts propose an opposing approach in which agreement is uniformly *upward* with the goal always c-commanding the probe, referred to as *upward agreement* or *downward valuation* (e.g., Koopman, 2006; Zeijlstra, 2012; Wurmbrand, 2012, 2014). With these two approaches as the two ends of the continuum, a reconciliatory approach has emerged with the view that agreement is *variable*, i.e., it can be upward or downward (e.g., Baker, 2008; Bjorkman & Zeijlstra, 2014; Carstens, 2016; Keine & Dash, 2019). The analysis proposed above aligns with the *variable* approach in that it shows that a verb agrees downwardly with the subject in VSO, but upwardly when the subject is focus-moved to SpecTP. It also conforms with the cross-linguistic observation that agreement relations in which the goal ends up higher than the probe are usually characterized by rich morphology (see Bjorkman and Zeijlstra 2014 for a discussion).

As indicated, this line of analysis which assumes a fused probe predicts that subject focus would show properties of A and Ā-movement, as pointed up by van Urk (2015) about this kind of movement in general. The standard characteristics that sets the two types apart include the ability of A-movement to create new binding relations, avert WCO effects and to typically not show re-construction (Mahajan, 1990; Chomsky, 1993, Fox, 1999; Miyagawa, 2010). Below are illustrative examples (Miyagawa, 2010:60)

(87) a. Who is it seems to his mother to be smart?
    b. John is himself seems to himself to be smart.
    c. Everyone has been not turning in their papers.

‘Who’ in (87)a is base-generated as a subject for the predicate ‘smart’ and then raises to the subject position of the matrix raising predicate ‘seem’ and then Ā-moves to form the wh-question. Although the lower trace in the A-chain combining the two traces does not c-command the pronoun ‘his’, this movement does not give rise to WCO effects. In (87)b, subject raising creates a new binder for the reflexive ‘himself’. Finally, Miyagawa (2010) points out that the universal quantifier
in (87)c is very hard, if not possible, to be read within the scope of negation, indicating that it does not reconstruct.

The investigation of these properties in the context of focused subjects in SA turns out to be recalcitrant. WCO and creating new binding relation is particularly hard to establish for subject focus since the subject starts out higher than internal arguments. Unlike English, SA is also argued to lack raising constructions (Mohammad, 2000; Soltan, 2007), and even in the context of appropinquation verbs where Haddad and Wurmbrand (2016) argue it exists, the assumed raising predicate does not subcategorize for an internal argument of any sort (not even PPs) and therefore remains invalid since the raised subject does not move across another DP. However, data on scope interactions shows the duality in properties of focus movement. Let us consider the sentence in (88) and (89) below.

\[(88)\]
\[
\begin{align*}
\text{a. } & \text{qaraʔ-tˤaalib-un mudʒtahid-un kull-a kitaab-in} \\
& \text{read.PERF-3SG.MASC student-NOM assiduous-NOM every-ACC book-GEN} \\
& \text{‘An assiduous student read every book.’} \\
& \exists \forall: \forall \exists
\end{align*}
\]

\[
\begin{align*}
\text{b. } & \text{tˤaalib-un mudʒtahid-un qaraʔ-a kull-a kitaab-in} \\
& \text{student-NOM assiduous-NOM read.PERF-3SG.MASC every-ACC book-GEN} \\
& \text{‘An assiduous student read every book.’} \\
& \exists \forall: \forall \exists
\end{align*}
\]

\[(89)\]
\[
\begin{align*}
\text{a. } & \text{lam ja-qaraʔ-tˤaalib-un mudʒtahid-un kull-a kitaab-in} \\
& \text{not 3-read.IMPERF student-NOM assiduous-NOM every-ACC book-GEN} \\
& \text{‘An assiduous student did not read every book’} \\
& \exists \forall: \forall \exists
\end{align*}
\]

\[
\begin{align*}
\text{b. } & \text{tˤaalib-un mudʒtahid-un lam ja-qaraʔ kull-a kitaab-in} \\
& \text{student-NOM assiduous-NOM not 3-read.IMPERF every-ACC book-GEN} \\
& \text{‘An assiduous student read every book.’} \\
& \exists \forall: ?/\forall \exists
\end{align*}
\]

The VSO clause in (88)a allows for both scope readings and so does its counterpart with the focused subject in (88)b. However, in the context of predicate negation, the scenario is different. While (89)a preserves both scopal readings between the subject and object, an inverse scope reading in (89)b is highly unlikely and the surface scope reading is more salient with the preverbal focused subject taking wide scope over the universal quantifier. The inverse scope reading in (88)b
is result of subject reconstruction to Spec\(vP\), a position lower than the position to which the universal quantifier is QRed for interpretation. This reconstruction option does not seem to be available in (89)b. This observation illustrates that the focused subject can reconstruct for scope but does not have to. Reconstruction is characteristic of \(\overline{A}\)-movement, whereas the lack thereof is typical of A-movement.

Interestingly, SpecTP as a focus position in SA provides a unique observation that reconciles positional definitions of A and \(\overline{A}\)-movement (Mahajan, 1990; Chomsky, 1986; Miyagawa, 2010, a.o.) with featural definitions in the sense of van Urk (2015). To visualize this, consider (90).

\[
(90)\begin{align*}
a. & \quad \text{qaabal-}a & \quad \text{kull-u} & \quad t'ullaab-i-[hi]_{k/rj} & \quad \text{[zajd-an]}_j \[\text{meet.PREF-3SG.MASC} & \quad \text{all-NOM} & \quad \text{students-GEN-his} & \quad \text{Zayd-ACC} \]
& \quad \text{‘All his}_{k/rj} \text{ students met Zayd.’} \\
\text{b.} & \quad \text{[zajd-an]}_j & \quad \text{qaabal-}a & \quad \text{kull-u} & \quad t'ullaab-i-[hi]_{k/j} \\
& \quad \text{Zayd-ACC} & \quad \text{meet.PREF-3SG.MASC} & \quad \text{all-NOM} & \quad \text{students-GEN-his} \\
& \quad \text{‘It is Zayd whom all his}_{k/rj} \text{ students met.’}
\end{align*}
\]

In (90)a, the pronoun ‘hi’ cannot be co-indexed with the object, otherwise a condition C violation would arise. In (90)b, by contrast, the reading is licensed with ‘Zayd’ binding the pronoun, but for it to be available, the focused object should not reconstruct. This leads to two conclusions. First, this kind of movement does not reconstruct for condition C, a characteristic typical of A-movement (Fox, 1999; Miyagawa, 2010). Second, it creates a new binding relation and it does not give rise to a WCO effect, characteristics typical of A-movement too (Miyagawa, 2010). To make sense of this observation considering that ‘Zayd’ has moved in response to \(uFoc\) specifically as assumed in (86)a, one might conjecture that that the specifier position of a head that has the potential to host a composite probe would display A and \(\overline{A}\) properties even if it is targeted by movement that is driven by a non-composite probe. This data also offers a new window into the dual nature of focus movement in SA in general.
To sum up, the observation that subject focus in SA is accompanied with full $\phi$ agreement is proposed to be the result of $[uFoc]$ and $[u\phi]$ fusion into one probe, in which case $[u\phi]$ does not probe the subject separately and therefore defective agreement does not arise. Combining the data in (88), (89) and (90), one notice that SpecTP as a focus position in SA exhibit properties of both types of movement, A and Ā-movement, and therefore an assumption is made that once a head has the potential to host a composite probe, its specifier positions would display this combination of properties. This assumption reconciles traditional positional definition of A and Ā-positions with the new arguments that their difference can be keyed to the attracting features. In the next section, I move on to the discussion of the complementizer position and how it follows from the proposal in (57).

2.6 Complementizer Position

The proposal in (57) which assumes that topical subjects in SVO and CLLD both merge in SpecCP raises the following question: how does the complementizer end up higher than both in (65), repeated in (91) below?

(91) a. ʔinna ʕalijj-an ʔidṣṭaaz-a l-ixtibaar-a

that Ali-ACC pass.PREF-3SG.MASC the-exam-ACC

‘Verily, Ali passed the exam.’

b. ʔinna l-ixtibaar-a ʕalijj-un ʔidṣṭaaz-a-hu

that the-exam-ACC Ali-NOM pass.PREF-3SG.MASC-it

‘Verily, as for the exam, Ali passed it.’

As shown, ʔinna is higher than the preverbal subject in (91)a and the LD phrase in (91)b. To account for this, let us take an excursus to Chomsky’s (2008, 2013, 2015) labeling algorithm (LA) in which he argues that labels are determined based on a set of simple computational principles. I argue that the requirements and workings of this operation are what is responsible for the derivation of the complementizer position. To begin with, providing the groundwork for this argument.
requires reviewing the principles of LA and discussing its applications one notch lower in the structure, namely at the level of vP.

2.6.1 The Labeling Algorithm (LA)

2.6.1.1 The System

The body of literature dedicated to how syntactic objects derived by merge are labelled is substantial, the most recent of which includes Chomsky (2008, 2013, 2015), Cecchetto and Donati (2007), Epstein et al. (2014, 2017), Carstens et al., (2015), Ott (2017), Rizzi (2016) and van Gelderen (2015), among others. In its latest incarnation, the labeling mechanism is assumed to work in a fashion identical to Agree, i.e., based on minimal search defined in terms of c-command (Chomsky, 2013). The simplest configuration that results from merge is one that combines a head and its complement, {H, XP}, in which case the resulting syntactic object is labelled after H since it is closer to the mother node\(^ {48} \). By way of schematic illustration, let us consider (92).

(92) a. \[
\alpha \\
H \hspace{1cm} XP \\
X \hspace{1cm} .... \\
\]

(92) b. \[
H \hspace{1cm} XP \\
H \hspace{1cm} XP \\
X \hspace{1cm} .... \\
\]

For \( \alpha \) in (92)a to be labeled, LA searches for the closest head, which is \( H \) in this case and therefore the label is resolved as HP as shown in (92)b. Ott (2011:64) models this labeling procedure in the statement in (93), which has the implication that LA can determine which element is a head based on whether this element is a simple LI or a complex constituent made up of smaller LIs. That is, LA adjudicates between H and X in (92) through minimal search, skipping over XP since it is a complex constituent.

\(^ {48} \) Chomsky (1995:358) defines closeness as follows: a probe \( X \) which c-commands two goals \( Y \) and \( Z \) is closer to \( Y \) than to \( Z \) if \( Y \) c-commands \( Z \).
(93) **Labeling by Minimal Search**

For any syntactic object $K = \{\alpha, \beta\}$, $\alpha$ is the label if $\alpha$ is an LI and $\beta$ is an XP.

Besides the syntactic form in (92), Chomsky (2013) points up some problematic configurations whose labels cannot easily be determined, one of which is a constituent that combines two phrases, one at the traditional bar level in X-bar theory terms and the other in the specifier position. This is schematized below, adapted from Rizzi (2016:107).

(94)

```
      α
   /   \
H1P   H2P
  /     /
H1    H2
```

(94) shows that $H_1$ and $H_2$ are equidistant from the mother node $\alpha$, resulting in a gridlock that makes $\alpha$ unlabellable. Chomsky (2013:46) outlines two possible ways to break this impasse. First, either $H_1P$ or $H_2P$ moves out of $\alpha$, rendering the lower copy and, by implication, its head invisible to LA since it becomes part of a discontinuous chain; the mother node then is labelled after the head of the remaining phrase. Thus, if the configuration in (94) corresponds to the traditional maximal $v$ projection, with $H_1P$ being the external argument and $H_2P$ the $v$-bar level, $H_1P$ movement would resolve the labeling standstill, and $\alpha$ would have the label $vP$\(^{49}\). Interestingly, this movement captures the effects previously put down to EPP, making the postulation of EPP needless, which is a welcome result since it has been among the most controversial constructs in the theory.

The second approach is for the two heads \{H1,H2\} to share a formal feature (e.g., [+wh] or phi-features), in which case the feature is what is passed on as a label for $\alpha$. This approach has

\(^{49}\) In English and English-like languages, the movement of the external argument breaks the labeling standstill at the level of $vP$, but re-establishes the same problematic configuration one notch higher in the structure, viz., at the TP level. In that position, the problem is solved by virtue of agreement; in view of the observation that T usually agrees in $\phi$-features with the subject in its specifier, the maximal projection of T is now labeled as <phi,phi> (Chomsky, 2013, 2015; van Gelderen, 2015).
its roots in Cecchetto and Donati (2007) and it builds on the cartographic hypothesis that heads and features are not substantially different (Cinque & Rizzi, 2008). It depicts labeling as an operation that is parasitic on agreement and therefore provides an explanation for a collection of agreement-related displacements. For instance, Rizzi (2016) utilizes it to derive his (1997) split-CP, i.e., the representational topic and focus projections are now derivationally established as a consequence of labeling through shared features.

2.6.1.2 Theoretical Justifications and Empirical Merits of LA

What is a label and why is it important? As Cecchetto and Donati (2015:29) put it, “the intuition of the notion “label” is that a group of words retains some of the properties of one (and only one) of the words that make up the group”. In the same vein, Chomsky (2007) emphasizes that labels mark which element of a complex object determines its role in further computation and interpretation. At first, labels were analyzed as the product of the projection principle whereby elements are divided into selectors and selectees (Collins, 2002; Chomsky, 2008). In particular, selectors, which are considered as probes in feature-driven syntax theories, determine labels. In the pre-minimalism era, the projection principle was thought to be satisfied at DS and must remain represented at all levels afterwards (Chomsky, 1986:84). However, with the dispensation of DS under minimalism, labels are outsourced to the operation “LA” which operates in the course of derivation with repercussions that arguably extend to the interfaces (Chomsky, 2013).

As Ott (2011:63) indicates, since the objects formed by merge are symmetric sets which, by definition, do not contain information about headedness and linearization, labeling is the mechanism by which this symmetry is broken. So, at PF labels play a role in linearization as well as in facilitating prosodic decisions in terms of which constituents receive certain intonation contours.
(ibid). As for LF, Rizzi (2016:105) points out that labels must be present at this level in order for selectional requirements, i.e., thematic relations, to be checked.

On the empirical side, LA furnishes an alternative to EPP as illustrated above. EPP in its original formulation which associates it with the tense head (Chomsky, 1995) and its later generalization to phase heads in the form of Edge Features (Chomsky, 2008) and to non-phase heads (Cable, 2012) has been among the most suspicious notions in the theory especially in the context of successive cyclic movement due to its look-ahead nature (see Bošković 2007 and Chou 2013 for an extensive discussion). This criticism can be summarized in Boeckx and Grohmann’s (2004:4) description of EPP as the “unmotivated motivation for movement”. This criticism led to the emergence of alternative proposals which come in the form of unidirectional downward agree (e.g., Bošković 2007 where an NP moves to a higher position to value its unvalued case) or upward agree (e.g., Zeijlstra, 2008; Bjorkman & Zeijlstra, 2014). LA is another alternative which has the advantage that it unifies the motivation for A and Ā-movement. Chomsky (2015:7) states that both are now driven by labeling failures, which force a moving phrase to keep on moving until it arrives at a position that brings it in a spec-head configuration with an agreeing head, in which case the node that combines both receives a label that conforms with their shared features. To illustrate, consider the sentence below adopted from Rizzi (2016:115).

(95) a. John thinks [C_{decl} [Bill read [which_{Q} book]]]
   b. * John thinks [α [which_{Q} book] [C_{decl} [Bill read ___]]]
   c. [β [which_{Q} book] [C_{Q} [John think [α ___ C_{decl} [Bill read]]]]

LA by shared features captures the necessary continuation of movement in (95)b. ‘which book’ cannot stop in the embedded SpecCP because it creates an XP-YP configuration identical to (94) which makes α unlabellable since the embedded C does not share a feature with ‘which book’. For
the structure to be salvaged, the wh-phrase has to move all the way to the specifier of the matrix C with which it shares the feature [Q] with the outcome that \( \beta \) can be labeled as QP.

With the system of labeling delineated above as a background, the next section is devoted to how LA works in SA, and perhaps in VSO languages in general, providing a starting point for the account I propose for the complementizer position based on LA.

### 2.6.2 Labeling in SA

In SA, the structure in (94) appears at the vP level, but unlike English, neither of the two solutions envisaged by Chomsky (2013) seems to be applicable. In recent analyses of VSO clauses (e.g., Mohammed, 2000; Soltan, 2007), they are argued to result from V rolling up through head movement (HM) to \( v \) and ultimately to T, with the external argument remaining in situ, i.e., SpecvP. Let us consider (96) and (97) which illustrates the problematic stage in the derivation that is equivalent to (94).

(96) qaraʔ-\( a \) tˤ-tˤaalib-u l-kitaab-a
read.PERF-3SG.MASC the-student-NOM the-book-ACC

‘The student read the book.’

(97)

\[
\begin{array}{c}
\text{TP} \\
\text{T} \\
\text{DP} \\
\text{VP} \\
\text{V} \\
\text{DP} \\
\end{array}
\]

The label of (?P) remains unresolved since the head \( v \) and the DP head \( \text{ʔa} \) ‘the’ are at an equal distance from the dominating node. There is no evidence that the subject DP or vP moves out of (?P). Moreover, \( v \) and the subject DP do not have features in common since uninterpretable \( \varphi- \).
features are on T, and they can receive values through Agree with the subject in situ (Soltan, 2007). In languages where \( v \) has its own set of \( \phi \)-features, they are usually valued by agreement with the object, not the subject (Chomsky, 2000, 2001; Baker, 2008).

Since none of the two conceivable solutions Chomsky (2013) points up is applicable, I propose that \( v+V \)-to-T movement is what enables \((?P)\) to be labelled\(^50\). However, with Chomsky’s argument that the lower copy of the moved element becomes invisible to labeling, \((?P)\) would then be labeled DP, which is an undesired result since semantically speaking this node is propositional, i.e., it is of type <\text{t}>. I therefore enhance the proposal with the ancillary assumption that, unlike phrasal movement, the lower copy in an HM chain remains visible to the algorithm and its becoming a viable label for the syntactic object in question has the conceptual justification that HM indicates an extension in the moved head domain. This concept of domain extension has occurred in various guises in generative grammar. For example, in Chomsky (1986) \( V \)-to-T (INFL at the time) HM is taken to eliminate the barrierhood of VP, implying that VP is extended. In a similar fashion, Chomsky (1993, 1995) argues that head movement extends checking domains of moving heads (see Hornstein et al. 2005 and Den Dikken 2006, 2007 for ample discussion). Recently, Gallego and Uriagereka (2006) and Gallego (2007:116) argue that \( v \)-to-T movement pushes the \( vP \) phase upwards in the structure, a process they call phase sliding. So, with these views in mind, I assume that, following HM, \((?P)\) is labelled as \( vP \), as shown in (98).

\(^{50}\) While this proposal is developed independently for labeling in SA since the Spring 2018, a recent publication, specifically Vercauteren (2017), came to my attention in which an identical proposal is made for labeling in Romance languages. Vercauteren (2017:73) points out that since in Romance languages “all verbs (can) move to TP […] some instances of ‘head’-movement [can be reduced] to labeling conflicts, and as such the application of label-driven movement [can be widened].”
Chomsky (2013) points out that labels have to be resolved by spell-out, i.e., when a phase is transferred to the interfaces. This entails that the HM in (98) must take place in the narrow syntax\(^{51}\), contrasting the accounts assuming that it occurs post-syntactically (at PF) due to its countercyclic nature, derivation qua adjunction, and lack of semantic effects (Chomsky, 2001; Boeck & Stjepanović, 2001; Lasnik, 1999, among others). Nevertheless, countervailing arguments that HM, or at least some of its manifestations, takes place in the narrow syntax also exist. For instance, Matushansky (2006) argues that the lack of interpretive consequences is insufficient per se to relegate HM to the PF component; A-movement does not have semantic effects and nonetheless there is a consensus that it occurs as part of feature valuation in the narrow syntax. There is also a growing body of literature that argues for HM having semantic effects (e.g., Lechner, 2006, 2007; Iatridou & Zeijlstra, 2013; Roberts, 2010), with empirical evidence drawn from various linguistic aspects, including the relative scope of modals and negation, the licensing of Negative Polarity Items (NPIs) as a result of subject-auxiliary raising, to name few. Below is an example from Roberts (2010:8).

---

\(^{51}\) Two questions are usually raised with regard to HM in contexts like (98). The first is whether it is a case of \(v\)-to-\(T\) movement or a case of remnant VP movement, i.e., the syntactic identity of the moved structure. The second question is whether this movement takes place in the syntax proper or at PF. The answer to the first question is that it is a genuine HM in SA. When the object vacates VP, it lands at \(vP\) edge in a position higher than the subject (see §3.3.1 below). As for the second question, the account given here is that it is part of the syntactic component.
(99)  a.  *I saw anyone. (Not licensed)
    b.  Did you see anyone? (Questions)

As can be seen, the NPI object ‘anyone’ is licensed only after T-to-C movement in (99)b. Roberts (2010:17) concludes from sentences like (99) that HM is part of the syntactic component. Moreover, Gallego (2007:12), based on similar examples, reaches the same conclusion since HM plays a role in clause typing. For instance, T-to-C movement in (99)b changes the clause type from a statement into a question. Insofar as SA is concerned, v-to-T movement derives VSO clauses which are interpretively different from SVOs as has been shown with ample evidence in §2.2. i.e., if v remains in situ with tense lowering down to it at PF (via affix hopping for instance) the structure would be SVO. Given these observations, the assumption that the instantiation of HM in (98) is part of the narrow syntax is not without roots and is already independently motivated in the literature. Labeling is only one more argument building in the same direction.

2.6.3 LA-based Account of Complementizer Position

Looking back at (91), repeated in (100) for easy reference, we find that it has the same problematic configuration, as shown in (101), which is confined to the relevant part of the structure.

(100 a. ʔinna ʕalijj-an ʔidṭaaz-a 1-ixtibaar-a
    that Ali-ACC pass.PREF-3SG.MASC the-exam-ACC
    ‘Verily, Ali passed the exam.’

    b. ʔinna 1-ʔixtibaar-a ʕalijj-un ʔidṭaaz-a-hu;
    that the-exam-ACC Ali-NOM pass.PREF-3SG.MASC-it
    ‘Verily, as for the exam, Ali passed it.’

As is the case at the vP level, Chomsky’s (2013) options are inoperative here, too. The movement of the DP ‘Ali’ means that it re-joins α, creating the structure below.
On the empirical side, this short movement is not typical in the Š-domain and in fact is not attested in the language. Theoretically, the literature on Š-movement reveals, based on cross-linguistic evidence, that some forms of this movement are constrained. One of the constraints reflects a prohibition of local movement of a specifier of an XP to re-adjoin the same XP (Chomsky, 2008; Murasugi & Saito, 1999; Bošković, 1997). It is semantically uninformative and syntactically unmotivated. Erlewine (2016:154) posits a similar constraint on too short Š-movement and terms it *Spec-to-Spec Anti-locality*. It states that “Š-movement of a phrase in the specifier of XP must cross a maximal projection other than XP”. In other words, for a spec-to-spec movement to be licit in the Š-domain, there has to be a maximal projection, say, ZP, such that ZP c-commands the launch position and is c-commanded by the landing position.

Similar objections are raised with regard to the movement of TP since it would mean moving a complement of an XP to the specifier position of the same XP, a movement that, to the best of my knowledge, has no manifestation elsewhere in SA. Moreover, this movement is unattested cross-linguistically, an observation that led to the emergence of another constraint in the literature (e.g., Pesetsky & Torrego, 2001; Abels, 2003) labelled as *Comp-to-Spec* constraint in Erlewine (2016). Moreover, Abels (2003:116ff) argues that TPs cannot move and strand C.

Moving to the second approach pointed up by Chomsky (2013), we find that, for it to be operable, the complementizer in (101) must agree with the DP ‘Ali’ in some relevant formal feature, in which case the feature is passed as the label for α. [Topic] is what springs up as the possible candidate for the relevant feature. However, unlike focus, which is argued to be a formal feature
in SA (see §2.3.3), evidence for topic as a formal feature is lacking. So, the head complementizer and the DP ‘Ali’ have no shared features in (101).

In view of the above reflections, I propose that the indeterminacy in (101) is resolved the same way it is resolved in the lower phase (vP), namely via HM of C above α, creating the new node α'. Below is the schematization.

(103)  
\[ \text{DP} \quad \alpha \quad \text{CP} \]  
\[ \text{ʔinna} \quad \text{ʔal-ʔixtibaar} \quad \text{ʔinna} \quad \ldots \]

‘ʔinna’ head-moves out of α, giving way for it to be labeled as CP on the assumption that HM indicates an extension in the domain of the moved head. The newly created projection, α', is then labeled as CP with no competition, since it is a typical head-complement configuration, rendering ʔinna as the closest head to α'.

However, the account for the complementizer position provided above seems to be challenged by a piece of data, in which the complementizer has the option to appear in between two CLLD phrases. Below are examples.

(104)  
\[ \text{zajd-un ʔinna ʔal-ʔixtibaar ʔinna} \quad \text{ʔal-ʔixtibaar ʔinna} \]  
\[ \text{Zayd-NOM that} \quad \text{friend-ACC-his hit.PERF-2SG.MASC-him} \]  
‘As for Zayd, verily, I hit his friend.’

\[ \text{ʔinna zajd-an ʔal-ʔixtibaar ʔinna} \quad \text{ʔal-ʔixtibaar ʔinna} \]  
\[ \text{that Zayd-ACC friend-NOM-his hit.PERF-2SG.MASC-him} \]  
‘Verily, as for Zayd, I hit his friend.’

As can be seen, ʔinna has the option to surface in between the two phrases ‘Zayd’ and ‘his friend’. This is exclusive to ʔinna as it is ungrammatical in the case of ʔanna, which does not figure in
root clauses. For the time being, there is no definite argument as to why the structure in (104)a is permissible. Based on the account above, the structure has to be as in (104)b invariently.

There are two possible approaches to tackle this variability. The first follows from Arregi and Pietraszko’s (2018, 2019) new theory of HM, put under the term generalized head movement, in which they bring up evidence showing that the highest copy of a moved head may not necessarily be the one that is pronounced at PF. For instance, in a three-step HM chain, the middle or lower copy might be the one that gets pronounced. They argue that this theory is empirically well-grounded and theoretically well-motivated as it displays that head-raising and head-lowering (upward and downward head displacement⁵²) are epiphenomenal, thus reducing the difference between the two to which copy of a moved head is pronounced at PF. Building on this perspective to HM, one might entertain the argument that ḡinna in (104)a moves all the way to its position in (104)b, with the difference put down to an optionality at PF as to which copy is pronounced. However, an account along this line needs independent substantiation, especially with the observed complication that HM is concomitant with a shift in the accusative case inflection from ‘his friend’ in the former to ‘Zayd’ in the latter. Furthermore, there is more than meets the eye here. The difference between (104)a and (104)b does not seem to be purely phonological. They demonstrate different syntactic behavior in terms of their embeddability and recursivity; only the latter can grammatically surface as an embedded clause as shown in (105). Moreover, unlike the post complementizer topics in (105)b, a pre-complementizer topic is characterized by its non-recursivity as shown in (105)c.

(105) a. */qul-tu zajd-un ḡinna sˤadiiq-a-hu dˤarab-tu-hu say.PERF-2SG.MASC Zayd-NOM that friend-ACC-his hit.PERF-2SG.MASC-him ‘As for Zayd, verily, I hit his friend.’

⁵² This duality in head movement directions led to a division of labor between two operations, with upward displacement analyzed as part of the syntactic component, while the downward head displacement is analyzed as an instance of PF merger or lowering (e.g., Halle & Marantz 1993; Bobaljik, 1995; Embick & Noyer 2001).
b. qu’il-tuʔinna zājdat-nsādīi-q-hu ḏ’ārab-tu-hu
say.PERF.2SG.MASC that Zayd-ACC friend-NOM-his hit.PERF.2SG.MASC-him
‘Verily, as for Zayd, I hit his friend.’

c. *zājdat-un sādīi-q-huʔinna ḏ’alīj-j-an ḏ’ārab-a-hu
Zayd-NOM friend-NOM-his that Ali-ACC hit.PERF.3SG.MASC-him
‘As for Zayd and as for his friend, verily Ali hit him.’

In addition to this disparity in embeddability and non-recursivity, ‘Zayd’ in (104)a is naturally followed by a pause that sets it apart from the rest of the sentence. Not only do these observations cast doubts on the reduction of the difference between both to a PF optionality as to which copy of a moved head is pronounced but they also set the scene for the second approach embodied in the notion of hanging topics (HT).

The diagnostics employed to identify HTs vary due to the different language-specific properties they display (e.g., Benincà, 1988, 2001; Benincà & Polletto, 2004; Cinque, 1982, 1990, 2014; Grohmann, 2003; Frey, 2004; Rizzi & Cinque, 2016). They are summarized in (106) as stated in Benincà and Polletto (2004:64f) as well as Badan and Del Gobbo (2011:76).

(106) a. Category: HTs can only be DPs.
   b. Recursivity: only a single HT position per clause is available
   c. Resumption: an HT has to be associated with a resumptive pronoun or epithet.
   d. Embedding: HTs are restricted in some types of embedded clauses such as relatives.
   e. Order in relation to LD: HTs always precede LDed XPs.
   f. Order in relation to C: unlike LDed XPs, an HT has to precede the complementizer.

Tests (106)a through (106)b are illustrated by the Italian sentences given below adopted form Benincà & Polletto (2004:63-66). The sixth test is illustrated by (110) from Chinese (Badan and Del Gobbo, 2011:76).
Example (107)a represents the order HT-LD, since only the second topic can be a PP. The reverse order in (107)b is ungrammatical. Moreover, (107)a also shows that a HT has to be associated with a resumptive pronoun, ‘him’ in this case. They also show that a HT can only be a DP. The PP in (107)b cannot function as a HT. Example (108)a shows that that two HTs cannot project in the same clause, hence the ungrammaticality of the sentence. When both topics are PPs, which rules out the possibility of one being an HT, the sentence is possible as in (108)b. (109) shows that the HT ‘this book’ cannot figure in a relative clause, which provides evidence for the root nature of HTs. Based on data like this, Cinque (2014:199) points out that HTs are a root phenomenon and therefore are less liable to embedding or appearing in adjunct temporal or locative clauses. He further indicates that, unlike regular topics, a clause can host only one HT, i.e., an HT projection cannot be recursive. Finally, (110) is evidence that an HT has to precede the complementizer when
they both appear in the same structure; the HT ‘that girl’ cannot follow the complementizer Zicong ‘since’. With data primarily from Italian, Benincà (2001), Benincà and Polletto (2004), Frascarelli (2007) and Bianchi and Frascarelli (2010) indicate that HTs usually appear high in the structure with no syntactic connection to the rest of the sentence, i.e., the node that combines a hanging topic with a sentence is not a CP.

Taking into account these cross-linguistic arguments and the empirical observations in (105), I propose that the two structures in (104) are syntactically different in that (104)a instantiates an HT, namely ‘Zayd’. (105) illustrates that what precedes the complementizer cannot be recursive or embedded. Resumption is not a decisive test in SA since CLLDed XPs are always resumed regardless of whether they are HTs or not. (105) is also evidence that a HT should precede CLLD and C. This proposal affords us explanations for two questions. First, the lack of connection between a hanging topic and the rest of the clause explains why (104)a is unamenable to embedding. ‘Zayd’ and the CP might be combined through a discourse node, rather than a CP, and hence cannot be embedded. Second, this discourse node shows why ‘Zayd’ in (104)a does not lead to a conflict in labeling within the clause. What transpires from this proposal is that the two sentences in (104) are syntactically different and therefore the idea that the initial DP challenges the account of complementizer movement does not hold.

In summary, the theme that emerges from the discussion in this section is that the ordering of the complementizer is derived by the requirements of labeling that are worked out via HM. Theoretically, this proposal that HM can play a role in labeling has the advantage of unifying this movement with phrasal movement in that both are utilized as mechanisms for the resolution of labeling failures. In the following section, I discuss the connection between labeling via HM and Gallego’s (2007) notion of phase sliding. This connection has something to bear on the question
of why long-distance wh-questions that target subjects are ungrammatical, a question to which I return in §2.7.

2.6.4 Implications of Labeling via HM

I have proposed in the previous section that labeling failures can be sorted out via HM, in addition to the two mechanisms proposed in Chomsky (2013, 2015), namely phrasal movement and shared features. My proposal is inspired by several previous accounts that argue HM can satisfy traditional EPP (e.g., Alexiadou & Anagnostopoulou, 1998; Haddad & Wurmbrand, 2016) and that HM eliminates barrierhood (Chomsky, 1986) and extends the domain of a moved head (Chomsky, 1993; Gallego & Uriagereka, 2006; Gallego, 2007). Gallego (2007) calls this domain extension *phase sliding* when the moved head is phasal. In what follows I explore this connection between labeling through HM and *phase sliding*, a connection that will be relevant to the discussion in §2.7. Interestingly, phase sliding influences transfer domains in that it increases their number within a clause (Gallego, 2007:119). To illustrate, Gallego argues that *v*-to-*T* movement adds another transfer layer to the structure as illustrated in the schematizations below, where transfer domains are identified by the grey squares (ibid:111).

\[(111)\]  
\[\begin{array}{ll}
\text{a. Before v Movement} & \text{b. After v-to-T Movement} \\
\end{array}\]

\[
\begin{array}{c}
TP \\
T \quad vP \\
\quad YP \quad vP \\
\quad \quad v \\
\quad \quad \quad VP \\
\quad \quad \quad V \quad XP \\
\end{array}
\]

As soon as \(v\) is externally merged in (111)a, the domain of the \(vP\) phase (i.e., \(VP\)) is sent off to the interfaces, based on Chomsky’s (2001) conceptualization of phases. Then, when \(v\) proceeds to \(T\) through HM, a new transfer domain is induced, consisting of the of complement of \(T\), i.e., \(vP\). I
follow Gallego in this argument, and put emphasis on a direct entailment it leads to, which is that if a constituent is present at the edge of vP by the time VP is transferred and this constituent has a feature that is yet to be licensed (valued), it has to move to SpecTP by the time vP is transferred induced by v-to-T movement (see §2.7 below for some applications of this argument).

This argument extends to the CP domain where I argue that labeling is also sorted out via HM. To illustrate, let us consider (112) where the grey squares indicate transfer domains again.

\[(112)\]
\[
\begin{array}{ll}
(a) & \text{Before C Movement} \\
(b) & \text{After C Movement}
\end{array}
\]

Once C is externally merged in (112)a, its complement is spelled out, i.e., TP is the domain of the CP phase. In (112)b, YP is externally merged as a topic in SpecCP (as I have argued in §2.3.3, therefore creating the projection α, which is unlabellable (see §2.6.3 above)). C moves out creating the new projection α', with the outcome that both projections (α and α') are labelled as CP. In a fashion parallel to the vP phase as delineated in (111), HM in (112)b induces another transfer domain, i.e., α is transferred to the interfaces by the time C moves, creating α'.

The doubling of transfer domains in the CP layer as illustrated in (112) provides an explanation for an observation about TopPs. Exploring the relation between Rizzi’s cartography of the left periphery and phasehood as proposed in Chomsky (2001), Ginsburg (2009) and Totsuka (2015) conclude that TopPs are phases. (112), which combines labeling via HM with Gallego’s notion of phase sliding, derives this observation without further ado. When the lower copy of C in (112)b is merged, its complement is spelled out. Then, YP is externally merged, deriving α. When
C moves to solve the labeling standstill at \( \alpha \), \( \alpha \) is transferred. If a new topical XP is merged in Spec\( \alpha \)\( P \), C would have to move higher, yet inducing a new transfer domain. This entails that a topic is always merged in the specifier position of a phase head.

With the argument represented in (111), I return, in the following section, to the question of why long-distance wh-extractions of embedded subjects is ungrammatical.

**2.7 Long-Distance Extraction of Subjects**

Recall that in the discussion of long-distance extractions in §2.3.2, we came to the conclusion that movement across topics is not banned but the sentence in (45) repeated below remained inexplicable.

(113) *ʔajj-u riḍzaal-in hasib-ta ?anna l-walad-a
which-NOM men-GEN think.PERF-2SG.MASC that the-boy-ACC
dˤarab-u-hu
beat.PERF-3PL.MASC-him

‘literally: Which men did you think that the boy, they beat him?’

‘which men’ is extracted from the embedded subject position. Which-type of questions are usually considered as D(iscourse)-linked, as indicated in Aoun et al. (2010:132ff). In root questions, they can appear with a gap or a resumptive pronoun but in long-distance wh-questions they have to be resumed. Below are examples adapted from Aoun et al. (2010:135).

(114) ʔajja marriidˤ-in qul-ta ?anna naadia zaara-t-* (hu)
which patient-GEN say.PERF.2SG.MASC that Nadia visit.PERF-3SG.FEM-(him)

‘Which patient did you say that Nadia visited him?’

(115) ʔajja marriidˤ-in zaara-t-(hu) naadia
which patient-GEN visit.PERF-3SG.FEM-(him) Nadia

‘Which patient did Nadia visit (him)?’

While resumption is optional in (115), it is obligatory in (114). One might argue that the ungrammaticality of (113) is attributed to the lack of resumption, and this is supported by the fact that with resumption, the sentence turns grammatical as shown below.

(116) ʔajj-u riḍzaal-in ḥasib-ta ?anna-* (hu) l-walad-a
which-NOM mean-GEN think.PERF-2SG.MASC That-they the-boy-ACC
d'arab-uu-hu
beat.PERF-3PL.MASC-him
‘literally: Which men did you think that, the boy, they beat him?’

However, obligatory resumption is not an explanation but rather another observation that requires an explanation. Additionally, long-distance wh-questions that target subjects require resumption even with wh-words that are not usually d-linked. Compare the subject question in (117) to the object question in (118). Resumption is obligatory in (117).

(117) man hasib-ta ?anna-* (hu) l-walad-a d'arab-a-hu
who think.PERF-2SG.MASC That-him the-boy-ACC beat.PERF-3SG.MASC-him
‘literally: Who did you think that he beat him?’

(118) man qul-ta ?anna naadia zaara-t-
who say.PERF.2SG.MASC that Nadia visit.PERF-3SG.FEM
‘Who did you say that Nadia visited?’

These facts strongly suggest that the unacceptability of the long-distance wh-extraction in (113) is peculiar to subjects and has nothing to do with movement across the topic in the embedded clause, namely ‘the boy’. To gain more insight into the nature of the puzzle in (113), let us consider the variation below.

(119) ?/?ajj-u ridjaal-in hasib-ta l-walad-a
which-NOM mean-GEN think.PERF-2SG.MASC the-boy-ACC
d'arab-uu-hu
beat.PERF-3PL.MASC-him
‘Which men did you think they beat the boy?’

Following Soltan (2007), one can argue that ‘the boy’ in (119) is based-generated in the object position of the verb ‘think’, while it binds the resumptive pronoun ‘hu’ in the object position of the embedded verb ‘beat’, and that this explains why subject extraction is acceptable here; it is not preceded by a topic in the embedded clause and therefore extraction is licit. However, an analysis along these lines will leave unexplained sentences like (118) (see also §2.3.2 for more data showing that movement across topics is licit). Nonetheless, (119) remains illuminating as it does not
contain an overt complementizer in the embedded clause, which might provide a new perspective on the problem.

With these considerations in mind, I would like to propose an account for the ungrammaticality of (113) in terms of the well-known that-trace phenomenon. Notice that in all subject extractions, the verb always shows full agreement with the extracted subject, which means that the subject must have landed in SpecTP at some point in the derivation before it proceeds to the matrix clause, leaving behind a copy (or trace). Recall that the position of a complementizer is derived by movement as I have argued in the preceding section. So, I suggest that the adjacency of the lower copy of C to the copy (or trace) of the subject in the embedded SpecTP is what gives rise to ungrammaticality. To illustrate, consider the structure given below for the question in (113).

(120) [TP ʔajj-u ridʒaal-in [vP pro hasib-ta [CP ʔanna [aCP l-walad-a ʔanna] [TP ʔajj-u ridʒaal-in d’arab-uu-hu [vP ʔajj-u ridʒaal-in [VP d’arab-uu-hu]]]]]]

The derivation in (120) proceeds as follows. ‘which men’ starts out in the embedded SpecvP and then moves to SpecT in accordance with (111), a movement that results in full agreement on T. Then, the complementizer ʔanna ‘that’ merges in the structure followed by the merge of ‘the boy’ in its specifier. The merger of C and ‘the boy’ creates a labeling conflict at the level of α that is resolved by ʔanna movement which allows α to be labelled as CP and the newly created projection as CP as proposed in § 2.6.3. When the matrix verb ‘think’ is merged, ‘which men’ moves to the matrix clause. The latter movement creates a that-trace type effect between the lower copy of ʔanna and ‘which men’ shown by the highlighted parts of the structure, leading to the sentence being ungrammatical. This effect can be averted by resumption as in (116) or if the complementizer is null as in (119). As for why the subject cannot move from the embedded SpecTP once it arrives there, a potential reason is that SpecTP is a criterial position for subjects since it induces full agreement, and hence once a subject moves to that position, it cannot move out of it (Rizzi &
Shlonksy, 2006; Rizzi, 2006). Any other element can still move out of this position in its way up to the matrix clause. So, the source of ungrammaticality in (120) is a combination of that-trace effect and the subject being in a criterial position.

In sum, the illicitness of subject extraction from embedded clauses is traced back to the traditional that-trace effect, which is provoked in this case by the adjacency of the lower copy of the complementizer and the copy of the subject in the embedded SpecTP, which is a criterial position for subjects. If this account is on the right track, it provides more support to the proposal that the overt complementizer position is derived via movement forced by labeling conflicts and is not the mere product of external merge in its surface position.

2.8 Concluding Remarks

In this chapter, VSO has been re-established as the basic and discourse-neutral order in SA. Then, I have put forward a proposal in which preverbal subjects in SVO are argued to be either topics externally merged in SpecCP or foci, in which case they arrive to their surface position through focus movement. Based on the patterns of extractions in VSO and SVO structures, I have proposed that wh-questions and focus are derived by movement to SpecTP, whereas topics are base-generated in SpecCP, a proposal presented within a feature inheritance approach to the left periphery.

It turns out that this argument poses a question with regard to the complementizer position. To answer the question, I have resorted to Chomsky’s (2013, 2015) LA and ended up proposing that, like phrasal movement, HM can also be taken to occur as a mechanism to resolve labeling failures, i.e., the complementizer occurs clause-initially due to HM induced by LA. Finally, I have shown that the illicitness of long-distance extractions of subjects is most likely due to a that-trace effect that results from an adjacency between a low copy of the complementizer and a copy of the subject in the embedded SpecTP.
Chapter 3

3 THE MID-FIELD: vP EDGE

3.1 Introduction

The preceding chapter has been devoted to setting the stage for the investigation of IS in relation to the clausal architecture in SA. In this chapter, I survey movements that land at the edge of the lower phase (vP), and attempt to uncover their structural properties and IS effects. Object DPs (definite and indefinite), prepositional phrases, clausal arguments, temporal and locative adverbs as well as secondary predicates can move to vP edge. These categorially different constituents are discussed below in the same order. The examination of this range of movements aims to establish that the vP edge is not confined to object shift but rather instantiates a discourse layer that can host any constituent within the domain of the phase on a par with the CP phase whose discourse layer is well-established cross-linguistically (e.g., Rizzi, 1997, 2004; Cinque, 1999; Belletti, 2004). Movement of internal arguments to the designated field is usually grouped under the operation “Object Shift”. The first section below is an overview of movement to vP edge across languages. It is intended to set a backdrop for the examination of this zone of the clause in SA.

3.2 Background

The main syntactic transformation that lands at the vP edge is object shift (OS henceforth). Vickner (2006:405) defines OS as “a leftward movement of a DP from a position inside VP to a position outside VP but inside the same clause”. In VSO languages (e.g., SA and Irish), OS is a syntactic displacement whereby an object moves out of VP to a position mediating between the canonical subject position, SpecvP, and the derived verb position, presumably under T (Soltan, 2007; Carnie & Bobaljik, 1995). This locates the object at the edge of the verbal phase. In some languages (e.g., Persian as argued by Karimi 2005), the displaced object is tucked in below the subject. The
treatment of OS in the literature has been influenced by evidence drawn from Scandinavian and Icelandic languages as well as languages such as German and Japanese, which demonstrate a movement akin to OS known as object scrambling (Bobaljik, 1995; Thráinsson, 2001).

As for the nature of OS, research is replete with opposing arguments, but they generally bifurcate into two major camps. Some analyses, on the one hand, consider OS as a form of A-movement which takes place to check formal features such as case and object agreement in some linguistic systems and hence lands in the specifier of an object agreement projection (AgrOP) external to VP, an argument that falls in line with early minimalism when agreement was thought to hold uniformly in a spec-head configuration (e.g., Chomsky, 1993; Holmberg & Platzack, 1995; Chomsky & Lasnik, 1993; Jonas & Bobaljik, 1993; Bures, 1992). On the other hand, some argue that it is an Ā-movement or at least a movement that is associated with IS effects (e.g., Müller & Sternefeld, 1994; Zwart, 1996; Mikkelsen, 2011). The latter position is taken based on the semantic effects this movement gives rise to. For instance, Diesing (1996) argues that OS in the clausal domain is concomitant with specificity and definiteness effects; only definite DPs or specific indefinite DPs can lend themselves to OS. These semantic effects gave rise to the assumption that vP has a left periphery with focus and topic projections similar to Rizzi’s (1997) split-CP (e.g., Zubizarreta, 1998; Jayaseelan, 2001; Belletti, 2004). The third approach to OS is that it takes place for pure phonological and prosodic considerations (Erteschik-Shir, 2005).

OS is subsumed under a broader class of movements which target objects. These movements differ in their structural conditions from a language to another. Holmberg (1985, 1986) observes that object movement in Icelandic is contingent on verb movement from VP (see (122) below where ‘ekk’ is standardly assumed to mark the edge of vP), an observation modelled into
what came to be known in subsequent relevant literature as Holmberg’s Generalization, which is given below (Holmberg 1985:184).

(121) Object Shift: Move an object NP leftwards within the X-bar projection of its governing verb, when this verb is phonetically empty.

Conversely, Thráinsson (2001) reports that an object in German can move even when the verb maintains its VP-internal position. Below are illustrative examples from Icelandic and German, respectively (Thráinsson, 2001:148)

(122) a. Nemandinn las ekki bókina
    student-the read not book-the
    ‘The student didn’t read the book.’
    b. Nemandinn las bókina ekki ti
       student-the read book-the not
       ‘The student didn’t read the book.’

(123) a. Der Student hat nicht das Buch gelesen
    the student has not the book read
    ‘The student hasn’t read the book.’
    b. Der Student hat das Buch nicht gelesen
       the student has the book not read
       ‘The student hasn’t read the book.’

The difference illustrated by (122) and (123) led to the standard distinction between OS and scrambling, i.e., Icelandic has OS while German has scrambling. What sets both distinct is the structural conditions that regulate them as only the former requires a phonetically empty V. Holmberg (1986) points out that, in addition to the condition of verb movement, OS in Icelandic takes place only in the context of a finite verb as observed in (122). German scrambling, by contrast, can appear in the context of non-finite verbs as well as in periphrastic constructions which contain an auxiliary and a main verb as evidenced in (123)b (Vikner, 2006; Bobaljik, 1995). Bošković (2004:102) indicates that (122)b in Icelandic is blocked in periphrastic constructions even when the verb moves out of VP. Below is his example where we can see that the object ‘the books’ cannot undergo OS.

(124) ?*Halldór hefur leisð bækurnarí ekki tì
Halldór has read the-books not
‘Halldór has not read the books.’

Besides the structural conditions identified above, Collins and Thráinsson (1996), with data from Icelandic again, consider the applicability of OS in double object constructions (DOCs) and conclude that, although several factors come into play, including stress, person, and animacy of the objects, the general picture that emerges is that OS of the indirect object or both the indirect and direct objects (IO & DO) is licit but the shift of the DO across the IO seems to be illicit.

Taking research on Scandinavian languages as a starting point, Gallego (2013), in his discussion of the vP periphery in Romance languages, demonstrates that object movement outside VP in these languages is also accompanied by verb movement to a position preceding the moved object. He, nevertheless, argues that object movement is divided into two different strategies: OS and VP-fronting. The availability of these two strategies is not a matter of optionality within the same language but is rather subject to a specific parametric cut such that the former appears in Western Romance languages (Galician, European Portuguese, and Spanish) whereas the latter appears in Central-Eastern varieties (Catalan and Italian). Below are schematizations of the two structures (ibid:410). Unlike (125), the object in (126) is deeply embedded within the fronted VP and therefore does not c-command the subject.

(125)
In addition to the question of the structural conditions that regulate movement to the edge of vP, one further question usually raised in this connection concerns identification of the constituents that are liable to movement to that zone. This question was first taken up in Holmberg (1986) who reports that movement of the type shown in (122)b is found also in Mainland Scandinavian, including Danish, Norwegian and Swedish provided that the object is an unstressed definite pronoun. The sentences in (127) show that OS of a full DP, namely ‘the book’, yields ungrammaticality in the three languages.

(127) a. *Studenten læste bogen ikke ti Danish
b. *Studenten leste bokeni ikke ti Norwegian
c. *Studenten läste bokeni inte ti Swedish

student-the read book-the not
‘The student didn’t read the book.’ (Thráinsson, 2001:150)

Moreover, Holmberg points out that while OS is optional in the case of full DPs in Icelandic, it becomes obligatory in the case of pronominal objects as shown by the sentences below.

(128) a.i *Nemandinn las ekki hana Icelandic
a.i *Studenten læste ikke den Danish
a.iii ?Studenten læste inte den Swedish

student-the read not it
‘The student didn’t read it.’

b.i Nemandinn las hana ekki ti Icelandic
b.ii Studenten læste deni ikke ti Danish
b.iii Studenten läste deni inte ti Swedish

student-the read it not
‘The student didn’t read it.’ (Thráinsson, 2001:150)
All the sentences in (128)a are ungrammatical because the pronominal object cannot be left in its base-generation position but instead has to move to vP edge as shown by the counterparts in (128)b. That is, as far as pronominal objects are concerned, Icelandic and Mainland Scandinavian behave alike in that pronominals must undergo OS. It is important to note that, in all the cases reviewed above, the object is definite. Movement of indefinite DPs is restricted (Holmberg, 1986; Bobaljik, 1995; Diesing 1996). Gallego (2013:413) finds out that some Romance languages (e.g., Spanish) exhibit parallelism with Icelandic in not confining OS to unstressed pronouns as shown in (129), where the full DP object *carta* ‘letter’ shifts to vP edge.

(129) Leyó la carta María
read-PST-3.SG the letter María
‘María read the letter.’

Thráinsson (2001) and Bošković (2004) highlight one further point of divergence among languages with respect to movement to the midfield; some languages (e.g., Icelandic) allow only the movement of objects of verbs to the edge of vP while others allow the movement of PPs and APs as in the case of secondary predication (e.g., German).

In summary, movement to the edge of vP is subject to parametric variation which follows from the different structural properties it displays which mainly relate to whether or not it requires verb movement as well as to what constituents can move. With this abridged review of movement to the mid-field in some relevant languages as a background, the next section turns to an investigation of this zone in SA, with the aim of finding out the structural conditions that regulate movement to it as well as the interpretive consequences this movement might have. Another aim is to contribute to the line of research that targets this area of the structure and examine with what languages SA patterns and most importantly what further observations it can provide about this zone.
3.3 vP Edge in SA

In what follows, I show that the vP edge in SA instantiates a mid-field discourse layer that can host internal arguments as well as spatiotemporal adverbs and secondary predicates. This aligns SA with Icelandic in that it allows the movement of internal arguments to this zone and equally aligns it with German in that it allows non-argument constituents originating with the domain of vP to move to its edge. To begin with, object movement to the vP edge is investigated in the following subsections under the cover term OS and an attempt is made to delineate the structural conditions that govern its derivation and how much structure is moved: OS or VP-fronting. I then examine the kind of movement it instantiates, namely A or Ā-movement, and the interpretations it gives rise to.

3.3.1 Object Shift (OS): Structural Conditions

As indicated above, different languages demonstrate different constraints on OS. SA patterns with Icelandic and Spanish in the observation that OS is conditional on verb movement out of vP. Below are illustrative examples.

(130) a. qaraʔ-qa zajd-un ʔal-kitaab-a
read.PERF-3SG.MASC Zayd-NOM the-book-ACC
‘Zayd read the book.’

b. qaraʔ-qa ʔal-kitaab-a zajd-un
read.PERF-3SG.MASC the-book-ACC Zayd-NOM
‘Zayd read the book.’

(131) a. kaana ja-qaraʔ-u zajd-un ʔal-kitaab-a
was 3-read.IMPERF-SG.MASC Zayd-NOM the-book-ACC
‘Zayd was reading a book.’

b. kaana ja-qaraʔ-u ʔal-kitaab-a zajd-un
was 3-read.IMPERF-SG.MASC the-book-ACC Zayd-NOM
‘Zayd was reading the book.’

c. */kaana ʔal-kitaab-a ja-qaraʔ-u zajd-un
was the-book-ACC 3-read.IMPERF-SG.MASC Zayd-NOM
‘Zayd was reading the book.’
It has already been established that the verb in sentences like (130)a moves to T (see §2.6.2), which makes OS in (130)b licit. The sentences in (131) are designated as complex tense constructions (CTCs) which are dealt with mostly as instantiating a biclausal structure (e.g., Fassi Fehri, 1993; Ouali & Fortin, 2007; Soltan, 2007; Ouali, 2018). The major evidence for this kind of analysis derives from the observation that the main verb can have tense as well; it can have the past tense form just as the verb ‘be’ does. However, setting this debate aside, one can argue that (131)b and (131)c still serve to illustrate that an object can shift only when the verb from which it receives its thematic role has moved from its respective VP to a position higher than the position of the shifted object. Moreover, (131)b demonstrates that OS in SA does not take place in the context of finite verbs only.

The question that follows from this observation is: why does this restriction obtain? One answer springs from Fox and Pesetsky’s (2005) translation of Holmberg’s Generalization, pointed up in (121), into an analysis of this phonological restriction in terms of cyclic linearization. Their proposal is rooted in the crucial assumption that linearization strings are established on a phase-by-phase basis. They also dispense with Chomsky’s (2001) *phase impenetrability condition* (see §1.6.1.2). For them, any element within the domain of a phase can still move out of the phase so long as its linearization relations with other constituents in the phase where it originates are preserved in subsequent linearization statements. To illustrate how the system works, suppose that the VP in (131)a is spelled out as soon as *v* is merged. This will yield the linearization string in (132), where “<” stands for precedence relations following Fox and Pesetsky’s notation.

(132) **VP**: ‘*read < the book*’

Suppose now, in line with Fox and Pesetsky’s reasoning that movement is still possible, that the object subsequently moves to SpecvP. By the time the second phase, CP, is linearized, the string
that is produced is the one in (133). Obviously, the linearization statements in (132) and (133) impose contradictory requirements on the phonological component; the former states that the verb precedes the object whereas the latter states that the reverse order obtains.

(133) CP: ‘kaana < the book < VP

To salvage the structure, the verb must move out of VP to re-establish the relation in (132) when the next phase is spelled out. To reconcile this explanation with the grammaticality of scrambling across verbs in German as shown in (123)b, one might argue that the difference can be reduced to the timing of object extraction. In German, it seems that the object undergoes movement before VP is linearized, whereas in SA and Icelandic object movement seems to follow VP linearization and the verb has to move to a higher position to re-establish the linearization statement yielded at the VP level, otherwise the derivation does not converge at PF due to linearization contradictions.

Recall that Gallego (2013) argues that VOS clauses in Romance languages can be the result of OS or VP-fronting (see (125) and (126)). The VP-fronting analysis is formerly proposed for Italian in Zubizarreta (1998) and Belletti (2004). This raises the question of whether SA is an OS or VP-fronting language. Two diagnostics stand out as ways to pinpoint what kind of movement a given language has. First, Gallego (2013:442) emphasizes that there is a previously unnoticed correlation between deriving VOS via OS and the licensing of VSO in Romance languages. He refers to this correlation as the VOS-VSO Generalization.

(134) VOS-VSO Generalization
   If a Romance language generates VOS through object shift, then it licenses VSO.

This correlation represents a parametric cut between OS and V-fronting languages. Even though the generalization in (134) is formulated in relation to Romance language, I argue that, since SA is a VSO language, this is an indication that VOS in the language is derived by OS, i.e., it patterns with Galician, European Portuguese and Spanish in Gallego’s analysis. The logic behind this
argument is that since the verb moves out of vP in VSO anyway, the object can move separately to further derive VOS.

The second diagnostic is brought to the fore in Belletti (2004) who points out that VP-fronting makes the prediction that the possibility of the object binding into the subject from the derived position of VP should be ruled out, because the object in this case does not c-command the in situ subject since it is embedded within the fronted VP. This prediction is borne out in Italian. Let us consider the following dialogue (Belletti, 2004:36).

(135) A: Chi ha salutato Gianni?
who have-3.SG greeted Gianni
‘Who greeted Gianni?’

B: *Hanno salutato Gianni, i propri genitori
have-3.PL greeted Gianni the own parents
‘His own parents have greeted Gianni.’

The inability of the object ‘Gianni’ in B’s sentence to bind the anaphor propri ‘own’ within the subject DP i propri genitori ‘his own parents’ is evidence that the object movement is not a case of OS but is rather a case of VP-fronting, in which case ‘Gianni’ does not c-command the subject. A fortiori, the reading under the binding relation shown in B’s sentence is not possible under a reconstruction analysis since it leads to a condition C violation. This does not mean that reconstruction is not possible in Italian in such construction. Consider (136) (Belletti, 2004:36).

(136) A: Chi ha baciato la propria moglie?
who have-3.SG kissed the own wife
‘Who kissed his own wife?’

B: Hanno baciato la propria, moglie tutti i candidati, have-3.PL kissed the own wife all the candidates
‘All the candidates have kissed their own wife.’

As can be seen in B’s answer in (136), the anaphor propria ‘own’ maintains its binding relation with the universally quantified subject candidati ‘candidate’, therefore deriving the co-variation reading which entails that VP-fronting can reconstruct in Italian.
With this demarcating line as a backdrop, Gallego (2013) reinforces earlier observations made by Ordóñez (1998) that Spanish is characterized by the ability of a shifted object to bind a pronoun within the subject. Consider the following pair of sentences (ibid:416).

(137) a. Recogió cada coche\textsubscript{i} su\textsubscript{i} propietario
   \textit{pick-up-PST.3.SG each car its owner}
   ‘Its owner picked each car up.’

   b. No regañó a ningún niño\textsubscript{i} su\textsubscript{i} madre
   \textit{not scold-PST.3.SG to no child his mother}
   ‘His mother did not scold any child.’

(137) illustrates that, unlike Italian, a shifted object in Spanish c-commands the \textit{in situ} subject and therefore \textit{coche} ‘car’ and \textit{nño} ‘child’ bind the anaphor \textit{su} ‘it/his’. This is evidence that Spanish is a language that has OS as Gallego argues.

Since SA is already shown to pattern with Western Romance languages, of which Spanish is a member, in terms of Gallego’s VOS-VSO Generalization, the prediction is that it is going to pattern with Spanish also with regard to Belletti’s diagnostic of binding. Turning to SA and applying this diagnostic, we find that this prediction is borne out as the sentences below show.

(138) a. qaabal-a kullu tˤullaab-i-hi\textsubscript{j/k} muʕallim-an\textsubscript{j}
   \textit{meet.PERF-3.SG.MASC all-NOM students-GEN-his teacher-ACC}
   ‘All his students met a teacher.’

   b. qaabal-a muʕallim-an\textsubscript{j} kullu tˤullaab-i-hi\textsubscript{j/k}
   \textit{teacher-ACC all-NOM students-GEN-his}
   ‘All his students met a teacher.’

The pronoun ‘\textit{his}’ in (138)a cannot bind the object ‘\textit{teacher}’ as is illustrated. However, when the object moves in (138)b, the reading is licensed, thus supporting the view that this movement is an instance of OS, not VP-fronting. In other words, (138)b could not have been derived from (139) by VP-fronting, assuming, for the sake of argument, that the subject remains in Spec\textsubscript{vP}\textsuperscript{53}.

(139) kull-u tˤullaab-i-hi\textsubscript{j/k} qaabal-a muʕallim-an\textsubscript{j}

\textsuperscript{53} It is already established in Chapter 2 that the subject in SVO structures like (139) cannot be in Spec\textsubscript{vP}. It is either in Spec\textsubscript{CP} or Spec\textsubscript{TP}.
A final observation about the structural properties of OS in SA is that it is characterized by its clause-boundedness. Unlike movement to the left periphery which permits that movement of an embedded object all the way to the left periphery in the matrix clause, long-distance OS of an embedded object to the matrix \(\nu P\) edge yields ungrammaticality. This local nature is reflected by the contrast between the following pair of sentences.

(140) a. kitaab-\(\text{an}_i\) \(\delta\text{ann-}\)a zajd-un ?anna \(\text{\$aliyy-}\)an
    book-ACC think.PERF-3SG.MASC Zayd-NOM that Ali-ACC
    qara\?-a \(t_i\)
    read.PERF-3SG.MASC
    ‘It is a book that I thought Ali read.’

b. *\(\delta\text{ann-}\)a kitaab-\(\text{an}_i\) zajd-un ?anna \(\text{\$aliyy-}\)an
    think.PERF-3SG.MASC book-ACC Zayd-NOM that Ali-ACC
    qara\?-a \(t_i\)
    read.PERF-3SG.MASC
    ‘It is a book that I thought Ali read.’

This clause-boundedness is typical of OS and has been observed in other languages (e.g., Icelandic as Vikner 2006 illustrates). I return to this characteristic in the following section in which I investigate whether OS is A or Ā-movement.

### 3.3.2 OS: A or Ā-movement

As indicated, cross-linguistic analyses differ in their characterization of OS, with some considering it as a form of A-movement that takes place in reaction to formal feature valuation such as object case, and the others arguing that it is a form of Ā-movement that takes place for discourse purposes. In SA, OS has been discussed in relative detail in Soltan (2007) and Musabhien (2009).

In early minimalist accounts where subject and object agreement are established within AgrP situated within the inflectional domain of the clause (Pollock, 1989, Chomsky, 1993), Ou-halla (1994:53) argues that OS in (130)b creates an A-chain whose tale is a theta position and its
head is a case-marked position. The difference between (130)b and (130)a is said to follow from whether movement takes place in the narrow syntax or at LF. However, this approach is untenable under an Agree-based analysis of agreement. In the course of his development of the argument that SA is a non-A movement language, Soltan (2007:117ff) analyzes OS as an instance of Á-movement. He indicates that this view is warranted considering that OS has interpretive consequences; OS is typically accompanied with definiteness and specificity interpretations. Moreover, A-movement is standardly driven by case and agreement requirements, which is not obvious in the case of OS, since the canonical order, VSO, shows that these features are valued with no movement. Although Soltan (2007:123) concludes that licensing of parasitic gaps is not an accurate test for the status of OS, I argue that (141)b is still regarded as less deviant than (141)a when the resumptive pronoun is replaced with a gap. The conclusive test Soltan counts on is that OS maintains binding relations and does not create new binding relations. (142) illustrates the latter property (cf. Soltan, 2007:123ff).

(141) a. 
apsha-rat
publish.PERF-3SG.FEM
 pub-tu-raa3i\-a-haa_i \((^e)\)
3SG.FEM-review.IMPERF-SUB-it
‘Hind published an article without reviewing it.’

b. ?apsha-rat
publish.PERF-3SG.FEM
 pub-tu-raa3i\-a-\(e\_i\)
3SG.FEM-review.IMPERF-SUB-PG
‘Hind published an article without reviewing it.’

(142) a. 
lab-a
blame.PERF-3SG.MASC
‘Zayd blamed himself.’

b. lab-a
blame.PERF-3SG.MASC
‘Zayd blamed himself.’
As can be seen in (141)b, OS licenses the gap in the adjunct clause, although the sentence is a bit degraded. (142)b shows that OS does not destroy binding relations; the reflexive is still bound by the subject. Notwithstanding that the evidence deduced from these sentences is unobjectionable, I argue that it is insufficient to side with the conclusion that OS is a case of Ā-movement. There is evidence that OS can license new binding relations and also seems to degrade reconstruction, because a quantified object takes scope in its derived position. The first trait is already exemplified in (138)b, which I repeat below for easy reference, and the second is exemplified by (144).

(143) qaabal-a muʕallim-anj kullu t’ullaab-i-hi/j/k
meet.PERF-3SG.MASC teacher-ACC all-NOM students-GEN-his
‘All his students met a teacher.’

(144) a. qaraʔ-a t’aalib-un kull-a kitaab-in
read.PERF-3SG.MASC student-NOM every-ACC book-GEN
‘A student read every book.’
   ∈∀; ∃∀ >∀

b. qaraʔ-a kull-a kitaab-in t’aalib-un
read.PERF-3SG.MASC every-ACC book-GEN student-NOM
   ∀∃; */?∃ >∀

As I have indicated earlier, the binding relation between ‘a teacher’ and ‘his’ in (143) is illegitimate prior to OS due to a condition C violation (cf. the Spanish example in (137)). In other words, OS in (143) bleeds condition C, which is checked at LF according to Fox (1999:159). In addition to the conclusion that OS can license new binding relations, this sentence is evidence that OS does not give rise to WCO effects; even though the lower copy of ‘a teacher’ does not

---

54 Bleeding condition C is a characteristic of A-movement as shown by the sentences below (Takahashi & Hulsey, 2009:395).

i. The claim [that John, was asleep] seems to him, to be correct.
ii. Every argument [that John, is a genius] seems to him, to be flawless.

Since in both cases the co-referentiality of the R-expression ‘John’ with the pronoun is licit, it is in an indication that somehow ‘John’ is not present in the lower copy of the raised subject in the subject position of the adjectives ‘correct’ and ‘flawless’, respectively. Takahashi and Hulsey argues that wholesale late merger is what derives this effect, which they call ‘anti-reconstruction effects’.
c-command the pronoun ‘his’, the sentence is still grammatical. Both are typical characteristics of A-movement (Mahajan, 1990; Chomsky, 1993, Fox, 1999; Miyagawa, 2010).

Turning to (144), we notice that (144)a allows both scopal interpretations whereas in (144)b OS has a disambiguating effect as the surface scope reading is very likely the only one available. What transpires from (143) and (144) is that OS does not reconstruct, which is again a typical trait of A-movement. In fact, these heterogeneous characteristics of OS and movements akin to it in other languages have been a recurring theme in the literature which strives to pinpoint their exact status. For instance, Mahajan (1990) studies scrambling in Hindi and comes to the conclusion that it has properties that pattern with rules like passivization (in the traditional transformational sense) and properties that pattern with QR, i.e., it has A and Ā-movement properties.

The puzzle that arises from the set of data reviewed above can be formulated in the observation that the lower copy of OS in some instances is the one that is interpreted at LF (e.g., (142)), while in some others the higher is the one that is interpreted (e.g., (144)), i.e., reconstruction is not obligatory and sometimes is ruled out, a phenomenon identified in Takahashi (2006) and Takahashi and Hulsey (2009) as ‘anti-reconstruction’ effects. There are two plausible directions to approach this conflicting data: i) we assume that OS is a case of Ā-movement based on (141) and (142) and consequently pursue an account of why reconstruction does not take place in (143) and (144); or ii) we assume that OS is A-movement based on (143) and (144) and pursue an account of why it licenses parasitic gaps and maintains binding relations in (141) and (142), respectively. Since A-movement usually takes place to license some feature without whose valuation the derivation would not converge, the first option seems to be the reasonable route to take; the VSO counterparts of the VOS constructions at issue above are grammatical. The
prediction is that they would have been otherwise should OS be a case of A-movement. Therefore, I proceed in what follows with the first option as the premise.

Relevant literature reveals that one approach stands out as a potential route to account for (144)b, namely Lebeaux’s (1988) notion of Late Merge and its extension by Takahashi and Hulsey (2009). This notion was first introduced into the theory to ravel out the puzzle sentences like the following present (Freidin, 1986:179).

(145) a. *[Which report that Johni was incompetent]j did hei submit tj?
   b. [Which report that Johni revised]j did hei submit tj?

Although both sentences are wh-questions, the first is ruled out because it gives rise to a condition C violation, i.e., the bracketed constituent reconstructs to the object position of the verb ‘submit’ at LF and consequently the R-expression “John’ is placed within the c-command domain of the pronoun ‘he’. The question that arises is: how is (145)b different? Lebeaux (1988) posits late merge to answer this question. This operation allows some constituents to be inserted into the structure countercyclically (ibid), i.e., it does not target the root node. Based on this notion, the difference between the two sentences lies in that the relative clause ‘that John revised’ in the second is introduced into the structure after the wh-phrase has moved to SpecCP. That is, the lower copy of the bracketed phrase only contains the DP ‘which report’. By contrast, the wh-phrase complement ‘that John was incompetent’ in (145)a is introduced into the structure earlier in the derivation; in particular, it is merged in the base-generation position of ‘which report’ as an object to ‘submit’ and therefore the lower copy contains the entire expression. So, the difference between (145)a and (145)b is not that the former shows reconstruction whereas the latter does not, but rather consists in the amount of structure that undergoes reconstruction.

Late merge, under this formulation, is regulated by complementation properties of lexical items such that only adjuncts can be merged late. Lebeaux (1998) derives this complement-adjunct
asymmetry from Chomsky’s (1981) Projection Principle. Adjuncts are liable to late merge because they are not lexically selected as opposed to complements which have to merge as soon as their selecting heads are merged in the structure. Given these assumptions, this asymmetry precludes any pursuit of explanation on the basis of late merge under Lebeaux’s formulation since it is confined to adjuncts in Ā-position. Neither ‘teacher’ in (143) nor ‘book’ in (144)b is an adjunct. ‘Book’ is merged as complement to the determiner kull ‘every’, while ‘teacher’ is a bare NP that merges directly in as complement to V or as complement to a null existential determiner. So, for a late merge account to be applicable, it might need to be regulated by principles of grammar other than the projection principle.

Extending this late merge approach to other linguistic phenomena, Takahashi (2006) and Takahashi and Hulsey (2009) propose another flavor of the notion which they call Wholesale Late Merger. Under this approach, late merge is not only available for the well-known cases of adjuncts but extends also to restrictors of determiners (Takahashi & Hulsey, 2009:387). For instance, they argue that late merge is responsible for the surface scope reading between ‘every argument’ and ‘seem’ in the following sentence.

(146) Every argument seems to be correct.

Takahashi & Hulsey (2009:388f) argue that the restrictor term ‘argument’ in (146) is merged late in the structure. The derivation of the sentence proceeds as follows.

(147) a. Base structure

```
XP
  [every] correct
```

b. Det movement

```
ZP
  [every]
  YP

seems to be
  XP
  [every] correct
```

c. Merger of a restrictor
The argument embodied in (147) is that ‘every argument’ takes scope over the verb ‘seem’. This reading, which rules out reconstruction, is derived by late merge of the restrictor ‘argument’. This entails that the lower copy in the subject of position of the adjective ‘correct’ contains only the determiner ‘every’ which is converted by Fox’s (1999, 2002) Trace Conversion into an object that receives the same interpretation as the syntactic objects traditionally called traces, i.e., it is dealt with as a variable that is bound by a lambda-abstract that is introduced at the level where the restrictor argument is merged. In this way, the ‘anti-reconstruction’ effect is derived.

With whole sale late merger at our disposal, one might argue that the ‘anti-reconstruction’ effect observed in (144)b is traced back to late merge. The derivation starts out with kull ‘every’ merged as complement to the verb ‘read’ and by the time the determiner shifts to vP edge, the restrictor term ‘book’ is inserted. This entails that the determiner’s scope would be as high as the point where its restriction is merged (cf. Fox & Nissenbaum 1999), therefore capturing the ‘anti-reconstruction effects’ it displays.

Notwithstanding the elegance of this approach, its extension to the data in (143) and (144) is theoretically and empirically problematic. Takahashi and Hulsey’s (2009) extension of the notion of late merge takes it to the realm of A-movement since (146) is a typical raising construction in which the embedded subject A-moves to the matrix subject position. Moreover, they argue that wholesale late merger in A-chains is not without restraints as observations indicate that it looks to be parasitic on case checking or valuation. Their argument follows from the assumption that ‘every argument’ in (146) as a constituent must receive case, a standard assumption that follows from the
case theory (Chomsky, 1981). Since the lower position in the first step of the derivation in (147) is not a case position while the matrix position in the third step is, they argue that wholesale late merger is only possible if the higher position, the one where the late merge takes place, is a case position. In other words, wholesale late merger of restrictors is deviant if the position to which the determiner moves is an Ā-position. With this correlation as the key determinant of late merger of restrictors, a late merger account of (144)b is unfounded. First, the launch site of movement, the complement of v, is definitely a case position. This is a well-established assumption and is evidenced by the grammaticality of (144)a where the determiner bears the accusative case inflection valued by v. Second, the determiner and the restrictor receive different case inflections, of which the former is the only one valued structurally by v. The genitive case on the restrictor is inherent and thereupon cannot be anchored to the position of late merge. Therefore, the movement in (144)b is not an instance of displacement that takes place from a non-case to a case position.

As it turns out, there is no logical way to reconcile both incarnations of late merge upon which an explanation for (143) and (144) can be based. Any alternative that unties Takahashi and Hulsey’s assumed interplay between case and wholesale late merger would take us back to square one, i.e., it destroys the explanation provided for the asymmetry in (145) since it would eliminate the distinction between complements and adjuncts formulated on the basis of case. In particular, it makes the prediction that (145)a should be grammatical, contrary to fact.

Due to the limitations of the late merge approach, I argue that the characteristics noticed in (141) through (144) can best be accounted for by a composite probe approach following van Urk (2015) (see §2.5 for an application at the TP level). As indicated, this approach does not require a definitive determination of whether movement is A or Ā if it is induced by a composite probe that combines φ-features as well as a discourse feature. Not only does this approach require no
determination but in fact it predicts that a movement of such kind is bound to reflect a hybrid of A and Ā properties. Since OS is assumed to take place for interpretive purposes as Soltan (2007) and Musabhien (2009) argue, and as I will elaborate further in §3.3.3 below, I propose that it is derived by a composite probe on v which is a combination of \([uφ]\) and \([uFoc]\)^55. These features are not passed down to V the way features are passed down from C to T as proposed for the left periphery in chapter 2. Instead, as v head-moves to T in VSO clauses, the complex of features it has remains on its lower copy, an account I base on Gallego (2014) who argues that the syntactic relation between phase and non-phase heads must be regarded as that of identity; non-phase heads (heads of phase complements) are copies of phase heads. Under this perspective, FI (feature inheritance) is in essence reconceptualized as a case of the lower copy of a moved phase head maintaining the complex of features. The proposal is schematized in (148) below.

(148)

Building on the assumption that v is what values the case of the object as accusative and the assumption that case is not a probing feature but rather is valued as a by-product of an agree relation that is initiated by φ-features, I assume that v in SA has its own set of uninterpretable φ-features and that this set is responsible for the initiation of agreement with the object even though this agreement does not have a morphological reflection on the verb (see Chomsky, 2000, 2001; Baker, 2008).

---

^55 The postulation of \([uFoc]\) is subjected to a re-evaluation by the end of the chapter after the interpretive consequences of movement to the vP edge are teased apart.
Since OS, by definition, targets objects, I postulate that it is due to \( v \) having a discourse feature that probes the object in unison with \( \phi \)-features as a composite probe. Under this approach, the hybrid properties OS displays are turned from a problem into a prediction. With data from Dinka and some Bantu and Austronesian languages, van Urk (2015:56) points out that such movement acts like A-movement in terms of binding in that it does not give rise to WCO effects, therefore explaining the grammaticality of (143). He also indicates that it should be able to license parasitic gaps and avoid obligatory reconstruction, thus explaining (141) and (144). Below are examples from Dinka in which a topicalized constituent does not give rise to WCO (ibid:110). As can be seen, the variable binder ‘every’ binds the pronoun in (149)b.

(149) a. Thɔk-ɗék/r_i ɗè-cè ɗük ɛbèn_i kàac.
goose.CS-SG.3SG 3S-PRT.SV boy every bite.NF
‘His/goat has bitten every boy.’

b. Dhük ɛbèn_i ɗè-cìj Thɔk-ɗék/k ___ kàac.
boy every 3S-PRT.SV goose.CS-SG.3SG bite.NF
‘Every boy, his/goat bit.’

In addition to capturing the hybrid properties OS exhibits, the proposal in (148) provides an explanation for the clause-boundedness nature of OS exemplified by (140) in the previous section; since OS takes place in response to a composite probe constituted from \([\upsilon\phi]\) and \([\upsilon Foc]\), the prediction is that an embedded object cannot land permanently in the matrix Spec\(v\)P because it cannot value \([\upsilon\phi]\) on the matrix verb.

To sum up, this section has looked into the hybrid characteristics OS demonstrates and after a critical evaluation of what kind of movement it is, a proposal is put forward in which OS is assumed to take place as a result of agreement with a composite probe on \( v \). This analysis turns the problem of heterogenous characteristics into a prediction since the composite probe that triggers movement is an amalgamation of \( \phi \)-features and focus. In the next section, I turn to an examination of the discourse contributions OS makes.
3.3.3 OS: IS Effects

Building on Soltan’s (2007) argument that OS takes place for interpretive purposes, Musabhien (2009:242f) claims that OS is an instance of contrastive focus in the middle of the clausal architecture in SA. His evidence is based primarily on i) OS liability to co-occur with negative continuations that pick out the object, and ii) from the grammaticality of wh-words in the same position. Below are illustrative examples.

(150) a. qaraʔ-a  zaid-un  ?al-kitaab-a
read.PERF-3SG.MASC  Zayd-NOM  the-book-ACC
‘Zayd read the book.’

b. qaraʔ-a  l-kitaab-a  zaid-un  laa  l-qisˤsˤat-a
read.PERF-3SG.MASC  the-book-ACC  Zayd-NOM  not  the-story-ACC
‘Zayd read [the book]F, not [the story]F.’

c. qaraʔ-a  maaðaa  zaid-un
read.PERF-3SG.MASC  what  Zayd-NOM
‘What did Zayd read?’

Despite his argument for a contrastive focus interpretation of OS, Musabhien (2009) distinguishes between this position and the CP edge focus position, shown in (151), by his indication that (151) is more emphatic.

(151) ?al-kitaab-a  qaraʔ-a  zaid-un
the-book-ACC  read.PERF-3SG.MASC  Zayd-NOM
‘[The book]F Zayd read.’

Language-specific and cross-linguistic evidence suggests that the contrastive focus reading of OS in SA might be an oversimplification. There is more to be unraveled. While the reading in (150)b is undeniable, it is insufficient to conclude that OS derives only contrastive focus. Actually, this reading is not what transpires naturally unless the object, besides its movement, is pronounced with some phonological prominence. In the absence of phonological prominence, it is more acceptable for the continuation to single out the unmoved subject, as in (152).

(152) qaraʔ-a  l-kitaab-a  zaid-un  laa  ?alijj-un
read.PERF-3SG.MASC  the-book-ACC  Zayd-NOM  not  Ali-NOM
‘[Zayd]\textsubscript{F} read the book, not [Ali]\textsubscript{F}.’

So, the first piece of evidence Musabhien (2009) provides is inconclusive. As for the grammaticality of a wh-word appearing in the same position, the question in (150)c can serve as an echo question that inquires about familiar information that is either shared by interlocutors or has occurred in previous immediate discourse, i.e., familiar information placed in focus.

In addition to the aforementioned language-particular objections, Holmberg (1999:41), in his analysis of object movement in Scandinavian languages, indicates that unfocused elements are what usually undergo movement, i.e., less prominent constituents move to the edge of \(vP\), leaving behind focused materials. This argument explains why pronominal object clitics, for example, obligatorily undergo OS, a characteristic that is attested in SA as will be shown shortly.

Before I proceed to my account of what these observations indicate, let us see whether they hold for indefinite DPs. Below is a variation of (150).

<table>
<thead>
<tr>
<th></th>
<th>qaraʔ-a</th>
<th>kitaab-an</th>
<th>zaid-un</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td><code>read.PERF-3SG.MASC</code></td>
<td><code>book-ACC</code></td>
<td><code>Zayd-NOM</code></td>
</tr>
<tr>
<td></td>
<td><code>Zayd read a book.</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td><code>read.PERF-3SG.MASC</code></td>
<td><code>book-ACC</code></td>
<td><code>Zayd-NOM</code></td>
</tr>
<tr>
<td></td>
<td><code>not [a story]\textsubscript{F}.</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td><code>read.PERF-3SG.MASC</code></td>
<td><code>book-ACC</code></td>
<td><code>Zayd-NOM</code></td>
</tr>
<tr>
<td></td>
<td><code>not [a story]\textsubscript{F}.</code></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comparing (153) to (152), we find that, while, in the case of definite DPs, a subject-oriented negative continuation is more acceptable, with indefinite DPs, it is unacceptable as reflected in (153)c. This tells us that OS of definite DPs serves more discursive functions.

Based on the above observations, I argue that definite DPs affected by OS oscillate between a contrastive focus and a contrastive topic reading, with the latter being the more natural one as it results from the mere disruption OS makes to VSO clauses. The former requires the
shifted object to be produced with phonological prominence. Indefinite DPs, on the other hand, seem to only support the contrastive focus reading.

(152) is the first piece of evidence in favor of the contrastive topic reading of shifted definite DPs. As indicated in §1.6.2, contrastive topics are usually accompanied by a focus somewhere in the structure (CT+F), the function of which is to define the domain of contrast\(^{56}\). In (152), the object, ‘the book’, is a contrastive topic, and the subject ‘Zayd’ is a focus. (152) is a valid answer to the question ‘who read the book?’. The CT+F reading is felicitous in case there is another piece of writing in the context, which was also read, but the speaker does not know who read it, or knows but does not tell who did. The other relevant, but unsettled question, could be ‘who read the story?’. Both questions can be conceptualized as part of the overarching question ‘who read them?’, with ‘them’ referring to a set of written elements that is part of the CG shared by the speaker and hearer. On this account, (152) has three semantic values delineated as follows.

(154) a. \([\text{qaraʔ}-\text{a l-kitaab-a zaid-un}]^0 = 1 \text{ iff Zayd read the unique } z \text{ s.t. } z \text{ is a book}\)

b. \([\text{qaraʔ}-\text{a l-kitaab-a zaid-un}]^F = \{\text{read (x, the book)} \mid x \in E\}\)

c. \([\text{qaraʔ}-\text{a l-kitaab-a zaid-un}]^{\text{CT+F}} = \{\{\text{Zayd read the book, Ali read the book, Omer read the book, …}\}, \{\text{Zayd read the story, Ali read the story, Omer read the story, …}\}\}

(154)a denotes the ordinary semantic value, in Rooth’s (1992) terms, which shows the sentence truth conditions. (154)b is the focus semantic value which indicates the relevance of other alternatives in the position of ‘Zayd’. The CT+F semantic value, represented in (154)c, induces a set of sets of alternatives, each of which has the same topic, the elements in bold, with variant alternatives in the position of the domain of contrast, the underlined elements. The first set in (154)c

\(^{56}\) The CT reading of shifted definite DPs can still be attributed to the \([\nu\text{Foc}] \text{ on } \nu\), i.e., a CT is the result of a topic placed in focus. The accompanying focus reading of the subject can be ascribed to a tendency to place default focus on a clause-final constituent.
can be reconceptualized as the set of answers to the question ‘who read the book?’, as opposed to the second set which has answers for the question ‘who read the story?’.

The second piece of evidence for the CT+F reading comes from interaction with focus-sensitive particles. Below are examples with the sentential negation *maa* and the polar question marker ʔa.

(155) a. maa qaraʔ-a qajd-un ?al-kitaab-a
not read.PERF-3SG.MASC Zayd-NOM the-book-ACC
‘Zayd didn’t read the book.’

b. maa qaraʔ-a l-kitaab-a qajd-un
not read.PERF-3SG.MASC the-book-ACC Zayd-NOM
‘[Zayd]F didn’t read the book.’
‘Zayd didn’t read [the book]F.’

c. ʔa qaraʔ-a qajd-un ?al-kitaab-a
Q read.PERF-3SG.MASC Zayd-NOM the-book-ACC
‘Did Zayd read the book?’

d. ʔa qaraʔ-a l-kitaab-a qajd-un
Q read.PERF-3SG.MASC the-book-ACC Zayd-NOM
‘Did [Zayd]F read the book?’
‘Did Zayd read [the book]F?’

While (155)a negates the entire proposition, (155)b is ambiguous between two readings as elucidated by the translation, and the difference between the two is in the kind of presupposition they legitimize. The first gives rise to the inference that a proposition of the form ‘x read the book’ holds true, with x being an individual other than ‘Zayd’, whereas the second gives rise to the inference that a proposition of the form ‘Zayd read x’ obtains, with x referring to a piece of writing other than ‘the book’. The same line of argumentation can be run for (155)c and (155)d. The question in (c) inquires about the veracity of the whole proposition, while in (d), it inquires whether ‘Zayd’ is the agent of the presupposed event ‘read the book’, or whether ‘the book’ is the object acted on in the presupposed event ‘Zayd read’.

Further evidence for a CT+F reading of VOS clauses with definite object DPs is obtained from the felicity of pair-list readings. Below is an example.
The list can go on to incorporate other elements that provide substitutions in the CT position and the F position. Pair-list readings can further be utilized to make use of a diagnostic indicated by Büring (2016:5) in which he argues that in F+F constructions, the lower focus cannot move across the higher one, whereas a CT can move across a focus higher in the structure. In (156), the coordination with other pairs is true even if the first clause is a VSO, i.e., (157) below is felicitous.

The CT+F reading provides insight into the descriptive statement that the middle field focus position is less emphatic than focus-fronting to the left edge as in (151); unlike the latter, the former introduces alternatives in two positions since the presuppositional part of the structure has alternatives in the CT position as well.

Now, we turn to the case of indefinite object DPs. As can be seen in (153), indefinite DPs support a focus reading of the shifted object, and are less likely to have a CT+F reading as shown by the degraded status of (153)c. OS in this context is an indication of specificity, i.e., though the object is indefinite, it is not quantificational. It rather denotes a variable conditioned by being an element of the set ‘book’57 and this variable is specific in that it is part of the knowledge base of

---

57 While definite DPs are usually of type <e> (they can also be of type <et, t> via type-shifting rules (see Partee (1987) for details) and quantificational DPs are either <et>, <et, t> or <et, t> based on their restriction, indefinite DPs do not have a regular semantic type. Heim (1982) argues that an indefinite DP denotation is reduced to a variable and a condition on the domain of that variable (e.g., book(x)) and that any quantificational sense that might, at first sight, seem to be tied with the indefinite itself is in fact contributed by other elements in the structure such as quantificational determiners or adverbs as argued by Lewis (1975).
the speaker, but not necessarily the hearer. The semantics of this specific indefinite object can therefore be modelled as follows\(^{58}\).

\[
(158) \quad [\text{kitaab-an}] = \lambda P_{e_{10}}. \exists x \left( \text{book}(x) \land P(x) \right)
\]

(158) indicates that there exists a specific variable that is an element of the set ‘book’ and of which some proposition is true. The literature on specificity is so large and distinguishes between different types of specificity (see Ionin (2006) for a review). However, the specific sense denoted by (158) is presuppositional in that it presupposes the existence of one element that belongs to the set denoted by the property ‘book’ such that this element is known to the speaker. Building on Fodor and Sag’s (1982) referentiality approach to such indefinites, Heusinger (2011:9) refers to them as ‘referential intentions’, meaning that the speaker has a particular referent in mind\(^{59}\).

The discussion of argument DPs affords us the conclusion that the interpretations they receive when they undergo OS are predictable depending on in/definiteness of the argument. Definite arguments have the potential for a contrastive focus reading or a contrastive topic plus focus reading, with the subject being the element in focus and hence the domain of contrast for the contrasted topics. On the other hand, indefinite DPs seem to support the contrastive focus reading only. These varied readings offer an explanation as to how OS is typically associated with the

\(^{58}\) Specific indefinites are known for their wide scope. However, there is an ongoing debate as to how their wide scope is cashed out, with the leading views being that it is in terms of QR or a Choice Function. One advantage for the choice function approach is that it generates wide scope with no need for covert movement at LF, therefore explaining why indefinites appearing within syntactic islands can sometimes have wide scope readings (Reinhart, 1997). As far as the data under discussion is concerned, no position on either approach is imperative. The specificity of indefinites in the data in hand is derived by virtue of its overt movement in the syntax, rendering both approaches irrelevant.

\(^{59}\) I should point out (thanks to Usama Soltan) that property-denoting NPs can also undergo OS. Below is an example.

\begin{verbatim}
i. ja-qraʔ-u kutub-a taariix-in zajd-un 3-read.IMPERF-SG.MASC books-ACC history-GEN Zayd-NOM
'Zayd reads history books.'
\end{verbatim}

The interpretation in (i) is that the NP can be referential but does not necessarily have to be. Specificity here can be modificational in that it shows what kind of books ‘Zayd’ reads.
semantic effects of definiteness and specificity (Soltan, 2007:116); shifted definite objects are topics while indefinite objects are specific.

The last point at issue under this section is what is called obligatory OS of pronominal objects. The literature on clitics is filled with controversy over their potential to be in prominence, with the largely held perspective being that clitics are deaccented elements, and that their tendency to cling onto appropriate hosts is a consequence of their phonological deficiency (Gerlach, 2002:2). As a result, an argument that an object clitic undergoes OS for interpretive purposes is hard to bear out. The data in question is repeated below.

(159) a. qaraʔ-a-**haa** zajd-un
read.PERF-3SG.MASC-it Zayd-NOM
‘Zayd read it.’
b. *qaraʔ-a zajd-un -**haa**/ **hijaa**
read.PERF-3SG.MASC Zayd-NOM -it/ it
‘Zayd read it.’

While pronominal clitics are taken to be definite in that they are referential, (-**haa**) in (159)a cannot have a topical interpretation, as is argued for definite DPs. The pronoun refers to an entity in the context and sometimes to a definite LD-DP as in (160).

(160) ?al-qisˤsˤat-u qaraʔ-a-**haa**
the-story-NOM read.PERF-3SG.MASC-it Zayd-NOM
‘As for the story, Zayd read it.’

In (160), (-**haa**) is a resumptive pronoun bound by the LD object. In other words, aside from the interpretive consequences of dislocation, the structure can still be classified as an OVS. In the absence of the LD-object, the clitic is just a referential resumptive pronominal that links the utterance to an entity that constitutes a topic for discussion and is part of the CG; Pesetsky (1987) introduces the term (d)iscourse-linking to designate the latter case. The cliticization to V is also attested in the OSV version of (160), with the subject and object as topics. Consider (161).

(161) a. ?al-qisˤsˤat-u zajd-un qaraʔ-a-**haa**
the-story-NOM Zayd-NOM read.PERF-3SG.MASC-it

‘As for the story, Zayd read it.’

b. ?al-qisˤsˤat-u zajd-un qaraʔ-a-haa huwaa

the-story-NOM Zayd-NOM read.PERF-3SG.MASC-it he

‘As for the story, Zayd read it (himself).’

It is not obvious from (161)a whether the clitic moves to vP edge or remains in the thematic object position internal to VP and cliticises to the verb at PF. However, if (161)b, where the subject-bound null pro in SpecvP is given an overt realization, is grammatical, it is evidence that the clitic moves to vP edge, similar to (159)a.

What transpires from this discussion is that the movement of the clitic is driven by phonological requirements and hence cannot be considered as a genuine instance of OS. The topical status of the element to which it refers derives from its being part of the CG, regardless of whether it appears explicitly in the structure as in (160) or remains covert. Since the pronominal function is to relate to an aboutness topic, it falls with what Frascarelli and Hinterhölzl (2007:88) call familiar topics, which they define as a given or accessible constituent that is typically destressed and hence realized in a pronominal form; when the pronominal is overtly linked with a pre-established aboutness topic as in (160), it is defined as a continuing topic. This analysis of OS of clitics in SA concurs with Erteschik-Shir (2005) and Vogel (2006) who ascribe the process to pure phonological reasons. Vogel (2006) argues that obligatory OS in Scandinavian is a reflection of a restriction against the occurrence of weak functional words at the edges of larger prosodic domains.

In this section the range of potential interpretative consequences of OS of DPs is discussed and evidence is provided that they vary based on the definiteness of the shifted DP. As for clitic objects, evidence suggests that their presumed obligatory OS looks to be dictated by their phonological deficiency, and therefore can be relegated to PF. In the next section, the
discussion is switched to PPs and CPs that move to vP edge. The aim of investigating this range of constituents is to furnish ample evidence that vP edge in SA hosts a discourse layer and is not confined to OS.

3.3.4 Movement of PPs and CPs to vP Edge

As heavy materials are usually placed clause-finally, forwarding PP and CP arguments must take place for some interpretive reasons. SA has no restrictions over the elements that can move to vP edge. PP and CP arguments in SA can also be affected by OS.

(162) a. tahaddaθ-a zajd-un maša šalijj-in talk.PERF-3SG.MASC Zayd-NOM with Ali-GEN ‘Zayd talked to Ali.’

b. tahaddaθ-a maša šalijj-in zajd-un talk.PERF-3SG.MASC with Ali-GEN Zayd-NOM ‘Zayd talked to Ali.’

(163) a. ʔblay-a-n-i šalijj-un ?anna l-baab-a tell.PERF-3SG.MASC-EC-me Ali-NOM that the-door-ACC m-ʔlaq-un NS-closed-NOM ‘Ali told me that the door is closed.’

b. ʔblay-a-n-i ?anna l-baab-a m-ʔlaq-un tell.PERF-3SG.MASC-EC-me that the-door-ACC NS-closed-NOM šalijj-un Ali-NOM ‘Ali told me that the door is closed.’

This salient interpretation for (162)b and (163)b is that the subject is set in focus. Therefore, similar to definite DPs, the forwarded PP and CP seem to designate given information. Evidence for this reading derives from the felicity of subject-oriented negative continuation in both. Moreover, pair list readings are felicitous where the second member is an alternative to the subject and the first is a constituent that correspond to a PP or any of its sub-constituents. By way of illustration, (164) is provided.

(164) tahaddaθ-a maša šalijj-in zajd-un wa maša šamr-in talk.PERF-3SG.MASC with Ali-GEN Zayd-NOM and with Amr-GEN
Ahmed-NOM and ....
‘Zayd talked to Ali, and to Amr Ahmed....’

PP arguments parallel definite DPs also in their liability for a focus reading, specifically if their shift is accompanied with some phonological prominence.

(165) taḥaddaθ-a maša ᵣalijj-in zajd-un laa maša ᵣamr-in
talk.PERF-3SG.MASC with Ali-GEN Zayd-NOM not with Amr-GEN
‘Zayd talked to Ali, not with Amr.’

This reading is degraded in (163)b even when there is a phonological prominence somewhere in the shifted CP.

(166) a. ?? ᵣblay-a-n-i ᵣanna l-baab-a m-uɣlaq-un
tell.PERF-3SG.MASC-EC-me that the-door-ACC NS-closed-NOM
’saļijj-un laa l-naafidat-a
Ali-NOM not the-window-ACC
‘Ali told me that the door is closed, not the window.’

b. ?? ᵣblay-a-n-i ᵣanna l-baab-a m-uɣlaq-un
tell.PERF-3SG.MASC-EC-me that the-door-ACC NS-closed-NOM
’saļijj-un laa l-maftuh-un
Ali-NOM not the-window-NOM
‘Ali told me that the door is closed, not open.’

To conclude, shifted PPs have the same readings as definite DPs, namely a focus reading or a CT+F reading, with the contrastive topic being the DP complement of the preposition. CPs, on the other hand, seem to only support the reading where the subject is set in focus as a function of shifting the CP. A major commonality between DPs and PP and CP arguments is that in most cases what moves is interpreted as part of the background information in some sense (whose movement can place them in focus)⁶⁰, while what is left in the vP is interpreted as focus. Even in the case of an indefinite DP, the existential interpretation is dismissed; it has to be specific, as indicated. Thus, the broader picture that emerges from the discussion of OS in SA is in tune with

---

⁶⁰ These structures are liable to an F+F reading, where what moves to the edge of vP is focused given information, whereas what is left behind is focused, and only the latter is read contrastively, hence the liability of negative continuations picking them out.
Biskup’s (2009:12) generalization that constituents that move to the edge of a phase are usually construed as part of the background information whereas constituents spelled out in in the domain are usually in focus. The shifted arguments, regardless of their syntactic size, are spelled out in the next higher phase since, based on the assumption that a spell-out domain contains the complement of a phase head, these constituents are out of vP by the time v-complement is spelled out. In the next subsection, I move on to temporal and locative adverbs, which can also appear at the edge of vP.

3.3.5 Temporal and Locative Adverbs

The study of adverbs requires careful attention as we will be treading on a relatively not well-charted territory, at least as far as SA is concerned; they have been pulled into the discussion of other aspects of the language, most notably tense and aspect (e.g., Fassi Fehri, 2003, 2012). Moreover, what contributes to the complexities of adverbs exploration is that they do not belong to a uniform category. APs, PPs, NPs and CPs can all function as adverbs. Crosslinguistically, arguments have emerged to the effect that adverbs have canonical orderings (e.g., Cinque, 1999, 2004) and hence cannot move about freely in the structure, i.e., subversive movement that results in uncommon orderings is usually restricted. Costa (2000) revisits Cinque’s hierarchy and argues for a distribution based on inherent semantics, prosodic structure and categorial status of adverbs.

A common observation is that the merge-in positions of adverbs are diverse, which entails that a movement analysis of an adverb that appears somewhere in the structure might not easily be established; it might have been externally merged in that position. Unlike argument movement which is conceived of as motivated by valuation of formal features, adverbs, being adjuncts, do not usually enter into feature valuation and their occurrence is not obligatory.
Chomsky (2015:34) points out that this unrestrictedness in positions is an indication that adjuncts are not interpreted as if they have moved from some more deeply embedded position. Adverbs have no morphological properties that require XP-adjunction and thus do not form chains by XP-adjunction (ibid:303).

Due to these facts, the discussion here is very limited in scope as it is confined to adverbs that can merge low in the structure, and can appear in the middle-field presumably via movement. Cinque (1999:16) points out that, among all adverbs, temporals and locatives are unordered, and they have the option to appear after the v complement, thus bearing the nuclear focus of the sentence. Fassi Fehri (1997:20) argues that this type of adverbs appear low in SA as well. Their function is to modify predicates via their specification of the location or time frame within which an event unfolds. Below are examples adapted from Bakir (1979:55ff).

\[(167)\]

a. ju-qāabil-u
   muhammad-un
   Șalijj-an
   fī
   l-dāamiʕat-i
   yad-an
   the-university-GEN
   tomorrow-ACC
   ‘Mohammed meets Ali at the university tomorrow.’

b. ju-qāabil-u
   fī
   l-dāamiʕat-i
   muhammad-un
   Șalijj-an
   yad-an
   Ali-ACC
   tomorrow-ACC
   ‘Mohammed meets Ali at the university tomorrow.’
   ‘Mohammed meets, at the university, Ali tomorrow.’

c. ju-qāabil-u
   yad-an
   muhammad-un
   Șalijj-an
   fī
   l-dāamiʕat-i
   at
   the-university-GEN
   tomorrow-ACC
   ‘Mohammed meets Ali at the university tomorrow.’
   ‘Mohammed meets, tomorrow, Ali at the university.’

As can be observed, the locative and temporal adverbs can move to the edge of vP as in (167)b and c, respectively. Negative continuations picking out the unmoved adverb are felicitous, and so are those picking out the forwarded one. Under the former reading, the moved adverb becomes
part of the background information while under the latter it is focused. However, the latter interpretation requires some phonological prominence on the moved adverb.

An additional observation about these adverbs is that they can both appear at \( vP \) edge as in (168)a; the reverse order where ‘tomorrow’ precedes ‘at the university’ is also licit. Variation is so unrestrained that adverbs can appear there alongside the shifted object, (168)b, in any mathematically possible order.

(168) a. ju-qabil-u fii l-d\( \text{\`a} \)ami\( \text{\`a} \)at-i yad-an muhammad-un \( \text{\`a} \)lijj-an Mohammed-NOM Ali-ACC

‘Mohammed meets Ali at the university tomorrow.’

(168) b. ju-qabil-u fii l-d\( \text{\`a} \)ami\( \text{\`a} \)at-i yad-an \( \text{\`a} \)lijj-an muhammad-un Ali-ACC Mohammed-NOM

‘Mohammed meets Ali at the university tomorrow.’

This so liberal variation in positions at the edge of \( vP \) is a good indication that these moved constituents have the same informational status. This multiple movement seems to establish a partition between background and focused information. In (168)a, the object is set in focus whereas in (168)b the subject is set in focus. These readings are evidenced by negative continuations which are more likely to be single out the sentence-final constituent than to single out any of the forwarded ones. Again, this observation is in line with the view that movement that drags a constituent outside the spell-out domain of the phase makes it part of the background, while constituents that remain within the spell-out domain of the phase are the focused part of structure.

3.3.6 Secondary Predication at \( vP \) edge

Secondary predication is commonly divided into two categories: depictives and resultatives (Bruening, 2018:538). A depictive portrays a state of an argument referent that obtains throughout the duration of the event denoted by the main predicate, while a resultative characterizes a
culmination state of an argument referent, which is brought about by the event. The literature contains several competing arguments as to what syntactic structure secondary predication has. On the one hand, there is the view that they are small clauses in which the DP is an argument of the secondary predicate but not of the main predicate, especially in the case of resultatives (e.g., Kayne, 1984; Harely, 2005, 2008). On the other hand, Ramchand (2008:121) proposes a hybrid analysis in which the DP and secondary predicate form a small clause but the DP moves out of this clause to become an argument of the main predicate.

Unlike resultatives which can only be predicated of direct objects, depictives can be predicated of both direct objects and subjects (Rothstein, 2004:60). The discussion is confined here to depictives since, as far as information structure is concerned, movement to vP edge is assumed to yield the same interpretation for both. However, as depictives can be predicated of objects and subjects, there are cases where a sentence-final depictive is ambiguous between an object and a subject-oriented reading. Below are examples.

(169) qaabal-a zaid-un ʃamr-an m-ubtasim-an
meet.PERF-3SG.MASC Zayd-NOM Amr-ACC NS-smiling-ACC
‘Zayd met Amr (and he was) smiling.’

The depictive ‘smiling’ in (169) can be true of ‘Zayd’ or ‘Amr’. This ambiguity interacts in interesting ways with movement to vP edge. Let us consider (170).

(170) a. qaabal-a ʃamr-an zayd-un m-ubtasim-an
  meet.PERF-3SG.MASC Amr-ACC Zayd-NOM NS-smiling-ACC
  ‘Zayd met Amr (and he was) smiling.’

b. qaabal-a m-ubtasim-an zayd-un ʃamr-an
  meet.PERF-3SG.MASC NS-smiling-ACC Zayd-NOM Amr-ACC
  ‘Zayd met Amr (and he was) smiling.’

c. qaabal-a ʃamr-an m-ubtasim-an zayd-un
  meet.PERF-3SG.MASC Amr-ACC NS-smiling-ACC Zayd-NOM
  ‘Zayd met Amr (and he was) smiling.’
When the object undergoes OS in (170)a, the depictive is disambiguated in favor of a subject-oriented reading, and the same effect holds when the depictive moves alone in (170)b. The object-oriented reading is maintained only when the object and depictive move together as in (170)c. However, in (170)c, the subject oriented-reading is still possible. Thus, the question that arises is: how does this happen? And what does it tell us about the structure of depictives?

One of the prominent analyses for both types of depictives is that object-oriented depictives are VP adjuncts, whereas subject-oriented depictives are vP adjuncts. For example, Richardson (2007:138) provides the following schematic representation for the sentence she ate the meat raw drunk.

(171)

Bruening (2015:13) argues for a different structure in which the relevant argument c-commands the depictive. This is shown below (VoiceP is equivalent to vP for him, following Kratzer (1996:120f)).
Unlike Richardson, Bruening also assumes that the depictive is a complement of a D(epictive) P(hrase), whose head has a specific semantics that derives the appropriate composition.

Abstracting away from whether or not there is a null depictive head, I follow Bruening in the assumption that the relevant argument must c-command the depictive. The reason is that in SA the depictive can have an overt pronominal that is bound by the argument. (173)b below showcases this as the depictive cooccurs with an overt referential pronoun. The fact that the pronoun can be bound by the subject or the object without being in violation of condition B indicates that the depictive forms some sort of a domain within which the pronoun is free.

(173) a. qaabal-a zajd-un Šamr-an m-ubtasim-an
    meet.PERF-3SG.MASC Zayd-NOM Amr-ACC smiling-ACC
    ‘Zayd3 met Amr1 (while he3/1 was) smiling.’

    b. qaabal-a zajd-un Šamr-an [wa huwaa m-ubtasim-un]
    meet.PERF-3SG.MASC Zayd-NOM Amr-ACC while he
    smiling-NOM
    ‘Zayd3 met Amr1 (while he3/1 was) smiling.’

The structure I argue for based on the above observations is that a subject-oriented depictive is a VP adjunct while an object-oriented depictive is a DP/NP adjunct. The adjunction analysis is standard since the depictive is not selected, i.e., its presence in the structure is not dictated by
the projection principle. Both have a null PRO which has the optionality to be realized overtly as in (173)b. Therefore, the ambiguity in (174)a stems from whether it has the structure in (174) or the one in (175) at LF.

These two structures provide an explanation as to how the sentences in (170) are derived. The disambiguation effect noticed in (170)a-b is the result of deriving both from (174); the object undergoes OS in the former, whereas in the latter the adjunct depictive moves. In either case, the depictive is subject oriented. However, (170)c is ambiguous because it could be the result of
moving both the object and the depictive in (174) separately, or moving the object plus its adjunct depictive as one unit in (175). Since the depictive in (175) is an NP adjunct, it cannot be extracted on its own (Fox & Nissenbaum, 1999; Nissenbaum, 2000).

For the informational import of the movement in (170), the salient reading is that the rightmost constituent that remains within vP is focused. This is evidenced, among other things, through the observation that a negative continuation is more likely to single out this constituent that any of those that moved to vP edge. Again, this accords with Biskup’s (2009) generalization that, as far as IS is concerned, the constituents that remain within the spell-out domain of v are focused while those that move up the structure and consequently are spelled out within the spell-out domain of C become part of the background. In addition to this reading, as was the case with other constituents, the constituents at vP edge in (170) can also be in focus provided that they are pronounced with some phonological prominence.

To sum up, this section has looked briefly into secondary predication in SA with exclusive focus on depictives. A syntactic structure for subject and object-oriented depictives is proposed and it turns out that it provides a plausible account for the disambiguation effects that result from the different movement instantiations that target vP edge in these constructions.

3.4 Implications of IS effects

The discourse contributions investigated in §3.3.4 through §3.3.6 points in the direction that what moves is somehow mapped into the background information. How could this be reconciled with the proposal presented in (148) in particular and with a system that assumes focus as the only discourse feature in SA in general? As far as OS is concerned, I assume that the shifted object moves in response to the composite probe in (148) which only has focus as a discourse feature. The CT reading of definite objects is then derived by an interplay between definiteness
and focus, whereas indefinite objects are in focus due to the focus feature only. As for the question of why the subject is liable to focus readings in OS constructions too, I believe that this might have nothing to do with agreement as v agrees with the object but rather follows perhaps from some phonological rules that places focus on sentence-final constituents that otherwise should not be final.

As for the rest of constituents including PPs, CPs, adverbs and secondary predicates, their movement to the edge of vP cannot be associated with a definitive formal feature when they are not in focus. For instance, they cannot be dealt with as topics. They simply get mapped into the background of the discourse and assume the status of presupposed information. Therefore, my speculation is that they instantiate free movement that is not triggered by a specific feature. All in all, a system that assumes focus as the only discourse feature is still founded.

3.5 Concluding Remarks

In this chapter, the edge of the lower phase, vP, has been explored in details. I have presented a detailed description of the structural conditions that regulate OS and, following an investigation of its properties, I put forward a proposal which assumes that OS is driven by a composite probe on v, therefore explaining the mixture of A and Ā characteristics it displays. I then proceeded to an examination of the interpretive effects OS engenders and argued that it can give rise to a CT+F reading of the object and subject in the context of definite objects and a focus reading of the object in the context of indefinite objects. This variation in interpretation is the result of an interplay between focus and definiteness. The remainder of the chapter was devoted to an investigation of a range of other constituents that can move to vP edge, namely PPs, CPs, adverbs and

---

61 This liability for interpretation as part of the background information could be taken as an argument for another discourse feature, probably [Givenness]. However, I refrain from making the assumption that this feature exists since, to the best of my knowledge, SA does not have specific morphology for this feature, which is the criterion I based my assumption of [Focus] on.
secondary predicates. The overall picture that emerged from the discussion is that whatever moves to the edge of $vP$ becomes more liable for a background interpretation, whereas the elements that are spelled out in the domain of $vP$ are focused.
Chapter 4

4 THE LEFT PERIPHERY: CP EDGE

4.1 Introduction

The preceding chapter has looked into the mid-field discourse zone, vP edge. I have examined the VOS structure from syntactic and semantic-pragmatic perspectives. I have also investigated a range of constituents that can move to that zone with the aim of establishing that vP edge is a discourse layer and is not confined to OS, the sole phenomenon discussed with relative details in the literature. In this chapter, I switch my focus to the left periphery, CP edge. I investigate its structure based on the proposal in (57) which is assumed to represent the derivational difference between VSO and SVO clauses.

I discuss the left periphery in SVOs and VSOs in §s 4.3 and 4.4, respectively. In view of the fact that the left periphery is a well-established discourse layer in the clausal structure and that the concentration of this thesis is variability in word order, I focus mainly on the presence of argument DPs in this area of structure either through displacement or base-generation with a dependency relating to a thematic position. The discussion covers the rest of mathematically possible word order permutations, including SOV, OSV and OVS. I also revisit SVO with more elaboration on its interpretive associations since what is presented in chapter (2) were prefatory remarks that were kept to the level necessary to argue for a distinction between SVO and VSO. In each case, I present arguments for their syntactic derivation and the kind of IS-related interpretations they give rise to. In §4.5, I conclude the chapter by an exploration of the syntax and semantic-pragmatic properties of answers to constituent questions.
4.2 SVO vs. VSO

As indicated, the left periphery has received most attention in the literature (e.g., Ouhalla, 1993, 1997; Shlonsky, 2000; Aoun et al., 2010). However, these works do not provide a comprehensive account of the interpretative consequences that go with the various constituents that appear in this zone, a gap I attempt to bridge here. The other shortcoming is brought forth by the first and consists in the observation that there has always been a conflation between SVO and VSO. However, recall that I have, to a certain extent, sided with Soltan (2007) that the two structures are different and argued for an extension of his proposal so that SVO is derived as in (57), repeated in (176).

(176)

The structure in (176) represents SVO in which the subject is interpreted as a topic. What is significant is that this proposal parts ways with Soltan’s account in that it maintains that SVO can be derived from VSO via focus movement of the subject from Spec\(vP\) to Spec\(TP\). In either case, the subject of SVO is not neutral in terms of its discourse contribution.

This proposal is a middle of the road account between the \textit{structural view} which advocates the argument that preverbal subjects are grammatical subjects derived by movement to Spec\(TP\) (as an option to satisfy EPP) and the \textit{topical view} which advocates the argument that preverbal subjects are invariably topics base-generated in Spec\(TP\). In this account, preverbal subjects always have a discourse function, but when in focus, they arrive at their surface position by movement. However,
I should point out that this account is not put forward out of a reconciliatory spirit but rather after an examination of a wide range of data that points in this direction, namely the direction that pre-verbal subjects are either topical or focused. To the best of my knowledge, this data has not been considered in its entirety and from all aspects (syntax, semantics and pragmatics) whenever the difference between SVO and VSO is subjected to scrutiny. Together with these merits, (176), as pointed up in §2.3.3, is not only devised to pin down the derivational differences between SVO and VSO but is also an argument that extends to non-subject topics; topics are all base-generated in SpecCP while focus is derived by movement to SpecTP.

With this essential distinction in mind, the left peripheries in SVO and VSO are predicted to manifest some differences. Therefore, the discussion is split up into two sections, each of which addresses one type of clause, starting with SVO.

4.3 The Left Periphery in SVO

4.3.1 Topical Subjects

An SVO with a non-focused subject is a typical case of topic-comment structure; Rizzi (1997) refers to this kind of structure as a high predication, to indicate that the complement to the pre-verbal DP, which is high in the complementizer system, is regarded as the constituent predicking over the DP. In his cartographic system, the predicate is Top0 and its complement. In our proposal, the predicate is C complement. The first basic question that I address is how the semantic denotation of an SVO with a topical subject in SpecCP is computed. The account is straightforward as it derives from the predicate having a variable whose value is fixed by the topic. The topic combines with the predicate via predicate abstraction as delineated in the rule given below (Heim & Kratzer, 1998:186). Predicate abstraction creates a derived predicate with a variable whose value is filled in by some constituent higher up in the structure (Nissenbaum, 2000).
(177) Predicate Abstraction (PA)

Let $\alpha$ be a branching node with daughters $\beta$ and $\gamma$, where $\beta$ dominates only a numerical index $i$. Then, for any variable assignment $a$, $\llbracket \alpha \rrbracket^a = \lambda x \in D. \llbracket \gamma \rrbracket^a$.

The standard assumption is that PA is induced by movement. That is, when a constituent moves from a certain position, it leaves behind a variable which it binds from its derived position, therefore creating a $\lambda$-operator adjacent to that position. However, Rezac (2011:278) points out that PA can also be established configurationally when a DP externally merged in a non-thematic position has a dependency with a resumptive pronoun or a null pro in the thematic domain. Below are the three relations under which PA is triggered (ibid).

(178) Interpretation of non-thematic positions

a. $\text{DP} [\beta \ i_{H^0} [\alpha \ldots \text{pronoun}] \ldots]] \Rightarrow \llbracket \beta \rrbracket^g = \lambda x. \llbracket \alpha \rrbracket^g [i \rightarrow x]$  
   where DP is Merged and $i$ is the lexical content of $H^0$

b. $\text{DP} [\beta \ i [\alpha \ H^0 \ldots t_i \ldots]] \Rightarrow \llbracket \beta \rrbracket^g = \lambda x. \llbracket \alpha \rrbracket^g [i \rightarrow x]$  
   where DP, $i$, $t_i$ are introduced by Move

c. $\text{PRO} [\beta \ i [\alpha \ H^0 \ldots t_i \ldots]] \Rightarrow \llbracket \beta \rrbracket^g = \lambda x. \llbracket \alpha \rrbracket^g [i \rightarrow x]$  
   as above, but PRO is an uninterpreted pronoun

Under the topical reading of the preverbal subject, the sentence in (179) is easily mapped onto the structure in (176), yielding the structure in (180) (irrelevant details are omitted) whose semantic denotation is computed by (178)a.

(179) zajd-un qaraʔ-a ?al-kitaab-a
   Zayd-NOM read.PERF-3SG.MASC the-book-ACC
   ‘Zayd read the book.’
   ‘As for Zayd, he read the book.’

(180)
By the time the semantic derivation reaches TP, it yields the proposition ‘*x read the unique z such that z is a book*’. This proposition which has a variable that can only be resolved by a contextual assignment is reopened by PA to become [\( \lambda x. x \) read the unique z such that z is a book] in which ‘Zayd’ is plugged as an argument deriving the proposition ‘Zayd read the unique z such that z is a book’.

After we have delineated how the semantic denotation of an SVO with a topical subject is computed, the question now is: what interpretation does this topic assume? As indicated in §1.6.3, ever since Chafe (1976) many proposals have been advanced arguing for finer flavors of topics. This typological literature reveals that a constellation of flavors are distinguished, including hanging topic, contrastive topic, framing topic, aboutness topic, shifting topic, familiar topic, given topic, and continuing topic (Benincà & Polletto, 2004; Bianchi & Frascarelli, 2010; Cinque, 1990, 1999; Frascarelli, 2007; Frascarelli & Hinterhölzl, 2007; Frey, 2004; Krifka, 2008; Reinhart, 1982). Some authors argue that these types of topic, when they coexist, show a strict hierarchy. For instance, Frascarelli and Hinterhölzl (2007:88) argue that German and Italian show the hierarchy in (181). (182) are examples from Italian (ibid:96) with ST, CT and FT representing shifting topic, contrastive topic and familiar topic, respectively.
(181) **Topic Hierarchy**
Shifting topic [+aboutness] > Contrastive topic > Familiar topic

(182) a. Io, inglese non l’avevo mai fatto. ST>FT
    I English not it (CL) have.PAST.1SG never done
    ‘I never studied English before.’

b. Io francamente questa attività particolare non me la ricordo. CT>FT
    I frankly this activity particular not to.me(CL) it(CL) Remember.1SG
    ‘Frankly, I do not remember that particular activity.’

The pronoun *Io* ‘I’ and the NP *inglese* ‘English’ in (182)a are a shift topic and familiar topic in the same order. In (182)b, the same pronoun and the NP *questa attività* ‘this activity’ are contrastive and familiar topics respectively. By transitivity, the hierarchy in (181) is derived. However, I depart from this literature in that I argue that encoding these distinctions in the syntax is superfluous because a topical constituent can receive different topical interpretations based on the context in which it is uttered, i.e., the interpretation is determined pragmatically. I have already shown that the mid-field discourse layer in SA can host contrastive and familiar object topics (see §3.3.3).

With these details at hand, let us return to the question of what topical interpretation ‘Zayd’ has in (179). There are at least two discursive functions that can easily be detected here. First, it can function as an aboutness topic which is part of the CG. This interpretation can be conceptualized as an answer to an implicit question of the form: *what about Zayd?*. It can also serve as an answer to more specific questions such as ‘*what did Zayd read?*’ or ‘*what did Zayd do?*’, in which case the answer to the former would partition the comment in (179) into a focused constituent and a presupposition as in (183)a whereas an answer to the second will set the entire comment in focus as (183)b.

(183) a. Topic> [V\_presupposition+O\_F]\_comment

---

62 (183) is evidence that focus and topic are adequate to tease apart other discourse functions as I have assumed in §1.6.3 following Büring (1997, 2003).
b. Topic> [VP\text{comment}]\#F

This aboutness reading does not require a rich context. All it requires for its felicity is a scenario where ‘Zayd’ is a referent known by the discourse parties. The addition the proposition makes to the CG is the assertion that some property holds of him. This conceptualization of aboutness is modelled in Reinhart (1982:80) under what she calls the \textit{pragmatic assertion} of a sentence. This approach to aboutness splits up the meaning of a sentence that has a topic into two parts: the referent of the topical expression, and the property expressed by remainder of the sentence\footnote{This approach to aboutness has been met with some conceptual criticism. Krifka (2008:265) points out that it presupposes that information in human communication is organized such that it can be said to be ‘about’ things and this does not follow from a general definition of information. A full-fledged discussion of this issue would take us far afield but it suffices to say that the account here is confined to sentences with topics and is not a claim about information in general. For detailed potential responses to Krifka’s concern, see Büring (2016) and the references therein.}. Under this view, discourse contexts are structured into individuals, and properties that are said to hold of them. Büring (2016) refers to this kind of topics as \textit{thematic topics} and points up that they correspond to CLLD in Romance and \textit{wa}-marked expressions in Japanese. Below are his examples from Catalan and Japanese.

\begin{itemize}
\item[(184) a.] Les pomes, jo no les he vist.  
\text{the apples, I NEG them have.1SG seen} 
\text{`The apples, I have not seen them.’}
\item[(184) b.] ano inu-wa kinoo kooen-de John-o kande-simatta  
\text{that dog-WA yesterday park-at John-ACC bite-ended up} 
\text{`That dog bit John in the park yesterday.’}
\end{itemize}

In addition to the aboutness reading, since a sentence can be conceptualized as an answer to a question, ‘Zayd’ in (179) can also assume a contrastive topic interpretation which comes about if the implicit question is rather drawn from a family of questions and the proposition leaves at least one of them unsettled (Roberts, 1996; Büring, 1997, 2003; Hagstrom, 1998; Krifka, 2001, 2011; Constant, 2012, 2014). The CT reading is evidenced by the felicity of the continuation in
(185) in which ‘Zayd’ is paired with a focused constituent in the comment, namely the object, which forms the domain of contrast (pair-list readings). It is these pairings that the assertion adds to the CG.

(185) zajd-un qaraʔ-a ?al-kitaab-a wa ?al-qisʕat-a
Zayd-NOM read.PERF-3SG.MASC the-book-ACC and Ali-NOM the-story-ACC
‘Zayd read a book and Ali [read] the story.’

The sentence in (185) is felicitous in a scenario where for example we have a set of three readers {Zayd, Ali, Omar} as part of the CG but only the speaker knows what each one of them read. The sentence settles two questions “what did Zayd read? and what did Ali read?”, and leaves unsettled the question what did Omar read?. The topical element in the unsettled question, Omar in this case, is identified as a residual topic (Büring, 1997:69).

The upshot of the discussion above is that a preverbal topical subject can be interpreted as an aboutness or a contrastive topic based on contexts, i.e., both interpretations are possible without assuming a difference in the position it occupies in the syntactic hierarchy which gives more currency to the proposal that the various types of topics arise as a result of contextual variation and thus need not be encoded as features in the syntax proper. Further support for this view comes from Büring (2016) who points up that the examples in (184) are also liable to contrastive topic readings without any change in position.

4.3.2 SOV with Overt Pronouns

Preverbal subjects in SVO can appear along with overt pronouns that presumably occupy SpecvP, or SpecTP, an option that is plausibly offered and accommodated by the structure in (176). This is exemplified in (186).

(186) a. ?atʕ-tʕullaab-u qaraʔ-u hum kitaab-an
    the-students-NOM read.PERF-3PL.MASC they book-ACC
    ‘The students, they read a book.’

b. ?atʕ-tʕullaab-u hum qaraʔ-u kitaab-an
Previous research shows that the overt pronoun in (186) has received two treatments (Fassi Fehri, 1999; Soltan, 2007). Fassi Fehri’s account follows from a fundamental difference between his view of agreement in SVO and the view of the mainstream literature. For him, the agreement morphology associated with the verb in (186)a is not an affix but rather the grammatical subject which has undergone an incorporation operation into the verb. In light of this perspective, the overt pronoun *hum* ‘they’ is analyzed as a parenthetical or an appositive that doubles the weak subject pronoun for the purposes of focus (ibid:114).

For Soltan (2007), the subject in SVO is a *null pro*, as indicated in chapter (2), and the affix attached to the verb in (186)a is an agreement morphology, an argument that falls in line with the mainstream literature. Accordingly, he considers the strong pronoun as the subject of the sentence (i.e., it is a realization of the *null pro* in SpecvP). This pronoun is liable to coordination with an overt DP as shown below which is a variation of (186)a.

(187) qaraʔ-uū [hum wa hunna] kitaab-an
read.PERF-3PL.MASC they and them.FEM book-ACC
‘They read a book.’

Notice that the verb shows full agreement with the first pronoun only. As it turns out, (187) is also evidence that the pronominal is not a parenthetical or appositive since it would be predicted not to take part in structural relations such as coordination. In other words, if *hum* ‘them’ is an appositive to -*uū* ‘them’, as Fassi Fehri argues, how can the grammaticality of *hunna* ‘them.FEM’ surfacing along with it be accounted for? The relation of an appositive and its anchor has to reflect

---

64 It is on the basis of this argument status of the pronoun, which he argues hold when the pronoun precedes the verb, that Soltan (2007:60) formulates the generalization that “full agreement is always required when the subject is (or includes as a first conjunct) a pronominal, whether that pronominal is overt or null, and whether it occurs in pre- or postverbal position”.

161
a one-to-one correspondence. Another serious challenge to the appositive perspective is posed by scopal interactions with negation which will be illustrated momentarily.

In view of these observations, I follow Soltan (2007) and argue that the strong pronoun in (186)a is an overt realization of the assumed *null pro* in SpecvP in SVO. It serves the function of putting the preverbal DP in focus. Evidence for this interpretation comes from two sources: i) the felicity of negative continuations which pick out the strong pronoun and ii) the interaction with negation which licenses the inference that the sentence, to the exclusion of the pronoun, is presupposed. Both are shown below (for (188)a, cf. Soltan, 2007:40f).

(188) a. \(\text{ʔa tˤ-tˤullaab-u } d3aaʔ-u \)hum laa ??aabaaʔ-u-hum
   the-students-NOM come.PERF-3PL.MASC they not parents-NOM-their
   ‘As for the students, they came, not their parents.’

   b. \(\text{ʔa tˤ-tˤullaab-u maa qaraʔ-uu hu}\)m kitaab-an
   the-students-NOM not read.PERF-3PL.MASC they book-ACC
   ‘As for the students, it is not them who read a book.’

(188)a is evidence that the pronoun sets the preverbal DP in focus and so is (188)b which licenses the inference that *somebody read a book* but it is not the students. Therefore, the same sentence allows for a positive continuation which turns the presuppositional frame into a true proposition. This continuation might be ‘bal muʕallim-u-hum’ ‘but their teacher’. This is not to say that negation in (188) is a constituent negation. Rather, its function is conceptualized in the sense of analyses which treat clausal negation as an operator that has a tripartite construction similar to quantificational determiners and adverbs (e.g., Partee, 1991, 1993; Fintel, 1994). Below is a schematization of the tripartite structure along with the elements that are mapped into the argument position of these operators (Partee, 1993:187).
Under this perspective, negation does not negate the entire proposition when there is a focus but rather asserts that the focused constituent is not part of the set that turns the presuppositional frame into a true proposition. This is the effect observed in (188)b and it is conclusive evidence against an appositive approach to such strong pronouns since appositives are typically read outside the scope of negation. Koev (2013:2) points out that the direct rejection in the short dialogue below can only pick up on the main clause, not the appositive.

(190) A. Edna, a fearless leader, started the descent.
   B. No, that’s not true.

Koev indicates that B’s rejection in (190) is understood to mean “Edna has not started the descent” but not “Edna is not a fearless leader”. The sentence in (186)b has the same interpretation. It looks as though the overt realization of an otherwise null pro immediately sets the subject in focus regardless of whether it remains in situ as in (186)a or move to the designated focus position in SpecTP as in (186)b.

The question that sequels from the above discussion is what discourse function the preverbal DP in (188) has since the pronoun is a focus. The answer is that it can still be conceived of as a topic that can be interpreted as an aboutness or contrastive topic based on contexts. This means
that the sentences in (186) have two expressions picking out the same reference but one functions as a topic and the other as a focus. Though apparently strange, these constructions are not unfamiliar. They have been identified as Split-XPs in the relevant literature and they are frequent in a considerable number of languages, including Croatian and German (Fanselow & Cavar, 2004; Frèy, 2007), Polish (Siewierska, 1984) and Russian (Sekerina, 1997). The prominent argument is that Split-XPs go hand in hand with particular informational structure import. In particular, Fanselow and Cavar (2002) point out that, in a split construction, the right part of XP must be focal, while the left-hand part may be a link topic or a second focus. Below are examples from German (Fèry, 2007:80).

(191) a. Maria hat rote Rosen gekauft.
    Mary has red roses bought
    ‘Mary bought the red roses.’

     b. Rosen hat Maria rote gekauft.
        roses has Mary red bought
        ‘Mary bought the red roses.’

While the noun and the adjective ‘red roses’ are adjacent in (191)a, they split up in (191)b. Fèry (2007:81) points out the motivation for this discontinuity lies in their information structural properties. In most contexts, ‘roses’ assumes a topic interpretation, while the element left in situ, ‘red’ in this case, is a focus. Thus, (191)b, as Fèry argues, would be felicitous in a situation in which roses have been previously introduced into the discourse and the sentence in question mentions them again and contrasts them with other flowers. The focused adjective adds the prominent information that the roses Mary bought are red, not another color.

The designation of these structures as split-XPs might give the impression that they are derived via movement, i.e., the two constituents that form that discontinuous structure start out as one unit, out of which the topical part is moved, stranding the material left behind. This is indeed the standard analysis which was put forward by van Riemsdijk (1989). However, Fanselow and
Cavar (2002) indicate that this movement analysis is challenged by data from languages where the lower constituent appears within a syntactic island which renders a simple movement analysis of the split construction impossible. Below are examples from Croatian where PPs function as islands (Fanselow & Cavar, 2002:72).

(192) a. Ivan se popeo [pp na veliko drvo
   Ivan self climbed on big tree
   ‘Ivan climbed on a big tree.’

b. *Što se Ivan popeo [pp na veliko ti
   what self I. climbed on big

c. *Drvo se Ivan popeo [pp na veliko ti
   tree self I. climbed on big

d. *Ivan se Drvoi popeo [pp na veliko ti
   I. self tree climbed on big

e. Na veliko se Ivan drvo popeo
   on big self I. tree climbed

The examples in (192) illustrate that wh-extraction (b), topicalization (c), and scrambling (d) are not possible from a PP. However, a split of the complex PP is possible, as (192)e shows, a fact that does not easily lend itself to a movement analysis to split-XPs since it violates a strong island.

Insofar as the SA data in (186) is concerned, it has already been established that topical preverbal subjects are externally merged in SpecCP (see chapter 2). Moreover, as the sentence in (187) shows, the strong pronoun can appear within an island, a coordinate structure island in this case, and therefore a movement analysis cannot be sustained. Therefore, split-XP constructions in SA are formed through base-generation of each constituent in its service position, i.e., the topic is merged in SpecCP and the pronoun in SpecvP. The latter can then move on its own to SpecTP as shown in (186)b.

To summarize, SVO clauses with an overt pronoun in the thematic domain or SpecTP are Split-XP constructions, of which the higher link is a topic and the pronoun is focus. In what follows, I switch the discussion to SVO structures with quantifiers.
4.3.3 Quantifiers in SVO

4.3.3.1 The Patterns

The distribution of the quantificational determiners ‘kull’ ‘every/all’ and ‘baʕd’ ‘some’ in SA displays two patterns: Q__NP and NP__[Q+clitic] (Shlonsky, 1991; Benmamoun, 1999). The NP in the first pattern has to be singular indefinite, plural definite or a singular definite (with some restrictions). However, the second pattern is confined to definite nouns, plural or singular (again with some restrictions). Below are illustrative examples of both patterns respectively.

**Q__NP Pattern**

(193) a. *kull-u tˤ-tˤaalib-i
def.sg
all-nom the-student-gen
‘All the student’

b. kull-u tˤ-tˤullaab-i
def.pl
all-nom the-students-gen
‘All the students’

c. kull-u l-dʒabal-i
def.sg
all-nom the-mountain-gen
‘all of the mountain’

d. kull-u tˤaalib-in
indef.sg
all-nom student-gen
‘Every student’

e. *kull-u tˤullaab-in
indef.pl
all-nom students-gen
‘Every students’

**NP__[Q+clitic] Pattern**

(194) a. ?al-dʒabal-u kull-u-hu
def.sg
the-mountain-nom all-nom-it
‘All of the mountain’

b. *?atˤ-tˤaalib-u kull-u-hu
def.sg
the-student-nom all-nom-him
‘All the student’

c. ?atˤ-tˤullaab-u kull-u-hum
def.sg
the-students-nom all-nom-them
‘all the students’

d. *tˤaalib-u/un kull-u-hu indef.sg
student-nom all-nom-him
‘All student’

e. *tˤullaab-u/un kull-u-hum Indef.PL
    students-NOM all-NOM-them

‘All students’

Both patterns can appear as preverbal subjects, but only the second can appear in floating quantifier (FQ) constructions. In particular, the thematic subject position can be an FQ, which agrees with a clause-initial DP in all φ-features. Consider the sentences below.

(195) a. kull-u ?atˤ-tˤullaab-i qaraʔ-uu kitaab-an
    all-NOM the-students-GEN read.PERF-3PL.MASC book-ACC
    ‘All the students read a book.’

b. kull-u tˤaalib-in qaraʔ-a kitaab-an
    all-NOM student-GEN read.PERF-3SG.MASC book-ACC
    ‘Every student read a book.’

(196) a. ?atˤ-tˤullaab-u qaraʔ-uu kull-u-hum kitaab-an
    the-students-NOM read.PERF-3PL.MASC all-NOM-them book-ACC
    ‘The students, all of them read a book.’

b. ?atˤ-tˤullaab-u kull-u-hum qaraʔ-uu kitaab-an
    the-students-NOM all-NOM-them read.PERF-3PL.MASC book-ACC
    ‘The students, all of them read a book.’

Apparently, these sentences seems to be straightforwardly accounted for by the structure in (176). However, a careful look at relevant literature reveals that sentences such as (196) have been subject to an extensive debate, the focus of attention being whether the underlined phrases are externally merged as separate constituents or they start out as one constituent, out of which the preverbal DP is extracted to a higher position. In what follows, both patterns are discussed with specific attention allocated to their quantificational properties to gain insight into how their distribution interacts with IS\textsuperscript{65}.

\textsuperscript{65} In the interest of space, the discussion is restricted to ‘kull’ here but the arguments I develop are believed to carry over to ‘baʕadˤ’ and their type of quantificational determiners that display the same patterns.
As indicated in §2.3.3, preverbal subjects with topical interpretations are characterized by definiteness, i.e., they have to be proper nouns, NPs preceded by the definite article ‘ʔal-‘ or the first member of a construct state structure with a definite genitive phrase such as kitaab-u ?atˤ-tˤaalib-i ‘the student’s book’. They cannot be quantificational but rather individual or set-denoting expressions whose referents are part of the CG. However, a definite plural can appear preceded by the determiner kull ‘every/all’ which assumes a quantificational sense in some constructions. The semantics of kull has been examined within the realm of investigating related phenomena such as FQs and DP structure (e.g., Mohammad, 2000; Elsaadany & Shams, 2012; Hallman, 2016). However, I agree with Hallman (2016:3) in his descriptive statement that kull functions as a strong quantifier only when followed by a singular indefinite restriction. When followed by a definite DP, singular or plural, kull is more likely a form of superlative (ibid:2). Below are illustrative examples adapted from Hallman (2016:2ff) as well as Elsaadany and Shams (2012:25).

(197) a. kull-u tˤ-tˤullaab-i qaraʔ-u kitaab-an
   all-NOM the-students-GEN read.PERF-3PL.MASC book-ACC
   ‘All the students read a book.’

   b. kull-u l-dʒabal-i ?ixtaf-a xalfa dˤ-dˤabaab-i
   all-NOM the-mountain-GEN read.PERF-3SG.MASC behind the-fog-GEN
   ‘All of the mountain disappeared behind the fog.’

In sentence (197)b, kull is clearly not quantificational but rather conveys the sense that the entirety of the mountain has disappeared behind the fog. In sentences like (197)a, Elsaadany and Shams argue that the indefinite object is liable to a collective or a distributive reading, i.e., in a scenario where we have ten students, the number of books read can either be ten or one. This variation in interpretation may at first glance look as though kull is quantificational even when it is followed by a definite DP and that the two readings result from scopal interactions between kull and the indefinite object. However, I maintain that kull in (197)a is not a strong quantifier for two reasons.
First, even though the object can show a distributive interpretation, it is restricted to the number of books but not the title. So, both readings obtain in a context where the ten students read “The Minimalist Program” for instance with variation confined to whether they all had one copy or each one has his own copy. For the diversity in book titles to obtain, the sentence has to have the form in (195)b above, which can have both scopal readings (∀∃; ∃∀) as I have shown earlier and is argued in Fassi Fehri (2012:186). The second reason for the objection against kull being the source of distributivity in (197)a is that this variation in interpretation holds even when kull does not figure in the structure. The sentence in (198) is amenable to a collective or a distributive reading. More interestingly, both readings are also possible in (199) where the object is a definite DP.

(198) ʔatˤ-tˤullaab-u qaraʔ-uu kitaab-an
       the-students-NOM read.PERF-3PL.MASC book-ACC
       ‘The students read a book.’

(199) ʔatˤ-tˤullaab-u qaraʔ-uu ?il-kitaab-a
       the-students-NOM read.PERF-3PL.MASC the-book-ACC
       ‘The students read the book.’

The broad conclusion that this data leads to is that variation in interpretation has to do with the plurality of the topical subject, and hence any source of explanation for distributivity has to take into account the semantics of plural nouns. It is neither peculiar to NPs preceded by kull nor to the structure of SVO clause in SA. Abe (2017:54ff) points out that the sentence in (200) is prone to a collective or a distributive reading.

(200) The women examined John.

This obvious association between plurality and distributivity has indeed been subject to extensive investigation (e.g. Link, 1983; Chierchia 1998, 2010; Sauerland 2003; Sauerland et al., 2005; 66 I will return to (195)b in §4.4 and I argue that it is derived via focus-preposing from a VSO clause, i.e., the QP starts out in the thematic subject position, SpecvP.)
Many accounts have been put forth which, despite variation, are basically derived from Link’s (1983) notion of Algebraic closure. Informally speaking, this notion boils down to the conjecture that the closure of a set \( P \) is the set that contains any sum of elements taken from \( P \). Abe (2017:55) provides an explanation for (200) which runs down the lines of Link’s proposal. The account goes as follows. Suppose that the set of women consists of the three elements: \{Nancy, Mary, Susan\}. As (201) shows, there are five ways the set can be divided, each of which instantiates a possible interpretation (\( \oplus \) stands for a non-atomic element, i.e., it represents the sum of the two atomic elements it combines).

(201) a. \{n, m, s\}
   b. \{n, m\( \oplus \)s\}
   c. \{m, n\( \oplus \)s\}
   d. \{s, n\( \oplus \)m\}
   e. \{n\( \oplus \)m\( \oplus \)s\}

Among these five choices, (201)a is the case where each woman examined John separately (i.e., extreme distributivity), whereas (201)e is the case where all the women examined John together in one go (i.e., extreme collectivity), and the other divisions fall in-between. In other words, this perspective models collectivity and distributivity as the extremes of a spectrum, with points in between which are partially distributive and partially collective.

With the considerations delineated above at hand, I argue that that distributivity in (197)a, (198) and (199) operates on the event, not the object, i.e., a noun denoting a plurality allows for one collective event or for as many events as there are conceivable individuals or sums of individuals (i.e., sub-pluralities) within the set. Therefore, variation in the number of entities denoted by

---

\(^{67}\) While these works all agree on the sense of distributivity in sentences with plural subjects, they diverge on whether atomic elements are still part of the set denoted by a plural. Three views have been advanced; the exclusive view which holds that a plural essentially means the sums of elements within the set to the exclusion of atoms; the inclusive view which holds that atomic elements are included as well in the meaning of a plural; and the mixed view which holds that a plural is ambiguous between the exclusive and inclusive sense (see Champollion, 2017 and the references therein).
the object is derived from variation in the number of events. Moreover, I would like to stress that, with this system in place, we get further readings that went unnoticed in Elsaadany and Shams (2012). These readings follow from the logical deduction that the plurality of events does not entail that the entity denoted by the object has to vary. For example, consider (198) again in a context where the number of students is ten. The distributive interpretation under which we have ten discrete events of reading does not necessarily mean that students have ten copies of a certain book, i.e., they might all have read the same copy but on different occasions after one another. By the same token, the collective interpretation does not rule out the possibility that the event of reading was one but every student had his own copy of the book. These various possibilities, which I argue are attested interpretations of the sentence, are summarized below under the assumed scenario.

(202) a. **Collective Interpretation**

   i) ten students-**one** reading event-one book copy
   ii) ten students-**one** reading events- ten book copies

b. **Distributive Interpretation**

   i) ten students-**ten** reading events-one book copy
   ii) ten students-**ten** reading events- ten book copies

Although this kind of variation seems to be hard to encode in the semantic component and should probably be outsourced to pragmatics, Sauerland (2003) and Sauerland et al. (2005) argue that it is the result of the number feature on the predicate which reflects its agreement with the subject plurality, i.e., this departs from the received conviction that φ-features on predicates are uninterpretable (e.g., Chomsky, 2000, 2001 and all dependent analyses). For Sauerland and his colleagues, number valuation on predicates is interpretable at LF. Their view seems to be upheld by some data from SA. AlQahtani (2016:54) brings up examples of SVO clauses in which agreement is defective. To be precise, number agreement does not obtain. AlQahtani argues that the interpretation is collective in the absence of full agreement. Below are his examples.

(203) a. ?ar-ridʒaal-u ta-dʒmaš-u ?al-hatˤab-a
    the-men-NOM  FEM-collect-SG  the-firewood-ACC
    ‘The men collect/are collecting the firewood.’
b. ʔar-ridʒaal-u  ja-dʒmaʕ-uun ʔal-hatˤab-a
   the-men-NOM  3-collect-PL.MASC  the-firewood-ACC
   ‘The men collect/are collecting the firewood.’

Although the preverbal DP in both sentences is plural, the former is only liable to a collective
interpretation\textsuperscript{68}. The second piece of evidence for the argument that \textit{kull} in (197)a is not quantifi-
cational is that when the same constituent appears in the object position in the context of an indef-
inite subject, the distributive reading of the event is still available, but the subject does not vary.
Unlike (204)b which allows for both scopal readings, (204)a does not have a reading under which
the indefinite can vary in number, i.e., the only reading available here is one student who either
read all the books in one go or at different times.

\begin{verbatim}
(204) a. qaraʔ-a tˤaalib-un kull-a l-kutub-i
   read.PERF-3SG.MASC student-NOM all-ACC the-books-GEN
   ‘A student read all the books.’

b. qaraʔ-a tˤaalib-un kull-a kitaab-in
   read.PERF-3SG.MASC student-NOM all-ACC book-GEN
   ‘A student read every book.’
\end{verbatim}

Since the Q\_NP constituent in (197) is argued to be non-quantificational, I argue that, as far as
IS is related, it serves as an aboutness or a contrastive topic the same simple definite nouns do as
elucidated in §4.3.1. Under the aboutness reading, the appropriate scenario would be a context in
which there is a set of students which has formerly been introduced in the discourse and therefore
is part of the SG. The role of rest of the sentence then is to assert that a certain property hold of
the entire set. On the other hand, in the CT reading the verb or the object might be in focus so as
to set a domain of contrast with some other topic that is part of CG. However, it is worth noting
that under the latter reading the residual topic with which the overt topic ‘all the students’ is con-
trasted cannot be part of the set itself, i.e., the CT is the whole DP and not just the determiner. To

\textsuperscript{68} Many aspects come into play when collectivity and distributivity are at stake, among which is the structure of the
event itself as denoted by the lexical meaning of the verb but I remain aloof to this labyrinth of issues for they are
beyond the scope of the current work (for a thorough discussion, see Champollion 2017 and the references therein).
illustrate, Büring (2003:534) cites the following example from German and indicates that it is infelicitous with ‘all politicians’ as a CT.

(205) \#ALLE\textsubscript{CT} Politiker SIND\textsubscript{F} korrupt.  
all politicians are corrupt  
‘All politicians are corrupt.’

The reasoning Büring lays out for the infelicity of (205) is that it is due to the CT-marking on the determiner ‘all’ along with focus on the verb. Focus on the verb signals polarity focus, i.e., the set of focus alternatives induced for (205) is \{all politicians are corrupt, all politicians are not corrupt\}. The CT-alternatives in turn are questions of the form ‘Are Q politicians corrupt?’, where Q is some determiner drawn from the set \{some, most, …\}. Now the source of infelicity is fleshed out. With ‘all’ as the CT in the assertion, the set of questions in the CT-alternatives are all short-circuited, i.e., obliviously if all politicians are corrupt then by entailment most, some and any fraction of them is. There is no point in asking any other question from the CT-alternatives; they are all resolved. ‘All’ has no other Q to contrast with as it entails the rest. An intuitive conclusion then is, for (205) to be felicitous, the Q marked as a CT has to be one that has other Qs above it on the scale of quantificational strength, ‘some’ for instance, in which case at least one question of the form ‘Are Q politicians corrupt?’ is still unsettled.

Unlike the German example, (197) does not induce questions of the form ‘What Q students read or did?’ because the entire DP is a CT, not just the determiner. Hence, the CT-alternatives include questions in the form of ‘What [(Q) DP] read or did’? The CT can be a DP preceded by the same or a different determiner or can be a DP with no Q at all. Below is an example that shows this difference (cf. Elsaadany & Shams, 2012:25).

(206) kull-u t\textsuperscript{e}-t\textsuperscript{u}llaab-i qaraʔ-uu kitaab-an  
all-NOM the-students-GEN read.PERF-3PL.MASC book-ACC  
wa ʕalijj-un qaraʔ-a kitaab-an  
and Ali-NOM read.PERF-3SG.MASC book-ACC
‘All students read a book and Ali read a book.’

(206) is felicitous in a context where all the students read a book and Ali read a different book, i.e., the domain of contrast is the difference in titles of the books they read.

To sum up, this section has shown that, for the Q__NP pattern to appear in SVO with topical subjects, the NP has to be definite, in which case the determiner is not quantificational. Distributivity is put down to the plurality of the NP complement of the quantifier.

4.3.3.3 NP_i[NQ+clitic_i]

Now that the source of distributivity with the topical Q__NP identified, let us return to the sentences in (196), repeated below for easy reference, and explore their syntax and potential interpretation.

(207) a. ?at’s-t’llaab-u qaraʔ-u kull-u-hum kitaab-an
      the-students-NOM read.PERF-3PL.MASC all-NOM-them book-ACC
      ‘The students, all of them read a book.’

b. ?at’s-t’llaab-u kull-u-hum qaraʔ-u kitaab-an
      the-students-NOM all-NOM-them read.PERF-3PL.MASC book-ACC
      ‘The students, all of them read a book.’

Unlike the strong pronouns discussed in §4.3.2 where the preverbal DP and the pronoun are argued to be externally merged as separate constituents in line with the structure in (176), a similar argument for the FQ in (207) has already been subject to oscillating disputes ever since Postal (1974) who first brought the phenomenon of Q-float to light. Different accounts have been developed to explain the derivation of sentences with FQs but they can be subsumed under two mainstreams. The first argues for an *adverbial or adjunct analysis* in which an FQ and its associate do not form a constituent at any stage of the derivation but rather the FQ is merged by adjunction as a VP modifier which can move to adjoin any higher projection in the clausal spine (e.g., Bordie, 1983; Dowty & Brodie, 1984; Baltin, 1995; Bobaljik, 1995; Torrego, 1996; Brisson, 1998). Below are examples adapted from Kim and Kim (2009).
(208) *Quantifier float as adverbial adjunction: VP modifier*
   a. The linguists may have [VP all left].
   b. The linguists may [VP all have left].
   c. The linguists [VP all may have left].

(209)

Evidence for this approach to FQs comes primarily from the various parallelisms they demonstrate with adverbs. The sites where adverbs placement is admissible are sites where FQs are admissible too. Moreover, they both cannot precede an elided VP as the examples below show (Sag, 1978; Kim & Kim, 2009).

(210) a. The workers (certainly/all) would (certainly/all) have (certainly/all) been (certainly/all) drinking some coffee.
   b. They (always/usually/all) have (always/usually/all) missed the teacher.

(211) a. Jay has studied physics, and his brothers (all/both/each/probably) have_____, too.
   b. Jay has studied physics, and his brothers have *all/*both/*each/*probably_____, too.

This approach has undergone some criticism for its inability to account for the non-admissibility of FQs in object position and with passive and unaccusative predicates. Below are examples from Bošković (2004:682).

(212) a. *The students were arrested all.
   b. *The students arrived all.
   c. *Mary hates the students all.

The second approach to FQs argues for a *movement and stranding* analysis in which the assumption is that FQs and their associate nominals start out as a complex constituent which is then broken up into a discontinuous chain due to a leftward movement of the associate nominal.
(e.g., Sportiche, 1988; Shlonsky, 1991; Benmamoun, 1999; Koopman & Sportiche, 1991; Merchant, 1996; Cinque 1999; McCloskey, 2000; Bošković, 2004). Below are French examples from Sportiche (1988:426).

(213) a. Tous les enfants ont vu ce film.
   all the children have seen this movie
   ‘All the children have seen this movie.’
   b. Les enfants ont tous vu ce film.
   the children have all seen this movie
   ‘The children have all seen this movie.’

The argument Sportiche makes is that ‘the children’ in (213)b merges as complement to ‘all’ in a fashion identical to (213)a, and then moves to the clause initial position stranding the quantifier in the sentence-medial position. This approach builds on the VP-internal subject hypothesis as it assumes the position of the stranded quantifier is the thematic subject position. However, it has been met with the same criticism as the adverbial analysis (see Bošković 2004 for a discussion and a modification of the stranding analysis by constraining it to non-theta positions).

There are a number of issues that make the extension of either account to (207) problematic although the second still fare better with the amendments Benmamoun (1999) introduces to it. For the adjunction analysis, unlike the case in (208)a where the example is from a typical SVO language in which the subject has to move to SpecTP, what would prevent an FQ from co-existing with a post-verbal subject in SA, therefore deriving the sentence in (214)a.

(214) a. *qaraʔ-u [
   read.PERF-3PL.MASC all-NOM-them the-students-NOM book-ACC
   ‘The students all read a book.’
   b. qaraʔ-a [
   read.PERF-3SG.MASC all-NOM the-students-GEN book-ACC
   ‘The students all read a book.’

For the sentence to turn grammatical, the quantifier has to be bare, i.e., without the pronominal attached to it, and ‘the students’ has to be genitive, not nominative as in (214)b. This raises serious
questions about the adjunction status of the FQ and what is the source of the illicitness of (214)a. Is the pronominal an agreement morphology that has to appear only when the associate nominal is high in the structure as in (207)? Moreover, even if we assume for the sake of argument that, in the absence of the pronominal in (214)b, the quantifier is an adjunct, several other issues arise. First, why should the subject be inflected for genitive if the quantifier is a vP adjunct? Second, what is the source of the nominative case on the quantifier? Third, ‘the students’ is predicted to move leaving the quantifier without the latter having to bear an agreement clitic, a prediction that is not borne out as the ungrammaticality of the sentence below shows.

(215) *ʔa-tˤullaabi-kulla-ab-an
        the-students-GEN read.PERF-3SG.MASC all-NOM book-ACC
        ‘Intended: The students all read a book.’

Given that these issues are so recalcitrant that I cannot conceive of any potential account for them, I conclude that an adjunction analysis of FQs in SA is untenable.

As for the movement and stranding account, it has already been argued to be the case in SA (Shlonsky, 1991; Benmamoun, 1999). For Shlonsky, the second pattern of quantifier constructions is derived from the first, and then FQs are derived from the second. The representations below illustrate his view.

(216) a. Q___NP= [QP..Q.. [NP]]
       b. NP_\[Q+clitic\]= [QP[NP] [QP..Q_{clitic}.. [NP]]]

Shlonsky argues that both patterns are headed by the quantifier with the NP merged as its complement, the difference being that in the second the complement NP moves to SpecQP as in (216)b therefore inducing agreement on Q in conformity with the early minimalist view that agreement is established in spec-head configurations. The NP can then proceed to move out of QP to adjoin any projection in the main spine of the structure (e.g., SpecTP), stranding the quantifier in the merge-in position of the complex constituent.
Shlonsky’s analysis has major shortcomings which Benmamoun (1999) discusses in detail. First, the NP in the first pattern has to be invariantly genitive; how does this case change when it moves to the edge of QP or out of the QP as shown in (207)? Second, this analysis misses the obvious generalization that in the second pattern, the quantifier always carries the same inflection as the NP. Consequently, Benmamoun argues, quite convincingly, that the two patterns are not related derivationally. He considers the first pattern as a typical case of a construct state structure, (217), out of which an NP cannot move. The quantifier patterns like the head noun in a construct state in that it inflects for case based in its position in the clause while the associate noun is invariably genitive as (218) shows.

(217) kitaab-u ?atˤ-tˤalib-i
    book-NOM the-student-GEN
    ‘The student’s book’

(218) a. kull-u ?atˤ-tˤullaab-i dʒaaʔ-uu
    all-NOM the-students-GEN come.PERF-3PL.MASC
    ‘All the students came’

    b. raʔaj-tu kull-a ?atˤ-tˤullaab-i
    see.PERF-1SG all-ACC the-students-GEN
    ‘I saw all the students.’

    c. maʕa kull-i ?atˤ-tˤullaab-i
    with all-GEN the-students-GEN
    ‘With all the students’

As for the second pattern, Benmamoun argues that it is a case of an NP projection that has a QP adjunct as schematized in (219). Evidence for the adjunction of QP derives from the observation that it agrees with the NP in case and φ-features. (220) is an illustration.

(219) NP₁[Q+clitic] = [NP[NP]…[QPclitic]]

\[
\text{NP} \quad \text{QP}
\]

\[
\text{NP} \quad \text{QP}
\]
Although Benmamoun’s version of the movement and stranding analysis circumvents a large portion of the drawbacks Shlonsky’s has, the movement of NP out of the configuration in (219) is still problematic as there are cases where the presumably stranded quantifier appears inside an island, which makes a movement analysis groundless; the associate nominal could not have originated in the position of the FQ. (221) is an example Benmamoun (1999:628) himself provides from Moroccan Arabic, supplemented with (222) and (223) from SA.

(221) hadu lə-wladı lli mš-at [island qbol ma-y-ži-w]
these the-children that leave.PAST-3FS before
kull-u-hum₁]
all-NOM them
‘These are the children that she left before meeting them all.’

(222) ʔaz-zuwwaar-u makaθ-uu ʔaʕat-ain [island qbla ʔan]
the-visitors-NOM stay.PERF-3PL.MASC hour-DUAL.ACC before that/to
ju-ʔaadir-uu kull-u-hum]\n3-leave.IMPERF-PL.MASC all-NOM-them
‘The visitors stayed for two hours before all of them left.’

(223) Coordinate Structure Island
ʔatˤ-tˤullaab-uj hadar-uu [island kull-u-hum₁] wa
the-students-NOM attend.PERF-3PL.MASC all-NOM-them and
ʔaabaaʔ-u-hum]\ l-dʒtimaaʕ-a
parents-NOM their the-meeting-ACC
‘As for the students, all of them and their parents attended the meeting.’

To assimilate this data within a movement analysis, it would be inevitable to assume that an FQ is derived by movement only when there is no island boundary between the two positions, and by
base-generation of the NP in the higher position when there is a phase boundary. This is indeed the route Benmamoun takes by his postulation of a last resort null pro in the NP projection which is bound by an NP higher up in the structure. This undermines the explanatory power of the account. Besides, an overt NP is not required even in cases where there is no phase boundaries. (224) is perfectly grammatical in a context that is rich enough for the reference of the pronoun ‘hum’ ‘them’ to be unambiguously resolved.

(224) qaraʔ-uu kull-u-hum kitaab-an
read.PERF-3PL.MASC all-NOM-them book-ACC
‘All of them read a book.’

Moreover, any movement analysis for SA FQs falls short of accounting for why FQs are not possible when the NP is an indefinite plural.

(225) *tˤullaab-un qaraʔ-u kull-u-hum kitaab-an
students-NOM read.PERF-3SG.PL all-NOM-them book-ACC
‘Intended: it was students who all read a book.’

To address these issues I propose an alternative for the movement analysis in which I maintain from Benmamoun (1999) the argument that the two patterns of quantifier structures are not related derivationally. More importantly, I depart from his account by arguing that no movement can take place from the structure he assumes for the second pattern given in (219). I assume that the associate nominal in the second pattern could be a null pro or an overt DP, and neither can move out of the constituent. However, when it is a null pro, it can be bound by a definite topical subject externally merged in SpecCP. This set of assumptions is delineated in the schematizations below.

(226) a. NP1__[Q+clitic] = [DP[dp pro]…[QP clitic]]
    b. NP1__[Q+clitic] = [DP [DP]…[QP clitic]]

With this proposal at our disposal, let us now reconsider (207), repeated below.

(227) a. ?atˤ-tˤullaab-u qaraʔ-uu kull-u-hum kitaab-an
The students, all of them read a book.

'It was all the students who read a book.'

I argue that (227)a is derived from the structure in (226)a, i.e., ‘kull-u-hum’ merges as a separate constituent in SpecvP and it has a null pro that is bound by ‘the students’ which externally merges in SpecCP as a topic. This is illustrated in (228). As for (227)b, two possible derivational paths are envisaged. First, ‘ʔatʾ-tʾullaab-u kull-u-hum’ might merge as one constituent in SpecvP based on (226)b, and then move to SpecTP for focus as one unit as shown in (229)a. Second, it might follow the same derivational path as (227)a, the difference being that ‘kull-u-hum’ proceeds to SpecTP for focus as shown in (229)b. This account follows from the structure in (176) and it avoids the island violations posed by the sentences in (221) and (222) as well as the questions raised by the sentences in (214). In addition, (229)b accounts for why only definite DPs co-occur with FQs; they are topics base-generated in the left periphery and therefore have to be definite.

(228) [CP [the students]; [TP read [vP [[pro]+all of them]…[VP]]]]

(229) a. [CP [[TP[[the students]+all of them]]] [TP read [vP [[the students]+all of them]…[VP]]]]

b. [CP [the students]; [TP[[[pro]+all of them] [TP read [vP [[[pro]+all of them]…[VP]]]]]]

In brief, what these syntactic derivations reveal is that the phenomenon of quantifier float is a misnomer since none of the derivational paths schematized in (229) assumes that ‘the students’ moves from a projection that combines it with ‘kull-u-hum’. The question that remains is, given these derivational paths, what interpretations these sentences could have. I propose that (228) and (229)b are cases of Split Topics in the sense spelled out in §4.3.2. This analysis captures intricate property of FQs, namely that they only appear in the context of definite DPs with which they are
co-indexed. These definite DPs are topics that are placed in focus by virtue of the FQ. On the other hand, (229)a is a typical case of subject focus derived from a VSO clause.

Summarizing, I have shown in this section how quantifiers interact with IS in SVO. The discussion concentrates on quantifiers appearing in the topical position in SpecCP or originating in the thematic position in SpecvP and moving to SpecTP as focus. The next section turns attention to the rest of constituents that can show up in the left periphery of an SVO clause.

4.3.4 Focus, Wh-question and Left Dislocation

As noted earlier, focus-fronting and wh-questions target SpecTP, in which case they appear below the pre-verbal subject in SpecCP. Examples are given below:

(230) a. zajd-un qaraʔ-a l-kitaab-a
   Zayd-NOM read.PERF-3SG.MASC the-book-ACC
   ‘Zayd read a book.’

b. zajd-un l-kitaab-a qaraʔ-a
   Zayd-NOM the-book-ACC read.PERF-3SG.MASC
   ‘As for Zayed, [a book] he read.’

c. zajd-un maaðaa qaraʔ-a
   Zayd-NOM what read.PERF-3SG.MASC
   ‘As for Zayed, what did he read?’

Cross-linguistically, the left peripheral focus position is usually associated with contrastive focus (e.g., Rizzi, 1997; Belletti, 2004; Neeleman et al., 2009), and the same is argued to obtain in SA (e.g., Moutaouakil, 1989; Ouhalla, 1997; Shlonsky, 2000). Contrastive focus indicates the relevance of at least one other alternative in the set \{Zayd read x | x ∈ E\}, and that this alternative is not true. Nevertheless, this is not the only way contrast can be expressed; it can also be marked with the object DP in situ through prosody or an overt negative continuation as in (231).

---

69 I should point out here that in (230)b, and the similar cases where a predicate-internal argument moves to the left periphery, I assume that movement proceeds successively-cyclically through the edge of vP and then to SpecTP, in conformity with Phase Impenetrability Condition (Chomsky, 2000:108). This condition states that if \( \alpha \) is a phase with the head H, the domain of H is inaccessible to operations outside \( \alpha \); only H and its edge are accessible to such operations.
Alongside preverbal DPs, an SVO can have a LD-phrase. As argued before, left dislocation yields topics which occupy the same position as preverbal topical subjects, i.e., SpecCP. (232) showcases this structure.

(232) a. ʔal-walad-u katab-a r-risaalat-a
    the-boy-NOM write.PERF-3SG.MASC the-letter-ACC
    ‘The boy wrote the letter.’

b. ʔar-risaalat-u l-walad-u katab-a-haa OSV
    the-letter-NOM the-boy-NOM write.PERF-3SG.MASC-it
    Lit: ‘The letter, the boy, he wrote it.’
    ‘As for the letter and the boy, he wrote it.’

c. ʔal-walad-u r-risaalat-u katab-a-haa SOV
    the-boy-NOM the-letter-NOM write.PERF-3SG.MASC-it
    Lit: ‘The boy, the letter, he wrote it.’
    ‘As for the boy and the letter, he wrote it.’

In (232)b-c, ‘the boy’ and ‘the letter’ are part of the common ground. Therefore, I argue that the contribution of such double-topic constructions is to put the verb in focus. So, the set of alternatives induced by both can be formalized as in (233).

(233) \{ R \text{(the letter, the boy)} \mid R \in \text{D}_{<e,<e,t>} \}

The alternatives to ‘write’ is a set of relations of type <e,<e,t>> that are salient in the context of the utterance. Evidence comes from negative continuations which can pick out only the predicate.

The fact that, in SA, LD-phrases must co-occur with resumptive pronouns that they bind anaphorically leads to the conclusion that referential DPs are the only category that is susceptible to left dislocation. DPs are usually part of the argument structure of the predicate, and therefore the dislocation of all, or some, of the arguments of the predicate is supposed to set the predicate and non-dislocated arguments in focus. Focus, in contrast, can target any constituent since it is not
associated with resumption (Aoun et al., 2010). Besides DPs, CPs, PPs and adverbs can be focus-fronted (see Ouhalla, 1997).

To sum up, I have shown in this section that the left edge of SVO structures can host focus-fronted as well as left dislocated constituents. Focus-fronted elements divide the comment into presupposed and non-presupposed information. The occurrence of dislocated phrases, along with a pre-verbal subject, leads to a reading in which the predicate is in focus. In the next section, I turn to VSO.

4.4 The Left Periphery in VSO

VSO is assumed to be the “discourse neutral” word order, as indicated in §2.2. Its neutral status can be altered either through focal stress or focus fronting. Let us first consider the controversies of subject fronting (it has already been touched upon in the discussion of example (227)b under the derivation in(229)a).

(234) a. ṭallafa-t zajnab-u riwaajat-an
   write.PERF-3SG.FEM Zaynab-NOM novel-ACC
   ‘Zaynab wrote a novel.’

   b. zajnab-u ṭallafa-t riwaajat-an
   Zaynab-NOM write.PERF-3SG.FEM novel-ACC
   ‘It is Zaynab who wrote a novel.’

Although Ouhalla (1997) argues that (234) involves focus-fronting of the subject, he remains implicit as to how the derivation proceeds. He does not assume the distinction in derivation proposed here between SVO and VSO orders. For him, the subject of an SVO is in SpecTP, and the subject of a VSO is presumably in SpecvP. The structure he postulates for focus-fronting is schematized in (235).
So, for Ouhalla (1997), the tacit assumption is that (234)b can be derived from (234)a or its SVO counterpart. Nevertheless, this view overlooks the observation that ‘Zaynab’ is compatible with a focused element in a lower position, but not in a higher position, as indicated earlier and shown in (236).

(235) .... 
   .... FP 
   .... F' 
   F | TP 
   [+F] .... T' 
   T vP 
   △ .... 

So, for Ouhalla (1997), the tacit assumption is that (234)b can be derived from (234)a or its SVO counterpart. Nevertheless, this view overlooks the observation that ‘Zaynab’ is compatible with a focused element in a lower position, but not in a higher position, as indicated earlier and shown in (236).

(236) a. zajnab-u riwaajat-an ?allafa-t
    Zaynab-NOM novel-ACC write.PERF-3SG.FEM
    ‘As for Zaynab, she wrote [a novel]f.’

b.* riwaajat-an zajnab-u ?allafa-t
    novel-ACC Zaynab-NOM write.PERF-3SG.FEM
    ‘Zaynab wrote [a novel]f.’

To maintain the view that (234)b can be derived from SVO as well, one might argue that the preverbal subject DP, which is in SpecTP for Ouhalla, topicalizes first, i.e., moves to SpecCP, and then the object DP is forwarded to FP in (235) for focus. This seems as a sound amendment, but it would still need to consider the fact that preverbal subject DPs share all the features left dislocated elements have, and the latter are base-generated in their surface position. Economically speaking, this account also involves more steps, as it entails topicalization and focus-fronting both by movement. What is more, the former looks as though it takes place for the sole purpose of making way for the latter. So, I argue that (234)b can only be derived via movement from (234)a, whereas
(236)a is derived from its SVO counterpart with the preverbal subject DP externally merged in SpecCP. When derived from SVO, it can only be through stress in SpecCP or by the overt realization of the null pro as discussed in §4.3.2.

This argument that the subject focus via movement can only be derived from a VSO is corroborated by (195)b, repeated below. An analysis along the lines of Ouhalla (1997) would fail to explain why this sentence is incompatible with preposing the object for focus. As it turns out, the subject in (237) is incompatible with object preposing, regardless of whether it lands below the subject or above it as show in (Mohammad, 2000:76).

(237) kull-u tˤaalib-in qaraʔ-a kitaab-an
all-NOM student-GEN read.PERF-3SG.MASC book-ACC
‘Every student read a book.’

(238) a. *kitaab-an kull-u tˤaalib-in qaraʔ-a
book-ACC all-NOM student-GEN read.PERF-3SG.MASC
‘Intended: It is a book that every student read a book.’

b. *kull-u tˤaalib-in kitaab-an qaraʔ-a
all-NOM student-GEN book-ACC read.PERF-3SG.MASC
‘Intended: It is a book that every student read a book.’

Under my proposal that subject focus is possible only from VSO and given that the subject in (237) is quantificational, it can only have arrived to its clause-initial position through focus movement from SpecvP to SpecTP. On this view, the ungrammaticality of the sentences in (238) is quite predicted; SpecTP, the focus position, is already filled by the subject, and, given the restriction that only one constituent can be focus-fronted, the object cannot be focus-fronted.

With the focus-fronting of the subject addressed, let us turn to cases where the other constituents in VSO are preposed as in (239).

(239) a. ?allaфа-t zajnab-u [riwaajat-an]F
write.PERF-3SG.FEM Zaynab-NOM novel-ACC
‘Zaynab wrote [a novel]F.’

b. riwaajat-an ?allaфа-t zajnab-u OVS
novel-ACC write.PERF-3SG.FEM Zaynab-NOM
‘It is a novel that Zaynab wrote.’

c. ʔallafa-t zajnab-u riwaajat-an
    write.PERF-3SG.FEM Zaynab-NOM novel-ACC
    ‘Zaynab [wrote] a novel.’

The object, when focused in *situ* as in (239)a, is ambiguous between a new information and contrastive focus. This ambiguity can be resolved through the presence of a contextually salient alternative to ‘a novel’ with which the proposition comes out untrue, or via an overt negative continuation. However, in (239)b, as indicated the standard view is that the only available reading is contrastive focus. In (239)c, Ouhalla (1997) points out that the entire TP moves to SpecFP in (235).

His account is built on the observation that in negative continuations as in (240), the subject and object are also part of the continuation and therefore might as well be in focus.

(240) ʔallafa-t zajnab-u l-qasˤiiday-a laa ʔalqa-t-haa
       write.PERF-3SG.FEM Zaynab-NOM the-poem-ACC not read.PERF-3SG.FEM-it
       ‘Zaynab [wrote] the poem, not [read it].’

Ouhalla (1997:28) formulates his account as follows: “as shown in the continuation, focus picks out not just the verb, but also the direct object, in the form of a clitic-pronoun, and possibly also the subject, in the form of the subject agreement marker. This means that the constituent being focused in such sentences is the whole IP (the proposition)”.

I argue against this analysis for the reason that what is in focus is just the verb, and this is evident through the continuation itself. The alternative provided is for the predicate, whereas the subject and the object remain presupposed by virtue of the agreement marker and the clitic; the subject is still ‘Zaynab’ and the object is still ‘the poem’. Therefore, it is a case of predicate focus. Furthermore, on the current proposal, the verb does not need to move; it is focused in T. The PGU is established via head movement.

The CP edge of VSO can also host LD-phrases. This can be accompanied by a focused phrase somewhere in the clause. (241) are illustrative examples.

(241) a. ʔar-riwaajat-u ʔallafa-t-haa zajnab-u OVS
(241)a is equivalent to normal SVO structures, which convey the standard meaning of a topic and comment. The comment represents new information which can be dealt with as an answer to an informational question of the form ‘What about the novel?’ In other words, with the assumption that focus on a particular constituent can be viewed as an answer to an informational question that inquires about the relevant constituent, the comment may as well be viewed as a focused constituent. (241)b, on the other hand, is ambiguous between an SVO with the object left-dislocated, and a VSO in which the object is left-dislocated and the subject is focus-fronted. Therefore, I guess this ambiguity can only be resolved by prosodic prominence on the fronted subject. The reading that it has then is that the comment is partitioned into presupposed information, which is the predicate ‘wrote it’ and a focused element, the subject ‘Zaynab’.

In summary, I have shown in this section that subjects can only be focus-fronted in VSOs. In SVOs, they are already higher than the position for focus. In addition, like SVO, the left edge of VSO can host LD-phrases. In the next section, I move on to the discussion of wh-questions and fragment answers and unravel its relation to discourse organization.

4.5 Constituent Questions and Fragment Answers

4.5.1 Introduction

SA is primarily a wh-movement language. Aoun et al. (2010) point out that SA employs the gap as well as the resumptive strategy in question formation; a wh-word could relate to a gap or a resumptive pronoun in some clause-internal position. With resumption, there is a possibility that clause-initial wh-words do not arrive there via movement but instead are externally merged there
(Soltan, 2007:53). Arabic dialects, on the other hand, differ in that they allow wh-in-situ questions as well as wh-movement questions. In addition, the resumptive strategy is more productive in dialects (e.g., Aoun et al., 2010; Soltan, 2007).

The focus of this section is not on wh-questions at large but is rather confined to the modes of answers in question-answer exchanges, in which answers show interesting variations in word order, an observation that pertains to the scheme of this work. In a question-answer exchange, an answer can take the form of: i) a full sentence with the constituent providing the required information occurring in the clause-internal argument position left as a gap as in (242)b; ii) a full sentence that have the same syntax as the question, i.e., the constituent providing the required information appears in the position the wh-word assume in the question as in (242)c; or iii) fragment answers confined to the required constituent as in (242)d.

(242)  a. maaðaa qaraʔ-a zajd-un
what read.PERC-3SG.MASC Zayd-NOM
‘What did Zayd read?’

b. qaraʔ-a zajd-un l-kitaab-a
read.PERC-3SG.MASC Zayd-NOM the-book-ACC
‘Zayd read [the book].’

c. ʔal-kitaab-a qaraʔ-a zajd-un
the-book-ACC read.PERC-3SG.MASC Zayd-NOM
‘[The book] Zayd read.’

d. ʔal-kitaab-a
the-book-ACC
‘The book.’

Of particular interest are (242)c and (242)d which give rise to intriguing questions. First, the derivation of fragment answers such as (242)d has been subject to a long drawn-out controversy which branches off to two major approaches: under the first, a short answer is covertly clausal but the clause,the exclusion of the answer, is elided (Merchant, 2005) and under the second it is a bare constituent (Groenendijk & Stokhof, 1982, 1984; Stainton 1998, 2005, 2006; Ginzburg & Sag,
2000; Jacobson 2016). The clausal approach in turn diverges on whether clausal ellipsis involves movement of the answer to the left periphery followed by TP ellipsis or whether it is a case of in-situ ellipsis, i.e., the answer remains in its clause-internal position and the materials around it, which sometimes do not form a constituent, undergo a PF deletion or suppression of vocabulary insertion (in late vocabulary insertion approaches such as distributed morphology) (Weir, 2014, 2018; Griffiths, 2019; Shen, 2019). Given this debate, how is (242)d derived? Second, given that the left periphery focus position is contrastive in SA and across languages (e.g., Rizzi, 1997; Neeleman et al., 2009; Ouhalia, 1997; Shlonsky, 2000; see also §s 4.3 and 4.4), does the answer in (242)c evoke contrast? These are the questions I am after in this section. In the course of developing answers, I provide a concise review of the approaches to fragments, with specific concentration on arguments for their covert clausality since fragments in SA show, like many other languages, what Merchant (2005:676) calls “connectivity effects”.

4.5.2 Approaches to Fragment Answers

4.5.2.1 Bare Nominals (constituents)

This approach to fragments is upheld in a number of works (e.g., Groenendijk & Stokhof, 1982, 1984; Ginzburg & Sag 2000; Jacobson 2016). The argument is that the answer in (242)d is syntactically non-clausal. For interpretation, the bare nominal interpretation composes with the question, which is conceived of as a lambda abstract in which the answer can be plugged to derive the proposition; the question above derives the function ‘\( \lambda x. \text{Zayd read } x \)’. Jacobson (2016:331) argues that this comes about through regarding the question and the answer as one unit, which she calls a Qu-Ans unit. However, an analysis along the lines of this approach would miss out some connectivity effects in fragment answers. The first is case matching. The fragment answer in (242)d bears the accusative case inflection, which is the case usually received when the answer originates in the
canonical object position in a clausal structure. The second connectivity effect pertains to binding.

An object fragment answer can contain a pronoun that is bound by the subject. Below is an example.

(243)  a. maaðaa qaraʔ-a  [kull-u tˤaalib-in]_i
      what  read.PERF-3SG.MASC  all-NOM  student-GEN
      ‘What did every student read?’

      b. kitaab-a-[hu_kji
         book-ACC-his
      ‘His book.’

The pronoun in (243)b is liable to a reading where it is bound by the quantifier. The same effect holds for condition A. In a question like ‘who did Zayd kill?’, ‘himself’ as a fragment answer is perfectly acceptable in SA. Although Jacobson (2016) proposes ways to get around these connectivity effects, they require compositionality across what are usually considered as distinct discourse units, namely questions and answers. So, since these effects show plausible parallelisms between fragment and sentential answers, I conclude that this approach to fragment answers is less preferable.

4.5.2.2 Clausal Approaches

These approaches differ in the mechanism they argue is responsible for ellipsis but agree that fragments are covertly sentential. One approach is proposed by Merchant (2005). His argument consists in the assumption that fragment answers are derived by Ā-movement of the fragment to a left-peripheral position, followed by TP deletion at PF. Below is an illustrative schematization of a fragment answer to the question ‘who did she see?’ (Merchant, 2005:675).
Merchant utilizes two tests to support that fragments involve movement: case-matching and preposition stranding. Case matching builds on the cross-linguistic observation from languages with case morphology that a fragment takes the same case as its counterpart in a clausal answer as shown in (245) and (246) from Greek and German (Merchant, 2005:676f).

(245) Q: Who saw Maria?  
Who.NOM saw the Maria  
Who saw Maria?  
(a) A: O Giannis.  
the Giannis.NOM  
(b) A: *Ton Gianni.  
the Giannis.ACC

(246) Q: Who is Hands following?  
Who.DAT follows Hans  
Who is Hands following?  
(a) A: Dem Lehrer.  
The.DAT teacher  
(b) A: *Den Lehrer.  
The.ACC teacher

Preposition stranding, on the other hand, stems from the observation that languages that strand prepositions in movement allow fragments to appear with no prepositions, whereas languages that do not strand prepositions require fragments to be preceded by a preposition as shown in (247) and (248), receptively (Merchant, 2005:685ff).

(247) a. Who was Peter talking with?  
b. Mary  
(248) a. Mit wem hat Anna gesprochen?  
with whom has Anna spoken?  
b. Mit dem Hans.  
The second approach that endorses an ellipsis analysis of fragment answers is the in-situ approach (e.g., Bruening, 2015; Abe, 2016; Ott & Struckmeier, 2016; Griffiths, 2019). The argument here is so simple. A fragment answer is derived from its sentential counterpart without movement but rather through PF deletion of materials around the fragment. Below is an illustration of how this approach is argued to work.

(249) a. What did John eat?
   b. He ate apples.
      He ate apples. at PF

Evidence for this approach to ellipsis comes primarily from two sources: i) from the observation that fragment answers do not show some Ā-properties and ii) from cases where fragments are not constituents that usually undergo Ā-movement alone. Below are examples (Griffiths, 2019:26).

(250) a. John refuse to teach every student. (refuse >∀, ∀> refuse)
   b. …and [teach every student] John refused to t₁. (refuse >∀, *∀> refuse)

(251) A: What did John refuse to do?
    B: [teach every student] John refused to t₁. (refuse >∀, ∀> refuse)

(252) A: Should he REVOLVE or TILT the gyroscope?
    B: REVOLVE, of course.

Predicate preposing usually bleeds inverse scope as in (250)b. If fragment answers are derived by movement and deletion, the prediction is that it would bleed inverse scope too, but this prediction is not borne out since both readings are still available in (251)b. On the other hand, in (252)b the fragment is a transitive verb that could not have moved alone.

To sum up, the subsection has reviewed two approaches to fragment answers, namely the bare constituents approach and the ellipsis approach, with the latter involving two mechanisms for implementation. I have already rejected the bare constituent approach on the grounds that
fragments in SA show connectivity effects with regard to case and binding properties. Therefore, I confine the discussion in what follows to an evaluation of the mechanisms of the ellipsis approach.

4.5.3 Fragment Answers in SA: Analysis

To gain a thorough insight into fragment answers in SA, let us enrich our database with questions that inquire about the subject and the predicate. Below are variations of (242), along with their possible answers.

(253) Subject-oriented questions

a. man qaraʔ-a l-kitaab-a
   who read.PERF-3SG.MASC the-book-ACC
   ‘Who read the book?’

b. ?qaraʔ-a zajd-un l-kitaab-a
   read.PERF-3SG.MASC Zayd-NOM the-book-ACC
   ‘Zayd read the book.’

c. qaraʔ-a l-kitaab-a zajd-un
   read.PERF-3SG.MASC the-book-ACC Zayd-NOM
   ‘Zayd read the book.’

d. zajd-un qaraʔ-a l-kitaab-a
   Zayd-NOM read.PERF-3SG.MASC the-book-ACC
   ‘It is Zayd who read the book.’

e. zajd-un
   Zayd-NOM
   ‘Zayd.’

(254) Predicate-oriented questions

a. maaðaa faṣal-a zajd-un
   what do.PERF-3SG.MASC Zayd-NOM
   ‘What did Zayd do?’

b. #/?qaraʔ-a zajd-un l-kitaab-a
   read.PERF-3SG.MASC Zayd-NOM the-book-ACC
   ‘Zayd read the book.’

c. qaraʔ-a l-kitaab-a zajd-un
   read.PERF-3SG.MASC the-book-ACC Zayd-NOM
   ‘Zayd read the book.’

d. zajd-un qaraʔ-a l-kitaab-a
   Zayd-NOM read.PERF-3SG.MASC the-book-ACC
(253) and (254) reveal an interesting observation about the first option for answers; with the assumption that the canonical subject position is Spec\_vP, the questionable felicity of (253)b casts serious doubts on the formulation of the first option in §4.5.1. In particular, it calls into question the felicity of an answer if the constituent appears in the canonical argument position. (253)c and (253)d is a probable indication is that the constituent in question may appear in the clause-final position or the clause-initial position. It just so happened that the clause-final position in (242) corresponds to the canonical position of the answer since the question targets the object. By the same token, (254) tells the same story. The V+Object answer complex cannot be separated with each appearing in its usual position in a neutral VSO clause. They either have to precede the subject as in (254)c in what seems to be a VP displacement, or they have to appear as sentence-final as in (254)d.

What transpires from the data above is that right formulation of answer modes in SA is that an answer can appear clause-initially, clause-finally or as a fragment. This supports the view that the clause-final position in SA is a focus position. It is the position that most likely bears the focus of the sentence.70

Insofar as what ellipsis approach is compatible with fragment answers, the data in (242), (253) and (254) allow for both options. The movement and deletion approach can derive fragment answers from clausal counterparts in which they appear clause initially, while the in-situ approach can derive them from clausal answer in which they appear clause-finally although the latter require

70 Some form of this argument has already been established in §3.3.3 where I argued that OS usually sets the subject, which becomes clause-final, in focus.
some movements of the elided items before ellipsis takes place. This is manifested in (253)c where
the object vacates its canonical position, setting the subject in clause-final position. To break this
symmetry, I bring into the mix data on wh-questions derived from SVO clauses. Recall that wh-
movement in SVO are shown to illicit when they land above the preverbal subject (a point that is
well-elaborated in chapter (2)). Let us consider possible answers in the context of the SVO coun-
terpart of (242)a given below.

(255) a. zajd-un maaðaa qaraʔ-a
    Zayd-NOM what read.PERF-3SG.MASC
    ‘As for Zayd, what did he read?’

b. zajd-un qaraʔ-a l-kitaab-a
    Zayd-NOM read.PERF-3SG.MASC the-book-ACC
    ‘As for Zayd, he read the book.’

c. ?zajd-un l-kitaab-a qaraʔ-a
    Zayd-NOM the-book-ACC read.PERF-3SG.MASC
    ‘As for Zayd, it is the book that he read.’

d. #/?ʔal-kitaab-a qaraʔ-a zajd-un
    the-book-ACC read.PERF-3SG.MASC Zayd-NOM
    ‘It is the book that Zayd read.’

e. ?ʔal-kitaab-a
    the-book-ACC
    ‘The book.’

(255) shows that a clausal answer is only possible when the constituent appears clause-finally.

(255)c and (255)d are infelicitous. The source of infelicity in the former seems to be that, although
this position is the focus position in SVO clauses, it does not function as an appropriate answer in
a question-answer exchange. The infelicity of the latter, on the other hand, seems to stem from the
fact the it obscures the topicality of ‘Zayd’ in the question, i.e., although ‘Zayd’ is marked as given
in (255)d by virtue of being part of the presuppositional frame of the answer, which is ‘Zayd read
x’, its topical status is not maintained. Combining the sentences in (255) with the set of data in
(242), (253) and (254) points towards an in-situ approach which derives fragment answers from
their clausal counterparts that show focus appearing in final position. However, this data adds to
the debate of clausal origins of fragments in that it shows that the in-situ approach also involves movement. As alluded to above, (253)c is an illustrative example as basis for the fragment answer in (253)d. The question picks out the subject, but the object has to move out of vP, placing the subject which remains in Spec\_vP, the thematic subject position, in focus. The forwarded object and the verb, which do not form a syntactic constituent, then undergo deletion or PF suppression, thus deriving the fragment in (253)d. The obvious difference is that what moves is part of the materials that get deleted.

Given that the connectivity effects given above on case and binding relations with regard to condition A and B are compatible with both implementations of the ellipsis analysis (movement vs. in-situ deletion), we need evidence for the flavor of the in-situ approach suggested here which goes beyond the data in (255). Recall that, as we have illustrated in §2.5, focus preposing bleeds condition C. Below is an example repeated from that section.

(256) a. qaabal-a kull-u t’ullaab-i-[hi]k/*j [zajd-an]i
meet.PREF-3SG.MASC all-NOM students-GEN-his Zayd-ACC
‘All his\_k/*j students met Zayd.’

b. [zajd-an]i qaabal-a kull-u t’ullaab-i-[hi]k/*j
Zayd-ACC meet.PREF-3SG.MASC all-NOM students-GEN-his
‘It is Zayd\_i whom all his\_k/*j students met.’

Accordingly, a question targeting the object in (256)a is predicted to allow for a reading where ‘Zayd’ binds the pronoun in the subject if the fragment is derived by movement to left periphery, but this prediction is not borne out. The fragment answer in (257)b below can only be felicitous if the pronoun in the question remains with a reference other than ‘Zayd’.

(257) a. man qaabal-a kull-u t’ullaab-i-[hi]k/*j
who meet.PREF-3SG.MASC all-NOM students-GEN-his
‘Who did his students met?’

b. [zajd-an]i
Zayd-ACC
I take this observation as an adequate evidence that fragment answers are not derived via the approach proposed above, and not by a left-peripheral movement the fragment followed by deletion by TP deletion.

As for fragment answers to predicate-oriented questions such as (254), the argument is that (254)e is derived from (254)d. Evidence for this extension comes from agreement facts. Let us consider (258).

\[(258)\]
\[
a.\text{maaad̠aafas̠al-aʔatˤtˤullaab-u}
\]
\[
\text{what do.PERF-3SG.MASC the-students-NOM}
\]
\[
\text{‘What did the students do?’}
\]
\[
b.\text{*qaraʔ-a̱l-kitaab-a}
\]
\[
\text{read.PERF-3SG.MASC the-book-ACC}
\]
\[
\text{‘Intended: they read the book.’}
\]
\[
c.\text{qaraʔ-uuʔal-kitaab-a}
\]
\[
\text{read.PERF-3PL.MASC the-book-ACC}
\]
\[
\text{‘They read the book.’}
\]

As can be seen, the fragment answer can only be felicitous if agreement is full as (258)c shows, which only holds in the case of SVO structures. That is, it could not have been derived from (259).

\[(259)\]
\[
\text{qaraʔ-a̱l-kitaab-aʔatˤtˤullaab-u}
\]
\[
\text{read.PERF-3SG.MASC the-book-ACC the-students-NOM}
\]
\[
\text{‘The students read the book.’}
\]

However, in (254) and (258), the topical subject which engenders full agreement does not necessarily arrive to its clause-initial position by movement and then undergoes deletion, it is most likely base-generated in the left periphery due to its being given in the question in (258)a.

**4.5.4 Fronted Answers**

As is shown in (242), a clausal answer with a preposed constituent can felicitously serve as answer. The question such answers raise however is whether or not they give rise to a contrastive focus reading since preposed constituents are usually associated with this kind of reading. As it turns out, this type of answer is only felicitous just in case the discourse participant has a reason
to suspect that the one who asks the question might have a wrong idea as to what the answer is, i.e., the contextual conditions for such answers are restrictive.

This alternation in answers to constituent questions is not an idiosyncrasy of SA but rather has been reported in several languages, including Italian (Belletti 2001), Spanish (Zubizarreta 1998), Gungbe (Aboh 2007a, 2007b), among others. Below are examples from Italian (Kratzer & Selkirk, 2019:23).

(260) a. chi ha scritto questo articolo?  
    who has written this article  
    ‘Who wrote this article?’

b. l’ha scritto Gennaro.  
    it has written Gennaro  
    ‘Gennaro wrote it.’

c. Gennaro l’ha scritto.  
    Gennaro it has written  
    ‘Gennaro wrote it.’

Similar to the SA data reviewed above, while both (260)b and (260)c are appropriate answers, the latter does not only express new information but also implies a contrast. It evokes the sense that ‘Gennaro’ is not the only possible author who might have written this article but rather the one picked out from several alternatives which other discourse participants might have thought were the authors of the article.

4.6 Concluding Remarks

This chapter has been devoted to an investigation of the left periphery. I have presented a detailed analysis of this structural zone in SVO and VSO clauses, respectively. I have shown that a pre-verbal subject can be a topic base-generated in the SpecCP, or a focus derived by movement from SpecvP to SpecTP. In the course of teasing apart the IS effects associated with the various order permutations that result from movement to this area, I have proposed a non-movement analysis of floating quantifiers in SA in which they are base-generated in their clause-internal position and are
co-indexed with a definite (mostly topical) constituent higher up in the structure. I have then switched the discussion to word order variation and fragments in answers to constituent-questions. I have argued that fragments are derived by an in-situ approach that might involve movement of some constituents. This movement leaves the fragment in the clause-final position prior to deletion or PF suppression of all other materials. As for clausal answers that contains a movement of the constituent targeted by the question, I have argued that the contextual conditions under which such answers are felicitous are constrained. They are only confined to contexts where there is good reason to assume that other discourse participants have other alternative answers that they might think are true.
Chapter 5

5 EXCEPTIVE CONSTRUCTIONS

This chapter explores in brief exceptive constructions in SA with specific focus on sentences where the domain XP and excepted XP are DPs. A complete investigation of the syntax and semantics of the entire realm of exceptive constructions with all potential domains and excepted phrases (i.e., CPs, PPs, AdvPs, AdjPs, etc.) is beyond our purposes here. In §5.3, I review the inventory of exceptive markers SA has and then provide arguments for their syntactic categories. In §5.4, I examine the syntax and semantics of exceptives and end up proposing that full exceptives are either connected or free exceptives. The former is further subdivided into two types based on the position of the excepted phrase, a DP-level exception or a right-peripheral exception. This classification is then shown to derive the attested syntactic properties and also account for their concomitant semantic and pragmatic effects. As for incomplete exceptives, I propose that they are CP-level exceptions in which the excepted XP is focused and the exceptive marker serves as an exhaustive focus marker on a par with ‘only’ since the latter can take its place and preserve the same interpretation.

5.1 Introduction

The syntax and semantics of exception have been investigated in a number of languages, including English (e.g., Hoeksema, 1987; Fintel, 1991, 1994; Crinč, 2016), Spanish (e.g., Garcia-Alvarez, 2009; Pérez-Jimenéz & Moreno-Quibén, 2012), German and French (Moltmann, 1992), among others. As far as SA is concerned, to the best of my knowledge, Moutouakil (2009) is the only work that addresses some aspects of exception based on Functional Discourse Grammar and it leaves many open questions which I intend to take on here. For dialectal Arabic, Soltan (2016) examines ʔilla exceptive in Egyptian Arabic.
Exceptive constructions have always posed a variety of questions with regard to their syntactic distribution and properties as well as their interpretive contributions. The scope of this chapter is confined to exceptive constructions where excepted XPs are DPs as we are interested in their role in amending the neutral status of VSO clauses in SA. In particular, I pursue answers for two questions: the first concerns the morphosyntactic properties of exceptives and the second their relatedness to IS. Table (1), repeated below, summarizes their morphosyntax which is usually reflected in the case inflections excepted XPs bear.

<table>
<thead>
<tr>
<th>Table (2): Case Inflections in Exceptives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Full Positive Exceptives</td>
</tr>
<tr>
<td>ACC</td>
</tr>
<tr>
<td>2. Full Negative Exceptives</td>
</tr>
<tr>
<td>- via agreement with the domain XP</td>
</tr>
<tr>
<td>3. Non-full Exceptives</td>
</tr>
<tr>
<td>4. Exceptives with Subjunctive 'maa'</td>
</tr>
</tbody>
</table>

This labyrinth of morphosyntactic properties requires careful consideration as it would reveal a great deal about the informational content of exceptives. As a jumping-off point for our discussion, I begin by presenting an abridged review of some of the standard characteristics that have been recognized as typical of exceptive constructions.

**5.2 Properties of Exceptives**

Exceptives demonstrate a variety of properties but they can be summarized in two major properties. First, their use is constrained as it is generally conditioned by a universal, positive or negative, quantifier in the domain XP (Hoeksema, 1987). This indicates that the quantifier may be *every, all* or *no*, but not, for instance, *most* or *few*. Moltmann (1992:315) calls this restriction the *Quantifier Constraint*. Some can co-occur with generic domains or domains headed by the definite article which identify a set of entities that is salient in the context of the discourse. This is exemplified below (adapted from Fintel, 1994:101; Hoeksema, 1987:10; Crnič, 2016:1).
Every student but John attended the meeting.

No student but John attended the meeting.

The students, except for Stan, have left.

No book but `War and Peace' is worth reading.

Some book but `War and Peace' is worth reading.

Fintel (1994:102) schematizes exceptive sentences like (261)a and (261)b as follows.

\[
(262) \begin{align*}
\text{a. } & \left[\text{every student but John}\right] (P) \iff \neg P \cap \left[\text{student}\right] = \{\left[\text{John}\right]\} \\
\text{b. } & \left[\text{no student but John}\right] (P) \iff P \cap \left[\text{student}\right] = \{\left[\text{John}\right]\}
\end{align*}
\]

(262)a means that an excepted XP subtracted from a universally quantified domain XP is the only element of which the property in the nuclear scope of the quantifier does not hold, which by entailment means that it is the only element of which the negation of the nuclear scope holds (the Negative Condition in Motlmann’s 1992 terms). To be concrete, the property of attending the meeting in (261)a is true of every student except for John of whom its negation (i.e., the property of not attending the meeting) is true. (262)b represents the opposite scenario in which an exceptive construction has a domain XP that is quantified over with a negative universal. In this case, the intersection of the domain XP and the nuclear scope yields a singleton set containing the excepted XP only. To illustrate more, the two representations in (262) correspond to the following diagrams (Fintel, 1994:101).

\[(263) \begin{align*}
\text{a. (262)a} & \quad \text{b. (262)b} \\
\text{Students} & \quad \text{Students} \\
\text{Attendees} & \quad \text{Attendees} \\
\text{J} & \quad \text{J}
\end{align*}\]

Another characteristic of exceptive constructions is that for their use to be felicitous the excepted XP should formulate the smallest set such that when it is subtracted from the domain the
residual domain of quantification yields a true meaning (Fintel, 1993:108; Moltmann, 1992: 327). This condition is referred to as the Uniqueness or Minimality Condition.

Both conditions are intuitively plausible. The condition of universal quantification in the domain reflects the natural sense that exceptions are conceived of as a strategy to make qualifications to generalizations. As for the uniqueness condition, it ensures that the exception is the most economical way to save the universality of quantification in the domain (Fintel, 1993:109).

Both conditions obtain in SA as has already been illustrated by examples in §1.4.3 and will be reemphasized below. Quite interestingly though, Soltan (2016:41) points out that exceptives in Egyptian Arabic are licensed by non-universal quantifiers provided that the excepted XP is not adjacent to the domain. Below are his examples.

(264) a. ?anā fuft kull/muʕzʔam/ktiir min ?il-tˤalaba fii ?il-muʔaadˤra
I saw-1SG all/most/many of the-students at the-lecture
?il-naḥaar-dah ?illaʔ ahmad
the-day-this except Ahmad
‘I saw all/most/many of the students at the lecture today, except Ahmad.’

b. ?anā fuft kull/ʔʕmʕzʔam/ktiir min ?il-tˤalaba ?illaʔ
I saw-1SG all/most/many of the-students except ahmad fii ?il-muʔaadˤra ?il-naḥaar-dah
Ahmad at ?il-muʔaadˤra the-day-this
‘I saw all/most/many of the students, except Ahmad, at the lecture today.’

The counterparts of (264)a with non-universal quantifiers are illicit in SA. With these conditions as a background for our investigation, we turn in the next section to a discussion of the categorial status of exceptive markers in SA.

5.3 Categorial Status of Exceptive Markers

As has been shown in §1.4.3, SA possesses a relatively large inventory of exceptive markers, including ʔilla, ʔafir, siwaa, xalaʔa, ʔaʕaʔa and ʕadaʔa, which all convey meanings of the type conveyed by ‘except for’ and ‘but’. Pérez-Jimenéz and Moreno-Quibén (2012:593) point out that exceptive markers are subdivided based on their categorial status into prepositions (P), conjunctions
(Conj) and *adverbs* (Adv). Starting with *ʔilla*, one notices that it has been dealt with rather vaguely in the literature. Ouhalla (1997:38) discusses this particle under the umbrella of focus and refers to it as ‘the particle of exception’. Moutaouakil (2009), who investigates *ʔilla* exceptive in particular in SA, does not take a stand on its categorial identity and refers to it as a ‘particle’.

However, there are several reasons which suggest that it cannot be treated as a preposition or a conjunctive. First, it cannot be considered as a preposition for the reason that prepositions always value the case feature of their complement DPs as genitive, which is evidently not the case with *ʔilla*. Consider the examples below, repeated from (13).

(265) a. maa dʒaaʔ-tu tˤ-tˤullaab-ʔilla zajd-an/un neg come.PERF-3SG.MASC the-students-NOM except Zayd-ACC/NOM
   ‘The students didn’t come, except for Zayd.’

b. maa qaabal-tu tˤ-tˤullaab-a ?illa zajd-an neg meet.PERF-1SG the-students-ACC except Zayd-ACC
   ‘I didn’t meet the students, except for Zayd.’

c. maa marar-tu ?illa bi-xaalid-in neg meet.PERF-1SG except by-Khalid-GEN
   ‘I passed by nobody but by Khalid.’

As observed, the DP following *ʔilla* in (265)a and (265)b inflects for accusative or nominative, an uncharacteristic case of a prepositional complement. In addition, (265)c offers yet another piece of evidence against a prepositional classification of *ʔilla* since it embeds a PP headed by ‘by’. By the same token, a conjunctive analysis of *ʔilla* does not stand as it encounters serious challenges. For one thing, *ʔilla* can appear clause-initially along with the excepted XP, while the domain XP occupies its clause-internal position. This is exemplified below (Moutaouakil, 2009:90).

(266) ʔilla zajd-an maa altaqaj-tu bi-l-kuttaab-i except Zayd-ACC neg Meet.PERF-1SG with-the-writers-GEN
   ‘Except for Zayd, I did not meet the writers.’

This distributional fact is hard to accommodate should *ʔilla* be analyzed as a conjunctive. If the exception phrase in (266) originates in a conjunction projection with ‘the writers’, it is arrival at
the clause-initial position via movement, for instance, is a violation of the Coordinate Structure Constraint (Ross, 1967), a constraint that is otherwise observed in SA. Moreover, ʔilla can appear in sentences where there is no domain XP at all. Below are examples, repeated from (14).

(267) a. *(maa) d3aaʔ-a ʔilla zajd-un/*an
    neg come.PERF-3SG.MASC except Zayd-NOM/*ACC
    ‘Nobody came but Zayd.’
    ‘Only Zayd came.’

b. *(maa) qaabal-tu ʔilla zajd-an
    neg meet.PERF-1SG except Zayd-ACC
    ‘I met nobody but Zayd.’
    ‘I met only Zayd.’

Based on the above facts, I argue that ʔilla is an adverb and therefore enjoys to some extent a relative freedom in terms of its positional distribution.

As for ɣajr, I follow traditional grammarians in the assumption that it is a noun since it can function as a verbal argument and inflect for case accordingly. This is illustrated in (15), repeated below.

(268) a. fahim-tu kull-a d-daruus-i ɣajr-a
    understand.PERF-1SG all-ACC the-lessons-GEN except-ACC
dars-in waahid-in lesson-GEN one-GEN
    ‘I understood all lessons, except for one (lesson).’

b. maa zaar-a-n-ii ʔahad-un ɣajr-a/u
    neg visit.PERF-3SG.MASC-EC-me one-NOM Zayd-ACC/NOM
zajd-in Zayd-GEN
    ‘Nobody visited me, except for Zayd.’

As is seen in (268)b, ɣajr can surface with the nominative inflection. More support for this line of analysis comes from the fact that the excepted XP following ɣajr is always in the genitive case, which is typical of the second member of a construct state in SA as is illustrated by (269).

(269) kitaab-u ʔatʕ-tʕaalib-i
    book-NOM the-student-GEN
    ‘The student’s book’
Traditionally, *siwaa* is argued to inflect for case the same way *ɣajr* does but due to phonological constraints this case in not reflected by overt morphology. Also, excepted XPs with *siwaa* are invariably genitive. I am therefore inclined to the assumption that *siwaa* is also a noun.

For *xalaa*, and *ʕadaa*, they are dealt with traditionally as verbs for two reasons: first, they can be preceded by the subjunctive marker *maa* as (270)b shows, which usually exists before verbs. Second, both have imperfective forms, which are used in no exceptive constructions. This explains why excepted XPs after them can take accusative case inflection as illustrated below.

(270) a.  

dʒaaʔ-a  
tˤ-tˤullaab-u  
xalaa  
zajd-an/in  
come.PERF-3SG.MASC  
the-students-NOM  
except  
Zayd-ACC/GEN  
‘The students came, except for Zayd.’

b.  
dʒaaʔ-a  
tˤ-tˤullaab-u  
maa  
xalaa  
zajd-an/*in  
come.PERF-3SG.MASC  
the-students-NOM  
SUBJ  
except  
Zayd-ACC/GEN  
‘The students came, except for Zayd.’

However, (270)a displays that the excepted XP with these markers can also be genitive in the absence of *maa*, an observation traditional grammarians took as basis for their argument that they are prepositions in such environments. *haafaa* seems to also support an analysis along the same lines, i.e., it can function as a verb or as a preposition since an excepted XP in its context can also be accusative or genitive. I argue based on these case inflection patterns that these three exceptive markers are *fossilized participles* which share with other participles the liberty to value the case of their complement as accusative or genitive. This is illustrated by the active participle in the examples below.

(271) a.  
?inna  
l-muʕallim-a  
muqaddim-un  
l-šilm-a  
li-tˤullaab-i-hi  
verily  
the-teacher-ACC  
presenter-NOM  
the-knowledge-ACC  
to-students-GEN-his  
‘Verily, the teacher is the imparter of knowledge to his students.’

b.  
?inna  
l-muʕallim-a  
muqaddim-u  
l-šilm-i  
li-tˤullaab-i-hi  
verily  
the-teacher-ACC  
presenter-NOM  
the-knowledge-GEN  
to-students-GEN-his  
‘Verily, the teacher is the imparter of knowledge to his students.’
The active participle ‘muqaddim’ in (271) values the case of its complement as accusative and genitive, respectively.

Summarizing, I have argued in this section that exceptive markers in SA belong to different categories. ʔilla is a focal adverb. ɣajr and siwaa are nouns whereas xalaa, haafa and Sadaa are fossilized participles. In what follows, I shift the discussion to the syntactic structure and the interpretive properties of exceptives and due to the fact that their syntax and semantics are intertwined, they are discussed together and not as separate sections. I confine my analysis to ʔilla, ɣajr and siwaa.

5.4 The Syntax and Semantics of Exceptives

5.4.1 Full Exceptives

Cross-linguistically, exceptives are subdivided into two types on the basis of their distribution in syntactic structures: connected exceptives (CEs) and free exceptives (FEs) (e.g., Hoeksema, 1987; Fintel, 1994; Pérez-Jiménez and Moreno-Quibén, 2012). The first class are DP-level exceptives, while the second are CP-level, i.e., they combine two CPs.

Let us commence the discussion with full exceptives, i.e., exceptives that have a domain XP. As indicated, the excepted XP in such constructions can either be accusative invariantly or it can show a case identical to that of the domain XP in the context of negation. Consider (272) below.

(272) a. d3aaʔ-a tˤ-tˤullaab-u ʔilla zajd-an/(*un)
come.PERF-3SG.MASC the-students-NOM except Zayd-ACC/(*NOM)
‘The students come except for Zayd.’

b. maa d3aaʔ-a tˤ-tˤullaab-u ?illa zajd-an/un
neg come.PERF-3SG.MASC the-students-NOM except Zayd-ACC/NOM
‘The students did not come, except for Zayd.’

To gain insight into the syntax of (272)a, let us consider it along with its negative counterpart in (272)b. When the XP is accusative, this sentence is ambiguous in interpretation, depending on
whether or not the exception phrase is read within the scope of negation. In particular, the sentence may negate the whole proposition ‘the students came except for Zayd’, which amounts to saying ‘it is not the case that the students came except for Zayd’, therefore licensing the interferences that nobody came or everybody came including ‘Zayd’. Alternatively, it could mean ‘the students did not come but Zayd came’. The first reading is evidenced by its felicitousness as an answer to the polar question below.

(273) ʔa dʒaaʔ-a tˤ-tˤullaab-u ?illa zajd-an
Q come.PERF-3SG.MASC the-students-NOM except Zayd-ACC
‘Is it the case that the students came except for Zayd?’

The first reading upholds a view in which the excepted XP appears within the domain XP in a vP-internal position, whereas the second supports the view that it appears in a right peripheral-position located outside the scope of negation. The fact that the excepted XP can follow a vP adjunct backs up the right-peripheral position for the second reading, and that it is not the result of an LF movement whereby the exception phrase otoscopes negation. This is evidenced in (274) below. In the negative counterpart of (274), the excepted XP is interpreted outside the scope of negation, too.

(274)  dʒaaʔ-a tˤ-tˤullaab-u bi-lʔams-i ?illa
come.PERF-3SG.MASC the-students-NOM in-the-yesterday-GEN except
zajd-an
Zayd-ACC
‘The students came yesterday except for Zayd.’

I therefore propose that full exceptives such as (272)a, when the excepted XP does not have the same case as the domain XP, are ambiguous between the following possible structures at LF. In both schematizations the excepted phrase is an adjunct, either to the domain XP or at the right periphery of the CP.
The excepted phase is base-generated in a right-peripheral position in (275)b, which places it outside the scope of ‘maa’. The structure in (275)a is a typical CE structure, whereas (275)b seems to fall in between CEs and FEs. It appears in a mono-clausal sentence but nevertheless is non-adjacent to the domain XP.
As for their IS effects, CEs like (275)a are mere exception constructions in that they convey the sense of an entity subtracted from a given domain. The resulting domain is the maximal set of which the predicate holds. (274) and (275)b, on the other hand, seem to underscore the generalization made by the predicate, while the excepted XP functions as a backgrounded exception. In other words, the predicate and domain XP are in focus while the exception phrase is more of an afterthought in the sense of Ott and Vries (2016:642). Evidence for this informational dissection comes from their reviewed interaction with negation. Recall that ‘maa’, as shown in §2.2, is sensitive to focus. Consequently, in (275)a, it associates with the predicate and domain XP, i.e., the negation of the domain XP being part of the set denoted by the predicate outweighs the assertion that the excepted XP is part of the predicate set.

Turning to the variant of (272)b where the excepted XP is nominative, it assumes the same interpretation as (275)b insofar as negation is concerned, i.e., the excepted XP does not fall within the scope of negation. However, at the IS level, the sentence sets ‘Zayd’ in a contrastive focus to the domain XP, i.e., the contribution of the whole construction is to emphasize that ‘Zayd’ came. Based on these observation, I propose that the variant of (272)b in which ‘Zayd’ is nominative is an FE that has the following representation at LF.

(276) Bi-clausal Exceptives
This structure does not only account for interactions with negation but also provides a configuration from which the nominative case on the DP 'Zayd' is derived without further ado. 'Zayd' starts out as the subject in CP₂ in which it moves to SpecTP for focus and the rest of the clause is suppressed or deleted at PF (Merchant, 2005).

5.4.2 Incomplete Exceptives

In addition to full exceptives, SA, as elucidated in §1.4.3, permits exceptives with no domain XP. Below are examples repeated from (267).

(277) a. *(maa) dʒaaʔ-ʔilla zajd-un/*an
    neg come.PERF-3SG.MASC except Zayd-NOM/*ACC
    ‘Nobody came but Zayd.’
    ‘Only Zayd came.’

b. *(maa) qaabal-tu zajd-an
    neg meet.PERF-1SG except Zayd-ACC
    ‘I met nobody but Zayd.’
    ‘I met only Zayd.’

These sentences have two interesting properties which reveal a great deal about their structure. First, the excepted XP inflects for case based on its grammatical function. Second, they convey a sense of exhaustive focus in that they restrict the predicate to being true of the excepted phrase only, i.e., in both cases in (277) ‘Zayd’ is outside the scope of negation. This makes them parallel
in interpretation to negative full exceptives of the form schematized in (276). However, how could they assume the same structure when the sentences in (277) lack a domain XP? In fact, although there is no domain XP in both, these sentences are typically uttered in contexts where there is a salient implicit domain or set of domains of which the excepted XP is a member. I therefore propose that these sentences are bi-clausal too. The domain XP is a null pro which refers to a context-salient domain. The excepted XP starts out in the thematic domain in CP₂ from which it moves to the left-peripheral focus position, SpecTP. Under this analysis, incomplete exceptives are in fact complete but their domains are not overt. So, the sentences in (277) assume the representations shown below.

(278)
These representations readily explain the case inflection pattern, i.e., ‘Zayd’ receives case based on its grammatical function in CP₂, therefore showing nominative and accusative inflections, respectively. Moutaouakil (2009:86) points out that the sentences in (277) are equivalent to their variants with the focus marker ‘ʔinnamaa’ which translates into ‘it is just...’ or ‘only’ or with ‘faqatˤ’ ‘only’. This is evidence for the focused interpretation of the excepted XP in such constructions.

(280) a. ʔinnamaa  dʒaaʔ-a zajd-un/*an
    only come.PERF-3SG.MASC Zayd-NOM/*ACC
    ‘Nobody came but Zayd.’
    ‘Only Zayd came.’
    ‘It is only Zayd who came.’

b. dʒaaʔ-a zajd-un faqat
    come.PERF-3SG.MASC Zayd-NOM only
    ‘Only Zayd came.’

c. ʔinnamaa qaabal-tu zajd-an
    only meet.PERF-1SG Zayd-ACC
    ‘I met nobody but Zayd.’
    ‘I met only Zayd.’
    It is only Zayd whom I met.’
5.4.3 yajr and siwaa Exceptives

As mentioned earlier, excepted XPs after yajr and siwaa are invariably genitive while yajr and siwaa themselves inflect for case the same way excepted XPs in ‘ʔilla’ exceptives do. Below are full exceptives with yajr, adapted from Omar et al. (1994:468f).

(281) Full Exceptives

a. fahim-tu kull-a d-daruus-i yajr-a
   understand.PERF-1SG all-ACC the-lessons-GEN except-ACC
   dars-in waahid-in
   lesson-GEN one-GEN
   ‘I understood all lessons, except for one (lesson).’

b. maa zaar-a-n-ii ?ahad-un yajr-a/u
   neg visit.PERF-3SG.MASC-EC-me one-NOM Zayd-ACC/NOM
   zajd-in
   Zayd-GEN
   ‘Nobody visited me, except for Zayd.’

(282) Incomplete Exceptives

a. maa d3aa?-a yajr-u zajd-in
   neg come.PERF-3SG.MASC except-NOM Zayd-GEN
   ‘Nobody came but Zayd.’
   ‘Only Zayd came.’

b. maa qaabal-tu yajr-a zajd-in
   neg meet.PERF-1SG except-ACC Zayd-GEN
   ‘I met nobody but Zayd.’
   ‘I met only Zayd.’

In a nutshell, there is a complete parallelism in syntactic representation and semantic interpretation between (281) and (272) as well as between (282) and (277).

5.5 Concluding Remarks

This chapter has looked briefly into the syntactic and semantic properties of exceptives in SA. The scope was limited to exceptives in VSO clauses and how their syntax interacts with their IS effects. I have argued that the various markers used for exception are focal adverbs, nouns or fossilized participles. I have established that full exceptives can be analyzed as CEs with two configurations; one that has the excepted XP as a DP-level adjunct in a vP-internal position and another that has
the excepted XP in a right-peripheral non-focused position. In negative full exceptives where the excepted XP agrees with the domain XP in case, I have argued that they are bi-clausal. Identically, for incomplete exceptives, I have argued that, although they lack overt domain XPs, they instantiate a bi-clausal structure in which the domain XP is a null *pro* in CP1. This structure is motivated by the parallelisms they display with negative full exceptives in terms of case inflections and interpretive effects.
Chapter 6

6 CONCLUSIONS

6.1 Summary of Conclusions

This goal of this thesis has been to examine the interplay between word order variation and information structure in SA. It took as a point of departure the premise that “VSO is the basic and ‘discourse neutral’ word order in SA, and any disruption to this order is accompanied with interpretative consequences pertinent to IS”. The aim has been to demonstrate that order permutations are not dispersed on a continuum of oddity where some are designated as odd or awkward. Rather, it has been shown that each has its own felicity or use conditions that set it distinct from the rest, and that some of these conditions are so elaborate that they might not arise as much frequently as others and by entailment the structure that is most appropriate under these conditions is equally infrequent. This dissertation has been divided based on which part of the structure is effected by order permutations, i.e., the midfield zone or the peripheries.

In Chapter (2), VSO has been re-established as the basic and discourse-neutral order in SA. Evidence is garnered from syntactic, semantic and pragmatic considerations, including VSO and SVO behaviors with regard to intra-clausal and inter-clausal extraction, negation and focus-association adverbs such as ‘only’. Then, I have put forward a proposal in which preverbal subjects in SVO are argued to be either topics externally merged in SpecCP or foci, in which case they arrive to their surface position through focus movement. Based on the patterns of extractions in VSO and SVO structures, I have proposed that wh-questions and focus are derived by movement to SpecTP, whereas topics are base-generated in SpecCP, a proposal presented within a feature inheritance approach to the left periphery. This proposal gave rise to a question with regard to the complementizer position. To answer the question, I have appealed to Chomsky’s (2013, 2015) LA and ended
up proposing that, like phrasal movement, HM can also be regarded as a mechanism to resolve labeling failures, i.e., the complementizer occurs clause-initially due to HM induced by LA. At the end of the chapter, I have reexamined long-distance extraction of subjects and shown that its illicitness is most likely due to a that-trace effect that results from an adjacency between a lower copy of the complementizer and a copy of the subject in the embedded SpecTP. This chapter also includes an account of why the preverbal focus position demonstrates a mixture of A-Ă properties; I have proposed that it is attributed to the featural composition of T and the argument that it hosts [uFoc] and [uφ].

Chapter (3) has switched the discussion to the midfield discourse zone, namely the edge of vP. I began by a detailed description of the structural conditions that regulate object shift and, following an investigation of its properties, I put forward a proposal which assumes that OS is driven by a composite probe on v, therefore explaining the mixture of A and Ă characteristics it displays. I then proceeded to an examination of the interpretive effects OS engenders and argued that it can give rise to a CT+F reading of the object and subject in the context of definite objects and a focus reading of the object in the context of indefinite objects. This variation in interpretation is the result of an interplay between focus and definiteness. The attention is then turned to an investigation of a range of other constituents that appear at vP edge, namely PPs, CPs, adverbs and secondary predicates with the aim of establishing vP edge as a discourse layer on a par with the left periphery, i.e., it is not just a position to which the object can move but rather a zone which can host any constituents that starts lower in the phase. For IS effect, the overall picture that emerged from the discussion is that whatever moves to the edge of vP becomes more liable for a background interpretation, whereas the elements that are spelled out in the domain of vP are focused.
Chapter (4) has been devoted to an investigation of the left periphery. I have presented a detailed analysis of this structural zone in SVO and VSO clauses, respectively. I have expanded on the argument made in chapter (2) that a preverbal subject can be a topic base-generated in SpecCP, or a focus derived by movement from SpecvP to SpecTP. In the course of teasing apart the IS effects associated with the various order permutations that result from movement to this area, I have proposed a non-movement analysis of floating quantifiers in SA in which they are argued to be base-generated in their clause-internal position and are co-indexed with a definite (mostly topical) constituent higher up in the structure. I have then switched the discussion to word order variation and fragments in answers to constituent-questions. I have argued that fragments are derived by an in-situ approach that might involve movement of some constituents. This movement leaves the fragment in the clause-final position prior to deletion or PF suppression of all other materials. As for clausal answers that contains a movement of the constituent targeted by the question, I have argued that the contextual conditions under which such answers are felicitous are constrained. They are only confined to contexts where there is good reason to assume that discourse participants have other alternative answers that they might think are true.

The final chapter, (5), has looked briefly into the syntactic and semantic properties of exceptives in SA. The aim has been to show that exceptives do not only contribute the truth-conditional sense of subtracting an entity from a certain domain in the context of a generalization. Rather, I have shown that they vary in structure based on the kind of syntactic properties and IS effects they have. At the beginning, I have argued that the various markers used for exception are divided into focal adverbs, nouns or fossilized participles. Then, I have established that full exceptives can be analyzed as CEs with two configurations; one that has the excepted phrase as a DP-level adjunct in a vP-internal position and another that has the excepted phrase in a right-
peripheral non-focused position. As for negative full exceptives and incomplete exceptives, I have argued that they instantiate a bi-clausal structure in which the domain XP, which is a null pro in the latter type, is located in CP₁. This unified structure is motivated by parallelisms in case inflections and interpretive effects.

6.2 Limitations and Directions for Future Work

This thesis has been confined to investigating the role of word order variation in structuring discourse. However, as is indicated from the outset, procedures for discourse structuring vary cross-linguistically as well as within the same language. Many order permutations that came up in the course of discussion in this work are shown to be liable to different interpretations and therefore one might presume that the language might utilize other means such as prosody to signify which interpretation is intended in a given context. Accordingly, a potential follow-up work might be to investigate, perhaps experimentally, the role phonology plays in disambiguating structures with more than one interpretation.

Another limitation of this work which could also be taken as a point of departure for further research is that it concentrates on SA. The same topic can be investigated in dialects even though dialects are not as so liberal in word order as SA. Many dialects show at least three word orders (see Aoun et al., 2010) and are therefore still form a viable testing ground for the same questions pursued here. Dialects might also formulate good venues to bring up more data which might bear on the assumption of more discourse features and the mechanisms by which they are manifested.

In this work, an attempt was made to pay equal attention to the syntactic, semantic and pragmatic properties of word order variation and this might leave room for more work on the same topic with exclusive concentration on one aspect or another. For instance, at the level of syntax it has been shown that different instantiations of movement in SA display hybrid A and A-bar
properties. One step forward is to pursue this issue further by widening the database to gain more insight into how such kind of movement is regulated and what it could further reveal about the previously assumed dichotomy between the two types of movement. Moreover, I have shown that order variation is not only accompanied with IS effects but also with semantic effects such as scope disambiguation in the context of quantifiers. This association between order and scope is worth an exploration on its own especially that scope-taking remains among the least researched aspects of structure in SA.
REFERENCES


Champollion, L. (2017). Linguistic applications of mereology. Script to the ESSLLI.


230


CURRICULUM VITAE

Salem Albu hayri

Place of birth: Albaha, Saudi Arabia

Education

B.A., King Saud University, Riyadh, April, 2009
Major: English Language and Translation

MA, Arizona State University, May, 2013
Major: Linguistics

Teaching Experience
2009 – present Lecturer at Department of English Language and Translation, King Saud University, Riyadh, Saudi Arabia

Publications

Presentations
The Complementizer Layer in Standard Arabic Revisited. Paper presented at the 32st Symposium on Arabic Linguistics at Arizona State University, Tempe, February 2018

Dissertation Title: Information Structure in Standard Arabic Verbal Sentences