# SENTENTIAL NEGATION IN ENGLISH AND ARABIC: A MINIMALIST APPROACH

by

Emad Ahmed Al-Tamari

B.A., The University of Jordan, 1991 M.A., The University of Jordan, 1995

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Redacted Signature
Redacted Signature

Redacted Signature (Committee Members)

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# To My Parents

#### **ABSTRACT**

#### Emad Ahmed Al-Tamari

#### University of Kansas

This dissertation presents an analysis for sentential negation in English and Arabic within the framework of the Minimalist Program as outlined in Chomsky (1993, 1995). To provide a comprehensive analysis for sentential negation in Arabic, six Arabic dialects are studied, namely, Standard Arabic, Moroccan Arabic, Egyptian Arabic, Jordanian Arabic, Syrian Arabic, and Saudi Arabic. The analysis is also expected to be applied crosslinguistically.

The analysis I provide is based on the analyses suggested by Pollock (1989) and Chomsky (1991) for English and French. I show that the movement of the verb and subject in Arabic (as proposed for English and French) is triggered by the strength of the nominal ([+D]) and verbal ([+V]) features that the heads of Agr<sub>S</sub>P and TP carry. I also show that Agr<sub>S</sub> plays a role in the word order in Standard Arabic but not in the non-Standard Arabic dialects. Evidence presented in this study shows the verb moves overtly to T in all Arabic dialects.

To account for the optionality of the subject's movement in the non-Standard Arabic dialects, I suggest a third value of strength of the nominal features of T, [-strong, -weak], which means that the nominal features are not strong enough to force the movement of the subject before Spell-out or weak enough to prevent it. To account for the merger between the verb and the negative marker, I argue, along with

Benmamoun (2000), that Neg is specified for a [+D] feature and the merger is to check this feature.

With respect to copular sentences in English, I argue that they are best described as small clauses that are dominated by an AgrP. The place I suggest for the copula is the head of vp, which is a functional projection that dominates AgrP. I show that copular and verbless sentences in Arabic can be accounted for in a principled way if we follow the proposed structure for the English copular sentences. One difference between the two languages is that in Arabic the head of AgrP dominating the small clause can be occupied by an agreement pronoun (AGR), which may surface optionally or obligatorily.

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# List of Abbreviations

1,2,3 first, second, third person

acc accusative

AGR agreement pronoun

asp aspect

Comp complement

ECP Empty Category principle
ED Economy of Derivation

f feminime

GB Government and Binding

gen genetive

HMC Head Movement Constraint

m masculine

neg-cop negative copula

nom nominatvie

p plura

pres present tense

s singular Subj subject

T tense

TCC Tense C-command Condition

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# Chapter One Introduction

### 1.1 Significance and purpose of the present study

This dissertation accounts for sentential negation in several Arabic dialects. Sentential negation in Arabic is one of the topics that has interested Arabic linguists recently (Eid (1991), Benmamoun (1992, 1996, 2000), Farghal and Thalji (1993), Fassi Fehri (1993), Obeidat and Farghal (1994), R. Bahloul (1996), and M. Bahloul (1966)). For one reason, sentential negation is one of the many areas of the Arabic grammar that still needs to be accounted for. Moreover, the differences between affirmative and negative sentences are of great importance in Arabic. In fact, studying negation in general and sentential negation in particular has helped scholars to have a better understanding of certain syntactic issues in Arabic such as tense and agreement. Benmamoun (2000), for example, has been able to address the status of tense in Arabic by providing concrete evidence from affirmative and negative constructions. For example, by comparing (1a) and (1b), it becomes clear that the verb does not carry an overt tense morpheme. The tense morpheme is indeed abstract as we will argue in chapter 2:

- a- ya-ðhab Ahmed-u ?ila l-madrasat-i kulla yawm.
   3m-go-(pres) Ahmed-nom to the-school-gen every day
   'Ahmed goes to school every day.'
  - b- lam ya-ðhab Ahmed-u ?ila l-madrasat-i kulla yawm. Neg-past 3m-go Ahmed-nom to the-school-gen 'Ahmed did not go to school.'

With the exception of Benmamoun (2000), previous studies on sentential negation have concentrated on describing individual or selected dialects with

occasional reference to Standard Arabic. Yet, none of these studies has attempted to come up with a satisfying generalization about the status of sentential negation in Arabic<sup>1</sup>. This study compares sentential negation in Standard Arabic, Moroccan Arabic, Egyptian Arabic, and other modern Arabic dialects that have not been accounted for, namely, Jordanian Arabic, Syrian Arabic, and Saudi Arabic. This comparison enables us to present a clearer picture about sentential negation in Arabic. First, it will account for the data from several Arabic dialects, which means that the analysis I present will be comprehensive. Second, it will show that the variation that exists in the Arabic dialects can be accounted for in a principled way. In fact, the analysis I present accounts for different sets of data that have not been accounted for yet. Finally, comparing English and Arabic gives strength to the analysis this study is adopting by showing that it accounts for both languages.

Three major issues will be the core of this dissertation. The first issue is to come up with a unified analysis for sentential negation in Arabic that accounts for the variation found in the Arabic dialects. The second issue is to prove that the negation system of Standard Arabic explains the syntactic behavior of the negative markers in the other Arabic dialects. Here I demonstrate that sentence structure in the Arabic dialects, in spite of variations between them in the shape of the markers of sentential negation, is basically the same as that of Standard Arabic. The last issue to tackle is

<sup>&</sup>lt;sup>1</sup>For instance, Eid (1991) works on Egyptian Arabic, Obeidat and Farghal (1994) work on Standard Arabic, Benmamoun (1996) works on Standard Arabic and Moroccan Arabic, M. Bahloul (1996) works on Standard Arabic, and R. Bahloul. (1996) works on Tunisian Arabic.

the status of copular and verbless sentences in Arabic and their behavior when negated. I elaborate on the analysis proposed for English sentential negation and the sets of inflectional parameters suggested by Bolotin (1995) to account for sentential negation in Arabic.

With respect to copular and verbless sentences, I propose a structure that accounts for all copular sentences in English and Arabic and verbless sentences in Arabic. It is based on Chomsky's (1995) analysis of small clauses in English. The structure I propose presents copular and verbless sentences in both languages as small clauses that are dominated by AgrP. The significance of proposing AgrP is that it accounts for the agreement holding between the subject and the adjectival or nominal predicate. Moreover, I propose that the 'agreement pronoun' that is used in copular and verbless sentences in Arabic originates in the head of AgrP. I also propose that the copula in both languages originates in the head of a functional projection, which I assume to be vp. This can be justified by the fact that the role of the copula in the sentence is mainly functional, which explains the fact that it must be deleted in Arabic in certain circumstances (as argued in chapter 4).

Sentential negation in English is discussed for two reasons. First, it is important to discuss sentential negation in other languages to compare it with Arabic. However, since the present study is discussing various Arabic dialects, I limit the comparison between Arabic and English. Second, compared to other languages, English is a well-studied language in almost every aspect. The fact that we can propose the same analysis of sentential negation for English and Arabic, as I argue,

provides some 'universality' for the proposed analysis. It is the goal of the present study to account for sentential negation in the various Arabic dialects assuming one analysis, which should be applied crosslinguistically as chapters 3 and 4 show.

# 1.2 Theoretical assumptions

The present study presents an analysis for sentential negation in Arabic within the framework of the Minimalist Program as outlined in Chomsky (1993, 1995). However, concepts from Government and Binding theory (GB) (Chomsky 1981), such as D-structure, S-structure, and Case assignment will be used in the discussion. The present study also adopts the 'NegP hypothesis', which is presumed to be the correct analysis of sentential negation (see Pollock (1989) and Benmamoun (1992), among others). The following subsections present a brief idea about the Minimalist Program and the NegP hypothesis.

#### 1.2.1 Minimalist Program

This theory, which is outlined in Chomsky (1993, 1995), assumes that verbs and lexical heads in general enter the syntax inflected (eliminating D-structure). Two interface levels of representations are described. First, Phonetic Form (PF) is viewed as the interface level with the 'articulatory-perceptual faculties'. Second, Logical Form (LF) is viewed as the interface level with the 'conceptual-intentional faculties' of the brain. Languages are believed to consist of two components: lexical and computational. The lexical component assures that lexical items can be drawn freely from the lexicon, fully inflected. The computational component, on the other hand, is

to ensure that the derivation of the structure is legitimate. Therefore, two points in the syntactic derivation of the sentence are recognized: Spell-out and LF. Spell-out is an operation that can apply at any point in the derivation. LF is the syntactic level that starts operating after Spell-out.

Lexical items must check their inflectional features (e.g., Case, agreement, and tense) against corresponding functional heads by LF. These features, however, can be strong or weak. Strong features must be checked before Spell-out, while weak features must be check by LF, so that the economy principle of Procrastinate (which states that movement should be delayed as long as possible (Chomsky (1995: 254))) will not be violated. The derivation crashes if the lexical items do not check their strong features before Spell-out and their weak features by LF. Feature checking is achieved by the movement of the lexical item either before Spell-out to check the strong features (overt movement) or after Spell-out to check the weak features (covert movement). It is important to mention that checking is what triggers movement. The features on the functional heads are matched with the features on the lexical heads. The features that are checked delete<sup>2</sup>. The strength of the features is what decides whether they must be checked before or after Spell-out. Feature checking can be achieved through a head-head relation or a Spec-head relation. For example, the verb checks the verbal features of T by moving to T (a head-head relation). The nominal

<sup>&</sup>lt;sup>2</sup>A complete understanding of the nature of the checking theory has not been reached yet. For the purpose of the present study, we will concentrate on nominal and verbal features of the functional heads and the manner in which these features are checked.

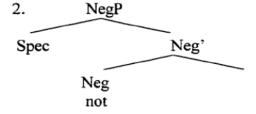
features of T are usually checked by the subject raising to the Spec of TP (a Spechead relation).

# 1.2.2 NegP Hypothesis

For thousands of years, philosophers, linguists, and psycholinguists have studied negation and its expressions in natural languages (Horn (1978)). A distinction between 'constituent' and 'sentential' negation has been made since 1917 by Jesperson who used the terms 'special' and 'nexal' negations<sup>3</sup>. The use of prefixes such as 'non-', 'un-', '-in'...etc. is an example of constituent negation (special negation), whereas the use of 'not' or 'n't' is an example of sentential negation (nexal negation).

Most of the current works on sentential negation have adopted what has been known as 'the NegP Hypothesis' (see among others, Chomsky (1991), Pollock (1989), Kayne (1989), Ouhalla (1990), Zannuttini (1990), Benmamoun (1992), Haegeman (1995), and Laka (1994)). According to this hypothesis, the negative markers head their own functional projections (NegP). In English, for example, the negative 'not' originates in the head of the functional projection NegP (for more details about the location of this functional projection in the tree structure of the sentence see sections 3.2.2 and 3.3.2.2):

<sup>&</sup>lt;sup>3</sup>Klima (1964) is among those who preferred to use these terms instead of 'special' and 'nexal' negation.



The NegP Hypothesis is a result of a more general hypothesis known as 'Split Inflection Hypothesis' (first suggested by Pollock (1989)). Under this hypothesis, tense, negation and agreement are represented as syntactic projections independent of their 'morpho-phonological' host (the predicate) (see among others, Pollock (1989), Chomsky (1991, 1995), and Benmamoun (1992, 2000)). Supporting evidence for the Split Inflection Hypothesis and the NegP Hypothesis will be presented throughout this study.

#### 1.3 Outline of the dissertation

This dissertation is composed of five chapters including the Introduction, Chapter 1. In chapter 2, I present basic sentence structure in Arabic. The topics that will be covered in this chapter are: word order, overt Case, agreement system, and tense. Three main goals are achieved in this chapter. First, it addresses the relationship between word order and overt Case. I show the existence of overt Case in Standard Arabic as the reason for the flexibility in word order in that dialect. The lack of this flexibility in the other Arabic dialects is due to the lack of overt Case in those dialects. Second, I discuss the relationship between word order and agreement, showing that in Standard Arabic when the verb agrees with the plural subject in number, the word order becomes obligatorily SVO. However, this phenomenon is not

necessarily true in the other Arabic dialects. Finally, the discussion about tense shows that the tense morpheme in Arabic is abstract. This is also believed to be true in all Arabic dialects.

In chapter 3, I discuss the status of sentential negation in English and Arabic verbal sentences. I present two major analyses of sentential negation in English (Pollock's (1989) and Chomsky's (1991)) in an attempt to show that an analysis for sentential negation in Arabic should be basically the same as that of English. Language specific constraints and parameters reflect the differences between the two languages. The second point addressed in this chapter is the variation that exists among the various Arabic dialects. To account for this variation, I propose a different set of inflectional parameters.

Two issues are discussed in chapter 4. First, I discuss the status of affirmative copular sentences in English and Arabic and verbless sentences in Arabic. Second, I discuss the derivation of the negative copular and verbless sentences in both languages. The variation that exists between the various Arabic dialects is also discussed. I argue that this variation is caused by the properties of the negative markers and the constraints that the various dialects impose on the merger between the negative marker and the lexical head. Finally, chapter 5 summarizes the current research.

# Chapter Two Sentence Structure in Arabic

#### 2.1 Introduction

The purpose of this chapter is to clarify some important aspects of sentence structure in Arabic that are relevant to the present study. Presumably, there are no native speakers of Standard Arabic, and so I will rely on consultants<sup>1</sup> in Standard Arabic to judge the grammaticality of the sentences. It is, however, important to present a brief idea about traditional Arab grammarians who tried to set a comprehensive prescriptive grammar for the rich Arabic language. Traditional Arab grammarians can be grouped into two groups according to their opinions about certain issues pertaining to the grammar of Arabic, such as dividing and defining sentence types. Two well-known schools of traditional Arabic grammar have emerged: the Kufi school and the Basri school (named after the cities of Kuufah and Basra in southern Iraq).

Depending on whether the sentence contains a verb, Kufi grammarians divided sentences in Arabic into 'nominal' and 'verbal'. Nominal sentences are the ones that lack a verb, and verbal sentences are the ones that contain a verb. Thus, (1) and (2) can be considered examples of nominal and verbal sentences, respectively:

Ahmed-u fi l-bayt-i.
 Ahmed-nom in the-home-gen

'Ahmed is home.'

The grammar of Standard Arabic is a prescriptive one. To the best of my knowledge, Standard Arabic has no native speakers and is learned in school only. It is usually used in formal situations, such as news and TV interviews. Those who study the grammar of Standard Arabic from books are the ones I refer to as consultants. Three consultants are consulted about the grammaticality of the Standard Arabic sentences that are used in this research.

2. ðahab-a Ahmed-u ?ila s<sup>c</sup>-s<sup>c</sup>uuq-i.<sup>2</sup> went-3m Ahmed-nom to the-market-acc 'Ahmed went to the market.'

Basri grammarians, however, consider a sentence verbal only if it starts with a verb. They treated a sentence like (3) below as a nominal sentence that has a Topic-Comment structure; the NP 'Ahmad-u' is the Topic and the 'VP' ' $\delta$ ahaba ?ila  $s^{\varsigma}$ - $s^{\varsigma}$ uuq-i' is a Comment about it:

3. Ahmed-u ŏahab-a ?ila s<sup>c</sup>-s<sup>c</sup>uuq-i.
Ahmed-nom went-3m to the-market-acc
'Ahmed went to the market.'

Sentence (3), therefore, would have the following representations; (4) represents Kufi grammarians' analysis, whereas (5) represents Basri grammarians' analysis:

For the purpose of the present study, we will follow the Kufi grammarians in their definition of nominal sentences. Thus, verbal sentences are the ones that contain a verb, and nominal sentences are the ones that lack a verb. The same analysis can be applied to the various Arabic dialects. (6) and (5) are examples of verbal and nominal (verbless) sentences from Jordanian Arabic:

<sup>&</sup>lt;sup>2</sup>The raised symbol following the consonant indicates that the consonant is pharyngrealized (emphatic).

- Maher daras mbaariħ.
   Maher studied yesterday
   'Maher studied yesterday.'
- Maher mariid<sup>§</sup>.
   Maher sick
   'Maher is sick.'

In section (2) I discuss morphological Case in Arabic. The word order in the Arabic sentence and its relation to overt Case-marking is discussed in section (3). In section (4) I discuss the agreement system in the various dialects of Arabic. Finally, tense will be discussed in the last section of the chapter.

# 2.2 Morphological Case

Arabic has three different Cases that can mark nouns as well as adjectives, which usually take the Case of the noun they describe. For example, the adjective 'jamiilun' in (8) carries nominative Case since the noun it describes carries nominative Case:

8. Maher-un jamiil-un.
Maher-nom handsome-nom
'Maher is handsome.'

In addition to nominative Case, Arabic has accusative and genitive Cases as illustrated in (9) below:

9. ?asta-a Maher-un əl-kitaab-a li-Ali-in. gave-3m Maher-nom the-book-acc to-Ali-gen 'Maher gave the book to Ali.'

Ouhalla (1994) argues that nominative Case is the default Case in Arabic. That is, nominative Case is assigned by default and not by Spec-head relation (Tense or Agreement). Unless there is a Case governor that assigns accusative or genitive Case

to the NP, a default mechanism assigns the NP nominative Case. The idea that nominative Case is the default Case in Arabic comes from the argument that in verbless sentences subjects are assigned nominative Case although the sentence lacks an obvious Case assigner as in (10a). However, once we have a potential Casegovernor, the noun is assigned a different Case (10b):

- 10. a- Maher-un fi l-bayt-i.

  Maher-nom in the-house-gen
  'Maher is home.'
  - b- ?inna Maher-an fi l-bayt-i. that Maher-acc in the-house-gen 'that Maher is home.'

According to traditional Arab grammarians, '?inna' affects its '?isim' (subject) by assigning it accusative Case (10b). In our terminology, the introduction of the complementizer '?inna', which is an accusative Case assigner, means that there is a potential Case-governor that assigns accusative Case to the subject. We will discuss this issue at length in chapters 3 and 4 when we discuss the negative marker 'laysa'.

The second morphological Case in Arabic is accusative Case. The potential accusative Case assigners are the verb and other complementizers such as '?inna' or its other form '?anna':

- qaabal-a Maher-un Ali-an. met-3m Maher-nom Ali-acc Maher met Ali.'
- 12. ?astsa-a Maher-un Ali-an kitaab-an. gave-3m Maher-nom Ali-acc book-acc 'Maher gave Ali a book.'
- 13. a- qaal-a Maher-un ?anna Ali-an ðahab-a ?ila s<sup>?</sup>-s<sup>?</sup>uuq-i. said-3m Maher-nom that Ali-acc went-3m to the-market-gen 'Maher said that Ali went to the market.'

\*b- qaal-a Maher-un ?anna Ali-un ŏahab-a ?ila s<sup>?</sup>-s<sup>?</sup>uuq-i. said-3m Maher-nom that Ali-nom went-3m to the-market-gen

In (11) the verb assigns accusative Case to its object. In double object structures, the verb assigns both objects accusative Case as in (12). Having '?inna' as a potential Case-governor for the subject, we expect the subject to be assigned accusative Case (13). Notice that the default Case (nominative Case) is assigned only in the absence of a Case assigner (if we agree with Ohallah's theory about the default nominative Case in Arabic).

Before we conclude this section, it is important to mention that non-Standard Arabic dialects lack the feature of overt-Case marking. The following is an example from Saudi Arabic, where we notice that the NPs 'Maher' and 'ktaab' are not overtly marked for Case:

14. Maher yiqra ktaab kil yoom. Maher read book every day. 'Maher reads a book ever day.'

In the following section, we will discuss the word order in Arabic and how the presence and absence of overt Case-marking plays a role in fixing the word order in the Arabic sentence.

# 2.2 Word order

Arabic has been known as a VSO language. However, the rich overt Casemarking gave Arabic flexibility in word order. This flexibility is achieved by what is known as 'taqdiim' (preposing), and 'ta'xiir' (postposing) (see Mohammad (2000)). In Standard Arabic for a sentence that has a transitive verb, a subject, and an object, six word orders are possible:

- 15. a- ra?a-a Maher-un Ali-an. saw-3m Maher-nom Ali-acc 'Maher saw Ali.'
  - b- ra?a-a Ali-an Maher-un.
  - c- Maher-un ra?a-a Ali-an.
  - d- Maher-un Ali-an ra?a-a.
  - e- Ali-an ra?a-a Maher-un.
  - f- Ali-an Maher-un ra?a-a.

The grammaticality of these sentences relies on the fact that they are unambiguous, i.e., changing the word order of the sentences does not change the meaning. Although we have six different orders, we still know that 'Maher' is the 'agent' and 'Ali' is the 'theme'. However, pragmatically these sentences convey different messages. Sentence (15a) is a 'neutral' informative statement, while in sentences (15b-f), the 'focus' is on the subject, the object, or both. We can focus on the subject by postposing (15b) or preposing (15c, d, f). The object can be focused only by preposing (15d, e, f). Note that the only difference between (15d) and (15f) is the

<sup>&</sup>lt;sup>3</sup>I use the concept 'focus' here to refer to a process that includes movement of a phrase to achieve a pragmatic function. In the sense of Ouhalla (1997), this process is not purely pragmatic; it should be treated as a syntactic process that involves the movement of the focused phrase to the Spec of a functional projection (which he calls a 'Focus Phrase' (FP)) to check the (+F) feature that the head of FP is specified for (cf. Moutaouakil (1989)). Mohammad (2000: 63-66) argues that sentences like (15b-f) are cases of topicalization, which he defines as an optional movement of an NP from a base-generated position (that is not sentence-initial) to another position leaving a trace behind. For the purpose of the present study, I will follow Moutaouakil (1989)) who considers examples like (15b-f) as cases of preposing and postposing that are used to achieve specific pragmatic functions. Therefore, I will not account for the derivation of these examples.

degree of importance of the subject and the object. Although both the subject and the object have a focus reading, the subject is more important than the object in (15d), but not in (15f).

We notice that the freedom of moving the subject and the object around comes from the fact that they carry overt nominative and accusative Cases, respectively. That is, what helps observe the meaning and avoid any ambiguity is the overt Case marking. We expect this freedom of word order to be restricted if Case is not realized overtly. In this case, the typical word order would be VSO. In fact, there are cases in Arabic where the overt Case is left out. For example, the phenomenon of what we refer to as 'taskiin' enables us to drop the Case morpheme. A person is advised to use 'taskiin' if s/he is not sure of the ending (Case) of the noun. Therefore, if we think of (15a) above as lacking Case ending as in (16a) below, we expect the freedom of word order to be severely restricted, banning sentences like (16c-f) as they become ambiguous:

- a- ra?a-a Maher Ali. saw-3m Maher Ali 'Maher saw Ali.'
  - ?b- Maher ra?a-a Ali. 'Maher saw Ali.'
  - \*c- ra?a-a Ali Maher.
    'Maher saw Ali.'
  - \*f Ali Maher ra?a-a. 'Maher saw Ali.'

<sup>&</sup>lt;sup>4</sup>This phenomenon involves the dropping of the Case morpheme. It also involves the dropping of the suffix that indicates the 'third person, singular, and masculine 'agreement that the verb in the perfective form may carry (see example (37)).

- \*d Maher Ali ra?a-a.
  'Maher saw Ali.'
- \*e- Ali ra?a-a Maher. 'Maher saw Ali.'

Although sentence (16b) is not favorable, it is not ruled out. This can be due to two reasons. First, we can argue that it is not ruled out normally because the subject precedes the object in Arabic (VSO). In this case (16b) can be looked at as a case of preposing. A similar case can be found in English when we prepose the object as in (17b) below:

- 17. a- I like Mary.
  - b. Mary, I like.

Second, the SVO word order is obligatory in Standard Arabic under certain circumstances (when the verb agrees with the plural subject in number). Consider the following sentences:

- 18. a- ?al-?awlaad-u jaa?-uu ?ila l-madrast-i. the-boys- nom came-3mp to the-school-gen 'The boys came to school.'
  - \*b- jaa?-uu l-?awlaad-u ?ila l-madrast-i.

We notice that the word order becomes obligatorily SVO when the verb agrees with the plural subject in number (18). Although Arabic is considered a VSO language, (18b) is ungrammatical. We will return to this case in section (2.4.2) when we discuss the agreement system in Arabic.

So far, we have seen that the main word order in Standard Arabic is the VSO order. The existence of overt Case enables us to move the subject and the object around for pragmatic purposes. We have also seen that the absence of overt Case

results in restricting the possible sentences to two word orders: VSO (16a) and SVO (16b) (keeping in mind that the SVO is used for a pragmatic purpose only, namely to focus on the subject).

Interestingly, there is a group of nouns that cannot carry overt Case. Nouns that end in a vowel do not carry overt Case in Arabic as shown in (19) below. Therefore, we expect the freedom of word order to be restricted when such nouns are used in the sentence (the examples in (19) are Mohammad (2000: 3)):

- a- qaabal-a Isa Musa. met-3m Isa Musa 'Isa met Musa.'
  - b- Isa qaabal-a Musa. 'Isa met Musa.'
  - \*c. Isa Musa qaabal-a. 'Isa met Musa.'

Since (19b) is used for pragmatic reasons (to focus on the subject), it becomes clear to us that the canonical word order in Standard Arabic is VSO. In other words, the subject must precede the object unless the object is marked (e.g., by a Case morpheme). We notice that the only way to identify the subject and the object in (19a-c) is through the word order, VSO and SVO. We obtain the freedom of word order if we can mark the subject, the object, or both of them. One way of doing that is by Overt Case. Moreover, this can also be achieved by adding an adjective that describes the subject or the object, since adjectives carry the same overt Case the noun they describe carries as illustrated in the examples below:

20. a- ra?a-a Isa Musa t<sup>c</sup>-t<sup>c</sup>awiil-a. saw-3m Isa Musa the-tall-acc 'Isa saw Musa, the tall one.'

- b- Musa t<sup>c</sup>-t<sup>c</sup>awiil-a ra?a-a Isa. Musa the-tall-acc saw-3m Isa.
- c- ra?a-a Isa Musa t<sup>s</sup>-t<sup>s</sup>awiil-u. saw-3m Isa Musa the-tall-nom 'Musa, the tall one, saw Isa.'
- d- Isa ra?a-a Musa t<sup>c</sup>-t<sup>c</sup>awiil-u. Isa saw-3m Musa the-tall-nom

The adjective 't<sup>c</sup>-t<sup>c</sup>awiil' describes 'Musa' and carries the Case that 'Musa' would carry if it did not end with a vowel. The fact that the adjective carries accusative Case in (20a and b) indicates that 'Musa' is the object and 'Isa' is the subject, and this is why both word orders are acceptable. In (20c and d), 'Musa' is identified as the subject since the adjective that describes it carries nominative Case. Another case that triggers flexibility in word order is the existence of agreement in gender between the subject and the verb. That is, if the subject and the object differ in gender, it would be easy to identify the subject through the agreement affix on the verb:

- 21. a- ra?a-at Mary Musa. saw-3f Mary Musa 'Mary saw Musa.'
  - b- ra?a-at Musa Mary. saw-3f Musa Mary
  - \*c- ra?a-at Musa Mary. saw-3f Musa Mary 'Musa saw Mary.'
    - d- ra?a-a Mary Musa. saw-3m Mary Musa 'Musa saw Mary.'
  - \*e- ra?aa Mary Musa. saw(3m) Mary Musa 'Mary saw Musa.'

Since the verb agrees with 'Mary' in gender, it is understood that 'Mary' is the subject as verbs do not have agreement with objects in Arabic. Therefore, moving 'Mary' around does not change the meaning or cause any ambiguity. (21c) is unacceptable since the verb agrees in gender with the object rather than the subject. Word order in the other Arabic dialects is more restricted than it is in Standard Arabic. The main reason for that is the absence of overt Case, which makes it difficult for us to locate the subject and the object without relying on their positions in the sentence. That is, the subject must precede the object (either VSO or SVO). Consider the following examples from Jordanian Arabic:

- 22. a- Ahmed d<sup>r</sup>arab Maher. Ahmed hit Maher 'Ahmed hit Maher.'
  - ?b-d<sup>c</sup>arab Ahmed Maher. hit Ahmed Maher
- 23. a- ?ij-a Ahmed \( \) \( \) a-l-beet. came-3m Ahmed to-the-house 'Ahmed came home.'

From a pragmatic point of view, (22a) and (22b) are the same, and so are (23a) and (23b). Therefore, using an SVO word order does not entail any special pragmatic function in Jordanian Arabic. The only difference between the 'a' and 'b' examples is the degree of 'preference'. What is interesting about (22) and (23) is that speakers of

<sup>&</sup>lt;sup>5</sup>Benmamoun (2000) argues that in non-Standard Arabic dialects VSO word order is preferred in the past tense, while SVO word order is preferred in the present tense. The examples presented in this study support Benmamoun's assumption. A detailed discussion of this issue will be presented in chapter 3.

Jordanian Arabic prefer VSO order to SVO order in the past tense. Unexpectedly, (22a) is more preferred than (22b). It seems that separating the subject and the object causes less confusion, especially because both NPs are a potential subject in the sentence (both agree with the verb in person, number and gender). We conclude from (22) that in such cases it is preferred that the subject precedes the verb, since having an SVO word order is one way for distinguishing the subject from the object in the sentence. The fact that a sentence like (22b) is not favored has to do with the ambiguity that might result from having adjacent 'semantically unidentified' subject and object. Consider the following examples:

- 24. a- ?akal Maher ət<sup>?</sup>-t<sup>?</sup>abiix. ate Maher the-food 'Maher ate the food.'
  - b- Maher ?akal it<sup>s</sup>-t<sup>s</sup>abiix. Maher ate the-food
  - c-?akal ət<sup>c</sup>-t<sup>c</sup>abiix Maher. ate the-food Maher
  - d- Maher ət<sup>f</sup>-t<sup>f</sup>abiix ?akal. Maher the-food ate
  - e- ət<sup>f</sup>-t<sup>f</sup>abiix Maher ?akal. the-food Maher ate
  - f-ət<sup>s</sup>-t<sup>s</sup>abiix ?akal Maher. the-food ate Maher

<sup>&</sup>lt;sup>6</sup>By 'semantically identified' I mean that the subject and the object can be identified regardless of their positions in the sentence as in (24).

Although the verb precedes the two NPs in (24a), we can still identify 'Maher' as the subject; the doer of the action (eating) can be 'Maher' but not 'ət-tabiiχ'. Sentences (24c-f) are possible with a focus reading of the object. Note also that although (24a, b) are grammatical, (24a) is more preferred than (24b).

In the present tense, the VSO word order is less preferred than the SVO. The following are examples from Syrian Arabic. (25a) is more preferred than (25b):

- 25. a- lə-wlaad b-yi-lγab-uu fi s-saaħa. the-boys asp-3m-play-p in the-yard 'The boys are playing in the yard.'
  - b-b-yi-l\u00edab-uu l\u00e3-wlaad fi s-saa\u00eha. asp-3m-play-p the-boys in the-yard

Note that a sentence like (25b) is not allowed in Standard Arabic. As we have discussed earlier, when the verb agrees with the plural subject in number, the subject has to precede the verb. It seems that this condition does not hold in the non-Standard dialects. Similar examples are given from Egyptian Arabic and Jordanian Arabic in (26) and (27) below:

- 26. a- l-iwlaad b-yi-lγab-u fi š-šaariγ. (Egyptian) the-boys asp-3m-play-p in the-street 'The boys are playing in the street.'
  - b- byi-l?ab-u l-iwlaad fi š-šaari?. asp-3m-play-p the-boys in the-street
- 27. a- raah-u li-walaad Sa-l-madrasah. (Jordanian) went-p the-boys to-the-school 'The boys went to school.'
  - b- l-walaad raaħ-u Sa-l-madrasah. the-boys went-3mp to-the-school

# 2.4 Agreement system in Arabic

# 2.4.1 Nouns and adjectives

We have mentioned earlier in section (2.3) that adjectives carry the same overt Case as the nouns they describe. When used attributively, adjectives also agree with the nouns they describe in definiteness and gender. Concerning number, the rule is not clear-cut. When describing human beings, adjectives usually agree in number. Consider the following examples:

- 28. a- rajul-un t<sup>s</sup>awiil-un. man-nom tall-nom 'a tall man'
  - \*b- rajul-un t<sup>s</sup>awiil-an. man-nom tall-acc
  - c- ?ar-rajul-u t<sup>\(\gamma\)</sup>-t<sup>\(\gamma\)</sup>awiil-u.
    the-man-nom the-tall-nom
    'the tall man'
  - \*d- ?ar-rajul-u t<sup>c</sup>awiil-un. the-man-nom tall-nom
  - d- rījaal-un t<sup>v</sup>iwaal-un. men-nom tall-(p)-un 'the tall men'
  - e- ?ar-rijaal-u t<sup>c</sup>-t<sup>c</sup>iwaal-u. the-men-nom the-tall-(p)-nom
  - \*g- ?ar-rijaal-u t<sup>s</sup>-t<sup>s</sup>awiil-u. the-men-nom the-tall-nom
  - h- fatat-un t<sup>°</sup>awiil-at-un. girl-nom tall-f-nom 'a tall girl'
  - i- ?al-fatat-u t<sup>c</sup>-t<sup>c</sup>awiil-at-u. the-girl-nom the-tall-f-nom 'the tall girl'
  - j- fatayaat-un t<sup>°</sup>awiil-aat-un. girls-nom tall-fp-nom 'tall girls'

- \*k- fatayaat-un t<sup>s</sup>awiil-un. girls-nom tall-(m)-nom
- l- ?al-fatayaat-u t<sup>c</sup>-t<sup>c</sup>awiil-aat-u. the-girls-nom the-tall-fp-nom 'the tall girls'
- 29. a- sayyarat-un dʒamiil-at-un. car-nom beautiful-f-nom 'a beautiful car'
  - b- sayyaraat-un dʒamiil-at-un. cars-nom beautiful-f-nom 'beautiful cars'
  - c- baqarat-un dʒamiil-at-un. cow-nom beautiful-f-nom 'a beautiful cow'
  - d- baqaraat-un dʒamiil-at-un. cows-nom beautiful-f-nom 'beautiful cows'

The examples in (28) clearly show that adjectives agree with the noun they describe in Case (28a), definiteness (28c), gender (28h), and number (28e). Sentences (28b), (28d), (28g), and (28k) are ungrammatical because the adjectives do not agree with the noun in Case, definiteness, number, and gender, respectively. Adjectives that describe non-human nouns do not necessarily agree with the noun in number; while the nouns are plural in (29b,c), the adjectives are singular. There are different explanations that are related to the morphology of the nouns and adjectives. This issue is not crucial to the present study; therefore, I will not pursue it further.

In the non-Standard Arabic dialects, the relationship between the nouns and their attributive adjectives is similar to that of Standard Arabic. With respect to overt Case, we do not have agreement between nouns and adjectives, since there is no overt Case in the non-Standard dialects. However, non-standard Arabic dialects are similar to Standard Arabic in that they require agreement between the noun and its attributive adjective in gender and definiteness. The following are examples from Syrian Arabic:

```
30. a-ħadii?a
                    kbiir-əh.
       garden -(f) big-f
       'a big garden'
   *b- ħadii?a
                      kbiir.
       garden-(f)
                      big-(m)
    c- l-ħadii?a
                       li-kbiir-əh.
       the-garden-(f) the-big-f
       'the big garden'
   *d- l-hadii?a
                        kbiir-əh.
       the-garden-(f)
                        big-f
       'the big garden'
```

The fact that the adjective 'kbiir' in (30b) does not agree with the noun in gender renders the sentence ungrammatical. (30c) is ungrammatical since the adjective is indefinite and the noun it describes is definite.

When used as a predicate (in verbless sentences), adjectives do not agree with nouns in definiteness in Arabic. With respect to agreeing with the noun in Case, gender, and number, adjectives behave the same as when they are used attributively. The following are examples from Standard Arabic and Egyptian Arabic:

31. a-?ar-rajul-u t<sup>c</sup>awiil-un. (Standard Arabic)
the-man-nom tall-nom
'The man is tall.'

b-?ar-rijaal-u t<sup>c</sup>iwaal-un.
the-men-nom tall-(p)-nom
'The men are tall.'

c-?al-fatat-u t<sup>c</sup>awiil-at-un.
the-girl-nom tall-f-nom
'The girl is tall.'

- d- ?al-fatayaat-u t<sup>s</sup>awiil-aat-un. the-girls-nom tall-fp-nom 'The girls are tall.'
- 32. a- ?as-sayyarat-u jamiil-at-un. (Standard Arabic) the-car-nom beautiful-f-nom 'The car is beautiful.'
  - b- ?as-sayyaraat-u jamiil-at-un. the-cars-nom beautiful-f-nom 'The cars are beautiful.'
- 33. a- t<sup>c</sup>-t<sup>c</sup>ifl gamiil. (Egyptian Arabic) the-baby beautiful 'The baby is beautiful.'
  - b- l-?at<sup>§</sup>faal gamiil-iin. the-babies beautiful-p 'The babies are beautiful.'
  - c- l-bint gamiil-ah. the-girl beautiful-f 'The girl is beautiful.'
  - b- l-banaat gamiil-aat. the-girls beautiful-fp 'The girls are beautiful.'

To sum up, there is agreement between adjectives and nouns in Arabic. In all cases, whether used attributively or predicatively, adjectives always agree with nouns in gender. When used attributively, they always agree with nouns in Case and definiteness. We have also seen that adjectives agree with nouns in number when they describe nouns that refer to human beings. What is important is that there is some kind of agreement between adjectives and nouns in Arabic. We will go back to this issue in Chapter 4.

#### 2.4.2 Verbs and subjects

Agreement between verbs and subjects is another important issue that we need to discuss in this chapter. Verbs can agree with subjects in person, number, and

gender. To understand the nature of agreement between the subject and the verb, we need to understand the agreement affixes that are attached to the verb.

Verbs in Arabic have two morphological forms, perfective and imperfective. The perfective form is used with the past tense, while the imperfective form is used with the present tense and infinitive. Agreement affixes can only be suffixes when attached to the perfective form of the verb, and prefixes and suffixes when attached to the imperfective form of the verb. Table (1)<sup>7</sup> shows the different agreement suffixes that can be attached to the perfective form of the verb in Standard Arabic and Jordanian Arabic. The verb 'daras' (studied) is used as an example:

Table 1
(Perfective form of the verb in Standard Arabic and Jordanian Arabic)

			Standard	Arabic	Jordanian	Arabic
Person	Number	Gender	Affix	Verb+Affix	Affix	Verb+Affix
1	Singular	f/m	-tu	daras-tu	-it	daras-it
2	"	m	-ta	daras-ta	-t	daras-it
2	"	f	-ti	daras-ti	-ti	daras-ti
3	"	m	-a	daras-a	Ø	daras
3	"	f	-at	daras-at	-at	dars-at
2	Dual	m/f	-tumaa	daras-tumaa	N/A	
3	"	m	-aa	daras-aa	N/A	
3	"	f	-ataa	daras-ataa	N/A	
I	Plural	f/m	-naa	daras-naa	-na	daras-na
2	"	m	-turn	daras-tum	-tu	daras-tu
2	"	f	-tunna	daras-tunna	-tin	daras-tin
3		m	-uu	daras-uu	-u	daras-u
3	66	f	-na	daras-na	-in	daras-in

<sup>&</sup>lt;sup>7</sup>The information concerning Standard Arabic in Tables (1) and (2) is adapted from Benmamoun (2000:20).

Since Arabic has been known as an inflectional language, we expect that affixes can have multiple functions. The suffix '-at' in both Standard Arabic and Jordanian Arabic, for example, indicates that the subject is 'third person, singular, and feminine' as (34) shows:

- 34. a- daras-at Fatimat-u t-taariix-a. (Standard Arabic) studied-3f Fatima-nom the-history-acc 'Fatima studied history.'
  - b- dars-at Fatima t-taariix. (Jordanian Arabic) studied-3f Fatima the-history

However, this suffix is replaced with a prefix when used with the imperfective form of the verb:

- 35. a- ta-drus Fatimat-u t-taariix-a. (Standard Arabic)
  3f-study Fatima-nom the-history-acc
  'Fatima studies history.'
  - b- b-tu-drus Fatima t-taariix. (Jordanian Arabic) asp-3f-study Fatima the-history

What makes the system more complicated is that certain suffixes that are used with the perfective form are replaced with a prefix and a suffix when used with the imperfective form:

- 36. a- ?anti daras-tii t-taariix-a. (Standard Arabic) you-(fs) studied-2fs the-history-acc 'You studied history.'
  - b-?anti ta-drus-ii t-taariix-a. you-(fs) 2-study-fs the-history-acc 'You study/are studying history.'

Note that the prefix 'ta-' has three functions in (35) but only one in (36b). It is not the goal of this study to determine the allomorphic distribution of the affixes. However, it

is clear that the morphological shape and the grammatical function(s) of the affix are connected to the morphological form of the verb.

We notice that Jordanian Arabic has basically the same agreement affixes as Standard Arabic with the exception of dual affixes which, to the best my knowledge, all non-Standard Arabic dialects lack. We also notice that Jordanian Arabic, as well as all non-standard Arabic dialects examined in the present study, does not have an agreement affix to indicate 'third person singular masculine'. The fact that this affix (-a) can be deleted under the phenomenon of 'taskiin' may be the reason why it is missing in the non-standard Arabic dialects. Sentence (37) is used in Standard Arabic and is considered as a grammatical one:

daras Ali t-taariix.
 studied Ali the-history
 'Ali studied history.'

Table (2) shows the different agreement affixes that can be attached to the imperfective form of the verb in Standard Arabic and Jordanian Arabic. It shows that the agreement morphemes that are attached to the imperfective form of the verb are suffixes and prefixes. The nature of the distribution of these affixes is not of importance to this study. However, it is clear that the morphological shape of the agreement affix is related to the morphological form of the verb. That is, an agreement affix is always a suffix when attached to the perfective form of the verb, but it either remains as a prefix or becomes a prefix and a suffix when attached to the imperfective form of the verb as we have seen earlier in examples ((35) and (36)). The fact that the two forms of the verb are associated with the present and the past

tenses raises one important question: are these affixes related to the tense of the verb?

This issue will be pursued in the next section.

Table 2
(Imperfective form of the verb in Standard Arabic and Jordanian Arabic)

			Standard	Arabic	Jordanian	Arabic
Person	Number	Gender	Affix	Verb+Affix		
1	Singular	f/m	?a-	?a-drus	ba-	ba-drus
2	56	m	ta-	ta-drus	<i>b</i> ti-	bti-drus
2	"	f	ta-ii	ta-drus-ii	<i>b</i> tu-i	btu-drus-i
3	**	m	ya-	ya-drus	<i>b</i> yu-	byu-drus
3		f	ta-	ta-drus	<i>b</i> tu-	btu-drus
2	Dual	m/f	ta-aa	ta-drus-aa		
3	"	m/f	ya-aa	ya-drus-aa		
1	Plural	f/m	na-	na-drus	<i>b</i> nu	bnu-drus
2	44	m	ta-uu	ta-drus-uu	<i>b</i> tu-u	btu-drus-u
2	"	f	ta-na	ta-drus-na	<i>b</i> tu-in	btu-drus-in
3	"	m	ya-uu	ya-drus-uu	<i>b</i> yu-u	byu-drus-u
3	"	f	ya-na	ya-drus-na	<i>b</i> yu-in	byu-drus-in

The table also shows that Jordanian Arabic is one of the Arabic dialects that has an aspectual prefix 'b-'8:

38. a- l-waad bi-yi-l?ab fi š- šaari?. (Egyptian Arabic) the-boy asp-3m-play in the-street 'The boy plays/is playing in the street.'

<sup>&</sup>lt;sup>8</sup>The exact meaning and function of this prefix is not clear. However, it is usually used with the imperfective form to indicate habitual or progressive 'aspect' as shown in (38).

Note that aspectuality is not expressed by a morpheme in Standard Arabic.

The last point we need to mention is that the plural agreement suffixes that are attached to the perfective and imperfective forms are obligatory only when the plural subject precedes the verb. That is, the verb does not have to agree with the subject in number except when the subject precedes the verb. Consider the following examples ((18a and b) are repeated as (39a and b) for convenience):

- 39. a- ?al-?awlaad-u jaa?-uu ?ila l-madrast-i. the-boys- nom came- 3mp to the-school-gen 'The boys came to school.'
  - \*b-jaa?-uu l-?awlaad-u ?ila l-madrast-i. came-3mp the-boys-nom to the-school-gen
  - c- jaa?-a l-?awlaad-u ?ila l-madrast-i. came-3m the-boys-nom to the-school-gen
  - \*d-ji?-ta l-?awlaad-u ?ila l-madrast-i. came-2ms the-boys-nom to the-school-gen
  - \*e-jaa?-at əl-?awlaad-u ?ila l-madrast-i. came-3f the-boys-nom to the-school-gen
  - f- ?al-banaat-u ji?-na ?ila l-madrast-i. the-girls- nom came-3fp to the-school-gen 'The girls came to school.'
  - \*g-ji?-na l-banaat-u ?ila l-madrast-i. came-3fp the-girls-nom to the-school-gen
  - h- jaa?-at əl banaat-u ?ila l-madrast-i. came-3f the-girls-nom to the-school-gen

The examples above show that the verb always agrees with the subject in person and gender. The ungrammaticality of (d) and (e) can be attributed to the fact that the verb does not agree with the subject in person or gender, respectively. However, the ungrammaticality of (b) and (g) can be attributed to the fact that although the verb

agrees with the subject in number, the subject fails to precede the verb to form the obligatory SVO order.

#### 2.5 Tense

In this section, I will shed some light on two important issues that are related to tense in Arabic. The first issue is whether we have tense morphemes in Arabic. The second one is whether we have future tense. The first issue is discussed thoroughly in Benmamoun (2000). He presents a very interesting and convincing argument that Arabic does not have overt tense morphemes. His argument is based on the idea that tense and agreement are separate in Arabic. That is, the affixes in tables (1) and (2) are agreement morphemes only.

The interweaving nature of Arabic morphology makes it difficult to identify a tense morpheme. Since Arabic roots consist of consonants only, we can argue that the vowel paradigm in the perfective form of the verb is the past tense morpheme since the perfective form indicates the past tense only. The problem that we face, however, is that these vowels are 'replaced' by a different set of vowels when voice is changed from active into passive. Consider the following examples:

40. a- drs (ROOT)
b- daras 'studied'
b- duris 'was studied'

The question is whether '-u-i-' in 'duris' represents passive voice, the past tense, or both. Since passive voice is achieved through transformation (a syntactic rule), it is unlikely for tense and passive voice to be represented by the same morpheme (see Benmamoun (2000: 19-36)).

With respect to the present tense morpheme, the argument against the idea that the imperfective form carries the present tense morpheme is that the imperfective form is not used exclusively for the present tense. Consider the following examples:

- 41. a- Ali ya-drus ?al-?injiliiziyyat-a. Ali 3m-study the-English-acc 'Ali studies English.'
  - b- ðahab-a Ali-un ?ila l-madrast-i likay ya-drus ?al-?injiliiziyyat-a. went-3m Ali-nom to the-school-gen to 3m-study the-English-acc 'Ali went to school to study English.'

The verb 'ya-drus' is in the imperfective form in both (41a) and (41b). However, it indicates the present tense only in (41a). The action of studying took place in the past in (41b). If the prefix 'ya-' indicates the present tense as well as agreement, then we do not expect 'ya-' to be used when the verb describes an action that took place in the past. Therefore, we can argue that tense morphemes in Arabic are abstract.

We can follow the same argument to decide whether we have future tense in Arabic. The particle 'sawfa' or the clitic 'sa-' (meaning 'will') are used with the imperfective form of the verb to refer to future. Fassi Fehri (1993: 152) argues against the idea that we have future tense in Arabic. He argues that there are no inflections on the verb to indicate the future tense (unless we consider 'sawfa' and the clitic 's-' as inflections for tense). He builds his argument on the idea that the particle 'sawfa' and the clitic 'sa' behave like modal particles rather than morphemes that carry tense

features, and hence they do not carry future tense features. In this respect, we can argue that Arabic, like English, uses modals to refer to future time:

- 42. a- sawfa ya-njah Ahmed-u fi l-?imtiħaan-i. will 3m-succeed Ahmed-nom in the-exam-gen 'Ahmed will pass the exam.'
  - b- sa-ya-njah Ahmed-u fi l-?imtiħaan-i. will-3m-succeed Ahmed-nom in the-exam-gen
  - c- qad ya-njah Ahmed-u fi l-?imtihaan-i. may 3m-succeed Ahmed-nom in the-exam-gen 'Ahmed may pass the exam.'

He further argues that we can refer to future without using 'sawfa' or 'sa-'. For example, we can refer to future by adding an adverb to the sentence as in (43) below:

43. yu-saadir ?al-qit<sup>s</sup>aar-u sadan.
3m-leave the-train-nom tomorrow
'The train leaves tomorrow.'

Benmamoun's suggestion that tense morphemes are abstract in Arabic does not conflict with Fassi Fehri's argument against the future tense in Arabic. From this point of view, we can argue that the absence of a future tense morpheme does not mean that we do not have future tense in Arabic. For the purpose of the present study, I will follow the view that argues for the existence of abstract present, past, and future tense morphemes in Arabic.

#### 2.6 Summary

The data presented in this chapter show that the absence of overt Case marking in the non-Standard Arabic dialects has restricted the freedom of word order that we find in Standard Arabic. One interesting difference between Standard Arabic and the other Arabic dialects being studied is that the SVO word order becomes obligatory in Standard Arabic (but not in the other modern Arabic dialects) when the verb agrees with the plural subject in number. However, if we disregard the cases of 'focus', we end up with only two word orders in Standard Arabic: VSO and SVO. Note that the SVO word order is used only when the verb agrees with the plural subject in number. In the non-Standard Arabic dialects, the available word orders are the same as those of Standard Arabic, i.e., VSO and SVO. The only difference is that both orders are optionally utilized. In the past tense, VSO order is more preferred that the SVO order, while in the present tense the SVO order is more preferred.

The agreement system in Arabic is a rich one. When used attributively, adjectives must agree with the nouns they describe in gender and definiteness if the nouns they describe are inanimate. However, if the nouns are animate, adjectives agree with them in number and gender. With respect to overt Case, adjectives carry the same Case as the noun they describe whether the noun is animate or inanimate. When used predicatively, adjectives do not follow the noun they describe in definiteness. The Case the predicative adjective carries is not related to the Case of the subject; it is assigned either by default or by a Case assigner. Finally, evidence shows that tense morphemes in Arabic are abstract.

### Chapter Three Sentential Negation in Verbal Sentences

#### 3.1. Introduction

In this chapter, I discuss sentential negation in verbal sentences in English and Arabic. Sentential negation cannot be explained without understanding the nature of movement, which mainly involves predicates and arguments. In the case of English and Arabic, the movement of the verb and the subject needs to be understood in order for us to provide a comprehensive analysis of sentential negation in the two languages. Moreover, it becomes evident as we examine the English and Arabic data that the nature of the negative markers varies from one language to another. For example, while merger between the verb and the negative marker is not allowed in English, it is required in Arabic.

As we have mentioned earlier, sentences in Arabic can be divided into nominal and verbal, depending on whether the sentence contains a verb. Nominal sentences are always in the present tense; to refer to the past tense, the perfective form of the copula is used. Nominal sentences and copular sentences in Arabic are equivalent to copular sentences in English:

 a- Ali-un fi l-bayt-i.
 Ali-nom in the-home-gen 'Ali is home'

b- kaan-a Ali-un fi l-bayt-i. was-3m Ali-nom in the-home-gen 'Ali was home.'

The nominal and copular structures in Arabic and the copular structures in English will be discussed in the next chapter.

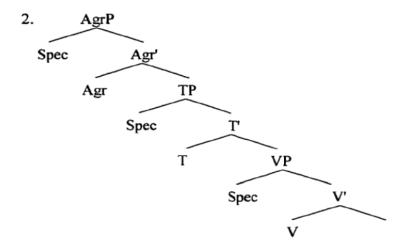
This chapter is outlined as follows. Section two reviews verb movement in English and provides different analyses of sentential negation in English. It points out the weakness and the strength of these analyses. Section three is divided into seven subsections. The first subsection discusses verb movement in Arabic. The rest of the subsections are devoted to discussing sentential negation in the Arabic dialects that are investigated in the present study. Finally, section four provides a summary of the proposed analysis that I provide to account for the variation in sentential negation within the one dialect as well as among the various dialects of Arabic.

### 3.2. Sentential negation in English

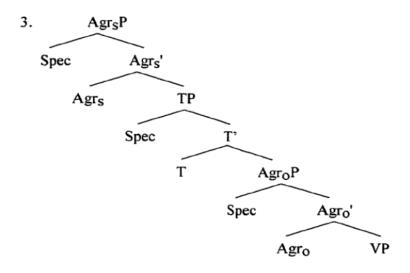
#### 3.2.1 Verb movement in English

The introduction of the various functional projections raises an important question about the their ordering. The interaction of these functional projections with the verb and the subject reflects the way they should be ordered. That is, there is a parametric choice that defines the order of these projections in different languages. The structure in (2), for example, shows the order of AgrP and TP in English and Romance languages as suggested by Belletti (1990)<sup>1</sup>. In fact, this is the structure that is suggested for all SVO languages (Ouhalla (1994)):

<sup>&</sup>lt;sup>1</sup>Belletti depends on morphological evidence to support the idea that AgrP should dominate TP (cf. Ouhalla (1992, 1994)). Chomsky (1995) supports Belletti's (1990) ordering of AgrP and TP, since Agr 'presumably stands in a government relation with the subject in tensed clauses, to yield the standard subject verb agreement phenomena'.



In his work on Negation in English and French, Pollock (1989), however, places AgrP below TP<sup>2</sup>. Chomsky (1995) argues that these conflicting conclusions reached by Pollock and Belletti can be 'reconciled' if we posit two kind of V-NP agreements: Agr<sub>S</sub> and Agr<sub>O</sub>. According to Chomsky's suggestion, Agr<sub>S</sub>P dominates TP, which dominates Agr<sub>O</sub>P:



<sup>&</sup>lt;sup>2</sup>Pollock (1989: 384fn.) argues that this structure is supported by the comparative properties of French and English. However, he assumes that this hierarchical structure may vary in other languages.

Laka (1994) supports the idea that AgrP is placed under TP by arguing that Tense (T) must c-command all functional heads at S-structure. She proposes a 'universal requirement' on functional heads by introducing what she refers to as the 'Tense C-command Condition' (TCC) (1994: 3):

### Tense C-command Condition<sup>3</sup>:

Tense must c-command at S-structure all propositional operators of the clause.

According to her argument, the 'TCC' is a requirement on sentence negation (NegP) as well as on all other functional heads that 'operate' on the clause. Laka argues that the fact that Chomsky (1991) has placed Agr<sub>S</sub>P above TP does not contradict the condition in (4), since Chomsky assumes that T raises to Agr<sub>S</sub> by S-structure.

Any analysis of negation in English has to take into account the idea that main verbs do not raise overtly in English. The position of the adverb in the sentence in English and French has lead Emonds (1976) to conclude that French has an obligatory rule that forces the movement of the verb to 'Aux(iliary)'. Assuming that the adverb is generated in the same position (before the verb), sentence (5a) is ruled out as ungrammatical since it includes raising of the verb to 'Aux', which is not allowed in English (the examples in (5) below are taken from Pollock (1989: 367)):

### 5. \*a- Mary kisses often John.

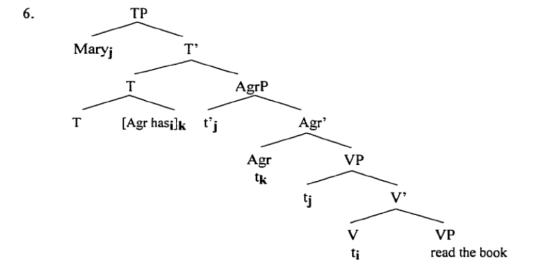
b- Mary embrasse souvent John.
 Mary kisses often John

<sup>&</sup>lt;sup>3</sup>Among the works that placed TP as the highest inflectional projection are Ritter (1988) and Mahajan (1989) (cited in Laka (1994)).

c- Mary often kisses John.

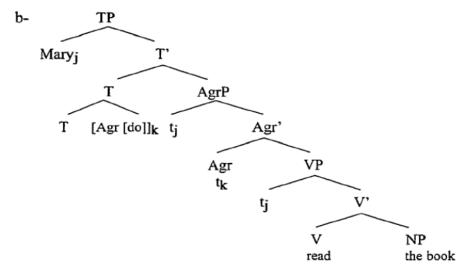
Pollock (1989) attempts to account for the verb movement in both languages by arguing that verb movement is related to the strength of Agr. In the case of French, Agr is strong, and so the verb can transmit its theta-grid to its trace after it raises to Agr (French Agr is transparent to theta marking). In the case of English, Agr is not strong 'enough' to allow the verb to transmit its theta-grid to its trace after it raises (English Agr is opaque to theta marking). That is, verbs that have theta roles to assign do not move overtly in English for the reasons mentioned above; auxiliary verbs and main verbs that have no theta roles to assign can raise overtly in English.

Moreover, Pollock assumes that [+finite] T is an 'operator' that must have a variable to bind at S-structure. He further argues that this variable must be verbal (a trace left by verb movement). Since auxiliary verbs move overtly, their movement creates the required variable as in (6) below:



Note that the movement of the auxiliary verb is required here. The movement of 'has' creates a trace (a verbal variable), which is bound by T. When the sentence lacks an auxiliary verb, T does not have a variable to bind since the movement of the main verb takes place at LF and the binding of the variable has to take place at S-structure. To solve the problem, Pollock proposes that English has a non-lexical head of '[do]' generated under Agr. This head, presumably phonologically unrealized, shares the same properties of its phonologically realized counterpart. Consequently, this head is generated under Agr and raises to T. The movement of this head creates the variable that can be bound by T. Sentence (7a) would be derived as shown in (7b):

### 7. a- Mary read the book.



The motivation for the movement of the phonologically unrealized head '[do]' is to satisfy the condition suggested by Pollock, i.e., the movement of '[do]' creates the verbal variable needed for Tense to bind. Presumably, Tense and agreement morphemes 'affix-hop' onto the lexical verb, which has to be done by lowering the complex head of Tense.

Chomsky (1995) provides an alternative account for verb movement. He argues that Tense in English is specified for two categorial features that reflect the interaction between Tense and the verb on the one hand, and between Tense and the subject, on the other. The verb has the feature [+V], which is checked off by the movement of the verb or the auxiliary to the head of TP. The subject has the feature [+D], which can be checked off by the movement of the subject to the Spec of TP.

Chomsky (1991, 1995) agrees that main verbs move covertly in English. To justify sentences like (8a, b) below, Chomsky follows the assumption that weak and strong Agr<sub>S</sub> determine the movement of the verb, whether it is to be overt or covert. Under this assumption, weak Agr cannot 'attract' true verbs, although it can draw auxiliary verbs (as is the case in English). In contrast, strong Agr can attract true verbs as well as auxiliary verbs. He further assumes that verbs can be divided into 'light' and 'heavy' verbs, arguing that only heavy verbs need a strong Agr so that they can move overtly. Thus, only light verbs (mainly auxiliaries, be, and have) move overtly in English, since they do not require a strong Agr. His assumptions indeed justify the sentences in (8a, b):

- a- Mary always goes to school early.
  - b- Mary has always gone to school early.

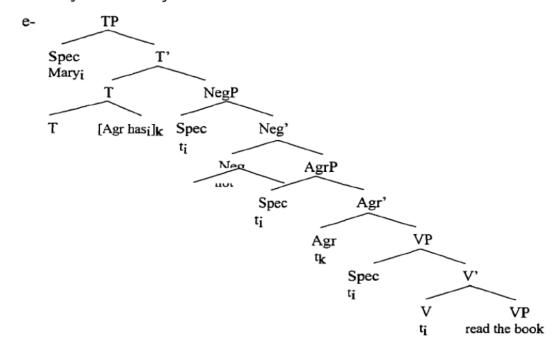
We have assumed earlier that 'always' is located before the verb (light or heavy). Since main verbs do not move overtly in English, the order in (8a) is expected. However, the movement of the auxiliary verb results in the structure in (8b).

## 3.2.2 Verb movement and NegP in English

We have mentioned earlier that negative markers have been analyzed as occupying the head of a functional projection (NegP). In English, NegP is placed between TP and AgrP (Pollock (1989) and Chomsky (1991), among others). In this section, we will see how the two major approaches that we have sketched deal with NegP.

Consider the following examples. (9e) represents the derivation of (9a):

- 9. a- Mary has not read the book.
  - \*b- Mary not has attend the party.
  - c- Mary did not leave early.
  - \*d- Mary not left early.



The ungrammaticality of (9b and d) results from the fact that NegP is a 'barrier' that prevents merger between T and the verb in English. Consequently, two options are

available. First, the verb moves to Agr and then over Neg to T. Second, T lowers<sup>4</sup> to Agr, and the complex head lowers to V. In both options, the merger between T and the verb is achieved. It is clear that the first option can be partially utilized. The auxiliary verb 'has' raises to Agr and the complex head raises over Neg to T (9e). However, the main verb cannot raise overtly to T (main verbs do not move overtly in English), which explains the ungrammaticality of (9d).

Note that the movement of the auxiliary 'has' over Neg violates the Head Movement Constraint (HMC) (Travis (1984), Chomsky (1991)). Although this move is not allowed, the sentence is still grammatical. To solve the problem, Chomsky (1995) suggests that if the violation of the HMC 'induces' an Empty Category Principle (ECP) violation, we cannot 'dismiss' the HMC as an operative constraint. That is, as long as the ECP is not violated in the process of derivation (merger between T and the verb), the HMC is inoperative.

As example (9c) shows, English resorts to inserting a 'dummy do' to fulfill the merger with T when the sentence lacks an auxiliary verb. The insertion of 'do' in sentence (9c), a phenomenon known as 'Do-support', has received a few explanations. As mentioned earlier, Pollock argues that English has a non-lexical version of 'do' that is generated under Agr. Although it is phonologically unrealized, it has the properties of the auxiliary 'do'. I will return to this analysis in chapter 4, where I suggest a similar analysis for the 'agreement pronoun' that appears in some

<sup>&</sup>lt;sup>4</sup>Introducing the concept of 'lowering' to justify certain structures is not favored in the sense that we like to see a uniform direction of movement, i.e., raising (see Chomsky (1995)).

nominal sentences in Arabic.

Building his argument on Pollock's (1989), Chomsky (1991, 1995) argues that 'do-insertion' results from the interaction of two principles, the ECP and the principle of the Economy of Derivation (ED). As mentioned earlier, two options are available for English to deal with sentences like (9a-d). The first one is to lower T to Agr, and then the complex head of [T+Agr] is lowered to V allowing the merger between T and the verb. Chomsky argues that English does not allow this option since it is too costly. The lowering of T to V results in an ECP violation as the trace left by T is not properly governed. LF raising of the complex head [V-Agr-T] to Agr then to T (so it can avoid the ECP violation) does not salvage this structure as the intermediate trace left by the complex head is not properly governed:

# 10. Mary [v leave-Agr-T] Neg t'v [VP tv early]<sup>5</sup>

The second option is to insert the 'dummy do' to salvage the structure. Chomsky suggests that 'do' is inserted under the Modal (Mod) node. 'Do', as an auxiliary verb, raises to Agr and the complex head [Agr+Mod] raises to T over Neg. In sum, although the overt movement of the auxiliary violates the HMC, it remains less costly, requires fewer steps, and does not induce an ECP violation. Finally, Laka (1994) argues that the lowering of T to V violates the 'TCC', as the functional projection 'NegP' is no longer c-commanded by T. Therefore, the option of 'do-insertion' is favored since the main verb cannot raise overtly in English. In Chapter 4,

<sup>&</sup>lt;sup>5</sup>The deletion of '[t'v]' violates the ECP as defined by Lasnik and Saito (1984) and later modified by Chomsky (1986) (see Chomsky (1995) pp.142-143, p.164 fn. (24)).

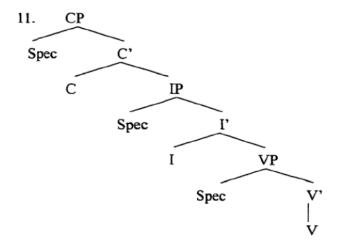
I propose an account for 'do-support' in English that combines Chomsky's and Pollock's approaches. I provide evidence for my approach from Arabic.

### 3.3. Sentential negation in Arabic

### 3.3.1 Verb movement in Arabic

In this section, we will explore verb movement in Arabic, its motivation, and its relation to the possible word orders. As we have mentioned earlier, Arabic has always been treated as a VSO language. The question that always arises concerning VSO languages has to do with D-structure: what is the word order at D-structure? The introduction of the 'VP-internal subject hypothesis' (see Koopman and Sportiche (1991)) has opened the door to treating VSO languages in general as having an SVO word order at D-structure. Among those who treat Arabic as having an SVO word order at D-structure are Mohammad (1988), Fassi Fehri (1993), and Benmamoun (1992).

The 'VP-internal subject hypothesis' assumes that the subject is generated under the Spec of VP at D-structure. Two approaches about how far the verb has to move up in the tree have been suggested. One approach, first proposed by Emonds (1980), suggests that all verb fronting is motivated by 'attraction to the complementizer'. According to this approach, the verb moves to C, whereas the subject moves to the Spec of IP:



The verb moves to 'I' and the complex head [I+V] moves to C. This approach has also been proposed to account for the VSO word order in Modern Welsh<sup>6</sup> ((Sproat (1985), Clack (1994)). For example, Sproat (1985) argues that I can assign nominative Case to the right under government. For I to govern the subject it has to be higher in the tree, and for I to assign case to the subject rightward, the subject has to be to the right of I. The only way to achieve that is to move the verb to I and then the complex head [I+V] to C. From this we conclude that Welsh does not allow an SVO word order, which is true.

Abd El-Moneim (1989) argues that the VSO word order in Arabic is derived the same way as described above. Her assumption is based on the idea that the subject is base-generated in the Spec of IP. To obtain the VSO order, the verb raises to C. Fassi Fehri (1993: 26) argues against raising V to C. He states that there is no evidence for raising V to C. Following Lasnik (1981), he argues that Tense and agreement under I are bound morphemes that need to be 'supported' at S-structure.

<sup>&</sup>lt;sup>6</sup>See McCloskey (1991, 1996) and Massam (2000) for counterevidence.

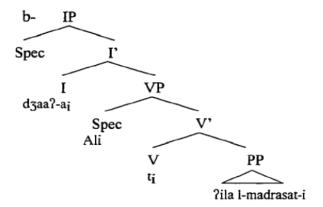
This can be achieved by raising the verb to I. In fact, If we raise V to C, a sentence like (12) below will be ruled out as ungrammatical although it is not:

 maaðaa law lam ja-ðhab Ahmed. what if not 3m-go Ahmed 'What if Ahmed did not go?'

Assuming that 'maaðaa' and 'law' occupy the Spec of CP and the head C, respectively, how can we justify the verb moving to C?

The second approach argues that the verb moves to I (or T) but not to C. That is, to obtain the VSO word order, the verb moves to I, while the subject remains *in situ*:

13. a- jaa?-a Ali-un ?ila l-madrasat-i. came-3m Ali-nom to the-school-gen 'Ali came to school.'



Most works on Arabic favor the second approach (e.g., Fassi Fehri (1988, 1993) Mohammad (1989), and Benmamoun (1992, 2000) among others). Mohammad (1989), for example, assumes that the VSO word order results from the fact that the verb always raises to I in Arabic, i.e., the subject is not required to move to the Spec of IP. He argues that for the subject to be in a Spec-head relation with I, it has to agree with the verb in number (in addition to person and gender). Remember that the

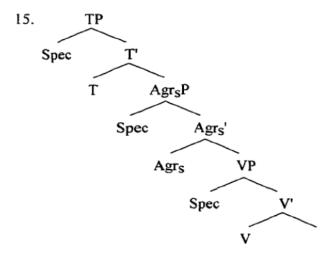
word order in Standard Arabic is obligatorily SVO only when the verb agrees with the plural subject in person, number, and gender:

- 14. a jaa?-a l-?awlaad-u ?ila l-madrast-i. came-3m the-boys-nom to the-school-gen 'The boys came to school.'
  - b- ?al-?awlaad-u jaa?-uu ?ila l-madrast-i. the-boys- nom came- 3mp to the-school-gen
  - \*c- jaa?-uu l-?awlaad-u ?ila l-madrast-i. came-3mp the-boys-nom to the-school-gen

According to this analysis, in (14a) the verb moves to I, and the subject remains in situ (Spec of VP); since the subject is not in a Spec-head relation with I, there is no agreement in number between the plural subject and the verb. In (14b) the verb moves to I, and the subject moves to the Spec of IP to receive case since it is in a Spec-head relation with I (i.e., there is agreement in number between the plural subject and the verb). In (14c) the verb agrees with the plural subject in number, however, it fails to move to the Spec of IP to receive case (Spec-head relation) which renders the sentences ungrammatical.

So far, it has been clear that all the suggestions and accounts for the derivation of the VSO word order in Arabic assume that the verb moves overtly in Arabic. The motivation for movement varies from one account to another but basically relates to the strength and the weakness of the target position (C and I) and to the kind of agreement between the verb and the subject. It has also been clear that none of those accounts has been an attempt to account for VSO languages in general. Recent analyses, however, attempt to focus on the universality of this phenomenon, trying to capture a unified account for the VSO languages.

Within the spirit of the Minimalist Program and the 'Split Inflection Hypothesis', a unified account for the derivation of VSO and SVO word orders becomes attainable. The structure that is suggested for Arabic and VSO languages in general requires TP to be higher in the tree as in (15) below (Ouhalia (1994)):



Ouhalla (1991) observes that in VSO languages the 'Agr<sub>S</sub> morpheme' is located inside the 'T morpheme'. He argues that in Arabic, for example, the T morpheme precedes the Agr<sub>S</sub> morpheme:

- 16. a- sa-ya-quul Ali-un əl-ħaq-a. will-3ms-say Ali-nom the-truth-acc 'Ali will say the truth.'
- \*b- ya-sa-quul Ali-un əl-ħaq-a.
  3ms -will-say Ali-nom the-truth-acc

Ouhalla maintains that if we switch the order of the morphemes, the sentence becomes ungrammatical as is the case in (16b). The importance of the ordering of the functional heads arises from the fact that the structure we suggest needs to capture the actual order of the sentence as uttered (at Spell-out or S-structure). According to Ouhalla's analysis, the verb always moves to T, and the subject can occupy two

positions, namely the Spec of VP (remains *in situ*) or the Spec of TP. The plural subject moves to the Spec of TP only when the verb agrees with the subject in number. Moreover, the plural subject can be in a Spec-head relationship with Agrs only when it agrees with the verb in number. Remember that Ouhalla's main argument is that nominative Case is assigned by a language specific default mechanism, which means that the movement of the subject is not motivated by the necessity for Case assignment. The problem with Ouhalla's analysis is that it captures the SVO word order in Standard Arabic only. That is, to achieve the SVO order, the plural subject must agree with the verb in number, which in turn enables the subject to be in a Spec-head relation with Agrs. However, in the other Arabic dialects the SVO word order can be achieved without the verb agreeing with the subject in number as we will see later.

Pollock (1997: 257) suggests that 'checking' is a process that can 'see' the morphological features that are the farthest from the 'root'; once that farthest morphological feature from the root is checked, the second farthest morphological feature becomes visible to be checked and so on. This means that in the syntactic structure, the functional projection that represents the farthest morphological features should be the closest to the root. According to this proposal, TP should be closer to the verb than the Agr<sub>S</sub>P in Arabic:

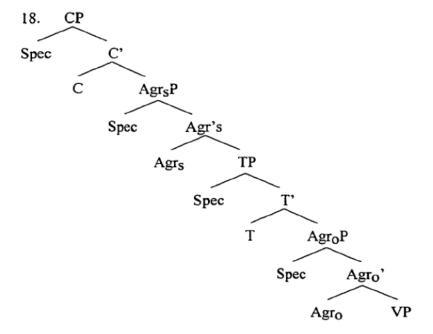
17. a- sa-ya-quul will-3ms-say

b- Tense-Agreement-ROOT (V) morphology

c- Agr<sub>S</sub>P-TP-VP syntactic structure

If we want to view the obligatory SVO word order in Standard Arabic as a result of 'strong' agreement that exists between the subject and the verb, we need to adopt Pollock's (1997) analysis. This will enable us to move the subject to the Spec of Agr<sub>S</sub>P, which should be higher than TP so that we can capture the obligatory SVO order. Remember that the verb moves to T before Spell-out in Arabic. Therefore, if we place Agr<sub>S</sub>P below TP, we will not be able to capture the SVO order.

Following Chomsky (1991), Bolotin (1995) argues that we can account for the different word orders by studying the nature of the inflectional features of those languages. She assumes that the order of the functional projections is the same crosslinguistically:



Trying to account for the VSO and SVO word orders that occur in Standard Arabic, she argues that there is a set of 'inflectional parameters' for each word order (following Chomsky (1992)). The two sets of inflectional parameters are shown in (19) below (Bolotin 1995: 20):

19.	VSO order	SVO order
V features of T	strong	strong
V features of Agr	weak	strong
N features of T	weak	weak
N features of Agr	weak	strong

Since the verbal features for T are strong in both word orders, she maintains that the verb always raises overtly to T in Arabic to have its strong V features checked off. Since the verbal features for Agr are strong in the SVO order and weak in the VSO order, the verb raises overtly to Agr only in SVO sentences to have its strong verbal features checked off. The subject raises overtly to the Spec of AgrP only in SVO sentences since the nominal features of Agr are strong. The subject remains *in situ* in VSO sentences and raises to the Spec of TP then to the Spec of AgrP at LF (by the Procrastinate principle). In sum, Bolotin argues that what determines the word order in Arabic (VSO vs SVO) is the strength of the nominal features on Agr. Weak nominal features on Agr means that the subject remains *in situ* at Spell-out (resulting in VSO word order) and raises to Agr at LF to have its nominal features checked off. On the contrary, strong nominal features on Agr means that the subject has to raise overtly (before Spell-out) to have its nominal features checked off, which results in the SVO word order.

Benmamoun (2000) argues that the movement of the verb and the subject to T and the Spec of TP decides the word order in Arabic. He builds his argument on the assumption that in verbal sentences AgrP does not play any role in determining the

word order. Therefore, he assumes that we need one functional projection (TP) in affirmative sentences. Since we have only one functional projection (TP), we are concerned with the features that need to be checked on the head of that functional projection (T). He follows Chomsky's (1995) argument that T is specified for verbal and nominal features. According to Chomsky (1995) T in English is specified for two categorical features, Verbal ([+V]) and nominal ([+D]). The relation between T and the subject is determined by the feature [+D]; and the relation between T and the verb is determined by the feature [+V].

Benmamoun's major argument is that in Arabic present tense features are different from past tense features. He maintains that while the past tense in Arabic is specified for verbal features ([+V]) and nominal features ([+D]), the present tense is specified for nominal features [(+D]) only. His argument is based on two points. First, the copula is required only in the past tense (20c), but not in the present tense (20a, b):

- 20. a- Ali-un t<sup>°</sup>aalib-un. Ali-nom student-nom 'Ali is a student'
  - \*b- Ali-un ya-kuunu t<sup>s</sup>alib-an. Ali-nom 3m-is student-acc 'Ali is a student'
  - c- Ali-un kaan-a t<sup>s</sup>aalib-an. Ali-nom was-3m student-acc 'Ali was a student'
  - \*d- Ali-un t<sup>s</sup>alib-an. Ali-nom student-acc 'Ali is a student'

The idea that the copula is not required in the present tense can be justified by the suggestion that the present tense is specified for the feature [+D] only, which does not require a verb to host it. The second argument is that the SVO sentences are more preferred in the present tense, indicating that the verb does not need to move to T in the overt syntax. If we accept the suggestion that the present tense is specified for the feature [+D] only, this phenomenon is explained. The assumption here is that the SVO word order results from the subject moving to the Spec of TP to check the [+D] feature of T, while the verb remains in situ. T does not attract the verb, because it lacks the [+V] feature. In the past tense, he argues, the VSO order is preferred. Since T is specified for [+V, +D] features, the verb is attracted to T to have its features checked off. Therefore, he assumes that the verb moves overtly in the past tense and covertly in the present tense. He maintains that the word order in idiomatic expressions supports his observations. In the present tense the SVO order is expected ((21), (22b)), while the VSO order is expected in the past tense (22a). He provides examples from Syrian Arabic (cited by Ferguson (1983: 12-223)) and from Moroccan Arabic:

21. a- ?alla y-sallma-k.
God 3m-keep-you
'May God keep you.'

(Syrian Arabic)

b- ?allah yə-šfii-k. God 3m-heal-you 'May God heal you.'

?c- y-sallma-k ?alla.

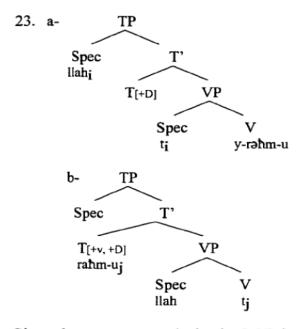
?d- yə-šfii-k ?allah

a- raħm-u llah.
 blessed-him God
 'May God bless him.'

(Moroccan Arabic)

b- llah y-rəħm-u.
God 3m-bless-him
'May God bless him.'

(23a, b) represent the derivation of (22b) and (22a) (p.58):



Since the present tense lacks the [+V] feature, the verb is not motivated to move to T. The subject moves to the Spec of TP to check the [+D] feature of T as shown in (23a). In (23b), the past tense is specified for [+D] and [+V] features, motivating the verb to move to T to check its [+V] feature. Since the verb is a potential checker for the [+D] feature (through the agreement it carries), it checks the [+D] features of T and the subject remains *in situ*.

<sup>&</sup>lt;sup>7</sup>Benmamoun (2000: 62-3) argues that the agreement on the verb can check the [+D] feature of T. He follows Borer's (1986) 'I-subject', according to which in null subject languages the agreement inflection acts as the subject.

Counterexamples to the idiomatic expressions Benmamoun provides in (21) are found in Standard Arabic:

- 24. a- ya-rhamu-hu llah. 3m-be merciful-him God
  - 'May God be merciful on him.'
  - \*b- llah ya-rħamu-hu.

    God 3m-be merciful-him

    'May God be merciful on him.'
  - c- ya-hdii-k-um llah. 3m-guide-you-pl God 'May God guide you.'
  - \*d- llah ya-hdii-k-um. God 3m-guide-you-pl 'May God guide you.'

Note that according to Benmamoun's argument, idiomatic expressions in the present tense are expected to have an SVO word order, which is contrary to what examples (24a-d) show. Moreover, counterexamples to the ones in (22) are found in Palestinian Arabic. Mohammad (2000: 74) cites the following examples:

- 25. a-?eħmad d<sup>°</sup>ayya<sup>°</sup> <sup>°</sup>agl-u.

  Ahmed lost mind-his

  'Ahmed lost his mind.'
  - ??b- d<sup>°</sup>ayya<sup>°</sup> ?eħmad <sup>°</sup>agl-u. lost Ahmed mind-his
    - c-?ehmad d<sup>s</sup>ayyas sumr-u.

      Ahmed lost life-his

      'Ahmed wasted his life (doing useless things).'
  - ??d- d<sup>s</sup>ayya<sup>s</sup> ?eħmad sumr-u. lost Ahmed life-his

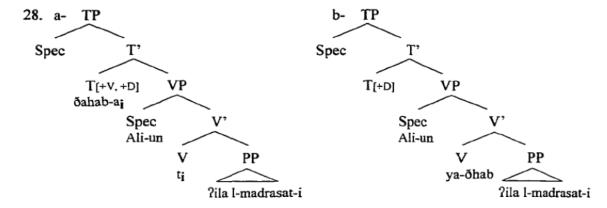
The problem here is the variation that exists in the Arabic dialects. Standard Arabic does not show much variation as we discussed earlier. The idiomatic expressions in (24) above support this view. In the present tense the order is VSO as expected. We expect that to be the same in the past tense (i.e., VSO) as the following idiomatic expressions show:

- 26. a- jazaa-k-um llah-u xayr-an. rewarded-you-p God-nom good-acc 'May God reward you.'
  - \*b- allah-u jazaa-k-um xayr-an. God-nom reward-you-p good-acc
  - c- Bafar-a llah-u la-k-um. forgave-3m God-nom for-you-p 'May God forgive you.'
  - \*d- allah-hu ʁafar-a la-k-um. God-nom forgave-3m for-you-p

Since Standard Arabic is a VSO language, (26b,d) are ruled out as expected.

As has been mentioned earlier, word order in Standard Arabic is believed to be VSO. That is, the main word order that we have to account for is the VSO order, which requires the verb to move to T overtly to have its [+V] feature checked. This is the first problem that Benmamoun's analysis faces. While it successfully accounts for the past tense sentences (27a), it fails to account for the present tense sentences (27b):

- 27. a- ðahab-a Ali-un ?ila l-madrasat-i. went-3m Ali-nom to the-school-acc 'Ahmed went to school'
  - b- ya-ðhab Ali-un ?ila l-madrasat-i. 3m-go Ali-nom to the-school-acc 'Ahmed goes to school.'



Sentence (27b) cannot be generated according to Benmamoun's analysis. The verb is not motivated to raise to T, since T lacks the [+V] feature as shown in (28b). He does not specify what regulates the movement of the verb and the subject. For example, it is not clear why the subject does not move to T to check the [+D] feature of T in (28b). Ignoring Standard Arabic, he assumes one word order (SVO) for present tense sentences in the other Arabic dialects (in particular Moroccan Arabic and Egyptian Arabic), an issue that I will return to later when I discuss the other Arabic dialects.

The last issue that is related to word order in Standard Arabic is the obligatory SVO word order that results when the verb agrees with the plural subject in number as shown in the examples below:

- 29. a- ya-?kul əl-walad-u t<sup>\(\cappa\_1\)</sup>-t<sup>\(\cappa\_3\)</sup>aam-a.
  3m-eat the-boy-nom the-food-acc
  'The boy is eating the food.'
  - b- ya-?kul əl-?awlaad-u t<sup>c</sup>-t<sup>c</sup>acaam-a. 3m-eat the-boys-nom the-food-acc 'The boys are eating the food.'
  - c-?al-?awlaad-u ya-?kul-uun ət<sup>°</sup>-t<sup>°</sup>a?aam-a. the-boys-nom 3m-eat-p the-food-acc 'The boys are eating the food.'
  - \*d- ya-?kul-uun əl-?awlaad-u t<sup>?</sup>-t<sup>?</sup>a?aam-a.

Bemmamoun (p.130) assumes that "the number feature on the verb [which he also assumes the verb carries throughout the syntactic derivation] is not spelled out by an affix but by the lexical subject, which merges with the verb". The merger between the subject and the verb causes the number features to be spelled out on the verb. The questions that arise are: where does this merger between the verb and the subject take place? And, why does the number feature get spelled out only when the subject is preverbal? He assumes that:

... agreement features can be checked whenever the verb and the subject are in a Spec-head relation. Thus, in sentences with auxiliary verbs, if the verb remains in the VP its agreement features can be checked within the thematic shell. ... as in the majority of languages, when the verb has a plural external argument it is specified for plural features. Obviously, any analysis will have to tie the absence of the number affix to the subject being in the post-verbal position. (Benmamoun: 2000: 130)

It is still not clear how the agreement features can be checked within the thematic shell. Moreover, the agreement between the subject and the verb plays no role in word order in the other Arabic dialects being studied. The following is an example from Jordanian Arabic:

- 30. a- lə-walaad bi-y-ruuh-u γa-l-madrasah kul yoom. the-boys asp-3m-go-p to-the-school every day 'The boys go to school every day.'
  - b- bi-y-ruuħ-u lə-walaad Sa-l-madrasah kul yoom. asp-3m-go-p the-boys to-the-school every day

The fact that both sentences are acceptable indicates that agreement plays no role in fixing the word order in Jordanian Arabic (as well as in the other non-Standard dialects being studied). I will return to this issue in section 3.3.2.3.

I would like to conclude this section by drawing the general outline of the solution that will account for sentential negation in Arabic. The account I present will be within the framework of Chomsky's (1993, 1995) Minimalist Program. I claim that my analysis accounts for sentential negation in the Arabic dialects under investigation. The analysis I present is based on the following assumptions and arguments. First, I assume that the movement of the verb as well as the subject in Arabic (as is also the case in English) are motivated by the strength of the features on the functional heads (mainly AgrP and TP). Therefore, I argue that T and Agr are specified for [+V, +D] features in both present and past tenses in Arabic. Second, I agree with the argument that the verb always moves overtly to T in Arabic. In other words, the [+V] feature of T is strong in Arabic. Third, I assume, along with Benmamoun, that Neg is specified for a [+D] feature, which explains the fact that the negative marker requires merger with the verb. However, I argue that the movement of the verb is not triggered by the [+D] feature of Neg. Fourth, I argue that the strength of the [+D] feature of Agrs (in Standard Arabic) and T (in the non-Standard dialects) is what decides the possible word orders in the Arabic dialects. Finally, I argue that the nature of the negative markers is the different Arabic dialects plays an important role in the variation that we encounter in those dialects. If our arguments and assumptions are on the right track, we should be able to account for sentential negation in the Arabic dialects in a principled way.

The remaining sections in this chapter will cover sentential negation in the Arabic dialects that are investigated in the present study. A review of Benmamoun's account of negation will be presented. This review is meant to show the points of strength and weakness in his account. I will further suggest some changes that I believe will provide a better account that can satisfy all the problematic data encountered in the various Arabic dialects. Finally, I will provide a set of data from Jordanian Arabic, Syrian Arabic, and Saudi Arabic that has not yet been accounted for.

#### 3.3.2 Sentential negation in Standard Arabic verbal sentences

#### 3.3.2.1 The data

Sentential negation in Standard Arabic involves five negators. We will start by reviewing their properties, and then we will review previous works on sentential negation in Standard Arabic. The review will include the GB account of sentential negation. However, the analysis I provide will be within the framework of Chomsky's Minimalist program.

The first negative marker we need to discuss is 'lam', which occurs only in the past tense. Consider the following sentences:

- 31. a- ðhab-a Ahmed-u ?ila l-madrasat-i. went-3m Ahmed-nom to the-school-gen 'Ahmed went to school.'
  - b- lam ya-ðhab Ahmed-u ?ila l-madrasat-i. neg-past 3m-go Ahmed-nom to the-school-gen 'Ahmed did not go to school.'
  - \*c- lam ðahab-a Ahmed-u ?ila l-madrasat-i. neg-past went -3m Ahmed-nom to the-school-gen 'Ahmed did not go to school.'

- \*d- lam sa-ya-ðhab Ahmed-u ?ila l-madrasat-i. neg-past will-3m-go Ahmed-nom to the-school-gen 'Ahmed will not go to school.'
- \*e- lam Ahmed-u ðahab-a ?ila l-madrasat-i. neg-past Ahmed-nom went-3m to the-school-gen

Three important aspects of 'lam' can be noticed. First, it indicates past tense as shown in (31b) and by the ungrammaticality of (31d). Second, it has to be adjacent to the verb it negates (ruling out sentences like (31e)). Third, it must be followed by an infinitive verb, which is in the imperfective form (thus the ungrammaticality of (31c)).

The second negative marker is 'lan', which occurs in the future tense only:

- 32. a- sa-ya-ðhab Ahmed-u ?ila l-madrasat-i. will-3m-go Ahmed-nom to the-school-gen 'Ahmed will go to school.'
  - b- lan ya-ðhab Ahmed-u ?ila l-madrasat-i. neg-fut 3m-go Ahmed-nom to the-school-gen 'Ahmed will not go to school.'
  - \*c- lan ðahab-a Ahmed-u ?ila l-madrasat-i. neg-fut went-3m Ahmed-nom to the-school-gen 'Ahmed did not go to school.'
  - \*d- lan ya-ðhab Ahmed-u ?ila l-madrasat-i. neg-fut 3m-go (pres) Ahmed-nom to the-school-gen 'Ahmed does not go to school.'
  - \*e- lan Ahmed-u ya-ðhab ?ila l-madrasat-i. neg-fut Ahmed-nom 3m-go to the-school-gen 'Ahmed will not go to school.'
  - \*f- lan sa-ya-ðhab Ahmed-u ?ila l-madrasat-i. neg-fut will-3m-go Ahmed-nom to the-school-gen 'Ahmed will not go to school.'

We notice from the examples that 'lan' behaves like 'lam' in that it carries tense as in (32b). 'lan' is also similar to 'lam' in that is has to be followed by the verb in the

infinitive form (32b). Moreover, like 'lam', 'lan' must be adjacent to the verb, which explains the ungrammaticality of (32e). Finally, 'lan' cannot co-occur with the clitic 'sa-', since both of them indicate future tense.

The third negative marker is 'laa', which is used to negate sentences in the present tense:

- a- ya-ðhab Ahmed-u ?ila l-madrasat-i.
   3m-go-(pres) Ahmed-nom to the-school-Gen 'Ahmed goes to school.'
  - b- laa ya-ðhab Ahmed-u ?ila l-madrasat-i. neg-(pres) 3m-go Ahmed-nom to the-school-Gen 'Ahmed does not go to school.'
  - \*c- laa ŏahab-a Ahmed-u ?ila l-madrasat-i. neg-(pres) went-3m Ahmed-nom to the-school-Gen 'Ahmed did not go to school.'
  - \*d- laa sa-ya-ðhab Ahmed-u ?ila l-madrasat-i. neg-(pres) will-3m-go Ahmed-nom to the-school-Gen 'Ahmed will not go to school.'
  - \*e- laa Ahmed-u ya-ŏhab ?ila l-madrasat-i. neg-(pres) Ahmed-nom 3m-go to the-school-Gen 'Ahmed does not go to school.'

The examples above show that 'laa' behaves exactly the same as 'lam' and 'lan'. It carries the present tense (thus the ungrammaticality of (33c, d)), requires the verb to be an infinitive (33b), and must be adjacent to the verb (which explains the ungrammaticality of (33e)).

The fact that 'lam', 'lan' and 'laa' show similarity in form has led Benmamoun ((1992) and (1996)) to suggest that the three negative markers are morphologically related. He argues that 'laa', the basic form, has three morphologically related (suppletive) forms that correlate with different temporal interpretation:

34. a- laa: occurs in the present tense.

b- lam: carries the past tense.

c- lan: carries the future tense.

Interestingly, examples (31b), (32b), and (33b) differ only in the use of the negative marker. That is, the difference in temporal interpretation in these sentences is caused by the choice of the negative marker. Thus, the three suppletive forms of 'laa' can be interpreted as follows:

35. a- laa: NEG -(present)

b- lam: NEG -past

c- lan: NEG -future

The fourth negative marker is 'maa', which has been described as a 'neutral' negative marker (Fassi Fehri (1993)). Consider the following sentences ((36a) is taken from Moutaouakil (1993:81))):

36. a- maa ?u-sall-ii. not 1s-pray-I 'I do not pray.'

> b- maa ðahab-a Ahmed-u ?ila l-madrasat-i. not went-3m Ahmed-nom to the-school-gen 'Ahmed did not go to school.'

\*c- maa sa-ya-ðhab Ahmed-u ?ila l-madrasat-i. not will-3m-go Ahmed-nom to the-school-gen 'Ahmed will not go to school.'

One important difference between 'maa' on the one hand, and 'lam', 'lan', and 'laa', on the other, is that 'maa' cannot be associated exclusively with any tense (neutral). Examples (36a, b) show that 'maa' can be used as a negator in both present and past tense sentences. These examples also show that 'maa' does not carry tense, and this is why the verb is in the imperfective form (indicating the present tense) in (36a) and in

the perfective form (indicating the past tense) in (36b). Interestingly, 'maa' cannot replace 'lan' to negate sentences in the future tense. This is an issue that has to do with the nature of 'maa', an issue that I will tackle in section 3.3.2.3.

The last negative marker that is used to negate verbal sentences is 'laysa'.

Although it is considered as a potential negator, its use is less limited than the other negators. Consider the following sentences:

- 37. a- laysa Ali-un ya-drii.
  neg-(3m) Ali-nom 3m-know
  "Ali doesn't know"
  - h lawa Alium da
  - \*b- laysa Ali-un dara-a. neg-(3m) Ali-nom knew-3m 'Ali didn't know.'
  - \*c- laysa Ali-un sa-ya-drii.
    neg-(3m) Ali-nom will-3m-know
    'Ali will not know.'

Unlike the four negative markers discussed earlier, 'laysa' does not have to be adjacent to the verb as example (37a) show. However, like 'lam', 'lan', and 'laa', the use of 'laysa' is limited to one tense. Example (37a) show that 'lasya' can be used in the present tense, but the ungrammaticality of examples (37b, c) show that 'laysa' cannot be used in the past or future tenses.

More importantly, 'laysa' differs from the other negators in that it always agrees with the subject in person and gender as shown in the examples below:

- 38. a- laysa-t Fatima ta-drii. neg-3f Fatima 3f-know 'Fatima doesn't know.'
  - \*b- las-ti Fatima ta-drii. neg-2fs Fatima 3f-know

- \*c- lays-a Fatima ta-drii. neg-3ms Fatima 3f-know
- d- las-ta ?anta ta-drii. neg-2ms you(ms) 2-know 'You (ms) don't know.'
- \*e- laysa ?antii ta-drii. not-3m you(fs) 2-know 'You (fs) don't know.'

Sentences (38a, d) show that 'laysa' agrees with the subject in person and gender. The sentence becomes ungrammatical if 'laysa' does not agree with the subject in person (38b), in gender (38c), or in both (38e). Concerning number, 'laysa' does not have to agree with the plural subject in number, but if it does, the subject has to precede it:

- 39. a- laysa l-walad-u ya-drii. neg-(3m) the-boy-nom 3m-know 'The boy does not know.'
  - b- laysa l-?awlaad-u ya-dr-uun. neg-(3m) the-boys-nom 3m-know-p 'The boys do not know.'
  - \*c-?al-?awlaad-u laysa ya-dr-uun. the-boys-nom neg-(3m) 3m-know-p
  - d- ?al-?awlaad-u lays-uu ya-dr-uun. the-boys-nom neg-3mp 3m-know-p
  - \*e- lays-uu l-?awlaad-u ya-dr-uun. neg-3mp the-boys-nom 3m-know-p

We notice that when the subject is singular or plural, 'laysa' precedes it (39a, b). When 'laysa' carries the plural morpheme, the subject has to precede it (39d).

The last characteristic that differentiates 'laysa' from the rest of the negators is that 'laysa' is a case assigner:

40. a- Ali-un t<sup>s</sup>aalib-un. Ali-nom student-nom 'Ali is a student.' b- laysa Ali-un t<sup>c</sup>aalib-an. not-(3m) Ali-nom student-acc 'Ali is not a student.'

As it is clear in (40), 'laysa' is not a mere negative marker. Its presence serves two purposes. Not only does it serve as a negative marker, but it also changes the grammatical Case of the complement to accusative Case.

To sum up, the examples mentioned above show that 'laysa' behaves like a verb. First, it precedes the subject when the subject is singular or plural (39a, b). Second, it has to agree with the subject in person and gender (39c). Third, it can agree with the plural subject in number, which makes it obligatory for the subject to precede it (39d). Finally, like verbs, 'laysa' assigns its complement accusative Case (40b). The evidence we have shown so far supports the traditional Arabic grammarians' point of view about the status of 'laysa', where they have treated it as an auxiliary verb. In high schools and colleges, 'laysa' is still taught to learners of Standard Arabic as an auxiliary verb (e.g., Al-Hammadi et al (1980) and Adas and Al-duweik (1984)). Further evidence about the status of 'laysa' as an auxiliary verb will be presented in Chapter 4.

To provide a comprehensive account for sentential negation in Standard Arabic, we need to take the facts reviewed above into consideration. That is, our account should explain and reflect the nature of the negative markers in Standard Arabic. Table (3) lists the negative markers and their functions as used in Standard Arabic verbal sentences:

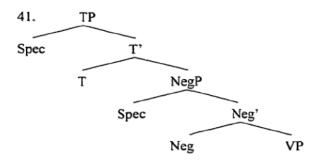
Table 3

Tense	Neg marker	Function	Remarks	
Present	esent laysa 1. negator		1.always precedes the subject	
		2. case assigner	when it agrees with it in person	
			and gender only	
			2. when it agrees with the plural	
			subject in number the subject	
			precedes it	
			3.does not have to be adjacent to	
			the verb	
			4. inherently [+present]	
Present	laa	1. negator	must be adjacent to the verb	
		2. carries present		
		tense		
Past	lam	1. negator	must be adjacent to the verb	
		2. carries past		
		tense		
Future	lan	1. negator	must be adjacent to the verb	
		2. carries future		
		tense		
Present,	maa	negator	1. must be adjacent to the verb	
Past			2. does not carry or indicate	
			tense	

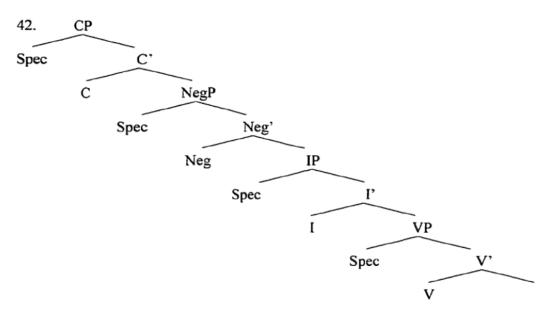
# 3.3.2.2 Previous accounts of Sentential negation in Standard Arabic

As we mentioned earlier, the 'NegP hypothesis' has been widely accepted recently. The important issue is related to the position of this functional projection. Although more than one suggestion has been proposed, it seems that in the case of Arabic the consensus is to place it under TP as the following structure shows

(Benmamoun (1992), (1996), (2000), Ouhalia (1994), and Bahloul (1996), among others):



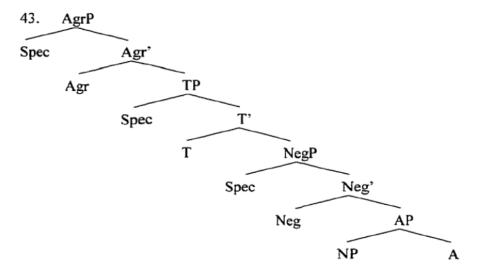
Others, however, suggested that NegP dominates TP (or IP) (e.g., Fassi Fehri (1993) and Shlonsky (1997)). Fassi Fehri (1993), for example, suggests a structure roughly the same as the one in (43) for the Arabic sentence (pp.27-8):



He argues that the negative morpheme in Standard Arabic selects an IP. According to his proposal, the position of NegP is the same at D-structure and at S-structure. The fact that the word order in Arabic is VSO when Agr is not 'strong' and the negative markers always precede the verb makes it logical to think of the position of NegP as dominating IP. Note that according to Fassi Fehri, the SVO word order is obtained

only when the Agr is strong which means that the subject has to raise to the Spec of AgrP to receive/check Case. Although he does not specify the position of NegP in SVO negative sentences, Fassi Fehri must assume that the word order of the negative SVO sentences can be achieved by having AgrP dominating NegP, which in turn dominates TP.

However, he proposes a different structure for verbless sentences where NegP is located under TP (1993: 88). The main idea here is that the negative marker 'laysa' assign accusative Case to its complement, which requires that 'laysa' be adjacent to its complement:

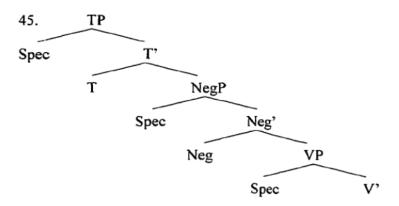


The proposed structures in ((42) and (43)) are not the optimal analyses for Arabic for two reasons. First, we like to see NegP projected in the same place in the tree for both verbal and verbless sentences. Second, any proposed structure should account for all possible negative sentences in the various Arabic dialects. A structure like (42) does not account for a sentence like (44):

44. Ahmed ma-b-yə-ktib-š gawabaat. (Egyptian Arabic)
Ahmed neg-asp-3m-write-neg
'Ahmed is not writing letters.'

According to Fassi Fehri's analysis, the verb moves to I to 'support' the tense and agreement morphemes. The problem that we face has to do with the reason why the subject the and verb have to move to the Spec and head of NegP (if we assume that the subject and the verb have to move higher than the Spec and head of IP to achieve the order in (44)).

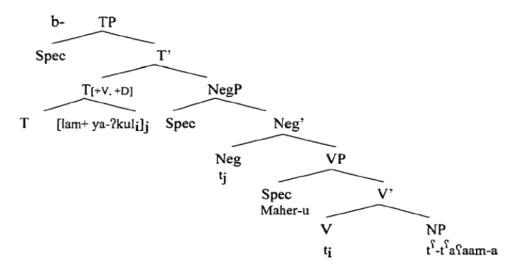
Benmamoun (2000) provides the most recent and the most comprehensive analysis to account for sentential negation in Arabic within the framework of the Minimalist program. His general argument is that all the negative markers except 'maa' are generated under the head of NegP, which is located between TP and VP. The subject and the verb are generated under the Spec and head of VP, respectively:



To account for the merger between the verb and the negative marker, Benmamoun assumes that Neg is specified for the [+D] feature that attracts the verb as a potential checker. He argues that the agreement on the verb can check the [+D] feature. Two factors, he maintains, motivate the movement of the verb. First, the [+V] feature of T attracts the verb to raise and check the [+V] feature. The second factor is the [+D]

feature that Neg is specified for. In the past tense, T is specified for verbal and nominal features ([+V, +D]). The verb is attracted by T to check its verbal features. It raises to Neg, merges with the negative marker, and checks the [+D] feature of Neg. The complex head moves to T to have its [+V] feature checked. Since the verb is already in T, it checks T's [+D] feature. This analysis will result in the VSO word order as shown in (46a, b) below:

46. a- lam ya-?kul Maher-u t<sup>5</sup>t<sup>5</sup>asam-a. neg-past 3m-eat Maher-nom the-food 'Maher did not eat the food.'



To justify the possibility of the SVO order (e.g., in Moroccan Arabic), Benmamoun argues that the subject, which is the 'primary' checker of the [+D] feature of T, moves to the Spec of TP through the Spec of NegP to check the [+D] feature of T. In general, his account has two advantages. First, it accounts for the merger between the verb and the negative marker. Second, it accounts for the VSO word order.

In the present tense, the verb is not attracted by T, since it lacks the [+V] feature. However, the merger with Neg can be justified by the fact that Neg is

specified for the [+D] feature, which attracts the verb as a possible checker. Since the [+D] feature of T is not checked by the verb, the subject moves to the Spec of TP through the Spec of NegP to check the nominal feature of T (i.e., [+D]).

The derivation of the VSO negative sentences in the future tense is justified exactly the same way as in the past tense. In the future tense, the verb raises to Neg then the complex head [Neg+V] raises to T to have the [+V] features checked. In sum, Benmamoun successfully accounts for the VSO orders in the past and the future tenses. His analysis also rules out ungrammatical sentences such as the ones in (47) below:

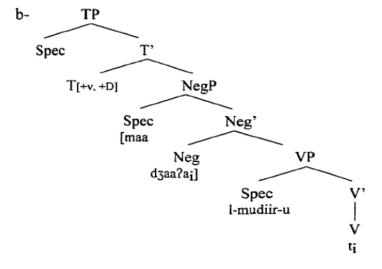
- 47. a- lan ya-qra? Ali-un əd-dars-a. neg-fut 3m-read Ali-nom the-lesson-acc 'Ali will not read the lesson.'
  - \*b- ya-qra? lan Ali-un əd-dars-a. 3m-read neg-fut Ali-nom the-lesson-acc
  - \*c- lan Ali-un ya-qra? əd-darsa. neg-fut Ali-nom 3m-read the-lesson-acc

Since the verb is required to move to Neg and merge with it, both (47b, c) are ruled out. In (47b) the verb raises over 'lam' violating the HMC. In (47c), the verb does not raise to merge with the negative marker or to check the [+V] feature of T. However, his analysis fails to account for the SVO sentences in the past and future tenses and VSO sentences in the present tense. It is not clear how the VSO word order is achieved in the present tense. Since T is not specified for the [+V] feature, there is no reason for the verb to move to T. Moreover, we expect the [+D] feature to attract the subject not the verb. These serious problems are not solved in Benmamoun's account. His idea is that both the verb and the subject are possible checkers for the [+D]

features of T and Neg. The different word orders are achieved by the different possibilities that Arabic has to have those features checked. His approach does not offer a mechanism according to which features are systematically checked and different word orders are expected.

Before we conclude this section, we need to discuss the fourth negative marker, 'maa'. As we have mentioned earlier, 'maa' is different from the rest of the negators in that it does not indicate tense. Benmamoun (p.108) argues that 'maa' is generated in the Spec of NegP. The assumption here is that in the past tense the verb moves to Neg to check its [+D] feature and merges with its Spec on its way to T to check the [+V] feature of T:

48. a- maa jaa?-a l-mudiir-u. neg came-3m the-principal 'The principal did not come.'

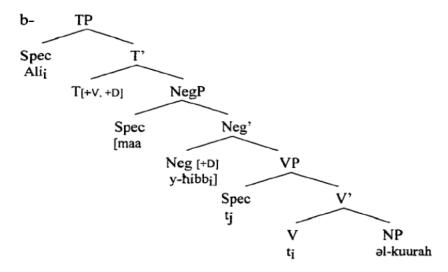


The merger between 'maa' and the verb is inevitable if we assume that the verb moves to T in the overt syntax (at least in the past tense). The fact that nothing can intervene between 'maa' and the verb supports the fact that they must be adjacent:

49. \*maa Ali-un ?akal-a t-tuffahat-a. neg Ali-nom ate-3m apple-acc 'Ali did not eat the apple.'

The problem that faces Benmamoun's analysis of 'maa' is that the SVO order is widely used with 'maa' as the negative marker in Jordanian Arabic, Syrian Arabic, and Saudi Arabic. It is not easy to explain how the subject will move to the Spec of TP through the Spec of NegP without causing a minimality violation (in the sense of Rizzi (1990)):

50. a- Ali maa y-hibb əl-kuurah. (Saudi Arabic)
Ali neg 3m-like the-ball
'Ali does not like soccer.'



The status of 'maa' will be discussed in more detail in section (3.3.2.3.2) as well as in chapter 4. A complete analysis of 'laysa' will also be given in chapter 4, since 'laysa' is basically used in verbless sentences.

In sum, Benmamoun has cleverly and convincingly accounted for the adjacency and merger between the verb and the negative markers. His analysis of sentential negation in Arabic is meant to be comprehensive, so that it can account for

sentential negation in the various Arabic dialects. Although his analysis shows flexibility in deriving optional word orders, it fails to account for VSO sentences in the present tense in Standard Arabic. In the next section, I will provide an alternative analysis that agrees with some of the insights provided by Benmamoun's account for sentential negation in Arabic. I will account for sentential negation for Standard Arabic, then I will apply the same analysis to account for sentential negation in the other Arabic dialects under investigation.

#### 3.3.2.3 An alternative solution based on strong vs. weak features

In this section, I provide an alternative analysis of sentential negation in Standard Arabic. This analysis is proposed to account for sentential negation in verbal and verbless sentences in Arabic. Any successful analysis of sentential negation in Arabic should account for three important issues. The first one is the merger and adjacency between the verb and the negative marker. The second one is the various word orders, optional and obligatory ones. Third, this analysis should be in line with the current syntactic theories. That is, language specific analyses should be avoided. It should show similarities that Arabic shares with languages of the world in general and the VSO languages in particular.

The analysis I present will be within the framework of Chomsky's Minimalist program. However, GB concepts and facts will be utilized for clarifying certain issues. Here I assume that different word orders (other than the cases of focus or topicalization) result from the strength of the features that are related to the subject and the verb. I follow Bolotin (1995) in her account for Standard Arabic VSO and

SVO word orders (as discussed earlier in section 3.3.1). However, the sets of inflectional parameters she has proposed do not generate optional word orders, which is a case that exists in the non-Standard Arabic dialects as the data will show later in the discussion. Therefore, describing the functional heads as having either strong or weak features does not account for the variation in word order that exists in the non-Standard Arabic dialects.

Assume that the modern Arabic dialects are a product of language change that affected older forms of these dialects. Also assume that the older versions of these dialects had [+strong] verbal and/or nominal features of Agr and/or T. Suppose that we study modern Arabic dialects and conclude that these dialects have [+weak] verbal or nominal features of T. Now it is logical to conclude that the change in the strength of the nominal and verbal features of T did not take place overnight. That is, it is logical to think that the strength of the nominal and verbal features of T and Agr has changed over time from [+strong] to lesser degrees of strength. However, a theory of binary features would allow us to get only three values of strength:

Note that feature [-weak] in (51a) and the feature [-strong] in (51b) are redundant, which means that the features should read as follows:

In the syntactic theory, two absolute values of strength are assumed, namely 'strong' (52a) versus 'weak' (52b). As discussed earlier, Bolotin (1995) argues that what determines the word order in Standard Arabic is the agreement between the verb and

the subject. Full agreement (i.e., person, gender, and number) means that Agr<sub>S</sub> has strong nominal features. Remember that strong features attract/force the movement of the verb, the subject and maybe the object. To simplify the derivation, we can assume that the strong nominal features of Agr<sub>S</sub> forces the subject to move to the Spec of Agr<sub>S</sub> to have those features checked. The fact that we can describe Agr<sub>S</sub> as having strong features is supported by the morphological agreement on the verb as we have shown earlier (see example (29)). However, the variation in word order in the non-Standard Arabic dialects cannot be accounted for as a result of strong and weak Agr<sub>S</sub>. Consider the following sentences from Jordanian Arabic:

- 53. a- ?ija Ahmed min əl-madrasah. came Ahmed from the-school 'Ahmed came from school.'
  - b- Ahmed ?ija min əl-madrasah. Ahmed came from the-school

Both sentences are used in Jordanian Arabic with no difference in interpretation. Now consider sentences from Standard Arabic:

- 54. a- jaa?-a Ahmed-u min l-madrasat-i. came-3m Ahmed-nom from the-school-gen 'Ahmed came from school.'
  - b- AHMED-U jaa?-a min l-madrasat-i.
    Ahmed-nom came-3m from the-school-gen
    'It is Ahmed who came from school.'

The difference between (54a) and (54b) is pragmatic. While (54a) is an informative sentence telling a fact about 'Ahmed' that 'he came from school', sentence (54b) is focusing on the person who performed the action rather than the action itself. Therefore, the relation between (53a, b) is different from the relation between (54a,b).

The pragmatic difference is little if it even exists between (53a, b), which indicates that they show variation in word order, with (53a) being more preferred. The difference in the pragmatic function between (54a, b) exists, which means that they do not show variation in word order (not for syntax reasons). That is, we cannot say that (54a) is more preferred than (54b) and visa versa, since each has a different pragmatic function.

To summarize, I argue that the strength of the of the nominal and verbal features on the functional heads decide the word order in Standard Arabic and the other Arabic dialects. In Standard Arabic two functional heads are involved: Agr<sub>S</sub> and T. Here I assume the sets of inflectional parameters proposed by Bolotin (1995). Note that these inflectional parameters assume the first two values of strength (52a, b). The movement of the subject to the Spec of Agr<sub>S</sub>P is triggered by the strength of the nominal features on Agr<sub>S</sub>. The verb, however, always moves overtly to T. The four sets of inflectional parameters are repeated in (55) for convenience:

55.	VSO order	SVO order
V features of T	strong	strong
V features of Agr	weak	strong
N features of T	weak	weak
N features of Agr	weak	strong

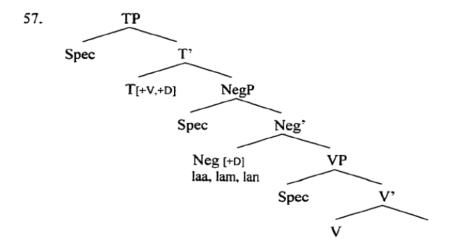
Since the factor of full agreement on the verb does not affect the word order in the non-Standard Arabic dialects (see example (30)), I argue that the nominal and verbal features of Agr<sub>S</sub> should no longer be part of any sets of inflectional parameters suggested for the non-Standard Arabic dialects, an issue that I will discuss in detail when I discuss those dialects. Briefly, I will argue that the third value of strength (52c) can be utilized to account for the optionality in word order that exists in the non-Standard Arabic dialects (e.g., (53) above). Therefore, I suggest that the three values of strength have the following interpretations:

- 56. a-[+strong] features: must be checked before Spell-out.
  - b-[+weak] features: must be checked after Spell-out (at LF).
  - c- [-strong, -weak] features: can be checked before or after Spell-out.

In the discussion of the remaining sections, I show that variation in the use of different negative markers in the various Arabic dialects can be explained along the ideas discussed so far. I will also show that the nature of these negative markers reflects the variation in their use. Sentential negation in Standard Arabic is discussed in the following subsections.

#### 3.3.2.3.1 laa, lam, and lan

I follow Benmamoun in his justification for the adjacency between the negative marker and the verb. Therefore, I assume that Neg has a [+D] feature, which allows the predicate to merge with it. I also assume that these negative markers occupy the head of NegP. In Standard Arabic, the negative markers 'laa', 'lam', and 'lan' carry the temporal features [+present], [+past], and [+future], respectively:

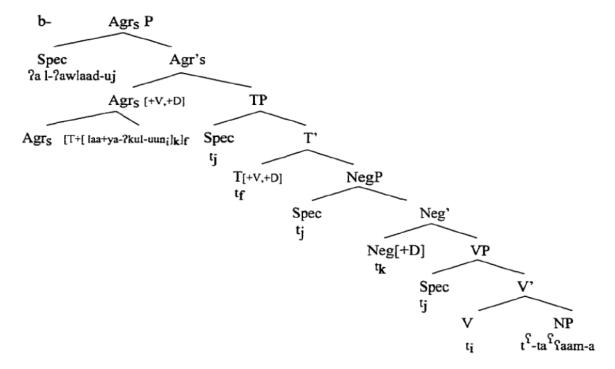


The motivation for the verb to raise is not the [+D] feature of Neg, but the strong verbal feature of T. The verb is attracted by the strong verbal features of T that need to be checked before Spell-out. The verb either raises over Neg violating the HMC (58a), or merges with Neg and the complex head moves to T to have its [+V] features checked (58b):

- 58. \*a- ya-ðhab lam Ahmed-u ?la l-madrasat-i.
  3m-go neg-past Ahmed-nom to the-school-gen
  'Ahmed did not go to school.'
  - b- lam ya-ðhab Ahmed-u ?la l-madrasat-i. neg-past 3m-go Ahmed-nom to the-school-gen 'Ahmed did not to school.'

Note that this derivation accounts for the merger between the verb and negative marker, as it also accounts for the basic word order in Standard Arabic. The derivation of the obligatory SVO word order will be accounted for on the same ground:

59. a- ?a l-?awlaad-u laa ya-?kul-uun t<sup>2</sup>-t<sup>2</sup>a αam-a. the-boys-nom neg 3m-eat-p the-food-acc 'The boys are not eating the food.'



The nominal and verbal features of Agr<sub>S</sub> are strong (as discussed earlier), which motivates the subject and the verb to raise to the Spec and head of Agr<sub>S</sub>P to check the strong features of Agr<sub>S</sub>. On its way to T and Agr<sub>S</sub>, the verb merges with the negative marker and the complex head [Neg+V] raises to T to check its verbal features. The complex head [T+[Neg+V]] then raises to Agr<sub>S</sub> to have its strong verbal features checked. The subject moves to the Spec of NegP and then to the Spec of TP on its way to the Spec of Agr<sub>S</sub>P to have its strong nominal features checked.

#### 3.3.2.3.2 maa:

'maa' has been described as a neutral negator, mainly because it is not associated with a particular tense. It is different from 'laa', 'lam', and 'lan' in that it can be used in constituent negation in present, past and future tenses:

- 60. a- maa Maher-un qaal-a l-haqq-a.
  not Maher-nom said-3m the-truth-acc
  'No Maher said the truth.'
  - b- maa Maher-un ya-quulu l-ħaqq-a. not Maher-nom 3m-say the-truth-acc 'No Maher says the truth.'
  - c- maa Maher-un sa-ya-quulu l-ħaqq-a. not Maher-nom will-3m-say the-truth-acc 'No Maher will say the truth.'

Note that although 'laa' can be used in constituent negation, its use is limited to the present tense only:

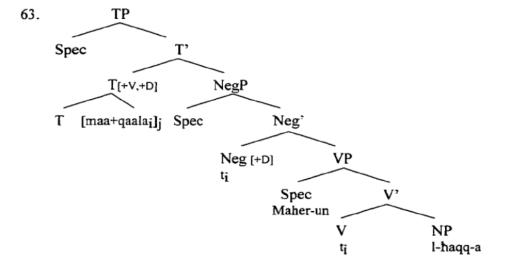
- 61. a- laa Maher-un ya-quulu l-haqq-a. not Maher-nom 3m-say the-truth-acc 'No Maher says the truth.'
  - \*b- laa Maher-un qaal-a l-haqq-a. not Maher-nom said-3m the-truth 'No Maher said the truth.'
  - \*c- laa Maher-un sa-ya-quulu l-ħaqq-a. not Maher-nom will-3m-say the-truth-acc 'No Maher will say the truth.'

The ungrammaticality of (61b, c) indicates that 'laa' has temporal interpretation. The grammaticality of the sentences in (60), however, indicates that 'maa' does not have temporal interpretation. When 'maa' is used in sentential negation, it must be adjacent to the verb as the examples in (62) show (repeated here for convenience):

- 62. a- maa ?u-sall-ii. not ls-pray-I 'I do not pary.'
  - b- maa qaal-a Maher-un l-haqq-a. not said-3m Maher-nom the-truth-acc 'Maher did not say the truth.'

Benmamoun (p.108) treats the sentences in (60) and (62) as cases of sentential negation, although he admits that sentences like the ones in (60) might be cases of constituent negation. If we compare the meanings of the sentences in (60) to their English counterparts, it becomes obvious to us that the use of 'maa' in these sentences is exactly the same as the use of 'no' in the English sentences. Moreover, the difference in the interpretation between the sentences in (60) and (62) indicates that 'maa' is not the same negative marker. The significant difference in the meaning of sentences (60a) and (62b) is a piece of evidence against treating 'maa' in (60) as a sentential negator. That is, the difference between the use of 'maa' in (60) and (62) is the same as the difference between 'no' and 'not', which means that only the sentences in (62) should be treated as cases of sentential negation.

I argue here that 'maa' (as a sentential negative marker) should be generated in the same position as 'laa', 'lam', and 'lan', i.e., under the head of NegP. Therefore, sentence (62b), for example, has the following derivation:



## 3.3.3 Sentential negation in Moroccan Arabic

Moroccan Arabic is different from Standard Arabic in that it has only one negative marker, 'ma-š'. This discontinuous negative marker is used in the present, past, and future tenses (example (64c) is taken from Benmamoun (2000: 89))<sup>8</sup>:

- 64. a- Maher ma-y-hib- š t-tiffah.

  Maher neg-3m-like-neg the-apples
  'Maher does not like apples.'
  - b- Maher ma-kəl-š. Maher neg-ate-neg 'Maher did not eat.'
  - c- ma-yadi- š n-safər. neg-going-neg l-travel 'I am not going to travel.'

The examples above show that 'ma-š' does not indicate tense, since it can be used in the present tense (64a), past tense (64b), and future tense (64c). Benmamoun argues that this negative marker occupies the head of NegP. The only problem that Benmamoun's analysis faces here is the possible word orders in the present and past tenses. As we mentioned before, Benmamoun argues that VSO order is less preferred in the present tense, while SVO is less preferred for the past tense. He presents an example of past tense orders in the following sentences (p.65):

65. a- ma-qra- š Omar lə-ktab. neg-read-3ms-neg Omar the book 'Omar did not read the book.'

<sup>&</sup>lt;sup>8</sup>Historically, Youssi (1992) and Caubet (1993) argue that the proclitic 's' evolved from the word 'say?' which means a 'thing' (cited in Benmamoun (2000: 161)). In previous studies, '-s' is analyzed as part of the negative marker, i.e., 'ma-s' is described as a case of 'discontinuous' negation. R. Bahloul (1996), for example, describes 'ma-s' as a case of discontinuous negation by comparing it to 'ne pas' in French. The following is an example from French:

i) Jean ne parle pas Anglais. Jean Neg speaks Neg English 'Jean does not speak English'

b- Omar ma-qra- š lə-ktab. Omar neg-read-3ms-neg the book

The derivation of (65a) is as follows. The verb moves to Neg on its way to T to have its [+V] feature checked. It merges with Neg and the agreement on the verb checks the [+D] feature of Neg. The complex head [Neg+V] moves to T and checks its [+V] features. Since the verb is a potential checker for the [+D] feature of T, it checks it. The subject is not attracted to move to T since T's [+D] feature has been checked by the verb. This yields the VSO order which Benmamoun describes as 'preferred'. The opposite word order (SVO) can be achieved by the subject raising and checking the [+D] feature of T. In the present tense, the verb is not attracted by T since it is not specified for the [+V] feature. However, it moves to Neg and merges with 'ma-š' since it is a potential checker of its [+D] feature. The subject raises to the Spec of TP to check the [+D] feature of T. This yields to the preferred SVO word order in the present tense.

The problems we face here are related to the less preferred word orders. In the SVO past tense sentences, it is not clear why the subject has to move to the Spec of TP if the verb, which is a potential checker for the [+D] feature of T, has already merged with T and can easily check its nominal features. We face the same problem when we want to derive the VSO word order in the present tense: why does the verb have to raise to T to check its [+D] feature if we already have the subject which is presumably the primary checker for the [+D] feature of T? Remember also that the

[+D] feature determines the interaction between T and the subject. It is more logical for the subject to move to the Spec of TP and check the nominal features of T.

I agree with Benmamoun that the VSO order is less preferred in the present tense, and the SVO order is less preferred in the past tense. It becomes obvious that, along these assumptions, it is the tense that determines the preference and the degree of acceptability of the word order. To account for the Moroccan Arabic data, we need to deal with the optionality of word order. As discussed earlier, the third value of strength (52c, 56c) can be utilized to account for the optionality in word order. Therefore, I propose that the following set of inflectional of parameters accounts for word order in Moroccan Arabic:

66.	Present Tense	Past Tense	
V features of T	[+strong]	[+strong]	
N features of T	[-strong, -weak]	[-strong, -weak]	

According to the parameters in (66), the verb always moves in the overt syntax (before Spell-out) in Moroccan Arabic. Subject movement, however, is not obligatory. The nominal features of T in both tenses are not strong enough to force the movement of the subject or weak enough to prevent it. That is, the nominal features of T can be checked either before or after Spell-out.

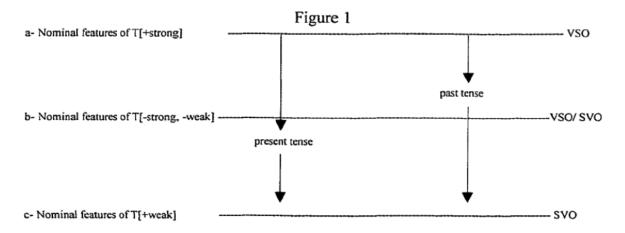
However, although subject movement is optional, it is preferred in the present tense but not in the past tense. Consider the following examples:

- 67. a- wsəl Maher l-bariħ. arrived Maher yesterday 'Maher arrived yesterday.'
  - b- Maher wsəl l-bariħ. Maher arrived yesterday

- c- t-yə-l?ab-u d-drari barrah. asp-3m-play-p the-boys outside 'The boys are playing outside.'
- d-d-drari t-yə-l\(\sigma\)barrah. the-boys asp-3m-play-p outside

The four sentences in (67) are used in Moroccan Arabic with varying degrees of preference. Sentences (67a, d) are more preferred than (67b, c). Although the parameters in (66) successfully generate sentences (67a-d), it does not account for the preference in word order.

If we accept the assumption that the modern Arabic dialects have evolved from older forms of dialects that were similar to Standard Arabic, we would be assuming that the word orders in those dialects were the same as those of Standard Arabic. That is, we can assume that the optional word orders of modern Arabic dialects were basically one order, namely VSO. Assuming that we are on the right track, we can argue that the change that has been taking place is working in two directions that are related to tense. For some reason the change seems to be slower in the past tense as shown in figure 1 below:



From a theoretical point of view, it is hard for us to assign two more values of strength to capture the degrees of preference in word order in the present and past tenses. The best solution a syntactic theory can adopt is to propose an intermediate value of strength (b). By proposing this value of strength, we justify the optionality in word order, which is indeed captured by the parameters in (66). Concerning the degree of preference, I would like to argue that although the proposed value of strength ([-strong, -weak]) indicates the optionality, it does not force equal optionality. That is, other factors, syntactic or non-syntactic, might affect this optionality in a way that results in preference. One piece of evidence comes from an example cited in chapter two (repeated here for convenience):

68. a- Ahmed d<sup>5</sup>arab Maher. Ahmed hit Maher 'Ahmed hit Maher.'

?b- d<sup>s</sup>arab Ahmed Maher. hit Ahmed Maher

Although (68a) is expected to be preferred to (68b), speakers of Jordanian Arabic<sup>9</sup> tend to avoid using (68b) for reasons that are related to ambiguity. Since the subject and the object are not semantically identified, the speakers feel more comfortable to separating the subject from the object by placing the subject before the verb (an option that is available for them).

With respect to the verb, evidence for its obligatory movement is provided from sentential negation:

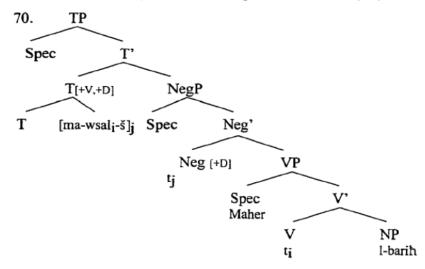
<sup>&</sup>lt;sup>9</sup>These sentences were judged by five speakers of Jordanian Arabic, including me. Similar sentences from Moroccan Arabic, Egyptian Arabic, Syrian Arabic and Saudi Arabic were judged by speakers of those dialects, who preferred the SVO to the VSO word order.

- 69. a- ma-wsəl-š Maher l-barih.
  neg-arrived-neg Maher yesterday
  'Maher did not arrive yesterday.'
  - b- Maher ma-wsəl-š l-bariħ.

    Maher neg-arrived-neg yesterday
  - c- ma-t-yə-l\cap lab-u -\cdot d-drari barrah.

    neg-asp-3m-play-p-neg the-boys outside
    'The boys are not playing outside.'
  - d-d-drari ma-t-yə-lγab-u -š barrah. the-boys neg-asp-3m-play-p-neg outside

The derivation of (69a), for example, is shown in (70):



The verb has to move to T to check its strong verbal features. It first raises to Neg and merges with the complex head 'ma-š', checks its [+D] feature, and the complex head '[Neg+V]' moves to T to check its verbal features. In (69b) the subject is motivated to raise to the Spec of TP to check the 'fairly' strong nominal features of T. The Spec of NegP is empty, which enables the subject to move to it first on its way to the Spec of TP. Since the movement of the subject is not obligatory, though preferred, the subject may remain *in situ* and move later at LF to check the nominal features of T. This results in (69c).

The ungrammaticality of sentences (71a, c) below can be explained by the fact that the merger between Neg and the verb is obligatory in Moroccan Arabic. Sentences like (71b, d) will be ruled out since the HMC is violated, which proves the obligatory overt movement of the verb in the syntax:

```
71. *a- ma-š
             wsəl Maher l-barih.
              arrived Maher yesterday
      neg
                      ma-š l-bariħ.
    *b- Maher wsəl
     Maher arrived neg
                             yesterday
               t-yə-l\ab-u d-drari barrah.
    *c- ma-š
              asp-3m-play-p the-boys outside
      neg
               t-yə-l\ab-u
    *d- d-drari
                             ma-š
                                    barrah.
      the-boys asp-3m-play-p neg
                                    outside
```

The last set of data shows that the merger between the negative marker and the verb is also obligatory in the future tense:

```
72. a- γadii n-safər. (Benmamoun: 87-88) going 1-travel
'I am going to travel.'
b- ma-γadii-š n-safər. neg-going-neg 1-travel
'I am not going to travel'
*c- ma-ši γadii n-safər. neg-going-neg 1-travel
```

Interestingly, this merger is not allowed in Egyptian Arabic or Jordanian Arabic. This issue will be dealt with in the next section.

# 3.3.4 Sentential negation in Egyptian Arabic

Egyptian Arabic is similar to Moroccan Arabic in that it utilizes 'ma-s' as the only negative marker. With respect to word order, data from Egyptian Arabic show

that it is the same as in Moroccan Arabic. That is, VSO is less preferred in the present and future tenses, while SVO is less preferred in the past tense:

- 73. a- saafir Samih lə-amriika. traveled Samih to-America 'Samih traveled to the United States.'
  - b- Samih saafir l-amriika. Samih traveled to-America
  - c- bə-y-saafir Samih l-amriika kulli sanah. asp-3m-travel Samih to-America every year 'Samih travels to the United States every year.'
  - d- Samih bəy-saafir l-amriika kulli sanah. Samih asp-3m-travel to-America every year
  - e- ha-y-saafir Samih l-amriika. will-3m-travel Samih to-America 'Samih will travel to the United States.'
  - f- Samih ha-y-saafir l-amriika. Samih will-3m-travel to-America

Sentences (73a, d, f) are more preferred than (73b, c, e). Depending on such data, it would be reasonable to argue that with respect to word order, Egyptian Arabic has the same set of parameters as Moroccan Arabic. However, let us first have a look at sentential negation in Egyptian Arabic:

- 74. a- ma-safir-š Samih li-amriika.
  neg-traveled-neg Samih to-America
  'Samih did not travel to the United States.'
  - b- Samih ma-safir-š li-amriika. Samih neg-traveled-neg to-America
  - c- ma-bəy-safir-š Samih li-amriika kulli sanah. neg-asp-3m-travel-neg Samih to-America every year 'Samih does not travel to the United States every year.'
  - d- Samih ma-bəy-safir-š li-amriika kulli sanah. Samih neg-asp-3m-travel-neg to-America every year

The sentences in (74) are derived the same way as their Moroccan Arabic counterparts. The merger between the verb and the negative marker results from the verb raising to Neg then to T. However, the examples in (75) show that Egyptian Arabic is not exactly the same as Moroccan Arabic, i.e., Egyptian Arabic shows more variation:

- 75. a- Samih ma-bə-y-safir-š li-amriika kulli sanah.
  Samih neg-asp-3m-travel-neg to-America every year
  - b- Samih miš bə-y-saafir li-amriika kulli sanah. Samih neg-neg asp-3m-travel to-America every year
  - \*c- Samih miš saafir li-amriika. Samih neg traveled to-America

Benmamoun argues that the ungrammaticality of sentences like (75c) results from the fact that the verb fails to move to T to check its [+V] feature. The verb, on the other hand, is not required to move to T in the present tense, since T is specified for the feature [+D] only, which in fact can be checked by the subject. This is, he argues, why sentences like (75b) are possible (assuming that the verb does not move to Neg to merge with the negative marker). Note that Benmamoun assumes that 'ma-š' and 'maši' are one negative marker. When the verb moves to Neg, it merges with 'ma-š', where 'ma-' cliticizes to the beginning and '-š' to the end of the verb. If the verb does not move to Neg 'ma-š' is realized as 'maši'. According this analysis, the verb does not move in (75b,c). A sentence like (75c) is not allowed because the [+V] feature of T is not checked.

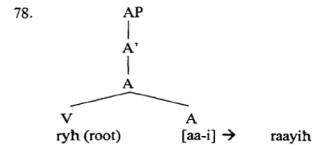
To deal with this variation, I argue that 'ma-s' and 'mis' are two different heads that have different properties. Let us first have a look at the last set of data that shows

another difference between Moroccan Arabic and Egyptian Arabic. The examples below show that Egyptian Arabic differs from Moroccan Arabic with respect to negating sentences in the future tense:

- 76. \*a- Samih ma-ħa-y-saafir-š li-amriika. Samih neg-will-3m-travel-neg to-America
  - b- Samih miš ħa-y-saafir li-amriika. Samih neg will-asp-3m-travel to-America
- Ali miš naayim.
   Ali not sleeping
   'Ali is not asleep.'

Benmamoun follows Eisele (1988) in his argument that the Egyptian 'motion predicate' 'raayih' (or 'raah'), from which the clitic 'ha-' is derived, patterns with 'active participles' (e.g., 'naayim' in (77) above) in that it cannot merge with negative markers.

In fact, if we study the nature of Neg and what kind of elements can merge with it, a logical justification for the ungrammaticality of (76a) follows. The nature of the participles in Arabic explains why 'ha-' (a reduced form of the participle 'raayih') cannot merge with Neg. Fassi Fehri (1993: 189) argues that participles are adjectival in nature. The participle 'raayih' would have the following representation:



One important point we need to mention is that the discontinuous head 'ma-s' can merge with adjectives in Moroccan Arabic (to be discussed in Chapter 4):

79. a- Maher mrid<sup>§</sup>.

Maher sick

'Maher is sick.'
b- Maher maši mrid<sup>§</sup>.

Maher neg sick

c- Maher ma-mrid<sup>§</sup>-š.

Egyptian Arabic, on the contrary, does not allow merger between 'ma-š' and adjectives:

- a- Maher miriid<sup>c</sup>.
   Maher sick
   'Maher is sick.'
   b- Maher miš miriid<sup>c</sup>.
  - Maher neg sick
  - \*c- Maher ma-miriid<sup>§</sup>-š. Maher neg-sick-neg

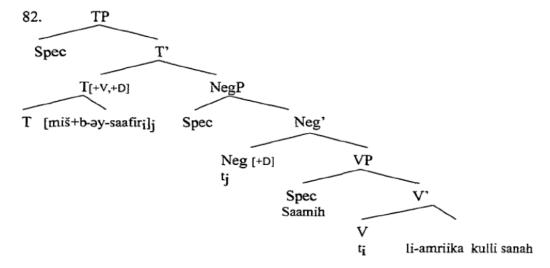
Knowing that 'ħa-' is a reduced form of a participle, we can now justify why the verb with 'ħa-' as a prefix cannot merge with Neg in Egyptian Arabic. Moroccan Arabic, on the other hand, allows merger between 'ma-š' and adjectives. Since 'γadii' is participial in nature, merger with 'ma-š' is allowed (72b).

Now we go back to the important point, which is whether Egyptian Arabic has the same set of parameters as in Moroccan Arabic. To address this issue, we need to decide whether 'ma-š' and 'miš' are one negative marker with two phonological realizations, or whether they are two negative markers. Note that it is logical to think that if we assume that they are one negative marker (as Benmamoun does), we would

be assuming that 'ma-š' occurs when merger takes place and 'miš' occurs when merger does not take place. I would like to argue that they are two different negative markers and that they both merge with the verb. Consider the following sentences:

- 81. a- Samih ma-b-əy-safir-s li-amriika kulli sanah.
  Samih neg-asp-3m-travel-neg to-America every year
  - ?b- miš b-əy-saafir Samih li-amriika kulli sanah. neg asp-3m-travel Samih to-America every year
  - c- Samih miš ħa-y-saafir li-amriika. Samih neg will-asp-3m-travel to-America
  - ?d- miš ħa-y-saafir Samih li-amriika. neg will-asp-3m-travel Samih to-America

Sentences (81b, d), although less preferred, are possible in Egyptian Arabic. A sentence like (81b) can be derived only by raising the verb to Neg on its way to T:



As is schematized in (82), the verb raises to Neg and the complex head raises to T. If this is correct, we can argue that the verb is still required to move to T in Egyptian Arabic. Therefore, we can safely suggest that Egyptian Arabic has the same set of parameters as Moroccan Arabic.

## 3.3.5 Sentential negation in Jordanian Arabic

Jordanian Arabic has three negative markers that are used in verbal sentences, 'maa' 'ma-š', and 'miš'. Both 'maa' and 'ma-š' have no temporal interpretation. 'maa' can be used in the past, present and future tenses, while 'ma-š' can be used in the past and present tenses. 'miš', however, can be used in the future tense only. With respect to word order, Jordanian Arabic has the same word orders as in Moroccan Arabic and Egyptian Arabic. Consider the following sentences:

- 83. a- saafər Ahmed la-ameerka. traveled Ahmed to-America. 'Ahmed traveled to the United States.'
  - b- Ahmed safeər la-ameerka. Ahmed traveled to-America
  - c-bə-y-saafər Ahmed la-ameerka kul sanah. asp-3m-travel Ahmed to-America every year 'Ahmed travels to the United States every year.'
  - d- Ahmed bəy-saafər la-ameeriika kul sanah Ahmed asp-3m-travel to-America every year
  - e- raah Ahmed y-saafər la-ameerka. will Ahmed 3m-travel to-America 'Ahmed will travel to the United States.'
  - f- Ahmed raah y-saafər la-ameerka. Ahmed will 3m-travel to-America

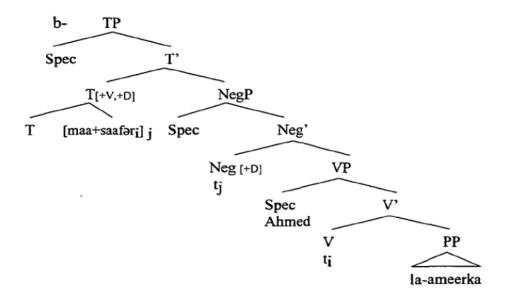
As is the case in Moroccan Arabic and Egyptian Arabic, the preferred word order is VSO in the past tense and SVO in the present and future tenses. With respect to sentential negation, Jordanian Arabic is different in that it utilizes three negative markers. 'maa' and 'ma-š' are used in the present and past tenses:

- 84. a- ma-saafər-š Ahmed la-ameerka.
  neg-traveled-neg Ahmed to-America
  'Ahmed did not travel to the United States.'
  - b- maa saafər Ahmed la-ameerka. neg traveled Ahmed to-America
  - c- Ahmed ma-b-əy-saafər-š la-ameerka kul sanah. Ahmed neg-asp-3m-travel-neg to-America every year 'Ahmed travels to the United States every year.'
  - d- Ahmed maa b-əy-saafər la-ameerka kul sanah. Ahmed neg asp-3m-travel to-America every year

It is important to notice that 'maa' is not a variant of 'ma-š'. Evidence can be provided from Syrian Arabic where we can find 'maa', but not 'ma-š' as we will see in the next section. Since 'maa' and 'ma-š' are seen as two separate morphemes, are they different in terms of their syntactic function? I argue here that 'maa' and 'ma-š' serve the same function in Jordanian Arabic. One piece of evidence can be provided from (84) above. Sentences (84a,b), for example, show that the only difference between 'maa' and 'ma-š' is that 'maa' is a free morpheme and 'ma-š' is a bound morpheme.

These sentences provide evidence against generating 'maa' in the Spec of NegP. Since 'maa' functions and behaves exactly like 'ma-š', we would like to see them occupying the same position, the head of NegP. The adjacency between 'maa' and the verb shows that 'maa', like 'laa', 'lam', and 'lan' must merge with the verb as shown in (85) below:

85. a- maa saafər Ahmed la-ameerka.



The only restriction on the use of 'ma-š' as a negative marker is the fact that it cannot be used in the future tense. Consider the following sentences:

- 86. a- Ahmed maa raah y-saafər la-ameerka. Ahmed neg will 3m-travel to-America 'Ahmed will not travel to the United States.'
  - b- maa raah Ahmed y-saafər la-ameerka. neg will Ahmed 3m-travel to-America
  - \*c- Ahmed ma- raaħ-š y-saafər la-ameerka. Ahmed neg-will-neg 3m-travel to-America
  - d- Ahmed miš raah y-saafər la-ameerka. Ahmed neg will 3m-travel to-America
  - e- miš raaħ Ahmed y-saafər la-ameerka.
    neg will Ahmed 3m-travel to-America

The case of the future participle in Jordanian Arabic is the same as in Egyptian Arabic. The discontinuous negative marker must merge with an item that can check its [+D] feature. Jordanian Arabic does not allow merger between 'ma-š' and adjectives, which explains the ungrammaticality of (86c). Remember that we have argued that those participles are adjectival in nature.

Similar to Moroccan Arabic and Egyptian Arabic, Jordanian Arabic requires the overt movement of the verb. The examples discussed in this section prove that the verb moves overtly to T in Jordanian Arabic. Therefore, I propose the same set of inflectional parameters for Jordanian Arabic.

### 3.3.6 Sentential negation in Syrian Arabic

Syrian Arabic is different from Jordanian Arabic in that it utilizes one negative marker, which is 'maa'. It is used in the present, past, and future tenses:

- 87. a- maa daras Ahmed. neg studied Ahmed 'Ahmed did not study.'
  - b- Ahmed maa b-yi-dros kil yoom. Ahmed neg asp-study every day.'
  - c- Ahmed maa raah yi-dros. Ahmed neg will study. 'Ahmed will not study.'

As is the case in the other Arabic dialects discussed in this study, 'maa' has to be adjacent to the verb. That is, the verb merges with 'maa' in Syrian Arabic, too:

- 88. \*a- maa Ahmed daras. neg Ahmed studied 'Ahmed did not study.'
  - \*b- maa Ahmed b-yi-dros kil yoom. maa Ahmed asp-3m-study every day 'Ahmed does not study every day.'
  - \*c- maa Ahmed raah yi-dros. neg Ahmed will 3m-study 'Ahmed will not study

The ungrammaticality of the sentences in (88) results from the fact that the verb fails to raise to Neg to merge with 'maa'.

In sum, the derivation of a sentence like (87a) is as follows. The verb moves overtly to T to have its [+V] feature checked. Since Neg is specified for the [+D] feature, the verb merges with 'maa' and checks its [+D] feature. The complex head of [maa+V] raises to T to have its [+V] feature checked. The subject remains *in situ*. With respect to word order, Syrian Arabic shows variation in word order in the three tenses:

- 89. a- Ahmed štaraa ktaab. Ahmed bought book 'Ahmed bought a book.'
  - b- štaraa Ahmed ktaab. bought Ahemd book
  - c- Ahmed bi-y-naam bakkiir. Ahmed asp-3m-sleep early 'Ahmed sleeps early.'
  - d- bi-y-naam Ahmed bakkiir. asp-3m-sleep Ahmed early
  - e- Ahmed raah y-saafir bukraa.

    Ahmed will 3m-travel tomorrow
  - f-raah Ahmed y-saafir bukraa. will Ahmed 3m-travel tomorrow

Similar to Moroccan Arabic, Egyptian Arabic, and Jordanian Arabic, sentences (89a, c, e) are more preferred than (89b, d, f) in Syrian Arabic. In other words, SVO is less preferred in the past tense, while VSO is less preferred in the present and future tenses. Consequently, the same set of inflectional parameters that has been suggested for the above mentioned non-Standard Arabic dialects can also be suggested for Syrian Arabic. In fact, the data from Saudi Arabic show that the same set of parameters would account for the variation that exists in the dialect.

### 3.3.7 Sentential negation in Saudi Arabic

Saudi Arabic is similar to Syrian Arabic in that it has only one negative marker, 'maa':

- 90. a- maa garaa Ahmed. Neg studied Ahmed 'Ahmed did not study.'
  - b- Ahmed maa b-yi- garaa kil yoom. Ahmed neg asp-3m-study every day 'Ahmed does not study every day.'
  - c- Ahmed maa raah yi-garaa.
    Ahmed neg will 3m-study.
    'Ahmed will not study.'

Since 'maa' has no temporal interpretation, it can be used in the present tense (90a), past tense (90b), and future tense (90c). As is the case in the previously discussed Arabic dialects, 'maa' must be adjacent to the verb in Saudi Arabic. Therefore, sentences like the ones in (91) are ruled out since the verb fails to move to Neg to merge with 'maa':

- 91. \*a- maa Ahmed garaa. neg studied Ahmed 'Ahmed did not study.'
  - \*b- maa Ahmed b-yi-garaa kil yoom. neg Ahmed asp-3m-study every day 'Ahmed does not study every day.'
  - \*c- maa Ahmed raaħ yi-garaa. neg Ahmed will 3m-study. 'Ahmed will not study.'

Concerning word order, Saudi Arabic shows variation in word order. VSO and SVO orders are used in the present, past and future tenses:

- 92. a- garaa Ahmed lə-ktaab. read Ahmed the-book 'Ahmed read the book.'
  - b- Ahmed garaa lə-ktaab. Ahmed read the-book
  - c- Ahmed b-yi- garaa ktaab kil yoom. Ahmed asp3m-read book every day 'Ahmed reads a book every day.'
  - d- b-yi- garaa Ahmed ktaab kil yoom. asp-3m-read Ahmed book every day
  - e- Ahmed raah yi-garaa kil lə-ktaab. Ahmed will 3m-read all the-book 'Ahmed will read the whole book.'
  - f- raah Ahmed yi-garaa kil lə-ktaab. will Ahmed 3m-read all the-book

Sentences (92a, c, e) are more preferred than sentences (92b, d, f) as is the case in the other non-Standard Arabic dialects discussed in this study. Depending on these observations, we can safely argue that Saudi Arabic has the same set of parameters as Moroccan Arabic, Egyptian Arabic, Jordanian Arabic, and Syrian Arabic. That is the verb has to move overtly to T to check its [+V] feature since it is [+strong]. The subject may remain *in situ*, which is preferred in the past tense and less preferred in the present and future tenses.

### 3.4 Summary

In this chapter, I have presented an analysis for sentential negation in Arabic. This analysis, which is within the framework of the Minimalist Program, assumes that the movement of the subject and the verb is motivated by the strength of the features the functional heads carry (mainly Agrs, T, and Neg). In English, the verbal features

of T and Agr<sub>S</sub> are weak, and so the verb moves to those heads to check their verbal features after Spell-out. However, The nominal features of T and Agr<sub>S</sub> are strong, which forces the subject to move to the Spec of TP and Agr<sub>S</sub>P before Spell-out. Light verbs (auxiliary verbs and verbs that do not assign theta roles) move before Spell-out (Chomsky (1995)). In sentential negation, the auxiliary verb moves over 'not' violating the HMC, which is inoperative since it does not induce the ECP.

The movement of the verb and the subject in Arabic can be accounted for through the same analysis applied to English. Following Bolotin (1995), I have argued that the VSO and SVO word orders can be accounted for by proposing sets of inflectional parameters that rely on the strength of the verbal and nominal features of Agr<sub>S</sub> and T. To account for the optionality in word order in the non-Standard Arabic dialects, I have proposed a third value of strength, [-strong, -weak]. I have also shown that the strength of the Agr<sub>S</sub> features play no role in the word order in the non-Standard dialects. Therefore, it is the strength of the verbal and nominal features of T that decide the word order of the sentence. The verb always moves to T since the verbal features are strong, whereas the nominal features of T are not strong or weak enough to force or delay the movement of the subject.

The data presented in this chapter support Benmamoun's suggestion that Neg is specified for a [+D] feature. However, although Benamamoun argues that this feature can be checked by the verb or the subject in verbal sentences, I have argued that this feature must be checked by the merger between the verb and the negative

marker. The behavior of the negative markers in verbless sentences will be discussed in the next chapter.

### Chapter Four Sentential Negation in Verbless and Copular Sentences

The purpose of this chapter is two-fold. First, I discuss the status of copular and verbless sentences in English and Arabic. A review of recent analyses of the copular structure in English and Arabic will be presented and discussed. Second, I apply the analysis I proposed in chapter three for sentential negation in English and Arabic.

### 4.1 Sentential negation in English copular sentences

### 4.1.1 The status of be in English

One important question that is related to the function of 'be' in copular sentences is whether it has thematic roles to discharge. Rothstein (1987: 225) argues that 'be' can be classified into three different types with respect to its ability to assign theta roles:

- a- Predicational: assigns one theta role.
  - b- Identificational or equative: assigns two theta roles.
  - c- Existential: assigns none.

The following are examples of the three types:

- a- Mary is a genius/ intelligent.
  - b- Mary is Mrs. Smith.
  - c- There are three cows in the garden.

'Be of predication' can be followed by an NP that is 'understood as a predicate expressing a property' of the referent of the subject (2a). It can also be followed by an adjective. 'Equative be' is followed by an NP that has the same (identical) referent as

the subject of the sentence (2b). Finally, sentence (2c) is an example of 'existential be'.

Since only arguments are theta-marked, we can assume that the NPs in (2b, c) are arguments. Moreover, since the subject of (2a) is referential, it is also considered as an argument (Chomsky (1981)). Depending on these ideas, Rothstein (1987)<sup>1</sup> maintains that the NPs in (2), except 'a genius', are arguments that are theta-marked. If we accept her assumption about the classification of 'be', we can argue that the verb assigns the theta roles in (2b, c). However, the verb cannot assign any theta roles in (2a) (predicational 'be'). She argues that the NP/AP following the 'be' in (2a) functions as a predicate<sup>2</sup> that assigns the subject a theta role. According to these assumptions, Rothstein argues that the subject position is a theta-marked position that can only be filled with an argument. A sentence like (3) below is excluded because the subject position is occupied by a non-argument NP:

### \*A genius is Mary.

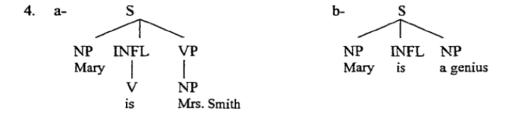
She proposes the derivation in (4a) for structures with identificational 'be' and the one in (4b) for the structures with predicational 'be':

<sup>&</sup>lt;sup>1</sup>Her main idea is that identificational and existential 'be' is a 'true' verb that can assign theta roles. She presents several arguments to prove that 'be' is a true verb. For example, 'be' is not a true verb in (i), and so it can be deleted. However, 'be' cannot be deleted in (ii) since it is a true verb (p.234):

i) I believe John (to be) a fool. (predicational)

ii) I believe there \*(to be) three cows in the garden.

<sup>&</sup>lt;sup>2</sup>According to Rothstein's (1983) Predication Condition, any maximal projection that is not assigned a theta role (and presumably not an argument) is treated in the syntax as a predicate. According to Williams (1980, 1982), a non-verbal predicate can also assign its subject a theta role.



In (4a), 'is' is a true verb that assigns a theta role to its internal argument directly and to its external argument via the VP. In (4b), the only argument in the sentence is the subject, which is assigned a theta role by the predicate 'a genius'.

In sum, Rothstein (1987) divides copular sentences into three types according to the ability of 'be' in assigning theta roles. The first type is 'equative' or 'equational' sentences which have two arguments that are assigned theta roles by 'be'. The second type is 'predicative' sentences, which have one argument that is assigned a theta role by the predicate ('be' lacks the ability to assign any theta roles). The third type includes the structures with existential 'be'. Sentences with existential 'be' contain one argument that is assigned a theta role by 'be' which is treated as a true verb in these sentences.

Most recent studies disagree with Rothstein that 'be' can assign theta roles (Moro (1991) and Heycock, (1992, 1995), among others). Moro (1991), for example, argues that 'be' is the same verb in sentences like the ones in (1), and this verb does

<sup>&</sup>lt;sup>3</sup>For the purpose of the present study, I will no longer focus on this type, which is expressed by a different verb in Arabic:

<sup>(</sup>i) There are three women in the room.

<sup>(</sup>ii) yu-wjad θalaaθ nisaa? fi l-yurfah. 3m-exist three women in the-room.' There are three women in the room.'

not assign any theta roles. He argues that the subject position can be occupied by a non-argument NP (p.124):

- 5. a- The cause of the riot was a picture of the wall.
  - b- A picture of the wall was the cause of the riot.

In (5b) the NP preceding the verb is occupying the subject position although it is not an argument. He argues that in any copular sentence, we have one argument only. He proposes the generalization in (6) (p.125):

6. The copula is followed by a referential NP only if it is preceded by a predicative NP.

He maintains 'the two NPs which occur with the copula cannot be simultaneously argumental, i.e., referential, but one of the two must be the argument which saturates the function denoted by the other'. That is, we have two options concerning copular sentences<sup>4</sup> (pp.125-6):

a- NP1 Copula NP2 (canonical sentence)
 b- NP2 Copula NP1 (inverse sentence)

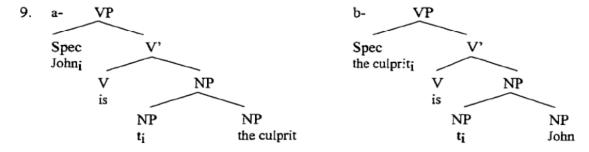
Therefore, sentences like the ones in (8) have the same structure as the ones in (5) above:

a- John is the culprit. (Referential NP Copula Predicative NP)
 b- The culprit is John. (Predicative NP Copula Referential NP)

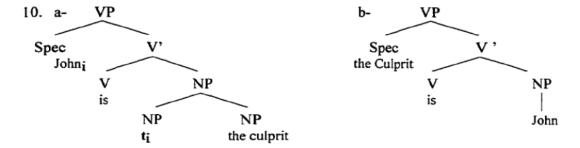
Moro must assume that the predicate assigns the argument (the referential NP) a theta role. Consequently, he treats predicative and equational sentences (in the sense of

<sup>&</sup>lt;sup>4</sup>It is needless to say that the copula can be followed by an adjective, which will be the predicate in this case.

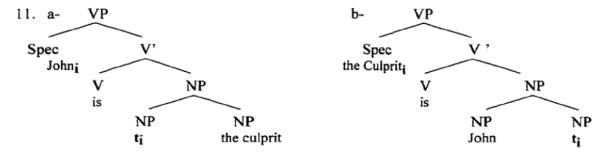
Rothstein (1987)) as one type of sentence that we can refer to as 'copular'. This is in fact what most recent studies assume. The structures that are being investigated are the canonical and inverse sentences. The questions that need to be answered are: what is the 'D-structure' of the copular sentences? And, do the canonical copular sentences have the same D-structure as the inverse copular sentences? Three possible analyses are suggested to account for copular structures in English (see Heggie (1988) and Heycock (1992), (1995) for more details). The first possible analysis is to argue that the canonical and inverse constructions have identical structures (Stowell (1978)). The only difference would be the distribution of the lexical items. According to this analysis, 'be' is treated as a raising verb that selects a small clause complement. The structures in (9) below roughly represent the two suggested structures:



The second analysis suggests that the canonical and inverse sentences have different structures (Bowers (1993)). According to this analysis, 'be' in the canonical structures is treated as a raising verb that selects a small clause, while 'be' in the inverse structures is treated as a transitive verb. The structures in (10) roughly represent the proposed structures for the canonical and inverse sentences:

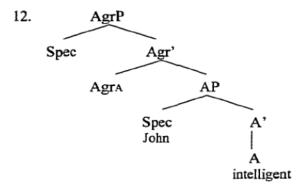


The third possibility is to argue that 'be' is the same verb in both structures, which both have identical D-structures (Moro (1991)). However, the two structures would have different derivational processes:



The canonical construction is obtained by raising 'John' (11a) and the inverse construction by raising 'the culprit' (11b). This analysis has an advantage over the other two in that it assumes one subcategorization for copular sentences in general.

Chomsky (1995) proposes that small clauses are dominated by AgrP. The subject raises to the Spec of AgrP and the predicate raises to the head of AgrP. Presumably, the head of AgrP is specified for features pertaining to the predicate itself. He gives an example of a small clause whose predicate is an adjective. The structure of a small clause that has an adjective as its predicate would have the following representation (Chomsky (1995: 175)):

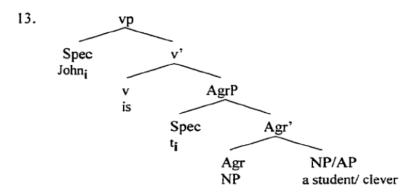


The subject raises to the Spec of AgrP, and the predicate raises to Agra. This movement of the subject and the predicate creates a Spec-head relation between them, which allows the checking of the relevant features (e.g., adjectival features). Evidence for this analysis will be provided later from the Arabic data. Chomsky, however, does not specify the position of 'be' in (12).

Here I assume that 'be' is a 'light' verb with no theta roles to discharge. I also assume that copular constructions originate as small clauses dominated by an AgrP. Furthermore, since 'be' does not assign any theta role it is logical to think of it as occupying a position other than the position that theta-assigning verbs occupy (i.e., the head of VP). I assume that 'be' is base-generated in the head of a 'vp shell', which is presumably a functional head<sup>5</sup> (see Radford (1997: 367-421) for more detail about the status of vp shells in the literature). Since vp is a functional projection, its head can be occupied by a verb with no theta roles to assign. Therefore,

<sup>&</sup>lt;sup>5</sup>Some studies that account for 'be' as a verb that cannot assign theta roles tend to place it under a functional head, which is the head of IP (Rothstein (1987) (for predicative 'be') and Moro (1991)). The idea of using 'vp shells' was first introduced by Larson (1988, 1990) in his treatment of 'double object constructions' in English. (See also Hale and Keyser (1991, 1993, 1994) and Chomsky (1995))

I propose that the structure in (13) accounts for the copular sentences in English. I will show later that the same structure accounts for the copular sentences in Arabic:

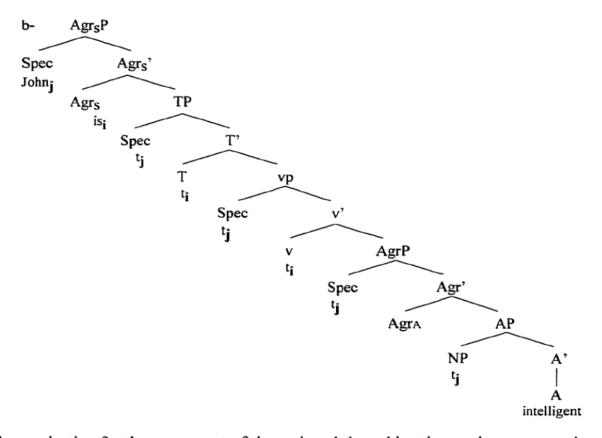


According to this analysis, the subject moves to the Spec of AgrP and then to the Spec of vp on its way to check other relevant features such as the nominal features of Tense and Agr<sub>S</sub> (as we will explain later).

So far, we have assumed that "be" is a raising verb that cannot assign theta roles. Depending on this idea, we can assume that classifying copular sentences into predicative and equational sentences is not necessary, which means that all copular sentences have one argument only. The complement of the argument is a predicate that assigns the theta role to the argument. We have also argued that an analysis that assumes one D-structure for canonical and inverse copular constructions is more preferred.

The analysis I assume here is that 'be' originates under the head of a functional projection (vp) and selects an AgrP (in the sense of Chomsky (1995)), which is located above the small clause. The derivation for a sentence like (14a) is provided in (14b):

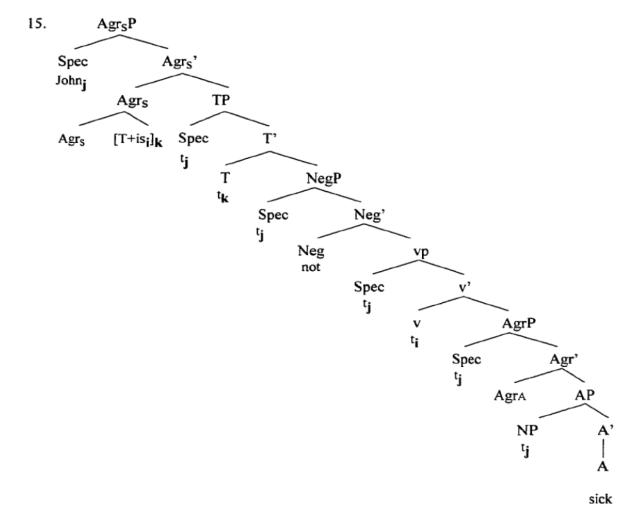
# 14. a-John is intelligent.



The motivation for the movement of the verb and the subject in copular sentences is expected to be the same as for non-copular sentences. The strong nominal features of Agr<sub>S</sub> and T attract the subject to move to have them checked. Strong features have to be checked before Spell-out, which means that the subject moves overtly to the Spec of TP and Agr<sub>S</sub>P. It has also been argued in Chapter 3 that auxiliary verbs and main verbs that do not assign theta roles are considered light verbs that move overtly to T and Agr<sub>S</sub> to check their verbal features.

# 4.1.2 Negating English copular sentences

A unified account of sentential negation is more preferred than positing different accounts for copular and non-copular sentences. We use the same analysis of sentential negation that has been proposed for non-copular sentences in chapter 3. Doing that, we can argue that NegP is located between TP and vp with 'not' occupying the head of NegP:



### 4.2 Sentential negation in Standard Arabic copular and verbless sentences

#### 4.2.1 The status of be in Standard Arabic

The status of 'be' in Arabic is one of the problematic topics that still need to be accounted for. Two important issues need to be discussed in this section. First, is there a deleted copula in verbless sentences? Second, what is the derivation of copular and verbless sentences in Arabic? The examples I will discuss are provided from Standard Arabic. The analysis will be generalized to the rest of the Arabic dialects that I am discussing in the present study. More examples of copular and verbless sentences will be provided later as we discuss the other Arabic dialects.

Three analyses are suggested to account for the absence of the copula in verbless sentences. The first one suggests that in verbless sentences there is always a copula that undergoes a deletion process under certain circumstances (Bakir (1980) and Obeidat and Farghal (1994)). That is, at D-structure the copula is lexically realized but gets deleted during the derivation if the conditions for deletion exist. Obeidat and Farghal, for example, argue that Mood is the determining factor for copula deletion. They argue that the copula must be deleted when it is specified [+indicative, +present, +nowness/timelessness] (1994: 19-35):

a- (\*ya-kuunu) s-suuq-u muzdaħim-un əlaan.
 3m-is(pres) the-market crowded-nom now

b- (\*ya-kuunu) ?al-maa?-u saa?il-un. 3m-is(pres) the water-nom liquid-nom

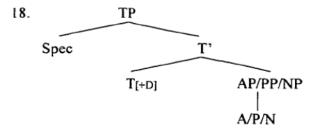
The copula is specified [+indicative, +present, +nowness] in (16a), which requires the deletion of the copula. In (16b), the copula is also deleted since it is specified

[+indicative, +present, +timelessness]. The copula is not deleted in (17a) since the mood is [+subjunctive] or in (17b) since the tense is [+past]:

17. a- law \*(ta-kuunu) mujtahid-an lanajaħt-a.
if 2-is diligent succeed-2m
'If you are diligent, you will succeed.'
b- \*(kaan-a) Ali-un fi l-bayt-i.
was-3m Ali-nom in the-house-gen

The second analysis assumes that the copula exists in the derivation as a null verb that is phonologically unrealized (Fassi Fehri (1993)). Note that by assuming a null copula in verbless sentences, we are assuming that there is a functional projection for Tense (TP). That is, although the copula is not 'visible', it still hosts tense.

The third analysis suggests that verbless sentences do not contain a null copula or undergo a copula deletion rule (Benmamoun (2000)). His argument, as we have explained in Chapter 3, is that since verbless sentences are in the present tense, we do not need to assume that there is a null copula that hosts tense. Remember that according to Benmamoun (2000), the present tense is specified for the [+D] feature only. He assumes the following structure:



According to this analysis, the subject is required to move to the Spec of TP to check the [+D] feature. Although Benmamoun uses sentences like (19 a, b) below as

evidence against a null copula analysis, he does not show how his analysis would account for the two possibilities:

- 19. a- ya-kuunu s-suuq-u muzdaħim-an fi l-masaa?-i.
  3m-is(pres) the-market-nom crowded-acc in the-evening
  'The market is habitually crowed in the evening.'
  - b- s-suuq-u muzdaħim-un fi l-masaa?-i. the-market crowded-nom in the-evening

According to his analysis, the two possible sentences in (19) would have two different D-structures, one with a VP and one without. His objection to the null copula analysis is related to the idea that the null copula should equal the lexical one at least in function. For example, if there is a null copula in (19b), why is the adjective carrying nominative case? Why is the adjective not assigned accusative case as in (19b)? One can address this issue by arguing that the null copula does not have the same function as the lexical one. For example, Pollock (1989) suggests that [do] is a null head that can be phonologically realized when needed, but he does not assume that null [do] and lexical 'do' are the same. Null [do], which is only a copy of lexical 'do', functions like lexical 'do' only when it is realized. One advantage to this analysis is that it makes use of something that can be universal (i.e., the existence of null heads), which means that we do not need to presuppose a language specific rule such as 'do-support'.

If we extend this analysis to the 'null copula analysis', we can assume that the null copula is not functionally 'active' at D-structure or S-structure. That is, it is only needed as a host for an abstract tense morpheme. Here I follow the assumption that verbless sentences have a functional projection specified for the present tense. I also

assume that verbless sentences contain a null copula that can be phonologically realized under certain circumstances. Since the copula (null or lexical) is presumably a functional head, I assume that it occupies the head of a vp as is the case in English.

To summarize, presenting verbless sentences in Arabic as including a null copula has many advantages. First, it accounts for sentences like the ones in (19) by giving them one structure; i.e., the only difference is that in (19b) the copula is phonologically unrealized. If we assume that we do not have a vp or VP projection in (19b), as Benmamoun does, we would be assuming that the two sentences have different structures, which would be a less favored analysis. Second, this analysis is similar to Pollock's (1989) in which he maintains that there is always a null [do] (phonologically unrealized), which surfaces when needed. Interestingly, the surfacing of the copula in Arabic can be optional (e.g., (19)) or obligatory (e.g., (17)), the realization of [do] can also be optional (emphasis) or obligatory (negation and questions). We will see later in the discussion that the surfacing of what we call 'agreement pronouns' can also be optional or obligatory. Finally, dealing with verbless sentences as having null copulas means that verbless sentences in Arabic and copular sentences in Arabic and English can be dealt with on the same basis. This means that the suggested analysis has some aspects of universality and that it may represent a basis for dealing with copular and verbless sentences in other languages. Moreover, the proposed analysis will neatly deal with the various structures of verbless and copular sentences in the Arabic dialects.

### 4.2.2 Predicative vs. equational sentences

### 4.2.2.1 The mysterious pronoun

The most important characteristic of predicative and equational sentences is that they are verbless in the present tense (with certain exceptions as discussed in the previous section). When verbless, equational sentences differ from predicative ones in that they contain a pronoun that agrees with the subject in gender and number<sup>6</sup>. With respect to person, it is always specified for third person:

- 20. \*a- Ali-un əl-qaa?id-u.
  Ali-nom the-leader-nom
  'Ali is the leader.'
  - b- Ali-un huwa l-qaa?id-u. Ali-un 3ms(he) the-leader-nom
  - c-?albanaat-u hunna l-qaa?idaat-u. the-girls-nom 3fp(they) the-leaders(f)-nom 'The girls are the leaders.'
  - d-?anta huwa əl-qaa?id-u. you(ms)3ms(he) the-leader-nom 'You(f) are the leader.'
- 21. a- Ali-un t<sup>s</sup>aalib-un. Ali-nom student-nom 'Ali is a student.'
  - ?b- Ali-un huwa t<sup>s</sup>aalib-un. Ali-nom 3ms (he) student-nom

As the examples above show, 'huwa' is obligatory in the equational sentences (20) but not in the predicative sentences (21). As example (21b) shows, 'huwa' is not favored in predicative structures. This pronoun has received two major analyses.

<sup>&</sup>lt;sup>6</sup>This pronoun also exists in Hebrew. It is obligatory in equational sentences and optional in predicative sentences. Rapoport (1987) discusses the status of this pronoun in Hebrew. Her major findings will be reviewed in this section.

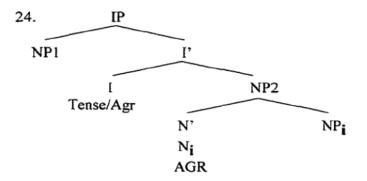
According to the first one, 'huwa' is treated as agreement (AGR) (Rapoport (1987)). This AGR 'surfaces' in the equational sentences but not in the predicative sentences. In her work on Hebrew, Rapoport argues that AGR is used in the equational sentences the same way copulas are used in English (following Rothstein (1987)). In Hebrew, AGR is located in the head of IP and must surface in equational sentences. Its function is to assign two theta roles to the two arguments that equational sentences have. However, since AGR is optional in the predicative sentences, it lacks the ability to assign any theta roles. The only argument in the sentence (the subject) is assigned a theta role by the predicate. The following are examples from Hebrew (Rapoport (1987: 30-31, 65)):

- 22. a- David hu ha-more.
  David AGR the-teacher
  'David is the teacher.'
  - \*b- David ha-more.

    David the-teacher
- 23. ha-yeled (hu) student. the-boy (AGR) student 'The boy is a student.'

The ungrammaticality of (22b) is due to the absence of AGR that is needed to assign the arguments their theta roles. Since AGR does not assign any theta roles in (23), its absence does not affect the grammaticality of the sentence. The only difference between Hebrew and Arabic is the optionality of AGR in the predicative sentence, where Arabic disfavors the surfacing of AGR in those constructions.

The second analysis treats AGR as a 'copular pronoun' (Eid (1991)). According to Eid, this pronoun is the head of an NP argument that occurs in a predicate position. The following structure roughly represents her analysis (1991: 58):



Eid argues that AGR assigns a theta role (which she specifies as theme) to its sister (NPi), and the predicate (NP2) assigns the subject the external theta role.

The problem with the two analyses is that they assume that AGR assigns theta roles in equational sentences. An argument against that will be provided from sentential negation in predicative and equational sentences. If AGR assigns theta roles to the arguments in equational sentences, we expect that this AGR is always obligatory, which is not the case in the negative sentences. Moreover, other examples (e.g., in Saudi Arabic) show that AGR is obligatory in negative predicative and equational sentences. I will assume that AGR does not assign any theta roles, and I will provide evidence as I proceed in the discussion.

I agree with Rapoport (1987) in her analysis of AGR as a 'reflection' (surfacing) of the agreement that exists between the subject and the predicate (which could also be between the two arguments according to Rapoport). I argue here that AGR can be looked at as a phonological realization of the agreement features that the

head of AgrP has. My argument is based on the conclusion that copular sentences are composed of small clauses that are dominated by AgrP. The head of this functional phrase is assumed to contain the agreement features that exist between the subject and the predicate. These features may surface as AGR in certain circumstances.

The questions that need to be addressed are: why does AGR surface only in these cases? Why does it have to surface in the first place? To answer the first question, we need to distinguish between obligatory and optional surfacing of AGR. So far we have discussed the obligatory cases of AGR in Arabic. However, AGR may optionally surface in copular sentences, when it is used for emphasis:

- 25. a- Ali-un huwa l-qaa?id-u.
  Ali-un AGR the-leader-nom
  'Ali is the leader.'
  - b- laysa Ali-un əl-qaa?id-a. neg Ali-un the-leader-acc
  - c- laysa Ali-un (huwa) əl-qaa?id-a. neg Ali-un (AGR) the-leader-acc
- 26. a- kaan-a Ali-un əl-qaa?id-a. was-3m Ali-un the-leader-acc
  - b- kaan-a Ali-un (huwa) əl-qaa?id-a. was-3m Ali-un (AGR) the-leader-acc
- 27. a- Ali-un qaa?id-u. Ali-un leader-nom
  - ?b- Ali-un huwa qaa?id-u.
    Ali-un AGR leader-nom

As we have argued in chapter 2, nominative case is assigned by default in Arabic. That is, if there are no potential case assigners, nominative case is assigned. Since morphological Case does not exist in the modern Arabic dialects, it is logical to conclude that AGR is not related to morphological Case 'assigning'. What is evident

is that the introduction of 'laysa' and 'kaana' in (25b) and (26a) fulfills the function of AGR in the sentence as it becomes optional ((25c) and (26b)). Interestingly, the difference between whether AGR surfaces or not is a matter of emphasis. That is, sentences with the optional AGR are more emphatic. Sentence (27b) is not ungrammatical, but not preferred.

The exact function of obligatory AGR is not well-defined. Berman (1978: 200) claims that AGR has a 'psycholinguistic' function in sentence processing (cited in Rapoport (1987: 31fn.)). Eid (1991: 42) suggests that obligatory AGR is used in Arabic as an 'anti-ambiguity' device to force sentential vs. phrasal interpretation of a structure. Consider the following structures:

- 28. a- ?ad<sup>5</sup>-d<sup>5</sup>aabitu Ali-un. the-officer-nom Ali-nom 'Ali, the officer'
  - b- ?ad<sup>5</sup>-d<sup>5</sup>aabitu huwa Ali-un. the-officer-nom AGR Ali-nom 'The officer is Ali.'
- 29. a- ?anta l-qaa?id-u. you(ms) the-leader-nom 'You are the leader.'
  - b-?anta huwa l-qaa?id-u. you(ms) AGR the-leader-nom 'You are the leader.'

The only difference between (28a) and (28b) is the absence of AGR in (28a). However, the difference in interpretation is evident. While (28a) is interpreted as a phrase, (28b) has a sentential interpretation. With respect to (29a, b), both have sentential interpretation. However, the use of AGR in (29b) makes the sentence more emphatic. If we accept that AGR is used only as an anti-ambiguity device (when it is

obligatory), we can explain its absence in (25b) and (26a). That is, the introduction of 'laysa' and 'kaana' invalidates any phrasal reading. Since there is no evidence that AGR has any role as a theta role assigner, we can accept the explanation made above. This analysis also explains why some argue that a sentence like (30a) below is in fact grammatical<sup>7</sup>:

- 30. a- Ali-un əl-qaa?id-u.
  Ali-nom the-leader-nom
  'Ali is the leader.'
  - b- Ali-un huwa l-qaa?id-u. Ali-nom AGR the-leader-nom

In sum, according to the argument presented so far, I assume that AGR has no clear syntactic role in the sentence. It serves as an anti-ambiguity device as explained above. Moreover, I argue that AGR is also used as a device for emphasis, which explains its optionality when it is used for emphasis. I will argue later that AGR has a syntactic role in some Arabic dialects (e.g., Jordanian Arabic, Syrian Arabic, and Saudi Arabic).

The last point I would like to discuss in this section is the similarity between Arabic AGR and English auxiliary 'do'. This brings us to Pollock's (1989) suggestion that there is a non-lexical version of 'do' that surfaces obligatorily in cases of questions and sentential negation and optionally when used emphatically. Pollock suggests that this version of 'do' occupies the head of AgrP. The similarities between

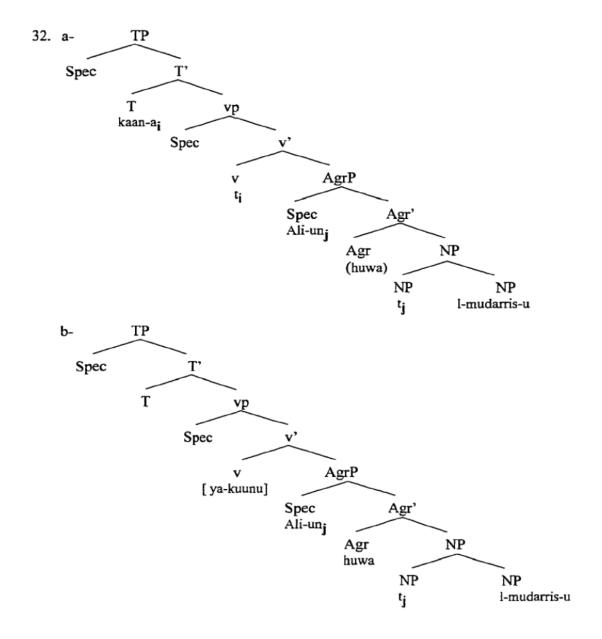
<sup>&</sup>lt;sup>7</sup>The three consultants of Standard Arabic agreed that (30a) is grammatical, and that the introduction of AGR makes it more emphatic. However, they also agreed that (30b) is more 'sound', which is consistent with the argument presented above.

AGR and auxiliary 'do' are striking. It would be reasonable to assume that what accounts for the English auxiliary 'do' accounts for Arabic AGR. Both of them are used obligatorily as well as optionally. The only difference might be the place where 'do' is located. Since auxiliary 'do' cannot co-occur with 'be' (and the other auxiliaries), we can suggest that 'do' occupies the head of vp. It surfaces when needed as explained in chapter 3. AGR, however, occupies the head of AgrP, and surfaces whenever needed.

### 4.2.2.2 The derivation of copular and verbless sentences in Standard Arabic

So far, I have argued that verbless sentences contain a null copula, which can be phonologically realized in certain structures. Since the copula has no theta role to assign, I assume that it is generated in a functional head, the head of vp. The assumption that we have a null copula entails the necessity of TP. Based on the argument in the previous section, I assume that the D-structure for predicative and equational sentences is the same. Depending on these ideas, the derivation of sentences like (31a, b) is represented in (32a, b):

- 31. a- kaan-a Ali-un (huwa) əl-mudarris-u. was-3m Ali-nom AGR the-teacher 'Ali was the teacher.'
  - b- Ali-un huwa əl-mudarris-u. Ali-nom AGR the-teacher



The motivation for the movement of the verb and the subject is the strength of the features. As we have argued in chapter 3, the inflectional sets of parameters in Standard Arabic require the overt movement of the verb to T. The subject is not motivated to move to the Spec of TP since the nominal features of T are [+weak]. However, the predicate has to agree with the subject in number (if the subject is

animate) and gender, which indicates that the nominal features of Agr are [+strong]. Therefore, the movement of the subject (or the referential predicate) to the Spec of AgrP is required; this can be viewed as an inflectional parameter that seems to be required in all Arabic dialects under investigation.

In (32a), 'kaana' raises to T and checks its [+V] features, and the subject raises to the Spec of AgrP to check the features of Agr. The subject remains in the Spec of AgrP since it is not motivated to raise higher in the tree. In (32b), the subject moves to the Spec of AgrP. There are no motivations for the subject or the predicate to move higher in the tree. The optionality of the surfacing of AGR has to do with emphasis.

### 4.2.3 Negating Standard Arabic copular and verbless sentences

### 4.2.3.1 *laysa*: a sentential negator or a negative copula?

The evidence presented in chapter 3 has shown that 'laysa' behaves like a verb. Farghal and Obeidat (1994) suggest that 'laysa' should for two reasons be treated as a portmanteau morpheme with the function of Neg and copula combined. First, it cannot co-occur with the copula (33). Second, 'laysa' and the copula have the same grammatical function with respect to case assignment. By comparing (34b) and (34c), we notice that both 'laysa' and the copula assign their complements accusative case:

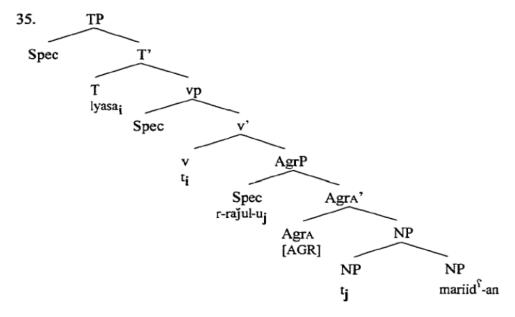
- 33. a- ya-kuunu t<sup>s</sup>-t<sup>s</sup>aqs-u jamiil-an fi s<sup>s</sup>-s<sup>s</sup>ayf-i.
  3m-is the-weather-nom beautiful-acc in the-summer-gen
  'The weather is beautiful in the summer'
  - \*b- laysa ya-kuunu t<sup>s</sup>-t<sup>s</sup>aqs-u jamiil-an fi s<sup>s</sup>-s<sup>s</sup>ayf-i.

    neg 3m-is the-weather-nom beautiful-acc in the-summer-gen

- c-laysa t<sup>s</sup>-t<sup>s</sup>aqs-u jamiil-an fi s<sup>s</sup>-s<sup>s</sup>ayf-i.
  neg the-weather-nom beautiful-acc in the-summer-gen
- d- laa ya-kuunu t<sup>s</sup>-t<sup>s</sup>aqs-u jamiil-an fi s<sup>s</sup>-s<sup>s</sup>ayf-i. neg 3m-is the-weather-nom beautiful-acc in the-summer-gen
- 34. a- ?ar-rajul-u mariid<sup>?</sup>-un. the-man-nom sick-nom 'The man is sick.'
  - b- kaan-a r-rajul-u mariid<sup>5</sup>-an. was-3m the-man- nom sick-acc 'The man was sick.'
  - c- laysa r-rajul-u mariid<sup>9</sup>-an. neg the-man-nom sick-acc 'The man is not sick.'

(33c, d) show that 'laysa' can be replaced by 'laa' and 'jakuunu', which proves that 'laysa' has the functions of Neg and the copula combined. However, 'laysa' is different from the copula in two aspects. First, while ''laysa' is inherently [+present], the copula can be used in the present (when it is required to surface), past and future tenses. Second, unlike the copula, 'laysa' is inherently negative. That 'laysa' is inherently [+present] justifies the fact that it cannot be conjugated for the past or the future tenses.

Keeping all these observations in mind, we can argue that 'laysa' is not a mere negative marker; it is more like a 'negative copula' (Neg-cop). Therefore, I assume here that 'laysa' is generated in the same position as the copula. This accounts for the fact that they are in complementary distribution. Sentence (34c) would be derived as follows:



Note that 'laysa' is inherently [+present], and since it is 'copular' it can check the [+V] feature of T, which is the derivation I assume. In sentences with obligatory AGR in affirmative clauses, the use of 'laysa' in their negative counterparts compensates for the function of AGR and makes it optional as in (36b) below:

- 36. a- Ali-un huwa mudiir-u l-madrast-i.
  Ali-nom AGR principal-nom the-school-gen
  'Ali is the school's principal.'
  - b- laysa Ali-un (huwa) mudiir-u l-madrast-i. neg-cop Ali-nom (AGR) principal-nom the-school-gen

In sum, 'laysa' is used to negate verbless sentences which are always in the present tense.

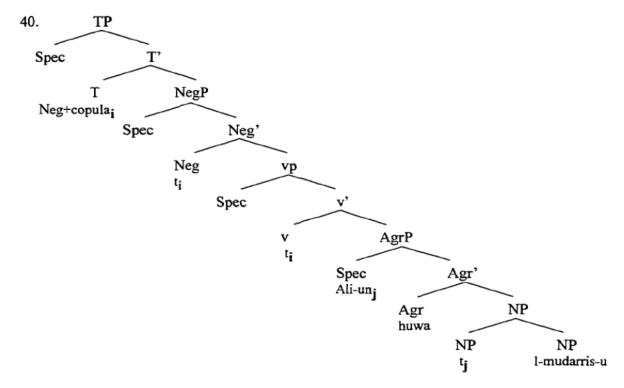
### 4.2.3.2 laa, lam, lan, and maa

The use of these negative markers in copular sentences is exactly the same with non-copular sentences:

37. a- kaan-a Ali-un šujaas-an. was-3m Ali-nom brave-acc 'Ali was brave.'

- b- maa kaan-a Ali-un šujaas-an. neg was-3m Ali-nom brave-acc 'Ali was not brave.'
- c- lam ya-kun Ali-un šujaas-an. neg-past be Ali-nom brave-acc
- 38. a- ya-kuunu s-suuq-u muzdaħim-an fi l-masaa?-i.
  3m-is the-market crowded-acc in the-evening-gen
  'The market is habitually crowded in the evening.'
  - b- maa ya-kuunu s-suuq-u muzdahim-an fi l-masaa?-i.
    neg 3m-is the-market crowded-acc in the-evening-gen
    'The market is not habitually crowded in the-evening.'
  - c- laa ya-kuunu s-suuq-u muzdahim-an fi l-masaa?-i. neg(pres) 3m-is the-market crowded-acc in the-evening-gen
- 39. a- sa-ya-kuunu s-suuq-u muzdaħim-an fi l-masaa?-i. will-3m-be the-market-nom crowded-acc in the-evening-gen 'The market will be crowded in the evening.'
  - \*b- maa sa-ya-kuunu s-suuq-u muzdaħim-an fi l-masaa?-i. neg will-3m-be the-market crowded-acc in the-evening-gen 'The market will not be crowded in the evening.'
  - c- lan ya-kuuna s-suuq-u muzdaħim-an fi l-masaa?-i.
    neg-fut 3m-be the-market crowded-acc in the-evening-gen

As is the case in the non-copular verbal sentences, the negative markers in the copular sentences occupy the head of NegP. This head is specified for the [+D] feature that needs to be checked. The negative markers must merge with a verbal head. The copula moves to the Spec of NegP, checks its [+D] feature, and the complex head [Neg+copula] raises to T to have its [+V] feature checked. This process is shown in (40) below:



Note that this derivation is based on the inflectional sets of parameters suggested for Standard Arabic, according to which the subject is not required to move overtly to the Spec of TP.

# 4.3 Sentential negation in Moroccan Arabic copular and verbless sentences

Moroccan Arabic uses two negative markers to negate copular and verbless sentences. In copular sentences, only 'ma-š' is used, while in verbless sentences 'ma-š' and 'maši' can be used. 'maši' is different from 'ma-š' in that it is inherently [+present]. We will see later that Jordanian Arabic 'miš' and Syrian Arabic 'muu' are also inherently [+present]. The next two subsections show the derivation of sentential negation in Moroccan Arabic copular and verbless sentences.

#### 4.3.1 ma-š

This negative marker can be used in copular sentences in the present, past, and future tenses as shown in (41) below (Benmamoun 2000:47):

- 41. a- ma-ta-y-kun-š l-žaww sxun f-s<sup>5</sup>-s<sup>5</sup>if.
  neg-asp-3m-is-neg the-weather hot in-the-summer
  'The weather is not hot in the summer.'
  - b- ma-kan-š l-žaww sxun f-s<sup>5</sup>-s<sup>5</sup>if. neg-was-neg the-weather hot in-the-summer 'The weather was not hot in the summer.'
  - c- ma-γada-š y-kun l-žaww sxun f-s<sup>5</sup>-s<sup>5</sup>if. neg-will-neg 3m-be the-weather hot in-the-summer 'The weather will not be hot in the summer.'

The copula raises to Neg and merges with 'ma-š' to check its [+D] feature. The complex head raises to T to check its [+V] feature. The subject movement is restricted by the inflectional sets of parameters that we have suggested for Moroccan Arabic in chapter 3. The nominal features of T are [-strong, -weak], indicating that the movement of the subject to the Spec of TP is optional. Neg's [+D] feature can be checked by 'ma-š' merging with adjectival (i.e., adjectives and participles) and pronominal elements as shown in (42) below:

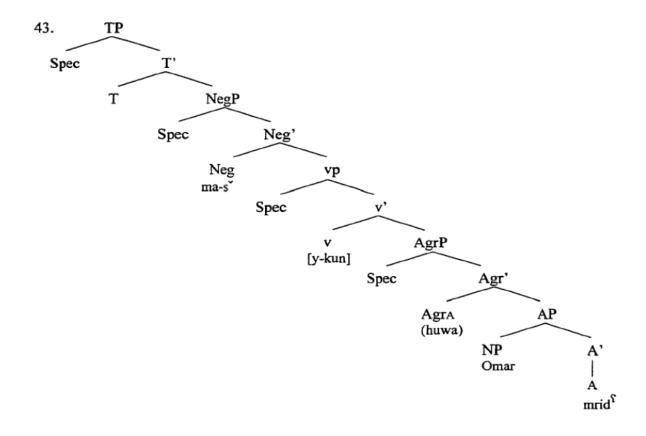
- 42. a- Omar mrid<sup>5</sup>.

  Omar sick
  'Omar is sick.'
  - b- Omar ma-mrid<sup>5</sup>-š. Omar neg-sick-neg 'Omar is not sick.'
  - c- Omar ma-huwa-š mrid<sup>6</sup> Omar neg-AGR-neg sick 'Omar is not sick.'

d- ma-huwa-š Omar mrid<sup>1</sup>. neg-AGR-neg Omar sick

In (42b), the negative head 'ma-š' attracts the adjective (which is a possible checker of Neg's [+D] feature) to raise to check its [+D] feature. In (42c) the negative head attracts AGR. As we have argued earlier, there is always a phonologically unrealized AGR that surfaces when needed. In the case of (42c), AGR surfaces to check Neg's [+D] feature. It also surfaces when needed as an anti-ambiguity device or for emphasis.

Note that in (42b, c), 'ma-š' has two possible checkers of its [+D] feature, AGR and the adjective. AGR has no pragmatic function in (42c) (i.e., emphasis), which means that it is used for a syntactic purpose, namely to check the [+D] feature of Neg. In fact, this can be used as a piece of evidence for the existence of a non-lexical copy of AGR. This copy can be used for syntactic as well as for pragmatic purposes. Moreover, (42d) is a grammatical sentence in Moroccan Arabic although it is less preferred than (42c). The set of inflectional parameters proposed for Moroccan Arabic accounts for the two optional word orders. Since the [+D] feature of T is [-strong, -weak], subject movement is optional. This means that the subject does not need to move to the Spec of TP overtly, which means that it can remain in the Spec of AgrP. This yields the order in (42d). However, if the subject moves to the Spec of TP overtly, which is preferred, we get the order in (42c). The structure in (43) is the start point of the derivations of (42b, c):



#### 4.3.2 *maši*

The feature that distinguishes 'maši' from 'ma-š' is that 'maši' is inherently [+present], and it cannot merge with any elements in Moroccan Arabic. This negative marker is more like 'laysa' in that it is an independent head that does not need to merge with verbal or pronominal heads. Since the merger between the verb and the negative marker is required in Arabic, we do not expect this negative marker to be used in copular sentences (44):

- 44. \*a- maši ta-y-kun l-žaww sxun f-s<sup>c</sup>-s<sup>c</sup>if.

  neg asp-3m-is the-weather hot in-the-summer

  'The weather is not hot in the summer.'
  - \*b- maši kan l-žaww sxun f-s<sup>5</sup>-s<sup>5</sup>if. neg was(3m) the-weather hot in-the-summer 'The weather is not hot in the summer.'

Therefore, we expect 'maši' to be used only in verbless sentences. Interestingly, when it is used, the obligatory AGR becomes optional as is the case in Standard Arabic when 'laysa' is used:

- 45. a- Omar huwa l-mu\(\frac{1}{2}\)əllim.

  Omar AGR the-teacher

  'Omar is the teacher.'
  - b- Omar maši (huwa) l-musəllim. Omar neg (AGR) the-teacher 'Omar is not the teacher.'
  - c- maši Omar (huwa) l-mu\(\sigma\) ellim.
    neg Omar (AGR) the-teacher
    'It is not Omar who is the teacher.'

In (45b), the subject has to raise to the Spec of NegP to have the [+D] features of Neg checked, since there are no other possible checkers. Note that (45c) is possible only with a 'focus' reading. However, this kind of 'focus' is not always available:

a- Omar maši mrid<sup>1</sup>.
 Omar neg sick
 Omar is not sick.

\*b- maši Omar mrid<sup>1</sup>.

Omar neg sick

'It is not Omar who is sick.'

To account for the ungrammaticality of (46b), we need first to account for the grammaticality and derivation of (45c), an issue that I will not pursue in this study.

## 4.4 Sentential negation in Egyptian Arabic copular and verbless sentences

Egyptian Arabic is similar to Moroccan Arabic in that it uses two negative markers to negate copular and verbless sentences, namely, 'ma-š' and 'miš'. The difference between Egyptian Arabic and Moroccan Arabic lies in the type of the

elements that 'ma-s' and 'mis' can merge with. Unlike Moroccan Arabic, Egyptian Arabic does not allow merger between 'ma-s' and the adjectival elements:

- 47. \*a- Omar ma-t<sup>°</sup>iwiil-š. Omar neg-tall-neg 'Omar is not tall.'
  - \*b- ma-raħ-š əl-gaww y-kuun ħaami bukra. neg-will-neg the-weather 3m-be hot tomorrow 'The weather is not going to be hot tomorrow.'

However, 'ma-s' can merge with verbal (48a, b) and pronominal (48c) elements:

- 48. a- ma-kan-š Ahmed waa?if. neg-was-neg Ahmed standing. 'Ahmed was not standing.'
  - b- əl-gaww ma-bə-y-kuun-š ħaami fi s<sup>s</sup>-s<sup>s</sup>eef. the-weahter neg-asp-3m-is-neg hot in the-summer. 'The weather is not hot in the summer.'
  - c- Omar ma-huwwa-š t<sup>s</sup>iwiil. Omar neg-AGR-neg tall 'Omar is not tall.'

The same analysis applied to the data in Moroccan Arabic can be applied to the Egyptian Arabic data. The only difference is that the merger between 'ma-š' and the adjective is not allowed in Egyptian Arabic.

With respect to 'miš', Egyptian Arabic is different from the rest of the Arabic dialects discussed in this study in that it allows the merger between 'miš' and verbs in the present and future tenses as we have discussed in chapter 3:

- 49. a- əl-gaww miš bə-y-kuun ħaami fi s<sup>s</sup>-s<sup>s</sup>eef. the-weahter neg asp-3m-is hot in the-summer.
  - b- əl-gaww miš raħ yə-kuun ħaami bukra. the-weahter neg will 3m-be hot tomorrow 'The weather is not going to be hot tomorrow.'

\*c- miš kaan əl-gaww ħaami mbaariħ. neg was(3m) the-weahter hot yesterday. 'The weather was not hot yesterday.'

'miš' is also used in verbless sentences, which makes AGR optional in the sentences.

Note that like 'ma-ši', 'miš' does not require merger with a pronominal or an adjectival head:

- 50. a- Omar miš (huwwa) l-masallim.
  Omar neg (AGR) the-teacher
  'Omar is not the teacher.'
  - b- miš Omar (huwa) l-masallim. neg Omar (AGR) the-teacher 'It is not Omar who is the teacher.'
  - c- Omar miš t<sup>s</sup>iwiil. Omar neg tall 'Omar is not tall.'
  - \*d- miš Omar t<sup>f</sup>iwiil. neg Omar tall

The motivation for the movement of the subject is the same as in Moroccan Arabic. In all cases, the subject moves to the Spec of AgrP. Its movement to the Spec of NegP or TP depends on the same factors discussed in the previous section. When 'mis' is used in verbless sentences, the subject always moves to the Spec of NegP to check Neg's [+D] feature. It may also move to the Spec of TP to check T's [+D] feature.

Sentence (50b) is grammatical with a focus reading, as is the case in Moroccan Arabic. (50d), however, is ungrammatical even with a focus reading. The fact that 'miš' allows merger with the verb only in the present and future tenses (49a, b) can be justified by the fact that 'miš' is inherently [+present], which also justifies the fact that it can be used with verbless sentences (which are inherently [+present]).

## 4.5 Sentential negation in Jordanian Arabic copular and verbless sentences

Jordanian Arabic utilizes three negative markers in the copular and verbless sentences. The first negative marker is 'ma-š', which behaves exactly the same as in Egyptian Arabic. That is, it has to merge with a verbal or a pronominal element. When the copula surfaces, 'ma-š' merges with it (51a, b); when the copula is null, 'ma-š' attracts AGR (51d). The second negative marker, 'miš', behaves the same as Moroccan Arabic 'maši' in that it is an independent negative marker that does not require merger with other elements. Therefore, it can be used only when the copula is null (52a) or when 'raah' is used (53d):

- 51. a- ma-kaan-iš Ahmed mriid<sup>1</sup>.
  neg-was(3m)-neg Ahmed sick.
  'Ahmed was not sick.'
  - b- Ahmed ma-kaan-iš mriid<sup>1</sup>. Ahmed neg-was(3m)-neg sick.
  - c- ma-huu-š Ahmed mriid<sup>s</sup>. neg-AGR-neg Ahmed sick.
  - d- Ahmed ma-huu-š mriid<sup>1</sup>.
    Ahmed neg-AGR-neg sick.
  - \*e- Ahmed ma-mriid<sup>§</sup>-š. Ahmed neg-sick-neg.
- 52. a- Ahmed miš mriid<sup>5</sup>.

  Ahmed neg sick.
  - \*b- miš Ahmed mriid<sup>i</sup>. neg Ahmed sick.
- 53. a- Ahmed miš (huwwa) li-msallim. Ahmed neg (AGR) the-teacher 'Ahmed is not the teacher.'
  - b- miš Ahmed (huwa) li-m\u00edallim. neg Ahmed (AGR) the-teacher 'It is not Ahmed who is the teacher.'

- c- miš raaħ Ahmed y-kuun (huwa) li-m\allim. neg will Ahmed 3m-be (AGR) the-teacher 'It will not be the teacher.'
- \*d- miš kaan Ahmed (huwa) li-msallim. neg was(3m) Ahmed (AGR) the-teacher 'Ahmed was not the teacher.'

The third negative marker, 'maa', behaves exactly like 'ma-š'. It requires merger with a verbal (54a, b) or a pronominal element (55a, b). In verbless sentences, AGR surfaces and moves to Neg and merges with it (54c, d):

- 54. a- maa kaan Ahmed mriid<sup>5</sup>. neg was(3m) Ahmed sick.

  'Ahmed was not sick.'
  - b- Ahmed maa kaan mriid<sup>§</sup>. Ahmed neg was(3m) sick.
  - c- maa huu Ahmed mriid<sup>§</sup>. neg AGR Ahmed sick.
  - d- Ahmed maa huu mriid<sup>§</sup>. Ahmed neg AGR sick.
  - \*e- Ahmed maa mriid<sup>v</sup>.

    Ahmed neg sick.
- 55. a- Ahmed maa huu li-m\allim.
  Ahmed neg AGR the-teacher
  'Ahmed is not the teacher.'
  - b- maa huu Ahmed li-m\allim.

    neg AGR Ahmed the-teacher

    'It is not Ahmed who is the teacher.'
  - \*c- Ahmed maa li-m?allim. Ahmed neg the-teacher 'Ahmed is not the teacher.'
  - d- maa raah Ahmed y-kuun (huwa) li-m?allim. neg will Ahmed 3m-be (AGR) the-teacher 'It will not be the teacher.'
  - e- maa kaan Ahmed (huwa) li-m\u00edallim. neg was(3m) Ahmed (AGR) the-teacher 'Ahmed was not the teacher.'

# 4.6 Sentential negation in Syrian Arabic copular and verbless sentences

Two negative markers are used in copular and verbless sentences in Syrian Arabic, namely, 'maa' and 'muu'. The first one, 'maa', behaves as in Jordanian Arabic. 'muu', which originally came from 'maa'+AGR (maa+huu), is treated as an independent head that has the same characteristics as Moroccan 'maši' and Jordanian 'miš'. As expected, AGR becomes optional when 'muu' is used. The following are some examples from Syrian Arabic:

- 56. a- Ahmed muu mriid<sup>5</sup>. Ahmed neg sick. 'Ahmed is not sick.'
  - \*b- muu Ahmed mriid<sup>§</sup>. neg Ahmed sick.
- 57. a- Ahmed muu (huwwa) li-m?allim.
  Ahmed neg (AGR) the-teacher
  'Ahmed is not the teacher.'
  - d- muu Ahmed (huwa) li-m\(\seta\)allim. neg Ahmed (AGR) the-teacher 'It is not Ahmed who is the teacher.'
  - e- muu raah Ahmed y-kuun (huwa) li-m\allim. neg will Ahmed 3m-be (AGR) the-teacher 'It will not be the teacher.'
  - \*d- muu kaan Ahmed (huwa) li-m\(^1\)allim. neg was(3m) Ahmed (AGR) the-teacher 'Ahmed was not the teacher.'

# 4.7 Sentential negation in Saudi Arabic copular and verbless sentences

The only negative marker that is used to negate copular and verbless sentences in Saudi Arabic is 'maa'. This negative marker has the same characteristics as in Jordanian Arabic and Syrian Arabic. The following examples show its distribution:

- 58. a- maa kaan Ahmed fi 1-bet. neg was(3m) Ahmed in the-house. 'Ahmed was not home.'
  - b- Ahmed maa kaan fi l-bet. Ahmed neg was(3m) in the-house.
  - c- maa huu Ahmed fi l-bet. neg AGR Ahmed in the-house. 'Ahmed is not.'
  - d- Ahmed maa huu fi l-bet. Ahmed neg AGR in the-house.
  - \*e- Ahmed maa fi l-bet. Ahmed neg in the-house.
- 59. a- Ahmed maa huu l-mudiir. Ahmed neg the-principal 'Ahmed is not the principal.'
  - c- maa huu Ahmed əl-mudiir. neg AGR Ahmed the-principal 'It is not Ahmed who is the principal.'
  - \*c- Ahmed maa l-mudiir.

    Ahmed neg the-principal

    'Ahmed is not the principal.'
  - d- maa raah Ahmed y-kuun (huwa) əl-mudiir. neg will Ahmed 3m-be (AGR) the-principal 'It will not be the principal.'
  - e- maa kaan Ahmed (huwa) əl-mudiir. neg was(3m) Ahmed (AGR) the-principal 'Ahmed was not the principal.'

## 4.8 Summary

In this chapter, I argued that copular sentences are best described as small clauses that are dominated by AgrP (as outlined in Chomsky (1995)). I also argued that the copula should be represented as occupying a functional head, since its role in the sentence seems to be functional; it does not assign any theta roles (Moro (1991),

and Heycok (1992), (1995), among others). The place I suggested for the copula is the head of vp, which is a functional head. The inflectional parameters suggested in chapter 3 apply to copular and verbless sentences. In English, the copula is a 'light' verb that does not assign any theta roles, and so it is required to move to T before Spell-out. The subject is also required to move to the Spec of TP then to the Spec of Agr<sub>S</sub>P to check the strong nominal features of Agr<sub>S</sub>.

In Arabic, the situation is more complicated. However, copular and verbless sentences in Arabic can be account for in a principled way if we follow the proposed structure for the English copular sentences. Therefore, I propose that copular and verbless sentences in Arabic have the same basic structure as the English copular sentences. One difference between the two languages is that the head of AgrP dominating the small clause can be occupied by an agreement pronoun (AGR), which may surface optionally or obligatorily. Another difference has to do with the movement of the subject, which is required to move to the Spec of NegP if the head Neg is occupied by a negative marker that does not allow merger with verbal, pronominal or adjectival elements (i.e., if it is occupied by 'maši', 'miš', or 'muu'). The movement of the subject in this case is needed to check the [+D] feature of Neg. According to the sets of inflectional parameters suggested for the Arabic dialects in chapter 3, the subject's movement to the Spec of TP and AgrsP is required in Standard Arabic if the subject has full agreement with the verb but not allowed if the verb agrees with the subject only in person and gender. In the other Arabic dialects, the movement of the subject to the Spec of TP is optional.

With respect to AGR, its role in the sentence depends on whether it is obligatory or optional. If AGR is obligatory, it is used as an anti-ambiguity device in affirmative verbless sentences and to check the [+D] feature of Neg in the negative verbless sentences. When optional, AGR has a pragmatic function (for emphasis). The nature of the negative markers in the various Arabic dialects affected the surfacing or non-surfacing of AGR. The surfacing of AGR in verbless sentence is obligatory in Egyptian and Jordanian Arabic when the negative marker 'ma-š' is used. AGR is also obligatory in verbless sentences when the negative marker 'maa' is used.

The following are the negative markers that are used in verbless sentences in the various Arabic dialects<sup>8</sup>:

- 1- ma-š: This negative marker is used in Moroccan Arabic, Egyptian Arabic, and Jordanian Arabic. In Moroccan Arabic, 'ma-š' requires merger with a pronominal or an adjectival element. In Egyptian and Jordanian Arabic, 'maš' can merge with a pronominal element only. This merger results in checking the [+D] feature of Neg.
- 2- maši: This negative marker is used in Moroccan Arabic. It can be described as an independent negative marker that does not allow merger with pronominal or adjectival elements. Since no merger takes places, the only way to check the [+D] feature of Neg is through the subject raising to the Spec of NegP.

<sup>&</sup>lt;sup>8</sup>I have argued that 'laysa' is not a mere negative marker. It is more like a negative copula. Therefore, I treated the sentences with 'laysa' as copular.

- 3- 'miš: This negative marker is used in Egyptian Arabic and Jordanian Arabic.
  It behaves exactly the same as 'maši'.
- 4- muu: This negative marker is used in Syrian Arabic. It behaves exactly the same as 'maši' and 'miš'.
- 5- maa: This negative marker is used in Jordanian Arabic, Syrian Arabic, and Saudi Arabic. In the three dialects, 'maa' requires merger with AGR, which functions as a checker for the [+D] feature of Neg.

### Chapter Five Summary and Conclusion

The purpose of the present study has been to account for sentential negation in Arabic within the framework of the Minimalist Program (Chomsky (1993, 1995)). Sentential negation in English has also been discussed. It has been obvious that in order to discuss sentential negation in English and Arabic, one has to account for verb and subject movements. It has been argued (e.g., Pollock (1989) and Chomsky (1991)) that the strength of the verbal and nominal features that the functional heads (Agr<sub>S</sub> and T) carry motivates the movement of the verb and the subject. English is believed to have strong nominal features of Agr<sub>S</sub>, which forces the movement of the subject in the overt syntax (before Spell-out). The fact that T has weak verbal features in English explains the fact that verbs move to T after Spell-out (weak features do not motivate movement). However, light verbs (auxiliary verbs and verbs that do not have theta roles to discharge) move overtly in English (Chomsky (1995)). An auxiliary verb has to move over 'not', which occupies the head of NegP, so that the ECP will not be violated if the true verb raises to T at LF (see section 3.2.2).

I have argued that verbless and copular sentences in English and Arabic can be accounted for by proposing that they have the same 'underlying' structure. I have shown that copular and verbless sentences should be analyzed as small clauses that are dominated by AgrP (in the sense of Chomsky (1995)). This AgrP is in turn dominated by a functional projection, which I have proposed to be vp. Since the copula is believed to lack the ability to assign any thematic roles, its role in the sentence is mainly functional (i.e., syntactic). The fact that the copula in Arabic can

be null supports this conclusion. The vp is dominated by NegP which is dominated by TP and Agr<sub>S</sub>P.

I have also argued that sentential negation in Arabic can be account for through the same analysis used for English. Therefore, I have followed Bolotin (1995) in her argument for sets of inflectional parameters that would derive the different word orders (VSO vs. SVO). That is, the movement of the verb and the subject is motivated by the strength of the verbal and nominal features that two functional heads carry, namely, Agrs and T. Moreover, the data from Arabic show that the verb moves before Spell-out in Arabic. It is the movement of the subject that distinguishes Standard Arabic from the rest of the Arabic dialect being studied. In standard Arabic, the agreement between the subject the verb determines the word order of the sentence. Full agreement between the subject and the verb (i.e., person, gender, and number) indicates that the nominal features of Agrs are strong, which requires the subject to move before Spell-out to have those features checked. This results in an SVO word order. 'Partial' agreement between the subject and the verb (i.e., person and gender only) indicates that the nominal features of Agr<sub>S</sub> are weak, which means that these features can be checked after Spell-out (forced by Procrastinate, an economy principle that requires some operations to be covert if they are not forced by other principles).

In the other Arabic dialects, I have argued that it is Tense that affects the movement of the subject. Evidence shows that the nominal features of T (the [+D] feature of T) are not strong enough to force that movement or weak enough to prevent

it. That is, the subject movement in non-Standard dialects is optional. The data presented in this study and the generalization made by Benmamoun (2000) show that the SVO word order is preferred in the present and future tenses, while the VSO word order is preferred in the past tense. To account for the optional movement of the subject, I have proposed that the nominal features of T can be described as [-strong, -weak], a value that a theory of binary features would allow us to have. The fact that the nominal features of T are not strong or weak enough to force or delay the movement of the subject justifies the optionality of this movement.

In verbal sentences, the verb is required to merge with the negative marker in all Arabic dialects. This requirement can be justified by the argument that Neg has a [+D] feature that needs to be checked before Spell-out. Since the verb moves to T before Spell-out, it raises to Neg, merges with the negative marker, and the complex head moves to T. The data show that the number of the negative markers in the non-Standard dialects is reduced. In Moroccan Arabic, 'ma-š' is the only negative marker that is used to negate the verbal sentences. In Egyptian Arabic, two negative markers are used, namely 'ma-š' and 'miš'. While 'ma-š' can be used in the past and present tenses, 'miš' can be used in the present and future tenses. This can be due to the fact that 'miš' is inherently [+present]. In Jordanian Arabic, three negative markers are used, namely 'ma-š', 'maa', and 'miš'. The first negative marker, 'ma-š', can be used in the present and past tenses. The second one, 'miš', is used in the future tense. And the third one, 'maa' can be used in the past, present and future tenses. In Syrian

Arabic and Suadi Arabic, 'maa' is the only negative marker that is used in verbal sentences. It can be used in the past, present and future tenses.

In verbless sentences, 'laysa' is used for negation. I have argued that 'laysa' should be treated as a negative copula, since it behaves like verbs in that it agrees with the subject in person and gender. It may also agree with the plural subject in number, which requires the subject to precede 'laysa'. Therefore, I have proposed that 'laysa' should be originated in the same place as the copula, i.e., in the head of vp. In the other Arabic dialects, five negative markers are used for negation in verbless sentences. The first one is 'maši', which is used in Moroccan Arabic only. It can be described as an independent head in that it does not require merger with any elements. When 'maši' is used, the nominal feature of Neg is checked by the movement of the subject to the Spec of NegP. The second negative marker is 'ma-s', which is used in Moroccan Arabic, Egyptian Arabic, and Jordanian Arabic. Since 'ma-s' is a bound morpheme, it has to cliticize to another morpheme. The possible morpheme in verbless sentences can be pronominal or adjectival. In Moroccan Arabic, both options are utilized. However, in Egyptian Arabic and Jordanian Arabic, 'ma-š' can merge with pronominal elements only. The third negative maker is 'miš', which is used in Egyptian Arabic and Jordanian Arabic only. It behaves exactly the same as 'maši'. The fourth negative marker is 'muu', which is used in Syrian Arabic only. It behaves exactly the same as 'maši' and 'miš'. The last negative marker is 'maa', which is used in Jordanian Arabic, Syrian Arabic, and Saudi Arabic. 'maa' is

similar to 'ma-s' in that it requires merger with another element. The only element that it can merge with is AGR.

The distribution of AGR in verbless and copular sentences has been account for by the analysis I have proposed. I have shown that AGR surfaces obligatorily for two reasons. First, it is needed as an anti-ambiguity device in copular sentences that have a referential predicate. Second, it surfaces when a checker for the [+D] feature of Neg is needed. However, AGR may surface optionally to achieve a pragmatic function, emphasis.

The analysis proposed for the Arabic dialects has three advantages. First, it can be applied crosslinguistically. Evidence presented in this study shows that it can account for the data in English and Arabic. Second, it presents a unified analysis that accounts for all the Arabic dialects being studied. Finally, it accounts for the wide variety of copular and verbless sentences that are found in the Arabic dialects.

The discussion presented in the present study shows that there are a few issues that still need to be researched further in order to complement this study. The issue of the preference in the word order in the non-Standard Arabic dialects deserves to be researched in more detail. We need to specify the pragmatic and syntactic factors that determine the preference in the word order in the present and past tenses. Moreover, if it is indeed a case of language change, we need to study the progress of this change in the different dialects. We also need to apply the proposed analysis to other Arabic dialects and see if there are any problematic sets of data that are still not accounted for.

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