Case, Agreement and Movement in Arabic
A Minimalist Approach

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B.A. AHU / Jordan (2001)

M.A. University of Essex (2004)

A thesis submitted to the

School of English Literature Language and Linguistics

for the degree of

Doctor of Philosophy

at

Newcastle University

November, 2008

Abstract

This thesis proposes a minimalist analysis that accounts for a number of word-order-related issues in Modern Standard Arabic (MSA) and Jordanian Arabic (JA). Assuming Chomsky's (2005) feature inheritance model, the thesis investigates the issues of Case, the interaction between subject positions and verbal agreement in addition to object movement.

In verb-subject-object word orders, subjects are invariably nominative; the Case value on the postverbal subject is an outcome of an Agree relation between these subjects and T, the head of Tense Phrase (TP), which inherits its feature from the complementiser. Chapter four argues that the Case variability on the preverbal subject in subject-verb-object structures is dependent on the type of the complementiser. The complementiser which introduces subject-verb-object clauses has a lexical Case feature that is not interpretable on T, hence T does not inherit this feature. Consequently, the lexical Case feature of the complementiser in subject-verb-object structures is discharged under a local Agree relation between the complementiser and the preverbal noun phrase which is raised from a lower position. It is also claimed in chapter four that the structure of zero copula sentences contains a light Noun Phrase (nP) functional projection that compares to the light Verb Phrase (vP) functional projection in verbal sentences. Case on the nominal complements in zero copula sentences is valued under an Agree relation with the features of n, the head of nP.

Chapter five deals with verbal agreement and subject positions; it claims that the supposed number marker, which appears as a clitic on the verb in subject-verb-object word orders, is in fact a spellout of the copy that is left behind the fronted subject. In MSA, the fronted subject undergoes topic movement to the specifier position of Topic Phrase (TopP). By contrast, in JA, the fronted subject is located in the specifier position of TP. JA differs from MSA in that it allows the verb to undergo topic movement to the specifier position of TopP across the subject in the specifier position of TP.

Finally, the phenomenon of object displacement and pronominal object cliticisation in MSA is investigated in chapter six. It is argued that verb-object-subject word orders are derived by focus movement of the object from its base position across the subject to an outer specifier position of vP. It is claimed that focus movement affects nominal objects as well as pronominal object clitics. In particular, it is claimed that pronominal object cliticisation onto the verb does not take place in Verb Phrase (VP). Rather, object cliticisation takes place after the spellout of vP phase.

Declaration and Statement of Copyright

Declaration

No part of the material contained within this thesis has previously been submitted for a degree at Newcastle University or any other university.

Statement of Copyright

Acknowledgement

الْحَمْدُ لِلَّهِ الَّذِي لَهُ مَا فِي السَّمَاوَاتِ وَمَا فِي الأَرْضِ وَلَهُ الْحَمْدُ فِي الآخِرَةِ وَهُوَ الْحَكِيمُ الْخَبِيرُ

Praise be to Allah (God), to Whom belong all things in the heavens and on earth: to Him be Praise in the Hereafter: and He is Full of Wisdom, acquainted with all things.

(Quran 34:1)

This thesis is the result of a number of years of work during which I have been accompanied and supported by many people. I would like to express my gratitude to all those who gave me the possibility to complete this work. First and foremost, I have great pleasure in expressing my deep sense of gratitude and indebtedness to my supervisors Prof. Maggie Tallerman and Dr Geoffrey Poole for their stimulating suggestions and insightful comments. Without their guidance and constant encouragement, this thesis would not have been in the present form. It goes without saying, however, that all errors and mistakes are my own.

I would like to gratefully acknowledge the financial support of Al-Hussein Bin Talal University in Jordan. They helped me immensely by providing me with a scholarship without which this thesis would not have been at all possible.

I would also like to express my sincere thanks to a number of people who have enriched my professional life in many ways. My thanks are due to Prof. Abdelkader Fassi Fehri, Prof. Anders Holmberg, Prof. Noel Burton Roberts and all the academic staff of linguistics in Newcastle University. I have furthermore to thank all the administrative staff in the school of English Literature Language and Linguistics and in Robinson Library for their help and support.

My thanks also go to my everyday circle of friends and colleagues. I thank Abdulmuttaleb Al-Zuweiri, Ahmad Mahfouz, Miri Hussein, Mohammad Kabaah, Mokhled Al-Tarawneh, Nadeem Bukhari, Nasser Al-Horais, Omar Abdulfatah, Oudeh Alenazi, Riaz Mangrio and Yousef Elramli for all their help, support, hints and the precious time we spent together in Newcastle.

My special thanks go to my parents, uncle and his family, brothers and sisters and their families, and my father-in-law and his family for their prayers and constant emotional support. Last but not least, my special thanks are due to my wife and children who have been with me in every moment of my PhD tenure; their love and prayers helped me in coming out of many moments of frustration.

Abbreviations

1	First Person
2	Second Person
3	Third Person
acc	Accusative case
AdvP	Adverb Phrase
AGR	Agreement
AgrOP	Object Agreement Phrase
AgrSP	Subject Agreement Phrase
C	Complementiser (Functional head)
CA	Classical Arabic
comp	Complementiser (Lexical item)
CP	Complementiser Phrase
d	Dual
dat	Dative case
DP	Determiner Phrase
DS	Deep Structure
EF	Edge Feature
EPP	Extended Projection Principle
f	Feminine
FP	Focus Phrase
gen	Genitive case
GB	Government and Binding
indic	Indicative Mood
indef	Indefinite
IP	Inflectional Phrase
JA	Jordanian Arabic
LF	Logical Form
m	Masculine
MP	Minimalist Program
MA	Moroccan Arabic
MSA	Modern Standard Arabic
Neg	Negation
NegP	Negation Phrase
NP	Noun Phrase
nP	Light Noun Phrase
Obj	Object
OVS	Object Verb Subject
p	Plural
PF	Phonetic Form
PrP	Predicate Phrase
P&P	Principles and Parameters
PP	Prepositional Phrase
RP	Resumptive Pronoun
s	Singular
Spec	Specifier
Subj	Subject
subjun	Subjunctive Mood
SVO	Subject Verb Object
SS	Surface Structure
TP	Tense Phrase
TopP	Topic Phrase
VP	Verb Phrase
vP	Light Verb Phrase
VOS	Verb Object Subject
VSO	Verb Subject Object
*****	Ungrammatical Structure

Transcription

Consonants

Arabic Letter	Symbol	Phonological Transcription
ء	'	glottal stop
ب	b	voiced bilabial stop
ت	t	voiced alveolar fricative
ث	θ	voiceless dental fricative
ج	j	voiced palatal affricate
ح	H	voiceless pharyngeal fricative
خ	X	voiceless uvular fricative
د	d	voiced alveolar stop
ذ	ð	voiced dental fricative
ر	r	voiced alveolar flap
ز	z	voiced alveolar fricative
س	s	voiceless alveolar fricative
ش	ŝ	voiceless palato-alveolar fricative
ص	S	emphatic s
ض	Ď	voiced velarized alveolar stop
ط	T	emphatic t
ظ	D	voiced velarized dental fricative
ع	3	voiced pharyngeal fricative
غ	G	voiced uvular fricative
ف	f	voiceless labiodental fricative
ق	q	velar glottalized plosive
ك	k	voiceless velar stop
ل	l	voiced alveolar lateral
م	m	voiced bilabial nasal
ن	n	voiced alveolar nasal
هـ	h	voiceless glottal fricative
و	w	voiced bilabial semi vowel
ي	y	voiced palatal semi vowel

Vowels	Short	Long
Central Open	a	aa
Front Closed	i	ee
Back Closed Rounded	u	uu

Table of Contents

List of Tables

CHAPTER ONE: Introduction

1.1. Introduction

The present thesis explores a number of interrelated issues that contribute to the word order variation in two varieties of Arabic: Modern Standard Arabic (MSA henceforth) and Jordanian Arabic (JA henceforth). The thesis adopts recent minimalist assumptions proposed by Chomsky (2000, 2001, and 2005) in order to provide answers for the basic questions surrounding case assignment, subject positions and the agreement patterns shown by the verb in both MSA and JA, in addition to object positions and object movement in MSA.

This thesis discusses some of the existing analyses and builds on the previous work done in the literature on the above mentioned issues. However, the thesis argues that there are some interesting agreement-related facts which require some discussion under recent minimalist assumptions. In order to contribute to the ongoing discussion, I adopt a phase-based approach and argue that Agree Theory (Chomsky 2000, 2001, 2005) can offer good solutions to the Case, agreement and movement issues in Arabic.

The next section lays out the central issues that this thesis will be dealing with. Also, it states the main claims that will be made during the course of the discussion.

1.2. Thesis Outline

1.2.1. On the Case Issue

It has been claimed that syntactic Case interacts with a language-specific morphological property; i.e. morphological case.[1] Chomsky's work assumes that abstract Case is a universal syntactic feature which is prerequisite to the morphological case (if the latter exists). Chomsky (2000, 2004) argues that the valuation of the uninterpretable Case feature on the goal DP via an Agree relation with the probe (i.e. the functional head) leads to the determination of the morphological case. Building on Chomsky's view, I argue that in MSA, the strong matching between the universal abstract Case and the overtly realized morphological case makes it very tempting to conceive of the latter as the mirror which enables us to see how and where the former is valued.

In Arabic, there are two situations where case on a given noun phrase does not seem to be a result of an Agree relation. The preverbal noun phrase in SVO structures is nominative only when it is not preceded by any overt Case assigner. Also, the complements in the nominal (copular) sentences carry nominative case only when the copula is zero. These instances of nominative case are referred to in the literature as 'default' cases (Fassi Fehri 1993 and Mohammad 2000). I will build on Chomsky (2005) and Fassi Fehri (2005) and argue that Case on the preverbal noun phrase is valued under an Agree relation with C.

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[1] I follow the convention and write Case with capital C to refer to the syntactic property, and I write case with small c to refer to the morphological property.

On the other hand, I will assume that the nominative case on the complement of zero copula sentences is valued by a functional head. Building on the work of Sportiche (1995), Starke (1995) and Bowers (1993), it is argued in this thesis that zero copula sentences contain an nP: a functional projection, which is analogous to vP that exists in verbal sentences. It is the head of nP, i.e. n, that is responsible for nominative case value on the complement in zero copula sentences.[2]

1.2.2. Subject Positions and Agreement

Both MSA and JA allow VSO and SVO word orders. However, while the unmarked word order in MSA is VSO, it is SVO in JA. The crucial difference between the two varieties is that the verb in MSA shows full agreement with the preverbal subject, and partial agreement with the postverbal subject (Mohammad 1990, 2000). In JA, like in many other local varieties of Arabic, the verb shows full agreement irrespective of the subject position, be it preverbal or postverbal. The proposed minimalist analysis in this thesis for agreement and subject positions is based on the following assumptions:

i. While the underlying structure of both MSA and JA is SVO, the subject in JA moves obligatorily from the specifier of vP to the specifier of TP to satisfy the EPP feature (or the edge feature of T using the latest term introduced by Chomsky (2005)). In MSA, on the other hand, T does not have an edge feature.

[2] These authors argue that verbless small clauses contain functional heads. Sportiche (1995) refers to this functional head as AGR. Starke (1995) identifies this functional head as a null V, while Bowers (1993) labels such a null functional head as Predicate Phrase (PrP). The term nP is inspired by work initiated by Sportiche (1990), Carstens (2000) and Radford (2004) who use it to account for the internal structure of DP.

Therefore, whether the preverbal noun phrase is a topic as argued by Plunkett (1993), Akkal (1996) and Ouhalla (1997) or a subject which has moved from a lower position, as assumed by Fassi Fehri (1993) and Benmamoun (2000b), it does not occupy the specifier position of TP. Rather, it is located in the specifier of TopP - one of the syntactic projections defined in Rizzi's (1997) work on split CP.

ii. While SVO is the usual unmarked word order in JA, VSO is a kind of a forced word order which is obtained when the verb is moved to a higher position. In other words, the verb itself is fronted to a position preceding the subject for the purpose of topicalisation. In MSA, on the other hand, VSO is the unmarked word order while SVO is a forced one. SVO in MSA is the word order that is derived by topicalising the subject. This assumption helps explain the agreement pattern alternation between SVO and VSO orders in MSA, and agreement preservation in JA regardless of the position of the subject with regard to the verb.

1.2.3. Object Positions and Movement in MSA

Normally, the objects in MSA appear in final positions. However, there are situations where the objects move optionally, or have to move obligatorily, to positions higher than the positions of the subjects. Arabic is not unique in this respect, as this phenomenon, which is referred to in the literature as object shift or scrambling, has been observed in a number of languages such as Icelandic,

Mainland Scandinavian and German by a number of authors (cf. Holmberg 1986, Holmberg and Platzack 1995, Thráinsson 2001 and Zwart 1996 among others).

In this thesis, *object movement* is used as a cover term for two similar but not identical types of contexts in which the objects precede the subjects in MSA.

i. The normal object movement where a full noun phrase object precedes a full noun phrase subject.

ii. Object cliticisation where the pronominal object appears as a clitic on the verb preceding the full noun phrase subject.

The thesis aims to provide a unified minimalist analysis that accounts for the above-listed types of object movement. In order to achieve this goal, the thesis adopts the idea of multiple specifiers. Building on Chomsky (1995, 2001 and 2005), I claim that object movement is triggered by the edge feature of v, the head of vP Phase. The landing site of the moved object is the outer specifier of vP.

With regard to pronominal object cliticisation, I assume that the pronominal object clitic moves like nominal object, then it cliticises onto the verb. However, a word is in order at this juncture about the pronominal object. When dealing with pronominal cliticisation, the issue that has to be excluded is the possibility of

having the pronominal clitic attached to the verb in VP. As I shall clarify in detail in chapter six, the data from MSA provide evidence against this possibility. Following Kayne (1975), I claim that the object clitics are best analyzed as full lexical arguments which are moved by syntactic means from their canonical positions, i.e. the positions in which they are base generated, to higher positions. Therefore, the cliticisation of the object clitic on the verb can be conceived of as a merely phonological process which applies at PF level of representation (cf. Holmberg 1999).

1.3. Organisation of the Thesis

In addition to this chapter, the introduction, the thesis comprises six other chapters. Chapter two is descriptive. It introduces the data from MSA and JA; the chapter shows how MSA is different from JA. Chapter three reviews the Minimalist Program (MP henceforth) - the theoretical framework adopted in this thesis. The chapter traces the development of the MP and places special emphases on the new advancements that are relevant to the topics of the thesis. Chapter four is the first analytical Chapter. It is concerned with the Case issue and how Case is valued within the phase-based model. Subject positions with regard to the verb in MSA and JA are dealt with in chapter five while chapter six deals with the object positions and the object movement phenomenon in MSA. Chapter seven summarises and concludes the thesis.

CHAPTER TWO: Descriptive Preliminaries

2.1. Introduction

Arabic is the language of the Arab World. It is the language spoken in the Arab countries in the Middle East and North Africa. In these countries, there are two levels of Arabic: a standard formal level that is used throughout the entire Arab World and a local informal level that varies from one country to another.

The present chapter is descriptive; it presents the data showing the main properties of MSA and JA. It explores the differences between MSA and JA in terms of morphological case and mood marking, agreement and pronominal systems. The chapter is organised as follows. Section 2.2 is a general background; it gives an idea about the differences between MSA and the local varieties and also between MSA and classical Arabic (CA henceforth). In Section 2.3, the morphological differences between MSA and JA are described; the section shows how dual and plural masculine and feminine nouns are formed in both MSA and JA. The section also shows that the two varieties differ from one another in terms of morphological marking of case and mood. Word order and agreement differences between MSA and JA are considered in section 2.4, whereas the classification of Arabic sentences as verbal and nominal is dealt with in section 2.5. Section 2.6 is a summary of the chapter.

2.2. General Background

In all Arab World countries, MSA is the formal official variety; it is the language of instruction and education in schools and universities, political speeches, religious ceremonies and sermons, media, announcements, formal and informal correspondence, and written literary genera such as novels and short stories. On the other hand, local varieties of Arabic do not have written forms; they are mainly spoken forms which are used for daily communication in informal settings. The Jordanian variety of Arabic discussed in this thesis is the one spoken in some areas in the southern part of Jordan, namely, in the villages and the rural areas around the city of Ma'an.

In MSA, VSO is the unmarked and neutral word order. On the other hand, we find that SVO is the predominant unmarked word order in the local varieties of Arabic such as Jordanian (El-Yasin 1985), Lebanese (Aoun, Benmamoun, and Sportiche 1994), Palestinian (Shlonsky 1997 and Mohammad 2000), Egyptian (Benmamoun 2000b), Tunisian (Mahfoudhi 2002) and Moroccan (Fassi Fehri 1993 and Benmamoun 2000b). However, as we shall see in section 2.4 below and later in chapter five, SVO word order is allowed in MSA and VSO word order is allowed in the local varieties. In other words, MSA and the local varieties of Arabic allow both VSO and SVO word orders.

2.2.1. MSA vs. Local Varieties

The crucial difference between MSA and the local varieties of Arabic, as observed by Shlonsky (1997) and Benmamoun (2000b) among many others, is

the agreement pattern shown by the verb. In MSA, the verb shows either partial agreement or full agreement depending on the position occupied with the subject. "If the subject precedes the verb, the verb shows full agreement with the subject in the features of person, number, and gender. If, on the other hand, the subject follows the verb, the verb shows some kind of 'impoverished' agreement" (Mohammad 1990:95); when the subject is postverbal the agreement is limited to person and gender, number is a default singular (Fassi Fehri 1993). Compare (1a) with (1b) below, the subject is postverbal in the former and preverbal in the latter. See also section 2.4 below.[1]

(1) a. waSala al-a'wlaad-u (MSA)
arrived.3ms the-boys-nom
"The boys arrived."

b. al-a'wlaad-u waSal-uu (MSA)
the-boys-nom arrived.3m-p
"The boys arrived."

In contrast to the verb in MSA, the verb in the local varieties shows full agreement with its subject irrespective of the position occupied by that subject. The data from Moroccan Arabic (MA henceforth) and JA in (2) and (3) below

[1] Notice that the plural number marker here is originally a resumptive pronoun that is associated with the preverbal noun phrase according to the Arab grammarians' view. In this chapter, it will be glossed as a number marker following Fassi Fehri (1993). However, in chapter five below, I will show, building on case and other facts, that it is a real pronominal elememt.

illustrate. In (2a) and (3a) the subjects are preverbal, whereas they are postverbal in (2b) and (3b).

(2) a. l-ulad ja-w (MA)
the-boys came-p
"The boys came."
(Fassi Fehri 1993:37 example 69)

b. ja-w l-ulad (MA)
came-p the-boys
"There came the boys."
(Fassi Fehri 1993:37 example 70)

(3) a. ar-rjaal naam-uu (JA)
the-men slept.3m-p
"The men slept."

b. naam-uu ar-rjaal (JA)
slept.3m-p the-men
"The men slept."

It is worth mentioning that I will refer to the supposed number affix on the verb as a *clitic* in this thesis. The use of this term is motivated by the similarities between the number affix and the object pronominal clitic. As we shall see later in chapter five, both the number affix and the object pronominal clitic are associated with preverbal noun phrases. Moreover, the supposed number affix

behaves in a similar way to the clitic in that it can cluster (but not be coordinated) with another clitic; however, in other structures it can be coordinated with a free pronominal form (cf. section 5.4 below).

Another noticeable difference between MSA and the local varieties is related to the morphological marking of case and mood. I shall show the main differences between MSA and JA in section 2.3 below. However, before we move on to these differences, a word is in order about the difference between MSA and CA.

2.2.3. MSA vs. CA

MSA is the direct descendant of CA. Nevertheless, the distinction between the ancestor (i.e. CA) and the successor (i.e. MSA) is not clear. Actually, there are three views in the literature concerning the differences between MSA and CA.

The first view is found in Chejne (1958) and Haeri (2002) among others. These authors claim that MSA and CA are identical syntactically. For example, Haeri (2002) prefers to use the term *Classical Arabic* to refer to CA as well as MSA; she rejects the frequently-used term *Modern Standard Arabic* which, according to her view, is a Western invention. However, Haeri (2002) recognises the differences between traditional CA and contemporary CA; she draws a distinction between "the classical Arabic of religion on the one hand, and the classical Arabic of every thing else on the other" (Haeri 2002:43).

A second view is defended by many authors and researchers. Robin (1955), and Stetkevych (1970) among many others, argue that CA and MSA are very different varieties of Arabic. According to these authors, the two varieties show morphological, lexical as well as *syntactic* differences.

A third moderate view claims that MSA and CA are syntactically similar. However, as Bakir (1980:3) asserts, "their differences lie in areas other than syntax". Travis (1979:6) argues that the "inflectional system of MSA is essentially the same as that of Classical Arabic". The differences between the two varieties are related to the vocabulary. New foreign words are borrowed from other languages, and many of these words are sometimes Arabised; "the question of foreign words study does not [...] fall within the scope of a study on CA (Classical Arabic); but rather it falls within a study of MSA" (Abd-Rabbo 1990:82).

Saidat (2006) suggests that close investigation is needed in order to determine whether MSA and CA are syntactically identical. The two varieties, according to Saidat, should be studied separately; "the data for any such research must be carefully selected so that the data collected do not come from a source that mingles the two varieties together" (Saidat 2006:33).

In line with Travis (1979), Bakir (1980), Abed-Rabbo (1990), and Haeri (2002) among others, I assume that the syntax of MSA and CA is the same. However, since the differences between MSA and CA are beyond the scope of this study,

and in order to avoid unnecessary controversy, the discussion in this thesis will be limited to standard contemporary Arabic, i.e. MSA, in addition to JA. Examples from CA will not be used to support any claim concerned with MSA structures. The next section introduces MSA and JA data, showing the differences and the similarities between the two varieties.

2.3. A Descriptive Overview of MSA and JA

2.3.1. Morphological Marking

The relatively rich inflectional system of MSA is the main property that distinguishes it from the local varieties such as JA. In MSA, nouns and verbs are morphologically marked for case and mood respectively (cf. Mohammad 2000, Fassi Fehri 1993).[2] Also, gender and number features on the nouns and verbs are marked overtly (cf. sections 2.3.1.1 and 2.3.1.2 below). In comparison with MSA, JA is morphologically poor. When it comes to case and mood marking, we find that nouns and verbs in JA are not marked morphologically. However, JA pronouns show case distinction as we shall see in section 2.3.2 below.

2.3.1.1. Dual Formation

Nouns in MSA and JA are classified into masculine and feminine. Masculine and feminine dual and plural forms of the nouns are obtained from the singular forms by morphological processes. In contrast to the process of pluralisation, described in section 2.3.1.2 below, dual formation is a systematic morphological process;

[2] It should be noted that adjectives in Arabic are nominal in character. Just like nouns, adjectives show (singular, dual and plural) number and (masculine and feminine) gender distinctions. Also they are marked for case and definiteness.

the same mechanism is used to derive the dual forms of all nouns, whether these nouns are regular or irregular, masculine or feminine. In MSA, the dual form is derived from the singular form by adding either the suffix *–aani* or the suffix *-ayni*. The former suffix appears on the nominative dual nouns, whereas the latter is associated with accusative and genitive dual nouns. The sentence in (4) below is illustrative.

(4) aXada aT-Taalib-aani al-ketaab-ayni mina al-bint-ayni
took the-student.m-d.nom the-book.d-acc from the-girl-d.gen
"The two male students took the two books from the two girls."

In JA, on the other hand, only the suffix *–ayn* is used, which means that Case is not indicated morphologically. Consider (5) below, where the subject, the object and the object of the preposition are suffixed with the same marker.

(5) al-bint-ayn eŝtarn al-ktaab-ayn min al-walad-ayn
the-girl-d bought the-book-d from the-boy-d
"The two girls bought the two books from the two boys."

The table below summarises the dual markers in MSA and JA. Notice that, as mentioned above, the MSA markers differ according to the case of the noun. In JA, on the other hand, the same form is preserved regardless of the case carried by the noun as (5) above shows.

Case	MSA	JA
Nominative	-aani	-ayn
Accusative	-ayni	-ayn
Genitive	-ayni	-ayn

Table 2.1: Dual Markers in MSA and JA.

2.3.1.2 Plural Formation

In Arabic there are two types of plural patterns: first, a regular pattern where the structure of the singular form remains intact; the plural form is obtained from the singular form by adding a certain suffix. This pattern of pluralisation is referred to in the literature as *Sound Plural*. The second pattern of the plural formation processes is irregular in that the plural form is not derived by adding suffixes. Rather, the plural form is derived from the singular form by the means of a *stem modification* process. The structure of the singular noun is 'broken' by either changing the order of the consonants and vowels or by inserting a new vowel, hence this type of pluralisation is referred to as *Broken Plural* (cf. Abd-Rabbo 1990 and Watson 2002).

There are no specific rules that determine how the broken plural is derived. Actually, the broken plural forms vary from one noun to another; the crucial factor that determines the broken plural form is the consonantal structure of the singular form. Traditional grammarians such as Hassan (1961) and Ibn Hisham (1964) identify more than twenty one broken plural templates. The nouns in (6) below are illustrative.

(6) a. rajul ⟶ rijaal
man men

b. jabal ⟶ jibaal
mountain mountains

c. bayt ⟶ buyuut
house houses

d. baab ⟶ abwaab
door doors

e. kitaab ⟶ kutub
book books

What concerns us in this thesis is that broken plural forms resemble singular nouns when it comes to morphological case marking, as we shall see in the next section. Sound plural forms, on the other hand, are divided into two genders: masculine sound plurals and feminine sound plurals. Masculine sound plural forms are analogous to the dual forms in (4) and (5) above; in MSA, as (7a) below shows, the nominative masculine sound plural is obtained by using the suffix *–uuna*. On the other hand, the accusative and the genitive forms are obtained by adding the suffix *–eena* to the singular form. Conversely, in JA, only the suffix *–een* is used irrespective of the grammatical function of the noun. Compare the MSA sentence in (7a) with its JA counterpart in (7b) below.

(7) a. qaabala al-muhandis-uuna al-mu3lim-eena (MSA)
met.3ms the-engineer-mp.nom the-teacher-mp.acc
"The engineers met the teachers."

b. qaabal-uu al-muhands-een al-m3lm-een (JA)
met.3m-p the-engineer-mp the-teachers-mp
"The engineers met the teachers."

The masculine sound plural markers in MSA and JA are summarised in table 2.2 below.

Case	MSA	JA
Nominative	-uuna	-een
Accusative	-eena	-een
Genitive	-eena	-een

Table 2.2: Masculine Sound Plural Markers in MSA and JA.

In order to show how the feminine sound plural is derived, a word is in order about how feminine singular nouns are formed in MSA and JA. In most cases, the feminine singular in both varieties is derived from the masculine singular by adding the feminine marker *–ah*, as (8) below shows.

(8) a. al-mu3lim ⟶ al-mu3lim-ah (MSA)
the-teacher.m the-teacher-f

b. aT-Taalib ⟶ aT-Taalib-ah (JA)
the-student.m the-student-f

In MSA, but not in JA, the feminine singular marker *–ah* is pronounced as *–at* when the morphological case marker is present. For instance, when the nominative case marker *–u* is used, the feminine noun *al-mu3lim-ah* in (8a) above becomes *al-mu3lim-at-u*. See section 2.3.1.3 below.

In fact, both MSA and JA coincide with English in this respect; the difference between the masculine form and the feminine form in (8) above is to some extent similar to the difference between *prince* and *princess* in English. However, not all feminine singular nouns in Arabic are derived in the same way. There are some nouns, such as *bint* 'girl', which have distinctive feminine singular forms; i.e. these feminine singular nouns are not derived from the masculine singular forms as in (8) above.[3]

As far as the feminine sound plural nouns are concerned, we find that they are derived by using the marker *–aat*. Being a feminine gender marker as well as

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[3] The plural form of the noun *bint* 'girl' is broken; the plural form is derived by changing the vowel structure of the singular form, not by the means of adding a suffix. Compare the singular and the broken plural forms of *bint* in (i) with the singular and the feminine sound plural of *mu3limah* 'teacher' in (ii) and the singular and the broken plural forms of *rajul* 'man' in (iii) below.

i. bint ⟶ banaat.
'girl' 'girls'

ii. mu3lim-ah ⟶ mu3lim-aat
'teacher-fs' 'teacher-fp

iii. rajul ⟶ rijaal
'man' 'men'

The broken plural form *banaat* resembles the feminine sound plural in that it ends with the same sound, therefore, in terms of case marking, the broken plural *banaat* is treated in the same way as the feminine sound plural in (9a).

plural number marker, the suffix *-aat* is added to the masculine singular noun to derive the feminine plural as (9a) and (9b) below show; compare these examples with those in (8) above.

(9) a. al-mu3lim ⟶ al-mu3lim-aat (MSA)
the-teacher.m the-teacher-fp

b. aT-Taalib ⟶ aT-Taalib-aat (JA)
the-student.m the-student-fp

In contrast to the dual and plural number markers, see table 2.1 and table 2.2 above, the feminine plural marker *–aat* has no case specifications. Rather, the feminine sound plural form is marked for case like singular nouns; i.e. the feminine sound plural noun is suffixed with the relevant case marker, as we will see in the following section.

2.3.1.3. Case Marking

Excluding the dual and masculine sound plural nouns discussed in the previous section, nouns in MSA are marked for case using different case markers. Masculine and feminine singulars, masculine and feminine broken plurals and feminine sound plurals carry various overtly realized case markers that indicate the grammatical functions performed by these nouns. Usually, as (10a) below shows, the nominative, accusative and genitive cases are indicated by the case endings *–u*, *–a*, and *–i* respectively. JA diverges from MSA in that nouns do not

carry case markers. Rather, the form of the noun is the same regardless of its grammatical function. Compare the MSA sentence in (10a) with the JA sentence in (10b) below.

(10) a. qaabala aT-Tulaab-u al-mu3lim-a fe
met the-students.m-nom the-teacher.m-acc in
al-madrasat-i
the-school-gen (MSA)
"The students met the teacher in the school."

b. AHmad aštara as-sayarah min ar-rajil (JA)
Ahmad bought the-car from the-man
"Ahmad bought the car from the man."

It is worth mentioning that in terms of case marking, nouns in MSA can be either triptotic or diptotic (cf. Holes 1995). Singulars and broken plurals are triptotic because they take three case endings, the choice of the case marker *–u*, *–a*, or *–i* is determined by the grammatical function of the noun, as stated earlier in the paragraph preceding (10) above.[4] Feminine sound plurals, on the other hand, are called diptotic because they take only two case endings; the marker *–u* indicates the nominative case, while the accusative as well as the genitive cases are marked by the marker *–i*, as the examples below show.

[4] The dual and masculine sound plural nouns are considered diptotic by some authors (Versteegh 1997) because, as table 2.1 and table 2.2 show, the number suffix has two different forms depending on the case value.

(11) a. ra'at aT-Taalib-aat-u al-mu3lim-aat-i (MSA)
saw the-student-fp-nom the-teacher-fp-acc
"The female students saw the female teachers."

b. takalam-tu m3 al-banaat-i (MSA)
talked-I with the-girls-gen
"I talked with the girls."

In addition to the feminine sound plural nouns, there is a class of diptotic nouns in MSA called *al-asma'u al-mamnuu3tu min aS-Sarfi* 'the unnunated nouns'. *Nunatin*, or 'Tanween' as referred to in Arabic, is a term used to refer to the process of adding a final *–n* sound (following the case marker) to many proper names and indefinite nouns (Fassi Fehri 1993 and Ryding 2005). To illustrate, nouns like *kitaab* 'book', and *walad* 'boy', and proper names such as *Muhammad*, and *Ali* are nunated; when they are nominative, for example, the nominative case marker *–u* coexists with a final *–n* sound, therefore, they are pronounced as *kitaab-un*, *walad-un*, *Muhammad-un* and *Ali-un* respectively.

On the contrary, the unnunated nouns are those which do not take a final *–n*. Among these nouns are borrowed foreign words, nouns ending with *–aan*, many proper feminine names and some proper masculine names such as *Ahmad* in addition to some adjectives such as *azraq* 'blue'. The point that concerns us here is that the unnunated nouns, i.e. the nouns that do not take a final *–n* sound, are diptotic in that they take only two case endings, the nominative case is indicated

by the marker *–u*, while the accusative and the genitive cases are indicated by the marker *–a*. Compare the nunated nouns in (12a) with their unnunated counterparts in (12b) below.[5]

(12) a. ðahaba MuHammad-un ila al-madeenat-i (MSA)
went Muhammad-nom to the-city-gen
"Muhammad went to the city."

b. ðahaba AHmad-u ela 3mmaan-a (MSA)
went Ahmad-nom to Amman-gen
"Ahmad went to Amman."

This distinction between triptotic and diptotic nouns does not exist in JA because, as mentioned earlier in this section, nouns are not marked morphologically for case. The table below summarises the suffixial case endings of triptotic and diptotic nouns in MSA.

[5] In Arabic, adjectives agree with the nouns they modify in number, gender and case, as in (i).

i. baab-un jadeed-un
door-nom new-nom
"A new door."

Interestingly, when an nunated noun is modified by an unnunated adjective, we find that they show different morphological cases; in contrast to (i) above, the modifying adjective in (ii) below carries a different morphological case marker from the marker carried by the modified noun.

ii. kitaab-in azraq-a
book-gen blue-gen
"A blue book."

Number	Gender	Case Markers		
		Nominative	Accusative	Genitive
Singular	Masc & Fem	-u	-a	-i
Broken Plural	Masc & Fem	-u	-a	-i
Sound Plural	Fem	-u	-i	-i
Unnunated Nouns	Masc & Fem	-u	-a	-a

Table 2.3: MSA Morphological Case markers

2.3.1.4. Definiteness

It has been observed that the final *–n*, i.e. nunation which has been described in the previous section, is in a complementary distribution with the definite article *al-*. Moreover, the nunation is not used in genitive possessive structures, as in (13c) below (Fassi Fehri 1993). Therefore, Arab grammarians and some modern authors suggest treating the nunation as an indefinite marker (Hassan 1961). The data in (13) below provide evidence supporting this claim.

(13) a. wajad-tu al-kitaab-a / *al-kitaab-an (MSA)
found-I the-book-acc / the-book-acc.indf.
"I found the book."

b. wajad-tu *kitaab-a / kitaab-an (MSA)
found-I book-acc / book-acc.indf.
"I found a book."

c. wajad-tu kitaab-a al-walad-i / *kitaab-an al-walad-i (MSA)
found-I book-acc the-boy-gen / book-acc.indf. the-boy-gen
"I found the boy's book."

However, with (nunated) proper names, *-n* is used, as we can observe from the example below. This would suggest that it is not an indefinite marker.[6]

(14) ja'a 3li-un (MSA)
came Ali-nom
"Ali came."

Building on this observation, amongst others, Fassi Fehri (1993) claims that most Arab grammarians' view that nunation is an indefinite marker is untenable. However, Fassi Fehri does not provide any alternative view, in some examples he glosses nunation as *–n*, but it is ignored in most of his other examples. The issue whether the final *–n* is an indefinite marker or not is beyond the scope of this study. However, in this thesis, for the sake of consistency, when *–n* is used with proper names, it will be treated as part of the case marker, i.e. it will not be glossed. But when *-n* appears with nouns such as those in (13) above, it will be glossed as an indefinite marker.

2.3.1.5. Mood Marking

Verbs in MSA and JA coincide with nouns in both varieties. In other words, while the MSA nouns are marked for case as shown in the previous section, the MSA verbs are marked morphologically for mood. In contrast with verbs in MSA, the verbs in JA do not express mood morphological distinctions, i.e. just as the nouns are not marked for case, the verbs are not marked for mood. However,

[6] However, one might assume that the use of –n is determined by morphological factors, and that the proper names have morphological indefinite forms, hence *–n* is used.

verbs in both MSA and JA show agreement with their subjects and they show morphological tense distinctions.

Morphologically, mood marking on verbs in MSA is not very different from case marking on nouns. In fact, traditional Arab grammarians do not distinguish between case and mood. They assume that verbs are inflected by certain morphological markers, just like nouns (cf. 3.1.3 above), in order to indicate specific grammatical status. The use of these markers is dependent on the tense of the verb.

Traditional Arab grammarians such as Ibn Hisham (1964) draw a distinction between what they call *al-mabni* 'the uninflected' and *al-mu3rab* 'the inflected'. According to this distinction, the past tense form of the verb in MSA is *mabni* 'uninflected' in that it has only one form that is uninflected to show mood distinction. On the other hand, the present form of the verb is *mu3rab* 'inflected'. This means that the present form of the verb is inflected by different morphological endings to mark mood, as we shall see shortly (cf. Bohas, Guillaume and Kouloughli 1990 and Plunkett 1993).

In MSA, there are four different moods. The use of a particular mood is determined by the structure in which the verb is used (cf. Holes 1995). The four moods and their uses are listed below with illustrative examples.

2.3.1.5.1. Indicative mood

The indicative mood is used in declarative affirmative sentences to report factual statements and beliefs (Ryding 2005). It is marked by using the indicative marker *–u*, which is homophonous with the nominative case marker discussed in section 2.3.1.3 above. Consider the sentence in (15) below.

(15) yaktub-u al-walad-u ad-dars-a (MSA)
write.3ms-indic the-boy-nom the-lesson-acc
"The boy is writing the lesson."

2.3.1.5.2. Subjunctive mood

The subjunctive mood is used in order to express "an attitude toward the action such as doubt, desire, wishing, or necessity" (Ryding 2005:53). The morphological marker of the subjunctive mood is homophonous with the accusative case marker *–a*; i.e. this mood is indicated by using the marker *–a*. In (16) below, the verb *taktub* 'write' in the embedded complement is assigned subjunctive mood by the complementiser *an*.

(16) ta'mal-u al-bint-u an taktub-a ad-dars-a (MSA)
hope.3fs-indic the-girl-nom comp write.3es-subjun the-lesson-acc
"The girl hopes to write the lesson."

2.3.1.5.3. Jussive mood

The jussive mood is usually associated with negation. When the verb is preceded by a negative particle such as *lam*, it is assigned jussive mood (Fassi Fehri 1993

and Rahhalli and Souâli 1997). The marker of the jussive mood is *sukuun* 'silence' or 'pause'; this means that no vowel suffixes are used (Ryding 2005). While the verb *yaktub* 'write' in the affirmative sentence in (17a) is indicative, it is jussive in the negative (17b). The jussive mood is indicated by the lack of the vowel markers *–u* or *–a*.

(17) a. yaktub-u 3li-un ar-risaalat-a MSA
write.3ms.indic Ali-nom the-letter-acc
"Ali is writing the letter."

b. lam yaktub 3li-un ar-risaalat-a MSA
not write.3ms.juss Ali-nom the-letter-acc
"Ali has not written the letter."

However, when the subject is a pronominal clitic, the mood is marked in a different way from (15), (16), and (17) above. The indicative mood is marked by a final *–na* or *-ni* when the subject is a pronominal clitic, whereas the subjunctive and jussive moods are indicated by the absence of the final *–na* or *-ni*.[7] Compare

[7] While *–na* is used when the subject pronominal clitic is masculine sound plural, as in (18), we find that *–ni* is used when the subject clitic is dual, as the examples below show:

i. yal3b-aa-ni
play.3m-they.d.indic
"They are playing."

ii. lam yal3b-aa
not play-they.d.juss
"They have not played."

the indicative verb in (18a) with the embedded subjunctive verb in (18b) and the jussive verb in (18c) below.

(18) a. yazur-uu-na al-batra'-a (MSA)
visit3m-they.indic the-Petra-acc
"They are visiting the city of Petra."

b. yuHawel-u as-suyaaH-u an yazur-uu
try.3ms-indic the-tourists-nom comp visit3m-they.subjun
al-batra'-a (MSA)
the-Petra-Acc
"The tourists try to visit the city of Petra."

c. lam yazur-uu al-barta'-a (MSA)
not visit.3m-they.juss. the-Petra-acc
"They did not visit the city of Petra."

2.3.1.5.4. Imperative mood

When the verb expresses command, the imperative mood is used. Unlike the situation in English, for example, the second person subject of the imperative verb in Arabic is realised overtly in the form of a pronominal clitic attached to the verb. Only in one case the second person subject is not realised overtly, namely, when the subject is second person masculine singular. Correspondingly, like the jussive mood in (17) above, the imperative mood is indicated by the lack of the vowel marker (Ryding 2005), as can be seen from (19a) below. However, like the jussive and subjunctive verbs in (18a) and (18b) above, when the subject clitic is present, the imperative mood is marked by the absence of *–na*.

(19) a. 'uktub! (MSA)
write.2ms.impr.
"Write!"

b. 'uktub-uu! (MSA)
write2m-you.p.impr.
"You all Write!"

2.3.2 MSA and JA Pronominal systems

In a language such as English, nouns are not marked for case. However, pronouns, depending on their grammatical functions have different morphological forms. Put differently, the nominative pronouns have different forms from the accusative or genitive pronouns.

In MSA as well as in JA, pronouns are not marked for case. According to the traditional grammarians, pronouns in Arabic are of two types, independent and dependent. In other words, pronouns are classified into free forms, in the sense that they can stand by themselves as lexical items, and bound forms in that they appear as clitics attached to lexical heads. All the non-subject pronouns in MSA and JA are clitics that have to attach to lexical heads, whereas subject pronouns are usually lexical items that can stand by themselves.[8]

[8] The issue whether non subject pronouns in Arabic have free forms is disputed in the literature. Fassi Fehri (1993) assumes that the object pronouns have free forms; according to this view, all the non subject forms in table 2.4 are preceded by the morpheme *iyya*. The morpheme *iyya* and the non subject form of the pronoun constitute a pronominal element that is free in the sense it can stand alone as a lexical item. On the other hand, Demerdache (1991) assumes that *iyya* is just a dummy morpheme that is used to provide a lexical support for the orphaned bound pronoun.

Fassi Fehri (1993) refers to the non-subject pronouns as the non-nominative forms, and he refers to the subject pronouns as nominative forms (cf. section 2.4.1 below). Consider the illustrative sentences in (20) below. In (20a) and (20b) the pronouns are objects, therefore they appear as clitics. In (20c) and (20d), on the other hand, the subject pronouns have independent (or free) forms.

(20) a. qaabala-hu at-tajir-u (MSA)
met.3ms-him.acc the-merchant-nom
"The trader met him."

b. ŝaaf-haa et-tajir (JA)
saw.3ms-her.acc the-merchant
"The trader saw her."

c. hiyya taktub-u (MSA)
she.nom write.3sf-indic
"She is writing."

d. hu safar qabil ŝaher (JA)
he.nom travelled before month
"He travelled a month ago."

MSA and JA pronominal forms are summarised in the following table. Notice that the JA pronouns are italicised. Notice also that the first person pronouns and all the dual pronouns do not show gender distinction.[9]

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[9] It is worth noting that the possessive forms, except the first person singular forms, are homophonous with the object forms. However, the possessive forms appear as clitics on nouns in possessive structures such as (i) below.

Gender, person and number	Subjective form		Objective form		Possessive form	
Masc. & Fem 1Sg.	anna	*anna*	-ni	*-ni*	-i	*-i*
Masc. & Fem 1Pl.	naHnu	*eHna*	-na	*-na*	-na	*-na*
Masc. 2Sg	anta	*ent*	-ka	*-ak*	-ka	*-ak*
Fem 2Sg.	anti	*enti*	-ki	*-ki*	-ki	*-ki*
Masc & Fem 2Dual	antumma	-	-kumma	-	-kumma	-
Masc 2Pl	antum	*entuu*	-kum	*-kum*	-kum	*-kum*
Fem 2Pl	antunna	*entin*	-kunna	*-ken*	-kunna	*-ken*
Masc. 3Sg	huwa	*hu*	-hu/hi	*-ah*	-hu/hi	*-ah*
Fem 3Sg.	hiyya	*hiy*	-haa	*-haa*	-haa	*-haa*
Masc & Fem 3Dual	humma	-	-humma	-	-humma	-
Masc 3Pl	hum	*hum*	-hum	*-hum*	-hum	*-hum*
Fem 3Pl	hunna	*hin*	-hunna	*-hin*	-hunna	*-hin*

Table 2.4: MSA and JA pronominal forms.

2.4. Word Order and Agreement

In MSA the basic and unmarked word order is VSO; "it is the order found in so-called pragmatically neutral sentences, i.e. in sentences which require few mechanisms of interpretation and derivation" (Fassi Fehri 1993:19). In JA, the unmarked and predominant word order is SVO, which is the case in most local varieties of Arabic (cf. Aoun et al. 1994 and Mahfoudhi 2002). Nevertheless, both MSA and JA allow alternative word orders, MSA allows, among other word orders, SVO and JA allows VSO, which means that SVO and VSO word orders are available in both varieties.

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i. kitaab-u-haa
book-nom-her
"Her book"

The objective forms on the other hand appear as (object) clitics on transitive verbs, as (ii) below shows.

ii. ra'aa-haa al-walad-u
saw.3ms-her the-boy-nom
"The boy saw her."

As stated in section 2.2 at the outset of this chapter, and as the sentences in (1), (2) and (3) above show, the intriguing difference between MSA and JA is the agreement pattern shown by the verb. For convenience, (1) and (3) above are repeated below.

(21) a. waSala al-a'wlaad-u (MSA)
arrived.3ms the-boys-nom
"The boys arrived."

c. al-a'wlaad-u waSal-uu (MSA)
the-boys-nom arrived.3m-p
"The boys arrived."

(22) a. naam-uu ar-rjaal (JA)
slept.3m-p the-men
"The men slept."

b. ar-rjaal naam-uu (JA)
the-men slept.3m-p
"The men slept."

It has been claimed that the verb in MSA shows partial (or impoverished) agreement with the postverbal subject and full agreement when the subject is preverbal (Mohammad 2000). In JA and most local varieties, as (22) above shows, the agreement shown by the verb is always full regardless of the position occupied by the subject (Benmamoun 2000b).

The subject pronouns are usually free lexical items (cf. table 2.4). However, they can appear in the form of a clitic. When a full noun phrase subject occupies a preverbal position, it is associated with a resumptive pronoun which is attached to the lexical verb; i.e. it appears as a clitic on the verb. According to the traditional Arab grammarians and some modern linguists, the clitic is analysed as a real subject, while the preverbal noun phrase is considered as a topic or focus (Hassan 1961, Ouhalla 1997). Other linguists treat the resumptive pronoun, i.e. the clitic, as a number marker, whereas the preverbal noun phrase is analysed as a real subject (cf. Fassi Fehri 1993, Bolotin 1995 and Mohammad 2000).

2.4.1. Inflectional Analysis of the Pronouns

Fassi Fehri argues that "that the non-nominative bound forms are best analyzed as pronouns, and there is no support for their analysis as inflectional" (Fassi Fehri 1993:121). According to the traditional grammarians' view, the bound nominative forms, i.e. the clitic forms of subject pronouns, are similar to the non-nominative forms in that they cannot be treated as inflectional. I will take issue with Fassi Fehri's assumption that "bound nominative forms are homonymously ambiguous between a pronoun and an inflection interpretation" (Fassi Fehri 1993:121). Contrary to Fassi Fehri, I will show that the feminine marker *–at* behaves in a very different way from the bound nominative pronouns. According to Fassi Fehri, in the MSA examples represented below, the *–at* morpheme can function as an agreement marker in (23a) and as an incorporated pronoun in (23b).

(23) a. jaa'-at al-banaat-u (MSA)
came-f the-girl-nom
"The girl came."

(Fassi Fehri 1993:121, example 69)

b. jaa'-at (MSA)
came-3s-f
"She came."

(Fassi Fehri 1993:121, example 70)

In fact, the marker *-at* has never been treated as a pronominal element by traditional grammarians, rather, it is analysed as an inflectional feminine gender marker (Hassan 1961 and Al-Ghalayyini 1974). The analysis of the marker *–at* as a gender marker by traditional grammarians is ascribed to the fact that it differs from the clitic forms of the subject pronouns in a number of significant ways. First, in MSA, the clitic form of the subject pronoun is in complementary distribution with the postverbal subject. In contrast to Fassi Fehri's example in (23a) above, (24a) below is ungrammatical, because the bound form of the pronoun cooccurs with an overt postverbal subject. This means that the bound form cannot have an inflectional interpretation.

(24) a. *ðahab-uu al-a'wlaad-u (MSA)
Went.3m-p the-boys-nom
"The boys went."

b. ðahab-uu (MSA)
went.3m-they
"They went."

The second difference between the marker *–at* and the clitic pronouns is observed when the subject is a bound dual pronoun. As table 2.4 above shows, the free nominative forms of the dual pronouns do not show gender distinction, and likewise *–aa*, the nominative bound form of the dual pronoun, is not specified for gender. Yet, the verb has to show gender agreement; the verb shows either masculine or feminine agreement depending on the gender of its subject. Consider the examples in (25) below, and the explanation underneath.

(25) a. Gadara al-a'meer-aani (MSA)
left.3ms the-prince-d.nom
"The two princes left."

b. Gadar-aa (MSA)
left.3ms-they.d.nom
"They left."

c. Gadar-at al-a'meer-at-aani (MSA)
left.3s-f the-princess-f-d.nom
"The two princesses left."

d. Gadar-at-aa (MSA)
left.3s-f-they.d.nom
"They left."

While the subject in (25a) above is dual masculine, it is dual feminine in (25c). Consequently, the verbs in (25a) and (25c) show masculine and feminine gender agreement respectively. The feminine gender feature in (25c) is indicated by the feminine gender marker *–at*. In (25b) and (25d), on the other hand, the subjects are pronominal clitics; they are bound forms attached to the verbs. The coexistence of *–at* with the nominative bound pronoun *–aa* in (25d) would not be predicted if *–at* were a pronoun.

Nonetheless, Fassi Fehri's insight can be adopted to account for the full agreement pattern shown by the verb with the postverbal subjects in JA. One could assume, building on Fassi Fehri's insight, that the pronominal clitic in JA has an inflectional interpretation, i.e. that it is a number marker, because it can cooccur with a full noun phrase postverbal subject, as (22) above shows. However, in certain structures in JA, the supposed number affix is not used in VSO structures, which means that JA behaves in a similar way to MSA. The sentences below show that in JA as well as in MSA the verb shows partial agreement with the postverbal subject that is modified by a numeral adjective.[10]

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[10] However, full agreement in a sentence like (26a) above is possible, hence the grammaticality of (i) below:

i. wasl-uu Xamis rjaal
arrived.3m-p five men
"Five men arrived."

However, (i) differs from (26a) above in that it has a different interpretation; in (i), the verb is more emphasised (cf. section 5.6.3.2.2 for detail). The contrast between (26a) and (i) does not contradict the agree-based analysis I introduce in chapter five below, as we can assume that in (26a) the subject is in situ while in (i) it moves to a higher position leaving behind a resumptive copy which in turn is affected by the topic movement of the verb, as section 5.6.3.2.2 below will show.

(26) a. waSal Xamis rjaal (JA)
arrived.3ms five men
"Five men arrived."

b. waSala Xamsat-u rijaal-in (MSA)
arrived.3ms five-nom men-gen
"Five men arrived."

However, when the subject appears in a preverbal position, the supposed number marker is used in both varieties. Consider:

(27) a. Xamis rjaal waSl-uu (JA)
five men arrived.3m-p
"Five men arrived."

b. Xamsat-u rijaal-in waSal-uu (MSA)
five-nom men-gen arrived.3m-p
"Five men arrived."

Building on this similarity and on the discussion in section 5.4 below, I assume that the supposed number marker in JA has to be treated on a par with its counterpart in MSA. Like the situation in MSA, if the affix in (27b) is to be treated as a number marker, the question that arises concerns its absence in (26b). Under the assumption of Agree Theory this agreement asymmetry is not expected, as Agree relation is established when the probe c-commands the goal.

Movement (or raising) of the goal to a preverbal position is not expected to affect agreement (cf. 4.5.2 for more discussion).

To conclude this section, one could claim that if the nominative bound pronouns are analysed as number agreement markers, then the agreement asymmetry in MSA, see for example (21) above, does not seem to be captured easily within the Agree model introduced in the work of Chomsky (2000, 2005). I shall return to this issue and deal with it in greater depth in chapter five below.

2.4.2. Implications of Agreement

It has been claimed that the rich morphological system of MSA, especially the morphological case marking discussed in section 2.3.1.3 above, allows MSA to have a high level of word order freedom (Mohammad 2000 and Al-Tamiri 2001). Also, since the verb agrees with the subject, but not the object, agreement is assumed to have implications for the word order variation. Mohammad (2000:4) claims that in Arabic it "is not absolutely that if Case-marking is suppressed then word order is restricted. Rather, if there is some indication as to which NP the subject is, then word order remains free." In fact, this claim is hardly tenable; if the word order variation was a result of making a morphological distinction between the subject and object, then, we would expect JA to have a high level of word order freedom as well; the JA verb-subject agreement helps distinguish the subject from the object, but in spite of this fact, the word order is restricted in JA.

What I intend to emphasise here is that the word order variation in Arabic is not a merely morphological phenomenon. Rather, word order variation is a reflex of different syntactically-determined movements, or internal Merge using Chomsky's (2000, 2001) terms (cf. chapter five and chapter six for more detail about the triggers of syntactic movements).

2.4.3. Complementisers

In certain context, the word order in Arabic is restricted, as the presence of certain types of complementisers in MSA confines the word orders either to SVO or VSO. Namely, there are two complementisers that behave in two different ways: the main clause complementiser *inna* is contrasted with the embedded clause complementiser *an*. The former complementiser requires an SVO order of its sentential complement, as (28a) below shows, whereas the latter requires a VSO complement as we can see in the embedded complement in (28b) below (cf. Majdi 1990 and Fassi Fehri 2005).

(28) a. inna al-mar'at-a tadrus-u an-naHw-a (MSA)
comp the-woman-acc study.3fs-indic the-syntax-acc
"Indeed, the woman is studying syntax."

b. tawq3-tu an tadrus-a al-mar'at-u
expected-I comp study.3fs-subjun the-woman-nom
an-naHwa (MSA)
the-syntax-acc
"I expected the woman to study syntax."

As the examples above show, the complementiser *inna* is a case assigner; it assigns the noun that follows it accusative case. The complementiser *an*, on the other hand, is a mood assigner as it assigns subjunctive mood to the following verb (Majdi 1990).

2.5. Types of Arabic Sentences

Arabic sentences are classified into two types: nominal sentences and verbal sentences. In the old linguistic literature of Arabic (8th and 9th centuries), there existed two opposite schools: Al-Basra School and Al-Kufah School. Sibawayeh (8th century), Al-Asma'i and Al-Akhfash (9th century) were among the scholars of Al-Basra School. Al-Rou'si (8th century), Al-Kisa'i and Al-Farra (9th century) were among the scholars of Al-Kufah School (cf. Owens 1988, 1990; Versteegh 1990, 1993; Goldziher, Dévényi and Iványi 1994; Gully 1995 and Bernards and Nawas 2005).

According to Basri scholars, nominal sentences are the ones that begin with noun phrases. The presence or absence of a lexical verb is irrelevant to the definition of nominal sentences as long as they have noun phrases in initial positions. Nominal sentences consist of a *mubtada'* (predicator or Topic) and a *Xabar* (predicate or Comment). Therefore, both of the sentences in (29) below are considered nominal. The Comment in (29a) is a predicative noun phrase, while it is a full verbal sentence in (29b).

(29) a. AHmad-u Tabeeb-un (MSA)
Ahmad-nom doctor-nom.indef
"Ahmad is a doctor."

b. al-a'Tfaal-u la3ib-uu al-kurat-a (MSA)
the-children-nom play.3m-they the-ball-acc
"The children, they played football."

The verbal sentences on the other hand, differ from the nominal sentences in that they must contain an overt form of the verb and that the verb should occupy an initial position, as in (28b) above for example. While the Kufi scholars agree with the Basri scholars in that (29a) above is a nominal sentence, they diverge from them in that they consider (29b) a verbal sentence; according to their view, the verbal sentence is the one which contains a verb regardless of the position occupied by the verb.

Most Arab grammarians (for example, Hassan 1961 and Al-Ghalayyini 1974) and modern linguists (for example, Fassi Fehri 1993 and Plunkett 1993) adopt the Basra School's definition of the nominal and verbal sentences. However, in this thesis, and for the sake of clarity, I diverge from these authors and scholars in that I will use the term *zero copula sentences* to refer to the sentences that lack overt forms of the verb. At the same time, I will consider, following the Kufi scholars, the sentences that contain verbs as verbal sentences irrespective of whether they have noun phrases in preverbal positions or not.

In fact, the use of the term *zero copula sentences* instead of nominal sentences is motivated by the fact that the presence or absence of the overt form of the verb has implications for Case and tense interpretation. "When denoting a state located in the present tense, clauses are verbless or 'nominal', in the sense that they contain no verbal copula or no verb" (Fassi Fehri 1993:152). In (29a) above, repeated as (30) below, the tense is present.[11]

(30) AHmad-u Tabeeb-un (MSA)
Ahmad-nom doctor-nom.indef
"Ahmad is a doctor."

The past and future counterparts of (30) have to contain overt forms of the verb, as (31a) and (31b) below show.

(31) a. kaana AHmad-u Tabeeb-an (MSA)
was.3ms Ahmad-nom doctor-acc.indef
"Ahmad was a doctor."

b. sa-yakuunu AHmad-u Tabeeb-an (MSA)
will-be.3ms Ahmad-nom doctor-acc.indef
"Ahmad will be a doctor."

If we reconsider the zero copula sentence in (30) above, we find that both the subject *Ahmad* and the complement *Tabeeb* are nominative. However, when the

[11] In JA, zero copula sentence differ form their counterparts in MSA only in terms of morphological case marking; as mentioned earlier, while case is marked in MSA, it is not marked in JA.

copular is overtly realised as in (31a) and (31b), the complements appear carrying accusative case. This suggests that Case on the complements in (30) and (31b) is valued by different heads. In (31), since the sentences contain verb forms, it is easy to assume that the accusative case is valued under an Agree relation with the light v, the head of vP. When it comes to (30), things are complicated. One possible way to account for the nominative case on the complement in (30) is to adopt Hiraiwa's (2001) *multiple agree theory*. However, I shall show in chapter four below that Hiraiwa's theory encounters some challenges. Instead, I will assume, building on the work of Bowers (1993), Sportiche (1995), and Starke (1995), that the zero copula sentence contains a functional head which is responsible for the nominative case on the complement. Such a head can be identified as a light n, equivalent to light v in verbal sentences. This issue will be discussed in detail in chapter four below.

It is noteworthy that the subject and the predicative complement in copular sentences agree in the features of person, gender and number but they cannot agree in definiteness; the subject must be definite and the predicative adjective or noun phrase has to be indefinite in order to obtain a sentential reading, as the sentences in (32) below show. Since the adjectives correspond to the nouns they modify in definiteness in (32b), and in indefiniteness in (32c), the structures are interpreted as noun phrases; i.e. the adjectives have attributive interpretations. In the contrary in (32a), the subject is definite; therefore, the indefinite adjective is interpreted predicatively.

(32) a. al-walad-u Taweel-un (MSA)
the-boy-nom tall-nom.indef
"The boy is tall."

b. al-walad-u aT-Taweel-u (MSA)
the-boy-nom the-tall-nom
"The tall boy."

c. walad-un Taweel-un (MSA)
boy-nom.indef tall-nom.indef
"A tall boy."

d. *walad-un aT-Taweel-u (MSA)
boy-nom.indef the-tall-nom
"The tall boy."

2.6. Summary

This theory neutral chapter has shed some light on a number of issues that distinguish MSA from the local varieties of Arabic and CA. The chapter began by giving the general background; MSA is defined, the main difference between MSA and the local varieties is described, and a number of views concerning the difference between MSA and CA have been reviewed briefly. The chapter showed how the dual and plural nouns are formed in MSA and JA, and how the nouns and verbs in MSA, but not in JA, are morphologically marked for case and

mood respectively. Also, the issues of word order and agreement, pronominal systems and types of sentences have been described.

The description provided in this chapter paves the way for the proposed theoretical analyses which will be set within the minimalist framework of Chomsky (2000, 2001, and 2005). However before we delve into the theoretical analyses of the issues of Case (chapter four), subject positions and agreement (chapter five), object positions and object movement (chapter six), the following chapter (chapter three) presents an overview of the theoretical framework adopted and focuses on some of the theoretical preliminaries that are relevant to the topics of this thesis.

CHAPTER THREE: The Theoretical Framework

3.1. Introduction

The investigation of the topics of the thesis is set within the minimalist model of generative grammar introduced in Chomsky (1993, 1995, 2000, 2001, 2004, and 2005). The MP, or Minimalism as it is referred to sometimes, is a recent and important link in a Chomskyan chain of formalisms and theories. In fact, the MP is a continuation and improvement of a series of generative-grammar ideas presented in the Standard Theory (Chomsky 1957, 1965), the Extended Standard Theory (Chomsky 1972), the Revised Extended Standard Theory (Chomsky 1977), and the Government and Binding (Chomsky 1981, 1986b).

In this chapter, the MP is reviewed; the chapter traces the development of the MP and sheds some light on how structures are derived and what sort of conditions are imposed on the derivational operations. The chapter is organised as follows. Section 3.2 presents the MP showing its emergence and the main ideas associated with it. Section 3.3 deals with the interface levels in the MP. The section also shows the difference between interpretable and uninterpretable formal features and their role in the derivation. The topic of section 3.4 concerns how the derivation proceeds in the computational system; it shows that Merge, Move and Agree are the basic derivational operations involved in deriving structures. New developments within the MP, namely, Phase Theory and the notion of feature inheritance, are dealt with in section 3.5. Section 3.6 is a summary of the chapter.

3.2. The Minimalist Program

3.2.1. The Emergence of the Minimalist Program

The MP was first introduced in the work of Chomsky (1993, 1995). It finds its roots in GB theory, which is also known as Principles and Parameters theory (P&P henceforth) (Chomsky 1981, 1986b). According to Chomsky, the MP is minimalist in the sense that the language faculty "provides no machinery beyond what is needed to satisfy minimal requirements of legibility and that it functions in as simple way as possible" (Chomsky 2000: 112-3). It also is a program, as opposed to a theory, as Chomsky (2000: 92) emphasises. Therefore, being a research program, the MP has been subject to revision and improvement over the last decade.

3.2.2. A Decade of Minimalist Ideas

The MP is more than one proposal, as we can distinguish between two versions of this framework. The influence of GB on the earliest version of the MP (Chomsky 1993, 1995) was obvious; several postulations made within GB accompanied the emergence of the MP. The similarities between the earliest version of the MP and the latest version of GB would suggest that they together constitute a transitional stage where the two frameworks share certain assumptions. One of these basic assumptions is that movement is driven by the need to check certain features of the moved item or the targeted position (cf. Chomsky 1995: Ch 1 and Ch 2). However, unlike the situation in GB, movement in the MP is more restricted, as we shall see shortly, and later in section 3.4 below.

According to Chomsky (1986b), GB is a "rule-free system"; it has only the general Move Alpha rule which "allows any category to move anywhere at any time" Hornstein (2001:2). On the other hand, movement in the MP is restricted. One restriction on movement is referred to by Chomsky (1995) as the Last Resort Principle, which claims that movement is a last resort operation that applies only when it has to. A further condition on movement is called the Minimal Link Condition, which requires movement to be as short as possible.

In contrast with GB, the MP is assumed to be mainly derivational; however, it has a representational property as we shall see shortly.[1] Derivation in the MP is uniform in that the regulating rules and conditions apply during the course of the derivation. Two economy considerations play a central role within the MP: the economy of derivation, and the economy of representation. Chomsky (1995: 92) argues that the "derivations contain no superfluous steps, just as representations contain no superfluous symbols". This means that the economy conditions suppress any unnecessary derivational operation, i.e. movement. On the other hand, the representational economy conditions rule out any unnecessary structures.

[1] Epstein, Groat, Kitahara and Kawashima (1998) and Epstein and Seely (2002) argue for a strong derivational approach. These authors assume that there are no levels of representations, rather, the computational system interprets the outcome of the operation Merge at the point it applies.

3.3. Representations in the Minimalist Program

3.3.1. The Interface Levels

Chomsky (1993) argues that only the interface levels LF and PF are conceptually required; therefore, all the other levels should be eliminated.[2] LF and PF are interface levels at which grammar contributes to the semantics and phonology (Hornstein 2001:3). The basic idea that underlies the MP is the strong minimalist thesis. The computational system relates sound and meaning to PF and LF interfaces respectively. "The strong minimalist thesis hypothesizes that the only constraints are those imposed by these interfaces and that computational system satisfies these constraints in an optimal fashion" (Poole (to appear: 1)).

The interface levels LF and PF are associated with the interpretability of formal features (cf. section 3.3.2 below). In fact, it is a requirement of the Principle of the Full Interpretation (FI) to delete all the uninterpretable features that are not accessible at the interface levels. In Chomsky's words:

> The principle FI is assumed as a matter of course in phonology; if a symbol in a representation has no sensorimotor interpretation, the representation does not qualify as a PF representation. This is what we called the "interface condition". The same condition applied to LF also entails that every element of the representation have [*sic*] a (language independent) interpretation (Chomsky 1995: 27).

[2] A major difference between the MP and GB concerns the number of "distinctive levels" of grammar. In GB there are four linguistically significant levels of representation: Deep Structure (DS), Surface Structure (SS), Logical Form (LF) and Phonological Form (PF) (Chomsky 1981). The MP reduces the number of the level of representation to only two levels, namely: LF and PF.

In other words, according to the interpretability condition, stated below, only interpretable features can be handled by the interface levels.

(1) The Interpretability Condition: LIs [lexical items] have no features other than those interpretable at the interface, the properties of sound and meaning.

(Chomsky 2000:113)

The condition in (1) above implies that the lexical items do not have any uninterpretable features at the interface levels; if these features exist, they have to be eliminated. Only the features that have semantic and phonological contents are allowed to reach the interface levels. With this condition in mind, we now move to the next section which deals with features and their interpretability.

3.3.2. The Interpretability of Formal Features

According to Chomsky (1995:Ch. 4 and later work), lexical items in the lexicon are endowed with a set of phonological, semantic and formal features. Formal features are the ones that derive computation; they are involved in triggering derivational operations such as Move and Agree (Chomsky 1995, 2000). The abstract Case feature, the EPP feature (or Edge feature as it is referred to in Chomsky (2005) and Fassi Fehri (2005)), and phi-features (φ-features henceforth) are the most frequently considered and discussed features.[3]

[3] EPP is a feature that requires the specifier position of a given head to be filled.

The features of person, number and in some languages, such as Arabic, gender are referred to collectively as φ-features. φ-features are interpretable on nominals. That is to say, these features plausibly play a role in interpretation and are visible at the LF interface. For example, whether a noun is singular, dual or plural is relevant for its semantic interpretation. Therefore, nominals enter the derivation with their φ-features valued (Chomsky 1995, 2000). By contrast, the Case features of nominals play no role in how the item itself is interpreted semantically. They therefore enter the derivation without a value.

Heads such as T and v are also claimed to possess φ-features. They often show morphological reflexes of person and number, and possibly gender in some languages.[4] However, φ-features on heads are not relevant for the semantic interpretation of these elements themselves at LF. φ-features on T and v are therefore uninterpretable and they too enter the derivation unvalued. If uninterpretable features reach LF, the derivation crashes. In order to get a convergent derivation, all uninterpretable features have to be deleted prior to the LF level. It should be noted that Chomsky (2005) argues that T does not have φ-features, rather, it inherits them from C, I shall return to this point in section 3.5 below.

[4] According to the work of Chomsky (2000), C, T, and v are functional categories. They are contrasted with substantive categories such as V (lexical verbs), N (nouns) A (adjectives).

3.4. Derivation in the Minimalist Program

3.4.1. The Computational System

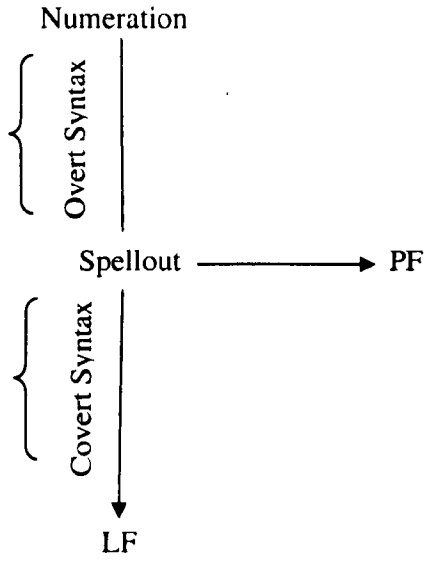
Under minimalist assumptions, structures are built within the computational system. The computational system is the setting where the processes of the derivation and the application of economy conditions and regulating principles take place. The computational system is composed of a number of components. Namely, it consists of overt syntax, covert syntax, spellout, PF and LF (Chomsky 1995 and Marantz 1995).

According to the work of Chomsky (1995), linguistic expressions are structured in the form of the pair (π, λ). The first member of the pair, i.e. π, stands for the legitimate objects that are interpretable at PF, while the second member, i.e. λ, stands for the legitimate objects that are interpreted at LF. On this issue, Chomsky states:

> [E]ach language will determine a set of pairs (π, λ) (π drawn from PF and λ from LF) as its formal representations of sound and meaning, [...] Parts of the computational system are relevant only to π, not λ: the *PF component*. Other parts are relevant only to λ, not π: *the LF component*. The parts of the computational system that are relevant to both are the *overt syntax* (Chomsky 1995:169). [Emphasis in the original].

The diagram in (2) below schematizes the structure of the computational system and the order of its components.

(2) LEXICON



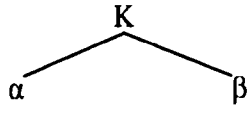
As (2) above shows, the starting point in the computational system is *Numeration*. The numeration is "a set of pairs (LI, *i*), where LI is an item of the lexicon and *i* is its index, understood to be the number of times LI is selected" (Chomsky 1995:225). Once the linguistic items are selected from the lexicon, two operations apply recursively, namely the operations Select and Merge. The operation Select demands that all the listed lexical items in the numeration have to be exhausted in order to acquire a convergent derivation (Chomsky 1995:226). The second and most essential operation in building the sentence structure is Merge, which is discussed in 3.4.2.1 below. It is worth noting that in Chomsky (2001 and later) derivation is assumed to proceed phase by phase. This means that the process *spellout* is cyclic in that it takes place in a multiple fashion; once the phase is constructed, it is transferred to the PF and LF interface levels (cf. section 3.5.1 below).

3.4.2. The Derivational Operations

3.4.2.1. The Operation Merge

Merge is the operation that "takes a pair of syntactic objects (SO_i, SO_j) and replaces them by a new combined syntactic object SO_{ij}" (Chomsky 1995:226). As the structure in (3) below shows, the operation Merge combines the item α with the item β to build a complex item K, which is a projection of either α or β.

(3)



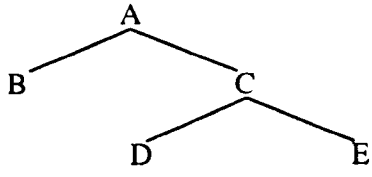
The Merge operation illustrated by (3) above, provides two important relations: sisterhood and immediately-contain; the sisterhood relation holds between (α, β) while the immediately-contain relation holds for (K, α), and (K, β). From these relations, the notion *c-command* is derived. This means that the notion of c-command, which is a fundamental relation in the minimalist framework, is a product of the computational system (Chomsky 2000). If we reconsider (3) above, we can reformulate the definition of c-command as in (4) below (cf. Chomsky 1995:35).[5]

[5] The notion c-command is sometimes defined in terms of dominance. Dominate is a relation that holds between the nodes in the structure (Chomsky 1993, Radford 2004). The relation *dominate* resembles the relation *contain* in that both of them are derived from the operation Merge. However, the difference between *dominate* and *contain* is captured when the difference between a category and a segment (of a category) is obtained. According to Chomsky (1995), α dominates β if every segment of α dominates β. On the other hand, *contain* is defined as follows, α contains β if some segment of α dominates β. To clarify, consider the structure in (i) below:

(4) α c-commands β if α does not contain, nor is contained within, β and the node K that immediately contains α immediately contains β.

However, the definition in (4) above implies that β c-commands α too. That is because β does not contain α, and both α and β are immediately contained within K. This kind of mutual c-command is referred to as symmetrical c-command (Radford 2004). The symmetrical c-command is compared with the asymmetrical c-command - a relation under which the element B in (5) below c-commands the element D and element E. However, neither D nor E can c-command B (Carnie 2007).

(5)



In (5) above, both B and C are immediately contained within A, therefore B has a symmetric c-command relation with C. But it has an asymmetrical c-command relation with D and E. By virtue of being contained within C, B c-commands D

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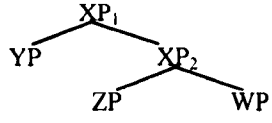
i.



In (i) above, XP has two segments: XP_1 and XP_2. Since YP is only dominated by one segment, XP_1, we say that XP contains YP. This is not the case with ZP; XP dominates ZP because ZP is dominated by both segments (cf. Chomsky 1995:177).

and E. However, neither D nor E can c-command B because the node A which immediately contains B does not immediately contain D and E.

The relation of c-command is crucial within the Agree model (Chomsky 2000, 2001), as the functional head (the probe) has to c-command the nominal (the goal) with which it agrees (cf. section 3.4.2.3 below). Also, this relation is essential for the interpretation of the coreferential pronouns. The sentences in (6) below show that the antecedent (the subject) must asymmetrically c-command the coreferential pronoun which is contained within the object, as in (6a). However (6b) is grammatical despite the fact that the coreferential pronoun precedes its antecedent.

(6) a. qaabala ar-rajul-u Sadeeq-a-hu (MSA)
met.3ms the-man-nom friend-acc-his
"The man met his friend."

b. qaabala Sadeeq-a-hu ar-rajul-u (MSA)
met.3ms friend-acc-his the-man-nom
"The man met his friend."

The object which contains the pronoun in (6b) has moved from its position, to a position higher than that of the antecedent.[6]

[6] In Musabhien (2007), I ascribed the optionality of object movement in (6b) to the Copy Theory of Movement (cf. Chomsky 1995). The moved object leaves a null copy in its base position; since the null copy is still c-commanded by the antecedent (i.e. the subject), the phonological appearance of the coreferential pronoun in front of the subject does not affect the grammaticality of the sentence.

3.4.2.2. The Operation Move

Now, let us return to the operations within the computational system. Once the operation Merge has applied and the linguistic items are merged in their base positions, other operations have to apply in order to construct and deliver an optimal output. As mentioned earlier, the merged items have bundles of features, and some of these features are uninterpretable. In order to obtain a convergent derivation, the Principle of Full Interpretation requires that all the unvalued uninterpretable features must be dispensed with at a stage preceding LF. According to the early minimalist literature (Chomsky 1995), uninterpretable features are deleted by means of a feature checking mechanism, a process which makes the uninterpretable features "invisible at LF but accessible to the computation" (Chomsky 1995:280).

According to Chomsky, the process of feature checking forces the operation Move to apply. The operation Move takes the item which has uninterpretable features and raises it to a specifier position of a functional phrase where the uninterpretable features can be checked against the interpretable features of the head of that functional phrase. In the late stage of GB, feature checking was assumed to take place in the specifier positions of Agr(eement) phrases.

However, Chomsky (1995) eliminates the Agr phrases because these phrases are not interpretable at LF. Moreover, the Agr phrases constitute a potential violation of the Inclusiveness Condition which claims that no new features can be

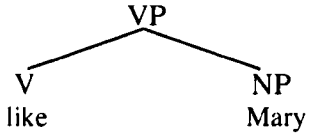
introduced by the computational system. Although Chomsky (1995) eliminates the Agr phrases, uninterpretable features are still assumed to be checked in specifier positions. He assumes that the process of feature checking takes place in the specifier position of TP, and the specifier position of vP, a projection that is headed by a light verb which immediately dominates VP.

Feature checking can take place overtly or covertly, hence the distinction between overt movement and covert movement. The former kind of movement means that the lexical item which has the uninterpretable features is raised from its canonical position to a higher specifier position in order to check its features. However, if the lexical item (i.e. the category) does not move overtly, a covert raising (i.e. covert movement) of its features is assumed; Chomsky (1995:261ff) calls the raising of uninterpretable features Move F. "The underlying intuitive idea is that the operation Move is driven by morphological considerations: the requirement that some feature F must be checked. The minimal operation, then, should raise just the feature F" (Chomsky 1995:262). However, in more recent years, Chomsky himself abandoned the idea of feature movement; he argues that the idea that there is no feature movement is an improvement which "is of some importance: feature movement is a complex operation, requiring some notion of "feature occurrence" that is not very clear" (Chomsky 2004: 108).

Under the earliest minimalist assumptions (i.e. Checking Theory), let us consider how the derivation of the simple English sentence *John likes Mary* proceeds; the description and the structures below show how the operation Merge, discussed in

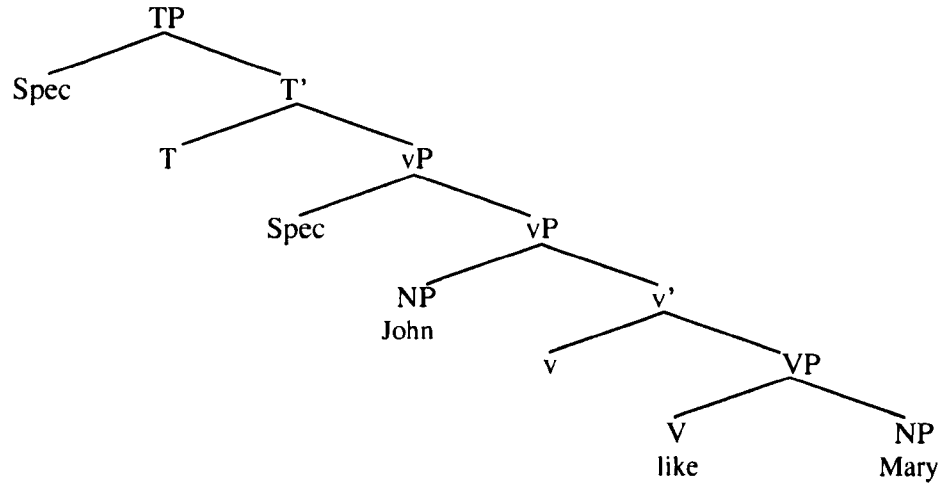
3.4.2.1 above, and the operation Move are involved in building structures. First, as in (7) below, the lexical verb *like* is merged with its complement, the object *Mary*, forming a VP.

(7)



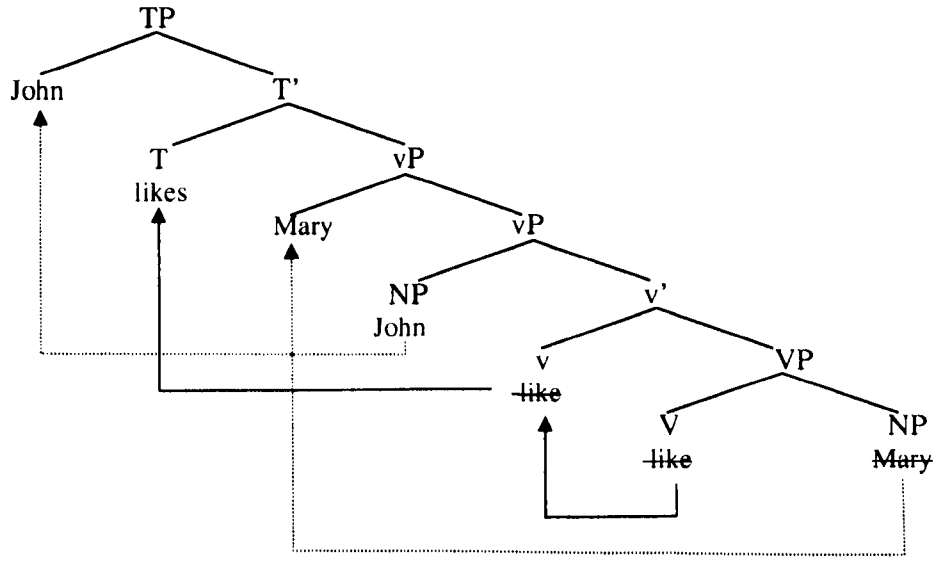
Assuming the VP-Internal Subject Hypothesis of Koopman and Sportiche (1991), which claims that the subject originates within the VP, the resulting VP in (7) above is merged with the functional head light which in turn is combined with the external argument (i.e. the subject *John*) resulting in a vP projection. For the purpose of accusative case checking an outer specifier of vP is 'constructed' (cf. Chomsky 1995: 353 ff). After that, vP is combined with the functional head T. T has an EPP feature which raises the subject from the specifier of vP to the specifier of TP; the specifier of TP is the position in which the subject lands for the purpose of feature checking. These steps are depicted in (8) below.

(8)



Once the structure in (8) above is built the operation Move applies. As the tree diagram in (9) below shows, the verb moves from its base position to lexically support v (Radford 2004), then it moves to join T. The object and the subject move to the outer specifier of vP and the specifier of TP respectively. In addition to feature checking, the operation Move also satisfies the EPP feature. EPP is a feature carried by the functional heads such as T; it requires that the specifier positions must be filled. Notice that the dotted arrows indicate the paths of the movement of the object and the subject.

(9)



The movement of the object across the subject to the outer specifier of vP in (9) above predicts a violation of the economy conditions; the Shortest Move restriction seems to be violated because the object can move across a potential mover, i.e. the subject in the inner specifier of vP. This situation is accounted for by resorting to the Equidistance principle stated in (10) below.

(10) γ and β are equidistant from α if γ and β are in the same minimal domain.

(Chomsky 1995:356)

According to Chomsky, the minimal domain of a given head includes the complement of the head as well as its specifier(s). Since both the object and the subject in (9) above are contained within the same minimal domain of vP, the outer specifier is accessible by the object. In other words, the subject in the inner

specifier of vP does not block the movement of the object to the outer specifier. By the same token, the subject can move across the object in the outer specifier to a higher position, i.e. the specifier of TP (cf. Hornstein, Nunes and Grohmann 2005). However, the subject cannot move from the inner specifier to the outer specifier as Chomsky argues; I shall clarify Chomsky's argument in detail in chapter six (cf. section 6.5.1.2 below).

After the introduction of the operation Agree (see 3.4.2.3 below) in the work of Chomsky (2000 and later), the role of the operation Move is restricted. Move applies only to satisfy the EPP feature.

3.4.2.3. The Operation Agree

According to Chomsky (2000), the feature-driven movement can be eliminated in favour of a long-distance agreement relation that matches the interpretable features with their uninterpretable counterparts. This kind of relation is referred to by Chomsky (2000) as the Agree operation. the Agree operation captures all the feature-deletion results achieved by Move without moving elements from their positions; this means that the Agree operation is arguably more consistent with Chomsky's (1995) economy considerations, i.e. the Principle of Economy.

Agree operates under the free operation of Match. The operation Agree establishes a relation between two elements, providing that these two elements are active in that they have matching unvalued features. In other words, Agree

relates *a probe* with a matching *goal*. The probe and the goal have to be active; the probe must have unvalued features, i.e. φ-features, which can be valued by matching them with their valued counterparts on the goal. Likewise, in order to be active, the goal must have an unvalued feature, namely the Case feature, which is valued by the matching-valued feature on the probe.

Furthermore, the two agreeing elements, i.e. the probe and the goal, have to be in a certain configuration; the probe agrees with the closest goal it c-commands. The outcome of the Agree operation is that all the unvalued uninterpretable features of both the probe and the goal are valued and deleted. Chomsky's (2001) definition of Agree is reformulated in (12) below (cf. Chomsky 2001:122 and Carstens 2000:349ff).

(12) The probe α agrees with the goal β providing that:

a. α has uninterpretable φ-features.

b. β has matching interpretable φ-features.

c. β is active by virtue of having an unvalued Case feature.

d. α c-commands β.

e. There is no potential goal γ intervening between α and β.[7]

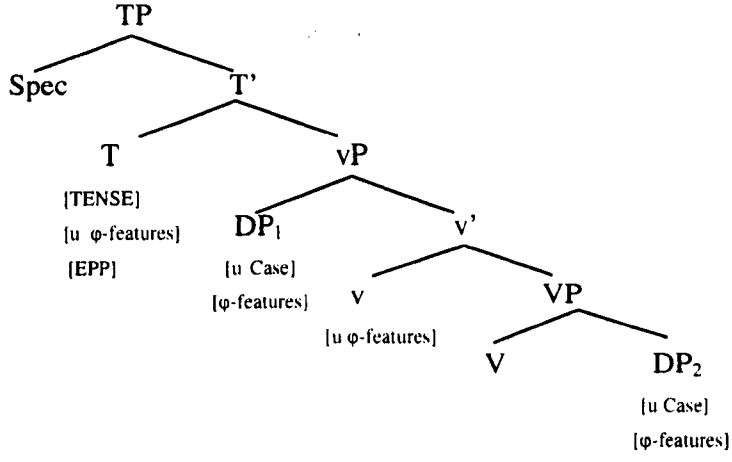
The definition of Agree above implies that all the offending uninterpretable features are deleted. The deletion of these features paves the way for a convergent

[7] However, Hiraiwa (2001) suggests that an intervening goal γ does not block the Agree relation between the probe and a lower goal if the goal γ itself is probed by the same head. I will be discussing Hiraiwa's theory in detail in chapter four.

derivation. In SVO languages, English for example, T has an obligatory EPP feature; T has a specifier position that has to be filled. The operation Agree cannot satisfy the EPP feature. Consequently, the 'last resort' operation Move applies. However, Chomsky (2001) assumes that the operation Agree is a prerequisite for the operation Move; the latter is dependent on the former.

Consider the tree diagrams in (13) and (14) below. They show how the derivation proceeds under the assumptions of the Agree-based theory. The tree diagram in (13) below shows the stage of merging the items with their features; the uninterpretable features are unvalued, while the interpretable ones are valued.

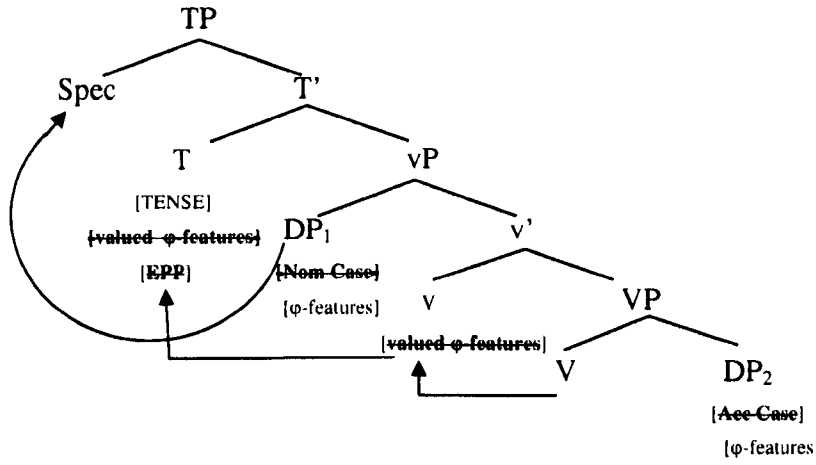
(13)



The tree diagram in (14) below shows the process of valuation and deletion of uninterpretable features via Agree. The lexical verb V adjoins to the functional head v which probes down and locates the object DP_2 with the matching uninterpretable features. The uninterpretable φ-features of v and the

uninterpretable Case feature of DP_2 are valued and deleted. After that, the verb moves and adjoins to T. Having its φ-features unvalued, the probe T searches down for a matching goal. The relevant goal is DP_1, the subject which occupies the specifier position of vP. The Agree relation values and deletes the uninterpretable features of T. However, T possesses an EPP feature which needs be satisfied. Therefore, the subject is raised by the operation Move from the specifier position of vP to satisfy the EPP feature of TP. Notice that the strikethrough indicates the deletion of the uninterpretable features.

(14)



It is worth mentioning that Chomsky (2004) replaces the term Move by Internal Merge. Internal Merge is a displacement operation that takes an item from a position and merges it in a higher position; such an operation, which occurs within the structure, is contrasted with the operation External Merge, or Merge which is discussed in 3.4.2.1 above. External Merge differs from Internal Merge

in that it applies earlier than Agree and it involves selecting items from the numeration (cf. section 3.4.1 above).

It should be noted also that the operation Agree constitute an important part of Phase Theory introduced in Chomsky's recent work (Chomsky 2000 and later). The following section is an overview of the latest development within the MP.

3.5. Recent Minimalist Developments

3.5.1. Phases

Phase Theory introduced in Chomsky (2000 and later) constitutes the main departure of the recent MP (Chomsky 2000, 2001, 2004 and 2005) from the earliest version of the MP (Chomsky 1993 and 1995). The phase is a unit of syntactic computation and the head of the phase is responsible for triggering syntactic operations (Chomsky 2005).

Chomsky argues that the derivation proceeds phase by phase and spellout applies cyclically. This means that uninterpretable features are valued and deleted at the phase level. Once the derivation of the phase is completed, the phase is transferred to the LF and PF interface levels. Once this is complete, the phase becomes inert in the sense that its domain becomes inaccessible to the higher probes for further operations. However, the head and the left peripheral edge of the phase can be involved in a further operation; the derived phases have to conform to the cyclicity condition, known as the phase impenetrability condition, which is stated in (15) below.

(15) In Phase α with head H, the domain of H is not accessible to operations outside α, only H and its edge are accessible to such operations.

(Chomsky 2000:108)

Chomsky explains the condition in (15) above by saying that the "cycle is so strict that operations cannot "look into" a phase α below its head H. H itself must be visible for selection and head-movement, hence its SPECs as well" (Chomsky 2000: 108).

Chomsky (2000, 2001) assumes that only CP and vP define phases, while TP is not a phase (see below). However, in Chomsky's most recent work, the vP phase is refined to v*P phase, where "v* is the functional head associated with full argument structure, transitive and experiencer constructions" (Chomsky 2005:10). The main property of phases is that their heads contain φ-features. TP is not assumed to be a phase because its head does not contain tense or φ-features (Chomsky 2005). Nonetheless, as the following section will show, in finite clauses, C transmits its features to T.

3.5.2. Feature Inheritance

Contra Chomsky (1995, 2000, 2001), Chomsky (2005) argues that T lacks φ-features and tense feature in the lexicon. Therefore, TP cannot act as a phase. Nevertheless, Chomsky argues that TP is a derivative phase in the sense that it inherits features from C. Put differently, if selected by C, T projects these

features, otherwise "it is a raising [...] infinitival, lacking φ-features" (Chomsky 2005:10). When probing down for a matching goal, T is in fact valuing the features of C. In other words, C and T form a complex probe which agrees with the matching goal. The matching goal can remain in its base position with its uninterpretable features deleted via Agree, "or it can raise as far as SPEC-T, at which point it is inactivated, with all the features valued, and cannot raise further to SPEC-C" (ibid).

The relation between v*, the head of the phase v*P, and V the head of its complement, parallels the relation between C and T. The head of v*P transmits its features to V. Chomsky (2005) claims that the phase heads C and *v contain two types of features: Agree features (φ-features), and the Edge feature, in addition to a tense feature on C. T and V, the heads of complements, inherit the Agree features from C and v*. The Edge feature triggers movements to the specifier position of the phase head. Consequently, the distinction between A-movement and A'-movement arises. Chomsky argues that only the specifier of CP and the extra specifier of v*P are A'-positions.

In fact, Chomsky's assumption that the DP goal in the specifier v*P can be 'inactivated' in the specifier TP might be thought of as a drawback to checking theory. It is not clear under the feature-inheritance approach, why the subject moves optionally from the specifier of v*P to the specifier of TP. I shall return to

this issue and to Fassi Fehri's refinement of Chomsky's idea in chapter four below.

3.6. Summary

This chapter has provided an overview of the MP and its development over the decade starting with Chomsky (1995) up to Chomsky (2005). In the earliest version of the MP, uninterpretable features trigger the operation Move. However, in recent version of the MP, i.e. after the introduction of the operation Agree, the role of Move is suppressed; the operation Move is no longer motivated by the need to value and delete uninterpretable features, rather, it occurs to satisfy the EPP feature (or the Edge feature in Chomsky 2005) - a feature, if it exists, it requires the specifier position of the functional head to be filled.

Unlike Move, the operation Agree is more consistent with the economy principle, as the uninterpretable features are valued and deleted in situ. Also, the Agree model seems to offer an elegant account for the word order variation in Arabic; I will assume that the Case feature in particular does not motivate movement as it can be valued under Agree (cf. Chapter four). Consequently, I argue that the movement of noun phrases from lower positions to preverbal positions is not motivated by the need to satisfy Case feature. Furthermore, I claim that the preverbal noun phrases in MSA SVO sentences are Topics. In JA, on the other hand, I assume that the preverbal noun phrases are subjects. The question that needs be answered then concerns the nature of the preverbal positions. I assume

that the preverbal noun phrases in JA are located in the specifier position of TP. With regard to MSA, I adopt Rizzi's (1997) split CP hypothesis and argue in chapter five that the preverbal noun phrases are contained with the Topic layer.

CHAPTER FOUR: Structural Case in Arabic

4.1. Introduction

Case and Case related issues have constituted intriguing topics of discussion in the literature of transformational grammar. Syntactic Case, or Abstract Case as it is referred to sometimes, is conceived of as a distributional feature of noun phrases. It is concerned with explaining the positions occupied by noun phrases and the relations which hold between noun phrases and the Case assigning heads. Within the literature of GB and the MP, there exist three prominent analyses of Case. The first analysis assumes that Case is assigned to nominals under government, or in specifier-head configurations (Chomsky 1981). The second approach assumes Case-*checking* rather than Case-*assignment*; nominals are introduced with their Cases specified, but a given Case needs be checked in a relevant specifier position (Chomsky 1993, 1995). The third and most recent analysis conceives of Case as part of the Agree relation between the features of a given head and the features of a nominal (Chomsky 2000, 2001, 2005).

As mentioned in chapter two above, MSA and JA show morphological differences. In the former variety, nominals have morphological exponence of case. The morphological case markers reflect syntactic Case as I assumed in chapter one above.

This chapter is concerned with how the Case feature is valued. Mainly, the chapter deals with how Case on the preverbal noun phrases in Arabic, which does

not seem to be associated with the tense and agreement on the verb, is valued. In addition, the chapter deals with the instances of nominative case on the subject as well as the nominal complement in zero copula sentences. However, the discussion of Case cannot be disassociated from the discussion of the general structure of zero copula sentences. I claim that zero copula sentences are full CP's. Also, in order to account for the nominative case on nominal complements, I assume that the structure of zero copula sentences contains a functional projection that compares to vP; I refer to the proposed projection as nP. Assuming this, the phase-based analysis I introduce eliminates the notion of the default case – a type of case that is assumed to be assigned to noun phrases when there is no Case assigner (Fassi Fehri 1987, 1993).

The chapter is organised as follows. Section 4.2 reviews Case Theory and its development. Section 4.3 discusses the Arabic default case and identifies the structures in which such case exists. Some instances of unusually assigned case in Icelandic, Lithuanian and Japanese are discussed in section 4.4, which also shows how the default case in Arabic differs from the unusually assigned case in these languages. Section 4.5 deals with the issue of Case within the MP; it discusses the challenges that the C-T complex (i.e. C and T as a single probe) analysis encounters when applied to Arabic data. Also, in this section Fassi Fehri's (2005) analysis is discussed. The proposed analysis is introduced in section 4.6. Finally, section 4.7 concludes the chapter.

4.2. Case Theory

4.2.1. Structural Case vs. Inherent Case

Chomsky (1981) distinguishes between two types of Case: *structural Case* and *inherent Case*. Structural Case is defined in terms of structural configurations; the Case assigner must c-command the Case recipient. On the other hand, inherent Case depends on the thematic relation between the Case assigner and the Case assignee.[1] Nominative case and accusative case are typical instances of structural Case; while the latter is assigned to the object by the transitive verb, the former is assigned to the subject by T; therefore, nominative is usually associated with the tense and the agreement pattern shown by the verb.

4.2.2. The Development of Case Theory

Since the introduction of the *Case Filter* (Chomsky 1981), Case has played a major role in deriving structures. The *Case Filter*, stated in (1) below, is a well-

---

[1] Inherent Case is strongly associated with theta role assignment. The relation between inherent Case assignment and theta role assignment is required by Chomsky's (1986b) Uniformity Condition on Case marking:

> i. If α is an inherent Case-marker, then α Case-marks NP if and only if α theta-marks the chain headed by NP.
>
> (Chomsky 1986b:194)

According to Chomsky (1986b), the inherent Case assigners are [+N], while the structural Case assigners are [-N]. A typical instance of inherent Case is the genitive Case which is assigned to the possessor by the head noun in a noun phrase such as *John's arrival at the school.* Inherent Case in Arabic is observed in the so called Construct State Construction (i.e. the possessive structure) where the possessor is assigned genitive case, as ii below shows:

> ii. kitaab-u al-walad-i
> book-nom the-boy-gen
> "The boy's book."

Notice that inherent Case is not discussed here as it is beyond the scope of this study.

formedness condition that prohibits structures that contain noun phrases without Case.

(1) Case Filter: *NP if NP has phonetic content and has no Case.

(Chomsky 1981: 49)

However, at a later stage, Chomsky (1986b) assumes that the Case Filter follows from a more general condition, which is the *Visibility Condition*. The Visibility Condition claims that Case correlates with theta role assignment. Specifically, a noun phrase must be assigned Case in order to be visible for theta-role assignment. After the introduction of the MP, Case is assumed to be an unvalued uninterpretable feature (cf. chapter three above); such a feature is required by the principle of Full Interpretation to be valued during the course of the derivation (Chomsky 1995, 2000). In the literature, different mechanisms for Case assignment have been proposed. The development of Case Theory is outlined in 4.2.3 below.

4.2.3. Models of Case Assignment

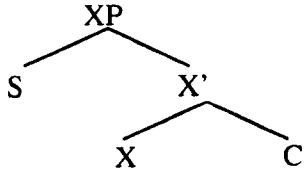
We can identify three substantial mechanisms of Case assignment. The three mechanisms are related to certain stages within the Chomskyan transformational theories of syntax. In the early GB (Chomsky 1981), Case is assumed to be assigned under government. In the late stage of GB (Chomsky 1986b) and the early stage of the MP (Chomsky 1993, 1995), it is argued that Case is checked in

specifier positions of certain functional heads. Under the recent minimalist assumptions (Chomsky 2000, 2005), Case is analysed as part of the Agree system; it is valued by the means of matching it with the corresponding valued interpretable feature on a given functional head.

4.2.3.1. Case Assignment under Government

Within the GB model, Case is assumed to be assigned under certain configurations. The head which assigns Case and the noun phrase to which Case is assigned must be either in a head-complement configuration, or in a specifier-head configuration. The structure in (2) below schematizes the two configurations of Case assignment.

(2)



The head X in (2) above assigns accusative case to the complement C and nominative case to the specifier S. In both configurations, the head which assigns Case c-commands the noun phrase to which the Case is assigned.[2]

[2] It should be noted that in the structure in (2) the head X c-commands the specifier S under Aoun and Sportiche's (1983) definition of c-command which is referred to now as m-command. According to Chomsky (1986a), X m-commands every element it c-commands, in addition, it m-commands the specifier S because the maximal projection of X dominates S.

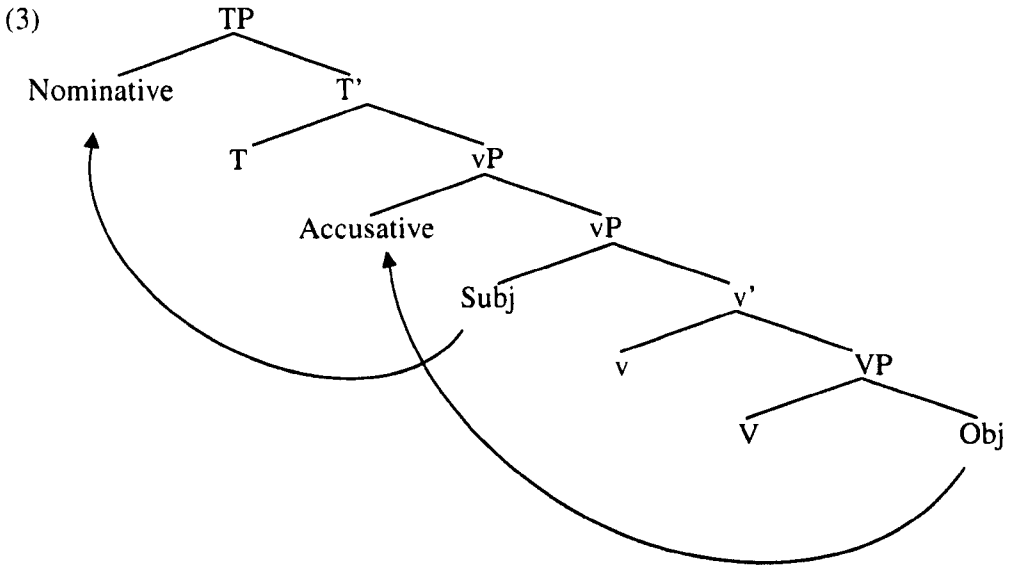
4.2.3.2. Case Checking Model

The later stage of GB (Chomsky and Lasnik 1993, Chomsky 1995: Chapter 2) witnessed a considerable change in the mechanism of Case assignment. The basic postulation during this stage is that Case is not assigned but checked. Nominals are assumed to be selected from the Numeration with their Cases specified. However, the predetermined Case needs be checked during the course of the derivation (Chomsky 1993).

Building on Pollock's (1989) *Split Infl Hypothesis*, Chomsky (1991, 1993) argues for the existence of two different functional projections, namely, AgrO(bject) Phrase and AgrS(ubject) Phrase, the former (i.e. AgrOP) dominates VP, while the latter (i.e. AgrSP) dominates TP. Kayne (1989) and Chomsky (1993) argue that the specifiers of AgrOP and AgrSP provide the positions for accusative Case and nominative Case checking respectively.

After the elimination of Agr projections in Chomsky (1995), Case is still assumed to be checked in a specifier position. Chomsky (1995) suggests that VP is immediately dominated by a light verb which has two specifier positions. As (3) below shows, the external argument (i.e. the subject) originates in the inner specifier. The outer specifier is the position in which the object can check its accusative Case. The nominative Case of the subject, on the other hand, is checked in the specifier of TP. (cf. chapter three above).

(3)



4.2.3.3. Feature Matching Model

Under the recent assumptions of the MP (Chomsky 2000 and later), Case is assumed to be an unvalued uninterpretable feature which has to be valued and eliminated via the Agree operation prior to the LF interface level. Therefore, Case is dealt with as part of the probe-goal system; it is valued under Agree operation (discussed in chapter three above). Accusative Case results from the Agree relation between light v and the object, whereas nominative Case results from the Agree relation between T and the subject.

It should be noted that, in contrast with the Case assignment model outlined in 4.2.3.1 and the Case checking model outlined in 4.2.3.2 above, Case under the feature matching model does not motivate movement; this means that the latter model observes the economy considerations of the MP as movement is driven by

the need to check certain features of the targeted position (cf. section 3.2 and section 3.4 above).

4.3. On Arabic Case

Structural nominative and accusative cases are present in Arabic structures. Evidence supporting their structural status can be drawn from the comparison between the active sentence in (4a) and its passive counterpart in (4b). Notice that in (4a) the active verb shows agreement with its nominative subject. Conversely, in (4b) the passive verb shows agreement with the theme subject (the object in the active sentence), which appears carrying nominative case.

(4) a. ŝahada al-a'wlaad-u al-mu3lim-at-a (MSA)
watched.3ms the-boys-nom the-teacher-f-acc
"The boys watched the teacher."

b. ŝuhid-at al-mu3lim-at-u (MSA)
was.watched.3s-f the-teacher-f-nom
"The teacher was watched."

However, there are certain structures in Arabic where the nominative case does not seem to be assigned by T.

4.3.1. The Default Case

As discussed in chapter two above and as the sentences in (4) above show, subjects and objects in Arabic are assigned nominative and accusative cases

respectively. However, there are certain structures where the noun phrases are assigned what is referred to as default case. Default case, as Schütze (2001) argues has nothing to do with the Case Filter, nor is it assigned by syntactic means. A number of authors have argued that the default case in Arabic is resorted to only when no Case assigners are available (Fassi Fehri 1987, 1993 and Ouhalla 1994).

4.3.2. Where Does the Default Case Exist in Arabic?

Postverbal subjects in Arabic are invariably nominative. However, the preverbal noun phrases, be they subjects or topics, can appear carrying case other than the nominative.[3] Fassi Fehri (1993:45) argues that "[w]hile subjects of VSO and VOS structures are Nominative under government by internal I, Cases of subjects in SVO structures indicate that the latter are accessible to external governors, which assign them non-nominative Case". Fassi Fehri adds "subjects in SVO sentences receive default nominative only in the absence of external governors. Otherwise, they receive specific structural cases from the latter" (ibid). He considers nominative a last resort Case; "it seems that nominative is the last resort case for preverbal subjects, and that when another case is available the subject must take it" (Fassi Fehri 1993:33).

The instances of default case in Arabic are always nominative and they are present in two kinds of structures. First, in structures where the verb is preceded

[3] The issue of whether the preverbal noun phrases are topics or subjects is dealt with later in chapter five.

by a noun phrase, the preverbal noun phrase is assigned nominative case which does not seem to result from a relation between that noun phrase and T, the functional head. Consider (5a) below. Second, in zero copula sentences which lack overt verb forms, both the subject and the complement are assigned nominative case, as (5b) below shows.

(5) a. al-a'wlaad-u ðarab-tu-hum (MSA)
the-children-nom beat-I-them
"The children, I beat them."
(Fassi Fehri 1993:28)

b. ar-rajul-u mareeð-un (MSA)
the-man-nom sick-nom
"The man is sick."
(Fassi Fehri 1993:33)

In order to account for the Case assignment dichotomy, and building on Chomsky's Minimality Condition, Fassi Fehri (1993) assumes that it is the type of AGR(eement) that determines nominative case.[4] The functional head T functions as a strong protector for the nominative case assigned to the subject in VSO and VOS sentences. Since AGR in SVO languages such as English is non-nominal, Fassi Fehri (1993:75) concludes that nominative case "is assigned/checked in Spec of AGR for SV languages, which is strong enough to

[4] Chomsky's (1986a) Minimality Condition on government claims that the projections of an intermediate heads function as barriers in the sense that they protect their domains from external governors. In fact, Chomsky's (1986a) definition of Minimality Condition is in way similar to Chomsky's (2001) definition of Agree stated in (12) in the previous chapter (cf. Collins 2002).

do so, and to protect AGR subjects from external governors". Conversely, "AGR in VS languages (when it occurs) is only nominal in character" (Fassi Fehri 1993:75). Therefore, it is weak and cannot protect the noun phrases from external Case assigners.

In zero copula sentences, on the other hand, default nominative case is assigned because, as Fassi Fehri (1993:48) argues, T "does not qualify as a protector, being lexically unsupported." Contra Fassi Fehri (1993) and in line with Fassi Fehri (2005), however, I argue later in section 4.6.2 below that the nominative case on the subject in zero copula sentences does not pose any challenge as it is assigned by null T. Adopting Chomsky's (2005) Phase Theory, I assume that the null T inherits its features from C.

In fact, Arabic is not unique in having instances of unusually assigned case, as this phenomenon has been attested in other languages.

4.4. Cross-linguistic Instances of Unusually Assigned Case

4.4.1. Icelandic Quirky Case

Icelandic recognises an unusual type of case which has become known in the literature as *quirky case* (Boeckx 2000; Schütze 2003; Sigurðsson 1992 and Sigurðsson 2004 among many others). Levin and Simpson (1981) define quirky case as the substitution of the nominative case on the subject and the accusative case on the object by non-nominative and non-accusative cases respectively. The

idiosyncratic use of case is determined by the type of the verb in Icelandic. The Icelandic sentences in (6) below are illustrative. The first sentence, (6a), has an ordinary nominative subject and ordinary accusative object. By contrast, the second sentence, (6b), has a subject and an object that carry dative and nominative cases respectively.

(6) a. Við kusum stelpuna (Icelandic)
we.nom elected-1p girl-acc
"We elected the girl."
(Sigurðsson 1992:2)

b. Henni höfðu leiðst þeir (Icelandic)
her.Dat had-3p bored.at they.nom
"She had found them boring."
(Sigurðsson 2000:87)

According to Boeckx (2000) and Sigurðsson (2004), the behaviour of the quirky (non-nominative) subjects is similar to the behaviour of the ordinary (nominative) subjects with regard to a number of syntactic phenomena such as reflexivization, inversion, and raising. However, the crucial difference between the ordinarily case-marked subjects and objects (i.e. nominative subjects and accusative object) on the one hand, and the quirky case assigned subjects and objects on the other hand, is concerned with the agreement shown by the verb. The Icelandic verb does not show agreement with the quirky subject. Rather, the Icelandic verb agrees with the nominative noun phrase, be it the ordinary nominative subject or

the quirky nominative object as (6a) and (6b) above show respectively (cf. Taraldsen 1995 and Schütze 2003).

However, when "there is only one argument – the Quirky Case-marked subject – agreement does not obtain between the verb and the subject. The verb takes what has come to be called "default agreement" (a form homophonous with the third person singular neuter)" (Boeckx 2000:357). Consider the sentences in (7) below, where the verb shows singular agreement despite the fact that the (dative) subject is plural.

(7) Stelpunum var hjálpað (Icelandic)
the girls.dat was3s helped $s_{(neuter)}$
"The girls were helped."

(Sigurðsson 1992:3)

Furthermore, Boeckx (2000:357) notes that when "there is another argument – an "object", agreement depends on the Case of the latter; if the Case of that argument is dative, genitive or accusative, no agreement obtains [...] If the Case is nominative, the verb agrees with the nominative NP, not with the quirky subject", as the sentences in (8) below show. Notice that Boeckx (2000) attributes (8a) to Yip et al. (1987).

(8) a. Mig iðrar þess (Icelandic)
I.acc repent s.default this.gen
"I repent this."

(Boeckx 2000:357)

b. Henni voru gefnar bækurnar (Icelandic)
her.dat were3p given books.nom
"She was given the books."

(Sigurðsson 1992:5)

In (8a), neither the subject 'Mig' nor the object 'þess' is nominative, therefore the verb shows default agreement. On the other hand, (8b) contains a nominative object with which the verb shows non-default agreement (i.e. it agrees with the plural nominative object 'bækurnar').

It has been observed that the verbal agreement is not associated with the position occupied by the nominative noun phrase. Sigurðsson (2000) claims that the agreement pattern shown by the Icelandic verb is associated with the nominative noun phrase irrespective of the position it occupies. Also authors such as Taraldsen (1995), Sigurðsson (1996, 2004), Boeckx (2000), and Schütze (2003) among many others have observed that the verbal agreement with the ordinary nominative subject in Icelandic is full and obligatory. On the contrary, the agreement shown by the verb with the quirky nominative object is partial in that the verb shows only number, but not person, agreement when the quirky object is first or second person (cf. Boeckx 2000: 358).

The typical analyses for the Icelandic quirky case assume disassociation between the EPP feature and the relation Agree, under which the structural Case is valued. The former (i.e. EPP feature) is satisfied by the quirky (non-nominative) subject,

which occupies the specifier position of TP. On the other hand, the agreement on T and the nominative case on the object result from a long-distance Agree relation between T and the object. Put differently, the dative case on the quirky subject as in (8b) above is inherent. This means that this Case (i.e. inherent) does not trigger agreement with T. T itself has a set of uninterpretable features that need be valued, also the object has an unvalued Case feature which cannot be valued as accusative by the predicate. The probe T locates the object as an active goal. Consequently a long distance Agree relation is established between the two elements, i.e. between T and the quirky object (see Boeckx 2000; Sigurðsson 2000; and Schütze 2003).

The default nominative case in Arabic differs significantly from the quirky nominative case in Icelandic. While the latter correlates with the agreement shown by the verb, which means that the quirky nominative is the outcome of an Agree relation between T and the quirky object, the former is not associated with agreement. The verb shows agreement only with the nominative subject; as mentioned earlier, the default nominative case is resorted to only when no overt c-commanding heads exist. Thus, the analysis of quirky case does not capture the default case facts in Arabic.

4.4.2. Lithuanian Left-Edge Case

Objects in Lithuanian are typically accusative. Lithuanian resembles many languages, Arabic and English for example, in that the accusative object is not

affected by the tense of the verb; the objects of finite and non-finite verbs are equally assigned accusative case. Consider the Lithuanian sentences in (9) below. The two sentences show that the objects carry accusative cases and follow the finite verb, as in (9a), and the embedded non-finite verb, as in (9b).

(9) a. Dailininkas nutapė paveikslą (Lithuanian)
artist-nom painted picture-acc
"The artist painted a picture."

(Ambrazas et al. 1997:605)

b. Jis nori [**aplankyti** **draugą**] (Lithuanian)
he wants to-visit friend-acc
"He wants to visit a friend."

(Franks and Lavine 2006: 240)

However, Ambrazes et al. (1997) and Franks and Lavine (2006) observe that, depending on the clause structure, the object of the embedded non-finite clause can carry case other than accusative. The object can be dative, genitive, or nominative. Moreover, the authors mentioned above note that the non accusative case-marked object, unlike the accusative object, must precede the non-finite verb, as the contrast between (9b) above and (10) below shows.

(10) Man nusibosta [**laikraščiai** **skaityti**] (Lithuanian)
me-dat is-boring newspapers-nom to-read
"It is boring for me to read newspapers."

(Franks and Lavine 2006: 257)

According to Franks and Lavine, the preverbal object in the embedded clause in (10) above may carry case other than nominative; it can be genitive or dative, however it cannot appear with accusative case. All the instances of non-accusative case which are associated with the preverbal objects in the embedded clauses are referred to by Franks and Lavine as the 'LEFT-EDGE'-Case. These authors argue that the embedded non finite verb does not determine the choice of the left-edge case. Rather, they hypothesise that the values of the left-edge case as dative, genitive or nominative are governed by the type of the infinitival clause or the type of the matrix verb.

As far as dative case is concerned, it is assigned to the object when the embedded clause functions as a purpose clause. However, when the infinitival purpose clause is used with a motion matrix verb, genitive case is assigned to the object. Nominative case, on the other hand, is assigned to the embedded object when the embedded clause appears as a complement of a matrix 'Experiencer' verb. Franks and Lavine (2006:257) observe that with nominative objects "the main-clause verb is 'defective' in the sense that it fails to show subject-predicate agreement: nominative objects in Lithuanian embedded infinitivals occur ONLY when the matrix predicate is non-agreeing."

While Franks and Lavine (2006) recognise the fact that under minimalist assumptions, Case does not motivate movement, their analysis assumes that the left-edge Case-assigned objects move to an outer specifier position of vP so that

they can be assigned a structural Case by a higher head. Franks and Lavine argue that dative, genitive and nominative cases on the objects of the embedded clauses are assigned by different higher heads. However, none of the three cases is assigned by T, hence the matrix verb does not show agreement with the nominative object.

Franks and Lavine hypothesize that the embedded purpose clause is a CP which is adjoined to vP. Correspondingly, they argue that the assignment of the left-edge dative case takes place within the embedded CP. The (silent) embedded complementiser "is responsible for both the purpose semantics of the embedded clause and the assignment of dative case" (Franks and Lavine 2006:274).

In contrast to dative case, genitive case is associated with motion verbs. Franks and Lavine analyse the clausal complement of the motion verb as a TP; they argue that 'aspect' plays a role in the purpose infinitival clause which is used as a complement of a motion verb. Building on this, Franks and Lavine (2006:276) claim that "the source of the genitive case on the LE [left-edge] object is the main clause motion verb's aspectual features". On the other hand, nominative case is assigned to the left-edge object in the same configuration under which genitive case is assigned. However, Franks and Lavine argue that when the matrix verb is of the type that assigns *Experiencer* theta role to its subject "[a]spect is invoked to mark a lack of transitivity", the result is that "nominative is assigned to [...] the object of an embedded infinitive" Franks and Lavine (2006:282).

The left-edge nominative case in Lithuanian differs from the quirky nominative case in Icelandic in that it is not associated with the agreement on T. However, the analysis proposed in Franks and Lavine (2006) is not applicable to Arabic default case. The left-edge case is different from the default case in Arabic, in that it is assigned by a higher head. The value of the left-edge case depends on the type of the c-commanding head and on the properties of the matrix verb.

A different kind of unusually assigned Case is attested in Japanese. This language allows the occurrence of two nominative cases in a single clause. The analysis proposed to account for multiple nominative cases in Japanese might seem to be applicable in part to default case in Arabic zero copula sentences.

4.4.3. Japanese Multiple Nominative Cases

Japanese sentences with multiple nominative cases bear a prima facie resemblance to the Arabic zero copula sentences where both the subject and the nominal complement carry nominative cases, as in (5b) above. It has been observed in certain structures in Japanese that more than one nominative noun phrase can coexist in a single clause (Takezawa 1987 and Hiraiwa 2001). As (11) below illustrates, both the subject *John* and the object *nihongo* are inflected with the nominative particle to mark their nominative cases. Notice that the gloss of Takezawa's (1987) example is slightly modified.

(11) John-ga nihongo-ga wakaru (Japanese)
John-nom Japanese-nom understand
"John understands Japanese."

(Takezawa 1987:24)

Takezawa claims that the nominative case in Japanese is a reflex of a relation between T and both nominative noun phrases. Also, Niinuma (2000) argues that the source of the nominative case on the Japanese object, as in (11) above, is T. Therefore, as Niinuma observes, nominative objects in Japanese appear normally in tensed clauses. Heycock (1993), Tateishi (1991), and Ura (2000) among others argue that T can assign more than one nominative case in a given clause.

In fact, the assumption that multiple nominative cases in a given clause are assigned by a single T head is consistent with the minimalist ideas only in a certain configuration. The head T can probe two goals providing that both goals are active and none of them is matched with a different head. Such a configuration is accounted for by assuming Chomsky's (2000) *Defective Intervention Constraint*, which I formulate as (12) below (cf. Chomsky 2000: 123). This constraint prohibits establishing an Agree relation between a probe (a head) and a goal (a nominal) when another goal intervenes between them.

(12) An Agree relation cannot be established between the probe α and the goal γ when the inactive goal β, which is matched with a different probe, intervenes between α and γ.

As (12) above states, β blocks the Agree operation if it is deactivated by a probe different from α. Taking this notion into consideration, Hiraiwa (2001) proposes the so called theory of Multiple Agree. He builds his theory on Chomsky's (2000, 2001) notions of Agree and the *Defective Intervention Constraint* stated in (12) above. In Hiraiwa's (2001) model, T, not C, is assumed to be the source of Φ-features because the idea of feature inheritance from C is introduced later in Chomsky (2005).

Under the assumptions of Hiraiwa's theory of multiple agree, the probe T has a set of [+multiple] Φ-features. Therefore, after T locates the first matching goal (i.e. the subject) it continues searching down for a further matching goal (i.e. the object). Hiraiwa argues that once the probe T locates the two matching goals, the Agree operation between T and the two matching goals applies. According to Hiraiwa, Agree between T and both the subject and the object is a single operation that applies once. In Hiraiwa's words, "AGREE applies to all the matched goals *derivationally simultaneously*, establishing AGREE (α, β, γ)" (Hiraiwa 2001:70).[5]

At first glance, Hiraiwa's (2001) model seems to be applicable to the Arabic zero copula sentences such as the one in (5b) above, and (13) below.

[5] Hiraiwa (2001) claims that a Multiple Move operation applies in Japanese structures in addition to the operation of Multiple Agree. Multiple Move is a single operation that takes the two goals from their base positions to multiple specifiers of the agreeing head (i.e. specifiers of the probe) (cf. Hiraiwa 2000).

(13) AHmad-u Tabeeb-un (MSA)
Ahmad-nom doctor-nom.indef
"Ahmad is a doctor."

As I already mentioned in chapter two above, the zero copula sentence such as (13) above has a present tense interpretation; its past and future counterparts must contain overt forms of the verb. Adopting Phase Theory, I argue that the sentence above is a CP, where C is the source of Φ-features that trigger the Agree operation. T, which is phonologically null, inherits its features from C and searches for a matching goal. One possible way to account for (13) above is to assume, in line with Hiraiwa (2001), that T agrees with both the subject *Ahmad-u* and the complement *Tabeeb-un*. The result of this multiple agree operation is that the case features of both elements (i.e. the subject and the complement) are valued as nominative.

However, close investigation reveals that this claim is problematic. There are at least two primary reasons to reject the multiple agree approach. First, when the overt complementiser *inna*, which is an accusative case assigner (Majdi 1990), introduces the zero copula sentence in (13) above, it assigns accusative case only to the subject; the complement remains nominative, as the sentence in (14) below shows.

(14) inna AHmad-a Tabeeb-un (MSA)
comp Ahmad-acc doctor-nom.indef
"Indeed, Ahmad is a doctor."

If the claim that C agrees multiply with the subject and the complement in (13) above proves correct, then we would expect that the overt C in (14) above to assigns two accusative cases to the subject and the complement. However, this does not happen, as the ungrammaticality of (15) below indicates.

(15) *inna AHmad-a Tabeeb-an (MSA)
comp Ahmad-acc doctor-acc.indef
"Indeed, Ahmad is a doctor."

The contrast between (13) on the one hand, and (14) and (15) on the other hand suggests that the nominal complement is not accessible to C. Building on this, I argue that the complement is protected from external head by virtue of being dominated by a phase head (cf. section 4.6.2 below for detail). It should be noted that when the verbal copula is used, we find that the subject and the nominal complement carry different cases, the former is nominative and the latter is accusative:

(16) kaana AHmad-u Tabeeb-an (MSA)
was.3ms Ahmad-nom doctor-acc.indef
"Ahmad was a doctor."

Actually, the copular sentence which contains an overt form of the verbal copula, as in (16), is identical to the normal verbal sentences. Therefore, I assume that the source of the nominative case on the subject is T (with its features inherited from

C), whereas the source of the accusative case on the complement is v, the head of vP.

The second reason to reject the multiple agree approach for zero copula sentences has to do with the behaviour of sentences such as (17) below.

(17) inna al-bint-a_i ja'a mu3lim-u-haa$_i$ (MSA)
comp the-girl$_i$-acc came.3ms teacher.m-nom-her$_i$.gen
Literally: "indeed, the girl, her teacher came."
"Indeed, it is the girl's teacher who came."

In (17), the postverbal subject is nominative. The preverbal accusative noun phrase is associated with a pronominal element contained within the subject. Under the assumptions of Phase Theory, C is the source of Φ-features and tense feature. If Hiraiwa's multiple agree model works for Arabic, then, being valued by the same C head, both the preverbal noun phrase and the postverbal noun phrase in (17) above should carry the same case, namely, accusative case.

Fassi Fehri (2005) introduces a solution for this kind of case variation; he assumes a multiple model of case assignment which is different from Hiraiwa's model. Fassi Fehri's proposal will be discussed in section 4.5.3 below.

4.5. Minimalism and Arabic Case

In this thesis, Phase Theory is adopted. I argue that such a theory can capture the case facts in Arabic. However, the analysis which assumes that C and T behave

as a single probe seems to be challenged by case on the preverbal nouns phrases, because the Case value on these noun phrases does not seem to follow from an Agree relation with C-T complex. Fassi Fehri's (2005) refinement of Chomsky's (2005) work provides considerable insight into how Case on the preverbal nouns is valued. However, before I proceed to Fassi Fehri's account, a word is in order about how Arabic Case facts are captured within the minimalist frame work.

4.5.1. The Theory of Agree

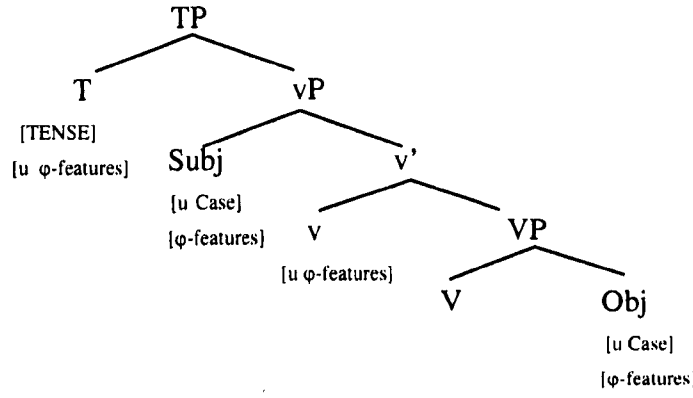
To put the discussion on a concrete footing, I follow Chomsky (2000 and later) in positing that Case in Arabic is an uninterpretable feature that needs be valued and eliminated during the course of the derivation. I also adopt Koopman and Sportiche's (1991) internal subject hypothesis and assume in line with Aoun et al. (1994) that Arabic subjects originate in the specifier position of vP. As mentioned in chapter two above, VSO is the unmarked word order in MSA, see (18a). On the other hand, SVO is the unmarked word order in JA, as (18b) below illustrates.

(18) a. kasara aŝ-ŝurTi-u al-baab-a (MSA)
broke.3ms the-policeman-nom the-door-acc
"The policeman broke the door."

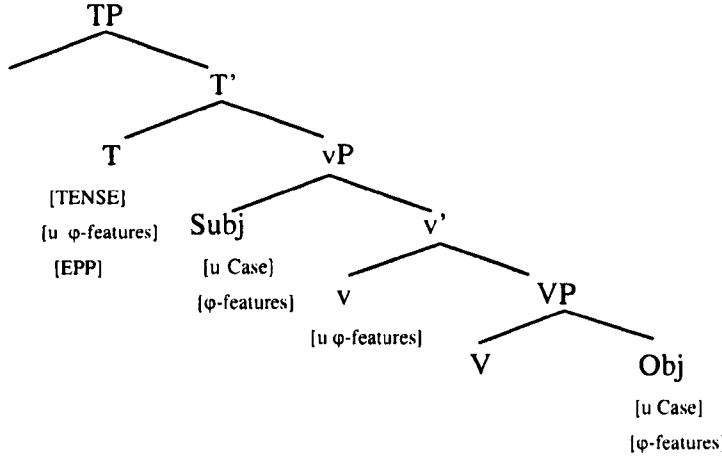
b. hum akal-uu aT-Ta3aam (JA)
they.nom ate.3m-p the-food
"They ate the food."

Assuming Chomsky's (2000) version of Agree Theory, the underlying structures of both sentences in (18) above would appear as represented in (19) below. The skeletal structure in (19a) shows that, in MSA, T does not have an EPP feature which means that the subject remains in situ. On the other hand, the JA structure, (19b), shows that T has an EPP feature, hence the subject has to move to the specifier of TP deriving the SVO word order.

(19) a.



b.



Now, after the Agree relation is established between v and the object on the one hand, and between T and the subject on the other hand, all the unvalued

uninterpretable features are valued and consequently deleted. Leaving the issue of agreement aside, the outcome of the Agree relation is that the object and the subject receive accusative and nominative case values respectively. The EPP feature, if it exists, is satisfied by movement of the subject from the specifier of vP to the specifier of TP (cf. Fassi Fehri 1993 and Benmamoun 2000b in addition to chapter five below which deals with subject positions and agreement).

Irrespective of the nature of the preverbal position, the crucial assumption made within Agree Theory is that the valuation of the Case feature 'inactivates' the noun phrase. In other words, the noun phrase becomes an inactive goal in the sense that it cannot enter in a new Agree relation. Then, if this analysis proves correct, we would expect that the preverbal subjects preserve their nominative cases, which is not the right expectation, as we can see from the examples below. While the preverbal subject in (20a) is assigned accusative case by the main clause complementiser, it is assigned accusative case by the matrix verb in (20b). When none of these case assigners exists, the preverbal noun phrase is nominative, as (20c) shows.

(20) a. inna al-kaatib-a zaara al-madeenat-a (MSA)
comp the-writer-acc visited.3ms the-city-acc
"Indeed, the writer visited the city."

b. Dannan-tu al-kaatib-a zaara al-madeenat-a (MSA)
believed-I the-writer-acc visited.3ms the-city-acc
"I believed that the writer visited the city."

c.	al-kaatib-u	zaara	al-madeenat-a	(MSA)
	the-writer-nom	visited.3ms	the-city-acc	
	"The writer visited the city."			

4.5.2 Phase Theory

The notion of the phase adopted in Chomsky (2001, 2005) and the idea of feature inheritance introduced in Chomsky (2005) have brought about a significant improvement to the Agree model. As mentioned in chapter three above, Chomsky (2005) does not consider TP a phase. T is finite only when it is selected by C. C, the head of the CP phase, is the source of the tense feature and the Φ-features on T. This means that, as Chomsky assumes, it is C that probes down via T and agrees with the goal subject. Put differently, C and T form a complex that functions as a probe. The valuation of Case on the subject as nominative is an outcome of the Agree relation between C-T and the subject.

Chomsky further conjectures that the features of the goal subject can be valued either under a long-distance Agree relation while the subject is in situ (this might be the situation in VSO languages) or by having the subject moved from its base position in the specifier of vP to the specifier of TP (this could be the case in SVO languages). However, Chomsky's (2005) proposal that C-T functions as a single probe cannot be assumed without question. When applied to Arabic data, the C-T complex analysis seems to have a number of limitations as discussed below.

First, the proposal does not seem to account clearly for why the subject moves to the specifier position of TP if it can have its features valued in situ.[6] Obviously, the need to value the Case feature of the subject does not derive movement under the assumption of Agree Theory. The subject in the specifier of vP is in the searching domain of C; Agree relation between the probe C and the postverbal subject can be established (via T) and the Case feature is valued. Consequently, movement of the subject to a higher position is not necessary and, if it occurs, it seems to violate the economy conditions. Furthermore, the position of the subject in MSA correlates with the agreement pattern on by the verb; the verb shows full agreement with the preverbal subject and partial agreement with the postverbal subject (cf. the next chapter). If the preverbal noun phrase in MSA is interpreted as a subject, a view defended by Fassi Fehri (1993) and Bolotin (1995) among others, then Chomsky's proposal is expected to offer an account for the agreement asymmetry. The status of the preverbal noun phrases and the agreement patterns are investigated in greater detail in chapter five below. The point I emphasise here is that Case in Arabic is valued postverbally; it does not trigger movement at all, hence postverbal subjects are invariably nominative. This is not the status of the preverbal noun phrases as explained in the next paragraph.

[6] In Chomsky (2005), it is argued that after Agree relation is established between C-T complex and the subject, the subject can remain in situ or it can raise as far as SPEC-T, at which point it is inactivated , with all features valued" (Chomsky 2005:10). There is no explanation as to why both options are available.

The second limitation of C-T analysis is observed when we consider the case variability on the preverbal noun phrases. If it is true that C agrees with the goal subject in either postverbal (i.e. specifier vP) or preverbal (i.e. specifier TP) positions, then we would expect that in Arabic the preverbal subject carries the same case carried by the postverbal subject. At first glance, this seems to be correct as we can see from the sentences below; both subjects in the VSO sentence in (21a) and its SVO counterpart (21b) are nominative.

(21) a. ja'a al-walad-u (MSA)
came.3ms the-boy-nom
"The boy came."

b. al-walad-u ja'a (MSA)
the-boy-nom came.3ms
"The boy came."

However, when the overt main clause complementiser *inna* is used we find that the preverbal subject appears carrying accusative case. For instance, compare between (21b) and (20a) above.

An obvious explanation for the asymmetry shown by (20a) and (21b) above is to claim that the overt complementiser in (20a) and the covert complementiser in (21b) belong to different classes; the former is an accusative case assigner while

the latter is a nominative case assigner. However, (22a) and (22b) below reveal that the status of C is not the issue.

(22) a. al-bint-u ja'a mu3lim-u-haa (MSA)
the-girl-nom came.3ms teacher.m-nom-her.gen
Literally: "The girl, her teacher came."
"It is the girl's teacher who came."

b. inna al-bint-a ja'a mu3lim-u-haa (MSA)
comp the-girl-acc came.3ms teacher.m-nom-her.gen
Literally: "indeed, the girl, her teacher came."
"Indeed, it is the girl's teacher who came."

If the preverbal noun phrases in (21b) and (20a) above are subjects and that their cases are assigned by C, we find that - in each sentence in (22) above, the preverbal noun phrase coexists with a postverbal nominative subject with which the verb shows agreement. The question that arises at this point is the following: *If C is responsible for the Case value on the preverbal noun phrase, then, what is the head that values Case on the postverbal noun phrase as nominative?* Fassi Fehri (2005) attempts to provide an answer by assuming that C assigns two Cases, an external Case to the preverbal noun phrase and an internal Case to the postverbal subject. Fassi Fehri's proposal is not without problems, however, as we shall see shortly.

The third problem with the C-T analysis is observed when the preverbal noun phrase, which is assumed to be dominated by the head of the CP phase, is accessed by a higher head. This happens when the complementiser is covert. As we can observe from the sentence in (20b) above; when the 'finite' sentence with the preverbal noun phrase appears as complement of the verb *Danna* 'believe', the preverbal noun phrase is assigned accusative case by the matrix verb.

Assuming that the embedded complement in (20b) is a CP, with the preverbal subject in the specifier of TP, the sentence predicts a violation of the phase impenetrability condition which is stated in (15) in chapter three above and repeated as (23) below.

(23) In Phase α with head H, the domain of H is not accessible to operations outside α, only H and its edge are accessible to such operations.

(Chomsky 2000:108)

Under the assumptions of Phase Theory, the preverbal subject in the embedded CP is not accessible to the matrix verb, because the specifier position of TP in the embedded CP is not at the edge of the CP phase. Fassi Fehri (1993) argues that the head governors must be lexically supported in order to protect their domains. According to his point of view, the potential governor is defined as follows (cf. Fassi Fehri 1993:48).

(24) Z is a potential head governor for Y providing that Z is a c-commanding lexical head.

One possible way to account for the sentence in (20b) above is to combine the phase impenetrability condition in (23) with Fassi Fehri's definition in (24) and argue that the phase head in Arabic must be lexical to protect its domain. However, this assumption cannot be sustained because the data do not provide evidence. As we shall see later in this chapter, the behaviour of zero copula sentences suggests that the nominal complement is not accessible to a higher head even though it is not dominated by any overt lexical head (consider the discussion in section 4.4.3 above). I argue in 4.6.2.3 below that the structures of the zero copula sentences contain a functional projection, which I call light nP, that acts as a phase; such a phase is equivalent to vP phase in the structures of the verbal sentences.

Another possibility to account for how the matrix verb assigns Case to the preverbal noun phrase in the embedded finite clause in (20b) above is to posit that the preverbal noun phrase is occupying the specifier position of CP. Assuming that, the structure of (20b) would conform to the condition in (23) above in that the edge of the CP is accessible to the matrix head. However, the question that remains unanswered is whether the preverbal noun phrase is base generated or moved from a lower position. I assume, following Fassi Fehri (1993), and Aoun

et al. (1994), that the preverbal noun phrases are moved from lower positions (cf. section 4.6 below in addition to the next chapter).

A fourth possible challenge that the C-T analysis encounters is the nominative case on the complement in zero copula sentences such as (13) above, repeated here as (25).

(25) AHmad-u Tabeeb-un (MSA)
Ahmad-nom doctor-nom.indef
"Ahmad is a doctor."

The sentence in (25) has a present tense interpretation (Fassi Fehri 1993). This suggests that the nominative case of the subject is assigned by a null T, which inherits its features from C. Relating to the nominative case on the nominal complement, one could assume that it is also assigned by T. In other words, T in zero copula sentences assigns nominative case to the subject as well as to the complement in a multiple manner as assumed by Hiraiwa (2001). However, the discussion in section 4.4.3 above has concluded that the multiple agreement approach is not valid for Arabic data. Fassi Fehri (2005) offers a phase-based analysis that investigates the structure and properties of the CP phase in Arabic. Fassi Fehri's proposal is discussed in the following section.

4.5.3 Fassi Fehri's (2005) Account

In line with Chomsky (2005), Fassi Fehri (2005) argues that CP and vP are the only phases in the clause and that the derivational operation Agree is triggered by the phase head. Furthermore, Fassi Fehri assumes, following Chomsky, that T inherits its features from C.

Fassi Fehri (2005) refines Chomsky's (2005) version of Phase Theory; he argues that the properties of a given clause are dependent on the properties of C, the head of the CP phase. In order to support this claim, Fassi Fehri investigates the behaviour of two C's that are used in MSA; he compares between the complementiser *anna* which takes SVO complements, as in (26a), and the complementiser *an* which selects VSO complements, as (26b) shows. Notice that for the sake of consistency, the examples below are represented in a form that differs slightly from Fassi Fehri (2005).

(26) a. hasib-tu anna an-nisa'-a daXl-na (MSA)
thought-I that the-women-acc entered-f.p
makaatib-a-hunna
offices-acc-their
"I thought that the women entered their offices."

(Fassi Fehri 2005: 2)

b. 'araada an ya'tiy-a ar-rajul-u (MSA)
wanted that come.3ms-subjun the-man-nom
"He wanted the man to come."

(Fassi Fehri (2005: 2)

The complementiser *anna*, as mentioned in chapter two, is an accusative case assigner; it assigns accusative case to the noun that follows it (Majdi 1990). The complementiser *an*, on the other hand, is a mood assigner; it assigns subjunctive mood to the verb that follows it (ibid). Fassi Fehri (2005) unifies Case and Mood under the super feature Kase[7]. According to his view, Mood is a temporal Case assigned to the verb, whereas he refers to the Case assigned to the noun phrases as nominal Case.

The case variation on the preverbal noun phrases suggests that Case is not assigned by T, rather, it is C that is responsible for Case assignment as Fassi Fehri (2005) argues. With respect to the embedded clause in (26a) above, and the main clause such as the one represented in (27) below, Fassi Fehri argues that there are two subjects: the external subject is the preverbal noun phrase while the internal subject is a Pro(noun) which "is realized through 'rich' agreement, involving Person/Number/Gender and Case" (Fassi Fehri 2005:4). Notice that in (27) below, contra Fassi Fehri (see the sentence in (26a) above), I gloss the rich agreement, i.e. the internal subject, as 'they' to emphasise its Pro(nominal) status; the pronominal clitic *-uu* is attached to the verb.

(27)	inna	aT-Tulaab-a	Gadar-uu	al-madrasat-a	(MSA)
	comp	the-students-acc	left-they.nom	the-school-acc	
	"Indeed, the student left the school."				

[7] According to Fassi Fehri's view, both Case and Mood are features that are assigned by C. However, C that assigns Case is different from C that assigns Mood.

Building on the sentences in (26), Fassi Fehri (2005) argues that every C assigns two Cases. In (26b), C assigns a temporal case (mood) to the verb and an internal nominative case to the postverbal subject. In (26a) on the other hand, C assigns an external accusative case to the preverbal noun phrase and an internal nominative case to the postverbal Pro. Although Fassi Fehri (2005:11) expects that "[s]uch a conclusion might seem odd at first glance", he assumes that the sentence in (28) below provides supporting evidence. C assigns an external accusative case to the first noun phrase and an internal nominative case to the second noun phrase.[8]

(28) inna al-fataat-a 'umm-u-haa GaaĎibat-un (MSA)
comp the-girl-acc mother-nom-her angry-nom
Literally: "Indeed, the girl, her mother is angry."

(Fassi Fehri 2005: 11)

Fassi Fehri assumes that the multiple valuation of Case on different noun phrases is expected under the assumptions of the multiple theory of Agree. This point of view might be accepted if both cases are accusative; actually, there is no explanation as to why a single C in a single clause assigns different cases. Furthermore, Fassi Fehri's analysis does not address the issue of the nominative case on the complement in (28) above which means that the nominative case on

[8] The idea of classifying subjects as external and internal is in fact similar to Doron and Heycock's (1999) distinction between what they call *broad subjects* and *narrow subjects*. According to their view, the first noun phrase in (28) is a broad subject, while the second noun phrase is a narrow subject. I will return to Doron and Heycock's argument in chapter five below.

the complement remains unaccounted for within this model. There is evidence as I shall discuss later in this chapter that the complements in zero copula sentences cannot receive Case from C. Rather, I suggest that the complements are contained within an nP phase that is not accessible to C (cf. section 4.6.2.3 below).

While Fassi Fehri's (2005) paper provides insight into how Case is assigned in structures such as those in (26), (27) and (28) above, it does not address the whole picture of Case assignment to the preverbal noun phrases in SVO sentences and the complements in zero copula sentences. In fact, the analysis he puts forward encounters a number of challenges. Fassi Fehri's proposal is built on evidence drawn from the behaviour of overt complementisers such as those in (26a), (26b) and (28) above. As a result, the proposed analysis is partial in the sense that it cannot be extended to account for all the Case facts. The analysis does not take into consideration that covert complementisers do not have to assign two cases. In a finite affirmative VSO sentence, the covert C assigns, via T, only one nominative case to the postverbal subject. Consider (29) below.

(29)	akala	aT-Tifl-u	at-tufaahat-a	(MSA)
	ate.3ms	the-child-nom	the-apple-acc	
	"The child ate the apple."			

A further issue that poses a challenge for Fassi Fehri's proposal is related to the mood of the verb. As mentioned earlier, the complementiser *an* assigns subjunctive mood; when *an* is absent the verb is indicative (cf. section 2.3). Since

the complementiser *an* assigns subjunctive mood, then under Fassi Fehri's assumptions, the indicative mood should also be assigned by a certain C. However, he avoids discussing this point by using a past form of the verb in (26a). What I intend to show here is that, if Fassi Fehri's assumption that C assigns temporal Case, i.e. mood, is correct, then we should expect C to assign four cases in (30) below: i) the first preverbal noun phrase *al-walad-a* is assigned accusative case, ii) the second preverbal noun phrase *aSdeqaa'-u* carries nominative case, iii) the verb is assigned indicative mood (i.e. a temporal case using Fassi Fehri's terminology), and iv) the internal pronominal subject *-uu* is nominative.

(30) inna al-walad-a aSdiqaa'-u-hu yala3b-uu-na (MSA)
comp the-boy-acc friends-nom-his.gen play.3m-they-indic
"Indeed, it is the boy whose friends are playing."

In fact, if we adhere to the minimalist assumptions and ideas, a single C is not expected to assign this number of different (and unrelated) cases in a single clause. To sum up, Fassi Fehri's analysis explains that the clause properties are dependent on the type of C, the head of CP; different C's select different complements. Also, Fassi Fehri's proposal offers a solution for case variation on the preverbal noun phrases in the structures where overt complementisers are used. However, Fassi Fehri's analysis, in its present version, does not provide a complete account for all Case-related facts, such as the process that leads to the nominative case value on the complement in zero copula sentences. Moreover,

the idea that the features of different C's can value different cases on the verbs as well as on the nouns is not justifiable. In the following section, I will build on Chomsky (2005) and Fassi Fehri's (2005) insight that C is the source of features. However, I depart from them and claim that C does not transfer all of its features to T. Rather, some C's keep a certain feature which is not valued under Agree between T and the subject, such a feature is valued under a local Agree relation between C itself and a matching goal.

4.6. The proposed analysis

4.6.1. Case Assignment to the Preverbal Noun Phrases

The analysis I put forward is based on the assumptions made in Chomsky (2001, and 2005). I assume that CP and vP are phases and that the head of the phase is responsible for initiating the Agree operation. I also assume in line with Chomsky that C is the source of the tense and Φ-features on T. However, I diverge from Chomsky (2005) and Fassi Fehri (2005) in positing that some C's do not transmit all of their features to T. While all the transmitted features (i.e. C features which are inherited by T) are valued by T on behalf of C, I claim that the uninherited features of certain C's have to be valued by C itself. My proposal is similar in part to Ouali's (2008) proposal.[9]

Building on data from Berber, Ouali (2008) argues that, under the assumptions of the feature inheritance theory, C has three available options. The first option is

[9] Ouali introduced his idea in the GLOW conference which was held at Newcastle University in March 2008 while this thesis was in progress.

DONATE; this means that C transfers all of its features to T. The second option is KEEP; C does not transfer its features to T. And the third option is SHARE which means that C keeps a copy of its features and transfers a copy of these features to T. My proposal is different in that I assume that C transfer its features to T, but only certain C's have an extra lexical Case feature which is not interpretable on T, therefore such a feature is not transferred. To exemplify, all the sentences in (31) below are finite, which means that they count as CP's under Chomsky's assumptions. In (31a), C is covert while in (31b) and (31c) C's are overt.

(31) a. zaara as-suyaaH-u al-madeenat-a (MSA)
visited.3ms the-tourists-nom the-city-acc
"The tourists visited the city."

b. *inna zaara as-suyaaH-u al-madeenat-a (MSA)
comp visited.3ms the-tourists-nom the-city-acc
"Indeed, the tourists visited the city."

c. inna as-suyaaH-a zaar-uu al-madeenat-a (MSA)
comp the-tourists-acc visited.3m-they.nom the-city-acc
"Indeed, the tourists visited the city."

The covert C in (31a) above transfers tense feature and Φ-features to T which, in its turn, probes down and locates the subject in the specifier of vP as a matching goal with which it agrees. The valuation of Case on the postverbal subject as

nominative is part of the Agree relation between C-T and the subject. The outcome of this Agree operation is a convergent derivation – hence the well-formedness of the sentence. However, the agreement in (31b) between C-T and the postverbal subject is insufficient to produce a convergent derivation, as the ungrammaticality of the sentence would suggest. Rather, the overt C has an additional requirement: a nominal has to occupy a position that immediately follows C, and an accusative case is assigned to that nominal, as (31c) shows.[10] Contra Fassi Fehri (2005), I argue that there is no connection between the preverbal case and the postverbal case in (31c) above.

The postverbal nominative case is straightforward in that it reflects a structural Case that is assigned under Agree by T which inherits the features of C. In contrast, the preverbal case does not seem to follow from the feature inheritance model as it seems to be assigned directly by C. In this respect, I make use of the notion of *Lexical Case* discussed in Woolford (2006). According to Woolford, the non-structural Cases are of two types: inherent Case (see footnote 1 above) and lexical Case. The latter is an idiosyncratic feature that is lexically required and licensed by certain heads. Building on this definition of lexical Case, I assume that the overt C in (31b) and (31c) above has a non-structural intrinsic Lexical Case feature which is not part of the bundle of features that are transferred to T. This lexical Case has to be discharged in order to obtain a

[10] Actually, the behaviour of (31c) is consistent with Fassi Fehri's idea that the properties of the clause are dependent on the type of C. The overt C here requires specific word orders; any verb-initial order is not allowed to follow the complementiser *inna*.

convergent derivation. Adopting the Agree model, C must be matched with an active goal that has an unvalued Case feature. The active goal is either merged internally or externally.

Internal Merge involves the movement of the subject to a preverbal position as in (31c) above, or even the object as the sentence below shows.[11]

(32) inna al-madeenat-a zaara-haa as-suyaaH-u (MSA)
comp the-city-acc visited.3ms-it.acc the-tourists-nom
"Indeed, it is the city that the tourists visited."

Conversely, External Merge is observed in structures like the ones in (33) below. The postverbal clausal subject cannot move higher to satisfy the requirement of C, as (33b) shows. Consequently, an expletive is used in (33c), hence its grammaticality.

(33) a. sarra-nee anna-ka najaH-ta (MSA)
pleased-me.acc that-you.acc succeeded-you
"It pleased me that you succeeded."

[11] Notice that the movement of the object across the subject induces a violation of the principle of shortest move. However the grammaticality of the MSA sentence in (32) suggests that shortest move violation is avoided. I argue that the object moves first to an outer specifier of vP before it moves higher to a position adjacent to C. Therefore, the pronominal copy of the moved object appears in a position preceding the subject. I shall be dealing with this issue in greater depth in chapter six below.

b. *inna anna-ka najaH-ta sarra-nee (MSA)
Comp that-you.Acc succeeded-you pleased-me.Acc
"Indeed, that you succeeded pleased me."

c. inna-hu sarra-nee anna-ka najaH-ta (MSA)
comp-it pleased-me.acc that-you.acc succeeded-you
"Indeed, it pleased me that you succeeded."

The use of an expletive in (33c) suggests that the preverbal position in not an argument position.[12] I shall make use of this observation in chapter five below and argue that the preverbal noun phrases in MSA are not subjects – a view which was proposed by traditional Arab grammarians (Sibawayh, for example) and adopted by some authors such as Plunkett (1993); Akkal (1996) and Ouhalla (1997) among others.

Irrespective of the position occupied by the preverbal noun phrase, an issue which I will refer to in the next chapter, the question that is asked here is related to the validity of the preverbal noun phrase as an active goal with which C can agree. Apparently, neither the internally merged subject as in (31c) or the object as in (32) is an active goal, as both of them have their Case already valued. Putting the question differently, *how is the inactive goal (which is moved from a lower position) activated so that it can enter in a new Agree relation with a*

[12] The use of the expletive provides a piece of evidence supporting Woolford's (2006) distinction between the Lexical Case and the inherent in that the latter (but not the former) is associated with theta role assignment.

higher probe? The answer to this question lies in the Copy Theory of Movement (Chomsky 1995) and in Pesetsky's (1997, 1998) work.

Under the assumptions of Copy Theory of Movement, the operation Move (or Internal Merge) is conceived of as a process of copying and deletion. What is moved is a copy of the lexical item. The original copy is deleted in the sense that it is not pronounced. However, in Pesetsky's (1997, 1998) Optimality theoretic work, it is argued that, under certain situations, the original copy of the moved item has to be spelt out and the spellout of that copy has to be as minimal as possible. "Pronouncing a category as a pronoun means giving phonological shape to one of its properties" (Pesetsky 1997:164); this view is expressed more clearly in Pesetsky (1998) who argues that "[a] pronoun is a pronounciation of Φ-features like number, person and gender, but is not a pronounciation of notional features" (Pesetsky 1998:366). According to Pesetsky, resumptive pronouns are spellout of copies; this means that original copies of the moved items have pronominal pronunciations. In Arabic this is exactly what happens. The fronted subject or object is associated with a resumptive pronoun that appears as a clitic on the verb, for example, see (31c) and (32) above. Bearing this fact in mind, I claim that the existence of the pronominal copy of the moved item is required to preserve the Agree relation. The copy that is fronted to the preverbal position is fresh in the sense that it does not have a valued Case feature. For that reason, the fronted copy counts as an active goal with which C agrees and to which a Lexical Case is assigned. As mentioned earlier, the structural Case that is assigned via T

to the postverbal subject is always nominative irrespective of the type of C. Conversely, the value of the Lexical Case depends on the type of C; while the overt complementiser *inna* assigns lexical accusative case, as in (31c) above, the covert complementiser assigns lexical nominative case to the preverbal noun phrase as in (34) below.

(34) as-suyaaH-u zaar-uu al-madeenat-a (MSA)
the-tourists-nom visited.3m-they.nom the-city-acc
"The tourists visited the city."

However, the preverbal noun phrases are not merged only to enable C to dispense with its Lexical Case feature, rather, they themselves have some sort of discourse function. The preverbal noun phrases can be topics or foci (Ouhalla 1997). It could be argued that the discourse function of the preverbal noun phrase follows from C. I return to this issue in the next chapter where I claim that, in the sense of Rizzi (1997), the preverbal noun phrases are occupying peripheral positions within the CP layer.

Having shown how the Case feature is valued in verbal sentences, I turn now to the issue of Case of the subjects and nominal complements in zero copula sentences.

4.6.2. Case in Zero Copula Sentences

4.6.2.1. Case on the Subjects in Zero Copula Sentences

With regard to the subjects in zero copula sentences, I extend the analysis proposed in the section 4.6.1 for the subjects in the verbal sentences. For example, like the subject of the verbal sentence in (31a) above, I assume that the subject in the zero copula sentence in (35) below receives its nominative case by the means of the Agree operation. In other words, an Agree relation is established between the dominating C-T complex and the subject; the nominative case on the subject is an outcome of of this Agree relation.

(35) ar-rajul-u baaHiθ-un (MSA)
the-man-nom researcher-nom.indef
"The man is a researcher."

However, when the complementiser *inna* is used, I assume that the subject has to be fronted and it receives an accusative case from C. Compare (36) below with (31c) above. While in (31c) above the subject moves across the verb in T, I claim that the subject in (36) below moves across the null T.

(36) inna ar-rajul-a baaHiθ-un (MSA)
comp the-man-acc researcher-nom.indef
"Indeed, the man is a researcher."

The fronted noun phrases are associated with resumptive pronominal elements that appear as clitics on the verb, as discussed in the section 4.6.1 above. In fact,

the data support the view that the subject in (36) above is fronted across T. Evidence is drawn from the possibility of using a resumptive pronoun in (36) above. The resumptive pronoun can appear in a lexical non bound form as we can see in (37).

(37)	inna	ar-rajul-a	hwa	baaHiθ-un	(MSA)
	comp	the-man-acc	he.Nom	researcher-nom.indef	
	"Indeed, the man is a researcher."				

In (37) above, the noun phrase that follows the complementiser is accusative while the post-T resumptive pronoun is nominative. In this respect, the zero copula sentence above parallels the verbal sentence in (31c) above. Notice that the resumptive pronoun in (37) should not be confused with the pronominal copula which will be discussed shortly.

4.6.2.2. Subject Position and Case on the Complement of Zero Copula Sentences

In comparison with zero copula sentences, the verbal copula sentences are straightforward. Since the latter contain a vP projection, it is reasonable to assume that their subjects are base generated in the specifier of vP as mentioned earlier (see also the structure in (46a) below). Furthermore, in the verbal copula sentences, the accusative case on the complement is ascribed to the existence of v, the head of vP. However, the structures of zero copula sentences are more complicated. In fact, two questions arise. The first question concerns the nature of

the canonical position of the subject. The second question concerns the source of the nominative case on the nominal complement. In order to provide answers to these questions, I will consider how the structures of small clauses have been conceived of in the literature.

The term *Small Clause* has been frequently used in the literature to refer to an incomplete clause such as the bracketed one in (38) below (cf. Williams 1975).

(38) John considers [Mary clever].

Small clauses resemble zero copula sentences in that they consist of a subject and a predicate but they lack verb forms. Various analyses have been proposed to capture the structure of the small clauses. Most of the proposed analyses are classified into two types: lexical-projection analyses and functional-projection analyses.

Under the assumptions of the lexical-projection analyses, the small clause is conceived of as a lexical projection of the predicate which can be of any lexical category (Stowell 1981, 1983). According to Stowell, the subject of the small clause occupies a specifier position of the lexical projection. On the other hand, authors who adopt a functional projection analysis, propose that the small clause contains a functional head. However, there is disagreement as to the nature of the proposed functional head. Bowers (1993) argues that the functional head in the

structure of the small clauses is a Predicate (Pr) head. Therefore, the maximal projection of the small clause is a Predicate Phrase (PrP), or PredP as it is referred to sometimes. According to Bowers (1993), the sole function of the Pr head is to encode predication. Other linguists such as Guéron and Hoekstra (1995) and Legendre (1997) argue that the small clause has an agreement projection which is headed by an AGR head. In Starke (1995), it is argued that the functional head in the small clause is a null V. In this thesis, I adopt the functional projection approach and apply it to the Arabic zero copula sentences.

In fact, the idea that zero copula sentences in Arabic contain functional heads is not a new one. Eid (1991) and Fassi Fehri (1993) among others have observed that the third person pronouns such as *hwa* 'he', *hiyya* 'she', *hum* 'they' etc. (see Table 2.4) can function as pronominal copulas. Under certain circumstances, the pronominal copula has to be overtly realized. For instance, a sentential reading of (39) below is obtained only when the copula is present morphologically, otherwise, (39) would be interpreted as a noun phrase which can translate as *the responsible soldiers* (cf. section 2.5 above).

(39) al-junuud-u hum al-mas'uul-uun (MSA)
the-soldiers-mom they the-responsible-p.nom
"The soldiers are the responsible."

(Fassi Fehri 1993:117)

Arab grammarians refer to the pronominal copula pronouns as *Ðama'er alfaSel* 'separation pronouns'. The primary function of these types of pronouns is to draw a line between the subject and the predicative complement. Building on this notion, and following Eid (1983), Eid (1991) argues that the overt pronominal copulas, such as the one in (39) above, "function as anti-ambiguity devices to force sentential, vs. a phrasal, interpretation of a structure" (pp. 42). JA parallels MSA in this respect; i.e. when the nominal complement is definite, a third person pronoun has to be used to 'separate' the subject from the complement:

(40) al-marah hiy aŝ-ŝuja3ah (JA)
the-woman she the-brave.f
"The woman is the brave one."

JA data provide direct evidence for the claim that the third person pronoun can have a copular status. While in MSA there are several ways to form negative sentences, in JA we find that negation is formed by using the negative particle *maa*.[13] The negative particle *maa* coexists with the verb form in the verbal sentences and along with the verbal copula in copular sentences. Compare the affirmative verbal copula sentence in (41a) with its negative counterpart in (41b).

[13] In addition to the use of the negative particle *maa* in MSA, there are other ways to form negative sentences. For instance, negation can be achieved by using the particle *laysa* which can sometimes function as a present negative copula that takes a nominative subject and an accusative object as we can see from the example below:

i. laysa al-walad-u θakiy-an
not the-boy-nom clever-acc.indef
"The boy is not clever."

(41) a. al-walad kaan naayim (JA)
the-boy was.3ms asleep
"The boy is asleep."

b. al-walad maa kaan naayim (JA)
the-boy not was.3ms asleep
"The boy was not asleep."

In zero copula sentences, the negative particle *maa* can never be used in JA without a following overt copula. Therefore, *maa* forces the overt realization of the pronominal copula, as can be seen in (42b).[14]

(42) a. *al-walad maa naayim (JA)
the-boy not asleep
"The boy is not asleep."

b. al-walad maa hu naayim (JA)
the-boy not he asleep
"The boy is not asleep."

The pronominal copula in (42b) resembles the verbal copula in (41b) above in that both of them follow the negative marker *maa*. However, the two copulas

[14] Unlike the situation in JA, in Sudanese Arabic, the negative particle *maa* can be used in copular sentences without an overt form of the pronominal copula (cf. Dickens 2006). Thanks to Jihad Abdullah for providing me with the Sudanese sentence below:

i. aS-Sabey maa naayim
the-boy not asleep
"The boy is not asleep."

behave in a different way when it comes to the word order. Like the ordinary verb, the verbal copula in both MSA and JA can be preceded or followed by the subject; i.e. VSO as well as SVO word orders are allowed. In both cases the verb is assumed to move and join T; the subject does not move to the specifier of TP in VSO structures while it does so in SVO structures (Mohammad 2000 and Benmamoun 2000b). In contrast with the verbal copula, the pronominal copula in (42b) cannot appear in an initial position as the ungrammaticality of (43) below shows.

(43) *maa hu al-walad naayim (JA)
not he the-boy asleep
"The boy is not asleep."

Not only in JA negative sentences, but also in MSA affirmative sentences the pronominal copula is not allowed to occupy an initial position; in (39) above, if the pronominal copula precedes the subject, the affirmative sentence is rendered ungrammatical. Nevertheless, under certain circumstances, the pronominal copula is allowed to, or in fact must, precede the subject. The binding relations show that the pronominal copula and the verbal copula behave the same in this respect. For instance, in (44), the subject contains a pronoun that is coreferential with the noun that is contained within the PP complement. Therefore, the subject has to follow the PP complement.

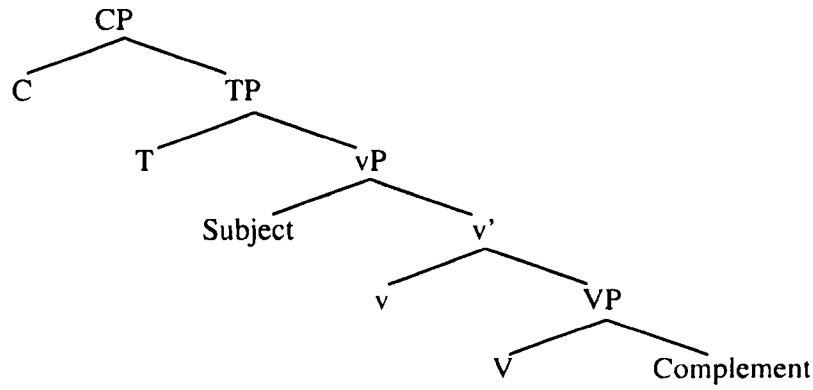
(44) maa kaan / hu fi ad-daar raa3i-ha (JA)
not was / he in the-house owner-its
"Its owner was/is not in the house."

The crucial difference between the pronominal copula and the verbal copula, which concerns us here, is that when the former is used the nominal complement is assigned nominative case. On the other hand, the nominal complement of the verbal copula is assigned accusative case (consider the examples (45a) and (45b) below). Taking this difference into consideration, and building on the similarities which have been discussed, I claim that the structures of the verbal copula sentence in (45a) and the zero copula sentence in (45b) are schematized in (46a) and (46b) respectively.

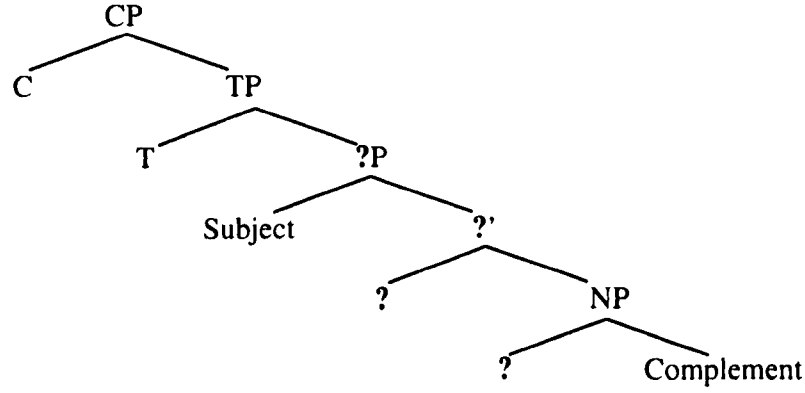
(45) a. kaanat al-mara'at-u mumariðat-an (MSA)
was.3mf the-woman-nom nurse-acc.indef
"The woman was a nurse."

b. al-mara'at-u mumariðat-un (MSA)
the-woman-nom nurse-nom.indef
"The woman is a nurse."

(46) a.



b.



In order to categorize the ?P functional projection in (46b) above, I will consider the analysis proposed for the structure of DP in Carstens (2000) and Radford (2000, 2004). I will borrow from these authors the notion of light nP projection and extend it to the structure in (46b) above.

4.6.2.3 Light nP Projections in the Literature

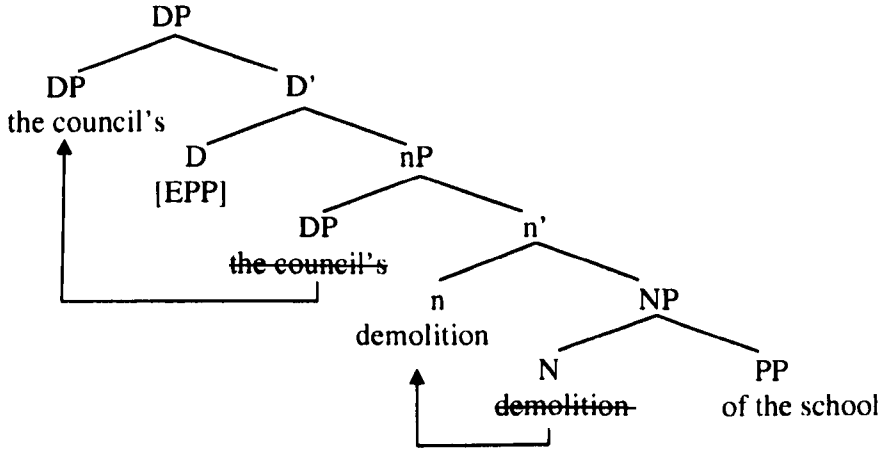
Conventionally, the vP projection is assumed to consist of a lexical VP core and an outer vP shell which is headed by an abstract light verb. After the elimination of Agr projections, the vP shell is adopted in Chomsky (1995 and later); the external argument of the verb is assumed to be base generated in the specifier of vP. Following Abney (1987), Carstens (2000) analyses noun phrases as DP's.

Building on the work of Ritter (1991) Carstens (1991) and Picallo (1991), Carstens (2000) argues that the structure of DP contains a functional projection similar to vP, and that such a functional projection mediates between the NP level and the DP level. Carstens identifies this functional projection as light nP. She claims, with Sportiche (1990) and Valois (1991), that in the structure of DP, the nP shell dominates the NP core. Radford (2000, 2004) argues for a similar idea. He extends the shell analysis to the structure of the argumental nouns, or the "process nominals" as he refers to them, such as the one in (47) below (cf. Radford 2000, 2004).

(47) The council's demolition of the school

While Radford (2004:367) emphasises that the application of the shell analysis to noun phrases and the remarks he makes "about nP shells are inevitably somewhat speculative", he assumes that (48) below represents the structure of the noun phrase in (47) above.

(48)



According to Radford's view, and as the structure in (48) shows, the head noun *demolition* originates as a head of the lexical NP core. The NP core is dominated by the functional nP shell. The head of nP, i.e. n, is affixal, therefore, it triggers the movement of the noun *demolition* from N. The possessor DP *the council's* originates as an external argument in the specifier of nP where it receives its Agent theta role. The possessor is assigned genitive case via agreement with D, the null head of DP. After that, the EPP feature of D triggers the movement of the possessor from the specifier of nP to the specifier of DP.

On the basis of the similarities between the verbal copula and the pronominal copula, and since the pronominal copula is nominal, I adopt the label nP to define the functional projection in (46b) above. It should be noted, however, that what interests us here is not what sort of label to use, rather, we are concerned with the behaviour of the nominal functional projection which is headed by the pronominal copula. The nP functional projection compares to the vP functional projection in that the heads of both projections are responsible for valuing the Case feature on their nominal complements. However, as stated earlier, the head of nP differs from the head of vP in that the former assigns nominative case to the complement. Despite this difference, both heads takes external THEME arguments.

Like the verbal copula, the pronominal copula agrees with the subject not the complement. To give an example, there are certain adjectives in Arabic such as *waduud* 'kind', *TamuuH* 'ambitious' and *Sabuur* 'patient' which are always

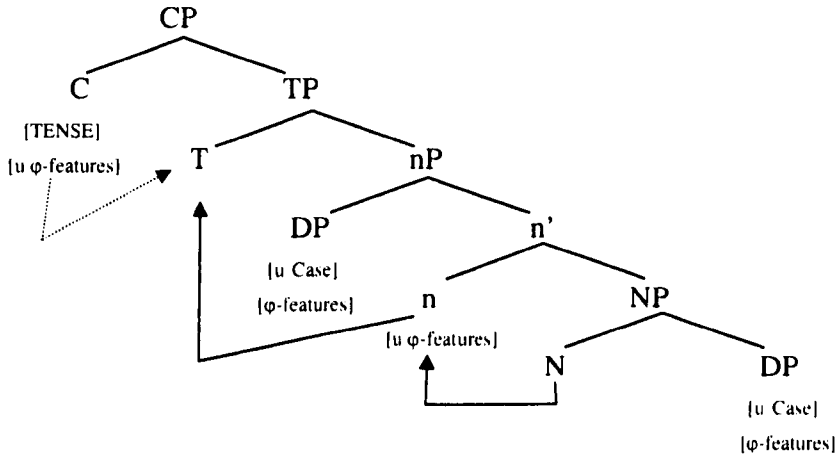
masculine (Hassan 1961). As (49) shows, the pronominal copula shows agreement with the feminine subject; if it were masculine, the sentence would be ruled out.

(49) al-mar'at-u hiyya aT-TamuuH-u (MSA)
the-woman-nom she the-ambitious-nom
"The woman is ambitious."

In addition to the sentence in (49), a sentence like (44) above shows that the pronominal copula agrees with the subject, as the complement in this sentence is PP. The agreement between the subject and the pronominal copula suggests that the latter moves to T on a par with the movement of the verbal copula from v to T. The behaviour of the pronominal copula indicates that the nP projection qualifies as a phase. As argued in Chomsky (2000), the phase is characterized as being Φ-complete. The phase head has its own Φ-features and the Agree operation within the phase is initiated by the phase head. The phasal status of the proposed nP projection is sustained by the fact that the nominal complements in zero copula sentences are not accessible to C head as mentioned earlier (see (14) and (16) above).

Bearing all these issues in mind, I revisit here the structure of zero copula sentences represented in (46b) above as follows:

(50)



As (50) shows, the DP complement is merged with the pronominal copula forming a lexical NP core. The NP core is combined with the functional head n which in turn is combined with the external argument (i.e. the subject) resulting in an nP projection. The resulting nP is subsequently merged with T is selected by C in finite sentences. In line with Chomsky (2005), I assume that T inherits its features from C; the dotted arrow in the structure above indicates the features-transfer process from C to T.

The pronominal copula moves from N and joins n. The phase head n has unvalued Φ-features; therefore it functions as a probe initiating an Agree relation with the closest active goal that it c-commands. The probe n locates and agrees with the DP complement, which is an active goal by virtue of having unvalued Case feature; the Case feature of the complement is valued nominative. Then, the head n moves to T which has already inherited its Φ-features from C. The probe

C-T agrees with the subject in the specifier of nP. As a result of this Agree operation, the case of the subject is valued nominative.

To sum up, since the nominative case on the nominal complement of the zero copula sentences is not captured within the multiple agree model, the hypothesis that a functional nP projection exists helps understand how such a case is assigned. The nP proposal observes the assumptions of Phase Theory in the sense that the head of nP protects its domain from external heads, hence the nominal complement cannot be assigned Case by C.

4.7. Conclusion

The conclusion we have to draw from the discussion in this chapter is that every instance of the structural Case is part of the Agree relation which is established between a single probe and a single matching goal in its c-commanding domain. Therefore, assuming the existence of the functional nP projection in the structures of zero copula sentences suppresses the role of the multiple agree approach. If all the features of C can be valued via T with the goal subject in the specifier of vP, then movement of the subject to the specifier of TP would predict a violation of the economy conditions. The claim that certain C's have Lexical Case features provides improvement for Phase Theory. Movement of the subject, or any other nominal, to the preverbal position allows C to discharge its Lexical Case feature under Agree with the fronted element. However, movement to the preverbal position is triggered by other features as we shall see in the next chapter, which

will also address the question which concerns the nature of the preverbal positions.

CHAPTER FIVE: Subject Positions and Agreement

5.1. Introduction

It could be argued that the word order facts in Arabic are not interesting for their own sake. Rather, the importance of certain word orders stems from their implications for the agreement patterns shown by the verb. In this respect, we concern ourselves in this chapter with the word orders where the subject immediately follows the verb, i.e. VS, and the word orders where the subject (if the preverbal noun phrase proves to be a subject) precedes the verb, i.e. SV. Agreement patterns on the verbs are strongly associated with these orders (cf. Aoun et al. 1994). The object position is not relevant to the discussion here; whether the object precedes or follows the subject, the agreement is not affected. The object positions and object movement issues are dealt with in the next chapter.

It has become a standard assumption that agreement in MSA depends on the subject position with regards to the verb; the verb shows full agreement with the preverbal subject and partial agreement with the postverbal subject (Mohammad 1990, 2000; Bahloul and Harbert 1992; Fassi Fehri 1993, 2004, 2005; Aoun et al. 1994; Shlonsky 1997; Bolotin 1995; Benmamoun 2000a, 2000b; Harbert and Bahloul 2002 and Benmamoun and Lorimor 2006). On the other hand, the verb in JA shows full agreement with the subject whether it is preverbal or postverbal. The agreement patterns in JA are also found in the other regional varieties of

Arabic such as Moroccan (Fassi Fehri 1993), Lebanese (Aoun et al. 1994), Palestinian (Mohammad 2000), Egyptian (Jelinek 2002) and Tunisian (Mahfoudhi 2002).

This chapter continues the discussion which has been presented in the previous chapter. It introduces a minimalist feature-inheritance-based analysis that accounts for some of the implicitly raised questions in chapter four above. The present chapter deals with the questions that concern the nature of the preverbal noun phrases and the positions they occupy.

Under the assumptions of Agree Theory, the features of the subject are valued while it is in situ. Assuming the phase-based Agree Theory, I argue that the movement of the subject to a preverbal position is redundant if it is motivated only by the need to value the uninterpretable features of subject. An easy explanation for such a movement, when it occurs, is to assume that the subject moves to the specifier position of TP to satisfy an edge feature (i.e. EPP feature using the old term) of T. However, the issue of agreement asymmetry in MSA and preservation (i.e. maintaining the same agreement pattern in VSO and SVO orders) in JA has to be addressed. Building on the Case facts which have been discussed in the previous chapter, in addition to phenomena such as coordination, passivisation and relativisation, I will show in this chapter that the resumptive pronoun in MSA and JA sentences cannot be treated as a number marker. Rather, it is best analysed as a real pronominal element that is associated with a fronted

noun phrase. Furthermore, while assuming that the underlying structures of MSA and JA are the same, I claim that SVO and VSO word orders in both varieties are derived in different ways.

The chapter is organised as follows. Section 5.2 is an overview. Section 5.3 reviews some views on the nature of the preverbal noun phrases, whereas section 5.4 deals with the resumptive pronouns; a number of tests are applied to show that the resumptive pronouns should not be treated as number markers. Section 5.5 reviews some of the previous analyses of agreement asymmetry in Arabic. In this section, Soltan's (2006) Agree-based analysis is discussed in detail because of its relevance to the topic of this chapter. The proposed analysis is presented in section 5.6; also in this section some limitations and implications of the proposed analysis are discussed. Finally, section 5.7 concludes the chapter.

5.2. Overview

In the literature, there are two common views that are concerned with the word order and agreement facts in Arabic. A view which claims that the pronominal clitic in SVO structures is a real subject is always contrasted with a view that conceives of the pronominal clitic as a number marker.

The first view is found in the work of Arab grammarians such as Hassan (1961) and Ibn Hisham (1964). It claims that the subject cannot precede the verb. Rather, the preverbal noun phrase in (1) below is treated as a topic; the comment is a full

verbal sentence which has a postverbal pronominal subject that appears as a clitic on the verb. The postverbal pronominal subject is coreferential with the preverbal noun phrase.

(1) al-u'maraa'-u qaabal-uu al-malikat-a
the-princes-nom met.3m-they.nom the-queen-acc
Literally: "The princes, they met the queen."
"It is the princes who met the queen." (MSA)

According to the traditional Arab grammarians, the sentence in (1) above is similar to the one in (2) below. The only difference is that the preverbal noun phrase in (2) is associated with an object pronominal clitic. In contrast with (1) above, the subject here is a full postverbal noun phrase.

(2) al-malikat-u qaabala-haa al-u'maraa'-u
the-queen-nom met.3M-her.acc the-princes-nom
Literally: "The queen, the princes met her."
"It is the queen who the princes met." (MSA)

The verb initial counterpart of both (1) and (2) does not contain any pronominal clitic, as we can see in (3) below.

(3) qaabala al-u'maraa'-u al-malikat-a
met.3ms the-princes-nom the-queen-acc
"The princes met the queen." (MSA)

While JA allows sentences like (2) above, where a preverbal noun phrase coexists with a coreferential object pronominal clitic, it differs drastically from MSA in terms of the position of the subject and the use of a coreferential pronominal clitic on the verb. In JA, unlike the situation in MSA, the pronominal clitic that is associated with the subject is present in SVO as well as VSO sentences. Compare (4a) and (4b) below with (1) and (3) above respectively.

(4) a. al-awlaad zaar-uu al-m3limah
the-boys visited.3m-they.nom the-teacher.f
"The boys visited the teacher." (JA)

b. zaar-uu al-walaad al-m3limah
visited.3m-they.nom the-boys the-teacher.f
"The boys visited the teacher." (JA)

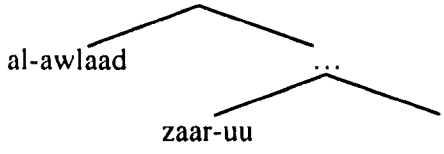
In fact, the behaviour of the JA sentences in (4), which also has been observed in most of the local varieties of Arabic, is one of the main reasons that have led many linguists to analyse the pronominal clitic on the verb as a number marker. Treating the pronominal clitic as a number marker is the second view concerning word order variation and agreement; such a view is adopted by many modern linguists such as Fassi Fehri (1993, 2004); Mohammad (1990, 2000); Shlonsky (1997); Aoun and Benmamoun (1999); Benmamoun (2000a, 2000b) and Soltan (2006) among many others. These authors assume that, in MSA, the verb shows partial agreement with the postverbal subject in that it shows agreement in the

features of gender and person but not number; the number feature is singular by default (Mohammad 2000). However, the agreement is said to be full when the subject is preverbal, which means that the verb shows agreement in number in addition to gender and person. Correspondingly, the preverbal noun phrase in MSA sentences like (1) above is considered a subject, whereas the pronominal clitic is analysed as a plural number marker. By contrast, the subject in (3) above is postverbal. As a result, the verb does not show number agreement (or rather it shows default singular number agreement, hence the absence of the pronominal clitic). Relating to the local varieties, this view claims that the agreement is full whether the subject is preverbal (4a) or postverbal (4b).

Whether the pronominal clitic in SVO sentences is analysed as a real pronominal subject following traditional grammarians, or as a number marker following modern linguists, problems still arise when the data are examined within the minimalist framework. If we adhere to the Agree-based analysis, in which the Agree operation applies once between a given probe and goal, the agreement asymmetry in MSA remains unaccounted for if the pronominal clitic on the verb is considered to be a number marker. If T agrees with the postverbal subject in a probe-goal configuration, and the subject moves afterward to a preverbal position, then T would not have the chance to have a further Agree relation with the preverbal subject. This means, whatever agreement pattern is obtained between T and the postverbal subject is expected to be preserved when the subject is moved to the preverbal position.

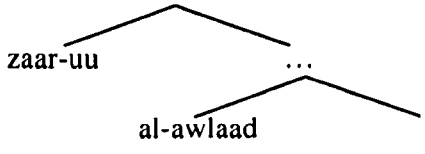
On the other hand, analysing the pronominal clitic as a real subject means that an account is needed for why the postverbal nominal subject and the coreferential pronominal clitic coexist in VSO word orders in JA, as (4b) above shows. In SVO structures in JA, the preverbal noun phrase c-commands the pronominal clitic. Therefore, the coreferential interpretation of the latter is allowed. (5) below depicts the structure of (4a) above.

(5)



However, in VSO structures, such as (4b) above, the pronominal clitic on the verb is not c-commanded by the postverbal subject, as (6) shows.

(6)



In order to account for this paradox, I will assume later in this chapter that the verb together with the (attached) pronominal clitic move across the preverbal subject to a higher position. In other words, the verb undergoes movement from T to the specifier position of Topic Phrase to get topicalisation; the attached pronominal clitic moves along with the moved verb (cf. section 5.6.3.2.2 below

for detail). Before we embark upon a discussion of these problems, the strong association between agreement and the position of the subject requires a literature review - an issue I now turn to in the following section.

5.3. On the Nature of the Preverbal Noun Phrases

There is no consensus amongst authors and researchers on the nature of the preverbal noun phrases in SVO sentences in Arabic. Also, there is controversy surrounding the issue of whether the preverbal noun phrase is merged externally or moved from a lower position (i.e. merged internally). Most of the analyses proposed thus far can be divided into two groups: the first group are those analyses that conceive of the preverbal noun phrase as a subject (Mohammad 1990, 2000; Demirdache 1991; Bahloul and Harbert 1992; Fassi Fehri 1993; Aoun et al. 1994; Bolotin 1995; Benmamoun 1996, 2000b and Benmamoun and Lorimor 2006 among many others), or broad subjects (Doron and Heycock 1999)[1]. The second group are the analyses that deal with the preverbal noun phrase as a topic (Plunkett 1993, Akkal 1996 and Ouhalla 1997) or a focus (Ouhalla 1997).

5.3.1 Analysing Preverbal Noun Phrases as Subjects

Most authors who adopt subject analyses for the preverbal noun phrase assume that the subject moves from a lower position (specifier of vP) to the specifier

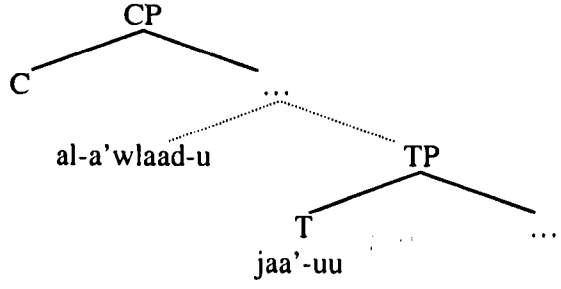
[1] Doron and Heycock use the term *Broad Subject* to refer to the sentence initial nominative noun phrases. The Broad subject is "neither a dislocated phrase nor in a designated focus position [...]. Rather, it is a subject which combines with a 'sentential predicate', that is, a phrase that semantically denotes a property, though syntactically it is a full clause which already contains a subject" (Doron and Heycock 1999:71). Consider section 5.3.3 for the differences between broad subjects and the ordinary (i.e. narrow) subjects.

position of TP. For example, Fassi Fehri (1993), Aoun et al. (1994) and Mohammad (2000) claim that SVO orders are derived by movement of the subject to preverbal position. However, Fassi Fehri (1993) claims that the preverbal noun phrase in the following sentence can have different interpretations: a subject interpretation or a topic interpretation.

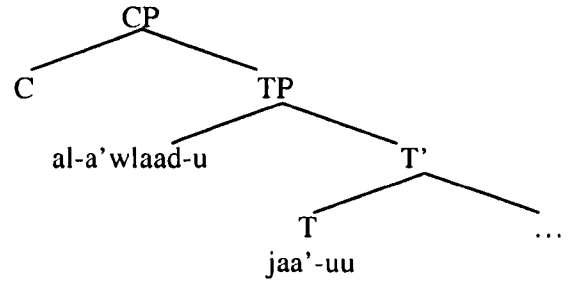
(7) al-a'wlaad-u jaa'-uu
the-children-nom came.3m-p
"The children, they came / the children came." (MSA)
(Fassi Fehri 1993: 27)

The preverbal position which is occupied by the preverbal subject in (7) is different from the position occupied by the topic. According to Fassi Fehri (1993), if the preverbal noun phrase is a topic, then it occupies a position within the CP layer but external to TP, consider (8a) below. On the other hand, if the preverbal noun phrase is a subject, it would be located in the specifier of TP, as can be seen in (8b) (cf. Fassi Fehri (1993: 28)).

(8) a.



b.



Fassi Fehri builds his claim that the preverbal noun phrase can be a subject on the (traditional Arab grammarians') general idea that the preverbal topic, unlike the postverbal subject, has to be definite or specific. In (9) below, the preverbal noun phrase *rijaal-un* 'men' is indefinite which means that it cannot appear clause initially, hence the ungrammaticality of the sentence.

(9) *rejaal-un jaa'-uu
men-nom.indef came.3m-p
"Men came." (MSA)

Since the topic has to be definite or specific, Fassi Fehri (1993) assumes that the grammaticality of the sentence below suggests that the preverbal indefinite and non-specific noun phrase cannot be a topic. Rather, it should be treated as a subject.

(10) baqarat-un takalamat
cow.nom.indef spoke.3fs
"A cow has spoken." (MSA)

(cf. Fassi Fehri 1993:28)

On the surface, there is no logical reason for why (9) is ruled out and (10) is acceptable; in JA, for example, the corresponding sentences of both (9) and (10) are equally grammatical.

(11) a. rjaal waSel-uu
men.indef arrived.3m-p
"Men have arrived." (JA)

b. baqarah Hakat
cow.indef spoke.3fs
"A cow has spoken." (JA)

The discrepancy between (9) and (10) is unaccounted for in Fassi Fehri (1993). The traditional Arab grammarians analyse the preverbal noun phrase in (10) as a topic despite the fact that it is indefinite. In the Arabic linguistic literature, topicalisation of indefinite noun phrases is permitted in certain cases. As Hassan (1961:486) asserts, traditional Arab grammarians identify about forty contexts where the topic (in the preverbal position) can be an indefinite and non specific noun phrase. For instance, in contexts where the speaker talks about eccentric things, exaggerates, warns or attracts attention to something, the topicalisation of indefinite and non specific noun phrases is allowed. Apparently, the grammaticality of (10) above is ascribed to the eccentricity of the situation where a cow is able to speak (cf. Ayoub 1981 and Mohammad 2000); in this situation an indefinite noun phrase can be topicalised. Building on this, one could conclude

that the subject interpretation of the preverbal noun phrase in (10) is not possible, hence the ungrammaticality of (9) above.

In fact, the grammaticality of (10) is due to the combination of the particular noun phrases *baqarat-un* 'a cow' with the particular verb *takalamat* 'spoke'. If we use a different noun phrase or a different verb, the sentence becomes ungrammatical. In order to show the reason behind the grammaticality of (10) and the ill-formedness of (9), let us observe what happens if we replace the preverbal noun phrase *baqaarat-un* 'a cow' with the noun phrase *bint-un* 'a girl':

(12) *bint-un takalamat
girl.nom.indef spoke.3fs
"A girl has spoken." (MSA)

In contrast with (10) above, the preverbal noun phrase in (12) is familiarly associated with act of speaking. Therefore, such a noun phrase cannot be topicalised because it is indefinite. Since the noun *bint-un* 'a girl' in (12) is the subject, it should follow the verb; its subject interpretation is obtained only if it follows the verb. Putting things differently and to show the point at hand, let us now change the verb instead of the noun phrase in (10) above; if the verb *takalamat* 'spoke' is replaced by the verb *akalat* 'eat', the sentence becomes ungrammatical:

(13) *baqarat-un akalat al-3uŝb-a
cow.nom.indef ate.3fs the-grass-acc
"A cow has eaten the grass." (MSA)

The behaviour of both (12) and (13) indicates clearly that a subject interpretation of the indefinite preverbal noun phrase in (10) is not possible.

5.3.2. Analysing Preverbal Noun Phrases as Topics

Following traditional Arab grammarians, Plunkett (1993) assumes that both of the preverbal noun phrases in (14) below are topics, see also our examples in (1) and (2) above.

(14) a. aT-Tulaab-u yadrus-uuna
the-students-nom study.3m-p
"The students, (they) are studying." (MSA)

b. aT-Tulaab-u uHibu-hum
the-students-nom like.1s-them
"The students, I like them." (MSA)

(Plunkett 1993: 241)

According to Plunkett's view, both topics are associated with resumptive pronouns. However she assumes that the resumptive pronoun in (14a) is null; "[s]ince Arabic is a pro-drop language the resumptive pronoun in subject position

is non-overt" (Plunkett 1993:241). In (14b) on the other hand, the resumptive pronoun is overt; it appears as a pronominal clitic on the verb.

Ouhalla (1997) distinguishes between two types of preverbal noun phrases. He argues that the preverbal noun phrase can be a topic:

(15) al-riwaayat-u a'llafat-haa Zaynab-u
the-novel-nom wrote.3fs-it Zaynab-nom
"(As for) the novel, Zaynab wrote it." (MSA)

(Ouhalla 1997:12)

Also, the preverbal noun can be a focus or f-phrase as Ouhalla calls it[2]:

(16) RIWAAYAT-AN a'llafat Zaynab-u
novel-acc wrote.3fs Zaynab-nom
"It was a NOVEL that Zaynab wrote." (MSA)

(Ouhalla 1997:12)

As the contrast between (15) and (16) above shows, topics differs from f-phrases in that the former carry nominative case. Topics, as Ouhalla (1991, 1997) argues, are base generated in the preverbal position and associated with a resumptive pronoun inside the clause. However, Ouhalla (1997) is imprecise about the positions that might be occupied by the topic; topics "either originate under a left-peripheral Top position (Chomsky 1977) or have the status of adjuncts of the

[2] Notice that in Ouhalla (1997), f-phrase is written in capital letters to distinguish it from topic.

highest projection of the clause" (Ouhalla 1997:14).[3] On the other hand, f-phrases are moved from lower positions to the specifier position of a functional head. Unlike topic, f-phrase is associated with gap within the clause. Also, f-phrase maintains the case which is associated with the position from which it moves. Therefore, in (16) above, the f-phrase, which has moved from the object position, is accusative.

As regards the position of f-phrase, Ouhalla (1997) argues that it occupies the specifier position of Focus Phrase (FP). Building on the contrasts between the topic in (15) and the f-phrase in (16), Ouhalla concludes that the preverbal noun phrase in (17) below is a focalised subject; it is an f-phrase which has moved from the subject position (i.e. specifier of vP) to the specifier of FP. According to Ouhalla, the preverbal f-phrase below maintains the nominative case and, unlike topic, it is not associated with a resumptive pronoun (cf. Ouhalla 1997:13).

(17) ZAYNAB-u a'llafat al-qaSidat-a
Zaynab-nom wrote.3fs the-poem-acc
"It was Zaynab who wrote the poem." (MSA)

(Ouhalla 1997:13)

Ouhalla (1997) makes use of (17) above to show that the preverbal noun phrase has the same status as the preverbal noun phrase in (16) above; i.e. he considers

[3] A similar view is found in Ouhalla (1991). He claims that the "preverbal subjects are base-generated in their surface position rather than moved from the predicate phrase" (Ouhalla 1991:120). According to Ouhalla's view, the preverbal subjects, which are "essentially topics", are located in the specifier of TP.

both noun phrases as f-phrases. In order to avoid the issue of full/partial agreement patterns and resumption, he uses a feminine singular subject.[4] However, close investigation shows that (17) is not the right sort of example to show that the preverbal noun phrase is an f-phrase. The nominative case on *Zaynab* is not actually carried over from the postverbal position; i.e. it is not maintained. Rather, it is assigned by C.[5] As discussed in the previous chapter, when (17) above is preceded by the complementiser *inna*, the preverbal noun phrase has to carry accusative case. Consider:

(18) inna ZAYNAB-a a'llafat al-qaSidat-a
comp Zaynab-acc wrote.3fs the-poem-acc
"Indeed, Zaynab wrote the poem." (MSA)

With regard to resumption, if the preverbal noun phrase in (17) above were plural, then a pronominal clitic should appear on the verb, as (19) below shows.

(19) ar-rijaal-u a'llaf-uu al-qaSidat-a
The-men-nom wrote.3m-they the-poem-acc
"It was the men who wrote the poem." (MSA)

---

[4] Third person singular preverbal nouns are not associated with overt nominative resumptive pronouns. The nominative third person singular pronouns are free forms; they do not appear as clitics on the verb. Therefore, they are optionally used. The null resumptive pronoun in (17) can be spelt out as *hiyya* 'she'.

[5] It is the sort of case that is conventionally referred to as default case (cf. Fassi Fehri 1993), see also section 4.3.1 above. Under the assumption made in chapter four above, the preverbal noun phrase in (17) carries a lexical case which is assigned by C.

In a nutshell, the preverbal noun phrase in (17) is identical to the preverbal noun phrase in (15) which means that they both have the same status, namely, they are topics as assumed by Plunkett (1993) following the traditional grammarians. However, the resumptive pronoun in (17) is null because it does not have a corresponding clitic form (see footnote 4).

5.3.3. Analysing Preverbal Noun Phrases as Broad Subjects

Doron and Heycock (1999) suppose that both the postverbal nominative noun phrase in (20a) and the preverbal nominative noun phrase in (20b) are subjects. While the former is base generated in the specifier of vP, the latter is moved from the specifier of vP to the specifier of TP.

(20) a. yuqaabilu aT-Tulaab-u hind-an
meet.3ms the-students.m-nom Hind-acc
"The students are meeting Hind." (MSA)

(Doron and Heycock 1999:70)

b. aT-Tulaab-u yuqaabil-uuna hind-an
the-students.m-nom meet.3m-p Hind-acc
"The students are meeting Hind." (MSA)

(Doron and Heycock 1999:77)

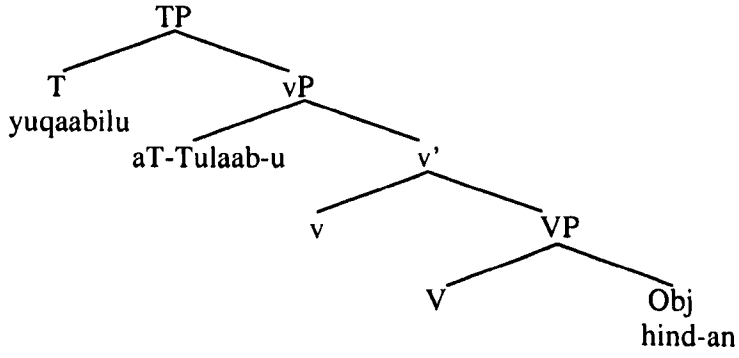
Doron and Heycock do not address the issue of agreement asymmetry. Rather, they argue for the existence of what they call Broad Subjects. While Doron and

Heycock (1999) refer to the subjects in sentences like the ones in (20) above as narrow subjects, they consider the preverbal nominative noun phrase in (21) below a broad subject.

(21) hind-un yuqaabilu-haa aT-Tulaab-u
Hind-nom meet.3ms-her the-students.m-nom
Literally: "Hind, the students are meeting her."
"The students are meeting Hind." (MSA)
(Doron and Heycock 1999:70)

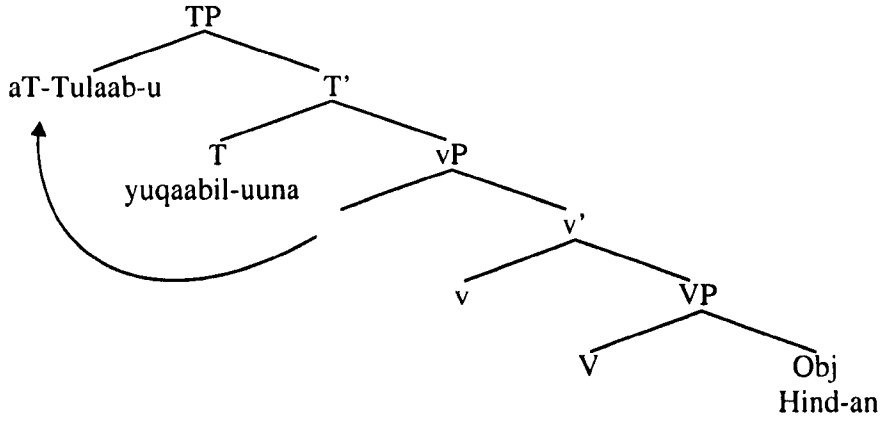
The main difference that sets the broad subject apart from the narrow subject is that, according to Doron and Heycock, only the latter induces agreement with the verb. Another difference is that the broad subject binds a resumptive pronoun, which appears as a clitic on the verb. A further difference between the two kinds of subjects concerns the positions they occupy. As mentioned above, while the postverbal narrow subject in (20a) is base generated in the specifier position of vP, as (22) below shows:

(22)



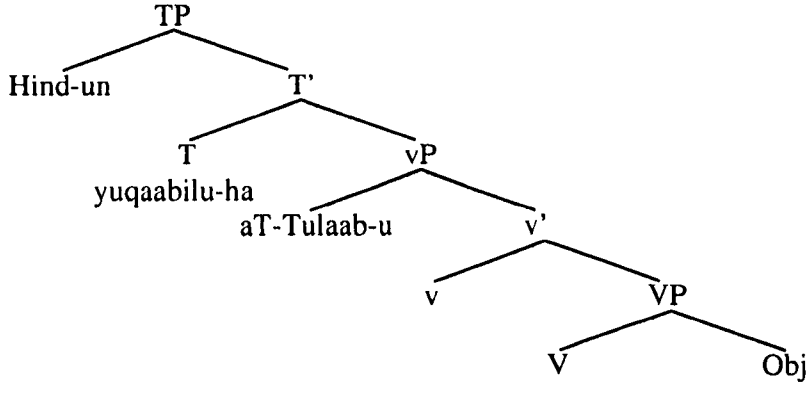
the occurrence of the preverbal narrow subject in the specifier position of TP in (20b) is achieved by movement.

(23)



In contrast, the broad subject in (21) is base generated in its surface position in the specifier position of TP and the narrow subject is in its base position in the specifier of vP.

(24)



Doron and Heycock argue that when the specifier of TP is occupied by the narrow subject, the broad subject is merged in an outer specifier of TP. In (25) below, *hind-un* is the broad subject and *aT-Tulaab-u* is the narrow subject.[6]

(25) hind-un aT-Tulaab-u yuqaabil-uuna-ha
Hind-nom the-students.m-nom meet.3m-p-her
"The students are meeting Hind."
Literally: "Hind, the students are meeting her." (MSA)

(Doron and Heycock 1999:78)

In fact, Doron and Heycock's broad subject corresponds to the subject in the work of Fassi Fehri (1993), see example (10) above, and to the topic in Plunkett (1993) and Ouhalla (1997), see section 5.3.2 above.

Let us summarize the discussion so far. The analyses discussed above claim that the preverbal noun phrases in SVO sentences can be subjects (Fassi Fehri 1993), broad / narrow subjects (Doron and Heycook 1999), topics (Plunkett 1993 and Ouhalla 1997) or foci (Ouhalla 1997). Some of these preverbal noun phrases are assumed to be associated with resumptive pronouns inside the clause. However, problems arise when it comes to the preverbal noun phrases which are treated as

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[6] As an indication to the controversy over the nature of the preverbal noun phrases, Doron and Heycock (1999) consider the preverbal noun phrase in the following sentences as a topic:

i. hind-an yuqaabilu aT-Tulaab-u
Hind-acc meet.3ms the-students-nom
"Hind, the students are meeting."

(Doron and Heycock 1999:72)

Ouhalla (1997) analyses such a noun phrase as a focus. Consider Ouhalla's example in (16).

subjects or topics that have been moved from subject positions. It could be argued that the source of disagreement among authors is ascribed to the common assumption that there is no resumptive pronoun in the postverbal subject position; i.e. that such a resumptive pronoun is treated as a number marker (cf. section 5.5 below).

In order to put the discussion of VSO and SVO structures on a concrete footing, I will claim, following the traditional Arab grammarians, and in line with Plunkett (1993), that the preverbal noun phrases are topics. However, I depart from Plunkett (1993), Benmamoun (2000b), and Soltan (2006) among others in assuming that what is treated as a number marker in a sentence like (14a) is in fact a resumptive pronoun. The following section is devoted to this issue; it will show how the resumptive pronoun is defined in the literature. Furthermore, it will show that there are at least four tests available to prove the resumptive-pronominal status of the inflectional element that is analysed as a number marker. These tests are relativisation, coordination, reflexivisation, and passivisation (RCRP tests for short).

5.4. On the Nature of the Resumptive Pronouns

5.4.1. Overview

The phenomenon of resumption has been attested in languages such as Hebrew (Shlonsky 1992, 1997), Irish (McCloskey 1990), Italian (Cinque 1990 and Rizzi 1997), Spanish (Suñer 1998) and Standard Yiddish (Prince 1990). This phenomenon is most commonly observed in relative clauses where the relativised

noun phrase is associated with a coreferential pronoun (Haegeman 2001); the coreferential pronoun in relative clauses is referred to as *resumptive pronoun.* According to Sells (1984), the resumptive pronouns are bound pronouns which refer back to previously mentioned antecedents. Kayne (1981) suggests that resumptive pronouns can be thought of as spellouts of traces. They exist in positions which are otherwise expected to be gaps. For instance, as the sentences in (26) and (27) below show, in English relative clauses where the gap is allowed, the resumptive pronoun is not. By contrast, where the gap is not allowed in Arabic, the resumptive pronoun is.[7]

(26) a. I saw the girl *who* John met ___.

b. *I saw the girl *who* John met *her.*

(27) a. *ŝif-t al-bint *alli* AHmad qaabal ___.
saw-I the-girl *who* Ahmad met.3ms ___.
"I saw the girl *who* Ahmad met." (JA)

b. ŝif-t al-bint *alli* AHmad qabal-*haa*
saw-I the-girl *who* Ahmad met.3ms-*her*.acc
"I saw the girl *who* Ahmad met *her.*" (JA)

---

[7] In English, the use of resumptive pronouns is marginal; these pronouns are largely limited to the constructions that contain islands. According to Ross (1967) and Sells (1984) resumptive pronouns are used to avoid island violation. A similar argument is found in Shlonsky (1992) and Hornstein (2001) who claim that the resumptive pronoun is a last resort strategy that is required when movement (or extraction) is not allowed. Relative clauses and wh-introduced clauses are considered islands which do not allow extraction. To exemplify, (i) shows that extraction from the wh- island is not allowed; therefore, a resumptive pronoun has to be used, as (ii) shows. Both sentences below are taken from Mckee and McDaniel (2001: 115).

i. *That's the girl that I don't know [what *t* did].
ii. That's the girl that I don't know [what she did].

However, the resumptive pronoun does not exist in interrogative clauses, as (28) below shows (consider also the sentences in (61) below).

(28) man qaabala AHmad-u
who met.3ms Ahamd-nom
"Who did Ahmad meet?"

Having defined the resumptive pronouns, let us now move to the next section where RCRP tests are applied.

5.4.2. Relativisation, Coordination, Reflexivisation and Passivisation Tests

5.4.2.1. Relativisation Test

The supposed number markers in SVO sentences such as (7) and (14a) above behave identically to the resumptive pronoun in (2) above. Just like the object (see (27b) above), the relativised subject in the modifying relative clauses in (29) below is associated with a resumptive pronoun; a gap is not allowed as (29b) shows.[8]

(29) a. ra'ay-tu al-a'wlaad-a *allaðeena* kasar-*uu* as-saiyarat-a
saw-I the-boys-acc *who*.mp broke.3m-*they* the-car-acc
"I saw the boys who broke the car." (MSA)

[8] Notice that MSA differs from JA in that the relative pronouns are specified for gender and number. In JA, the relative pronoun has only one form, *alli*, which is used with singular and plural nouns irrespective of their gender.

b. *... *allaðeena* kasar as-saiyarat-a
... *who*.mp broke.3m the-car-acc
"... who broke the car." (MSA)

The resumptive pronoun *-uu* in (29a) has the same status as the pronoun which is associated with the preverbal noun phrase in (30a) below (and also in (1), (7) and (14a) above). In both constructions, i.e. (29a) and (30a), the absence of the pronominal element *-uu* leads to ungrammaticality, as (29b) and (30b) shows.

(30) a. al-a'wlaad-u kasar-*uu* as-saiyarat-a
the-boys-nom broke.3m-*they* the-car-acc
"The boys broke the car." (MSA)

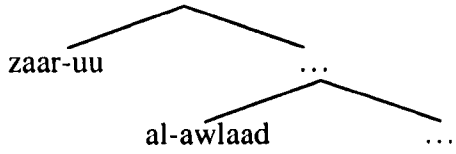
b. *al-a'wlaad-u kasar as-saiyarat-a
the-boys-nom broke.3m the-car-acc
"The boys broke the car." (MSA)

JA parallels MSA in that it requires resumptive pronouns in relative clauses (see (27b) above) as well as in SVO sentences (for instance, see (11a) above). However, VSO sentences in JA pose a challenge because the postverbal subject is preceded by the coreferent resumptive pronoun, as in (4b) above, which is repeated below as (31).

(31) zaar-uu al-awlaad al-m3limah
visited.3m-*they* the-boys the-teacher.f
"The boys visited the teacher." (JA)

The resumptive pronoun in (31) is superficially not c-commanded by the subject, as the structure (6) above shows. (6) above is repeated here as (32).

(32)



In order to account for (31), I shall assume later in this chapter in the sense of Holmberg (1999) that the verb in (31) is topicalised. In line with Kayne (1989), I claim that since the resumptive pronoun is a clitic it is affected by the syntactic processes that affect the host, i.e. the verb; this means that when the topicalised verb moves from T to a higher position, the clitic moves with it (see 6.3.2.2 below).

5.4.2.2. Coordination Test

It is worth pointing out here that the properties of Arabic resumptive pronouns, which appear as clitics on their hosts, are similar to the properties of Romance clitics, which are discussed in Kayne (1975, 1989). According to Kayne (1975) clitics are not coordinated or modified. In fact, coordination, which is the second of RCRP tests, can be used in two ways. In the one hand, the coordination test shows that the resumptive pronouns have the properties of clitics in that they cannot be coordinated, see (33a) below. However, coordination between a

resumptive clitic and a free (non-clitic) pronominal form is possible, as (33b) below shows.[9, 10]

(33) a. *ja'at-aa wa *-uu
came.3f-they.d and –they

b. ja'at-aa wa hum
came.3f-they.d and they
Literally: "Both of them and they came."
"They came with them." (MSA)

On the other hand, coordination facts reveal that the resumptive pronoun should not be treated as a number marker because it can be coordinated with a full noun phrase. In (34a) below, the object resumptive pronoun is coordinated with a noun phrase, whereas in (34b) it is the subject resumptive pronoun that is coordinated with the full noun phrase.

(34) a. hind-un ra'y-tu-haa wa al-mu3lim-at-a
Hind-nom saw-I-her.acc and the teacher-f-acc
"Hind, I saw her and the teacher." (MSA)

---

[9] However clitics cluster in Arabic; when the subject and the object are clitics; they appear in a fixed order. The subject clitic precedes the object clitic, as can be seen from (i) below:

i. kasar-uu-haa
broke-they-it
"They broke it."

[10] (33b) is grammatical according to Arab grammarians such as Alafghani (1974), it is not preferable, though.

b. aT-Tulaab-u ja'a-uu wa al-mu3lim-u
the-students-nom came.3m-they.nom and the-teacher-nom
"The students, they and the teacher came." (MSA)

5.4.2.3. Reflexivisation Test

The behaviour of reflexives is another test that we can use in order to confirm that the resumptive pronouns should not be treated as number markers. Since the early days of GB theory, which dates back to Chomsky (1981), it has been observed that the anaphoric reflexives such as *himself*, *themselves*, etc. are required to be bound by a clause-internal antecedent. Condition A of the Binding Theory governs the distribution of the anaphoric reflexive and its antecedent; the former must be c-commanded by the latter. In both MSA and JA, reflexives cannot refer to clause-external antecedents. Also, as the ungrammaticality of (35) below suggests, reflexives in MSA and JA, like their counterparts in English, for example, cannot function as subjects.

(35) *ja'a anfus-u-hum
came.3ms selves-nom-their
"Themselves came." (MSA)

As mentioned earlier, in SVO sentences, the form of the resumptive pronoun appears as a clitic on the verb. The same pronominal form is used in sentences such as (36) below where no overt nominal subject is present; such a pronominal clitic is the subject. Authors who analyse this pronominal as a number marker

assume that (36) below is a pro drop sentence (cf. Plunkett 1993 and Mohammad 2000).

(36) akal-uu aT-Ta3aam-a
ate.3m-they the-food-acc
"They ate the food." (MSA)

The subject pronominal clitic in (36) above can bind a feature-compatible reflexive; i.e. the features of the reflexive have to correspond to the features of the antecedent, the pronominal clitic.

(37) lam-uu anfus-a-hum
blamed.3m-they selves-acc-their
"They blamed themselves." (MSA)

A further example, where the pronominal subject clitic is dual:

(38) qatal-aa nafs-ai-hima
killed.3m-they.d self-d.acc-their.d
"They both killed themselves." (MSA)

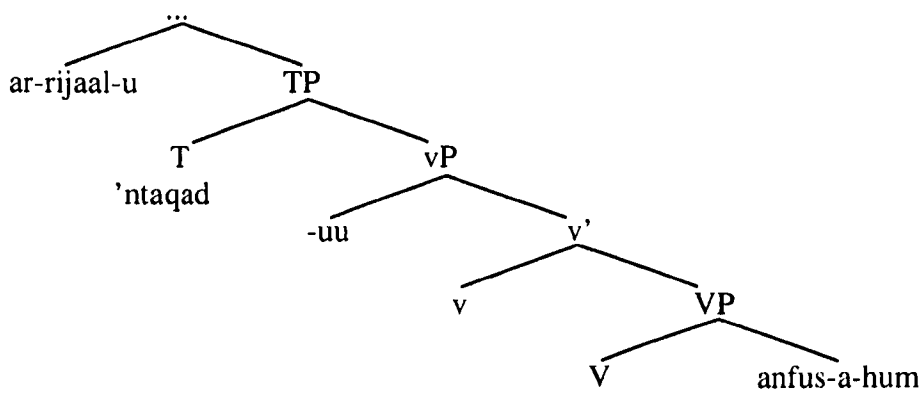
If the pronouns in (36), (37) and (38) above were number markers, then the binding relation between them and the reflexives would not be established, as it has been a standard assumption that reflexive binding is subject to the locality constraint which requires the reflexive and its antecedent to be in the same local

domain (Chomsky 1981). According to Chomsky (2000), locality should reduce to the closest c-command. This, in principle, means that (37) and (38) above are not different from (39) below.

(39) ar-rijaal-u 'ntaqad-uu anfus-a-hum
the-men-nom criticized.3m-they seleves-acc-their
"The men, they criticized themselves" (MSA)

Apparently, in (39) above, the resumptive pronoun is the closest c-commanding antecedent; it is closer than the preverbal noun phrase to the reflexive, as can be seen in (40) below.

(40)



The conclusion that could be made is that since the resumptive pronoun can function as an antecedent which binds the reflexive, number marker analysis should be declined. In certain structures, however, a null subject can bind the reflexive. This is observed when the pronominal subject is third person singular. As mentioned in footnote 4, there is no clitic form of these pronouns. In (41a)

below, the antecedent of the reflexive is null, however it can be spelt out as (41b) shows.

(41) a. qatala nafas-a-hu
killed.3ms self-acc-his
"He killed himself."

b. qatala huwa nafas-a-hu
killed.3ms he self-acc-his
"He killed himself."

5.4.2.4. Passivisation Test

Finally, the passivisation test shows that the resumptive pronouns behave in a similar way to the full noun phrase. In both the active sentence (42a) and its passive counterpart (42b), the preverbal topic is associated with a resumptive pronoun. In (42a), the accusative resumptive pronoun functions as a theme object. In the passive sentence (42b), the resumptive pronoun appears in a different form; it is nominative which means that it functions as a theme structural subject.

(42) a. al-a'wlaad-u ŝahada-hum al-mu3lim-u
the-boys-nom saw.3m-them the-teacher-nom
"The boys, the teacher saw them." (MSA)

b. al-awlaad-u ŝuhid-uu
the-boys-nom was.seen.3m-they
"The boys, they were seen." (MSA)

The contrast between (42a) and (42b) suggests that the resumptive pronouns can function as real arguments. This view, which is attributed to Arab grammarians, corresponds to Kayne's (1975, 1989) view which claims that clitics are syntactically (but not phonologically) independent elements. Kayne (1975) assumes that, in French, clitics are base-generated in argument positions, but they move from their base positions to adjoin to the verbs, their hosts.[11]

The resumptive pronoun in (42b) cannot be treated as a number marker; the verb does not show agreement with the preverbal noun phrase because it is neither the goal nor the theme subject. Rather, the verb agrees with the pronominal subject. Putting things clearly, I claim that the resumptive pronouns in (42a) and (42b) above are object and subject respectively. In fact, the data provide direct evidence in support of this claim. In (43) below, the preverbal noun phrase has the same status as the preverbal noun phrases in (42) above; i.e. it is a topic. However, unlike, the situation in (42), the preverbal noun phrase in (43) below is associated with the possessive pronoun which is contained within the structure of the object; the subject here is a full noun phrase which appears in a position following the verb.

(43)	al-a'wlaad-u	ŝahada	al-mu3lim-u	'umm-a-hum
	the-boys-nom	saw.3ms	the-teacher-nom	mother-acc-their
	"The boys, the teacher saw their mother."			(MSA)

[11] A different view from Kayne's is found in Uriagereka (1995) who argues that clitics in Romance languages are not arguments; rather, they constitute the functional part of the argument.

Now, in the passive counterpart of (43) above, the object becomes the (theme) structural subject with which the verb shows agreement.

(44)	al-a'wlaad-u	ŝuhidat	'umm-u-hum
	the-boys-nom	was.seen.3fs	mother-nom-their.
	"The boys, their mother was seen."		(MSA)

In short, the comparison between (42a) and (42b) in the one hand, and (43) and (44), on the other hand, substantiates the argumental status of the resumptive pronoun in the passive sentence (42b), and in active sentences such as (39), for instance.

To sum up and conclude this section, the RCRP tests indicate that the resumptive pronouns are best analysed as pronominal clitics rather than number markers. However, in relation to this conclusion, two main issues have to be addressed when Agree Theory and the feature inheritance model (Chomsky 2000, 2005) are adopted. The first issue concerns the nature of the preverbal positions and whether the preverbal nouns are base generated or moved from lower positions. The second issue concerns the existence of the resumptive pronoun in VSO orders in JA; the possibility of having the resumptive pronoun c-commanding the antecedent in JA VSO sentences requires some discussion. These issues are dealt with in section 5.6 below. The following section discusses some previous analyses which have been proposed to account for the agreement asymmetry in Arabic and the positions occupied by subjects.

5.5. Analyses of Agreement in the Literature

As mentioned earlier in this chapter (see section 5.2 above), the positions occupied by the subject and the agreement pattern on the verb are strongly related. Generally speaking, most of the analyses adopt Koopman and Sportiche's (1991) VP-Internal Subject Hypothesis and assume that the postverbal subject originates in the specifier position of VP, or vP. In SVO sentences, the preverbal subjects achieve their surface position in the specifier position of TP by movement. Such a movement is motivated by an EPP feature on T (Aoun et al. 1994; Mohammad 2000 and Mahfoudhi 2002 among several others).

Various analyses have been proposed to account for the relation between agreement asymmetry and the subject positions. The majority of these analyses were set within the GB framework and the early stage of the MP.

5.5.1. Pre-minimalist Analyses

5.5.1.1. Null Expletive Hypothesis

In an attempt to account for the agreement asymmetry in MSA, Mohammad (1990, 2000) argues for what he calls the null expletive hypothesis. Such a hypothesis claims that the agreement is determined under specifier-head configuration. The verb which shows agreement is located in T, while the element that dictates partial or full agreement on the verb is located in the specifier of TP. In the case of SVO word orders, full agreement is dictated by the preverbal noun phrase, i.e. the lexical subject in the specifier position of TP according to Mohammad. On the other hand, in VSO structures, the partial

agreement pattern on the verb is the outcome of the relation between the verb in T and a third person singular expletive pronoun in the specifier of TP.

Mohammad's null expletive hypothesis does not seem to be a good solution for the agreement asymmetry in MSA as it encounters empirical difficulties. From an empirical standpoint, as argued by Fassi Fehri (1993), the null expletive hypothesis fails to account for the full agreement pattern that is found in VSO structures in local varieties of Arabic such MA, and JA. As we have observed in (4b) above, the verb shows non third person singular agreement, which means that it is not dictated by a third person singular expletive. Moreover, Fassi Fehri (1993) argues against the null expletive hypothesis on the ground that the expletive need not be third person singular, as the following sentence shows; he assumes that the third person plural pronoun *hum* 'they' in (45) is an expletive.

(45) hum al-junuud-u
they.m. the-soldiers-nom
"It is the soldiers / That's soldiers" (MSA)
(Fassi Fehri 1993:40)

Bahloul and Harbert (1992) argue that the null expletive hypothesis fails to account for the structures where the verb shows full agreement with the pronominal subject whether it is postverbal or preverbal, as (46a) and (46b) below show respectively. If Mohammad's hypothesis is correct, then the verb in

(46a) should show singular agreement. The ungrammaticality of (46c) indicates that the singular agreement is not possible.[12]

(46) a. ðahab-uu hum illa al-madeenat-i
went.3m-p they.nom to the-city-gen
"They went to the city." (MSA)

b. hum ðahab-uu illa al-madeenat-i
they.nom went.3m-p to the-city-gen
"They went to the city." (MSA)

c. *ðahaba hum illa al-madeenat-i
went.3ms they.nom to the-city-gen
"They went to the city." (MSA)

Under the recent assumptions of the MP, the null expletive hypothesis is unadoptable because the agreement is a manifestation of the Agree relation which holds between T and the subject in the specifier position of vP; the subject movement to the preverbal position follows the Agree operation, which applies

[12] Notice that while Bahloul and Harbert (1992) and Soltan (2006) among others consider that (46a) is grammatical, Fassi Fehri (1993) argues that it is not. The use of a free form of the pronoun renders the sentence ungrammatical, as his example below shows:

i. *ji'-na hunna
came.3-f.p they.f
Literally: "They they came." (MSA)
(Fassi Fehri 1993:108, example 31)

In this thesis, I follow the traditional grammarians in that I do not treat such a pronoun as a subject. Rather, as assumed in Fassi Fehri (1988), I consider it as a parenthetical pronoun which doubles the pronominal clitic.

between a given probe and a goal in the searching domain of that probe. Once the probe agrees with the goal, the unvalued uninterpretable features of both items are valued. This means that in the case of Arabic SVO structures the verb agrees with the subject while it is in a postverbal position. The subject moves to a preverbal position for certain reasons, i.e. to satisfy an EPP feature on T, but it does not dictate agreement from the preverbal position. Therefore, the controversial question of full/partial agreement is still unanswered. An alternative analysis was introduced in Fassi Fehri (1993). Fassi Fehri's (1993) proposal for the agreement asymmetry in MSA is reviewed in section 5.5.1.2 below.

5.5.1.2. Incorporation Analysis

As mentioned earlier in this thesis, Fassi Fehri (1993) claims that the nominative pronominal bound forms, such as those listed in Table 2.4, can be interpreted as real pronouns or inflectional markers (cf. section 2.3.2 above). When a sentence such as (47) does not contain an overt subject, the pronominal clitic is conceived of as an incorporated pronoun.

(47) ŝarib-uu al-Haleeb-a
drank.3m-they.nom the-milk-acc
"They drank the milk." (MSA)

However, when the subject is an overt noun phrase, as in (39) above, the pronominal clitic is treated as a genuine number marker. In order to account for the asymmetrical agreement which is associated with the subject positions, Fassi

Fehri (1993) introduces the AGR Criterion - a principle that regulates the relation between the full/ partial agreement pattern and the subject position.

(48) AGR Criterion: rich AGR is licensed by an argumental NP in its Spec, and an argumental NP in Spec AGR is licensed by rich AGR.

(Fassi Fehri 1993:34)

According to the principle in (48), the preverbal noun phrase occupies the specifier position of an AGR phrase. The licensing of the subject in SVO sentences and full agreement pattern is reciprocal in that full agreement licenses the preverbal subject and vice versa. The main challenge that the AGR Criterion encounters is the full agreement pattern found in VSO sentences in local varieties of Arabic such as JA and MA. In an attempt to overcome this shortcoming, Fassi Fehri (1993) assumes that agreement is licensed either by R-NPs or by R-chains.[13] In SVO structures in MSA, full agreement is licensed by R-NP in the specifier position of AGR phrase. On the other hand, partial agreement in VSO structures is licensed by an R-chain; the R-NP member of the chain follows the verb, while the expletive member is in the specifier of AGR phrase. Both options (i.e. R-NP and R-chain) are available to specify the full agreement patterns in VSO as well as SVO structures in local varieties of Arabic such as MA.

[13] Fassi Fehri uses "the expressions R-NPs or R-chains to designate constituents which are not of 'pure expletive nature" (Fassi Fehri 1993:44). He clarifies that "R-chains establish referential dependence between members of the chain, of which one member is an R-NP, and another member is an expletive" (Fassi Fehri 1993:93, fn. 37).

Fassi Fehri's (1993) AGR Criterion offers a suitable alternative to Mohammad's (1990) null expletive hypothesis. However, assuming the theory of Agree, AGR Criterion cannot be adopted as it does not seem to be consistent with the minimalist assumptions. As argued by Chomsky (1995), the existence of AGR phrase is conceptually unnecessary. Furthermore, under the assumptions of the Agree-based model, the agreement on the verb does not play a role in determining the position of the preverbal position, as agreement itself is a product of the Agree relation between the features of C on T and the postverbal subject. Agreement, whether it is full or partial, does not motivate the postverbal subject to move to a preverbal position.

5.5.1.3. Agreement Loss Analysis

A different view from Fassi Fehri's on the asymmetrical agreement is found in Aoun et al. (1994). These authors argue that full agreement between the verb and the subject is obtained in both VSO and SVO word orders. However, full agreement in VSO structures in MSA is lost because of the movement of the verb from T to a higher functional head; Aoun et al. (1994) identify such a functional head as FP. The motive for verb movement from T to FP is not clear and is not addressed in Aoun et al. (1994). Loss of agreement in number features in VSO structure in MSA is ascribed to Aoun et al.'s (1994) distinction between number and gender features. "Agreement must be retained for intrinsic features but not for grammatical features" (Aoun et al. 1994:206). Therefore, "head movement

must preserve gender agreement but may fail to preserve number agreement" (Aoun et al. 1994:206).

Mahfoudhi (2002) argues for a similar idea: he assumes that in VSO orders the inflectional marker of the number feature is deleted when the subject follows the verb because of what he calls "heaviness reasons in a general sense". According to his view, the deletion of the number feature does not affect the interpretation of number as such a feature is recoverable from the form of the postverbal subject.

Under the assumptions of Agree Theory, agreement loss or deletion analyses do not seem to be adoptable. Assuming the un/interpretability of features (Chomsky 1995), both number feature and gender feature are Φ-features. The gender feature, like the number feature, can be recoverable from the form of the postverbal subject. It could be argued then that any process that may result in the loss of the number feature in Arabic would be expected to lead to the loss of the gender feature, as both features form a complex. However, the loss of gender feature is hard to attest in Arabic because there is no neutral gender marking.

5.5.1.4. Agreement under Government or Specifier-Head Configurations

Benmamoun (1992) claims that full agreement and partial agreement take place in different structural configurations. He argues that while in MSA partial agreement in VSO takes place under government configurations, full agreement in SVO structures takes place in a specifier-head configuration. The former

agreement pattern is obtained when the verb in T governs the subject, while the latter is obtained when the subject is located in the specifier position of TP.

Relating to the local varieties of Arabic, where the agreement is full regardless of the subject position, Benmamoun assumes that full agreement takes place either under government or in specifier-head configuration. Such a configurational analysis of agreement is not well-suited to minimalist assumptions as the specifier-head and government relations are abandoned in favour of the Agree relation. Since the probe T can have its Φ-features valued under Agree with an active goal in its c-commanding domain, it does not initiate an Agree relation with a preverbal noun phrase.

5.5.2. Asymmetrical Agreement and Minimalism

5.5.2.1. The Merger of the Subject and the Verb at PF

Aoun and Benmamoun (1999) and Benmamoun (2000a) argue for a minimalist analysis which assumes that the merger of the verb and the subject in VSO structures takes place at PF level. Accordingly, the partial agreement pattern found in the VSO structures in MSA is due to this process of PF merger of the verb and the subject. Benmamoun asserts that:

> Since number is interpretable and intrinsic feature of the noun (Chomsky 1995) the merger of the subject and the verb amounts to endowing the verb with number features. This in turn precludes spelling out the number feature on the verb by an affix, otherwise number would be spelled-out twice which is redundant (Benmamoun 2000a:31).

However, Benmamoun's account does not provide any convincing evidence as to why full agreement is obtained in VSO structures in the local varieties of Arabic, such as MA. The only explanation he offers is that MSA differs from the local varieties in that the "the former has a rule that merges the verb and the subject in PF" (Benmamoun 2000:32); such a rule does not exist in the local varieties of Arabic.[14] A different and more recent minimalist view is advocated in Soltan (2006) who argues for an Agree-based analysis for the agreement asymmetry in MSA. Section 5.5.2.2 below discusses Soltan's view.

5.5.2.2. Null Pro Analysis

Soltan (2006) considers that in SVO structures, the preverbal subject is base generated in the specifier position of TP to satisfy an EPP feature of T. The specifier position of vP, on the other hand, is occupied by *pro* which is associated with the preverbal subject. In contrast, T in VSO structures does not have an EPP feature. Therefore, the subject originates and stays in the specifier position of vP.

Initially, Soltan ascribes the full agreement in SVO sentences to *pro identification requirement* (Rizzi 1982, 1986 and McCloskey 1986) which claims that null *pro* has to be identified through the full agreement on the verb.[15] However, the main

[14] In fact, Benmamoun's (2000a) original text contains a typographical error which would change the intended meaning. He asserts "the difference between Moroccan Arabic and Standard Arabic is that the later [*sic*] [*the former*] does not have a process that merges the subject and the verb. Therefore, number agreement on the verb is spelled-out even when the latter precedes and is adjacent to the subject" (Benmamoun 2000a:32). It is Moroccan Arabic, not MSA, that does not merge the subject and the verb at LF according to Benmamoun's view.

[15] According to Rizzi (1986), argumental *pro* in null subject languages, such as Italian, must be licensed and identified. Licensing of *pro* is achieved by a governing Case assigning head, such as

problem that would pose a challenge for the *pro identification requirement* is that the verb in VSO sentences shows full agreement with the postverbal lexical pronominal subject. Consider (46a) which is repeated below as (49) for convenience.

(49)	ðahab-uu	hum	illa	al-madeenat-i
	went.3m-p	they.nom	to	the-city-gen
	"They went to the city."			(MSA)

In order account for the full agreement pattern in (49) above, which seem to contradict the *pro identification requirement*, Soltan assumes that the "overtness of the pronominal in subject position is actually the result of an interface operation of lexicalization of a null subject *pro* rather than early insertion of a pronominal with phonological content" (Soltan 2006:252). In fact, this is a weak justification as the full agreement in JA and other local dialects of Arabic is obtained with full noun phrases in VSO; for instance, consider the JA sentences in (4) above (and also see below). As the discussion goes on, Soltan argues that the features which are carried by T determine whether the agreement pattern on the verb should be full or partial:

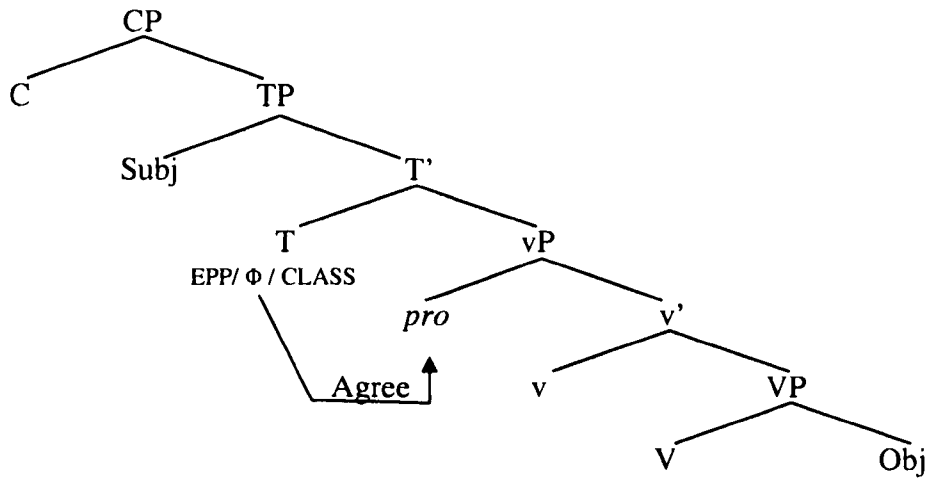
> "T has the following inventory of uninterpretable features: First, Φ-features of the traditional Person and Number features, which may also happen to have *default* values. Second, T may also appear with a separate

T. For *pro* to be strongly referential, it must be identified. Identification of *pro* is achieved by the rich agreement on the licensing head.

> *CLASS* feature, familiar from languages with rich classifier systems (e.g. Bantu), which also appears as a Gender feature in many languages. If Gender is not part of the Φ-complex on T, then it should be able to probe separately for the purpose of Agree [...] Finally, T may appear with an EPP feature [...] In principle, then, T can appear with Φ, CLASS, EPP, or any combinations of these three, subject to lexical parameterization" (Soltan 2006:255). [Emphasis in the original].

Correspondingly, in SVO sentences, the full agreement pattern on the verb is considered as a manifestation of Agree relation between T and *pro*. As the structure in (50) below shows, T has a set of EPP, CLASS and Φ-features. As mentioned earlier, EPP is satisfied by the base generation of the nominal subject in the specifier position of TP. T, which has CLASS feature and Φ-features, probes down and locates *pro* in the specifier of vP as a matching goal. As a result, an Agree relation applies between the two elements, i.e. the probe T and the goal *pro*. Put differently, as assumed by Soltan, CLASS and Φ-features probe "separately for the purpose of Agree"; the outcome of this operation is full agreement in CLASS feature and Φ-features. The structure in (50) below schematizes the Agree relation which induces full agreement in SVO orders.

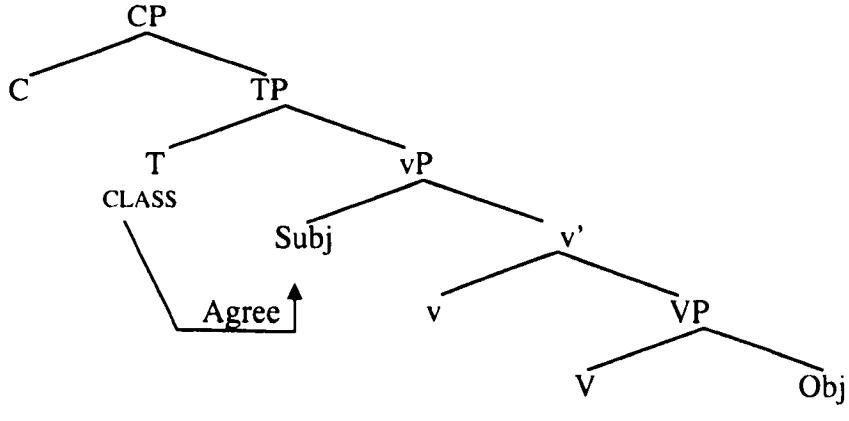
(50)



(cf. Soltan 2006:256, eg. 40)

Unlike SVO structures, VSO structures do not contain *pro*. The lexical subject originates in the specifier of vP. Soltan (2006: 256) claims that in VSO structures "T has no Φ nor EPP features, as a lexical option for" MSA. T has only CLASS feature; the CLASS-endowed T locates the postverbal subject in specifier of vP as a matching goal with which it agrees. The result of the Agree relation is partial agreement which is limited to gender only. Compare the VSO structure in (51) below with the SVO structure in (50) above.

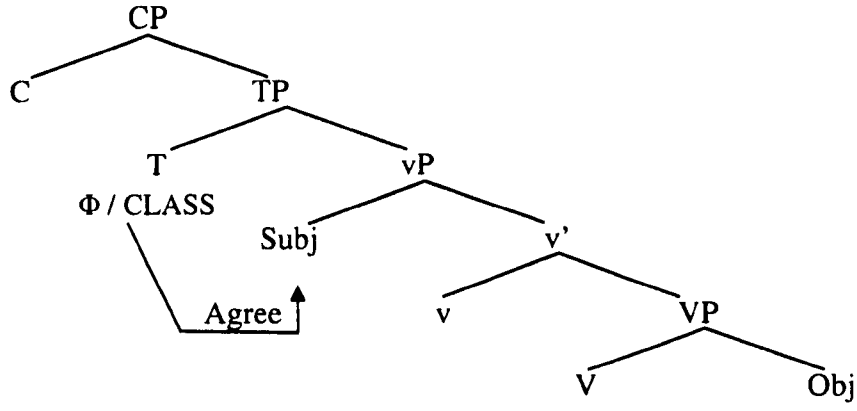
(51)



(cf. Soltan 2006:256, eg. 41)

Data from JA and other local varieties of Arabic, such as Lebanese Arabic (LA) and MA, pose a challenge for Soltan's proposal, as the verb in these varieties shows full agreement with the postverbal subject, see for example (4b) above. The presence of full agreement in VSO structures in local varieties suggests that T has Φ-features, in addition to CLASS feature, which would undermine Soltan's view. However, he avoids discussing this problem by eventually assuming that the local varieties "allow a T with both Φ and Class features without an EPP option" (Soltan 2006:256). The tree diagram in (52) below represents the VSO structure in JA and other local varieties, which allow full agreement in VSO sentences.

(52)



(cf. Soltan 2006:256, eg. 42)

Soltan concludes that his proposal has implications for both word order variation and agreement asymmetry. The existence or absence of *pro* in the numeration is the crucial factor that determines whether the resulting word order is SVO or VSO. The former word order is obtained if *pro* exists while the latter word order is obtained when *pro* is not present in the structure. Consequently, *pro* plays a

significant role in determining the agreement patterns. As (50) and (51) above show respectively, full agreement is obtained when T agrees with *pro* while partial agreement is a manifestation of an Agree relation between T and the lexical subject.

The analysis proposed in Soltan (2006) for the agreement asymmetry is to some extent similar to Mohammad's proposal discussed in section 5.5.1.1 above, though the latter is set up within a different framework. Soltan criticises the null expletive hypothesis; "it is not clear how to motivate the presence of a null expletive in the grammar. A null expletive is LF-inert and PF-empty; hence it has no interface value; it simply lives and dies in the syntax" (Soltan 2006:242).

Despite this criticism and rejection of Mohammad's proposal, Soltan's analysis, which I call here the pro hypothesis, is not very different from Mohammad's null expletive hypothesis. In fact, the pro hypothesis can be thought of as a mirror image of the null expletive hypothesis. While Mohammad assumes the existence of the null expletive in VSO (but not in SVO) structures, Soltan assumes that a null *pro* exists in SVO structures but not in VSO structures. The contrast between the two points of view is diagrammed below:

(53)

Pro Hypothesis			**Null Expletive Hypothesis**		
SV	+	pro	expletive	+	VS
VS		(no pro)	(no expletive)		SV

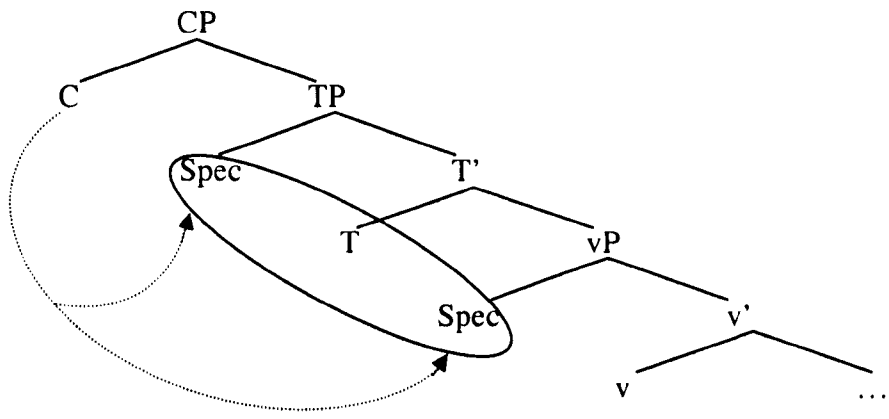
One of the minimalist assumptions claims that any element in the numeration must have effects on both LF and PF interface levels or at least on one of them (Chomsky 1995, 2000), otherwise, it is conceptually unnecessary. Since the null *pro* has an effect at LF, then assuming its existence is not expected to cause a conceptual problem. However, this null *pro* which has to be identified by the Φ-features on T is problematic because the uninterpretable Φ-features of T would not be able to identify the null *pro*. In other words, since the Φ-features on T are uninterpretable, they do not have specific values. The probe T which carries these unvalued Φ-features needs a matching goal with a set of valued Φ-features so that the Agree operation can apply. Since the null *pro* is unidentified, it does not seem to be the ideal goal. Therefore, Soltan's view which claims that *pro* is identified by complete Φ-complex on T is untenable simply because the Φ-complex itself is not valued, hence it would not be able to identify *pro*. One possible solution to this problem (as discussed by Holmberg (2005)) might be to assume that Φ-features in T are interpretable. Consequently, when T agrees with *pro*, the latter is identified. However, this proposal is not supported empirically. In JA for example, T agrees with the postverbal DP subject which is assumed to have a valued set of Φ-features. Therefore, assuming that T has an interpretable set of Φ-features means that T is an inactive probe that cannot initiate the Agree operation.

Nevertheless, pro-related problems still persist because of the assumed interaction between the null *pro* and the features of T. It is not obvious, under Soltan's hypothesis, why and how *pro* is able to determine the type of features on

T. Under the assumptions of feature inheritance model (Chomsky 2005), which is adopted in this thesis (cf. chapter four), the features of T in SVO as well as in VSO structures are inherited from C. This means that whether *pro* exists or not, the features of T are not affected.

The analysis introduced in Soltan (2006) can be improved by adopting the feature inheritance model (Chomsky 2005). Assuming Chomsky's feature inheritance model, *pro* has to be dispensed with because it does not contribute to the derivation and thus its existence is unnecessary. A convergent derivation of either VSO or SVO structures in Arabic can be obtained without *pro*, as an Agree relation can be established irrespective of the position occupied by the subject. To explain, C is the phase head which is the source of all features that initiate Agree operation. Being selected by C, T inherits the features from C, the phase head. Accordingly, when "C-T agrees with the goal DP, the latter can remain in situ [i.e. SPEC vP] under long-distance agree, with all uninterpretable features valued; or it can raise as far as SPEC-T, at which point it is inactivated, with all features valued" (Chomsky 2005:10).This, in principle, means that the domain of the probe C extends from the specifier of TP to the specifier of vP - the left edge of the vP phase.

(54)



As (54) above shows, whether the subject, i.e. the goal with which C agrees, is in the specifier of vP (VSO) or in the specifier of TP (SVO order), the Agree operation can apply and all the unvalued features are valued by matching them with their valued counterparts. Thus, *pro* is redundant and its existence is not needed (cf. Holmberg 2005).

However, the main problem that remains unaccounted for under the feature-inheritance-based analysis is the agreement alternation in MSA in addition to the Case variability as discussed in the previous chapter. To recapitulate, in VSO sentences, the postverbal subject is invariably nominative. On the other hand, in SVO sentences the preverbal noun phrase can be nominative or non-nominative depending on whether it is preceded by an overt case assigner, such as the complementiser *inna*, or not. In order to account for the case variability, I assumed that some C's transmit only some of their features to T; the inherited features are valued via Agree with the postverbal subject while the 'kept' lexical

Case feature is valued via Agree between C and the preverbal noun phrase (for details see section 4.7 above).

For the sake of argument, the analysis I proposed in chapter four above for Case facts avoids addressing the question that concerns the nature of the preverbal noun phrases. In this chapter, that analysis will be extended and modified in order to account for the agreement asymmetry in MSA and the agreement preservation in JA (see section 5.6 below).

Having reviewed the previous analyses and discussed the problems they encounter, and having shown in section 5.4 above that the resumptive pronoun which are associated with the preverbal noun phrases are not number markers, we move now to the proposed minimalist analysis.

5.6. Toward a Minimalist Analysis

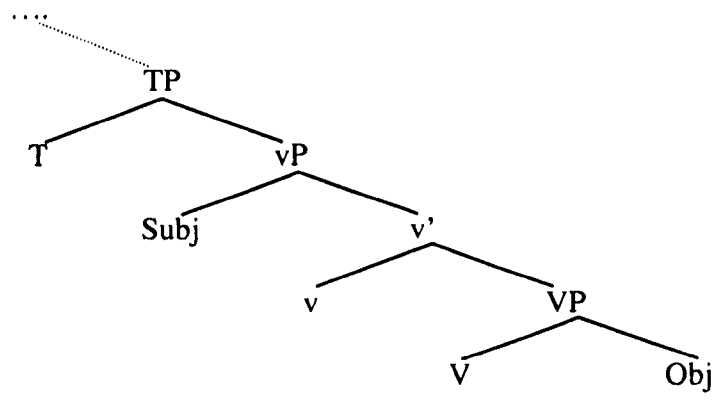
5.6.1. Basic assumptions

The starting point of my account for subject positions and agreement in both MSA and JA is to extend the analysis I put forward in the previous chapter to account for Case on the preverbal noun phrases. I assumed in chapter four above that the preverbal noun phrases are moved from lower positions; assuming the Copy Theory of Movement, I claimed that the fronted noun phrases leave behind pronounceable copies which are realised as resumptive pronouns. Case on the preverbal noun phrases dose not follow from Agree relation between these noun phrases and T. The fronted noun phrases are active goals by virtue of having an

unvalued Case feature. Consequently, they receive lexical Case from C (cf. section 4.7 above). In this chapter, I posit that there are two basic assumptions underlining the analysis I introduce here for subject positions and agreement facts in MSA and JA.

The first assumption claims that the underlying structure for both MSA and JA is SVO. I follow the literature and adopt Koopman and Sportiche's (1991) VP-Internal Subject Hypothesis; the subject in both varieties originates in the specifier position of vP. (55) below schematizes the underlying structures of MSA as well as JA.

(55)



The second assumption concerns the variation in word orders. While SVO is a marked word order in MSA, VSO is the basic and unmarked word order. Quite the opposite holds true for JA; SVO is the unmarked word order in JA whereas VSO is not. Bearing in mind this difference between MSA and JA, I speculate that the derivational operations required to derive unmarked word orders are less

than the operations that are required to derive marked word orders. The latter word orders contain topicalised elements which are moved from their positions.[16]

Putting this assumption more explicitly, a given SVO structures in MSA is derived by applying a further operation after the VSO structure is derived. Conversely, in JA, the derivation of SVO structures precedes the derivation of VSO structures; after an SVO structure is derived, the verb is raised from T to a higher position. This amounts to saying the VSO word orders in MSA and JA are outcomes of different derivational operations, as I shall explain later in this chapter.

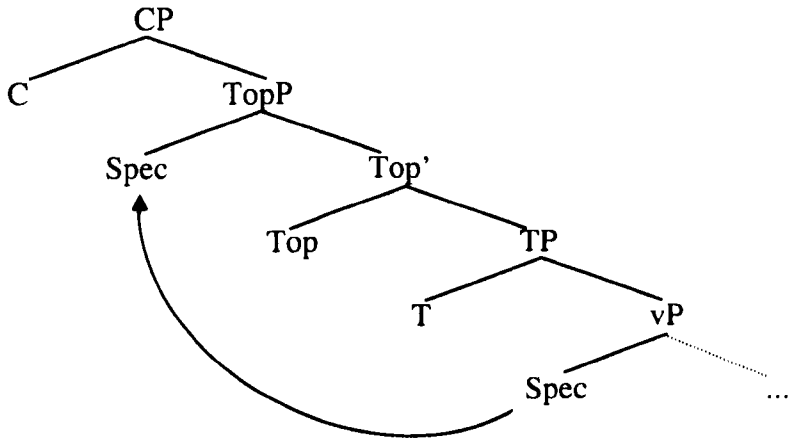
5.6.2. The Structure of CP and Movement

The type of word order, whether it is VSO or SVO, is determined by C which is the head of the CP phase (cf. Fassi Fehri 2005). C, according to Chomsky, "is shorthand for the region that Rizzi (1997) calls the "left periphery," possibly involving features spread over fewer functional heads (maybe only one)" (Chomsky 2005:10). In Rizzi's influential (1997) work, CP is assumed to be split into a number of projections ranging from Force Phrase, the highest projection, to Finite Phrase, the lowest projection. Topic Phrase and Focus Phrase occupy positions between Force Phrase and Finite Phrase (cf. Rizzi 1997:297).

[16] This issue has been touched upon in the literature especially in Romance languages where the distinction is made between topicalisation and left dislocation. The general assumption is that the left dislocated elements are base generated in their surface positions while topics are moved from lower positions (cf. Cinque 1990).

In line with Chomsky (2005), I argue that the edge feature of C attracts topics from lower positions. However, I diverge from Chomsky in positing that topic movement does not target the specifier of CP. I adopt Rizzi's idea and assume that the preverbal topics in Arabic are moved to the specifier position of Topic Phrase (TopP) which is located between C and above TP, as the structure below illustrates:

(56)

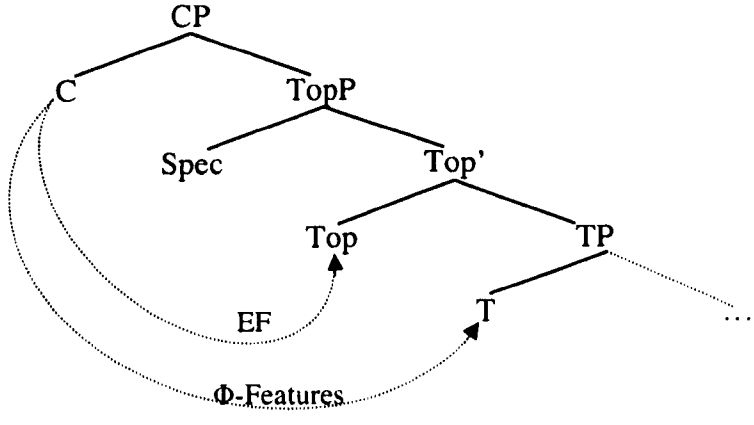


To show how my proposal works, a brief review of Chomsky's (2005) view on movement to the left periphery is needed. Chomsky (2005) distinguishes between two types of movement: A-movement and A'-movement. He also makes a distinction between the positions targeted by the two kinds of movement. According to his view, the specifier position of CP and the outer specifier position of vP are A' positions. A'-movement to these positions is initiated directly by the phase head. The edge feature of the phase head triggers the A' movement from lower positions providing that the A'-moved element has not

undergone A-movement. This means that, as Chomsky assumes, the edge feature of C does not motivate A'-movement from the specifier position of TP which is the landing site of A-movement. Chomsky assumes also that, like A'-movement, A-movement is initiated by the phase head, however, unlike A'-movement, A-movement is not triggered directly by the edge feature of the phase head. Rather, such movement is triggered indirectly by the C features which are inherited by T; these features raise the subject from the specifier position of vP to the specifier position of TP.

Adopting Rizzi's (1997) split CP, and building on Chomsky's disassociation between Φ-features of C on T, which initiate Agree operation, and edge feature of C which triggers A'-movement, I claim that C can transmit the edge feature in the same way as Φ-features. While Φ-features are inherited by T, the edge feature is inherited by Top, the head of TopP. The structure in (57) below illustrates this point of view:

(57)



Since the edge feature of C is inherited by the Top head, the topicalised elements in Arabic are raised from lower positions to the specifier position of TopP, not the specifier of CP, as assumed in Chomsky (2005). The use of the main clause complementiser *inna* provides support for this claim. It has been a standard assumption in the traditional literature that *inna* takes a topic-comment complement. Arab grammarians refer to the preverbal noun phrase that follows the complementiser *inna* in (58b) below as *isim inna* 'name of inna'; this noun has the same status as the topic in (58a) (cf. Plunkett 1993).

(58) a. ar-rijaal-u Haraθ-uu al-Haqla-a
the-men-nom ploughed.3m-they the-field-acc
"The men, they ploughed the field." (MSA)

b. inna ar-rijaal-a Haraθ-uu al-Haqla-a
comp the-men-acc ploughed.3m-they the-field-acc
"Indeed, it is the men who ploughed the field." (MSA)

The preverbal noun *ar-rijaal-a* in (58b), which is a topic in (58a), cannot precede the overt complementiser; Building on this, I claim that topics do not occupy the specifier position of CP. Rather, the topic is located in a position below C; it is in the specifier of TopP in (57) above. However, it seems that the transmission of edge feature from C to a lower head is dependent on the type of C itself. In interrogative clauses, the wh-word occupies initial position and it is in a complementary distribution with overt C.

(59) *inna maaða kataba ar-rajul-u
comp what wrote.3ms the-man-nom
"What did the man write?" (MSA)

In (59) the wh- word can not precede or follow the complementiser *inna*. In a different context, the wh- word can coexists with an overt complementiser; however, the wh-word must precede the complementiser, as we can observe in the dialogue below.

(60) Speaker A: sa-yuqadim-uuna at-taqreer-a Gadan
will-submit-they the-report-acc tomorrow
"They will submit the report tomorrow."

Speaker B: maaða in lam yafaʒl-uu?
what comp not do.3m-they
Literally: "What if they do not?"
Intended: "What will happen if they do not submit?"

The contrast between (58b) on the one hand, and (59) and the question in (60), on the other hand, suggests that C in interrogative clauses does not transfer its edge feature to a lower head. Accordingly, the "kept" edge feature of C attracts a wh-word directly to the specifier position of CP (cf. Chomsky 2005). Such a conclusion is confirmed by the absence of the resumptive pronouns in interrogative clauses, as mentioned earlier in section 5.4 above. The data provide convincing evidence toward the assumption that the edge-feature-attracted

elements can target the specifier of CP. Consider the interrogative sentences in (61) below. The affirmative sentence is given in (61a). Neither the wh- subject nor the wh- object is associated with a resumptive pronoun, hence the ungrammaticality of (61c) and (61e).

(61) a. kasara al-a'wlaad-u az-zujaaj-a
broke.3ms the-boys-nom the-glass-acc
"The boys broke the glass." (MSA)

b. man kasara az-zujaaj-a
who broke.3ms the-glass-acc
"Who broke the glass?" (MSA)

c. *man kasar-uu az-zujaaj-a
who broke.3m-they the-glass-acc
"Who broke the glass?" (MSA)

d. maaða kasara l-a'wlaad-u
what broke.3ms the-boys-nom
"What did the boys break?" (MSA)

e. * maaða kasara-hu al-a'wlaad-u
what broke.3m-it the-boys-nom
"What did the boys break?" (MSA)

In fact, wh- words resemble foci (cf. Ouhalla 1997, Rizzi 1997 and Chomsky 2005). The sentences (61b) and (61d) are comparable to the structures where the fronted noun phrase is a focus. Unlike the topic (see (30) above, for instance), the focus is not associated with resumptive pronoun and it bears the same case which is associated with its base position inside the clause (Ouhalla 1997). Ouhalla's (16) above is repeated below as (62).

(62) RIWAAYAT-AN a'llafat Zaynab-u
novel-acc wrote.3fs Zaynab-nom
"It was a NOVEL that Zaynab wrote." (MSA)

An overt main clause complementiser does not precede the focus, hence the awkwardness of the following sentence. In contrast with (63) below, (58b) above is undoubtedly grammatical.

(63) ? inna RIWAAYAT-AN a'llafat Zaynab-u
comp novel-acc wrote.3fs Zaynab-nom
"Indeed, it was a NOVEL that Zaynab wrote." (MSA)

One might argue, building on the discussion presented so far, that the item that is attracted directly to the specifier of CP by the edge feature would not be able to receive a lexical Case value from C. Therefore, these items maintain their original Case values; that is why they are not associated with resumptive pronouns. To summarise, I claim, in the sense of Fassi Fehri (2005), that the type of C

determines the clause properties; unlike C which allows topicalisation in (58b), the interrogative C in (61b) and (61c) and C that allows focus movement in (63) do not assigns lexical Case. Correspondingly, wh-moved elements and foci maintain their internally valued Case.

5.6.3. The Derivation of Arabic Structures

In this section I show how VSO and SVO structures in both MSA and JA are derived from the underlying SVO structure in (55) above. The proposed feature-inheritance analysis is based on the two assumptions stated in 5.6.1 above. I basically assume that VSO and SVO orders in MSA are derived in different ways from their counterparts in JA.

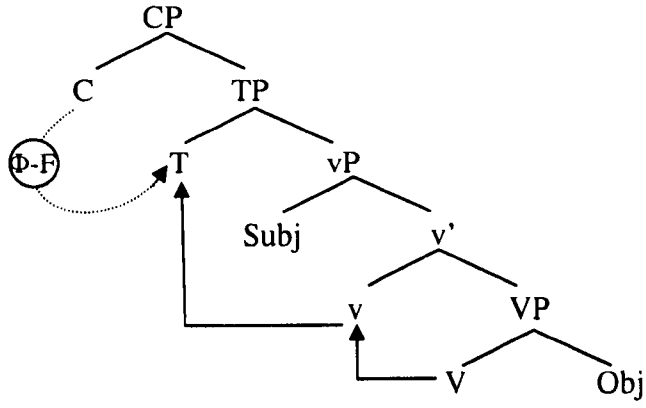
5.6.3.1. MSA Structures

5.6.3.1.1. The Derivation of VSO Word Order

The unmarked and prominent VSO word order in MSA is obtained by movement of the lexical verb from V to the functional head v then to the functional head T. The configurational relations between the functional heads v and T (i.e. the probes) and the object and the subject (i.e. the goals) ensure that the Agree operation, which operates downward, can apply. As a result, all the unvalued uninterpretable features of the functional heads and the nominals are valued under Agree. The subject remains in situ in the specifier position of vP because C in VSO structures does not have an edge feature, which means that no movement of any element is required. (64) below schematizes the derivation of VSO

structures in MSA. While the dotted arrow shows that the Φ-features of T are inherited from C, the solid arrows show the path of the verb movement.

(64)



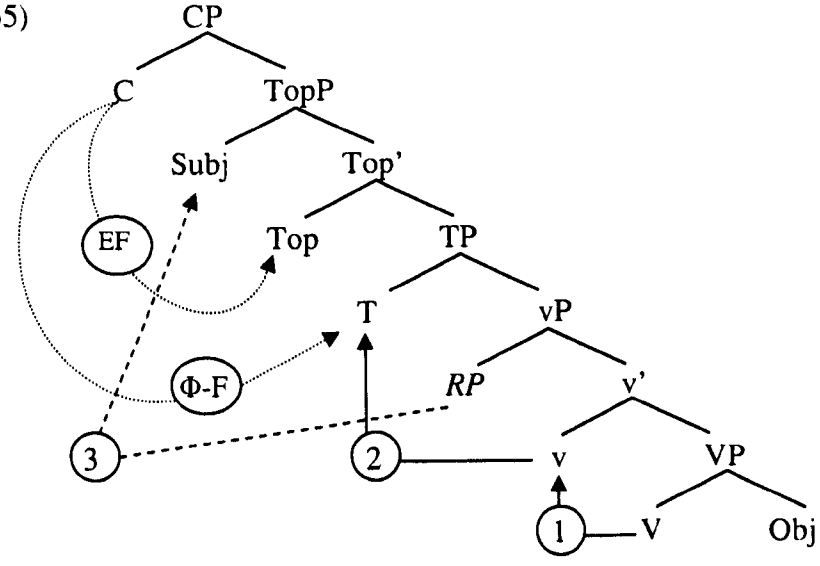
5.6.3.1.2. The Derivation of SVO Word Order

SVO structures in MSA are derived in a similar way to the VSO structures. The verb moves from V to v which in its turn probes down and agrees with the object. After that, the verb moves to T. The probe T, with its features inherited from C, agrees with the matching goal it c-commands; i.e. T agrees with the subject in the specifier of vP.

However, SVO structures differ from VSO structure in that a further operation applies. The operation Move (or Internal Merge) takes the subject from the specifier position of vP to the preverbal position to get topicalisation. I refine the analysis I presented in chapter four above and assume that T does not inherit a feature from C that triggers subject movement. Rather, the movement of the subject to a preverbal position is triggered by the edge feature which is inherited

from C by Top, the head of TopP; the preverbal noun phrase is moved to the specifier position of TopP. I claim following Chomsky (2005) that topic movement is triggered by the edge feature of C. Since this feature is on the Top head, the topicalised subject in SVO structures moves from the specifier of vP to the specifier of TopP. In (65) below, the solid arrows 1 and 2 show the verb movement from V to v and from v to T respectively. The dashed arrow 3 shows the movement of the subject from the specifier of vP to specifier of TopP. Notice that the moved subject leaves behind the resumptive pronoun (RP) in the specifier of vP. The dotted arrows show the process of feature inheritance from C.

(65)



Following Rizzi (1997), both of TopP and TP belong to the CP layer; in other words, using Chomsky's terminology, TopP and TP are not phases. Therefore, the heads of these projections inherit their features from C, the head of the CP phase. While T inherits Φ-features and agrees with the postverbal subject, the

edge feature is inherited by Top. The inherited edge feature raises the subject to the specifier of TopP (cf. section 5.6.2 above).

As argued in chapter four above, C has a lexical Case feature which is not transferred to lower projections. The fronted topic is a copy of the postverbal subject; such a copy is an active goal by virtue of having an unvalued Case feature. Therefore, the topicalised subject can be probed by C and assigned lexical Case (cf. section 4.7 above for detail).

5.6.3.2. JA Structures

5.6.3.2.1. The Derivation of SVO Word Order

The unmarked SVO word order in JA is derived in a similar way to the derivation of SVO sentences in MSA. The subject moves from the specifier of vP to a higher specifier position. However, JA is different from MSA in that the motive for the movement of the subject from its base postverbal position to the preverbal position seems to be different. While in MSA, as assumed above, the subject is topicalised by movement to the specifier of TopP, we find that in JA there is an indication that the preverbal noun phrase is not a topic. Section 5.3.1 above has shown that there are restrictions on the preverbal noun phrase in MSA; the preverbal noun phrase, which is treated as topic, has to be definite or specific, hence the ungrammaticality of (9) above (see also (66a) below). In contrast with MSA, JA imposes no restrictions on the preverbal noun phrase; the preverbal noun phrase can be definite or indefinite and non-specific. Compare the MSA

sentence in (9) above with the JA sentence in (11a) above. For convenience, (9) and (11a) are repeated below as (66a) and (66b) respectively.

(66) a. *rijaal-un jaa'-uu
men-nom.indef came.3m-p
"Men came." (MSA)

b. rjaal waSel-uu
men.indef arrived.3m-p
"Men have arrived." (JA)

In fact, JA differs strikingly from MSA in that restrictions are imposed on the postverbal subject in VSO sentences. It is the postverbal subject that has to be definite or specific in JA. The use of the indefinite subject in (67) below renders the sentence ungrammatical.[17] In contrast, MSA does not pose any restrictions on the postverbal subject, as mentioned earlier (cf. 3.1 above).

(67) *zaar wazeer al-qariyah
visited.3ms minister the-village
"A minster visited the village." (JA)

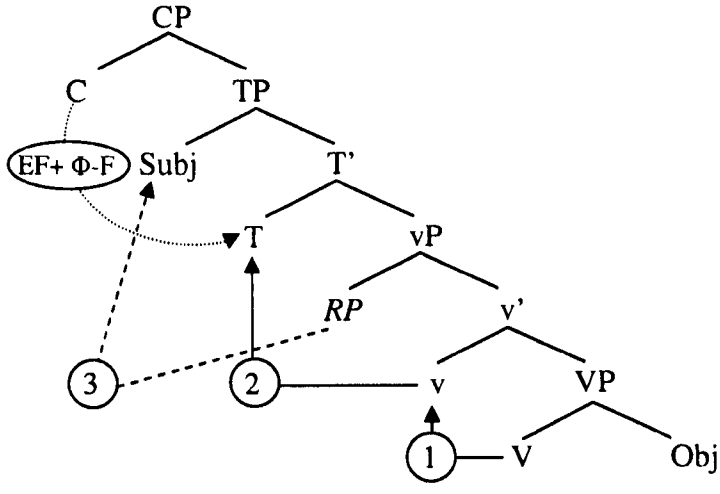
[17] Two of my fellow Arab students confirmed to me that in their dialects the indefinite postverbal subjects in sentences such as the ones below are not acceptable. Thanks to Miri Hussain and Yousef Elramli for providing me with the Syrian and Libyan data respectively.

i. *baa3 zalami byit-o
sold man house-his
"A man sold his house." (Syrian Arabic)

ii. *baa3 rajil al-Huush
sold man the-houŝ
"A man sold the house." (Libyan Arabic)

On the basis of JA sentences in (66b) and (67), it could be argued that the preverbal noun phrase in SVO sentences in JA is a subject. Accordingly, the derivation of SVO sentences in JA is slightly different from the derivation of SVO sentences in MSA. Since the preverbal noun phrase is not a topic, it occupies the specifier position of TP instead of the specifier position of TopP, as assumed for MSA. In other words, as argued in the previous chapter, T in JA inherits the Φ-features as well as the edge feature from C. For that reason, after T agrees with the subject in the specifier of vP, the edge feature raises a copy (with unvalued Case feature) of the subject to the specifier of TP. The lexical Case feature of C probes the subject in the specifier of TP as a matching goal with which an Agree relation is established. The derivation of SVO sentences in JA is outlined in (68) below.

(68)



The argument that the subject moves to the specifier of TP becomes attainable when we consider the derivation of VSO word orders in JA (see 5.6.3.2.2 below).

The derivation of the unmarked VSO word order in JA is achieved by verb movement from T to a higher position to receive topicalisation. I presume that in both VSO as well as SVO word orders the subject moves to the specifier of TP (cf. Aoun et al. 1994).

5.6.3.2.2. The Derivation of VSO Word Order

The claim that the subject in VSO structures moves from the specifier of vP to the specifier of TP seems to contradicts the earlier mentioned fact that JA does not allow indefinite subjects in postverbal positions (see (67) above). However, an explanation for this ostensible contradiction is not hard to find. The possibility of having an indefinite subject in a preverbal position in (66b) indicates clearly that subject movement from the specifier of vP to the specifier of TP applies. This means that whether the subject is indefinite or definite, it undergoes movement to the specifier of TP to satisfy the edge feature on T. Evidence in favour of this claim is obtained from resumption; the resumptive pronoun in JA exists with indefinite subjects, as in (66b) above, and with definite subjects, as (69) below shows.

(69) ar-rjaal waSl-uu
the-men arrived.3m-p
"The men have arrived." (JA)

Resumption indicates that subject movement to the specifier of TP occurs in SVO and VSO sentences. The existence of the resumptive pronoun in a position

preceding the subject in VSO sentences in JA is supportive evidence, as I shall explain shortly.

It should be noted that while VSO word order in MSA is neutral and used without restrictions, it is a restricted word order in JA, as mentioned in 5.6.3.2.1 above; such a word order in JA is felicitous in that it is used for certain purposes. When this word order is used, the speaker does not give new information, as is the situation in MSA. Rather, he / she attracts attention to what happens/happened. For example, while SVO sentences, such as (69) above, give new information, we find that speaker B in the following context places emphasis on the event by preposing the verb (cf. also examples (26) and (27) and footnote 10 in chapter two above).

(70) Speaker A: enta qult al-m3almeen eshtar-uu as-sayiarah
you said.2ms the-teachers bought.3m-p the-car
"You said that the teachers bought the car."

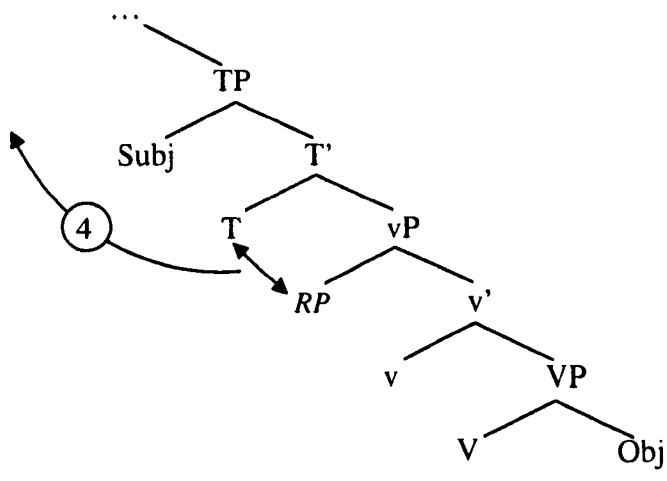
Speaker B: laa, anna qult esta'jar-uu al-m3almeen as-sayiarah
no, I said.1ms hired.3m-p the-teachers the-car
"No, I said that the teachers hired (not bought) the car.

Taking into consideration the assumption that indefinite and definite subjects in JA are equally raised to the specifier of TP in SVO and VSO sentences, I argue that the ill-formedness of VSO sentences with an indefinite subject, such as (67)

above, is attributed to the impossibility of verb movement across indefinite subjects. A careful assumption can be made here. One might assume that the verb topicalisation by movement from T to a higher position (i.e. to the specifier of TopP) is in interaction with the definiteness of the subject in the specifier of TP. Since the aim of topic fronting is to place emphasis on the fronted element, topicalisation of the verb is unnecessary when the preverbal subject is referentially weak (i.e. indefinite). Because the indefinite preverbal subject has less emphatic status than the verb, the latter need not move from T.

In contrast with the derivation of VSO structures in MSA, consider (64) above, VSO structures in JA are derived after the SVO structures are derived. In comparison with (68) above, the numbered arrow in (71) below denotes that the verb undergoes a further movement which results in VSO word order (see also (72) below).

(71)



As I assumed earlier in chapter four, when the subject moves to a higher position, it leaves behind a resumptive pronoun in the specifier of vP. The resumptive pronoun attaches to the verb in T, as (71) above shows. In the sense of Kayne (1989), I assume that the resumptive pronoun, which is realized as a clitic, is affected by the syntactic operations that affect its host, the verb in T in our case. When the verb in (71) above is topicalised by movement to a higher position, it carries the resumptive pronoun with it. This movement results in having the resumptive pronoun preceding the subject which occupies the specifier position of TP. By assuming this we account for why agreement in VSO word orders in the regional dialects of Arabic is considered to be full by the authors who analyse resumptive pronouns as number markers.

Now, the question that arises at this juncture is the one that concerns the nature of the position to which the topicalised verb moves. In order to identify this position, I make use of certain arguments made in Holmberg (1999) and in Alexiadou and Anagnostopoulou (1998). The phenomenon of verb (and VP) topicalisation has been attested in some languages such as Swedish and Yiddish (Källgren and Prince 1989) and some Scandinavian languages (Holmberg 1999). On his remarks on Holmberg's Generalization, Holmberg (1999) argues that object shift is blocked by phonological entities. He notes that when the verb is topicalised, object shift is possible. Holmberg concludes that the topicalised verb is located in the specifier of CP.

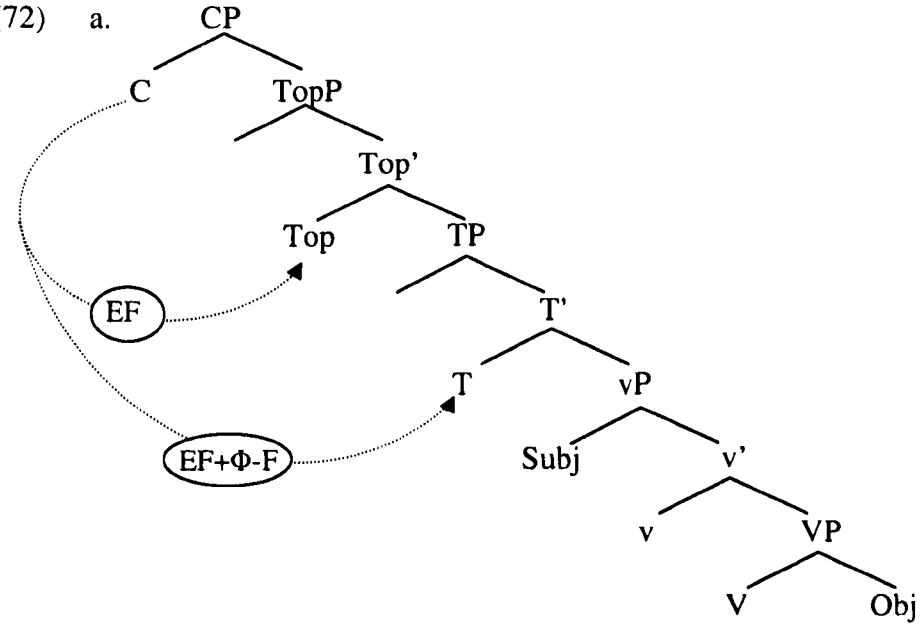
Alexiadou and Anagnostopoulou (1998) argue extensively that EPP is a universal feature that exists in all languages. This feature is satisfied by two different categories depending upon the type of the languages. In non-null subject languages, Icelandic for example, the EPP feature is satisfied by XP (i.e. nominal subject) movement to the specifier position of TP. On the other hand, the EPP feature in null subject languages, such as Greek and some Romance languages, is satisfied by verb movement to the specifier position of TP. "Assuming that verbal agreement has the categorical status of a pronoun in pro-drop languages, V-raising checks the EPP-feature the same way XP-raising does in non-pro-drop languages" (Alexiadou and Anagnostopoulou, 1998:517).

In this section, in order to account for the verb topicalisation in VSO structure in JA, I build my analysis on Holmberg's (1999) idea that the topicalised verb is raised to the specifier of CP, and on Alexiadou and Anagnostopoulou's (1998) proposal that the EPP feature (the edge feature in our case) can be satisfied by verb movement. I combine the ideas of these authors with Rizzi's (1997) idea that CP is split into further projections. Adopting Chomsky's (2005) feature inheritance model, I argue that the topicalised verb in VSO sentences in JA is raised by the edge feature of C on Top head to the specifier of TopP.

In brief, the derivation of VSO structures proceeds as follows. C the head of the CP phase transmits Φ-features and a copy of the edge feature to T. Also, the head of TopP, which is located above T, inherits another copy of the edge feature from

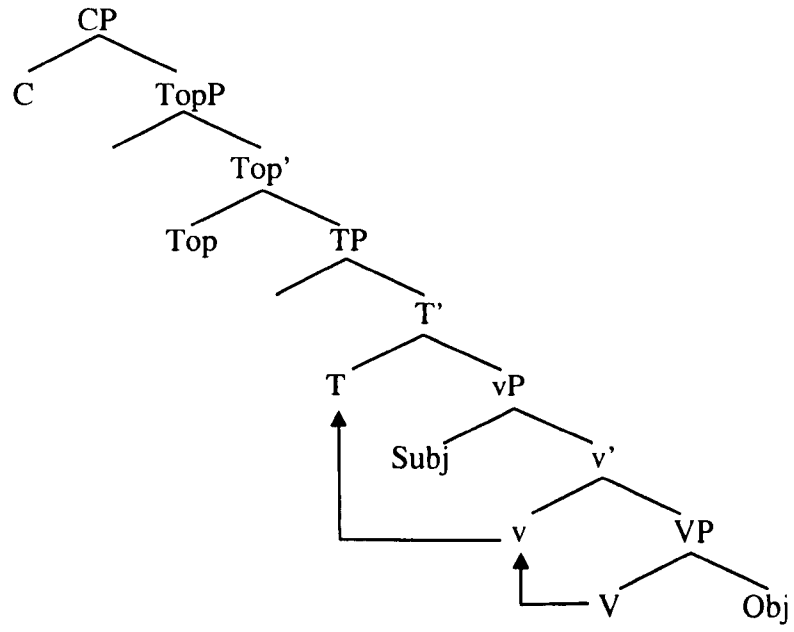
C (cf. 57 above). Notice that the empty specifiers of TP and TopP are used here to denote the positions to which the edge-feature triggered items are moved.

(72) a.



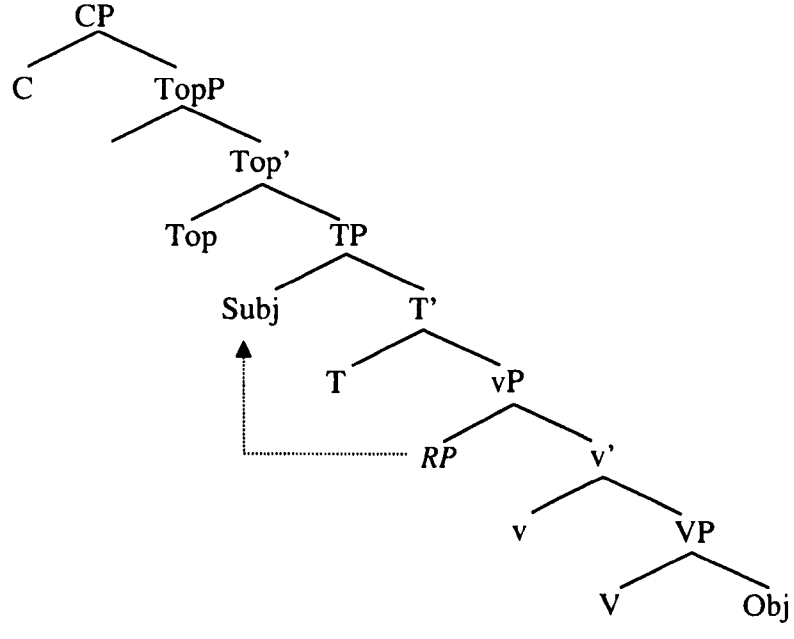
The verb moves from V to the functional head v which, in turn, agrees with the object. After that, the verb moves to T. Φ-features on T initiate an Agree relation with the subject in the specifier of vP. The tree diagram below illustrates the verb movements.

b.



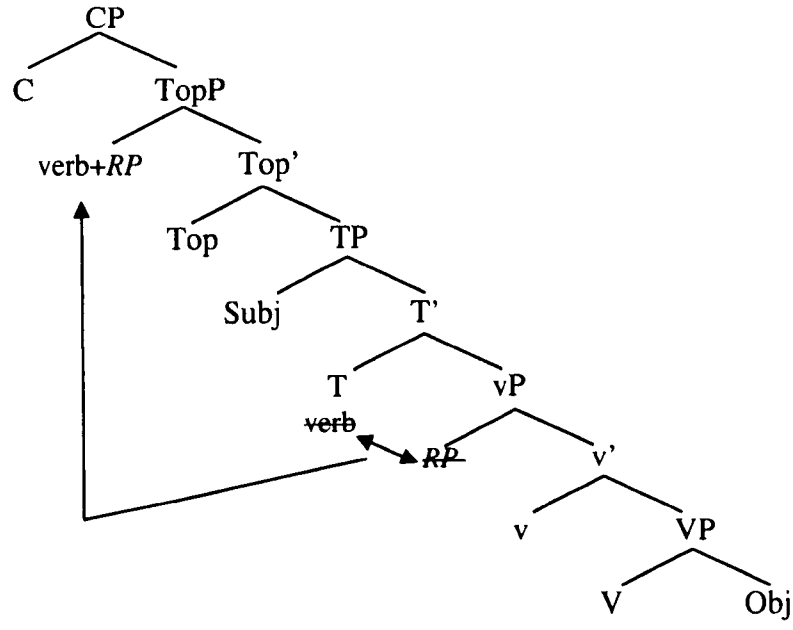
The subject is raised from the specifier of vP to the specifier of TP to satisfy the edge feature on T head. As assumed in chapter four, the moved subject leaves behind a resumptive pronoun in the specifier of vP.

c.



Being a clitic, the pronominal copy attaches to the lexical verb in T. The edge feature on Top head triggers the movement of the verb from T to the specifier of TopP to get topicalisation. The topicalised verb moves along with the cliticised resumptive pronoun, as the arrow in the structure below shows.

d.



In fact, the analysis I propose here does not pretend to present a final solution to the problem of agreement asymmetry in MSA and preservation in JA, it has some good implications, though.

5.6.4. Implications and Limitations

Before I conclude the chapter, I discuss briefly in this section the possible implications and limitations of the ideas that have been presented so far. The analysis presented in 5.6.3 above is more consistent with the MP than some of the

previous analyses (cf. section 5.5 above). One of the implications is that the proposed feature-inheritance-based analysis constitutes a good alternative to the null expletive hypothesis (Mohammad 1990, 2000), and the null pro hypothesis (Soltan 2006).

Assuming Agree Theory, neither a null expletive nor a null pro is need to account for the impoverished agreement in VSO structures (in MSA) and full agreement in SVO structures. The Agree operation operates downward, therefore T agrees with the subject it c-commands in the specifier of vP. No null element is required to license agreement. This in turn leads to another implication. If we maintain the idea that that the resumptive pronoun should not be treated as a number marker, then we would conclude that, irrespective of the subject position, there is only one agreement pattern in Arabic. Namely, agreement is limited to the features of person and gender; the feature of number is default singular.

Also, the proposed analysis can successfully replace the analyses of agreement loss (Aoun et al. 1994 and Mahfoudhi 2002) and PF merger of the verb and subject (Benmamoun 2000a and Aoun and Benmamoun 1999). These analyses contain superfluous steps that are not justified if we adhere to the assumptions of Agree Theory and the feature inheritance model.

The proposal is not without limitations, however. There are at least three limitations that need further investigation. The first limitation concerns the

undesirable X (i.e. head) movement of the topicalised verb from T to the specifier of TopP. While accepting Chomsky's (2005) idea that the edge feature triggers movement to a specifier position, the topicalised verb, in (72) for instance, is expected to move to the head Top instead of the specifier of TopP. However, under the assumptions of our proposal, it is not clear what the feature that would attract the verb to Top is. Furthermore, if we assume that movement of the topicalised verb targets Top, then we need to account for how the edge feature on Top head is satisfied.

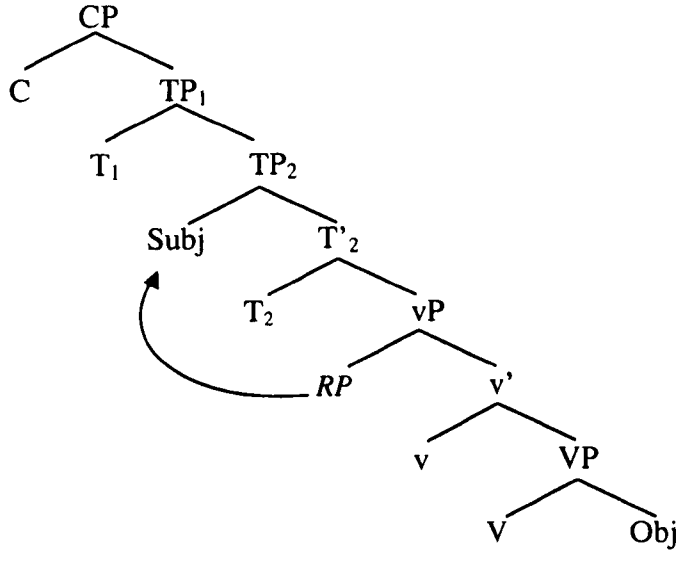
The second limitation is brought about by constructions that contain an auxiliary in addition to the lexical main verb. What is interesting about these constructions is that both the auxiliary and the lexical verb show agreement. (73) below illustrates:

(73)	kaana	al-a'wlaad-u	yaktub-uu-na	ad-dars-a
	was.3ms	the-boys-nom	write.3m-they-indic	the-lesson-acc
	"The boys were writing the lesson."			(MSA)

A possible solution is to posit following Fassi Fehri (2004) that (73) above has two independent T heads. Fassi Fehri claims that (73) above contain two T's: T_1 where the auxiliary is located and T_2 where the lexical verb is located. "Each T defines a temporal ordering relation between two temporal arguments: T_1 orders RT [reference time] with respect to UT [utterance time] ... and T_2 orders RT with

respect to ET [event time]" (Fassi Fehri 2004:235-6).[18] Assuming that the resumptive pronoun is a plural number marker, then, we can say that there are two observable agreement patterns in (73) above. The two verbs agree with the same noun phrase; the lexical verb shows full agreement while the auxiliary shows partial agreement. Leaving the issue of temporal and aspectual interaction aside, as it is beyond the scope of this thesis, the structure of (73) can be represented as follows:

(74)



One might propose to extend the analysis presented in the previous section and assume that both T's in (74) inherit their features from C. On the one hand, T_2 inherits Φ-features in addition to edge feature which raises the subject from the specifier of vP to the specifier of TP_2 in the same way as T in (68) above does. The raised subject leaves behind a resumptive pronoun; i.e. the raised copy of the

[18] Fassi Fehri's (2004) paper investigates the temporal and aspectual relation; it is not concerned with agreement pattern.

subject is a valid goal in that it has an unvalued Case feature (cf. section 4.7 above). On the other hand, T_I inherits only a copy of Φ-features from C. T_I locates the raised subject in the specifier of TP_2 as a matching active goal with which it agrees.[19] However, if such a proposal is possible under feature inheritance model, then, a further research is required to investigate the properties of C that selects more than one T and to show how the selected T's are different from one another.

5.7. Summary and Conclusion

The aim of this chapter has been to investigate the assumed interaction between agreement and subject positions in MSA and JA from a minimalist feature-inheritance-based perspective. The chapter has reviewed a number of previous analyses and showed that they are not adoptable within a feature-inheritance model. Soltan's (2006) null pro analysis has been discussed in detail because it is the most recent and relevant analysis. However, it has been concluded in 5.5.2.2 that null pro should be dispensed with as its existence is not necessary to obtain a convergent derivation of either VSO or SVO structures. Also the chapter has discussed the traditionally-treated number markers; RCRP tests have indicated that these number markers have the properties of pronominal clitics.

Taking into consideration the fact that the unmarked word order in MSA is different from the unmarked word order in JA, it has been argued that structures

[19] This amounts to saying that there is a multiple transmission of C features to the selected T's.

in both varieties are derived in different ways. The unmarked VSO order in MSA is derived by V movement via v to T. The subject does not move from its base position, i.e. the specifier of vP, as it has its features valued under Agree with the c-commanding T. In SVO order, on the other hand, the subject is moved to the specifier of TopP to receive topicalisation. The moved subject leaves behind a pronounceable copy which is realised as resumptive pronoun. In JA, SVO is derived in a similar way but the moved subject targets the specifier of TP to satisfy an edge feature on T. VSO in JA differs greatly from VSO in MSA in that it is derived by topicalising the verb. The topicalised verb moves to the specifier of TopP carrying with it the cliticised resumptive pronoun, hence the appearance of the latter in a position that precedes the coreferential subject in the specifier of TP.

In conclusion, the proposed analysis implies that there is no agreement asymmetry in Arabic. Agreement on the verb which is the product of the Agree operation is obtained under the probe-goal configuration; whether the goal moves or remains in situ, agreement is not expected to alter. Such a conclusion is well suited to the assumptions of Agree Theory.

CHAPTER SIX: Object Positions and Object Movement

6.1. Introduction

The previous chapter has been concerned with the word order where the subject follows the verb, i.e. VSO, and the word order where the subject precedes the verb, i.e. SVO. The discussion has been limited to these orders because of their implications for agreement on the verb. However, word orders in Arabic are not limited to only SVO and VSO. Under certain circumstances, VOS word order is allowed, where the object is optionally or obligatorily located in a position preceding the subject. In this chapter, the discussion of the word orders where the object precedes the subject will be limited to MSA.[1] The term *object movement* is used in this thesis to refer the process that derives VOS structures; this term is used in order to distinguish this process from object shift in Scandinavian languages and scrambling in languages such as German. As I shall show later, object movement in Arabic differs from object shift and scrambling in two significant ways. First, unlike the shifted and scrambled object, the moved object in Arabic does not show a definiteness effect; i.e. definite as well as indefinite objects can undergo movement. Second, while object shift and scrambling affect unfocused objects, object movement in Arabic seems to affect focused objects.

The main empirical issue investigated in this chapter concerns the structures where the subject and the object interchange their surface order. The purpose of

[1] The predominant word order in JA, as discussed earlier in this thesis, is SVO. Word orders with the object preceding the subject are marginal. Therefore, JA data is excluded from the discussion in this chapter.

the present chapter is to provide a minimalist account for the motivation triggering object movement in addition to the position occupied by the moved object. I argue that VOS word order is derived by focus movement of the object from its base position as a complement of V to an outer specifier of vP, a position preceding the subject. The proposed analysis builds on Chomsky's (2001, 2005) work and assumes that object movement in MSA is an instance of A' movement which is triggered by the edge feature on the head of the vP phase. Object cliticisation is treated on a par with object movement; the pronominal object clitic does not attach to the verb in VP. Rather, I assume that it undergoes movement to the outer specifier position like normal noun phrases, then it cliticises onto the verb in T.

The chapter is organised as follows. Section 6.2 introduces the object movement facts in MSA showing when such a movement is optional or obligatory. Section 6.3 presents an overview of the properties of Scandinavian object shift and scrambling in German. The section also shows how these phenomena are analysed in the literature. In section 6.4, Jayaseelan's (2001) proposal which assumes the existence of TP-internal focus positions is investigated; the section shows that this proposal cannot be adopted for theoretical and empirical reasons. The subject matter of section 6.5 is the proposed analysis. Section 6.6 extends the proposed analysis to object movement in double object constructions. Finally, section 6.7 concludes the chapter.

6.2. Object Positions in MSA

Irrespective of the position occupied by the subject, i.e. whether it precedes or follows the verb (cf. the previous chapter), the object in MSA normally appears in final positions. (1) below shows that the object is preceded by both the verb and the subject.

(1) kataba ar-rajul-u ar-risaalat-a
wote.3ms the-man-nom the-letter-acc
"The man wrote the letter."

Nevertheless, in certain structures, MSA allows the object to appear in a position preceding the subject. In other words, the object moves from its base position as a complement of the verb to a position higher than the subject position. In this respect, a distinction can be made between two types of object movement: full noun phrase movement and cliticisation of the pronominal object onto the verb. The first type of object movement is observed when a full noun phrase object is positioned in front of the subject. For example, the object *ar-risaalat-a* 'the letter' in (1) above can precede the subject *ar-rajul-u* 'the man'. Consider:

(2) kataba ar-risaalat-a ar-rajul-u
wrote.3ms the-letter-acc the-man-nom
"The man wrote the letter."

While the contrast between (1) and (2) above shows that object movement is optional in that the object may (or may not) precede the subject, we find that the object has to precede the subject in other contexts. In (3) below, the subject contains a pronominal element that is coreferential with the object. Therefore, the object is obligatorily positioned in front of the subject in (3b) in order to bind the coreferential pronoun. If the object remains in its final position, the sentence is ruled out, as (3a) shows.

(3) a. *Ďaraba Taalib-u-haa$_i$ al-mu3lim-at$_i$-a
hit.3ms student-nom-her$_i$ the-teacher$_i$-f-acc
"Her$_i$ student hit the teacher$_i$."

b. Ďaraba al-mu3lim-at$_i$-a Taalib-u-haa$_i$
hit.3ms the-teacher$_i$-f-acc student-nom-her$_i$
"The teacher$_i$'s student hit her$_i$."

However, when the structure of the object contains a pronoun that is coreferential with the subject, object movement becomes optional, as we can see in (4) below.

(4) a. Ďaraba aT-Taalib$_i$-u mu3lim-at-a-hu$_i$
hit.3ms the-student$_i$-nom teacher-f-acc-his$_i$
"The student$_i$ hit his$_i$ teacher."

b. Ďaraba mu3lim-at-a-hu$_i$ aT-Taalib$_i$-u
hit.3ms teacher-f-acc-his$_i$ the-student$_i$-nom
"The student$_i$ hit his$_i$ teacher."

The second type of object movement is observed in the structures where the object is pronominal. As mentioned earlier in this thesis (see Table 2.4), the non nominative pronominal forms are bound in the sense that they need lexical support; therefore they appear as clitics on verbs.[2] Consider:

(5) a. *zaara aT-Taalib-u –hum
visite.3ms the-student-nom –them.acc
"The student visited them."

b. zara-hum aT-Taalib-u
visited.3ms-them.Acc the-student-nom
"The student visited them."

Irrespective of the binding relations, as in (3) and (4), the main difference between object movement of the full noun phrase in (2) above and cliticisation in (5) is that the former is optional and the latter is obligatory. However, under certain situations, we find that object movement of full noun phrases as well as cliticisation of pronominal object clitics is not allowed. (6a) and (6b) below show that the object contains a coreferential pronoun. The antecedent of the

[2] Unlike the subject pronominal clitics, which are sometimes treated as inflectional markers (cf. the previous chapter), the object pronominal clitics have not been analysed as inflectional markers. Rather, they are conceived of as real pronominal arguments (cf. Fassi Fehri 1993 and Mohammad 2000, for instance).

coreferential pronoun is contained within the subject. In this case, object movement is not possible, therefore (6b) below is ruled out.

(6) a. ra'at 'um-u ar-rajul$_i$-i ibnat-a-hu$_i$
saw.3fs mother-nom the-man$_i$-gen daughter-acc-his$_i$
"The man$_i$'s mother saw his$_i$ daughter."

b. *ra'at ibnat-a-hu$_i$ 'um-u ar-rajul$_i$-i
saw.3fs daughter-acc-his$_i$ mother-nom the-man$_i$-Gen
"The man$_i$'s mother saw his$_i$ daughter."

Also, when the antecedent of a coreferential pronominal object clitic is contained within the subject, cliticisation of the pronominal object is not allowed, as (7a) shows. However, (7b) is not better, as the clitic cannot stand by its own.

(7) a. *dahana-hu Sahib-u al-bayt$_i$-i
painted.3ms-it$_i$ owner-nom the-house$_i$-gen
"The owner of the house$_i$ painted it$_i$."

b. *dahana Sahib-u al-bayt$_i$-i -hu
painted.3ms owner-nom the-house$_i$-gen -it$_i$
"The owner of the house$_i$ painted it$_i$."

The only possible way to allow cliticisation in (7) is to move the subject to a preverbal position. Consider (8) below.

(8) Sahib-u al-bayt$_i$-i dahana-hu$_i$
owner-nom the-house$_i$-gen painted.3ms-it$_i$
"The owner of the house$_i$ painted it$_i$."

The contrast between (4a) and (4b) on the one hand, and (7a) and (8) on the other hand, shows that things are not as straightforward as they might seem. The coreferential pronoun does not have to follow its antecedent in (4b) while in (8) it has to, hence the ungrammaticality of (7a).

In fact, Arabic is not unique in allowing structures where the object is located in a position that is different from its base position. The next section shows that this phenomenon has been observed in other languages; the process of moving the object from its base position is referred to as object shift in languages such as Icelandic and Mainland Scandinavian, and scrambling in languages such as German, Dutch and Japanese.

6.3. Object Shift and Scrambling

6.3.1. Overview

The phenomenon of object displacement has figured prominently in the literature and still constitutes an intriguing topic of discussion. In the literature a distinction is made between two types of operations that result in changing the position of the object. The first type of object displacement, which is observed in Icelandic and Mainland Scandinavian languages, is referred to as object shift (Holmberg 1986, 1999; Vikner 1994 and Collins and Thráinsson 1996 among others). The

second type of object displacement is treated as a kind of scrambling; it is attested in languages such as German and Dutch (Müller & Sternefeld 1994; Haider, Olsen and Vikner 1995 and Zwart 1996 among others). Some authors and researchers have noted that the shifted objects in languages like Icelandic and Mainland Scandinavian move across negation, sentential adverbial and particles to higher positions (cf. Holmberg 1986; Holmberg and Platzack 1995 and Collins and Thráinsson 1996). Also, it has been observed that the scrambled object moves across the subject or negation in German and Dutch (Haider, Olsen and Vikner 1995 and Zwart 1996).

Object shift differs from scrambling in a number of ways. First, object shift affects only full noun phrases and pronouns. Scrambling on the other hand can affect noun phrases as well as other projections such as prepositional phrases. Second, object shift and scrambling exhibit a structural difference; while object shift is dependent on the verb movement (because the phonological presence of the verb blocks object shift, as Holmberg (1999) assumes), scrambling is not. For example, in German (see section 6.3.3 below), the unmoved verb does not block scrambling because it is not in the way of the scrambled element. Despite these differences, both phenomena (i.e. object shift and scrambling) have a common property; it has been observed that the shifted as well as the scrambled objects have to be unfocused (cf. section 6.3.2 and section 6.3.3 below).[3] Among the issues that have been subject to extensive research are the theoretical implications

[3] For a good review of the similarities and differences between object shift and scrambling see Thráinsson (2001).

of object shift and scrambling, conditions under which object shift and scrambling are allowed, in addition to the nature of the positions occupied by the shifted and scrambled objects.

6.3.2 Object Shift

Holmberg (1986) observes that in Icelandic and Mainland Scandinavian languages object shift is not an entirely optional process. Rather, it applies under certain conditions. Such a process is subject to a well-known regulating condition which claims that the movement of the shifted object has to be preceded by the movement of the finite verb. This structural condition is frequently referred to in the literature as Holmberg's Generalisation.

Holmberg (1986) explains that the process of object shift has to take place in structures where the verb is finite and when the object is pronominal. As the Icelandic sentences in (9) below show, the pronominal object *hana* 'it' cannot remain in situ (9a). Rather, as in (9b), it has to move across the negation adverbial *ekki* to a higher position (cf. Holmberg and Platzack 1995 and Thráinsson 2001).

(9) a. *Nemandinn las ekki hana
Student-the read not it

b. Nemandinn las **hana**$_i$ ekki t_i
student-the read it not
"The student did not read it."

(Thráinsson 2001:150)

While object shift is obligatory in (9) above, it is optional in Icelandic when the object is a full noun phrase. However, for the optional object shift to apply, the full noun phrase object has to be definite (Holmberg and Platzack 1995). Otherwise, object shift is not allowed, as the contrast between (10) and (11) below shows. All the Icelandic examples in (10) and (11) below are taken from Thráinsson (2001:149-50).

(10) a. Nemandinn las ekki bókina
Student-the read not book-the

b. Nemandinn las **bókina**$_i$ ekki t_i
student-the read book-the not
"The students didn't read the book."

(11) a. Hún keypti ekki kaffi
she bought not coffee

b. *Hún keypti **kaffi**$_i$ ekki t_i
she bought coffee not
"She didn't buy coffee."

Mainland Scandinavian languages such as Swedish and Danish show resemblance to Icelandic in that they allow pronominal object shift (Holmberg and Platzack 1995 and Thráinsson 2001). However, they differ from Icelandic in

that object shift of a full noun phrase is not allowed. In contrast with (10b) above, object shift of full noun phrases leads to ungrammaticality.

(12) a. Läste studenterna **den/*artikeln** inte alla? (Swedish)
read the-students it / the-article not all
"Didn't the students all read it / the article?"
(Holmberg and Platzack 1995:141)

b. Studenten læste **den/*bogen** ikke (Danish)
student-the read it / book-the not
"The student didn't read it/ the book."
(Thráinsson 2001:150)

The traditional assumption is that movement of the subject and the object to higher positions is Case-driven (Holmberg 1986 and Holmberg and Platzack 1995). The subjects and objects move from their base positions to check their nominative and accusative Cases in the specifier position of AgrSP and the specifier of AgrOP, respectively. With the elimination of Agr phrases in Chomsky (1995), Case checking is assumed to take place in an outer specifier of vP for the object and in the specifier of TP for the subject (Chomsky 1995). According to Chomsky (2000) object shift targets an outer specifier position of vP to satisfy an EPP feature (for Chomsky's (2005) view, see below).

Holmberg (1999) argues against the idea that object shift is Case-driven, observing that not all nominals are shifted in Icelandic (see (11) above). He asserts that "[t]he crucial error in Holmberg (1986), Holmberg & Platzack (1995),

and Vikner (1994) is the assumption that Case is the feature triggering Object Shift" (Holmberg 1999:22). As an alternative to the Case-driven analysis, Holmberg (1999) suggests that nominals are assigned a focus feature that, depending on its value, needs be checked in the right position. Holmberg proposes "that the crucial feature is [±Foc]: Object Shift affects only nominal objects which are [–Foc]. This captures what I take to be common for Scandinavian Object Shift, Scrambling and Clitic Movement: They move arguments which are not focused out of VP" (Holmberg 1999:22-3). Holmberg clarifies that the "feature [–Foc] can be licensed inside VP in Scandinavian [...]. The condition is that it must be governed by a visible verb or preposition" (Holmberg 1999:25). Correspondingly, object shift of the object pronoun in (13) is disallowed because the licenser of [–Foc], i.e. the verb, is present.

(13)	Jag	har	inte	kysst	**henne**	(Swedish)
	I	have	not	kissed	her	

It is worth mentioning that there is another factor that prevents the object from movement in (13) above. As argued in Holmberg (1999), the phonological presence of the verb blocks object movement. "Less often mentioned, but no less true, is the fact that not just an unmoved verb, but any phonologically visible category inside VP preceding the object position will block object shift" (Holmberg 1999:2). The Swedish examples below show that, despite the verb movement, the phonological presence of the verbal-particle in (14b) blocks the

movement of the pronominal object. In (14c) on the other hand, there is no verbal-particle. Therefore the object shift is licit.

(14) a. Jag skrev faktiskt upp det (Swedish)
I wrote actually up it

b. *Jag skrev **det**$_i$ faktiskt upp t_i
I wrote it actually up
"I actually wrote it up."
(Holmberg 1986: 166)

c. Jag kysste henne$_i$ inte t_i
I kissed her not
"I did not kiss her."
(Holmberg and Platzack 2005: 429)

6.3.3 Scrambling

The phenomenon of scrambling is attested in languages such as German. In contrast with object shift in Icelandic and Mainland Scandinavian, which is dependent on the movement of verb (in the sense that VP has to be empty (cf. Holmberg 1986, 1999)), scrambling of the object in German can take place with unmoved non finite verbs (cf. Zwart 1996). In the finite clauses below, the verb coexists with a finite auxiliary. Therefore, the non finite verb does not move.[4]

[4] However, scrambling of the object in (15) does not contradict Holmberg's Generalisation. The unmoved verb does not phonologically block scrambling because the verb is not in the way of the scrambled object (cf. Holmberg 1999).

(15) a. Der Student hat nicht das Buch gelesen (German)
the student has not the book read

b. Der student hat **das Buch**$_i$ nicht t_i gelesen
the student has the book not read
"The student hasn't read the book."
(Thráinsson 2001:149)

However, it has been noted by Diesing (1997), Mahajan (1990), Müller (1995) among others that scrambling is associated with some factors such as definiteness, specificity, and information structure. Therefore, in contrast with (15b) above, the scrambling of the focused object in (16b) below is illicit (cf. Müller 1995).

(16) a. daß der Chef DAS BUCH geklaut hat (German)
that the boss the book $_{\text{focused}}$ stolen has

b. ??daß DAS BUCH der Chef t geklaut hat
that the book $_{\text{focused}}$ the boss stolen has
"... that the boss has stolen the book."
(Müller 1995:143)

Part of the discussion of scrambling facts has been concerned with the association between scrambling and whether the movement of the scrambled element is a type of A-movement or A'-movement (Fanselow 1990; Vikner 1994; Deprez 1994; Webelhuth 1989 and Mahajan 1994). Webelhuth (1989) observes that, in

German, scrambling is a kind of movement which has the properties of both A'-movement and A-movement. Accordingly, he argues that the landing site of the scrambled element is neither an A-position nor an A'-position. Rather, as he assumes, the position occupied by the scrambled constituent is a mixed position in that it has some of the properties of A-positions in addition to the properties of A'-positions. According to Webelhuth, scrambling is left adjunction to IP (i.e. TP) or VP (cf. Webelhuth 1992 and Müller 1995).

Various views have been advocated in the literature to account for scrambling. These views are based on whether scrambling is treated as A or A' movement. Some researchers who consider scrambling as an A-movement argue that scrambling is Case-driven. The scrambled constituent moves from its base position to the specifier position of a functional head, i.e. the specifier of AgrOP, in order to check its Case (cf. Deprez 1994; Mahajan 1990 and Fanselow 1990). However, after the Case-checking theory has been abandoned, some authors argue that scrambling is motivated by an EPP feature (cf. Lavine 1998). On the other hand, researchers who consider scrambling as a kind of A'-movement argue that scrambling is driven by focus considerations; the unfocused elements, as in (15b) above, move to a higher functional projection (De Hoop 1992 and Müller and Sternefeld 1994). According to Reinhart (1995), such a movement of the unfocused element is motivated by "PF (Phonological or prosodic) reasons. These PF considerations, on their part, may interact with the focus structure of the sentence" (Reinhart 1995: 59). In fact, the analysis that assumes that object

shift is focus-driven in Scandinavian languages (Holmberg 1999) seems to be applicable to scrambling data, as Holmberg assumes. In the case of scrambling the movement of scrambled constituent is motivated by [–Foc] feature.

6.3.4. On the Status of the Moved Object in MSA

Leaving aside the analyses that assume Case-driven movement, the analyses which deal with object shift and scrambling as types of non-focus movement (i.e. –Foc-driven movment) do not seem to be applicable to Arabic data. Object movement in Arabic differs from object shift in Scandinavian languages and scrambling in German and Dutch in two significant ways. The first difference that sets object movement apart from object shift and scrambling is that it does not show specificity or definiteness effects. Rather, any kind of object, whether it is definite (17a) or indefinite (17b), can be moved to a position preceding the subject. Both sentences below are equally grammatical.

(17) a. ra'a al-bint-a al-walad-u
saw.3ms the-girl-acc the-boy-nom
"The boy saw the girl."

b. ra'a bint-an al-walad-u
saw.3ms girl-acc.indef the-boy-nom
"The boy saw a girl."

The second difference is that, in contrast with shifted and scrambled objects, which are unfocused elements, the moved object in Arabic seems to have all the properties that are associated with the preverbal focused object. When we consider the differences between topic and focus, which have been discussed in chapter five above, we can stipulate that the moved object is best treated as a focus.

It is mentioned in section 5.3 above that topic is distinguished from focus in a number of ways. Recall that topic in (18a) differs from focus in (18b) in that it is associated with a resumptive pronoun inside the clause. For convenience, (16) and (17) in the previous chapter are repeated here as (18a) and (18b) respectively.[5]

(18) a. al-riwaayat-u a'llafat-haa Zaynab-u
the-novel-nom wrote.3fs-it Zaynab-nom
"(As for) the novel, Zaynab wrote it." (MSA)

(Ouhalla 1997:12)

b. RIWAAYAT-AN a'llafat Zaynab-u
novel-acc wrote.3fs Zaynab-nom
"It was a NOVEL that Zaynab wrote." (MSA)

(Ouhalla 1997:12)

[5] Another difference, which is irrelevant to the discussion in this chapter, can be deduced from the comparison between the fronted topic in (18a) and the fronted focus in (18b); such a difference is Case-related. As discussed in section 5.3.2, focus, unlike topic, preserves the case form that is associated with its clause-internal base position (cf. Ouhalla 1997); the object is accusative when it appears in its base position. However, while the focused object in (18b) is accusative, the topicalised object in (18a) carries nominative case.

A further important difference is that indefinite and non specific noun phrases are not topicalised in Arabic (cf. section 5.3 above). By contrast, focus is not sensitive to definiteness and specificity; it can be indefinite as in (18b) above or definite as in (19b) below. By contrast, the topic in (18a) above cannot be indefinite, hence the ungrammaticality of (19a) below.

(19) a. *riwaayat-un a'llafat-haa Zaynab-u
novel-nom wrote.3fs-it Zaynab-nom
"A novel, Zaynab wrote it."

b. Al-RIWAAYAT-A a'llafat Zaynab-u
the-novel-acc wrote.3fs Zaynab-nom
"It was the NOVEL that Zaynab wrote."

The moved object in VOS sentences has the properties of focus not topic; as the sentences in (17) above show, definite and indefinite objects can equally undergo object movement to a position preceding the subject. Also, the moved object is not associated with a resumptive pronoun. The most important similarity between the preverbal focus in (18b) and (19b) above, and the moved object in (20) below, and also in (17) above, is that all of them must bear focal stress. For example, consider:

(20) qatala AL-A'SAD-A ar-rajul-u
killed.3ms the-lion-acc the-man-nom
"The man killed the lion."

Sentences such as (20) indicate that the moved object has the same interpretation of the preverbal focus. In fact, the preverbal focus in (19b), which I assume occupies the specifier of CP, and the moved object in (20) have contrastive focus interpretations; as the sentences below show, both the preverbal noun phrase in (21a) and the moved object in (21b) can be associated with negative continuations (cf. Ouhalla 1997).

(21) a. Al-RIWAAYAT-A a'llafat Zaynab-u (laa al-qisat-a)
the-novel-acc wrote.3fs Zaynab-nom (not the-story-acc)
"It was the NOVEL (not the story) that Zaynab wrote."

b. qatala AL-A'SAD-A ar-rajul-u (laa al-kalab-a)
killed.3ms the-lion-acc the-man-nom (not the-dog-acc)
"The man killed the lion (not the dog)."

Building on the similarities between the preverbal foci in (18b), (19b) and (21a) and the moved objects in (17), (20) and (21b), I conclude that the moved object is best analysed as a vP-internal focus. In other words, the Arabic clause has two focus positions, the specifier of CP in which the preverbal focus is located in addition to the vP-internal focus position which is occupied by the moved object. I shall identify the vP-internal focus position as the outer specifier of vP (cf. section 6.5 below). The sentence below provides support in favour of this conclusion, as it shows that two contrastive foci can coexist in a single clause.

(22) AL-A'SAD-A (laa al-kalb-a) qatala AR-RAJUL-U
The-lion-acc (not the-dog-acc) killed.3ms the-man-nom
(laa al-walad-u)
(not the-boy-Nom)
"It is the man, not the boy, who killed the lion, not the dog."

However, the main difference between the preverbal focus and the vP-internal focus is that the former has more emphasis than the latter.[6] In fact, it has been observed that the contrastive focus is preposed in a language like Finnish, which allows various word orders. Holmberg (1997) claims that in OSV orders the object is contrastively focused. However, this language (i.e. Finnish) allows the contrastive focus to appear in situ as argued in Kaiser (2000). According to Kaiser, the contrastive focus in the left periphery has more emphasis than the in-situ focus; she notes that the contrastive focus in the left periphery cannot be preceded by any other focused item. This means that there are different degrees of focus interpretation; the focus in the left periphery has a stronger interpretation than the focus in a lower position. In fact, this is what distinguishes the preverbal

[6] Five of my fellow Arab students have individually confirmed to me that the objects in the OVS and VOS sentences below have focus interpretation; however, they consider that the preverbal focus has more emphasis.

i. a. al-a'sad-a qatala ar-rajul-u
the-lion-acc killed.3ms the-man-nom
"The man killed the lion."

b. qatala al-a'sad-a ar-rajul-u
killed.3ms the-lion-acc the-man-nom
"The man killed the lion."

Thanks to Ahmad Mahfouz, Miri Hussien, Nasser Al-Horais, Oudah Alenazi and Yousef Elramli for their responses.

focus from the vP-internal focus in the Arabic sentences in (21a) and (21b) above respectively.

Assuming that wh-word movement and focus movement target the same position (cf. Ouhalla 1997, Chomsky 2005 in addition to section 5.6.2 above), we find that the wh-word parallels the preverbal focus and the vP-internal focus. The wh-words in (23a) and (23b) seem to occupy the same positions occupied by the preverbal focus in (19b) and the vP-internal Focus in (20) respectively.

(23) a. maða qatala ar-rajul-u
what killed.3ms the-man-nom
"What did the man kill?"

b. qatala maða ar-rajul-u
killed.3ms what the-man-nom
"What did the man kill?"

Being A'-movement, the moved wh- word *maða* 'what' in (23a) must target an A'-position. It occupies the specifier position of CP as discussed earlier in the previous chapter. The wh-word in (23b), which precedes the subject, is expected to be also in an A'-position. Apparently, the position that is occupied by the clause-internal wh-word is the outer specifier of vP which is identified in Chomsky (2005) as an A'-position. By the same token, the moved object in sentences such as (20) above should also be in an A'-position, i.e. the outer specifier of vP.

Since the focused object in Arabic moves from its base position across the subject to a higer position, its movement is not accounted for under the analyses that suggest non-movement of the focused element. An alternative analysis to these analyses is found in Jayaseelan (2001). Building on data from English and Malayalam, Jayaseelan (2001) suggests that vP is dominated by separate Focus and Topic projections; these projections replace the outer specifier position of vP, according to his view. He assumes that focus movement targets the specifier of Focus Phrase. This suggests that his analysis might work for Arabic data. Jayaseelan's (2001) proposal is discussed in detail in the following section.

6.4. Movement of Focus Phrase, Jayaseelan (2001)

6.4.1. Wh- Words in Malayalam

In an attempt to account for the position of the question words which are contiguous to V in Malayalam language, in addition to other phenomena such as cleft focus in English, Jayaseelan (2001) argues for the existence of Topic and Focus projections above vP and lower than IP (or TP to employ the more recent term). He claims that assuming the existence of these positions can account for object shift in Scandinavian and scrambling in Malayalam, German, and Dutch. Furthermore, he argues that the postulated Topic and Focus positions above vP can fulfil all the functions which are associated with the outer specifier position of vP – a position that is still maintained in Chomsky (2005).[7]

[7] A similar idea to Jayaseelan's is argued for in Belletti (2001, 2004). In her account for subject inversion in VS orders which reverse a canonical SVO, Belletti assumes that the lower part of the clause might contain Focus and Topic phrases. In a sentence like the following she argues "that the postverbal subject can be interpreted as a new information focus" (Belletti (2004:21).

The basic assumption that underlies Jayaseelan's proposal is that the focused element moves out of vP to the specifier position of the Focus Phrase above vP. Malayalam is an SOV language. However, Jayaseelan observes that the question word has to be adjacent to the verb deriving an OSV word order; the wh- subject has to be adjacent to the verb as the following sentences illustrate.

(24) a. ninn-e aarə aTiccu ?
you-acc. who beat-past
"Who beat you?"

b. *aarə ninn-e aTiccu?

(Jayaseelan 2001: 40)

The word order in (24a) cannot be derived by subject lowering, as Jayaseelan argues. In order to account for how OSV word order in (24a) is derived, he assumes that the wh- subject targets a specifier position of Focus Phrase (above vP) instead of the specifier of TP which is located higher in the structure. Jayaseelan explains that the question word in Malayalam is endowed with a strong focus feature; such a feature triggers the movement of the question word from its base position to the specifier position of Focus Phrase in order to be next

---

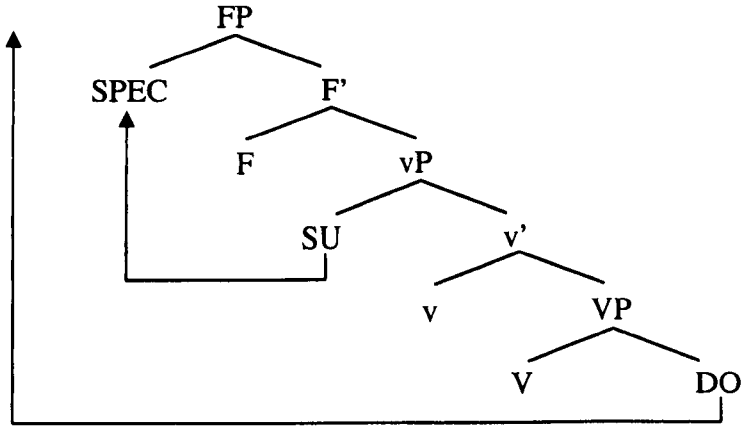
i) E' partito / ha parlato Gianni
Has left / has spoken Gianni

Belletti argues that since the subject is focalised it must be positioned in the specifier of Focus Phrase which is located above VP. The verb moves to a higher position (i.e. T). The specifier of TP "is filled by a nonovert expletive *pro*, the associate of the postverbal subject" (Belletti 2004: 25).

to the verb. The verb moves from V to v then it adjoins to Focus, the head of Focus Phrase. Jayaseelan does not explain why the verb does not move to T. He simbly says that the verb (and the copula, in (26) below) in Malayalam does not raise to T; he suggests "that it adjoins to Focus when Focus is present" (Jayaseelan 2001:63).

The object moves from its position across the subject wh-word in the specifier of Focus phrase to a specifier position of a higher functional projection[8]. The tree diagram below depicts the structure of (24a) above.

(25)



(Jayaseelan 2001: 41)

In fact, it is very hard under Jayaseelan's proposal to identify vP as a phase in the sense of Chomsky (2001, 2005). It is not obvious from his analysis how the

[8] I expect this position to be the specifier of TP. It is unclear in Jayaseelan (2001) what is the motivation for object movement and what is the landing site of the moved object.

object moves directly out of the vP phase to a higher position. This is not the only problem with his analysis, as I shall discuss in section 6.4.4 below.

6.4.2. Cleft Focus Movement

When he discusses cleft focus phenomenon in Malayalam and English, Jayaseelan assumes that the cleft focused element also moves to the specifier position of Focus Phrase. In the Malayalam sentence in (26) below, Jayaseelan argues that the noun phrase *Mary* is a cleft focus which is moved from the embedded CP to the specifier position of Focus Phrase. The specifier of TP is filled by an expletive pro.[9]

(26) Mary-(y)e aaNə ñaan kaND-atə
-acc. is I saw-nominalizer
"It is Mary that I saw."

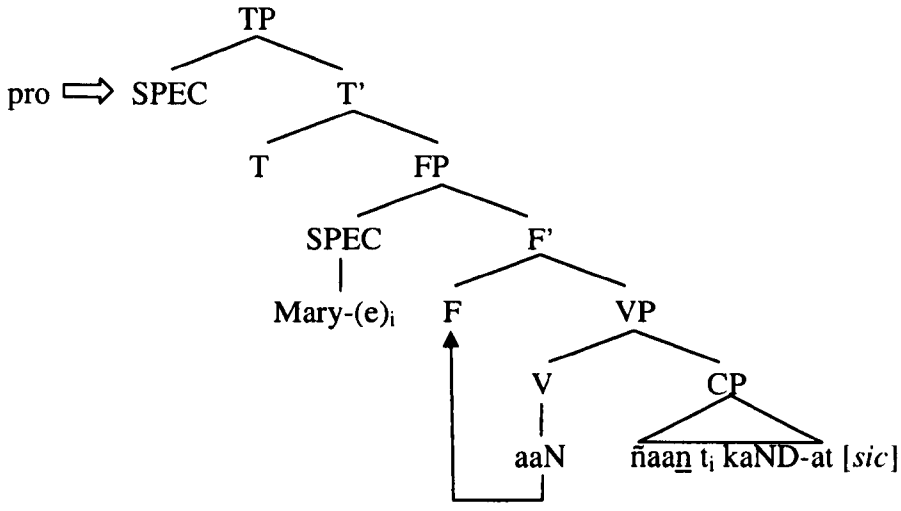
(Jayaseelan 2001:63)

The tree diagram (27) below depicts the derivation of (26) above. Notice that I use the label TP instead of the older label IP which is used in Jayaseelan (2001).[10]

[9] Jayaseelan claims that an expletive pro might not be needed in Malayalam. "Another possibility is that the EPP feature is only optionally assigned to Malayalam INFL [T]" (Jayaseelan 2001: 63, fn. 31).

[10] Notice also that the tree diagram in the original text contains a typo; while Jayaseelan argues that the verb does not move to T, the tree diagram in Jayaseelan's (2001) paper contains an arrow indicating the verb movement from Focus to T.

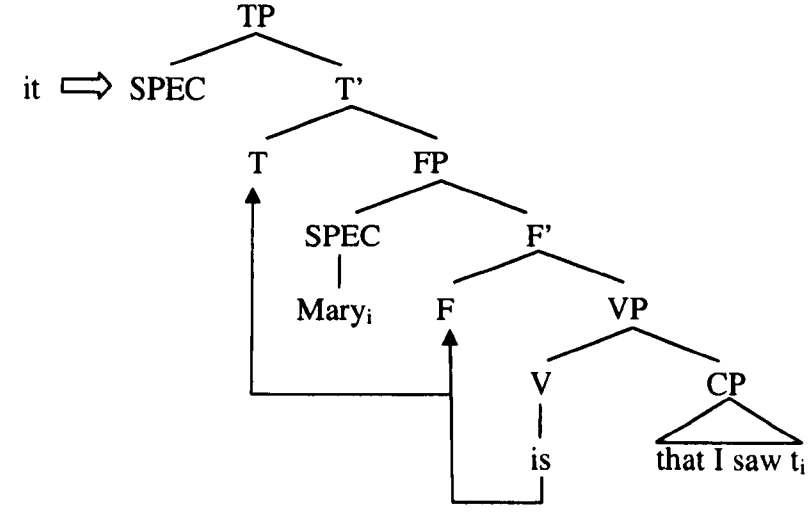
(27)



(Jayaseelan 2001: 63)

Jayaseelan claims that the English sentence *it is Mary that I saw* is derived in a similar way to (27) above. The cleft focus noun phrase *Mary* moves to the specifier position of Focus Phrase. However, unlike the Malayalam structure in (27) above, the copular verb in English moves from V to Focus then to T, and the specifier of TP is filled by the expletive *it*.

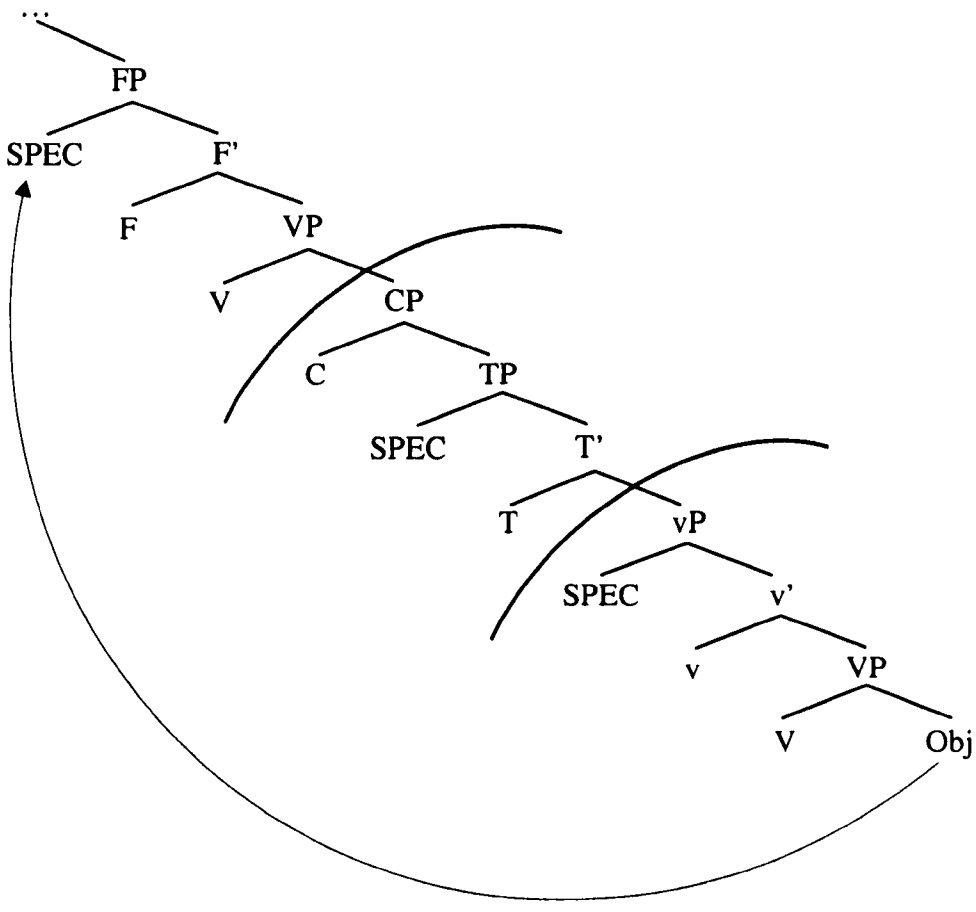
(28)



(Jayaseelan 2001: 63)

While the movement of the focused phrase is usually a clause-internal process, Jayaseelan (2001) is sceptical about the derivation of (27) and (28) above. He raises the question: "is the 'cleft focus' *Mary* moved directly from the embedded CP? If so, this would be exceptional" (Jayaseelan 2001:63, fn. 31). According to Jayaseelan's analysis, the path of the cleft focus movement in (28) above would look as diagrammed below:

(29)



One might think that assuming exceptionality of the focus movement across the boundaries of the vP and the CP phases is not a satisfactory explanation. In fact,

such a movement of the cleft focus phrase across the boundaries of two strong phases is not consistent with the assumptions of Phase Theory (Chomsky 2000, 2001, 2005). The direct movement of the object from the embedded CP violates the Phase Impenetrability Condition:

(30) In Phase α with head H, the domain of H is not accessible to operations outside α, only H and its edge are accessible to such operations.

(Chomsky 2000:108)

The condition (30) above emphasises the importance of the edge of the phase (i.e. the specifier positions of the vP and CP phases) as an escape hatch through which the focused items can move to positions outside the phase (Chomsky 2000, 2001, 2004). Thus, the movement in (27) and (28) above can be captured easily within a phase-based approach by assuming that the cleft focus undergoes a series of movements, i.e. cyclic movement. It moves from its base position to an outer specifier of vP, then it moves to the specifier position of CP. After that, the cleft focus would be able to undergo a further movement from the specifier position of the embedded CP to the specifier position of Focus Phrase.

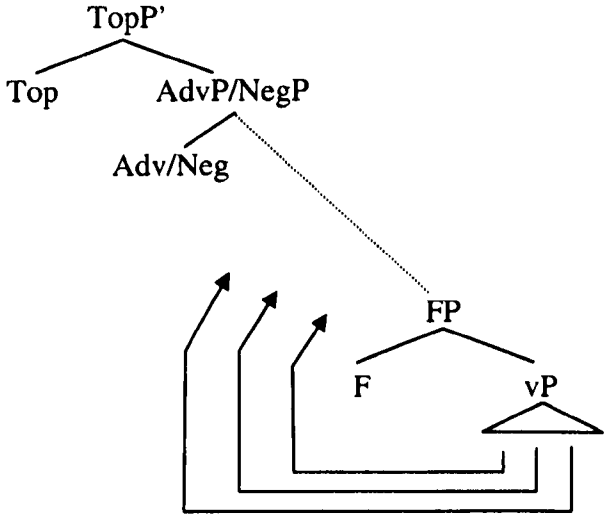
It seems that Jayaseelan deliberately overlooks this possibility. He conjectures that the direct movement of the cleft focus is exceptional because, under his analysis, the outer specifier of vP does not exist; he argues that his *IP-internal*

topic and focus phrases replace the outer specifier of vP and fulfil the functions associated with it.

6.4.3. Scrambling and Object Shift

With regards to scrambling in German and Dutch, Jayaseelan argues that these languages generate a set of 'canonical positions' above Focus Phrase and below Topic Phrase and Adverb/Negation positions. All the adjuncts and arguments move from vP to these positions by nested movements, as (31) below illustrates.

(31)



(Jayaseelan 2001:56)

The unscrambled noun phrase to the left of the verb, as in (15a) above, "is most probably in its canonical position; here it is existentially interpreted. However it could also be in the Focus Phrase, in which case it will bear contrastive stress" (Jayaseelan 2001:58). On the other hand, scrambling of the noun phrase in (15b)

above is ascribed to the fact that it is topicalised; it moves from its canonical position to the specifier of Topic Phrase across NegP. Jayaseelan argues that such an analysis explains Lenerz's (1977, cited in Jayaseelan 2001) definiteness condition; "an indefinite NP which receives an existential interpretation is necessarily 'new information' and therefore cannot be a Topic" (Jayaseelan 2001:45); this accounts for why indefinite noun phrases do not scramble. Relating to object shift in Scandinavian languages, Jayaseelan claims that since the unshifted definite object has a contrastive interpretation, it is located in Focus Phrase. The shifted object on the other hand is located in Topic Phrase.

6.4.4. Problems with Jayaseelan's Analysis

Jayaseelan's work provides insight into how object shift in Scandinavian, scrambling in German and object movement in Arabic might be treated. However, if we adhere to the assumptions made in Chomsky (2005), Jayaseelan's proposal does not seem to be sustained. In fact, I reject Jayaseelan's analysis for two reasons: a theoretical reason and an empirical reason.

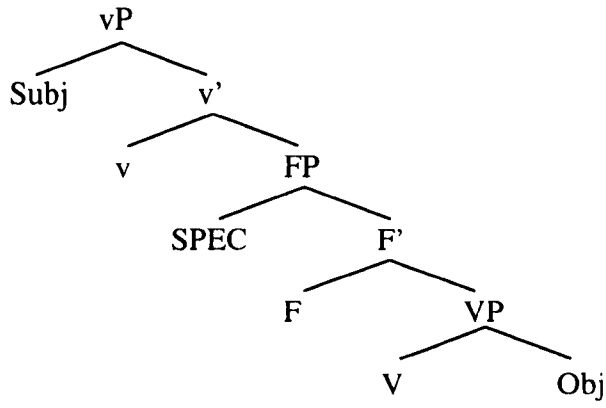
Theoretically, Chomsky considers that the phase head is the source of Φ-features in addition to the edge feature. The features on v and C, the phase heads, are responsible for initiating the syntactic operations Agree and Move. Also, Chomsky assumes that movement is feature-driven; the movement of a given item is triggered by a feature on a higher head. Focus Phrase is not a phase. Consequently, its head cannot initiate the operation Move unless it inherits the

feature that triggers movement from the phase head. Under Jayaseelan's assumption, Focus Phrase is located above vP. As discussed in Jayaseelan (2001), Focus Phrase, which is immediately located above vP, is dominated by several projections, which intervene between Focus phrase and C. This means that it is inconceivable how the edge feature of C can be transmitted to the head of Focus Phrase across TP, TopP, NegP, in addition to a set of 'canonical positions' to which elements move from vP (see (31) above).

A further theoretical problem, which I mentioned in section 6.4.1 above, is that vP allows direct movement of the object to a higher position. Such a movement violates the Phase Impenetrability Condition (30) above. The focused object in Arabic cannot move directly to the specifier of Focus phrase across the boundaries of vP phase.

One suggestion to improve Jayaseelan's proposal is to assume that the IP-internal Focus position belongs to the vP phase. In other words, in order to guarantee that the head of Focus Phrase inherits its features from the phase head and to ensure that the condition (30) is not violated, the Focus Phrase should be located below v and above VP just like the situation in Rizzi's (1997) COMP system where Focus Phrase is located below C and above TP; (32) below illustrates this suggestion (cf. section 5.6.2 above).

(32)



However, assuming that the Focus Phrase is located below v is not supported empirically by the Arabic data. Positing that the moved object in Arabic is a focus occupying the specifier position of Focus Phrase, VOS word order is not captured by (32) above simply because the landing site of the focused object would be to the right of the subject which is base generated in the specifier of vP.

To sum up, Jayaseelan's proposal does not capture object movement facts in Arabic if Chomsky's (2001, 2005) notions of phase and feature inheritance are adopted. In order to account for the motivation that triggers object movement and the landing site of the moved object, I build on Chomsky (2001, 2005) in assuming that focus movement of the object is triggered by an edge feature on v and that the moved object is positioned in the outer specifier of vP.

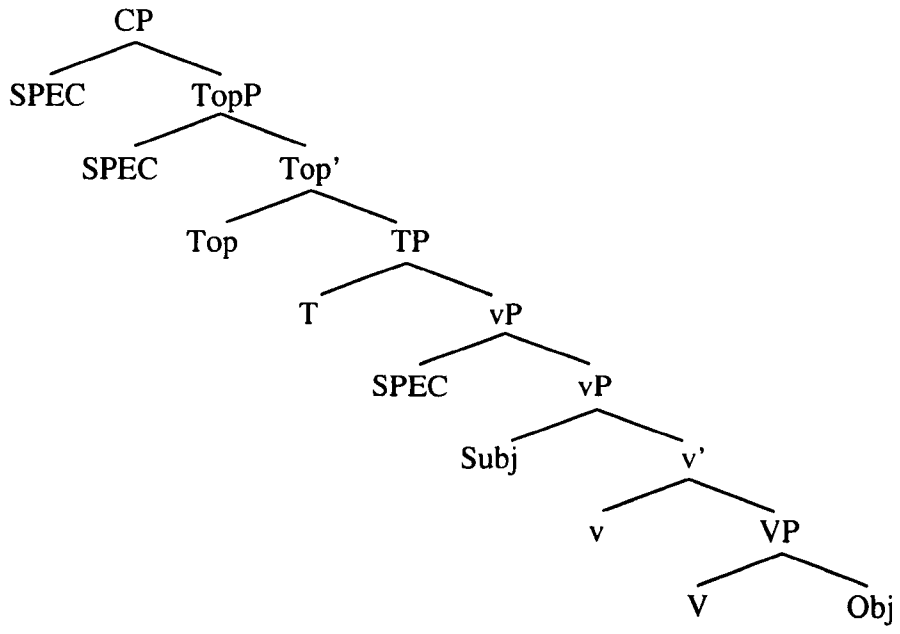
6.5. Toward an Analysis

To begin with, I claim that Topic Phrase is exclusive to the COMP system. In the sense of Rizzi (1997), Topic Phrase exists as an independent projection below C.

Therefore, any topicalised phrase has to move to the specifier of Topic Phrase. In other words, when topic movement applies, it targets the specifier of Topic Phrase which belongs to C, as assumed in the previous chapter. Topic movement observes the Phase Impenetrability Condition in (30) above in that such a movement must take place from the edge of the vP phase (see below).

However, building on the discussion presented in chapter five above, which assumes that C in interrogative clauses does not transmit its edge feature to a lower head, and on the basis of the similarities between wh- movement and Focus movement which have been discussed in section 6.3.4 above, I diverge from Rizzi (1997) by assuming that Focus Phrase does not exist as an independent projection. Rather, following Chomsky (2005), I claim that both focus movement and wh- movement target the outer specifier of vP, and from this position they move to the specifier position of CP. In the case of VOS word order, the object remains in the outer specifier of vP. The tree diagram in (33) below depicts the structure of the Arabic clause.

(33)



A VSO structure is derived by the verb movement from V to v, which agrees with the object. Then, the verb moves to T which in its turn agrees with the subject in the inner specifer of vP. The movement of the object from its base position as a complement of V to the outer specifer of vP across the subject results in a VOS structure. Such a movement of the object is triggered by the edge feature of v, the phase head. The edge-feature-raised object can undergo a successive cyclic A'-movement which may take it to the specifier position of CP. In the sense of Chomsky (2005), since the object is raised to the outer specifier of vP by the edge feature of the phase head, it does not head an A-chain. This means that the object in the outer specifer of vP is eligible to be raised by a higher edge feature; i.e. the object can be raised by the edge feature of C to the specifier of CP.

6.5.1. The Analysis of Object Movement

Bearing in mind the properties of the moved object (cf. section 6.3 above), I will continue to assume in this section that the moved objects are foci. This section proposes a minimalist analysis that accounts for object movement and the positions occupied by the moved objects. I build on Chomsky (2005) and assume that object movement is triggered by the edge feature of v and it targets the outer specifier position of vP.

6.5.1.1. The Relation between Subject Movement and Object Movement

The basic assumption that underlies my analysis is that there is a strong correlation between object movement to the outer specifier of vP and subject movement to the left periphery of the clause. The data show (see below) that the relation between object movement and subject movement is reciprocal in the sense that when movement of the object applies, movement of the subject is blocked; the reverse is true, as object movement cannot apply when the subject is moved to the left periphery of the clause. Cliticisation facts provide evidence in support of this view because the topicalised subject that moves to the specifier position of TopP leaves behind a resumptive pronoun which appears as a clitic on the verb, as (34a) shows. However, if object movement applies across the subject, as in (34b), the movement of the subject to the left periphery is not allowed; the resumptive pronoun cannot be left behind in a position following the moved object, as (34c) shows.

(34) a. al-a'wlaad-u katab-uu ar-risaalat-a
the-boys-nom wrote.3m-they the-letter-acc
"It is the boys who wrote the letter."

b. kataba ar-risaalat-a al-a'wlaad-u
wrote.3ms the-letter-acc the-boys-nom
"The boys wrote the letter."

c. *al-a'wlaad-u kataba ar-risaalat-a -uu
the-boys-nom wrote.3ms the-letter-acc -they
"It is the boys who wrote the letter."

In addition to (34a) and (34b) above, (35) below confirms that subject movement across the moved object is illicit. We mentioned in the previous chapter that clitics in Arabic can cluster. If the subject is able to move across the object in the specifier of vP, then we would expect (35) below to be acceptable, which is not the case. The resumptive pronoun which is left behind the topicalised subject cannot follow the pronominal object clitic. Rather, the object pronominal clitic has to follow the resumptive pronoun.

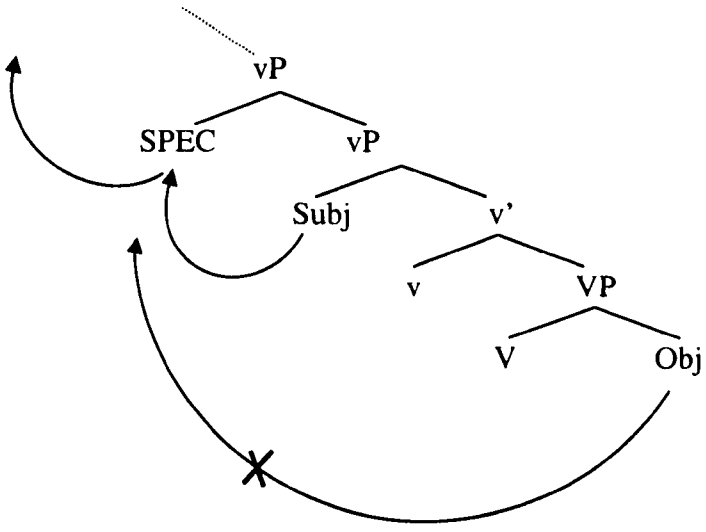
(35) al-a'wlaad-u *kataba-haa-uu / kataba- uu-haa
the-boys-nom wrote.3m-it –they / wrote.3m-they-it
"It is the boys who wrote it."

6.5.1.2. The Outer Specifier of vP as a Target of Movements

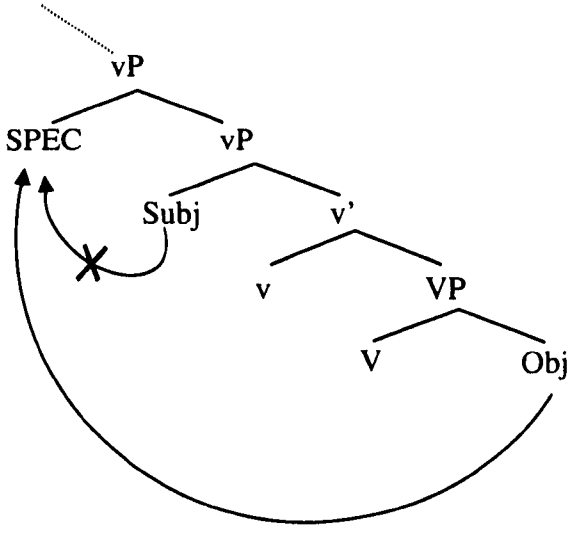
In fact, the interaction between subject movement and object movement is expected under minimalist assumptions. One possibility to account for this interaction is to assume that the outer specifier position of vP is targeted by both movements. Both movement (the topicalised subject movement or the object movement) are dependent on the vacancy of the outer specifier of vP. According to Chomsky (2001, 2004), the outer specifier position is the escape hatch through which the moved element can pass in order to avoid violating the Phase Impenetrability Condition (30) above.

In our case, the topicalised subject needs the outer specifier of vP to move outside the boundaries of the vP phase. Also, the moved object, as I assumed building on Chomsky (2005) in section 6.3 above, targets the outer specifier position of vP. Consequently, when any of the two elements moves to the outer specifier of vP, the movement of the other element is blocked. The subject cannot leave the phase if the outer specifier of vP is occupied by the object. Likewise, object movement does not occur when the subject moves to the preverbal position simply because the outer specifier of vP is no longer available. This point of view is represented by the tree diagrams below. (36a) shows that the subject moves from the inner specifier to the outer specifier of vP, then it moves higher (however, see below). Therefore, object movement does not apply because of the lack of a landing site. The opposite is seen in (36b); when the object moves to the outer specifier, the subject cannot escape the boundaries of the phase.

(36) a.



b.



However, under Chomsky's assumptions, movement of the subject from the inner specifier to the outer specifier of vP is impossible. Assuming the Checking Theory, it is argued in Chomsky (1995) that a convergent derivation is obtained only when the object moves (across the subject) to the outer specifier of vP; such

a movement establishes the checking relation for Case on the object and Φ-features on v. The subject cannot move from the inner specifier to the outer specifier of vP for the following two considerations.

First, when the subject moves to the outer specifier it will be in the checking domain of v. If the features of the subject mismatch the features of the verb, "then the derivation is cancelled. If they match, then Subj receives accusative Case and object agreement, and Case and Φ-features of V erase" (Chomsky 1995:369).

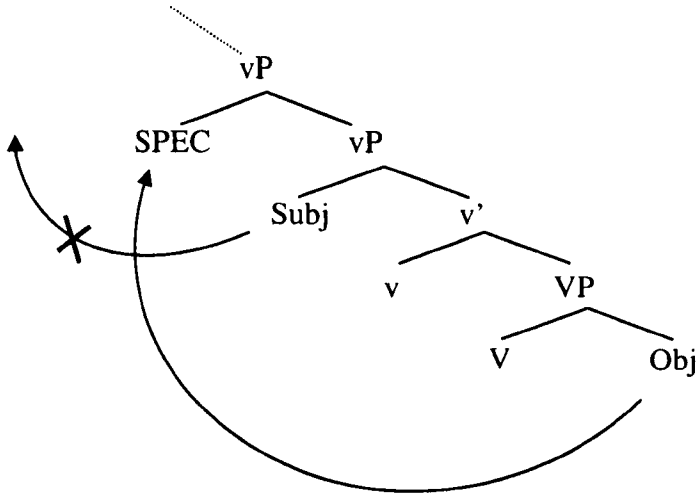
The second consideration which led Chomsky to exclude the possibility of subject movement to the outer specifier of vP is that the object would not be able to check its Case feature. As Chomsky puts it, the Case feature of the object "still has to be checked, and that will have to take place in the checking domain of T. But unraised Obj cannot reach that position" (ibid). This means that, as Chomsky explains, the subject in the outer specifier of vP is closer to T, hence it prevents the object from movement to the specifier position of TP.

However, movement of the subject from the inner specifier to the outer specifier does not seem to be problematic under the assumptions of the Agree Theory, which is adopted in this thesis. Both the subject and the object can have their features valued before movement of any of them applies. In other words, if the subject raises to the outer specifier, as in (36a) above, the object still does not

have to move as it has its features already valued under Agree with v. Nevertheless, movement of the subject to the outer specifier is illicit, as Chomsky (2005) argues. The purpose of movement to the outer specifier of vP is to satisfy the edge feature which itself is a feature of v, the head of the vP phase. One of the basic assumptions of the Agree Theory is that the valuation of features must take place under the probe-goal configuration; the probe has to c-command the goal. Accordingly, the element that has to satisfy the edge feature of v has to be in the searching domain of v. Since the subject in the inner specifier of vP is not in the searching domain of v it cannot move to the outer specifier to satisfy the edge feature. Conversely, the object can move to the outer specifier by virtue of being c-commanded by v.

In the light of Chomsky's argument, I assume that the interaction between subject movement and object movement in Arabic is due to the absence or presence of the outer specifier of vP. I assume following Chomsky (2005) that the edge feature which triggers movement to the outer specifier position of vP is an optional feature. This means that object movement is dependent on whether v, the head of the vP phase, possesses the edge feature or not. As the structure (37) below shows, the object has to move to the outer specifier of vP to satisfy the edge feature of v. When the object movement applies, the subject cannot move higher because it is no longer at the edge of the phase.

(37)



When the edge feature of v does exist, which means that object movement does not take place, subject movement to the left periphery (if it has to apply, cf. the previous chapter) is not obstructed because the subject is at the edge of the vP phase. Assuming the existence / absence of the feature on v, the obligatory and disallowed instances of object movement are captured.

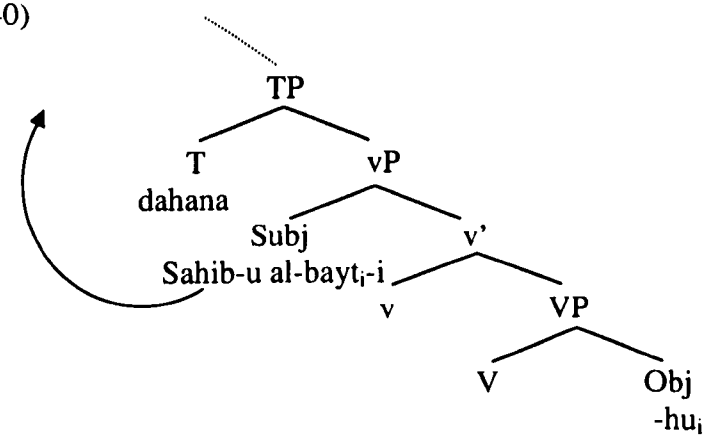
We can conclude then that in the case of obligatory object movement, v has an edge feature which triggers the movement of the object to the outer specifier position. By the same token, when v has no edge feature, object movement does not apply. In other words, this means that since there is no edge feature on v, object movement is not triggered. Cliticisation of the pronominal object is accounted for in term of obligatory/disallowed object movement. The tree diagrams in (40) and (41) below represent the structures of (38) and (39) below respectively.

(38) Sahib-u al-bayt$_i$-i dahana-hu$_i$
owner-nom the-house$_i$-gen painted.3ms-it$_i$
"The owner of the house$_i$ painted it$_i$."

(39) zaara-hum aT-Taalib-u
visited.3MS-them.acc the-student-nom
"The student visited them."

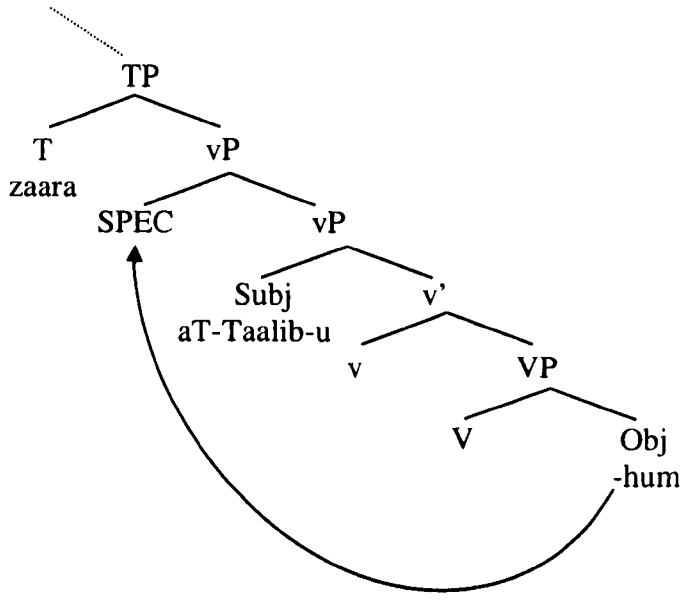
The functional head v in the structure of (38) does not have an edge feature. Consequently, the object cannot move. The phonological presence of the subject between the verb in T and the object prevents the latter from cliticising onto the verb. In order to obtain a convergent derivation, the subject is obligatorily moved allowing the clitic to attach to the verb.

(40)



By contrast, the structure of (39) has an outer specifier of vP. Therefore, the pronominal object clitic moves across the subject to the outer specifier of vP then it clitisises onto the verb, as (41) below shows.

(41)



6.6. Extending the Analysis

Further research will be concerned with object movement in double object constructions. Normally, the indirect object precedes the direct object in double object constructions, as (42a) below shows. However, the direct object and the indirect object can exchange their positions sometimes. In contrast with (42a), (42b) shows that the direct object is placed in a position preceding the indirect object.

(42) a. a3taa aT-Taalib-u al-bint-a al-qalam-a
gave.3ms the-student-nom the-girl-acc the-pen-acc
"The student gave the girl the pen."

b. a3taa aT-Taalib-u al-qalam-a al-bint-a
gave the-student-nom the-pen-acc the-girl-acc
"The student gave the girl the pen."

Furthermore, the sentences in (43) below show that either of the objects (the direct (43a) or the indirect (43b) can precede the subject.

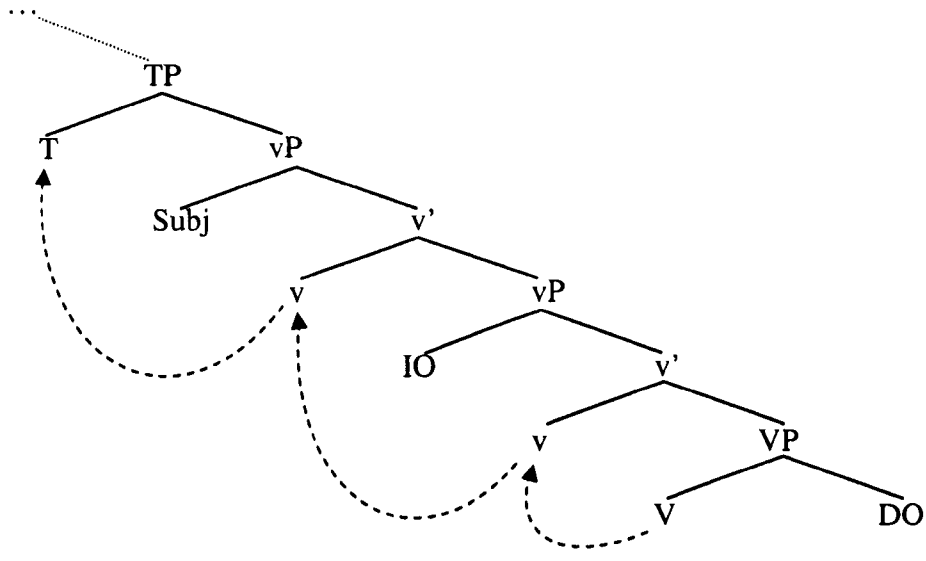
(43) a. a3taa al-qalam-a aT-Taalib-u al-bint-a
gave.3ms the-pen-acc the-student-nom the-girl-acc
"The student gave the girl the pen."

b. a3taa al-bint-a aT-Taalib-u al-qalam-a
gave.3ms the-girl-acc the-student-nom the-pen-acc
"The student gave the girl the pen."

Chomsky's notions of edge feature and outer specifer will be utilised to account for the positions occupied by the objects in (43) above. I will extend the analysis presented in this chapter to double object constructions and assume that the objects in (42b) and (43) are in outer specifier positions of vP. As the tree diagram in (44) below shows, I claim that vP in the underlying structure of double object constructions consists of two layers. The direct and the indirect object are based generated in the lowest layer while the subject originates in the specifier position of the highest layer. Following Larson (1988), Holmberg and Platzack (1995) and Radford (2004), I assume that the indirect object is located in the specifier position of the lowest layer. The lexical verb is in the lowest vP layer; it moves from V to the first v which in turns agrees with the direct object. Then the verb moves to the second v and another Agree relation is established

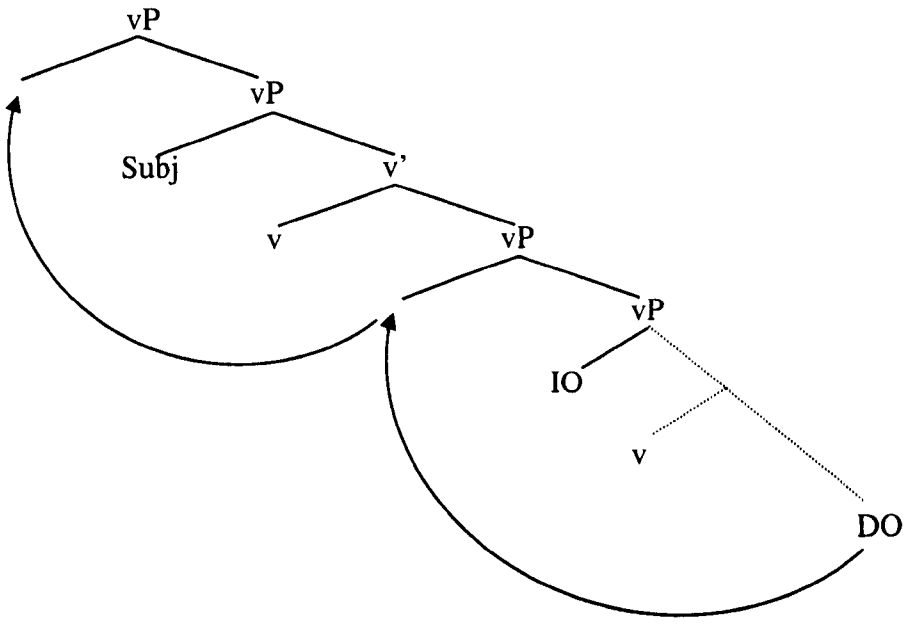
with the indirect object. Afterward, the verb moves and adjoins to T. the path of the verb movement is indicated by the dashed arrows.

(44)

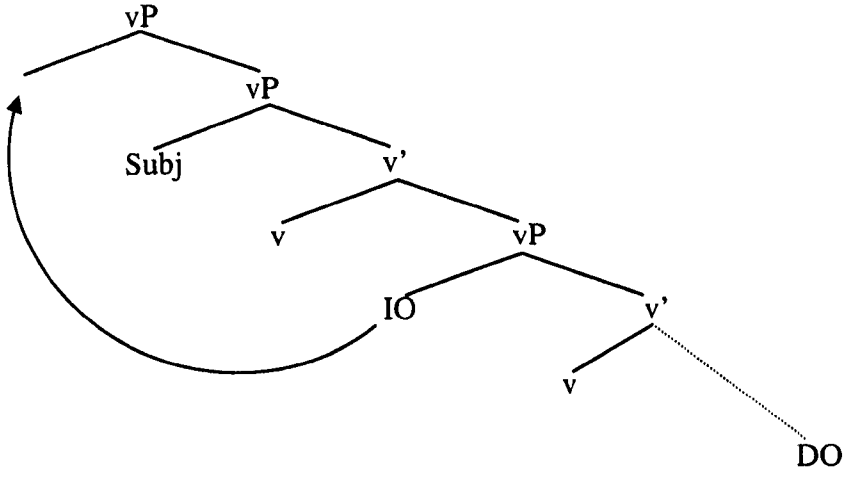


When the direct object appears in front of the indirect object, as in (42b), it actually targets an outer specifier position of the lower vP layer, which is located above the position of the indirect object. With regard to object movement to a position preceding the subject as in (43) above, I postulate that in (43b) the indirect object moves from its base position in the specifier of the lower vP layer to an outer specifier position of the highest vP layer. The moved direct object in (43a) occupies the same position as the indirect object in (43b); i.e. it is in the outer specifier of the highest vP. However, unlike the indirect object, the direct object does not move directly, as its movement has to take place via an outer specifier of the lowest vP. The structures (45a) and (45b) below depict the movement of the direct object movement (43a) and the indirect object movement in (43b) respectively. Irrelevant details are omitted.

(45) a.



b.



6.7. Summary and Conclusion

The chapter has shown that the object in MSA moves from its base position to a higher position. Object movement in MSA resembles object shift in Scandinavian languages and scrambling in German in that the object is moved across another constituent. However, object movement in MSA differs from object shift and scrambling in that it is not sensitive to definiteness.

The purpose of this chapter has been to provide a minimalist account for motivation triggering object movement and for the landing site of the moved object. The proposed analysis has assumed, building on Chomsky (2005), that object movement is triggered by the edge feature on the head of the vP phase. Such a movement takes the object to the outer specifier position of vP. Cliticisation of pronominal object is treated on a par with object movement; the pronominal object clitic moves across the subject to the outer specifier of vP, then it cliticises onto the verb in T. However, if the clitic is not allowed to move, the phonological blocker (the subject) is moved to the left periphery in order to allow the clitic to attach to the verb.

There are areas of our proposal which remain unaccounted for. For instance, Arabic allows OSV sentences like (46) below. In this sentence, both the object and the subject are topicalised and they appear in preverbal positions.

(46)	al-Hadeeqat-u	al-a'wlaad-u	zaar-uu-haa
	the-garden-nom	the-boys-nom	visited.3m-they-it

"It is the garden that the boys visited."

Under our analysis, it is not clear how the object reaches its surface position. The subject does not pose a challenge as it moves from the edge of the vP phase to the specifier of TopP. Object movement from its lower position seems to skip the edge of the vP phase. This means such a movement constitutes a violation of the Phase Impenetrability Condition. A possible solution is to assume following Doron and Heycock (1999) that the first noun phrase is base generated in its

surface position. An alternative but less acceptable solution is to claim in the sense of Jayaseelan (2001) that object movement here is exceptional. However, despite the challenge posed by sentences such as (46) above (which will be subject to further research), Chomsky's notions of the edge feature and outer specifier of vP help understand how the VOS word order in MSA is derived. Furthermore, these notions might be extended to account for other issues in Arabic such the positions of objects in double object constructions.

CHAPTER SEVEN: Concluding Remarks

7.1. Summary

This thesis has been an attempt at studying three issues that contribute to the word order variation in Arabic. Adopting Chomsky's (2000) Agree Theory, Chomsky's (2001) Phase Theory and Chomsky's (2005) feature inheritance model, the thesis has addressed the issues of Case, the interaction of agreement with subject positions in addition to object movement (and pronominal object cliticisation) across the subject, which results in VOS word orders.

7.1.1. Case

In chapter four, I argued that the Case value on nominals is the product of a local Agree relation between a probe (a functional head) and a goal (the nominal). The Case feature of the postverbal subject is valued under an Agree relation between the subject and the features of C on T. However, some C's have a lexical Case feature that is not inherited by T. Such a feature is discharged under a local Agree relation between C and the preverbal noun phrase, which is raised from a lower position. The raised copy of the noun phrase is an active goal by virtue of its unvalued Case feature. I claimed, in the sense of Pesetsky (1997, 1998), that the copy that is left behind the raised noun phrase is spelt out in the form of a pronoun representing the features of the moved item. With regard to zero copula sentences, I claimed that their structures contain an nP functional projection that compares to vP in verbal sentences. Case on the nominal complements in zero

copula sentences is valued under an Agree relation between the nominal complement and the head of nP projection.

7.1.2. Agreement and Subjects

In chapter five, I took issue with the analyses that assume asymmetrical agreement in Arabic. Assuming Chomsky's Agree Theory and building on the discussion of Case, I claimed that the supposed number marker is best analysed as a pronominal clitic that is associated with the fronted subject. This amounts to saying that there is no agreement asymmetry in MSA. The preverbal noun phrase in SVO structures in MSA is a topic, which is moved from its base position in the specifier of vP to the specifier of TopP. By contrast, in JA the preverbal noun phrase is a subject located in the specifier of TP. VSO word order in MSA is derived in a different way from its counterpart in JA. While the VSO word order in MSA is a result of head movement of the verb from v to T, I claimed that the VSO word order in JA is derived by a further movement of the verb. VSO structures in JA are derived (after SVO structures are derived) by means of topic movement of the verb from T to the specifier of TopP. This proposal accounts for why the pronominal clitic, which is coreferential with the subject, appears in a position preceding the subject; in the sense of Kayne (1975, 1989), I claimed that topic movement of the verb affects the cliticised coreferential pronominal clitic.

7.1.3. Object Movement and Cliticisation

The issue of object movement and pronominal object cliticisation has been investigated in chapter six. Contra the analyses that assume non movement of the

focused object in languages such as Icelandic and German, I argued that the focused object in MSA moves from its base position across the subject to a higher position. Building on Chomsky's (2001, 2005) work, I assumed that focus movement of the object is triggered by an edge feature on v, the head of the vP phase. The targeted position of the moved object is the outer specifier position of vP. Pronominal object cliticisation is treated on a par with full noun phrase object movement. The object pronominal clitic moves from its object position to the outer specifier of vP, then it attaches to the verb in T. Assuming Chomsky's (2001, 2005) cyclic spellout of phases, I argued that the pronominal object cliticisation does not take place in VP. Rather, it takes place after the vP has been spelt out.

7.2. Conclusions

The discussion in this thesis implies that the word order variation in Arabic results from different syntactic operations. The raised issues seem to be captured more easily under the assumptions of Phase Theory. Accepting the idea that C is responsible for the Case value on the preverbal noun phrases and that zero copula sentences contains an nP functional projection implies that the well known notion of *default case* is no longer needed. Every instance of Case is valued under an Agree relation between a probe and a goal. Furthermore, assuming that the relation of Agree applies once between the probe and the goal suggests that there is no agreement asymmetry in Arabic. After an Agree relation between the features of C on T and the goal subject is obtained, agreement does not alter whether the goal moves from its position or remains in situ. Finally, the idea of

cyclic derivation of phases (cf. Chomsky 2001) provides an elegant account for the phenomenon of cliticisation in Arabic. Cliticisation takes place after spellout. Consequently, the object pronominal clitic does not attach to the verb in VP because verb movement out of VP takes place prior to spellout. By contrast, the pronominal subject clitic (i.e. the resumptive pronoun) is at the edge of the vP phase which has been spelt out while the verb is located in T, which is part of the CP phase that has not been spelt out. Therefore, the already spelt out subject clitic is affected by the topic movement of the verb, as JA data have shown.

When investigating a number of issues in this thesis, it goes without saying that other related issues which deserve no less attention have not been addressed. It is my hope that future research will build on the discussion presented in this thesis and extend the proposed analyses to Case, agreement and movement facts in the embedded complements, which seem to lack tense interpretations despite the fact that the verb shows agreement.

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